

**PROJECT STUDY REPORT-
PROJECT DEVELOPMENT SUPPORT
(PSR-PDS)**

To

**Request Approval of a Locally Funded Project
to Proceed to the Project Approval
and Environmental Document (PA&ED) Phase**

And

Authorize Preparation of a Cooperative Agreement

On Route Interstate 80

Between West of Red Top Road (Post Mile 11.2)

And East of Interstate 505 (Post Mile 29.3)

APPROVAL RECOMMENDED:



JANET ADAMS, SOLANO TRANSPORTATION AUTHORITY
PROJECT SPONSOR, Accepts Risks Identified in
This PSR-PDS and Attached Risk Register



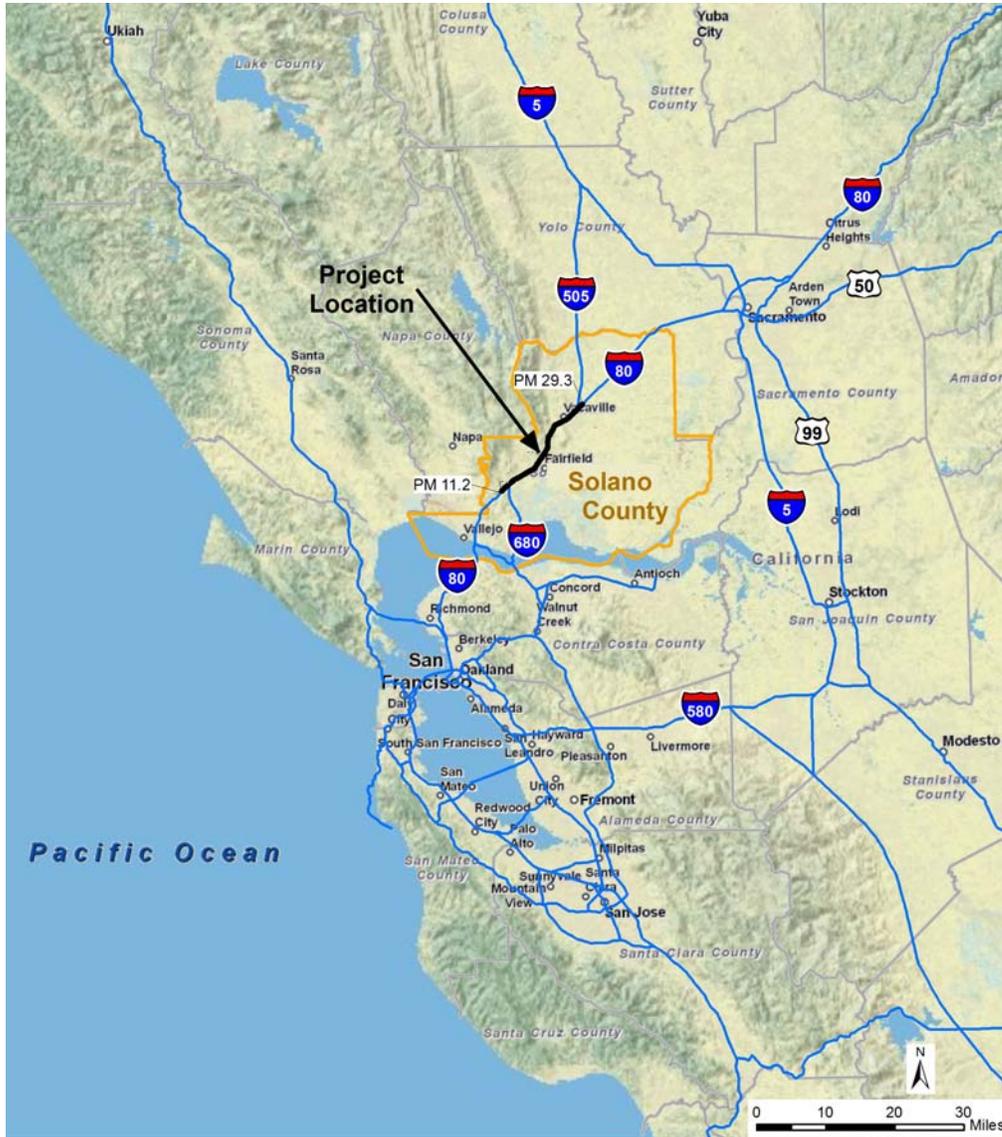
NICOLAS ENDRAWOS, CALTRANS PROJECT MANAGER

APPROVED:



BIJAN SARTIPI, DISTRICT DIRECTOR (or delegated authority)

4/4/12
DATE



Vicinity Map

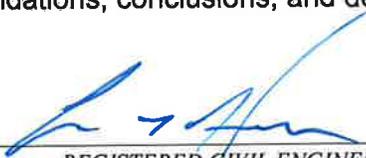
On Route Interstate 80

Between West of Red Top Road (Post Mile 11.2)

And East of Interstate 505 (Post Mile 29.3)

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


REGISTERED CIVIL ENGINEER

3/27/12
DATE



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1. INTRODUCTION

The Solano County Transportation Authority (STA) and Metropolitan Transportation Commission (MTC), in cooperation with the California Department of Transportation (Caltrans) and Federal Highway Administration (FHWA) propose to provide express lanes in both westbound (WB) and eastbound (EB) directions on Interstate 80 (I-80) from west of Red Top Road to east of Interstate 505 (I-505), within Solano County with portions in the cities of Fairfield and Vacaville. The project would construct approximately eighteen (18) miles of express lanes to the I-80 corridor through conversion of existing HOV lanes, and widening for new express lanes.

I-80 is a major commuter route for people in Solano, Contra Costa, and Alameda counties to jobs in San Francisco and Oakland. Within the project limits, I-80 is heavily traveled by commuters living in Solano County, interregional traffic to and from the Sacramento area, and recreational travelers to and from the Lake Tahoe area in Nevada on the weekend. This portion of I-80 is also a major freight and goods movement corridor between the Port of Oakland and points east, and to commerce centers from the Canadian border to the Mexican border via I-505 and Interstate 5 (I-5). Heavy traffic volumes are experienced on both weekdays and weekends resulting in delays and congestion throughout the I-80 corridor.

The project is consistent with MTC's Transportation 2035 Plan for the San Francisco Bay Area, adopted in April 2009 and is an element of MTC's 533-mile "backbone" network for express lanes in the San Francisco Bay Area as described in the programmatic Project Study Report (PSR) to Support the Bay Area Express Lane Backbone Network approved in September 2011. The project would further implement the overall plan for a regional express lanes network, and would begin implementation of express lanes on I-80 to improve throughput, reduce delay and relieve congestion.

See Attachment C, Preliminary Cost Estimate for specific work items included in this project.

Project Limits (Dist., Co., Rte., PM)	District 04; Solano County; I-80; PM 11.2 / 29.3
Number of Alternatives:	2 Alternatives
Capital Outlay Support for PA&ED	\$8 to \$12 million
Capital Construction Cost Range	\$146 million to \$990 million
Right of Way Cost Range	\$4.5 million to \$75 million
Funding Source:	MTC Enterprise Funds / Regional Measure 2
Type of Facility (conventional, expressway, freeway):	Freeway: express lanes widening and/or HOV lane conversion to existing I-80
Number of Structures:	31 structures, sound walls at various locations
Anticipated Environmental Determination or Document:	EIR/EIS PA&ED – March 2014
Legal Description	In Solano County in Fairfield and Vacaville from 0.2 miles west of Red Top Road Undercrossing to 0.9 miles east of E80-N505 Connector Separation
Approximate Schedule	PA&ED – Mar 2014, Construction - 2015
Project Category	3

The remaining support, right of way, and construction components of the project are preliminary estimates and are not suitable for programming purposes. A Project Report will serve as approval of the “selected” alternative and the programming document for the remaining support and capital components of the project.

2. BACKGROUND

A. Existing Facility

Within the project study limits, I-80 is an eight to twelve lane east-west freeway passing through Solano County and the cities of Fairfield and Vacaville connecting the San Francisco Bay Area and Port of Oakland to the Central Valley, as well as the eastern United States. The existing facility is described further under the “West Segment” heading in which HOV conversion to express lanes is proposed, and under the “East Segment” heading in which widening for new express lanes is proposed. A project location map showing each segment is shown on Figure 1.

WEST SEGMENT: the limits of this segment are from west of Red Top Road to Air Base Parkway. This segment is approximately eight miles long and is located within Solano County and the City of Fairfield. Within this segment, I-80 has five general purpose lanes and one HOV lane in each direction between Interstate 680 (I-680) and State Route 12 (SR 12) East, and the remainder of this segment is four general purpose lanes plus one HOV lane in each direction. The general purpose lanes vary from 10.8 to 11.8-feet wide. The HOV lane is from 11.8 to 14-feet wide. The outside shoulder varies from 6.5 feet to 9.8-feet, and the inside shoulder varies from 1-foot to 9.8-feet. The eastbound and westbound lanes are separated by a concrete median barrier except for the segment of thrie-beam barrier from approximately PM 14.79 to PM 15.12. The median ranges from 5-feet to 22-feet. Both the eastbound and westbound I-80 Cordelia Commercial Vehicle Enforcement facilities (CVEF) are within the West Segment on I-80, located between the I-680 Interchange and the SR-12 East Interchange. In addition, several auxiliary lanes and interchanges, including the I-80/I-680/ and I-80/SR-12 (East and West) interchange, are located within this segment as described in Tables 1 and 2 below.

Table 1 – West Segment Interchange Locations

PM	Interchange	No. of Ramps			
		WB-On	WB-Off	EB-On	EB-Off
11.39	Red Top Road	1	1	1	1
11.98	I-80/ SR 12 West		1	1	
12.74	Green Valley Road	1		1	1
12.84	I-80/ I-680	1	1	1	1
13.49	Suisun Valley Road		1	1	1
15.81	I-80/ SR 12 East	1			1
16.17	Suisun Parkway	1	1	1	1
17.20	West Texas Street	1	1	2	1
17.92	Travis Boulevard	2	1	1	2
19.18	Air Base Parkway	1	2	1	1

Table 2 – West Segment Auxiliary Lanes Locations

Direction	Auxiliary Lane
EB	SR 12 West On-Ramp to Green Valley Road Off-Ramp
EB	I-680 North On-Ramp to SR 12 East Off-Ramp
EB	Suisun Parkway On-Ramp to Auto Mall Parkway Off-Ramp
EB	Beck Avenue On-Ramp to Travis Blvd Off-Ramp
EB	Air Base Parkway Off-Ramp (1200-feet long)
WB	Air Base Parkway On-Ramp (1500-feet long)
WB	Travis Blvd On-Ramp to Oliver Road Off-Ramp
WB	SR 12 East On-Ramp to I-680 South Off-Ramp

EAST SEGMENT: the limits are from Air Base Parkway to east of I-505. This segment is approximately ten miles long and is located within Solano County and the cities of Fairfield and Vacaville. I-80 has four general purpose lanes in each direction. The general purpose lanes are 12-feet wide, the outside shoulder varies from 8-feet to 10-feet, and the inside shoulder varies from 4-feet to 10-feet. The median width varies from 36-feet to 99-feet with temporary railing (Type-K) and thrie-beam barrier in the areas of grade differential between the eastbound and westbound lanes. The barriers are placed at the edge of the inside shoulder in both directions. Several interchanges and auxiliary lanes are located within the segment as described in Table 3 and 4 below.

Table 3 – East Segment Interchange Locations

PM	Interchange	No. of Ramps			
		WB-On	WB-Off	EB-On	EB-Off
20.93	North Texas St. / Manual Campus Parkway	1	1	1	1
23.13	Cherry Glen Road / Lagoon Valley Rd	1	1	1	1
23.96	Rivera Road	1	2	1	1
25.31	Alamo Drive	1	1	1	1
26.00	Davis Street	1	1	1	1
26.46	Mason Street	1	1	1	1
27.20	Allison Drive	1	1	1	1
28.01	Nut Tree Road			1	
28.15	I-80/ I-505 North	1	1	2	1

Table 4 – East Segment Auxiliary Lanes Locations

Direction	Auxiliary Lane
EB	Allison Street On-Ramp to Nut Tree Blvd Off-Ramp
WB	Alamo Street On-Ramp to Davis Street Off-Ramp

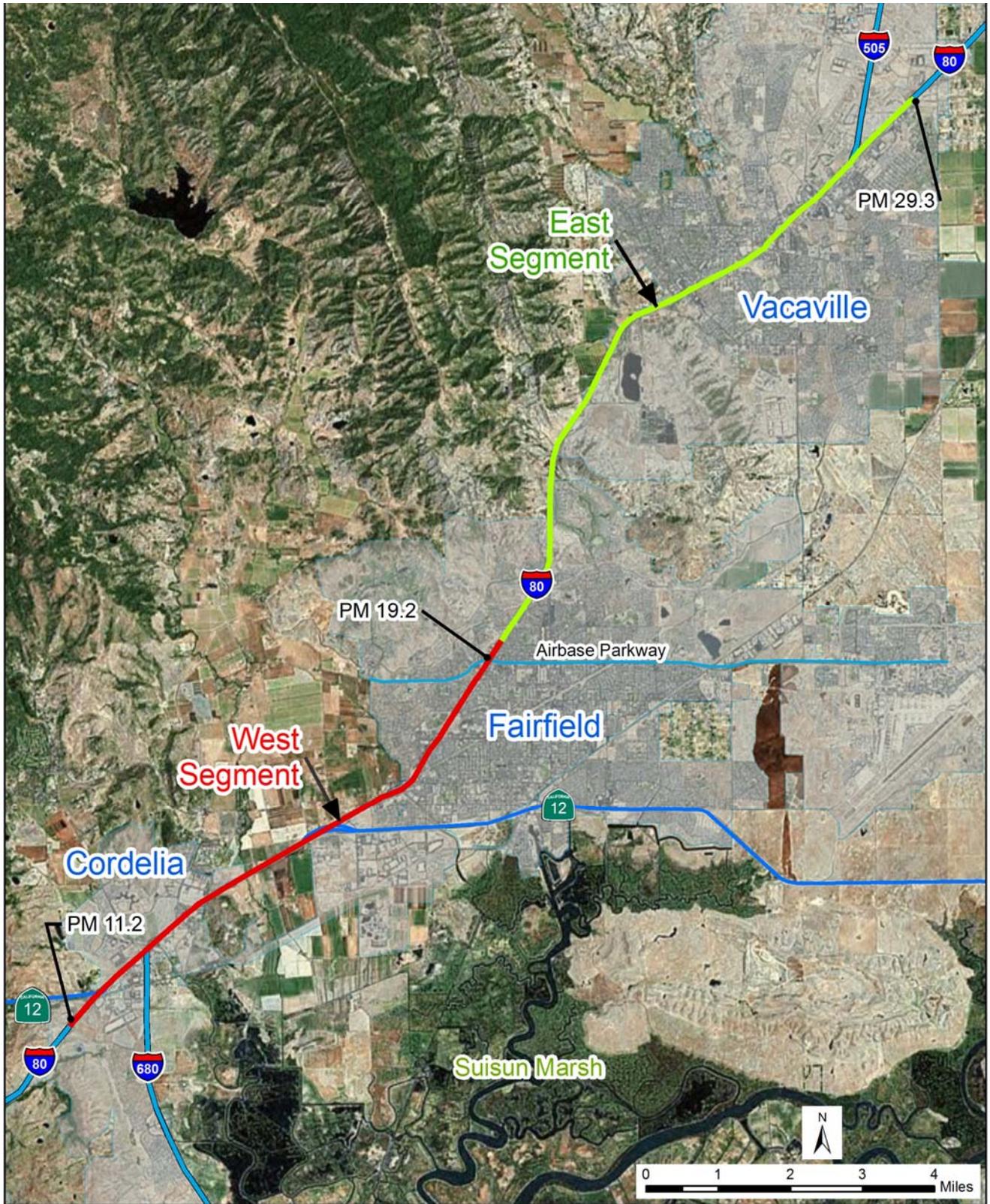


Figure 1: Project Location Map

B. Project Development History

In early 2006 the MTC began study efforts to determine the feasibility of a Regional High Occupancy Toll (HOT) Lane Network in the Bay Area. HOT lanes, also known as Express Lanes, would allow single occupancy vehicles to use the carpool lanes by paying a toll, adjusted dynamically based on congestion. The study examined the institutional, financial, and technical merits of implementing an express lane network, including cost and revenue estimates, as well as design approaches. The corridor analyses found that express lanes over the majority of the identified network were feasible provided some flexibility in the design approach for areas with significant physical, environmental or financial challenges.

In 2009, the MTC adopted the Transportation 2035 Plan for the San Francisco Bay Area which sets forth the agency's vision of "an integrated, market-based pricing system for the region's carpool lanes (via a regional express lane network), bridges and roadways" to help manage the demand on mature transportation systems and, as a source of revenue, to fund infrastructure improvements.

The MTC completed the programmatic Project Study Report (PSR) To Support the Bay Area Express Lane Backbone Network in September 2011. As part of that study, express lanes on the I-80 corridor from the Yolo County Line to I-680 were studied. The findings from that study concluded that implementation of express lanes within the corridor was feasible.

The proposed project study limits are within the limits of the MTC's Express Lane Backbone Network PSR. The project would include both the conversion of existing high occupancy vehicle (HOV) lanes to express lanes from Red Top Road to Air Base Parkway (West Segment) and the construction of new express lanes from Air Base Parkway to I-505 (East Segment).

STA initiated the project in 2010 and began preliminary studies, including coordination with Caltrans and MTC on the project delivery approach and project features. Originally the first phase of project development was anticipated to be a Project Study Report / Project Report (PSR/PR). However, the passage of the 2011/2012 State budget required changes to Caltrans' procedures for locally funded projects in the project initiation phase and STA elected to enter into a cooperative agreement with Caltrans to prepare a PSR-PDS. Cooperative Agreement 04-2429 between Caltrans and STA was executed November 28, 2011 for the reimbursed oversight work of this PSR-PDS. Approval of this PSR-PDS will be the authorizing document for the PA&ED cooperative agreement between Caltrans and STA.

Prior to that change, several actions were taken regarding the proposed project as noted below:

- The type of managed lane envisioned for this express lane is a continuous and unrestricted access approach as identified in the April 2011 Caltrans Traffic Operations Policy Directive (TOPD) for Updated Managed Lane Design. This approach was presented by STA and concurred by Caltrans and MTC in March 2011 provided that safety and operational analyses are conducted consistent with the TOPD.
- A Continuous Access White Paper describing the issues influencing continuous access and recommending a continuous access approach for the I-80 Express Lanes was prepared by STA and presented to Caltrans Traffic Operations and MTC in March 2011.
- Digital Mapping has been prepared for the project limits.

- A Traffic Methodology Memorandum presenting the proposed traffic analysis methodologies was approved by Caltrans on May 26, 2011.
- Existing Traffic Condition Analysis was submitted to Caltrans on June 10, 2011.

3. PURPOSE AND NEED

I-80 is the main east-west interregional freeway that connects the San Francisco and Sacramento metropolitan areas, passing through the counties of Alameda, Contra Costa, Solano, and Yolo. The portion of I-80 through the cities of Fairfield and Vacaville is the most heavily-traveled segment of the I-80 corridor within Solano County as it is utilized by commuters, recreational travelers, public transit services, and for interstate and interregional goods movement.

The MTC's Transportation 2035 Plan establishes the implementation of a Bay Area Express Lanes Network to effectively improve throughput and reduce delays and congestion on the major travel corridors within the San Francisco Bay Area, including I-80 in Solano County.

Recognizing the importance of I-80 as part of the Bay Area Express Lanes Network, and as a corridor for the movement of people and goods within Solano County, and between the San Francisco Bay Area and the Central Valley, the Solano Transportation Authority proposes a project that would:

A. Purpose

- Optimize capacity in the existing I-80 corridor to better meet current and future traffic demands.
- Close the gaps within the existing HOV lanes on I-80, increasing travel time savings and reliability for all users including HOVs and transit.
- Maximize the efficiency of freeway facilities by better utilizing available unused capacity in the existing HOV lanes.
- Provide a funding mechanism through express lanes¹ to accelerate implementation of the regional network of HOV and express lanes.

¹The State has authorized the implementation of express lanes as a way to implement the regional carpool lane system faster than traditional state and local funding sources.

B. Need

- Congestion currently exists in the general purpose lanes during peak periods on the I-80 corridor in Solano County and this level of congestion will continue to worsen as traffic demand increases.
- The existing HOV lane system on the I-80 corridor is characterized by gaps, limiting travel time savings and trip reliability for cars and transit vehicles.
- Available unused capacity in the existing HOV lane system needs to be utilized to enhance transportation system efficiency.
- There is limited funding available to close gaps in the existing HOV lane system without utilizing alternative financial mechanisms such as express lane tolling.

4. TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT

A Preliminary Traffic Engineering Assessment (PTEA) was conducted for the project limits utilizing readily available information and applying macro-level analysis and evaluation techniques. The PTEA focused on planning level analyses of mainline operations under current and forecasted conditions. A more detailed assessment of system components will be addressed in the subsequent Project Approval and Environmental Document (PA&ED) phase of project development. The key findings of the PTEA include:

A. Current Operating Conditions

Under current conditions, the peak directions of travel are westbound during the morning period and eastbound during the afternoon period. During the morning peak hour (7:00 to 8:00 AM), the westbound mixed-flow lanes operate at LOS D conditions along most of the study corridor, while the eastbound mixed-flow lanes operate at LOS B or C. During the afternoon peak hour (5:00 to 6:00 PM), the eastbound mixed-flow lanes operate at LOS D conditions from just east of Air Base Parkway, where the existing HOV lane ends in Fairfield, to Alamo Drive in Vacaville, while the westbound lanes operate at LOS B or C.

On the weekends the traffic volumes along the corridor are generally similar to or slightly higher than the volumes observed during the weekday peak hours. In cases where the weekend volumes are somewhat higher than the weekday volumes, the differences are not great enough to cause the operations of any of the study segments to degrade below the observed weekday peak hour conditions.

The HOV lanes between Red Top Road and Air Base Parkway operate at free flow (LOS B or better) conditions in both directions during both of the weekday peak hours. The relatively low utilization currently observed in the HOV lanes creates a substantial amount of available capacity. Depending on the peak hour studied, between 60% and 84% of the HOV lane capacity is not currently used.

B. Accident Data

Collision data for the corridor was provided by Caltrans via their Traffic Accident Surveillance and Analysis System (TASAS). Table 5 summarizes the TASAS data for the entire study corridor.

**TABLE 5
COLLISION DATA
JULY 1, 2007 TO JUNE 30, 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
EB I-80	8.00 to 31.40	1,555	8	493	0.80	0.004	0.26	0.88	0.009	0.28
WB I-80	31.40 to 8.00	1,513	3	486	0.77	0.002	0.25	0.88	0.009	0.28
EB/WB I-80 Between Projects Limits	8.00 to 31.40	3,068	11	979	0.79	0.003	0.25	0.88	0.009	0.28

Notes: Limits are from west of American Canyon Road to east of Meridian Road.
Source: Caltrans TASAS data, 2007-2010

As indicated in Table 5, there were a total of 3,068 accidents along the I-80 corridor between American Canyon Road and Meridian Road in the three-year period summarized. Actual accident rates averaged for the entire segment are less than the average statewide rate for comparable facilities. The corridor summarized here is slightly longer than the project limits and does not break down the data by segment. In order to do a more detailed comparison of actual accident rates with the statewide average rates it would be necessary to obtain recent collision data for the individual freeway segments within the project limits. Such analysis will be conducted at the PA&ED phase of the project.

C. Forecasted Conditions

A preliminary assessment of design year (2037) operating conditions was performed under both a No-Build and Build (express lanes) alternative.

The No-Build Alternative would generally maintain the existing number of lanes along the I-80 corridor. Based on estimated 2037 traffic demand volumes, the peak direction of travel along I-80 (westbound in the AM and eastbound in the PM) would experience extended periods of time where the demand volumes substantially exceed the available capacity. The operation of some of the freeway segments within the project limits is expected to be at LOS F for a portion of each peak period.

Based on the estimated future traffic demand, the number of available traffic lanes, and the presence of lane adds/drops and weaving sections, several bottlenecks would likely occur along the corridor. In the eastbound direction of travel, the primary potential bottleneck locations are the merge sections from SR 12 West and I-680 northbound, as well as the HOV lane drop near Air Base Parkway. For westbound travel, the primary potential bottleneck location is near the I-505 interchange, where the demand exceeds the available capacity at this gateway to the study corridor. Additional minor bottlenecks may also occur between closely-spaced ramps or other weaving sections.

Assuming that weekend traffic volumes would likely increase proportionally in the future compared to existing conditions, the eastbound volumes on Saturday and westbound volumes on Sunday would exceed the available capacity during much of these peak periods as well. LOS F conditions would be expected on at least some of the freeway segments during both days, and bottleneck would likely occur at similar locations as described above.

The Build Alternative would add an express lane in each direction between Air Base Parkway and I-505. This additional capacity would be expected to improve the over-capacity conditions along the project corridor, particularly as the utilization of the express lane is maximized by applying variable pricing to ensure that the express lane maintains a travel speed advantage over the mixed-flow lanes. The actual effect of the new express lane would depend on the number of single-occupant vehicles choosing to pay the toll to shift from the mixed-flow lane to the express lane. If the express lanes were fully utilized, the overall LOS along the peak direction of travel would be expected to improve substantially, although the corridor is still expected to remain somewhat congested.

During the weekends, the effect of the additional capacity would depend on how the HOV lane restrictions would be enforced. The current plan for Bay Area High Occupancy Toll Lanes calls for HOV restrictions to be enforced from noon to 7 PM on weekends (and from 6 AM to 7 PM on weekdays); with occupancy requirements being adjusted from HOV 2+ to HOV 3+ once capacity is reached on the express lane. Detailed operational analysis during the PA/ED phase will be required to more accurately determine the hours of HOV restrictions and enforcement. Because of the high level of vehicle occupancy that already occurs along this corridor on the weekends, it is possible that the express lane would need to be restricted to HOV 3+ vehicles early in its implementation, at least during weekend periods. If HOV 3+ restriction is implemented, it would affect the amount of capacity available for toll-paying users, and thus would also affect the overall corridor capacity and operations. It is possible that the Build alternative could operate at a lower level of service than the No Build alternative on the weekends along the western segment, if the express lane does not operate at full capacity.

The potential bottleneck locations described under the No Build scenario above would be positively affected by the proposed project. In the eastbound direction of travel, the bottleneck at the Air Base Parkway HOV lane drop would be addressed. In the westbound direction, the potential bottleneck at I-505 would largely be addressed, although near-capacity conditions would still exist during the weekday morning peaks and on Sundays. Additional minor bottlenecks may occur between closely-spaced ramps or other weaving sections.

D. PA&ED Traffic Scope

During the PA&ED phase of the project a Traffic Operations Analysis Report will be prepared. This work will be conducted in accordance with Section 149 of the California Streets and Highway Code and applicable Caltrans requirements including, but not limited to, the latest versions of the Caltrans Traffic Manual and the California Manual on Uniform Traffic Control Devices, the 2003 High Occupancy Vehicle Guidelines for Planning, Design, and Operations, and the Traffic Operations Policy Directive 11-02 on Updated Managed Lanes Design dated April 7, 2011.

The scope of work and the technical approach for the Traffic Operations Analysis Report (TOAR) to be prepared during PA&ED was developed through a series of discussions including the STA, the consultant team, and Caltrans District 4 staff. The Technical Traffic Memorandum – I-80 Express Lanes Project from Red Top Road to Leisure Town Road, Solano Transportation Authority, May 18, 2011 documents the scope and approach. It not only

addresses the traffic operations-related work for the PA&ED phase, but it also describes the approach to complete the revenue forecasts associated with the HOT lane scenarios. Note that the scope outlined in the Technical Traffic Memorandum is planned to be modified to include the evaluation of different access options (e.g., continuous access, limited access) for the proposed Express lanes.

5. DEFICIENCIES

The PTEA of future conditions on the I-80 corridor within the project limits shows that the demand is expected to far exceed the available capacity during peak periods, adversely affecting travel speeds and creating bottlenecks at constrained locations. The forecasted conditions indicate a level of congestion that is also expected to cause substantial diversion of through traffic onto local streets, degrade air quality, reduce transit service reliability, and worsen the collision rate in the corridor.

The PTEA includes additional information on deficiencies related to current conditions, traffic accident data, and forecasted conditions.

6. CORRIDOR AND SYSTEM COORDINATION

A. Identify Systems

I-80 has been identified by the State as part of the Interregional Road System, and is a major transcontinental Interstate between the San Francisco Bay Area and the East Coast. I-80 serves as the single freeway connection between the San Francisco Bay Area and the Sacramento metropolitan region. It is vital to commuting, freight and recreational traffic and is one of the most congested freeway facilities in the region. Within California, the highway connects the Bay Area to the Sacramento metropolitan region and provides connectivity to I-5 to the north via I-505. The route is designated as a Surface Transportation Assistance Act (STAA) National Network route and is part of the State Highway Extra Legal Road (SHELL) network.

B. State Planning

I-80 is identified as a High Emphasis Route within the Interregional Road System (IRRS) and a "Transportation Gateway of Major Statewide Significance" by the 1998 Interregional Transportation Strategic Plan (ITSP).

With the passage of the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act, known as Proposition 1B, in November 2006, Caltrans implemented the Corridor System Management Plan (CSMP) for all corridors with projects funded by the Corridor Mobility Improvement Act (CMIA) Program. Within Solano County two projects received CMIA funding;

- HOV Lanes, Fairfield (Rte 80/680/12 to Putah Creek)
- WB I-80 to SR 12 (West) Connector and Green Valley Road Interchange Improvements

In coordination with MTC and the Solano STA, Caltrans developed a CSMP for the I-80 East Corridor. The corridor limits extend from the Carquinez Bridge (Solano/Contra Costa County

line) to the junction with SR 113 North. It is approximately 43 miles in length and intersects Interstates 780, 680, 505, and State Routes 29, 37, 12, and 113.

A CSMP is a transportation planning document that provides for the safe, efficient and effective mobility of people and goods within California's most congested transportation corridors. 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. CSMPs also support the Governor's Strategic Growth Plan (SGP), which calls for an infrastructure improvement program that includes a major transportation component (GoCalifornia).

The I-80 East CSMP was completed in October 2010 and presents a performance assessment of the corridor and recommended strategies and improvements. This project's limits, from Red Top Road to I-505, closely align with Segments D and E in the I-80 East CSMP. The CSMP's performance assessment of the corridor identifies two of the top three congested locations, and three of the four bottlenecks as falling within the project limits.

I-80 East CSMP - Congested Locations

- PM eastbound from I-680 to SR-12 East
- AM westbound from West Texas Street to I-680

I-80 East CSMP - Key Bottlenecks

- I-80/Exit to SR-12 West/westbound
- I-80/I-680 connector to eastbound I-80
- I-80/Between Travis Boulevard on ramp and Air Base Parkway off-ramp/eastbound

Consistent with the proposed scope of this project, the I-80 East CSMP recommended corridor management strategies to meet the goals of mobility, reliability and safety by extending the HOV Lanes from Air Base Parkway to I-505 which would encourage additional use of HOV lanes and relieve congestion in the mixed flow lanes.

C. Regional Planning

The MTC 2009 Regional Transportation Plan, Transportation 2035 - Change in Motion, identifies I-80 as a priority corridor and a major gateway Route and includes the project, number 230650 - Widen I-80 from Red Top Road to Air Base Parkway to add HOV lanes in both directions. To speed travel and reduce congestion on Bay Area highways the Transportation 2035 Plan identified a Bay Area Express Lane Network. For I-80 in Solano County, the Transportation 2035 Plan includes three express lane projects; 230658 – I-80 in Solano County from Route 37 to Carquinez Bridge – widen to add an express lane in each direction, 230659 – 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, 230660 – I-80 in Solano County from Red Top Road to Air Base Parkway – convert HOV lanes to express lanes. The cost to construct, finance and operate the network would be paid for with toll revenues. The funds generated from the network would be used to pay for additional mobility improvements in the express lane corridors.

On September 28, 2011, the MTC submitted the Bay Area Express Lanes Public Partnership Application for High Occupancy Toll Lanes to the California Transportation Commission (CTC). The application, submitted in cooperation with Caltrans, requests authority, pursuant to Section 149.7 of the Streets and Highways Code, to develop and implement 285 miles of express lanes

with the Bay Area. The application includes 129.7 directional miles (both directions) on I-80 from the San Francisco/Oakland Bay Bridge to the Solano/Yolo County Line. This proposed project is within these corridor limits and provides the linkage between I-505 and I-680. Within the application, and included in the associated Project Study Report to Support the Bay Area Express Lane Backbone Network, the following projects are listed which constitute the limits of this project.

- I-80 in Solano County from Air Base Parkway to I-505 – new express lanes in each direction.
- I-80 in Solano County from Red Top Road to Air Base Parkway – convert HOV lanes to express lanes in each direction.

In October 2011, CTC Resolution G-11-10 approved MTC's Bay Area Express Lane Network application for the planned integrated express lane network to enhance mobility and afford greater user flexibility. This project is integral element of the planned network on I-80.

D. Transit Operator Planning

Several local transit agencies operate in the I-80 corridor and provide express bus services which transport passengers from local stops and Park and Ride lots in Solano County to the El Cerrito Del Norte and Pleasant Hill BART stations or directly to San Francisco. Express Bus routes utilizing the corridor within the project limits include:

- Fairfield-Suisun Transit Express Bus Routes 20, 30, 40, and 90
- Vallejo Transit Express Bus Routes 80 and 85
- Yolo Bus Route 220

Riders utilize the HOV system on I-80 through Fairfield and just east of the Carquinez Bridge (westbound direction only) which continues to the San Francisco-Oakland Bay Bridge. Solano Express Bus Route 30 also takes passengers to Dixon, Davis and Sacramento. In addition, STA provides ride matching through its Solano Napa Commuter Information (SNCI) service. There are also a number of park and ride lots constructed and operated by local jurisdictions along the I-80 corridor.

This project would enhance transit operations along the I-80 corridor by providing eighteen miles of continuous HOV Lane / Express Lane access to Transit Operators from Red Top Road near Fairfield to I-505 in Vacaville.

E. Local Planning

The STA's Comprehensive Transportation Plan (CTP 2030) for Solano County envisions, directs, and prioritizes the transportation needs of Solano County through the year 2030. The CTP incorporates various STA studies and plans into a 25-year planning document. The CTP 2030 was adopted by the STA Board of Directors on June 8th, 2005. The goal of the Solano CTP for arterials, highways, and freeways is to "Develop a balanced transportation system that reduces congestion and improves access and travel choices through the enhancement of roads." One of the objectives in meeting that goal is to "Add HOV Lanes" through Implementation of HOV lane projects on I-80 and I-680 identified in the I-80/I-680/I-780 Major Investment & Corridor Study.

The I-80/I-680/I-780 Major Investment & Corridor Study was adopted by the STA Board in July 2004 and includes the project to construct HOV lanes on I-80 in both directions between Air Base Parkway and I-505 in its long range improvement plan.

More recently, in February 2010 the STA Board adopted the Solano Highways Operations Study (SHOS). Previously called the I-80/I-680/I-780 Corridors Highway Operations Study & Implementation Plan, the study analyzes the performance and safety of Solano County's interstate highway corridors and recommends a variety of operations improvements as well as visual guidelines for landscape and hardscape treatments. This study was developed through the Solano Highways Partnership (SoHIP), which includes staff from the Solano Transportation Authority (STA), the Metropolitan Transportation Commission (MTC), the Sacramento Area Council of Governments (SACOG), Caltrans District 3 and District 4, and the cities of Benicia, Dixon, Fairfield, Vacaville, and Vallejo. Similar to earlier plans, and the East I-80 CSMP, extending the HOV lanes from Air Base Parkway to I-505 (both directions) is identified as a priority project in SHOS.

In February 2009, the STA Board approved an Express Lanes Priority Project List, should the STA be successful in gaining financial resources from MTC/BATA for the funding of the HOV/HOT projects within Solano County. The top two priority projects are to convert the existing HOV lanes from Red Top Road to Air Base Parkway to express lanes, and to construct express lanes from Air Base Parkway to I-505 in each direction.

7. ALTERNATIVES

The approach taken in developing alternatives for this PSR-PDS was to identify two alternatives, Alternatives A and B, that would establish a study area that satisfies the project's purpose and need, and identifies the project factors that must be analyzed and resolved in the PA&ED phase.

Alternative A would provide improvements to the existing facility to implement continuous access express lanes in each direction. While this alternative provides reduced environmental and right-of-way impacts it will require justification and approval of non-standard features. Alternative A provides the lower limit of a study area for PA&ED.

Alternative B would provide improvements to implement express lanes in each direction with ingress/egress access locations and a 4-foot buffer, as well as improvements to the existing facility to meet current design standards within the project limits. While this alternative provides substantial compliance with design standards there would be environmental and right-of-way impacts. Alternative B provides the upper limit of a study area for PA&ED.

The PA&ED studies will define a build alternative that satisfies the project purpose and need, is cost effective and will avoid or minimize environmental and right-of-way impacts while trying to maintain design standards. Analysis of the following key project factors is necessary to establish the build alternative in PA&ED.

- Access Configuration: as described in Section 4.D "PA&ED Traffic Scope" a Traffic Operations and Analysis Report will be conducted to evaluate both continuous and limited access configurations for the express lanes. The results of this analysis will

determine the width necessary for the express lane; limited access with buffer separation, or continuous access.

- CHP Observation Areas: observation areas for the alternatives were provided based on current HOV Guidelines regarding cross section width and taper distances, and an approximate 3 mile spacing between enforcement areas. These locations may change in PA&ED based on the determination of the express lane access configuration. A continuous access configuration would provide enforcement areas at regular intervals, while a limited access configuration would likely require a specific location downstream of the proposed ingress/egress locations.
- Design Standards: All deviations from design standards will require evaluation and justification in the PA&ED phase. The standards influenced by the determination of access configuration type and the CHP observation locations include median width, inside shoulder width, travel way width and stopping sight distance.
- Environmental Impacts: there is a range of potential environmental impacts for the project as identified in the PEAR (Attachment D), including; wetlands, biological sensitive habitat areas, historical and archeological sites, and Section 4(f) property. Establishing the locations of environmental constraints in the PA&ED phase will provide the necessary information to refine a build alternative to avoid or minimize environmental impacts.

A discussion on the no-build and build alternatives follows. Recognizing approval of the PSR-PDS does not constitute conceptual approval of alternatives or non-standard design features, the discussion on the build alternatives focuses on the design concepts and major features. During PA&ED, the analyses of the key project factors will result in a build alternative that meets the project's purpose and need within the study limits.

The project limits are composed of two distinct segments. The West Segment is from Red Top Road (PM 11.2) to Air Base Parkway (PM 19.2) and would convert the existing HOV lanes to express lanes in each direction. The East Segment is from Air Base Parkway to I-505 (PM 29.3) and would construct new express lanes in the median in each direction.

A. No-Build Alternative

Under the No-Build Alternative, no express lanes would be constructed along I-80 from the Red Top Road Interchange to the I-80/I-505 Interchange. The existing HOV lanes along I-80 from Red Top Road to Air Base Parkway would remain as they currently exist. The No-Build Alternative represents the baseline alternative and offers a basis for assessing current conditions and for comparison to the build alternatives. This alternative would include all currently planned and programmed projects on I-80 within the project limits through the year 2037. The No-Build Alternative includes the following related projects:

- Ramp Metering (West Segment) – installation of ramp metering hardware between Red Top Road and Air Base Parkway was completed at the end of 2011 and will be operational by early 2013.
- Ramp Metering (East Segment) – ramp metering improvements from Air Base Parkway to I-505 are currently under development.

- Eastbound I-80 Cordelia Truck Scales Relocation – the EB Cordelia Truck Scales will be relocated to a new, larger facility, approximately 2,500 feet to the east of the current location. The project is anticipated to begin construction in early 2012 and be completed by mid 2013. This project corrects the non standard typical section on EB I-80 between west of Dan Wilson Creek and the WB SR-12/WB I-80 Connector.
- I-80/I-680/SR-12 Interchange Project – the project includes several phased improvements. The first improvement is the Initial Construction Package (ICP) of Alternative C, Phase 1, which consists of the reconstruction of the WB I-80 to WB SR-12 Connector and Green Valley Road Interchange and removal of the existing Green Valley Road Interchange. This project is anticipated to be constructed and open to traffic in 2014.

B. Alternative A

Build Alternative A would implement continuous access express lanes in each direction of I-80 from Red Top Road to I-505. Attachment A provides the typical sections and layouts for this Alternative and the design scope for each segment is provided below.

West Segment – Red Top Road to Air Base Parkway: Build Alternative A would convert the existing HOV lanes to continuous access express lanes through the addition of electronic toll technologies within the existing median. Three CHP observations areas are proposed within the West Segment at the locations shown in Table 6.

Table 6 – West Segment CHP Observation Areas

General Location Description	Direction	PM
Existing area between EB Jameson On-Ramp and Green Valley Road OC	WB	12.1
Existing area between Suisun Creek Bridge and EB SR 12	WB & EB	15.2
Proposed area between Travis Blvd OC and Air Base Parkway OC	WB & EB	18.5

Under this alternative, the conversion of the existing HOV lanes in the West Segment is proposed to be accomplished through restriping and limited outside widening.

East Segment – Air Base Parkway to I-505: Build Alternative A would construct a new continuous access express lane in each direction of I-80 within the East Segment. The express lane, including the addition of electronic toll technologies, would be constructed within the existing median area with minimal widening. Four CHP observations areas are proposed within the East Segment at the locations shown in Table 7.

Table 7 – East Segment CHP Observation Areas

General Location Description	Direction	PM
Proposed area between Air Base Parkway OC and N. Texas Street	WB & EB	20.2
Proposed area between Cherry Glen Road OC and Rivera Road OC	WB & EB	23.5
Between Ulatis Creek Bridge and Allison Drive OC	EB	26.8
Between Nut Tree Road OC and E80-N505 Connector Bridge	WB	28.2

The construction of the express lanes in the East Segment would be accomplished through minimal widening. Table 8 provides a listing of the structures within the East Segment. There are fifteen (15) structures, some of which may require modification.

Table 8 – East Segment Structures

Structure	Bridge No.	PM
N. Texas St OC	#23-102	20.93
Cherry Glen Road OC	#23-160	R23.13
Rivera Road OC	#23-107	23.96
Alamo Creek Bridge	#23-10	R25.03
Alamo Drive OC	#23-13	R25.31
Davis Street UC	#23-23	R26.00
Mason St. UC	#23-51	R26.46
Ulatis Creek Bridge	#23-52	R26.61
Allison Drive OC	#23-213	R27.20
Nut Tree Road OC	#23-145	R28.01
S505-E80 Conn SEP	#23-146	R28.15
Pine Tree Creek Bridge	#23-36L	R28.32
E80-N505 Conn SEP	#23-104G	R28.36
Horse Creek Bridge	#23-11L	R28.57
Horse Creek Bridge	#23-73R	29.25

The project footprint and study area for Build Alternative A would constitute the lower limit of studies during PA&ED as the implementation of express lanes would be accomplished through converting the existing HOV lanes in the West Segment and constructing new express lanes in the median in the East Segment. Outside widening in areas may be necessary to accommodate this alternative.

Depending on the location and requirements for outside widening, additional lands outside the existing State right-of-way, as well as utility easements and temporary construction easements

may be necessary. Non standard design features associated with this alternative would require review and approval during the PA&ED phase. Approval of the PSR-PDS does not constitute conceptual approval of these features.

C. Alternative B

Build Alternative B would provide improvements to implement express lanes in each direction with ingress/egress access locations and a 4-foot wide buffer, as well as improvements to the existing facility to satisfy current design standards within the project limits. Attachment B provides the typical sections and layouts for this Alternative and the design scope for both segments is provided below.

This alternative would provide a 36-foot paved median, concrete median barrier, 12-foot express lane with 4-foot buffer. Additional outside widening would be constructed to accommodate standard sight distance at existing deficient locations. CHP observation areas would be provided in locations similar to those identified in Build Alternative A. The CHP observation areas would be located within the proposed 36-foot paved median and no additional outside widening would be necessary. Similar to the CHP observation areas, the median would be utilized to provide for express lane ingress/egress locations without the need for additional outside widening. Auxiliary lanes would be provided under this alternative at various locations shown in Table 9.

Table 9 – Alternative B Proposed Auxiliary Lanes

Direction	Location
EB	Travis Blvd On-Ramp to Air Base Parkway Off-Ramp
EB	Lagoon Valley Road On-Ramp to Rivera Road Off-Ramp
EB	Rivera Road On-Ramp to Alamo Drive Off-Ramp
EB	Cliffside Drive On-Ramp to Allison Drive Off-Ramp
WB	Alamo Drive On-Ramp to Rivera Road Off-Ramp
WB	North Texas Road On-Ramp to Air Base Pkwy Off-Ramp
WB	Air Base Pkwy On-Ramp to Travis Blvd Off-Ramp
WB	SR 12 On-Ramp to I-680 Off-Ramp

Under this Alternative twenty five (25) interchanges would be impacted due to the outside widening and mandatory design standards. Table 10 provides a listing of the structures within the project limits and those impacted by this alternative that would be evaluated in PA&ED.

Table 10 – Structures Requiring Modification or Relocation Due to Alternative B Impacts

Structure	Bridge No.	PM	Modification/ Relocation
Red Top Road UC	#23-165	R11.39	X
Cordelia UP	#23-25	R11.92	X
E12-E80/80 Conn SEP	#23-16G	R11.98	
Green Valley Road OC	#23-138	12.74	
RTE 680/80 SEP	#23-139E	12.84	
Green Valley Creek	#23-4	12.91	X

Suisun Valley Road OC	#23-140	13.49	X
Dan Wilson Creek Bridge	#23-6	13.92	X
Suisun Creek Bridge	#23-7	14.55	X
W12-W80/80 Conn SEP	#23-199F	15.81	
Abernathy Road OC	#23-141	16.17	
Ledgewood Creek Bridge	#23-8	17.02	X
W. Texas Street UC	#23-106	17.2	X
W. Fairfield PUC	#23-93	17.27	X
Travis Blvd OC	#23-61	17.92	X
Air Base Pkwy OC	#23-96	19.18	
N. Texas St OC	#23-102	20.93	X
Cherry Glen Road OC	#23-160	R23.13	X
Rivera Road OC	#23-107	23.96	X
Alamo Creek Bridge	#23-10	R25.03	X
Alamo Drive OC	#23-13	R25.31	X
Davis Street UC	#23-23	R26.00	X
Mason St. UC	#23-51	R26.46	X
Ulatis Creek Bridge	#23-52	R26.61	X
Allison Drive OC	#23-213	R27.20	X
Nut Tree Road OC	#23-145	R28.01	X
S505-E80 Conn SEP	#23-146	R28.15	X
Pine Tree Creek Bridge	#23-36L	R28.32	X
E80-N505 Conn SEP	#23-104G	R28.36	X
Horse Creek Bridge	#23-11L	R28.57	X
Horse Creek Bridge	#23-73R	29.25	X

The project footprint and study area for Alternative B would constitute the upper limit of studies during PA&ED as this alternative would require reconstruction or widening of the existing roadway and structures, reconstruction of existing interchanges, sound walls, and retaining walls, and the construction of new sound walls and retaining walls. These improvements would result in right of way, utility, and environmental impacts.

Under this build alternative there are some proposed deviations from design standards such as stopping sight distance along vertical curves at two locations within the East Segment and interchange spacing along the West Segment. In addition, providing for some design standards in this alternative may not be viable due to potential environmental and right of way impacts.

8. RIGHT OF WAY

A. Right of Way

Right of Way Estimates have been prepared for each build alternative and are included in the estimates shown in Attachment C. Alternative A would not include fee parcel takes if design exceptions are warranted, and assumes only impacts for proposed temporary construction easements (TCEs) and the utility impacts which are discussed below. The parcel requirements for Alternative B would include various agricultural, residential and commercial/industrial properties as well as the utility impacts discussed below. A Conceptual Cost Estimate Request - Right of Way Component scoping tool sheet has been prepared and is shown in Attachment H.

B. Railroad

There is an existing Union Pacific Railroad (UPRR) crossing within the I-80 project limits. The crossing is located in the West Segment at PM 11.92 with the structure designation of "Cordelia UP" bridge number 23-25. Build alternatives A and B do not propose to impact the existing UPRR structure and therefore it is assumed that a railroad agreement will not be required.

C. Utilities

A preliminary investigation of the existing utilities within the project study area is summarized in Attachment F of this report. The table primarily shows existing transverse utilities within the State right of way that may be impacted by the build alternatives.

It is anticipated that Build Alternative A will have no impacts requiring relocation of non-Caltrans utilities along the corridor. During the PA&ED phase of the project the design team will confirm any impacts with the utility agency owners through the Caltrans utility relocation process.

Build Alternative B assumes that all existing utilities within the project area will be relocated, realigned, and/or extended as necessary to accommodate the project construction and operation. Utilities that will be affected include water, sanitary sewer, electrical, gas, cable/fiber, and telephone lines. These facilities include both overhead and underground lines and conduits.

Impacts associated with the various utility relocations will be addressed in the PA&ED phase pursuant to California Public Utilities Commission (PUC) General Order (GO)-131 D filing requirements. The precise field location of high-risk utilities will be identified during the final design PS&E phase in accordance with the Caltrans Procedures on High Risk Utilities. Any modification or new longitudinal encroachment exceptions will be pursued in the PA&ED phase of the project development.

9. STAKEHOLDER INVOLVEMENT

The STA and its member agencies are supportive of the project. There is no known opposition to the project at this time.

10. ENVIRONMENTAL DETERMINATION AND DOCUMENTATION

The appropriate level of environmental document is expected to be an EIR/EIS if Alternative B as currently configured is carried forward as an action alternative. This is because it is likely that Build Alternative B would result in significant and unavoidable adverse effects to Peña Adobe. The recommended historic architecture evaluation will be necessary to determine the precise extent of any such impacts to Peña Adobe and whether such impacts can be successfully mitigated. Alternative B could take enough land in the surrounding park such that the integrity of the historic resource is compromised to such a degree to adversely affect its eligibility for inclusion on the National Register. It should also be noted that Peña Adobe will also require close analysis for impacts under Section 4(f), as it is likely to qualify as a Section 4(f) property.

The appropriate level of environmental document for Build Alternative A is expected to be an IS/EA. This document level would be supportable based on the environmental constraints present in the project study area and the low potential for the project (including all design options) to cause significant environmental impacts.

Caltrans would act as the lead agency in the preparation of this joint NEPA/CEQA environmental document. Caltrans will serve as the NEPA lead agency under its assumption of responsibility pursuant to 23 U.S. Code 327. It is expected that the environmental technical reports and environmental document (IS/EA or EIR/EIS) would take approximately 18 to 42 months to prepare and process for final certification/approval, including time for substantive review by the environmental division staff within Caltrans. It is anticipated a number of environmental technical studies and reports will be required for this project as identified in the Preliminary Environmental Assessment Report (PEAR) included as Attachment D.

11. FUNDING

Preliminary cost estimates are provided in Attachment C. A summary of cost ranges for the project is provided below.

	<u>Range of Total Cost (x 1,000)</u>	
Roadway Items	\$ 140,000	\$ 845,000
Structure Items	<u>\$ 6,000</u>	<u>\$ 145,000</u>
Subtotal Construction	\$ 146,000	\$ 990,000
Right of Way	\$ 4,500	\$ 75,000
Capital Outlay Support	<u>\$ 44,500</u>	<u>\$ 333,000</u>
Total Project Cost	\$ 195,000	\$ 1,398,000

All costs escalated to 2015 except for support costs which are estimated as a percentage of the capital costs.

A. Capital Cost

Capital Outlay Estimate (in 2015 dollars)

	Range for Total Cost	STIP Funds	Fund Source "A"
Build Alternatives	\$195 to 1,400 million	\$0	MTC Enterprise Funds

The capital costs should not be used to program or commit capital funds. The Project Report will serve as the appropriate document from which the remaining support and capital components of the project will be programmed.

B. Capital Support Estimate

The capital support needed to complete the PA&ED phase is estimated at \$12 million and will be funded with Regional Measure 2 funds.

12. SCHEDULE

Project Milestones	Delivery Date (Month, Year)
Begin Environmental	January 2012
Circulate DED	September 2013
PA&ED	March to June 2014
Construction	2015

13. FHWA COORDINATION

No federal-aid funding is anticipated for the project. FHWA coordination will be required in the PA&ED phase as the proposed project is on the Interstate.

14. DISTRICT CONTACTS

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	Beth Perrill (510) 286-5383
Caltrans Traffic Operations	David Seriani (510) 286-4653

15. PROJECT REVIEWS

No project reviews with Caltrans District 4 staff have been conducted to date. Project reviews with the appropriate PDT members and Caltrans District 4 staff is anticipated to occur in PA&ED.

16. ATTACHMENTS

- A. Alternative A – Layouts and Typical Cross Sections**
- B. Alternative B – Layouts and Typical Cross Sections**
- C. Preliminary Cost Estimate**
- D. Preliminary Environmental Analysis Report (PEAR)**
- E. PID Cooperative Agreement & Draft Cooperative Agreement for PA&ED**
- F. Existing Utilities Summary Table**
- G. Risk Register**
- H. Right of Way Conceptual Cost Estimate**
- I. Transportation Planning Scoping Checklist**

17. REFERENCES

- MTC's *Transportation 2035 Plan for the San Francisco Bay Area* - April 2009
 - http://www.mtc.ca.gov/planning/2035_plan/
- MTC's *Project Study Report (PSR) to Support the Bay Area Express Lane Backbone Network* - August 2011
 - <http://www.mtc.ca.gov/planning/hov/>
- Caltrans *Traffic Operations Policy Directive (TOPD) for Updated Managed Lane Design* - April 2011
 - <http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm>
- *California Manual on Uniform Traffic Control Devices* - 2010
 - http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca_mutcd2010.htm
- Caltrans *High Occupancy Vehicle Guidelines for Planning, Design, and Operations-2003*
 - http://www.dot.ca.gov/hq/traffops/systemops/hov/hov_sys/guidelines/
- Caltrans *Interregional Transportation Strategic Plan (ITSP)* – June 1998
 - <http://www.dot.ca.gov/hq/tpp/offices/oasp/itsp.html>
- Caltrans *Corridor System Management Plan (CSMP) for the I-80 East Corridor* – October 2010
 - http://www.dot.ca.gov/hq/tpp/corridor-mobility/CSMPs/d4_CSMPs/i80_east/I-80_East_FINAL_CSMP_FULL_DOC.pdf
- MTC's *Bay Area Express Lanes Public Partnership Application For High Occupancy Toll Lanes* – September 2008
 - <http://www.mtc.ca.gov/planning/hov/>
- STA's *Comprehensive Transportation Plan (CTP 2030)* - 2005
 - <http://www.sta.ca.gov/Content/10054/ComprehensivePlans.html>
- STA's *I-80/I-680/I-780 Major Investment & Corridor Study* - July 2004
 - <http://www.sta.ca.gov/Content/10055/CountywidePlansampStudies.html>
- STA's *Solano Highways Operations Study* - February 2010
 - <http://www.sta.ca.gov/Content/10055/CountywidePlansampStudies.html>
- STA's *Continuous Access White Paper* - presented to Caltrans Traffic Operations and MTC in March 2011

ATTACHMENT A

Alternative A

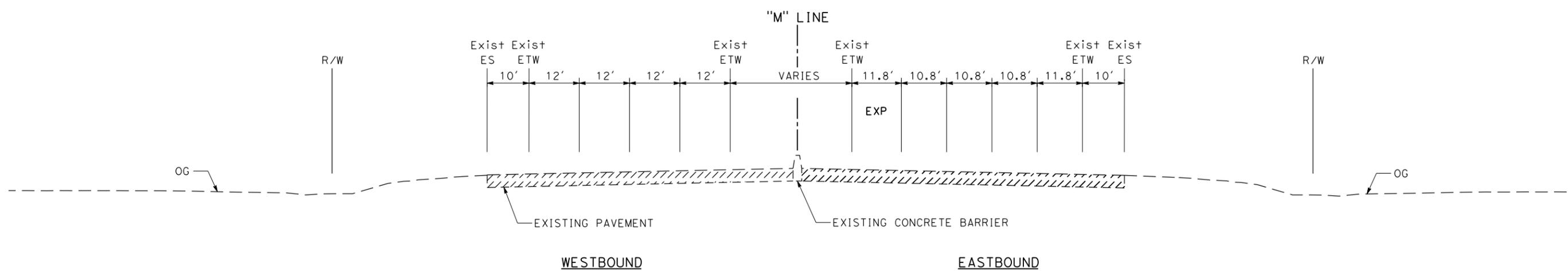
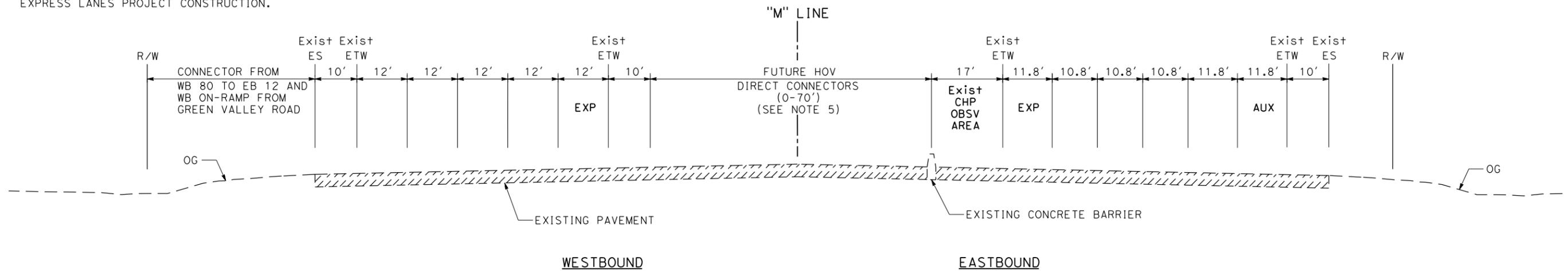
Layouts and Typical Cross Sections

NOTES:

1. ALL EXISTING SHOULDER PAVEMENT TO BE REMOVED AT LOCATIONS OF INSIDE AND OUTSIDE WIDENING.
2. VARIABLE MESSAGE SIGNS WILL REDUCE THE SHOULDER WIDTH SHOWN BY 2 FEET. LOCATIONS ARE TO BE DETERMINED.
3. TOLLING EQUIPMENT POLES WILL REDUCE THE SHOULDER WIDTH SHOWN BY 0.3 FEET. LOCATIONS ARE TO BE DETERMINED.
4. SEE LAYOUT SHEETS FOR LOCATION OF EACH SECTION.
5. 80/680/12 PACKAGE 1 PROJECT (WB 80 REALIGNMENT, GREEN VALLEY ROAD OC RELOCATION AND WB 80/ROUTE 12 CONNECTOR MODIFICATION) AND EB CORDELIA TRUCK SCALE RELOCATION PROJECT ARE ASSUMED TO BE COMPLETED PRIOR TO EXPRESS LANES PROJECT CONSTRUCTION.

ABBREVIATIONS:

- EXP EXPRESS LANE
 CHP CALIFORNIA HIGHWAY PATROL
 OBSV OBSERVATION
 AUX AUXILIARY LANE



LEGEND:

	EXISTING PAVEMENT
	PROPOSED PAVEMENT

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:

HDR ENGINEERING, INC
 2121 N CALIFORNIA Blvd
 SUITE 475
 WALNUT CREEK, CA 94596

PREPARED FOR:

SOLANO TRANSPORTATION AUTHORITY
 ONE HARBOR CENTER, SUITE 130
 SUISUN CITY, CA 94585

NO SCALE

PROJECT NUMBER: **0412000332K**

PROJECT EA: **04-4G080K**

DESIGNED BY: **M. RAMIREZ**

DATE: **02-17-12**

DRAWN BY: **I. KUKANEGO**

DATE: **02-17-12**

CHECKED BY: **B. STEWART**

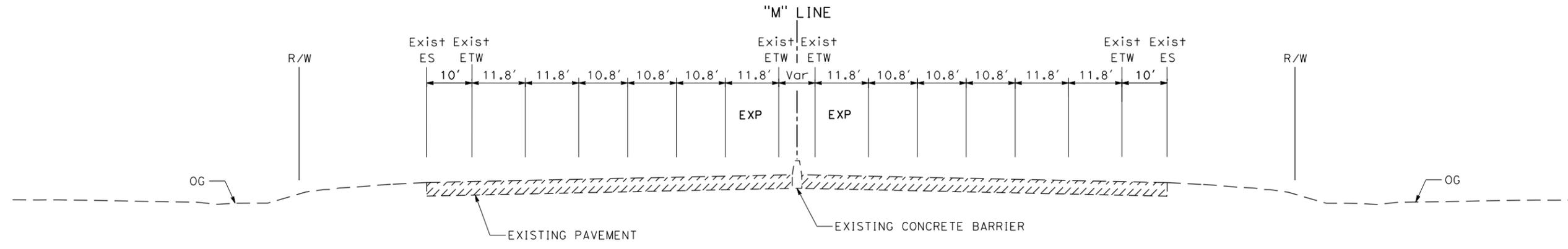
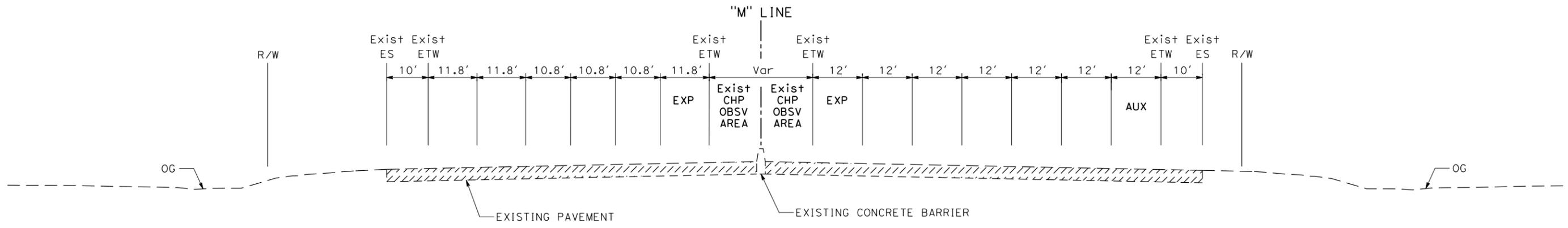
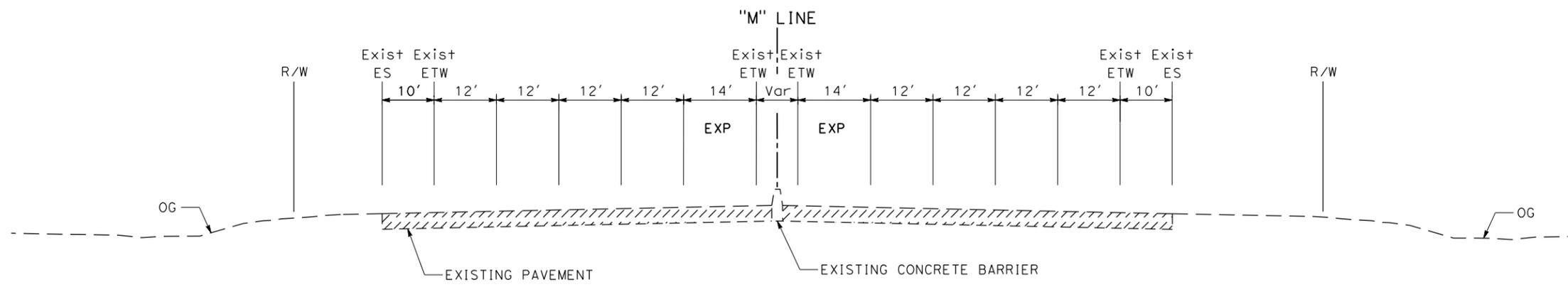
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INTERSTATE 80 EXPRESS LANE PROJECT

ALTERNATIVE A

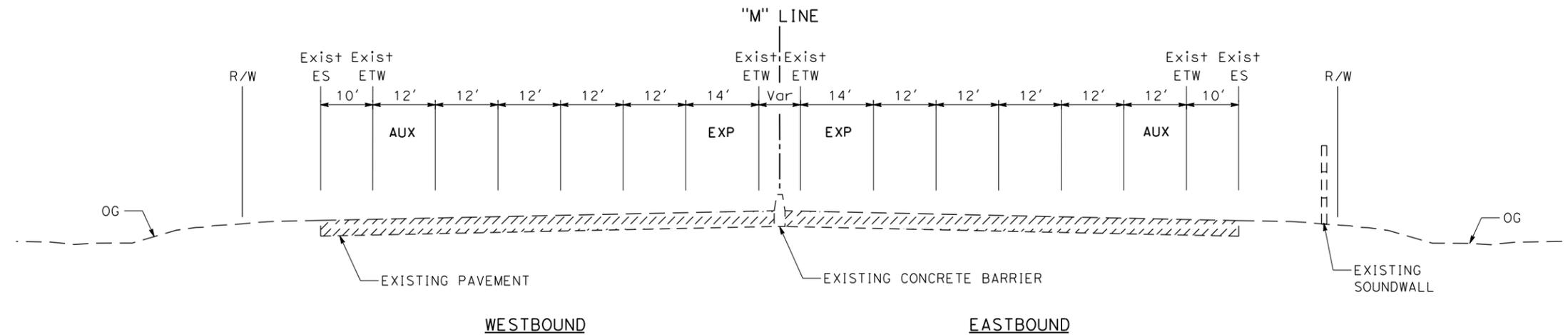
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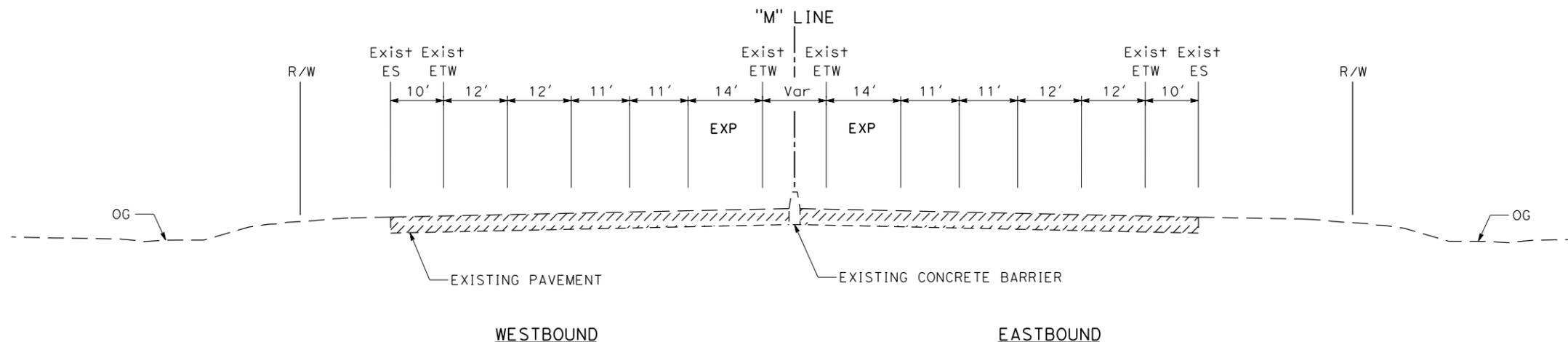


**FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET AX-1**

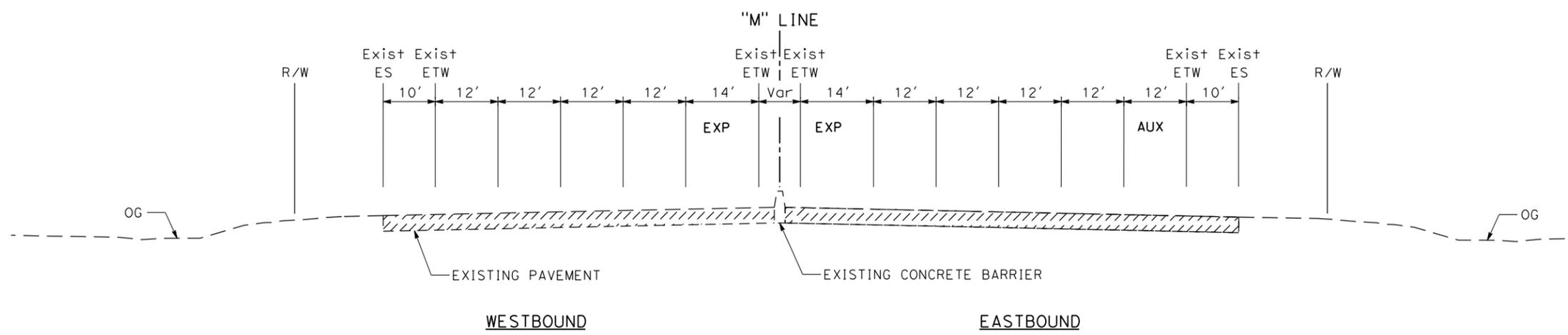
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	COUNTY AND POST MILE: SoI 11.2/29.3					DRAWN BY: I. KUKANEGO	DATE: 02-17-12		
						CHECKED BY: B. STEWART	DATE: 02-17-12		



SECTION H



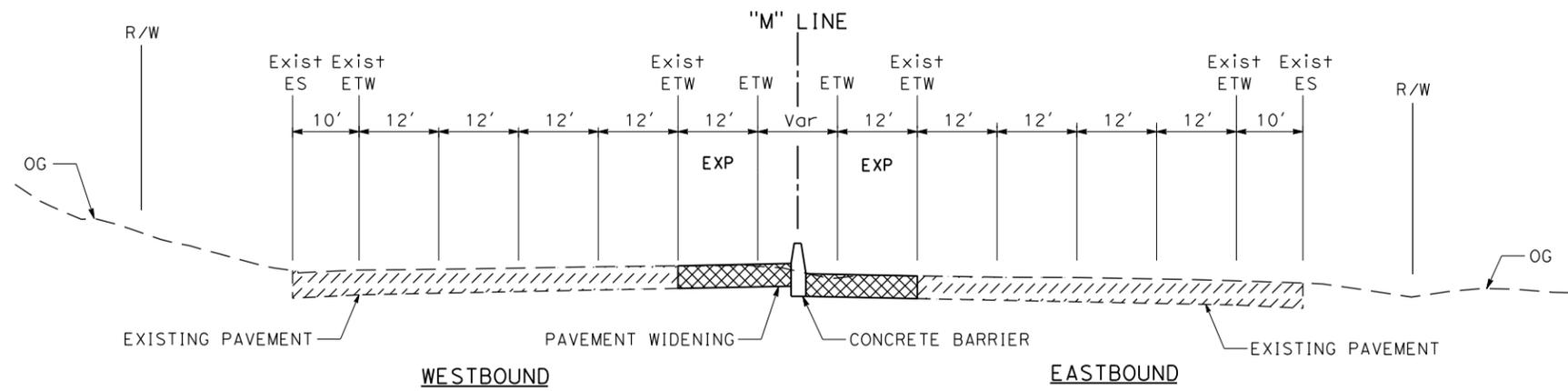
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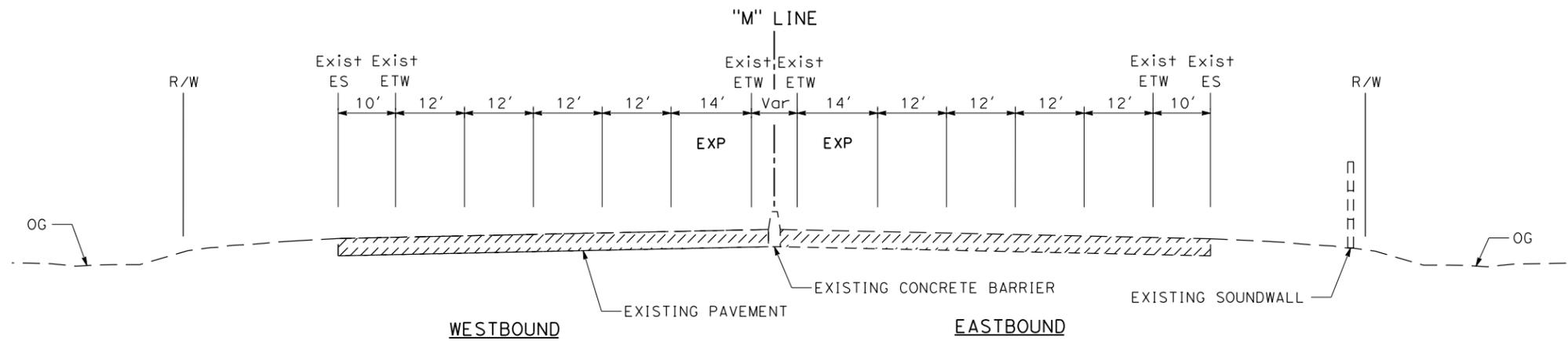
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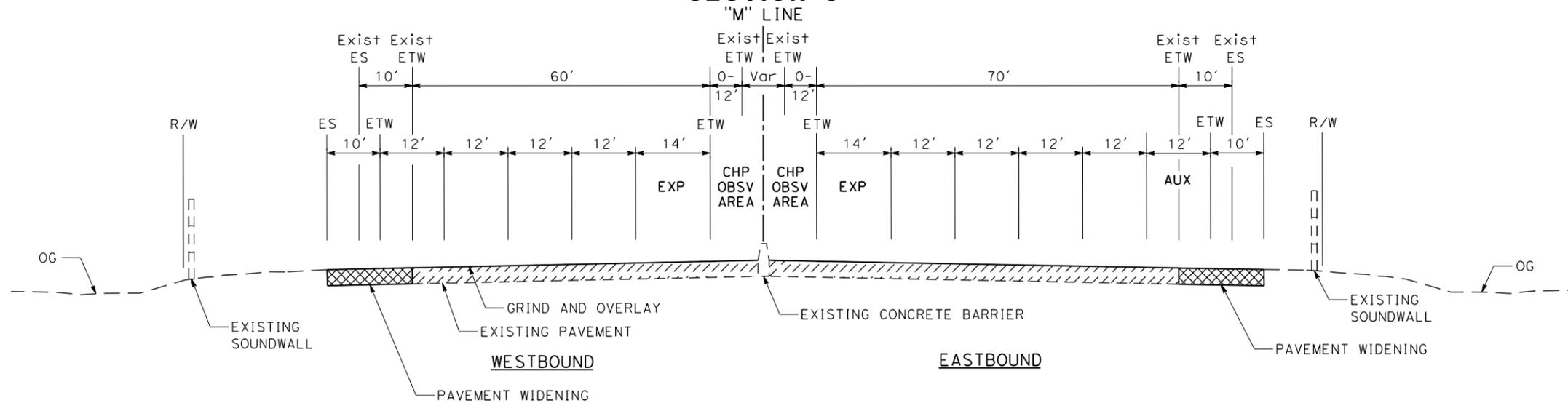
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COUNTY AND POST MILE: Sol 11.2/29.3	PROJECT NUMBER: 0412000332K		PROJECT EA: 04-4G080K		I. KUKANEGO		
NO SCALE		CHECKED BY: B. STEWART		DATE: 02-17-12			



SECTION K



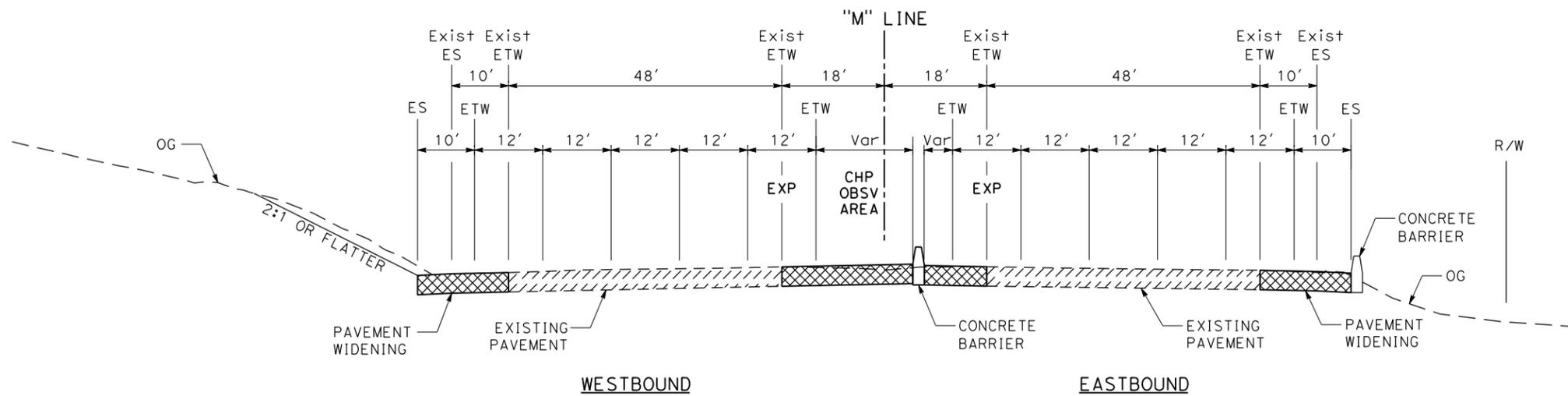
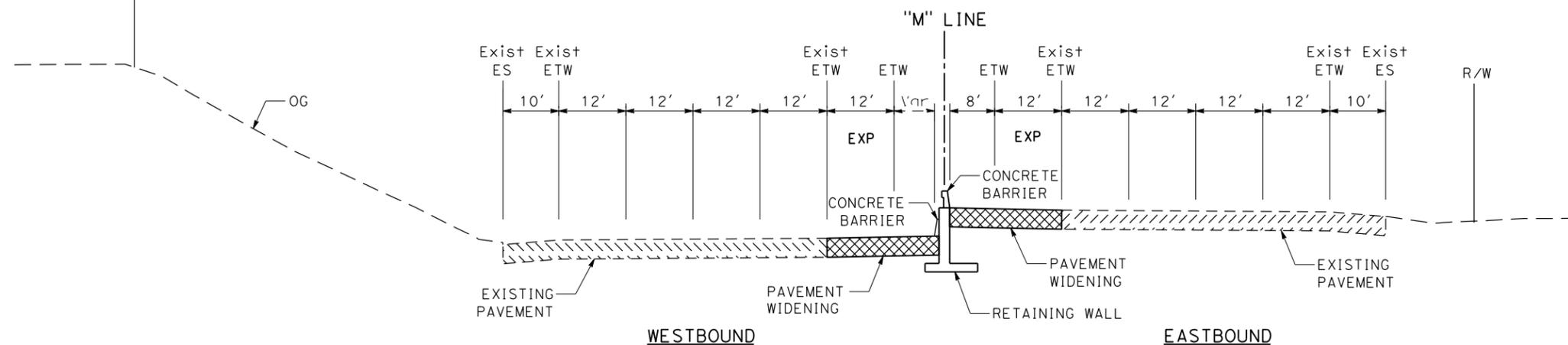
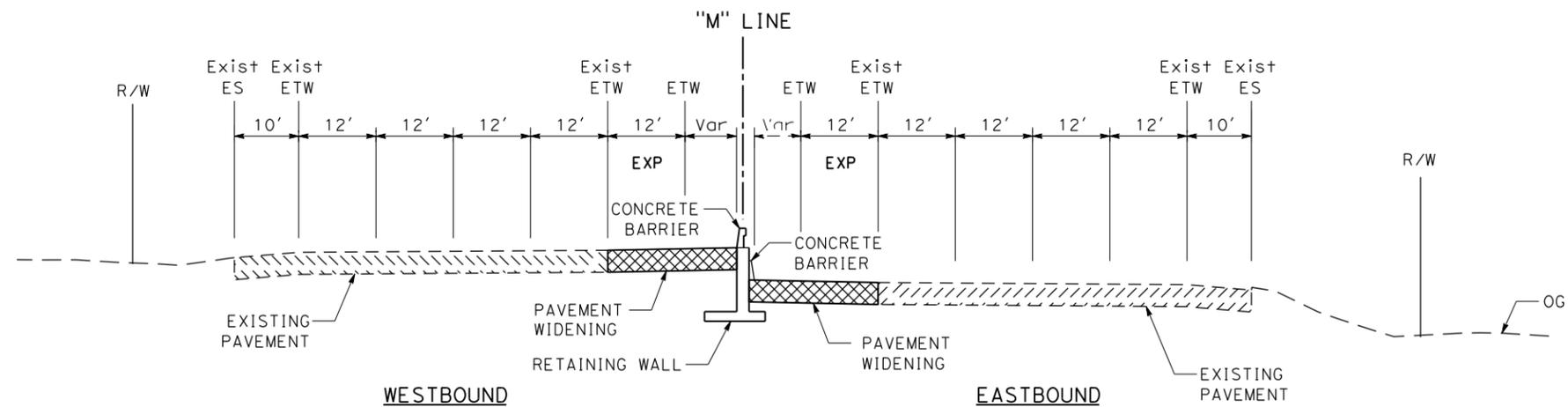
SECTION J



SECTION I

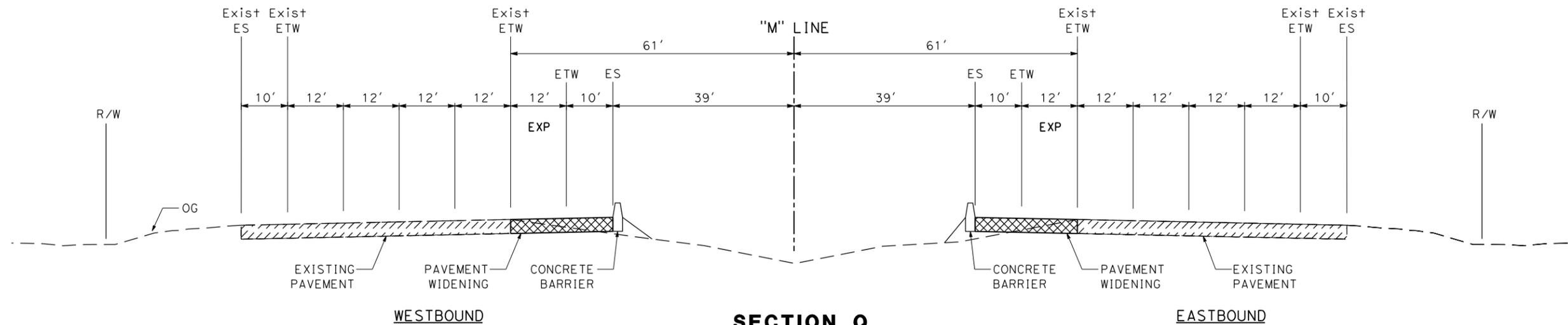
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET AX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	PROJECT NUMBER: 0412000332K	PROJECT EA: 04-4G080K	DESIGNED BY: M. RAMIREZ	DATE: 02-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	AX-4
	COUNTY AND POST MILE: Sol 11.2/29.3					DRAWN BY: I. KUKANEGO	DATE: 02-17-12		
		NO SCALE		CHECKED BY: B. STEWART	DATE: 02-17-12	ALTERNATIVE A			

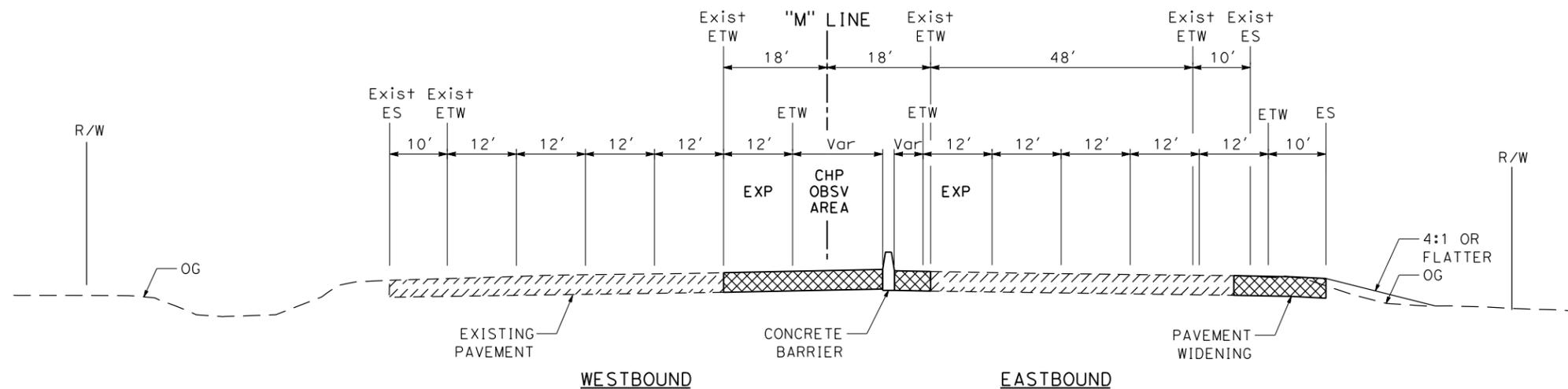


FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET AX-1

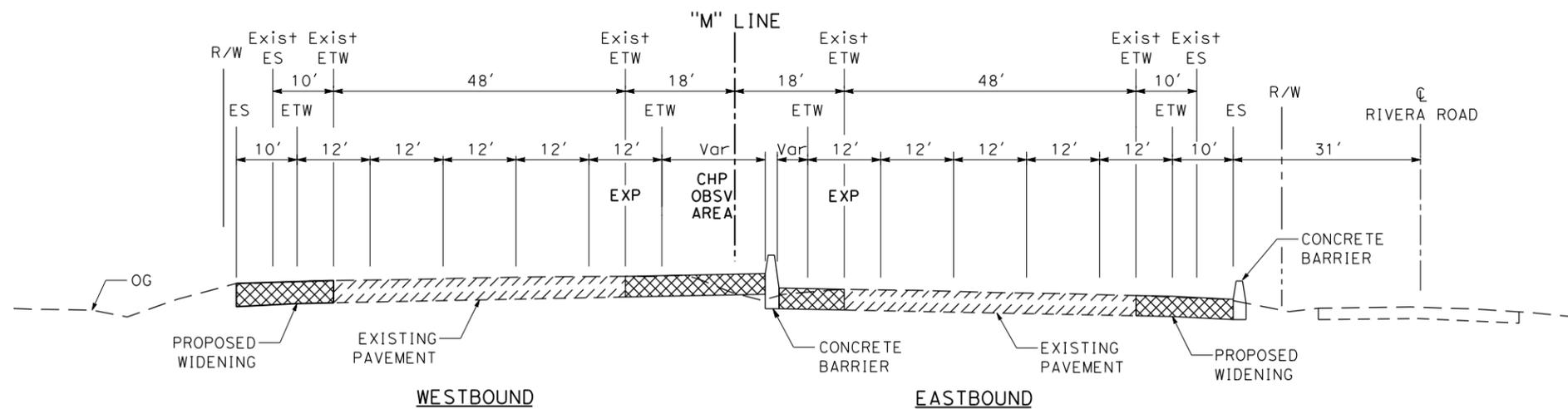
DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	PROJECT NUMBER: 0412000332K	PROJECT EA: 04-4G080K	DESIGNED BY: M. RAMIREZ	DATE: 02-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	AX-5
	COUNTY AND POST MILE: SoI 11.2/29.3					DRAWN BY: I. KUKANEGO	DATE: 02-17-12		
						CHECKED BY: B. STEWART	DATE: 02-17-12		



SECTION Q



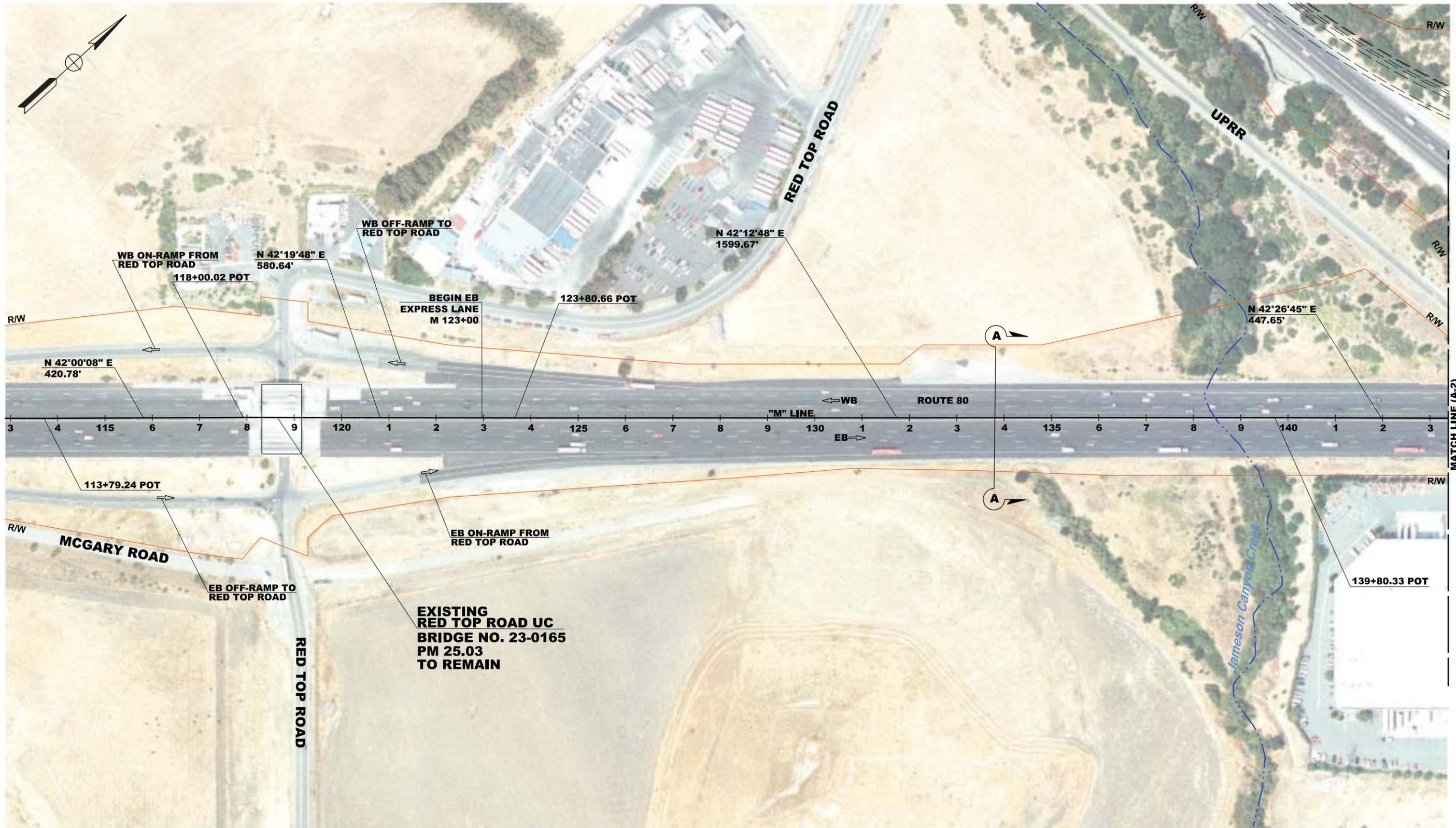
SECTION P



SECTION O

FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET AX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 02-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	AX-6
	COUNTY AND POST MILE: Sol 11.2/29.3			DRAWN BY: I. KUKANEGO	DATE: 02-17-12		
		PROJECT NUMBER: 0412000332K	PROJECT EA: 04-4G080K	CHECKED BY: B. STEWART	DATE: 02-17-12		



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: --- POTENTIAL IMPACT --- EXISTING R/W	DISTRICT: 04	ROUTE: 80
	COUNTY AND POST MILE: Sol 11.2/29.3	

PREPARED BY: MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
--

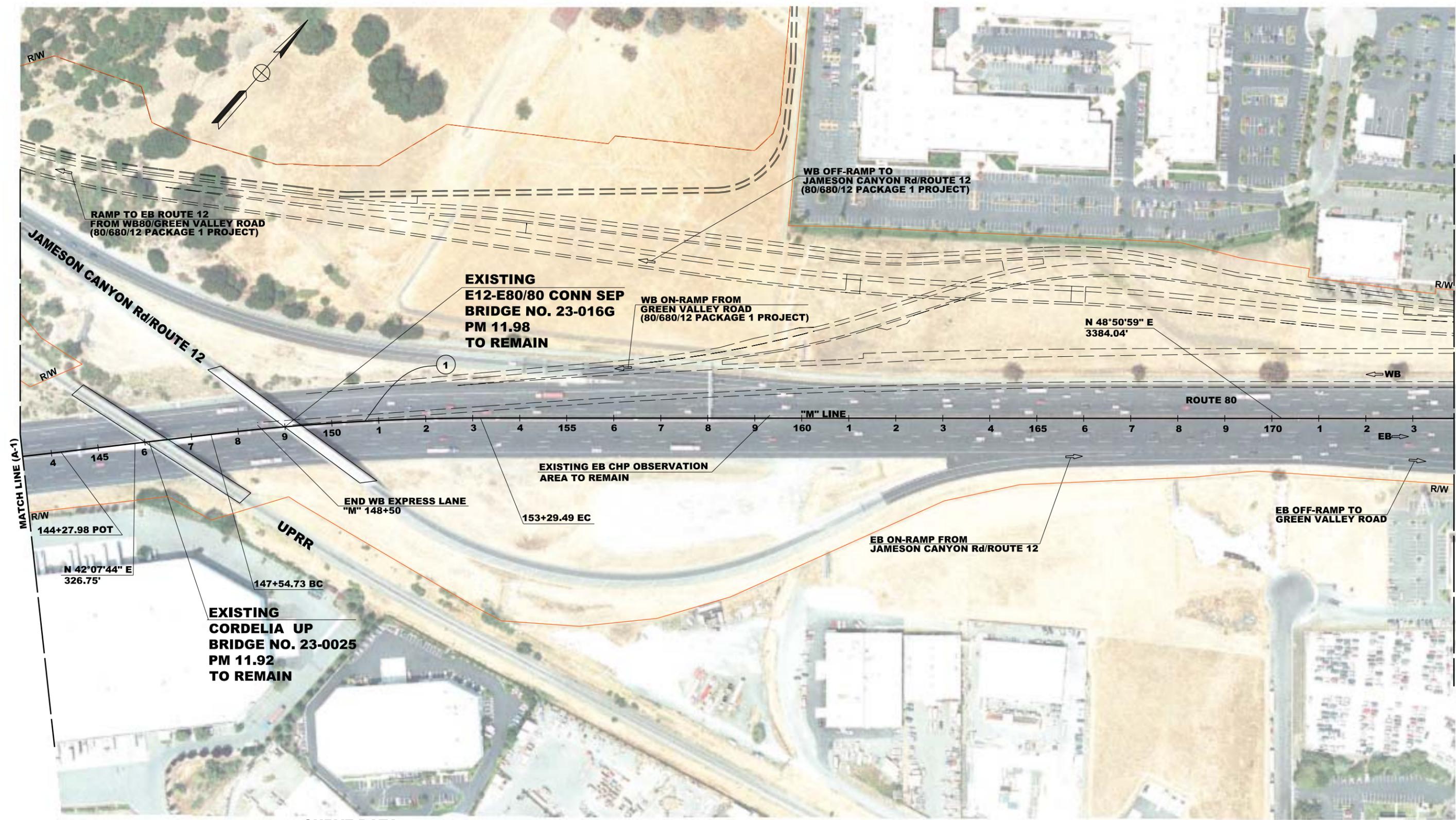
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: R. LOPEZ	DATE: 2-17-12
DRAWN BY: R. LOPEZ	DATE: 2-17-12
CHECKED BY: M. SCHRAM	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A - 1



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
1	4900.00'	06°43'14"	287.71'	574.76'	1834289.71	6522095.60

FOR NOTES AND ABBREVIATIONS, SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT:	ROUTE:	PREPARED BY:
04	80	MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE:		PREPARED FOR:
Sol 11.2/29.3		SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

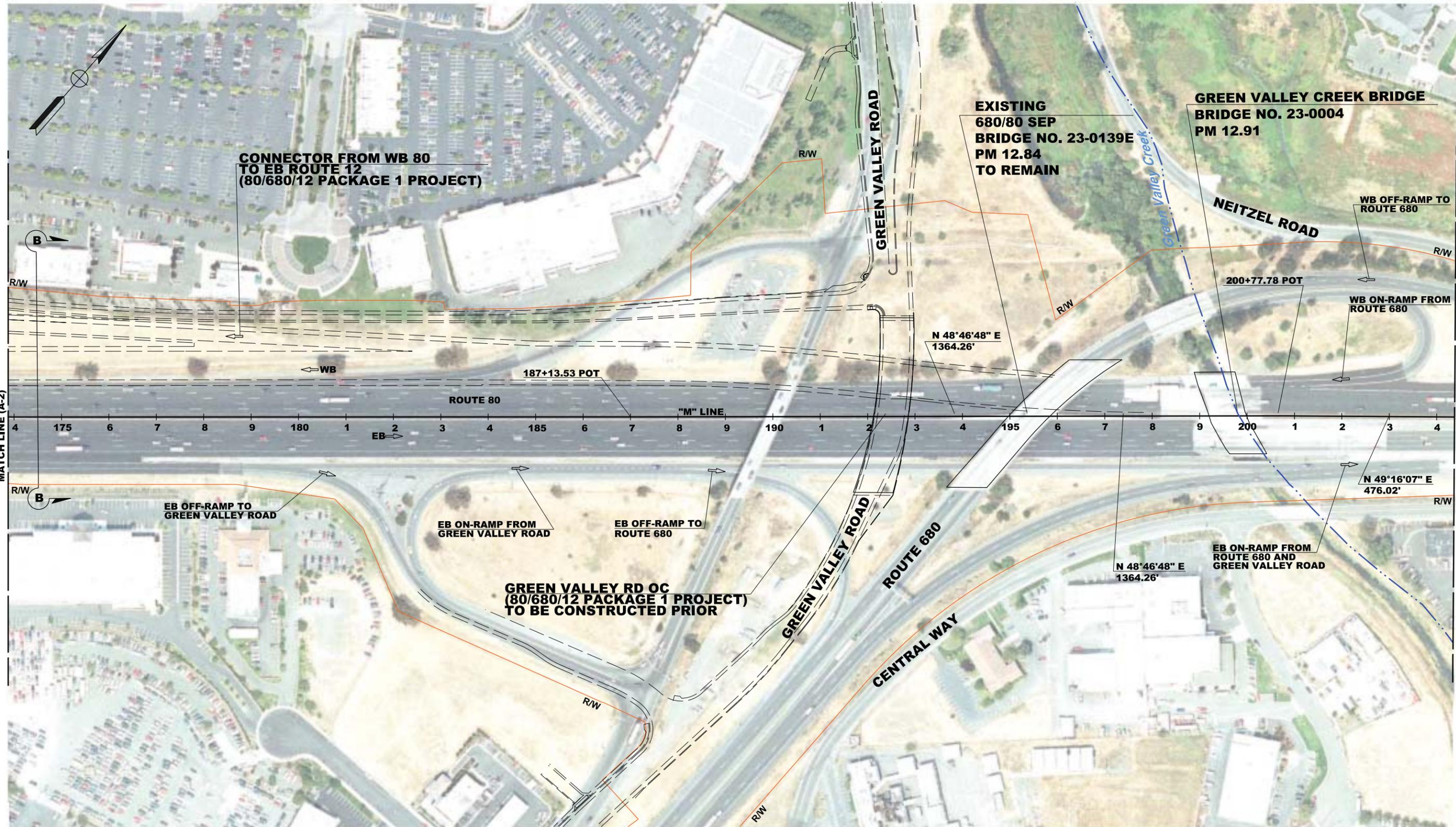
DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

PROJECT No:	PROJECT EA:
0412000332K	04-4G080K

SCALE:
200 100 0 100 200

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE A	

A - 2



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

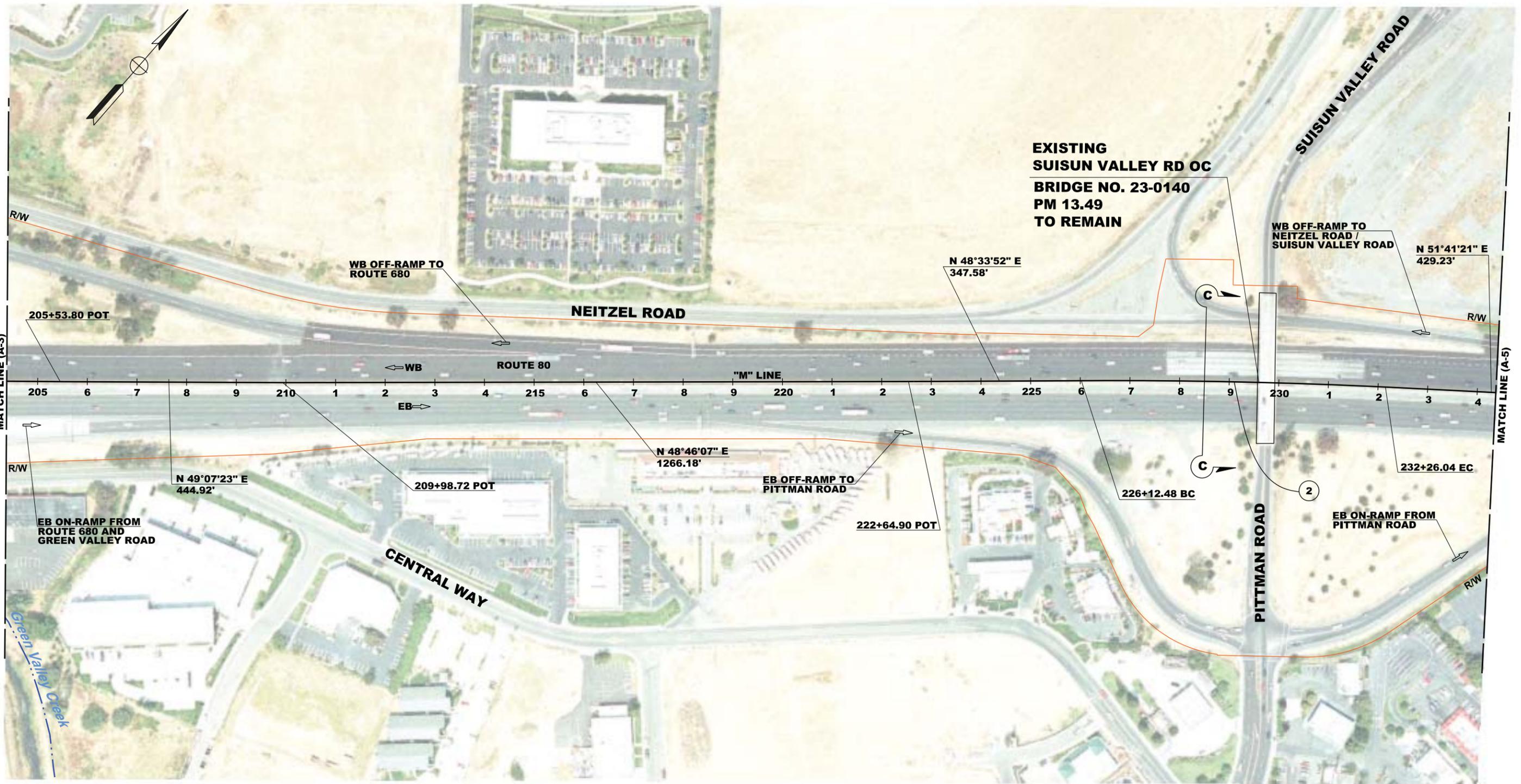
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT E#:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT ALTERNATIVE A
--

A - 3



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
2	11250.00'	03°07'29"	306.86'	613.56'	1834337.36	6531800.45

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT: 04	ROUTE: 80	PREPARED BY: MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE: Sol 11.2/29.3		

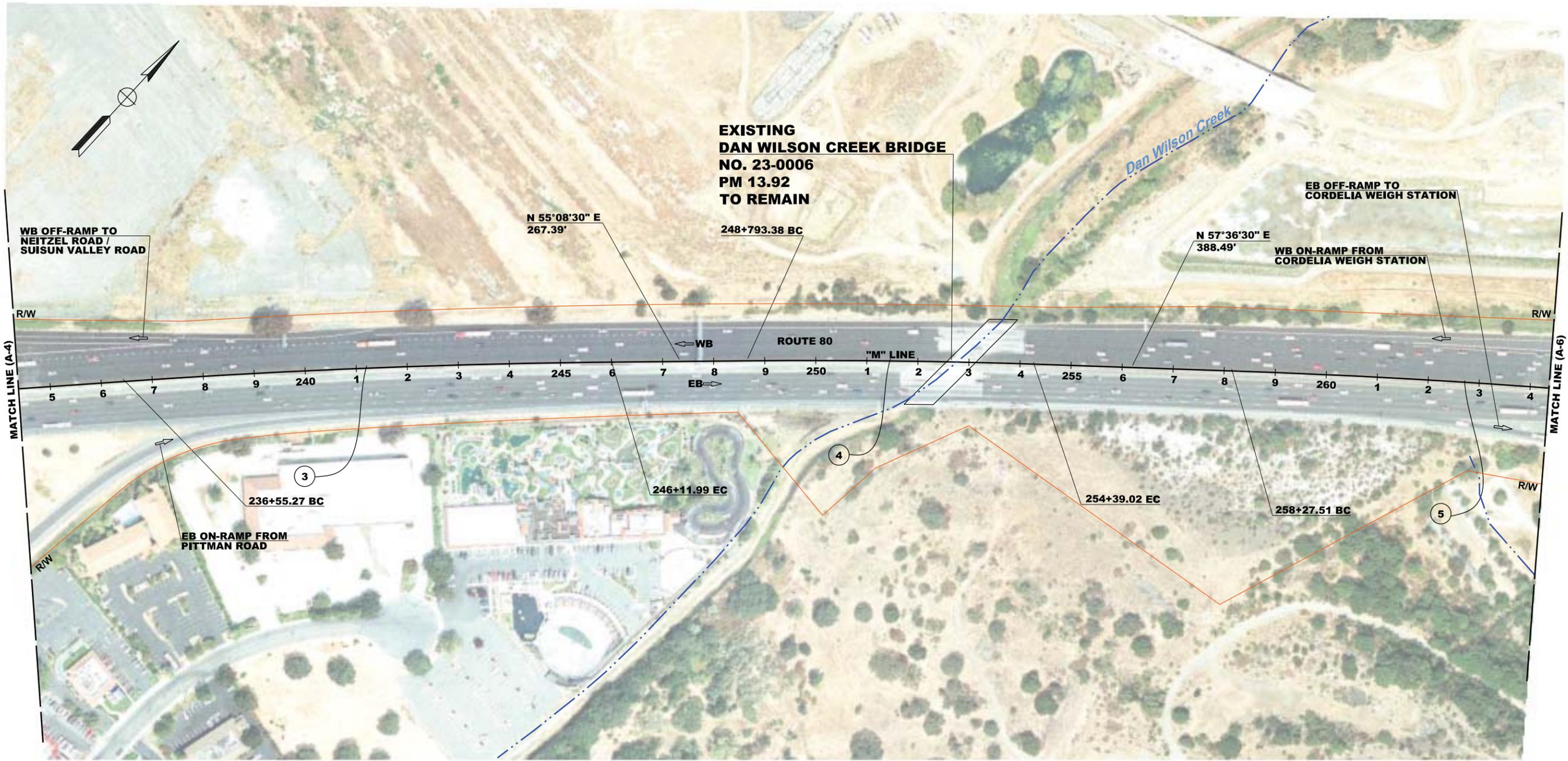
PREPARED FOR:
**SOLANO TRANSPORTATION AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585**

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: R. LOPEZ	DATE: 2-17-12
DRAWN BY: R. LOPEZ	DATE: 2-17-12
CHECKED BY: M. SCHRAM	DATE: 2-17-12

**INTERSTATE 80
EXPRESS LANE PROJECT**

ALTERNATIVE A



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
3	15930.02'	03°27'46"	478.51'	956.72'	1831009.69	6534976.52
4	13000.00'	02°28'00"	279.86'	559.64'	1833486.37	6533580.78
5	15000.00'	03°29'19"	456.78'	913.29'	1827916.09	6537917.83

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:
 POTENTIAL IMPACT
 EXISTING R/W

DISTRICT: 04 ROUTE: 80
 COUNTY AND POST MILE: Sol 11.2/29.3
 PREPARED BY: MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

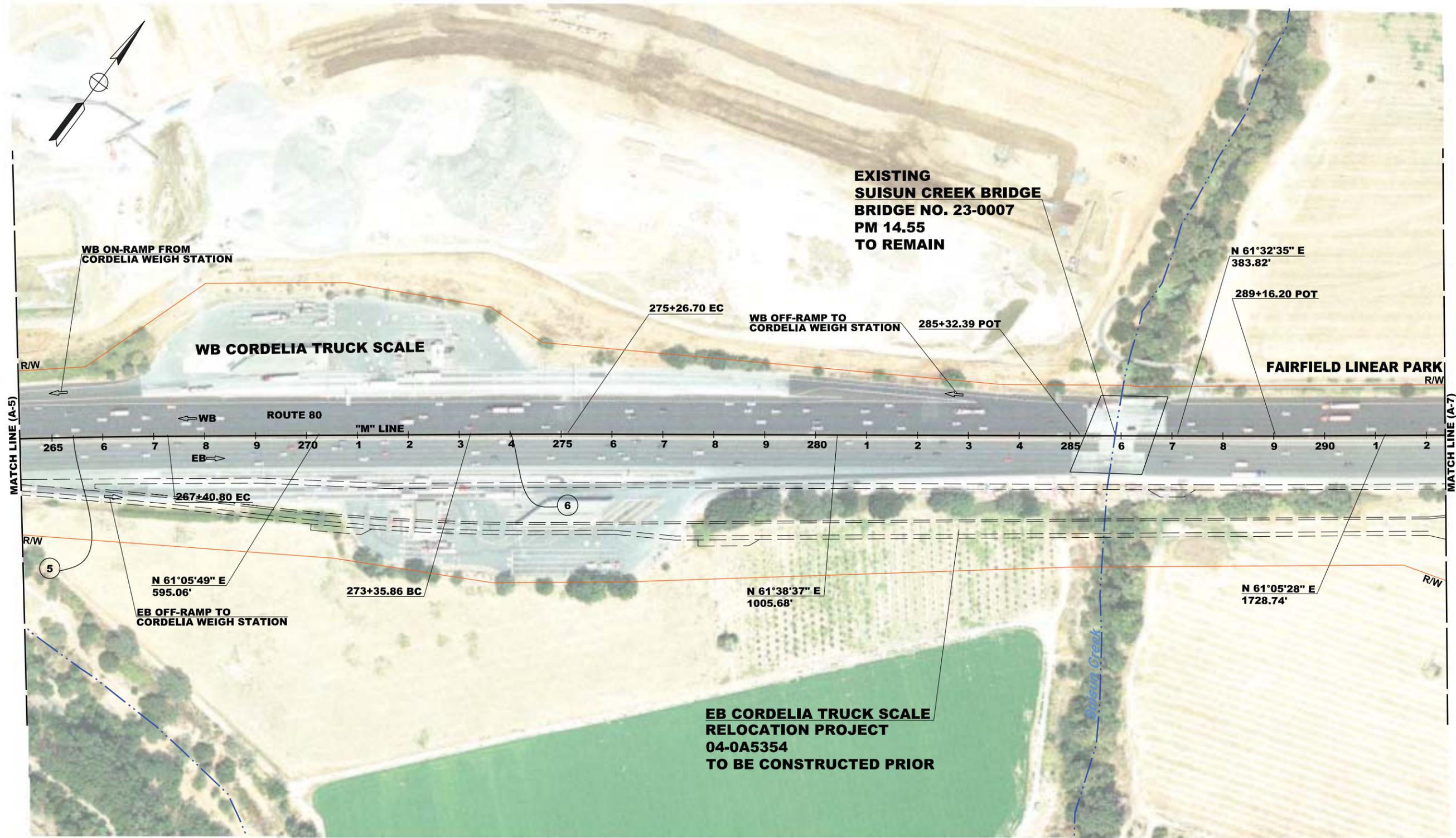
200 100 0 100 200

 PROJECT No: 0412000332K PROJECT E#: 04-4G080K

DESIGNED BY: R. LOPEZ DATE: 2-17-12
 DRAWN BY: R. LOPEZ DATE: 2-17-12
 CHECKED BY: M. SCHRAM DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
 ALTERNATIVE A

A - 5



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
5	15000.00'	03°29'19"	456.78'	913.29'	1827916.09	6537917.83
6	20000.00'	00°32'48"	95.42'	190.84'	1827916.09	6537917.83

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

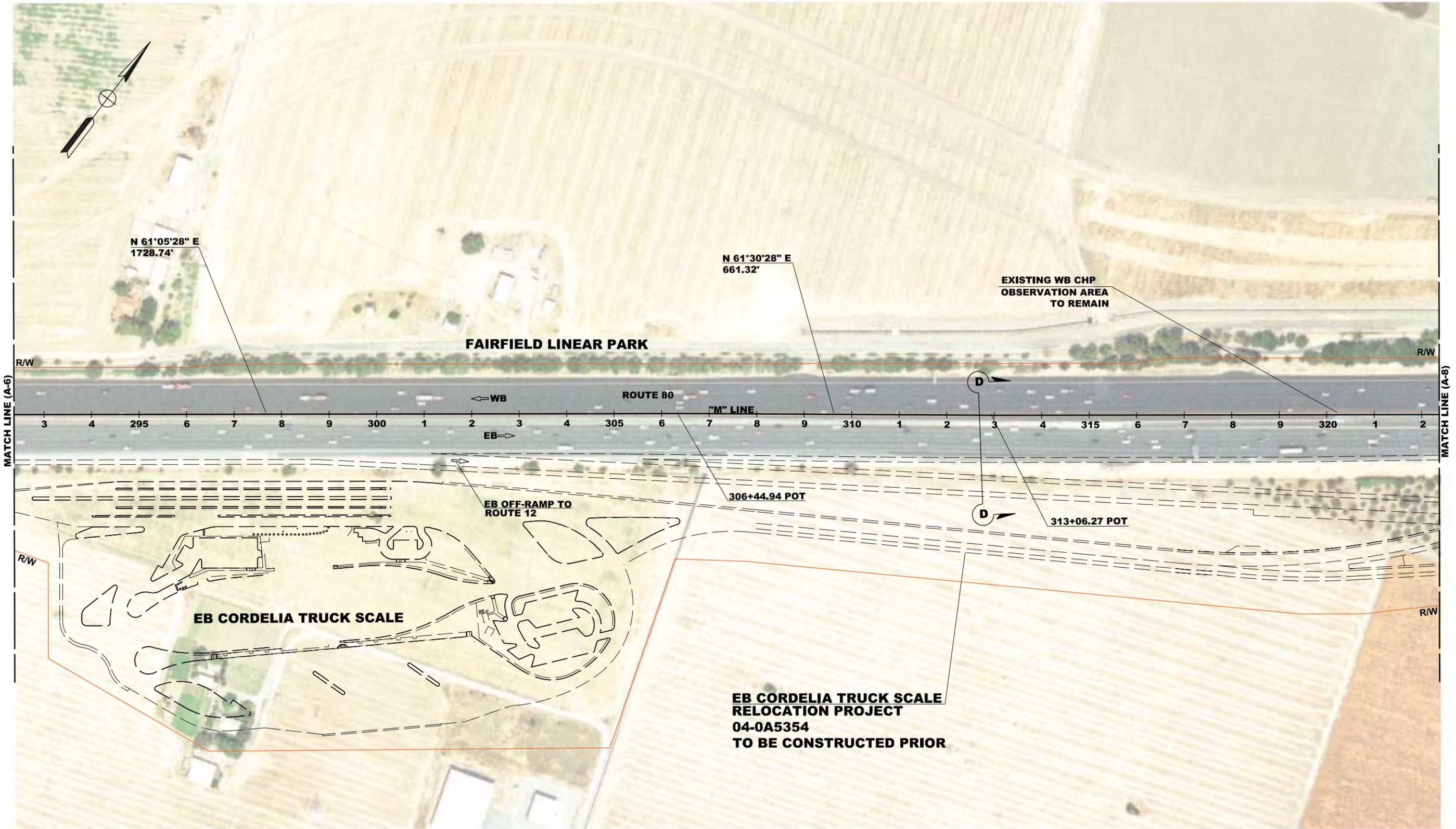
DISTRICT: 04 ROUTE: 80
 COUNTY AND POST MILE: Sol 11.2/29.3
 PREPARED BY: MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

200 100 0 100 200
 PROJECT No: 0412000332K PROJECT E&I: 04-4G080K

DESIGNED BY: R. LOPEZ DATE: 2-17-12
 DRAWN BY: R. LOPEZ DATE: 2-17-12
 CHECKED BY: M. SCHRAM DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
 ALTERNATIVE A



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

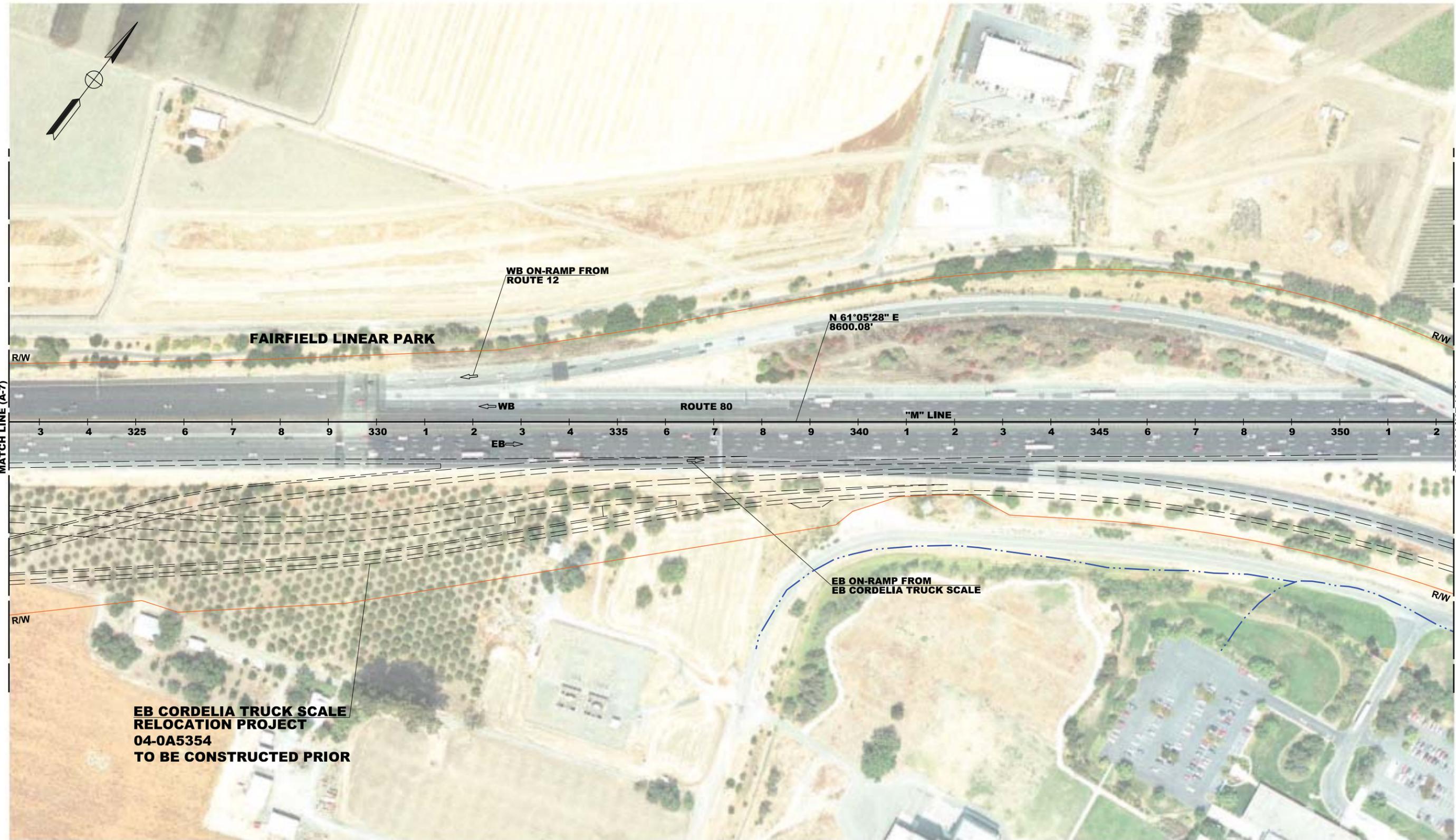
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT E&I:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A - 7



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:
POTENTIAL IMPACT
EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

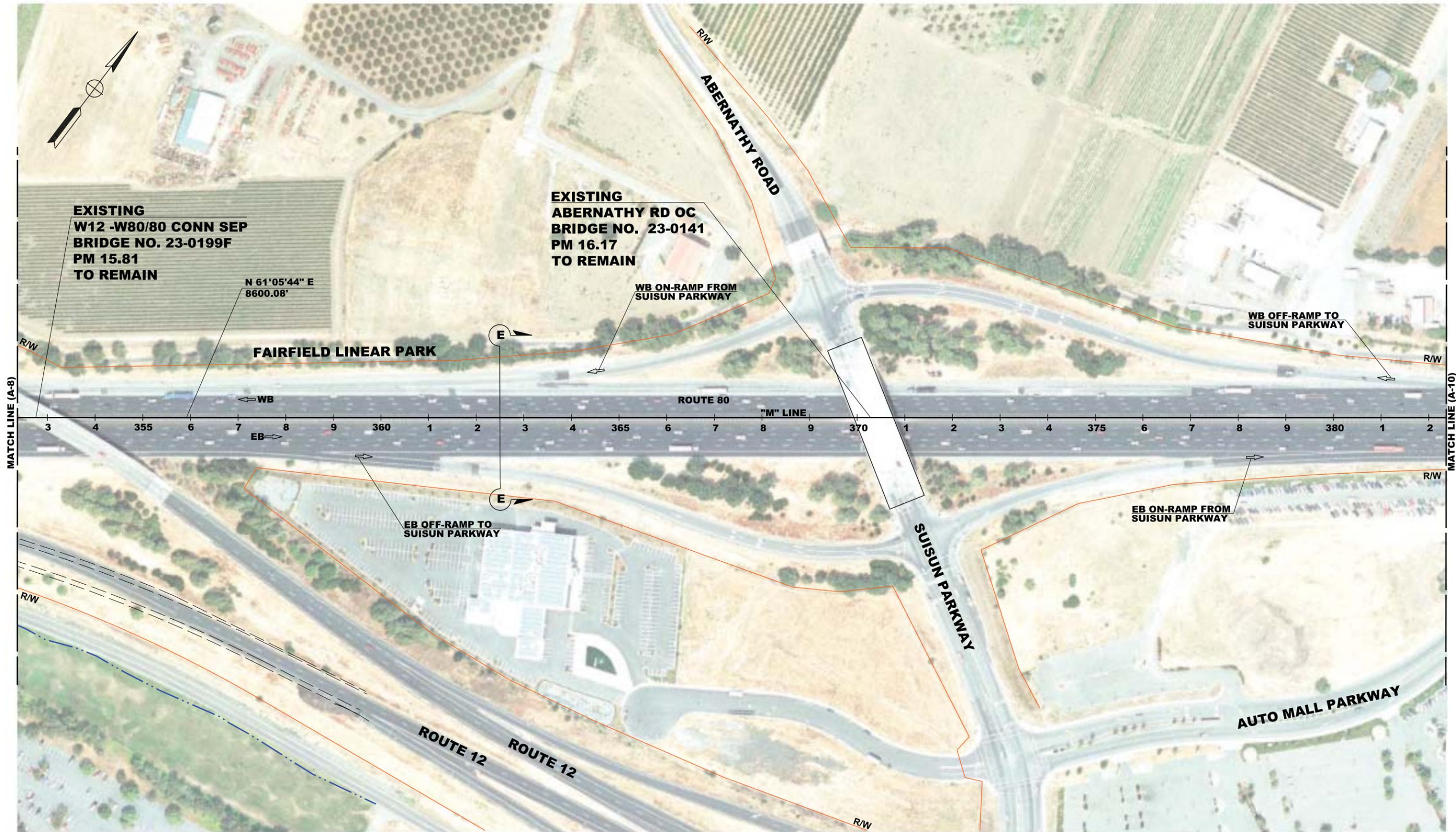
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A - 8



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

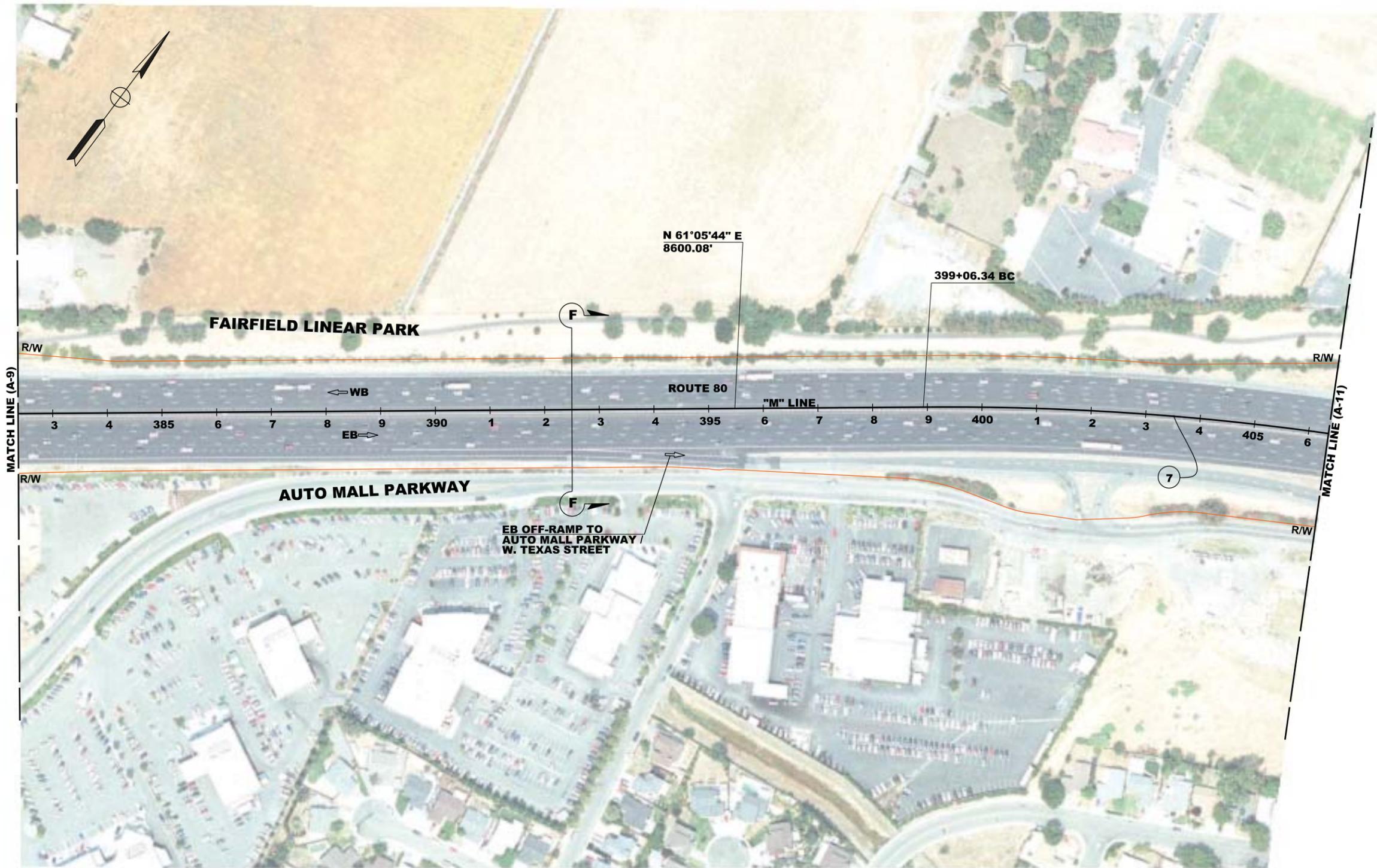
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT E#:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A - 9



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
7	5000.00'	10°30'00"	459.44'	916.30'	1847107.73	6541681.20

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04
ROUTE: 80
COUNTY AND POST MILE:
Sol 11.2/29.3

PREPARED BY:
MARK THOMAS & COMPANY, INC.
1960 ZANKER ROAD
SAN JOSE, CA 95112

PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT No: 0412000332K

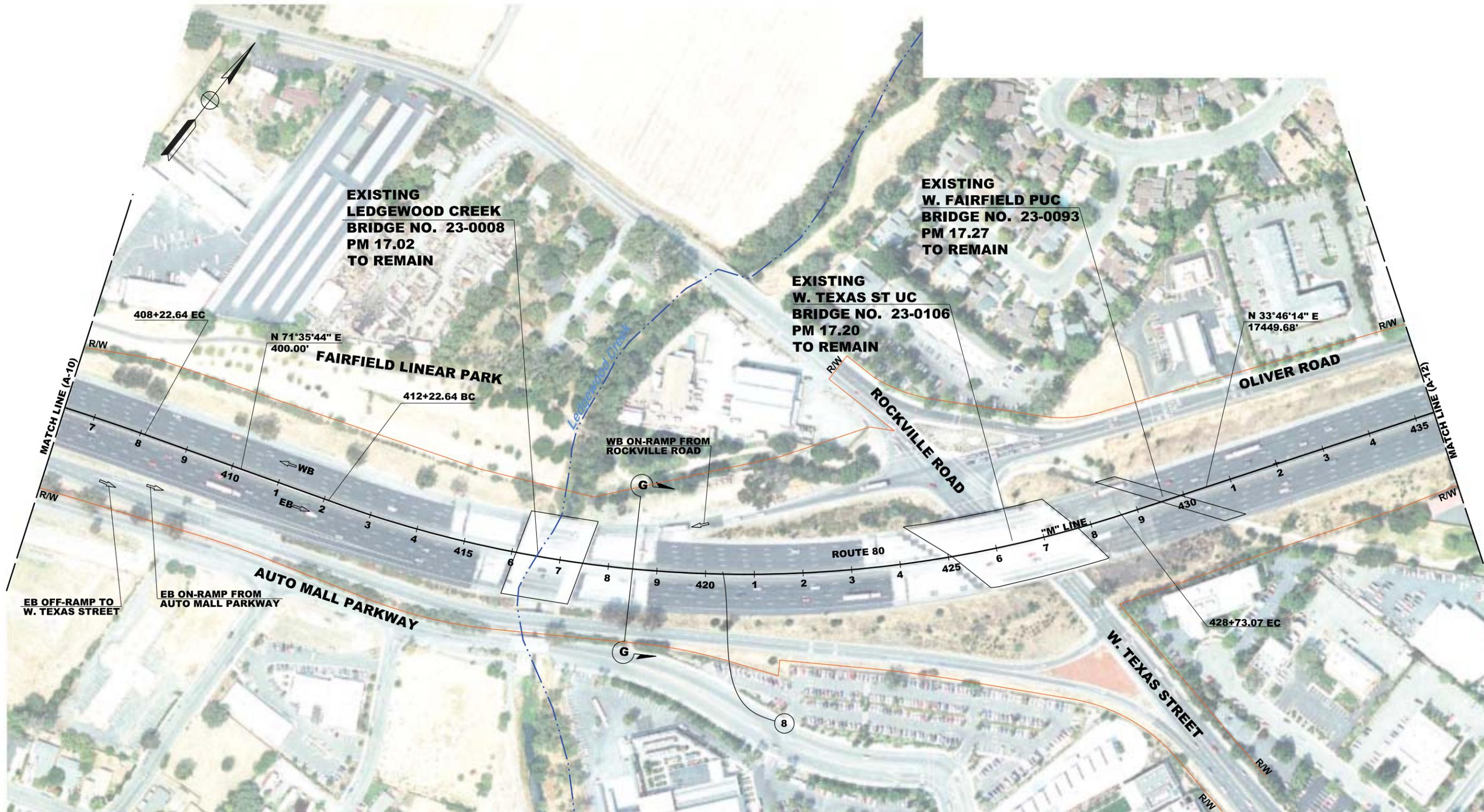
PROJECT EA: 04-4G080K

DESIGNED BY: R. LOPEZ
DATE: 2-17-12
DRAWN BY: R. LOPEZ
DATE: 2-17-12
CHECKED BY: M. SCHRAM
DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT

ALTERNATIVE A

A-10



CURVE DATA

No. (X)	R	△	T	L	NORTHING	EASTING
8	2500.00'	37°49'30"	856.55'	1650.43'	1854350.40	6539692.83

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04
ROUTE: 80

COUNTY AND POST MILE:
Sol 11.2/29.3

PREPARED BY:

MARK THOMAS &
COMPANY, INC.
1960 ZANKER ROAD
SAN JOSE, CA 95112

PREPARED FOR:

SOLANO TRANSPORTATION
AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT No: 0412000332K

PROJECT E#: 04-4G080K

DESIGNED BY:

R. LOPEZ

CHECKED BY:
M. SCHRAM

DATE:

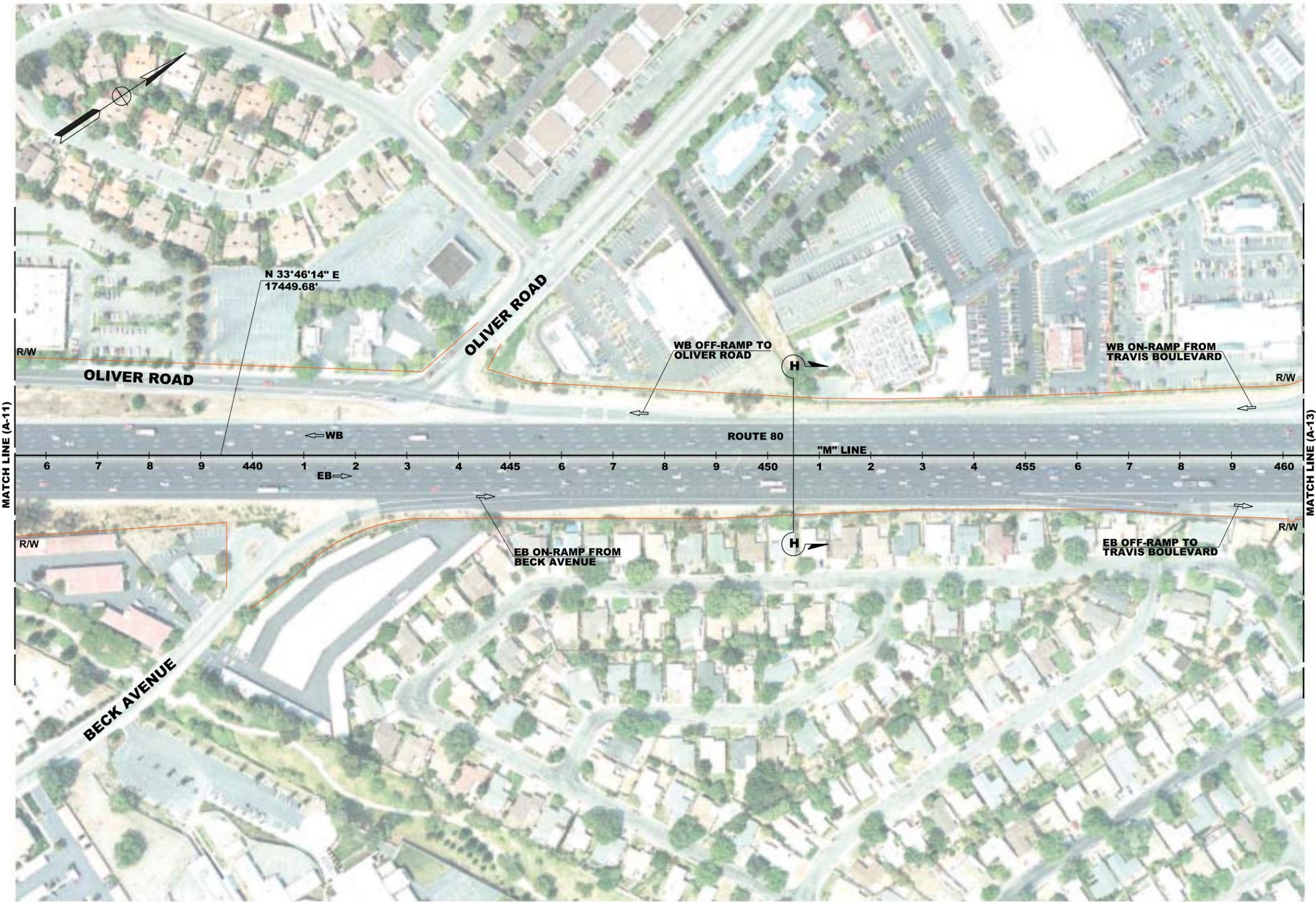
2-17-12

DATE:
2-17-12

**INTERSTATE 80
EXPRESS LANE PROJECT**

ALTERNATIVE A

A-11



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:
POTENTIAL IMPACT
EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

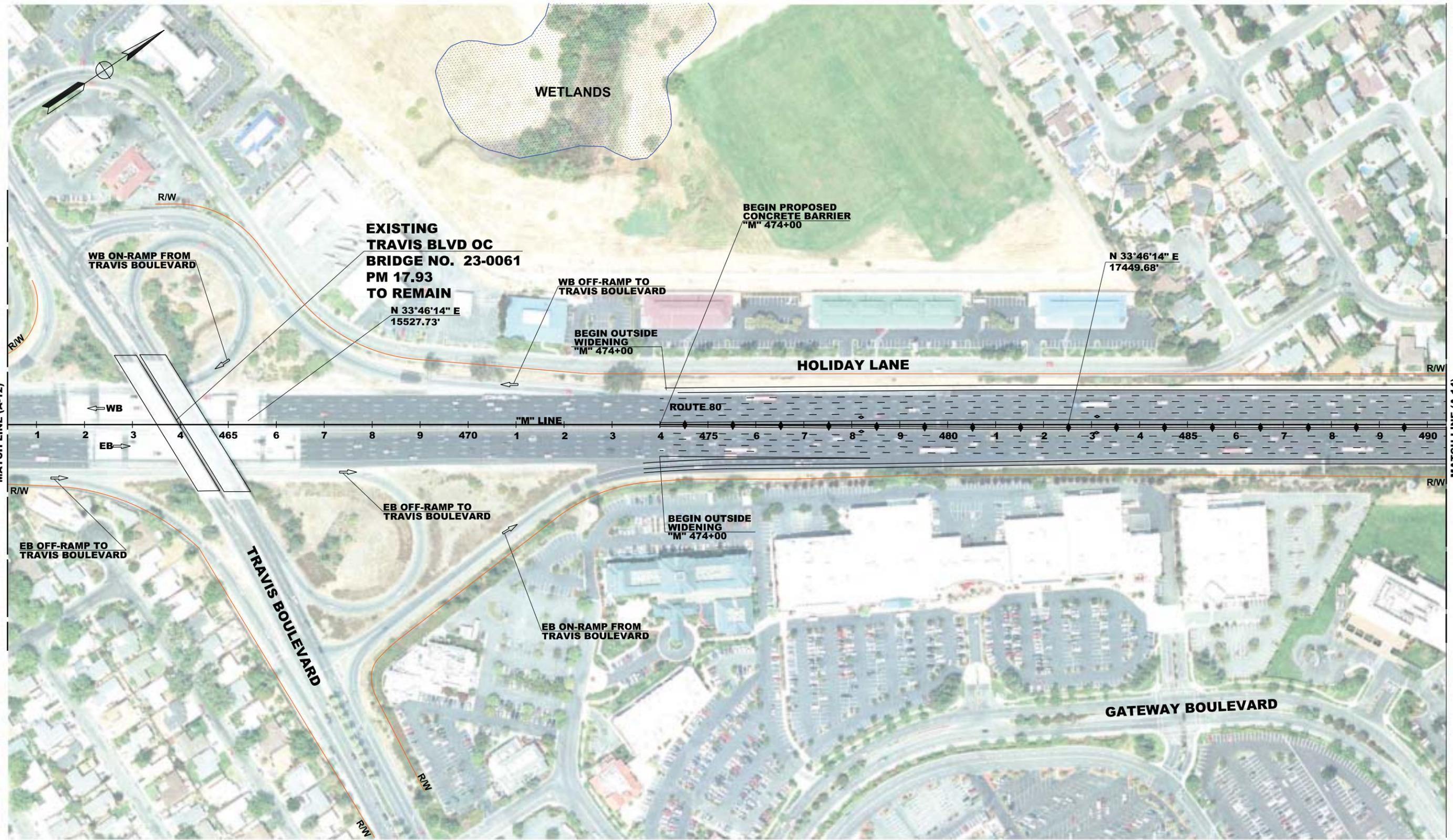
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT E&I:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-12



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:
POTENTIAL IMPACT
EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

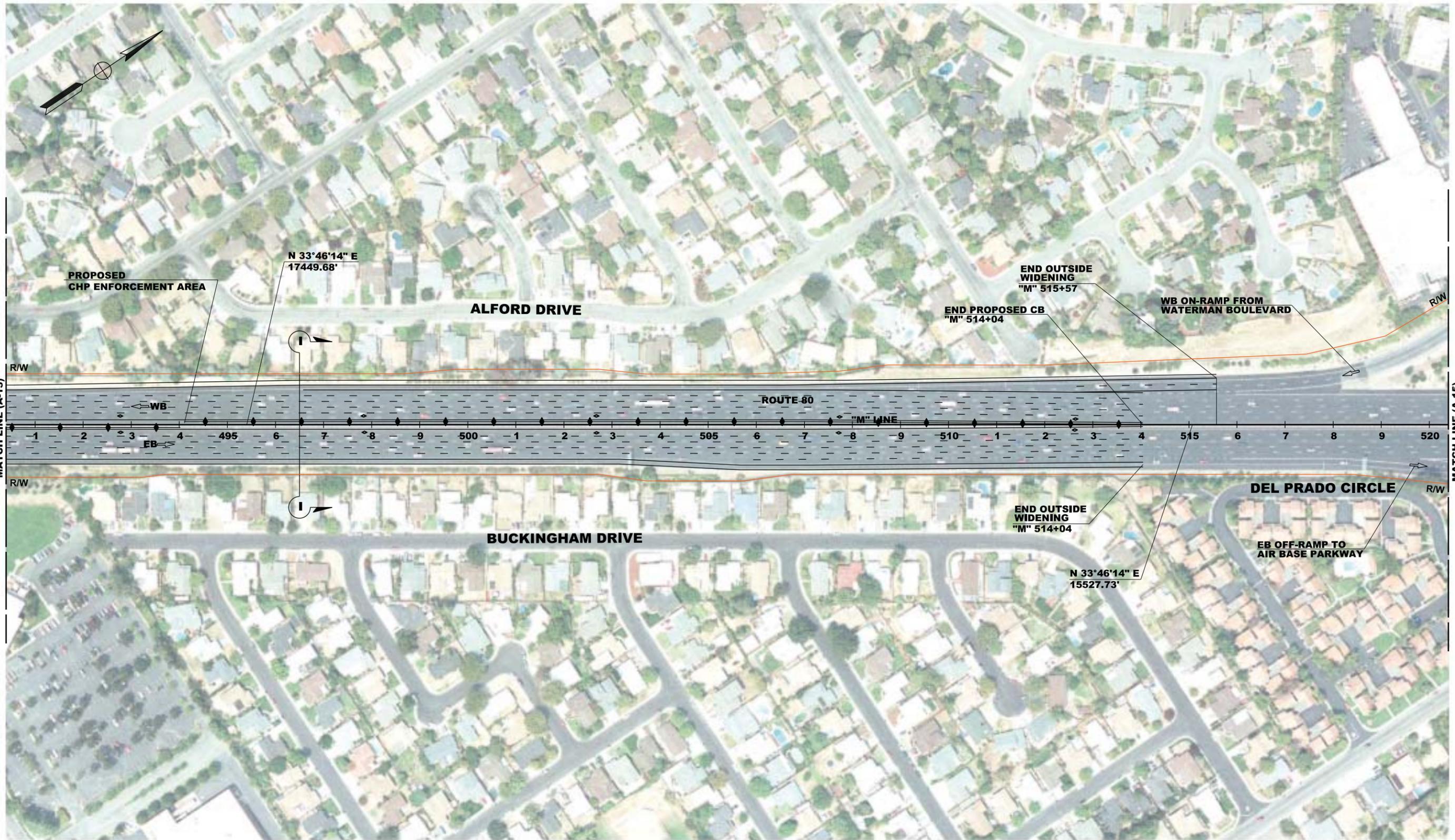
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT E&I:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A - 13



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT E&I:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	2-17-12
DRAWN BY:	DATE:
R. LOPEZ	2-17-12
CHECKED BY:	DATE:
M. SCHRAM	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-14



**EXISTING
AIR BASE PKWY OC
BRIDGE NO. 23-0096
PM 19.18
TO REMAIN**

**N 33°46'14" E
17449.68'**

MATCH LINE (A-14)

MATCH LINE (A-16)

**FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1**

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	

PREPARED BY: MARK THOMAS & COMPANY, INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

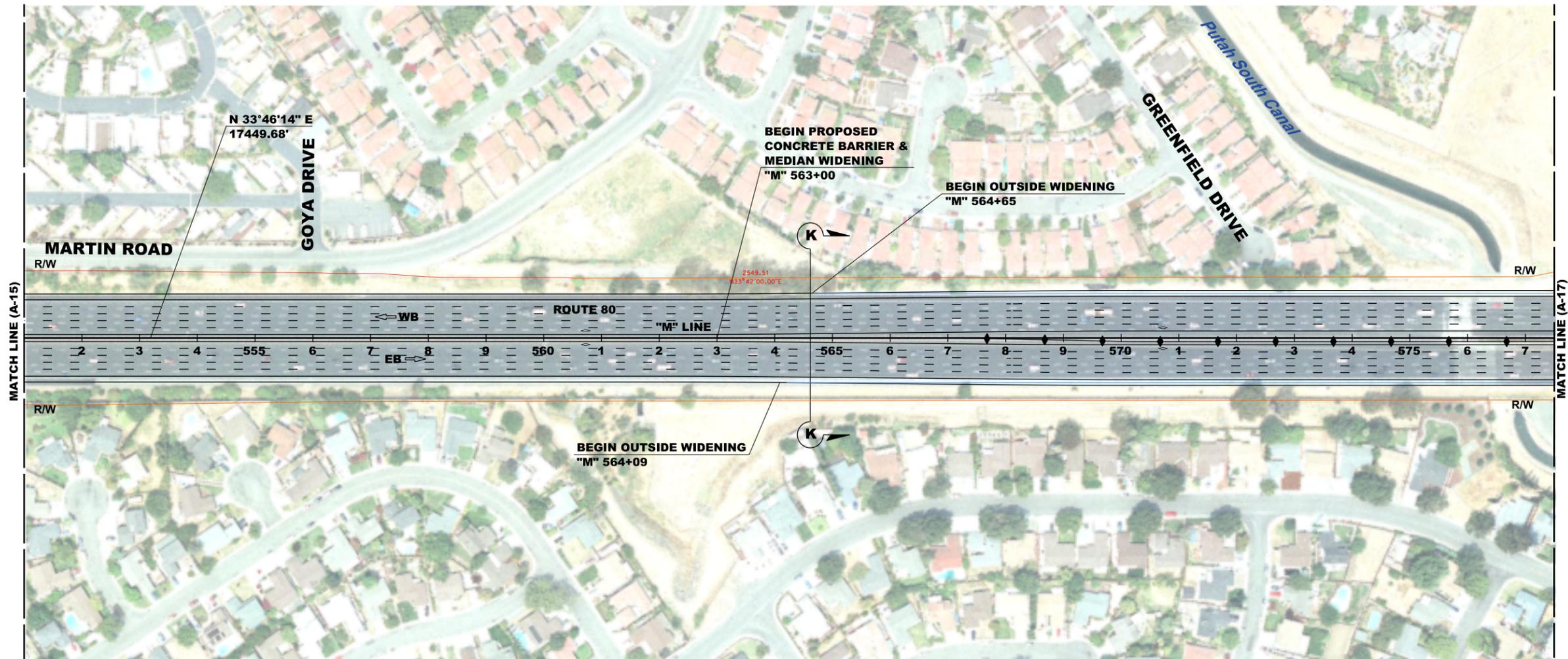
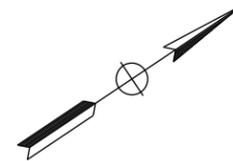
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: R. LOPEZ	DATE: 2-17-12
DRAWN BY: R. LOPEZ	DATE: 2-17-12
CHECKED BY: M. SCHRAM	DATE: 2-17-12

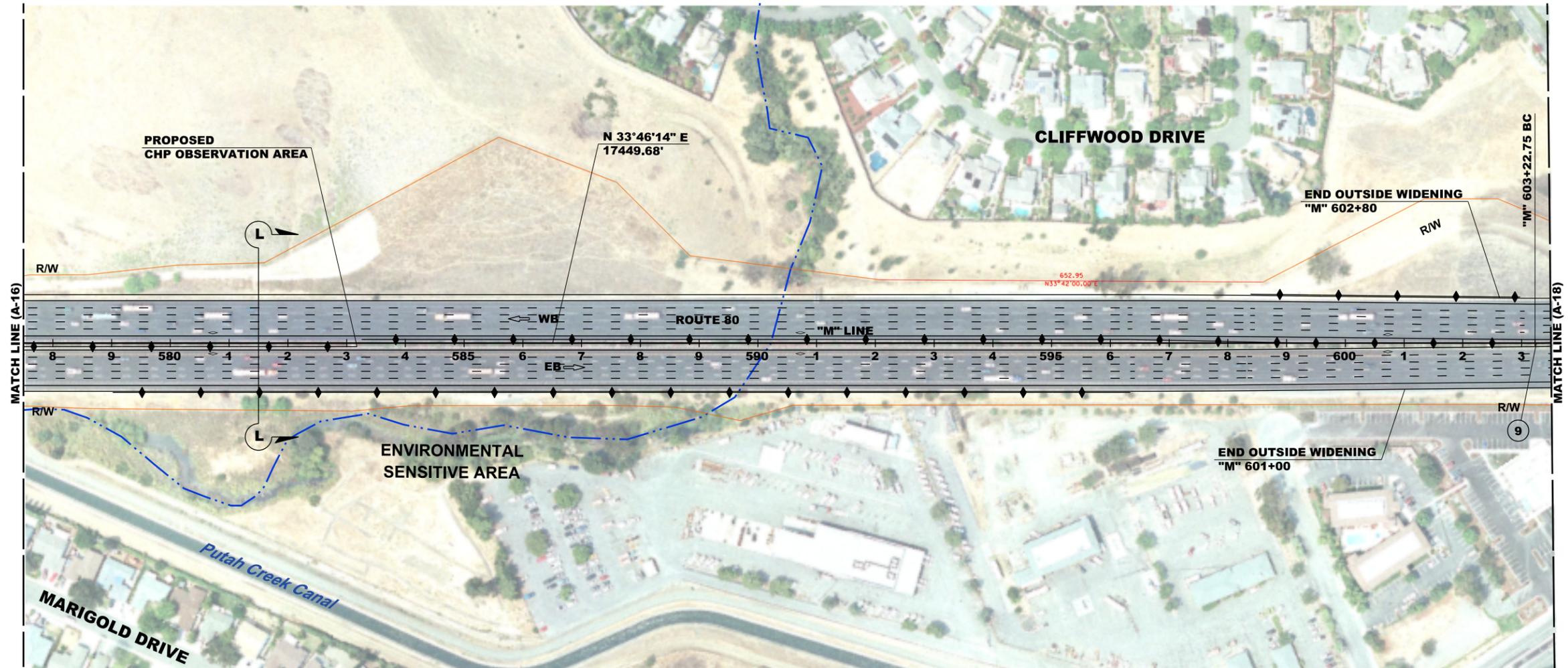
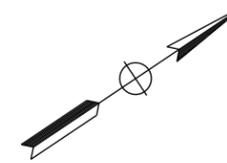
INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE A	

A-15



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: POTENTIAL IMPACT EXISTING R/W	DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585		DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	A-16
	COUNTY AND POST MILE: Sol 11.2/29.3	PROJECT No: 0412000332K	PROJECT EA: 04-4G080K	DRAWN BY: I. KUKANEGO	DATE: 2-17-12	CHECKED BY: B. STEWART	DATE: 2-17-12		

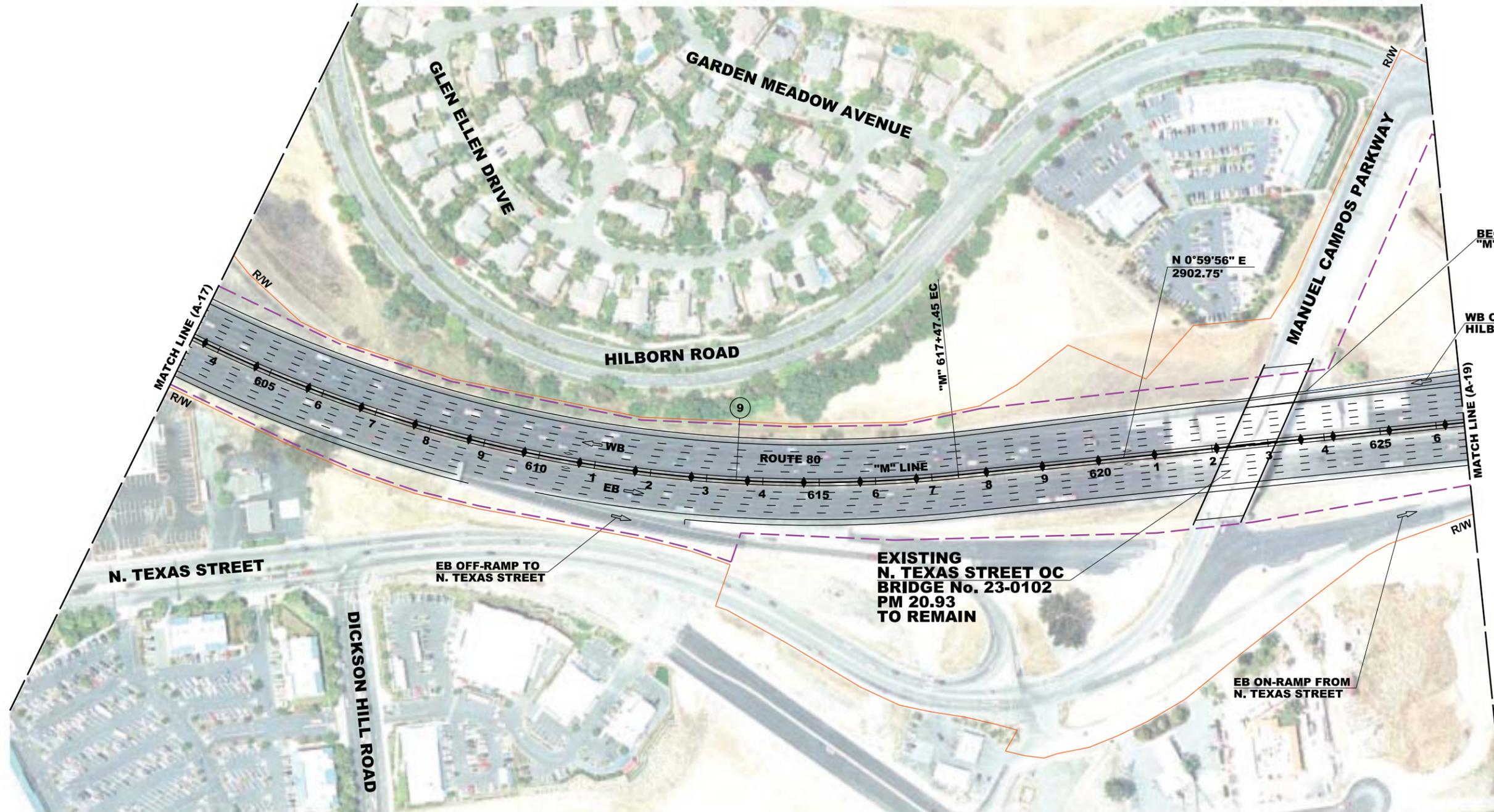


CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
9	2490.85'	32°46'18"	732.43'	1424.70'	1868074.98	6551877.86

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: POTENTIAL IMPACT EXISTING R/W	DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	200 100 0 100 200 	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	A - 17
	COUNTY AND POST MILE: Sol 11.2/29.3	PROJECT No: 0412000332K	PROJECT EA: 04-4G080K	DRAWN BY: I. KUKANEGO	DATE: 2-17-12	CHECKED BY: B. STEWART	DATE: 2-17-12		



CURVE DATA

No. (X)	R	△	T	L	NORTHING	EASTING
9	2490.85'	32°46'18"	732.43'	1424.70'	1868074.98	6551877.86

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
COUNTY AND POST MILE: Sol 11.2/29.3		

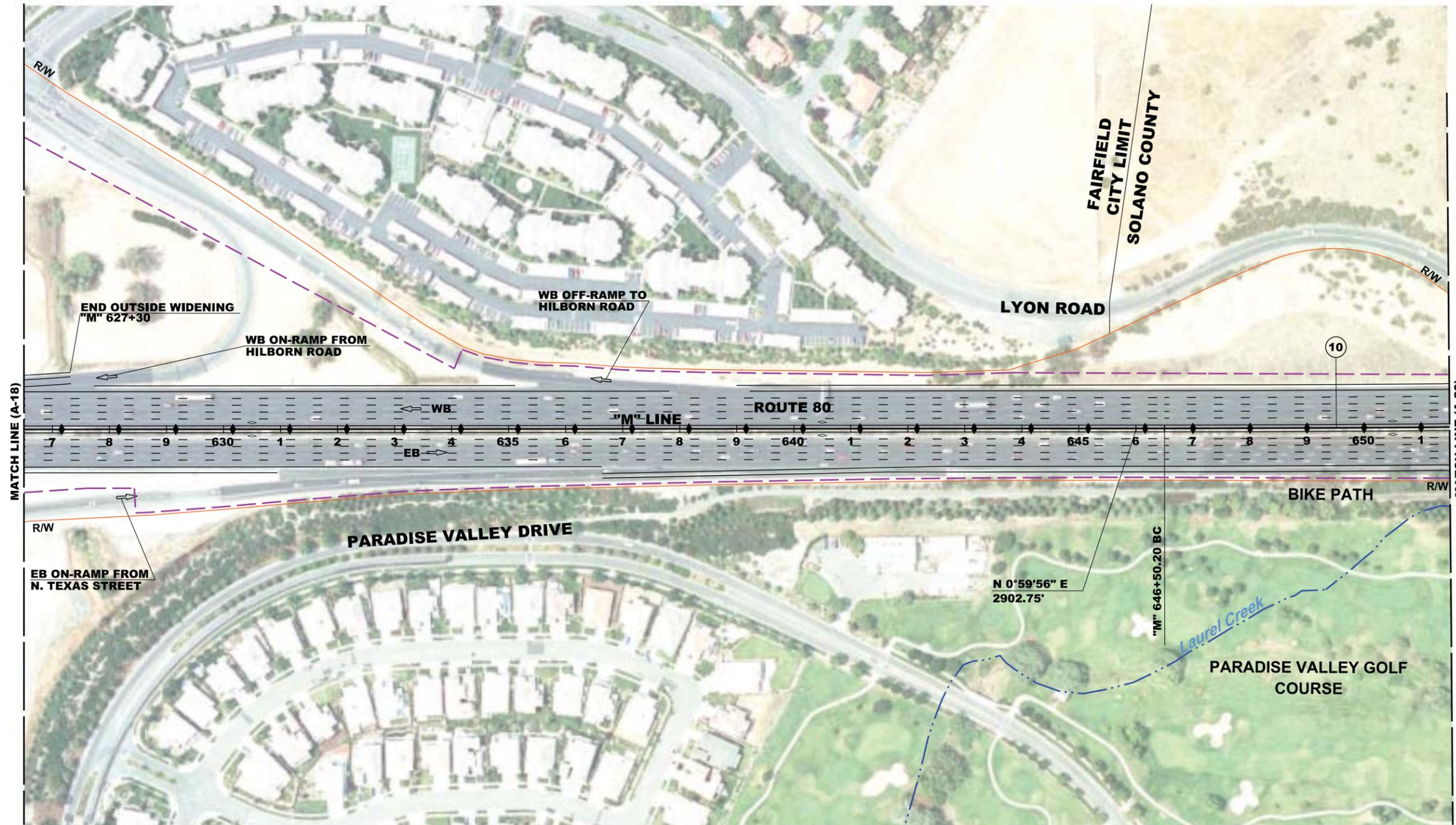
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
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PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE A	

A - 18

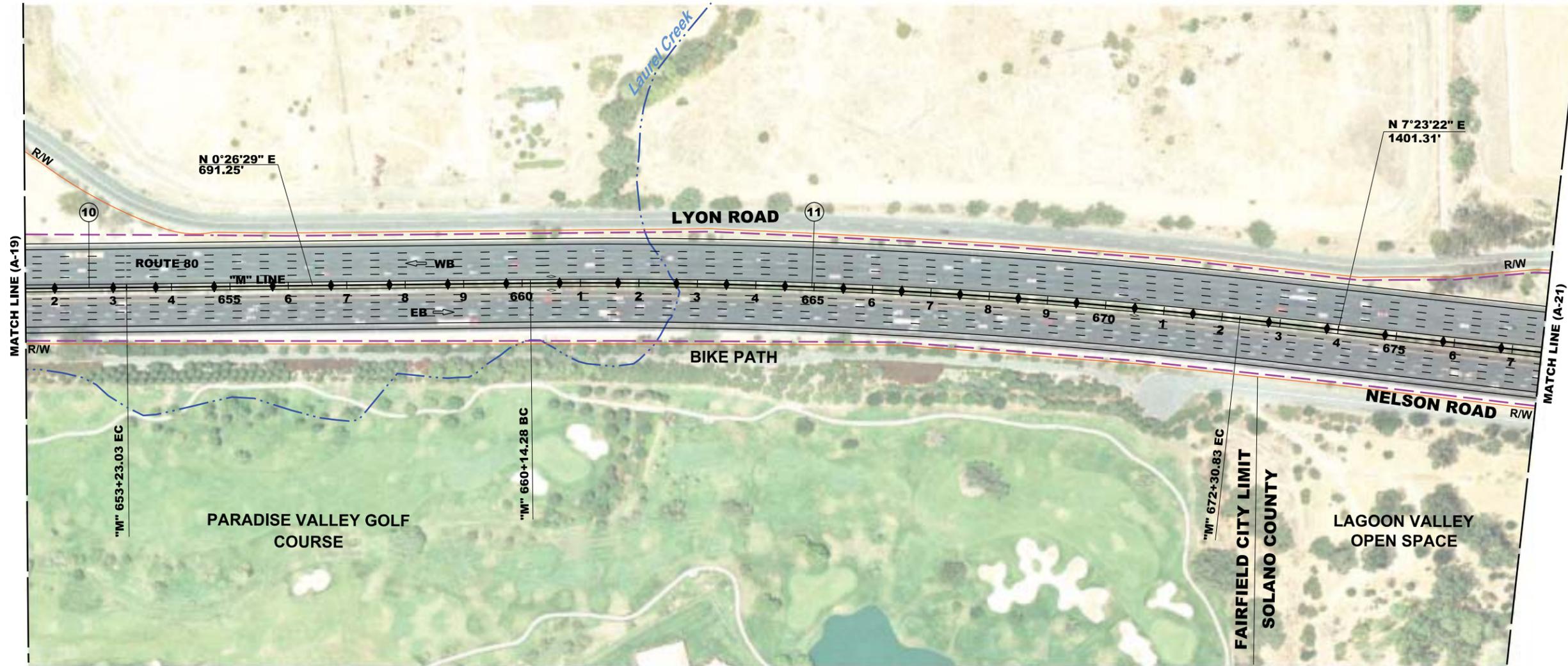


CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(10)	69148.00'	0°33'27"	336.41'	672.83'	1872045.97	6551947.10

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: POTENTIAL IMPACT EXISTING R/W	DISTRICT: 04 ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	200 100 0 100 200 	DESIGNED BY: M. RAMIREZ DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT ALTERNATIVE A	A-19
	COUNTY AND POST MILE: Sol 11.2/29.3	PROJECT No: 0412000332K	PROJECT EA: 04-4G080K	DRAWN BY: I. KUKANEGO DATE: 2-17-12	CHECKED BY: B. STEWART DATE: 2-17-12		



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
10	69148.00'	0°33'27"	336.41'	672.83'	1872045.97	6551947.10
11	10032.00'	6°56'53"	609.02'	1216.55'	1873682.61	6551959.71

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
COUNTY AND POST MILE: Sol 11.2/29.3		

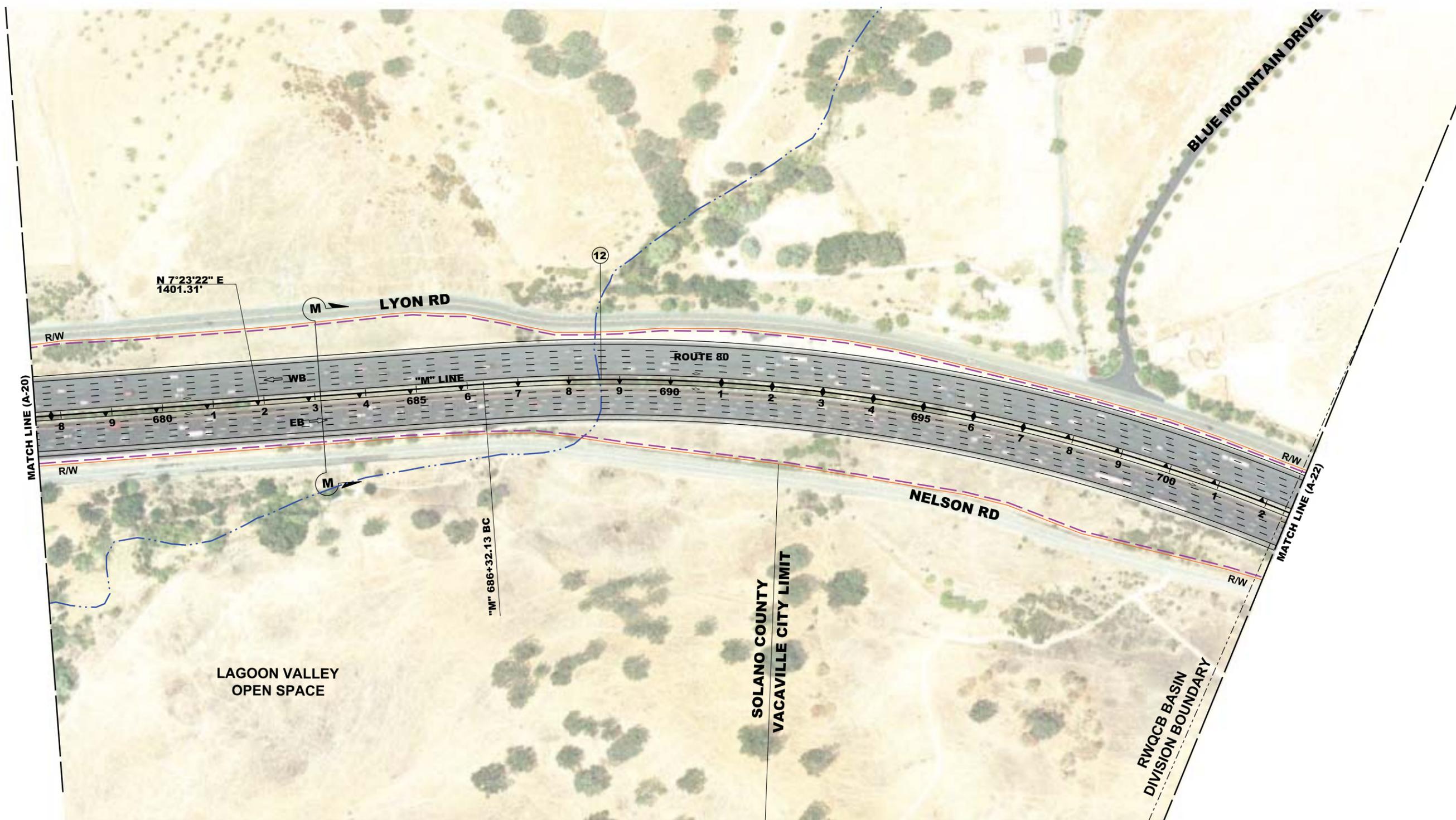
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT EA: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-20

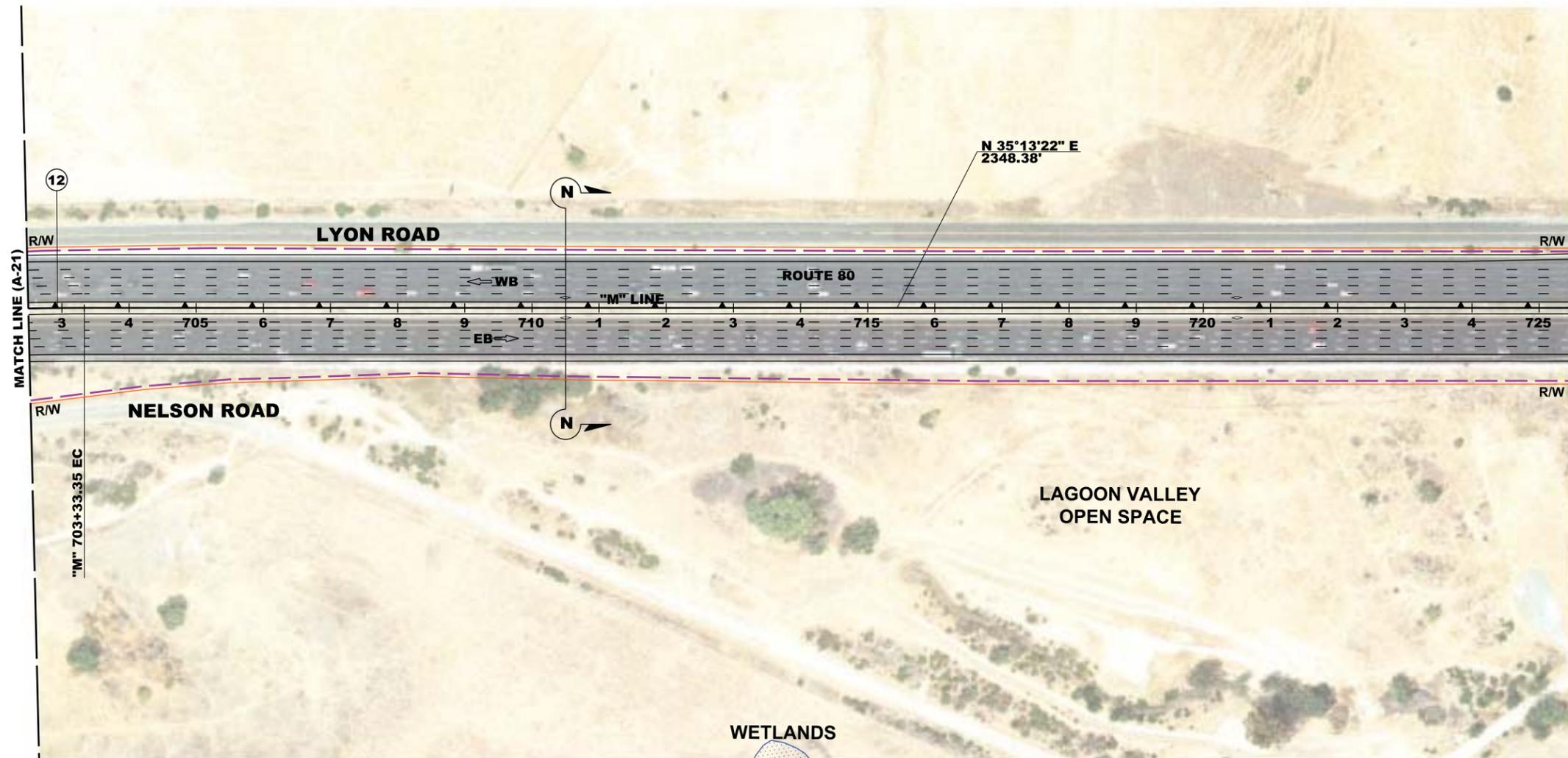
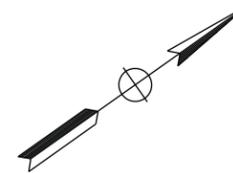


CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
12	3502.00'	27°50'0"	867.74'	1701.21'	1876536.77	6552329.86

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: POTENTIAL IMPACT EXISTING R/W	DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	200 100 0 100 200 	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	A-21
	COUNTY AND POST MILE: Sol 11.2/29.3	PROJECT No: 0412000332K	PROJECT EA: 04-4G080K	DRAWN BY: I. KUKANEGO	DATE: 2-17-12	CHECKED BY: B. STEWART	DATE: 2-17-12		

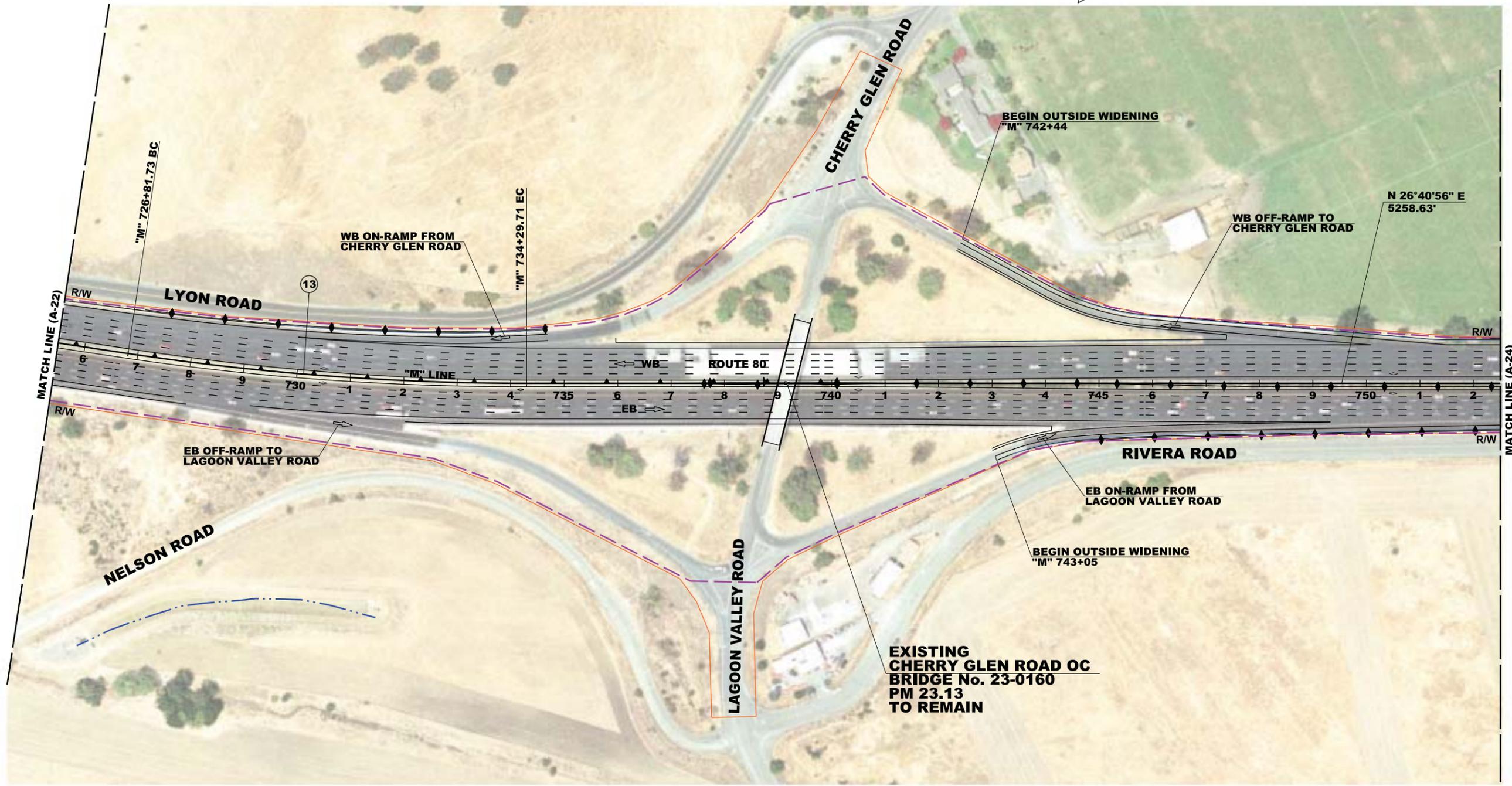
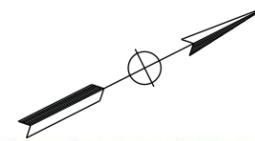


CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
12	3502.00'	27°50'0"	867.74'	1701.21'	1876536.77	6552329.86

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: POTENTIAL IMPACT EXISTING R/W	DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	200 100 0 100 200 	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	A-22
	COUNTY AND POST MILE: Sol 11.2/29.3	PROJECT No: 0412000332K	PROJECT E#: 04-4G080K	DRAWN BY: I. KUKANEGO	DATE: 2-17-12	CHECKED BY: B. STEWART	DATE: 2-17-12		

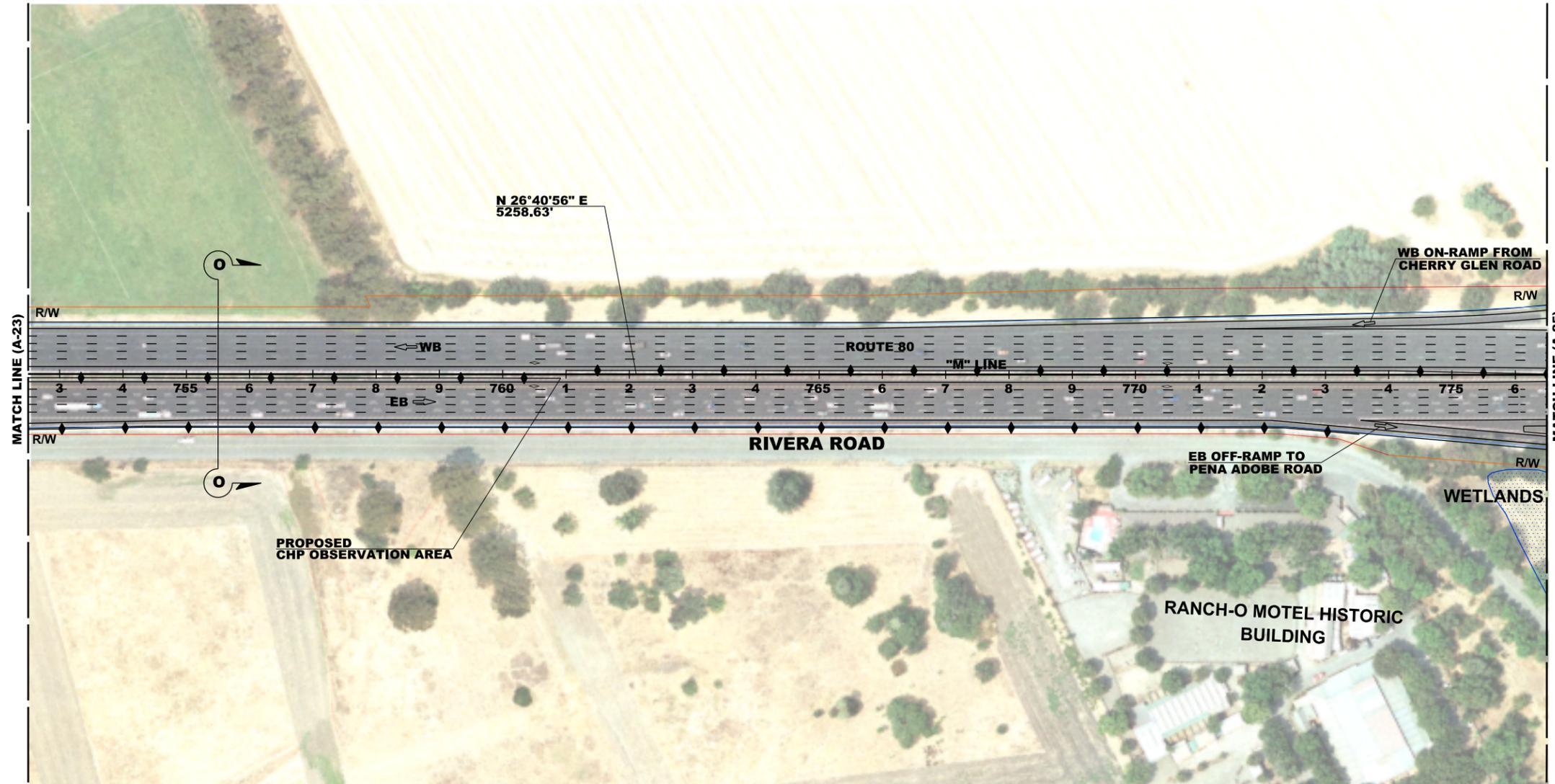
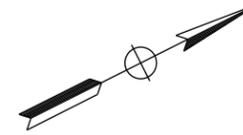


CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
13	5017.98'	8°32'26"	374.98'	747.98'	1879470.16	6554400.89

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: POTENTIAL IMPACT EXISTING R/W	DISTRICT:	ROUTE:	PREPARED BY:	PREPARED FOR:	200 100 0 100 200 	DESIGNED BY:	DATE:	INTERSTATE 80 EXPRESS LANE PROJECT ALTERNATIVE A	A - 23
	04	80	HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	PROJECT No: 0412000332K	PROJECT EA: 04-4G080K	M. RAMIREZ		
		COUNTY AND POST MILE:				DRAWN BY:	DATE:		
		Sol 11.2/29.3				I. KUKANEGO	2-17-12		
						CHECKED BY:	DATE:		
						B. STEWART	2-17-12		



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596

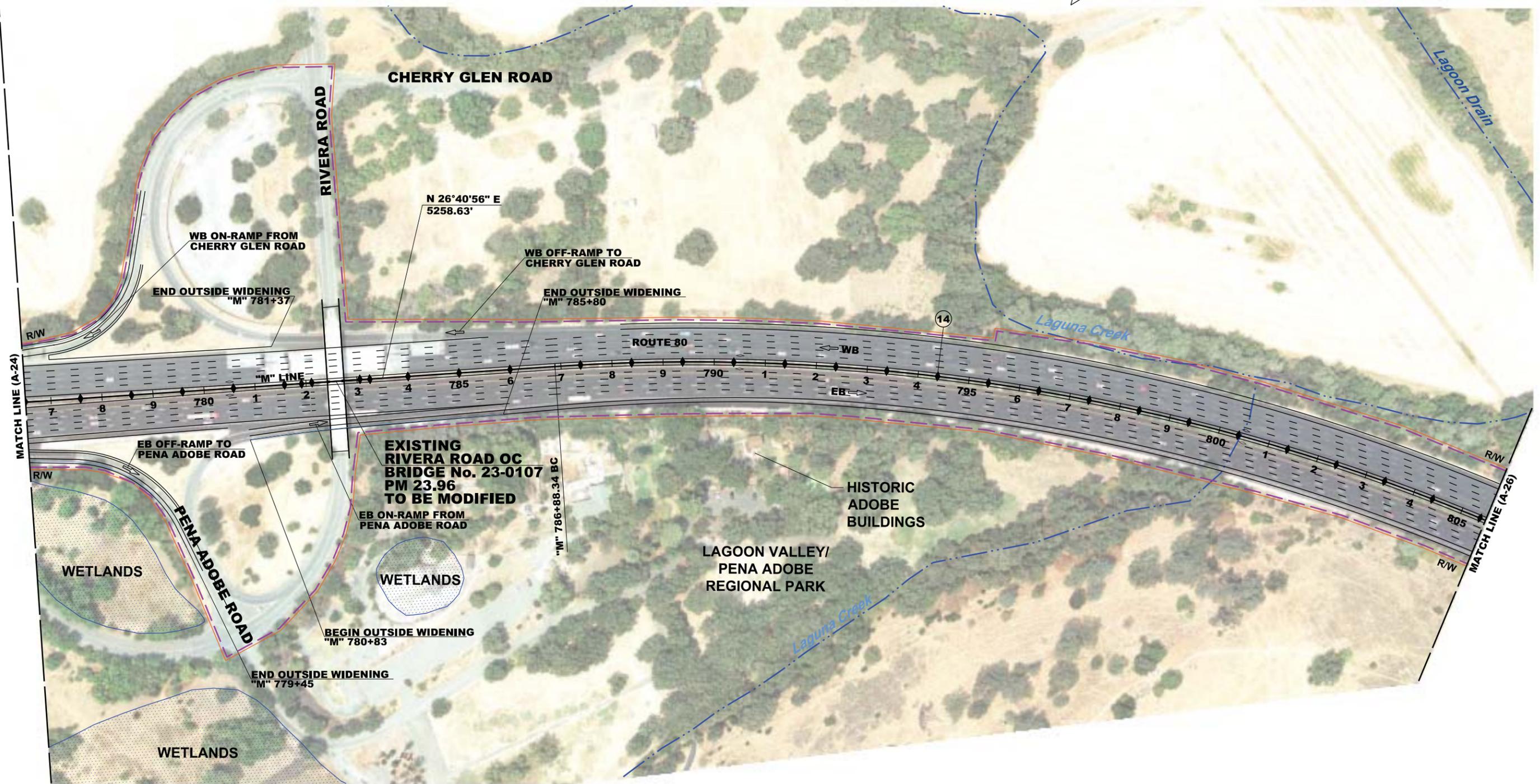
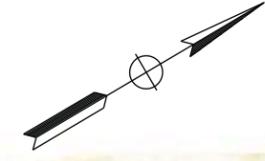
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
M. RAMIREZ	2-17-12
DRAWN BY:	DATE:
I. KUKANEGO	2-17-12
CHECKED BY:	DATE:
B. STEWART	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-24



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(14)	4032.32'	43°26'37"	1606.43'	3057.44'	1885938.95	6557651.83

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
COUNTY AND POST MILE: Sol 11.2/29.3		

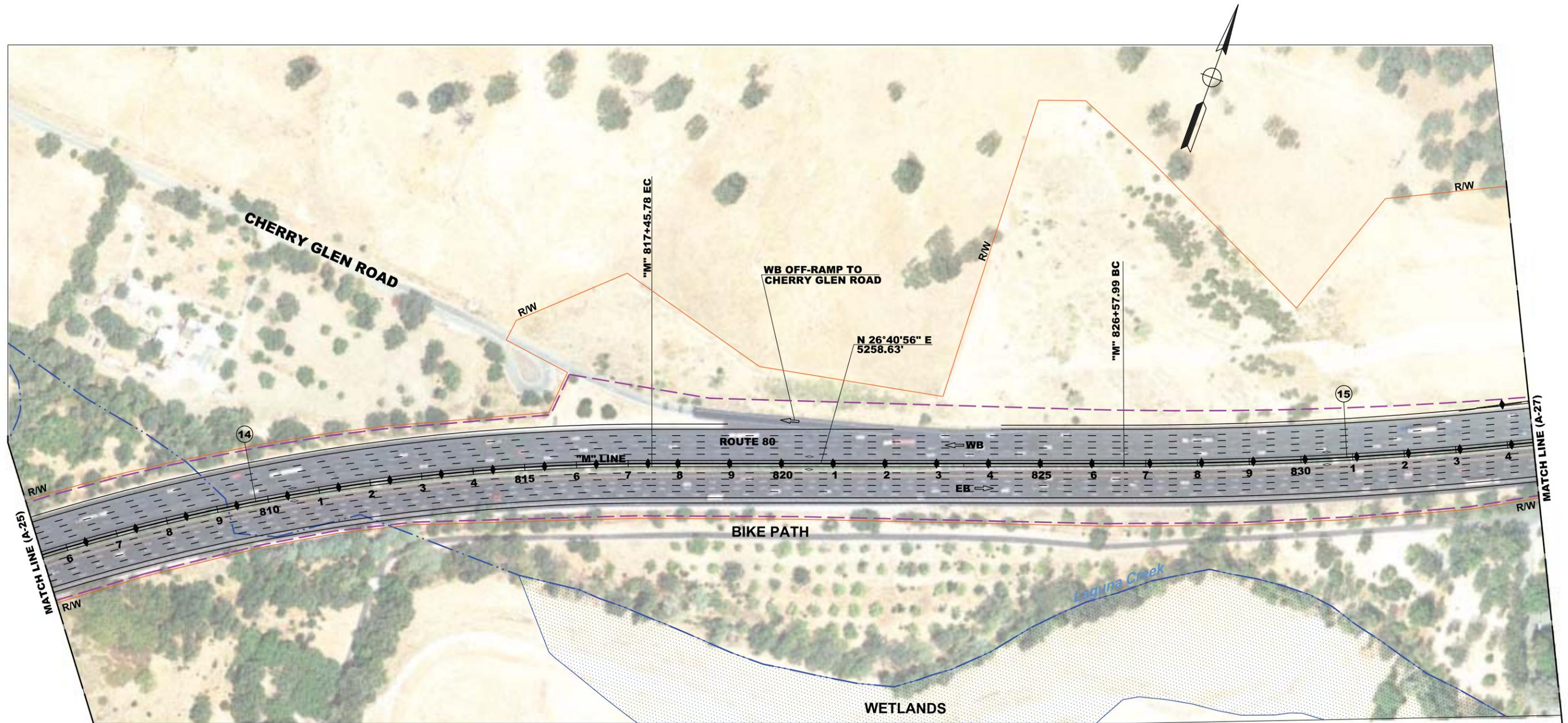
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE A	

A-25



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
14	4032.32'	43°26'37"	1606.43'	3057.44'	1885938.95	6557651.83
15	7666.12'	6°26'20"	431.21'	861.52'	1894004.71	6557414.33

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND: - - - POTENTIAL IMPACT - - - EXISTING R/W	DISTRICT: 04	ROUTE: 80
	COUNTY AND POST MILE: Sol 11.2/29.3	

PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
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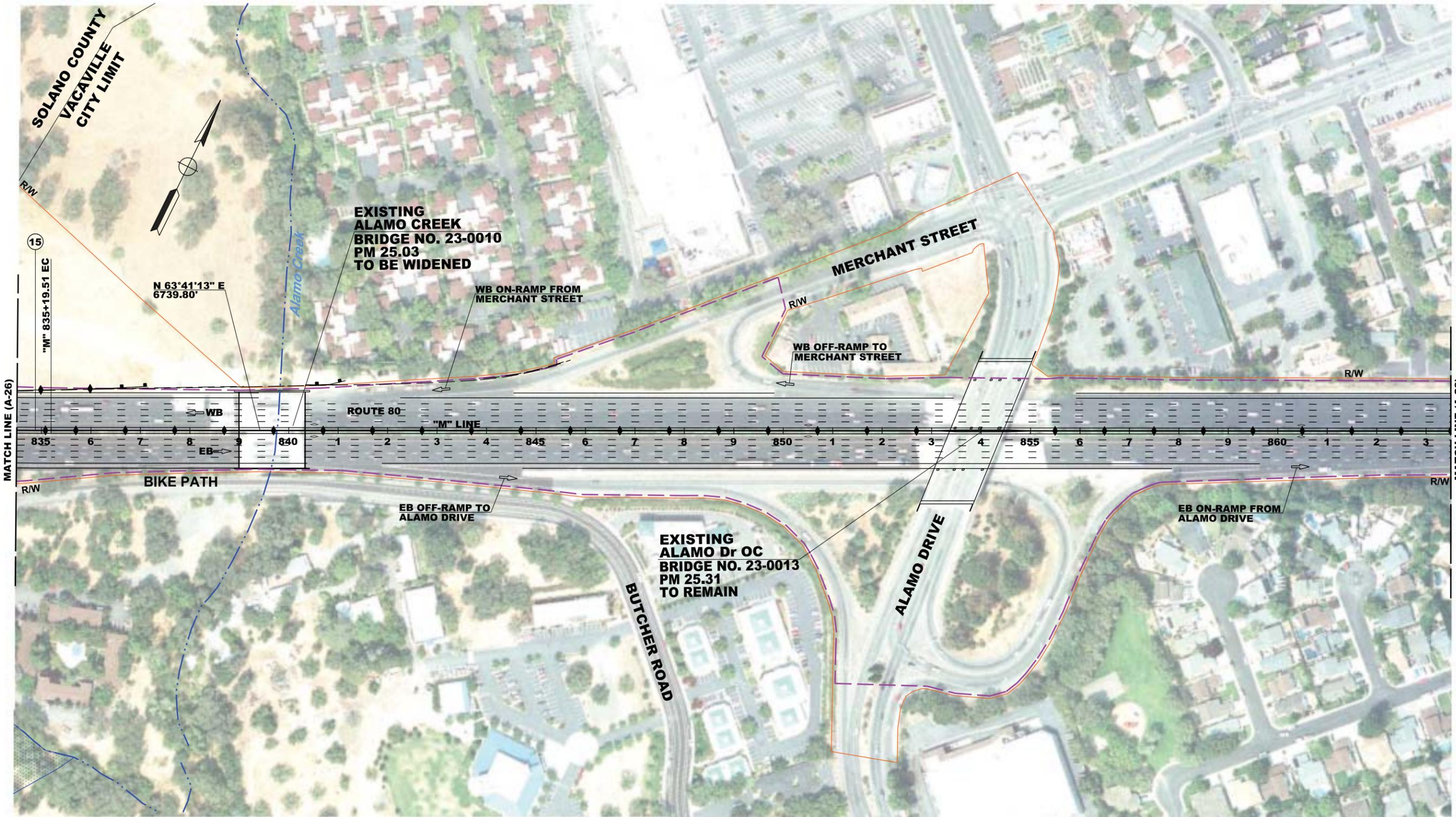
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
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PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A - 26



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
15	7666.12'	6°26'20"	431.21'	861.52'	1894004.71	6557414.33

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04
ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3

PREPARED BY:
WMH CORPORATION
555 12th STREET
SUITE 1900
OAKLAND, CA 94607

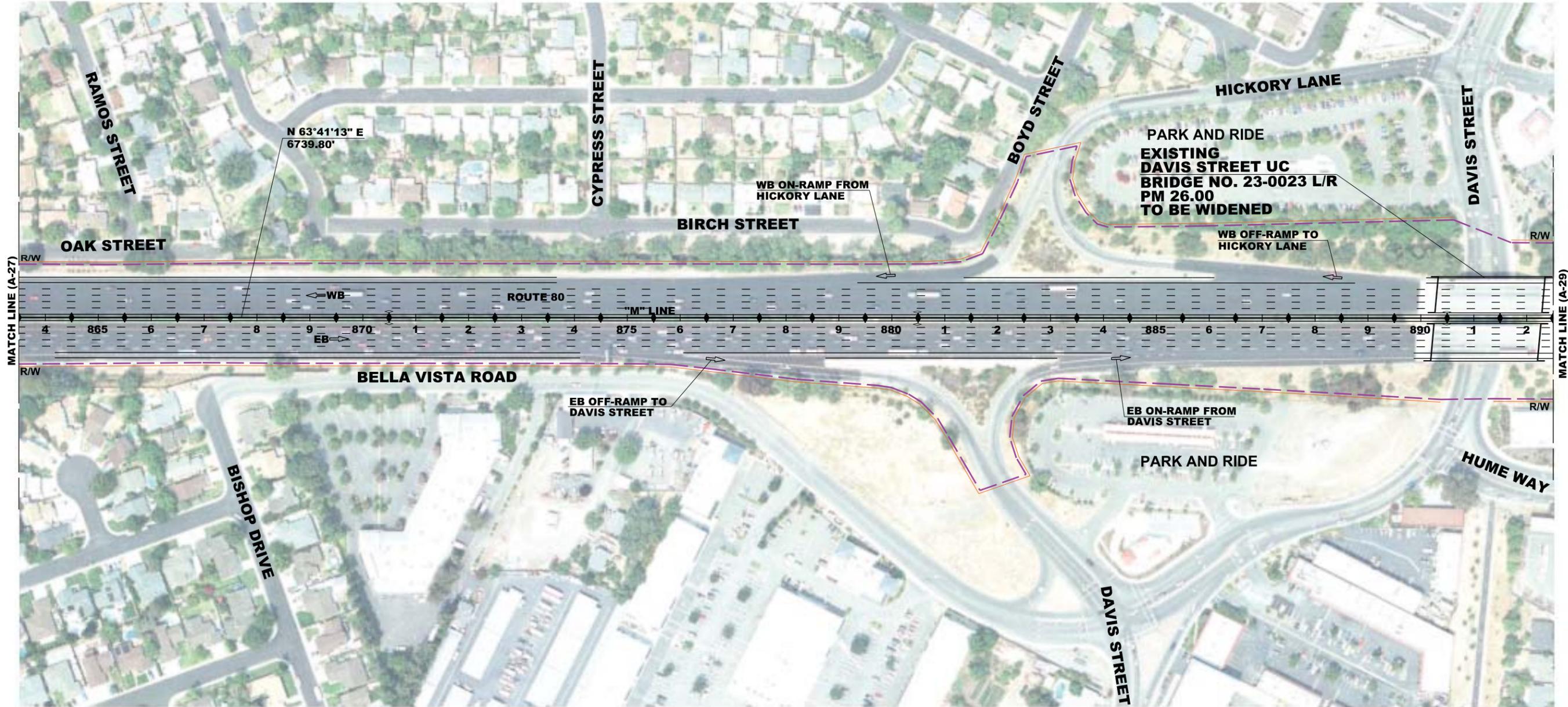
PREPARED FOR:
**SOLANO TRANSPORTATION
AUTHORITY**
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT No: 0412000332K
PROJECT E#: 04-4G080K

DESIGNED BY: D. XI
DATE: 2-17-12
DRAWN BY: H. CHARLES
DATE: 2-17-12
CHECKED BY: S. CHARLES
DATE: 2-17-12

**INTERSTATE 80
EXPRESS LANE PROJECT**
ALTERNATIVE A



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:
POTENTIAL IMPACT
EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607

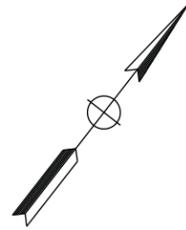
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
D. XI	2-17-12
DRAWN BY:	DATE:
H. CHARLES	2-17-12
CHECKED BY:	DATE:
S. CHARLES	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-28



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
16	3012.00'	23°21'50"	622.77'	1228.22'	1892820.415	6565518.846

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

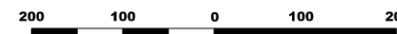
- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04 ROUTE: 80

COUNTY AND POST MILE:
Sol 11.2/29.3

PREPARED BY:
WMH CORPORATION
555 12th STREET
SUITE 1900
OAKLAND, CA 94607

PREPARED FOR:
**SOLANO TRANSPORTATION
AUTHORITY**
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT No: 0412000332K

PROJECT EA: 04-4G080K

DESIGNED BY:
D. XI

DRAWN BY:
H. CHARLES

CHECKED BY:
S. CHARLES

DATE:
2-17-12

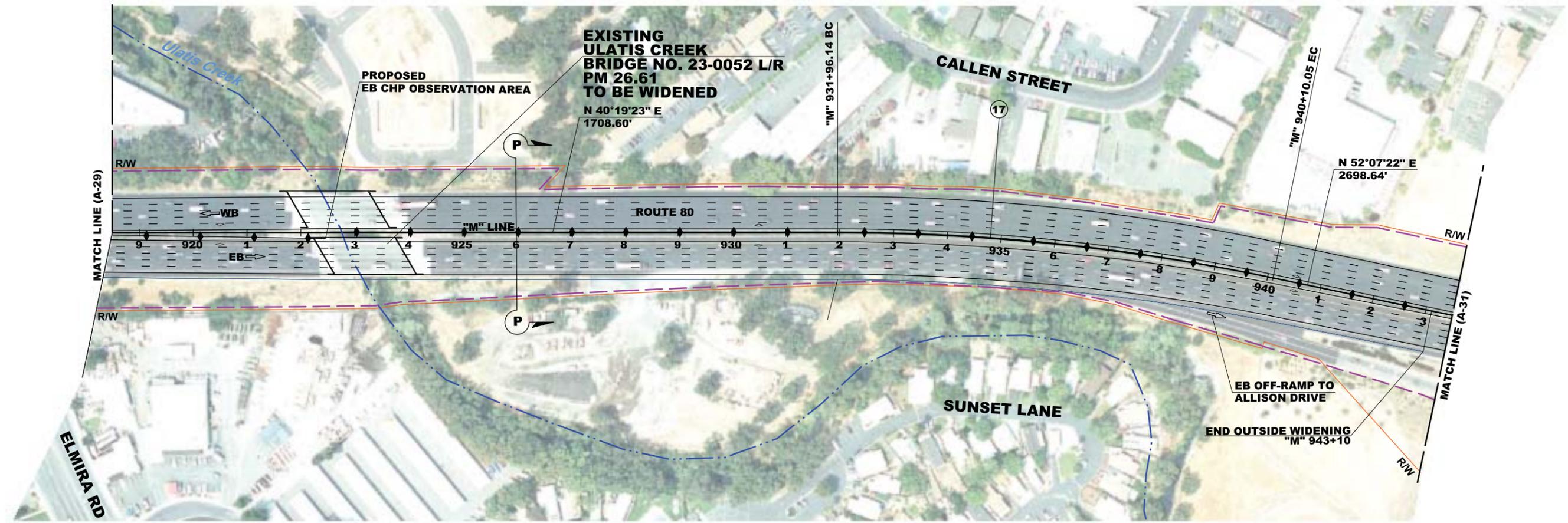
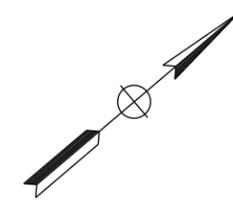
DATE:
2-17-12

DATE:
2-17-12

**INTERSTATE 80
EXPRESS LANE PROJECT**

ALTERNATIVE A

A - 29



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
17	3952.14'	11°47'59"	408.40'	813.92'	1889616.595	6571933.992

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		

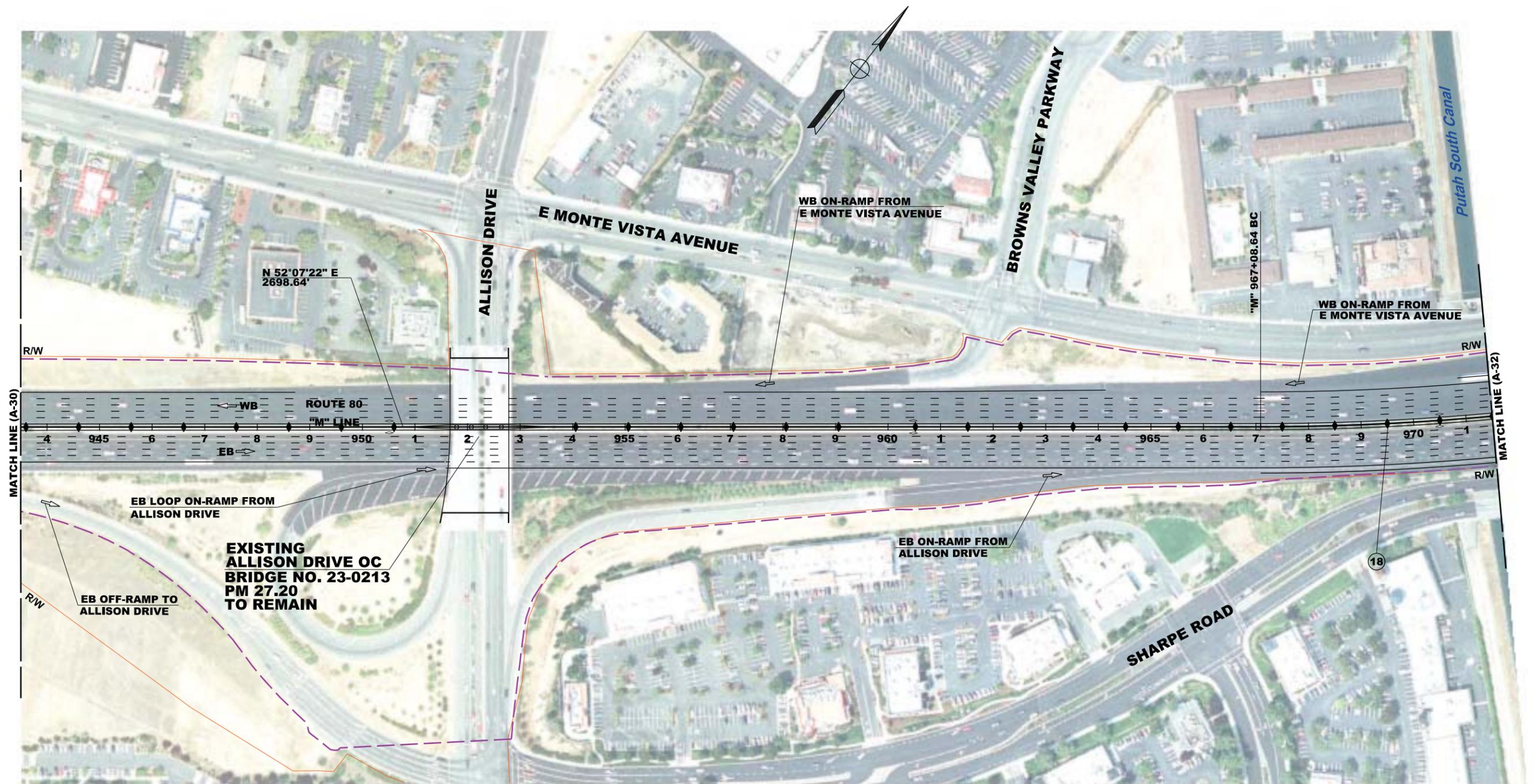
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
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PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-30



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(18)	4912.40'	6°17'11"	269.76'	538.98'	1898270.516	6568621.532

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT:

04

ROUTE:

80

PREPARED BY:

WMH CORPORATION
555 12th STREET
SUITE 1900
OAKLAND, CA 94607

PREPARED FOR:

SOLANO TRANSPORTATION
AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT No:
0412000332K

PROJECT EA:
04-4G080K

DESIGNED BY:

D. XI

DATE:

2-17-12

DRAWN BY:

H. CHARLES

DATE:

2-17-12

CHECKED BY:

S. CHARLES

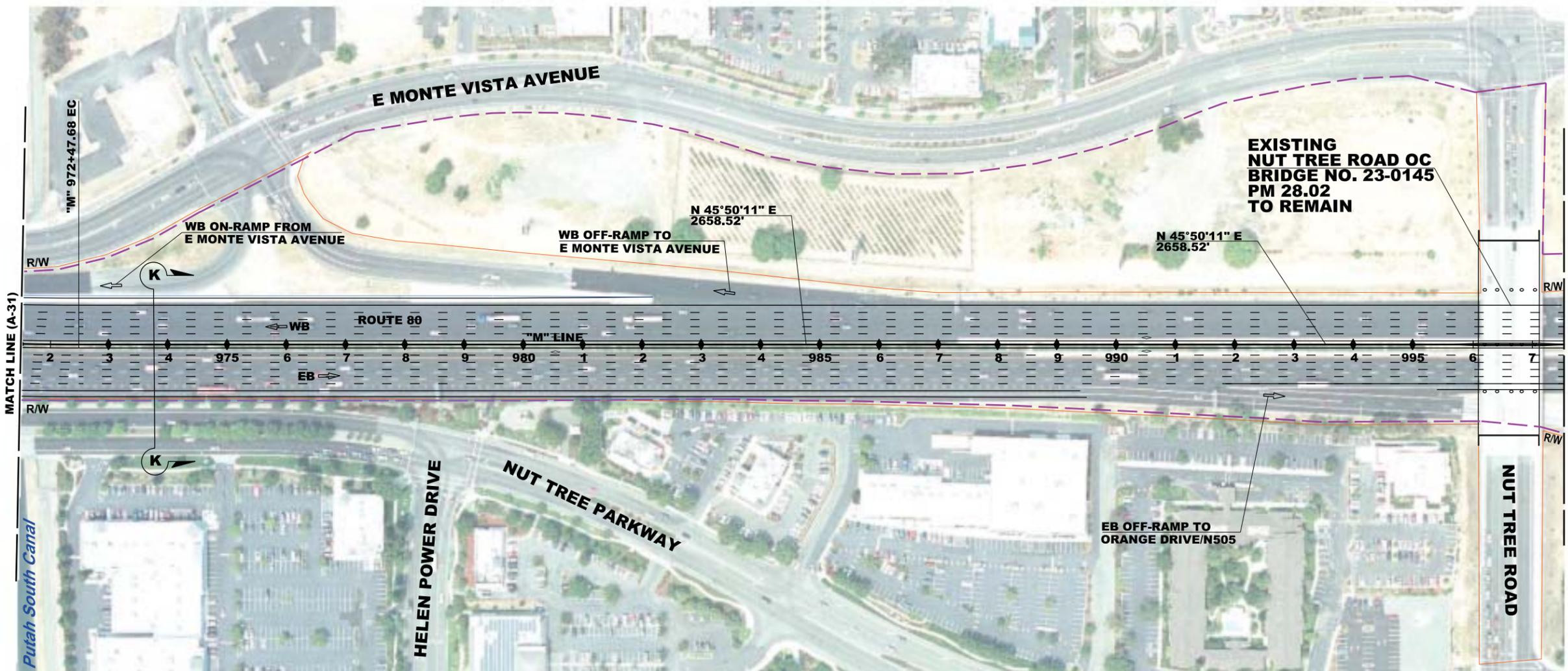
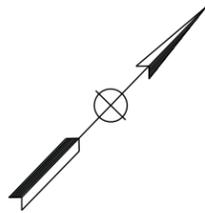
DATE:

2-17-12

**INTERSTATE 80
EXPRESS LANE PROJECT**

A-31

ALTERNATIVE A



FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:
POTENTIAL IMPACT
EXISTING R/W

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607

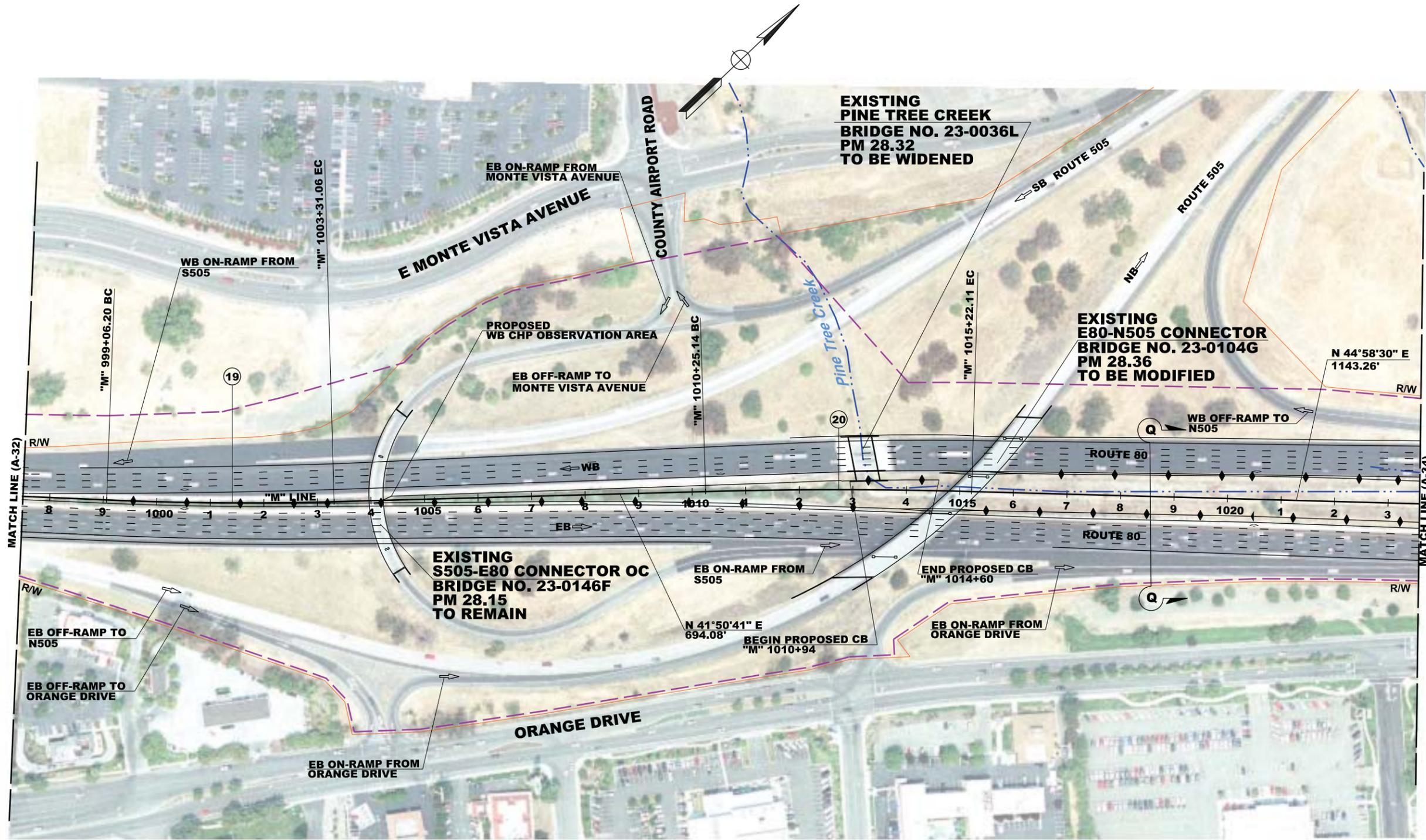
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
D. XI	2-17-12
DRAWN BY:	DATE:
H. CHARLES	2-17-12
CHECKED BY:	DATE:
S. CHARLES	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-32



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
19	6098.48'	3°59'30"	212.52'	424.87'	1900973.571	6569702.277
20	9096.34'	3°07'49"	248.54'	496.97'	1891353.947	6581484.770

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

DISTRICT: 04
ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3

PREPARED BY:
WMH CORPORATION
555 12th STREET
SUITE 1900
OAKLAND, CA 94607

PREPARED FOR:
SOLANO TRANSPORTATION
AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT No: 0412000332K

PROJECT E#: 04-4G080K

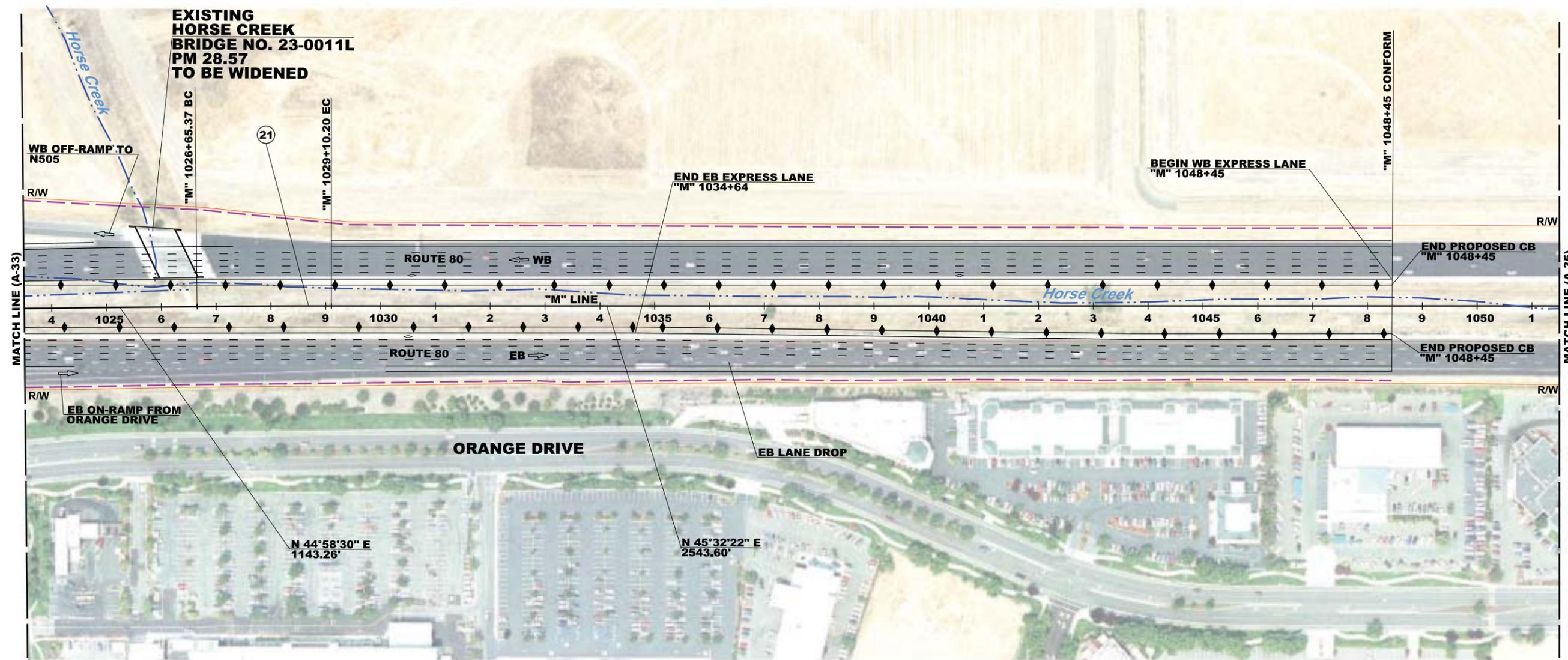
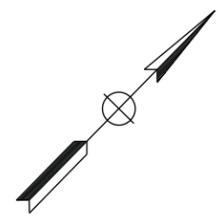
DESIGNED BY: D. XI
DRAWN BY: H. CHARLES
CHECKED BY: S. CHARLES

DATE: 2-17-12
DATE: 2-17-12
DATE: 2-17-12

**INTERSTATE 80
EXPRESS LANE PROJECT**

ALTERNATIVE A

A-33



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(21)	24853.82'	3°33'52"	122.42'	244.85'	1881025.346	6593439.903

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W

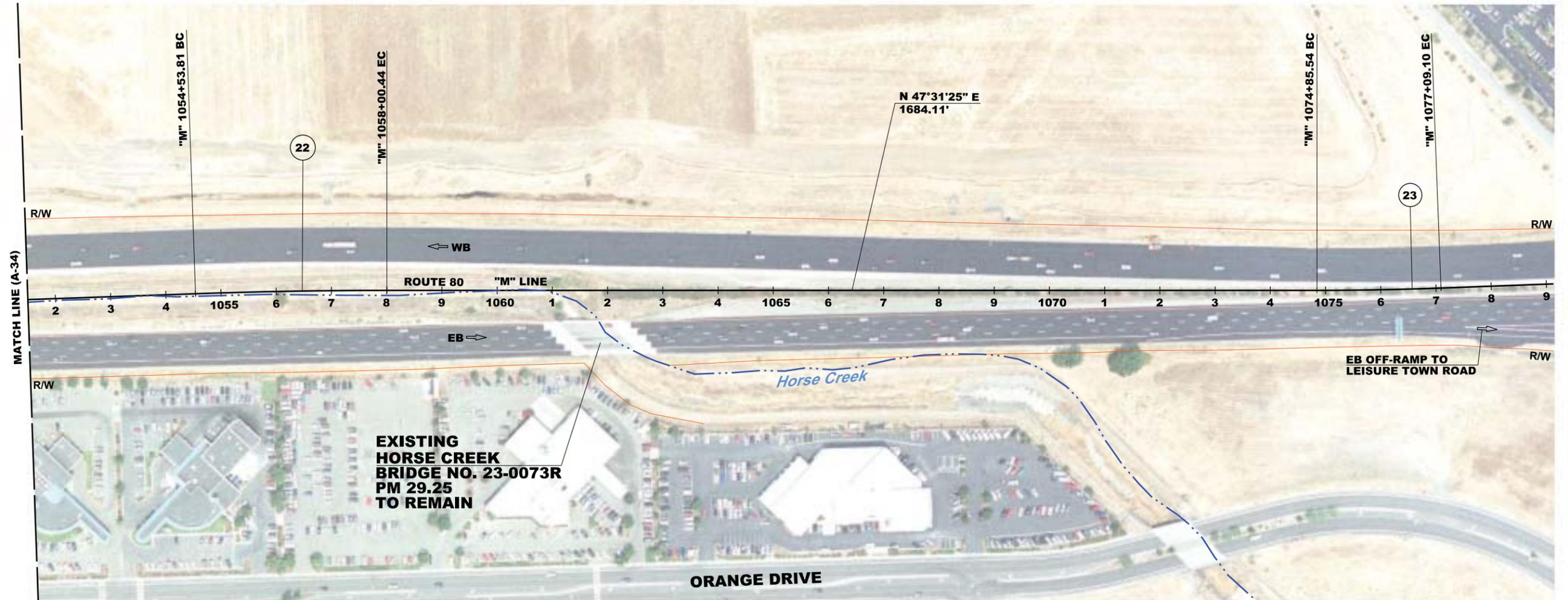
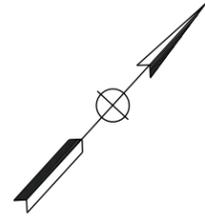
DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		

PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE A	



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
22	10009.41'	1°59'03"	173.33'	346.63'	1893401.872	6584858.061
23	5999.64'	2°08'40"	112.29'	224.55'	1906346.693	6575289.491

FOR NOTES AND ABBREVIATIONS,
SEE SHEET AX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607	

PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE A

A-35

ATTACHMENT B

Alternative B

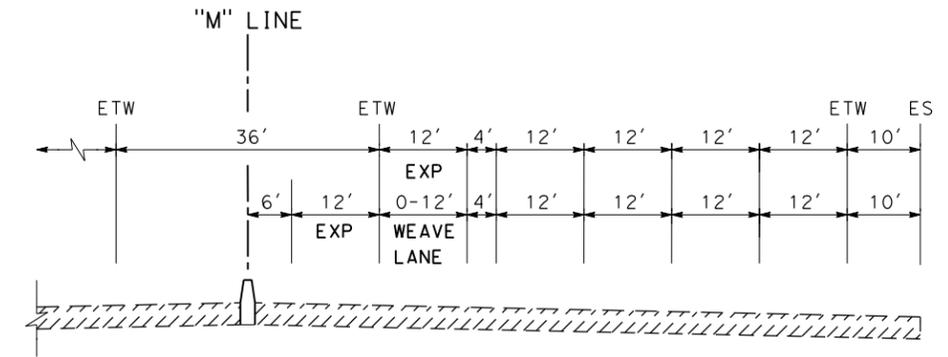
Layouts and Typical Cross Sections

NOTES:

1. ALL EXISTING SHOULDER PAVEMENT TO BE REMOVED AT LOCATIONS OF INSIDE AND OUTSIDE WIDENING.
2. CHP OBSERVATION AREAS ARE TO UTILIZE THE PROPOSED 36-FOOT WIDE MEDIAN.
3. EXACT LOCATIONS OF THE PROPOSED INGRESS AND EGRESS ARE TO BE DETERMINED. SEE INGRESS-EGRESS WEAVE LANE DETAIL (DETAIL A) FOR PROPOSED WEAVING LANE CROSS SECTION DETAILS. PROPOSED 36-FOOT MEDIAN ACCOMODATES WIDTH FOR WEAVE LANES AT ANY LOCATION ALONG THE PROJECT LIMITS.
4. SEE LAYOUT SHEETS FOR LOCATION OF EACH SECTION.
5. 80/680/12 PACKAGE 1 PROJECT (WB 80 REALIGNMENT, GREEN VALLEY ROAD OC RELOCATION AND WB 80/ROUTE 12 CONNECTOR MODIFICATION) AND EB CORDELIA TRUCK SCALE RELOCATION PROJECT ARE ASSUMED TO BE COMPLETED PRIOR TO EXPRESS LANES PROJECT CONSTRUCTION.

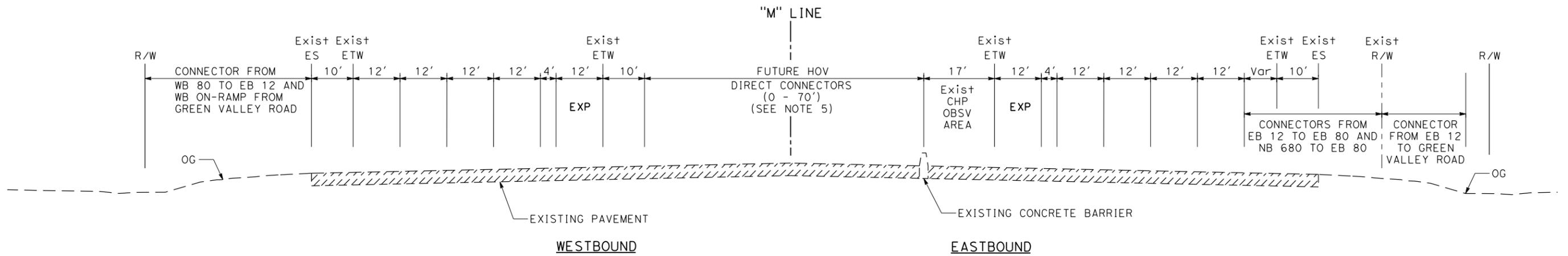
ABBREVIATIONS:

- EXP EXPRESS LANE
 CHP CALIFORNIA HIGHWAY PATROL
 OBSV OBSERVATION
 AUX AUXILIARY LANE

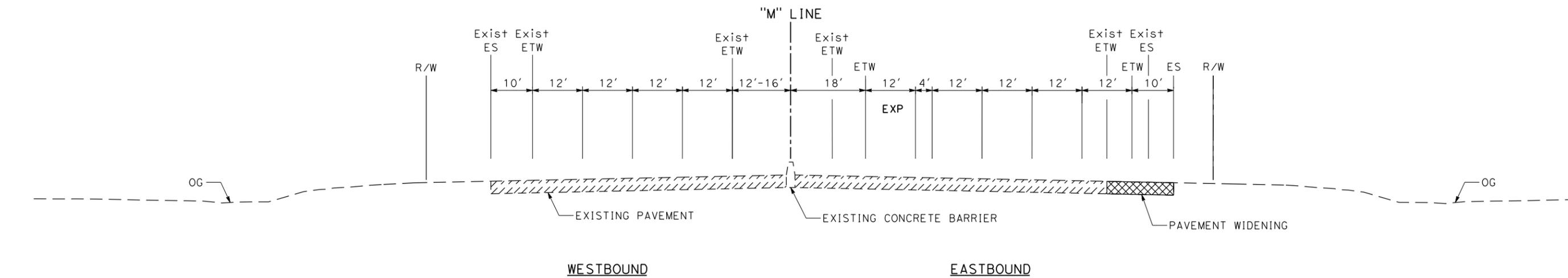


DETAIL A

INGRESS-EGRESS WEAVE LANE DETAIL



SECTION B



SECTION A

LEGEND:

	EXISTING PAVEMENT
	PROPOSED PAVEMENT

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
COUNTY AND POST MILE: SoI 11.2/29.3		PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

CHARGE UNIT: 0412000332K	PROJECT NUMBER: 04-4G080K
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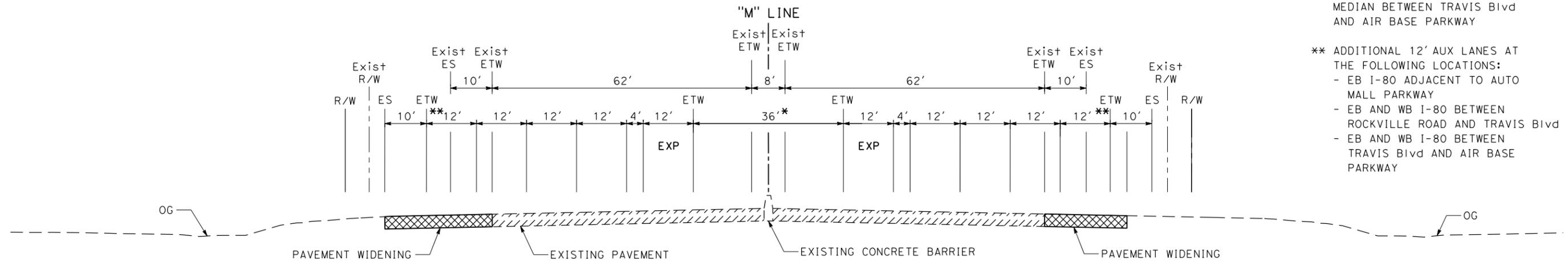
DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

NO SCALE

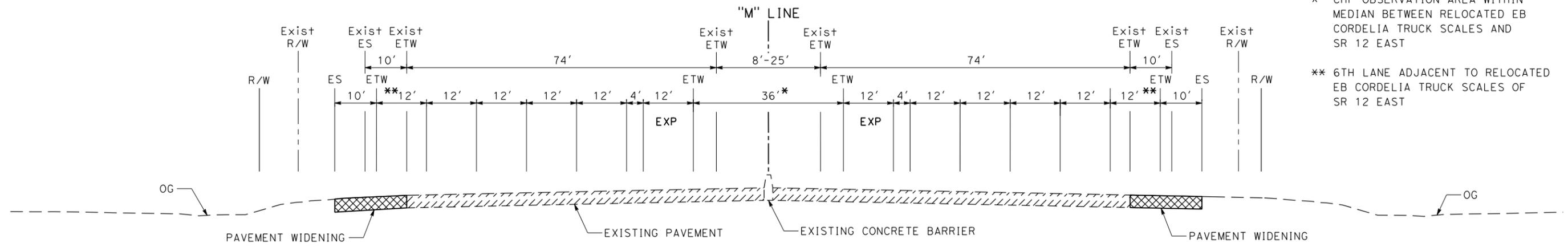
INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

BX-1

\$DATE \$USER \$REQUEST



- * CHP OBSERVATION AREA WITHIN MEDIAN BETWEEN TRAVIS Blvd AND AIR BASE PARKWAY
- ** ADDITIONAL 12' AUX LANES AT THE FOLLOWING LOCATIONS:
 - EB I-80 ADJACENT TO AUTO MALL PARKWAY
 - EB AND WB I-80 BETWEEN ROCKVILLE ROAD AND TRAVIS Blvd
 - EB AND WB I-80 BETWEEN TRAVIS Blvd AND AIR BASE PARKWAY

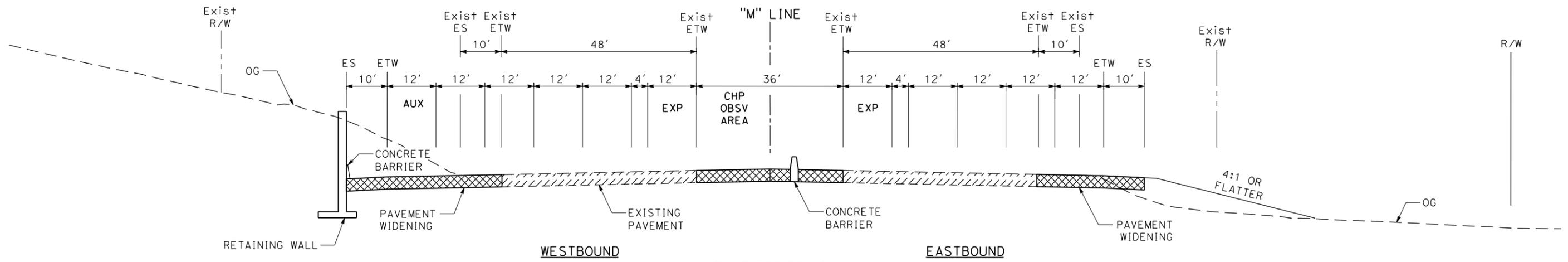


- * CHP OBSERVATION AREA WITHIN MEDIAN BETWEEN RELOCATED EB CORDELIA TRUCK SCALES AND SR 12 EAST
- ** 6TH LANE ADJACENT TO RELOCATED EB CORDELIA TRUCK SCALES OF SR 12 EAST

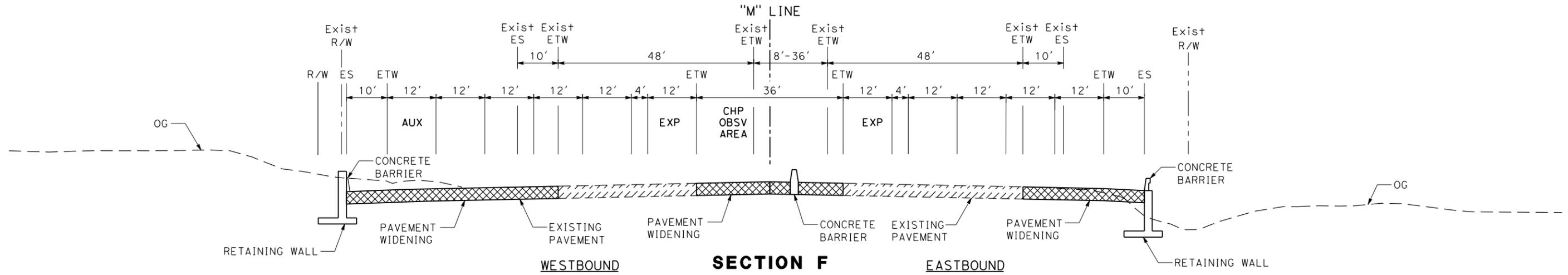
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY:	PREPARED FOR:	DESIGNED BY:	DATE:	INTERSTATE 80 EXPRESS LANE PROJECT	BX-2
		HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596		SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585			
COUNTY AND POST MILE: Sol 11.2/29.3				DRAWN BY:	DATE:		
				I. KUKANEGO	2-17-12		
				CHECKED BY:	DATE:		
				B. STEWART	2-17-12		
				CHARGE UNIT:	PROJECT NUMBER:		
				0412000332K	04-4G080K		

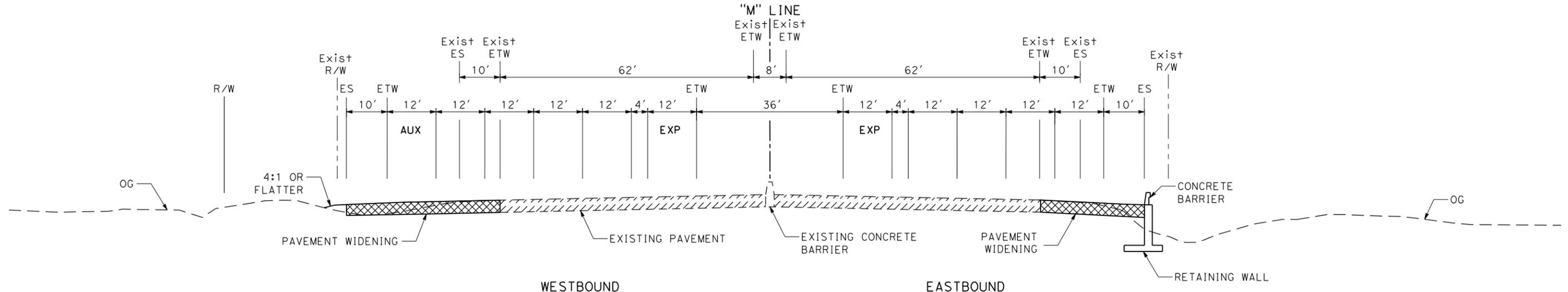
\$DATE \$USER \$REQUEST



SECTION G



SECTION F

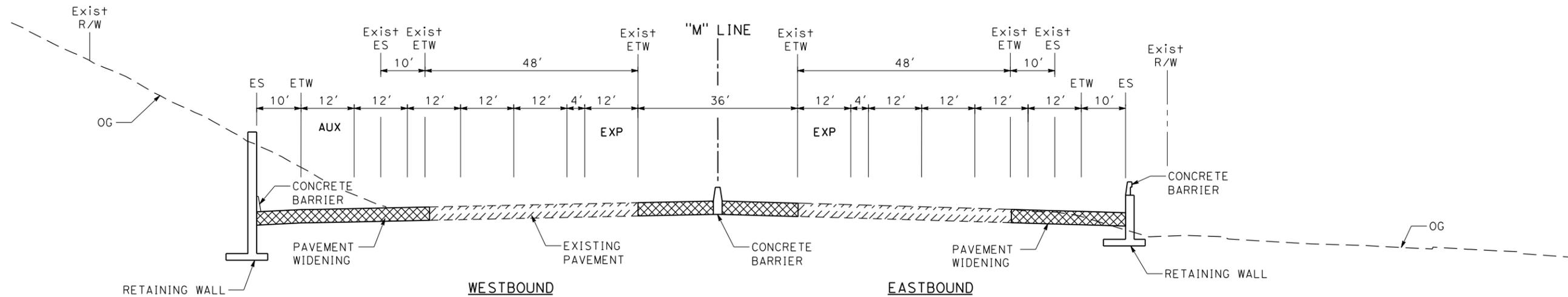


SECTION E

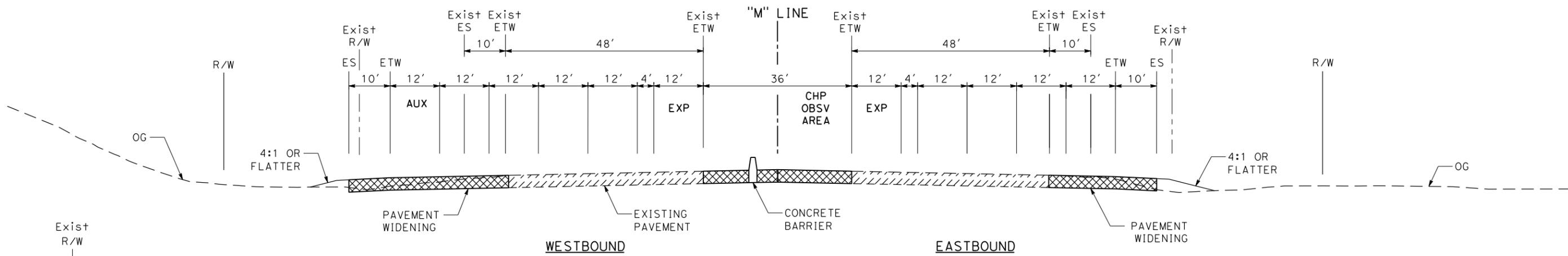
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	BX-3
	COUNTY AND POST MILE: Sol 11.2/29.3				DRAWN BY: I. KUKANEGO		
CHARGE UNIT: 0412000332K				PROJECT NUMBER: 04-4G080K	CHECKED BY: B. STEWART		

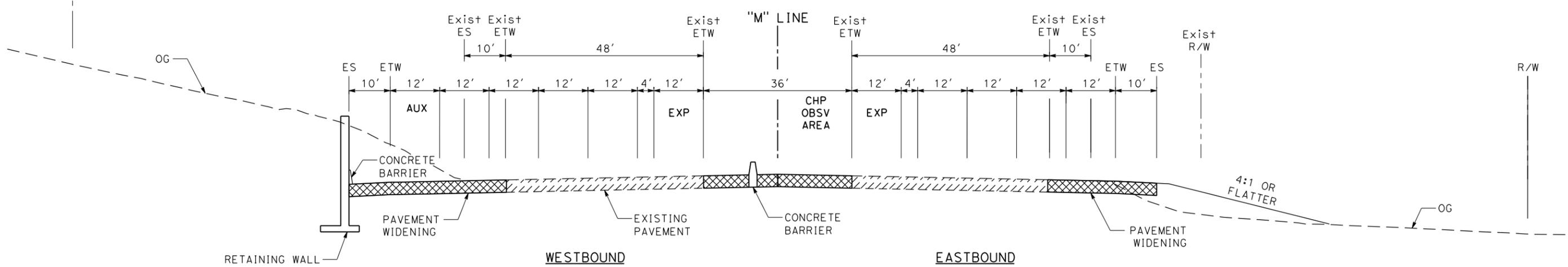
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SECTION J



SECTION I

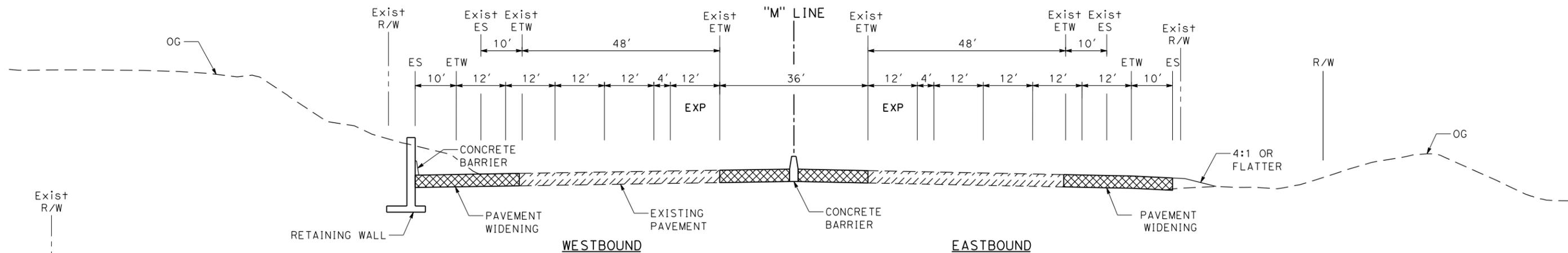


SECTION H

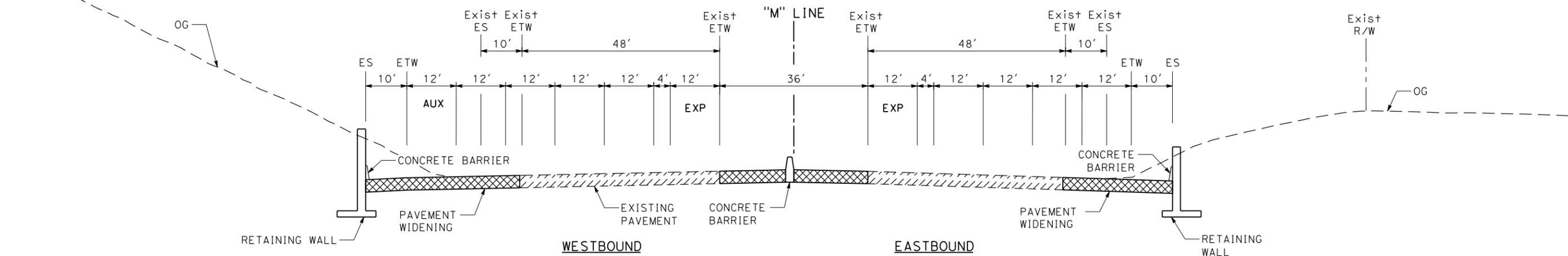
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	B X - 4
	COUNTY AND POST MILE: SoI 11.2/29.3			DRAWN BY: I. KUKANEGO	DATE: 2-17-12		
				CHECKED BY: B. STEWART	DATE: 2-17-12		

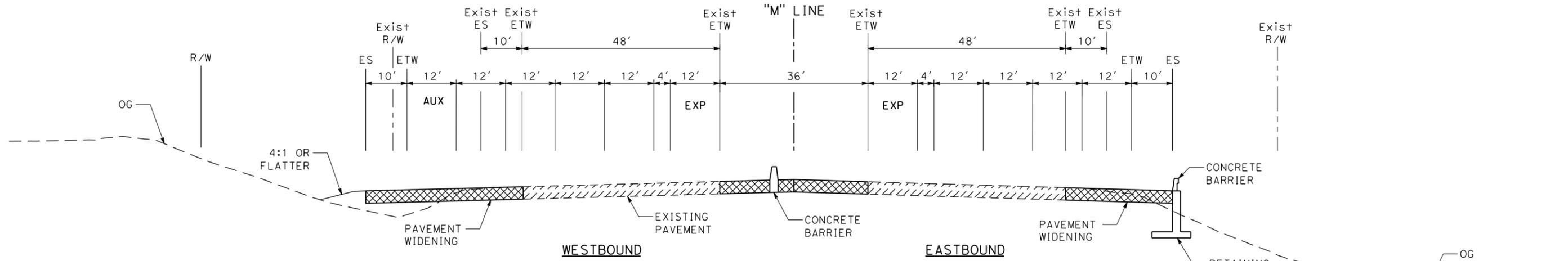
\$DATE \$TIME \$USER \$REQUEST



SECTION M



SECTION L

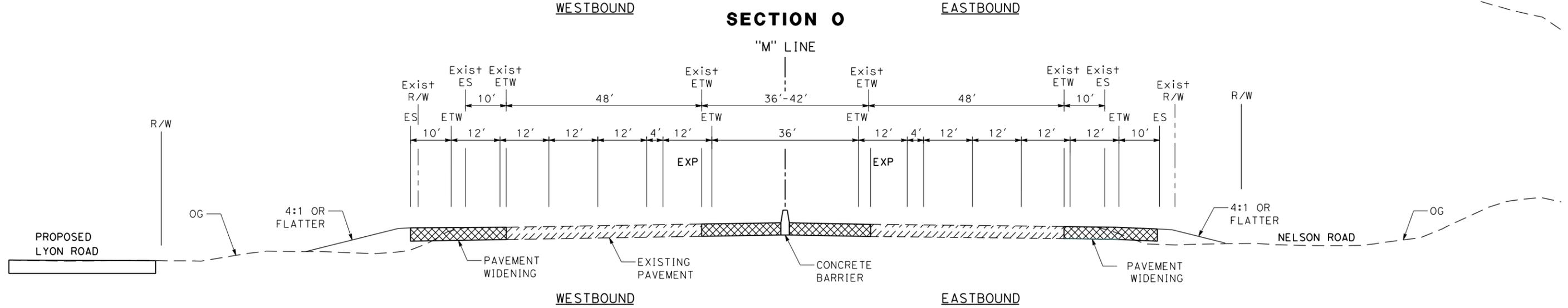
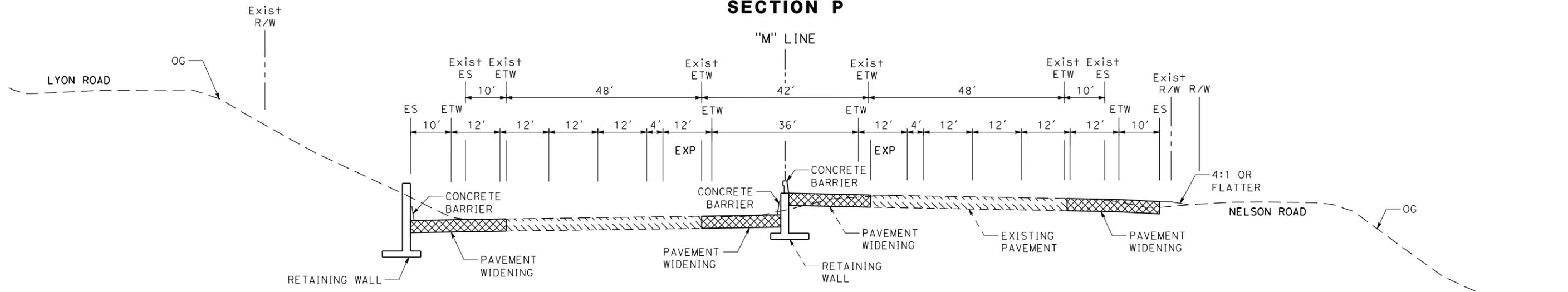
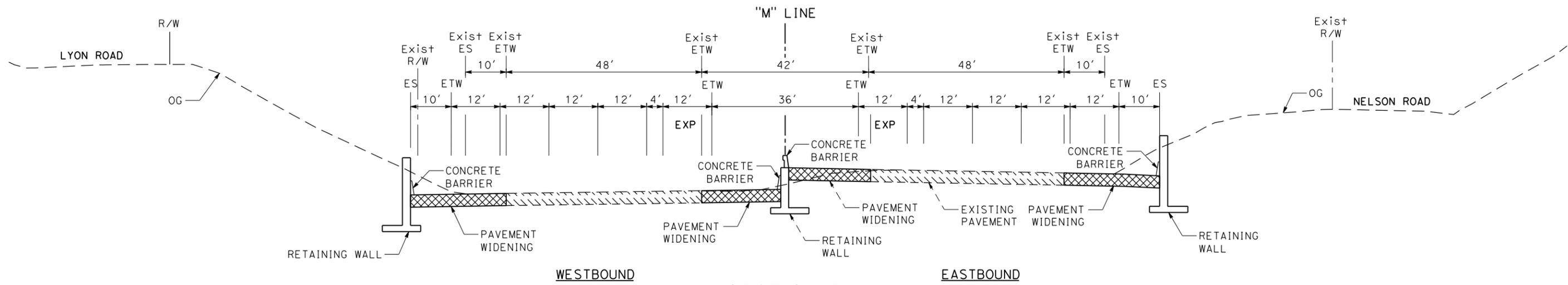


SECTION K

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	BX-5
	COUNTY AND POST MILE: Sol 11.2/29.3			DRAWN BY: I. KUKANEGO	DATE: 2-17-12		
		CHARGE UNIT: 0412000332K	PROJECT NUMBER: 04-4G080K	CHECKED BY: B. STEWART	DATE: 2-17-12		

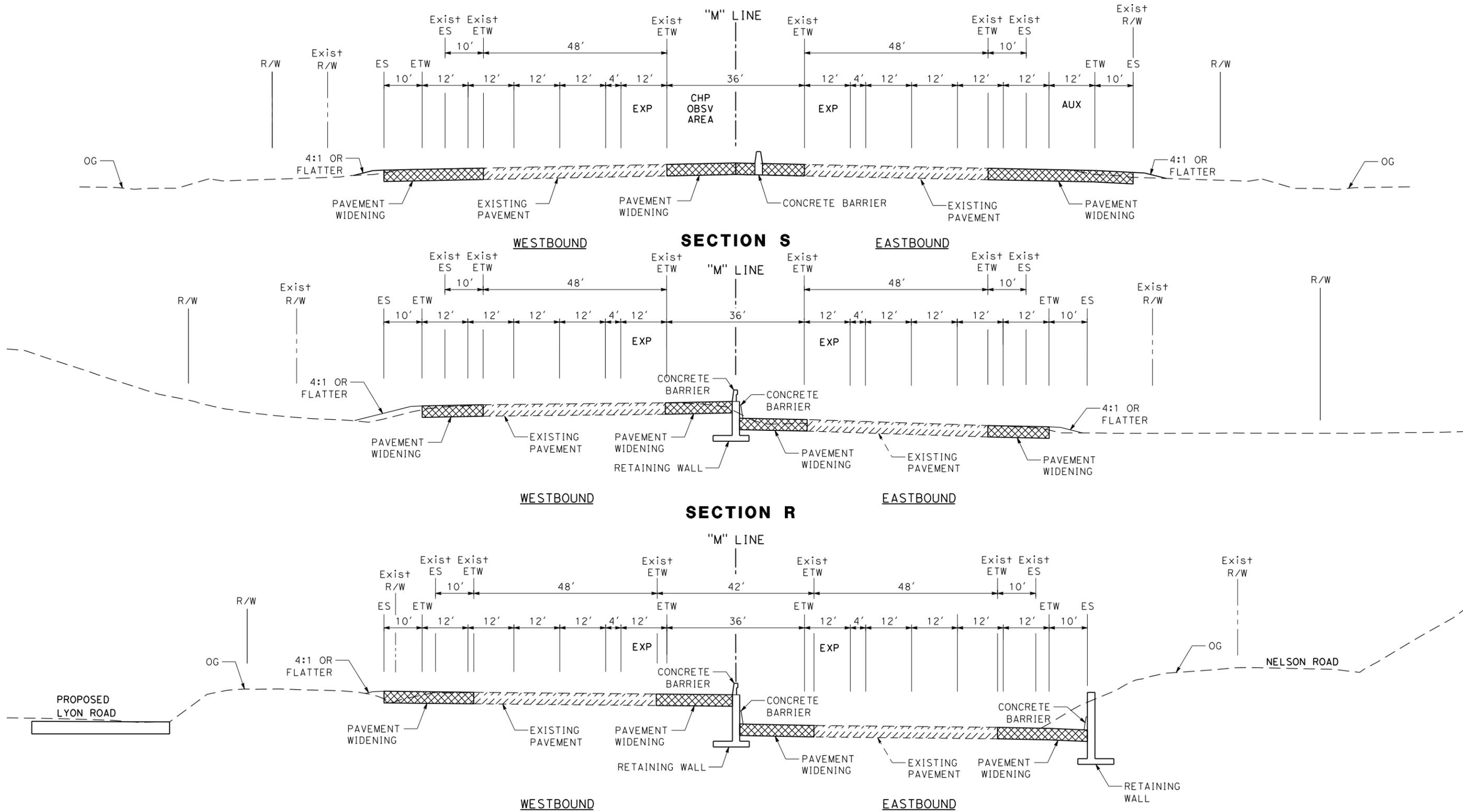
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FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	BX-6
COUNTY AND POST MILE: Sol 11.2/29.3		CHARGE UNIT: 0412000332K		DRAWN BY: I. KUKANEGO	DATE: 2-17-12		
		PROJECT NUMBER: 04-4G080K		CHECKED BY: B. STEWART	DATE: 2-17-12		
						ALTERNATIVE B	

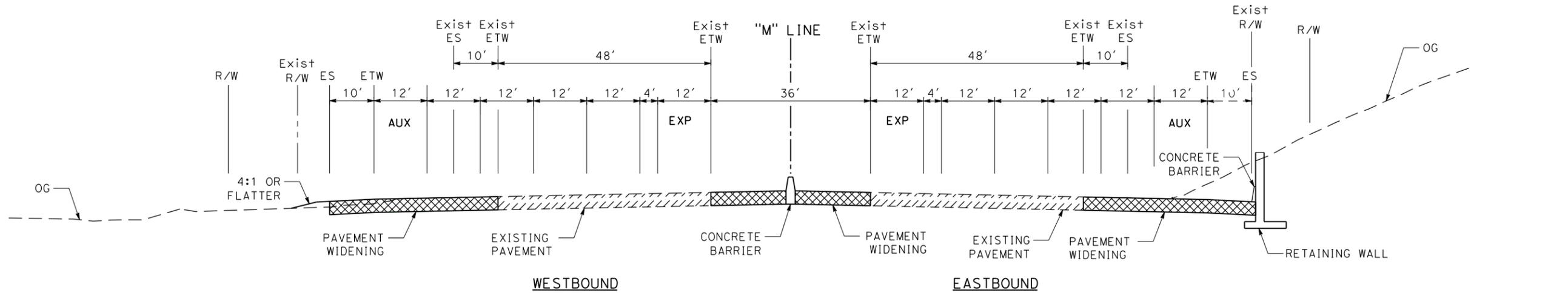
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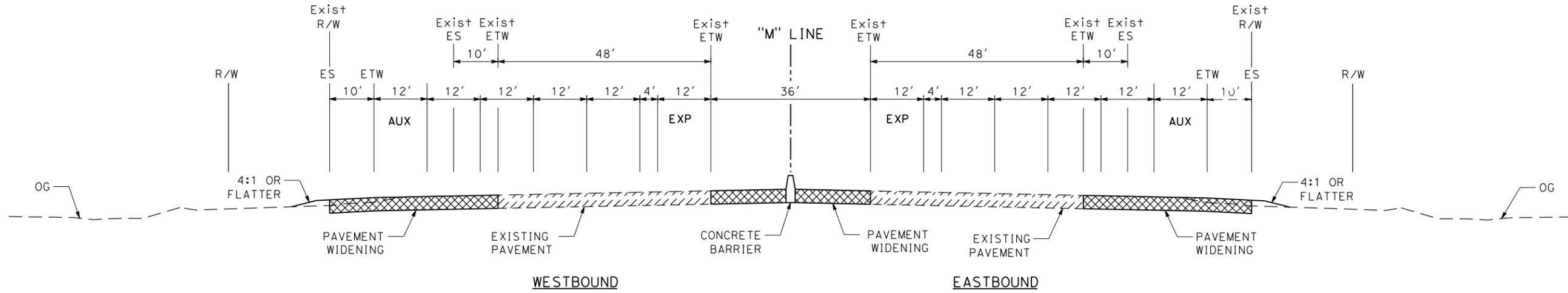
FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	BX-7
	COUNTY AND POST MILE: Sol 11.2/29.3			DRAWN BY: I. KUKANEGO	DATE: 2-17-12		
				CHECKED BY: B. STEWART	DATE: 2-17-12		

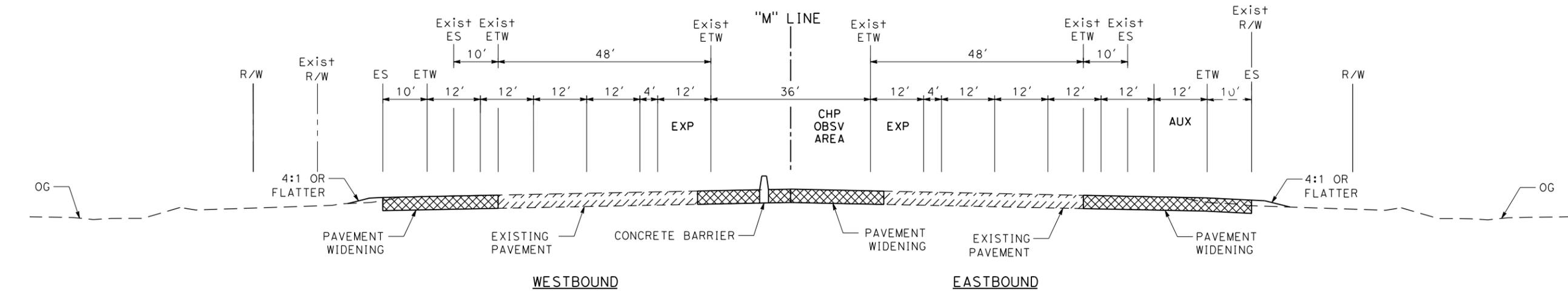
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SECTION V



SECTION U

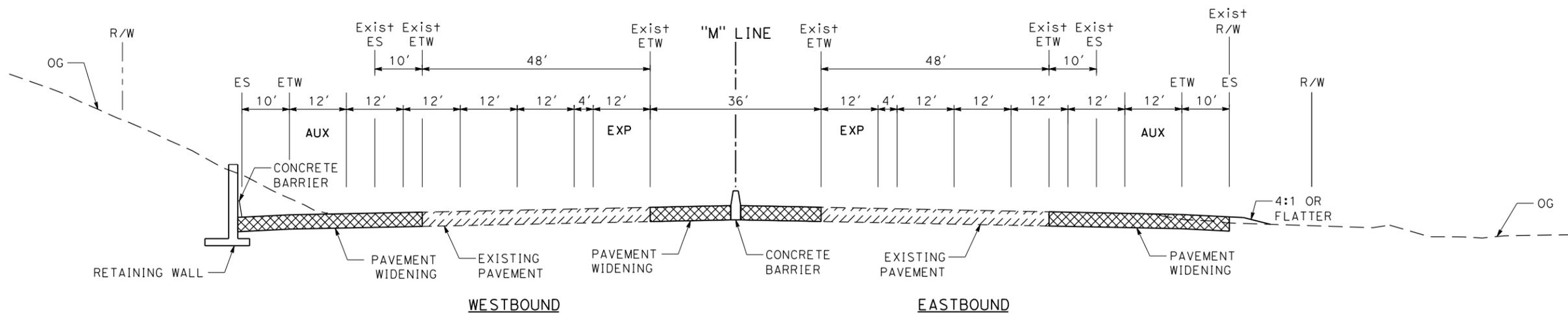
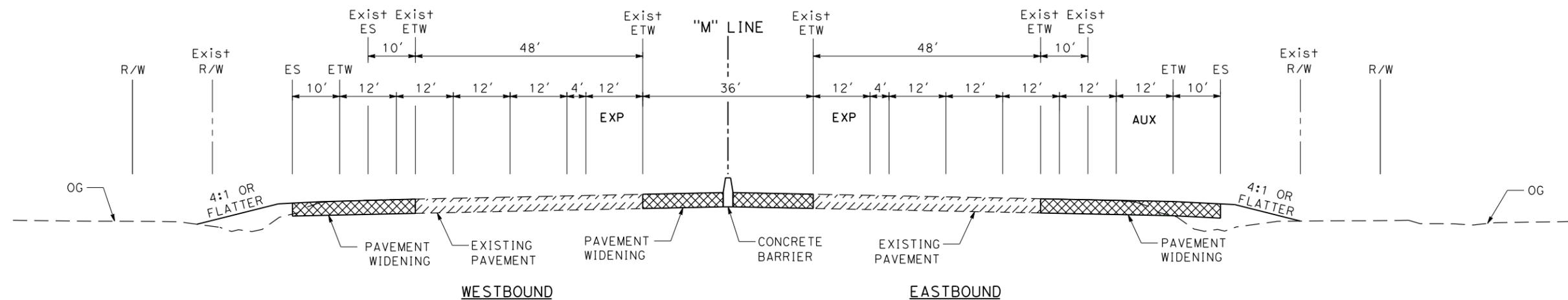
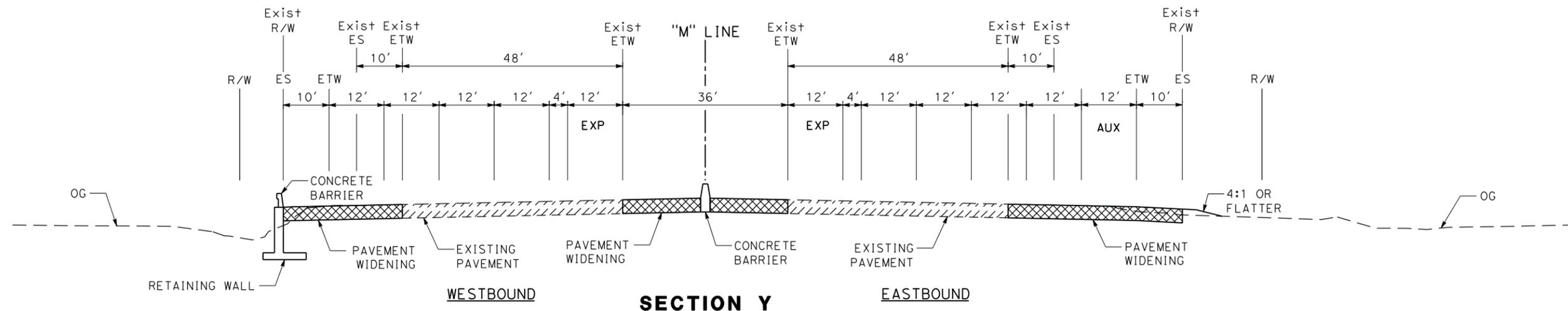


SECTION T

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	B X - 8	
COUNTY AND POST MILE: SoI 11.2/29.3		CHARGE UNIT: 0412000332K		PROJECT NUMBER: 04-4G080K	NO SCALE			ALTERNATIVE B
				DRAWN BY: I. KUKANEGO	DATE: 2-17-12			
				CHECKED BY: B. STEWART	DATE: 2-17-12			

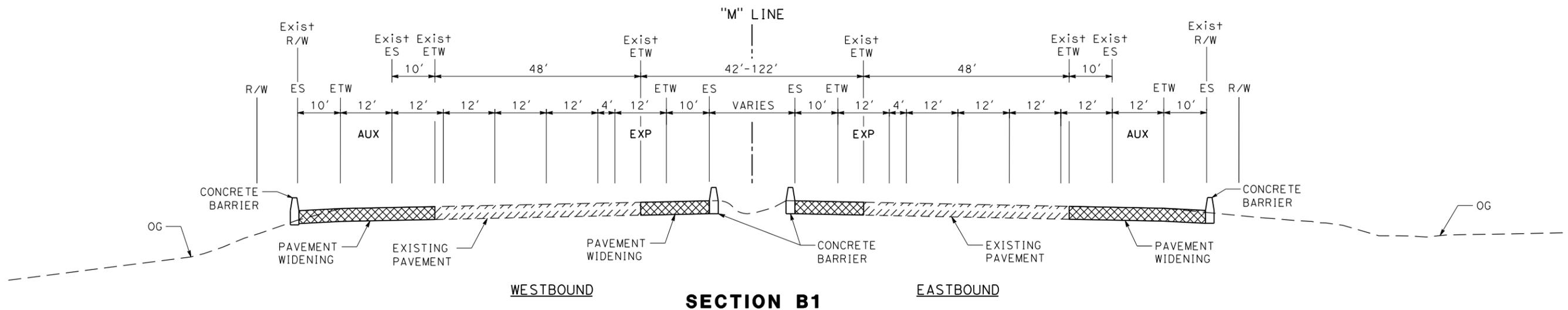
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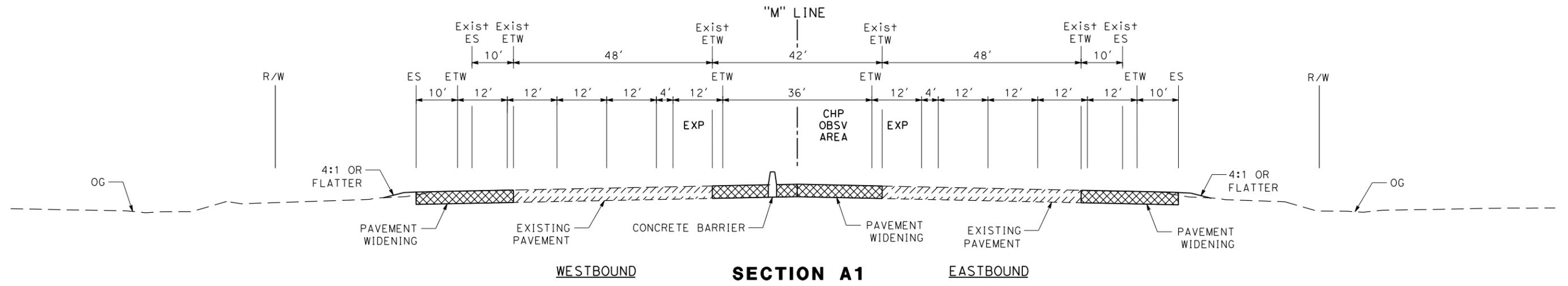
FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	BX-9
COUNTY AND POST MILE: SoI 11.2/29.3		CHARGE UNIT: 0412000332K		DRAWN BY: I. KUKANEGO	DATE: 2-17-12		
		PROJECT NUMBER: 04-4G080K		CHECKED BY: B. STEWART	DATE: 2-17-12		
						ALTERNATIVE B	

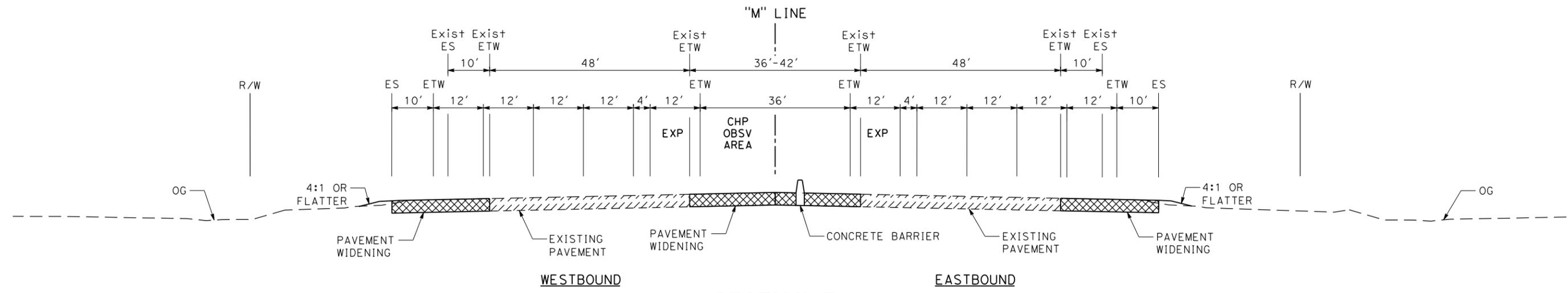
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SECTION B1



SECTION A1

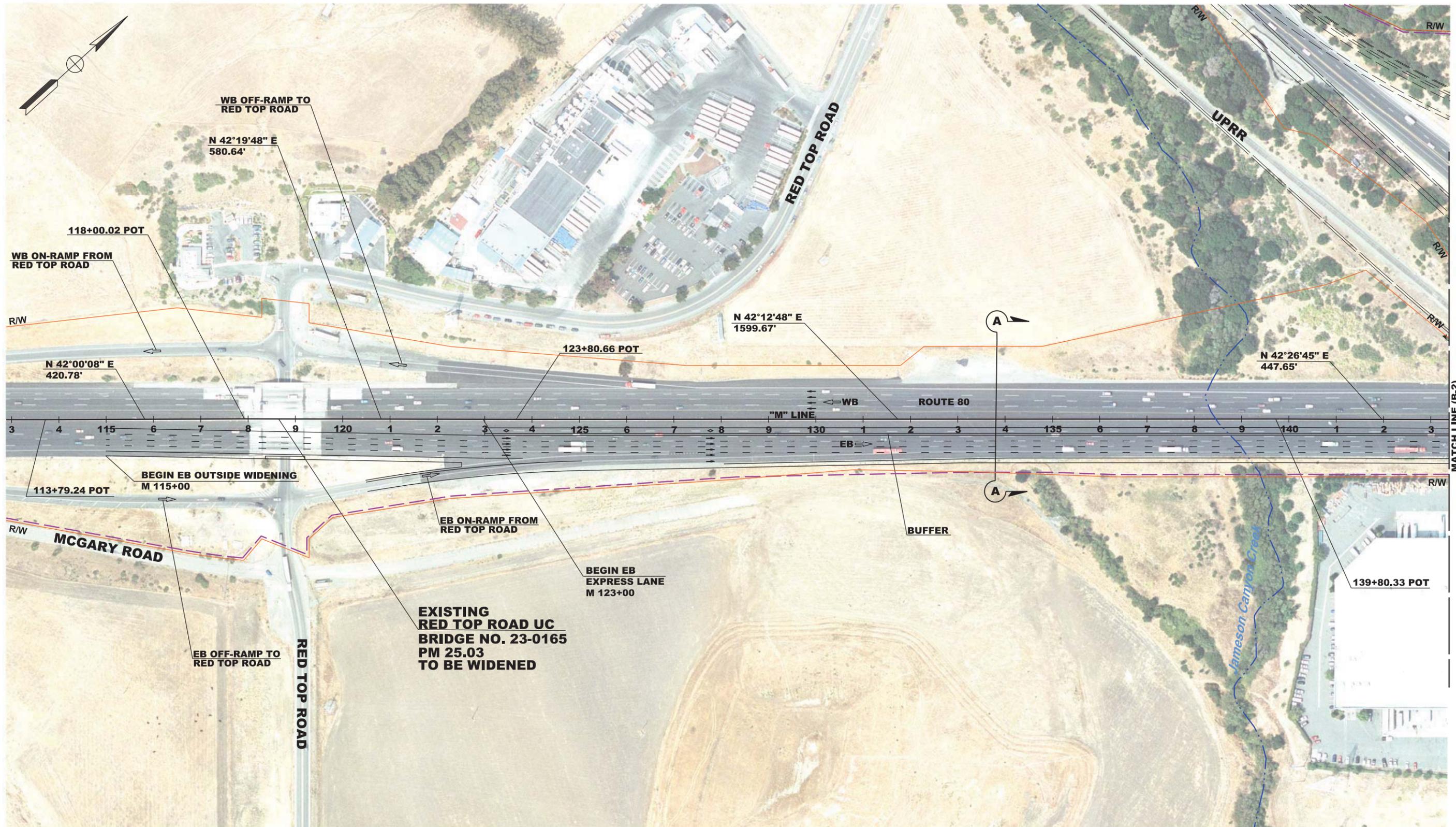


SECTION Z

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR ENGINEERING, INC 2121 N CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	DESIGNED BY: M. RAMIREZ	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	BX-10
COUNTY AND POST MILE: SoI 11.2/29.3		CHARGE UNIT: 0412000332K		DRAWN BY: I. KUKANEGO	DATE: 2-17-12		
		PROJECT NUMBER: 04-4G080K		CHECKED BY: B. STEWART	DATE: 2-17-12		
						ALTERNATIVE B	

\$DATE \$TIME \$USER \$REQUEST



FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
	XX ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

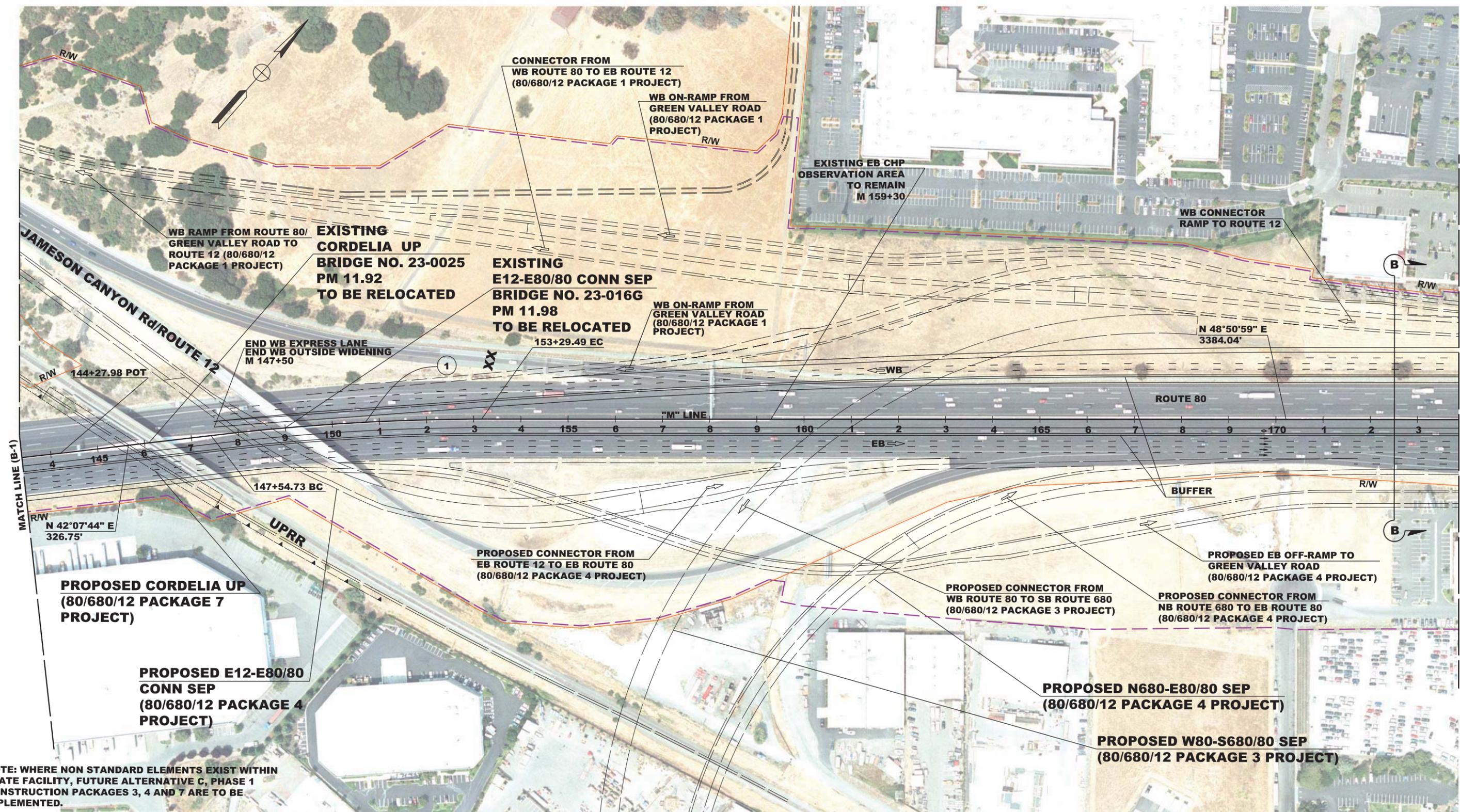
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B - 1



NOTE: WHERE NON STANDARD ELEMENTS EXIST WITHIN STATE FACILITY, FUTURE ALTERNATIVE C, PHASE 1 CONSTRUCTION PACKAGES 3, 4 AND 7 ARE TO BE IMPLEMENTED.

CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
1	4900.00'	06°43'14"	287.71'	574.76'	1834289.71	6522095.60

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W
- XX ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04 ROUTE: 80

COUNTY AND POST MILE: Sol 11.2/29.3

PREPARED BY: MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112

PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

200 100 0 100 200

PROJECT NUMBER: 0412000332K PROJECT EA: 04-4G080K

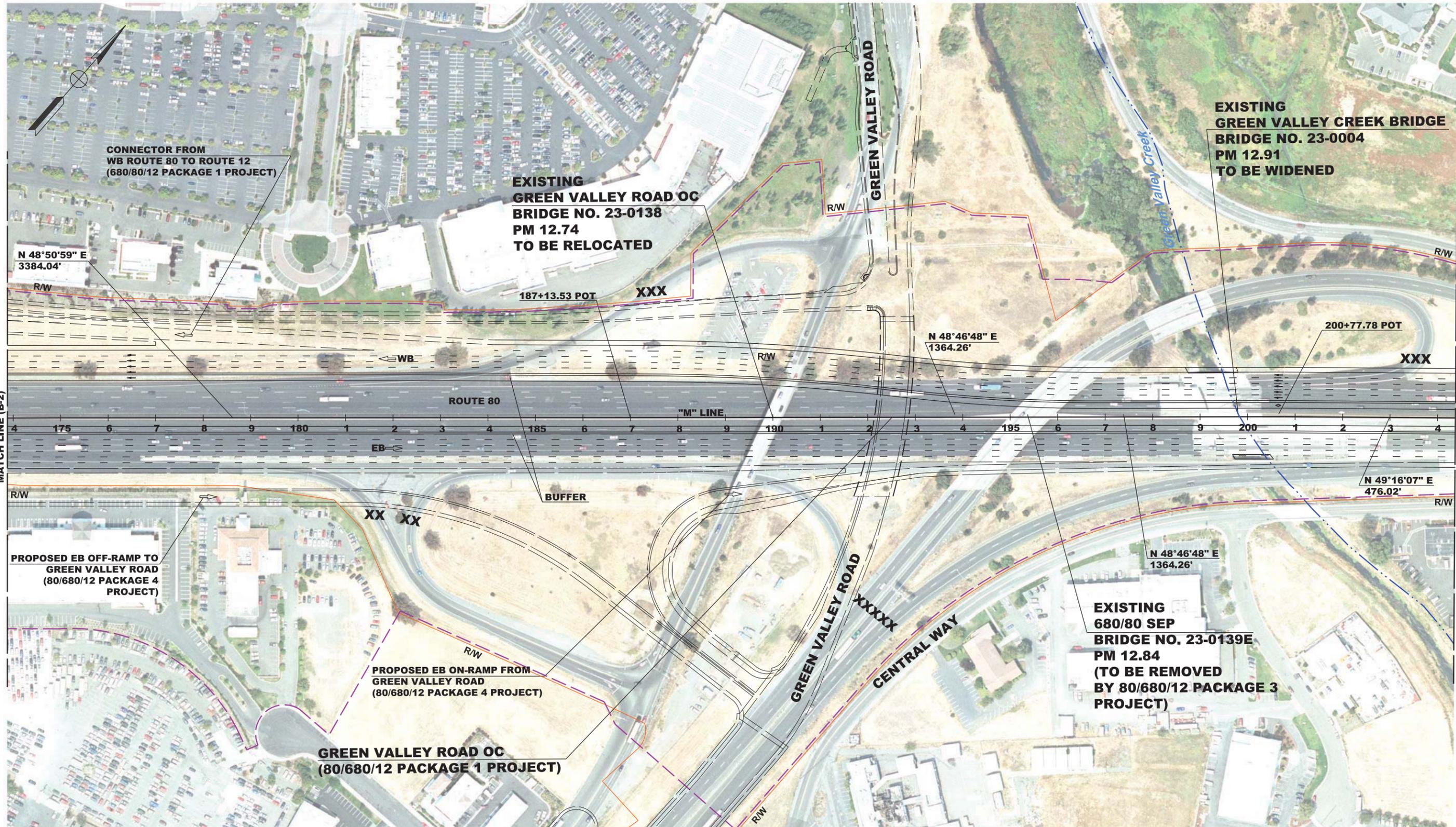
DESIGNED BY: R. LOPEZ DATE: 02-14-12

DRAWN BY: R. LOPEZ DATE: 02-14-12

CHECKED BY: M. SCHRAM DATE: 02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT

ALTERNATIVE B



FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
	XX ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:
MARK THOMAS & COMPANY INC.
 1960 ZANKER ROAD
 SAN JOSE, CA 95112

PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY
 ONE HARBOR CENTER, SUITE 130
 SUISUN CITY, CA 94585

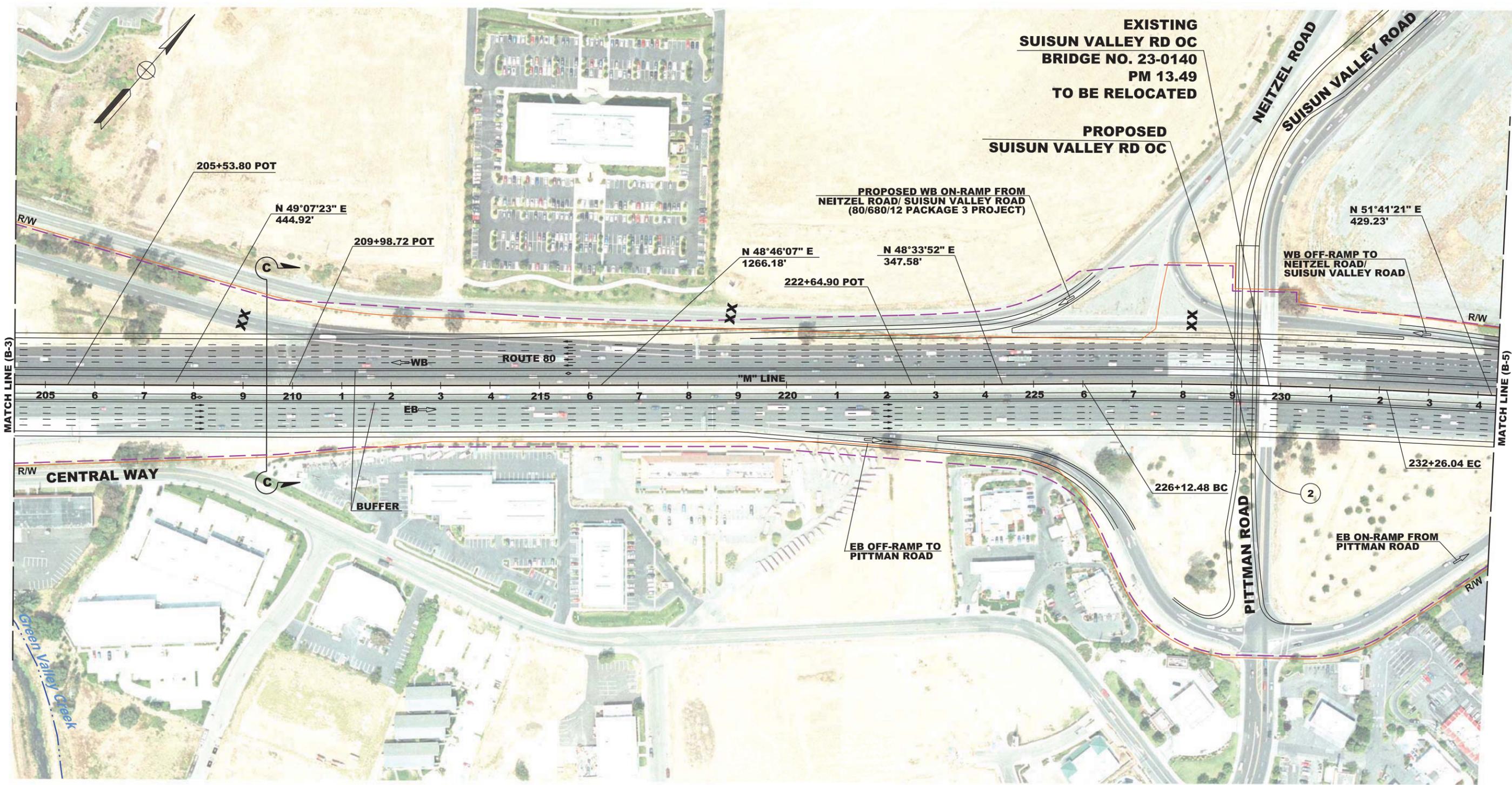
PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

**INTERSTATE 80
 EXPRESS LANE PROJECT**

ALTERNATIVE B

B - 3



CURVE DATA

No.	X	R	Δ	T	L	NORTHING	EASTING
2		11250.00'	03°07'29"	306.86'	613.56'	1834337.36	6531800.45

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W
- XX ROAD TO BE CLOSED/ABANDONED

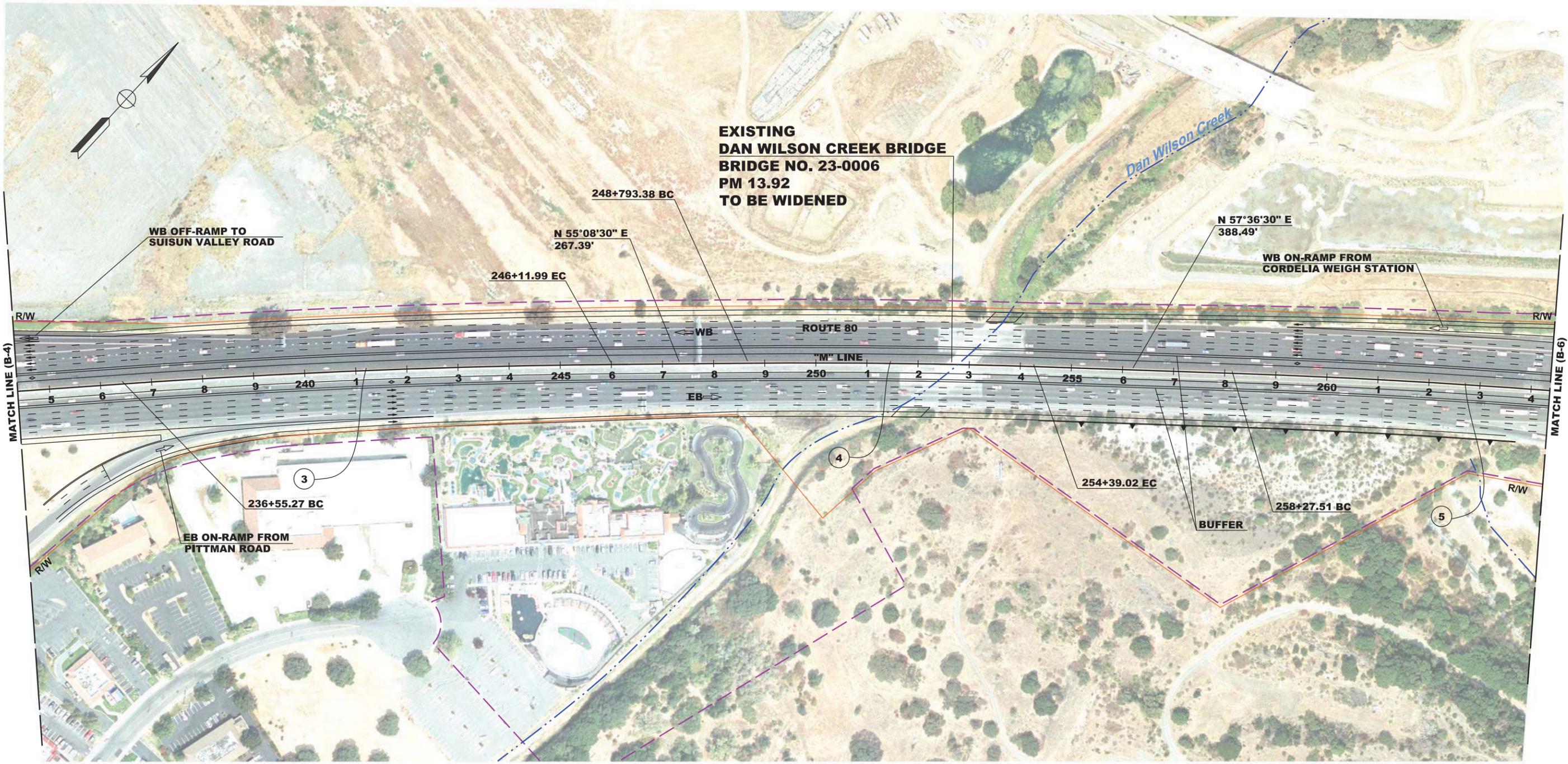
DISTRICT: 04 ROUTE: 80
 COUNTY AND POST MILE: Sol 11.2/29.3
 PREPARED BY: MARK THOMAS & COMPANY INC.
 1960 ZANKER ROAD
 SAN JOSE, CA 95112

PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY
 ONE HARBOR CENTER, SUITE 130
 SUISUN CITY, CA 94585

200 100 0 100 200
 PROJECT NUMBER: 0412000332K PROJECT EA: 04-4G080K

DESIGNED BY: R. LOPEZ DATE: 02-14-12
 DRAWN BY: R. LOPEZ DATE: 02-14-12
 CHECKED BY: M. SCHRAM DATE: 02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT
 ALTERNATIVE B



**EXISTING
DAN WILSON CREEK BRIDGE
BRIDGE NO. 23-0006
PM 13.92
TO BE WIDENED**

CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
3	15930.02'	03°27'46"	478.51'	956.72'	1831009.69	6534976.52
4	13000.00'	02°28'00"	279.86'	559.64'	1833486.37	6533580.78
5	15000.00'	03°29'19"	456.78'	913.29'	1827916.09	6537917.83

**FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1**

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112	

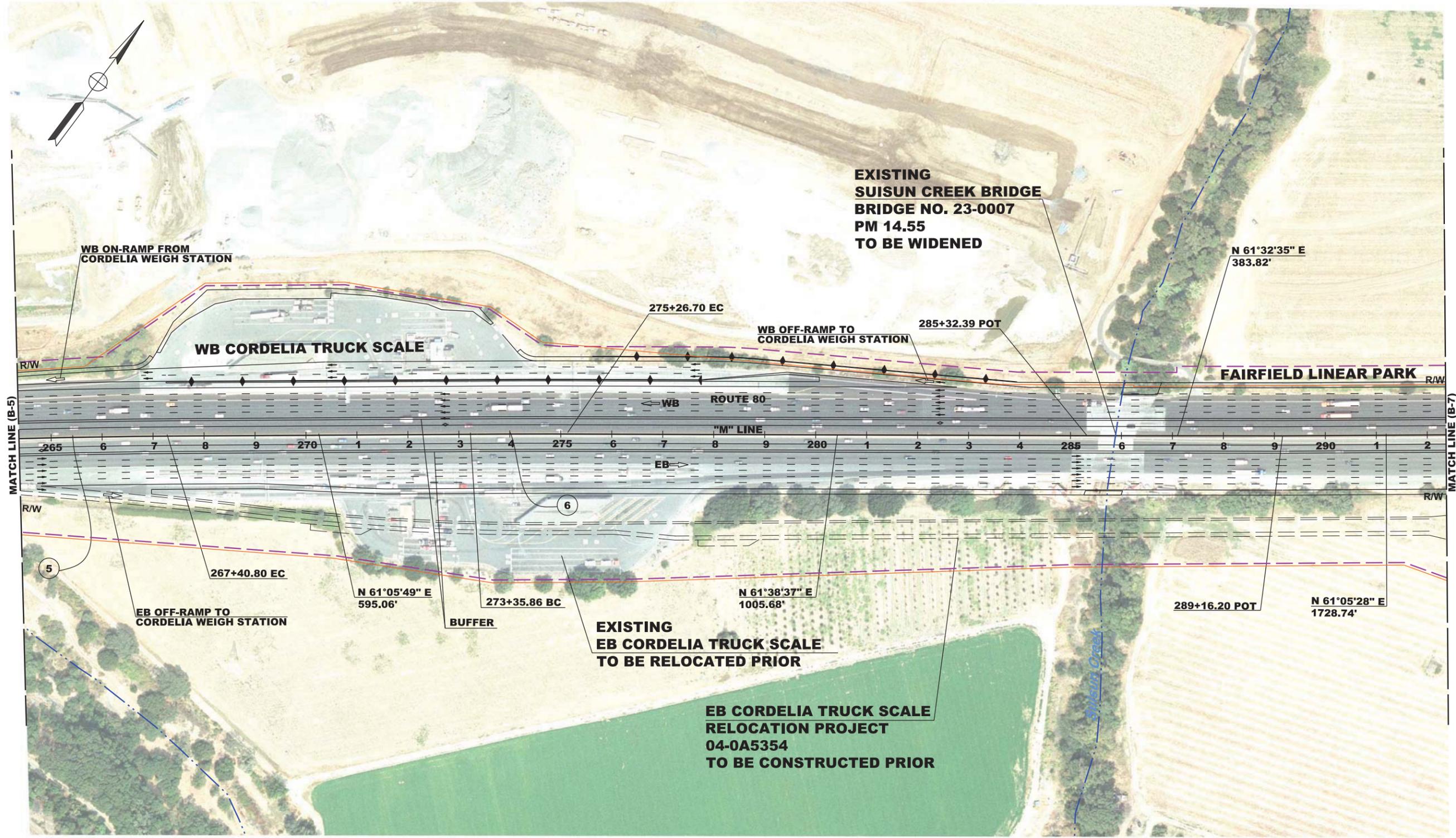
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT NUMBER: 0412000332K	PROJECT EA: 04-4G080K

DESIGNED BY: R. LOPEZ	DATE: 02-14-12
DRAWN BY: R. LOPEZ	DATE: 02-14-12
CHECKED BY: M. SCHRAM	DATE: 02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 5



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
5	15000.00'	03°29'19"	456.78'	913.29'	1827916.09	6537917.83
6	20000.00'	00°32'48"	95.42'	190.84'	1827916.09	6537917.83

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80	PREPARED BY: MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE: Sol 11.2/29.3		

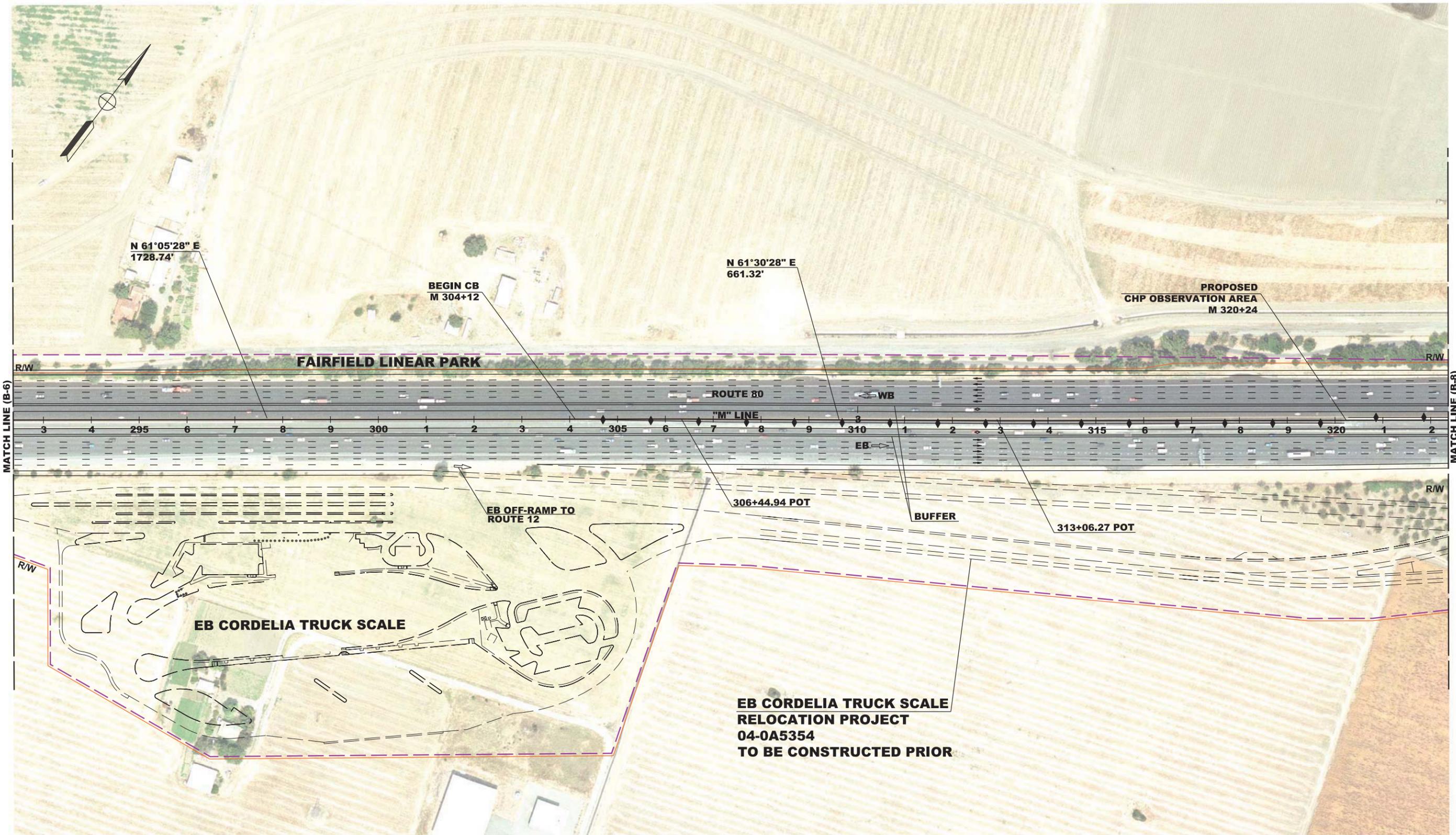
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT NUMBER: 0412000332K	PROJECT EA: 04-4G080K

DESIGNED BY: R. LOPEZ	DATE: 02-14-12
DRAWN BY: R. LOPEZ	DATE: 02-14-12
CHECKED BY: M. SCHRAM	DATE: 02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 6



MATCH LINE (B-6)

MATCH LINE (B-8)

FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

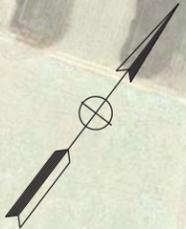
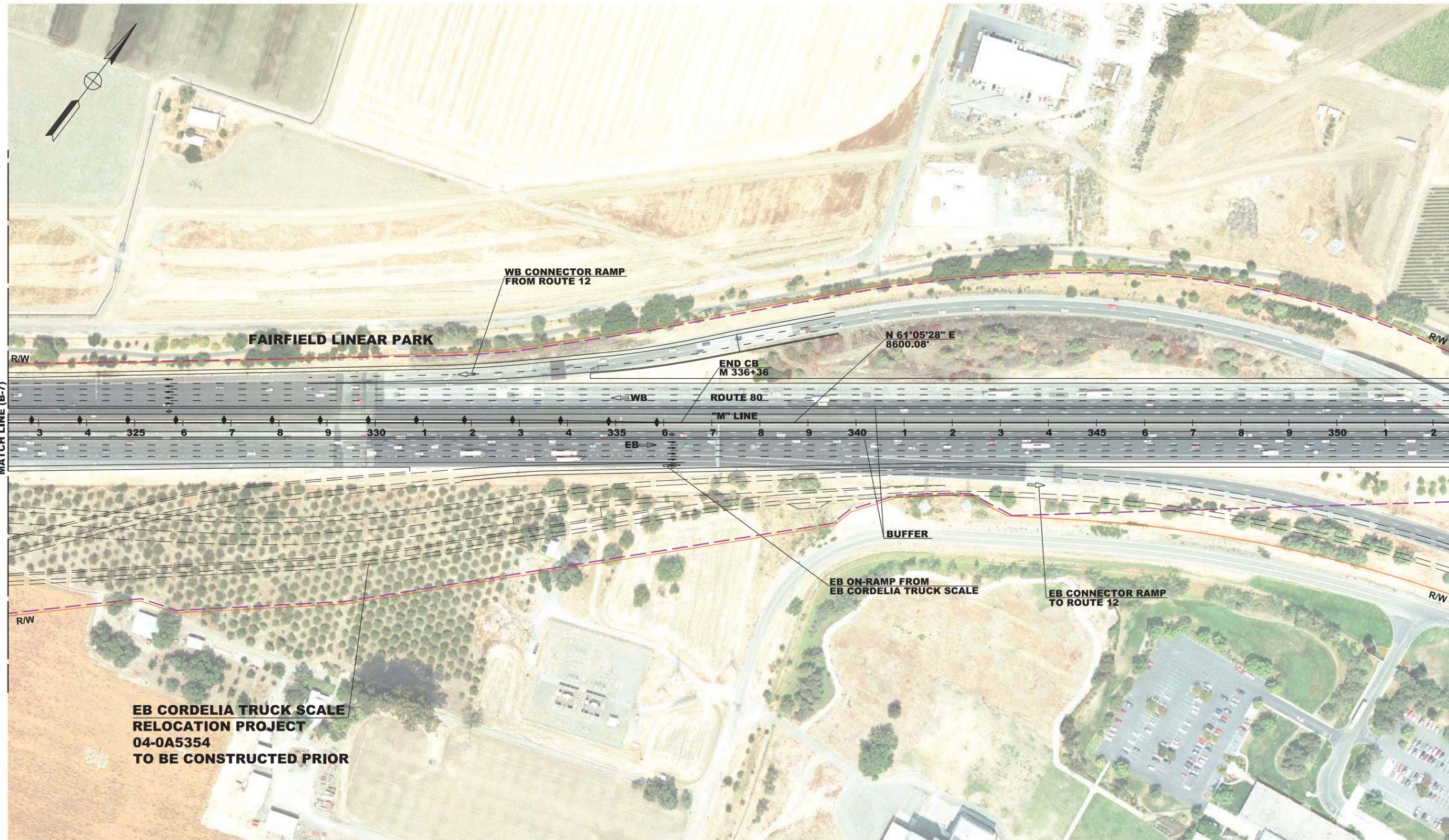
DISTRICT:	ROUTE:	PREPARED BY:
04	80	MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE:		PREPARED FOR:
Sol 11.2/29.3		SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-7

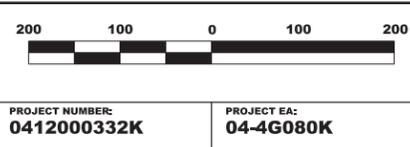


FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:	PREPARED BY:
04	80	MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE:		PREPARED FOR:
Sol 11.2/29.3		SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

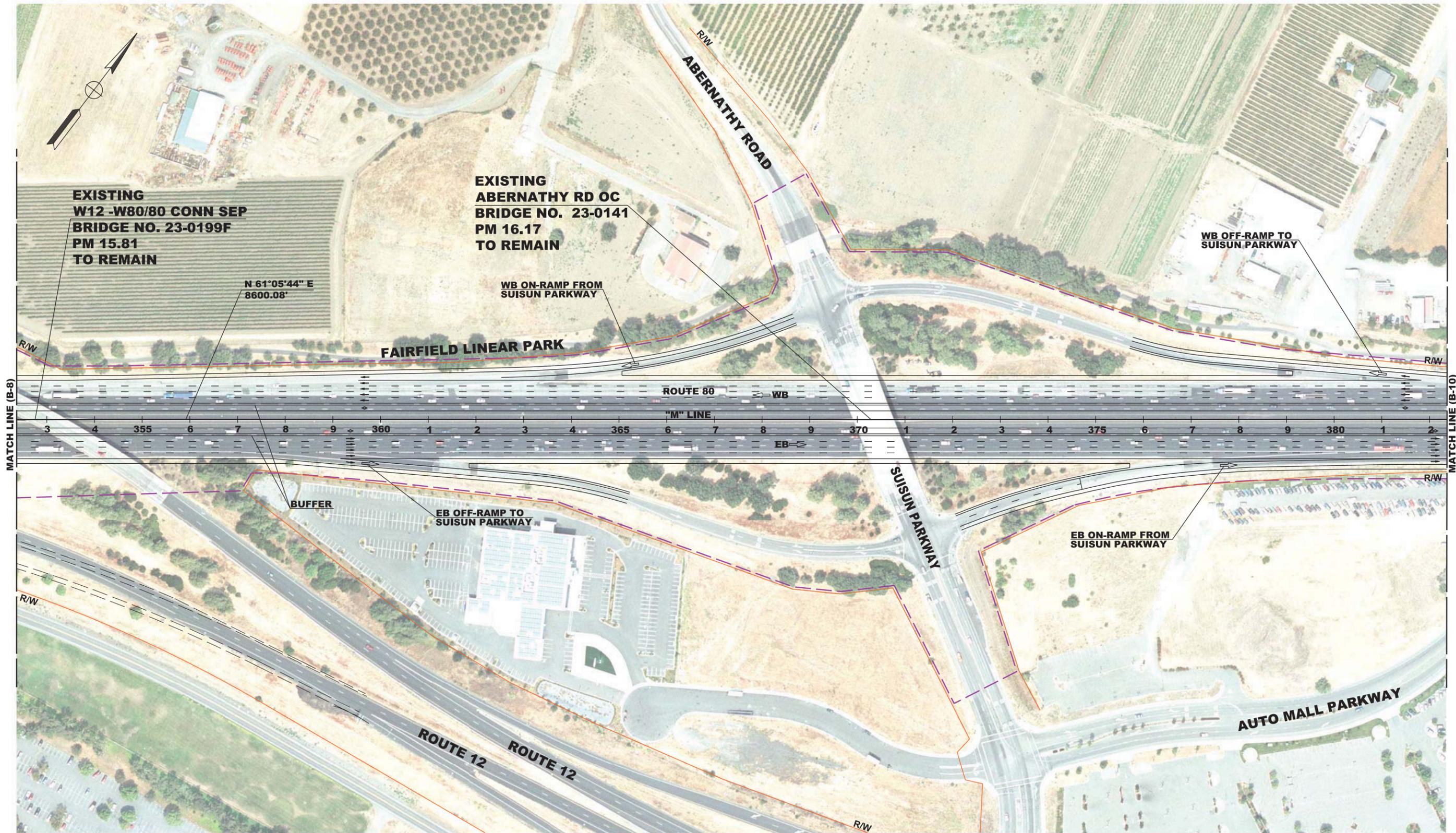
PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K



DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 8



FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

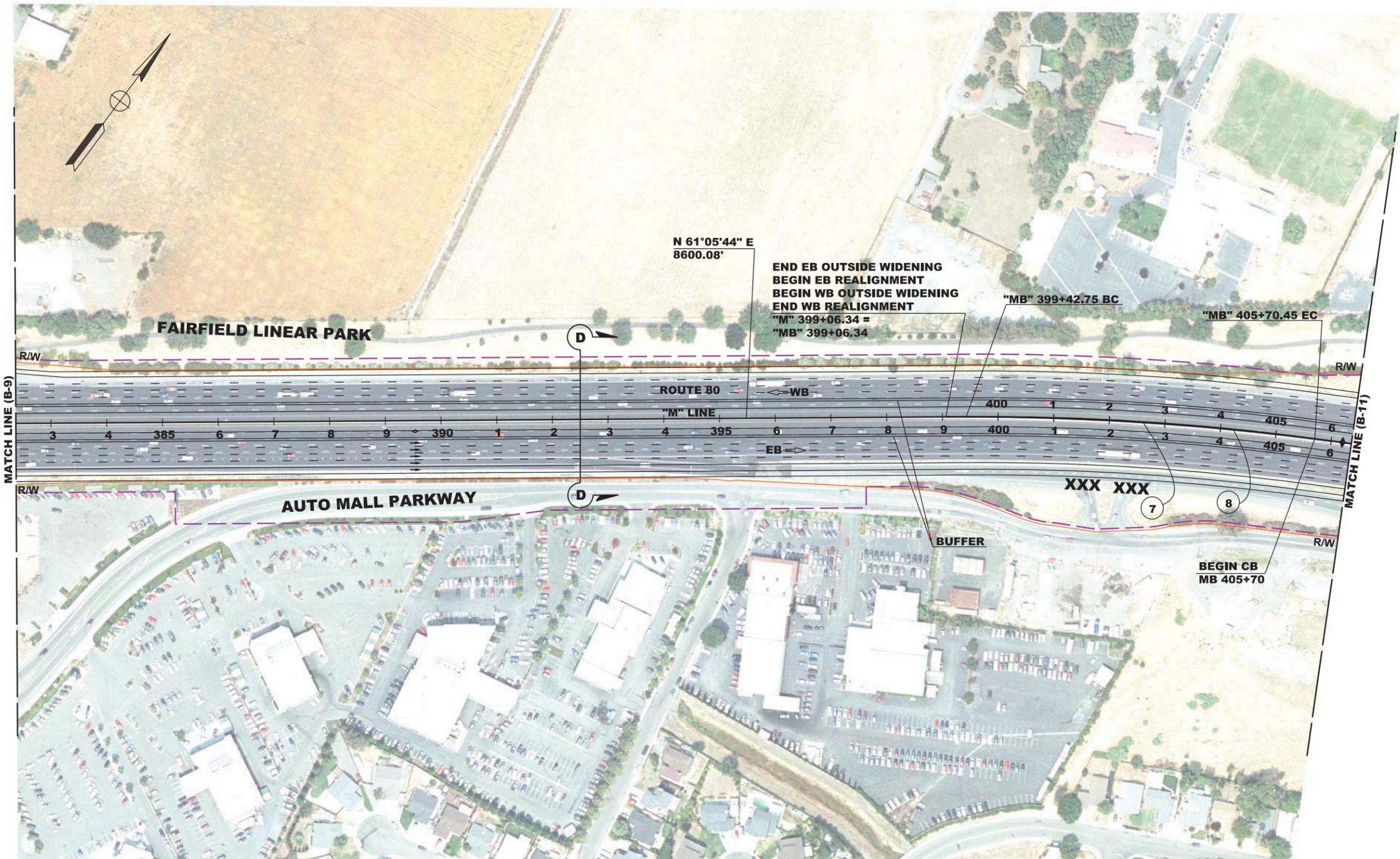
DISTRICT:	ROUTE:	PREPARED BY:
04	80	MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE:		PREPARED FOR:
Sol 11.2/29.3		SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 9	
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CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
7	5000.00'	10°30'00"	459.44'	916.30'	1847107.73	6541681.20
8	4500.00'	07°59'31"	314.36'	627.70'	1847563.04	6541471.40

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W
- XX** ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04
ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3

PREPARED BY:
MARK THOMAS & COMPANY INC.
1960 ZANKER ROAD
SAN JOSE, CA 95112

PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT NUMBER: 0412000332K

PROJECT EA: 04-4G080K

DESIGNED BY: R. LOPEZ
DATE: 02-14-12
DRAWN BY: R. LOPEZ
DATE: 02-14-12
CHECKED BY: M. SCHRAM
DATE: 02-14-12

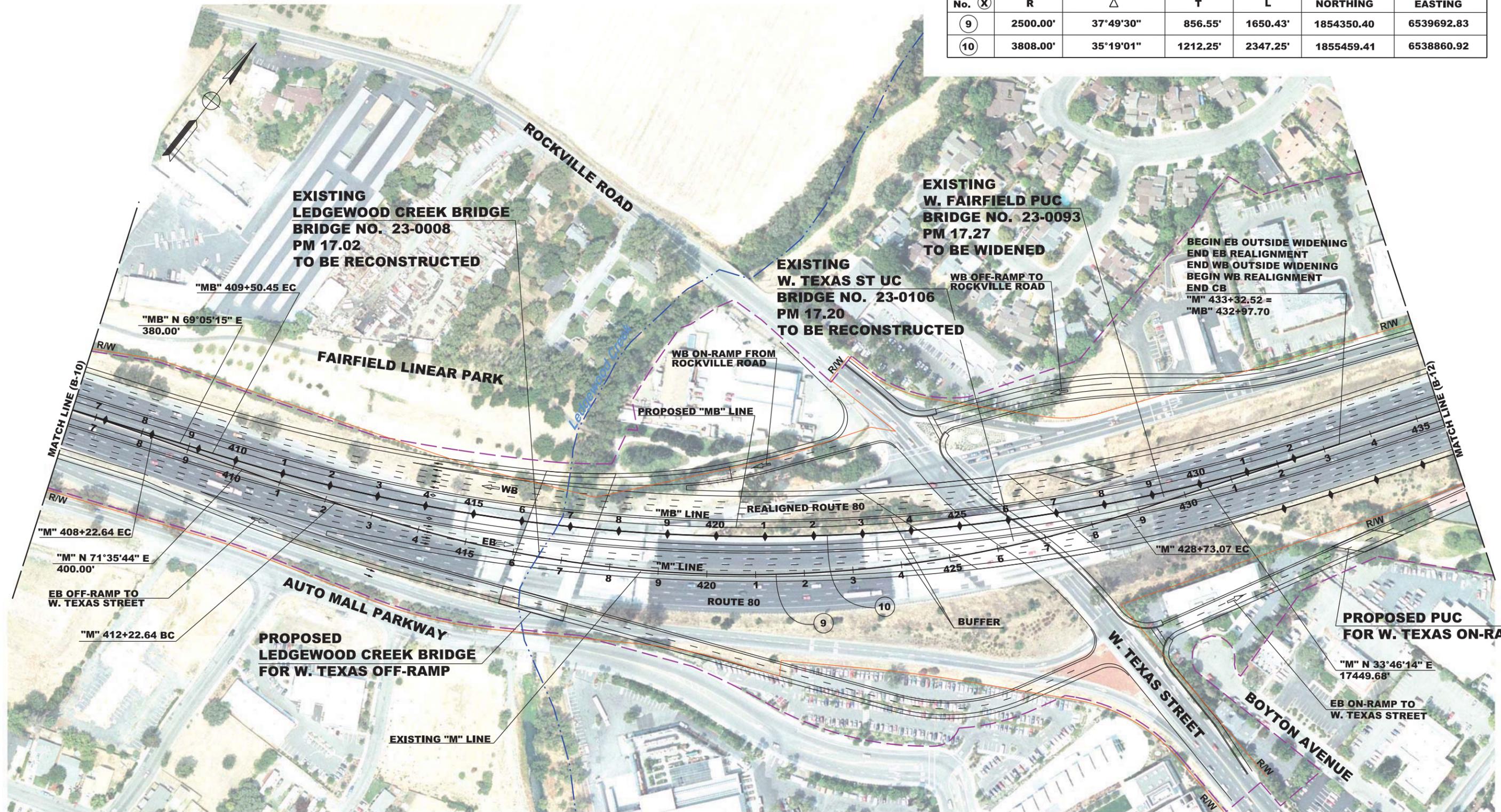
INTERSTATE 80 EXPRESS LANE PROJECT

ALTERNATIVE B

B-10

CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
9	2500.00'	37°49'30"	856.55'	1650.43'	1854350.40	6539692.83
10	3808.00'	35°19'01"	1212.25'	2347.25'	1855459.41	6538860.92



FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

LEGEND:	— — — — — POTENTIAL IMPACT
— — — — —	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:	PREPARED BY:
04	80	MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE:		PREPARED FOR:
Sol 11.2/29.3		SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

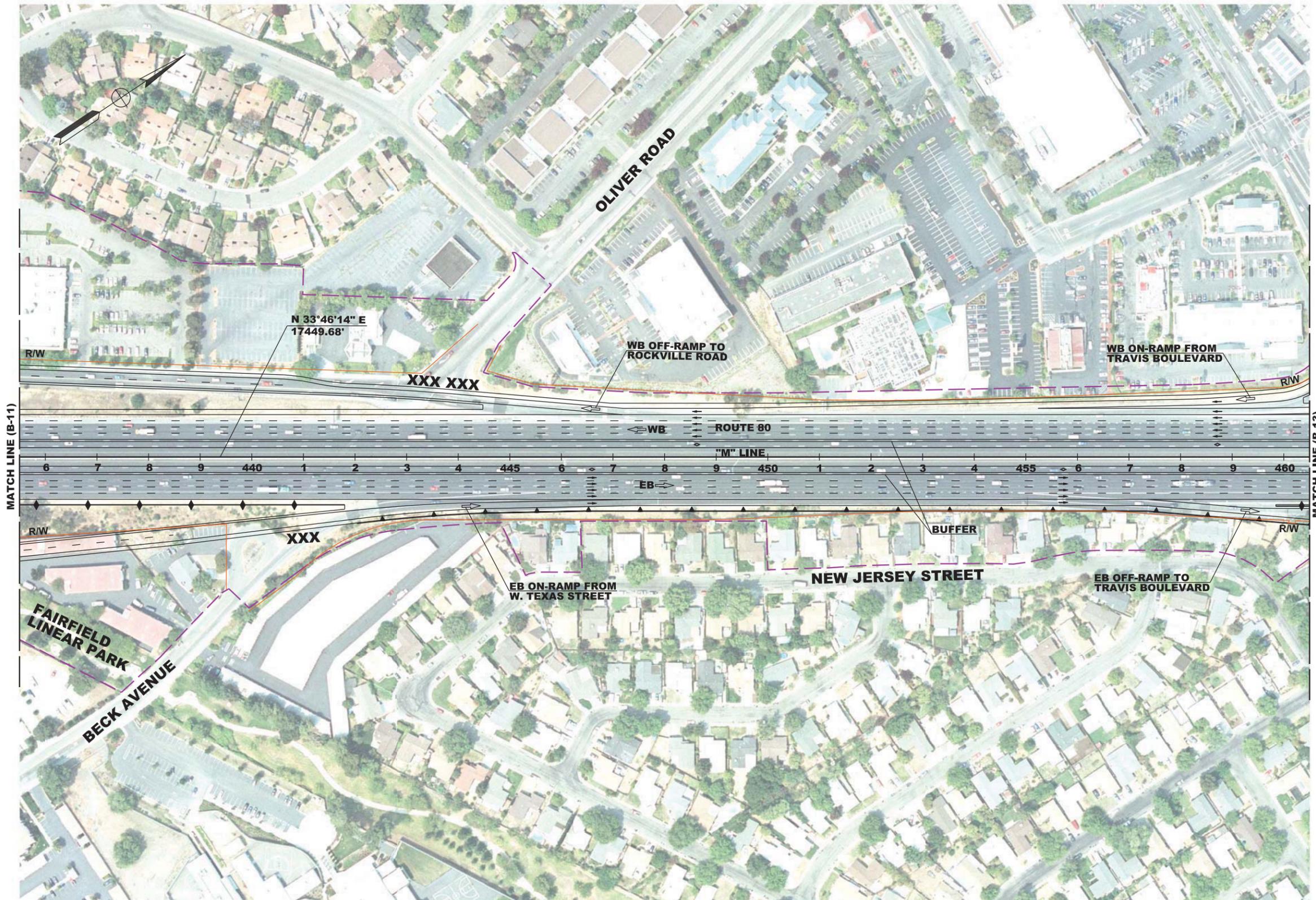
DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K

SCALE:
200 100 0 100 200

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B-11



FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	

PREPARED BY: MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
--

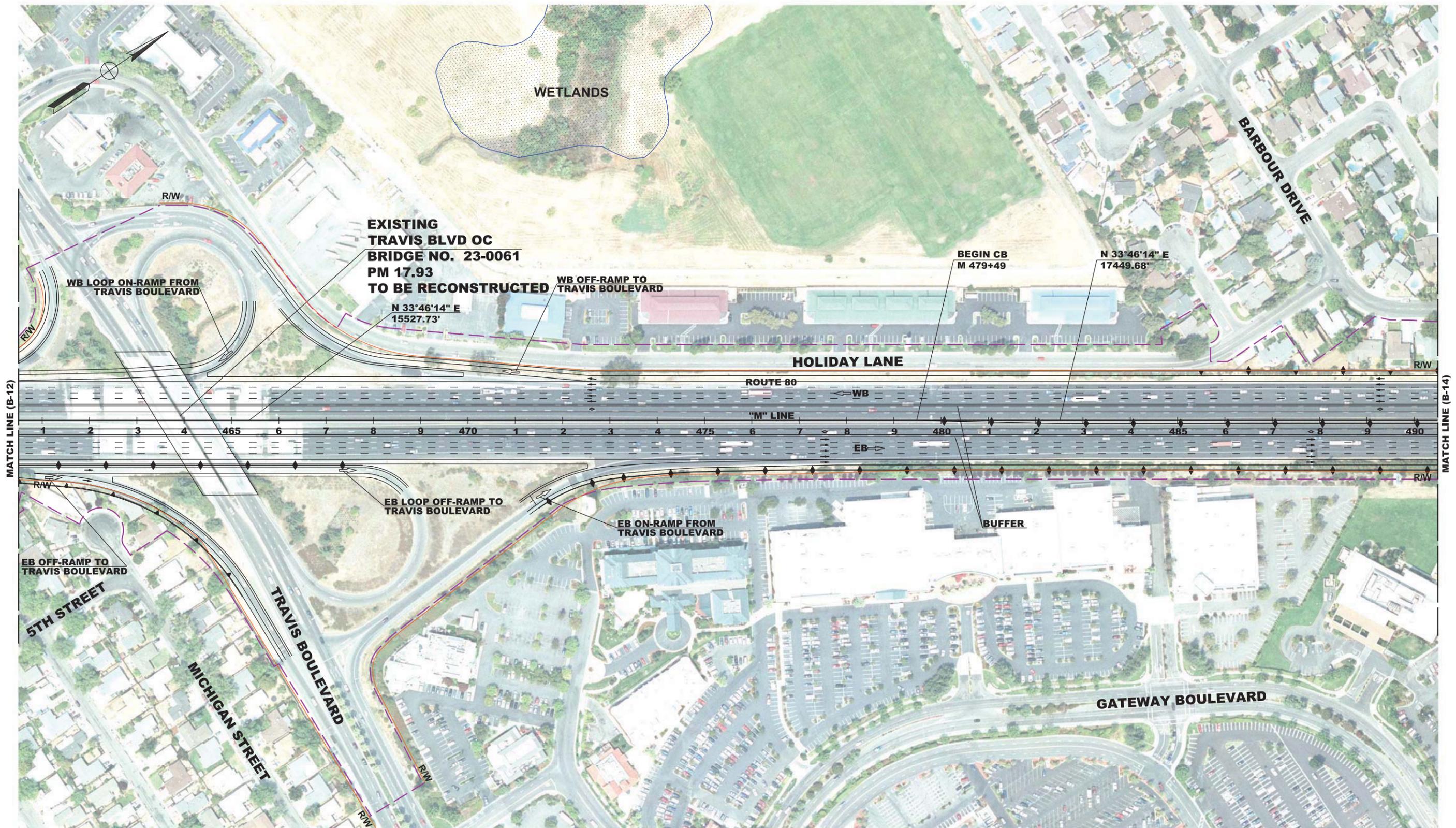
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT NUMBER: 0412000332K	PROJECT EA: 04-4G080K

DESIGNED BY: R. LOPEZ	DATE: 02-14-12
DRAWN BY: R. LOPEZ	DATE: 02-14-12
CHECKED BY: M. SCHRAM	DATE: 02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B-12



FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
SoI 11.2/29.3	

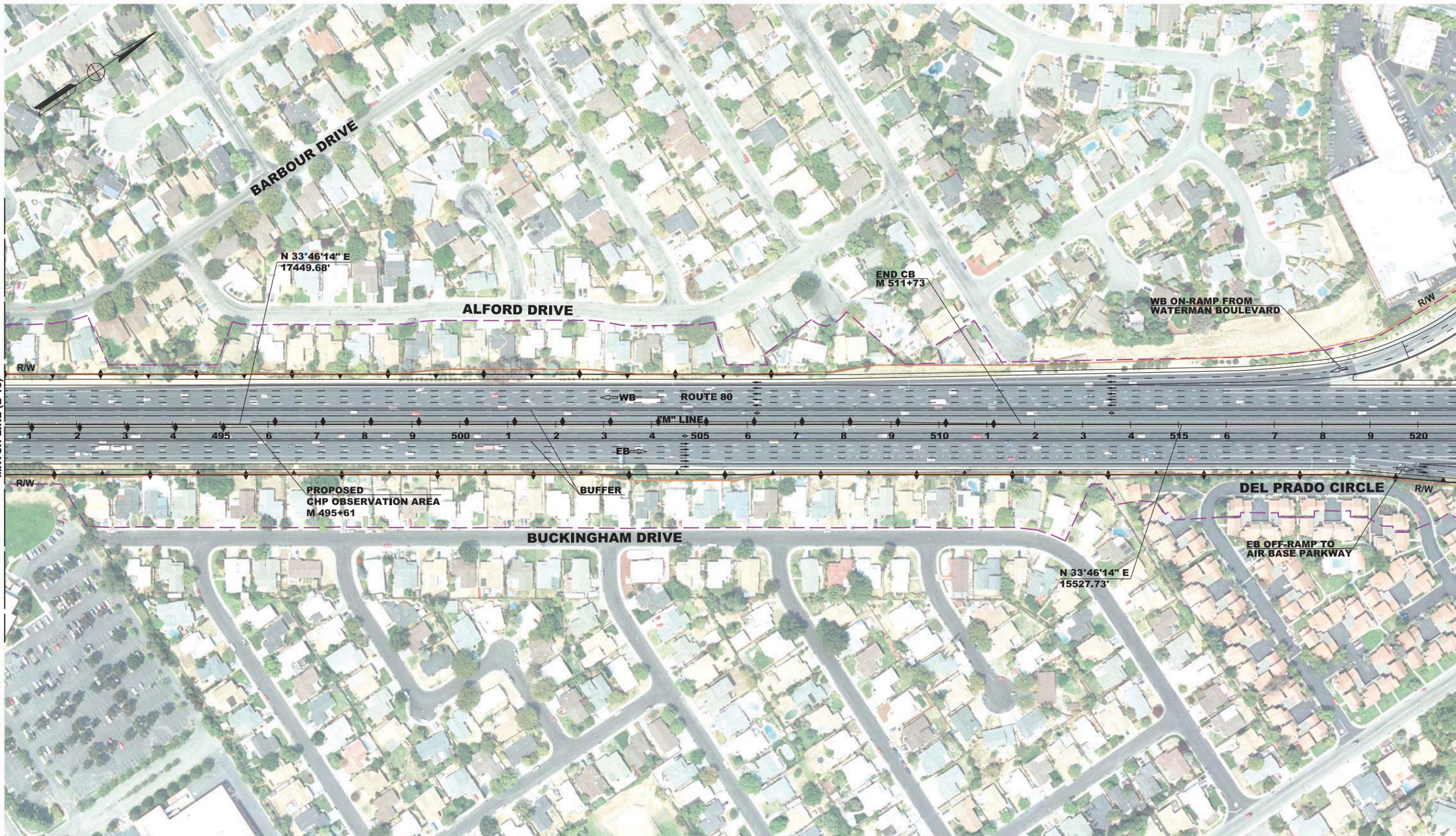
PREPARED BY:	PREPARED FOR:
MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112	SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-13

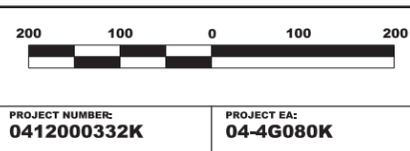


FOR NOTES, ABBREVIATIONS
AND LEGEND, SEE SHEET BX-1

LEGEND:	--- POTENTIAL IMPACT
---	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:	PREPARED BY:
04	80	MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112
COUNTY AND POST MILE:		PREPARED FOR:
Sol 11.2/29.3		SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

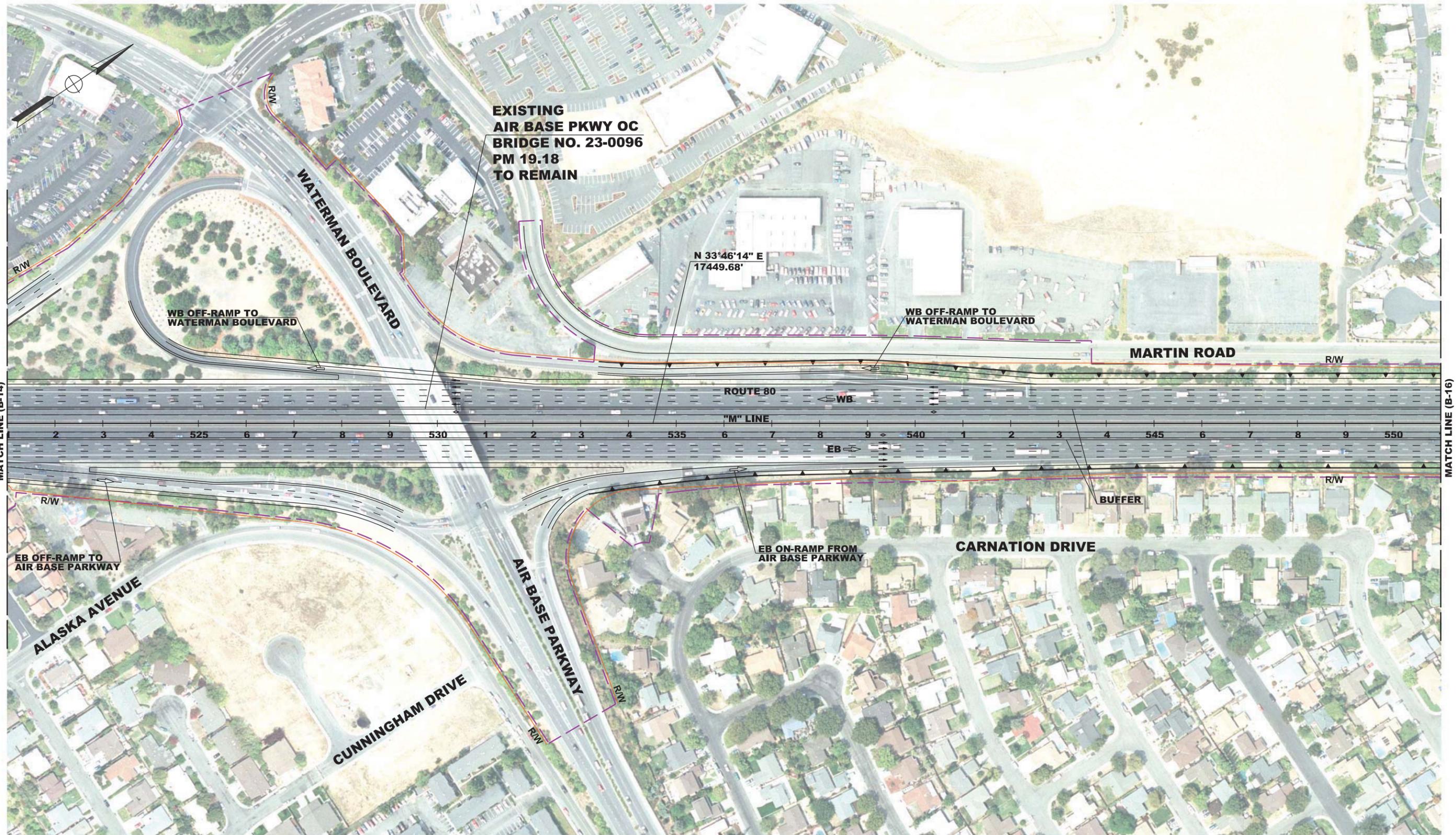
PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K



DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-14



MATCH LINE (B-14)

MATCH LINE (B-16)

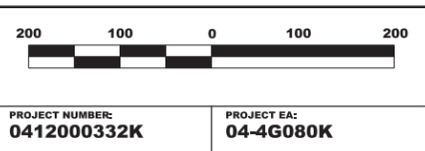
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET BX-1

LEGEND:	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:
04	80
COUNTY AND POST MILE:	
Sol 11.2/29.3	

PREPARED BY:	PREPARED FOR:
MARK THOMAS & COMPANY INC. 1960 ZANKER ROAD SAN JOSE, CA 95112	SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

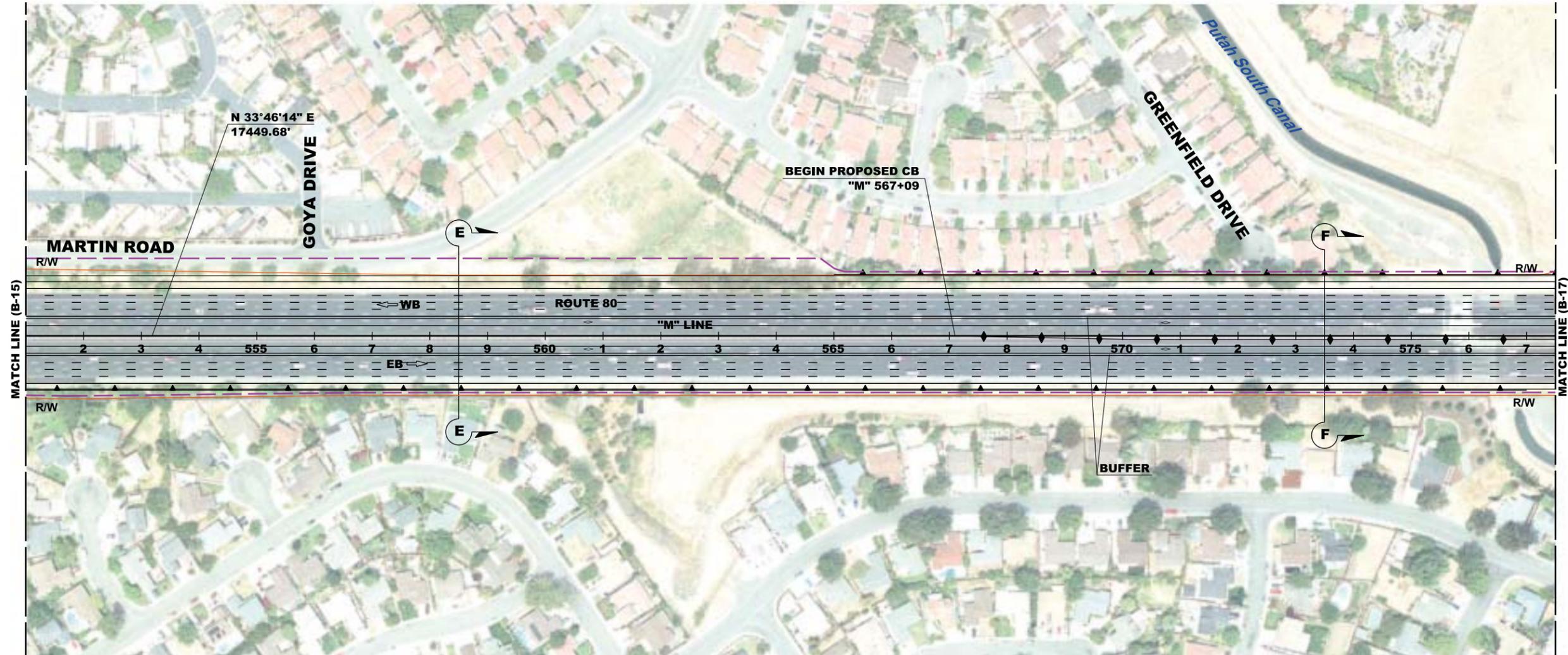
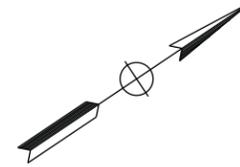
PROJECT NUMBER:	PROJECT EA:
0412000332K	04-4G080K



DESIGNED BY:	DATE:
R. LOPEZ	02-14-12
DRAWN BY:	DATE:
R. LOPEZ	02-14-12
CHECKED BY:	DATE:
M. SCHRAM	02-14-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-15



FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:	— — — — — POTENTIAL IMPACT
— — — — —	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:	PREPARED BY:
04	80	HDR
COUNTY AND POST MILE:		2121 N. CALIFORNIA Blvd
Sol 11.2/29.3		SUITE 475
		WALNUT CREEK, CA 94596

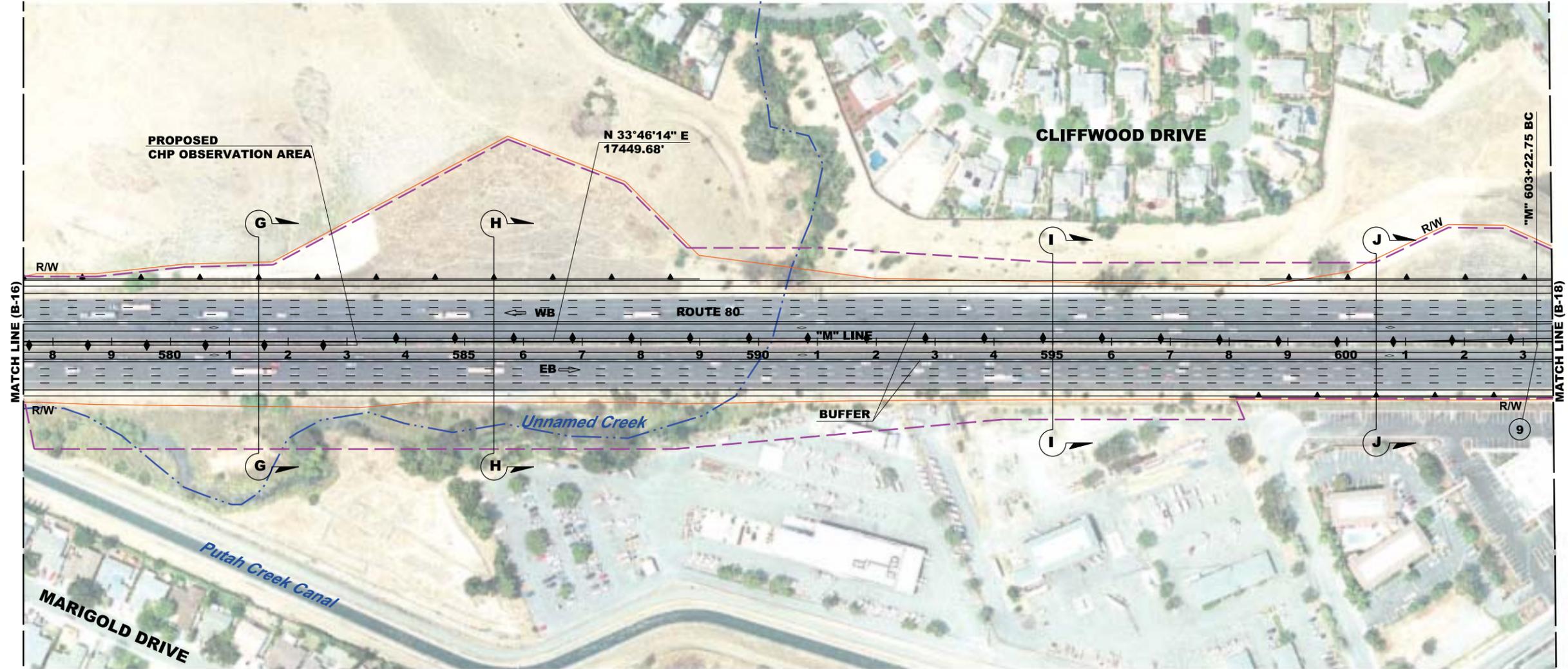
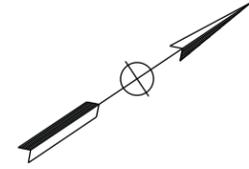
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585

200 100 0 100 200
PROJECT No: 0412000332K
PROJECT EA: 04-4G080K

DESIGNED BY:	DATE:
M. RAMIREZ	2-17-12
DRAWN BY:	DATE:
I. KUKANEGO	2-17-12
CHECKED BY:	DATE:
B. STEWART	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B-16



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
9	2490.85'	32°46'18"	732.43'	1424.70'	1868074.98	6551877.86

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
COUNTY AND POST MILE: Sol 11.2/29.3		

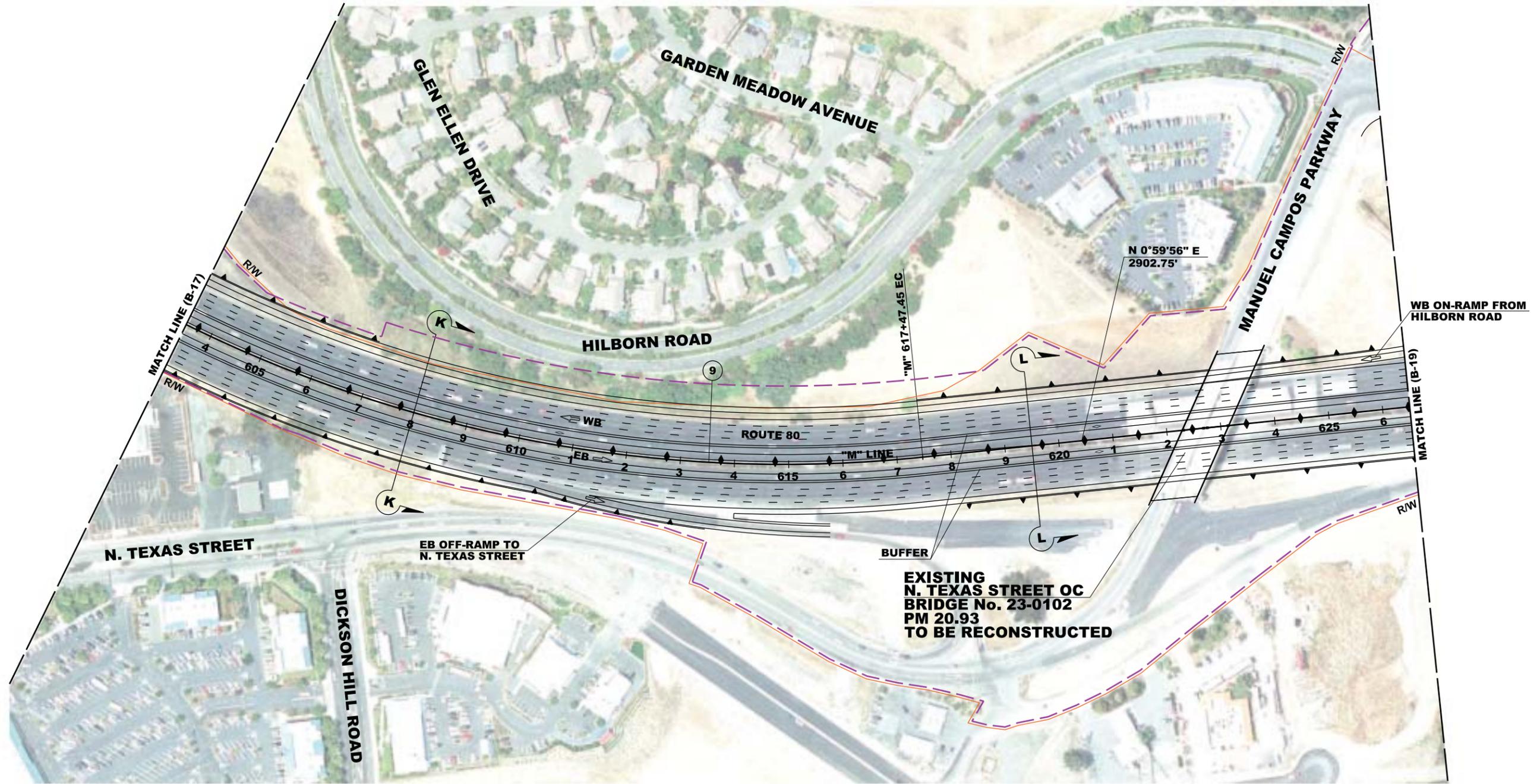
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT EA: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-17



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
9	2490.85'	32°46'18"	732.43'	1424.70'	1868074.98	6551877.86

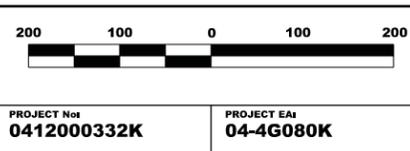
FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
COUNTY AND POST MILE: Sol 11.2/29.3		PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

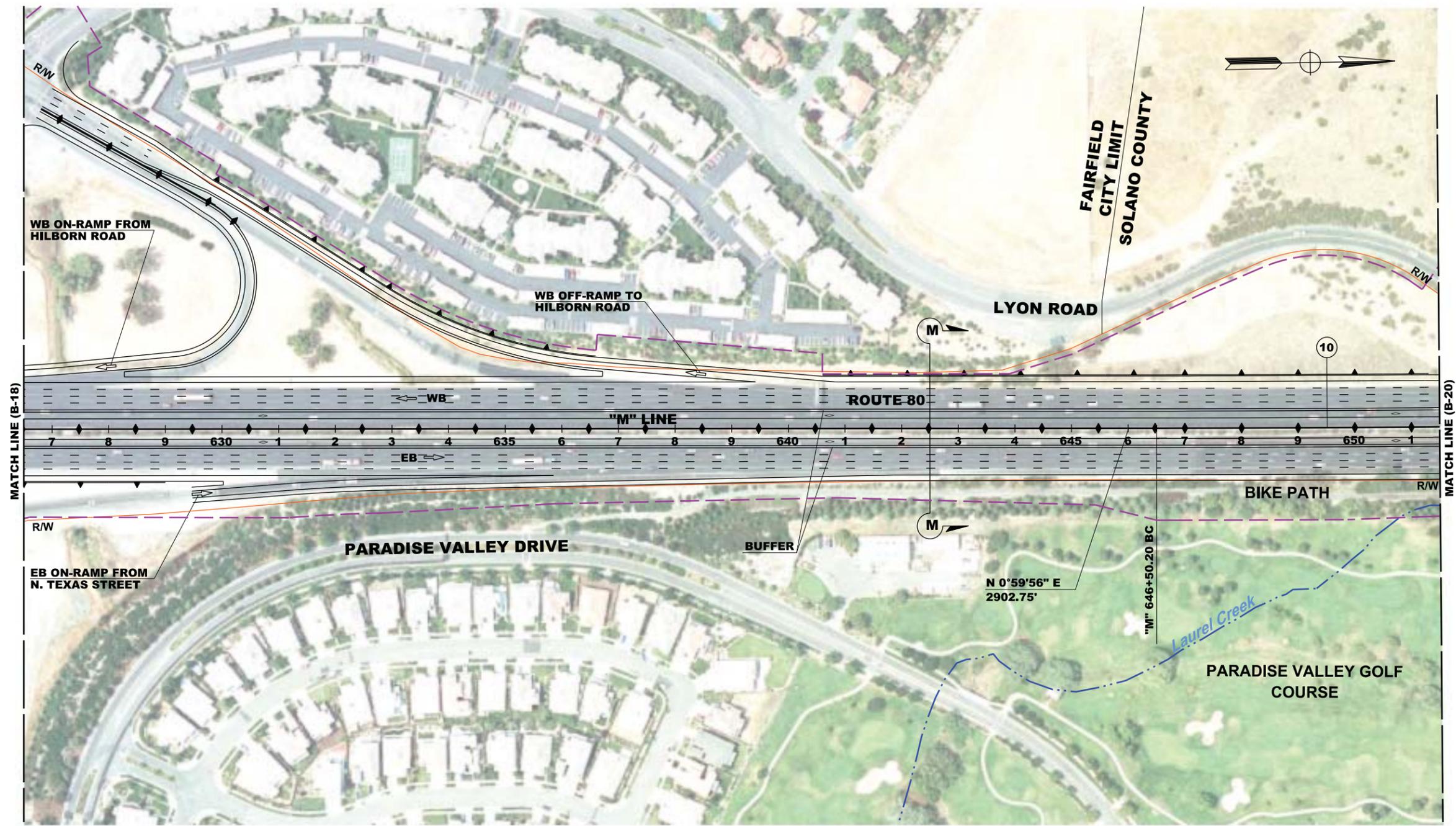
PROJECT No: 0412000332K	PROJECT EAI: 04-4G080K
-----------------------------------	----------------------------------



DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 18



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(10)	69148.00'	0°33'27"	336.41'	672.83'	1872045.97	6551947.10

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:	PREPARED BY:
04	80	HDR
COUNTY AND POST MILE:		2121 N. CALIFORNIA Blvd
Sol 11.2/29.3		SUITE 475
		WALNUT CREEK, CA 94596

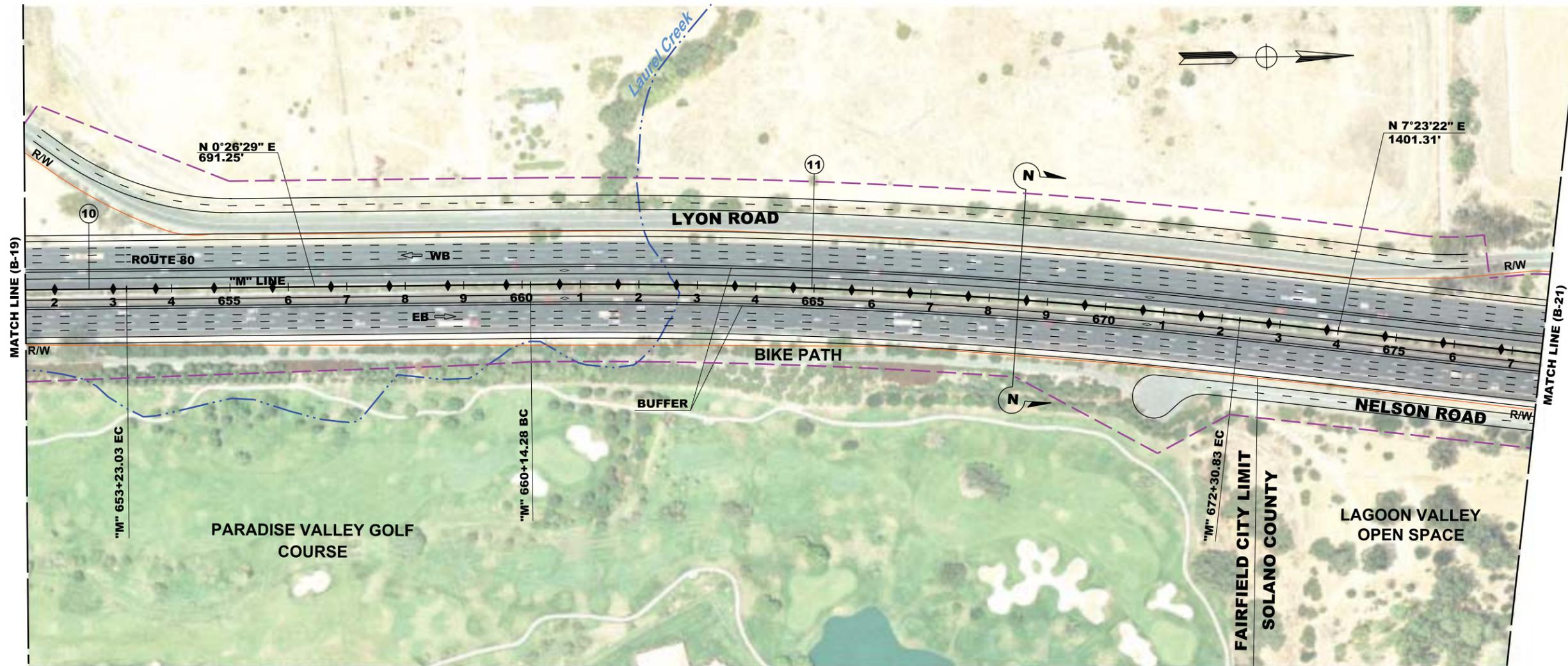
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585

PROJECT No:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
M. RAMIREZ	2-17-12
DRAWN BY:	DATE:
I. KUKANEGO	2-17-12
CHECKED BY:	DATE:
B. STEWART	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B-19



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
10	69148.00'	0°33'27"	336.41'	672.83'	1872045.97	6551947.10
11	10032.00'	6°56'53"	609.02'	1216.55'	1873682.61	6551959.71

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	

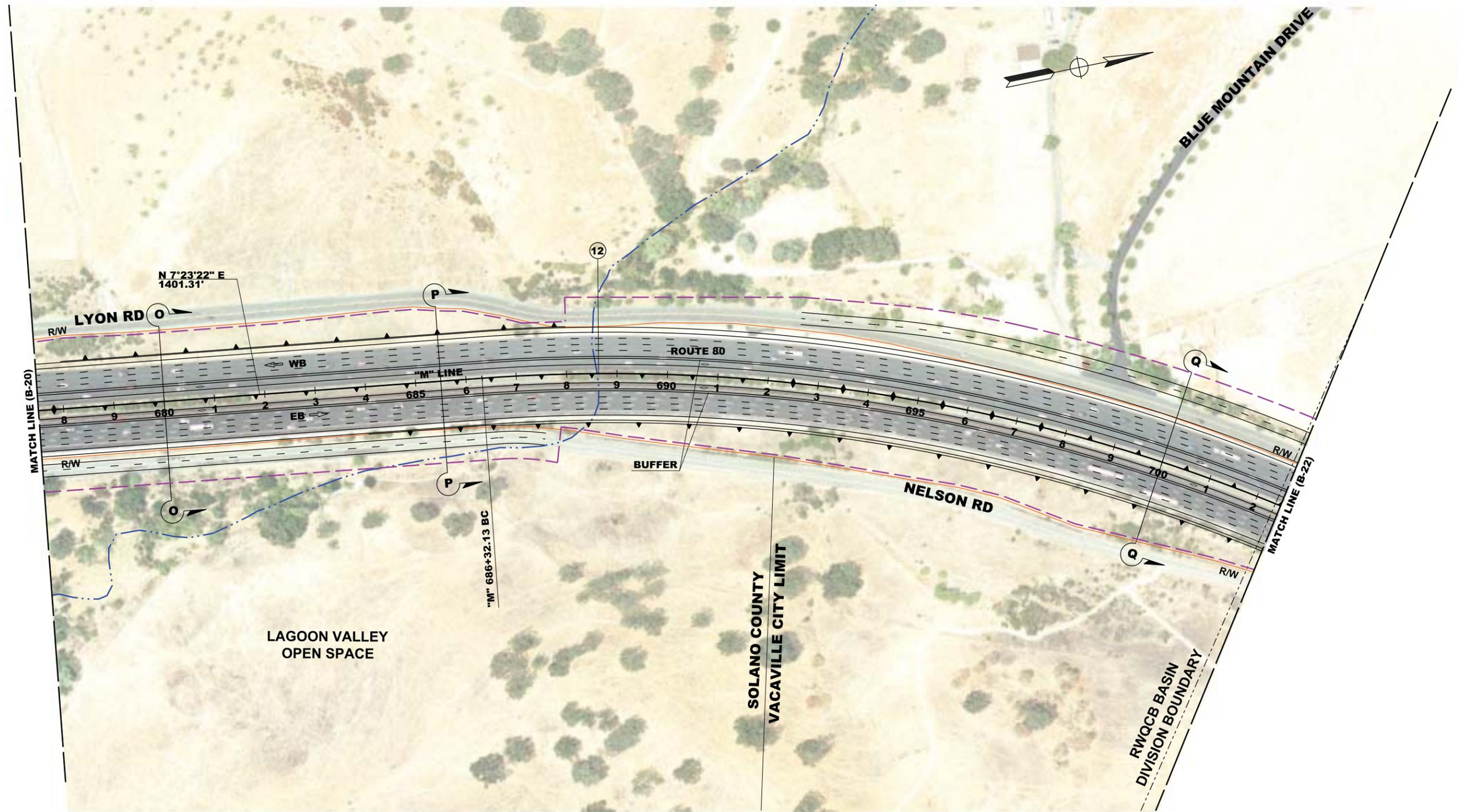
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT EA: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B-20



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(12)	3502.00'	27°50'0"	867.74'	1701.21'	1876536.77	6552329.86

FOR NOTES AND ABBREVIATIONS, SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	

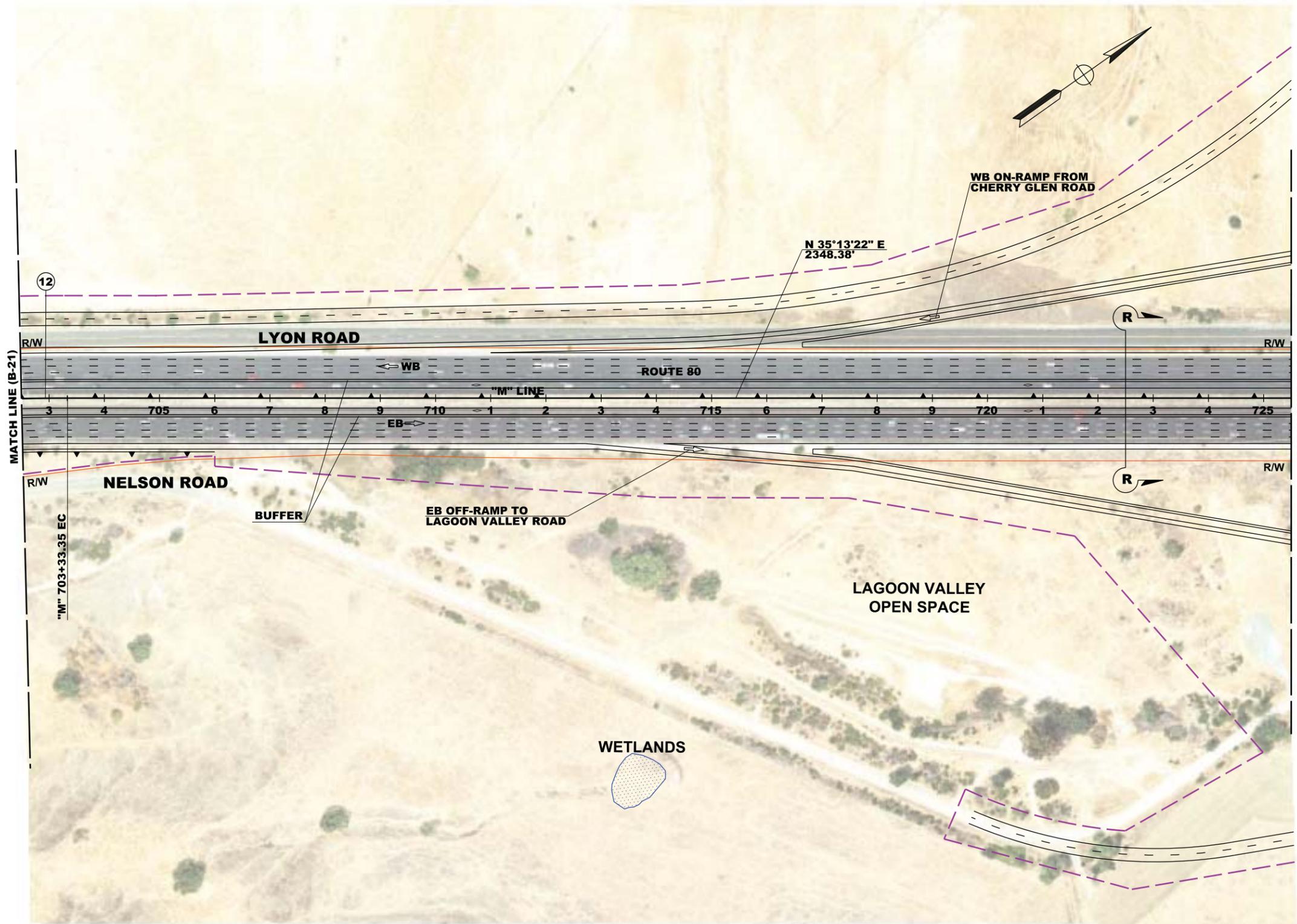
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-21



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
12	3502.00'	27°50'0"	867.74'	1701.21'	1876536.77	6552329.86

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	

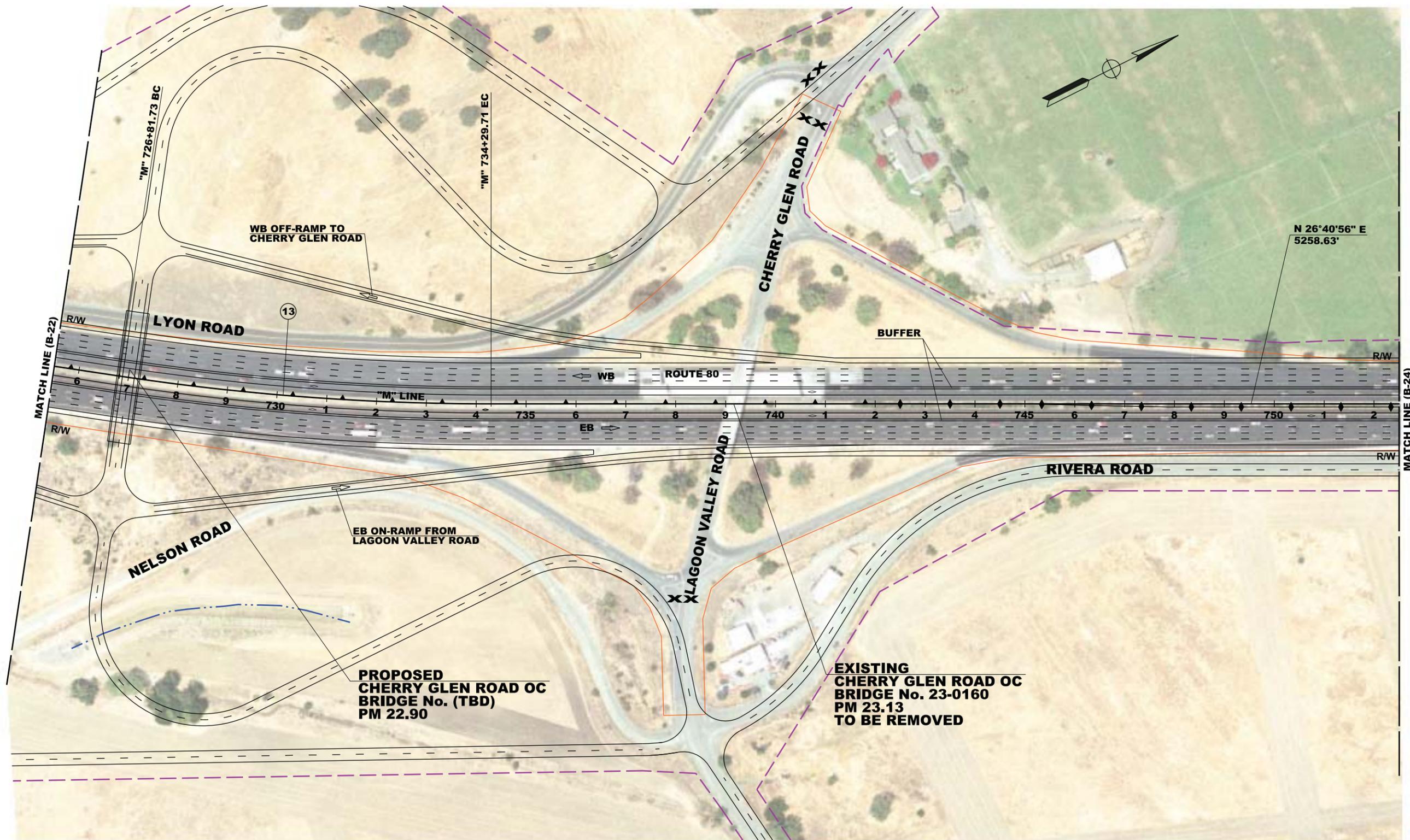
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT EAs: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-22



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
13	5017.98'	8°32'26"	374.98'	747.98'	1879470.16	6554400.89

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
	ROAD TO BE CLOSED/ABANDONED

DISTRICT:	ROUTE:	PREPARED BY:
04	80	HDR
COUNTY AND POST MILE:		2121 N. CALIFORNIA Blvd
Sol 11.2/29.3		SUITE 475
		WALNUT CREEK, CA 94596

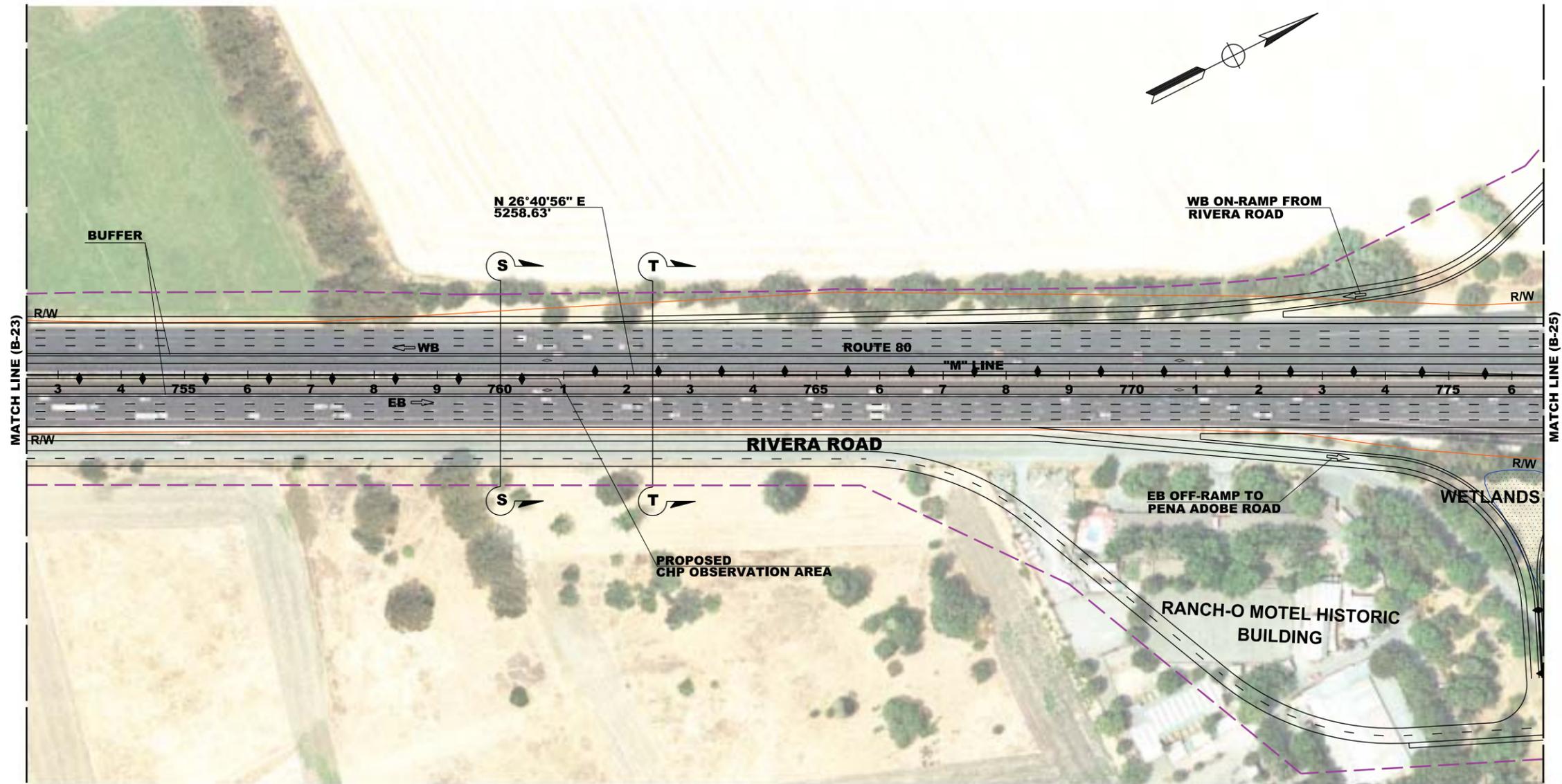
PREPARED FOR:
SOLANO TRANSPORTATION AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585

PROJECT No:	PROJECT EA:
0412000332K	04-4G080K

DESIGNED BY:	DATE:
M. RAMIREZ	2-17-12
DRAWN BY:	DATE:
I. KUKANEGO	2-17-12
CHECKED BY:	DATE:
B. STEWART	2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B - 23



FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:
POTENTIAL IMPACT
EXISTING R/W
XX ROAD TO BE CLOSED/ABANDONED

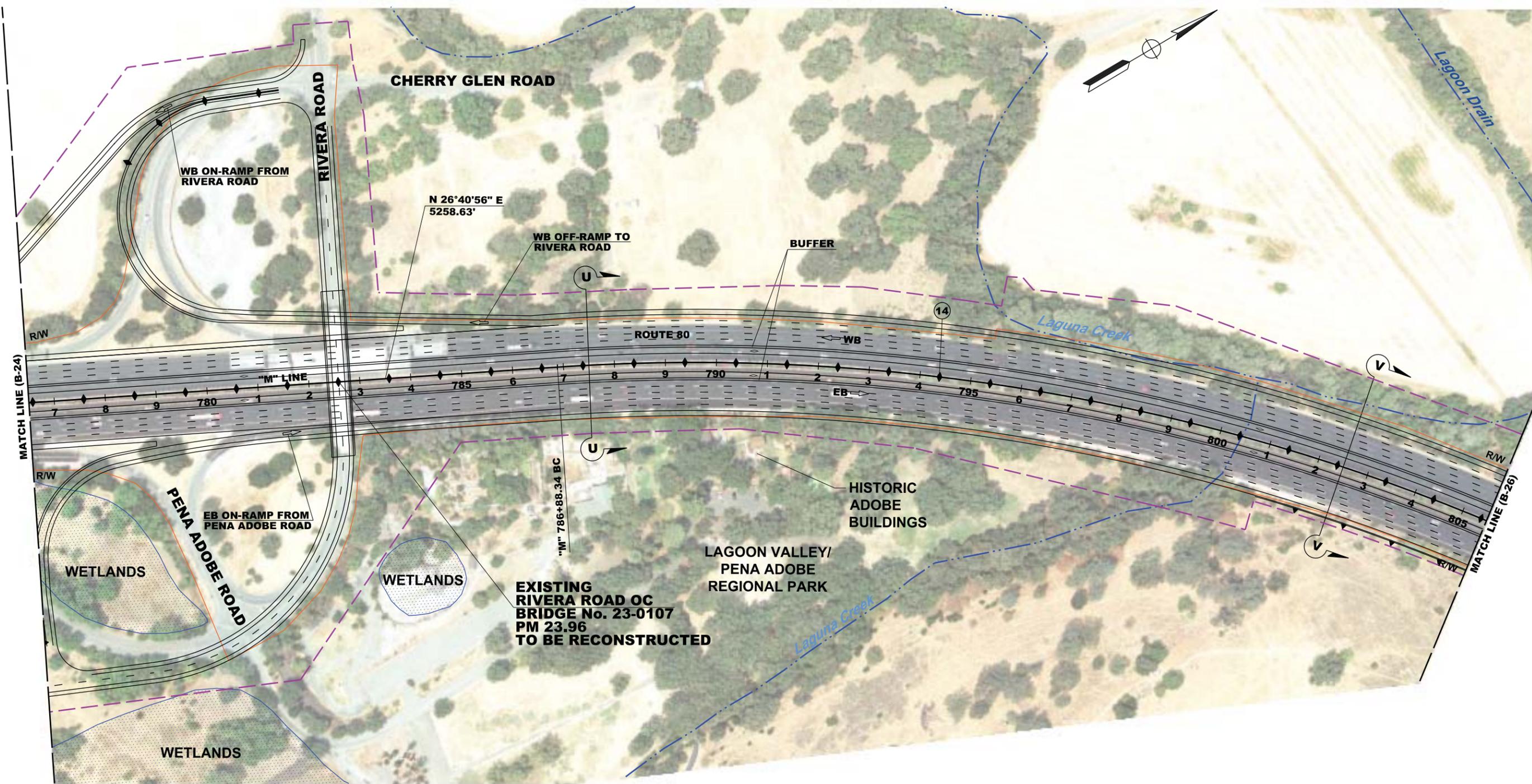
DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No:	PROJECT E&I:
0412000332K	04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-24



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
14	4032.32'	43°26'37"	1606.43'	3057.44'	1885938.95	6557651.83

FOR NOTES AND ABBREVIATIONS, SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

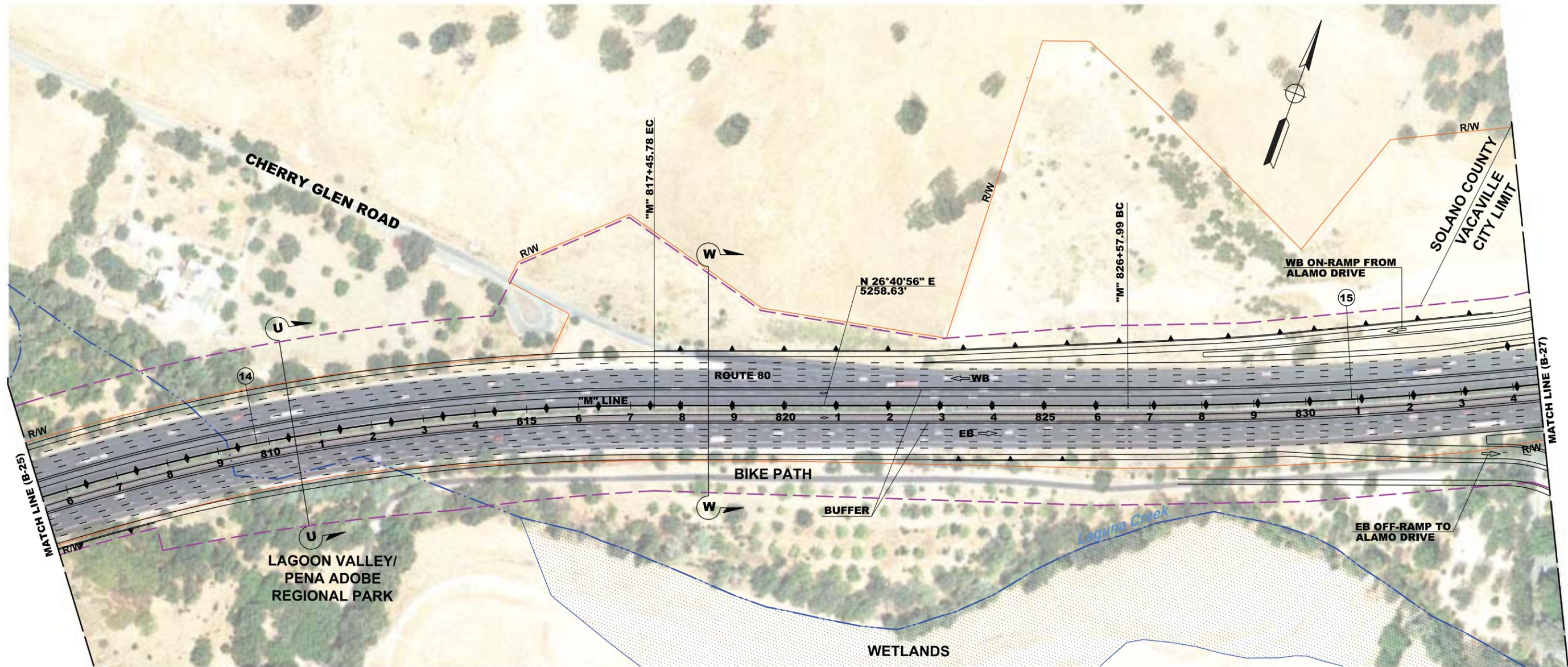
DISTRICT: 04	ROUTE: 80	PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596
COUNTY AND POST MILE: Sol 11.2/29.3		PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No: 0412000332K	PROJECT EAs: 04-4G080K
-----------------------------------	----------------------------------

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 25



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
14	4032.32'	43°26'37"	1606.43'	3057.44'	1885938.95	6557651.83
15	7666.12'	6°26'20"	431.21'	861.52'	1894004.71	6557414.33

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: HDR 2121 N. CALIFORNIA Blvd SUITE 475 WALNUT CREEK, CA 94596	

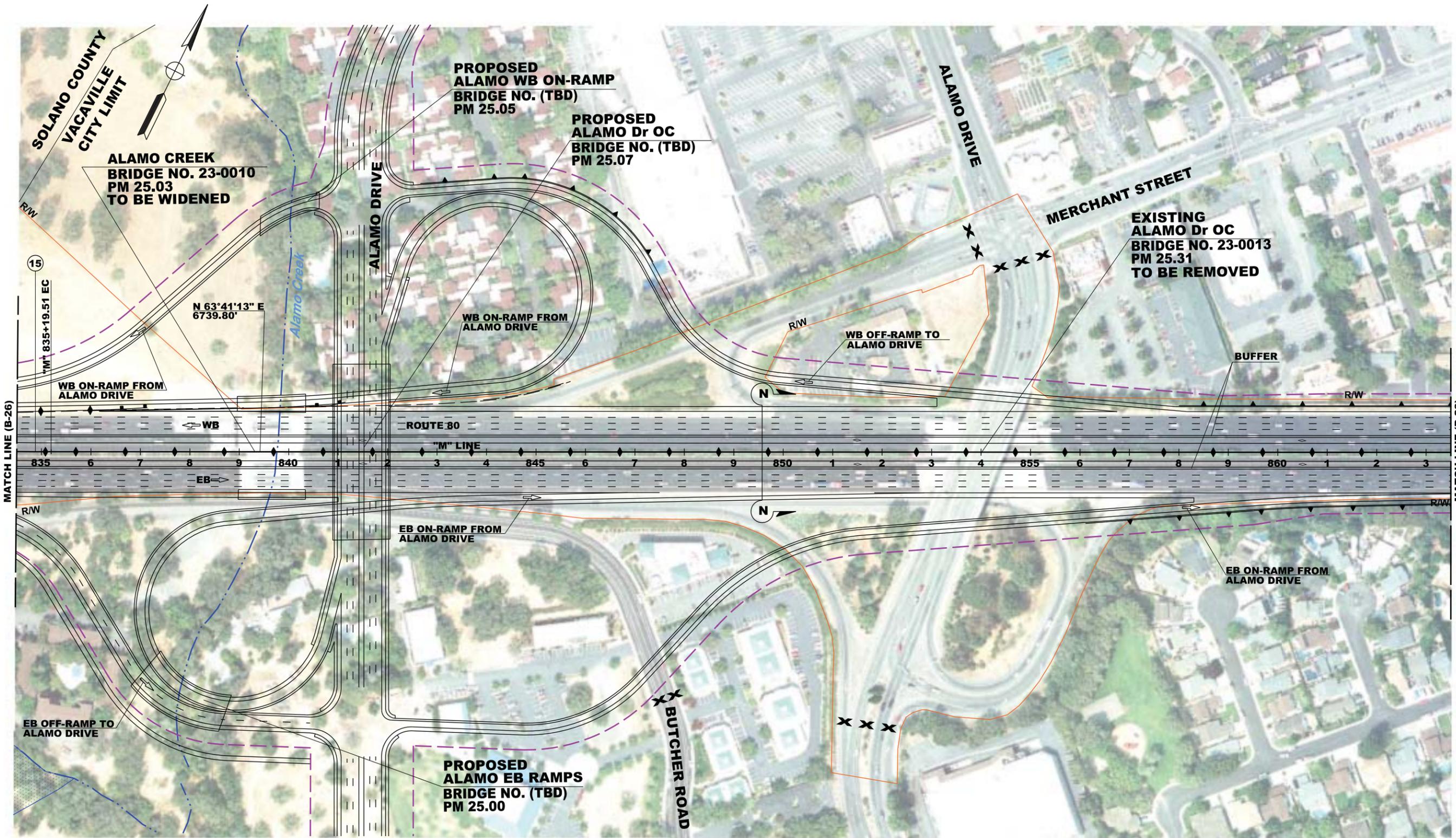
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: M. RAMIREZ	DATE: 2-17-12
DRAWN BY: I. KUKANEGO	DATE: 2-17-12
CHECKED BY: B. STEWART	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 26



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
15	7666.12'	6°26'20"	431.21'	861.52'	1894004.71	6557414.33

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

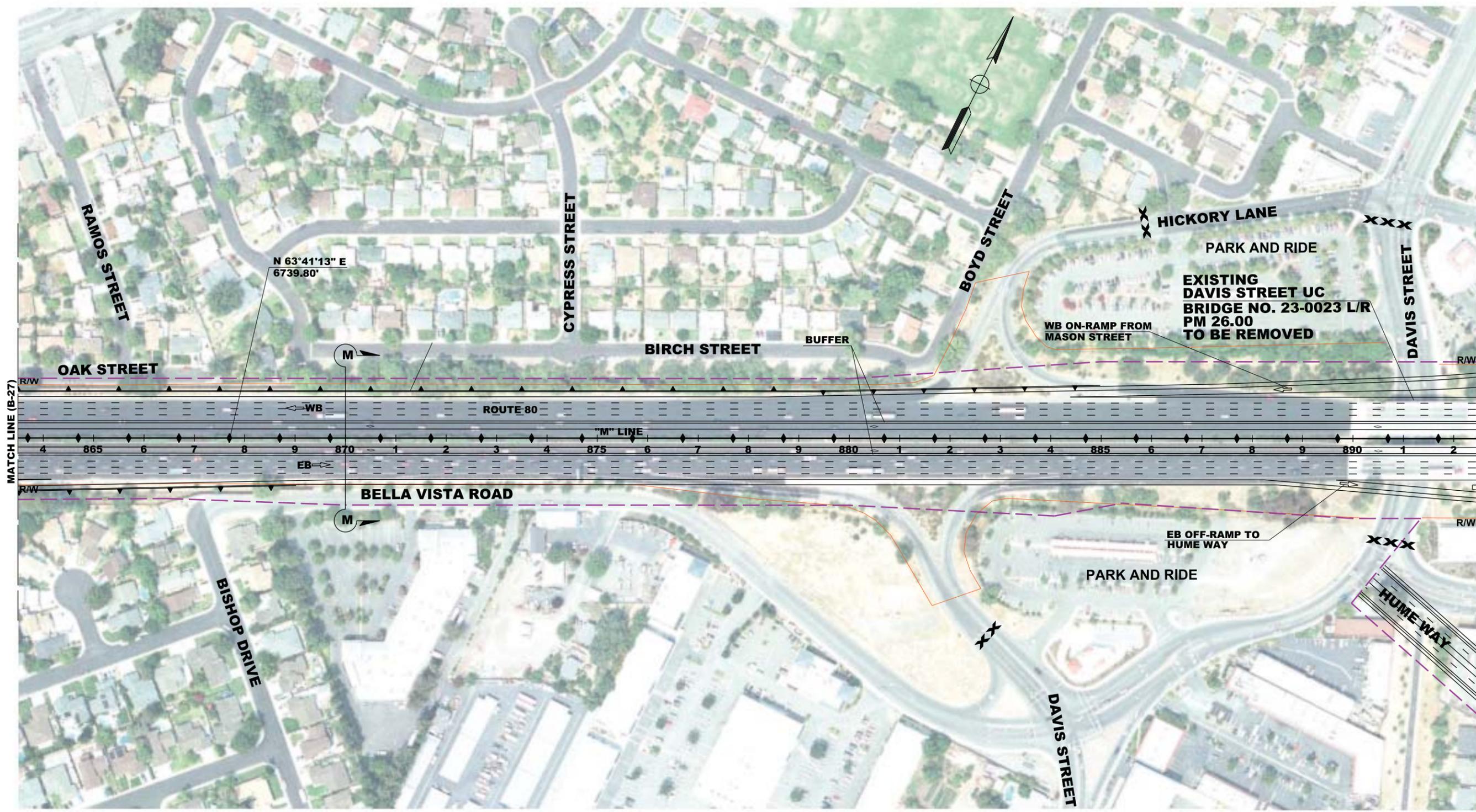
DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

PROJECT No: 0412000332K	PROJECT EAI: 04-4G080K
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SCALE: 1" = 200'	
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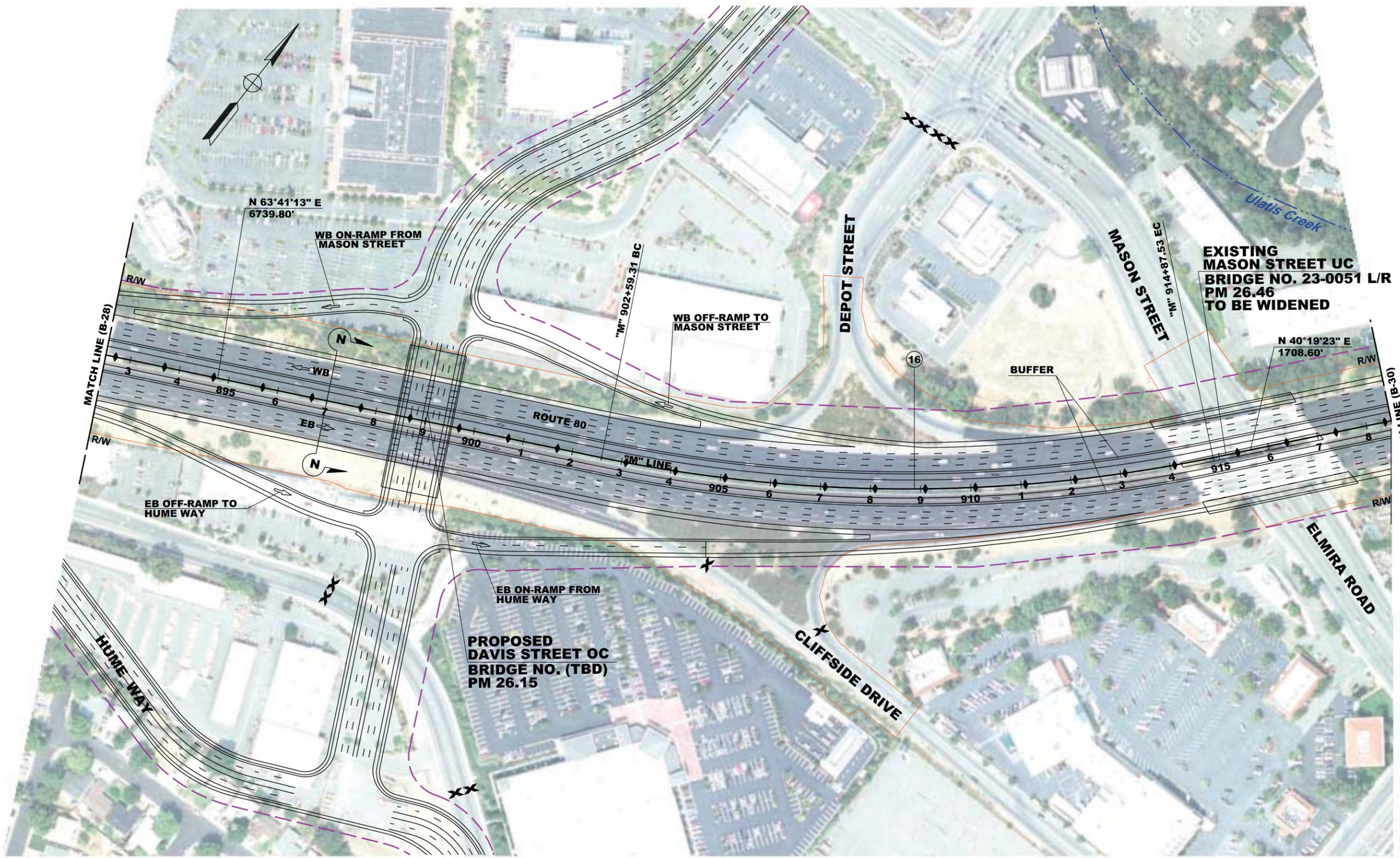
INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-27



FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND: POTENTIAL IMPACT EXISTING R/W ROAD TO BE CLOSED/ABANDONED	DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585	200 100 0 100 200 	DESIGNED BY: D. XI	DATE: 2-17-12	INTERSTATE 80 EXPRESS LANE PROJECT	B-28
	COUNTY AND POST MILE: Sol 11.2/29.3	PROJECT No: 0412000332K	PROJECT EA: 04-4G080K	DRAWN BY: H. CHARLES	DATE: 2-17-12	CHECKED BY: S. CHARLES	DATE: 2-17-12		



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
16	3012.00'	23°21'50"	622.77'	1228.22'	1892820.415	6565518.846

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		

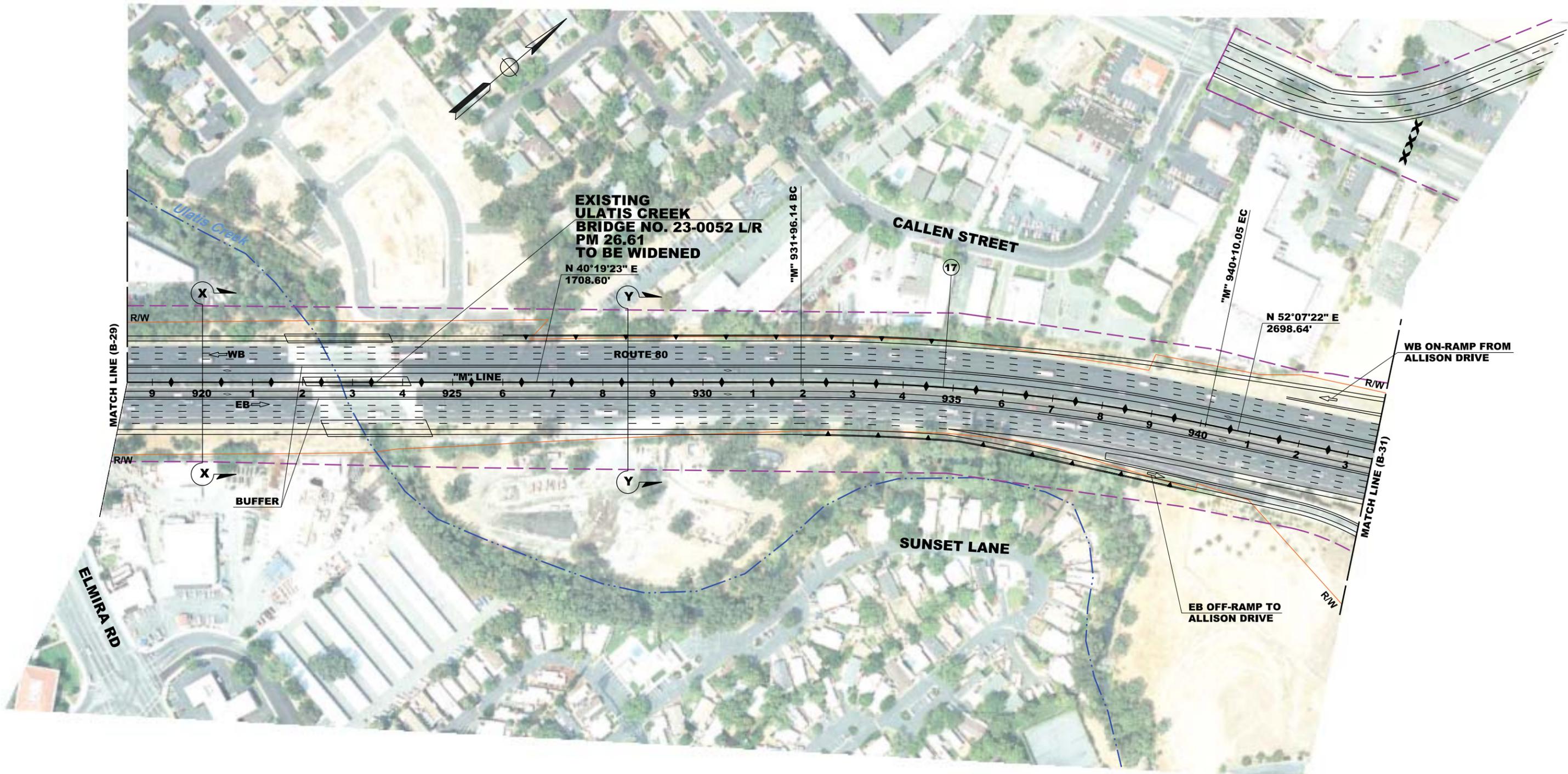
PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E&I: 04-4G080K

DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B - 29



**EXISTING
ULATIS CREEK
BRIDGE NO. 23-0052 L/R
PM 26.61
TO BE WIDENED**
N 40°19'23" E
1708.60'

"M" 931+96.14 BC

"M" 940+10.05 EC

N 52°07'22" E
2698.64'

MATCH LINE (B-29)

MATCH LINE (B-31)

CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(17)	3952.14'	11°47'59"	408.40'	813.92'	1889616.595	6571933.992

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

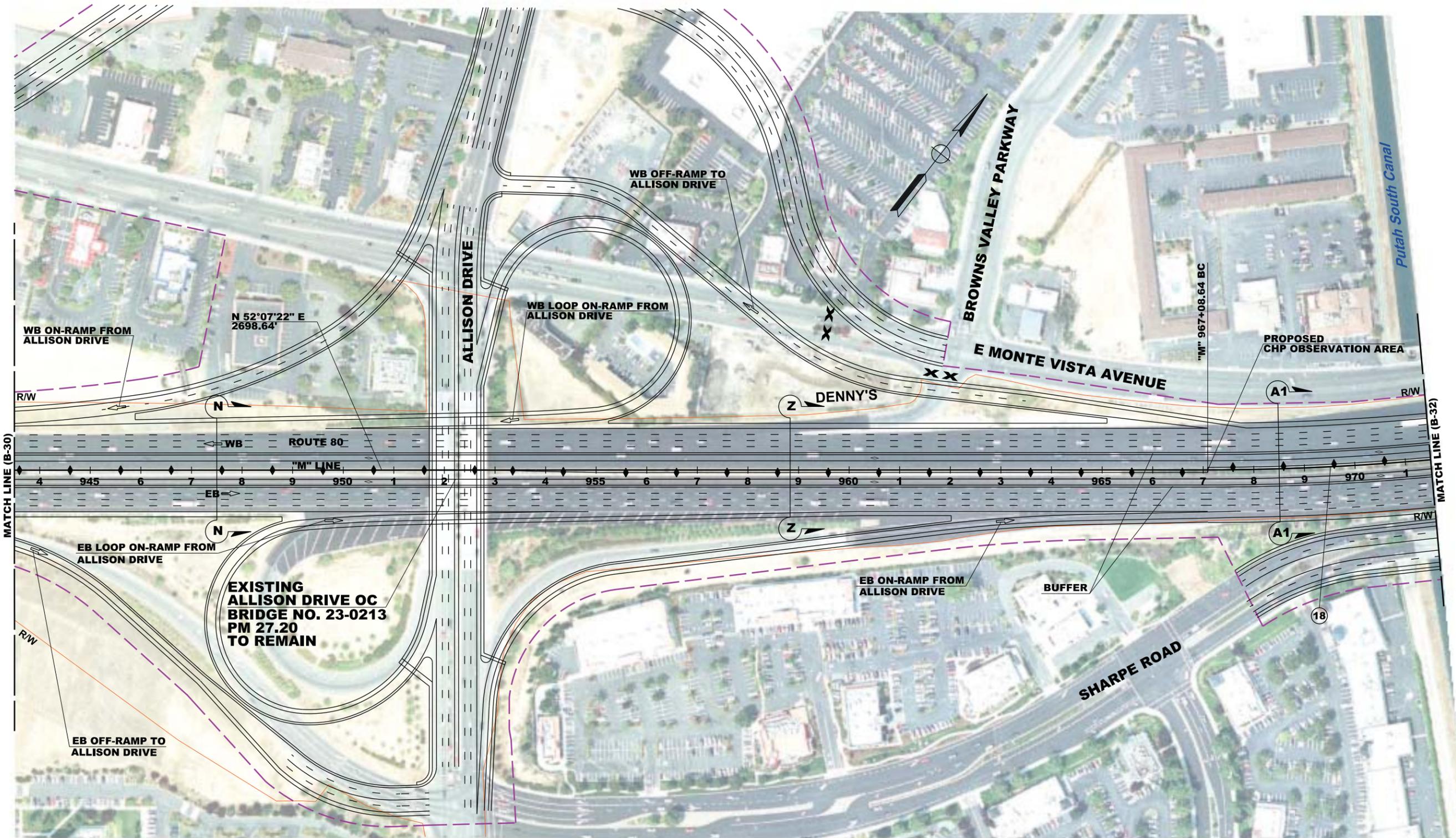
DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

PROJECT No: 0412000332K	PROJECT EAI: 04-4G080K
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SCALE:

INTERSTATE 80 EXPRESS LANE PROJECT
ALTERNATIVE B

B-30



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
(18)	4912.40'	6°17'11"	269.76'	538.98'	1898270.516	6568621.532

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

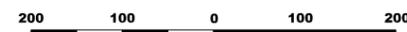
LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W
- XX ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04
ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3

PREPARED BY:
WMH CORPORATION
555 12th STREET
SUITE 1900
OAKLAND, CA 94607

PREPARED FOR:
SOLANO TRANSPORTATION
AUTHORITY
ONE HARBOR CENTER, SUITE 130
SUISUN CITY, CA 94585



PROJECT No: 0412000332K

PROJECT EA: 04-4G080K

DESIGNED BY: D. XI

DATE: 2-17-12

DRAWN BY: H. CHARLES

DATE: 2-17-12

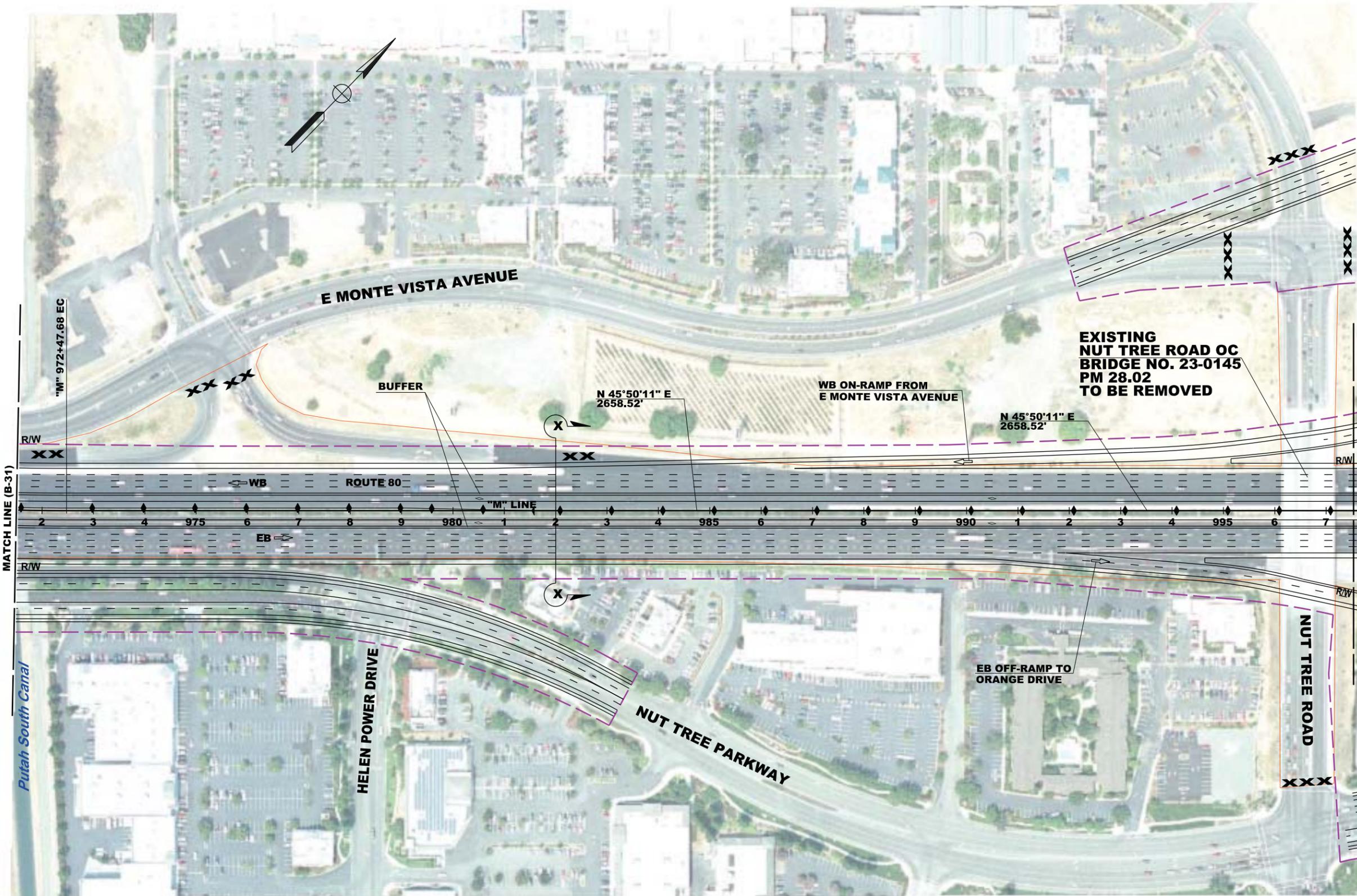
CHECKED BY: S. CHARLES

DATE: 2-17-12

**INTERSTATE 80
EXPRESS LANE PROJECT**

ALTERNATIVE B

B-31



FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:
POTENTIAL IMPACT
EXISTING R/W
XX ROAD TO BE CLOSED/ABANDONED

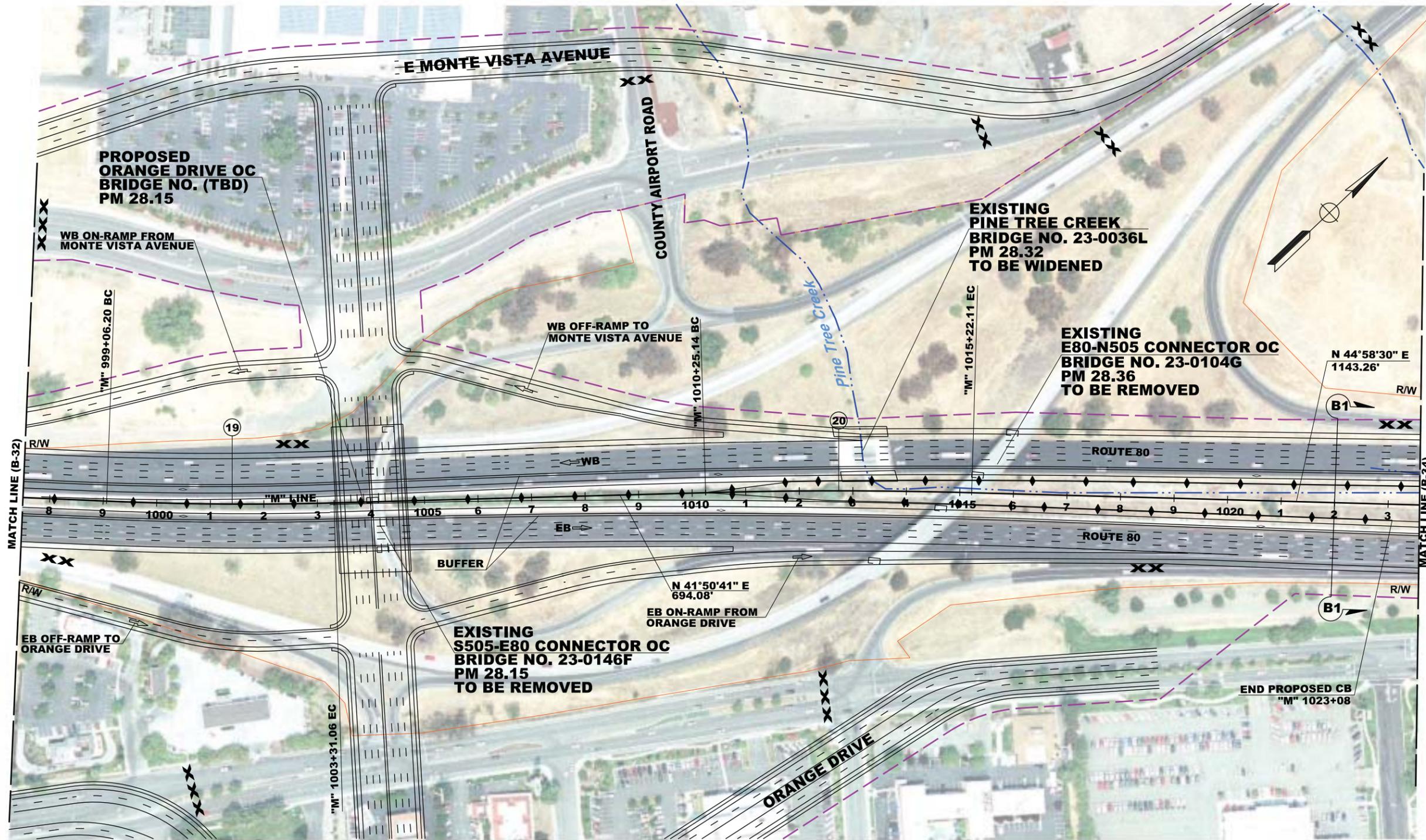
DISTRICT: 04	ROUTE: 80
COUNTY AND POST MILE: Sol 11.2/29.3	
PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607	PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K
-----------------------------------	------------------------------

DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-32



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
19	6098.48'	3°59'30"	212.52'	424.87'	1900973.571	6569702.277
20	9096.34'	3°07'49"	248.54'	496.97'	1891353.947	6581484.770

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

- POTENTIAL IMPACT
- EXISTING R/W
- XX ROAD TO BE CLOSED/ABANDONED

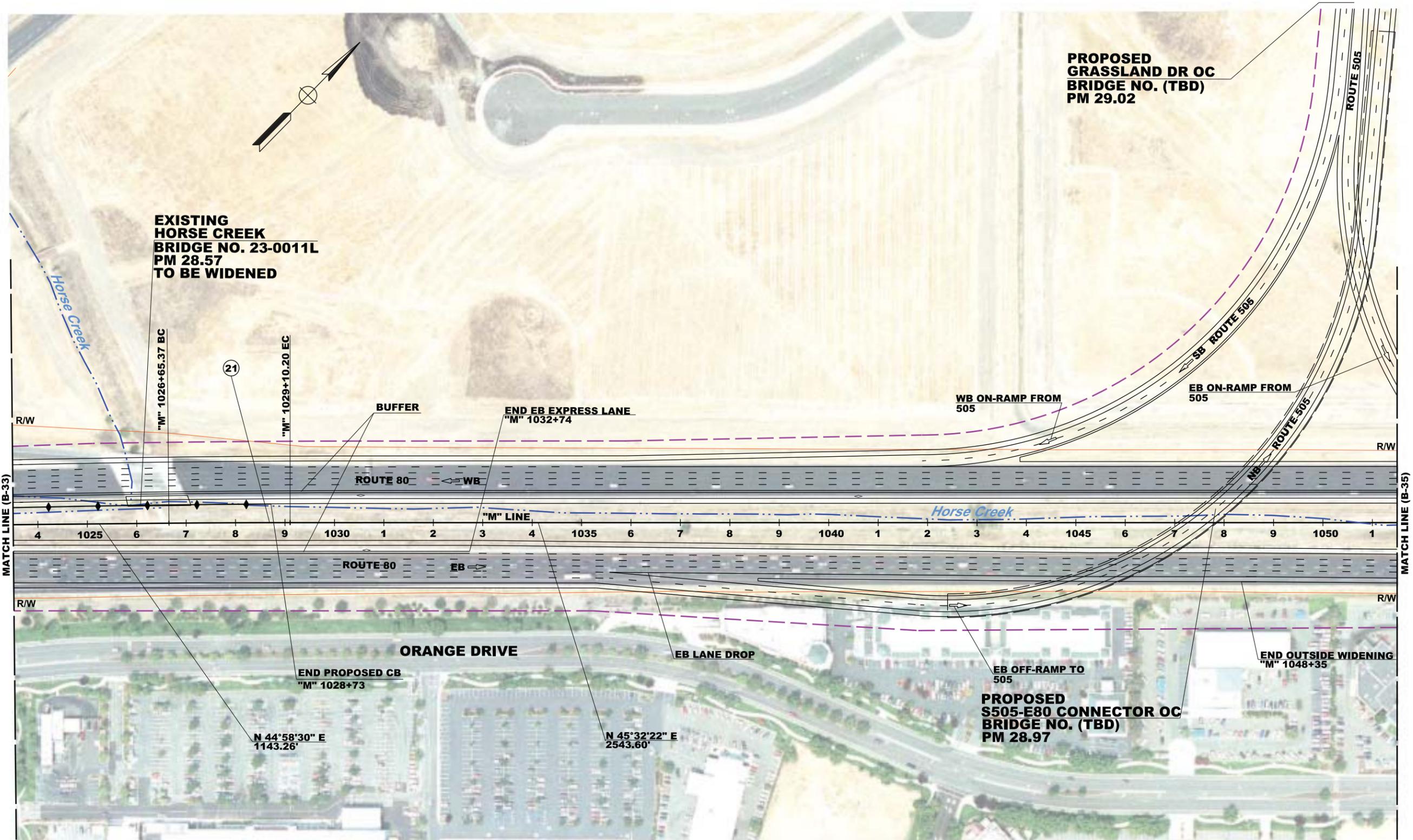
DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K
-----------------------------------	------------------------------

DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-33



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
21	24853.82'	3°33'52"	122.42'	244.85'	1881025.346	6593439.903

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
	ROAD TO BE CLOSED/ABANDONED

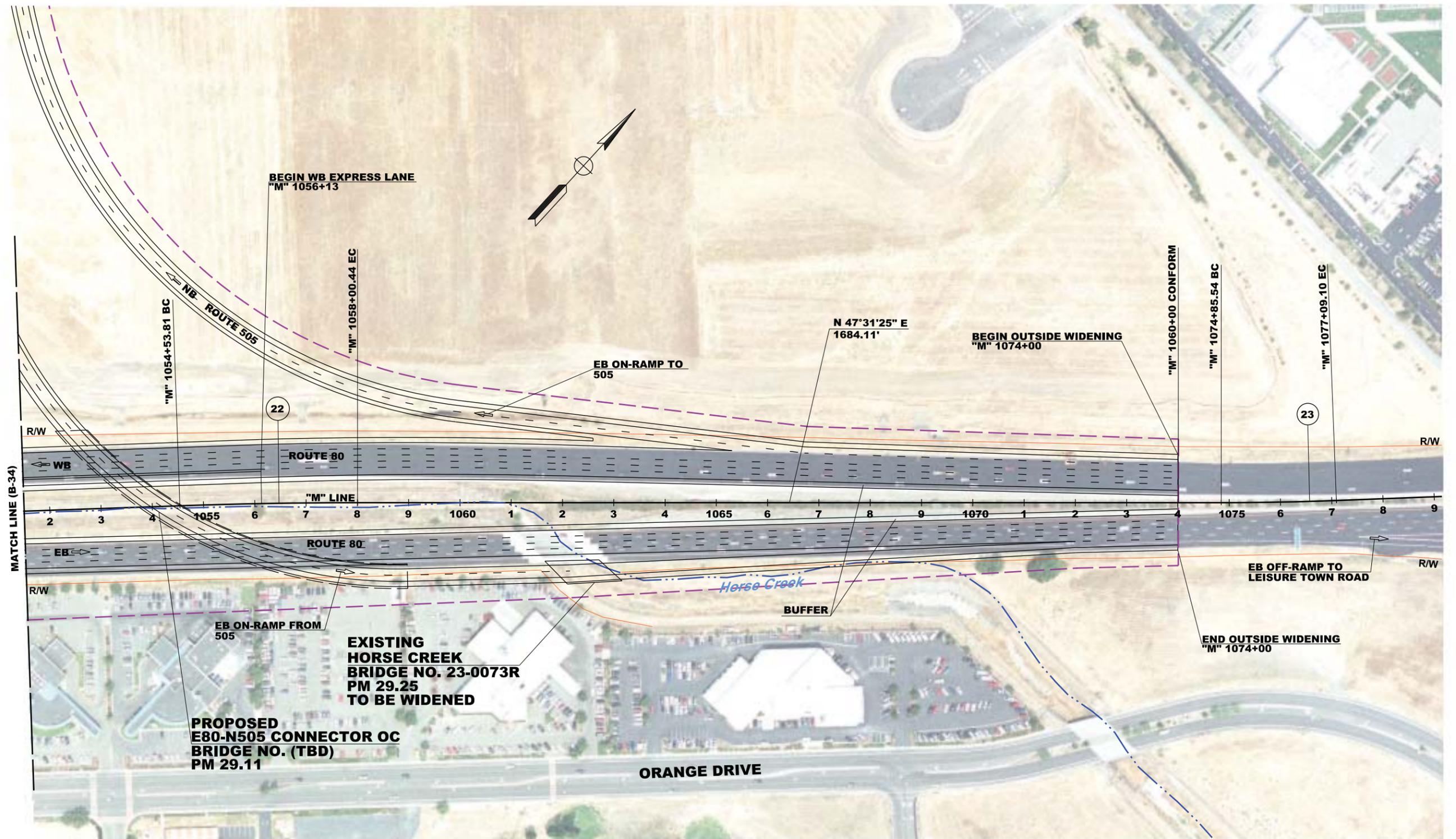
DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585

PROJECT No: 0412000332K	PROJECT EAI: 04-4G080K
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DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-34



CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
22	10009.41'	1°59'03"	173.33'	346.63'	1893401.872	6584858.061
23	5999.64'	2°08'40"	112.29'	224.55'	1906346.693	6575289.491

FOR NOTES AND ABBREVIATIONS,
SEE SHEET BX-1

LEGEND:

	POTENTIAL IMPACT
	EXISTING R/W
XX	ROAD TO BE CLOSED/ABANDONED

DISTRICT: 04	ROUTE: 80	PREPARED BY: WMH CORPORATION 555 12th STREET SUITE 1900 OAKLAND, CA 94607
COUNTY AND POST MILE: Sol 11.2/29.3		

PREPARED FOR: SOLANO TRANSPORTATION AUTHORITY ONE HARBOR CENTER, SUITE 130 SUISUN CITY, CA 94585
--

PROJECT No: 0412000332K	PROJECT E#: 04-4G080K

DESIGNED BY: D. XI	DATE: 2-17-12
DRAWN BY: H. CHARLES	DATE: 2-17-12
CHECKED BY: S. CHARLES	DATE: 2-17-12

INTERSTATE 80 EXPRESS LANE PROJECT	
ALTERNATIVE B	

B-35

ATTACHMENT C

Alternative A

Preliminary Cost Estimate

I-80 Express Lanes
Preliminary Project Cost Estimate Summary

District-County-Route:	04-Sol.-80
PM:	11.2-29.3
Project No.:	0412000332K
Program Code:	HB4C

PROJECT DESCRIPTION:

Limits: I-80 Express Lanes - Red Top Road to I-505

Scope: Alternative A - HOV conversion and proposed median widening of I-80,
placement of median barrier, continuous ingress/egress striping and CHP enforcement areas.

SUMMARY OF PROJECT COST ESTIMATE

PROJECT CONSTRUCTION COSTS

ROADWAY ITEMS (2011 Value)	\$ 127,467,000
STRUCTURE ITEMS (2011 Value)	\$ 5,148,000
SUBTOTAL CONSTRUCTION (2011 Value)	\$ 132,615,000

CAPITAL OUTLAY SUPPORT

ENGINEERING (18% of Construction Costs)	\$ 23,900,000
RIGHT OF WAY SUPPORT (12% of R/W Costs)	\$ 500,000
CONSTRUCTION SUPPORT (15% of Construction Costs)	\$ 19,900,000
SUBTOTAL CAPITAL OUTLAY SUPPORT	\$ 44,300,000

ESCALATED PROJECT COSTS

ROADWAY ITEMS (2015 Value)	\$ 139,332,100
STRUCTURE ITEMS (2015 Value)	\$ 5,627,200
SUBTOTAL CONSTRUCTION (2015 Value)	\$ 144,959,300
RIGHT OF WAY (2015 Value)	\$ 4,072,000
CAPITAL OUTLAY SUPPORT (From Above)	\$ 44,300,000
TOTAL ESCALATED PROJECT COST (2015 Value)	\$ 194,000,000

02/17/12

(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

I. ROADWAY ITEMS

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Roadway Excavation	200,000	CY	\$15	\$3,000,000	
Imported Borrow	6,000	CY	\$10	\$60,000	
Clearing & Grubbing	1	LS	\$190,000	\$190,000	
Develop Water Supply	1	LS	\$46,000	\$46,000	
Top Soil Reapplication	1	LS	\$20,000	\$20,000	
Stepped Slopes and Slope Rounding (Contour Grading)	1	LS	\$50,000	\$50,000	
Contaminated Soil Excavation (Type Y-1) (ADL)	43,400	CY	\$20	\$868,000	
Contaminated Soil Excavation (Type Y-2) (ADL)	28,200	CY	\$30	\$846,000	
Contaminated Soil Excavation (Type Z-2) (ADL)	1,650	CY	\$200	\$330,000	
				Subtotal Earthwork	\$5,410,000
<u>Section 2 - Structural Section</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Asphalt Concrete (Open Graded)	64,800	Ton	\$80	\$5,184,000	
Asphalt Concrete (HMA)	123,000	Ton	\$90	\$11,070,000	
Lean Concrete Base	60,500	CY	\$110	\$6,655,000	
Class 3 Aggregate Base	0	CY	\$0	\$0	
Class 4 Aggregate Subbase	143,000	CY	\$20	\$2,860,000	
Treated Permeable Base	0	CY	\$0	\$0	
Subgrade Enhancement Fabric	63,400	SQYD	\$1	\$63,400	
Remove OGAC	698,000	SQYD	\$2	\$1,396,000	
				Subtotal Pavement Structural Section	\$27,228,400
<u>Section 3 - Drainage</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Large Drainage Facilities	0	LS	\$0	\$0	
Project Drainage	1	LS	\$3,000,000	\$3,000,000	
Hydromodification	1	LS	\$1,000,000	\$1,000,000	
Grated Line Drain	5,800	LF	\$130	\$754,000	
Edge Drains	0	LF	\$0	\$0	
				Subtotal Drainage	\$4,754,000

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Retaining Walls ⁽¹⁾	43,900	SQFT	\$150	\$6,585,000	
Soundwalls ⁽¹⁾	0	SQFT	\$0	\$0	
Equipment/Animal Passes	0	EA	\$0	\$0	
Water Pollution Control	1	LS	\$5,310,000	\$5,310,000	
Hazaroudous Waste Investigation and/or Mitigation Work	0	LS	\$0	\$0	
R/W Fence	1,000	LF	\$15	\$15,000	
Environmental Compliance	0	LS	\$0	\$0	
Concrete Barrier	63,100	LF	\$52	\$3,281,200	
MBGR	1	LS	\$500,000	\$500,000	
Remove Concrete Barrier	4,000	LF	\$23	\$92,000	
Remove K-Rail	50,600	LF	\$2	\$101,200	
Remove MBGR	3,100	LF	\$9	\$27,900	
Remove Thrie Beam Railing	43,800	LF	\$10	\$438,000	
Remove Existing Facilities ⁽²⁾	1	LS	\$100,000	\$100,000	
Resident Engineer Office	1	LS	\$500,000	\$500,000	
			Subtotal Specialty Items		\$16,950,300

<u>Section 5 - Traffic Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Lighting (New & Relocate)	1	LS	\$205,000	\$205,000	
Traffic Delineation Items	1	LS	\$480,000	\$480,000	
Traffic Signals	0	LS	\$0	\$0	
Traffic Operating Systems	1	LS	\$500,000	\$500,000	
Roadside Sign	1	LS	\$200,000	\$200,000	
Overhead Sign	17	EA	\$200,000	\$3,400,000	
Lightweight Overhead Gantry	34	EA	\$100,000	\$3,400,000	
Bridge Mounted Sign	6	EA	\$80,000	\$480,000	
Traffic Control System	1	LS	\$570,000	\$570,000	
Transportation Management Plan	1	LS	\$500,000	\$500,000	
System Integrator and Hardware	1	LS	\$10,600,000	\$10,600,000	
K-Rail	47,400	LF	\$10	\$474,000	
Stage Construction	1	LS	\$2,100,000	\$2,100,000	
			Subtotal Traffic Items		\$22,909,000

(1) MSE and Non-Standard Retaing Walls are included in the Structures Section

(2) Removal of Existing Facilities entails Curb & Gutter, Sidewalk, Lighting, etc.

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

<u>Section 6: Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Highway Planting	0	AC	\$0	\$0	
Replacement Planting	0	AC	\$0	\$0	
Irrigation Modification	1	LS	\$100,000	\$100,000	
Relocate Existing Irrigation	1	LS	\$150,000	\$150,000	
Irrigation Crossovers	1	LS	\$10,000	\$10,000	
			Subtotal Planting and Irrigation		\$260,000

<u>Section 7: Roadside Management & Safety</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Vegetation Control Treatments	1	LS	\$100,000	\$100,000	
Gore Area Pavement	1	LS	\$50,000	\$50,000	
Pavement Beyond Gore Area	1	LS	\$50,000	\$50,000	
Miscellaneous Paving	1	LS	\$100,000	\$100,000	
Erosion Control (Permanent BMP)	1	LS	\$1,110,000	\$1,110,000	
Slope Protection	1	LS	\$100,000	\$100,000	
Side Slopes/Embankment Slopes	1	LS	\$100,000	\$100,000	
Maintenance Vehicle Pull Outs	0	EA	\$0	\$0	
Roadside Facilities (Crash Cushions)	1	LS	\$50,000	\$50,000	
Off-Freeway Access (Gates, etc.)	0	LS	\$0	\$0	
			Subtotal Roadside Management & Safety		\$1,660,000

TOTAL SECTIONS: 1 thru 7 **\$79,171,700**

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

			<u>Unit Cost</u>	<u>Section Cost</u>
<u>Section 8 - Minor Items</u> (Includes 10% TRO)				
Subtotal Sections 1 - 7	<u>\$79,171,700</u>	X <u>15%</u>	<u>\$11,875,755</u>	
			TOTAL MINOR ITEMS:	<u><u>\$11,876,000</u></u>
 <u>Section 9 - Roadway Mobilization</u>				
Subtotal Sections 1 - 8	<u>\$91,047,455</u>	X <u>10%</u>	<u>\$9,104,746</u>	
			TOTAL ROADWAY MOBILIZATION	<u><u>\$9,105,000</u></u>
 <u>Section 10 - Roadway Additions</u>				
Supplemental Work				
Subtotal Sections 1 - 8	<u>\$91,047,455</u>	X <u>10%</u>	<u>\$9,104,746</u>	
Contingencies				
Subtotal Sections 1 - 8	<u>\$91,047,455</u>	X <u>20%</u>	<u>\$18,209,491</u>	
			TOTAL ROADWAY ADDITIONS	<u><u>\$27,314,000</u></u>
			TOTAL ROADWAY ITEMS	<u><u>\$127,467,000</u></u>
				(Total of Sections 1 - 8)

Estimate
 Prepared By: Sean Charles, P.E. (510) 698-6300 02/17/12
 (Print Name) (Phone) (Date)

Estimate
 Checked By: Brian Stewart, P.E. (925) 974-2572 02/17/12
 (Print Name) (Phone) (Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

II. STRUCTURES ITEMS

Bridge Name	<u>Davis St Undercrossing</u> 23-0023 L/R Widen Existing	<u>Mason Undercrossing</u> 23-0051 L/R Widen Existing	<u>Ulatis Creek Bridge</u> 23-0052 L/R Widen Existing	<u>Pine Tree Creek Bridge</u> 23-0036 L Widen Existing	<u>Horse Creek Bridge</u> 23-0011 L Widen Existing
Structure Type	<u>Concrete Tee Beam</u>	<u>Steel Girder</u>	<u>Steel Girder (R) Concrete Slab (L)</u>	<u>Concrete Slab</u>	<u>Concrete Slab</u>
New Width (Ft)					
Widening Width (Ft)	<u>20.00</u>	<u>20.00</u>	<u>20.00</u>	<u>19.00</u>	<u>22.00</u>
Retrofit Width (Ft)					
Span Lengths (Ft)	<u>260.0</u>	<u>280.0</u>	<u>135.0</u>	<u>45.0</u>	<u>125.0</u>
Total New Area (SQ Ft)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Widening Area (SQ Ft)	<u>5,200</u>	<u>5,600</u>	<u>2,700</u>	<u>855</u>	<u>2,750</u>
Total Retrofit Area (SQ.Ft)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Footing Type (pile/spread)	<u>CIDH</u>	<u>Spread</u>	<u>CIDH</u>		
Cost per Sq. ft of New	<u>\$130</u>	<u>\$130</u>	<u>\$130</u>	<u>\$250</u>	<u>\$250</u>
Cost per Sq. ft of Widening	<u>\$260</u>	<u>\$340</u>	<u>\$300</u>	<u>\$300</u>	<u>\$300</u>
Cost per Sq. ft of Retrofit	<u>\$16</u>	<u>\$16</u>	<u>\$16</u>	<u>\$16</u>	<u>\$16</u>
Including: Mobilization: 10% Contingency: 20%					
Total Cost for Widening	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total Cost for Widening	<u>\$ 1,352,000</u>	<u>\$ 1,904,000</u>	<u>\$ 810,000</u>	<u>\$ 257,000</u>	<u>\$ 825,000</u>
Total Cost for Retrofit	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Bridge Removal	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total Cost for Structures	<u>\$ 1,352,000</u>	<u>\$ 1,904,000</u>	<u>\$ 810,000</u>	<u>\$ 257,000</u>	<u>\$ 825,000</u>
Railroad Related Costs					
					<u>\$5,148,000</u>

COMMENTS:

Estimate Prepared By: Sean Charles, PE 02/17/12
 (Print Name) (Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

III. RIGHT OF WAY ITEMS

Right-of-Way estimates should consider the probable highest and best use and type and intent of improvements at the time of acquisition. Assume acquisition including utility relocation occurs at the right of way certification milestone as shown in the Funding and Scheduling Section of the PSR. For further guidance see Chapter 1, Caltrans Right of Way Procedural Handbook.

	Current Values (Future Use) (2011)	Escalation Rate (%/yr)	Escalated Value (2015)
A. Acquisition (Fee & TCE), including excess lands and damages to remainders	\$ 1,000,000	5%/Yr	\$ 1,216,000
B. Utility Relocation (State share)	\$2,000,000	5%/Yr	\$ 2,430,000
C. Relocation Assistance	\$ -	5%/Yr	\$ -
D. Clearance / Demolition	\$ -	5%/Yr	\$ -
E. R/W Services - Title and Escrow Fees	\$ 300,000	5%/Yr	\$ 365,000
Easement (Utility Corridor)	\$ 50,000	5%/Yr	\$ 61,000
TOTAL RIGHT OF WAY ITEMS	\$ 3,350,000		\$4,072,000

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work* _____

amount is to

COMMENTS:

Estimate prepared by: Brian Stewart, P.E. (925) 974-2572 02/17/12
 (Print Name) (Phone) (Date)

ATTACHMENT C

Alternative B

Preliminary Cost Estimate

I-80 Express Lanes
Preliminary Project Cost Estimate Summary

District-County-Route:	04-Sol.-80
PM:	11.2-29.3
Project No.:	0412000332K
Program Code:	HB4C

PROJECT DESCRIPTION:

Limits: I-80 Express Lanes - Red Top Road to I-505

Scope: Alternative B - HOV conversion and proposed widening of
I-80, replacement of non-standard interchanges, placement of median barrier,
continuous ingress/egress striping and CHP enforcement areas.

SUMMARY OF PROJECT COST ESTIMATE

PROJECT CONSTRUCTION COSTS

ROADWAY ITEMS (2011 Value)	\$ 770,982,000
STRUCTURE ITEMS (2011 Value)	\$ 129,780,000
SUBTOTAL CONSTRUCTION (2011 Value)	\$ 900,762,000

CAPITAL OUTLAY SUPPORT

ENGINEERING (18% of Construction Costs)	\$ 162,137,000
RIGHT OF WAY SUPPORT (12% of R/W Costs)	\$ 8,686,000
CONSTRUCTION SUPPORT (15% of Construction Costs)	\$ 162,137,000
SUBTOTAL CAPITAL OUTLAY SUPPORT	\$ 332,960,000

ESCALATED PROJECT COSTS

ROADWAY ITEMS (2015 Value)	\$ 842,750,000
STRUCTURE ITEMS (2015 Value)	\$ 141,860,000
SUBTOTAL CONSTRUCTION (2015 Value)	\$ 984,610,000
RIGHT OF WAY (2015 Value)	\$ 72,381,000
CAPITAL OUTLAY SUPPORT (From Above)	\$ 332,960,000
TOTAL ESCALATED PROJECT COST (2015 Value)	\$ 1,390,000,000

02/17/12

(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

I. ROADWAY ITEMS

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Roadway Excavation	6,160,000	CY	\$15	\$92,400,000	
Imported Borrow	0	CY	\$10	\$0	
Clearing & Grubbing	1	LS	\$570,000	\$570,000	
Develop Water Supply	1	LS	\$140,000	\$140,000	
Top Soil Reapplication	1	LS	\$60,000	\$60,000	
Stepped Slopes and Slope Rounding (Contour Grading)	1	LS	\$150,000	\$150,000	
Contaminated Soil Excavation (Type Y-1) (ADL)	572,000	CY	\$20	\$11,440,000	
Contaminated Soil Excavation (Type Y-2) (ADL)	386,000	CY	\$30	\$11,580,000	
Contaminated Soil Excavation (Type Z-2) (ADL)	19,100	CY	\$200	\$3,820,000	
			Subtotal Earthwork		\$120,160,000
<u>Section 2 - Structural Section</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Asphalt Concrete (Open Graded)	159,000	Ton	\$80	\$12,720,000	
Asphalt Concrete (HMA)	400,000	Ton	\$90	\$36,000,000	
Lean Concrete Base	198,000	CY	\$110	\$21,780,000	
Class 3 Aggregate Base	0	CY	\$0	\$0	
Class 4 Aggregate Subbase	474,000	CY	\$20	\$9,480,000	
Treated Permeable Base	0	CY	\$0	\$0	
Subgrade Enhancement Fabric	63,400	SQYD	\$1.00	\$63,400	
Remove OGAC	1,730,000	SQYD	\$2.00	\$3,460,000	
			Subtotal Pavement Structural Section		\$83,503,400
<u>Section 3 - Drainage</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Large Drainage Facilities	7	EA	\$250,000	\$1,750,000	
Project Drainage	1	LS	\$9,000,000	\$9,000,000	
Hydromodification	1	LS	\$3,000,000	\$3,000,000	
Grated Line Drain	0	LF	\$130	\$0	
Edge Drains	0	LF	\$0	\$0	
			Subtotal Drainage		\$13,750,000

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Retaining Walls ⁽¹⁾	315,000	SQFT	\$150	\$47,250,000	
Soundwalls ⁽¹⁾	253,000	SQFT	\$16	\$4,048,000	
Equipment/Animal Passes	0	EA	\$0	\$0	
Water Pollution Control	1	LS	\$30,000,000	\$30,000,000	
Hazaroudous Waste Investigation and/or Mitigation Work	0	LS	\$0	\$0	
R/W Fence	51,700	LF	\$12	\$620,400	
Environmental Compliance	0	LS	\$0	\$0	
Concrete Barrier	89,500	LF	\$48	\$4,296,000	
MBGR	1	LS	\$300,000	\$300,000	
Remove Concrete Barrier	11,000	LF	\$20	\$220,000	
Remove K-Rail	49,900	LF	\$2	\$99,800	
Remove MBGR	8,490	LF	\$8	\$69,194	
Remove Thrie Beam Railing	51,900	LF	\$10	\$519,000	
Remove Sound Wall	135,000	SQFT	\$4	\$540,000	
Remove Existing Facilities ⁽²⁾	1	LS	\$100,000	\$100,000	
Resident Engineer Office	1	LS	\$500,000	\$500,000	
Interchange Replacement - Small	1	LS	\$13,600,000	\$13,600,000	
Interchange Replacement - Medium	1	LS	\$70,200,000	\$70,200,000	
Interchange Replacement - Large	1	LS	\$60,500,000	\$60,500,000	
			Subtotal Specialty Items		\$232,862,394
<u>Section 5 - Traffic Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Lighting (New & Relocate)	1	LS	\$205,000	\$205,000	
Traffic Delineation Items	1	LS	\$480,000	\$480,000	
Traffic Signals	0	LS	\$0	\$0	
Traffic Operating Systems	1	LS	\$1,000,000	\$1,000,000	
Roadside Sign	1	LS	\$200,000	\$200,000	
Overhead Sign	17	EA	\$200,000	\$3,400,000	
Lightweight Overhead Gantry	34	EA	\$100,000	\$3,400,000	
Bridge Mounted Sign	6	EA	\$80,000	\$480,000	
Traffic Control System	1	LS	\$570,000	\$570,000	
Transportation Management Plan	1	LS	\$500,000	\$500,000	
System Integrator and Hardware	1	LS	\$10,600,000	\$10,600,000	
K-Rail	111,000	LF	\$10	\$1,110,000	
Stage Construction	1	LS	\$2,100,000	\$2,100,000	
			Subtotal Traffic Items		\$24,045,000

(1) MSE and Non-Standard Retaing Walls are included in the Structures Section

(2) Removal of Existing Facilities entails Curb & Gutter, Sidewalk, Lighting, etc.

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
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<u>Section 6: Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Highway Planting	0	AC	\$0	\$0	
Replacement Planting	0	AC	\$0	\$0	
Irrigation Modification	1	LS	\$250,000	\$250,000	
Relocate Existing Irrigation	1	LS	\$375,000	\$375,000	
Irrigation Crossovers	1	LS	\$25,000	\$25,000	
			Subtotal Planting and Irrigation		\$650,000

<u>Section 7: Roadside Management & Safety</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Vegetation Control Treatments	1	LS	\$100,000	\$100,000	
Gore Area Pavement	1	LS	\$50,000	\$50,000	
Pavement Beyond Gore Area	1	LS	\$50,000	\$50,000	
Miscellaneous Paving	1	LS	\$100,000	\$100,000	
Erosion Control	1	LS	\$3,350,000	\$3,350,000	
Slope Protection	1	LS	\$100,000	\$100,000	
Side Slopes/Embankment Slopes	1	LS	\$100,000	\$100,000	
Maintenance Vehicle Pull Outs	0	EA	\$0	\$0	
Roadside Facilities (Crash Cushions)	1	LS	\$50,000	\$50,000	
Off-Freeway Access (Gates, etc.)	0	LS	\$0	\$0	
			Subtotal Roadside Management & Safety		\$3,900,000

TOTAL SECTIONS: 1 thru 7 **\$478,870,794**

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

			<u>Unit Cost</u>	<u>Section Cost</u>
<u>Section 8 - Minor Items</u>	(Includes 10% TRO)			
Subtotal Sections 1 - 7	<u>\$478,870,794</u>	X <u>15%</u>	<u>\$71,830,619</u>	
			TOTAL MINOR ITEMS:	<u>\$71,831,000</u>
 <u>Section 9 - Roadway Mobilization</u>				
Subtotal Sections 1 - 8	<u>\$550,701,413</u>	X <u>10%</u>	<u>\$55,070,141</u>	
			TOTAL ROADWAY MOBILIZATION	<u>\$55,070,000</u>
 <u>Section 10 - Roadway Additions</u>				
Supplemental Work				
Subtotal Sections 1 - 8	<u>\$550,701,413</u>	X <u>10%</u>	<u>\$55,070,141</u>	
Contingencies				
Subtotal Sections 1 - 8	<u>\$550,701,413</u>	X <u>20%</u>	<u>\$110,140,283</u>	
			TOTAL ROADWAY ADDITIONS	<u>\$165,210,000</u>
			TOTAL ROADWAY ITEMS	<u>\$770,982,000</u>
				(Total of Sections 1 - 8)

Estimate
 Prepared By: Sean Charles, P.E. (510) 698-6300 02/17/12
 (Print Name) (Phone) (Date)

Estimate
 Checked By: Brian Stewart, P.E. (925) 974-2572 02/17/12
 (Print Name) (Phone) (Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

II. STRUCTURES ITEMS

Bridge Name	<u>Red Top Road Undercrossing</u> 23-0165 Widen Existing EB	<u>Green Valley Creek Bridge</u> 23-0004 Widen Existing	<u>Dan Wilson Creek Bridge</u> 23-0006 Widen Existing	<u>Suisun Creek Bridge</u> 23-0007 Widen Existing	<u>W Fairfield Ped UC</u> 23-0093 Widen Existing
Structure Type	_____	_____	_____	_____	_____
New Width (Ft)	_____	_____	_____	_____	_____
Widening Width (Ft)	_____	_____	_____	_____	_____
Retrofit Width (Ft)	_____	_____	_____	_____	_____
Span Lengths (Ft)	_____	_____	_____	_____	_____
Total New Area (SQ Ft)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Widening Area (SQ Ft)	<u>523</u>	<u>1,972</u>	<u>2,155</u>	<u>2,250</u>	<u>4,980</u>
Total Retrofit Area (SQ.Ft)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Footing Type (pile/spread)	_____	_____	_____	_____	_____
Cost per Sq. ft of New	<u>\$250</u>	<u>\$250</u>	<u>\$250</u>	<u>\$250</u>	<u>\$250</u>
Cost per Sq. ft of Widening	<u>\$300</u>	<u>\$300</u>	<u>\$300</u>	<u>\$300</u>	<u>\$300</u>
Cost per Sq. ft of Retrofit	<u>\$16</u>	<u>\$16</u>	<u>\$16</u>	<u>\$16</u>	<u>\$16</u>
Including: Mobilization: 10% Contingency: 20%					
Total Cost for Widening	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total Cost for Widening	<u>\$ 157,000</u>	<u>\$ 592,000</u>	<u>\$ 647,000</u>	<u>\$ 675,000</u>	<u>\$ 1,494,000</u>
Total Cost for Retrofit	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Bridge Removal	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total Cost for Structures	<u>\$ 157,000</u>	<u>\$ 592,000</u>	<u>\$ 647,000</u>	<u>\$ 675,000</u>	<u>\$ 1,494,000</u>
Railroad Related Costs	_____	_____	_____	_____	_____
				TOTAL STRUCTURE ITEMS	<u>\$ 3,565,000</u>
				(Structure Sheet A)	

COMMENTS:

Estimate Prepared By: Sean Charles, PE 02/17/12
(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

II. STRUCTURES ITEMS

Bridge Name	Suisun Valley Road Overcrossing	Ledgewood Creek Bridge	Ledgewood Creek Bridge	W Texas Street Undercrossing	Ped UC for W Texas On-Ramp
	23-0140 Relocated	23-0008 L/R Reconstructed	23-0008 S Reconstructed	23-0106 L/R Reconstructed	TBD New
Structure Type					
New Width (Ft)	47.00	136.00	137.00	284.00	74.00
Widening Width (Ft)					
Retrofit Width (Ft)					
Span Lengths (Ft)	422.0	211.0	36.0	184.0	36.0
Total New Area (SQ Ft)	19,834	28,696	4,932	52,256	2,664
Total Widening Area (SQ Ft)	0	0	0	0	0
Total Retrofit Area (SQ.Ft)	0	0	0	0	0
Footing Type (pile/spread)					
Cost per Sq. ft of New	\$250	\$250	\$250	\$250	\$250
Cost per Sq. ft of Widening	\$300	\$300	\$300	\$300	\$300
Cost per Sq. ft of Retrofit	\$16	\$16	\$16	\$16	\$16
Including: Mobilization: 10% Contingency: 20%					
Total Cost for Widening	\$ 4,545,000	\$ 6,893,500	\$ 1,172,500	\$ 12,465,000	\$ 666,000
Total Cost for Widening	\$ -	\$ -	\$ -	\$ -	\$ -
Total Cost for Retrofit	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Removal	\$ 414,000	\$ 280,500	\$ 60,500	\$ 599,000	\$ -
Total Cost for Structures	\$ 4,959,000	\$ 7,174,000	\$ 1,233,000	\$ 13,064,000	\$ 666,000
Railroad Related Costs					
TOTAL STRUCTURE ITEMS					\$ 27,096,000
(Structure Sheet B)					

COMMENTS:

Estimate Prepared By: Sean Charles, PE 02/17/12
(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

II. STRUCTURES ITEMS

Bridge Name	Travis Blvd Overcrossing 23-0061 R/L Reconstructed	North Texas Overcrossing 23-0102 Reconstructed	Cherry Glen Overcrossing 23-0160 Relocated	Rivera Rd Overcrossing 23-0107 Reconstructed	Alamo Creek Bridge 23-0010 Widen Existing
Structure Type					
New Width (Ft)	100.00	88.00	46.00	46.00	
Widening Width (Ft)					50.00
Retrofit Width (Ft)					
Span Lengths (Ft)	355.0	295.0	264.0	297.0	140.0
Total New Area (SQ Ft)	35,500	25,960	12,144	13,662	0
Total Widening Area (SQ Ft)	0	0	0	0	7,000
Total Retrofit Area (SQ.Ft)	0	0	0	0	0
Footing Type (pile/spread)					
Cost per Sq. ft of New	\$250	\$250	\$250	\$250	\$250
Cost per Sq. ft of Widening	\$300	\$300	\$300	\$300	\$250
Cost per Sq. ft of Retrofit	\$16	\$16	\$16	\$16	\$16
Including: Mobilization: 10% Contingency: 20%					
Total Cost for Widening	\$ 8,286,500	\$ 6,075,000	\$ 2,875,500	\$ 3,223,000	\$ -
Total Cost for Widening	\$ -	\$ -	\$ -	\$ -	\$ 1,750,000
Total Cost for Retrofit	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Removal	\$ 588,500	\$ 415,000	\$ 160,500	\$ 193,000	\$ -
Total Cost for Structures	\$ 8,875,000	\$ 6,490,000	\$ 3,036,000	\$ 3,416,000	\$ 1,750,000
Railroad Related Costs					
TOTAL STRUCTURE ITEMS					\$ 23,567,000
(Structure Sheet C)					

COMMENTS:

Estimate Prepared By: Sean Charles, PE 02/17/12
(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

II. STRUCTURES ITEMS

Bridge Name	Alamo Creek WB On-Ramp	Alamo Creek EB Ramps	Alamo Dr Overcrossing	Davis Street Overcrossing	Mason Street Undercrossing
	TBD New	TBD New	23-0013 Relocated	23-0023 L/R Relocated	23-0051 L/R Widen Existing
Structure Type					
New Width (Ft)	40.00	95.00	116.00	114.00	
Widening Width (Ft)					60.00
Retrofit Width (Ft)					
Span Lengths (Ft)	130.0	175.0	360.0	290.0	300.0
Total New Area (SQ Ft)	5,200	16,625	41,760	33,060	0
Total Widening Area (SQ Ft)	0	0	0	0	18,000
Total Retrofit Area (SQ.Ft)	0	0	0	0	0
Footing Type (pile/spread)					Spread
Cost per Sq. ft of New	\$250	\$250	\$250	\$250	\$130
Cost per Sq. ft of Widening	\$300	\$300	\$300	\$300	\$340
Cost per Sq. ft of Retrofit	\$16	\$16	\$16	\$16	\$16
Including: Mobilization: 10% Contingency: 20%					
Total Cost for Widening	\$ 1,300,000	\$ 4,156,000	\$ 9,855,000	\$ 7,701,000	\$ -
Total Cost for Widening	\$ -	\$ -	\$ -	\$ -	\$ 6,120,000
Total Cost for Retrofit	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Removal	\$ -	\$ -	\$ 585,000	\$ 564,000	\$ -
Total Cost for Structures	\$ 1,300,000	\$ 4,156,000	\$ 10,440,000	\$ 8,265,000	\$ 6,120,000
Railroad Related Costs					
TOTAL STRUCTURE ITEMS					\$ 30,281,000
(Structure Sheet D)					

COMMENTS:

Estimate Prepared By: Sean Charles, PE 02/17/12
(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

II. STRUCTURES ITEMS

Bridge Name	Ulatis Creek Bridge 23-0052 L/R Widen Existing	Nut Tree Rd Overcrossing 23-0145 Relocated	Pine Tree Crk Bridge 23-0036 L Widen Existing	Horse Creek Bridge 23-0011 L Widen Existing	80E to 505N Connector 23-0104G Relocated
Structure Type					
New Width (Ft)		136.00			40.00
Widening Width (Ft)	75.00		35.00	22.00	
Retrofit Width (Ft)					
Span Lengths (Ft)	210.0	265.0	105.0	130.0	1,000.0
Total New Area (SQ Ft)	0	36,040	0	0	40,000
Total Widening Area (SQ Ft)	15,750	0	3,675	2,860	0
Total Retrofit Area (SQ.Ft)	0	0	0	0	0
Footing Type (pile/spread)	CIDH				
Cost per Sq. ft of New	\$130	\$250	\$250	\$250	\$250
Cost per Sq. ft of Widening	\$300	\$300	\$300	\$300	\$300
Cost per Sq. ft of Retrofit	\$16	\$16	\$16	\$16	\$16
Including: Mobilization: 10% Contingency: 20%					
Total Cost for Widening	\$ -	\$ 8,339,500	\$ -	\$ -	\$ 9,634,000
Total Cost for Widening	\$ 4,725,000	\$ -	\$ 1,103,000	\$ 858,000	\$ -
Total Cost for Retrofit	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Removal	\$ -	\$ 670,500	\$ -	\$ -	\$ 366,000
Total Cost for Structures	\$ 4,725,000	\$ 9,010,000	\$ 1,103,000	\$ 858,000	\$ 10,000,000
Railroad Related Costs					
TOTAL STRUCTURE ITEMS					\$ 25,696,000
(Structure Sheet E)					

COMMENTS:

Estimate Prepared By: Sean Charles, PE 02/17/12
(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

II. STRUCTURES ITEMS

Bridge Name	505S to 80E Connector 23-0146F Relocated	Grassland Dr Overcrossing TBD New	Horse Creek Bridge 23-0073 R Widen Existing		
Structure Type					
New Width (Ft)	40.00	100.00	60.00		
Widening Width (Ft)					
Retrofit Width (Ft)					
Span Lengths (Ft)	1,400.0	160.0	105.0		
Total New Area (SQ Ft)	56,000	16,000	6,300		
Total Widening Area (SQ Ft)	0	0	0		
Total Retrofit Area (SQ.Ft)	0	0	0		
Footing Type (pile/spread)					
Cost per Sq. ft of New	\$250	\$250	\$250		
Cost per Sq. ft of Widening	\$300	\$300	\$300		
Cost per Sq. ft of Retrofit	\$16	\$16	\$16		
Including: Mobilization: 10% Contingency: 20%					
Total Cost for Widening	\$ 13,842,500	\$ 4,000,000	\$ 1,575,000		
Total Cost for Widening	\$ -	\$ -	\$ -		
Total Cost for Retrofit	\$ -	\$ -	\$ -		
Bridge Removal	\$ 157,500	\$ -	\$ -		
Total Cost for Structures	\$ 14,000,000	\$ 4,000,000	\$ 1,575,000		
Railroad Related Costs					
TOTAL STRUCTURE ITEMS					\$ 19,575,000
(Structure Sheet F)					
TOTAL COMBINED STRUCTURE ITEMS					\$ 129,780,000
(Structure Sheets A-F)					

COMMENTS:

Estimate Prepared By: Sean Charles, PE 02/17/12
(Date)

District-County-Route: 04-Sol.-80
 PM: 11.2-29.3
 Project No.: 0412000332K

III. RIGHT OF WAY ITEMS

Right-of-Way estimates should consider the probable highest and best use and type and intent of improvements at the time of acquisition. Assume acquisition including utility relocation occurs at the right of way certification milestone as shown in the Funding and Scheduling Section of the PSR. For further guidance see Chapter 1, Caltrans Right of Way Procedural Handbook.

	Current Values (Future Use) (2011)	Escalation Rate (%/yr)	Escalated Value (2015)
A. Acquisition (Fee & TCE), including excess lands and damages to remainders	\$53,200,000	5%/Yr	\$ 64,665,000
B. Utility Relocation (State share)	\$6,000,000	5%/Yr	\$ 7,290,000
C. Relocation Assistance	\$ -	5%/Yr	\$ -
D. Clearance / Demolition	\$ -	5%/Yr	\$ -
E. R/W Services - Title and Escrow Fees	\$ 300,000	5%/Yr	\$ 365,000
Easement (Utility Corridor)	\$ 50,000	5%/Yr	\$ 61,000
TOTAL RIGHT OF WAY ITEMS	\$ 59,550,000		\$72,381,000

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work* _____

amount is to

COMMENTS:

Estimate prepared by: Brian Stewart, P.E. (925) 974-2572 02/17/12
 (Print Name) (Phone) (Date)

ATTACHMENT D

Preliminary Environmental Analysis Report (PEAR)



PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

1. Project Information

District: 4	County: Solano	Route: 80	PM: 11.2/29.3	EA: 4G080K
Project Title: Interstate 80 (I-80) Express Lanes Project				
Project Manager: Nicolas Endrawos			Phone #: (510) 286-5123	
Project Engineer: Carlton Haack, HDR, Inc.			Phone #: (916) 595-3272	
Environmental Office Chief/Manager: Melanie Brent			Phone #: (510) 286-5231	
PEAR Preparer: Scott Steinwert, Circlepoint			Phone #: (415) 227-1100	

2. Project Description

The Solano Transportation Authority (STA) proposes to construct westbound and eastbound express lanes along approximately 18 miles of the existing Interstate 80 (I-80) corridor in Solano County. **Attachments A and B**, of the PSR/PDS, show the general location of the environmental study area extending along I-80 from postmile 11.2 to 29.3 and passing through the cities of Fairfield and Vacaville. The I-80 Express Lanes Project (project) consists of two components that will be cleared through a single environmental document which would allow for phased implementation.

The first component, the West Segment, runs along I-80 from the Red Top Road interchange (postmile 11.4) to the Air Base Parkway interchange (postmile 19.2), including the area around the I-80/I-680 interchange. In the West Segment, existing HOV lanes in both the eastbound and westbound directions would be restriped and repurposed as express lanes.

The second component, the East Segment, would construct new HOV/express lanes in both the eastbound and westbound directions of I-80 from the Air Base Parkway interchange through the I-80/Interstate 505 (I-505) Interchange (postmile 28.4).

Purpose and Need

I-80 is an inter-regional east-west corridor that connects the San Francisco and Sacramento metropolitan areas, passing through the counties of Alameda, Contra Costa, Solano, and Yolo. The portion of I-80 through the cities of Fairfield and Vacaville is the most heavily-traveled segment of the I-80 corridor within Solano County as it is utilized by commuters, public transit services, and for interstate and interregional goods movement. Such heavy traffic through the corridor results in frequent significant congestion in the general purpose lanes, particularly acute during the peak travel hours.

In an August 2011 Project Study Report (PSR), Caltrans and the Metropolitan Transportation Commission (MTC) identified a 533-mile “backbone” system of express lanes intended to enhance mobility and afford greater user flexibility of the transportation

network. The PSR indicated that express lanes (in the form of either repurposed currently existing HOV lanes or newly constructed travel lanes) were an appropriate tool to optimize and increase the capacity of the existing regional freeway network to reduce delay while also meeting current and future traffic demand needs.

The PSR specifically included the I-80 corridor in Solano County, including the above-described West and East Segments from Fairfield to Vacaville being analyzed in this PEAR. Accordingly, this PEAR incorporates the following purpose and need as identified in the PSR for the regional backbone network:

Need

- Congestion currently exists in the general purpose lanes during peak periods on the I-80 corridor in Solano County and this level of congestion will continue to worsen as traffic demand increases.
- The existing HOV lane system on the I-80 corridor is characterized by gaps, limiting travel time savings and trip reliability for cars and transit vehicles.
- Available unused capacity in the existing HOV lane system needs to be utilized to enhance transportation system efficiency.
- There is limited funding available to close gaps in the existing HOV lane system without utilizing alternative financial mechanisms such as express lane tolling.

Purpose

- Optimize capacity in the existing I-80 corridor to better meet current and future traffic demands.
- Close the gaps within the existing HOV lanes on I-80 increasing travel time savings and reliability for all users as well as HOVs and transit.
- Maximize the efficiency of freeway facilities by better utilizing available unused capacity in the existing HOV lanes.
- Provide a funding mechanism through express lanes¹ to accelerate implementation of the regional network of HOV and express lanes.

¹The State has authorized the implementation of express lanes as a way to implement the regional carpool lane system faster than traditional state and local funding sources.

Alternatives

This PEAR considers three alternatives: a no-build alternative along with two action alternatives.

No-Build Alternative

Under the No-Build Alternative, no express lanes would be constructed along I-80 from the Red Top Road Interchange to the I-80/I-505 Interchange. The existing HOV lanes along I-80 from Red Top Road to Air Base Parkway would remain as they currently exist. No widening of the I-80 mainline east of Air Base Parkway would occur. Other planned and approved traffic improvements along local routes may be implemented by local agencies or under other projects. The No-Build Alternative is considered the

environmental baseline against which potential environmental effects of the action alternatives described below would be considered.

Alternative (ALT A)

Build Alternative A includes converting the existing HOV lanes in the West Segment and widening I-80 into the existing median in the East Segment.

Converting the HOV lanes in the West Segment to express lanes would involve restriping, installing signage and tolling equipment. However existing non-standard design features would not be corrected under ALT A. In general, under ALT A, the conversion of the existing HOV lanes in the West Segment would not require additional lands outside existing State rights-of-way. However, sliver widening will be required to accommodate one new CHP observation area.

In the East Segment, I-80 would be widened to accommodate one new lane in each direction within the freeway median while maintaining the current number of general purpose lanes. The new median lane would be stripped for HOV and Express use, and appropriate signage and tolling equipment would be installed. Under ALT A, the inside shoulder (median shoulder) would have an average width of 5 feet, which is below the Caltrans standard requirement of 10 feet. Outside shoulders would remain as is and generally meet the Caltrans standard of 10-feet. In general, under ALT A, the widening of I-80 in the East Segment would not require additional lands outside existing State rights-of-way but may require utility easements and temporary construction easements. However, sliver widening would be required to accommodate CHP observation areas at four locations.

Alternative (ALT B)

For the West Segment, Alternative B (ALT B) entails conversion of the existing HOV lanes to express lanes, which would involve restriping, installing signage and tolling equipment, and correcting all non-standard design features that currently exist within this segment. This would require widening of the existing pavement and would require additional lands outside existing State rights-of way.

In the East Segment, I-80 would be widened to accommodate one new lane in each direction within the freeway median while maintaining the current number of general purpose lanes and shoulder widths. The new median lane would be stripped for HOV or Express use, and appropriate signage and tolling equipment would be installed to allow for tolling and express lane use as appropriate. The widening of I-80 would require additional lands for State rights-of-way, utility easements, and temporary construction easements.

3. Anticipated Environmental Approval

CEQA		NEPA	
Environmental Determination			
Statutory Exemption	<input type="checkbox"/>	Categorical Exclusion	<input type="checkbox"/>
Categorical Exemption	<input type="checkbox"/>		
Environmental Document			
Initial Study or Focused Initial Study with proposed Negative Declaration (ND) or Mitigated ND	<input type="checkbox"/>	Routine Environmental Assessment with proposed Finding of No Significant Impact	<input type="checkbox"/>
		Complex Environmental Assessment with proposed Finding of No Significant Impact	<input type="checkbox"/>
Environmental Impact Report	<input checked="" type="checkbox"/>	Environmental Impact Statement	<input checked="" type="checkbox"/>
CEQA Lead Agency (if determined):		California Department of Transportation, District 4	
Estimated length of time (months) to obtain environmental approval:		24-42 months	
Estimated person hours to complete identified tasks:		[Caltrans to provide hours per WBS spreadsheet]	

4. Special Environmental Considerations

The two action alternatives have substantially different potential to impact sensitive environmental resources.

ALT A would develop express lanes through the conversion of the existing freeway median. While ALT A would require sliver widenings in various locations, ALT A would generally confine most physical impacts to the existing I-80 corridor and existing State right-of-way, avoiding the need for any relocations. The median is generally not known to contain any substantial quantities of significant biological or cultural resources. Any such resources in the median are likely to be marginal/minimal in quality and quantity due to the long-standing operation of the freeway.

In contrast, ALT B will require substantial land acquisitions and relocations, particularly in the East Segment. Accordingly, ALT B is likely to significantly affect biological and cultural resources in proximity to the I-80 corridor. Such resources include special status wildlife species and associated habitat, wetlands and waters of the U.S., and recorded/unrecorded Native American and archaeological resources. As such, ALT B would likely entail complex federal consultation and certification processes such as Sections 401 and 404 of the Clean Water Act (CWA), Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act (16 U.S.C. 470) and Section 4(f) of the Department of Transportation Act (49 U.S.C. 303), all contingent on

the findings of supplemental jurisdictional delineation reports, a Natural Environmental Study, and archaeological technical reports. The time required for legal sufficiency review of these processes could impact the project schedule should the Section 404, Section 401, or Section 7 processes and/or an extensive Section 4(f) evaluation be required.

Sliver widenings associated with ALT A could require consultation and certification, but these are expected to be minor relative to the activities associated with ALT B. Accordingly, consultation processes related to ALT A would likely be much less complex and thus require less time to complete.

5. Anticipated Environmental Commitments

The appropriate level of environmental documentation to be prepared during the Project Approval and Environmental Document (PA&ED) phase of project development would be an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) to satisfy both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements for ALT B. Preparation of the EIR/EIS, including technical studies, is anticipated to take 24 to 42 months, after receiving information necessary to begin the environmental analysis. This timeline includes time for substantive review by the environmental division staff within the Department, but does not include time for permitting by federal or state resource agencies.

Appendix D, of this attachment, contains estimated costs of environmental commitments identified in this Preliminary Environmental Analysis Report (PEAR) for each action alternative.

6. Permits and Approvals

Water Quality: The action alternatives are likely to utilize the California Department of Transportation's (Department) NPDES permit during construction. The NPDES permit includes measures that would be taken by the project to reduce or avoid runoff that would affect local storm water quality. Additionally, the project would be required to file a Notice of Intent (NOI) to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activity.

Biological Resources: The project corridor spans urban, suburban, and rural agricultural environments. Significant biological resources are generally concentrated in the riparian areas around the creeks crossed by I-80 and proximate to agricultural buffer areas. Such resources are anticipated to be somewhat more abundant in the East Segment, which has more creek crossings and greater proximity to agricultural buffer areas than the relatively developed West Segment.

Because ALT B would require substantial land acquisitions in the more biologically sensitive East Segment, it could result in greater impacts to waters of the U.S. and special- status species/habitat areas than ALT A. ALT A would have lesser effects to biological resources as the habitat value of regularly maintained lands within the existing I-80 corridor is generally considered low to negligible. Biological resources impacts of ALT A would thus generally be limited to riparian corridors that cross the corridor due to bridge widening or culvert extensions.

A Natural Environment Study (NES) would be required to determine the specific sensitive species in the project area. Depending on the findings of the NES, Section 7 compliance and approvals from the U.S. Fish and Wildlife Service (USFWS) may be required if such species are affected by an action alternative. As noted above, ALT B is expected to result in more adverse effects than ALT A owing to the substantial difference in required land acquisition.

Both ALT A and ALT B are expected to result in limited impacts to waters of the U.S. where it is necessary to widen some of the existing I-80 bridge structures that cross creeks. Both action alternatives would require a delineation of jurisdictional wetlands and waters of the U.S. to determine the presence and location of jurisdictional resources in the areas potentially affected by the action alternatives. Impacts to waters of the U.S. and wetlands as a result of the project, including any temporary impacts during construction, would need to be quantified. The greater widening associated with ALT B would likely result in more substantial implications to wetlands and waters of the U.S. than ALT A. If impacts to wetlands or waters of the U.S. are identified, coordination for CWA Section 401 Certification and CWA Section 404 Permit would be required.¹

A Lake or Streambed Alteration Agreement (SAA), in compliance with Section 1602 of the California Fish and Game Code, is required for project that will substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. If the project results in any of the above-mentioned activities, coordination with the California Department of Fish and Game (CDFG) for a Section 1602 SAA would be required.

Appendix D, of this attachment, provides a detailed environmental commitments cost estimate for each action alternative.

7. Level of Effort: Risks and Assumptions

Risk management is the systematic process of identifying and planning for issues that, were they to occur, could have a positive or negative effect on the project objectives, including the timeline and/or budget for project implementation. Initial phases of project development include developing and regularly reviewing a risk management matrix prepared for the project. This PEAR is designed to provide an evaluation of the level of technical study and environmental documentation that would be required for the project.

The discussion of PEAR Technical Summaries below is based on windshield surveys of the project area, existing public data, and technical reports prepared for other projects in the project area to evaluate the potential environmental risks associated with the action alternatives. Based on this information, the process of attaining full project approval would take approximately 24 to 42 months to complete.

Appendix C, of this attachment, provides a sample schedule of the environmental review process for the project.

¹ Under federal CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification (Certification) that the proposed activity will comply with state water quality standards. Most Certifications are issued in connection with U.S. Army Corps of Engineers CWA Section 404 permits for dredge and fill discharges.

Assumptions

The following assumptions were made when evaluating the project:

- The community would be generally supportive of the need for the project.
- Hazardous materials could be encountered during Phase I soils sampling and surveying of the bridge structures.
- Special-status species (or associated habitat) could be affected by the project.
- The project could result in impacts to wetlands and waters of the U.S. due to the proximity of the waterways creeks crossed by I-80.
- The project could result in significant effects to recreational and/or cultural resources, primarily the Peña Adobe (listed on the National Register of Historic Places), in Vacaville. The project could entail consultation under Section 106 of the NHPA and require a detailed Section 4(f) evaluation.

Risks

A risk is an uncertain event or condition that, if it occurs, has a positive or negative impact on at least one project objective: scope, cost, or schedule. **Table 1** defines the potential impact of a risk on the project objectives.

Table 1: Evaluation the Impact of a Risk on Project Objectives

Impact	Low	Moderate	High
Objectives			
Time	Delivery Plan milestone delay within quarter	Delivery Plan milestone delay of one quarter	Delivery Plan milestone delay of more than 1 quarter
Cost	<5% Cost Increase	5-10% Cost Increase	>20% Cost Increase
Scope	Changes in project limits or features with <5% cost increase	Changes in project limits or features with 5-10% cost increase	Sponsor does not agree that scope meets the purpose and need

Based on the project’s assumptions, the following risks were identified:

- If the community opposes the project, additional time for public involvement and outreach may be needed, which would delay the project schedule. This risk is low and would have a moderate impact on the schedule.
- If unrecorded Native American cultural resources are discovered in the study area, consultation and coordination with Native American tribal representatives during preparation of the CEQA/NEPA document, and monitoring for Native American artifacts during construction, may be required. This risk is unlikely and would have a high impact on schedule and cost.

- If unrecorded paleontological resources are discovered in the study area, construction monitoring by a qualified paleontologist may be required, and a curation program prepared for the project to create protocols for how to protect any resources discovered during construction. This risk is unlikely and would have a high impact on schedule and cost.
- If hazardous materials are encountered during Phase I soil sampling and bridge surveying in such high concentrations such that extensive remediation and re-testing would be required before project approvals could be obtained, the additional remediation work would delay the project schedule. The probability of this occurrence is high and the impact on schedule is high.
- If wetlands and/or waters of the U.S. are identified within the project study area, an avoidance alternative analysis for wetland impacts would need to be prepared in accordance with the U.S. Army Corps of Engineers. The probability of this occurrence is high and the impact on the project schedule is high.
- The precise effects to recreational and cultural resources cannot be ascertained without detailed design information. The project would appear to encroach into portions of Lagoon Valley Regional Park, which includes the Peña Adobe, the oldest building in Solano County. Consultation under Section 106 of the NHPA could require extensive coordination with the State Historic Preservation Officer (SHPO). In addition, certain cultural properties are also considered Section 4(f) resources. The probability of these occurrences is high and the impact on the project schedule is high.

It is not known at this time if all potential impacts, particularly impacts to the human environment, could be mitigated to a less-than-significant level. If impacts are determined to be significant even after application of mitigation, the level of environmental document may need to be elevated. This determination should be made during the PA&ED phase once technical studies have been completed.

8. PEAR Technical Summaries

8.1 Land Use:

The project would occur within the existing I-80 freeway corridor, a long-established freeway that pre-dates much of the adjacent commercial and residential development. ALT A would require sliver widenings with ALT B requiring substantial land acquisitions. As previously noted and discussed further below, ALT B could thus encroach upon park resources, primarily the Peña Adobe Park and Lagoon Valley Regional Park in Vacaville. Such encroachment is expected to require more extensive consideration of potential effects under Section 4(f). The potential for significant Land Use and other related impacts would need to be investigated more fully in a Community Impact Assessment (CIA).

Although ALT A is expected to require sliver widenings, such acquisitions are not expected to extend substantially beyond the existing freeway corridor where significant conflicts with existing or planned land uses might occur. For ALT A, a qualitative discussion would suffice for both CEQA and NEPA purposes.

8.2 Growth:

The growth inducement discussion is required under CEQA, which states that growth must not be assumed in any area to be necessarily detrimental, beneficial, or of no significance to the environment. In general, a project could be considered growth inducing if it directly or indirectly affects the ability of agencies to provide needed public service, or if it can be demonstrated that the potential growth significantly affects the environment in some other way. CEQA does not require separate mitigation for growth inducement as it is assumed that these impacts are already captured in the analysis of environmental impacts.

The action alternatives would optimize and expand the capacity of the I-80 freeway between Air Base Parkway and I-505. A brief assessment in a Community Impact Assessment (CIA) will be required to determine whether this growth inducement would merely facilitate planned growth or result in the potential for unplanned growth.

8.3 Farmlands/Timberlands:

There are several areas of farmlands in the study area, particularly in the span between the cities of Fairfield and Vacaville. Farmland impacts are likely to occur under ALT B, particularly given the need for substantial land acquisition in the East Segment. Particular attention should be made to impacts to prime farmlands and lands under conservation easements.

Farmland impacts are less likely under ALT A; sliver widenings are not expected to result in significant effects.

All effects to farmlands can be addressed in the CIA.

No timberlands are known to existing in the project study area, so no further timberland evaluation would be required.

8.4 Community Impacts:

The existing I-80 corridor between Fairfield and Vacaville, along with immediately adjacent lands, comprise the study area. The Fairfield and Vacaville portions of the study area are generally urbanized and have developed around the long-existing I-80 freeway. The freeway has guided development in the study area.

ALT A would minimally expand the width of the I-80 corridor and would thus be likely to result in few or no direct effects on community character or cohesion. Further, the sliver widenings needed for ALT A would entail no permanent relocations, merely temporary construction easements (TCEs). Effects to public utilities, facilities, and emergency services would thus be expected to be minimal.

In contrast, ALT B would require substantial expansion of the freeway corridor with attendant significant potential to adversely affect community character. Moreover, ALT B could entail a relatively large number of temporary or permanent relocations. Any public utilities or facilities located immediately adjacent to the freeway (such as pipelines, bike routes, or parklands) would thus be more substantially impacted under ALT B. Emergency service provision could also be affected.

Although project construction would be temporary, it would take place over a period of years and could be disruptive to the local area. Lane closures, detours, and other construction over extended periods could impact local residents and businesses and result in negative economic impacts as a result of lost business and/or increase commuted times. Either action alternative would require preparation of a Community Impact Assessment (CIA) to clarify the differing levels of effects associated with ALT A and ALT B.

The project study area includes communities with substantial populations of minority and low income individuals based on data from the 2010 U.S. Census. Further analysis will be required to determine if any of the affected census tracts qualify as environmental justice communities. In particular, the prospect of adding toll lanes raises questions of environmental justice with regard to accessibility for lower-income people. Accordingly, both action alternatives would require further analysis to determine if the proposed action could disproportionately affect any qualifying environmental justice community.

8.5 Visual/Aesthetics:

None of the project study area is located within a designated state scenic highway. However, the action alternatives would traverse several identified scenic areas in both Fairfield and Vacaville. These include but are not limited to the Tri-County Open Space Scenic Vista Area near the west end of the study area, the agricultural “buffer” lands between Fairfield and Vacaville, and views of scenic hillsides, productive agricultural lands, and oak woodland areas, primarily in the non-urbanized portions of the study area. The general plans of both Fairfield and Vacaville and Solano County each identify specific scenic resources that the study area traverses.

The action alternatives would have somewhat similar visual effects. Neither alternative would significantly alter distant views for drivers or people nearby because they are intended to merely modify and/or slightly widen an existing freeway corridor. Both would require the installation of signage/tolling equipment within the already disturbed freeway corridor. The precise locations of such equipment will need to be assessed for the potential to block views and alter the visual character of the corridor experienced by motorists. In addition, both ALT A and ALT B are anticipated to require full or partial removal of the oleander bushes that line much of the median within the East Segment, notably altering the visual character experienced by drivers.

ALT A would not require any new overpasses or other overhead structures, but ALT B would require new overcrossings in several locations and would also require reconstruction of several existing overcrossings. These could represent one or more significant new visual impediments, contingent on precise location relative to visual resources. Further, ALT B would require some new or relocated soundwalls to mitigate identified noise impacts, but such structures are unlikely to substantially alter visual conditions for various viewer groups. To fully assess impacts to all potentially affected viewer groups (drivers, users of nearby park and open space resources, and people living near the study area), a Visual Impact Assessment is recommended.

8.6 Cultural Resources:

In fulfillment of requirements under Section 106 of the National Historic Preservation Act (NHPA), to assess the potential for either action alternative to adversely affect cultural resource, an Area of Potential Effect (APE) should be identified encompassing both archaeological and historic architectural resources.

ALT A would be developed within or immediately adjacent to the existing freeway corridor. ALT A would thus have low potential for encountering significant archaeological resources during construction. Any archaeological resources in this area are likely to have been damaged during construction and maintenance of the freeway, likely adversely affecting the integrity of such resources. Similarly, the sliver widenings required for ALT A are unlikely to affect any historic resources in proximity to the freeway corridor. Accordingly, the ASR for ALT A is likely to be relatively brief. There may be no properties to investigate in an HRER. Therefore, ALT A is unlikely to entail an extensive consultation process under Section 106.

ALT B would require land acquisitions outside the freeway corridor, where there a greater potential for encountering archaeological resources is expected. The integrity of such resources is likely to increase at locations further from the freeway corridor. A significant historic architectural resource, the Peña Adobe, is located approximately 200 feet to the east of the existing I-80 corridor. Peña Adobe is the oldest building remaining in Solano County and is listed on the National Register of Historic Resources. It is located within the City of Vacaville's Peña Adobe Park. The park includes other structures and landscape features associated with Peña Adobe. While ALT B would not need to fully acquire, demolish, or relocate this resource, it would require some of the associated property. Such acquisition could result in direct impacts to features and structures near Peña Adobe, in turn possibly resulting in indirect effects to the integrity of the building. The analysis will need to determine whether such effects could potentially affect Peña Adobe's eligibility for listing on the National Register.

Consultation on this matter with appropriate stakeholders, such as the California SHPO, may be appropriate given ALT B's potential effects to Peña Adobe. A literature review, field survey, and consultation with Native Americans would be appropriate next steps to address both potential archaeological and historic architectural resources. An Archaeological Survey Report (ASR) should be prepared, as well as a Historic Resources Evaluation Report (HRER). These should be summarized in a comprehensive Historic Property Survey Report (HSPR), with appropriate findings of effects. The HSPR should be reviewed with appropriate stakeholders, including but not limited to the California SHPO, whose assent may be required in determining findings of effect to Peña Adobe.

8.7 Hydrology and Floodplain:

The action alternatives would follow an 18-mile freeway corridor that crosses several creeks in Fairfield and Vacaville, as well as the Putah South Canal. Several creeks are noted as 100-year flood zones per Federal Emergency Management Agency (FEMA)

flood maps.² These maps identified the floodplains at the following crossings to be within Zone A: Union Avenue Creek, Laurel Creek, Lagoon Drain, Laguna Creek, Alamo Creek, Ulatis Creek and Pine Tree Creek. Zone A represents areas that are within the 100-year floodplain that are mapped by approximate method. Except for Laurel Creek, the FEMA *Flood Insurance Study* provides detailed 100-year flow and water surface elevation information for the floodplains.

A Location Hydraulic Study (LHS) should be prepared for the project. A LHS is a preliminary study of base floodplain encroachments and must be performed by a registered engineer with hydraulic expertise. Detailed studies to determine impacts to the floodplain base flows and water surface elevations will be presented in the PS&E *Bridge Design Hydraulic Study* for the existing creek crossings along the corridor.

Based on the findings of these efforts, the environmental document will incorporate appropriate mitigation measures related to construction in and near the floodplain.

8.8 Water Quality and Storm Water Runoff:

The project must comply with the Caltrans Statewide NPDES Permit (No. 99-06-DWQ), and the temporary and permanent best management practices that are to comply with the Permit will be presented in the Project Storm Water Data Report during the PA/ED phase.

Both action alternatives would result in a soil disturbance of one acre or more, so the Project must comply with the Statewide Construction General Permit (No. 2009-0009-DWQ); the Caltrans NPDES Permit references the Construction General Permit for regulation of stormwater discharges from all Caltrans construction projects. Both action alternatives would also result in the addition of one acre or more of impervious area and would be required to incorporate measures to provide permanent stormwater treatment and mitigate for hydromodification impacts to receiving water bodies. The stormwater treatment measures would be required to be designed in accordance with the Caltrans Project Planning and Design Guide, and the hydromodification analysis and mitigation measures would need to be in compliance with the San Francisco Bay Regional Water Quality Control Board Municipal NPDES Permit (No. R2-2009-0074).

As a matter of law, implementation of either action alternative would require the incorporation of design Best Management Practices (BMPs), as well as BMPs to prevent effects to water quality during construction (such as excessive erosion or sedimentation). These BMPs are outlined in both the Department's Storm Water Management Plan (SWMP) and would be incorporated into the SWPPP. Incorporation of the measures outlined in the SWPPP would ensure that neither action alternative would adversely affect water quality in local waterways or groundwater quality.

Refer to **Section 8.15, Biological Resources**, for a discussion of potential effects to wetlands or waters of the U.S. If wetlands or waters of the U.S. are identified in the project study area, Clean Water Act (CWA) Section 404 permits and Section 401 Certification would be required.

² Federal Emergency Management Agency. FEMA issued Flood Maps 06095C0276E and 06095C0277E, 06095C0257E 06095C0259E; 2009; City of Fairfield Public Works Department website: <http://www.fairfield.ca.gov/gov/depts/pw/flood/default.asp>, Accessed on October 13, 2011.

8.9 Geology, Soils, Seismic and Topography:

A preliminary geotechnical report should be prepared to evaluate the potential for the action alternatives to result in impacts related to existing soils and/or seismic conditions.

Prior to final design, field explorations will be required to fully document subsoil and groundwater conditions and evaluate corrosion potential to develop specific recommendations for foundation construction, embankment construction, and retaining wall construction. Detailed study should also be conducted to analyze the slope stability of specific slopes that would be potentially affected by the action alternatives and should consider slope maintenance and protection. The findings of these field explorations and detail study will be incorporated into the environmental document.

The project study area crosses two Alquist-Priolo fault zones in Fairfield and a concealed portion of the Lagoon Valley Fault crosses the study area in Vacaville. The action alternatives should be designed in accordance with the Department's 2007 Deterministic PGA Map and the ARS Online (Version 1.0.4). The possibility of the project study area to experience ground shaking is moderate to high and the impact due to liquefaction is considered moderate to high, based on information published in the Fairfield and Vacaville general plans. During the Plans, Specifications, and Estimates (PS&E) phase of the project, additional data should be collected to confirm site conditions and as the basis for appropriate mitigation measures.

8.10 Paleontology:

Several records of known fossil localities exist in close proximity to the project study area.³ Numerous findings of microfossils have been recorded at Lower Cement Hill and along Ulatis Creek, the latter of which crosses the study area. Accordingly, a site-specific Paleontological Inventory Report (PIR) should be prepared to determine if any known paleontological resources exist in the study area. The findings of the PIR will be incorporated into the environmental document.

Should the PIR determine that the action alternatives could impact known paleontological resources or paleontological resources with a high sensitivity status, a qualified paleontologist will need to prepare a Paleontological Evaluation Report (PER) to determine: (1) the Department's legal responsibilities; (2) the necessity for involving other agencies and/or stakeholders; (3) whether the resource can be avoided; and (4) the significance of the resource. The PER is typically completed as part of the draft environmental document/determination and draft project report.

8.11 Hazardous Waste/Materials:

As both action alternatives would be constructed in close proximity to existing freeway lanes, an investigation for heavy metals/aerially deposited lead along with an Initial Site Assessment (ISA) are recommended. Further, Preliminary Site Investigations (PSIs) would be needed for all proposed acquisition/widening areas. While both action alternatives would require at least sliver widenings to accommodate CHP observation areas, ALT B would require substantially more additional right-of-way in the

³ On-line fossil locality search, University of California Museum of Paleontology, (October 12, 2011). Accessed at <http://ucmpdb.berkeley.edu/loc.shtml>.

8.12 Air Quality:

The action alternatives are intended to reduce existing and future traffic congestion, which in turn should result in improved regional air quality. However, the action alternatives could cause minor shifts in traffic patterns which could result in highly localized air quality impacts. At present, a detailed traffic operations report has not been prepared for the action alternatives.

Given the potential for the action alternatives to result in modifications in traffic operations, an Air Quality Study should be prepared to evaluate potential air quality impacts both in the near term and over the project planning horizon. As part of this analysis, the study should include a mobile source air toxics (MSAT) screening evaluation as well as a carbon monoxide hotspot analysis. The findings of the Air Quality Study will be incorporated into the environmental document.

The project must conform to the Bay Area Air Quality Management District (BAAQMD) 2010 Clean Air Plan (CAP). The CAP is based on regional population, housing, and employment projections through 2020 compiled by the Association of Bay Area Governments (ABAG). A project is considered to conflict with or obstruct implementation of a regional air quality plan if it would be inconsistent with the regional growth assumptions, in terms of population, employment, or regional growth in Vehicle Miles Travelled (VMT). As such, the Air Quality Study should provide extensive modeling and documentation of the project's conformity with ABAG's projections. As the action alternatives would potentially increase the capacity of I-80, further analysis is needed to determine the potential for growth-inducing effects, a substantial change in VMT, and in turn, consistency with the CAP.

Because the action alternatives would affect highway operations, regional interagency consultation to discuss and gain consensus on conformity issues would be required, as defined by the Interagency Consultation requirements in the U.S. EPA Conformity Rule at 40 CFR 93.105. The project would be required to complete FHWA's Transportation Conformity and NEPA Assumption Questions and Answers forms, as well as the Conformity Analysis Documentation checklist.

Additionally, the San Francisco Bay Area is designated as nonattainment for the 24-hour PM_{2.5} standard.⁴ If the action alternatives are considered to require further evaluation of PM_{2.5}, a PM_{2.5} hot-spot evaluation should be included as part of the Air Quality Study to ensure conformity with the Clean Air Act.

Construction of either action alternative would require earth movement, pavement removal, installation of new pavement, and other associated activities. The BAAQMD CEQA Guidelines, as modified in 2010, require quantification of construction period emissions for criteria pollutants, including that produced by construction equipment and fugitive dust. Mitigation, including but not limited to standard Best Management Practices, is likely to be required to reduce levels of emissions below BAAQMD's operative thresholds.

⁴ Beginning December 14, 2010, certain projects are required to engage in interagency consultation and complete PM_{2.5} hot-spot analysis as part of the project level-conformity determination process.

8.13 Noise and Vibration:

A preliminary field review of the project study area by a qualified acoustician indicated that the action alternatives could require the construction and/or replacement of noise barriers in several locations.⁵ This field review was based in part on information developed as part of the I-80 HOV Lane Project.

As the action alternatives could widen the existing I-80 corridor in several places, particularly along the eastern segment that does not currently have HOV lanes, there is the potential for a change in existing noise patterns that could adversely affect both existing and new sensitive receptors in the vicinity of the project study area. A detailed noise analysis should be conducted to determine the full extent of noise impacts associated with the action alternatives, as well as recommended mitigation measures. Mitigation measures should be considered in terms of both feasibility and reasonableness, weighing cost to construct against the number of beneficiaries.

Because the implementation of the action alternatives is likely to require substantial construction activity over a period of many months and would be in very close proximity to noise-sensitive land uses, construction could result in significant noise and vibration impacts. The Noise Study Report should include a construction noise assessment that evaluates potential noise and vibration effects and, if warranted, proposes appropriate mitigation measures. The findings of the Noise Study Report will be incorporated into the environmental document.

8.14 Energy and Climate Change:

At present, the I-80 corridor experiences significant congestion; such congestion can in turn increase emissions of carbon dioxide, a key greenhouse gas. To the extent a project relieves congestion by enhancing operations and improving travel times in high congestion travel corridors, greenhouse gas emissions may be reduced. As the purpose of the action alternatives is to relieve existing and projected future traffic congestion, the action alternatives could result in CO₂ emission reductions. An appropriate greenhouse gas emissions analysis should be prepared as part of the environmental document. The environmental document will include a qualitative discussion regarding the operation of the project relative to greenhouse gas emission and climate change effects. The analysis will be prepared in accordance with the Department's most current guidance at the time the environmental document is prepared. The environmental document will include the Department's boilerplate language regarding greenhouse gas emissions and will follow the defined methodology from the Department's Standard Environmental Reference materials.

8.15 Biological Environment:

The project corridor spans urban, suburban, and rural agricultural environments. Significant biological resources are generally concentrated in the riparian areas around the creeks crossed by I-80 and proximate to agricultural buffer areas. Such resources are anticipated to be somewhat more abundant in the East Segment, which has more creek crossings and greater proximity to agricultural buffer areas than the relatively developed West Segment.

⁵ Illingworth and Rodkin, Inc., April 4, 2011.

Because ALT B would require substantial land acquisitions in the more biologically sensitive East Segment, it could result in greater impacts to waters of the US and special status species/habitat areas than ALT A. ALT A would have lesser effects to biological resources as the habitat value of regularly maintained lands within the existing I-80 corridor is generally considered low to negligible. Biological resources impacts of ALT A would thus generally be limited to riparian corridors that cross the corridor due to bridge widening or culvert extensions.

Special-Status Plant and Wildlife Species

For both action alternatives, some widening of existing bridge structures would be anticipated in areas where sensitive wildlife and plant species may be present. A Natural Environment Study (NES) would be required to determine the specific sensitive species in the project area. Depending on the findings of the NES, Section 7 compliance and development of a Habitat Mitigation and Monitoring Plan (HMMP) may be required. If the NES determines that the action alternatives would affect both a state and federal listed species, compliance with the Federal Endangered Species Act (FESA) will satisfy the California Endangered Species Act (CESA) if the Department of Fish and Game (CDFG) determines that federal compliance is “consistent” with CESA under Fish & Game Code Section 2080.1. If the action alternatives would result in a “take” of a state-only listed species, the Department must apply for a take permit under Section 2081 (b).

Wetlands

The project would also result in limited impacts to waters of the U.S. where it is necessary to widen some of the existing I-80 bridge structures that cross creeks for both action alternatives. A delineation of jurisdictional wetlands and waters of the U.S. should be prepared to determine the presence and location of jurisdictional resources in the areas potentially affected by the action alternatives. The jurisdictional delineations should be completed in accordance with Section 404 and Section 401 of the federal Clean Water Act (CWA), which regulate the discharge of dredged or fill material into waters of the US, including wetlands. Executive Order 11990 requires an avoidance alternative analysis for wetland impacts unless there is no practicable alternative available. Impacts to waters of the U.S. and wetlands as a result of the action alternatives, including any temporary impacts during construction, would need to be quantified. If impacts to wetlands or waters of the U.S. are identified, coordination for CWA Section 401 Certification and CWA Section 404 Permit would be required.⁶

A Lake or Streambed Alteration Agreement (SAA), in compliance with Section 1602 of the California Fish and Game Code, is required for projects that will substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. If the action alternatives result in any of the above-mentioned activities, coordination with the California Department of Fish and Game (CDFG) for a Section 1602 SAA would be required.

⁶ Under federal CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification (Certification) that the proposed activity will comply with state water quality standards. Most Certifications are issued in connection with U.S. Army Corps of Engineers CWA Section 404 permits for dredge and fill discharges.

8.16 Cumulative Impacts:

Cumulative impacts occur as a result of the combined actions of multiple projects. Even when an individual project does not have significant impacts, in combination with other related projects, these cumulative effects may be considerable. The cumulative study area varies by location along the I-80 corridor. Urbanized areas are largely built-out or planned for future residential, commercial, or industrial development projects. Outside of urbanized areas, lands are designated for agricultural and/or open space uses. As such, the environmental document will have to establish a list of potentially approved future projects in the vicinity of the study area that could cumulatively impact several areas of environmental resources.

Potential cumulative impacts for the action alternatives would generally be related to traffic, noise, and air quality/greenhouse gas emission issues resulting from regional growth. These cumulative impacts are therefore generally accounted for in the long-term scenarios of the noise, air quality, and greenhouse gas emissions technical reports, which would be based on the regional growth projected in the traffic operation analysis. Other cumulative impacts to which the action alternatives could contribute include the loss of biological resources or wetlands.

8.17 Context Sensitive Solutions:

The Department uses Context Sensitive Solutions (CSS) to integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. CSS are reached through a collaborative, interdisciplinary approach involving all stakeholders, engaged through early coordination with agencies as well as early outreach to the community.

STA has proposed the two different action alternatives in part related to the issue of context sensitivity. ALT B would meet the purpose and need of the project but would require substantial right-of-way acquisitions. In contrast, ALT A would also meet the purpose and need, but would achieve this through more intensive use of the existing freeway right-of-way (i.e., conversion of the median to express lanes) but would require several exceptions to various Caltrans design standards. Both alternatives would be carried through the environmental documents to clearly demonstrate the pros and cons of each relative to context sensitivity.

9. Summary Statement for Project Study Report or Project Study Report-Project Development Support

The appropriate level of environmental document could be an EIR/EIS if ALT B as currently configured is carried forward as an action alternative. This is because it is likely that ALT B would result in significant and unavoidable adverse effects to Peña Adobe. The recommended historic architecture evaluation will be necessary to determine the precise extent of any such impacts to Peña Adobe and whether such impacts can be successfully mitigated. ALT B could take enough land in the surrounding park such that the integrity of the historic resource is compromised to such a degree to adversely affect its eligibility for inclusion on the National Register.

It should be noted that Peña Adobe will also require close analysis for impacts under Section 4(f), as it is likely to qualify as a Section 4(f) property. Section 4(f) regulations stipulate that the DOT cannot approve a project found to use a Section 4(f) resource if any “feasible or prudent” alternative is available. Assuming the analysis concludes that ALT B would result in the use of a Section 4(f) resource, in order for ALT B to move forward, an analysis of all feasible or prudent alternatives to use of the Section 4(f) resource would be required.

The appropriate level of environmental document for ALT A standing alone could be an MND/EA. This document level would be supportable based on the environmental constraints present in the project study area and the low potential for the project (including all design options) to cause significant environmental impacts.

The Department would act as the lead agency in the preparation of this joint NEPA/CEQA environmental document. The Department will serve as the NEPA lead agency under its assumption of responsibility pursuant to 23 U.S. Code 327. It is expected that the environmental technical reports and environmental document (IS/EA or EIR/EIS) would take approximately 24 to 42 months to prepare and process for final certification/approval, including time for substantive review by the environmental division staff with the Department. It is anticipated multiple environmental studies and reports will be required for this project.

See **Appendix A**, of this attachment, for the complete list of environmental studies and reports that would be prepared for this project.

10. Disclaimer

This PEAR provides information to support programming of the proposed project. It is not an environmental determination or document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in the Project Study Report (PSR). The estimates and conclusions in the PEAR are approximate and are based on cursory analyses of probable effects. A reevaluation of the PEAR would be necessary in the event that changes occurred in project scope or alternatives, or in environmental laws, regulations, or guidelines.

11. List of Preparers

Document Authors



John Cook, Senior Environmental Planner
Circlepoint

Date: March 26, 2012

12. Review and Approval

I confirm that environmental cost, scope, and schedule have been satisfactorily completed and that the PEAR meets all Caltrans requirements. Also, if the project is scoped as a routine EA, complex EA, or EIS, I verify that the HQ DEA Coordinator has concurred in the Class of Action.



Environmental Branch Chief

Date: 27 March 2012



Project Manager

Date: 3/27/2012

REQUIRED ATTACHMENTS:

Appendix A: PEAR Environmental Studies Checklist

Appendix B: Estimated Resources by WBS Code

Appendix C: Schedule (Gantt Chart)

Appendix D: PEAR Environmental Commitments Cost Estimate (Standard PSR)



PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

APPENDIX A

Attachment A: PEAR Environmental Studies Checklist

Rev. 11/08

Environmental Studies for PA&ED Checklist							
	Not anticipated	Memo to file	Report required	Risk*			Comments
				L	M	H	
Land Use	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Growth	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Farmlands/Timberlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Community Impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Community Character and Cohesion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Relocations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Environmental Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Utilities/Emergency Services	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Visual/Aesthetics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Cultural Resources:							
Archaeological Survey Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
Historic Resources Evaluation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
Historic Property Survey Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Historic Resource Compliance Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Section 106 / PRC 5024 & 5024.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Native American Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Finding of Effect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Data Recovery Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Memorandum of Agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Hydrology and Floodplain	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Water Quality and Stormwater Runoff	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Geology, Soils, Seismic and Topography	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Paleontology	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
PER	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
PMP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Hazardous Waste/Materials:							
ISA (Additional)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
PSI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Noise and Vibration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L			
Energy and Climate Change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	L			
Biological Environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
Natural Environment Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
Section 7:							
Formal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
Informal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
No effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
Section 10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L			
USFWS Consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
NMFS Consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			
Species of Concern (CNPS, USFS, BLM, S, F)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H			CTS, CRLF

Environmental Studies for PA&ED Checklist

	Not anticipated	Memo to file	Report required	Risk* L M H	Comments
Wetlands & Other Waters/Delineation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
404(b)(1) Alternatives Analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	M	
Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Wild & Scenic River Consistency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Coastal Management Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
HMMP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
DFG Consistency Determination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
2081	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Cumulative Impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Context Sensitive Solutions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Section 4(f) Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M	
Permits:					
401 Certification Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
404 Permit Coordination, IP, NWP, or LOP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
1602 Agreement Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Local Coastal Development Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
State Coastal Development Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
NPDES Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	M	
US Coast Guard (Section 10)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
TRPA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
BCDC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	

Attachment A: PEAR Environmental Studies Checklist

Rev. 11/08

Environmental Studies for PA&ED Checklist					
	Not anticipated	Memo to file	Report required	Risk* L M H	Comments
Land Use	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Growth	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Farmlands/Timberlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Community Impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Community Character and Cohesion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Relocations	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Environmental Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Utilities/Emergency Services	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Visual/Aesthetics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Cultural Resources:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Archaeological Survey Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Historic Resources Evaluation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Historic Property Survey Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Historic Resource Compliance Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Section 106 / PRC 5024 & 5024.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Native American Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Finding of Effect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Data Recovery Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Memorandum of Agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Hydrology and Floodplain	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Water Quality and Stormwater Runoff	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Geology, Soils, Seismic and Topography	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Paleontology	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
PER	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
PMP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Hazardous Waste/Materials:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
ISA (Additional)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
PSI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Noise and Vibration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L	
Energy and Climate Change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	L	
Biological Environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Natural Environment Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Section 7:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Formal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Informal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
No effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
Section 10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L	
USFWS Consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
NMFS Consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	
Species of Concern (CNPS, USFS, BLM, S, F)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H	CTS, CRLF

Environmental Studies for PA&ED Checklist

	Not anticipated	Memo to file	Report required	Risk*			Comments
				L	M	H	
Wetlands & Other Waters/Delineation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
404(b)(1) Alternatives Analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			L	
Wild & Scenic River Consistency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
Coastal Management Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
HMMP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
DFG Consistency Determination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
2081	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
Cumulative Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			L	
Context Sensitive Solutions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
Section 4(f) Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
Permits:							
401 Certification Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
404 Permit Coordination, IP, NWP, or LOP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
1602 Agreement Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			H	
Local Coastal Development Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
State Coastal Development Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
NPDES Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			M	
US Coast Guard (Section 10)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
TRPA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	
BCDC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			L	



PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

APPENDIX B

Appendix B - Resources by WBS Code

EA:	<i>NOTE: This WBS resource estimating tool is for Generalist use ONLY when a district-specific WBS estimating tool is not available. Check with your supervisor before using this form.</i>													WBS current 11/2008		
Description:	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Paleo	Sup Svcs	Total	Begin Date	End Date	Duration (days)		
Project Management																
100.05.05 – Project Init. & Plng.											0			0		
100.05.10 – PID Cmpnt Exec. & Ctrl.											0			0		
100.05.15 – PID Cmpnt Closeout											0			0		
100.10.05 – PA&ED Cmpnt Init. & Plng.											0			0		
100.10.10 – PA&ED Cmpnt Exec. & Ctrl.											0			0		
100.10.15 – PA&ED Cmpnt Closeout											0			0		
100.10.20 – Project Shelving (PA&ED)											0			0		
100.10.25 – Project Unshelving (PA&ED)											0			0		
100.10.30 – Updd Admtv Rec during PA&ED											0			0		
100.10.35 – Execd Coop Agre for PA&ED Process											0			0		
100.15.05 – PS&E Cmpnt Init. & Plng.											0			0		
100.15.10 – PS&E Cmpnt Exec. & Ctrl.											0			0		
100.15.15 – PS&E Cmpnt Closeout											0			0		
100.15.20 – Project Shelving (PS&E)											0			0		
100.15.25 – Project Unshelving (PS&E)											0			0		
100.15.30 – Updd Admtv Rec during PS&E											0			0		
100.15.35 – Execd Coop Agre for PS&E Process											0			0		
100.20.05 – Const. Cmpnt Init. & Plng.											0			0		
100.20.10 – Const. Cmpnt Exec. & Ctrl.											0			0		
100.20.15 – Const. Cmpnt Closeout											0			0		
100.20.20 – Project Shelving (Construction)											0			0		
100.20.25 – Project Unshelving (Construction)											0			0		
100.20.30 – Updd Admtv Rec during Const											0			0		
100.20.35 – Execd Coop Agre for Const Process											0			0		
100.25.05 – R/W Cmpnt Init. & Plng.											0			0		
100.25.10 – R/W Cmpnt Exec. & Ctrl.											0			0		
100.25.15 – R/W Cmpnt Closeout											0			0		
100.25.20 – Project Shelving (Right of Way)											0			0		
100.25.25 – Project Unshelving (Right of Way)											0			0		
100.25.30 – Updd Admtv Rec during R/W											0			0		
100.25.35 – Execd Coop Agre for R/W Process											0			0		
100.25.50 – Execd Coop Agre for R/W Rlnmnt											0			0		
Total Project Management	0	0	0	0	0	0	0	0	0	0	0					
Perform Preliminary Engineering Studies and Prepare Draft Project Report																
160.05.05 – Approvd PID Review											0			0		
160.05.10 – Geotechnical Information Review											0			0		
160.05.20 – Traffic Data & Forecasts Review											0			0		
160.05.30 – Project Scope Review											0			0		
160.10.20 – Value Analysis											0			0		
160.10.25 – Hydraulics/Hydro Study											0			0		
160.10.30 – Hwy Planting Des Concepts											0			0		
160.15.20 – Draft Project Report											0			0		
160.15.25 – Draft PR Circ, Rev & App											0			0		

160.30.05 – Maps for ESR												0			0
160.30.10 – Surveys/Maps for Env Studies												0			0
160.30.15 – Prop Access Rights for Env/Eng Studies												0			0
160.40 – NEPA Delegation												0			0
Total Prelim Eng Studies	0	0	0	0	0	0	0	0	0	0	0	0			
Assigned Unit	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Paleo	Sup Svcs	Total	Begin Date	End Date	Duration (days)	
Perform Environmental Studies and Prepare Draft Environmental Document															
165.05.05 – Project Information Review											0				0
165.05.10 – Pub & Agency Scoping											0				0
165.05.15 – Alts for Further Study											0				0
165.10.15 – CIA, Land Use & Growth											0				0
165.10.25 – Noise Study											0				0
165.10.30 – Air Quality Study											0				0
165.10.35 – Water Quality Studies											0				0
165.10.40 – Energy/Climate Change Studies											0				0
165.10.45 – Sum Geotech Report											0				0
165.10.50 – Preliminary Site Investigation HW											0				0
165.10.55 – Draft R/W Relocation Impact Eval											0				0
165.10.65 – Paleontology Study											0				0
165.10.70 – Wild & Scenic River Coordination											0				0
165.10.75 – Envir Commitments Record											0				0
165.10.99 - Other Env Studies											0				0
165.15.05 – Biological Assessment											0				0
165.15.10 – Wetlands Study											0				0
165.15.15 – Resource Agency Coord											0				0
165.15.20 – NES Report											0				0
165.15.99 – Other Biological Studies											0				0
165.20.05 – Archaeology Survey											0				0
165.20.05.05 – APE Map											0				0
165.20.05.10 – NA Consultation											0				0
165.20.05.15 – Records & Literature Search											0				0
165.20.05.20 – Field Survey											0				0
165.20.05.25 – ASR											0				0
165.20.05.99 – Other Archy Survey Products											0				0
165.20.10 – Extended Phase I Archy Studies											0				0
165.20.10.05 – Native American Consultation											0				0
165.20.10.10 – Extended Phase I Proposal											0				0
165.20.10.15 – XP1 Field Investigation											0				0
165.20.10.20 – XP1 Materials Analysis											0				0
165.20.10.25 – Extended Phase I Report											0				0
165.20.10.99 – Other Phase I Archy Products											0				0
165.20.15 – Phase II Archy Studies											0				0
165.20.15.05 – NA Consultation											0				0
165.20.15.10 – Phase II Proposal											0				0
165.20.15.15 – Field Investigation											0				0
165.20.15.20 – Materials Analysis											0				0
165.20.15.25 – Phase II Report											0				0
165.20.15.99 – Other Phase II Archy Products											0				0
165.20.20 – Hist & Architectural Studies											0				0
165.20.20.05 – Prelim APE/Study Area Maps - Archl											0				0
165.20.20.10 – Hist Res Eval Rpt - Archy											0				0

165.20.20.15 – Hist Res Eval Rpt - Archl												0			0
165.20.20.20 – Bridge Evaluation												0			0
165.20.20.99 – Other H & A Study Products												0			0
165.20.25 – Cultural Res Comp Docs												0			0
165.20.25.05 – Final APE Maps												0			0
165.20.25.10 – PRC 5024.5 Consult												0			0
165.20.25.15 – HPSR/HRCR												0			0
165.20.25.20 – Finding of Effect												0			0
165.20.25.25 – Archy Data Recovery Pln												0			0
165.20.25.30 – MOA												0			0
165.20.25.99 – Other Cult Res Comp Products												0			0
165.25.05 – Draft ED Analysis												0			0
165.25.10 – 4(f) Evaluation												0			0
165.25.15 – CE/CE Determination												0			0
165.25.20 – Env Quality Control & Other Reviews												0			0
165.25.25 – Approval to Circ Resolution												0			0
Assigned Unit	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Paleo	Sup Svcs	Total	Begin Date	End Date	Duration (days)	
165.25.30 – Env Coordination											0				0
165.25.99 – Other DED Products											0				0
165.30 – NEPA Delegation											0				0
Total Env Studies & Prep DED	0	0	0	0	0	0	0	0	0	0	0				
Permits, Agreements, and Route Adoptions during PA&ED Cmpnt															
170.05 - Required Permits (list)												0			0
170.10.05 - US Army Corps 404 Permit												0			0
170.10.10 - US Forest Service Permit(s)												0			0
170.10.15 - US Coast Guard Permit												0			0
170.10.20 - DFG 1600 Agreement(s)												0			0
170.10.25 - Coastal Zone Development Permit												0			0
170.10.30 - Local Agency Concurrence/Permit												0			0
170.10.40 - Waste Discharge (NPDES) Permit(s)												0			0
170.10.45 - US Fish & Wildlife Service Approval												0			0
170.10.50 - RWQCB 401 Permit												0			0
170.10.60 - Updated ECR												0			0
170.10.95 - Other Permits												0			0
170.45 - MOU from TERO Office												0			0
170.55 - NEPA Delegation												0			0
Total Permits, Agreements & Route Adoptions	0	0	0	0	0	0	0	0	0	0	0				
Circulate Draft Environmental Document and Select Preferred Project Alternative															
175.05.05 – Master Dist & Invitation Lists												0			0
175.05.10 – Notices Pub Hear & DED Avail												0			0
175.05.15 – DED Pub & Circulation												0			0
175.05.20 – Fed Consistency Det (Coastal)												0			0
175.05.99 – Other DED Circulation Products												0			0
175.10.05 – Need for Pub Hearing Determination												0			0
175.10.10 – Pub Hearing Logistics												0			0
175.10.15 – Displays for Pub Hearing												0			0
175.10.20 – 2nd Notice Pub Hear & Avail												0			0
175.10.25 – Map Display & Hearing Plan												0			0
175.10.30 – Display Pub Hear Maps												0			0
175.10.35 – Public Hearing												0			0

175.10.40 – Record of Public Hearing												0			0
175.10.99 – Other Pub Hearing Products												0			0
175.15 – Responses to Pub Hear Comments												0			0
175.20 – Project Preferred Alternative												0			0
175.25 – NEPA Delegation												0			0
Total DED & Preferred Alt	0	0	0	0	0	0	0	0	0	0	0	0			0
Prepare and Approve Project Report and Final Environmental Document															
180.05.10 – Approved Project Rep												0			0
180.05.15 – Updated Stormwater Data Report												0			0
180.10.05 – Approved FED												0			0
180.10.05.05 – Draft FED Review												0			0
180.10.05.10 – Revised Draft FED												0			0
180.10.05.15 – Section 4(f) Evaluation												0			0
180.10.05.20 – Findings Report												0			0
180.10.05.25 – Statement of Overriding Consid												0			0
180.10.05.30 – CEQA Certification												0			0
180.10.05.35 – FHWA and Approval												0			0
180.10.05.40 – Section 106 Cons & MOA												0			0
180.10.05.45 – Section 7 Consultation												0			0
180.10.05.50 – Final Section 4(f) Statement												0			0
180.10.05.55 – Floodplain Only PAF												0			0
180.10.05.60 –Wetlands Only PAF												0			0
180.10.05.65 – Sect 404 Permit Compliance												0			0
180.10.05.70 – Mitigation Measures												0			0
180.10.10 – Public Dist & Resp to Comments												0			0
Assigned Unit	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Paleo	Sup Svcs	Total	Begin Date	End Date	Duration (days)	
180.10.15 – Final R/W Relo Impact Document											0				0
180.10.99 – Other FED Products											0				0
180.15.05 – ROD (NEPA)											0				0
180.15.10 – NOD (CEQA)											0				0
180.15.20 – Env Commitments Record											0				0
180.15.99 – Other Complete ED Products											0				0
180.20 – NEPA Delegation											0				0
Total App PR & FED	0	0	0	0	0	0	0	0	0	0	0				0
Update Project Info for PS&E															
185.05.05 – Project Concept Review for PS&E											0				0
185.05.10 – Updated Project Info for PS&E dev											0				0
Total Update for PS&E	0	0	0	0	0	0	0	0	0	0	0				0
ROW & Excess Land															
195.40.25 – Property Maint & Rehab (non-rental)											0				0
195.40.35 – Transfer of Prop to Clear Status											0				0
195.45.05 – Excess Lands Inventory											0				0
195.45.20 – Prop Disp Units less than \$15 K											0				0
195.45.25 – Prop Disp Units \$15 K - \$500 K											0				0
195.45.30 – Prop Disp Units over \$500 K											0				0
Total ROW & Excess Land	0	0	0	0	0	0	0	0	0	0	0				0
Utility Relocation															
200.15 – Approved Utility Relocation Plan											0				0

200.20 – Utility Relocation Package													0			0
Total Coordinate Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Permits, Agreements, and Route Adoptions during PS&E Cmpnt																
205.10.05 - US Army Corps 404 Permit													0			0
205.10.10 - US Forest Service Permit(s)													0			0
205.10.15 - US Coast Guard Permit													0			0
205.10.20 - DFG 1600 Agreement													0			0
205.10.25 - Coastal Development Permit													0			0
205.10.30 - Local Agency Concurrence/Permit													0			0
205.10.40 - Waste Discharge (NPDES) permit													0			0
205.10.45 - US Fish & Wildlife Service Approval													0			0
205.10.50 - RWQCB 401 Permit													0			0
205.10.60 - Updated ECR													0			0
205.10.95 - Other Permits													0			0
205.20.05 – Draft Fwy Agreement													0			0
205.20.10 – Draft Fwy Agree Review													0			0
205.20.15 – Final Fwy Agree													0			0
205.20.20 – Executed Fwy Agreement													0			0
205.40.10 - New Connections & Route Adopt Sbtl													0			0
205.55 - NEPA Delegation													0			0
Total Permits, Agreements, and Route Adoptions	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Assigned Unit	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Paleo	Sup Svcs	Total	Begin Date	End Date	Duration (days)		
Right of Way Interests																
225.55.20 – Right of Way Clearance													0			0
Total Right of Way Interests	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Prepare Draft PS&E																
230.05.45 – Noise Barrier Plans													0			0
230.10.05 – Hwy Planting Plans													0			0
230.10.15 – Plant List													0			0
230.35.10 – Hwy Planting Specs													0			0
230.35.35 – Water Pollution Ctrl Specs													0			0
230.35.40 – Erosion Control Specs													0			0
230.60 – Updated Proj Info for PS&E Package													0			0
230.60.05 - Updated Storm Water Data Report													0			0
230.60.10 – Other Reviews/Updates Proj Info													0			0
230.90 – NEPA Delegation													0			0
Total Prepare Draft PS&E	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Mitigate Environmental Impacts and Clean-up Hazardous Waste																
235.05.05 – Hist Structures Mitig													0			0
235.05.10 – Archy & Cult Mitigation													0			0
235.05.15 – Biological Mitigation													0			0
235.05.20 – Env Mitigation R/W work													0			0
235.05.25 – Paleontology Mitigation													0			0
235.05.99 - Other Env Mitigation Products													0			0
235.10.10 – Haz Waste Sites Survey													0			0
235.10.15 – Detailed HW Sites Investigation													0			0
235.15 – HW Management Plan													0			0
235.20 – HW PS&E													0			0

235.25 – HW Clean-up												0			0
235.30 – Certification of Sufficiency (HW)												0			0
235.35 – Long Term Mitigation Monitoring												0			0
235.40 – Updated ECR												0			0
235.45 – NEPA Delegation												0			0
Total Mitigation & HW Clean-up	0	0	0	0	0	0	0	0	0	0	0	0			0
Permits for Subsurface Geotechnical Exploration															
240.70 – Site Ready for Subsurface Exploration												0			0
Total Geotechnical Permit	0	0	0	0	0	0	0	0	0	0	0	0			0
Circulate, Review and Prepare Final District PS&E Package															
255.05 – Circ & Rev Draft Dist PS&E												0			0
255.10.25 - Updated Technical Reports												0			0
255.15 – Env Reevaluation												0			0
255.20.05 - Rev Plans for Stds Comp												0			0
255.40 - Res Engs Pending File												0			0
255.45 – NEPA Delegation												0			0
Total PS&E	0	0	0	0	0	0	0	0	0	0	0	0			0
Assigned Unit															
	Senior	Coord	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	Noise/Air	Paleo	Sup Svcs	Total	Begin Date	End Date	Duration (days)	
Prepare Contract Documents															
260.75 - Env Cert at RTL											0				0
Total Prepare Contract Documents	0	0	0	0	0	0	0	0	0	0	0				0
Perform Construction Engineering and General Contract Administration															
270.20.50 – Technical Support											0				0
270.55 – Final Inspect & Accept Rec											0				0
270.70 – Update ECR											0				0
270.75 – Permit Renewal & Extension											0				0
270.80 – Long-Term Mitigation Contract											0				0
Total Const Engineering	0	0	0	0	0	0	0	0	0	0	0				0
Prepare and Administer Contract Change Orders															
285.05.05 - Need for CCO Determination											0				0
285.10.15 – Other Func Support											0				0
Total CCOs	0	0	0	0	0	0	0	0	0	0	0				0
Resolve Contract Claims															
290.35 – Provide Technical Support											0				0
Total Contract Claims	0	0	0	0	0	0	0	0	0	0	0				0
Accept Contract, Prepare Final Construction Estimate & Prepare Final Report															
295.35 – Cert of Env Compliance											0				0
295.40 – Long-Term Mitigation Contract											0				0
Total Final Construction	0	0	0	0	0	0	0	0	0	0	0				0
Total Project Hours	0	0	0	0	0	0	0	0	0	0	0				0



PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

APPENDIX C

I-80 Express Lanes
Conceptual ED Schedule

ID	Task Name	Start	Finish	2012				2013				2014				2015				2016				2017
				Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1																								
2	Draft Environmental Document	Thu 3/1/12	Mon 9/2/13																					
3	Final Environmental Document/Environmental Approval	Tue 9/3/13	Mon 3/3/14																					
4	PS&E	Tue 3/4/14	Mon 6/1/15																					
5	Begin Construction	Tue 6/2/15	Mon 1/2/17																					

Project: Attachment C Conceptual Sch Date: Wed 3/28/12	Task		Milestone		External Tasks	
	Split		Summary		External Milestone	
	Progress		Project Summary		Deadline	



PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

APPENDIX D

Attachment D: PEAR Environmental Commitments Cost Estimate

Standard PSR Only

(Prepare a separate form for each viable alternative described in the Project Study Report)

PART 1 PROJECT INFORMATION

rev. 11/08

District-County-Route-Post Mile 4-SOL-80-11.2/29.3	EA: 0G360K
Project Description: I-80 Express Lanes- Minimum Impact Alternative (ALT A)	
Form completed by (Name/District Office): District 4	
Project Manager: TBD	Phone Number: TBD
Date: 11/10/2011	

PART 2 PERMITS AND AGREEMENTS

	Permits and Agreements (\$\$)
<input checked="" type="checkbox"/> Fish and Game 1602 Agreement	50000
<input type="checkbox"/> Coastal Development Permit	
<input type="checkbox"/> State Lands Agreement	
<input checked="" type="checkbox"/> Section 401 Water Quality Certification	50000
<input checked="" type="checkbox"/> Section 404 Permit – Nationwide (U.S. Army Corps)	50000
<input type="checkbox"/> Section 404 Permit – Individual (U.S. Army Corps)	
<input type="checkbox"/> Section 10 Navigable Waters Permit (U.S. Army Corps)	
<input type="checkbox"/> Section 9 Permit (U.S. Coast Guard)	
<input type="checkbox"/> Other:	
Total (enter zeros if no cost)	

PART 3. ENVIRONMENTAL COMMITMENTS FOR PERMANENT IMPACTS

To complete the following information:

- Report costs in \$1,000s.
- Include all costs to complete the commitment:
 - Capital outlay and staff support. Refer to Estimated Resources by WBS Code. For example, if you estimated 80 hours for biological monitoring (WBS 235.35 Long Term Mitigation Monitoring), convert those hours to a dollar amount for this entry. For current conversion rates from PY to dollars, see the Project Manager.
 - Cost of right of way or easements.
 - If compensatory mitigation is anticipated (for wetlands, for example), insert a range for purchasing credits in a mitigation bank.
 - Long-term monitoring and reporting
 - Any follow-up maintenance
 - Use current costs; the Project Manager will add an appropriate escalation factor.
 - This is an estimating tool, so a range is not only acceptable, but advisable.

Environmental Commitments Alternative ALT A		
	Estimated Cost in \$1,000's	Notes
Noise abatement or mitigation		min. new walls
Special landscaping		oleander?
Archaeological resources	30	const. monitor
Biological resources	60	mitigation
Historical resources	0	none antic.
Scenic resources		
Wetland/riparian resources	100	mitigation
Res./bus. relocations		
Other:		
Total (enter zeros if no cost)		

Attachment D: PEAR Environmental Commitments Cost Estimate

Standard PSR Only

(Prepare a separate form for each viable alternative described in the Project Study Report)

PART 1 PROJECT INFORMATION

rev. 11/08

District-County-Route-Post Mile 4-SOL-80-11.2/29.3	EA: 0G360K
Project Description: I-80 Express Lanes- Full Standard Improvement Alternative (ALT B)	
Form completed by (Name/District Office): District 4	
Project Manager: TBD	Phone Number: TBD
Date: 11/10/11	

PART 2 PERMITS AND AGREEMENTS

	Permits and Agreements (\$\$)
<input checked="" type="checkbox"/> Fish and Game 1602 Agreement	50000
<input type="checkbox"/> Coastal Development Permit	
<input type="checkbox"/> State Lands Agreement	
<input checked="" type="checkbox"/> Section 401 Water Quality Certification	50000
<input type="checkbox"/> Section 404 Permit – Nationwide (U.S. Army Corps)	
<input checked="" type="checkbox"/> Section 404 Permit – Individual (U.S. Army Corps)	150000
<input type="checkbox"/> Section 10 Navigable Waters Permit (U.S. Army Corps)	
<input type="checkbox"/> Section 9 Permit (U.S. Coast Guard)	
<input type="checkbox"/> Other:	
Total (enter zeros if no cost)	250000

PART 3. ENVIRONMENTAL COMMITMENTS FOR PERMANENT IMPACTS

To complete the following information:

- Report costs in \$1,000s.
- Include all costs to complete the commitment:
 - Capital outlay and staff support. Refer to Estimated Resources by WBS Code. For example, if you estimated 80 hours for biological monitoring (WBS 235.35 Long Term Mitigation Monitoring), convert those hours to a dollar amount for this entry. For current conversion rates from PY to dollars, see the Project Manager.
 - Cost of right of way or easements.
 - If compensatory mitigation is anticipated (for wetlands, for example), insert a range for purchasing credits in a mitigation bank.
 - Long-term monitoring and reporting
 - Any follow-up maintenance
 - Use current costs; the Project Manager will add an appropriate escalation factor.
 - This is an estimating tool, so a range is not only acceptable, but advisable.

Environmental Commitments Alternative		
	Estimated Cost in \$1,000's	Notes
Noise abatement or mitigation		New soundwalls
Special landscaping		Oleander replac
Archaeological resources	100	Const, monitor
Biological resources	1000	mitigation
Historical resources	100	Pena Adobe
Scenic resources		
Wetland/riparian resources	500	mitigation
Res./bus. relocations		
Other:		
Total (enter zeros if no cost)		

ATTACHMENT E

PID Cooperative Agreement & Draft Cooperative Agreement for PA&ED

COOPERATIVE AGREEMENT

THIS AGREEMENT, ENTERED INTO EFFECTIVE ON November 28, 2011, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "CALTRANS," and the

SOLANO TRANSPORTATION AUTHORITY,
a public entity, referred to herein as "STA."

RECITALS

CALTRANS and STA, collectively referred to herein as PARTIES, pursuant to Streets and Highways Code sections 114 and 130, are authorized to enter into a Cooperative Agreement for improvements to the State Highway System (SHS) right of way.

1. STA desires to develop a project initiation document (PID) for Express Lanes (HOT Lanes) on Interstate 80 from Red Top Road to Interstate 505, referred to herein as "PROJECT."
2. PARTIES acknowledge that this Agreement is only applicable for a project study report / project development support (PSR/PDS) PID.
3. California Government Code section 65086.5 mandates that CALTRANS review and approve all PIDs developed by entities other than CALTRANS.
4. STA is willing to develop the PID and is willing to fund one hundred percent (100%) of the PID's costs and fees, including costs to reimburse CALTRANS.
5. CALTRANS will review and approve the PID prepared by STA as reimbursed work; will provide relevant proprietary information in the form of existing data dumps, spreadsheets, and maps as reimbursed work; and will also actively participate in the project delivery team (PDT) meetings as reimbursed work.
6. PARTIES hereby set forth the terms, covenants and conditions of this Agreement, under which they will complete the PID.

AGREEMENT

1. STA will prepare a PID for PROJECT at its sole cost and expense and at no cost to CALTRANS. The PID shall be signed on behalf of STA by a Civil Engineer registered in the State of California.
2. STA will complete the activities assigned to it on the Scope Summary-Exhibit A which is attached to and made a part of this Agreement by reference. CALTRANS will complete the activities that are assigned to it on the Scope Summary. Activities marked with "N/A" on the Scope Summary are not included within the scope of this Agreement.

3. The PID shall be prepared in accordance with all State and Federal laws, regulations, policies, procedures, and standards that CALTRANS would normally follow if CALTRANS was to prepare the PID.
4. STA agrees to pay CALTRANS, an amount not to exceed \$126,000.
5. PARTIES will not incur costs beyond the funding commitments established in this Agreement.
6. CALTRANS will provide STA with relevant and readily available information in the form of data dumps, spreadsheets, and maps as reimbursed work; and will actively participate in the project delivery team (PDT) meetings as reimbursed work.
7. CALTRANS will complete a review of the draft PID and provide its comments to STA within sixty (60) calendar days from the date CALTRANS received the draft PID from STA. STA will address the comments provided by CALTRANS. If any interim reviews are requested of CALTRANS by STA, CALTRANS will complete those reviews within thirty (30) calendar days from the date CALTRANS received the draft PID from STA.
8. After STA revises the PID to address all of CALTRANS' comments and submits the PID and all related attachments and appendices, CALTRANS will complete its review and final determination of the PID within thirty (30) calendar days from the date CALTRANS received the draft PID from STA. Should CALTRANS require supporting data necessary to defend facts or claims cited in the PID, STA will provide all available supporting data in a reasonable time so that CALTRANS may conclude its review.
9. CALTRANS will perform its review and approval in accordance with the provision of the current Project Development Procedures Manual. CALTRANS' review and approval does not involve any work necessary to actually develop or complete the PID, nor any validation by verifying nor rechecking work performed by STA or providing guidance to STA. No liability will be assignable to CALTRANS, its officers and employees by STA under the terms of this Agreement or by third parties by reason of CALTRANS' review and approval of the PID.
10. PID preparation, except as set forth in this Agreement, is to be performed by STA. Should STA request CALTRANS to perform any portion of PID preparation work, except as otherwise set forth in this Agreement, STA shall first agree to reimburse CALTRANS for such work and PARTIES will amend this Agreement.
11. CALTRANS will invoice STA for a single, lump sum payment of \$126,000 upon execution of this Agreement. STA will pay the invoice within forty-five (45) days of receipt of invoice.
12. If any hazardous materials, pursuant to Health and Safety Code 25401.1, are found within PROJECT limits, STA will notify CALTRANS within twenty-four (24) hours of discovery.
13. PARTIES agree to consider alternatives to PROJECT scope and/or alignment, to the extent practicable, in an effort to avoid any known hazardous materials within the proposed PROJECT limits.
14. If hazardous materials are discovered within PROJECT limits, but outside of SHS right of way, it is the responsibility of STA in concert with the local agency having land use jurisdiction over the property, and the property owner, to remedy before CALTRANS will acquire or accept title to such property.
15. CALTRANS' acquisition or acceptance of title to any property on which any hazardous materials are found will proceed in accordance with CALTRANS' policy.

16. CALTRANS' obligations under this Agreement are subject to the appropriations of resources by the Legislature, the State Budget Act authority, and the allocation of funds by the California Transportation Commission.
17. 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, including, but not limited to, tortious, contractual, inverse condemnation, or other theories or assertions of liability occurring by reason of anything done or omitted to be done by CALTRANS and/or its agents under this Agreement.
18. 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, including, but not limited to, tortious, contractual, inverse condemnation, or other theories or assertions of liability occurring by reason of anything done or omitted to be done by STA and/or its agents under this Agreement.
19. No alteration or variation of the terms of this Agreement shall be valid unless made by a formal amendment executed by the PARTIES hereto and no oral understanding or agreement not incorporated herein shall be binding on any PARTY(IES) hereto.
20. This Agreement will terminate ninety (90) days after PID is signed by PARTIES or as mutually agreed by PARTIES in writing. However, all indemnification articles will remain in effect until terminated or modified in writing by mutual agreement.

SIGNATURES

PARTIES declare that:

- 1. Each PARTY is an authorized legal entity under California state law.
- 2. Each PARTY 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.

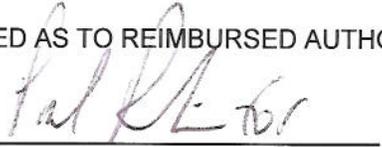
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

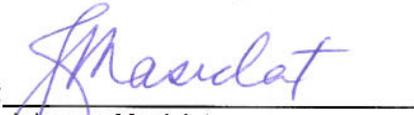
SOLANO TRANSPORTATION AUTHORITY

By: 
 Helena (Lenka) Culik-Caro
 Deputy District Director, Design

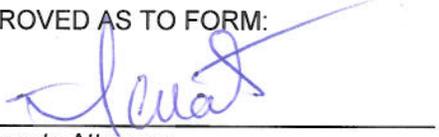
By: 
 Daryl Halls
 Executive Director

CERTIFIED AS TO REIMBURSED AUTHORITY:

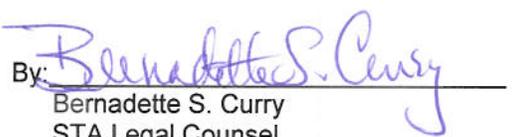
By: 
 Kevin M. Strough
 District Budgets Manager

By: 
 Johanna Masiclat
 Clerk of the Board

APPROVED AS TO FORM:

By: 
 Deputy Attorney

APPROVED AS TO FORM:

By: 
 Bernadette S. Curry
 STA Legal Counsel

APPROVED AS TO FINANCIAL TERMS:

By: 
 HQ Accounting

EXHIBIT A

**SCOPE SUMMARY
 [PSR-PDS]**

WBS Level				Description The Descriptions have been modified for the purposes of this cooperative agreement and no longer correlate with the original WBS activities.	CALTRANS	STA	N/A
4	5	6	7				
0	100			PROJECT MANAGEMENT FOR DEVELOP PROJECT INITIATION DOCUMENT [PSR-PDS]	X	X	
		05		QUALITY MANAGEMENT PLAN		X	
		10		RISK MANAGEMENT PLAN		X	
		15		COMMUNICATION PLAN		X	
		30		CO-OP AGREEMENT FOR PSR-PDS REIMBURSEMENT	X	X	
		40		CO-OP AGREEMENT FOR PA&ED PHASE	X	X	
1	150			DEVELOP PROJECT INITIATION DOCUMENT [PSR-PDS]	X	X	
		05		TRANSPORTATION PROBLEM DEFINITION AND SITE ASSESSMENT	X	X	
			05	PROVISION OF EXISTING REPORTS, DATA, STUDIES AND MAPPING	X		
			10	PROVISION OF EXISTING GEOLOGICAL INFORMATION	X		
			15	PROVISION OF EXISTING UTILITY INFORMATION	X		
			20	PROVISION OF ENVIRONMENTAL CONSTRAINTS INFORMATION	X		
			25	PROVISION OF EXISTING TRAFFIC FORECASTS/MODELING	X		
			30	PROVISION OF EXISTING SURVEYS AND MAPS	X		
			35	PROBLEM DEFINITION		X	
			45	AS-BUILT CENTERLINE AND EXISTING RIGHT OF WAY	X		
			90	INDEPENDENT QUALITY ASSURANCE (IQA) PROCESS	X		
		15		ALTERNATIVES ANALYSIS		X	
			05	RIGHT OF WAY ASSESSMENT		X	
			10	UTILITY ASSESSMENT		X	
			15	RAILROAD INVOLVEMENT AND ASSESSMENT		X	
			35	MULTIMODAL CONSIDERATIONS (SEE PRE-PID SCOPING CHECKLIST)		X	
			40	HYDRAULIC ASSESSMENT		X	
			45	TRAFFIC ASSESSMENT		X	
		20		PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT		X	
		25		APPROVE PID [PSR – PDS]	X		
			25	STORM WATER DATA		X	
		35		REQUIRED RIGHT OF ENTRY DURING PROJECT INITIATION DOCUMENTS DEVELOPMENT		X	
		40		PERMIT IDENTIFICATION DURING PROJECT INITIATION DOCUMENTS DEVELOPMENT		X	
		45		BASE MAPS FOR PSR-PDS		X	

**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: *J. Masclat*
Johanna Masclat
Clerk of the Board

Anthony Intintoli
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
Daryl K. Halls, Executive Director
Solano Transportation Authority

COOPERATIVE AGREEMENT

This agreement, effective on _____, 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 PA&ED and PS&E components of PROJECT for Construction of Express Lanes on Interstate 80 from Red Top Road to Interstate 505 in the county of Solano.

For the purpose of this agreement, Construction of Express Lanes on Interstate 80 from Red Top Road to Interstate 505 in the county of Solano will be referred to as PROJECT. All responsibilities assigned in this agreement to complete the PA&ED and PS&E components of PROJECT will be referred to as OBLIGATIONS.

3. Prior to this agreement, STA developed the Project Initiation Document. STA developed the Project Study Report/Project Development Support (Cooperative Agreement No. 4-2429), which was approved on April 16, 2012.
4. The estimated date for OBLIGATION COMPLETION is November 30, 2015.
5. In this agreement capitalized words represent defined terms and acronyms. The Definitions section contains a complete definition for each capitalized term.
6. From this point forward, PARTNERS define in this agreement the terms and conditions under which they will accomplish OBLIGATIONS.

RESPONSIBILITIES

7. STA is SPONSOR for 100% of PROJECT.

8. 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.
9. STA may provide IQA for the portions of WORK outside existing and proposed SHS right of way.
10. STA is the only FUNDING PARTNER for this agreement. STA's funding commitment is defined in the FUNDING SUMMARY.
11. CALTRANS is the CEQA lead agency for PROJECT.
12. CALTRANS is the NEPA lead agency for PROJECT.
13. STA is IMPLEMENTING AGENCY for PA&ED and PS&E.

SCOPE

Scope: General

14. PARTNERS will perform all OBLIGATIONS in accordance with federal and California laws, regulations, and standards; FHWA STANDARDS; and CALTRANS STANDARDS.
15. IMPLEMENTING AGENCY for a PROJECT COMPONENT will provide a Quality Management Plan (QMP) for that component as part of the PROJECT MANAGEMENT PLAN.
16. Any PARTNER may, at its own expense, have representatives observe any OBLIGATIONS performed by another PARTNER. Observation does not constitute authority over those OBLIGATIONS.
17. 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.
18. PARTNERS will invite each other to participate in the selection and retention of any consultants who participate in OBLIGATIONS.
19. 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.
20. 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.
21. 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.

22. 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.
23. 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.
24. 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.
25. If HM-1 or HM-2 is found during a PROJECT COMPONENT, IMPLEMENTING AGENCY for that PROJECT COMPONENT will immediately notify PARTNERS.
26. 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.
27. 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.
28. 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.
29. 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.
30. 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.

31. IMPLEMENTING AGENCY for each PROJECT COMPONENT will furnish PARTNERS with written monthly progress reports during the implementation of OBLIGATIONS in that component.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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

37. PARTNERS will maintain and make available to each other all OBLIGATIONS-related documents, including financial data, during the term of this agreement.

38. PARTNERS will retain all OBLIGATIONS-related records for three (3) years after the final voucher.
39. 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.

40. Any PARTNER that hires another party to participate in OBLIGATIONS using federal or state funding will conduct a pre-award audit of that party in accordance with the *Local Assistance Procedures Manual*.
41. 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.

42. If WORK stops for any reason, IMPLEMENTING AGENCY will place all facilities impacted by WORK in a safe and operable condition acceptable to CALTRANS.
43. 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.
44. 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

45. 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/STA	CALTRANS	CALTRANS
401 RWQCB	CALTRANS	STA	CALTRANS	CALTRANS/STA	CALTRANS	CALTRANS
NPDES SWRCB	CALTRANS	STA	CALTRANS	CALTRANS/STA	CALTRANS	CALTRANS
1602 DFG	CALTRANS	STA	CALTRANS	CALTRANS/STA	CALTRANS	CALTRANS

Scope: Project Approval and Environmental Document (PA&ED)

46. CALTRANS is the CEQA lead agency for PROJECT. CALTRANS will determine the type of environmental documentation required and will cause that documentation to be prepared.
47. Any PARTNER involved in the preparation of CEQA environmental documentation will follow the CALTRANS STANDARDS that apply to the CEQA process including, but not limited to, the guidance provided in the Standard Environmental Reference available at www.dot.ca.gov/ser.
48. Pursuant to SAFETEA-LU Section 6004 and/or 6005, CALTRANS is the NEPA lead agency for PROJECT. CALTRANS will assume responsibility for NEPA compliance and will prepare any needed NEPA environmental documentation or will cause that documentation to be prepared.
49. Any PARTNER involved in the preparation of NEPA environmental documentation will follow FHWA STANDARDS that apply to the NEPA process including, but not limited to, the guidance provided in the FHWA Environmental Guidebook available at www.fhwa.dot.gov/hep/index.htm.
50. STA will prepare the appropriate CEQA environmental documentation to meet CEQA requirements.
51. STA will prepare the appropriate NEPA environmental documentation to meet NEPA requirements.
52. Any PARTNER preparing any portion of the CEQA environmental documentation, including any studies and reports, will submit that portion of the documentation to the CEQA lead agency for review, comment, and approval at appropriate stages of development prior to public availability.
53. Any PARTNER preparing any portion of the NEPA environmental documentation (including, but not limited to, studies, reports, public notices, and public meeting materials, determinations, administrative drafts, and final environmental documents) will submit that portion of the documentation to CALTRANS for CALTRANS' review, comment, and approval prior to public availability.

54. STA will prepare, publicize, and circulate all CEQA-related public notices and will submit said notices to the CEQA lead agency for review, comment, and approval prior to publication and circulation.
55. STA will prepare, publicize, and circulate all NEPA-related public notices, except Federal Register notices. STA will submit all notices to CALTRANS for CALTRANS' review, comment, and approval prior to publication and circulation.

CALTRANS will work with the appropriate federal agency to publish notices in the Federal Register.
56. The CEQA lead agency will attend all CEQA-related public meetings.
57. STA will plan, schedule, prepare materials for, and host all CEQA-related public meetings and will submit all materials to the CEQA lead agency for review, comment, and approval at least 10 working days prior to the public meeting date.
58. The NEPA lead agency will attend all NEPA-related public meetings.
59. STA will plan, schedule, prepare materials for, and host all NEPA-related public meetings. STA will submit all materials to CALTRANS for CALTRANS' review, comment, and approval at least 10 working days prior to the public meeting date.
60. If a PARTNER who is not the CEQA or NEPA lead agency holds a public meeting about PROJECT, that PARTNER must clearly state its role in PROJECT and the identity of the CEQA and NEPA lead agencies on all meeting publications. All meeting publications must also inform the attendees that public comments collected at the meetings are not part of the CEQA or NEPA public review process.

That PARTNER will submit all meeting advertisements, agendas, exhibits, handouts, and materials to the appropriate lead agency for review, comment, and approval at least 10 working days prior to publication or use. If that PARTNER makes any changes to the materials, it will allow the appropriate lead agency to review, comment on, and approve those changes at least three (3) working days prior to the public meeting date.

The CEQA lead agency maintains final editorial control with respect to text or graphics that could lead to public confusion over CEQA-related roles and responsibilities. The NEPA lead agency has final approval authority with respect to text or graphics that could lead to public confusion over NEPA-related roles and responsibilities.

61. The PARTNER preparing the environmental documentation, including the studies and reports, will ensure that qualified personnel remain available to help resolve environmental issues and perform any necessary work to ensure that PROJECT remains in environmental compliance.

Scope: Plans, Specifications, and Estimate (PS&E)

62. 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, construction surveys, and provide design/construction support.

63. 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.
64. 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.
65. The responsibility to advertise, open bids, award, and approve the construction contract will be handled outside of this agreement.

COST

Cost: General

66. The cost of any awards, judgments, or settlements generated by OBLIGATIONS is an OBLIGATIONS COST.
67. CALTRANS, independent of PROJECT, will pay all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within the existing SHS right of way.
68. 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.
69. HM MANAGEMENT ACTIVITIES costs related to HM-2 are CONSTRUCTION SUPPORT and CONSTRUCTION CAPITAL costs.
70. The cost to comply with and implement the commitments set forth in the environmental documentation is an OBLIGATIONS COST.
71. The cost to ensure that PROJECT remains in environmental compliance is an OBLIGATIONS COST.
72. The cost of any legal challenges to the CEQA or NEPA environmental process or documentation is an OBLIGATIONS COST.
73. 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.

74. 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.
75. CALTRANS will provide encroachment permits to PARTNERS, their contractors, consultants and agents, at no cost.
76. 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.
77. 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.

78. 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.
79. If CALTRANS reimburses STA for any costs later determined to be unallowable, STA will reimburse those funds.
80. The cost to place PROJECT right of way in a safe and operable condition and meet all environmental commitments is an OBLIGATIONS cost.
81. 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.
82. 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.

83. PARTNERS will pay invoices within 30 calendar days of receipt of invoice.

Cost: Environmental Permits, Approvals and Agreements

84. 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: Project Approval and Environmental Document (PA&ED)

85. The cost to prepare, publicize, and circulate all CEQA and NEPA-related public notices is an OBLIGATIONS COST.
86. The cost to plan, schedule, prepare, materials for, and host all CEQA and NEPA-related public hearings is an OBLIGATIONS COST.

Cost: Plans, Specifications, and Estimate (PS&E)

87. 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

88. PARTNERS will manage the schedule for OBLIGATIONS through the work plan included in the PROJECT MANAGEMENT PLAN.

GENERAL CONDITIONS

89. 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.
90. 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.
91. Any PARTNER performing IQA does so for its own benefit. No one can assign liability to that PARTNER due to its IQA activities.

92. 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.

93. 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.

94. 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.

95. PARTNERS will not assign or attempt to assign OBLIGATIONS to parties not signatory to this agreement.

96. PARTNERS will not interpret any ambiguity contained in this agreement against each other. PARTNERS waive the provisions of California Civil Code section 1654.

97. 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.

98. 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.

99. 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.

100. 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.

101. PARTNERS maintain the ability to pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.
102. 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.
103. PARTNERS intend this agreement to be their final expression and supersede any oral understanding or writings pertaining to OBLIGATIONS.
104. 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.
105. PARTNERS will execute a formal written amendment if there are any changes to OBLIGATIONS.
106. 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.

107. 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.

PA&ED (Project Approval and Environmental Document) – See PROJECT COMPONENT.

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 Construct Express Lanes on Interstate 80 from Red Top Road to Interstate 505 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) 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, Project Manager

111 Grand Avenue

Oakland, California 94623

Office Phone: (510) 286-5123

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) 424-6075

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 K. Halls
Executive Director

CERTIFIED AS TO FUNDS:

By: _____
Johanna Masiclat
Clerk of the Board

By: _____
Kevin M Strough
District Budget Manager, Acting

APPROVED AS TO FORM AND PROCEDURE

By: _____
Bernadette S. Curry
STA Legal Counsel

SCOPE SUMMARY

4	5	6	7	8	Description	CALTRANS	STA	N/A
2	160				Perform Preliminary Engineering Studies and Draft Project Report	X	X	
		05			Updated Project information		X	
		10			Engineering Studies		X	
		15			Draft Project Report		X	
		20			Engineering and Land Net Surveys		X	
		30			Environmental Study Request (ESR)		X	
		40			NEPA Delegation	X		
		45			Base Maps and Plan Sheets for Project Report and Environmental Studies		X	
2	165				Perform Environmental Studies and Prepare Draft Environmental Document	X	X	
		05			Environmental Scoping of Alternatives Identified for Studies in Project Initiation Document	X	X	
		10			General Environmental Studies		X	
		15			Biological Studies		X	
		20			Cultural Resource Studies		X	
		25			Draft Environmental Document or Categorical Exemption/Exclusion	X	X	
		30			NEPA Delegation	X		
2	170				Permits, Agreements, and Route Adoptions during PA&ED component	X	X	
		05			Required permits		X	
		15			Railroad Agreements			X
		20			Freeway Agreements	X	X	
			05		Draft Freeway Agreement		X	
			10		Draft Freeway Agreement Review		X	
			15		Final Freeway Agreement	X	X	
			20		Executed Freeway Agreement	X	X	
			99		Other Freeway Agreement Products			X
		25			Agreement for Material Sites	X	X	
		30			Executed Maintenance Agreement	X	X	
		40			Route Adoptions			X
		45			MOU From Tribal Employment Rights Office (TERO)			X
		55			NEPA Delegation	X		
2	175				Circulate Draft Environmental Document and Select Preferred Project Alternative Identification	X	X	
		05			DED Circulation	X	X	
		10			Public Hearing	X	X	
		15			Public Comment Responses and Correspondence	X	X	
		20			Project Preferred Alternative	X	X	
		25			NEPA Delegation	X		

	5	6	7	8	Description	CALTRANS	STA	N/A
2	180				Prepare and Approve Project Report and Final Environmental Document	X	X	
		05			Final Project Report	X	X	
			05		Updated Draft Project Report		X	
			10		Approved Project Report	X		
			15		Updated Storm Water Data Report		X	
			99		Other Project Report Products		X	
		10			Final Environmental Document	X	X	
			05		Approved Final Environmental Document	X		
			10		Public Distribution of Final Environmental Document and Respond To Comments	X	X	
			15		Final Right of Way Relocation Impact Document		X	
			99		Other Final Environmental Document Products		X	
		15			Completed Environmental Document	X	X	
			05		Record of Decision (NEPA)	X		
			10		Notice of Determination (CEQA)	X		
			20		Environmental Commitments Record		X	
			99		Other Completed Environmental Document Products		X	
		20			NEPA Delegation	X		
3	185				Prepare Base Maps and Plan Sheets for PS&E Development		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	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	

4	5	6	7	8	Description	CALTRANS	STA	N/A
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	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		
3	265				Awarded and Approved Construction Contract			X

FUNDING SUMMARY

Funding Source	Funding Partner	Fund Type	PA&ED	PS&E	Subtotal Support	Subtotal Funds Type
LOCAL	STA	Local	\$16,400,000	\$5,745,000	\$22,145,000	\$22,145,000
		Subtotals by Component	\$16,400,000	\$5,745,000	\$22,145,000	\$22,145,000

ATTACHMENT F

Existing Utilities Summary Table

Existing Utilities - I-80 (PM 11.2 to 29.3)

"M" Line Station	Facility	Owner	Additional Info
118+50	Electrical OH	PG&E	230 kV
118+60	Water	City of Fairfield	16"
133+20	Electrical OH	PG&E	115 kV
135+20	SS	Fairfield-Suisun Sewer District	8"
141+70	Electrical OH	PG&E	21 kV
143+70	Water	City of Fairfield	24" w/ 36" casing
183+20	Gas	PG&E	16" w/ 20" casing
184+10	Gas	PG&E	10" w/ 14" & 16" casing
187+60	Water	City of Vallejo	39"
187+70	Water	City of Benicia	30"
188+80	Telephone	AT&T	12-4" PVC conduits
189+10	Electrical OH	PG&E	Unknown
190+50	Water	City of Fairfield	8" HDPE w/ 12" CMP casing
191+00	Gas	PG&E	6" w/ 10" steel casing (60 psi)
191+10	Electrical UG	PG&E	2-6" conduits
209+80	Electrical OH	PG&E	60 kV
210+80	Electrical OH	PG&E	60 kV
216+40	SS	Fairfield-Suisun Sewer District	33" w/ 60" steel casing
221+50	SS	Fairfield-Suisun Sewer District	21" w/ 36" steel casing
224+00	F/O & Telephone	AT&T	Unknown
224+50	Electrical OH	PG&E	12 kV
248+00	Water	City of Fairfield	24" w/ 40" steel casing
253+20	SS	Fairfield-Suisun Sewer District	3" PVC
270+90	Electrical UG	CALTRANS	EB Truck Scales Electric Service
271+00	Water	CALTRANS	1.25" CSP w/ 18" CMP casing
271+05	Telephone	CALTRANS	2 lines
286+60	Electrical OH	PG&E	12 kV
323+05	Water	City of Fairfield	Unknown diameter, encased
339+60	Electrical OH	PG&E	12 kV
340+40	Gas	PG&E	6" w/ casing
343+60	Electrical OH	PG&E	115 kV
344+50	Electrical OH	PG&E	115 kV
378+00	Electrical OH	PG&E	12 kV
378+80	Gas	PG&E	6" w/ casing
412+00	Water	City of Fairfield	36"
426+60	Water	City of Fairfield	12"
426+70	SS	Fairfield-Suisun Sewer District	18"
426+80	Telephone	AT&T	2 lines
429+50	F/O	Unknown	Unknown
429+60	Gas	PG&E	4"
429+80	Water	Solano County Water Agency	63" North Bay Aqueduct
430+00	Telephone	AT&T	Unknown
439+45	Gas	PG&E	3" w/ 6" casing
439+55	Water	City of Fairfield	20" w/ 36" casing
441+50	Electrical OH	PG&E	12 kV
442+10	SS	Fairfield-Suisun Sewer District	20"
442+60	Telephone	AT&T	Unknown
464+15	Water	Unknown	12"
464+30	Electrical UG	PG&E	Two-6" conduits
494+60	SS	Fairfield-Suisun Sewer District	8"
511+80	Gas	PG&E	6" w/ 10" casing
512+00	Water	Unknown	16"
512+30	Electrical UG	PG&E	12 kV
512+80	Telephone	AT&T	Unknown
513+00	Water	Unknown	24"
540+38	SS	Fairfield-Suisun Sewer District	8"
540+40	Water	City of Fairfield	10"

WEST SEGMENT

EAST SEGMENT	555+15	SS	Fairfield-Suisun Sewer District	8"
	572+25	Electrical UG	PG&E	Unknown
	576+70	Canal Culvert	Solano County Water Agency	Putah South Canal
	589+90	Fiber Optic	Unknown	Unknown
	650+75	Electrical UG	PG&E	Unknown
	783+55	Electrical UG	PG&E	Unknown
	845+20	Gas	PG&E	Unknown
	855+40	Electrical UG	PG&E	Unknown
	875+80	Gas	PG&E	Unknown
	886+80	Telephone	AT&T	Unknown
	989+40	SS	City of Vacaville	Unknown
	997+50	SS	City of Vacaville	Unknown diameter w/ 42" casing
	1002+00	Water	City of Vacaville	Unknown
	1002+80	SS	City of Vacaville	Unknown
1022+40	Telephone OH	AT&T	Unknown	

ATTACHMENT G

Risk Register

Project Risk Register

DIST- EA 04-4G080K		Project Name: Interstate 80 (I-80) Express Lanes Project						Project Manager: Carlton Haack					Date Created:		Last Updated:		
		Co - Rte - PM: Sol-80-11.2/29.3						Telephone: 916-595-3272									
ITEM	ID #	Status	Threat / Opportunity	Category	Date Risk Identified	Risk Discription	Root Causes	Primary Objective	Overall Risk Rating	Cost/Time Impact Value	Risk Owner	Risk Trigger	Strategy	Response Actions w/ Pros & Cons	Adjusted Cost/Time Impact Value	WBS Item	Status Date and Review Comments
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1	04-4G080K-01	Active	Threat	ENV	11/25/11	Agreement on action alternative(s) for PA&ED	Lack of information / anlysis in PID phase on project factors	TIME	Probability 3=Med (20-39%) High Impact 5 =Very High		Project Manager	Comments from agencies and review times	MITIGATE	Response to comments and review coordination meetings		0	TBA
2	04-4G080K-02	Active	Threat	ENV	11/25/11	No public support for project	Public involvement and information	TIME	Probability 2=Low (10-19%) Med Impact 4 =High		STA	Project opposition at public meetings	MITIGATE	Increase public involvement and outreach		0	TBA
3	04-4G080K-03	Active	Threat	ENV	11/25/11	Wetlands impacted	Widen roadway or change flow patterns along roadway example Lagoon Valley	TIME	Probability 4=High (40-59%) Med Impact 3 =Med		Env Mgr	Env field surveys, APE	MITIGATE	Utilize previous findings from earlier projects on corridor		0	TBA
4	04-4G080K-04	Active	Threat	ENV	11/25/11	Hazardous waste discovery	Discovery during soil sampling after beginning of Env Document	COST	Probability 4=High (40-59%) Med Impact 3 =Med		Env Mgr	Env field surveys, APE	MITIGATE	Utilize previous findings from earlier projects on corridor		0	TBA
5	04-4G080K-05	Active	Threat	ENV	11/25/11	Unrecorded Native American cultural resources	Discovery of resources for widened freeway	TIME	Probability 3=Med (20-39%) Med Impact 4 =High		Env Mgr	Env field surveys, APE	MITIGATE	Utilize previous findings from earlier projects on corridor		0	TBA
6									Probability Impact								

ATTACHMENT H

Right of Way Conceptual Cost Estimate

CONCEPTUAL COST ESTIMATE – RIGHT OF WAY COMPONENT ALTERNATIVE A

To: Carlton Haack (HDR Engineering)
Project Manager

Date: February 20, 2012

From: James Staudinger (HDR Engineering)
Real Estate Manager

04-SOL-80-11.2/29.3
Project ID: 0412000332K
EA: 04-4G080K

Project Description: Alternative A - HOV conversion and proposed median widening of I-80, placement of median barrier, continuous ingress/egress striping and CHP enforcement areas.

A Field Review was conducted Yes No

Scope of the Right of Way

Provide a general description of the right of way including the location attributes.

Right of Way Required Yes No

Number of Parcels 1-10 11-25 26-50 51-100 >100

Urban Rural

Land Area: Fee 0 Easement TCE Only

Displaced Persons/Businesses Yes No

Demolition/Clearance Yes No

Railroad Involvement Yes No

Utility Involvements Yes No 43 Number of Utilities in area

Cost Estimates

Support Costs (R/W)	<input type="checkbox"/> \$0-\$25,000	<input checked="" type="checkbox"/> \$500,001-\$1,000,000
	<input type="checkbox"/> \$25,001-\$100,000	<input type="checkbox"/> \$1,000,001-\$5,000,000
	<input type="checkbox"/> \$100,001-\$250,000	<input type="checkbox"/> \$5,000,001-\$10,000,000
	<input type="checkbox"/> \$250,001-\$500,000	<input type="checkbox"/> >\$10,000,000

Capital Costs (R/W)	<input type="checkbox"/> \$0-\$100,000	<input type="checkbox"/> \$5,000,001-\$15,000,000
	<input type="checkbox"/> \$100,001-\$500,000	<input type="checkbox"/> \$15,000,001-\$50,000,000
	<input type="checkbox"/> \$500,001-\$1,000,000	<input type="checkbox"/> \$50,000,001-\$100,000,000
	<input checked="" type="checkbox"/> \$1,000,001-\$5,000,000	<input type="checkbox"/> >\$100,000,000

Schedule

Right of Way will require 18 months to deliver a Right of Way Certification #1 from Final R/W Maps. This estimate is based on a Right of Way Certification date of June 1, 2015.

Areas of Concern

Provide a description of areas in close proximity to the project footprint that are likely to result in complex right of way issues if impacted (i.e. junkyards, cemeteries, utility towers, etc.).

- **For this alternative no fee takes will be required. Only TCE's and minor utility relocations have been assumed under this alternative so there are no major areas of concern regarding R/W activities under this alternative.**

Assumptions and Limiting Conditions

Provide a description of assumptions and limiting conditions.

- **No R/W Fee Takes**
- **TCE's limited (staging areas, retaining wall construction)**
- **Existing utility information is limited to crossing locations, owners and type of facility (depths, casing lengths, overhead clearance are not know at this time)**

CONCEPTUAL COST ESTIMATE – RIGHT OF WAY COMPONENT ALTERNATIVE B

To: Carlton Haack (HDR Engineering)
Project Manager

Date: February 20, 2012

From: James Staudinger (HDR Engineering)
Real Estate Manager

04-SOL-80-11.2/29.3
Project ID: 0412000332K
EA: 04-4G080K

Project Description: Alternative B - HOV conversion and proposed widening of I-80, replacement of non-standard interchanges, placement of median barrier, continuous ingress/egress striping and CHP enforcement areas.

A Field Review was conducted Yes No

Scope of the Right of Way

Provide a general description of the right of way including the location attributes.

Right of Way Required Yes No

Number of Parcels 1-10 11-25 26-50 51-100 >100

Urban Rural

Land Area: Fee 367 AC Easement TCEs and Utility Relocations

Displaced Persons/Businesses Yes No

Demolition/Clearance Yes No

Railroad Involvement Yes No

Utility Involvements Yes No 43 Number of Utilities in area

Cost Estimates

Support Costs (R/W)	<input type="checkbox"/> \$0-\$25,000	<input type="checkbox"/> \$500,001-\$1,000,000
	<input type="checkbox"/> \$25,001-\$100,000	<input type="checkbox"/> \$1,000,001-\$5,000,000
	<input type="checkbox"/> \$100,001-\$250,000	<input checked="" type="checkbox"/> \$5,000,001-\$10,000,000
	<input type="checkbox"/> \$250,001-\$500,000	<input type="checkbox"/> >\$10,000,000

Capital Costs (R/W)	<input type="checkbox"/> \$0-\$100,000	<input type="checkbox"/> \$5,000,001-\$15,000,000
	<input type="checkbox"/> \$100,001-\$500,000	<input type="checkbox"/> \$15,000,001-\$50,000,000
	<input type="checkbox"/> \$500,001-\$1,000,000	<input checked="" type="checkbox"/> \$50,000,001-\$100,000,000
	<input type="checkbox"/> \$1,000,001-\$5,000,000	<input type="checkbox"/> >\$100,000,000

Schedule

Right of Way will require 24 months to deliver a Right of Way Certification #1 from Final R/W Maps. This estimate is based on a Right of Way Certification date of June 1, 2015.

Areas of Concern

Provide a description of areas in close proximity to the project footprint that are likely to result in complex right of way issues if impacted (i.e. junkyards, cemeteries, utility towers, etc.).

- **For this alternative requires significant R/W takes, TCEs and utility easements. There are major PG&E tower line facilities that will need relocation as well as distribution pole lines and gas mains.**
- **R/W takes include displacement of persons/businesses and demolition work.**
- **All utility crossings will need to be extended to new R/W and cased**

Assumptions and Limiting Conditions

Provide a description of assumptions and limiting conditions.

- **Major R/W Fee Takes**
- **Existing utility information is limited to crossing locations, owners and type of facility (depths, casing lengths, overhead clearance are not know at this time)**

ATTACHMENT I

Transportation Planning Scoping Information Sheet

ARTICLE 4 Transportation Planning Scoping Information Sheet

PROJECT INFORMATION

District	County	Route	Post Miles	Project ID No/ Expenditure Authorization No.
04	SOL	80	11.2/ 29.3	4G080K
Project Name and Description : I-80 Express Lanes Project				

Prepared by:

District Information Sheet Point of Contact*:	Name: Pawan Gupta	Functional Unit:	Design North Counties
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* The District Information Sheet Point of Contact is responsible for completing Project Information, PDT Team and Stakeholder Information, and coordinating the completion of project-related information with the Transportation Planning Stakeholders. Upon completion, provides the Transportation Planning PDT Representative and Project Manager with a copy of the Information Sheet.

Project Development Team (PDT) Information		
Title	Name	Phone Number
Project Manager	Nicolas Endrawos	(510) 286-5123
Project Engineer	Roni Boukhalil	(510) 286-5694
Transportation Planning PDT Representative**	Cameron Oakes	(510) 622-5758

Transportation Planning Stakeholder Information		
Title	Name	Phone Number
System & Regional Planner	Cameron Oakes, System and Regional Planning	(510) 622-5758
Local Development- Intergovernmental Review (LD-IGR) Planner	Gary Arnold, Transit and Community Planning	(510) 622-5491
Community Planner	Beth Thomas, Transit and Community Planning	(510) 286-7227
Goods Movement Planner	Joe Aguilar, System and Regional Planning	(510) 286-5591
Transit Planner	Wingate Lew, Transit and Community Planning	(510) 622-5432
Bicycle and Pedestrian Coordinator	Ina Gerhard, System and Regional Planning	(510) 286-5598
Park and Ride Coordinator	Linda Tong, Traffic Systems-Park & Ride Program	(510) 286-5735
Native American Liaison	Blesilda Gebreyesus, System and Regional Planning	(510) 286-5575
Other Coordinators:	TBD	

Project Purpose and Need –**

Purpose

- Optimize capacity in the existing I-80 corridor to better meet current and future traffic demands.
- Close the gaps within the existing HOV lanes on I-80, increasing travel time savings and reliability for all users including HOVs and transit.
- Maximize the efficiency of freeway facilities by better utilizing available unused capacity in the existing HOV lanes.
- Provide a funding mechanism through express lanes to accelerate implementation of the regional network of HOV and express lanes.

Need

- Congestion currently exists in the general purpose lanes during peak periods on the I-80 corridor in Solano County and this level of congestion will continue to worsen as traffic demand increases.
- The existing HOV lane system on the I-80 corridor is characterized by gaps, limiting travel time savings and trip reliability for cars and transit vehicles.
- Available unused capacity in the existing HOV lane system needs to be utilized to enhance transportation system efficiency.
- There is limited funding available to close gaps in the existing HOV lane system without utilizing alternative financial mechanisms such as express lane tolling.

** The Transportation Planning PDT Representative is responsible for providing the PDT with the system-wide and corridor level deficiencies identified by Transportation Planning. The PDT uses the information provided by Transportation Planning to develop the purpose and need with contributions from other Caltrans functional units and external stakeholders at the initiation of the PID and is refined throughout the PID process. As the project moves past the project initiation stage and more data becomes available, the purpose and need is refined. For additional information on purpose and need see: www.dot.ca.gov/hq/env/emo/purpose_need.htm

1. Project Funding:

a	List all known and potential funding sources and percent splits: (ie. State Transportation Improvement Program (STIP)/State Highway Operations and Protection Program (SHOPP)/Transportation Enhancement (TE)/Environmental Enhancement and Mitigation (EEM)/Safe Routes to School (SR2S)/etc.).
	Local Regional Measure Funds / TBD
b	Is this a measure project? Yes ___/No <u>X</u> . If yes, name and describe the measure.

2. Regional Planning:

a	Name of and contact information for Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA). Janet Adams – Solano Transportation Authority (707) 424-6075
b	Name of and contact information for local jurisdiction (City or County) TBD
c	Provide the page number and project description as identified in the Regional Transportation Plan (RTP) and the date of adoption, or provide an explanation if not in RTP.
d	Provide nexus between the RTP objectives and the project to establish the basis for the project purpose and need.
e	Is the project located in an area susceptible to sea-level rise? NO
f	Name of Air Quality Management District (AQMD) San Francisco Bay
g	If the project is located in a federal non-attainment or attainment-maintenance area is the project:

	• Regionally Significant? (per 40 (Code of Federal Regulations (CFR) 93.101) Y__/N__
	• Exempt from conformity? (per 40 CFR 93.126 and 93.128) Y__/N__
	• Exempt from regional analysis? (per 40 CFR 93.127) Y__/N__
	• Not exempt from conformity (must meet all requirements)? Y__/N__

3. Native American Consultation and Coordination:

a	If project is within or near an Indian Reservation or Rancheria? If so, provide the name of Tribe. TBD
b	Has/have the Tribal Government(s) been consulted? Y__/N__X__. If no, why not? No direct Impact Identified to date
c	If the project requires Caltrans to use right-of-way on trust or allotted lands, this information needs to be included as soon as possible as a key topic in the consultation with the Tribe(s). Has the Tribe been consulted on this topic? Y__/N__X__. If no, why not? NA
d	Has the Bureau of Indian Affairs (BIA) been notified? Y__/N__X__ Will be as needed in PA/ED
e	Have all applicable Tribal laws, ordinances and regulations [Tribal Employment Rights Ordinances (TERO), etc.] been reviewed for required contract language and coordination? NA
f	If the Tribe has a TERO, is there a related Memorandum of Understanding between the District and the Tribe? NA
g	Has the area surrounding the project been checked for prehistoric, archeological, cultural, spiritual, or ceremonial sites, or areas of potentially high sensitivity? If such areas exist, has the Tribe, Native American Heritage Commission or other applicable persons or entities been consulted? No direct Impact Identified to date
h	If a Native American monitor is required for this project, will this cost be reflected in cost estimates? TBD
i	In the event of project redesign, will the changes impact a Native American community as described above in d, e, or h? TBD

4. System Planning:

a	Is the project consistent with the DSMP? Y__/N__. If yes document approval date. If no, explain.
b	Is the project identified in the TSDP? Y__/N__? If yes, document approval date____. If no, explain.
c	Is the project identified in the TCR/RCR or CSMP? Y__/N__. If yes, document approval date ____. If no, explain. Is the project consistent with the future route concept? Y__/N__. If no, explain.
d	Provide the Concept Level of Service (LOS) through project area. TBD
e	Provide the Concept Facility – include the number of lanes. Does the Concept Facility include High Occupancy Vehicle lanes? Y__X__/N__. 4 mixed flow, 1 HOV/Express in each direction
f	Provide the Ultimate Transportation Corridor (UTC) – include the number of lanes. Does the UTC include High Occupancy Vehicle Lanes? Y__/N__.

g	Describe the physical characteristics of the corridor through the project area (i.e. flat, rolling or mountainous terrain...).
	Flat and Rolling, varies
h	Is the highway in an urban or rural area? Urban_X_/Rural_X_. Provide Functional Classification.
	Both Urban and Rural
i	Is facility a freeway, expressway or conventional highway?
	Freeway
j	Provide Route Designations: (i.e. Interregional Transportation Strategic Plan (ITSP) High Emphasis or Focus Route, Surface Transportation Assistance Act (STAA) Route, Scenic Route...).
	Scenic Route, STAA
k	Describe the land uses adjacent to project limits (i.e. agricultural, industrial...).
	Agricultural, Residential and Commercial
l	Describe any park and ride facility needs identified in the TCR/CSMP, local plans, and RTP.
	Fairfield/ Vacaville P&R within project limits, no impacts identified at this time
m	Describe the Forecasted 10 and 20-year Vehicle Miles Traveled (VMT), Annual Average Daily Traffic (AADT), and Peak Hour truck data in the TCR. Include the source and year of Forecast, and names and types of traffic and travel demand analysis tools used.
	See PTEA Report
n	Has analysis on Daily Vehicle Hours of Delay (DVHD) from the Highway Congestion Monitoring Program (HICOMP) been completed and included? Y__/N_X_.

5. Local Development – Intergovernmental Review (LD-IGR):

List LD-IGR projects that may directly or indirectly impact the proposed Caltrans project or that the proposed Caltrans project may impact. (Attach additional project information if needed.)

LD-IGR Project Information		Project
a	County-Route-Postmile & Distance to Development.	
b	Development name, type, and size.	
c	Local agency and/or private sponsor, and contact information.	
d	California Environmental Quality Act (CEQA) status and Implementation Date.	
e	If project includes federal funding, National Environmental Policy Act (NEPA) status.	
f	All vehicular and non-vehicular unmitigated impacts and planned mitigation measures including Transportation Demand Management (TDM) and Transportation System Management (TSM) that would affect Caltrans facilities.	
g	Approved mitigation measures and implementing party.	
h	Value of constructed mitigation and/or amount of funds provided.	
i	Encroachment Permit, Transportation Permit, Traffic Management Plan, or California	

	Transportation Commission (CTC) Access approvals needed.	
j	Describe relationship to Regional Blueprint, General Plans, or County Congestion Management Plans.	
k	Inclusion in a Regional Transportation Plan Sustainable Community Strategy or Alternative Planning Strategy?	
l	Regional or local mitigation fee program in place?	

6. Community Planning:

INITIAL PID INFORMATION		
a	Has lead agency staff worked with any neighborhood/community groups in the area of the proposed improvements? Y__/N_X_. If yes, summarize the process and its results including any commitments made to the community. If no, why not?	
	Will be done in PA/ED	
b	Are any active/completed/proposed Environmental Justice (EJ) or Community-Based Transportation (CBTP) Planning Grants in the project area? Y__/N_X_. If yes, summarize the project, its location, and whether/how it may interact with the proposed project.	
	None Identified at this time	
c	Describe any community participation plans for this PID including how recommendations will be incorporated and/or addressed. Has a context sensitive solutions (CSS) approach been applied? Y_X_/N__	
	Will be investigated further in PA/ED	
FINAL PID INFORMATION		
d	How will the proposed transportation improvements impact the local community? Is the project likely to create or exacerbate existing environmental or other issues, including public health and safety, air quality, water quality, noise, environmental justice or social equity? Y_X_/N__. Describe issues, concerns, and recommendations (from sources including neighborhood/community groups) and what measures will be taken to reduce existing or potential negative effects.	
	Will be investigated further in PA/ED	
e	Does this highway serve as a main street? Y__/N_X_. If yes, what main street functions and features need to be protected or preserved?	

7. Freight Planning:

INITIAL PID INFORMATION		
a	Identify all modal and intermodal facilities that may affect or be affected by the project.	
	Refer to discussion with PSR-PDS	
FINAL PID INFORMATION		
b	Describe how the design of this project could facilitate or impede Goods Movement and relieve choke points both locally and statewide through grade separations, lane separations, or other measures (e.g., special features to accommodate truck traffic and at-grade railroad crossings).	
	Refer to discussion with PSR-PDS	
c	Describe how the project integrates and interconnects with other modes (rail, maritime, air, etc.). Do possibilities exist for an intermodal facility or other features to improve long-distance hauling, farm-to-market transportation and/or accessibility between warehouses, storage facilities, and terminals?	

	Refer to discussion with PSR-PDS
d	Is the project located in a high priority goods movement area, included in the Goods Movement Action Plan (GMAP) or on a Global Gateways Development Program (GGDP) route? Y__/N___. If yes, describe.
	Refer to discussion with PSR-PDS
e	Is the project on a current and/or projected high truck volume route [e.g., Average Annual Daily Truck Traffic (AADTT) of 5 axle trucks is greater than 3000]? Yes_X_/N___. If yes, describe how the project addresses this demand.
	Refer to discussion with PSR-PDS
f	If the project is located near an airport, seaport, or railroad depot, describe how circulation (including truck parking) needs are addressed.
	NA
g	Describe any other freight issues.

8. Transit (bus, light rail, commuter rail, intercity rail, high speed rail):

	INITIAL PID INFORMATION
a	List all local transit providers that operate within the corridor.
	Refer to discussion with PSR-PDS
b	Have transit agencies been contacted for possible project coordination? Y__/N_X_. If no, why not?
	Will be done in PA/ED
c	Describe existing transit services and transit features (bus stops, train crossings, and transit lines) within the corridor.
	Refer to discussion with PSR-PDS
d	Describe transit facility needs identified in short- and long-range transit plans and RTP. Describe how these future plans affect the corridor.
	FINAL PID INFORMATION
e	Describe how the proposed project integrates transit and addresses impacts to transit services and transit facilities.
	Refer to discussion with PSR-PDS
f	Have transit alternatives and improvement features been considered in this project? Y__/N_X_ If yes, describe. If no, why not?
	NA

9. Bicycle:

	INITIAL PID INFORMATION
a	Does the facility provide for bicyclist safety and mobility needs? If no, please explain.
	NA, Freeway
b	Are any improvements for bicyclist safety and mobility proposed for this facility by any local agencies or included in bicycle master plans? If yes, describe (including location, time frame, funding, etc.).
	NA
c	Are there any external bicycle advocacy groups and bicycle advisory committees that should be included in the project stakeholder list? If so, provide contact information.
	NA
	FINAL PID INFORMATION
d	Will bicycle travel deficiencies be corrected? How or why not?
	NA
e	How will this project affect local agency plans for bicycle safety and mobility improvements?
	NA

f	If the project is the construction of a new freeway or modification to an existing freeway, will it sever or destroy existing provisions for bicycle travel? If yes, describe how bicycle travel provisions will be included in this project.
	NA, No impacts to facilities identified at this time

10. Pedestrian including Americans with Disabilities Act (ADA):

INITIAL PID INFORMATION	
a	Does this facility provide for pedestrian safety and mobility needs? If so, describe pedestrian facilities. Do continuous and well-maintained sidewalks exist? Are pedestrians forced to walk in the roadway at any locations due to lack of adequate pedestrian facilities? Please explain.
	NA, Freeway
b	Are pedestrian crossings located at reasonable intervals?
	NA
c	Are all pedestrian facilities within the corridor ADA accessible and in compliance with Federal and State ADA laws and regulations?
	NA
FINAL PID INFORMATION	
d	Will pedestrian travel deficiencies be corrected? How or why not?
	NA
e	How will this project affect local agency plans for pedestrian safety and mobility improvements?
	NA
f	If the project is the construction of a new freeway or modification to an existing freeway, will it sever or destroy existing provisions for pedestrian travel? If yes, describe how pedestrian travel provisions will be included in this project.
	NA, No impacts to facilities identified at this time
g	Are there any external pedestrian advocacy groups and advisory committees that should be included in the project stakeholder list? If so, provide contact information.
	NA
h	Have ADA barriers as noted in the District’s ADA Transition Plan been identified within the project limits? If not included in the project, provide justification and indicate whether District Design coordinator approval was obtained.
	NA

11. Equestrian:

INITIAL PID INFORMATION	
a	If this corridor accommodates equestrian traffic, describe any project features that are being considered to improve safety for equestrian and vehicular traffic?
	NA
FINAL PID INFORMATION	
b	Have features that accommodate equestrian traffic been identified? If so, are they included a part of this project? Describe. If no, why not?
	NA

12. Intelligent Transportation Systems (ITS):

INITIAL PID INFORMATION	
a	Have ITS features such as closed-circuit television cameras, signal timing, multi-jurisdictional or multimodal system coordination been considered in the project? Y_X_/N__. If yes, describe. If no, explain.
	Yes considered but direct impacts a not known at this time

FINAL PID INFORMATION	
b	Have ITS features been identified? If so, are they included a part of this project? Describe. If no, why not?
	No, specific features and impacts will be identified in PA/ED