08 - Riv - 60 – PM 20.0/22.0
EA 0M590 – PN 0813000109
Program Code: 800.100 – HE 11
February 2020

Draft Project Report

To Authorize Public Release of the Draft Environmental Document

On State Route 60 at World Logistics Center Parkway
(formerly Theodore Street)
Between Redlands Boulevard

And Gilman Springs Road

I have reviewed the right of way information contained in this report and the right of way data sheet attached hereto, and find the data to be complete, current and accurate:

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APPROVAL RECOMMENDED:

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CONCURRED BY:

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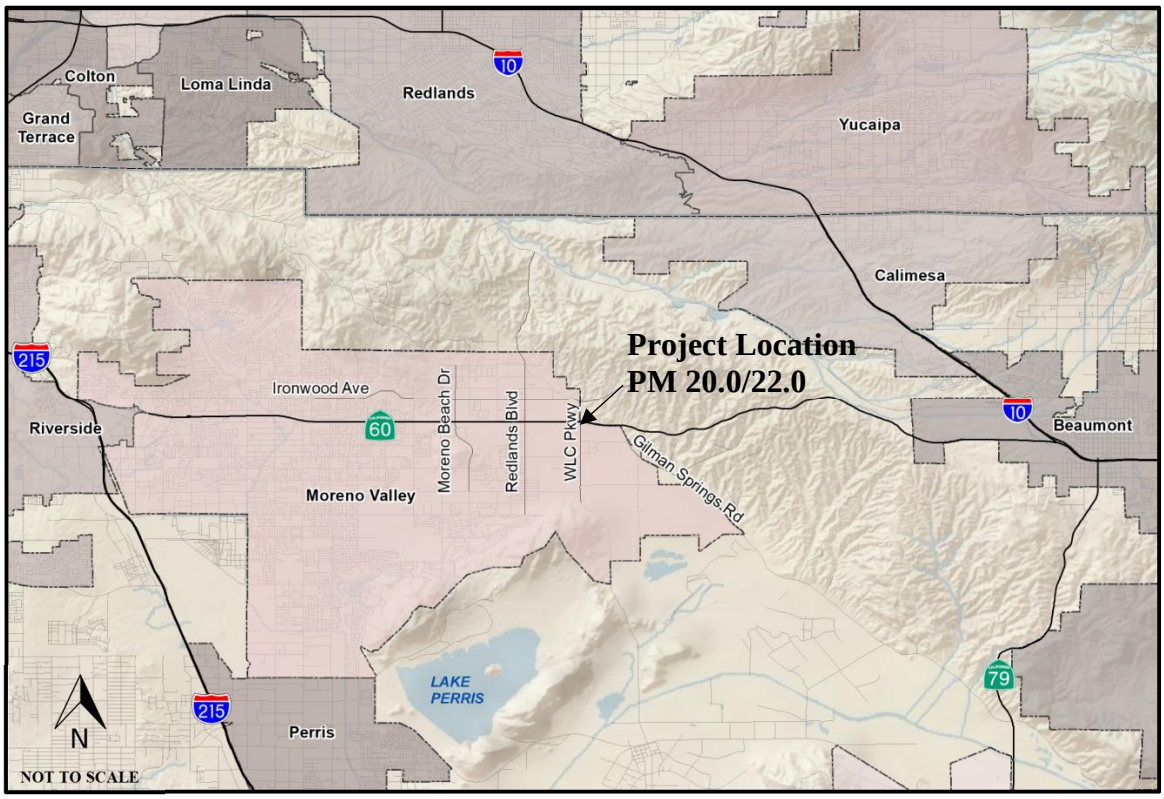
CONCURRED BY:

Jamal Elsaleh, *DEPUTY DISTRICT DIRECTOR, DESIGN*

APPROVED:

for Michael D. Beauchamp, *DISTRICT DIRECTOR* 03/12/2020 *DATE*

Vicinity Map



On SR-60 at WLC Pkwy
(1 mile east of Redlands Blvd and 0.7 miles west of Gilman Springs Rd)

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

2/3/2020

Rebecca M. Young, Michael Baker International
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1. INTRODUCTION

Project Description

The City of Moreno Valley (City), in cooperation with California Department of Transportation (Caltrans) District 8, proposes to reconstruct and improve the State Route 60/World Logistics Parkway (SR-60/WLC Pkwy) interchange. Theodore Street has been renamed to WLC Pkwy by City Council on February 6, 2018 and May 21, 2019 between Hemlock Avenue (Ave) and its southern terminus at Alessandro Boulevard (Blvd)/Davis Road (Rd). The SR-60/Theodore Street Interchange Project is now referred to as the SR-60/WLC Pkwy Interchange Project (project). The majority of the project site is located in the City of Moreno Valley. The northeast quadrant of the site is located within unincorporated Riverside County (County) and within the City's Sphere of Influence. The purpose of the project is to provide standard vertical clearance for the WLC Pkwy overcrossing, to alleviate existing and future traffic congestion at the SR-60/WLC Pkwy interchange ramps during peak hours, and to improve traffic flow along the freeway and through the interchange. The total length of the project on SR-60 is 2 miles.

The project is currently funded with a variety of funding sources including federal and local funds through Project Approval and Environmental Documentation (PA/ED) and, as such, will be required to comply with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans will be the Lead Agency for CEQA and the City is a Responsible Agency under CEQA. Caltrans, as assigned by the Federal Highway Administration (FHWA), is the federal Lead Agency for NEPA. The environmental review, consultation, and any other action required in accordance with the applicable federal laws for this project will be carried out by Caltrans under its assumption of responsibility pursuant to 23 United States Code (USC) 327. Therefore, preparation of the NEPA compliance documents, including the technical studies and the environmental document, will have oversight by Caltrans District 8. An Environmental Impact Report/Environmental Assessment (EIR/EA) (joint CEQA/NEPA document) is being prepared.

The PA/ED phase is funded with a mix of federal and local sources, including a Congestion Mitigation and Air Quality (CMAQ) federal grant, Measure A local match, and Development Impact Fees (DIF). Potential fund sources for future phases include federal, State, and local grants as well as development fees and sources. Eligible City funds may be used at the discretion of the City Council. As the project progresses, the City may apply for funds appropriate to the project stage completed and the components to be funded.

Three alternatives and two design variations are evaluated in the environmental document and are further discussed in Section 5 of this report:

- **Alternative 1:** No Build Alternative (no project)
- **Alternative 2:** Modified Partial Cloverleaf with Signalized Intersections
- **Alternative 6:** Modified Partial Cloverleaf with Roundabout Intersections

- **Design Variations 2a and 6a:** Design Variations of Alternatives 2 and 6 to realign Eucalyptus Avenue

According to the Caltrans *Project Development Procedures Manual (PDPM)*, Chapter 8, Section 5, Project Development Categories, the project is classified as *Category 4A (see Attachment 10)* because:

- The SR-60/WLC Pkwy Interchange is an existing facility
- Substantial new right-of-way is required
- A revised *Freeway Agreement (FA)* is not required
- Route Adoption is not required

Below is a summary of the project information.

TABLE 1 - Project Summary

Project Limits	*08-Riv-60* *PM 20.0/PM 22.0*	
Number of Alternatives	*3 (One No Build, Two Build Alternatives)*	
	Current Cost Estimate:	**Escalated Cost Estimate:**
Capital Outlay Support	$11.2 Million	$12.2 Million
Capital Outlay Construction Cost	Alternative 2: $69,688,200 Design Variation 2a: $70,650,300 Alternative 6: $62,131,600 Design Variation 6a: $63,971,300	Alternative 2: $77,438,458 Design Variation 2a: $80,077,707 Alternative 6: $70,422,292 Design Variation 6a: $72,507,477
Capital Outlay Right-of-Way Cost	Alternative 2: $25,444,305 Design Variation 2a: $ 32,405,121 Alternative 6: $ 25,585,980 Design Variation 6a: $ 31,369,379	Alternative 2: $ 26,973,835 Design Variation 2a: $34,131,829 Alternative 6: $ 27,150,109 Design Variation 6a: $ 33,502,141
Funding Source	Local Funds and Federal Funds	
Funding Year	2021/2022	
Type of Facility	Freeway Interchange (four (4) freeway lanes, two-lanes in each direction)	
Number of Structures	1 – WLC Pkwy Overcrossing over SR-60 (Br. No. 56-0488)	
Environmental Determination or Document	NEPA - EA CEQA - EIR	
Legal Description	IN RIVERSIDE COUNTY NEAR MORENO VALLEY FROM 0.1 MILE EAST OF REDLANDS BOULEVARD OVERCROSSING TO 0.2 MILE WEST OF GILMAN SPRINGS ROAD OVERCROSSING AT WORLD LOGISTIC CENTER PARKWAY OVERCROSSING	
Project Development Category	4A	

2. RECOMMENDATION

It is recommended that approval be given to publicly circulate the approved Draft EIR/EA, with a Notice of Availability to schedule a public hearing.

3. BACKGROUND

Project History

A portion of Theodore St was renamed to WLC Pkwy from the future Hemlock Ave to Alessandro Blvd. The City's General Plan Circulation Element designates Theodore St/WLC Pkwy as a Minor Arterial north of Eucalyptus Ave, and WLC Pkwy as a Divided Major Arterial south of Eucalyptus Ave. Existing Theodore St/WLC Pkwy through the project limits is one travel lane in each direction, including the SR-60 overcrossing. Existing SR-60 between Redlands Blvd and Gilman Springs Rd is two mixed-flow travel lanes in each direction. The proposed project would modify the existing SR-60/WLC Pkwy interchange from Post Mile (PM) 20.0 to PM 22.0 on SR-60, approximately 2 miles long. Major improvements to the interchange include:

(1) Reconstruction of the westbound and eastbound SR-60 on- and off-ramps.

(2) Replacement of the existing WLC Pkwy overcrossing to provide a minimum 16.5-foot vertical clearance and additional through and turn lanes.

(3) Addition of auxiliary lanes in each direction from SR-60/WLC Pkwy to the Redlands Blvd (west) and Gilman Springs Rd (east) interchange on- and off-ramps.

(4) Improvements to Theodore St/WLC Pkwy north to Ironwood Ave and south to Eucalyptus Ave and Dracaea Ave.

Contingent upon full funding of all phases, construction could begin in 2022. For further details on the staging and phasing see *Section 7. Stage Construction and Phasing*.

Caltrans previously approved a Project Study Report-Project Development Support (PSR-PDS) for the project in November 2013. The document presented a range of alternatives to address interchange improvements. One no-build alternative and three build alternatives were studied. All build alternatives required the removal and reconstruction of the WLC Pkwy overcrossing, ramps, and auxiliary lanes between Redlands Blvd and Gilman Springs Rd. Additional alternative details include:

PSR-PDS Alternative #1 – No Build alternative

PSR-PDS Alternative #2 – Construction of a new modified partial cloverleaf interchange with direct on-ramps, an eastbound loop on-ramp, a direct eastbound off-ramp and westbound loop off-ramp, and a six-lane overcrossing

PSR-PDS Alternative #3 – Construction of a spread diamond interchange with direct on- and off-ramps and a six-lane overcrossing

PSR-PDS Alternative #4 – Construction of a modified spread diamond interchange with direct on- and off-ramps, an additional westbound loop off-ramp, and a six-lane overcrossing

During the initial phase of Project Approval/Environmental Document (PA/ED) additional alternatives were developed in addition to the three build alternatives identified in the PSR-PDS. The additional alternatives introduced during PA/ED were the following:

Alternative #5 – Construction of a modified spread diamond interchange with direct on- and off-ramps, an additional westbound loop off-ramp, a four-lane overcrossing, and addition of a collector/distributor road between WLC Pkwy and Gilman Springs Rd

Alternative #6 – Construction of a new modified partial cloverleaf interchange with direct on-ramps, a direct eastbound off-ramp and westbound loop off-ramp, a four-lane overcrossing, and addition of roundabout intersection control at the ramps

Alternative #7 – A Single Point Urban Interchange (SPUI)

All build alternatives were tabulated and scored on a variety of criteria established by the Project Development Team (PDT) over several PDT meetings and geometric focus meetings in 2014. The PDT agreed to move forward with Alternative 2 and Alternative 6 as the viable build alternatives for PA/ED, and the remaining alternatives were rejected. For further details see *Section 5.* Alternatives. The alternatives studied during PA/ED within this DPR include:

PA/ED Alternative #1 – No Build alternative

PA/ED Alternative #2 – Construction of new modified partial cloverleaf interchange with direct on-ramps, an eastbound loop on-ramp, and a direct eastbound off-ramp and westbound loop off-ramp, and a six-lane overcrossing

PA/ED Alternative #6 – Construction of a new modified partial cloverleaf interchange with direct on-ramps, a direct eastbound off-ramp and westbound loop off-ramp, a four-lane overcrossing, and addition of roundabout intersection control at the ramps

In 2016, design variations were recommended for Alternative 2 and Alternative 6. After analyzing the feasibility of the design variations, the PDT agreed to incorporate the design variations as part of the project build alternatives. In 2018, the project re-initiated with the addition of the two design variations, Design Variation 2a and Design Variation 6a, as well as the project name change from Theodore St to WLC Pkwy.

Partial grading for the eastbound off-ramp was completed in 2010 as part of a separate project and approved by Caltrans under Encroachment Permit No. 08-09-6-DD-0825. No right-of-way for the eastbound off-ramp or other improvements have been acquired for the proposed project. No additional issues have been identified.

The regional location of the proposed project is shown in *Attachment 1 – Regional Vicinity Map*.

Community Interaction
Stakeholders from the City and Caltrans functional units were heavily involved throughout preparation of the PA/ED technical studies, DPR and Draft EIR/EA.

The project is part of the City's Adopted Capital Improvement Plan FY 2017/2018 & 2018/2019 with a project status of "in progress" thereby signifying the proposed project is supported by the City.

The City had one-on-one discussions with adjacent land owners and agencies including the Metropolitan Water District, Riverside County Waste Management, Riverside County Transportation Department, and residents. All discussions were preliminary for the purposes of planning, and no commitments were made.

The City held a business briefing meeting on July 23, 2018. The purpose of the business briefing was to provide businesses and residents with frontage on the propose project an overview and the opportunity to ask questions related to the project. The business briefing meeting was open to the public. Questions were raised about the project schedule, funding, and the proposed alternatives. Questions were addressed at the business briefing meeting by members of the PDT in attendance. Additionally, comment responses were provided from the City to those who provided a written comment at the business briefing meeting or subsequent to the meeting.

The City provided their City Council with periodic updates regarding the project status, including an update on the design alternatives, aesthetics, possible inclusion of a mandatory borrow site, and the street name change. Additional City Council updates are anticipated throughout the PA/ED phase.

The community was informed of the project status during the Notice of Preparation (NOP) period for the EIR/EA. The NOP review period began on November 25, 2019 and concluded on January 3, 2020, for a total of 39 days. A public scoping meeting was held on December 16, 2019. The public scoping meeting was open to the public. Topics addressed at the public scoping meeting included a project overview, alternative discussion, and schedule. Comments were collected from the public during the NOP review period and included both support and opposition. The individuals and agencies who provided comments during the NOP review period have been added to the project distribution list to be informed of future community interaction opportunities. The individuals who provided comments during the NOP review period and did not provide a mailing address were contacted by Caltrans to ensure they were appropriately added to the project distribution list.

Special interest groups related to environmental were contacted as part of the NOP process. As part of the NOP public review comments provided from the environmental special interest groups, the following mobility needs were identified: animal movement under SR-60, and multi-use trail linkage. Special interest groups' needs, specifically sidewalks, bicycle lanes, a multi-use trail and ADA compliant features are incorporated in the proposed design. See *Section 6.G Title VI Considerations* for more information. The multi-use trail will be designed with an appropriate surface material to accommodate equestrian mobility. An existing 60-inch corrugated metal pipe is located under SR-60 near the Gilman Springs Rd WB on-ramp and is usable by wildlife. Enhancements would be provided to the existing 60-inch corrugated metal pipe for animal movement.

Existing Facility

SR-60 is an east-west freeway that travels through Los Angeles, San Bernardino, and Riverside Counties. The facility begins at its junction within Interstate 10 (I-10) in the City of Los Angeles (Los Angeles County) and ends at its junction with I-10 in the City of Beaumont (Riverside County) as described in the SR-60 Transportation Concept Report (TCR). The total length of SR-60 is 70.9 miles. SR-60 within the project limits is two mixed-flow lanes in each direction.

SR-60 serves intraregional, interregional, and interstate travel, and is listed in Section 253.1 of the California Streets and Highway Code as a State Freeway and Expressway System. As part of the National Highway System (NHS), SR-60 is classified as an "Other NHS Route" for its entire length. "Other NHS routes" are highways in rural and urban areas. The entire route is included in the National Network for the Federal Surface Transportation Assistance Act for Oversized Trucks and is a Priority Global Gateway Trade Corridor for the movement of international trade. SR-60 is classified as a Transportation Gateway of Major Statewide Significance in the Caltrans June 1998 Interregional Transportation Strategic Plan (ITSP). ITSP gateways are principal centers of transportation facilities that provide access to major State, national, or international trade and commerce, goods movement, and intermodal transfer. The 2015 ITSP categorizes SR-60 as a Tier 1 Freight Facility. Tier 1 represents highways that have the highest truck volumes and provide essential connectivity to and between key freight gateways and regions. SR-60 is functionally classified as an Urban Principal Arterial. SR-60 is a major truck route, and according to the California 2016 Annual Average Daily Truck Traffic compiled by Caltrans, 16 percent of the Annual Average Daily Traffic (AADT) on SR-60 was truck traffic.

WLC Pkwy is a north-south arterial that begins at Hemlock Avenue (north of SR-60) and terminates at Alessandro Blvd/Davis Road (south of SR-60). North of Hemlock Avenue to Ironwood Avenue WLC Pkwy transitions to Theodore Street. WLC Pkwy is located in the eastern half of the City, between Redlands Blvd (west) and Gilman Springs Rd (east) and provides north-south access in addition to Perris Blvd, Redlands Blvd, Gilman Springs Rd, Moreno Beach Drive (Dr), and Pigeon Pass Rd/Frederick St. The City's General Plan

Circulation Element designates WLC Pkwy as a Minor Arterial (two lanes in each direction) north of Eucalyptus Ave and as a Major Arterial south of Eucalyptus Ave (three lanes in each direction). Existing WLC Pkwy through the project limits is one travel lane in each direction, including the SR-60 overcrossing, *see Attachment 2 – Existing Conditions.*

4. PURPOSE AND NEED

4.A Problem, Deficiencies, Justification

Purpose:
The purpose of the proposed project is to:

- Improve existing interchange geometric deficiencies;
- Provide increased interchange capacity, reduce congestion, and improve traffic operations to support the forecast travel demand for the 2045 design year; and
- Accommodate a facility that is consistent with the City of Moreno Valley General Plan.

Need:
The project addresses the following needs, transportation deficiencies and problems:

- The existing overpass bridge was constructed in 1964 and does not meet current geometric standards related to vertical clearance. Current Caltrans standards require 16 ft 6 inches of minimum vertical clearance in the ultimate condition. The existing vertical bridge clearance is 15 ft 2 inches. The overpass bridge was hit by an excavator hauled on a flatbed trailer in January 2015 and a costly emergency repair project was required involving closure of the overpass bridge. Additionally, the overpass bridge was hit by an unknown vehicle in June 2019, and repairs were performed. Both incidences occurred in the westbound direction. Additional geometric deficiencies include non-standard ramp geometry and a lack of pedestrian facilities that are in compliance with the Americans with Disabilities Act (ADA).
- According to the Demographics and Growth Forecast prepared for the 2016 SCAG RTP/SCS, between 2012 and 2040, Riverside County's population is expected to increase by 42 percent, households are anticipated to increase by 52 percent, and employment is anticipated to increase by 90 percent. For Moreno Valley specifically, between 2012 and 2040, population is anticipated to increase by 30 percent, households are anticipated to increase by 41 percent, and employment is anticipated to increase by 165 percent. Without the proposed improvements, the interchange intersections and SR-60 mainline are anticipated to operate at unacceptable levels of service (LOS) by Design Year 2045 (acceptable LOS is LOS D or better).

- Planned transportation improvement projects, including the SR-60/WLC Pkwy interchange project, need to be consistent with the transportation goals as identified in the City of Moreno Valley General Plan. Project improvements need to accommodate the movement of people using multiple modes of transportation with community-based design taking into consideration the natural environment, social environment, and transportation behavior. Regarding equestrian, bicycle, and pedestrian users, the project needs to be consistent with the City's Master Plan of Trails to implement a multi-use trail along WLC Pkwy from Eucalyptus Ave to the northern project limit.

4.B Regional and System Planning

Identify Systems

SR-60 is an east-west principal arterial traversing the urbanized and rural areas of Los Angeles, San Bernardino, and Riverside Counties. Beginning near the junction of Interstate Route 5 (I-5) and I-10 in Los Angeles, SR-60 terminates at its junction with I-10 in the City of Beaumont, Riverside County. Within Caltrans District 8, SR-60 runs a distance of approximately 40.5 miles. SR-60 ranges from four lanes in rural areas to 10 lanes in urbanized areas. Beginning as a 10-lane facility in San Bernardino County at the Los Angeles County line and moving easterly, it traverses the Cities of Chino, Ontario, and Eastvale. SR-60 transitions to eight lanes in the City of Jurupa Valley, and passes through the Cities of Riverside and Moreno Valley. SR-60 continues through the City of Moreno Valley where it transitions to six lanes and then to four lanes. East of the Moreno Valley City limit, the remainder of SR-60 in District 8 is a four-lane facility that passes through Riverside County ending at the City of Beaumont. Existing SR-60 in the vicinity of the proposed interchange is delineated to provide two general-purpose lanes in each direction.

SR-60 is included in the State Freeway and Expressway System with the Federal Functional classifications of Rural Principal Arterial and extension of a Rural Principal Arterial into an urban area. SR-60 has been identified in the NHS, and the Goods Movement Action Plan (GMAP). The 1990 Federal Surface Transportation Assistance Act (STAA) identifies SR-60 as a "National Network" route for STAA trucks. SR-60, within the project limits, is not identified in the Extralegal Load Network (ELLN) according to the Division of Traffic Operations (May 2001).

Theodore St/WLC Pkwy is a north-south street that travels through Moreno Valley, beginning at its intersection with Ironwood Ave to the north and terminating where it turns into Davis Rd to the south. The City's General Plan Circulation Element designates Theodore St./WLC Pkwy north of Eucalyptus Ave as a Minor Arterial and as a Divided Major Arterial south of Eucalyptus Ave along WLC Pkwy. The existing Theodore St/WLC Pkwy corridor is one travel lane in each direction, including the SR-60 overcrossing. The WLC Pkwy interchange is east of Redlands Blvd and west of Gilman Springs Rd.

State Planning

In June 2017, Caltrans District 8 prepared a District System Management Plan (DSMP) for SR-60. The DSMP identifies the programmed project to reconstruct the SR-60/WLC Pkwy interchange within post miles 20.0 and 22.0. The DSMP refers to the former street name, Theodore St.

The Caltrans TCR, dated September 2012, identifies the SR-60/WLC Pkwy interchange project limits within Segment 6. The TCR for this reach of SR-60 identifies six mixed-flow lanes for the concept facility to maintain LOS D through this Segment 6 of SR-60. The TCR identifies the programmed project to reconstruct the SR-60/WLC Pkwy interchange within post miles 20.0 and 22.0. The TCR refers to the former street name, Theodore St.

EA 0N69U/ PN 0812000307 – SR-60 Truck Lanes Project: Riverside County Transportation Commission (RCTC), in cooperation with Caltrans, has proposed to construct an eastbound truck-climbing lane and westbound truck-descending lane on SR-60 in a portion of unincorporated Riverside County between Gilman Springs Rd and 1.37 miles west of Jack Rabbit Trail. The Initial Study with MND/EA with FONSI prepared for the SR-60 Truck Lanes project was approved on May 16, 2016 and construction began in June 2019.

A separate project to widen SR-60 from two to three mixed-flow lanes between Redlands Blvd and Gilman Springs Rd is anticipated and included in the 2019 approved Federal Transportation Improvement Program (FTIP), the 2016 Regional Transportation Plan (RTP), and the 2017 DSMP. As mentioned above, the TCR identifies six (6) mixed-flow lanes for SR-60 to maintain LOS D in 2035. The traffic analysis performed for the SR-60/WLC Pkwy interchange also identified the need for an additional general-purpose lane in both directions of SR-60. The additional lane is needed between opening year (2025) and horizon year (2045).

Regional Planning

Each project alternative is fully compatible with the design concept and scope described in the current regional transportation plan and is consistent with the 2019 FTIP and 2016 RTP. The 2019 FTIP (ID# RIV080904) Amendment 19-03 and 2016 RTP (ID# RIV080904) description is as follows:

> AT SR-60/WORLD LOGISTICS CENTER PKWY IC: WIDEN OC FROM 2 TO 4/6 THRU LNS; WIDEN WB EXIT/ENTRY RAMPS FROM 1-2 LNS AT EXIT/ENTRY, 3 LNS AT ART. W/ HOV AT ENTRY; WIDEN EB EXIT RAMP FROM 1-2 LNS AT EXIT AND 3 LNS AT ART.; WIDEN EB ENTRY RAMP FROM 1-2 LNS W/HOV; ADD EB LOOP ENTRY WITH 2 LNS AT ART AND 1 LN AT ENTRY; ADD AUX LNS 1400' EB DIR E/O IC, 2,500' EB DIR W/O IC, 2,300' WB DIR W/O IC & 1,700' WB DIR E/O IC (EA0M590)

A separate project that will widen SR-60 from two to three mixed-flow lanes in each direction (consistent with the DSMP and TCR) is identified in the 2019 FTIP. The 2019 FTIP ID# RIV151220 description for the mainline addition is as follows:

> IN WESTERN RIVERSIDE COUNTY IN THE CITY OF MORENO VALLEY ALONG SR 60 - WIDEN FROM TWO TO THREE LANES IN EACH DIRECTION IN THE EXISTING MEDIAN TO PROVIDE ONE ADDITIONAL GENERAL PURPOSE LANE IN EACH DIRECTION FROM REDLANDS BLVD. TO GILMAN SPRINGS RD.

Local Planning

The SR-60/WLC Pkwy interchange is consistent with regional and local planning. The interchange is included in the City's 2015 General Plan and the May 2015 Circulation Plan. Theodore St/WLC Pkwy is listed as a Minor Arterial/Major Arterial. WLC Pkwy is also included in the City's January 2012 Designated Truck Route Map. The General Plan refers to the former street name, Theodore St.

The City designated the SR-60/WLC Pkwy interchange as a gateway interchange on May 21, 2019. The gateway aesthetics would be in accordance with the Route 60 Corridor Master Plan for Aesthetics and Landscaping, dated August 2010. The gateway designation would require a revision to the Route 60 Corridor Master Plan Aesthetics and Landscaping, which currently designates Gilman Springs Rd as the gateway interchange in the eastern portion of the City. The Route 60 Corridor Master Plan Aesthetics and Landscaping refers to the former street name, Theodore St. Additional discussion on aesthetics and landscaping can be found in *Section 5. Alternatives.*

The City's General Plan (2015) and the County of Riverside's (County's) General Plan (2017) contain land use and circulation designations intended to guide future development in the City and County, respectively.

According to the City's existing Bike Map (2019) and the City General Plan, Master Plan of Trails (2018) – multi-use trails are proposed in the northwestern portion of the City and along the length of WLC Pkwy. The proposed project will provide a multi-use trail crossing over SR-60 connecting the northern and southern halves of the City.

Transit Operator Planning

Riverside Transit Agency and SunLine Transit Agency currently use SR-60 within the proposed project limits for their respective bus routes. The improvements proposed at the SR-60/WLC Pkwy interchange are not anticipated to affect the bus routes currently using SR-60. Based upon the City's General Plan, the City does not have existing or future plans for transit operations on SR-60 or WLC Pkwy within the project limits, therefore current transit planning within the project limits does not address future plans for transit operations. The proposed build alternatives do not preclude future transit operations within the project limits by providing

right-of-way for future bus bays on Eucalyptus Ave, high-occupancy vehicle (HOV) preferential lanes on all entrance ramps, and ramp metering on all entrance ramps.

4.C Traffic

Current and Forecast Traffic

A Traffic Study Report (TSR) dated January 2019, was prepared for the proposed project titled "SR-60/World Logistics Center Parkway Interchange PA/ED Traffic Study Report." The TSR was approved by Caltrans on March 1, 2019.

There are three parts to the traffic analysis:

- Analysis of traffic on SR-60
- Analysis of intersections affected by the re-configuration of the SR-60/WLC Pkwy interchange
- Interchange Closure Study and Ramp Closure Study

The Interchange Closure Study and Ramp Closure Study are separate documents, and are further discussed in *Section 7. Stage Construction*.

The intersection analysis included the following eight study intersections:

- Theodore St/Ironwood Ave
- WLC Pkwy/Westbound SR-60 Ramps
- WLC Pkwy/Eastbound SR-60 Ramps
- WLC Pkwy/Eucalyptus Ave
- Redlands Blvd/Ironwood Ave
- Redlands Blvd/Westbound SR-60 Ramps
- Redlands Blvd/Eastbound SR-60 Ramps
- Redlands Blvd/Eucalyptus Ave

The freeway analysis covered traffic flows along SR-60 in both directions from the eastbound off-ramp at the SR-60/Gilman Springs Rd interchange to the westbound off-ramp of the SR-60/Moreno Beach Dr interchange.

North of SR-60, the Community Development Element of the City's General Plan calls for the development of a mix of office buildings and single-family dwellings. South of SR-60, the General Plan includes the World Logistics Center (WLC) Specific Plan. WLC would consist primarily of approximately 41 million square feet of high-cube logistics warehouse buildings. With buildout of the General Plan, the traffic demand at the SR-60/WLC Pkwy interchange will be much greater than at present. The proposed project is to improve the capacity of the SR-60/WLC Pkwy interchange to accommodate the anticipated increase in demand. The operations analysis was based on traffic forecasts assuming the buildout of the General Plan as

well as the regional development assumed in the Southern California Area Government's 2016 Regional Transportation Plan/Sustainable Communities Strategies (SCAG 2016 RTP/SCS).

The current SCAG RPT/SCS and the FTIP include an additional general-purpose lane in each direction on SR-60 between Redlands Blvd and Gilman Springs Rd (i.e. the interchanges on either side of WLC Pkwy). The analysis performed for the current study anticipates the need for these lanes on SR-60 between the Redlands Blvd and Gilman Springs Rd interchanges. The need for these lanes would occur between opening year (2025) and horizon year (2045) and would be dependent upon the timing of the General Plan buildout. The TCR identifies six (6) mixed-flow lanes for SR-60 to maintain LOS D by 2035. The proposed SR-60/WLC Pkwy interchange project is compatible with an additional general purpose lane on SR-60 in both directions. Refer to 4.B Regional and System Planning for information on the additional general purpose lane.

The traffic forecasting and methodology report was approved for this project by Caltrans on September 26, 2018 in which the following assumptions were provided for the existing, opening, and forecast years:

Existing (2018) – A 2018 model year was created by adding in approved land use changes and network changes completed between 2012 and 2018.

Opening Forecast Year (2025) – A 2025 model year was created for all known approved development projects and land use in the greater Moreno Valley area that will foreseeably be completed by 2025. The network includes roadway projects from the STIP, RTP, and City of Moreno Valley General Plan.

Long-Range Forecast Year (2045) - A 2040 model year was created using SCAG's 2016 RTP/SCS. This model also includes all foreseeable development projects in the greater Moreno Valley area. The network is consistent with the SCAG 2040 RTP/SCS model network in the greater Moreno Valley area. The network includes roadway projects from the STIP, RTP, and City of Moreno Valley General Plan. Forecasts for the 2045 study year were developed by extrapolating the growth for the 2025-to-2040 period for an additional 5 years. No roadway projects were added because no adopted plans are available beyond 2040 so any additions would have been speculative.

The analytical methods used to forecast traffic impacts takes into account the driving characteristics of different classes of vehicles. This is typically done through the use of Passenger Car Equivalents (PCE) factors, which convert the number of heavy vehicles in the traffic stream into an equivalent number of passenger cars.

For signalized and stop-controlled intersection analyses, the City's guidelines mandate the use of PCE factors taken from the San Bernardino County CMP, 2003 Update. These are more

precise and on average higher than default rates in the Highway Capacity Manual (HCM) 6th Edition. Where HCM recommends two PCEs per heavy truck, the San Bernardino CMP PCE rates use 1.5 for 2-axle trucks, 2.0 for 3-axle trucks and 3.0 for trucks with four or more axles. Intersection volumes were input to Synchro directly as PCEs (with the heavy vehicle percentage set to zero to avoid double-counting of trucks).

Table 2 provides the traffic data specific to SR-60 at the proposed SR-60/WLC Pkwy interchange.

TABLE 2
Existing (2018), 2025, and 2045 Forecast Conditions
SR-60/WLC Pkwy Traffic Data

SR-60 MAINLINE		EXISTING 2018	OPENING 2025	DESIGN 2045
AVERAGE DAILY TRAFFIC (AADT)	WB	33,272	46,100	83,000
	EB	35,387	48,900	85,400
PEAK HOUR (VEHICLES)	AM	3,728	5,760	10,100
	PM	4,615	6,720	11,270
PEAK DIRECTIONAL SPLIT (WB/EB)	AM	50/50	53/47	63/37
	PM	47/53	46/54	43/57
TRUCK PERCENTAGE	AM	12%	17%	14%
	PM	10%	14%	11%

Note: WB = Westbound; EB = Eastbound

The narrative and traffic data tables in the following sections are intended to concisely summarize traffic impacts to existing or future conditions, potential needs for upgrades or improvements, and proposed interchange's ability to accommodate the design year traffic volumes. The circulation scenarios analyzed have been evaluated for opening year (2025) and long range (2045) conditions.

Design Variations 2a and 6a do not impact the traffic analysis and operations for each build alternative. The operations presented for Alternative 2 and Alternative 6 also apply to the design variations.

Intersection Volumes

As documented in the TSR, with the proposed improvements to the SR-60/WLC Pkwy interchange, the roadway network will operate at a satisfactory intersection LOS in 2025 and 2045, as described below.

Table 3, Table 4, and Table 5 provide a summary of existing (2018) and forecast (2025, and 2045) traffic volumes for the SR-60/WLC Pkwy interchange.

TABLE 3
Existing 2018 Conditions
Peak Hour Traffic Volumes (In Vehicles)

FREEWAY	ROADWAY	RAMP	EXISTING (2018)	
			AM	PM
SR-60	WLC PKWY	WB OFF RAMP	111	36
		WB LOOP ON RAMP	52	53
		EB OFF RAMP	119	72
		EB LOOP ON RAMP	69	49
	REDLANDS BOULEVARD	WB OFF RAMP	76	65
		WB LOOP ON RAMP	416	453
		EB OFF RAMP	284	568
		EB LOOP ON RAMP	92	106

Note: WB = Westbound; EB = Eastbound

TABLE 4
Forecast Conditions 2025
Peak Hour Traffic Volumes (In Vehicles)

FREEWAY	ROADWAY	RAMP		WITHOUT PROJECT		WITH PROJECT (ALT 2 & 6)	
				AM	PM	AM	PM
SR-60	WLC PKWY	WB OFF RAMP		290	230	-	-
		WB LOOP ON RAMP		1020	750	-	-
		WB LOOP OFF RAMP		-	-	290	230
		WB DIRECT ON RAMP		-	-	1020	750
		EB OFF RAMP		890	880	890	880
		EB LOOP ON RAMP	(ALT 2)	270	310	10	40
		EB DIRECT ON RAMP	(ALT 2)	-	-	260	270
			(ALT 6)			270	310
	REDLANDS BOULEVARD	WB OFF RAMP		380	150	380	150
		WB LOOP ON RAMP		210	260	210	260
		WB DIRECT ON RAMP		460	360	460	360
		EB OFF RAMP		420	860	420	860
		EB LOOP ON RAMP		90	290	90	290
		EB DIRECT ON RAMP		60	70	60	70

Note: WB = Westbound; EB = Eastbound; ALT=Alternative

TABLE 5
Forecast Conditions 2045
Peak Hour Traffic Volumes (In Vehicles)

FREEWAY	ROADWAY	RAMP		WITHOUT PROJECT		WITH PROJECT (ALT 2 & 6)	
				AM	PM	AM	PM
SR-60	WLC PKWY	WB OFF RAMP		560	460	-	-
		WB LOOP ON RAMP		1630	1350	-	-
		WB LOOP OFF RAMP		-	-	560	460
		WB DIRECT ON RAMP		-	-	1630	1350
		EB OFF RAMP		1140	1320	1140	1320
		EB LOOP ON RAMP	(ALT 2)	460	500	120	250
		EB DIRECT ON RAMP	(ALT 2)	-	-	340	250
			(ALT 6)			460	500
	REDLANDS BOULEVARD	WB OFF RAMP		1070	870	1070	870
		WB LOOP ON RAMP		130	220	130	220
		WB DIRECT ON RAMP		190	300	190	300
		EB OFF RAMP		410	640	410	640
		EB LOOP ON RAMP		170	550	170	550
		EB DIRECT ON RAMP		220	1040	220	1040

Note: WB = Westbound; EB = Eastbound; ALT=Alternative

Study Intersections

The following intersections have been identified for analysis in the study:

- Theodore St/Ironwood Ave
- WLC Pkwy/Westbound SR-60 Ramps
- WLC Pkwy/Eastbound SR-60 Ramps
- WLC Pkwy/Eucalyptus Ave
- Redlands Blvd/Ironwood Ave
- Redlands Blvd/Westbound SR-60 Ramps
- Redlands Blvd/Eastbound SR-60 Ramps
- Redlands Blvd/Eucalyptus Ave

Intersection Analysis Methodology

The LOS for intersections was determined using Synchro 10 applying the HCM 6th Edition methodology. HCM Approach C multiperiod analysis was not necessary because the intersections did not exceed capacity for the build alternatives. Roundabout intersections were analyzed in SIDRA software using HCM 6th Edition methodology.

The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on corresponding stopped delay per vehicle ranges for signalized and unsignalized intersections. Caltrans has established a target LOS as the transition between LOS C and LOS D for the section of SR-60 under study. The City of Moreno Valley has established a target LOS of D for the eight study intersections.

Intersection Analysis – Existing Conditions

Table 6 summarizes existing conditions AM peak hour and PM peak hour average stopped delay per vehicle and corresponding LOS of the study intersections.

TABLE 6
Existing Conditions 2018 - Peak Hour Intersection Level of Service

	STUDY INTERSECTION	DELAY (SEC/VEH)		LOS	
		AM	PM	AM	PM
WLC PKWY	EUCALYPTUS AVE	10.0	9.2	A	A
	SR-60 EB RAMPS	10.1	9.0	B	A
	SR-60 WB RAMPS	10.3	9.4	B	A
	IRONWOOD AVE	8.8	8.8	A	A
REDLANDS BOULEVARD	EUCALYPTUS AVE	7.8	13.1	A	B
	SR-60 EB RAMPS	19.1	27.9	B	C
	SR-60 WB RAMPS	30.6	26.5	C	C
	IRONWOOD AVE	12.8	13.2	B	B

Note: WB = Westbound; EB = Eastbound; SEC=Seconds; VEH=Vehicles

As shown in Table 6, all study intersections are currently operating at an acceptable LOS according to Caltrans performance criteria.

Intersection Analysis – Forecast Year 2025 (Opening Year) Conditions

Table 7 summarizes forecast year 2025 conditions AM peak hour and PM peak hour average stopped delay per vehicle and corresponding LOS of the study intersections for without and with project conditions. Intersection delay for Alternative 2 and Alternative 6 are identical for all study intersections, unless noted otherwise.

TABLE 7
Forecast Conditions 2025
Peak Hour Intersection Level of Service

	STUDY INTERSECTION		WITHOUT PROJECT				WITH PROJECT (ALT 2 & 6)			
			DELAY (SEC/VEH)		LOS		DELAY (SEC/VEH)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
WLC PKWY	EUCALYPTUS AVE	(ALT 2)	>180	>180	F	F	21.5	6.5	C	A
		(ALT 6)					7.6	7.7	A	A
	SR-60 EB RAMPS	(ALT 2)	>180	>180	F	F	17.2	11.4	B	B
		(ALT 6)					6.8	6.8	A	A
	SR-60 WB RAMPS	(ALT 2)	126.2	109.2	F	F	8.1	20.4	A	C
		(ALT 6)					5.5	5.5	A	A
	IRONWOOD AVE		9.4	9.7	A	A	9.4	9.7	A	A
REDLANDS BOULEVARD	EUCALYPTUS AVE		13.3	15.7	B	B	13.3	15.7	B	B
	SR-60 EB RAMPS		6.4	7.8	A	A	6.4	7.8	A	A
	SR-60 WB RAMPS		6.3	6.7	A	A	6.3	6.7	A	A
	IRONWOOD AVE		13.4	15	B	B	13.4	15	B	B

Note: WB = Westbound; EB = Eastbound; SEC=Seconds; VEH=Vehicles; ALT; Alternative

As shown in Table 7, all study intersections have acceptable LOS with the proposed SR-60/WLC Pkwy interchange. With the project improvements, study intersection operations are improved or maintained compared to the no-build.

Intersection Analysis – Forecast Year 2045 Conditions

Table 8 summarizes forecast year 2045 AM peak hour and PM peak hour average stopped delay per vehicles and corresponding LOS of the study intersections. Intersection Delay for Alternative 2 and Alternative 6 are identical for all study intersections, unless noted otherwise.

TABLE 8
Forecast Conditions 2045
Peak Hour Intersection Level of Service

	STUDY INTERSECTION		WITHOUT PROJECT				WITH PROJECT (ALT 2 & 6)			
			DELAY (SEC/VEH)		LOS		DELAY (SEC/VEH)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
WLC PKWY	EUCALYPTUS AVE	(ALT 2)	>180	>180	F	F	48.1	50.3	D	D
		(ALT 6)					13.5	19.7	B	C
	SR-60 EB RAMPS	(ALT 2)	>180	>180	F	F	8.7	13.3	A	B
		(ALT 6)					10.1	14.3	B	B
	SR-60 WB RAMPS	(ALT 2)	>180	>180	F	F	28.4	20.9	C	C
		(ALT 6)					13.3	14.7	B	B
	IRONWOOD AVE		1.5	1.1	A	A	1.5	1.1	A	A
REDLANDS BOULEVARD	EUCALYPTUS AVE		17.5	22.8	B	C	17.5	22.8	B	C
	SR-60 EB RAMPS		6.7	15.0	A	B	6.7	15	A	B
	SR-60 WB RAMPS		9.9	9.1	A	A	9.9	9.1	A	A
	IRONWOOD AVE		17.4	22.5	B	C	17.4	22.5	B	C

Note: WB = Westbound; EB = Eastbound; SEC=Seconds; VEH=Vehicles; ALT; Alternative

As shown in Table 8, all study intersections have acceptable LOS with the proposed SR-60/WLC Pkwy interchange. With the project improvements, study intersection operations are improved or maintained compared to the no-build.

Alternative 6 would perform better compared to Alternative 2 at the WLC Pkwy/Eucalyptus Ave intersection and at the WLC Pkwy/SR-60 WB Ramps. At the WLC Pkwy/SR-60 EB Ramps Alternative 2 would perform better than Alternative 6 in the AM peak hour and the same in the PM peak hour.

Merge/Diverge and Freeway Analysis Methodology

The LOS analysis for freeways was performed using HCM 6th Edition Approach C (multiperiod analysis). Each direction of travel was analyzed using the freeway facility function in HCS 7 using eight (8) fifteen-minute time periods representing the two-hour peak periods (7:00-9:00 AM and 4:00-6:00 PM).

Freeway analysis used the recommended heavy truck PCE factor of 2.0 from the HCM 6th Edition for level terrain.

Caltrans has established a target LOS as the transition between LOS C and LOS D for the section of SR-60 under study. The City of Moreno Valley has established a target LOS of D for the eight (8) study intersections. Table 9 summarizes the LOS thresholds.

TABLE 9

LOS Thresholds for Freeway Facilities

Level of Service	Merge/Diverge Density	Freeway Segment Density
	Density Range (pc/mi/ln) [1]	Density Range (pc/mi/ln) [1]
A	0.0-10.0	0.0-11.0
B	10.1-20.0	11.0-18.0
C	20.1-28.0	18.0-26.0
D	28.1-35.0	26.0-35.0
E	>35.0	35.0-45.0
F	>43.0, or Demand Exceeds Capacity	>45.0, or Demand Exceeds Capacity

[1] passenger car per mile per lane.
Source: HCM 6TH Edition, TRB

Merge/Diverge Analysis – Existing Conditions

Table 10 summarizes existing conditions highest peak hour LOS of the freeway ramps.

TABLE 10
Existing Year 2018 Conditions
Merge/Diverge

FREEWAY	ROADWAY	RAMP	EXISTING (2018)			
			AM		PM	
			DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS
SR-60	GILMAN SPRINGS ROAD	WB ON RAMP	16.8	B	19.5	C
		EB OFF RAMP	17.7	C	23.6	C
	WLC PKWY	WB OFF RAMP	18.2	C	20.8	C
		WB LOOP ON RAMP	16.9	B	19.7	B
		EB OFF RAMP	17.9	C	22.4	C
		EB LOOP ON RAMP	16.5	C	21.6	C
	REDLANDS BOULEVARD	WB OFF RAMP	18.1	C	21.1	C
		WB LOOP ON RAMP	19	B	22.8	C
		EB OFF RAMP	10.7	A	14.2	B
		EB LOOP ON RAMP	16.6	B	21.2	C

Note: WB = Westbound; EB = Eastbound; pc=passenger car; mi=mile; ln=lane

As shown in Table 10, all freeway ramps are currently operating at an acceptable LOS according to Caltrans performance criteria.

Merge/Diverge Analysis – Forecast Year 2025 (Opening Year) Conditions

Table 11 summarizes forecast year 2025 highest multiperiod peak hour LOS of the freeway ramps. Merge/Diverge densities for Alternative 2 and Alternative 6 are identical for all study ramps, unless noted otherwise.

TABLE 11
2025 Forecast Conditions
Merge/Diverge

FREEWAY	ROADWAY	RAMP		WITHOUT PROJECT				WITH PROJECT (ALT 2 & 6)			
				AM		PM		AM		PM	
				DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS
SR-60	GILMAN SPRINGS ROAD	WB ON RAMP		14.9	B	16.4	B	11.8	B	12.7	B
		EB OFF RAMP	(ALT 2)	11.8	B	16.7	B	9.7	A	14.3	B
			(ALT 6)					9.8	A	14.0	B
	WLC PKWY	WB OFF RAMP		15.8	C	17.4	C	-	-	-	-
		WB LOOP ON RAMP		19.9	C	20.2	C	-	-	-	-
		WB LOOP OFF RAMP		-	-	-	-	11.8	B	12.7	B
		WB DIRECT ON RAMP		-	-	-	-	17.0	B	16.0	B
		EB OFF RAMP		16.5	C	21.3	C	11.7	B	15.5	B
		EB LOOP ON RAMP	(ALT 2)	13.3	B	18.8	C	10.9	A	15.8	B
		EB DIRECT ON RAMP	(ALT 2)	-	-	-	-	9.7	A	14.3	B
			(ALT 6)					9.8	A	14.0	B
	REDLANDS BOULEVARD	WB OFF RAMP		18.2	A	19.0	A	17.0	B	16.0	B
		WB LOOP ON RAMP		17.7	C	19.5	C	17.7	C	19.5	C
		WB DIRECT ON RAMP		19.8	B	21.2	C	19.8	B	21.2	C
		EB OFF RAMP		17.6	A	23.4	B	17.7	A	23.4	B
		EB LOOP ON RAMP		15.3	B	20.1	C	13.5	B	16.7	B
		EB DIRECT ON RAMP		15.2	B	20.1	B	11.7	B	15.5	B

Note: WB = Westbound; EB = Eastbound; ALT; Alternative; pc=passenger car; mi=mile; ln=lane

As shown in Table 11, all freeway ramps have acceptable LOS with the proposed SR-60/WLC Pkwy interchange.

Merge/Diverge Analysis – Forecast Year 2045 Conditions

Table 12 summarizes forecast year 2045 highest multiperiod peak hour LOS of the freeway ramps. Merge/Diverge densities for Alternative 2 and Alternative 6 are identical for all study ramps, unless noted otherwise.

TABLE 12
2045 Forecast Conditions
Merge/Diverge

FREEWAY	ROADWAY	RAMP		WITHOUT PROJECT				WITH PROJECT (ALT 2 & 6)			
				AM		PM		AM		PM	
				DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS
SR-60	GILMAN SPRINGS ROAD	WB ON RAMP		68.6	F	26.0	C	29.3	D	21.5	C
		EB OFF RAMP	(ALT 2)	17.5	B	35.0	D	15.4	B	28.0	C
			(ALT 6)					15.1	B	28.8	D
	WLC PKWY	WB OFF RAMP		72.1	F	26.3	D	-	-	-	-
		WB LOOP ON RAMP		>Cap.	F	38.2	E	-	-	-	-
		WB LOOP OFF RAMP		-	-	-	-	29.3	D	21.5	C
		WB DIRECT ON RAMP		-	-	-	-	>Cap.	F	29.5	D
		EB OFF RAMP		22.7	D	>Cap.	F	16.7	B	34.7	D
		EB LOOP ON RAMP	(ALT 2)	19.9	C	34.5	D	15.4	B	38.4	E
		EB DIRECT ON RAMP	(ALT 2)	-	-	-	-	15.4	B	28.0	C
			(ALT 6)					15.1	B	28.8	D
	REDLANDS BOULEVARD	WB OFF RAMP		>Cap.	F	31.6	C	>Cap.	F	29.5	D
		WB LOOP ON RAMP		35.8	D	31.0	D	34.8	D	31.0	D
		WB DIRECT ON RAMP		36.7	D	32.9	D	35.9	D	32.9	D
		EB OFF RAMP		22.7	B	73.7	F	22.8	B	31.7	C
		EB LOOP ON RAMP		20.5	C	77.6	F	17.9	B	27.2	D
		EB DIRECT ON RAMP		21.2	B	>Cap.	F	16.7	B	34.7	D

Note: WB = Westbound; EB = Eastbound; ALT=Alternative; pc=passenger car; mi=mile; ln=lane;
>Cap.= Segment over capacity (V/C >1)

The following study freeway ramps will maintain LOS operations without and with the proposed SR-60/WLC Pkwy interchange:

- SR-60/Gilman Springs Rd Eastbound Off Ramp (Alternative 6)
- SR-60/Redlands Blvd Westbound Loop On Ramp
- SR-60/Redlands Blvd Westbound Direct On Ramp

The following study freeway ramps will experience acceptable LOS with the proposed SR-60/WLC Pkwy interchange:

- SR-60/WLC Pkwy Westbound Loop Off Ramp
- SR-60/WLC Pkwy Eastbound Direct On Ramp

The following study freeway ramps will experience improvements in LOS with the proposed SR-60/WLC Pkwy interchange:

- SR-60/Gilman Springs Rd Westbound On Ramp
- SR-60/Gilman Springs Rd Eastbound Off Ramp (Alternative 2)
- SR-60/WLC Pkwy Eastbound Off Ramp
- SR-60/Redlands Blvd Eastbound Off Ramp
- SR-60/Redlands Blvd Eastbound Loop On Ramp
- SR-60/ Redlands Blvd Eastbound Direct On Ramp

The following study freeway ramps will experience a LOS lower than D with the proposed SR-60/WLC Pkwy interchange:

- SR-60/WLC Pkwy Westbound On Ramp (AM)
- SR-60/WLC Pkwy Eastbound Loop On Ramp (Alternative 2 – PM)
- SR-60/Redlands Blvd Westbound Off Ramp (AM)

The above noted deficient merge/diverge maneuvers would be overcapacity for one 15-minute interval within the peak hour, but not to the extent that queueing would occur on SR-60. If the entire peak period is averaged for the above noted ramps, the merge/diverge maneuvers would result in acceptable LOS. The project may include additional features to address these deficiencies such as signage and/or optimized ramp metering. The actual deficient 15-minute period may vary within the peak period, and may vary from day to day, as such, any signage is recommended in the form of changeable message signs to not confuse drivers during periods of acceptable operations.

Freeway Study Areas

This section evaluates the forecast impact of the proposed project at the following State Highway study segments:

- Westbound SR-60 from Gilman Springs Rd to WLC Pkwy
- Westbound SR-60 from WLC Pkwy to Redlands Blvd
- Westbound SR-60 from Redlands Blvd to Moreno Beach Dr
- Eastbound SR-60 from Moreno Beach Dr to Redlands Blvd
- Eastbound SR-60 from Redlands Blvd to WLC Pkwy
- Eastbound SR-60 from WLC Pkwy to Gilman Spring Rd

Freeway Analysis – Existing Conditions

Table 13 summarizes existing peak hour LOS of the freeway segments.

TABLE 13
Existing Year 2018 Conditions
Freeway Mainline Level of Service (LOS)

SR-60 MAINLINE		EXISTING (2018)			
		AM		PM	
		DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS
WESTBOUND	GILMAN SPRINGS ROAD TO WLC PKWY	14.9	B	17.2	B
	WLC PKWY TO REDLANDS BOULEVARD	15.2	B	17.8	B
	REDLANDS BOULEVARD TO MORENO BEACH DRIVE	17.2	B	20.8	C
EASTBOUND	MORENO BEACH DRIVE TO REDLANDS BOULEVARD	10.7	A	14.2	B
	REDLANDS BOULEVARD TO WLC PKWY	15.0	B	19.1	C
	WLC PKWY TO GILMAN SPRINGS ROAD	17.7	B	23.6	C

Note: pc=passenger car; mi=mile; ln=lane

As shown in Table 13, all studied freeway segments are currently operating at an acceptable LOS according to Caltrans performance criteria.

Freeway Analysis – Forecast Year 2025

Table 14 summarizes forecast year 2025 highest multiperiod peak hour LOS for the segments within the study area mentioned above. Mainline densities for Alternative 2 and Alternative 6 are identical for all study segments, unless noted otherwise.

TABLE 14
2025 Forecast Conditions
Freeway Mainline Level of Service (LOS)

SR-60 MAINLINE		WITHOUT PROJECT				WITH PROJECT (ALT 2 & 6)			
		AM		PM		AM		PM	
		DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS
WESTBOUND	GILMAN SPRINGS ROAD TO WLC PKWY	15.8	B	17.4	B	13.3	B	14.3	B
	WLC PKWY TO REDLANDS BOULEVARD	17.0	B	17.9	B	15.4	B	17.2	B
	REDLANDS BOULEVARD TO MORENO BEACH DRIVE	18.9	C	20.3	C	18.9	C	20.3	C
EASTBOUND	MORENO BEACH DRIVE TO REDLANDS BOULEVARD	15.7	B	21.4	C	15.8	B	21.4	C
	REDLANDS BOULEVARD TO WLC PKWY	16.5	B	21.3	C	14.2	B	17.6	B
	WLC PKWY TO GILMAN SPRINGS ROAD	12.3	B	17.3	B	11.4	B	16.4	B

Note: ALT=Alternative; pc=passenger car; mi=mile; ln=lane

As shown in Table 14, all studied freeway segments are forecast to operate at an acceptable LOS for forecast year 2025 conditions with the proposed SR-60/WLC Pkwy interchange. Improvements in LOS density are experienced in most mainline segments with the SR-60/WLC Pkwy interchange project.

Freeway Analysis – Forecast year 2045

Table 15 summarizes forecast year 2045 highest multiperiod peak hour LOS for the segments within the above-mentioned study area. Mainline densities for Alternative 2 and Alternative 6 are identical for all study segments, unless noted otherwise.

TABLE 15
2045 Forecast Conditions
Freeway Mainline Level of Service (LOS)

SR-60 MAINLINE		WITHOUT PROJECT				WITH PROJECT (ALT 2 & 6)			
		AM		PM		AM		PM	
		DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS
WESTBOUND	GILMAN SPRINGS ROAD TO WLC PKWY	72.1	F	26.3	D	32.3	D	21.4	C
	WLC PKWY TO REDLANDS BOULEVARD	>Cap.	F	33.6	D	35.5	E	29.8	D
	REDLANDS BOULEVARD TO MORENO BEACH DRIVE	39.2	E	34.1	D	38.4	E	34.1	D
EASTBOUND	MORENO BEACH DRIVE TO REDLANDS BOULEVARD	20.8	C	33.4	D	20.9	C	33.4	D
	REDLANDS BOULEVARD TO WLC PKWY	22.7	C	>Cap.	F	18.8	C	28.1	D
	WLC PKWY TO GILMAN SPRINGS ROAD	18.1	C	35.3	E	16.0	B	37.9	E

Note: ALT=Alternative; pc=passenger car; mi=mile; ln=lane; >Cap.= Segment over capacity (V/C >1)

The following freeway segments will maintain LOS operations without and with the proposed SR-60/WLC Pkwy interchange:

- Westbound SR-60 from Redlands Blvd to Moreno Beach Dr
- Eastbound SR-60 from Moreno Beach Dr to Redlands Blvd

As shown in Table 15, the following freeway segments experience LOS lower than D with the SR-60/WLC Pkwy interchange:

- Westbound SR-60 from WLC Pkwy to Redlands Blvd (AM)
- Westbound SR-60 from Redlands Blvd to Moreno Beach Dr (AM)
- Eastbound SR-60 from WLC Pkwy to Gilman Springs Rd (PM)

Of the deficient segments listed above, the following segments experience improvements in density with the SR-60/WLC Pkwy interchange:

- Westbound SR-60 from WLC Pkwy to Redlands Blvd (AM)
- Westbound SR-60 from Redlands Blvd to Moreno Beach Dr (AM)

For the deficient segments mentioned above if the entire multiperiod peak hour operation is averaged, the mainline segment experiences acceptable LOS. Auxiliary lanes are proposed and aid in improved operations. Additionally, signage may be proposed during the Plans, Specifications and Estimate (PS&E) phase to address the 15-minute peak period experiencing deficient LOS. Signage is recommended in the form of changeable message signs as to not confuse drivers when the mainline segments are operating acceptably.

Collision Analysis

Traffic accident history available through the Caltrans Traffic Accident Surveillance and Analysis System (TASAS) for SR-60 (PM 20.0/22.0) were reviewed for a 3-year period between January 2015 through December 2017.

The following summarizes the TASAS *Table B – Selective Collision Rate Calculation* and the *TASAS Selective Record Retrieval (TSAR)* data by location, accident rate, accident type, object struck, and other collision factors. Refer to Tables 16 through 19. A conclusion is provided at the end of the discussion.

TABLE 16
TASAS Table B Accident Rates

Segment	Actual Accident Rates (1)			Statewide Average Accident Rates(1)		
	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
SR-60 Mainline						
SR-60 Eastbound Mainline PM 20.0/22.0	**0.014**	**0.27**	**0.91**	0.007	0.26	0.75
SR-60 Westbound Mainline PM 20.0/22.0	0.000	**0.29**	**0.84**	0.007	0.26	0.75
WLC Parkway On- and Off-Ramps						
WB Off-Ramp to WLC Pkwy PM 21.46	0.000	**2.60**	**2.60**	0.010	0.33	0.98
WB On-Ramp from WLC Pkwy PM 21.37	0.000	0.00	**1.83**	0.001	0.23	0.67
EB Off-Ramp to WLC Pkwy PM 21.27	0.000	**6.63**	**6.63**	0.004	0.32	0.92
EB On-Ramp from WLC Pkwy PM 21.37	0.000	**2.28**	**2.28**	0.002	0.15	0.44

(1) Accident rates for mainline segments are expressed as the number of accidents per million vehicle miles. Accident rates for ramp segments are expressed as the number of accidents per million vehicles.
(2) Source: Caltrans District 8 TASAS Table B (January 2015 – December 2017)
(3) Note: WB = Westbound; EB = Eastbound
(4) Bold indicates the total actual accident rate is higher than the statewide average accident rate.

As shown in Table 16, the SR-60 Eastbound Mainline Fatal accident rate is higher than the statewide average rate with all other segments less than the statewide average rate for similar facilities. The Fatal + Injury accident rate is higher than the statewide average rate for all segments except for the WB On-Ramp from WLC Pkwy segment. The Total mainline and ramp accident rates are higher than the statewide averages rates for all segments. Table 17 below summarizes "Accident Types" by mainline and ramp segments.

TABLE 17
TSAR – Accident Types

Segment / Accident Type [2]	Head-On (%)	Sideswipe (%)	Rear End (%)	Broadside (%)	Hit Object (%)	Overturn (%)	Not Stated (%)
SR-60 Mainline							
SR-60 EB Mainline PM 20.0/22.0	-	20.3	25.0	3.1	**42.2**	9.4	-
SR-60 WB Mainline PM 20.0/22.0	-	27.1	28.8	5.1	**33.9**	5.1	-
WLC Parkway On- and Off-Ramps							
WB Off-Ramp to WLC Pkwy PM 21.46	-	-	-	-	**100**	-	-
WB On-Ramp from WLC Pkwy PM 21.37	-	-	-	-	**100**	-	-
EB Off-Ramp to WLC Pkwy PM 21.27	-	-	-	25.0	**50.0**	25.0	-
EB On-Ramp from WLC Pkwy PM 21.37	-	-	-	**100**	-	-	-

(1) Source: Caltrans District 8 TASAS Selective Accident Retrieval (TSAR) (January 2015 – December 2017)
(2) Expressed as a percentage of accidents per segment.
(3) Note: WB = Westbound; EB = Eastbound and Bold indicates the highest accident type per segment.

As shown in Table 17, the predominant mainline accident types were vehicle to vehicle Sideswipe (Eastbound: 20.3%, Westbound: 27.1%), Rear End (Eastbound: 25.0%, Westbound: 28.8%), and Hit Object (Eastbound: 42.2%, Westbound: 33.9%) accidents, with Hit Object having the highest percentage of collisions in both the westbound and eastbound mainline directions. The primary accident type for the Westbound On- and Off-Ramps was Hit Object (100%). The primary accident types for the Eastbound Off-Ramp to WLC Pkwy were Hit Object (50.0%), Broadside (25.0%), and Overturn (25.0%). The primary accident type for the Eastbound On-Ramp from WLC Pkwy was Broadside (100%). The Hit Object category is further categorized in Table 18.

TABLE 18
TSAR – Object Struck for Hit Object Category

Segment / Object Struck (2)	SR-60 EB Mainline PM 20.0/22.0	SR-60 WB Mainline PM 20.0/22.0	WB Off-Ramp to WLC Pkwy PM 21.46	WB On-Ramp from WLC Pkwy PM 21.37	EB Off-Ramp to WLC Pkwy PM 21.27	EB On-Ramp from WLC Pkwy PM 21.37
Bottom of Structure (%)	-	1.7	-	-	-	-
End of Guard Rail (%)	-	1.7	-	-	-	-
Light or Signal Pole (%)	-	-	-	-	-	-
Traffic Sign/Sign Post (%)	3.1	-	-	-	-	-
Guardrail (%)	-	5.1	-	**100**	25.0	-
Median Barrier (%)	21.9	11.9	-	-	-	-
Wall (Except Sound Wall) (%)	1.6	-	-	-	-	-
Dike or Curb (%)	3.1	1.7	-	-	25.0	-
Cut Slope or Embankment (%)	-	5.1	-	-	-	-
Over Embankment (%)	7.8	-	-	-	-	-
Fence (%)	7.8	1.7	-	-	-	-
Trees (%)	1.6	-	-	-		-
Other Object on Road (%)	-	-	-	-	-	-
Other Object off Road (%)	-	3.4	-	-	-	-
Overturned (%)	6.3	5.1	**100**	-	25.0	-
Unknown Object Struck (%)	1.6	-	-	-	-	-
No Object Involved (%)	-	-	-	-	-	-
Vehicle (%)	**46.9**	**61.0**	-	-	25.0	-
Does Not Apply (%)	4.7	20.3			-	-

(1) Source: Caltrans District 8 TASAS Selective Accident Retrieval (TSAR) (January 2015 – December 2017)
(2) Expressed as a percentage of accidents per segment.
(3) Note: WB = Westbound; EB = Eastbound
(4) Bold indicates the highest object type struck per segment.

As shown in Table 18, the highest percentage of mainline accidents were vehicle to vehicle in the Hit Object category in both the eastbound and westbound mainline directions (46.9% and 61.0%). The primary Hit Object for the WB Off-Ramp to WLC Pkwy was Overturned (100%). The primary Hit Object for the WB On-Ramp was Guardrail (100%). The primary Hit Object for the EB Off-Ramp were Guardrail (25.0%), Dike or Curb (25.0%, Overturned (25.0%), and vehicle to vehicle (25.0%). The EB On-Ramp did not include Hit Object data because the majority of the accidents (100%) were categorized as Broadside.

TABLE 19
Other Accident Factors

Segment / Other Factors[2]	SR-60 EB Mainline PM 20.0/22.0	SR-60 WB Mainline PM 20.0/22.0	WB Off-Ramp to WLC Pkwy PM 21.46	WB On-Ramp from WLC Pkwy PM 21.37	EB Off-Ramp to WLC Pkwy PM 21.27	EB On-Ramp from WLC Pkwy PM 21.37
Weather						
Clear (%)	**87.5**	**84.7**	**100**	**100**	**75**	**100**
Cloudy (%)	12.5	10.2	-	-	-	-
Raining (%)	-	5.1	-	-	25	-
Other (%)	-	-	-	-	-	-
Lighting						
Day Light (%)	**43.8**	**59.3**	**-**	**100**	**-**	**100**
Dusk/Dawn (%)	1.6	1.7	-	-	-	-
Dark-Street Light (%)	20.3	13.6	**100**	-	50	-
Dark-No Street Light (%)	34.4	25.4	-	-	50	-
Primary Collison Factor						
Influence Alcohol (%)	10.9	6.8	-	-	**75**	-
Follow Too Close (%)	-	-	-	-	-	-
Failure to Yield (%)	-	-	-	-	-	**100**
Improper Turn (%)	**42.2**	**44.1**	-	-	-	-
Speeding (%)	25.0	30.5	**100**	-	25	-
Other Violations (%)	15.6	18.6	-	**100**	-	-
Improper Driving (%)	-	-	-	-	-	-
Other Than Driver (%)	6.3	-	-	-	-	-

(1) Source: Caltrans District 8 TASAS Selective Accident Retrieval (TSAR) (January 2015 – December 2017)
(2) Expressed as a percentage of accidents per segment.
(3) Note: WB = Westbound; EB = Eastbound
(4) Bold indicates the highest value per category/segment.

Table 19 presents the Weather conditions, Lighting conditions and the Primary Collision Factors associated with each segment's incidents. As shown in Table 19, most mainline incidents were during Day Light hours (Eastbound: 43.8%, Westbound: 59.3%) and in Clear conditions (Eastbound: 87.5%, Westbound: 84.7%). The predominant mainline collision factors were Improper Turning (Eastbound: 42.2%, Westbound: 44.1%) and Speeding (Eastbound: 25.0%, Westbound: 30.5%). As shown in Table 19, most ramp incidents were under Clear conditions. 100% of accidents for the WB Off-ramp were under Dark-Street Light conditions. 100% of accidents for the WB On-Ramp and EB On-Ramp were under Day Light conditions. EB Off-Ramp accidents were split between Dark-Street Light (50.0%) and Dark-No Street Light (50.0%) conditions.

Proposed eastbound and westbound mainline auxiliary lanes between Redlands Blvd and Gilman Springs Rd will allow merging vehicles to slow down or accelerate on a dedicated lane. Vehicle to vehicle, Rear End and Sidewipe accident rates are expected to decrease with the addition of the mainline auxiliary lanes. Within the project limits of improvements, existing pavement striping will be re-striped to current Caltrans standards which is expected to decrease the accident rates for Sideswipes occurring on the mainline by improving mainline lane visibility. The project will address the non-standard WLC Pkwy overcrossing vertical clearance by demolishing, reconstructing and making the bridge clearance over SR-60 standard, which is expected to reduce future Hit Object accidents to the Bottom of Structure. During reconstruction of the bridge, the median guardrail will be removed and then replaced with median barrier designed to current Caltrans standards, which would likely reduce the severity of Median Barrier accidents on the mainline.

The proposed project will re-align and upgrade the existing WLC Pkwy interchange ramps from the current elongated non-standard ramp geometry to a more standard ramp configuration. This would improve driver visibility, increase acceleration / deceleration lengths and increase ramp radii. These improvements are not expected to increase accident frequency and severity and are expected to reduce the amount of Overturned and vehicle to vehicle Hit Object accidents on the ramps. Additionally, all guardrail and dike/curb along the on- and off-ramps will be upgraded to current Caltrans standards, which would likely reduce the severity of Guardrail and Dike or Curb Hit Object accidents currently experienced on the ramps. Roadside objects, when possible, will be moved to outside the clear recovery area, made breakaway, or shielded with standard guardrail, thereby it is expected that the accident frequency and severity of Hit Object accidents on the ramps will be reduced.

Based on the available accident history and proposed project improvements, it is expected that the number and severity of accidents will decrease after the project is constructed.

5. ALTERNATIVES

5.A Viable Alternatives

The SR-60/WLC Pkwy interchange project report includes two viable build alternatives for the PA/ED phase: Alternative 2, modified partial cloverleaf interchange and Alternative 6, modified partial cloverleaf interchange with roundabout intersections. All directional movements will be accommodated by each of the proposed alternatives. Alternative 1, (No Build) was also analyzed and was determined to not meet or satisfy the purpose and need of the project.

Locally Preferred Alternative

Alternative 6 was identified as the Locally Preferred Alternative (LPA) at the May 21, 2019 City Council Meeting.

Proposed Engineering Features Common of the Build Alternatives

Approximately 50,000 cubic yards of import material will be imported to the project from the City Stockpile borrow site. The stockpile site is located at the northwest corner of the intersection of Alessandro Blvd/Nason St, approximately 2.3 miles from the western boundary of the project site. This project will exhaust the material available at the City Stockpile and grade the area after removal. The City Stockpile will be environmentally cleared with this project. Additional fill material beyond the 50,000 cubic yards will be necessary for the project and will come from other site(s) to be determined during future phases of the project. All local and imported borrow placed within State right-of-way must conform to the latest Caltrans standards and Section 19-7 of the Standard Specifications.

Both viable alternatives may be adapted to incorporate different bridge aesthetics or alternative bridge types in the future. Additional coordination during PS&E would be needed to determine impacts for alternative bridge types or modified bridge aesthetics.

With the proposed improvements, both build alternatives are predicted to operate at acceptable LOS of D or better at the study intersections, and at the ramp merge/diverge locations in 2025 and 2045. Mainline operations are predicted to operate at acceptable LOS C or better in 2025 for the study segments in both directions for both build alternatives. Mainline operations are predicted to operate at LOS D or better in 2045 for the study segments in both directions for both build alternatives with the exception of SR-60 between WLC Pkwy and Redlands Blvd (WB only, AM only), Redlands Blvd and Moreno Beach Dr (WB only, AM only), and WLC Pkwy and Gilman Springs Rd (EB only, PM only) which are predicted to operate at LOS E. As compared to the No Build alternative, all mainline segments predicted to operate at LOS E with the build alternatives were predicted to operate at LOS F or LOS E in the No Build scenario, thereby showing improvement. Refer to *Section 4. C Traffic* for additional detail and assessment.

Interchange On- and Off-Ramp Improvements

The proposed interchange is located approximately 1 mile east of the SR-60/Redlands Blvd interchange and 0.7 miles west of the SR-60/Gilman Springs Rd interchange. See *Attachment 1 – Regional Vicinity Map* for the project vicinity. The new on- and off- ramps and the new bridge overcrossing would provide a direct and continuous alignment for WLC Pkwy traffic crossing SR-60. In accordance with the Caltrans District 8 Ramp Meter Design Manual, all interchange on-ramps would be two-lane and/or three-lane metered ramps, with sufficient right-of-way to accommodate vehicle storage, ramp meter equipment, and California Highway Patrol enforcement areas. Additionally, all on-ramps would not preclude future high-occupancy vehicle (HOV) preferential lanes.

An existing Caltrans paved material transfer area located in the southwest quadrant of the existing SR-60/WLC Pkwy interchange, within the existing eastbound loop on-ramp, is

currently used as a temporary site for the transfer of street sweeping materials. The existing paved material transfer area will be relocated to the SR-60/Gilman Springs Rd interchange as part of the proposed project.

Roadway Improvements

Roadway improvements common to both alternatives include the following:

- Widening WLC Pkwy through the proposed project limits from one lane each direction to two 12-foot lanes each direction with a raised median south of Eucalyptus Ave,
- A 0- to 16-foot parkway on both sides of WLC Pkwy, a 6-foot sidewalk on both sides of WLC Pkwy south of Eucalyptus Ave, an 8-foot sidewalk along the northbound side of WLC Pkwy north of Eucalyptus Ave, and an 11-foot wide multi-use trail along the northbound side of WLC Pkwy north of Eucalyptus Ave,
- Improvements to Eucalyptus Ave to provide a detour route between Redlands Blvd and WLC Pkwy. Improvements anticipated for detour traffic include widening by a minimum of 12-feet to accommodate two directions of travel on Eucalyptus Ave (if not completed prior by a separate developer project); and
- Addition of one 12-foot auxiliary lane on SR-60 and in each direction between the Redlands Blvd and Gilman Springs Rd interchanges.

No additional future widening is planned on WLC Pkwy within the interchange limits for either build alternative. The overcrossing horizontal alignment is unchanged from the existing condition and has a bearing of North 0° 27' 9" East. The vertical alignment through the interchange has a design speed of 45 miles per hour (mph). The vertical alignment or profile grade has been raised through the overcrossing to provide greater overcrossing clearance. The minimum vertical clearance differs between alternatives and is further discussed in the alternative specific discussion below. The overcrossing is within a 520 ft vertical curve with an algebraic grade difference of 5.29% (4.00% to -1.29%) for both alternatives. Additional horizontal and vertical alignment data is provided with the attached plan and profile sheets, see *Attachment 3 – Key Map, Typical Sections, Plans, Profiles.*

The structural sections proposed for each alternative are identified in *Section 5A. Viable Alternatives – Pavement Life Cycle Cost Analysis* and *Attachment 09 – Life Cycle Cost Analysis for Pavement*. Existing drainage structures will be maintained and extended within the project limits. The existing drainage structures are perpendicular to SR-60, located under the travel lanes. There are four (4) existing storm drain culvert structures located between Redlands Blvd and WLC Pkwy.

Proposed Engineering Features Specific to Alternative 2 (Modified Partial Cloverleaf)

Alternative 2 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration, and is referenced in *Attachment 3 – Key Map, Typical Sections, Plans, Profiles*. Improvements under Alternative 2 include the construction of a new westbound direct

on-ramp and a new westbound loop off-ramp in the northwest quadrant of the interchange, in a cloverleaf configuration. A new eastbound direct off-ramp, a new eastbound loop on-ramp, and a new eastbound direct on-ramp would be constructed in the southwest and southeast quadrants, in a partial cloverleaf configuration. The westbound on-ramp is widened from one to three 12-foot lanes and all other proposed ramps are widened from one to two 12-foot lanes. Alternative 2 removes and replaces the existing two through lane (one lane in each direction) WLC Pkwy overcrossing with a new four through lane (two through lanes in each direction) overcrossing that is approximately 137 ft wide and 298 ft long. Included within the proposed overcrossing width are two 12-foot left-turn lanes in the northbound direction and one 17-foot right-turn lane in the southbound direction. The proposed minimum bridge vertical clearance over SR-60 is 18'-10".

Additional improvements as part of Alternative 2 include the installation of signals at both the proposed eastbound and westbound ramp intersections, as well as at the intersection of Eucalyptus Ave/WLC Pkwy. Bike lanes are provided on both sides of WLC Pkwy throughout the project limits. Through the interchange, bike lanes are 8-feet wide with a 4-foot buffer along WLC Pkwy and taper to 5-feet curb adjacent outside the interchange limits. At the eastbound and westbound ramp intersections bike lanes are 4-feet wide.

A total of 99.5 acres of right-of-way (Caltrans and City), including slope easements and temporary construction easements, is anticipated to be required for the project. Proposed right-of-way on WLC Pkwy ranges between approximately 120 ft and 160 ft. Proposed right-of-way on SR-60 ranges between approximately 200 ft and 320 ft. Caltrans access control is proposed on WLC Pkwy between Eucalyptus Ave and the paper street identified as Hemlock Ave. Proposed Caltrans access control does not include the intersection of WLC Pkwy and Eucalyptus Ave or the future intersection of WLC Pkwy and Hemlock Ave. Reference *Attachment 6 – Right of Way Data Sheet* for more information. Alternative 2 costs are detailed in *Attachment 5 – Preliminary Project Cost Estimate* and summarized under *Cost Estimates* of this section.

Design Variation 2a – (Alternative 2 with Design Variation)

Design Variation 2a will have the same features as Alternative 2 with the exception of the alignment of Eucalyptus Ave on the west side of WLC Pkwy and the location of the Eucalyptus Ave/WLC Pkwy intersection. The design variation consists of moving the current Eucalyptus Ave/WLC Pkwy intersection approximately 900 ft south from its current location, in order to align the roadway with the existing Eucalyptus Ave on the east side of WLC Pkwy. The shift would result in a partial realignment of Eucalyptus Ave from approximately 2,600 ft west of WLC Pkwy to connect with the west side of WLC Pkwy. The benefits for the design variation include: reduction in vertical distance between the proposed roadway and the existing roadway, potential reduction in the amount of earthwork, potential reduction in the complexity of the utility relocations, provide increased intersection spacing, and reduce approach speeds on Eucalyptus Ave. The design

variation will be moved forward with the build alternatives to PS&E (as applicable) and studied until it is removed from consideration.

Proposed Engineering Features Specific to Alternative 6 (Modified Partial Cloverleaf with Roundabout Intersections)

Alternative 6 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration, and is referenced in *Attachment 3 – Key Map, Typical Sections, Plans, Profiles*. Improvements under Alternative 6 would include the construction of a new westbound direct on-ramp and a new westbound loop off-ramp in the northwest quadrant, in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial cloverleaf configuration. The westbound on-ramp is widened from one to three 12-foot lanes and all other proposed ramps are widened from one to two 12-foot lanes.

Alternative 6 removes and replaces the existing two through lane (one lane in each direction) WLC Pkwy overcrossing with a new four through lane (two through lanes in each direction) overcrossing that is approximately 90 ft wide and 245 ft long. The proposed minimum bridge vertical clearance over SR-60 is 20'-3½". Roundabouts are proposed at the eastbound and westbound ramp intersections, as well as at Eucalyptus Ave/WLC Pkwy. On WLC Pkwy north of the Eucalyptus Ave intersection and on Eucalyptus Ave, bike lanes are provided on both sides within the width of the proposed shoulders. Through the roundabouts, bicyclists have the option to either merge with vehicular traffic or cross the roundabout with pedestrian traffic. Lighting and signage will be determined in PS&E to provide pedestrian and trail user safety.

A total of 100 acres of right-of-way (Caltrans and City), including slope easements and temporary construction easements, is anticipated to be required for Alternative 6. Proposed right-of-way on WLC Pkwy ranges between approximately 100 ft and 150 ft. Proposed right-of-way on SR-60 ranges between approximately 200 ft and 320 ft. Caltrans access control is proposed on WLC Pkwy between Eucalyptus Ave and the paper street identified as Hemlock Ave. Proposed Caltrans access control includes the approach and departure legs for Eucalyptus Ave and WLC Pkwy roundabout north of Eucalyptus Ave and does not include the future intersection of WLC Pkwy and Hemlock Ave. Reference *Attachment 6 – Right of Way Data Sheet* for more information. Alternative 6 costs are detailed in *Attachment 5 – Preliminary Project Cost Estimate* and summarized under *Cost Estimates* of this section.

Design Variation 6a – (Alternative 6 with Design Variation)

Design Variation 6a will have the same features as Alternative 6 with the exception of the alignment of Eucalyptus Ave on the west side of WLC Pkwy and the location of the Eucalyptus Ave/WLC Pkwy intersection. The design variation consists of moving the current Eucalyptus Ave/WLC Pkwy intersection approximately 900 ft south from its current location, in order to align the roadway with the existing Eucalyptus Ave on the east side of WLC Pkwy. The shift would result in partial realignment of Eucalyptus Ave from

approximately 2600 ft west of WLC Pkwy to connect to the west side of WLC Pkwy. Construction of the roundabout at WLC Pkwy and Eucalyptus Ave east would result in one residential displacement in the southeast quadrant of WLC Pkwy and Eucalyptus Ave east. The benefits for the design variation include: reduction in vertical distance between the proposed roadway and the existing roadway, potential reduction in the amount of earthwork, potential reduction in the complexity of the utility relocations, provide increased intersection spacing, and reduce approach speeds on Eucalyptus Ave. The design variation will be moved forward with the build alternatives to PS&E (as applicable) and studied until it is removed from consideration.

Boldface and Underlined Design Features

The *Design Standards Risk Assessment Table* (Table 20) below lists all known nonstandard project design features. Alternatives 2 and 6, include design features that do not meet Caltrans Boldfaced and Underlined design standards. Table 20 discusses the issues related to each nonstandard feature and provides justification for their exception along with a *Probability of Design Exception Approval* rating. A design standards risk assessment focus meeting was held on January 13, 2016, to determine the level of risk associated with each nonstandard feature and their "probability of approval" rating. Anthony Ng, the District Design Liaison, and Luis Betancourt, the Project Delivery Coordinator, were present at the above-mentioned meeting.

TABLE 20
Design Standards Risk Assessment Table

Design Standards Risk Assessment			
Alternative / Design Variation	**Design Standard from Highway Design Manual Tables 82.1A & 82.1B**	**Probability of Design Exception Approval** (None, Low, Medium, High,)	**Justification for Probability Rating**
2, 6, 2a & 6a	202.5 (1) Superelevation Transitions	High	Superelevations will be designed, at a minimum, to comfort speed and to transition at a minimum of 6% per 100' and will be finalized for the preferred alternative.
2, 6, 2a & 6a	202.5 (2) Superelevation Runoff	High	Superelevations will be designed, at a minimum, to comfort speed and to transition at a minimum of 6% per 100' and will be finalized for the preferred alternative.
2, 6, 2a & 6a	309.1 (2)(a) – Clear Recovery Zone (Necessary Highway Features)	High	Where proposed signal and lighting poles cannot be moved to outside the clear recovery area, made breakaway or yielding and cannot be set, at a minimum, 1 foot 6 inches beyond the face of curb, they shall be shielded. Pole location and type will be determined in the final design phase.
2, 6, 2a & 6a	**501.3 – Minimum Interchange Spacing**	High	This is an existing condition and is not changing with the proposed design. The existing condition cannot be remedied without complete reconstruction of multiple interchanges.
2, 6, 2a & 6a	**504.7 – Minimum Weave Length**	Medium	This is an existing condition that cannot be remedied without a complete reconstruction of multiple interchanges. Weave movements are improved by adding auxiliary lanes.

Interim Features

No interim features are proposed for Alternative 2, Alternative 6, or the design variations.

High Occupancy Vehicle (Bus and Carpool) Lanes

Per the TCR, the Concept Facility does not propose HOV lanes for SR-60 within the project limits for design year 2035. Per the 2017 Caltrans District System Management Plan (DSMP), the Concept Facility does not propose any new HOV lanes for SR-60 within the project limits. According to the 2016 RTP, no HOV facilities are planned within the project limits within the design year 2035. According to the TCR, HOV lanes are proposed west of Redlands Blvd therefore, the SR-60/WLC Pkwy interchange project does not preclude the addition of HOV preferential lanes on the on-ramps.

Ramp Metering

In accordance with the Caltrans District 8 Ramp Meter Design Manual, all interchange on-ramps would be two-lane and/or three-lane metered ramps, with sufficient right-of-way to accommodate vehicle storage, and ramp meter equipment.

California Highway Patrol Enforcement Areas
California Highway Patrol (CHP) enforcement areas will be included on all entrance ramps to the SR-60 Freeway (*Attachment 3 – Key Map, Typical Sections, Plans, Profiles*).

Park-and-Ride Facilities
No Park and Ride facilities are existing or planned as part of this project because there are no HOV facilities planned on SR-60 with the proposed project.

Utility and Other Owner Involvement
The proposed project would require relocation or protection of several utility facilities, see *Attachment 12 – Utility Exhibits*. To prevent impacts to utility facilities and services during construction, the following utilities have been contacted regarding the proposed project: Eastern Municipal Water District (EMWD), Metropolitan Water District of Southern California (MWD), Western Municipal Water District (WMWD), Riverside County Flood Control and Water Conservation District (RCFCWCD), Riverside County Waste Management, Moreno Valley Electric Utility, Time Warner Cable, Charter Communications, Southern California Edison (SCE), Southern California Gas Company (SCG), Questar Southern Trails Pipeline Company, Sunesys, Verizon, and AT&T.

The existing SCE overhead 115-kilovolt (kV) transmission line and 12 kV distribution line that are currently adjacent to the west side of Theodore St/WLC Pkwy would be relocated to the east side of WLC Pkwy south of the westbound ramps intersection. North of the westbound ramps intersection, the SCE utility lines will cross Theodore St/WLC Pkwy and be relocated to the parkway on the west side of Theodore St/WLC Pkwy.

In order to accommodate future utilities, the proposed overcrossing would incorporate conduits for Moreno Valley Electric Utility, SCE and other utility companies as requested.

The Right-of-Way Data Sheet and Utility Information Sheet found in *Attachment 6 – Right of Way Data Sheet* lists the utility companies affected by the project and which ones will be protected in place. Prior rights will be investigated in final design, therefore, it is preliminarily estimated that SCE and Verizon will be responsible for 50% of the relocation costs. Time Warner Cable, Moreno Valley Electric Utility and EMWD are estimated to be responsible for 100% of the relocation costs.

Railroad Involvement
No railroad involvement is planned as part of this project because there are no railroad facilities within the project limits.

Highway Planting

Existing highway planting in the vicinity of the proposed interchange improvements consists of trees and low growing shrubs. The Natural Environment Study (NES) further describes the existing interchange vegetation communities. Proposed landscaping palettes and the Highway Planting Design will be implemented in consultation with and approved by the City and the Caltrans District Landscape Architect in the final design phase. Landscape improvements within Caltrans' right-of-way will follow a replacement planting strategy for all trees. Plant palettes will substantially conform with the guidance and plant list, listed in the *Route 60 Corridor Master Plan for Aesthetics and Landscaping*, dated August 2010, and any updates. Preliminary median, parkway and roundabout (as applicable) landscaping options are identified in the Visual Impact Assessment (VIA) report. Highway planting construction contracting details will be determined in the final design phase.

Erosion Control

Erosion control will be applied to the graded slopes and disturbed areas affected by the project. The maximum side slope will be 4:1 within Caltrans right-of-way, except where steeper conditions are needed to join existing slopes. An Erosion Control Plan will be required to identify specific measures for control of siltation, sedimentation, and other soil materials. The plan will be implemented during the project construction period. A Storm Water Pollution Prevention Plan (SWPPP) will be developed and implemented by the contractor during the construction phase. Permanent erosion control will be installed per the construction plans, Caltrans' Standard Plans and Standard Special Provisions (SSPs) and will include hard surfaces at gore areas, swales and dissipation devices, gravel mulch, and preservation of natural vegetation. The City and Caltrans District Landscape Architect would approve the Permanent Erosion Control during PS&E.

Infiltration basins and bioswales will be incorporated into the project to treat runoff from the highway operation, which includes impervious area runoff and slope runoff. Infiltration basins and bioswales will be located within the graded area of the interchange. Pipes will be required to transport some roadway runoff to the basins. At the beginning of the PS&E phase, an infiltration percolation test at each of the proposed infiltration basin sites will be performed to determine and confirm the site is appropriate for infiltration devices.

Noise Barriers

A Noise Study Report (NSR) was prepared for this project and the report was concurred by Caltrans' Environmental Branch on May 10, 2019. A total of 38 representative noise receptors were modeled and evaluated for potential traffic noise impacts in the report. Traffic noise impacts result from one or more of the following occurrences: (1) an increase of 12 A-weighted decibels (dBA) or more over their corresponding existing noise level, or (2) predicted noise levels approaching or exceeding the Noise Abatement Criteria (NAC). When traffic noise impacts occur, noise abatement measures must be considered. Implementation of the proposed

project was found to result in potential short-term noise impacts during construction and long-term operational noise impacts from use of the completed project.

The following receptor locations were found to be exposed to noise levels that approach or exceed the NAC and/or a substantial noise increase under Alternative 2, 2a, and 6:

- **Receptor R-10:** This receptor location represents an existing residence along the east side of WLC Pkwy north of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 1) was modeled at the top of the slope on private property. Noise barriers were not evaluated within the State right-of-way or edge of shoulder because the receptor is approximately 30 ft higher in elevation than the area within the State right-of-way and the barrier would not be feasible at that location.
- **Receptor R-25:** This receptor location represents an existing residence along the east side of WLC Pkwy south of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 2) was modeled along the City right-of-way and private property line.
- **Receptor R-28:** This receptor location represents an existing residence along the east side of WLC Pkwy south of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 3) was modeled along the City right-of-way and private property line.

The following receptor locations were found to be exposed to noise levels that approach or exceed the NAC and/or a substantial noise increase under Alternative 6a:

- **Receptor R-10:** As described above.
- **Receptor R-28:** As described above.

Noise barriers were the only form of noise abatement considered for this project. Each noise barrier considered was evaluated for feasibility based on achievable noise reduction. Three preliminary noise barriers were evaluated under Alternative 2, 2a, and 6 – Noise Barriers No. 1, 2, and 3. Two noise barriers, NB No. 1 and 3, were evaluated under Alternative 6a.

- NB No. 1 was capable of reducing noise levels by 5dBA or more for all conditions.
- NB No. 2 was capable of reducing noise levels by 5dBA or more for Alternative 2, 2a, and 6.
- NB No. 3 was capable of reducing noise levels by 5dBA or more for all conditions.

For each noise barrier found to be acoustically feasible, reasonable cost allowances were calculated by multiplying the number of benefited receptors by $107,000. For any noise barrier to be considered reasonable from a cost perspective, the estimated cost of the noise barrier should be equal to or less than the total cost allowance calculated for the barrier. Construction cost estimates for noise barriers were not provided in the NSR, but are presented in the Noise

Abatement Decision Report (NADR). See *Section 6.H Noise Abatement Decision Report* for additional NADR discussion.

The design of NB No. 1, 2, and 3 was preliminary and conducted at a level appropriate for environmental review, but not for final design of the proposed project. If pertinent parameters change substantially during the final project design, preliminary noise barrier may be modified or eliminated from the final project. A final decision on the construction of the noise abatement will be made upon completion of the public involvement process when the Noise Barrier Survey is distributed.

Compliance with the construction hours specified by the City's Municipal Code and Caltrans Standard Specifications in Section 14-8.02 will be required to minimize construction noise impacts on sensitive land uses adjacent to the project site. The noise level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 dBA at 50 ft.

Nonmotorized and Pedestrian Features

The proposed project includes construction of several nonvehicular and pedestrian access improvements. These include an 8 ft wide sidewalk on the east side of WLC Pkwy along the limits of the WLC Pkwy improvements, a 6 ft wide sidewalk on the west side of WLC Pkwy between the southern project limits and Eucalyptus Ave and potentially a 6 ft wide sidewalk on both sides of Eucalyptus Ave from WLC Pkwy to Redlands Blvd. The proposed sidewalk on Eucalyptus Ave is dependent upon nearby development, which may construct the pedestrian facility prior to the SR-60/WLC Pkwy interchange project. Additionally, an 11 ft wide multi-use trail would be constructed on the east side of WLC Pkwy between Eucalyptus Ave and Ironwood Ave. The multi-use trail will be used by equestrian, pedestrian and bike users. Bike lanes are provided on WLC Pkwy north of the Eucalyptus Ave intersection and on Eucalyptus Ave within the width of the proposed shoulders. For Alternative 6, bicyclists would have the option to merge with vehicular traffic to navigate through the roundabout or exit the travel lane prior to each roundabout and cross the roundabout with pedestrian traffic.

The proposed project would not preclude a future 11 ft wide multi-use trail on the north side of Eucalyptus Ave between Redlands Blvd and WLC Pkwy. A grade-separated trail and pedestrian crossing over the eastbound SR-60 direct on-ramp would potentially be provided in the future based on available funding.

Needed Roadway Rehabilitation and Upgrading

Based on a recent cursory site visit, the existing pavement appears to be generally in a good condition with noted low-severity thermal/reflective cracking in most areas. Both mainline pavement and WLC Parkway on- and off-ramps appear to have received recent HMA overlays. Rehabilitation is proposed on the adjacent mainline lane within the project limits. D8 Materials Engineering Unit recommends to cold plain 0.20' and overlay with 0.20' RHMA-G. A future project to widen to the inside will rehabilitate the other existing mainline lane.

Needed Structure Rehabilitation and Upgrading

Bridge rehabilitation was eliminated from consideration for the WLC Pkwy SR-60 overcrossing due to the existing bridge's nonstandard vertical clearance. The existing bridge vertical clearance is 15'-2" in the westbound SR-60 direction and 15'-5" in eastbound SR-60 direction. In January 2015, the existing bridge was struck by an excavator being hauled on a flatbed truck. The damage to the bridge resulted in full and partial closure of WLC Pkwy until the repairs were completed in October 2015. A bridge replacement for the WLC Pkwy overcrossing is proposed to correct the nonstandard vertical deficiencies.

No other structures would require additional rehabilitation and or upgrading since there are no additional structures within the project limits.

Cost Estimates

The cost estimates for the viable build alternatives and design variations are summarized in Table 21 and detailed in *Attachment 5 – Preliminary Project Cost Estimate*. Capital outlay support costs are estimated at $11,200,000 and are not included in the costs outlined in Table 21.

TABLE 21
Alternative Cost Estimates (Current Year)

Alternative	Roadway	Structures	Right-of-Way	Total
Alternative 2	$54,640,200	$15,048,000	$25,444,305	$95,133,000
Design Variation 2a	$55,602,300	$15,048,000	$32,405,121	$103,056,000
Alternative 6	$53,947,600	$8,184,000	$25,585,980	$87,718,000
Design Variation 6a	$55,787,300	$8,184,000	$31,369,379	$95,341,000

Right-of-Way Data

Right-of-way costs and impacts have been reported on the right-of-way data sheets (Attachment 6 – Right of Way Data Sheet), costs are summarized in Table 21.

Effects of Special-Funded Proposal on Operation

The interchange will be funded as the project progresses utilizing a variety of funding sources that will be determined. The PA/ED phase is funded by local and federal funds.

The improvements proposed would have a benefit to the intersection LOS for all study intersections in 2045. With the proposed SR-60/WLC Pkwy interchange, merge/diverge operations would be improved on SR-60 at Redlands Blvd, and mainline operations on SR-60 between Redlands Blvd and Gilman Springs Rd. The project includes ramp metering for all on-ramps for management of traffic flow and improved operations along the SR-60.

5.B Rejected Build Alternatives

Alternative 3 (Spread Diamond)
Alternative 3 would reconstruct and improve the existing interchange in a spread diamond configuration. Improvements would include construction of new entrance and exit ramps in all four quadrants of the interchange. An auxiliary lane would be added in both directions between the Redlands Blvd and Gilman Springs Rd interchanges. The existing WLC Pkwy overcrossing would be removed and replaced by a new bridge.

Alternative 3 would impact areas in all four interchange quadrants, including an existing residential development located in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Rd and WLC Pkwy was not achieved with the Alternative 3 ramp configuration. Additionally, Alternative 3 does not accommodate the large turning movement volume turning from northbound WLC Pkwy to the westbound on-ramp. Ultimately, this alternative was eliminated from further consideration due to an insufficient westbound weaving length between WLC Pkwy and Gilman Springs Rd, and the northbound-to-westbound turning movement.

Alternative 4 (Modified Spread Diamond)
Alternative 4 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified spread diamond configuration. Improvements under Alternative 4 would include the construction of a new westbound direct on-ramp in the northwest quadrant of the interchange, as well as a new westbound direct off-ramp and a new loop on-ramp in the northeast quadrant, in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial spread diamond configuration. An auxiliary lane would be added in both directions between the Redlands Blvd and Gilman Springs Rd interchanges. The existing WLC Pkwy overcrossing would be removed and replaced by a new bridge.

Alternative 4 would impact areas in all four interchange quadrants, including an existing residential development located in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Rd and WLC Pkwy was not achieved with the Alternative 4 ramp configuration. Ultimately, this alternative was eliminated from further consideration due to an insufficient westbound weaving length between WLC Pkwy and Gilman Springs Rd.

Alternative 5 (Modified Spread Diamond with Collector/Distributor Road)
Alternative 5 would reconstruct and improve the existing interchange in a modified spread diamond with a collector/distributor road configuration. Improvements would include construction of new entrance and exit ramps in all four quadrants of the interchange.

Improvements under Alternative 5 would construct a new westbound direct on-ramp in the northwest quadrant of the interchange, as well as a new westbound direct off-ramp and a new loop on-ramp in the northeast quadrant, in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial spread diamond configuration. The Gilman Springs Rd entrance and exit ramps would require partial reconstruction. An eastbound collector/distributor road along the south side of SR-60 would feed into a southbound road connecting to Gilman Springs Rd. The eastbound collector/distributor road would merge with eastbound SR-60 west of the Gilman Springs Rd off-ramp. A westbound collector/distributor road along the north side of SR-60 would feed from the southbound Gilman Springs Rd off-ramp and collect vehicles from the westbound Gilman Springs Rd on-ramp. The westbound collector/distributor road would distribute traffic to the proposed westbound WLC Pkwy off-ramp and merge with westbound SR-60 west of the westbound WLC Pkwy loop on-ramp. An auxiliary lane would be added in both directions between the Redlands Blvd and WLC Pkwy interchanges. The existing WLC Pkwy overcrossing would be removed and replaced with a new overcrossing structure.

Alternative 5 would impact areas in all four interchange quadrants, including an existing residential development located in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Rd and WLC Pkwy was not achieved with the Alternative 5 ramp configuration. Additionally, the merge/diverge LOS did not meet Caltrans performance criteria. Ultimately, this alternative was eliminated from further consideration due to an insufficient westbound weaving length between WLC Pkwy and Gilman Springs Rd and a merge/diverge LOS E.

Alternative 7 (Single-Point Urban Interchange)

Alternative 7 would reconstruct and improve the existing interchange in a single-point urban interchange configuration. Improvements would include construction of new entrance and exit ramps in all four quadrants of the interchange. All through traffic accessing these on- and off-ramps would be directed to a single intersection located at the midpoint of the interchange. An auxiliary lane would be added in both directions between the Redlands Blvd and Gilman Springs Rd interchanges. The existing WLC Pkwy overcrossing would be removed and replaced by a new bridge.

Alternative 7 would impact areas in all four interchange quadrants, including an existing residential development located in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Rd and WLC Pkwy was not achieved with the Alternative 7 ramp configuration. Additionally, intersection LOS did not meet Caltrans performance criteria. Ultimately, this alternative was eliminated from further consideration due to an insufficient westbound weaving length between WLC Pkwy and Gilman Springs Rd and an intersection LOS E.

6. CONSIDERATIONS REQUIRING DISCUSSION

6.A Hazardous Waste

The Initial Site Assessment (ISA) prepared for the proposed project, approved on March 4, 2019, revealed the following conditions in connection with the project site:

- Pesticides and Herbicides: Based on the historical use of some potential right-of-way properties for agricultural purposes, residual organochlorine pesticides and arsenical herbicides may exist in the subsurface soil. A preliminary site investigation was conducted to gather information and concentrations of potential pesticides and herbicides within the project limits. The investigation concluded that the herbicide concentrations and pesticide concentrations were below the Department of Toxic Substances Control (DTSC) limits.
- Aerially Deposited Lead (ADL): Caltrans approved the SR-60/WLC Pkwy ADL Survey Memorandum on 12/21/2018. Based on the ADL Survey data and statistical analysis, tested soils do not represent significant environmental or health hazard with lead concentrations below the California Human Health Screening Level threshold limit, and according to the DTSC draft soil management agreement issued to the Department, does not meet the definition of ADL-contaminated soil, and can be reused on site as an unregulated soil.
- Unverified Soil Source: A soil stockpile is located in the southeast quadrant of the SR-60/WLC Pkwy intersection and is a partial right-of-way acquisition and slope easement parcel. The soil in this area was unverified and may contain non-suitable soil from previous construction of the MWD inland feed pipeline. As part of the preliminary site investigation, soil borings were taken in this area and the investigation concluded that the soil was non-hazardous.

An Asbestos and Lead Based Paint (LBP) survey and memorandum (approved on January 30, 2019) found:

- No asbestos containing materials on the WLC Pkwy overcrossing in excess of compliance levels and should not be an issue if the structure is demolished or renovated. If suspect materials are encountered during construction, the new material(s) must be properly sampled for the content of asbestos or assumed to be asbestos containing prior to any activity which may disturb the subject material.

  No surface coatings which had lead concentrations defining them as LBPs, in accordance with 17 California Code of Regulations (CCR) 35001 et. seq., and 8 CCR 1532.1. No building components and respective surface coatings had lead concentrations, in excess of the level for compliance, as defined in 8 CCR 1532.1. Yellow safety paint utilized for the center stripe on the bridge was found to contain

chromium and disturbed yellow centerline paint should be removed and disposed of in accordance with the CCR, and the project special provisions. All traffic striping disturbance waste should be disposed of at an appropriate, permitted disposal facility by a properly trained and equipped employee.

All impacted existing electrical equipment and Treated Wood Waste from MBGR or sign post will be removed and disposed of by the contractor in accordance with the latest Caltrans Standard Specifications and CCR.

Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be handled in accordance with standard procedures. There are standard regulations and California Department of Transportation (Caltrans) policies (avoidance and minimization measures) that must be followed with respect to the use, storage, handling, disposal, and transport of potentially hazardous materials during construction of the project to protect human health and the environment.

The contractor should conduct work in compliance with Caltrans Unknown Hazards Procedures for Construction. If suspect contamination is discovered during site disturbance/construction activities, work should cease near the find and the contractor should retain a qualified Phase II/Site Characterization Specialist to sample/test the suspect materials prior to removal from the site and subsequent disposal. The Specialist should document the results and recommend further action if necessary, including contacting appropriate regulatory agencies.

6.B Value Analysis

A Value Analysis (VA) study is required for all projects on the NHS utilizing federal funds with a total project cost of $25,000,000 or more. As a result, a VA study will be conducted in the beginning of the PS&E phase. The PDT agreed upon this approach at a PDT meeting held on June 4, 2015. A detailed alternative screening matrix was prepared by the PDT as part of the alternative development process early in the PA/ED phase, therefore the VA study will focus on construction cost saving methods during the PS&E phase such as skewing the bridge to facilitate stage construction.

6.C Resource Conservation

The purpose of the SR-60/WLC Pkwy interchange project is to provide standard bridge vertical clearance, provide multi-modal transportation, and alleviate existing and future traffic congestion at the interchange. Based on the Traffic Study Report (January 2019), the proposed project would improve traffic flow without increasing the traffic volumes along WLC Pkwy or SR-60, thus the No Build and both Build Alternative vehicle miles traveled (VMT) amounts are the same within each scenario analyzed. The VMT increases from 2018 to 2025 due to the increased regional vehicle traffic from all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2025. The VMT increases 2018 to 2045 due

to the increased regional vehicle traffic from all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2045. The Build Alternatives and design variations would reduce Green House Gas (GHG) emissions in both the opening and horizon years compared to the corresponding No Build Alternative. Alternative 6 would further reduce emissions compared to Alternative 2 with the implementation of roundabouts.

As discussed above, while the project would not reduce VMT, because of the congestion reduction and improved vehicle efficiencies, the energy impacts of the project would be negligible at the Riverside County regional and, by extension, statewide level. The project would not conflict with California energy conservation plans because California energy conservation planning actions are conducted at a regional level, and the total project impact to regional energy supplies would be minor.

The proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy.

6.D Right-of-Way Issues

Right-of-Way Required

Alternatives 2 and 6 and Design Variation 2a would each require a total of six full acquisitions: one full acquisition in the northwest quadrant and five full acquisitions in the southwest quadrant. Design Variation 6a will require the same amount of acquisitions with an additional full acquisition in the southeast quadrant of the interchange. There would be partial right-of-way acquisitions within all four quadrants of the interchange. The full acquisition for Design Variation 6a in the southeast quadrant of the interchange would require one residential displacement. Reference *Attachment 6 – Right of Way Data Sheet* for more information.

Relocation Impact Studies

A Draft Relocation Impact Memorandum (DRIM) was approved by Caltrans on January 3, 2019. The DRIM noted that there will be sufficient vacant residential replacement properties available that are equal to or better than the displaced residential property. Once the preferred build alternative is identified, a Final Relocation Impact Memorandum (FRIM) will be prepared during the PS&E phase that will identify in more detail the relocation impact and the appropriate replacement resources. The Relocation Assistance Program is deemed adequate to provide for necessary relocation resources and assistance.

Airspace Lease Areas

The proposed project is not in an area of high land values having potential for future airspace leases.

6.E Environmental Compliance

Caltrans will be the Lead Agency for CEQA, the City is the Responsible Agency under CEQA, and the FHWA is the federal Lead Agency for NEPA. The environmental review, consultation, and any other action required in accordance with the applicable federal laws for this project will be carried out by Caltrans under its assumption of responsibility pursuant to 23 USC 327. Therefore, preparation of the NEPA compliance documents, including the technical studies and the environmental document, will have oversight by Caltrans District 8. The EIR/EA is the appropriate document for the proposal (*Attachment 11 – Cover Page, Signed Title Sheet from the Draft EIR/EA*).

Wetlands and Flood Plains

Per the Jurisdictional Determination, approved by Caltrans on December 16, 2019 as part of the NES, there were no areas in the biological study area (BSA) identified as USACE jurisdictional wetland waters. The total potential CDFW jurisdiction with the BSA is 2.09 acres., and the total area of potential RWQCB jurisdiction is 0.56 acres. A SWPPP will be prepared and will specify the project Best Management Practices (BMPs) to be implemented.

An Awareness Floodplain is mapped within the project area. The majority of the Awareness Floodplain falls within the City and a small portion, the northeast quadrant of the interchange, is in Unincorporated Riverside County. The local flood control agency, Riverside County Flood Control and Water Conservation District (RCFC&WCD), has adopted the Awareness Floodplain for Unincorporated Riverside County areas where RCFC&WCD acts as the Floodplain Manager. As the Floodplain Manager for the unincorporated areas, it is RCFC&WCD policy to adopt and regulate Awareness Floodplains in the same manner as a Federal Agency Management Agency (FEMA) Flood Hazard Zone. Within the City, the City acts as the Floodplain Manger however, and has not adopted the Awareness Floodplain as a Flood Hazard Zone. Therefore, the larger portion of the Awareness Floodplain in Moreno Valley is not regulated.

Only minor improvements (minor grading for ramp removal and sliver widening along the eastbound and westbound roadways) or grading are proposed for the northeast quadrant. The majority of the improvements are in the other three quadrants of the interchange. This will serve to minimize any floodplain impacts in the regulated area. The encroachment that would occur from the implementation of the proposed project would be classified as minimal.

Other Environmental Issues

The following technical studies have been prepared and either approved, require updating to current conditions and standards, or are under review by Caltrans: Noise Study Report, Air Quality Assessment, Community Impact Analysis (CIA), Water Quality Scoping Questionnaire, Location Hydraulic and Floodplain Study Reports, Delineation of Jurisdictional Waters, Historic Property Survey Report (HPSR), NES, Paleontological Evaluation Report and Mitigation Plan, Phase 1 ISA, and VIA.

Project limits are within the San Jacinto Watershed, a watershed that Caltrans has been named a "stakeholder". As per Attachment IV of the Caltrans NPDES permit (Order No. 2012-0011-DWQ, NPDES No. CAS000003) treatment of storm water should exceed the 100% of WQV for the new net impervious surface (NIS).

On April 7, 2015, the State Water Resources Control Board adopted an amendment to the Water Quality Control Plan, referred to as the Trash Amendment. The Trash Amendments were created to address the impacts trash has on beneficial use of surface waters. On June 1, 2017 the SWRCB issued a Water Code Section 13383 to Caltrans that requires the submittal of an implementation plan describing how Caltrans will comply with the Trash Amendment. Trash control BMPs will be installed through SHOPP and Caltrans-funded local agency projects within areas designated as a "Significant Trash Generating Area", which the project limits are within. Trash BMPs will be included to mitigate the significant amount of trash on this portion of SR-60.

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6.F Air Quality Conformity

Each project alternative is fully compatible with the design concept and scope described in the current regional transportation plan. The proposed project is fully compatible with the 2016 RTP, which SCAG has determined to conform to the State Implementation Plan (SIP) for air quality. The 2016 RTP (ID# 3M0801) and 2019 FTIP (ID# RIV080904) description is as follows:

AT SR-60/WLC Pkwy ST IC: WIDEN OC FROM 2 TO 4/6 THRU LNS; WIDEN WB EXIT/ENTRY RAMPS FROM 1-2 LNS AT EXIT/ENTRY, 3 LNS AT ART. W/ HOV AT ENTRY; WIDEN EB EXIT RAMP FROM 1-2 LNS AT EXIT AND 3 LNS AT ART.; WIDEN EB ENTRY RAMP FROM 1-2 LNS W/HOV; ADD EB LOOP ENTRY WITH 2 LNS AT ART AND 1 LN AT ENTRY; ADD AUX LNS 1400' EB DIR E/O IC, 2,500' EB DIR W/O IC, 2,300' WB DIR W/O IC & 1,700' WB DIR E/O IC (EA:0M590)

The proposed project was submitted to stakeholders at a Transportation Conformity Working Group (TCWG) meeting on October 23, 2018. The SR-60/WLC Pkwy interchange project was approved and concurred upon by Interagency Consultation at the TCWG meeting that the project is not a project of air quality concern (POAQC). The project would not have adverse impacts on air quality, and it meets the requirements of the Clean Air Act (CAA) and 40 CFR 93.116. Thus, the proposed build alternatives would not create a new or worsen an existing $PM_{2.5}$ and PM_{10} violation. The best available control measures (BACM), as specified in SCAQMD Rule 403, shall be incorporated into the project commitments. The contractor shall adhere to Caltrans Standard Specification for Construction, specifically, Section 10-5: Dust Control, Section 14-9.02: Air Pollution Control.

6.G Title VI Considerations

This project has been developed in accordance with the Civil Rights Act of 1964 as amended and Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". This project will not result in "disproportionately high and adverse effects on minority and low-income populations". The project will positively influence low mobility groups such as pedestrians, bicycles and equestrian users. This project includes Americans with Disabilities Act (ADA) compliant pedestrian access through the interchange along one or both sides of WLC Pkwy and will not preclude or hinder pedestrian access on both sides of Eucalyptus Ave, within the project limits. Crosswalks will be provided along WLC Pkwy for all crossing maneuvers except across WLC Pkwy at the eastbound and westbound SR-60 ramps. The southbound WLC Pkwy direction does not have a safe pedestrian passageway (sidewalk or multi-use trail) and crosswalks are not provided at the ramp intersections for this reason. Nonmotorized vehicle access for bikes will be provided in the form of on-street bike lanes for both directions of travel. Access for alternate forms of transportation, such as equestrians, will be provided on the east side of WLC Pkwy in the multi-use trail. The above mentioned features will provide for a continuation of existing access to shopping, schools, and hospitals within the vicinity of the project. For more information, see section "Nonmotorized and Pedestrian Features, etc." above in Section 5A. – Proposed Engineering Features. Any future plans for additional transit activity in the area such as locations and accessibility of public transit stops will not be precluded by the project.

6.H Noise Abatement Decision Report

Refer to section 5A. Noise Barriers for the results of the NSR. The proposed project NADR was approved on August 12, 2019.

This section summarizes the NADR which:

- Is an evaluation of the reasonableness and feasibility of incorporating noise abatement measures into the proposed project.
- Constitutes the preliminary decision on noise abatement measures to be incorporated into the Draft EIR/EA:
- Is required for Caltrans to meet the conditions of Title 23 Code of Federal Regulations, Part 772 in accordance with the Federal Highway Administration noise standards.

The NADR is a design responsibility and is prepared to compile information from the NSR, other relevant environmental studies, and design considerations into a single, comprehensive document before public review of the proposed project. The NADR was prepared after completion of the NSR and prior to publication of the Draft EIR/EA. The NADR included noise abatement construction cost estimates that were prepared and approved by the project engineer based on site-specific conditions. Construction cost estimates were compared to reasonable allowances in the NADR to identify which noise barrier configurations are reasonable from a cost perspective. If the estimated noise barrier construction cost exceeded

the total reasonable allowance, the noise barrier was determined to not be reasonable. If the estimated noise barrier construction cost was within the total reasonable allowance, the noise barrier was determined to be reasonable.

The total reasonable allowance was determined based on the number of benefited residences multiplied by the reasonable allowance per residence. The estimated noise barrier construction cost was provided by Michael Baker International (March 2019).

All feasible noise barriers were determined to not be reasonable because the estimated construction cost exceeded the total reasonable allowance. Additionally, because all feasible noise barriers identified were determined to be not reasonable:

- there are no non-acoustical factors related to feasibility.
- no noise barriers would be recommended.
- noise abatement measures would not have any secondary effects (e.g., cultural, scenic views, hazardous materials, and biology) on other resources.

At the end of the public review process for the Draft EIR/EA, the final noise abatement decision is made and is indicated in the Final EIR/EA. The preliminary noise abatement decision will become the final noise abatement decision unless compelling information received during the EIR/EA phase indicates that it should be changed.

6.I Life-Cycle Cost Analysis

An LCCA report was prepared and concurred by Caltrans Design Oversight on November 4, 2019. The following provides a summary of the background analysis and conclusion of the LCCA.

The Life Cycle Cost Analysis (LCCA) evaluates the cost effectiveness of alternative pavement design for new roadway or for existing roadway requiring Capital Preventative Maintenance (CPM), rehabilitation or reconstruction. HDM Topics 612 and 619 identify a situation where a LCCA must be performed to assist in determining the most appropriate pavement alternative for a project. Caltrans practice is to perform a LCCA when scoping a project and during the PA/ED phase. The life cycle costs consist of the agency costs, the road user costs, future maintenance and rehabilitation, and routine annual maintenance. The LCCA performed three (3) separate analyses for this project. The analyses compared pavement alternatives for the new construction of the SR-60 auxiliary lanes, the entrance and exit ramps, and WLC Pkwy. Based on the LCCA Procedures Manual (August 2013) only the eastbound off-ramp was analyzed because it best represents all of the ramps for the project and it has the most conservative traffic volume. The results from the eastbound off-ramp would be applied to the other ramps. The LCCA considered a 40-year design life for the SR-60 auxiliary lanes and the eastbound off-ramp per the LCCA Procedures Manual. The LCCA considered 20- and 40-year design lives for WLC Pkwy per the LCCA Procedures Manual and direction from the City. Table 22 summarizes the Traffic Indices (TI) used in the LCCA.

TABLE 22
Traffic Index

Improvement Locations	20-Year Design Life	40-Year Design Life
SR-60 Auxiliary Lane	17.0	18.5
SR-60/WLC Pkwy Ramps	n/a	17.5
WLC Pkwy	14.5	15.5

Pavement alternatives for the analysis are based on the TI values, Figure 2-1 in the LCCA Procedures Manual the scope of the proposed improvements, recommended 20- and 40- year (if applicable) design lives, and the recommended pavement structural sections from the Preliminary Materials Report.

The analysis was performed using RealCost, Version 2.5.4CA to obtain the deterministic results as specified in the LCCA Procedures Manual. The initial construction costs were determined with Caltrans Contract Costs Data tool and maintenance and rehabilitation costs were determined using methodology outlined in the LCCA Procedures Manual.

Based on the LCCA results, the most cost-effective alternatives were found to be the 40-year CRCP alternatives for all three improvement locations (auxiliary lanes, ramps, and WLC Pkwy). For the SR-60 auxiliary lanes and ramps, the CRCP 40-year alternative is the recommended pavement type. For WLC Pkwy, although the 40-year CRCP pavement type was the most cost-effective alternative, the City is responsible for the maintenance of WLC Pkwy and requested the 20-year flexible pavement type be selected in lieu of a 40-year CRCP design for construction. City maintenance operates equipment for the maintenance of asphalt only and not concrete. See *Attachment 9 – LCCA.*

6.J Reversible Lanes

Assembly Bill 2542 amended California Streets and Highways code to require, effective January 1, 2017, that the Department or a regional transportation planning agency demonstrate that reversible lanes were considered when submitting a capacity-increasing project or a major street or highway lane realignment project to the California Transportation Commission for approval (California Streets and Highways Code, Section 100.015). However, reversible lanes were not considered for the SR-60/WLC Pkwy interchange improvement project because it was programmed prior to January 1, 2017.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

The Draft EIR/EA, prepared in compliance with CEQA/NEPA requirements, will be circulated for public review initiated by filing of a Notice of Availability/Notice of Intent.

The Draft EIR/EA will be publicly circulated for a minimum period of 45 days to formally solicit comments from the general public, as well as from elected officials and federal, state,

and local agencies regarding the proposed project. A Notice of Availability of the Draft EIR/EA will be issued to announce the 45-day public review period as well as the date, time, and location of the public hearing, which will be conducted during the 45-day public review period to present the proposed project and solicit input from attendees.

Route Matters

A new connection approval and route adoption action is not needed for the proposed SR-60/WLC Pkwy interchange, as the proposed improvements are on an existing state facility. State property may be relinquished in the north-east quadrant of the SR-60/WLC Pkwy interchange depending on which build alternative is selected as the preferred alternative. An update to the FA is not anticipated, but if required, would be updated in final design.

Permits

The following permits, reviews, and approvals would be required for project construction, as shown in Table 23.

TABLE 23
Permits and/or Approvals Needed

Agency	Permit/Approval	Status
Section 404 Nationwide Permit No. 14	United States Army Corps of Engineers	Application will be submitted after environmental document approval.
Section 1602 Streambed Alteration Agreement	California Department of Fish and Wildlife	Application will be submitted after environmental document approval.
Section 401 Water Quality Certification	Santa Ana Regional Water Quality Control Board	Application will be submitted after environmental document approval.
National Pollutant Discharge Elimination System (NPDES)	State Water Resources Control Board (SWRCB)	Submittal of the NPDES, Notice of Intent will be at the onset of Construction.
Section 402 Clean Water Act NPDES	Santa Ana Regional Water Quality Control Board	The project will comply with the requirements of Nationwide Permit 14. Documentation, as required, will be prepared and provided as required.
Storm Water Pollution Prevention Plan (SWPPP)	SWRCB	SWPPP will be submitted (by the contractor) at the start of construction.
Federal Highway Administration (FHWA)	Air Quality Conformity Determination	Determination request to be submitted after selection of a Preferred Alternative.
Encroachment Permit	Caltrans District 8	Will be obtained prior to construction.
Encroachment Permit	City of Moreno Valley	Will be obtained prior to construction.
Encroachment Permit	County of Riverside Transportation Department (TMLA)	Will be obtained prior to construction.
Encroachment Permit	RCFC&WCD	Will be obtained prior to construction.

Cooperative Agreements

A Cooperative Agreement (Agreement 08-1562) (*Attachment 08 –Cooperative Agreement*) executed on August 22, 2013, between the City and Caltrans was executed for the interchange reconstruction on SR-60 and Theodore St (the agreement references the old street name). The agreement outlines each agency's responsibilities for PA/ED, design, and right-of-way for the project. Caltrans will be responsible for the oversight of the project design and provide an encroachment permit for construction in access-controlled State right-of-way. The City will be responsible for funding the project as well as production of all project documentation. The Cooperative Agreement would be amended prior to the expenditure of State or federal funds. A Construction Cooperative Agreement would be prepared to cover the construction phase and would outline the responsibilities of the City and Caltrans during construction.

Other Agreements

A Freeway Maintenance Agreement (FMA) was executed on April 14, 2014 between Caltrans and the City. The agreement documents the maintenance responsibilities of Caltrans and the City. Maintenance of all facilities within Caltrans' right-of-way, including structures, slopes, drainage, and other facilities, will be the responsibility of Caltrans. Maintenance of all facilities outside of Caltrans' right-of-way is the responsibility of the City. The City is currently responsible to maintain the local road segment on the WLC Pkwy overcrossing, while Caltrans is responsible for maintaining the entire structure below the desk surface. Modifications to Exhibit A of the FMA must be completed and approved prior to Ready to List (RTL).

Report on Feasibility of Providing Access to Navigable Rivers

The project does not lie within the vicinity of a navigable waterway and therefore no provisions have been made.

Public Boat Ramps

The project does not have public boat ramps and therefore no provisions have been made.

Transportation Management Plan

A TMP Data Sheet has been developed to provide recommendations to minimize the traffic impacts of construction activities (*Attachment 7 – Transportation Management Plan Data Sheet)*. The TMP Data Sheet was approved on April 10, 2019. Proposed measures in the TMP Data Sheet include: Off-peak lane closures and nighttime detours, a public awareness campaign to inform the public about construction activities, the use of portable changeable message signs, a Construction Zone Enhanced Enforcement Program (COZEEP), traffic control officers, and reduced speed zones. Short-term closures will be publicized through the local media.

Stage Construction

The proposed project construction is anticipated to last 18 months. North-south access on WLC Pkwy between the eastbound and westbound ramps is proposed to be closed for approximately four (4) months. An Interchange Closure Study was prepared, and approved by Caltrans on

July 18, 2019, to document the construction staging and closure of the interchange. The document identifies the main reason for closure which is attributed to the taller proposed vertical profile between proposed and existing ground surfaces along WLC Pkwy.

During the construction phase of the proposed project, removal of the existing overcrossing and construction of the new overcrossing and ramps will affect access to SR-60 at WLC Pkwy. To address this, Eucalyptus Ave will be extended between WLC Pkwy and Redlands Blvd to provide a detour route to SR-60. The improvements to Eucalyptus Ave will be constructed early in the construction schedule, prior to the closure of the WLC Pkwy overcrossing. North of the freeway, access to SR-60 during construction would be provided via Ironwood Ave and Redlands Blvd. South of the freeway, access to SR-60 would be provided via Alessandro Blvd and Gilman Springs Rd and via Eucalyptus Ave and Redlands Blvd. Additional intersection improvements are proposed along the detour routes to facilitate vehicle movement. As a result, widening is proposed at the Redlands Blvd/Ironwood Ave, WLC Pkwy/Alessandro Blvd, and Alessandro Blvd/Gilman Springs Rd intersections. Consequently, a signal modification is proposed at the Redlands Blvd/Ironwood Ave and Redlands Blvd/Eucalyptus Ave intersections. A new signal would be installed at the Gilman Springs Rd/Alessandro Blvd intersection due to the high through movements on Gilman Springs Rd conflicting with left turns to and from Alessandro Blvd. The improvements required for the detour routes also include utility adjustments and/or relocations at Redlands Blvd/Ironwood Ave, WLC Pkwy /Alessandro Blvd, and Alessandro Blvd/Gilman Springs Rd

Construction is proposed in three (3) phases, and each phase contains sub-phases:

Construction Phase 1 - The estimated construction duration for Phase 1 is seven (7) months if sub-phases 1b, 1c, and 1d occur concurrently with Phase 1a.

- **Sub-Phase 1a** – Construct portion of the proposed eastbound and westbound ramps of the interchange that are not within the footprint of the existing ramps. No roadway closure is anticipated and the interchange will remain open. (Estimated Duration: 7 months)
- **Sub-Phase 1b –** Construct one (1) to two (2) lanes of the extension of Eucalyptus Ave between WLC Pkwy and Redlands Blvd. Partial closure at the Eucalyptus Ave/Redlands Blvd intersection is anticipated but traffic flow will be maintained on Redlands Blvd. The interchange will remain open. (Estimated duration: 2 months)
- **Sub-Phase 1c** – Construct the Eucalyptus Ave/WLC Pkwy intersection and permanent grading for the SCE poles relocation. The WLC Pkwy/Eucalyptus Ave intersection would be closed to all traffic movements during this phase. A temporary roadway would be constructed at the south west quadrant of the closed intersection to connect Eucalyptus Ave and WLC Pkwy to the south. Traffic accessing in and out of the Skechers distribution facility would be detoured to the Eucalyptus Blvd/Redlands Blvd

intersection. The interchange would remain open during this sub-phase providing access to and from the north on WLC Pkwy only. (Estimated duration: 4 months)

- **Sub-Phase 1d** – Construct the temporary detour connecting the WLC Pkwy/Eucalyptus Ave intersection to the existing WLC Pkwy and the freeway ramp to the north. The intersection would remain closed during this sub-phase. (Estimated duration: 1 month)

Construction Phase 2 - The estimated construction duration for Phase 2 is six (6) months with some overlap of the two sub-phases.

- **Sub-phase 2a** – Construct WLC Pkwy north and south of the existing bridge over SR 60 to join with the newly constructed ramps from sub-phase 1a. The interchange may be completely closed to all traffic movements during this sub-phase for approximately 4 months. (Estimated duration: 4 months)
- **Sub-phase 2b** – Demolish the existing ramps and construct the remaining portion of the proposed ramps and approaches of the interchange. Portion of the work in this sub-phase can be done concurrently with sub-phase 2a to minimize the need for other roadway closures. (Estimated duration: 4 months)

Construction Phase 3 - The estimated construction duration for Phase 3 is ten (10) months with sub-phase 3b occurring concurrently with sub-phase 3a.

- **Sub-phase 3a** – Construct the new WLC Pkwy bridge over SR-60. The WLC Pkwy bridge will be closed but the newly constructed freeway ramps will be open during this sub-phase. Some of the bridge work could overlap with work in phase 2 to reduce construction duration. (Estimated duration: 10 months)
- **Sub-phase 3b** - Widening of WLC Pkwy near Ironwood Ave. Partial closure of the WLC Pkwy at Ironwood Ave is anticipated. (Estimated duration: 2 months)

North of the freeway, access to SR-60 during construction would be provided via Ironwood Ave and Redlands Blvd. South of the freeway, access to SR-60 would be provided via Alessandro Blvd and Gilman Springs Rd and via Eucalyptus Ave and Redlands Blvd. Additional temporary intersection improvements are proposed along the detour routes to facilitate vehicle movement. As a result, temporary widening is proposed at the Redlands Blvd/Ironwood Ave, WLC Pkwy/Alessandro Blvd, and Alessandro Blvd/Gilman Springs Rd intersections. Consequently, temporary signal modifications are proposed at the Redlands Blvd/Ironwood Ave and Redlands Blvd/Eucalyptus Ave intersections. A temporary signal is proposed at the Gilman Springs Rd/Alessandro Blvd intersection due to the high through movements on Gilman Springs Rd conflicting with left turns to and from Alessandro Blvd. The improvements required for the detour routes also include utility adjustments and/or relocations at Redlands Blvd/Ironwood Ave, WLC Pkwy/Alessandro Blvd, and Alessandro Blvd/Gilman Springs Rd. For additional utility information see *Section 5.A Utility and Other Owner Involvement*.

Phasing
Some improvements or phases may be built prior to the project by developers. The project could be split into six (6) stand-alone project phases:

Phase 1 – Improvements along Eucalyptus Ave between Redlands Blvd and WLC Pkwy to accommodate detour traffic.

Phase 2 – Construction of WLC Pkwy between the eastbound ramps and the southern limit of the project. Phase 2 also includes partial reconstruction of Eucalyptus Ave to match grade at WLC Pkwy.

Phase 3 – Widening of WLC Pkwy/Theodore St for approximately 700 ft south of Ironwood Ave.

Phase 4 – Widening and reconstruction of WLC Pkwy between SR-60 and the southern limits of improvements from Phase 3. Phase 3 also includes construction of the new westbound on-ramp from WLC Pkwy, partial construction of the westbound off-ramp to WLC Pkwy, and construction of the westbound auxiliary lane between Redlands Blvd and WLC Pkwy.

Phase 5 – Reconstruction of WLC Pkwy between the improvements in Phase 2 and the southern edge of the existing WLC Pkwy bridge. Phase 5 also includes construction of the new eastbound off-ramp and eastbound on-ramp, and the eastbound auxiliary lanes.

Phase 6 – Reconstruction of the WLC Pkwy overcrossing, completion of the westbound loop on-ramp, removal of the existing westbound ramps, infield grading, mainline right shoulder work, and the westbound auxiliary lane between WLC Pkwy and Gilman Springs Rd.

Accommodation of Oversize Loads
The aspects of the project such as lane widening and curb return radii will be designed to accommodate standard STAA truck movements for all turning movements except for the Theodore St and Ironwood Ave intersection, which is outside of Caltrans right-of-way and not included in the NHS.

The proposed minimum vertical clearance for the WLC Pkwy overcrossing will meet current Caltrans standards. SR-60, within the project limits, is not included in the Caltrans District 8 ELLN.

Graffiti Control
The City of Moreno Valley has a population greater than 5,000 therefore the project is located within an urban area which is classified as a graffiti-prone area in the PDPM. Early in the design phase of this project, aesthetic treatments and other measures from the SR-60 Corridor Master Plan will be incorporated to deter graffiti. The measures may include anti-stick graffiti

coatings, architectural/aesthetic treatments (textured concrete surfaces, painted/stained surfaces, and/or applied/mounted alternative materials), planting trees and shrubs, and or making access to key locations more challenging. The measure would be identified and implemented during the design phase.

Asset Management

According to the Office of Asset Management website, "*Transportation Asset Management is a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their life cycle.*" The *Purpose and Need* of the proposed project is to expand, upgrade, and improve the existing interchange capacity, flow, multi-modal access, and safety in support of local and regional planned development and growth projections. The existing interchange is projected to operate deficiently through the project design year, 2045, catalyzing the need for improvements. All project stakeholders have reviewed and approved the Purpose and Need which has guided the development of effective project alternatives. The project considers roundabouts which will reduce long-term cost and intersection maintenance as compared to traditional signalized intersections. Additionally, an LCCA was performed to consider alternate pavement options and a pavement type was selected with City input based on the analysis results. An existing FMA outlines the responsibilities of the State and the City in maintaining the interchange, as discussed in *Section 7 – Other Considerations as Appropriate.*

Complete Streets

The proposed project improves bike, pedestrian, and equestrian access through the interchange with the addition of a dedicated multi-use trail, sidewalk, and bike lanes. See previous sections for details on the multi-use trail, sidewalk, and bike lanes.

Climate Change Considerations

The SR-60/WLC Pkwy Interchange Project Draft EIR/EA, provides a detailed discussion and conclusions on Climate Change / GHG emissions with respect to the project. The purpose of the SR-60/WLC Pkwy interchange project is to provide standard bridge vertical clearance, provide multi-modal transportation, and alleviate existing and future traffic congestion at the interchange. Based on the Traffic Study Report (January 2019), the proposed project would improve traffic flow without increasing the traffic volumes along WLC Pkwy or SR-60, thus the No Build and both Build Alternative vehicle miles traveled (VMT) amounts are the same within each scenario analyzed. The VMT increases from 2018 to 2025 due to the increased regional vehicle traffic from all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2025. The VMT increases 2018 to 2045 due to the increased regional vehicle traffic from all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2045. Traffic data, including VMT, was used to produce GHG emission rates. The Build Alternatives and design variations would reduce GHG emissions in both the opening and horizon years compared to the corresponding No Build

Alternative. Alternative 6 would further reduce emissions compared to Alternative 2 with the implementation of roundabouts.

Broadband and Advance Technologies
Broadband and other advanced technologies will be considered in the final design phase.

Other Appropriate Topics
Caltrans oversight project *EA 0N69U / PN 0812000307 – SR-60 Truck Lanes Project* is currently in construction and Construction Contract Acceptance (CCA) is anticipated for 11/15/22 which may overlap with construction of SR-60/WLC Pkwy (EA 0M590, current project). This item has been added to the project Risk Register for continued tracking and will be coordinated through PS&E with the truck lane project.

8. FUNDING, PROGRAMMING AND ESTIMATE

It has been determined that this project is eligible for Federal-aid funding. The PA/ED phase is funded by the City utilizing a variety of funding sources including local funds and federal funds. Funding for future phases has not been determined. The project is programmed in the 2016 RTP and 2019 FTIP for $96,613,000. Refer to *Section 4 – Regional Planning* for the project description. The project cost estimates for each alternative and design variation are found in *Attachment 5 – Preliminary Project Cost Estimate.* See *Section 5A. – Cost Estimates* for a summary of the cost estimates.

9. DELIVERY SCHEDULE

Table 24 identifies the tentative project schedule, contingent on full funding of all phases.

TABLE 24
Project Schedule

Project Milestones		Milestone Date (Month/Year) (Actual)	Milestone Designation (Target)
PROGRAM PROJECT	M015	11/2013	-
BEGIN ENVIRONMENTAL	M020	11/2013	-
NOTICE OF PREPARATION (NOP)	M030	11/2019	
CIRCULATE DPR & DED EXTERNALLY	M120	-	02/2020
PA & ED	M200	-	06/2020
BEGIN STRUCTURE	M215	-	10/2020
PS&E TO DOE	M377	-	02/2021
DRAFT STRUCTURES PS&E	M378	-	04/2021
PROJECT PS&E	M380	-	01/2022
RIGHT OF WAY CERTIFICATION	M410	-	01/2022
READY TO LIST	M460	-	04/2022
AWARD	M495	-	06/2022
APPROVE CONTRACT	M500	-	06/2022
CONTRACT ACCEPTANCE	M600	-	01/2024
END PROJECT EXPENDITURES	M800	-	01/2024
FINAL PROJECT CLOSEOUT	M900	-	02/2024

Note: DED = Draft Environmental Document (EIR/EA). DOE = Division of Office Engineer

10. RISKS

A Risk Register was created for the project in order to manage and track potential risks associated with the project. Each risk was identified and given a strategy on how to manage the risk. A Risk Management workshop was held on December 2, 2014 and the Risk Register has been updated throughout PA/ED. Refer to *Attachment 13 – Project Risk Register* for the detailed Risk Register.

Potential types of risk categories for the project include environmental, management, organizational, design, construction, right-or-way, and aesthetics. Possible risks associated with each category include the following:

- Environmental: Borrow site requirements, hazardous materials, floodplain regulations, permits
- Project Management: Project funding, stakeholders
- City/Organizations: Coordination with adjacent developers, local community, federal funding, political factors, city changes
- Design: Utility relocations, design standards, fault investigation
- Construction: Interchange closure, construction delays, utility delays
- Right-of-Way: Permits, right-of-way acquisitions
- Division of Engineering Services: Aesthetic plan

A summary of the high risks are listed below.

- Lack of project funding
- Adjacent developers
- Threat of lawsuits
- Bridge habitation by species (i.e. Bats, Migratory Birds)
- Right-of-way acquisition delay

Each risk is either accepted, mitigated, or avoided as a course of action.

11. EXTERNAL AGENCY COORDINATION

This DPR has been reviewed by Caltrans' FHWA Liaison, Sergio Avila on 4/8/2019 and is eligible for federal aid funding. SR-60 is off the federal interstate system and is exempt from federal approval for design.

Coordination, agreements, and permits are required with the following agencies to advance the project. See Section 7 *Permits, Cooperative Agreements* and *Other Agreements* for more information.

- United States Army Corps of Engineers
- California Department of Fish and Wildlife
- Santa Ana Regional Water Quality Control Board
- State Water Resources Control Board (SWRCB)
- Caltrans District 8
- City of Moreno Valley
- County of Riverside Transportation Department (TMLA)
- Riverside County Flood Control (RCFC) and Watershed Conservation District (WCD)

The project is not a project of division interest and does not propose a new or modified access to the Interstate as the project is on a State Route.

12. PROJECT REVIEWS

Headquarters Project Delivery Coordinator	Luis Betancourt	February 11, 2020
Project Manager	Elaheh Hadipour	February 11, 2020
District Design Liaison/FHWA/ADA	Sergio Avila	February 11, 2020
Traffic Safety Review	Kevin Chen	February 11, 2020
Constructability Review	Martha Santana	February 11, 2020
Traffic Operations	Moe Bhuyian	February 11, 2020
Design Oversight	Faustino Abella, Jr.	February 11, 2020

13. PROJECT PERSONNEL

Elaheh Hadipour Project Manager – Caltrans District 8	(909) 383-4978
Aysha Habib Design Oversight – Caltrans District 8	(909) 806-2554
Faustino Abella, Jr. Design Oversight – Caltrans District 8	(909) 388-7193
Boniface Udotor Environmental Unit Supervisor – Caltrans District 8	(909) 888-2347
Antonia Toledo Environmental Unit Supervisor – Caltrans District 8	(909) 806-2541
Jessica Chavez Environmental – Caltrans District 8	(909) 888-2360
Moe Bhuyian Traffic Operations – Caltrans District 8	(909) 383-4226
Margery Lazarus, PE Senior Engineer – City of Moreno Valley	(951) 413-3133
Rebecca Young, PE Project Manager – Michael Baker International	(909) 974-4976

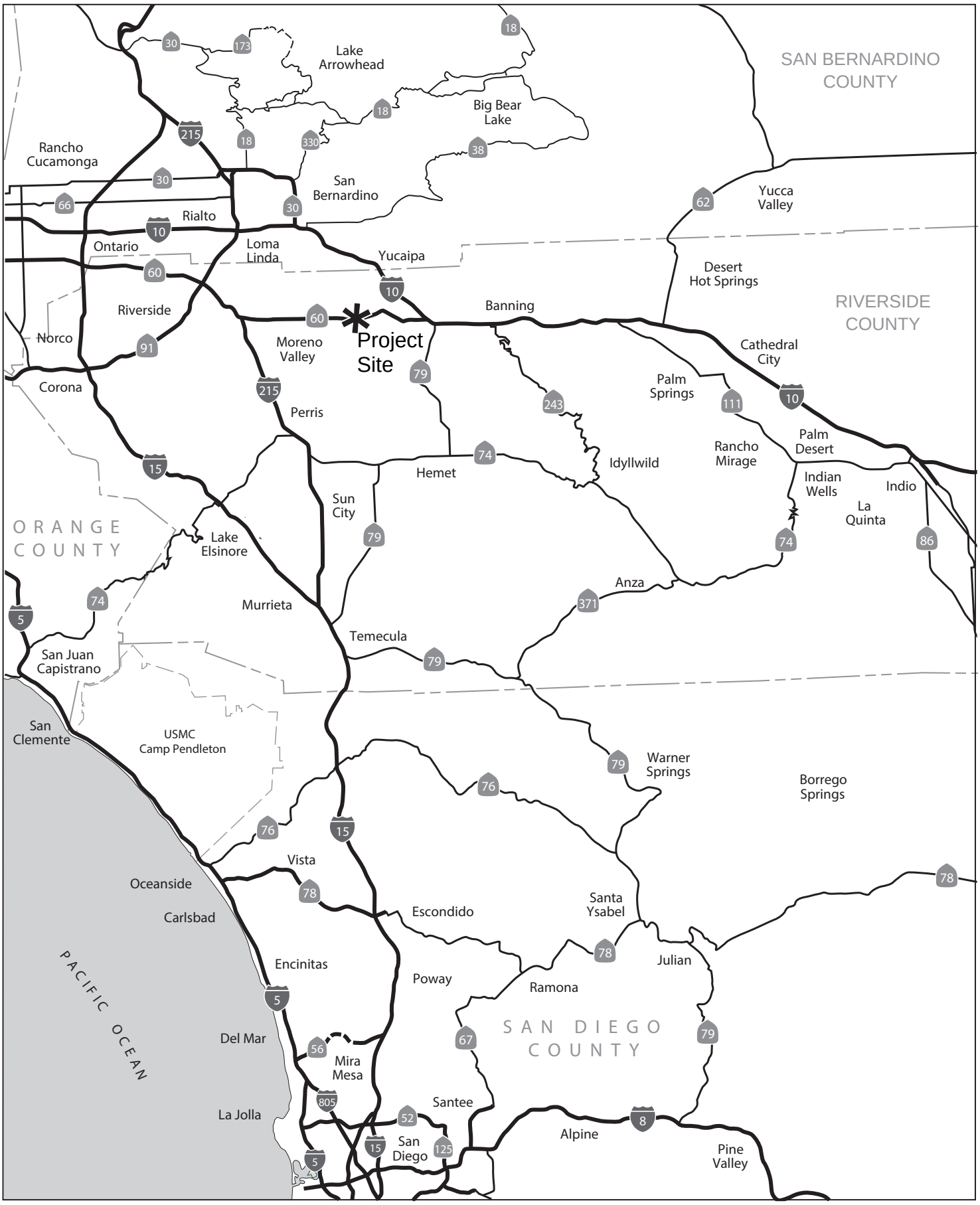
14. ATTACHMENTS

Attachment Title **Attachment No.**

Regional Vicinity Map (1) 1
Existing Conditions (1) 2
Key Map, Typical Sections, Plans, Profiles (62) 3
Advanced Planning Study (2) 4
Preliminary Project Cost Estimate (40) 5
Right of Way Data Sheet (32) 6
Transportation Management Plan Data Sheet (5) 7
Cooperative Agreement (15) 8
Life Cycle Cost Analysis for Pavement (9) 9
Category Determination Request Approval Letter (1) 10
Cover Page, Signed Title Sheet from the Draft EIR/EA (2) 11
Utility Exhibits (7) 12
Project Risk Register (2) 13

Regional Vicinity Map

Attachment 1



0 6 12 miles

APPROXIMATE

SR-60/WORLD LOGISTICS CENTER PARKWAY

Regional Vicinity Map

Existing Conditions

Attachment 2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

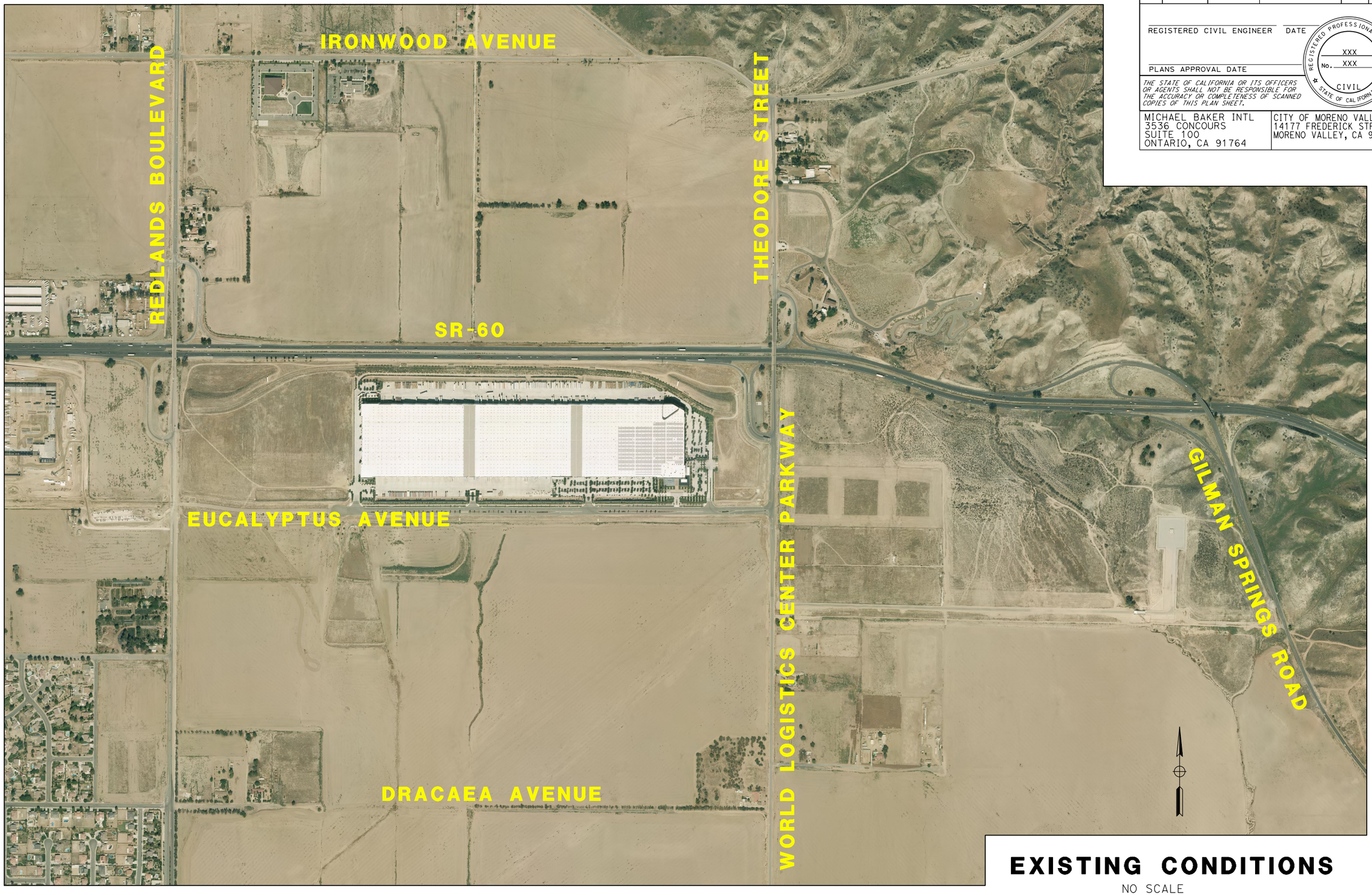
PLANS APPROVAL DATE

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

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



EXISTING CONDITIONS

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY	DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 07-FEB-2019

TIME PLOTTED => 09:27

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DGN FILE => Project Location Exhibit_1000Scale.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Key Map, Typical Sections, Plans, Profiles

Attachment 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
XXX
No. XXX
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

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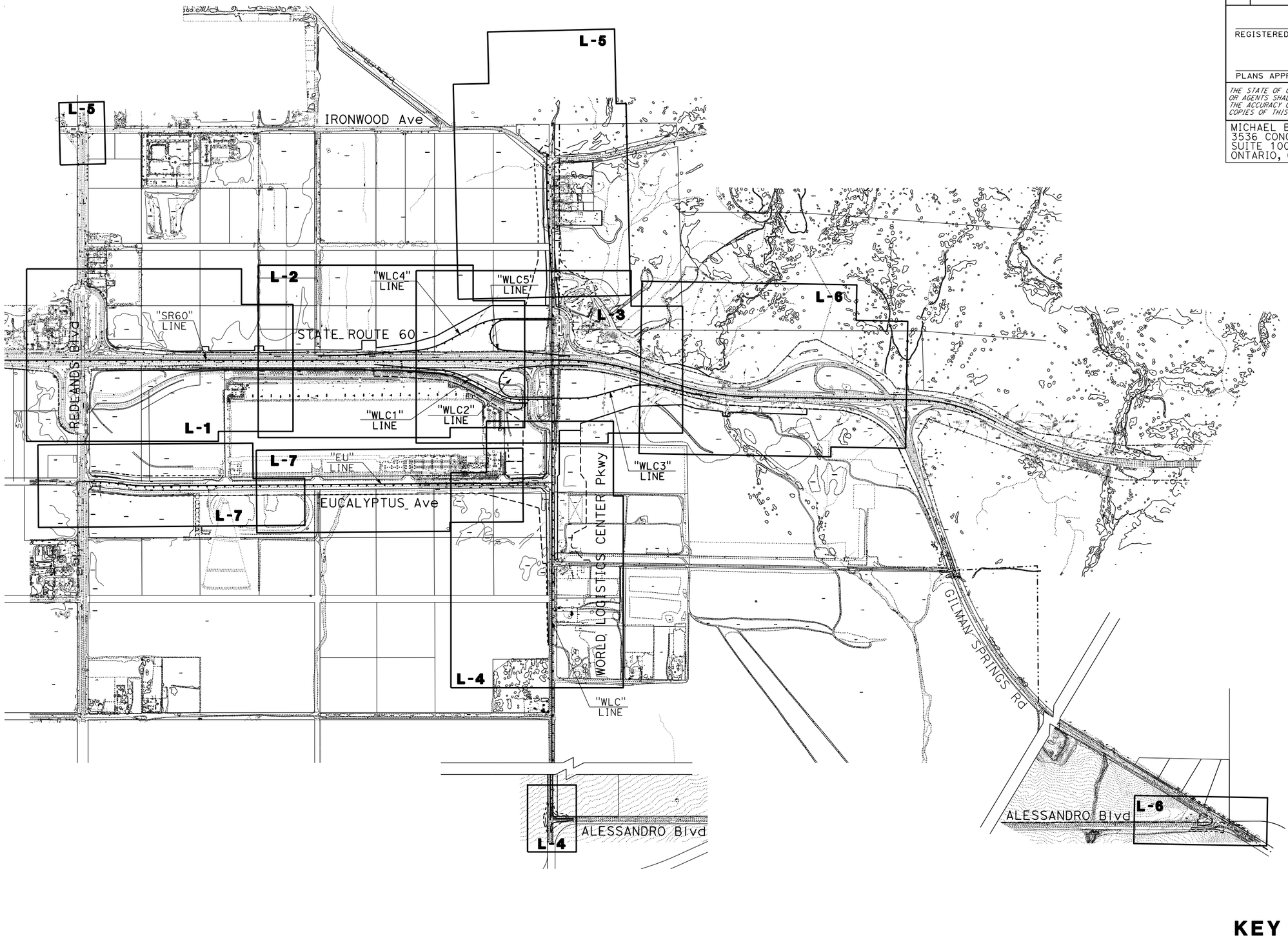

KEY MAP
ALTERNATIVE 2
NO SCALE

K-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG	CALCULATED-DESIGNED BY: H. SALCEDO	CHECKED BY: R. RATZLAFF

DATE REVISED	REVISED BY

LAST REVISION 00-00-00
DATE PLOTTED => 31-JUL-2019
TIME PLOTTED => 11:49

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DGN FILE => 08130001090da001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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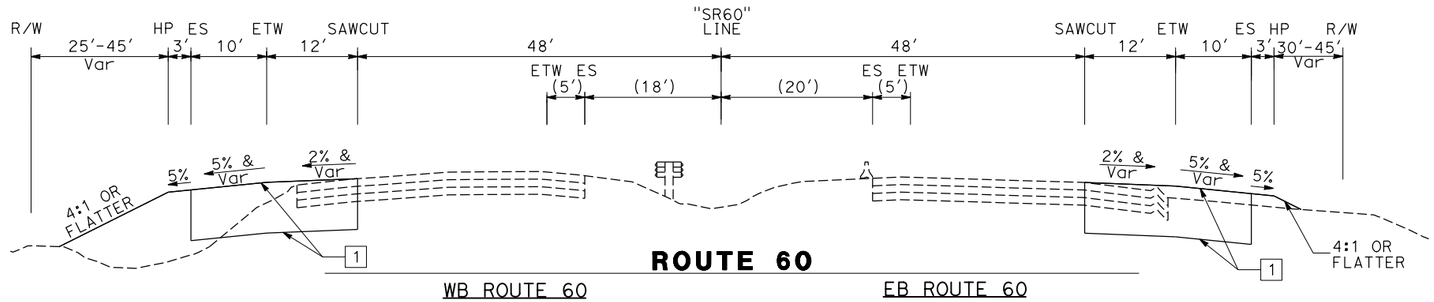
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

STRUCTURAL SECTIONS

1. CRCP: 1.10'
   HMA-A: 0.25'
2. CRCP: 1.05'
   HMA-A: 0.25'
3. RHMA: 0.20'
   HMA-A: 1.0'
   AB: 0.5'



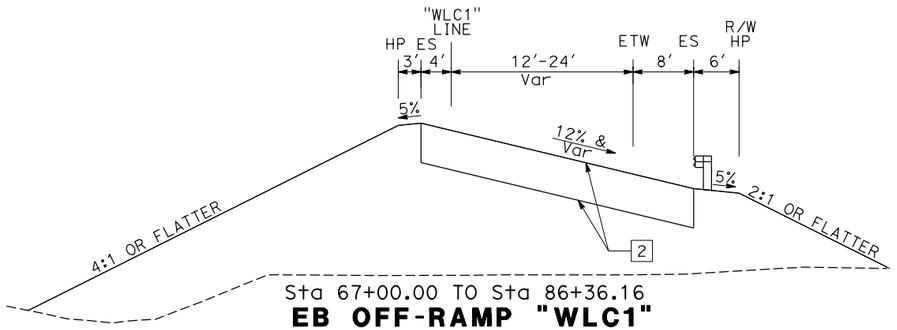
ROUTE 60

WB ROUTE 60

Sta 441+88.39 TO Sta 460+70.42
Sta 488+98.35 TO Sta 505+23.16

EB ROUTE 60

Sta 442+36.94 TO Sta 467+05.78
Sta 505+99.75 TO Sta 515+74.01



Sta 67+00.00 TO Sta 86+36.16

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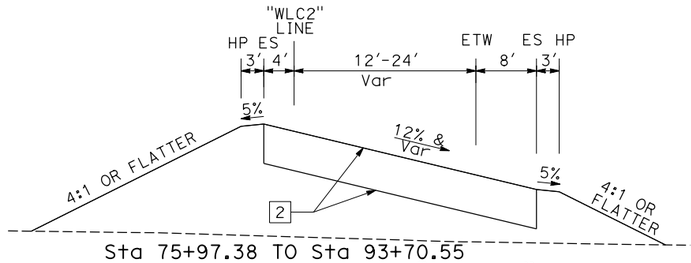
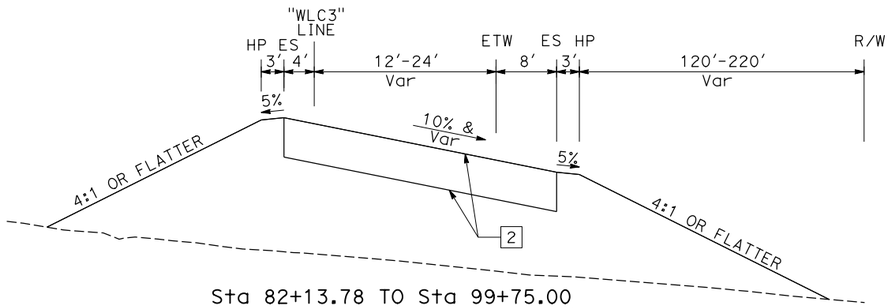


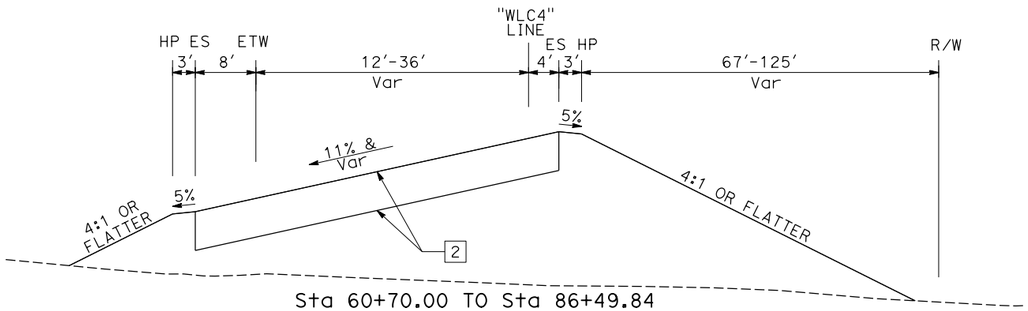
Sta 75+97.38 TO Sta 93+70.55

EB LOOP ON - RAMP "WLC2"



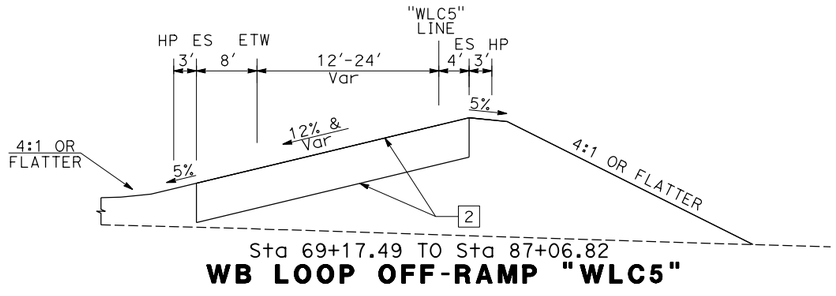
Sta 82+13.78 TO Sta 99+75.00

EB ON-RAMP "WLC3"



Sta 60+70.00 TO Sta 86+49.84

WB ON-RAMP "WLC4"



Sta 69+17.49 TO Sta 87+06.82

WB LOOP OFF-RAMP "WLC5"

NOTES:

1. CURB AND GUTTER, SIDEWALK, AND CURB DETAILS WILL BE DETERIMINED IN THE FINAL DESIGN PHASE AND WILL BE IN ACCORDANCE WITH THE LATEST CALTRANS AND CITY STANDARDS AND SPECIFICATIONS.
2. SLOPE ROUNDING IS REQUIRED AT ALL TOP OF SLOPE AND TOE OF SLOPE LOCATIONS.
3. TAPERED EDGE REQUIRED AS APPLICABLE PER THE LATEST CALTRANS STANDARD PLANS

TYPICAL CROSS SECTIONS

ALTERNATIVE 2

NO SCALE

X-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 10-FEB-2020 | TIME PLOTTED => 17:19

BORDER LAST REVISED 7/2/2010 | USERNAME => Jerusalem.Verano | DGN FILE => 0813000109ca001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

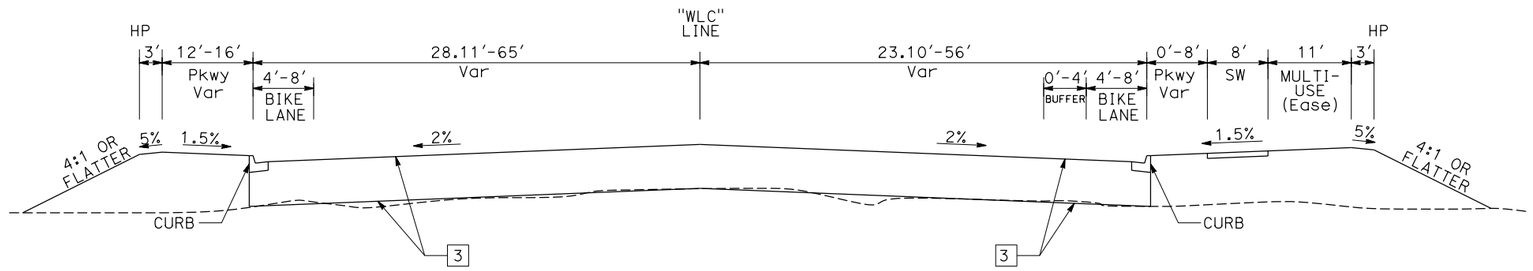
PLANS APPROVAL DATE

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

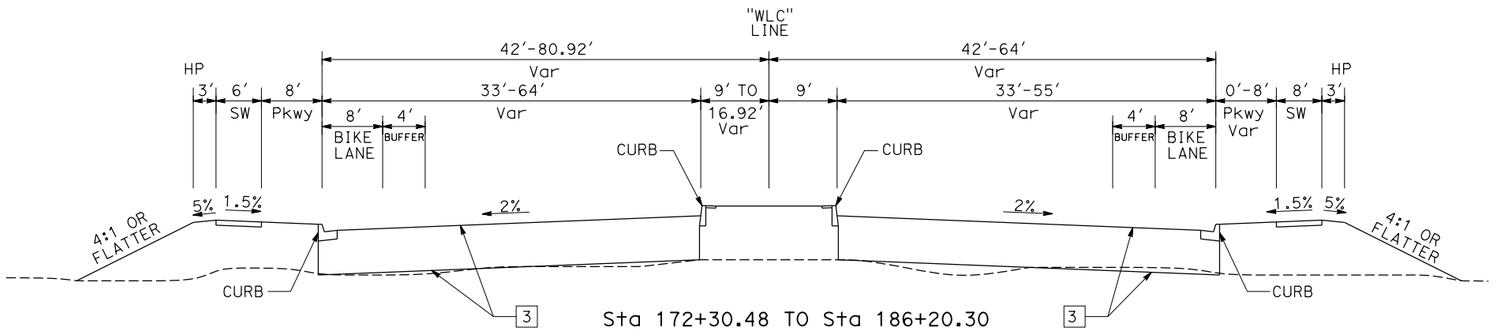
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

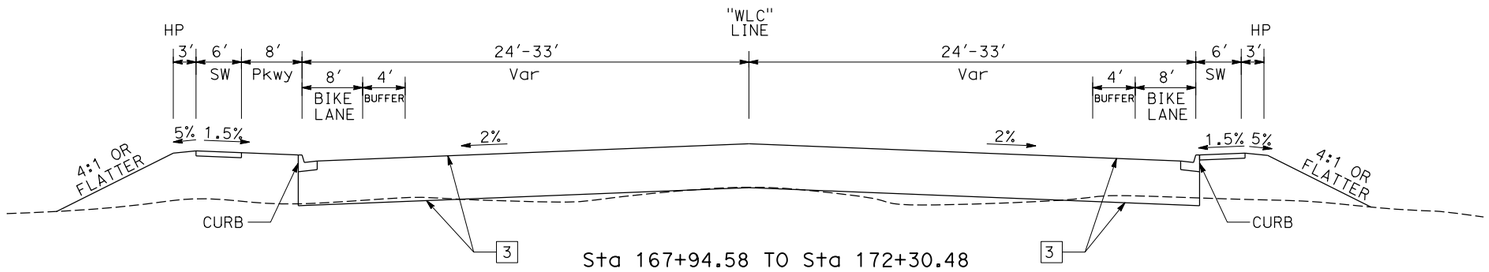
CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



Sta 186+20.30 TO Sta 221+70.32



Sta 172+30.48 TO Sta 186+20.30



Sta 167+94.58 TO Sta 172+30.48

WORLD LOGISTICS CENTER PARKWAY

NOTES:

1. CURB AND GUTTER, SIDEWALK, AND CURB DETAILS WILL BE DETERIMINED IN THE FINAL DESIGN PHASE AND WILL BE IN ACCORDANCE WITH THE LATEST CALTRANS AND CITY STANDARDS AND SPECIFICATIONS.

2. SLOPE ROUNDING IS REQUIRED AT ALL TOP OF SLOPE AND TOE OF SLOPE LOCATIONS.

3. TAPERED EDGE REQUIRED AS APPLICABLE PER THE LATEST CALTRANS STANDARD PLANS.

TYPICAL CROSS SECTIONS

ALTERNATIVE 2

NO SCALE

X-2

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:19

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ca002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
XXX
No. XXX
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

REDLANDS Blvd

Exist WB OFF-RAMP

Exist WB ON-RAMP

"SR60" 441+88.39
JOIN Exist

Prop CT R/W

Exist CT R/W

12'

10'

STATE ROUTE 60 WESTBOUND

"SR60" LINE

STATE ROUTE 60 EASTBOUND

8 9 430 1 2 3 4 435 6 7 8 9 440 1 2 3 4 445 6 7 8 9 450 1 2 3 4 455

N89°33'13"W

MATCH LINE "SR60" STA 455+50
SEE L-2

Exist CT R/W

"SR60" 442+36.94
JOIN Exist

Prop CT R/W

Exist EB ON-RAMP

Exist EB OFF-RAMP

LEGEND

- Exist PROPERTY LINES
- Exist CT R/W
- PROPOSED CT R/W
- CUT/FILL LINE
- TCE
- SLOPE Ease
- Exist COUNTY R/W
- PROPOSED MGS
- PROPOSED PAVEMENT

LAYOUT

ALTERNATIVE 2

SCALE: 1" = 100'

L-1

LAST REVISION	DATE PLOTTED => 10-FEB-2020
00-00-00	TIME PLOTTED => 17:11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

DATE REVISED	REVISED BY

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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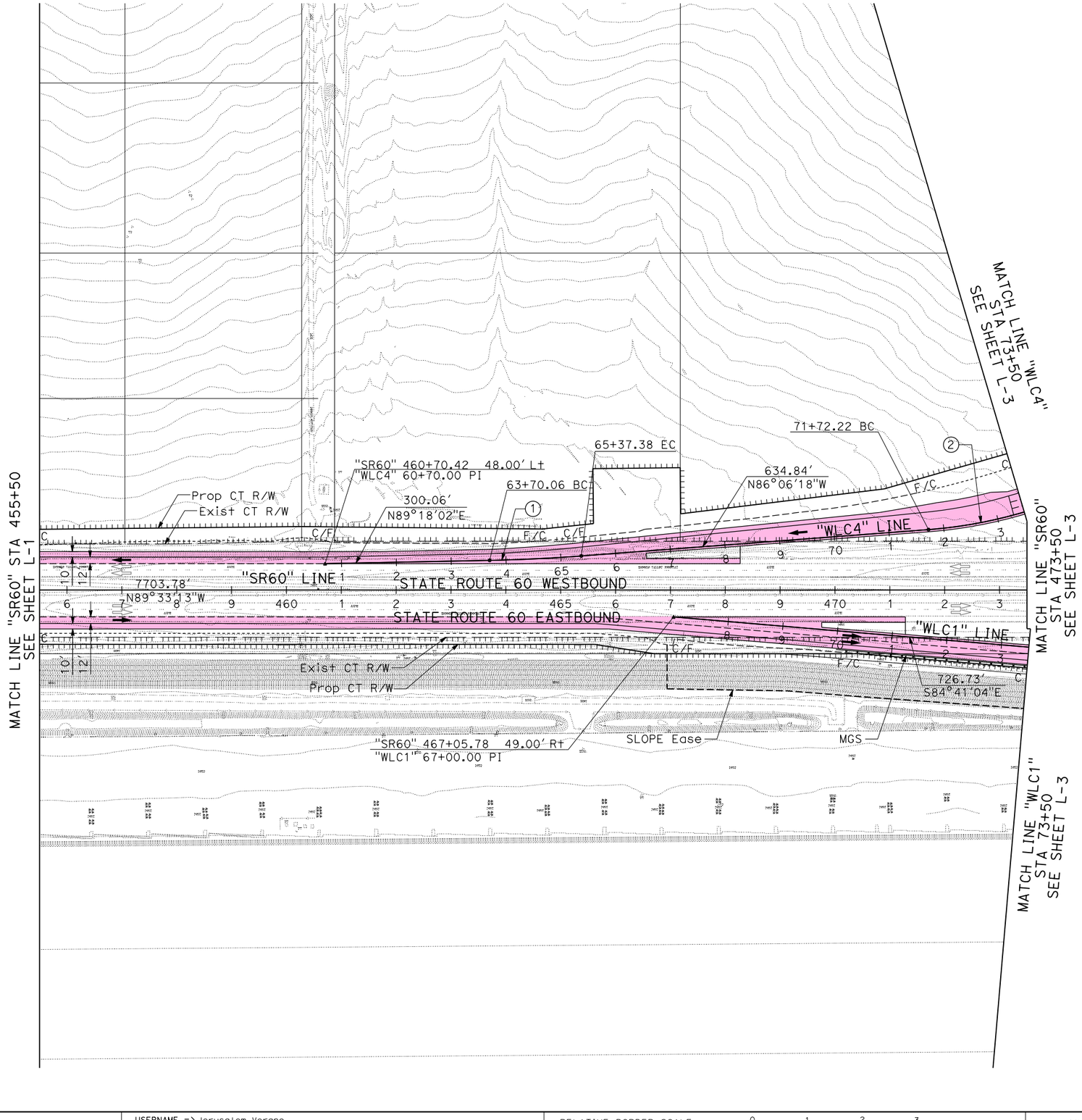
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



CURVE DATA

No.	R	Δ	T	L
(1)	3000.00′	3°11′44"	83.68′	167.32′
(2)	838.00′	23°48′26"	176.65′	348.20′

LAYOUT

ALTERNATIVE 2

SCALE: 1" = 100′

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY | DATE REVISED

LAST REVISION: 00-00-00

DATE PLOTTED => 10-FEB-2020

TIME PLOTTED => 17:11

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano

DGN FILE => 0813000109ea002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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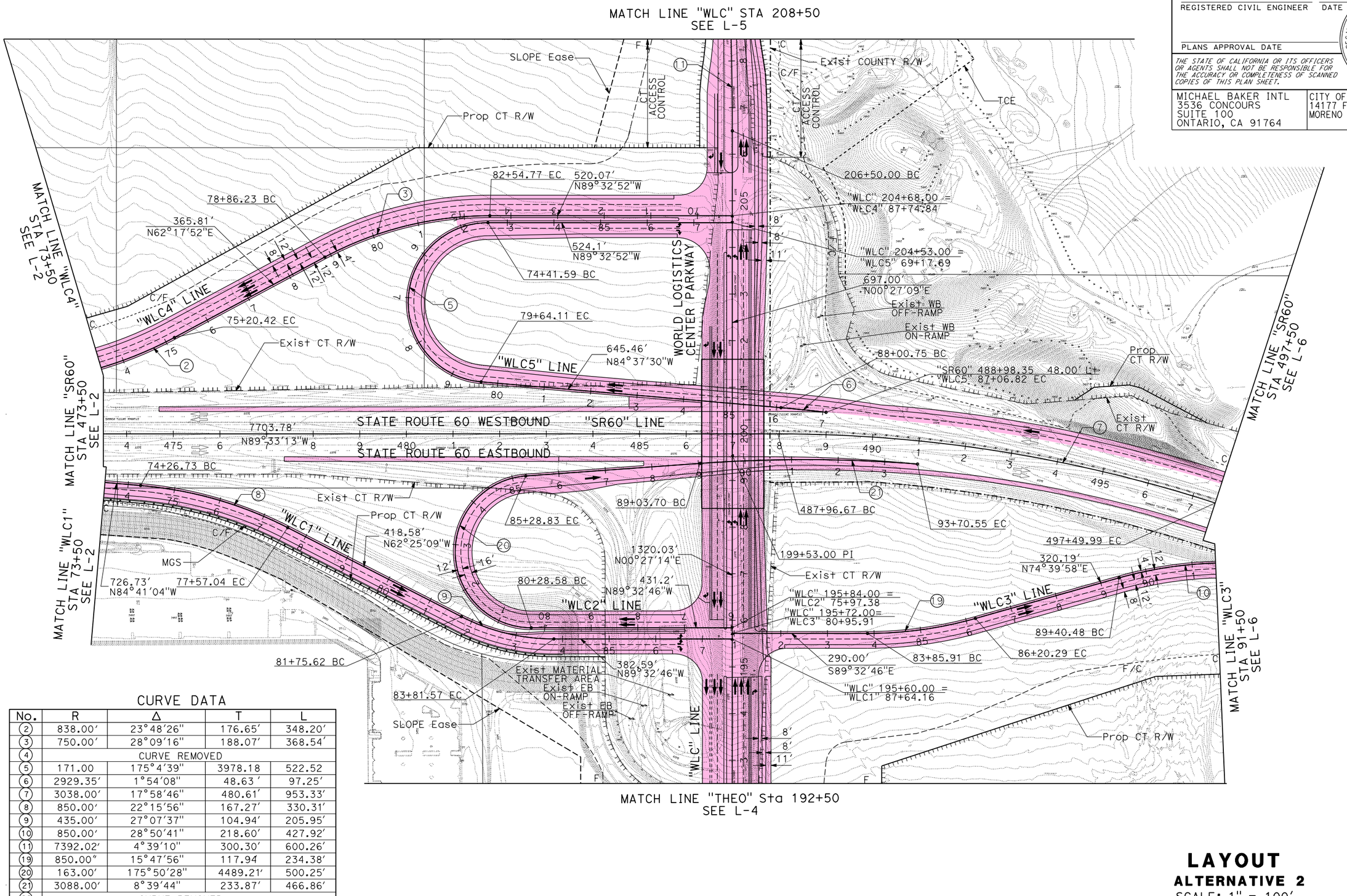
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



CURVE DATA

No.	R	Δ	T	L
(2)	838.00′	23°48′26"	176.65′	348.20′
(3)	750.00′	28°09′16"	188.07′	368.54′
(4)	CURVE REMOVED			
(5)	171.00	175°4′39"	3978.18	522.52
(6)	2929.35′	1°54′08"	48.63′	97.25′
(7)	3038.00′	17°58′46"	480.61′	953.33′
(8)	850.00′	22°15′56"	167.27′	330.31′
(9)	435.00′	27°07′37"	104.94′	205.95′
(10)	850.00′	28°50′41"	218.60′	427.92′
(11)	7392.02′	4°39′10"	300.30′	600.26′
(19)	850.00"	15°47′56"	117.94	234.38′
(20)	163.00′	175°50′28"	4489.21′	500.25′
(21)	3088.00′	8°39′44"	233.87′	466.86′
(22)	CURVE REMOVED			

LAYOUT

ALTERNATIVE 2

SCALE: 1" = 100′

L-3

REVISED BY	DATE REVISED
H. SALCEDO	
R. RATZLAFF	

CALCULATED-DESIGNED BY

CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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BORDER LAST REVISED 7/2/2010 | USERNAME => Jerusalem.Verano | DGN FILE => 0813000109ea003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

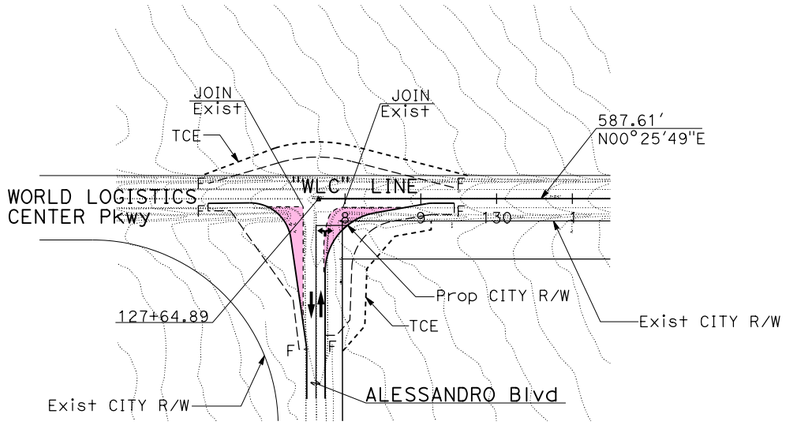
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

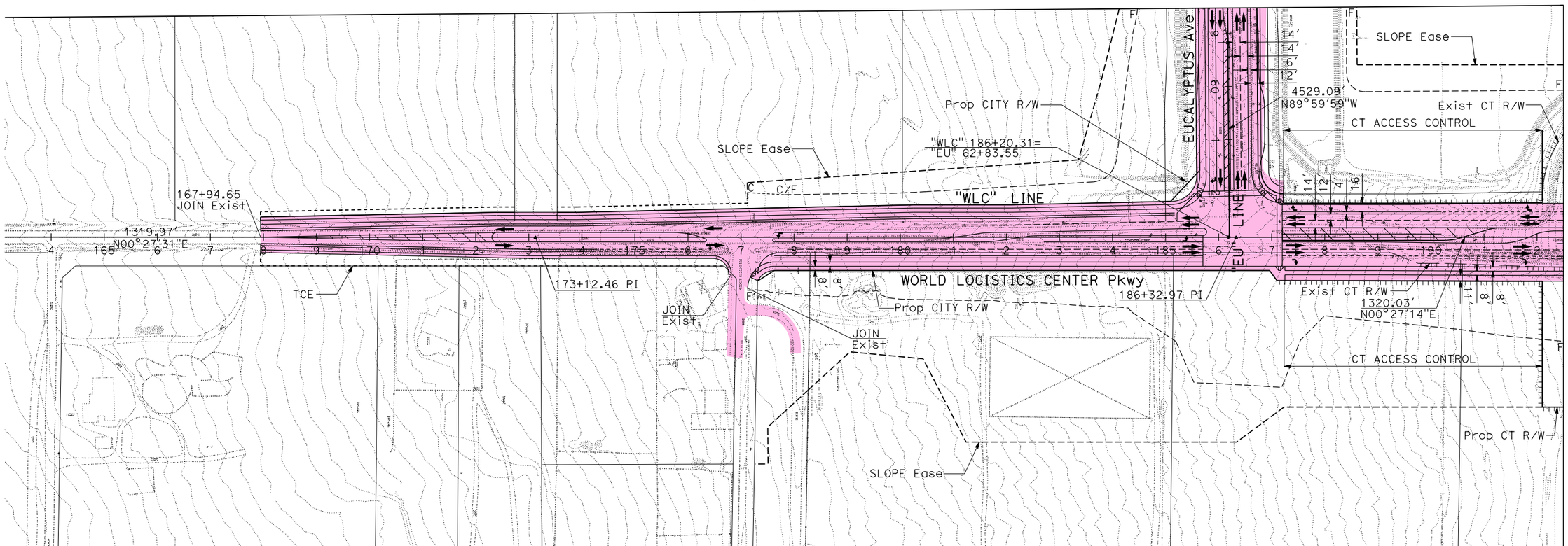
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



WORLD LOGISTICS CENTER Pkwy AND ALESSANDRO Blvd

MATCH LINE "EU" STA 58+50
SEE L-7



MATCH LINE "WLC" STA 192+50
SEE L-3

LAYOUT
ALTERNATIVE 2
SCALE: 1" = 100'

L-4

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
H. SALCEDO	R. RATZLAFF		

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 10-FEB-2020 | TIME PLOTTED => 17:11

BORDER LAST REVISED 7/2/2010 | USERNAME => Jerusalem.Verano | DGN FILE => 08130000109ea004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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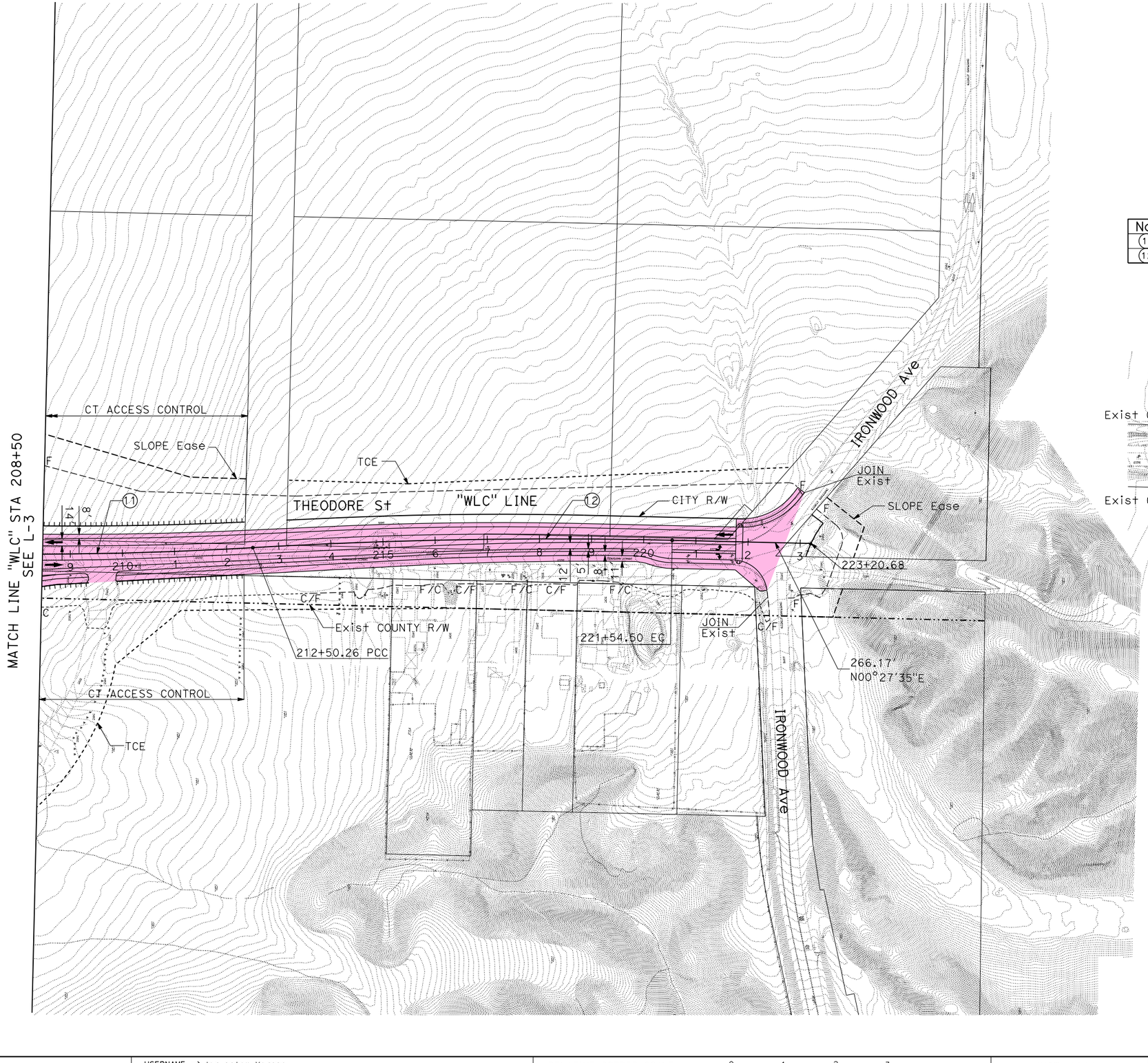
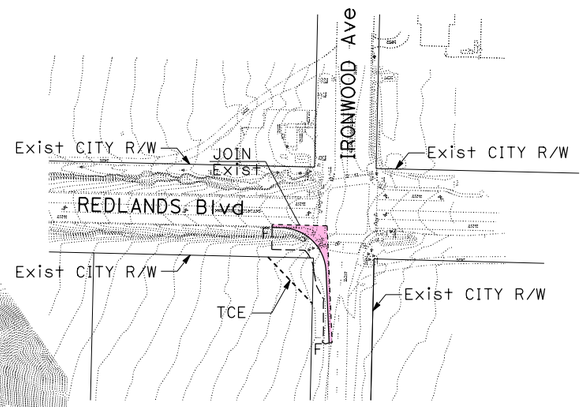
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

CURVE DATA

No.	R	Δ	T	L
(11)	7392.02′	4°39′10"	300.30′	600.26′
(12)	9888.41′	4°39′36"	402.34′	804.24′





REDLANDS Blvd AND IRONWOOD Ave

LAYOUT
ALTERNATIVE 2
SCALE: 1" = 100′

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF

REVISED BY	DATE REVISED

LAST REVISION: 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:11

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea005.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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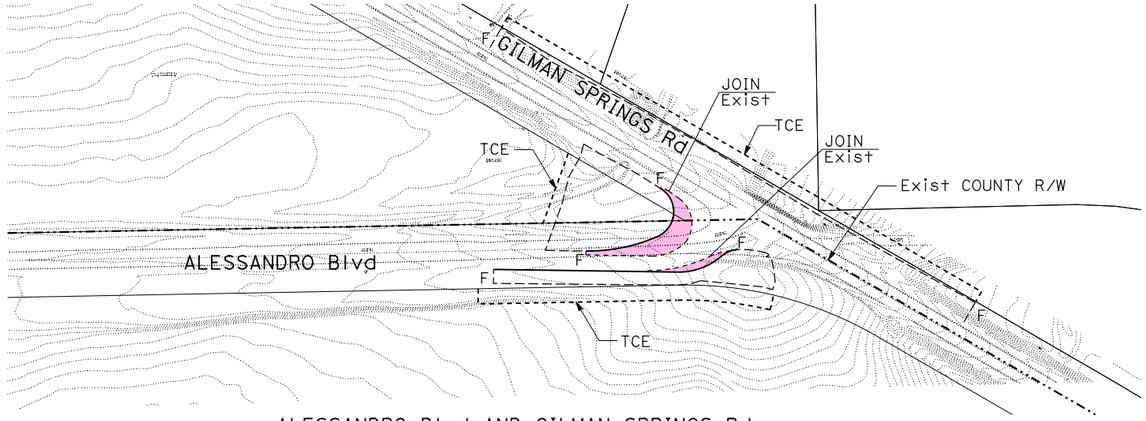
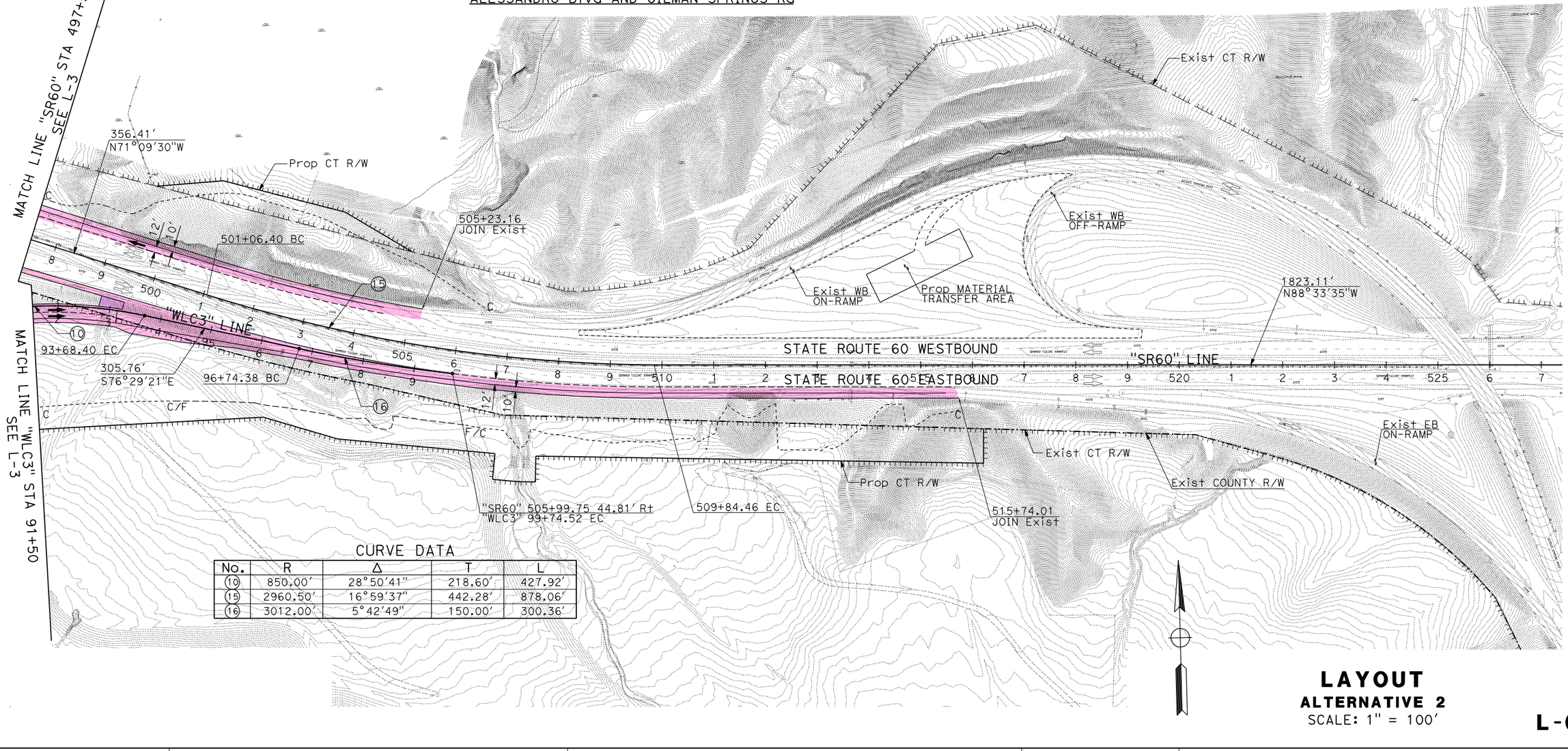
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



ALESSANDRO Blvd AND GILMAN SPRINGS Rd



CURVE DATA

No.	R	Δ	T	L
(10)	850.00'	28°50'41"	218.60'	427.92'
(15)	2960.50'	16°59'37"	442.28'	878.06'
(16)	3012.00'	5°42'49"	150.00'	300.36'

LAYOUT

ALTERNATIVE 2

SCALE: 1" = 100'

L-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY | DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:11

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea006.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

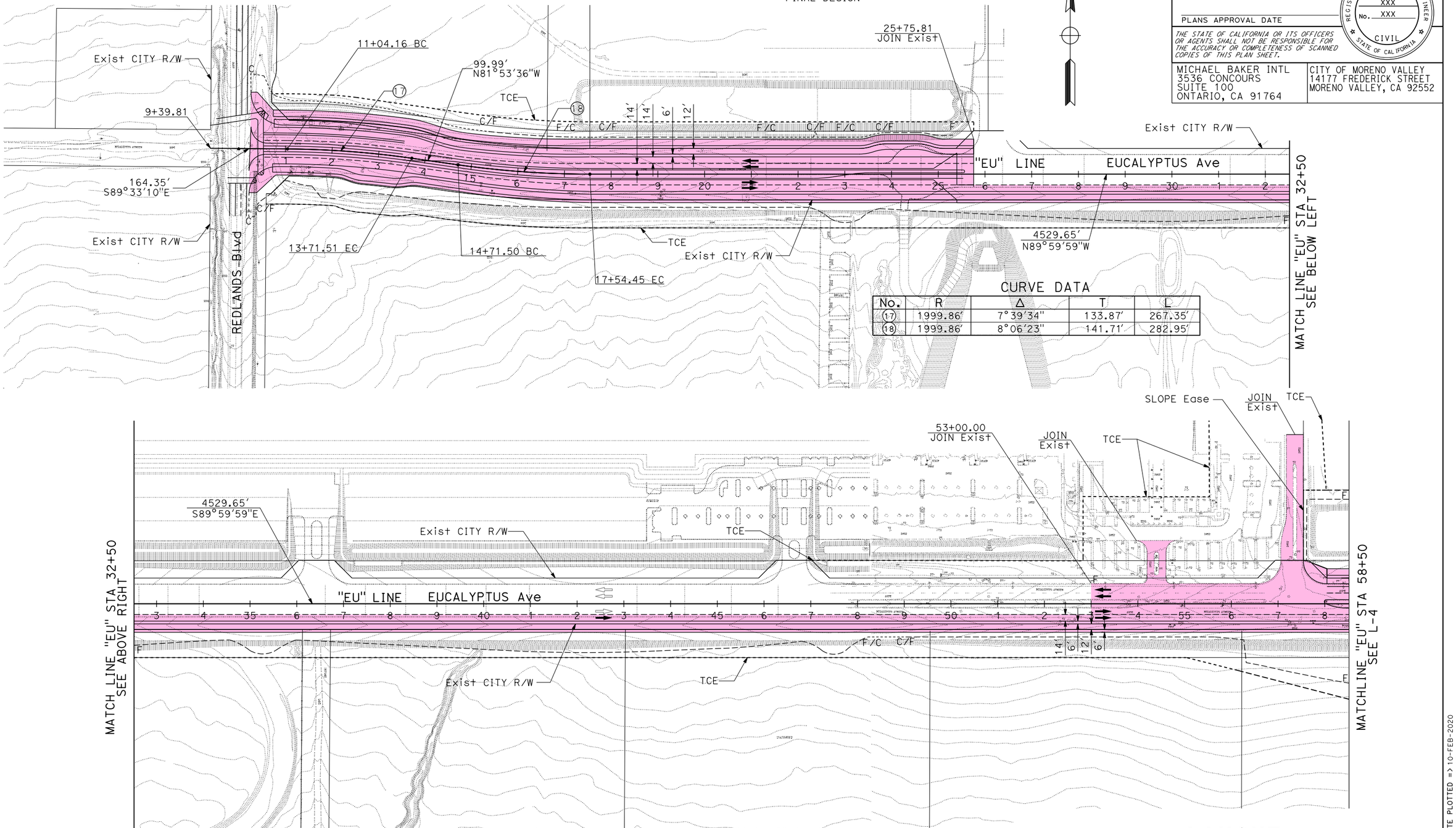
PLANS APPROVAL DATE

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

NOTES:
1. IMPROVEMENTS SHWON ON EUCALYPTUS AVENUE ARE FOR ULTIMATE RIGHT-OF-WAY PRESERVATION AND TEMPORARY DETOUR ROUTE IMPROVEMENTS WILL BE DETAILED DURING FINAL DESIGN



CURVE DATA

No.	R	Δ	T	L
(17)	1999.86'	7°39'34"	133.87'	267.35'
(18)	1999.86'	8°06'23"	141.71'	282.95'

LAYOUT
ALTERNATIVE 2
SCALE: 1" = 100'

L-7

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
H. SALCEDO	R. RATZLAFF		

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION 00-00-00 | DATE PLOTTED => 10-FEB-2020 | TIME PLOTTED => 17:11

BORDER LAST REVISED 7/2/2010 | USERNAME => Jerusalem.Verano | DGN FILE => 0813000109ea007.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

NOTES:
1. IMPROVEMENTS SHWON ON EUCALYPTUS AVENUE ARE FOR ULTIMATE RIGHT-OF-WAY PRESERVATION AND TEMPORARY DETOUR ROUTE IMPROVEMENTS WILL BE DETAILED DURING FINAL DESIGN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

MATCH LINE "EU" STA 54+50
SEE L-7DV

SLOPE Ease

EUCALYPTUS Ave

"EU-DV" LINE

EU-DV = 64+87.02
WLC= 177+12.73

PROPERTY LINE

"WLC" LINE

WORLD LOGISTICS CENTER Pkwy

TCE

CITY R/W

CT ACCESS CONTROL

Exist CITY R/W

SEE L-4

MATCH LINE "WLC" STA 192+50
SEE L-3

LAYOUT
DESIGN VARIATION 2a
SCALE: 1" = 100'

L-4DV

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY
Caltrans	R. YOUNG	CHECKED BY
		R. RATZLAFF
		H. SALCEDO
		REVISED BY
		DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:11

BORDER LAST REVISED 7/2/2010
USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea004.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

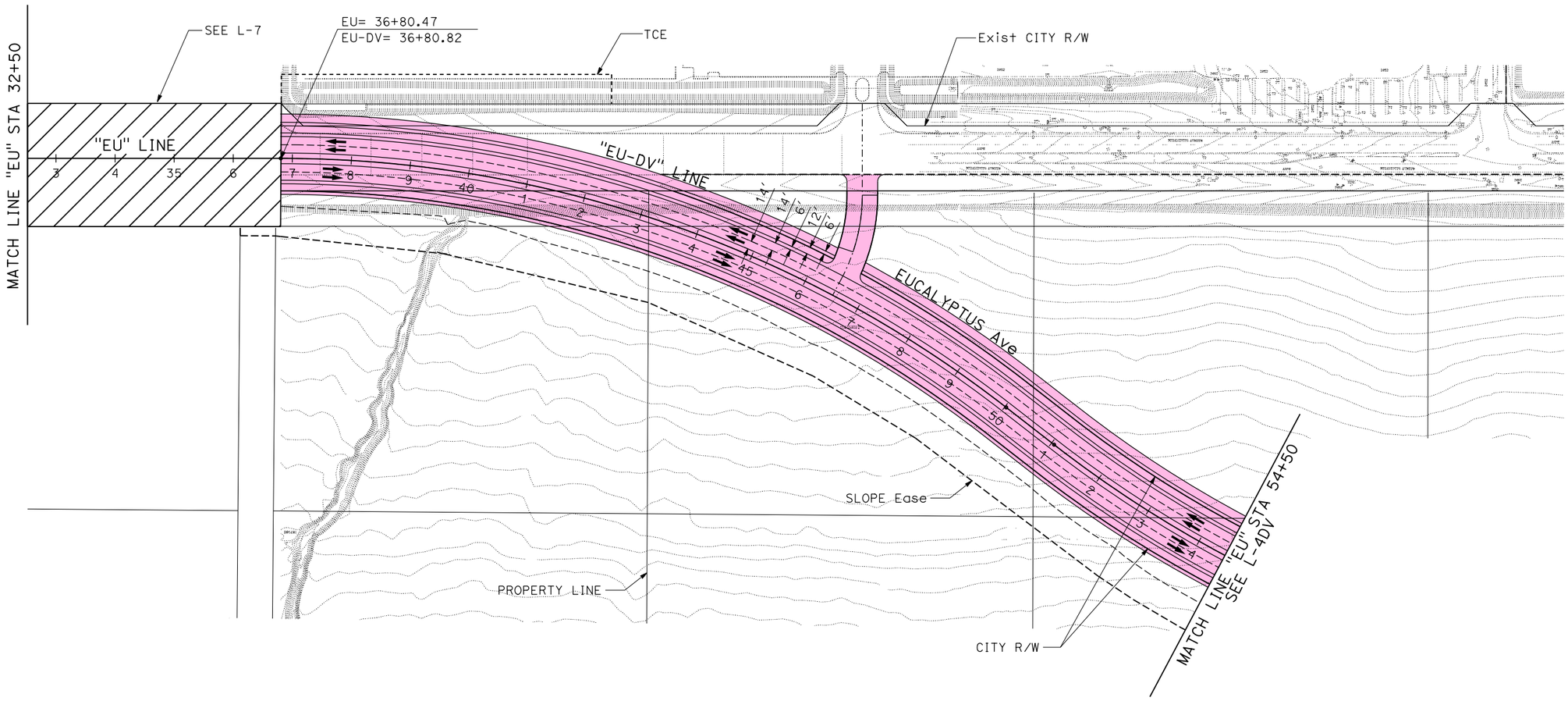
PLANS APPROVAL DATE

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

NOTES:
1. IMPROVEMENTS SHWON ON EUCALYPTUS AVENUE ARE FOR ULTIMATE RIGHT-OF-WAY PRESERVATION AND TEMPORARY DETOUR ROUTE IMPROVEMENTS WILL BE DETAILED DURING FINAL DESIGN



CURVE DATA

No.	R	Δ	T	L
(X)	XXXX.XX'	X°XX'XX"	XXX.XX'	XXX.XX'
(X)	XXXX.XX'	X°XX'XX"	XXX.XX'	XXX.XX'

LAYOUT
DESIGN VARIATION 2a
SCALE: 1" = 100'

L-7DV

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans®

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 10-FEB-2020 | 00-00-00 | TIME PLOTTED => 17:11

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 08130001090ea007.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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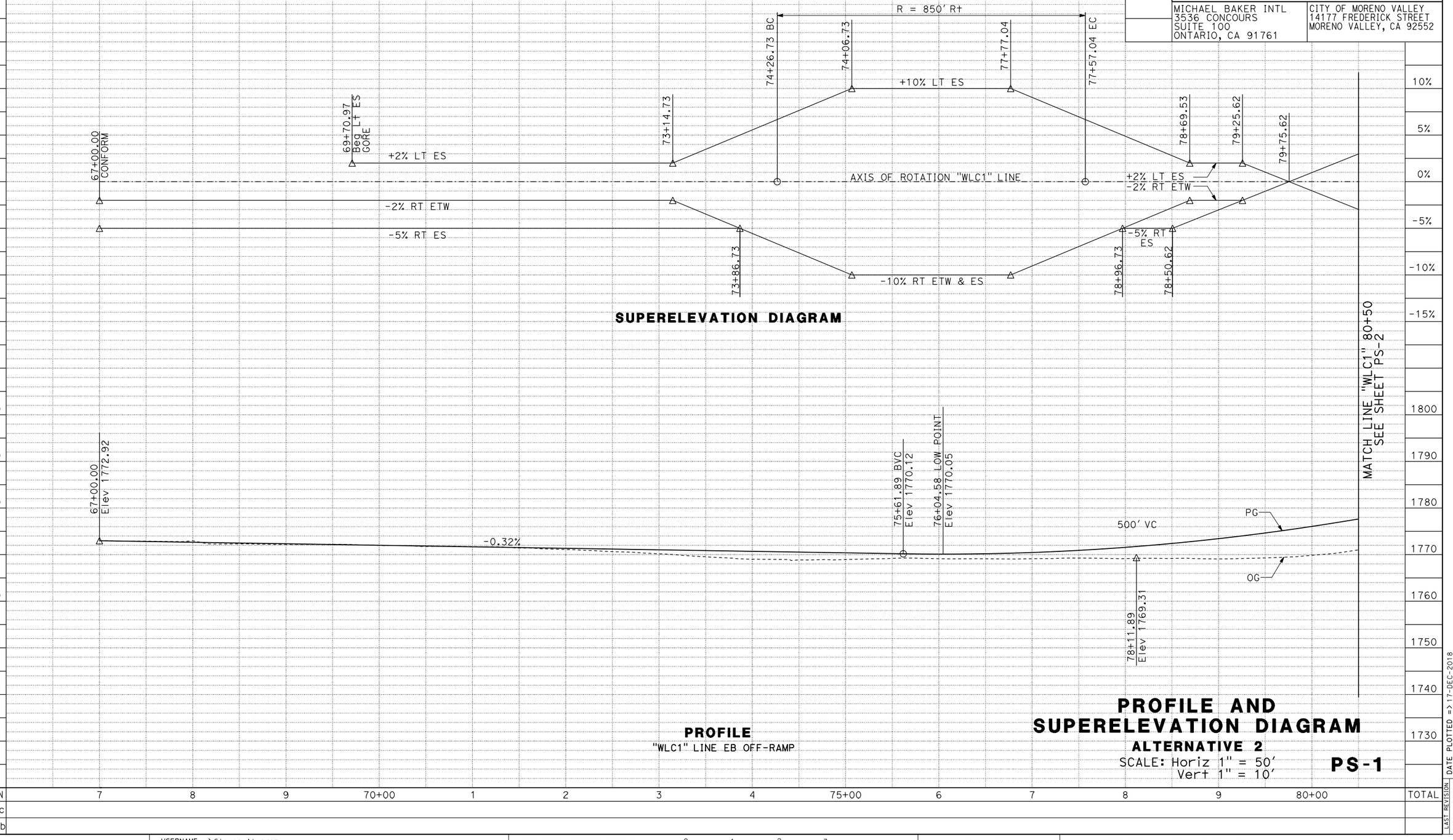
MORENO VALLEY, CA 92552



SUPERELEVATION DIAGRAM

PROFILE
"WLC1" LINE EB OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-1

STATION	7	8	9	70+00	1	2	3	4	75+00	6	7	8	9	80+00	TOTAL
CY Exc															
CY Emb															

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 17-DEC-2018
00-00-00 TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 0813000109fb001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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REVISED BY | DATE REVISED

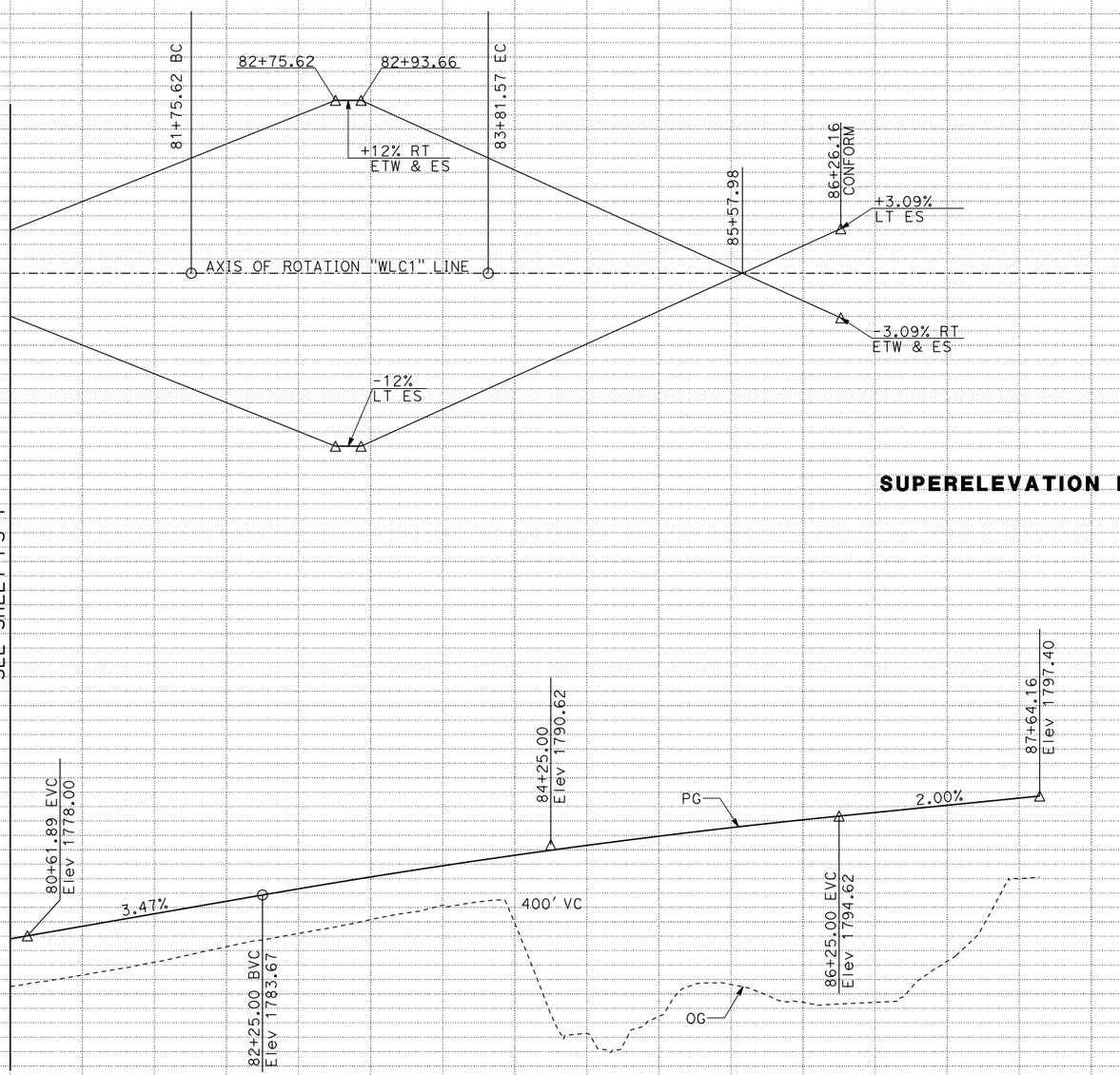
H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans



SUPERELEVATION DIAGRAM

PROFILE
"WLC1" LINE EB OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-2

STATION	1	2	3	4	85+00	6	7	8	TOTAL
CY Exc									
CY Emb									

LAST REVISION 00-00-00 | DATE PLOTTED => 17-DEC-2018 | TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 0813000109fb002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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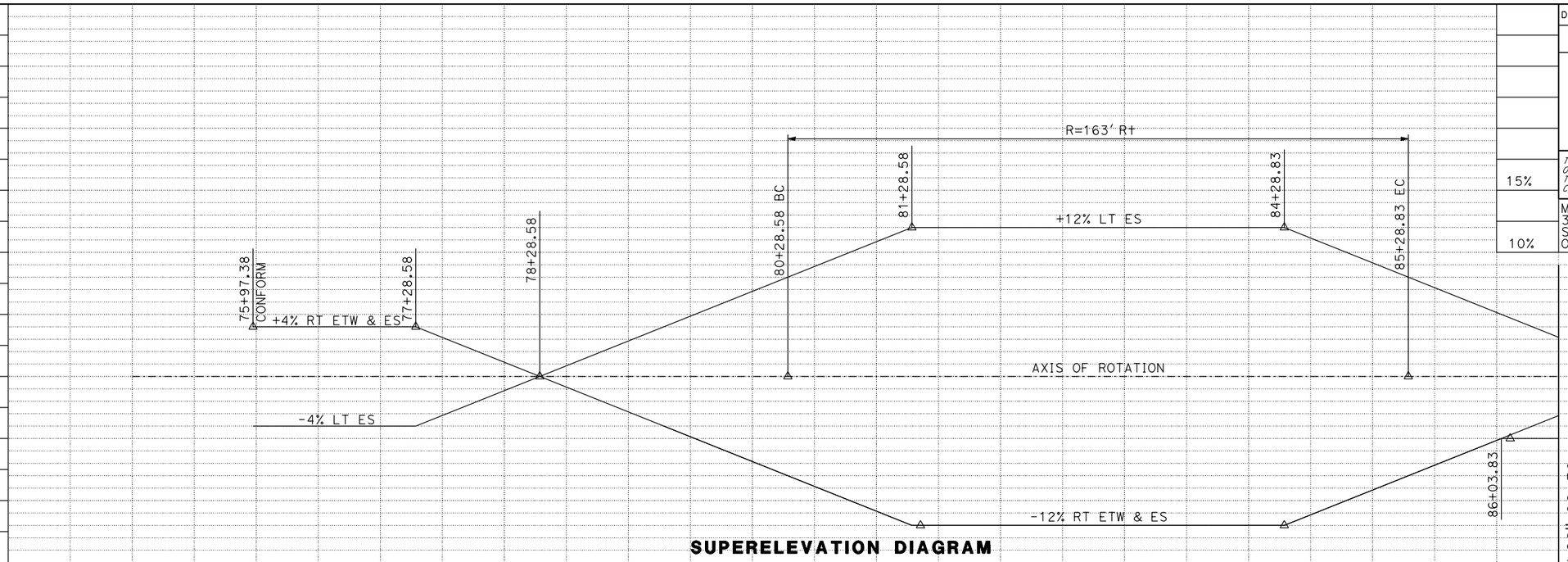
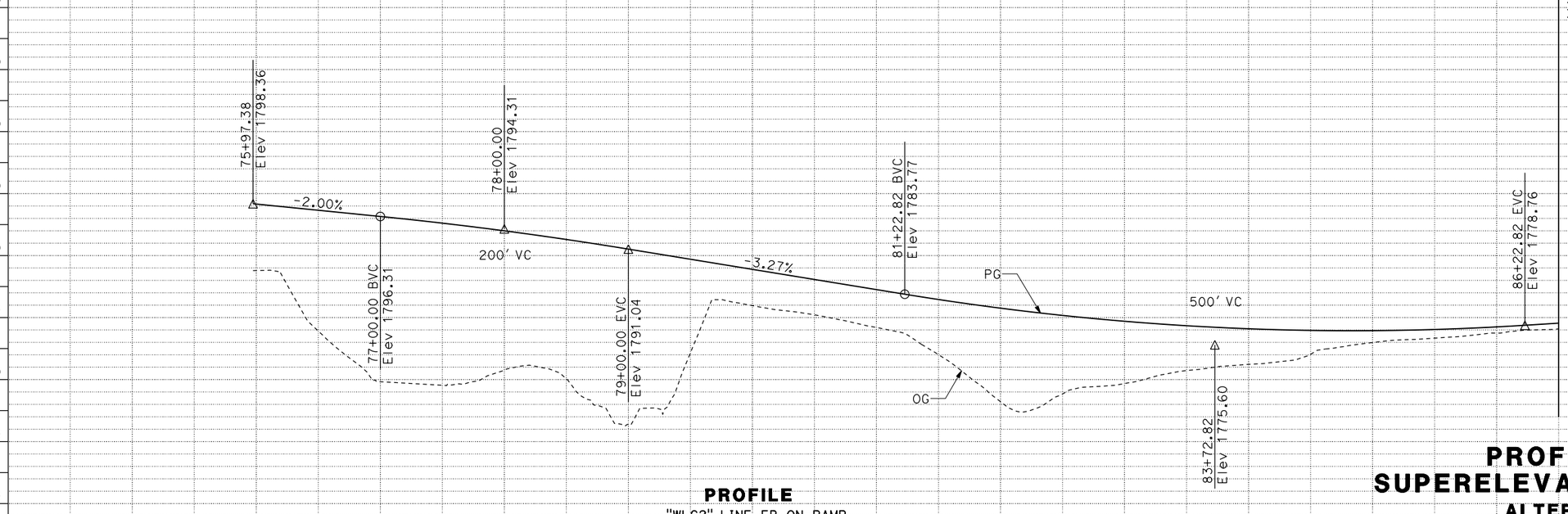
MORENO VALLEY, CA 92552



SUPERELEVATION DIAGRAM

MATCH LINE "WLC2" 86+50
SEE SHEET PS-4



PROFILE
"WLC2" LINE EB ON-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-3

STATION	75+00	6	7	8	9	80+00	1	2	3	4	85+00	6	7	8	TOTAL
CY Exc															
CY Emb															

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY | DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 01-FEB-2019
TIME PLOTTED => 15:52

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => 08130001090fb003.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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MORENO VALLEY, CA 92552

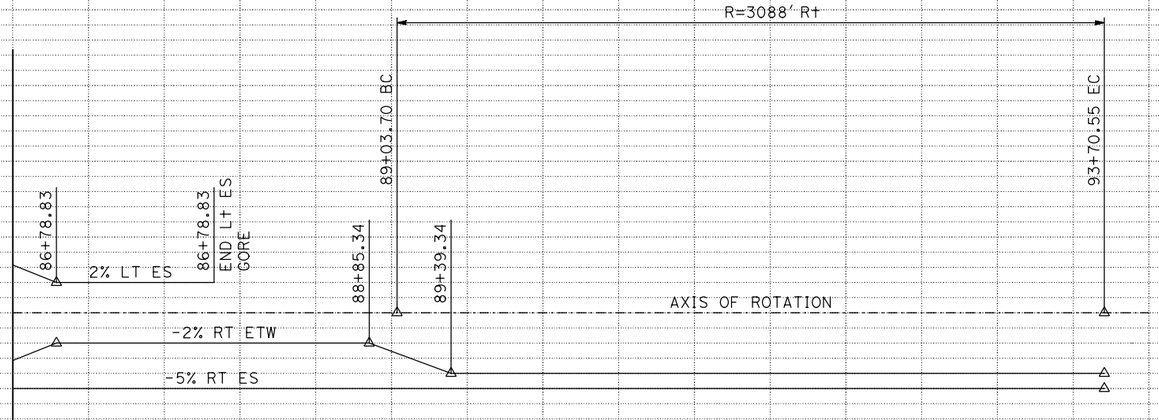
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

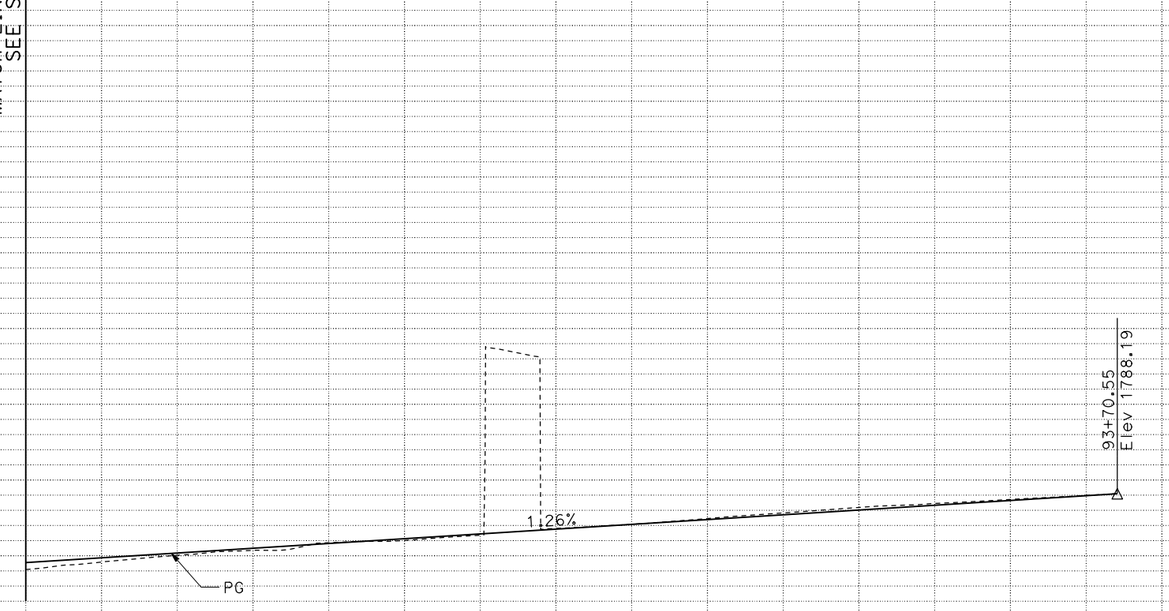
CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY / DATE REVISED



SUPERELEVATION DIAGRAM



PROFILE
"WLC2" LINE EB ON-RAMP

STATION	7	8	9	90+00	1	2	3	4	95+00	6	TOTAL
CY Exc											
CY Emb											

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-4

LAST REVISION 00-00-00
DATE PLOTTED => 01-FEB-2019
TIME PLOTTED => 15:52

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => 08130001109fb004.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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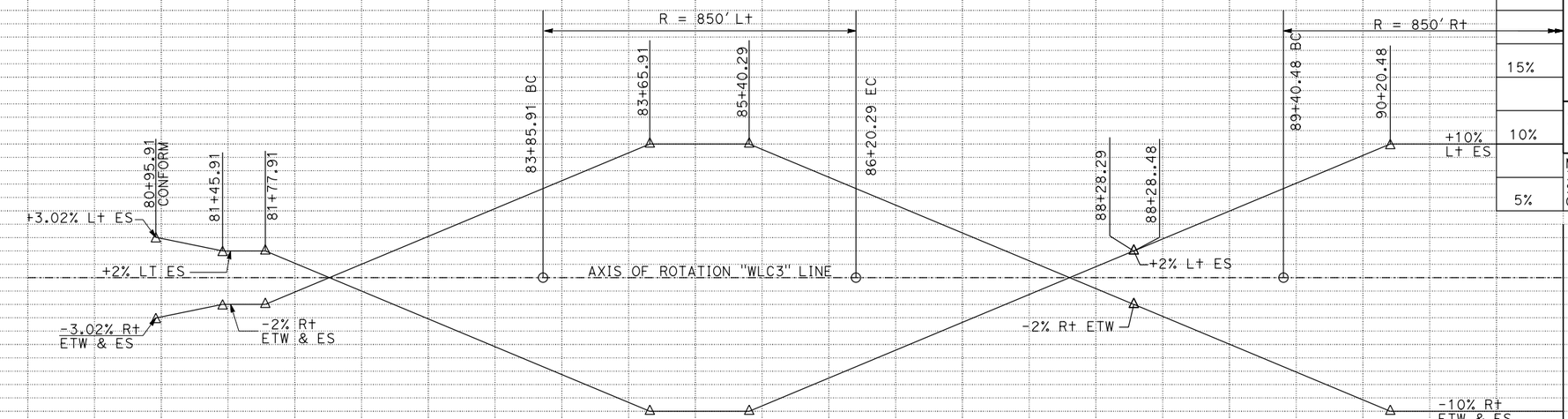
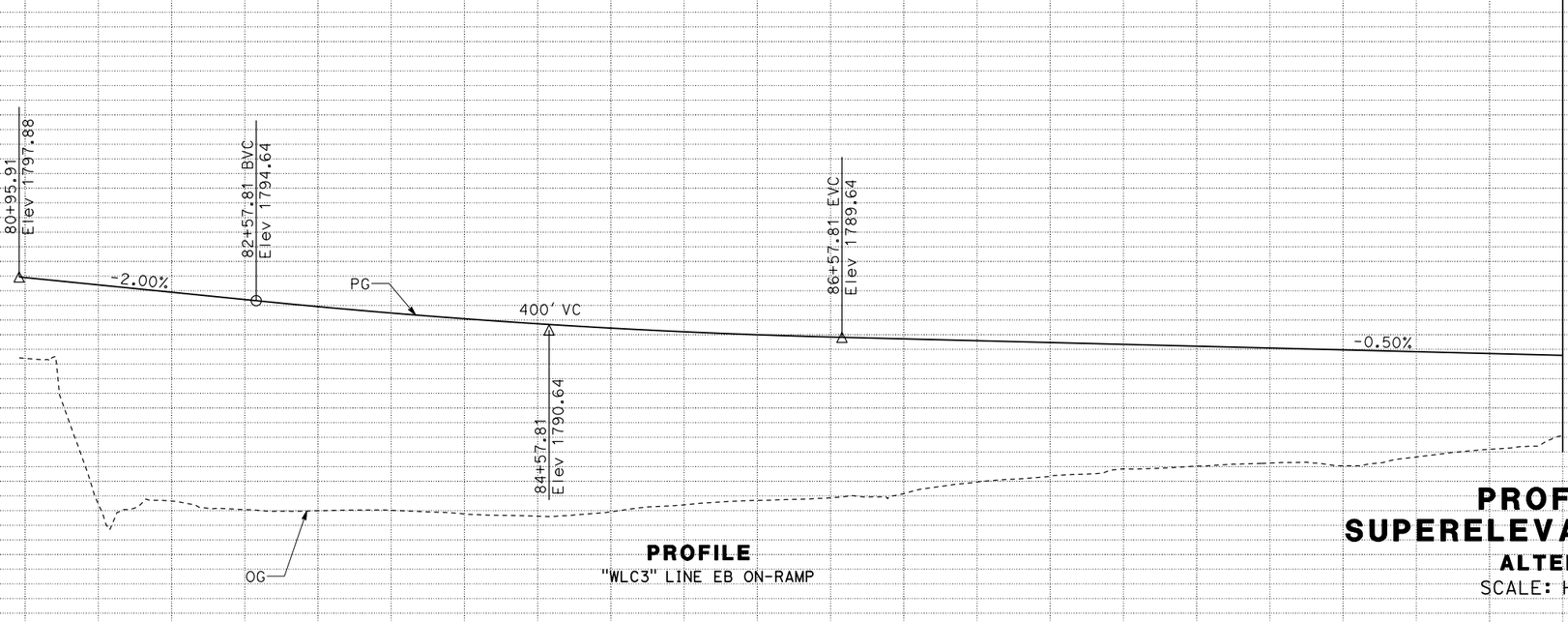


SUPERELEVATION DIAGRAM



PROFILE
"WLC3" LINE EB ON-RAMP

MATCH LINE "WLC3" 91+50
SEE SHEET PS-6

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-5

STATION	80+00	1	2	3	4	85+00	6	7	8	9	90+00	1	2	3	TOTAL
CY Exc															
CY Emb															

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
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LAST REVISION 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010
USERNAME => Steven.Alvarez
DGN FILE => 08130001090fb005.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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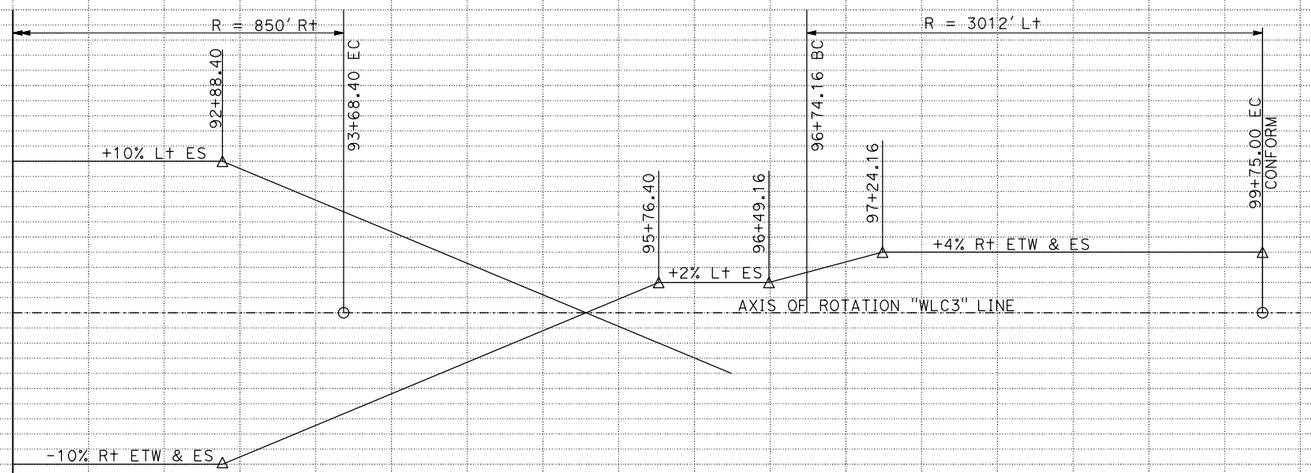
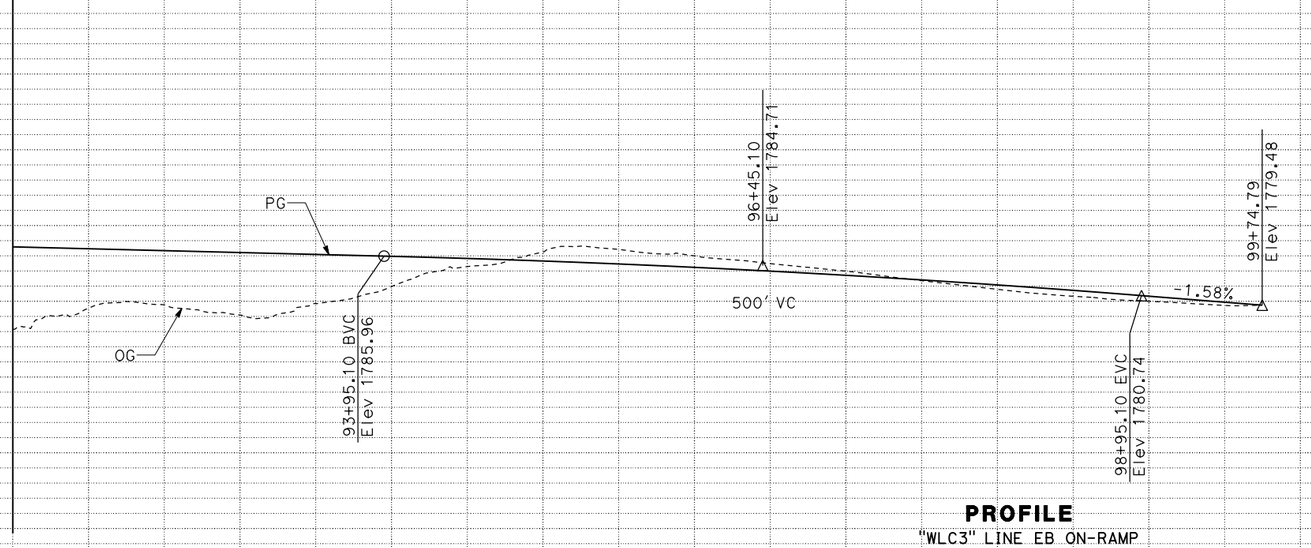


SUPERELEVATION DIAGRAM

MATCH LINE "WLC3" 91+50
SEE SHEET PS-5



PROFILE
"WLC3" LINE EB ON-RAMP

STATION	2	3	4	95+00	6	7	8	9	100+00	TOTAL
CY Exc										
CY Emb										

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
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DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010
USERNAME => Steven.Alvarez
DGN FILE => 08130001109fb006.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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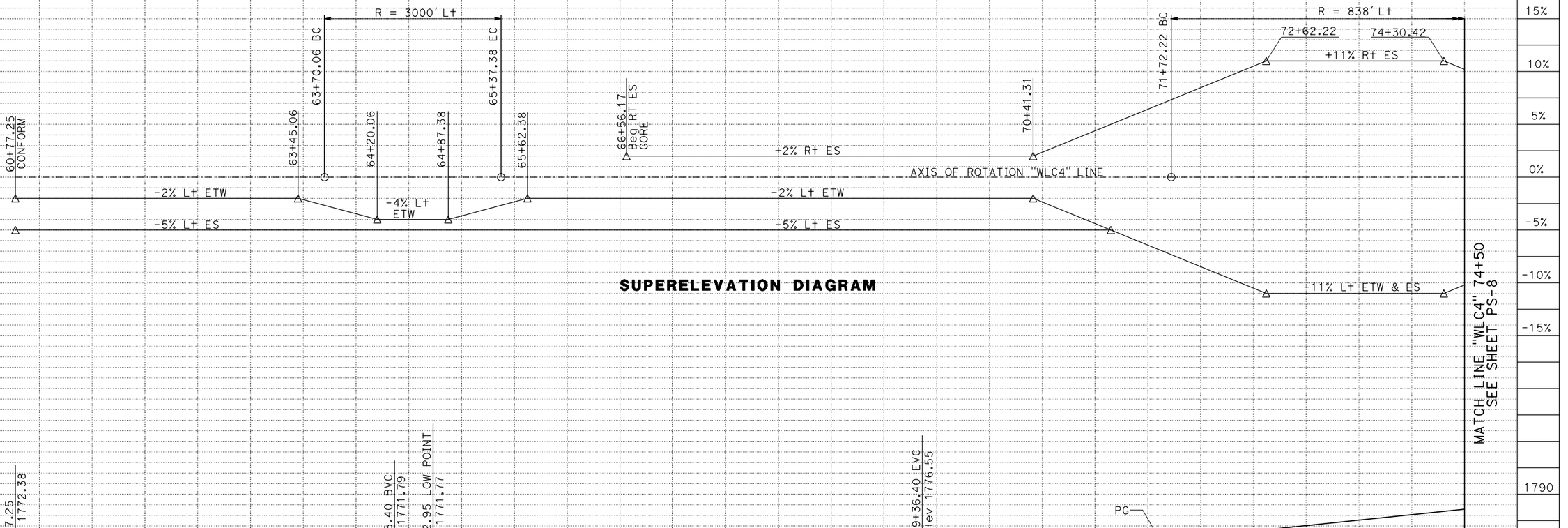
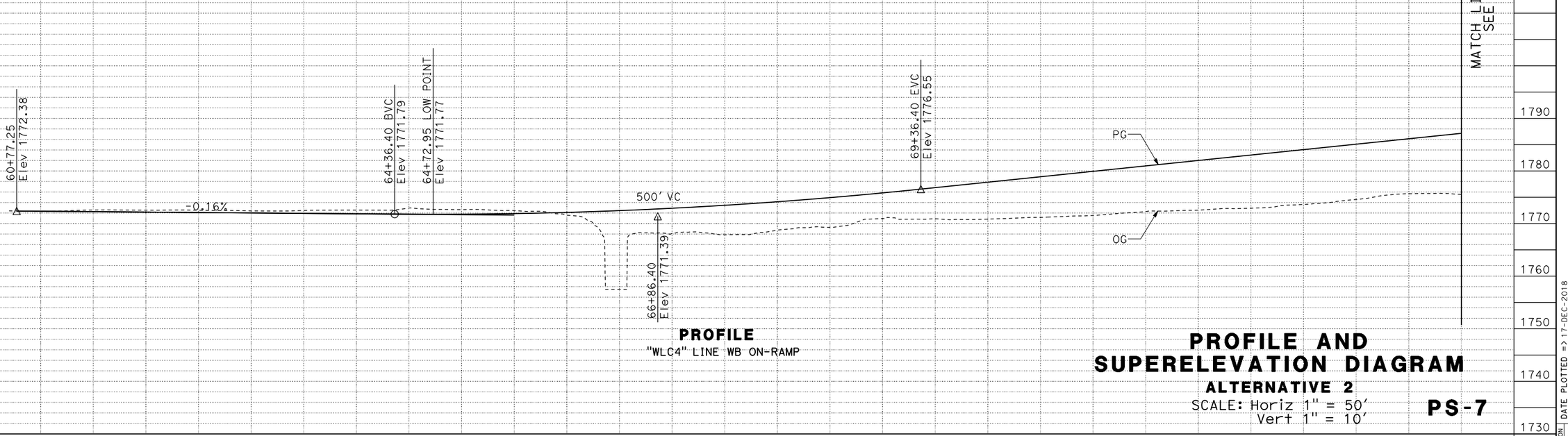


SUPERELEVATION DIAGRAM



PROFILE
"WLC4" LINE WB ON-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-7

STATION	1	2	3	4	65+00	6	7	8	9	70+00	1	2	3	4	TOTAL
CY Exc															
CY Emb															

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF

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LAST REVISION 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 0813000109fb007.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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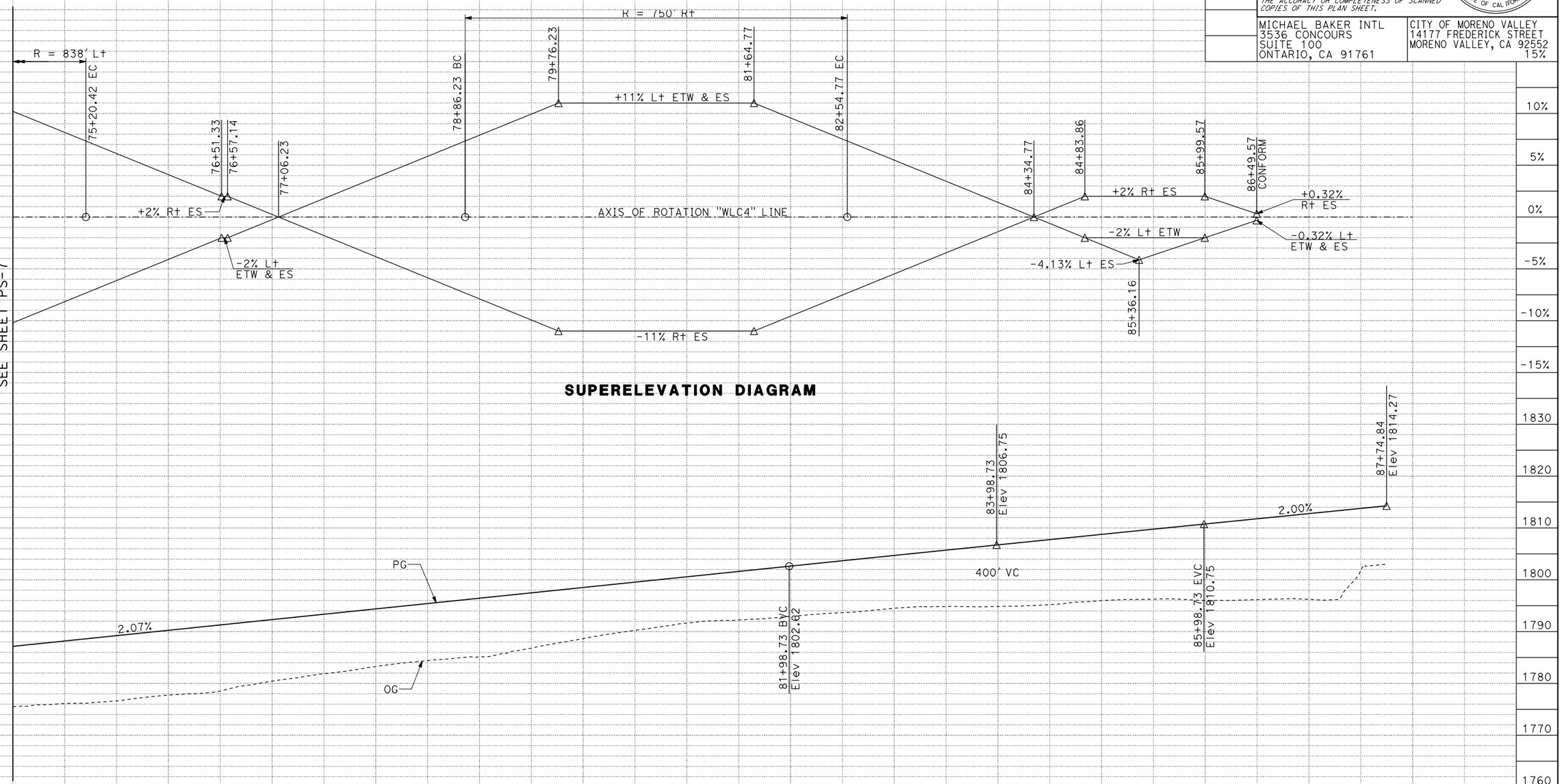
15%



SUPERELEVATION DIAGRAM

PROFILE
"WLC4" LINE WB ON-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-8

STATION	75+00	6	7	8	9	80+00	1	2	3	4	85+00	6	7	8	TOTAL
CY Exc															
CY Emb															

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

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CHECKED BY: H. SALCEDO

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LAST REVISION 00-00-00

DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 08130001109fb008.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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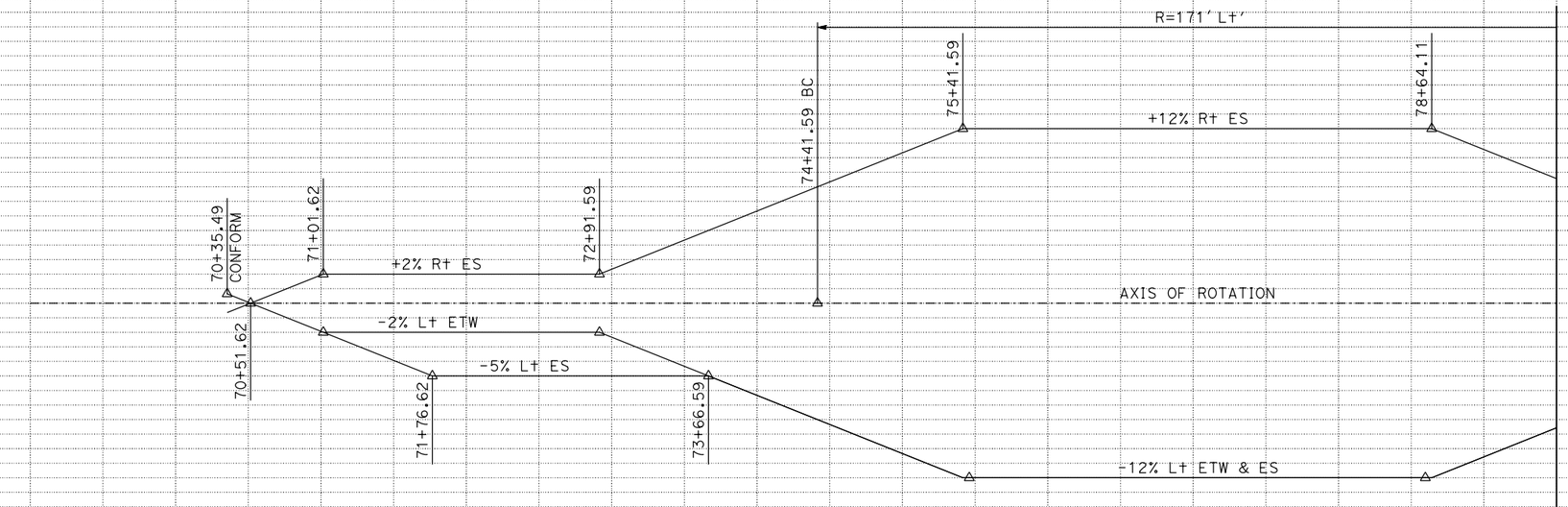
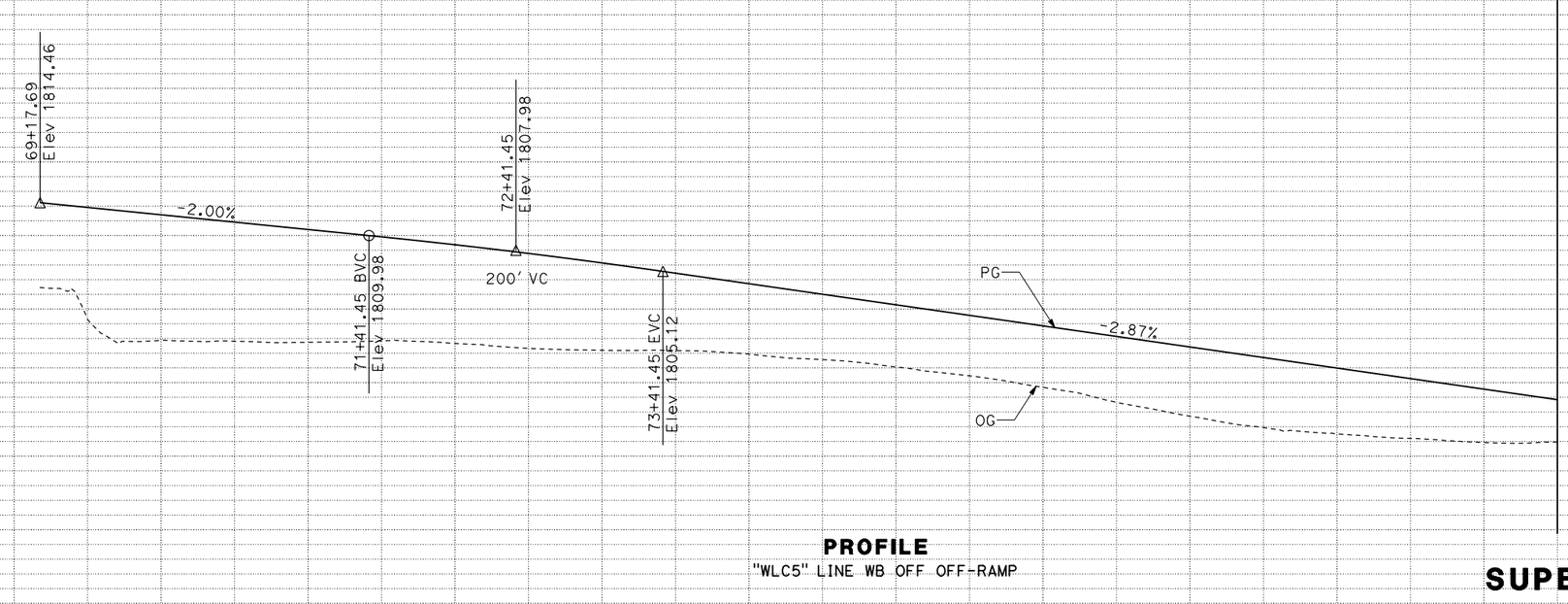


SUPERELEVATION DIAGRAM

MATCH LINE "WLC5" 79+50
SEE SHEET PS-10



PROFILE
"WLC5" LINE WB OFF OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-9

STATION	9	70+00	1	2	3	4	75+00	6	7	8	9	80+00	TOTAL
CY Exc													
CY Emb													

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 01-FEB-2019
TIME PLOTTED => 15:52

BORDER LAST REVISED 7/2/2010
USERNAME => Hector.Salcedo
DGN FILE => 0813000109fb009.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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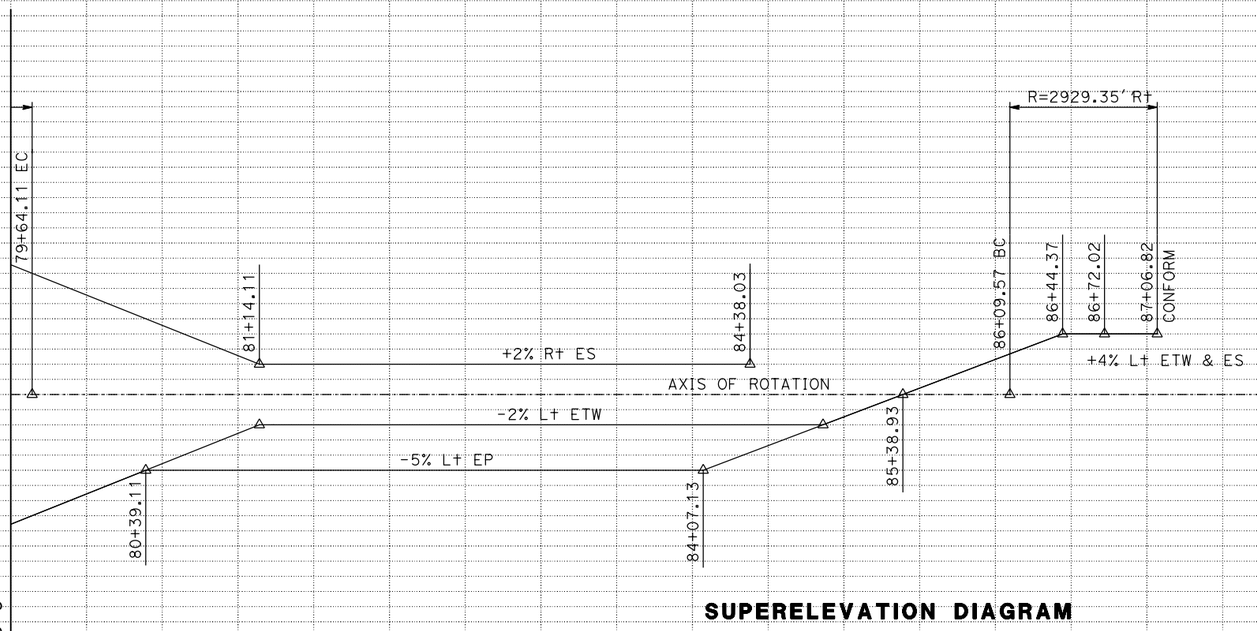
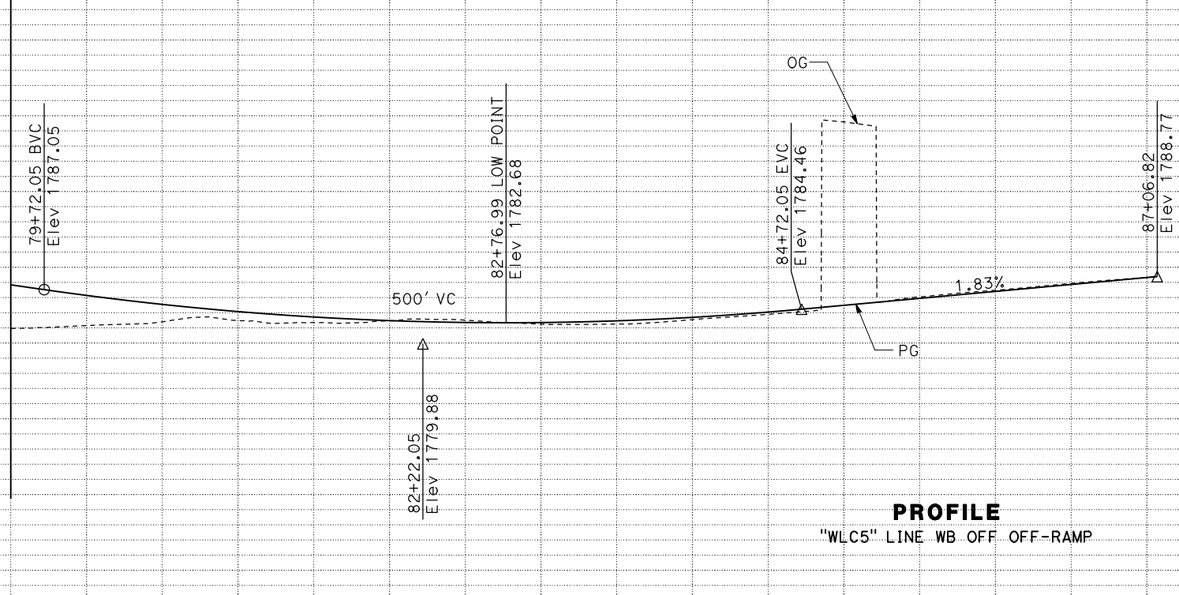


SUPERELEVATION DIAGRAM



PROFILE

"WLC5" LINE WB OFF OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-10

STATION	80+00	1	2	3	4	85+00	6	7	8	9	90+00	TOTAL
CY Exc												
CY Emb												

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

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LAST REVISION: 00-00-00

DATE PLOTTED => 01-FEB-2019
TIME PLOTTED => 15:52

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => 0813000109fb010.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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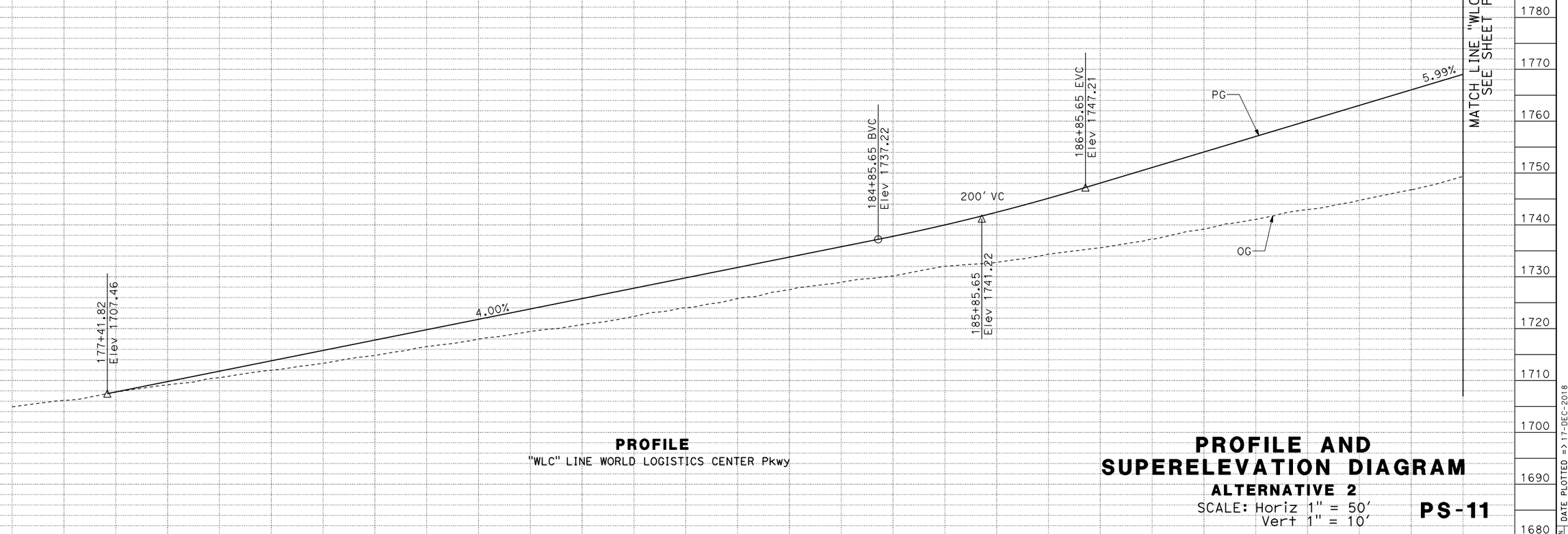
AXIS OF ROTATION "WLC" LINE

-2% L+ & R+
ETW & EP

SUPERELEVATION DIAGRAM



PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-11

STATION	7	8	9	180+00	1	2	3	4	185+00	6	7	8	9	190+00	TOTAL
CY Exc															
CY Emb															

REVISED BY | DATE REVISED
H. SALCEDO | R. RATZLAFF
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION 00-00-00 | DATE PLOTTED => 17-DEC-2018 | TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 08130000109fb011.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

AXIS OF ROTATION "WLC" LINE

-2% L+ & R+
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "WLC" 190+50
SEE SHEET PS-11

193+50.00 BVC
Elev 1787.01

194+50.00
Elev 1793.00

200' VC

195+50.00 EVC
Elev 1797.00

198+40.00 BVC
Elev 1808.60

PG

201+00.00
Elev 1819.00

4.00%

5.99%

-1.29%

520' VC

Exist Top of Deck

OG

203+60.00 EVC
Elev 1815.66

MATCH LINE "WLC" 204+50
SEE SHEET PS-12

PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-12

STATION	1	2	3	4	195+00	6	7	8	9	200+00	1	2	3	4	TOTAL
CY Exc															
CY Emb															

LAST REVISION 00-00-00 | DATE PLOTTED => 17-DEC-2018 | TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 08130001090fb012.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

AXIS OF ROTATION "WLC" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "WLC" 204+50
SEE SHEET PS-12

205+08.61 BVC
Elev 1813.75

206+09.03 LOW POINT
Elev 1813.10

-1.29%

PG

530' VC

OG

207+73.61
Elev 1810.34

210+38.61 EVC
Elev 1824.91

5.50%

211+80.00 BVC
Elev 1832.69

213+30.00
Elev 1840.94

300' VC

214+80.00 EVC
Elev 1843.52

1.72%

215+20.00 BVC
Elev 1844.21

300' VC

216+70.00
Elev 1846.80

218+20.00 EVC
Elev 1852.55

MATCH LINE "WLC" 218+50
SEE SHEET PS-14

PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-13

STATION	205+00	6	7	8	9	210+00	1	2	3	4	215+00	6	7	8	TOTAL
CY Exc															
CY Emb															

15% 10% 5% 0% -5% -10% -15%

1870 1860 1850 1840 1830 1820 1810 1800 1790 1780 1770

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 17-DEC-2018 | TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 08130001090fb013.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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14177 FREDERICK STREET
MORENO VALLEY, CA 92552

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R. RATZLAFF

CALCULATED-DESIGNED BY
CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR
R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

15%
10%
5%
0%
-5%
-10%
-15%

AXIS OF ROTATION "WLC" LINE
-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "WLC" 218+50
SEE SHEET PS-13

1880
1870
1860
1850
1840
1830
1820
1810

220+90.00
Elev 1862.90

223+20.68
Elev 1865.22

PG

1.01%

3.83%

200' VC

OG

219+90.00 BVC
Elev 1859.06

221+90.00 EVC
Elev 1863.90

PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

STATION	9	210+00	1	2	3	4	TOTAL
CY Exc							
CY Emb							

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-14

LAST REVISION 00-00-00 | DATE PLOTTED => 17-DEC-2018 | TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 0813000109fb014.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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14177 FREDERICK STREET
MORENO VALLEY, CA 92552

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

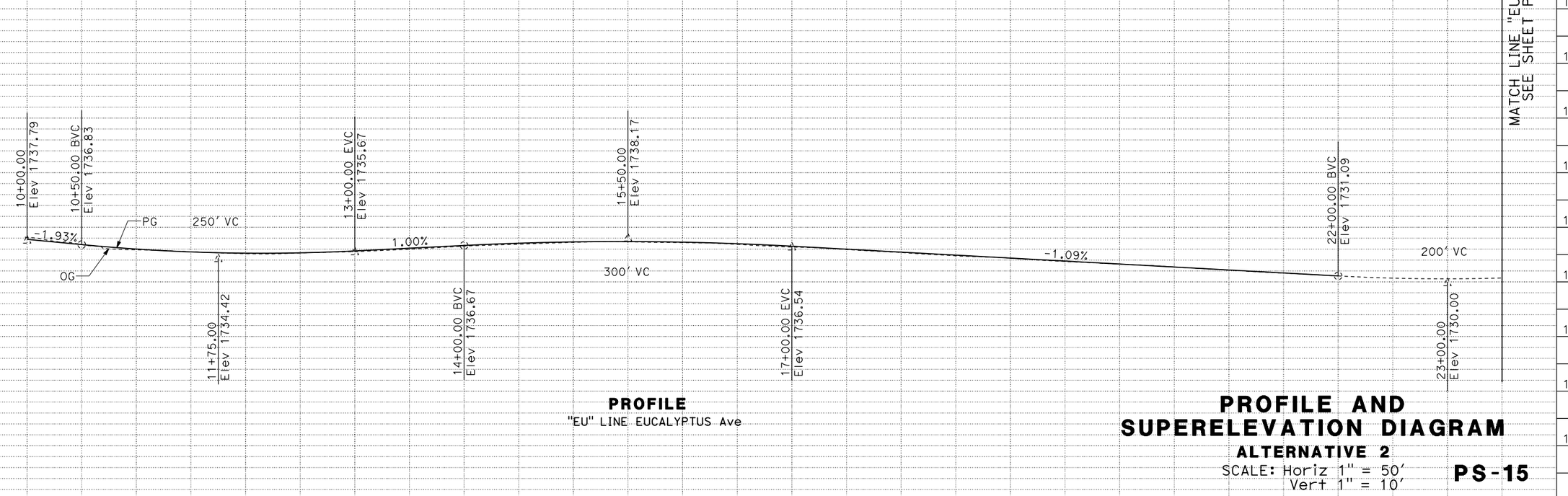
REVISED BY

DATE REVISED

AXIS OF ROTATION "EU" LINE

-2% L+ & R+
ETW & EP

SUPERELEVATION DIAGRAM



PROFILE

"EU" LINE EUCALYPTUS Ave

STATION	10+00	1	2	3	4	15+00	6	7	8	9	20+00	1	2	3	TOTAL
CY Exc															
CY Emb															

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-15

LAST REVISION 00-00-00

DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => EU0813000109fb015.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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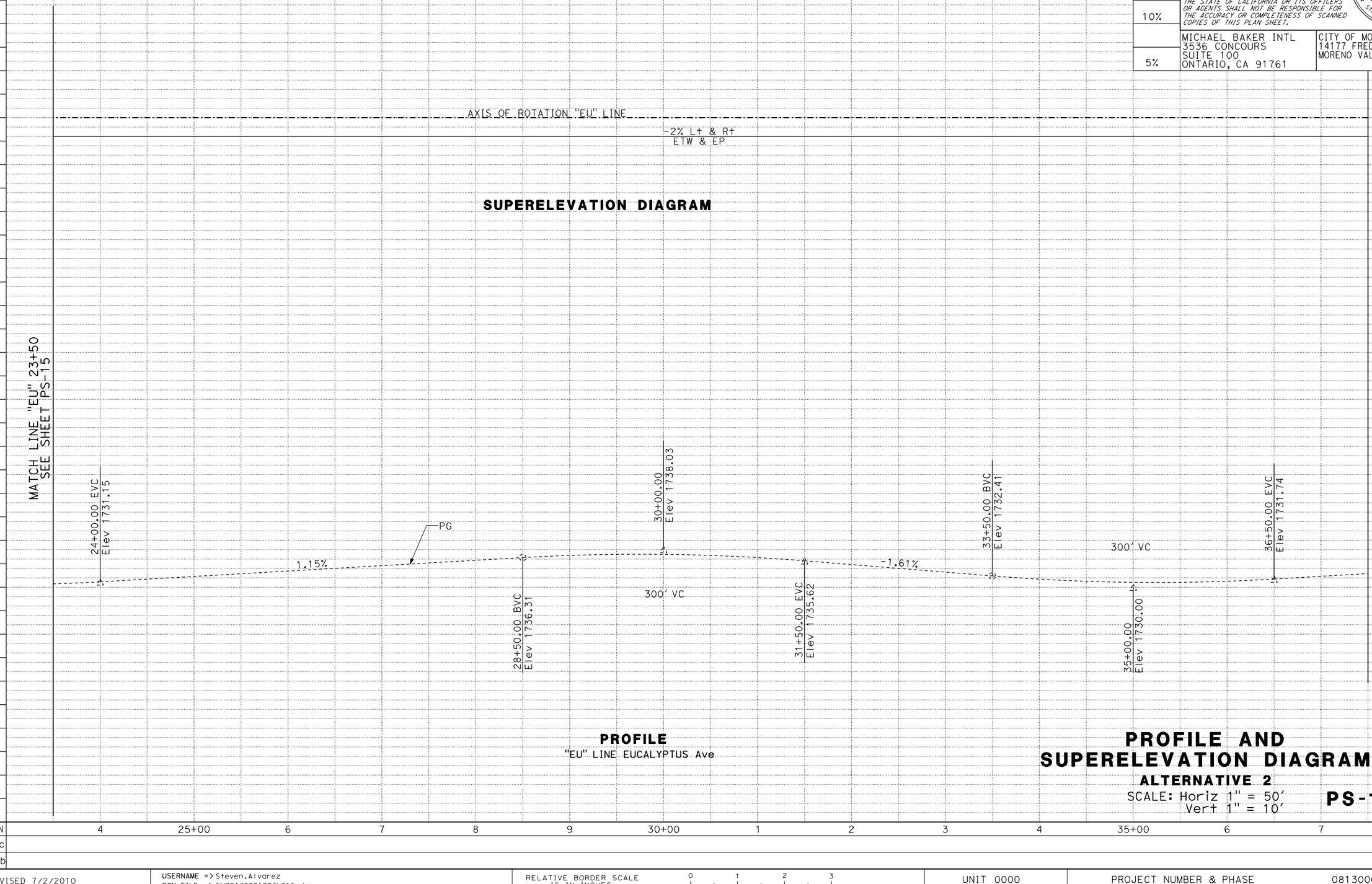
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

SUPERELEVATION DIAGRAM



PROFILE
"EU" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY	DATE REVISED

LAST REVISION: 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => EU0813000109fb016.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

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

PLANS APPROVAL DATE

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SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

AXIS OF ROTATION "EU" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "EU" 37+50
SEE SHEET PS-17

MATCH LINE "EU" 51+50
SEE SHEET PS-17

40+50.00 BVC
Elev 1736.39

42+00.00
Elev 1738.13

43+50.00 EVC
Elev 1736.63

PG

46+75.00 BVC
Elev 1733.38

47+75.00
Elev 1732.38

48+75.00 EVC
Elev 1733.88

50+25.00
Elev 1736.13

1.16%
300' VC
1.00%
200' VC
1.50%
1.08%

PROFILE
"EU" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM
ALTERNATIVE 2
SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-17

STATION	8	9	40+00	1	2	3	4	45+00	6	7	8	9	50+00	1	TOTAL
CY Exc															
CY Emb															

REVISED BY | DATE REVISED
H. SALCEDO | R. RATZLAFF
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 17-DEC-2018 | TIME PLOTTED => 12:58

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => EU0813000109fb017.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

R. YOUNG

CONSULTANT FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

15% 10% 5% 0% -5% -10% -15%

AXIS OF ROTATION "EU" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

1790 1780 1770 1760 1750 1740 1730 1720 1710 1700

MATCH LINE "EU" 51+50
SEE SHEET PS-18

1.08%

2.00%

59+20.33 BVC
Elev 1741.71

300' VC

60+70.33
Elev 1738.71

2.00%

62+20.33 EVC
Elev 1741.71

62+82.21
Elev 1742.94

PROFILE

"EU" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 2

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-18

STATION	2	3	4	55+00	6	7	8	9	60+00	1	2	3	4	65+00	TOTAL
CY Exc															
CY Emb															

LAST REVISION 00-00-00 | DATE PLOTTED => 30-JAN-2019 | TIME PLOTTED => 16:18

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => EU0813000109fb018.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

AXIS OF ROTATION "EU-DV" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "EU" 39+50
SEE SHEET PS-17

MATCH LINE "EU-DV" 53+50
SEE SHEET PS-20DV

39+58.07
Elev 1735.32

1.16%

40+41.15 BVC
Elev 1736.29

42+66.15
Elev 1738.90

450' VC

44+91.15 EVC
Elev 1735.00

PROFILE

"EU-DV" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM

DESIGN VARIATION 2a

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-19DV

STATION		40+00	1	2	3	4	45+00	6	7	8	9	50+00	1	2	3	TOTAL
CY	Exc															
	Emb															

LAST REVISION 00-00-00
DATE PLOTTED => 30-JAN-2019
TIME PLOTTED => 15:49

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
DATE REVISED
REVISED BY

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => EU0813000109fb0018.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

AXIS OF ROTATION "EU-DV" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "EU-DV" 53+50
SEE SHEET PS-19DV

-1.73%

61+69.52 BVC
Elev 1705.93

300' VC

64+69.52 EVC
Elev 1706.33

64+87.02
Elev 1706.68

2.00%

63+19.52
Elev 1703.33

PROFILE

"EU-DV" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM

DESIGN VARIATION 2a

SCALE: Horiz 1" = 50' **PS-20DV**
Vert 1" = 10'

STATION	4	55+00	6	7	8	9	60+00	1	2	3	4	65+00	6	7	TOTAL
CY Exc															
CY Emb															

15% 10% 5% 0% -5% -10% -15%

1780 1770 1760 1750 1740 1730 1720 1710 1700 1690

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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LAST REVISION 00-00-00 | DATE PLOTTED => 30-JAN-2019 | TIME PLOTTED => 15:50

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => EU0813000109fb019.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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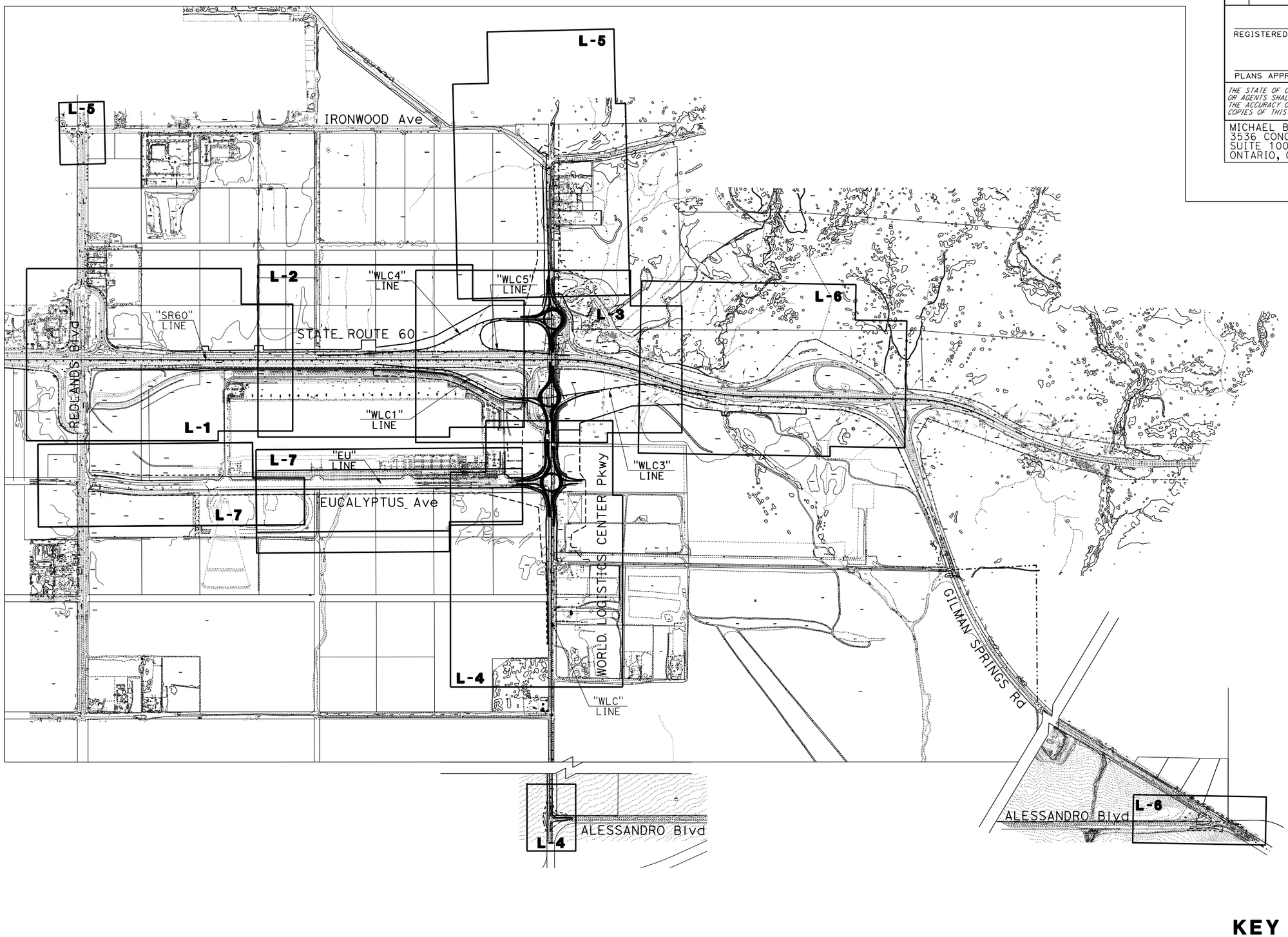
CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



KEY MAP
ALTERNATIVE 6
NO SCALE

K-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CALCULATED-DESIGNED BY	H. SALCEDO	REVISED BY
Caltrans	CHECKED BY	R. RATZLAFF	DATE REVISED
CONSULTANT FUNCTIONAL SUPERVISOR	R. YOUNG		

LAST REVISION 00-00-00 | DATE PLOTTED => 30-JUL-2019 | TIME PLOTTED => 12:29

BORDER LAST REVISED 7/2/2010 | USERNAME => armando.santosponce | DGN FILE => 08130001090da001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

MICHAEL BAKER INTL
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SUITE 100
ONTARIO, CA 91764

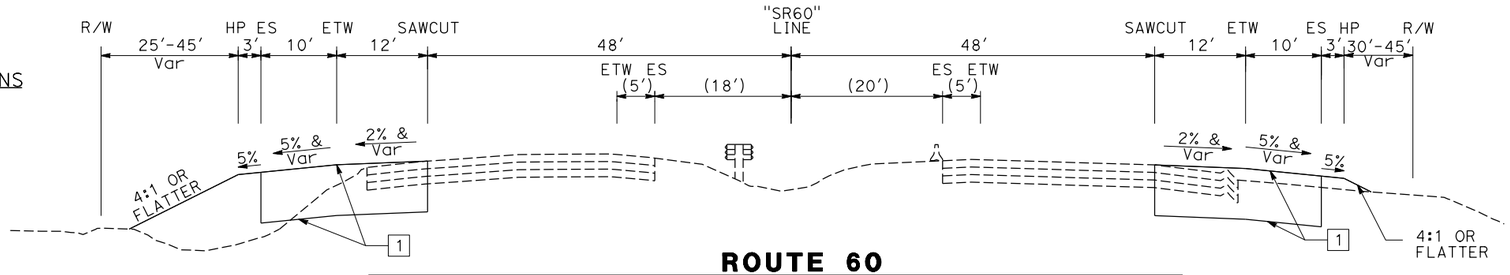
CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

STRUCTURAL SECTIONS

1 CRCP: 1.10'
HMA-A: 0.25'

2 CRCP: 1.05'
HMA-A: 0.25'

3 RHMA: 0.20'
HMA-A: 1.0'
AB: 0.5'

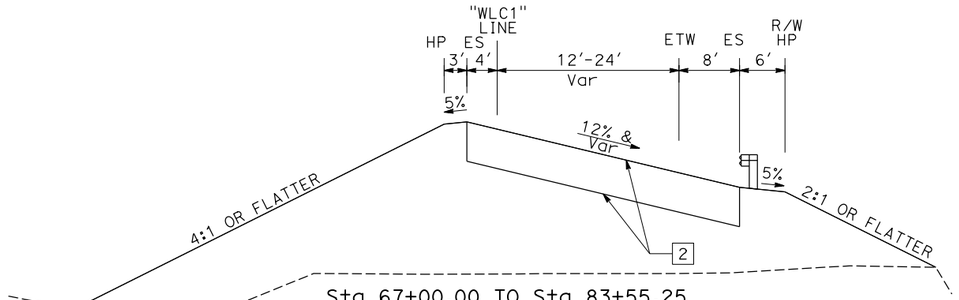


ROUTE 60

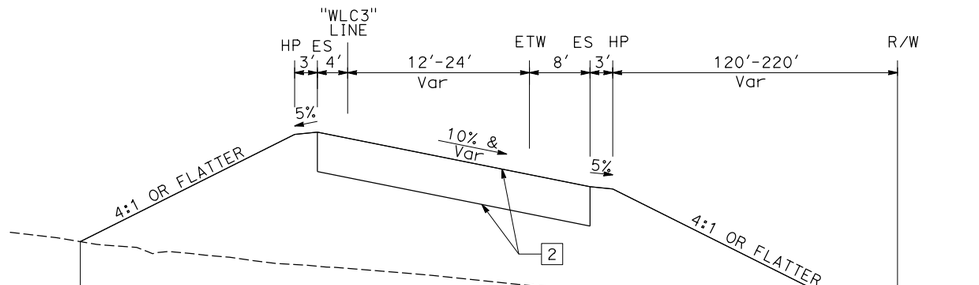
WB ROUTE 60	EB ROUTE 60
Sta 441+88.39 TO Sta 460+70.42	Sta 442+36.94 TO Sta 467+05.78
Sta 488+98.35 TO Sta 505+23.16	Sta 505+99.75 TO Sta 515+74.01

NOTES:

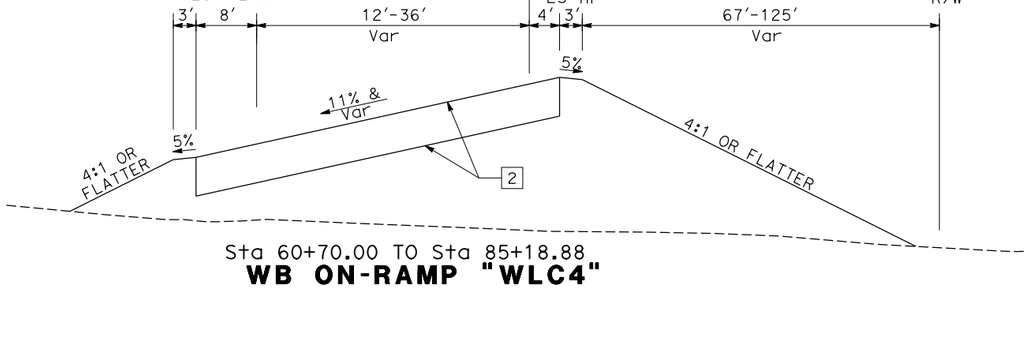
1. CURB AND GUTTER, SIDEWALK, AND CURB DETAILS WILL BE DETERIMINED IN THE FINAL DESIGN PHASE AND WILL BE IN ACCORDANCE WITH THE LATEST CALTRANS AND CITY STANDARDS AND SPECIFICATIONS.
2. SLOPE ROUNDING IS REQUIRED AT ALL TOP OF SLOPE AND TOE OF SLOPE LOCATIONS.
3. TAPERED EDGE REQUIRE AS APPLICABLE PER THE LATEST CALTRANS STANDARD PLANS



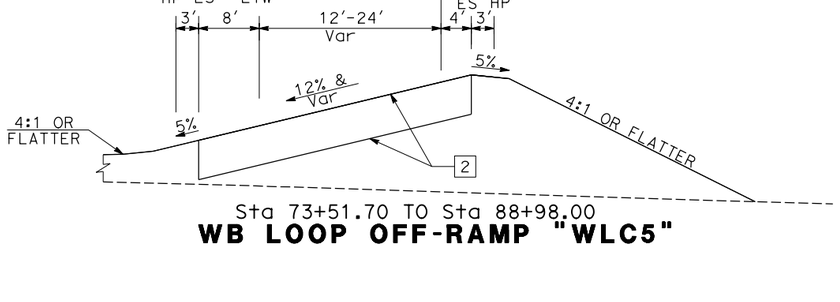
Sta 67+00.00 TO Sta 83+55.25
EB OFF-RAMP "WLC1"



Sta 91+11.25 TO Sta 105+98.87
EB ON-RAMP "WLC3"



Sta 60+70.00 TO Sta 85+18.88
WB ON-RAMP "WLC4"



Sta 73+51.70 TO Sta 88+98.00
WB LOOP OFF-RAMP "WLC5"

TYPICAL CROSS SECTIONS

ALTERNATIVE 6

NO SCALE

X-1

REVISED BY	DATE REVISED
H. SALCEDO	R. RATZLAFF

CALCULATED-DESIGNED BY

CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00

DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:19

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 08130001090a001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

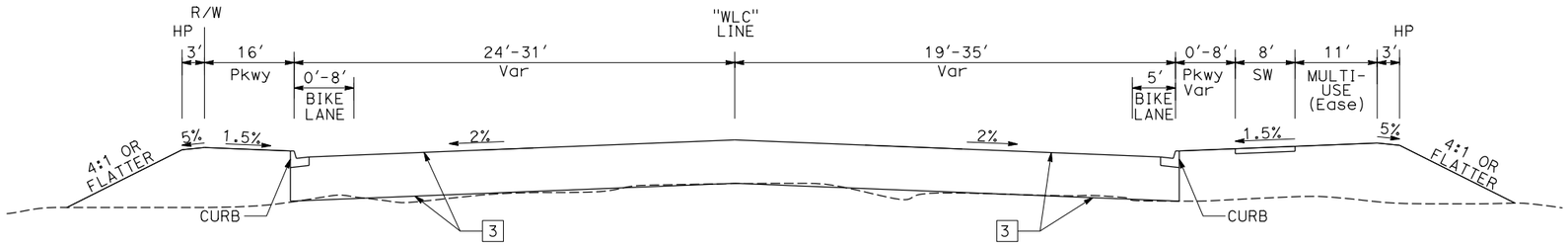
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

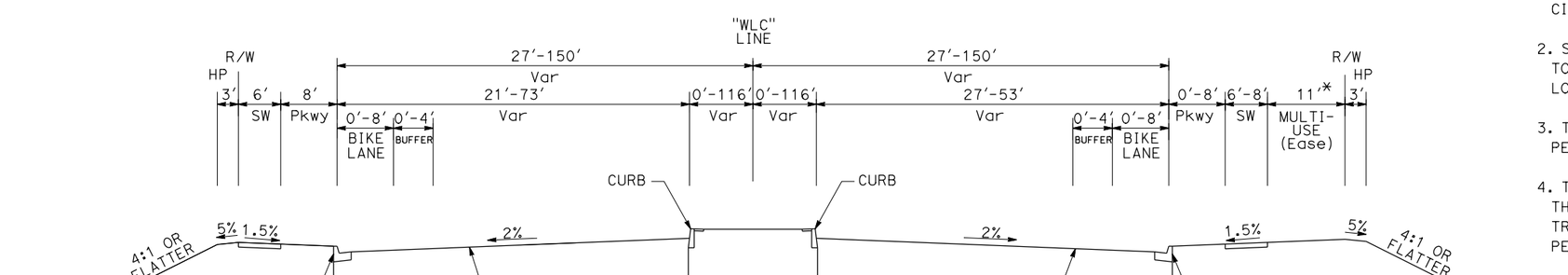
REGISTERED PROFESSIONAL ENGINEER — XXX — No. XXX — CIVIL — STATE OF CALIFORNIA

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



Sta 207+96.84 TO Sta 221+70.32



Sta 172+30.48 TO Sta 207+96.84
*Sta 188+11.53 TO Sta 207+96.84

Sta 167+94.58 TO Sta 172+30.48

NOTES:

1. CURB AND GUTTER, SIDEWALK, AND CURB DETAILS WILL BE DETERIMINED IN THE FINAL DESIGN PHASE AND WILL BE IN ACCORDANCE WITH THE LATEST CALTRANS AND CITY STANDARDS AND SPECIFICATIONS.

2. SLOPE ROUNDING IS REQUIRED AT ALL TOP OF SLOPE AND TOE OF SLOPE LOCATIONS.

3. TAPERED EDGE REQUIRED AS APPLICABLE PER THE LATEST CALTRANS STANDARD PLANS.

4. THROUGH THE ROUNDABOUTS, BIKES HAVE THE OPTION TO EITHER MERGE WITH VEHICLE TRAFFIC OR CROSS THE ROUNDABOUT WITH PEDESTRIANS.

WORLD LOGISTICS CENTER PARKWAY

TYPICAL CROSS SECTIONS

ALTERNATIVE 6

NO SCALE

X-2

REVISED BY	DATE REVISED
H. SALCEDO	
R. RATZLAFF	

CALCULATED-DESIGNED BY

CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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LAST REVISION 00-00-00

DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:19

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ca002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
XXX
No. XXX
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

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MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

REDLANDS Blvd

Exist WB OFF-RAMP

Exist WB ON-RAMP

"SR60" 441+88.39
JOIN Exist

Prop CT R/W

Exist CT R/W

12'

10'

"SR60" LINE

STATE ROUTE 60 WESTBOUND

7703.78'

N89°33'13"W

8 9 430 1 2 3 4 435 6 7 8 9 440 1 2 3 4 445 6 7 8 9 450 1 2 3 4 455

STATE ROUTE 60 EASTBOUND

Exist CT R/W

"SR60" 442+36.94
JOIN Exist

Prop CT R/W

MATCH LINE "SR60" STA 455+50
SEE L-2

Exist EB ON-RAMP

Exist EB OFF-RAMP

LEGEND

- Exist PROPERTY LINES
- Exist CT R/W
- PROPOSED CT R/W
- CUT/FILL LINE
- TCE
- SLOPE Ease
- Exist COUNTY R/W
- PROPOSED MGS
- PROPOSED PAVEMENT

LAYOUT

ALTERNATIVE 6

SCALE: 1" = 100'

L-1

LAST REVISION: 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:16

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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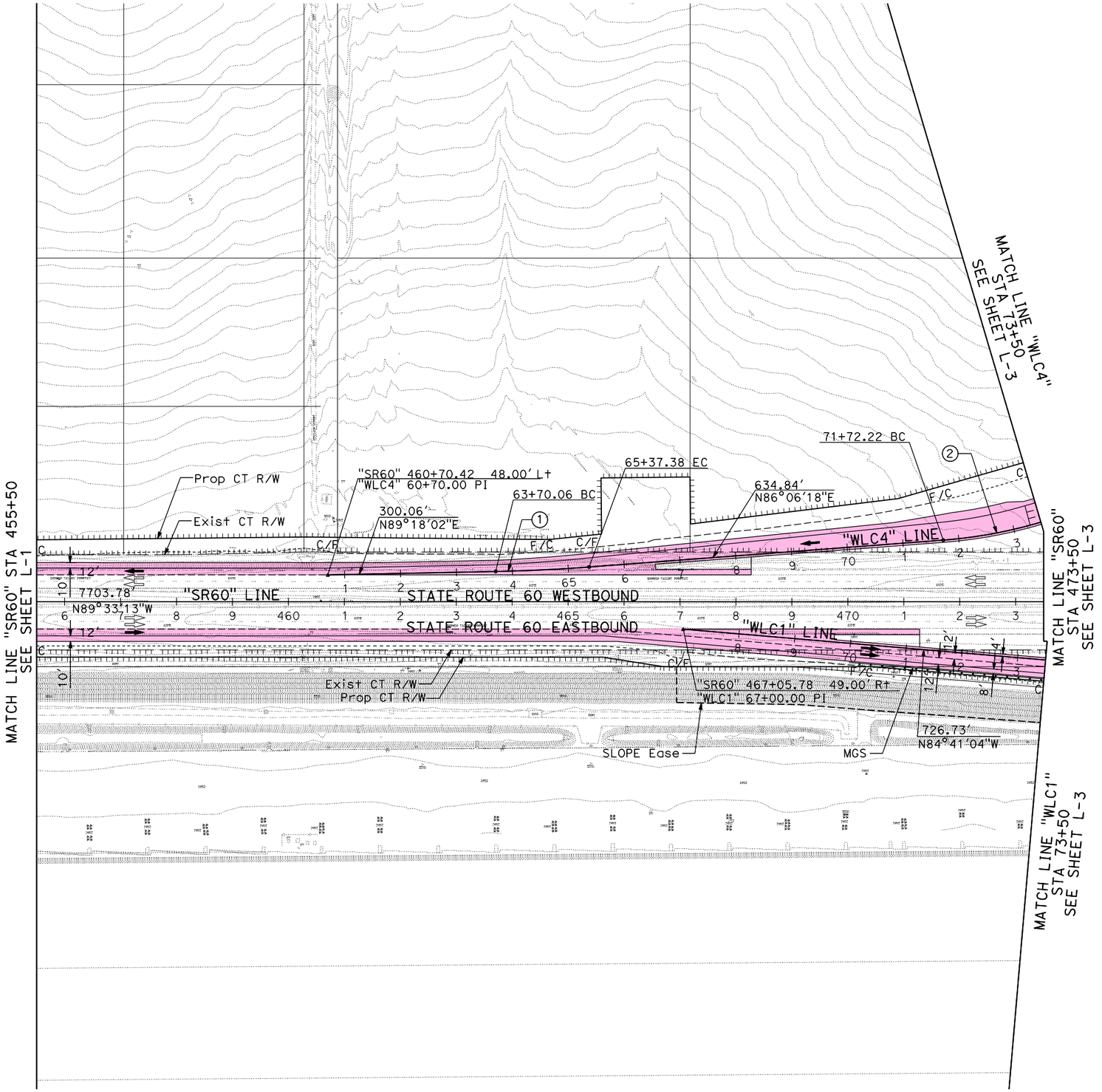
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



CURVE DATA

No.	R	Δ	T	L
(1)	3000.00′	3°11′44"	83.68′	167.32′
(2)	838.00′	23°48′26"	176.65′	348.20′

LAYOUT

ALTERNATIVE 6

SCALE: 1" = 100′

L-2

LAST REVISION 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
REVISED BY
DATE REVISED

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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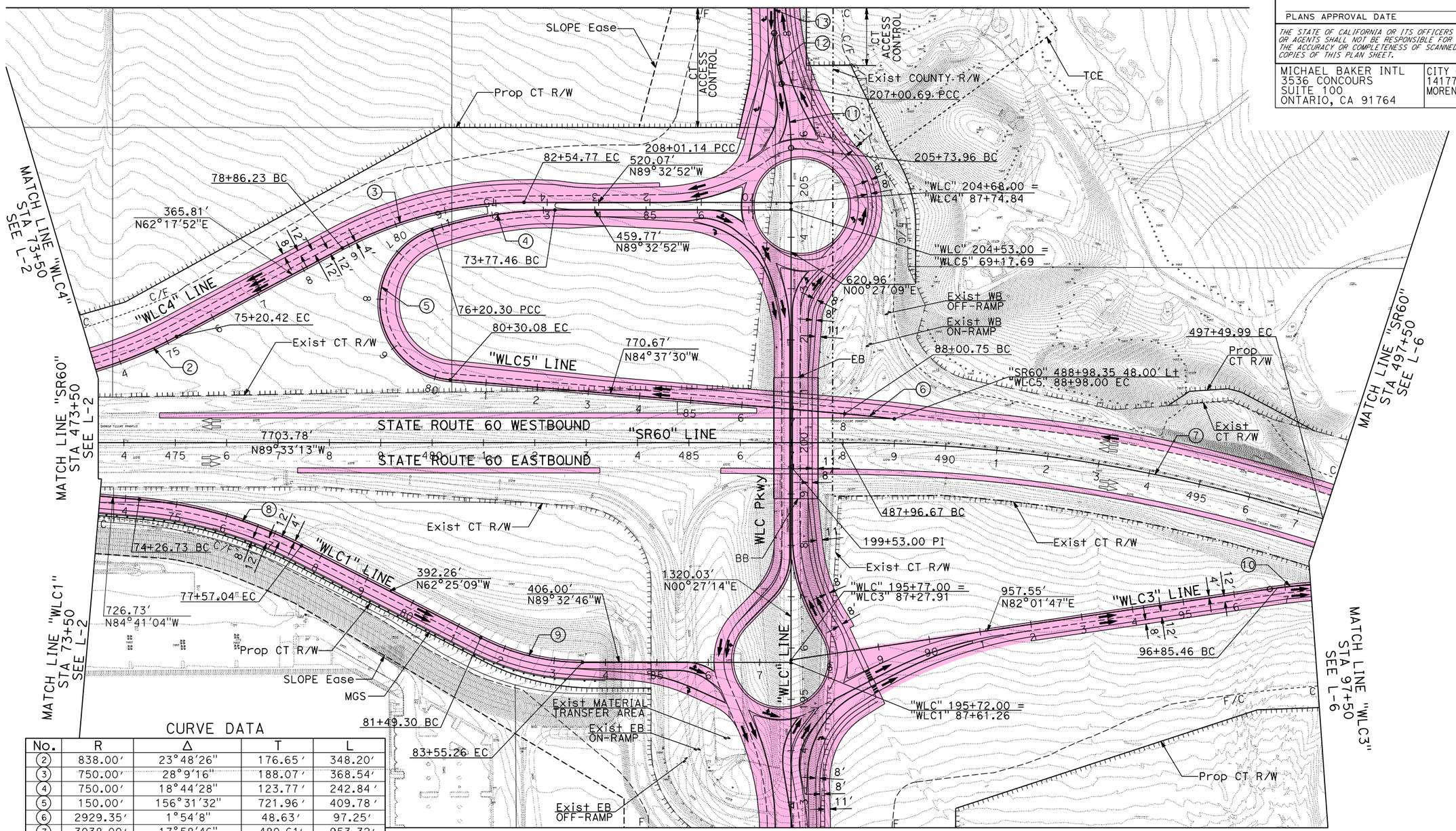
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

MATCH LINE "WLC" Sta 208+50
SEE L-5



MATCH LINE "WLC" Sta 192+50
SEE L-4

CURVE DATA

No.	R	Δ	T	L
(2)	838.00′	23°48′26"	176.65′	348.20′
(3)	750.00′	28°9′16"	188.07′	368.54′
(4)	750.00′	18°44′28"	123.77′	242.84′
(5)	150.00′	156°31′32"	721.96′	409.78′
(6)	2929.35′	1°54′8"	48.63′	97.25′
(7)	3038.00′	17°58′46"	480.61′	953.32′
(8)	850.00′	22°15′56"	167.27′	330.31′
(9)	435.00′	27°7′37"	104.94′	205.95′
(10)	850.00′	22°45′32"	171.07′	337.64′
(11)	433.69′	16°44′32"	63.82′	126.73′
(12)	343.79′	16°44′32"	50.59′	100.45′
(13)	17627.81′	1°18′49"	202.08′	404.16′

LAYOUT
ALTERNATIVE 6
SCALE: 1" = 100′

L-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
REVISED BY
DATE REVISED

LAST REVISION: DATE PLOTTED => 10-FEB-2020
00-00-00 TIME PLOTTED => 17:17

BORDER LAST REVISED 7/2/2010
USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea003.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

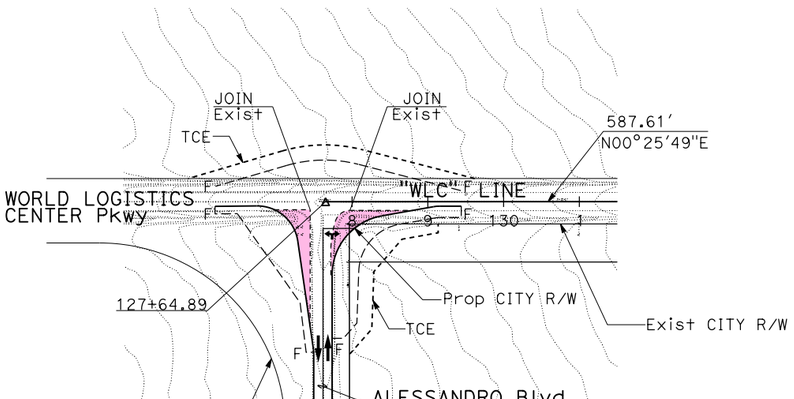
PLANS APPROVAL DATE

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

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

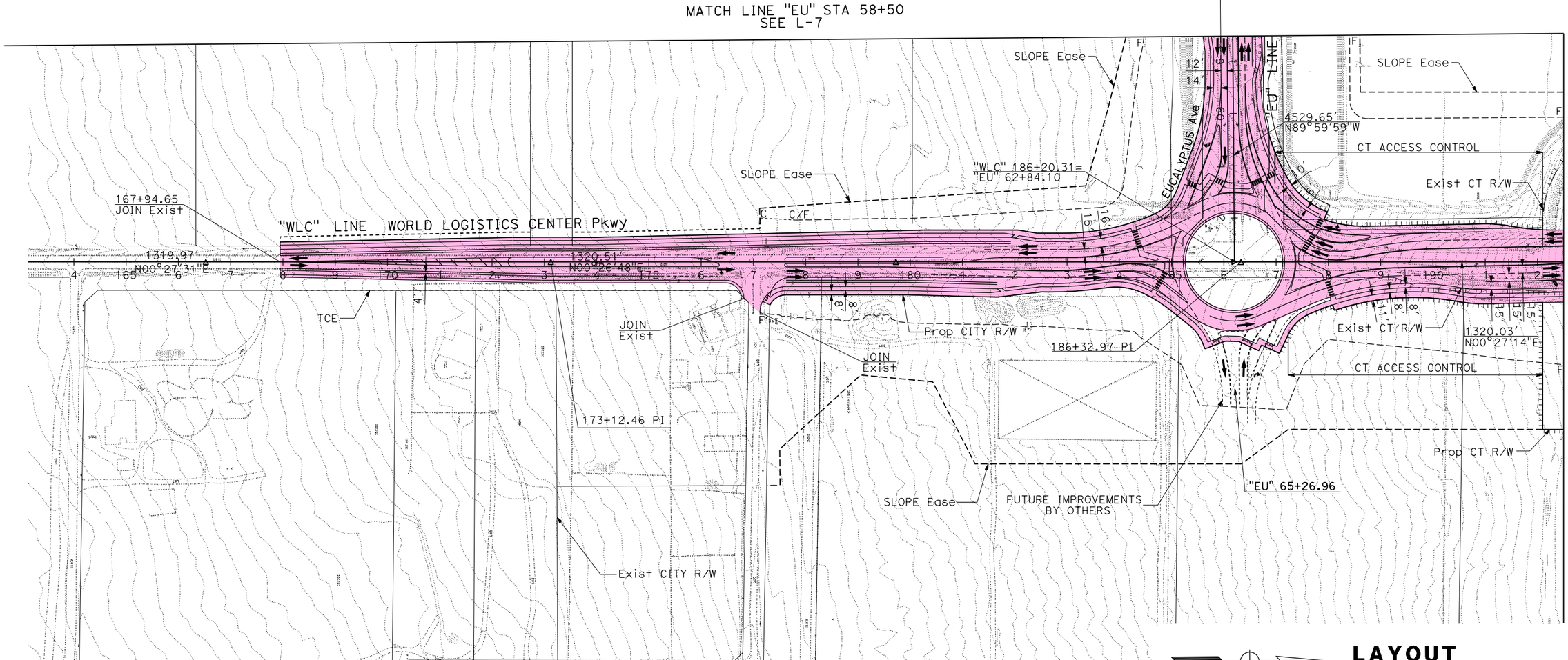
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



WORLD LOGISTICS CENTER Pkwy AND ALESSANDRO Blvd

MATCH LINE "EU" STA 58+50
SEE L-7



MATCH LINE "WLC" STA 192+50
SEE L-3

LAYOUT
ALTERNATIVE 6
SCALE: 1" = 100'

L-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:17

BORDER LAST REVISED 7/2/2010
USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea004.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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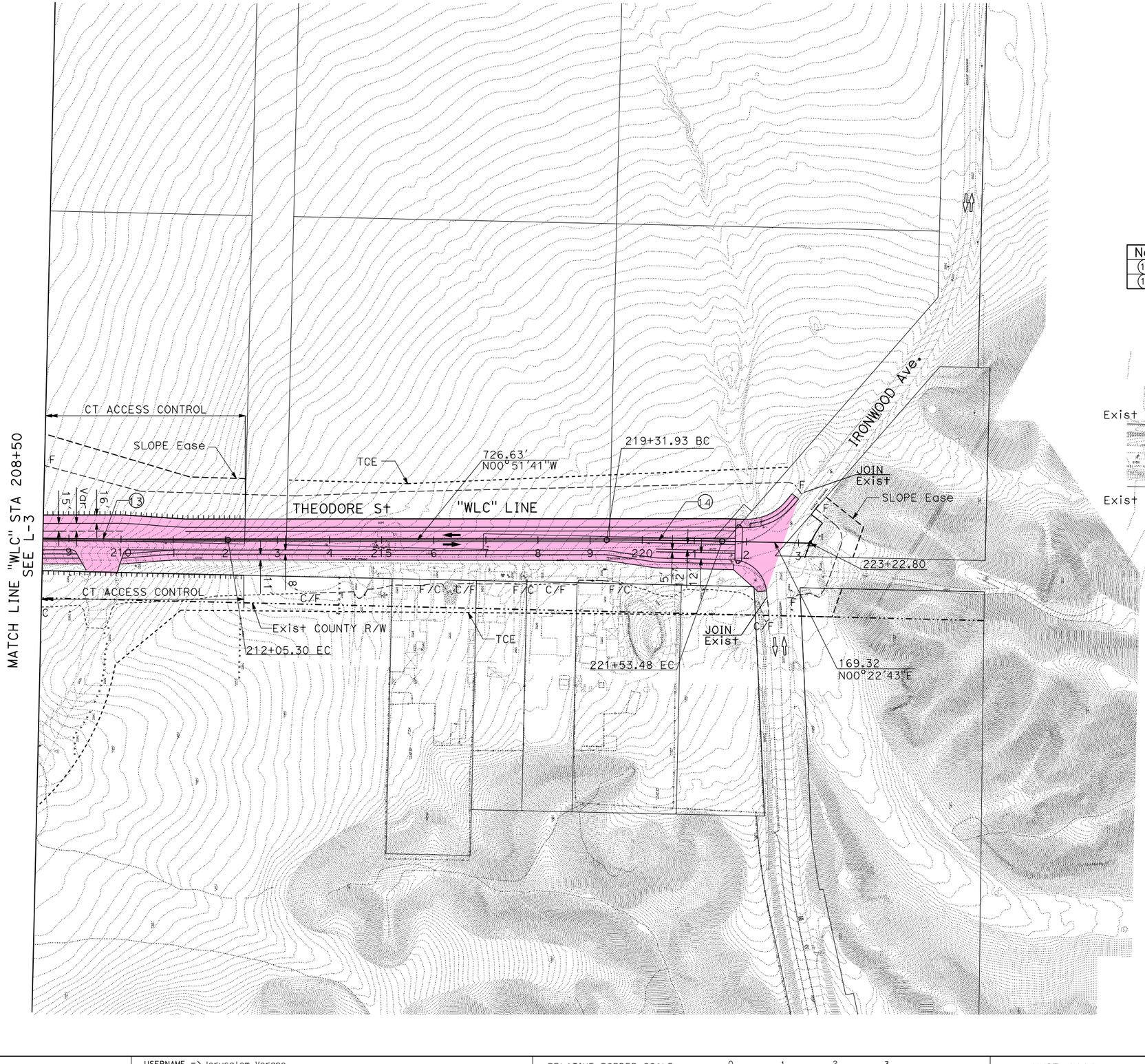
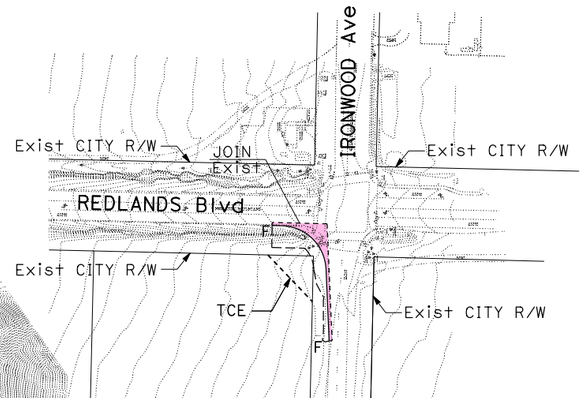
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



CURVE DATA

No.	R	Δ	T	L
(13)	17627.81′	1°18′49"	202.08′	404.16′
(14)	10238.70′	1°14′23"	110.78′	221.55′



REDLANDS Blvd AND IRONWOOD Ave

LAYOUT
ALTERNATIVE 6
SCALE: 1" = 100′

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF

REVISED BY | DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:17

BORDER LAST REVISED 7/2/2010
USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea005.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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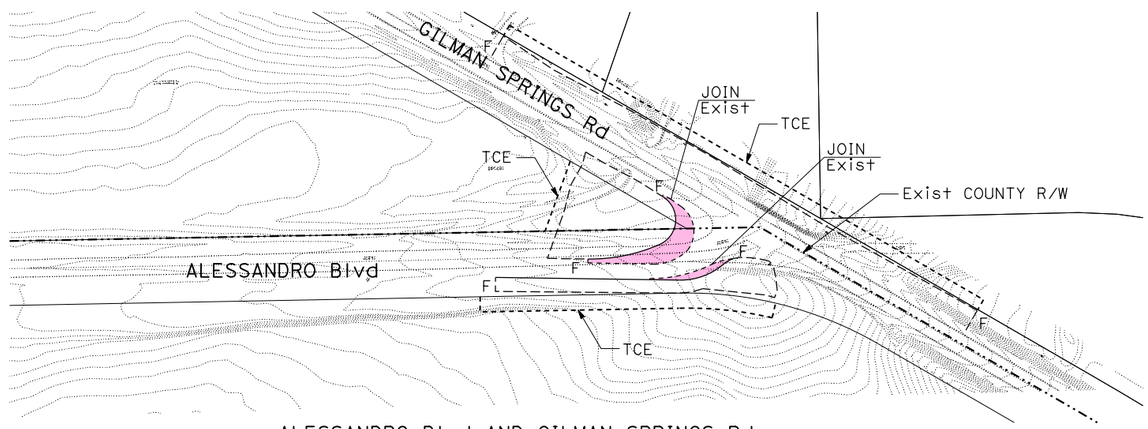
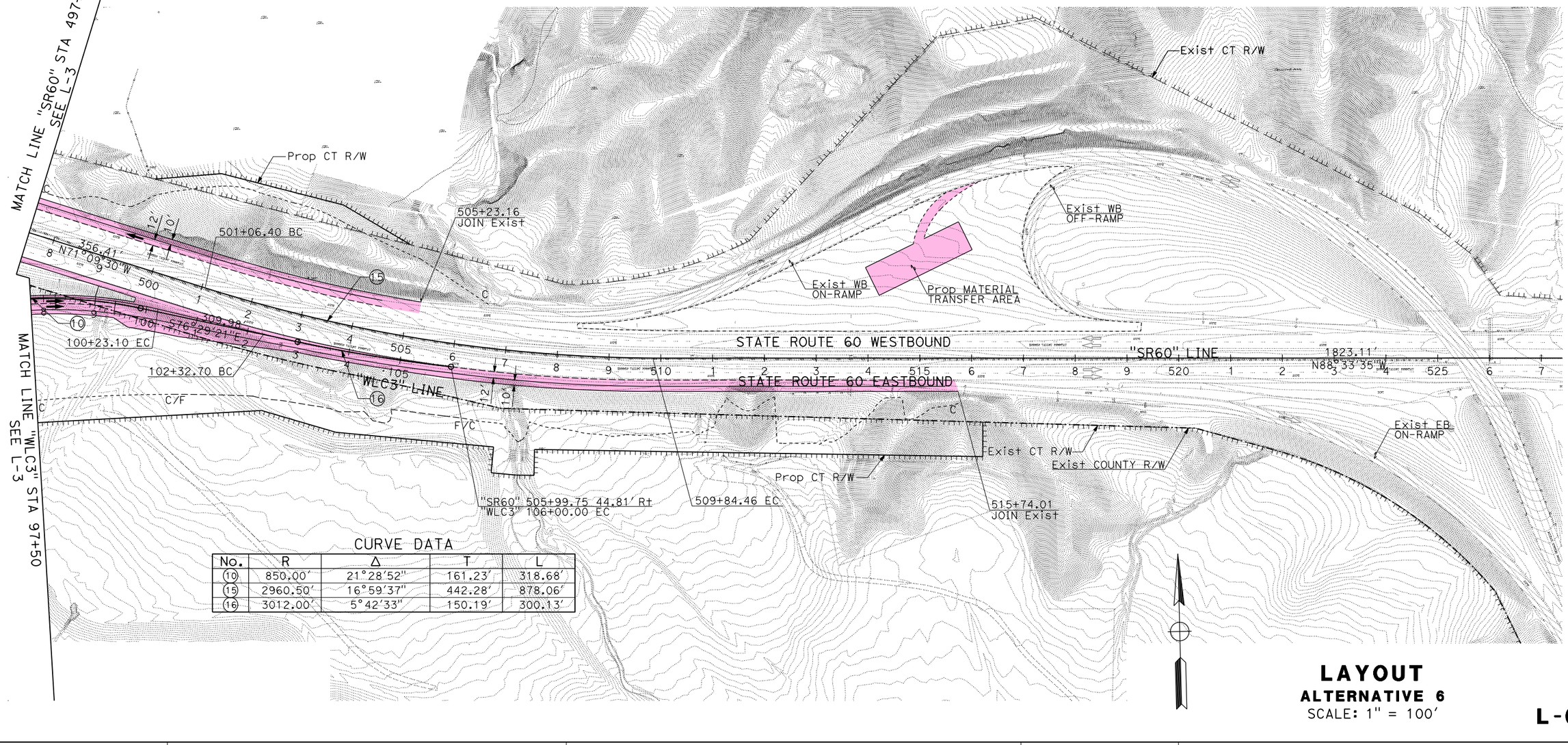
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



ALESSANDRO Blvd AND GILMAN SPRINGS Rd



CURVE DATA

No.	R	Δ	T	L
(10)	850.00'	21°28'52"	161.23'	318.68'
(15)	2960.50'	16°59'37"	442.28'	878.06'
(16)	3012.00'	5°42'33"	150.19'	300.13'

LAYOUT

ALTERNATIVE 6

SCALE: 1" = 100'

L-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 10-FEB-2020 | TIME PLOTTED => 17:17 | 00-00-00

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea006.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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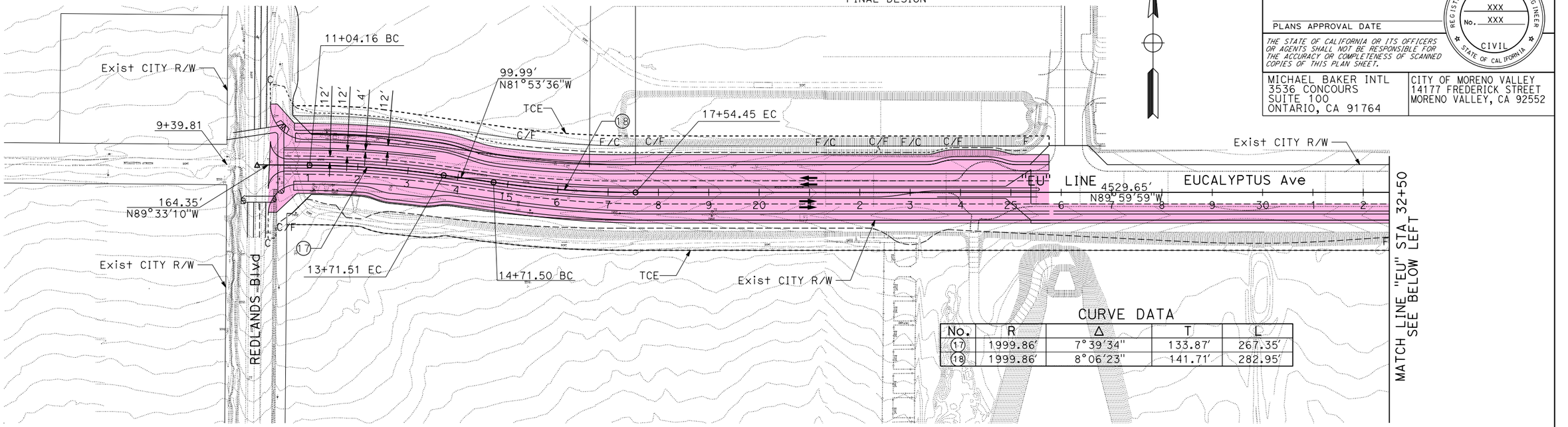
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

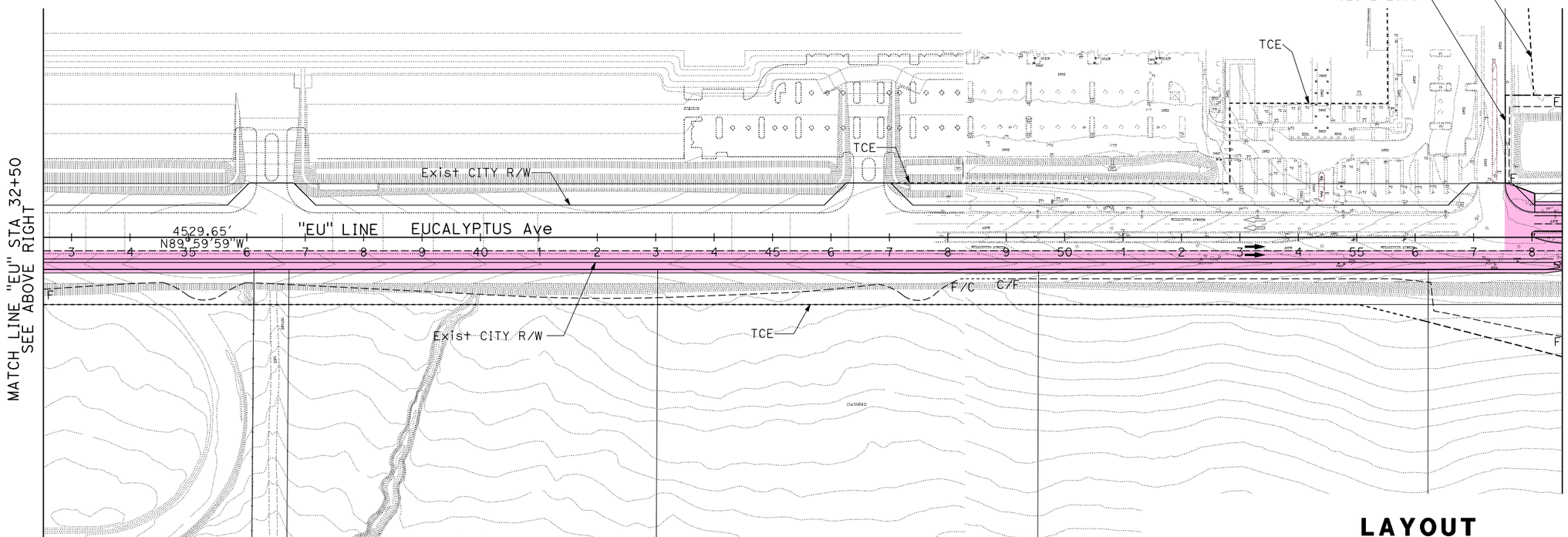
CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

NOTES:
1. IMPROVEMENTS SHWON ON EUCALYPTUS AVENUE ARE FOR ULTIMATE RIGHT-OF-WAY PRESERVATION AND TEMPORARY DETOUR ROUTE IMPROVEMENTS WILL BE DETAILED DURING FINAL DESIGN



CURVE DATA

No.	R	Δ	T	L
(17)	1999.86'	7°39'34"	133.87'	267.35'
(18)	1999.86'	8°06'23"	141.71'	282.95'



LAYOUT
ALTERNATIVE 6
SCALE: 1" = 100'

L-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF

REVISED BY | DATE REVISED

LAST REVISION 00-00-00 | DATE PLOTTED => 10-FEB-2020 | TIME PLOTTED => 17:17

BORDER LAST REVISED 7/2/2010 | USERNAME => Jerusalem.Verano | DGN FILE => 0813000109ea007.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

NOTES:
1. IMPROVEMENTS SHWON ON EUCALYPTUS AVENUE ARE FOR ULTIMATE RIGHT-OF-WAY PRESERVATION AND TEMPORARY DETOUR ROUTE IMPROVEMENTS WILL BE DETAILED DURING FINAL DESIGN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

MATCH LINE "EU" STA 54+50
SEE L-7DV

SLOPE Ease

PROPERTY LINE

EU-DV = 64+87.02
WLC= 177+12.73

"WLC" LINE

SLOPE EASEMENT

CITY R/W

SLOPE EASEMENT

CT ACCESS CONTROL

Exist CITY R/W

WORLD LOGISTICS CENTER Pkwy

Prop CITY R/W

CT ACCESS CONTROL

SEE L-4

PROPERTY LINE

MATCH LINE "WLC" STA 192+50
SEE L-3

LAYOUT
DESIGN VARIATION 6a
SCALE: 1" = 100'

L-4DV

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:17

BORDER LAST REVISED 7/2/2010
USERNAME => Jerusalem.Verano
DGN FILE => 0813000109ea004.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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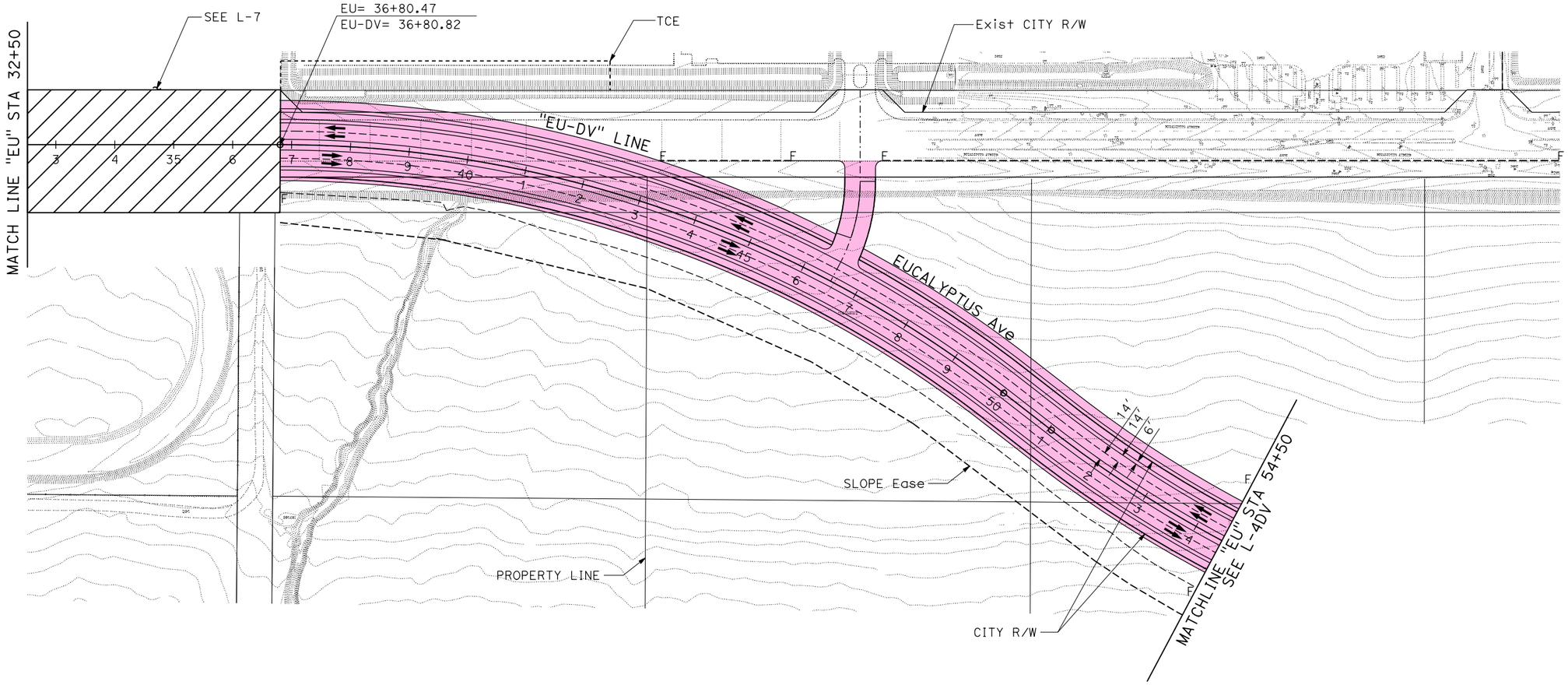
MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

NOTES:
1. IMPROVEMENTS SHWON ON EUCALYPTUS AVENUE ARE FOR ULTIMATE RIGHT-OF-WAY PRESERVATION AND TEMPORARY DETOUR ROUTE IMPROVEMENTS WILL BE DETAILED DURING FINAL DESIGN



CURVE DATA

No.	R	Δ	T	L
(X)	XXXX.XX'	X°XX'XX"	XXX.XX'	XXX.XX'
(X)	XXXX.XX'	X°XX'XX"	XXX.XX'	XXX.XX'

LAYOUT

DESIGN VARIATION 6a

SCALE: 1" = 100'

L-7DV

		REVISED BY	DATE REVISED
CALCULATED-DESIGNED BY	H. SALCEDO		
CHECKED BY	R. RATZLAFF		
CONSULTANT FUNCTIONAL SUPERVISOR	R. YOUNG		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 10-FEB-2020
TIME PLOTTED => 17:17

BORDER LAST REVISED 7/2/2010

USERNAME => Jerusalem.Verano
DGN FILE => 08130000109ea007.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

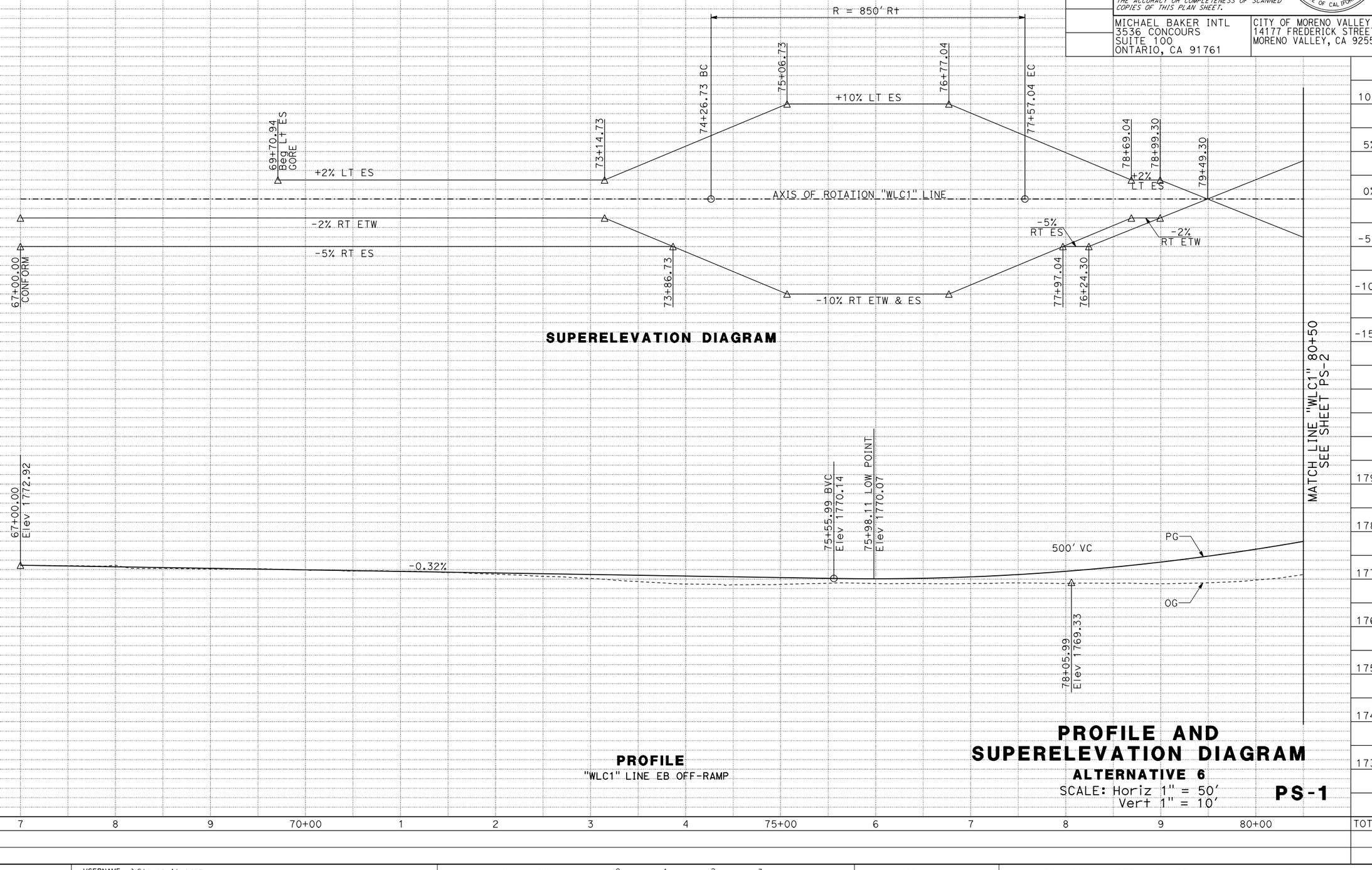
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



SUPERELEVATION DIAGRAM

PROFILE
"WLC1" LINE EB OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-1

STATION	7	8	9	70+00	1	2	3	4	75+00	6	7	8	9	80+00	TOTAL
CY Exc															
CY Emb															

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

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BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 0813000109fb001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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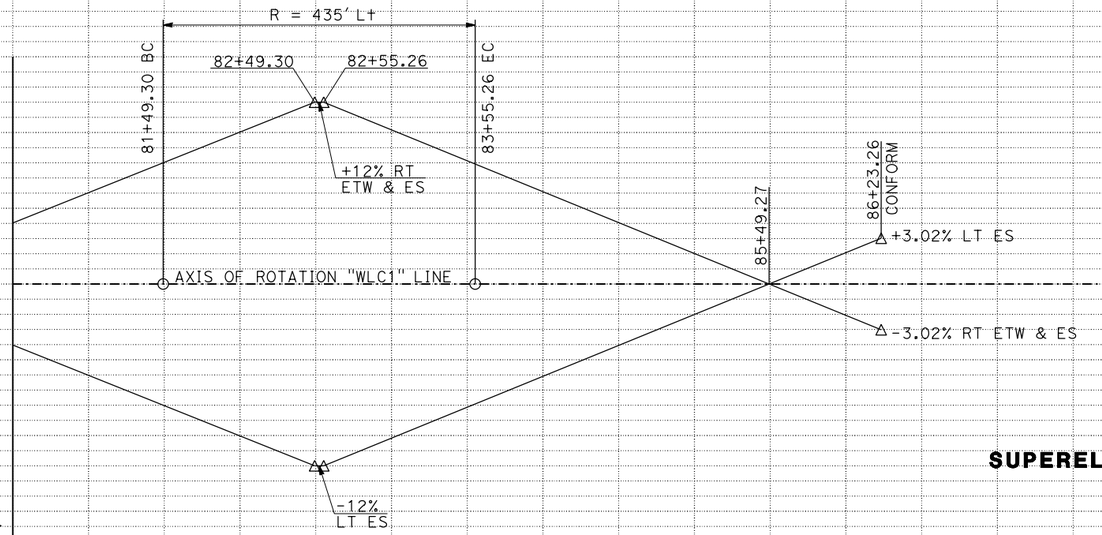
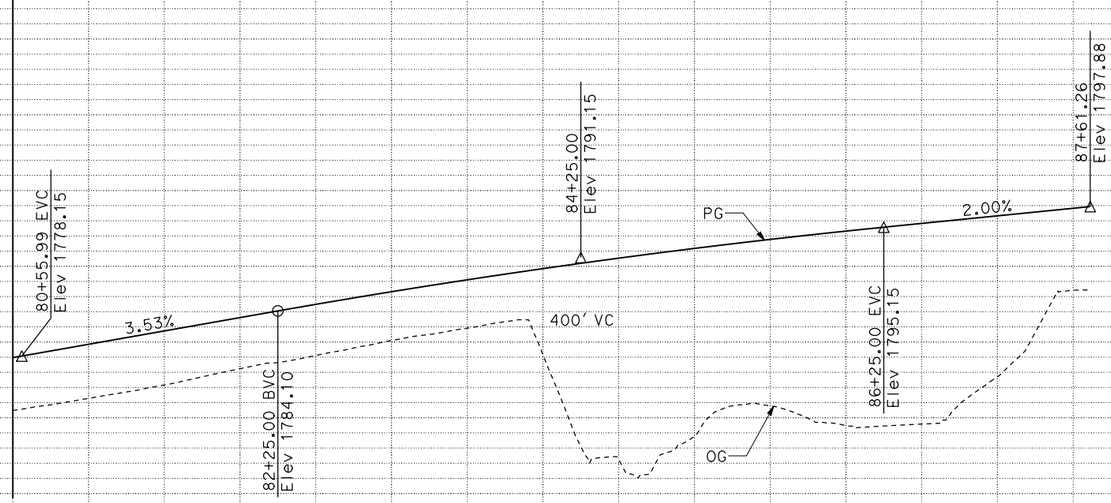
MORENO VALLEY, CA 92552



SUPERELEVATION DIAGRAM



PROFILE

"WLC1" LINE EB OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-2

STATION	1	2	3	4	85+00	6	7	8	TOTAL
CY Exc									
CY Emb									

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BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 0813000109fb002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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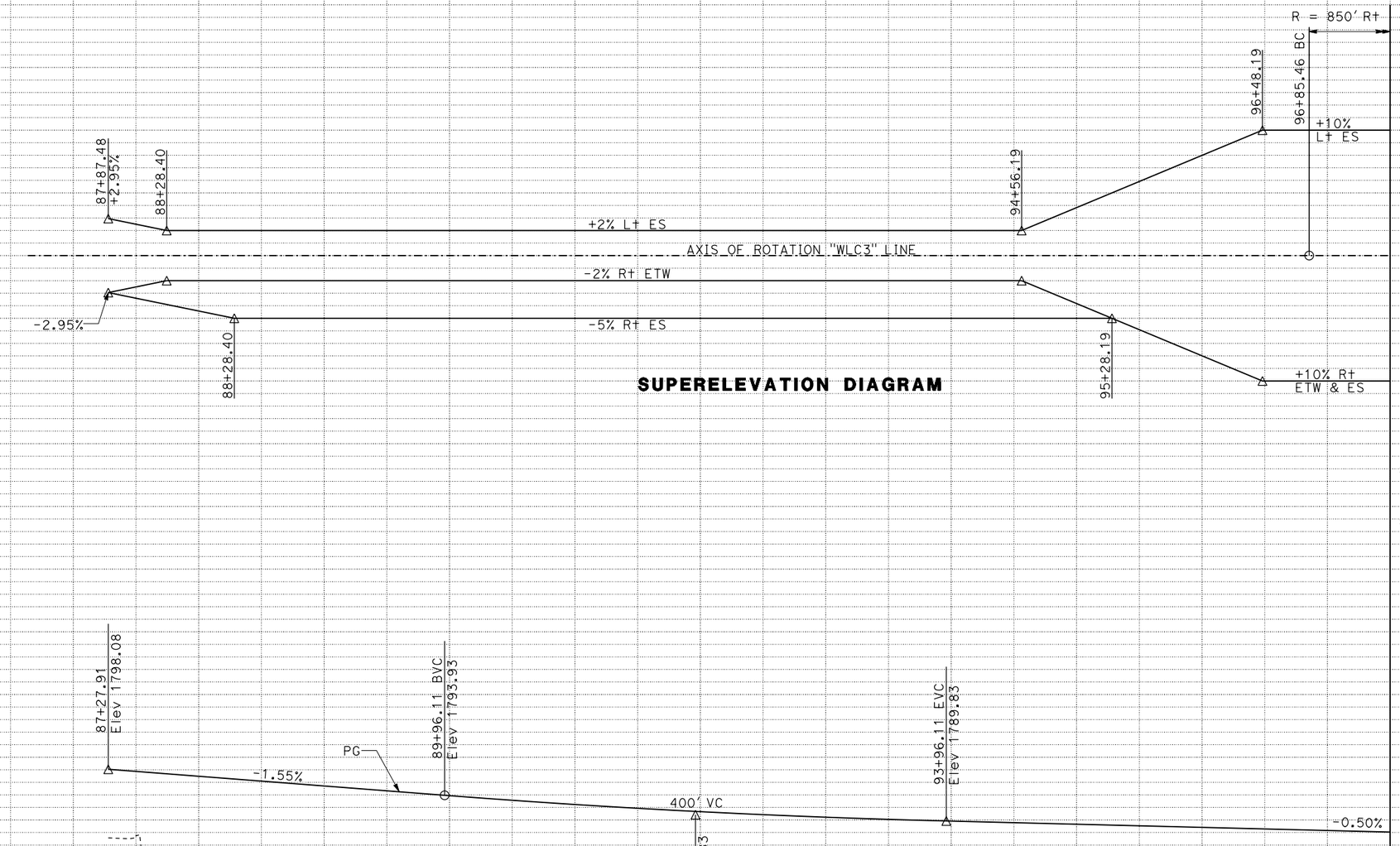

SUPERELEVATION DIAGRAM

PROFILE
"WLC3" LINE EB ON-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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CHECKED BY: R. RATZLAFF

REVISED BY / DATE REVISED

STATION: 7 | 8 | 9 | 90+00 | 1 | 2 | 3 | 4 | 95+00 | 6 | 7 | 8 | TOTAL

CY Exc / Emb

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BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 08130001090fb003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

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PLANS APPROVAL DATE

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CITY OF MORENO VALLEY
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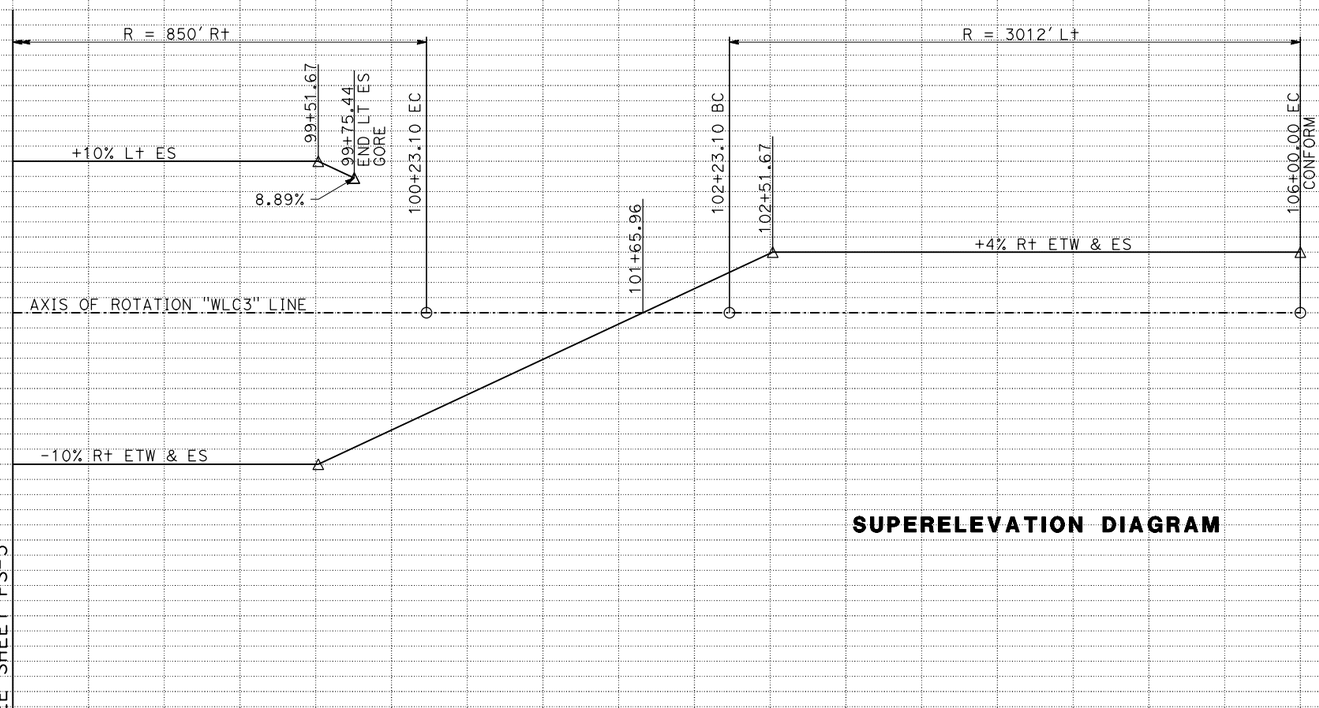
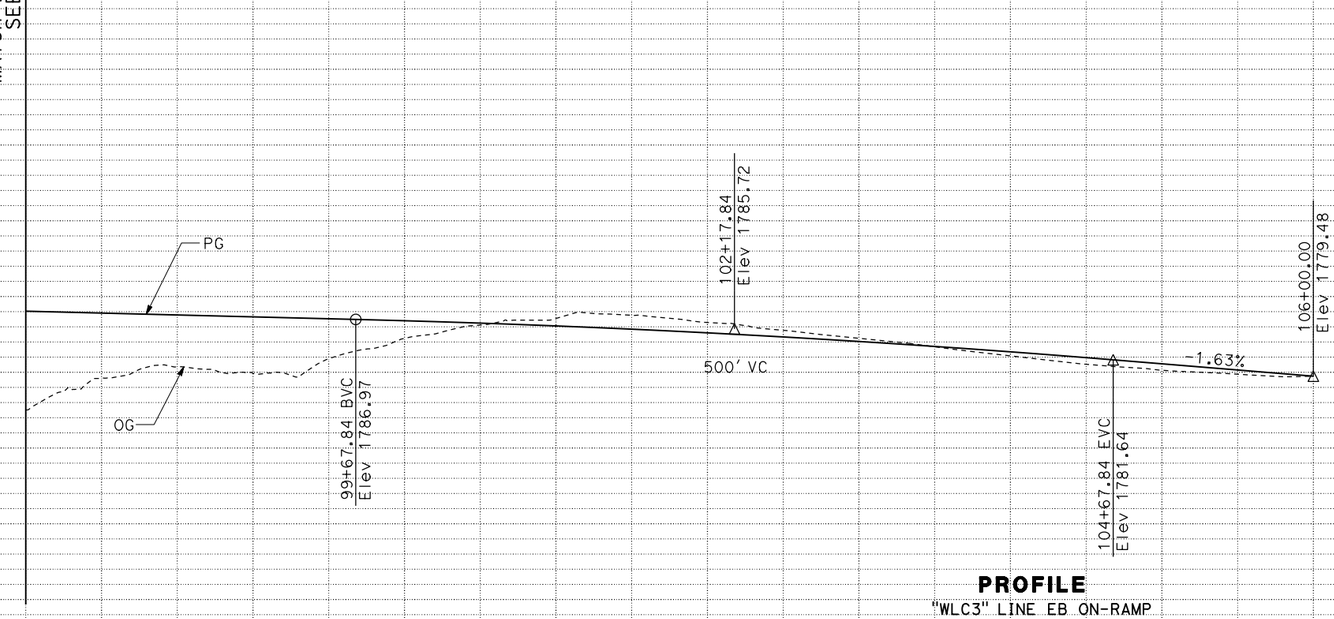


SUPERELEVATION DIAGRAM

MATCH LINE "WLC3" 97+50
SEE SHEET PS-3



PROFILE
"WLC3" LINE EB ON-RAMP

STATION	8	9	100+00	1	2	3	4	105+00	6	TOTAL
CY Exc										
CY Emb										

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-4

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CHECKED BY: R. RATZLAFF
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 13:33

BORDER LAST REVISED 7/2/2010
USERNAME => Steven.Alvarez
DGN FILE => 08130001090fb004.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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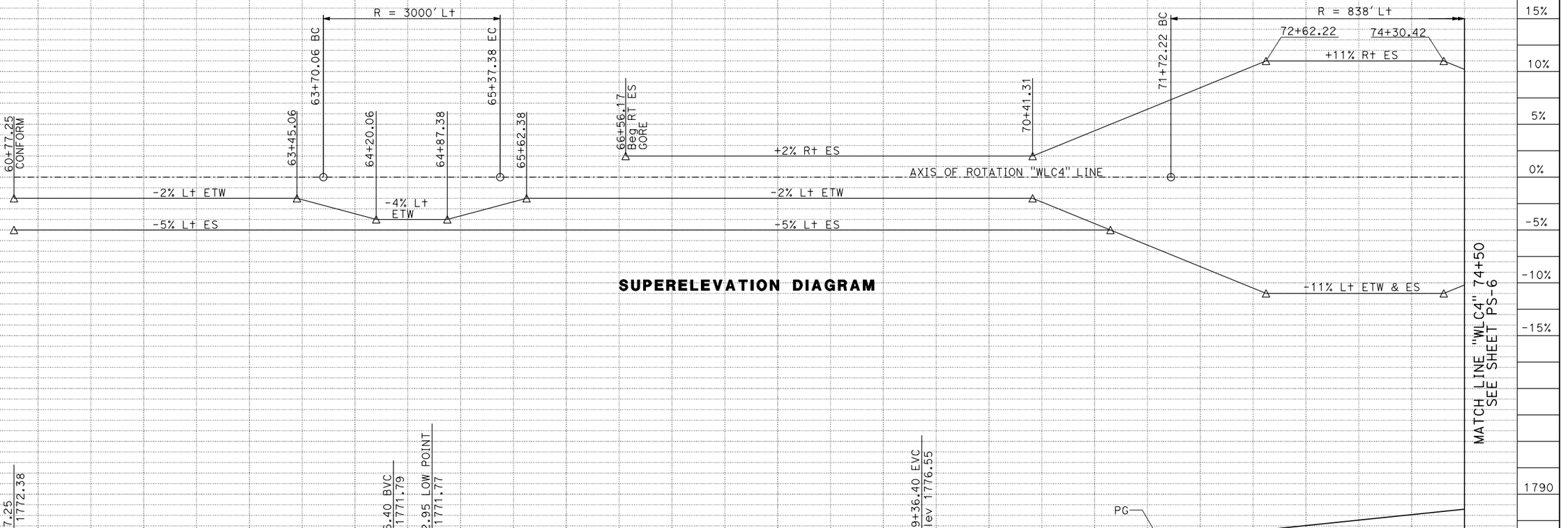
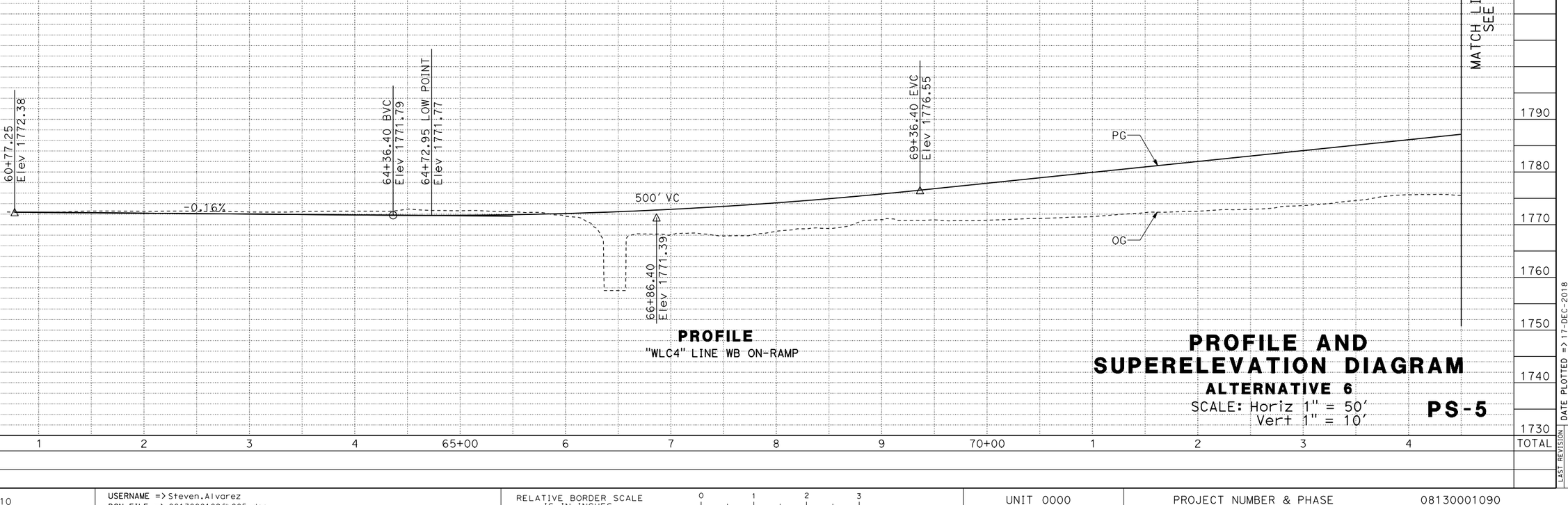


SUPERELEVATION DIAGRAM



PROFILE
"WLC4" LINE WB ON-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-5

STATION	1	2	3	4	65+00	6	7	8	9	70+00	1	2	3	4	TOTAL
CY Exc															
CY Emb															

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Caltrans

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DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 13:33

BORDER LAST REVISED 7/2/2010
USERNAME => Steven.Alvarez
DGN FILE => 0813000109fb005.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0000
PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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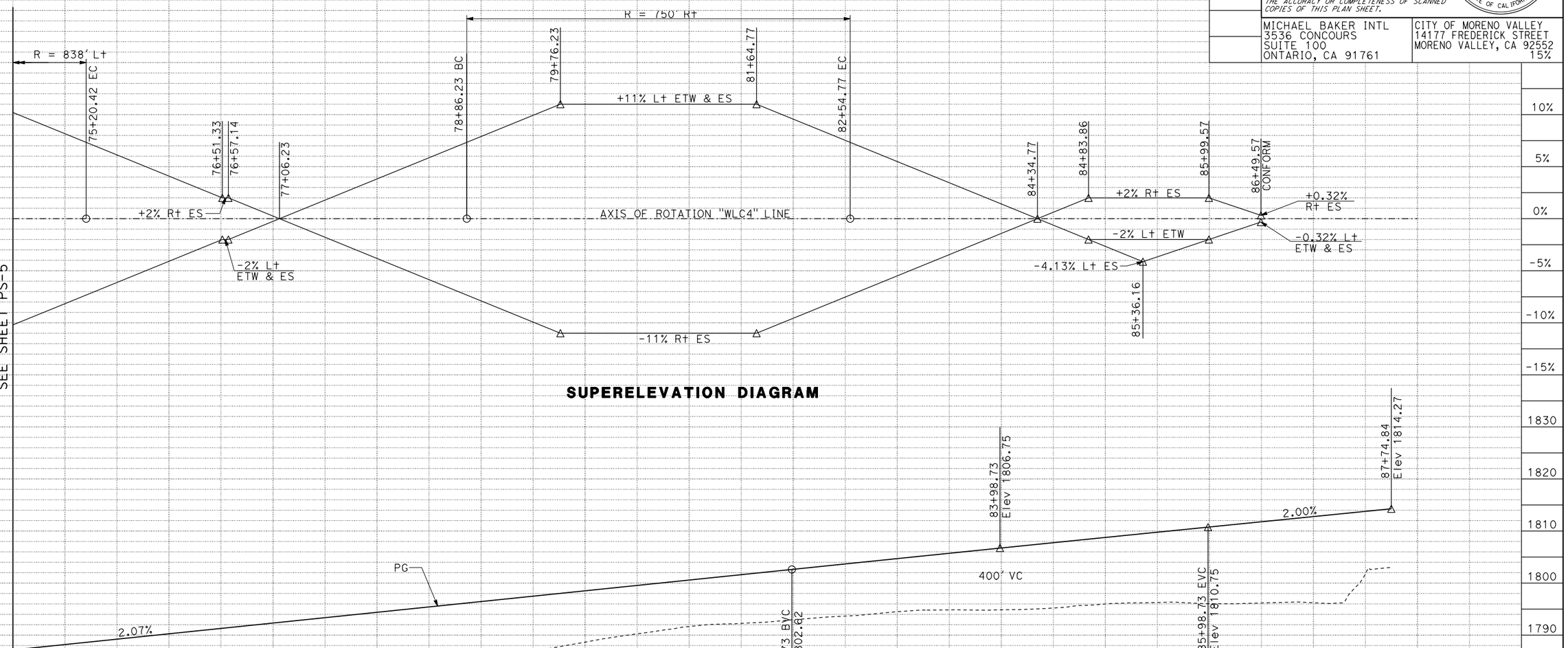
15%



SUPERELEVATION DIAGRAM

PROFILE
"WLC4" LINE WB ON-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-6

STATION	75+00	6	7	8	9	80+00	1	2	3	4	85+00	6	7	8	TOTAL
CY Exc															
CY Emb															

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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CHECKED BY: R. RATZLAFF

REVISED BY	DATE REVISED

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USERNAME => Steven.Alvarez
DGN FILE => 08130001109fb006.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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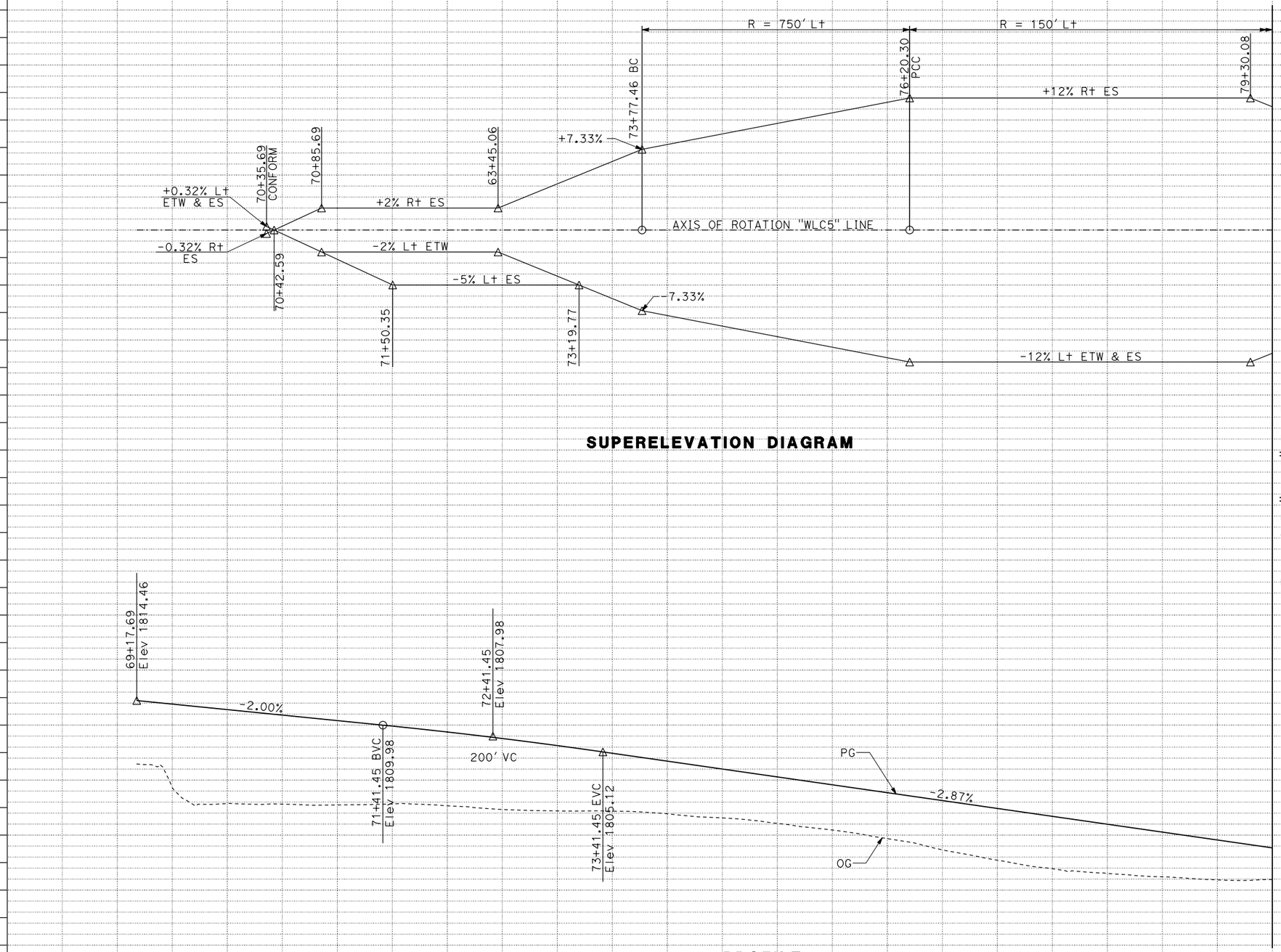

SUPERELEVATION DIAGRAM

PROFILE
"WLC5" LINE WB OFF OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-7

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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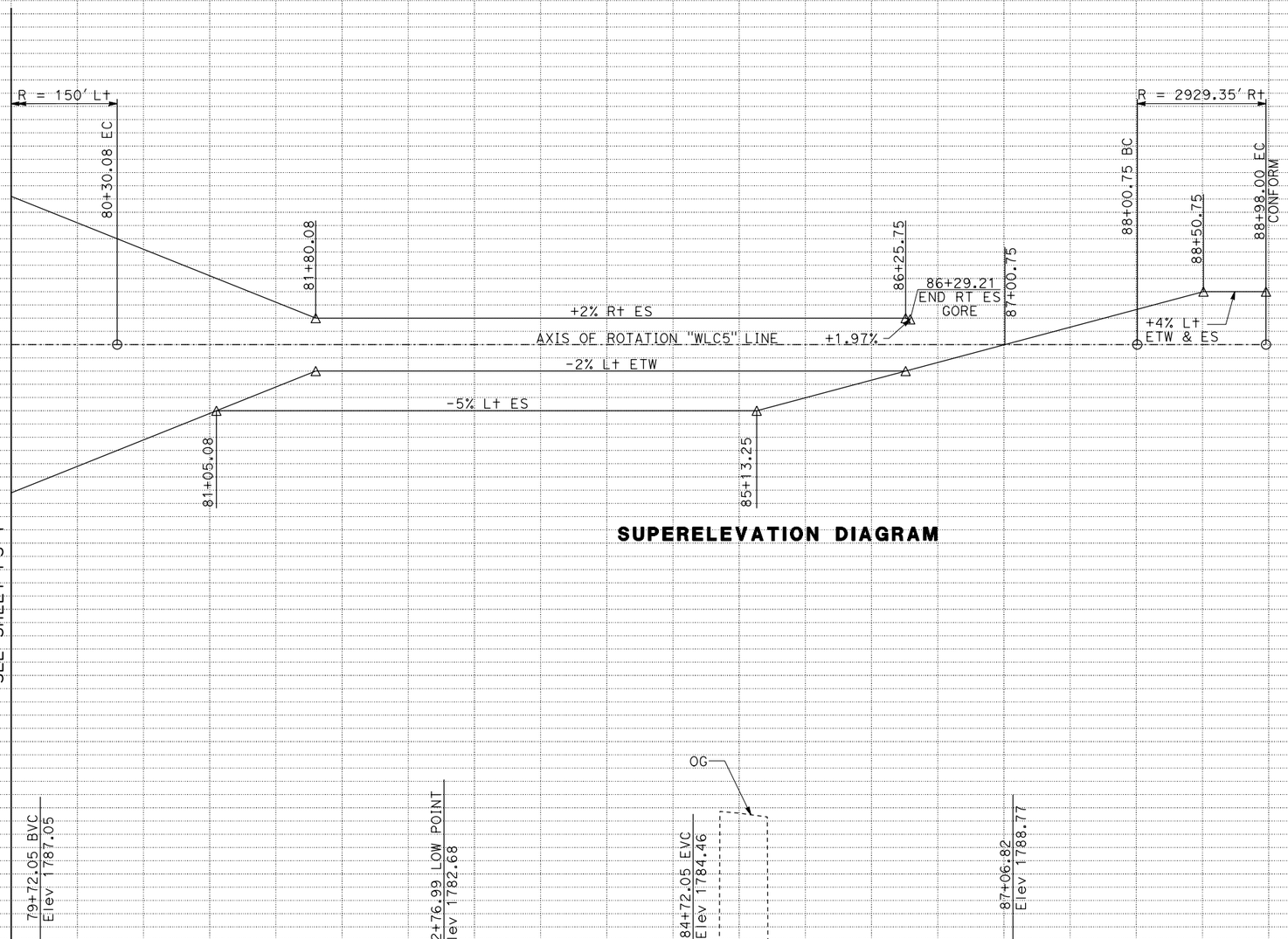

SUPERELEVATION DIAGRAM

PROFILE

"WLC5" LINE WB OFF OFF-RAMP

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-8

STATION	80+00	1	2	3	4	85+00	6	7	8	9	90+00	TOTAL
CY Exc												
CY Emb												

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

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PLANS APPROVAL DATE

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CITY OF MORENO VALLEY
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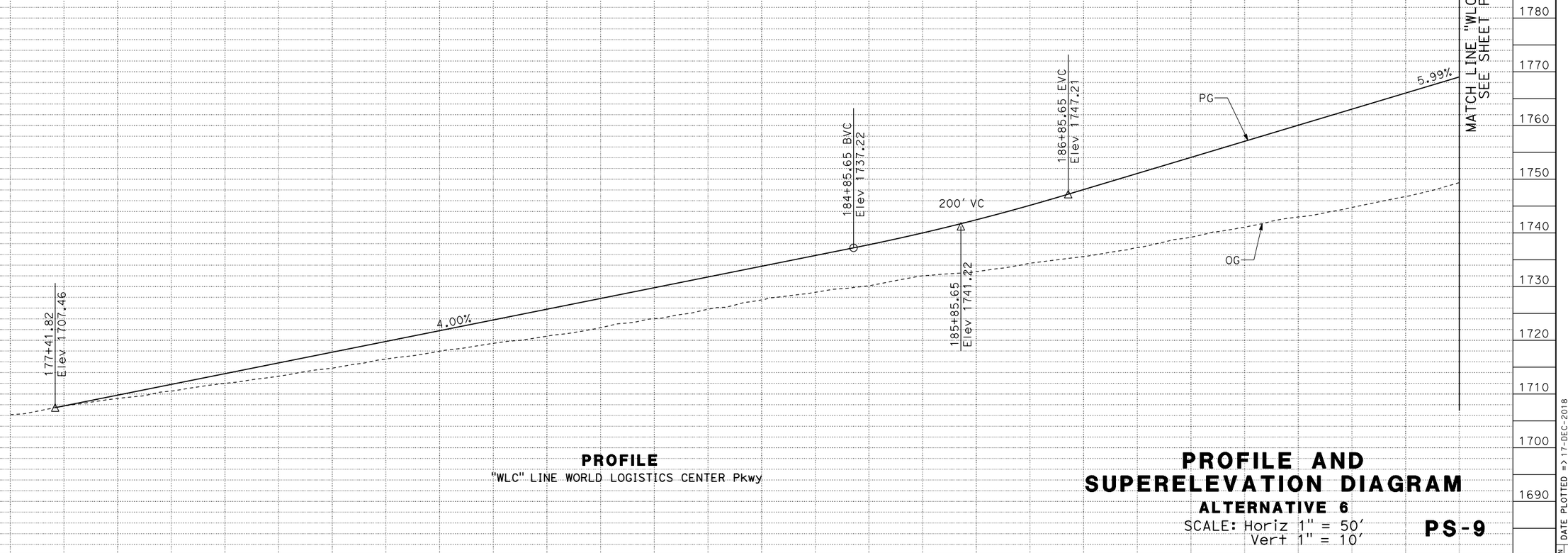
MORENO VALLEY, CA 92552

AXIS OF ROTATION "WLC" LINE

-2% L+ & R+
ETW & EP

SUPERELEVATION DIAGRAM



PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-9

STATION	7	8	9	180+00	1	2	3	4	185+00	6	7	8	9	190+00	TOTAL
CY Exc															
CY Emb															

15% 10% 5% 0% -5% -10% -15% 1780 1770 1760 1750 1740 1730 1720 1710 1700 1690

REVISED BY | DATE REVISED
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CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
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BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 08130001090fb009.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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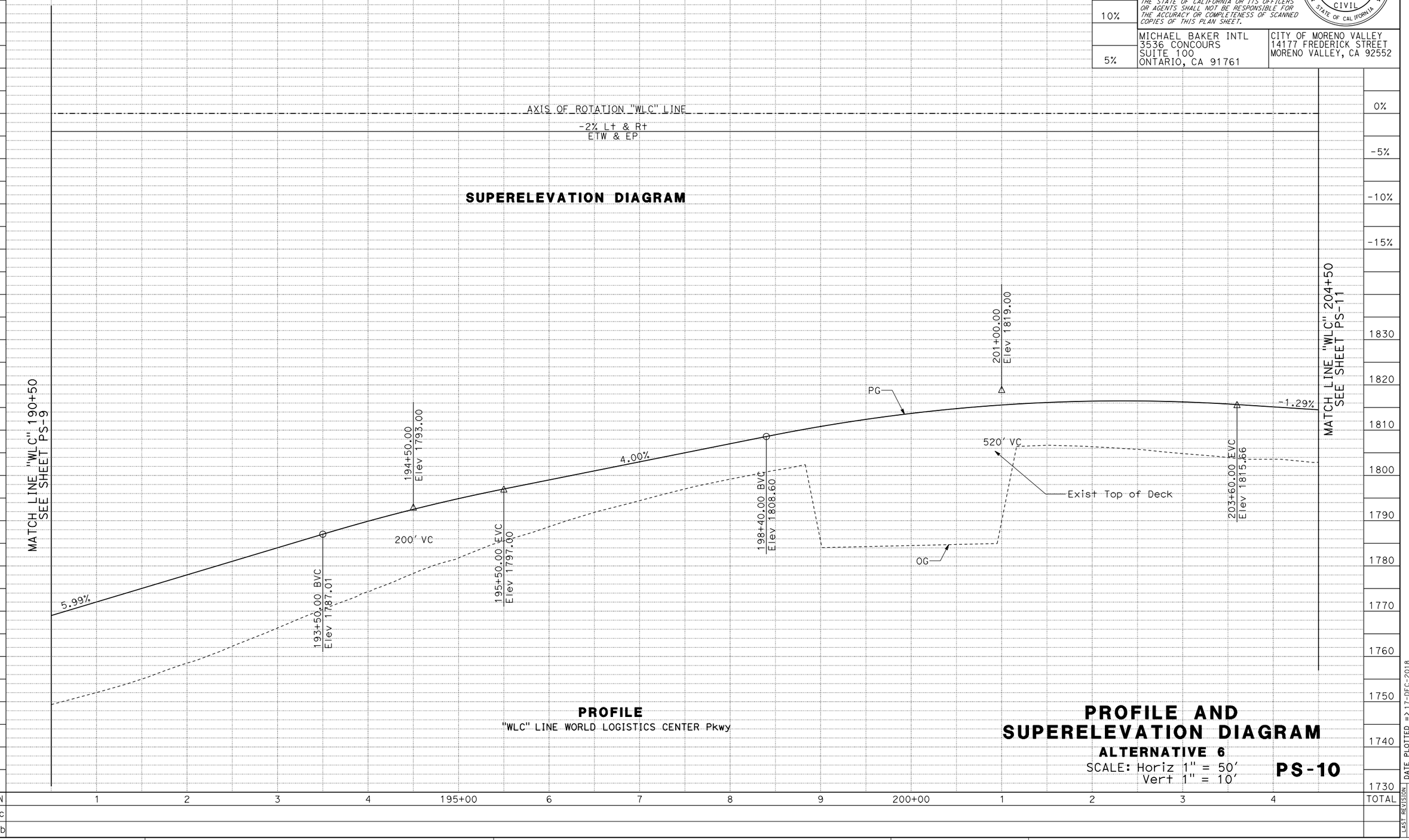
MORENO VALLEY, CA 92552

AXIS OF ROTATION "WLC" LINE

-2% L+ & R+
ETW & EP

SUPERELEVATION DIAGRAM



PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-10

H. SALCEDO — CALCULATED-DESIGNED BY
R. RATZLAFF — CHECKED BY
R. YOUNG — CONSULTANT FUNCTIONAL SUPERVISOR
REVISED BY — DATE REVISED

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BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 0813000109fb010.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

AXIS OF ROTATION "WLC" LINE

-2% L+ & R+
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "WLC" 204+50
SEE SHEET PS-10

205+08.61 BVC
Elev 1813.75

206+09.03 LOW POINT
Elev 1813.10

-1.29%

530' VC

PG

OG

207+73.61
Elev 1810.34

210+38.61 EVC
Elev 1824.91

5.50%

211+80.00 BVC
Elev 1832.69

213+30.00
Elev 1840.94

300' VC

214+80.00 EVC
Elev 1843.52

1.72%

215+20.00 BVC
Elev 1844.21

300' VC

216+70.00
Elev 1846.80

218+20.00 EVC
Elev 1852.55

MATCH LINE "WLC" 218+50
SEE SHEET PS-12

PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-11

STATION	205+00	6	7	8	9	210+00	1	2	3	4	215+00	6	7	8	TOTAL
CY Exc															
CY Emb															

REVISED BY	DATE REVISED
H. SALCEDO	
R. RATZLAFF	

CALCULATED-DESIGNED BY

CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR
R. YOUNG

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DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 13:33

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 08130001090fb011.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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MORENO VALLEY, CA 92552

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H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

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Caltrans

15% 10% 5% 0% -5% -10% -15%

AXIS OF ROTATION "WLC" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "WLC" 218+50
SEE SHEET PS-11

1890 1880 1870 1860 1850 1840 1830 1820

220+90.00
Elev 1862.90

223+20.68
Elev 1865.22

PG

1.01%

3.83%

200' VC

OG

219+90.00 BVC
Elev 1859.06

221+90.00 EVC
Elev 1863.90

PROFILE

"WLC" LINE WORLD LOGISTICS CENTER Pkwy

STATION	9	210+00	1	2	3	4	TOTAL
CY Exc							
CY Emb							

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-12

LAST REVISION | DATE PLOTTED => 17-DEC-2018
00-00-00 | TIME PLOTTED => 13:33

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 0813000109fb012.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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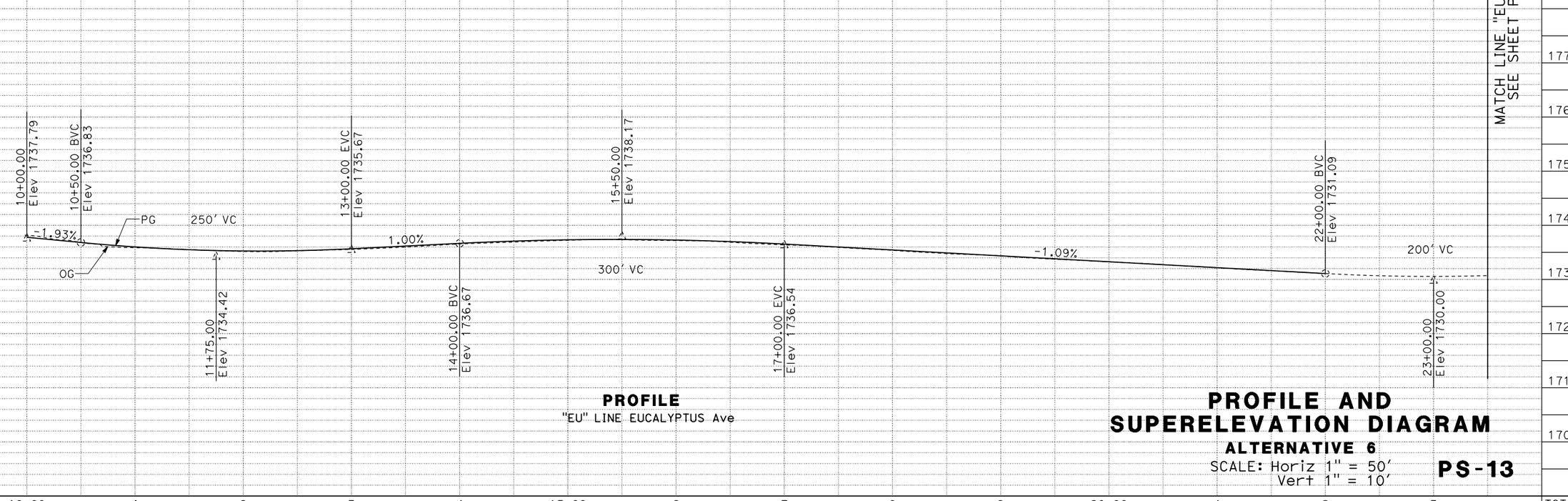
AXIS OF ROTATION "EU" LINE

-2% L+ & R+
ETW & EP

SUPERELEVATION DIAGRAM



PROFILE
"EU" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-13

STATION	10+00	1	2	3	4	15+00	6	7	8	9	20+00	1	2	3	TOTAL
CY Exc															
CY Emb															

REVISED BY	DATE REVISED
H. SALCEDO	R. RATZLAFF

CALCULATED-DESIGNED BY
CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 13:33

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => EU0813000109fb013.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY / DATE REVISED

SUPERELEVATION DIAGRAM

AXIS OF ROTATION "EU" LINE

-2% Lt & Rt
ETW & EP

MATCH LINE "EU" 23+50
SEE SHEET PS-13

MATCH LINE "EU" 37+50
SEE SHEET PS-15

24+00.00 EVC
Elev 1731.15

PG

1.15%

28+50.00 BVC
Elev 1736.31

30+00.00
Elev 1738.03

300' VC

31+50.00 EVC
Elev 1735.62

1.61%

33+50.00 BVC
Elev 1732.41

300' VC

35+00.00
Elev 1730.00

36+50.00 EVC
Elev 1731.74

STATION	4	25+00	6	7	8	9	30+00	1	2	3	4	35+00	6	7	TOTAL
CY Exc															
CY Emb															

PROFILE

"EU" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-14

LAST REVISION 00-00-00
DATE PLOTTED => 17-DEC-2018
TIME PLOTTED => 13:33

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => EU0813000109fb014.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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3536 CONCOURS
SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

AXIS OF ROTATION "EU" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

15% 10% 5% 0% -5% -10% -15%

MATCH LINE "EU" 37+50
SEE SHEET PS-14

40+50.00 BVC
Elev 1736.39

42+00.00
Elev 1738.13

43+50.00 EVC
Elev 1736.63

PG

46+75.00 BVC
Elev 1733.38

47+75.00
Elev 1732.38

48+75.00 EVC
Elev 1733.88

50+25.00
Elev 1736.13

MATCH LINE "EU" 51+50
SEE SHEET PS-16

1.16% 300' VC 1.00% 200' VC 1.50% 1.08%

1780 1770 1760 1750 1740 1730 1720 1710 1700

STATION 8 9 40+00 1 2 3 4 45+00 6 7 8 9 50+00 1 TOTAL

CY Exc

CY Emb

PROFILE
"EU" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM
ALTERNATIVE 6
SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-15

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 17-DEC-2018 | TIME PLOTTED => 13:33

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => EU0813000109fb015.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

R. YOUNG

CONSULTANT FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

15% 10% 5% 0% -5% -10% -15%

AXIS OF ROTATION "EU" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

1790 1780 1770 1760 1750 1740 1730 1720 1710 1700

MATCH LINE "EU" 51+50
SEE SHEET PS-18

1.08%

2.00%

59+20.33 BVC
Elev 1741.71

300' VC

60+70.33
Elev 1738.71

2.00%

62+20.33 EVC
Elev 1741.71

62+82.21
Elev 1742.94

PROFILE

"EU" LINE EUCALYPTUS Ave

STATION	2	3	4	55+00	6	7	8	9	60+00	1	2	3	4	65+00	TOTAL
CY Exc															
CY Emb															

PROFILE AND SUPERELEVATION DIAGRAM

ALTERNATIVE 6

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-16

LAST REVISION 00-00-00 | DATE PLOTTED => 30-JAN-2019 | TIME PLOTTED => 16:27

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => EU0813000109fb016.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

AXIS OF ROTATION "EU-DV" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "EU" 39+50
SEE SHEET PS-17

MATCH LINE "EU-DV" 53+50
SEE SHEET PS-20DV

39+58.07
Elev 1735.32

40+41.15 BVC
Elev 1736.29

1.16%

42+66.15
Elev 1738.90

450' VC

44+91.15 EVC
Elev 1735.00

PROFILE

"EU-DV" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM

DESIGN VARIATION 6a

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-17DV

STATION		40+00	1	2	3	4	45+00	6	7	8	9	50+00	1	2	3	TOTAL
CY	Exc															
	Emb															

15% 10% 5% 0% -5% -10% -15% 1790 1780 1770 1760 1750 1740 1730 1720 1710 1700

REVISED BY | DATE REVISED
H. SALCEDO | R. RATZLAFF
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION 00-00-00 | DATE PLOTTED => 30-JAN-2019 | TIME PLOTTED => 16:28

BORDER LAST REVISED 7/2/2010 | USERNAME => Hector.Salcedo | DGN FILE => EU08130001090fb018 (2).dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91761

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

REVISED BY | DATE REVISED

H. SALCEDO | R. RATZLAFF

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

15% 10% 5% 0% -5% -10% -15%

AXIS OF ROTATION "EU-DV" LINE

-2% Lt & Rt
ETW & EP

SUPERELEVATION DIAGRAM

MATCH LINE "EU-DV" 53+50
SEE SHEET PS-19DV

1780 1770 1760 1750 1740 1730 1720 1710 1700 1690

-1.73%

61+69.52 BVC
Elev 1705.93

300' VC

64+69.52 EVC
Elev 1706.33

64+87.02
Elev 1706.68

2.00%

63+19.52
Elev 1703.33

PROFILE
"EU-DV" LINE EUCALYPTUS Ave

PROFILE AND SUPERELEVATION DIAGRAM
DESIGN VARIATION 6a

SCALE: Horiz 1" = 50'
Vert 1" = 10'

PS-18DV

STATION	4	55+00	6	7	8	9	60+00	1	2	3	4	65+00	6	7	TOTAL
CY Exc															
CY Emb															

LAST REVISION 00-00-00 | DATE PLOTTED => 30-JAN-2019 | TIME PLOTTED => 16:30

BORDER LAST REVISED 7/2/2010

USERNAME => Hector.Salcedo
DGN FILE => EU0813000109fb019.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Advanced Planning Study

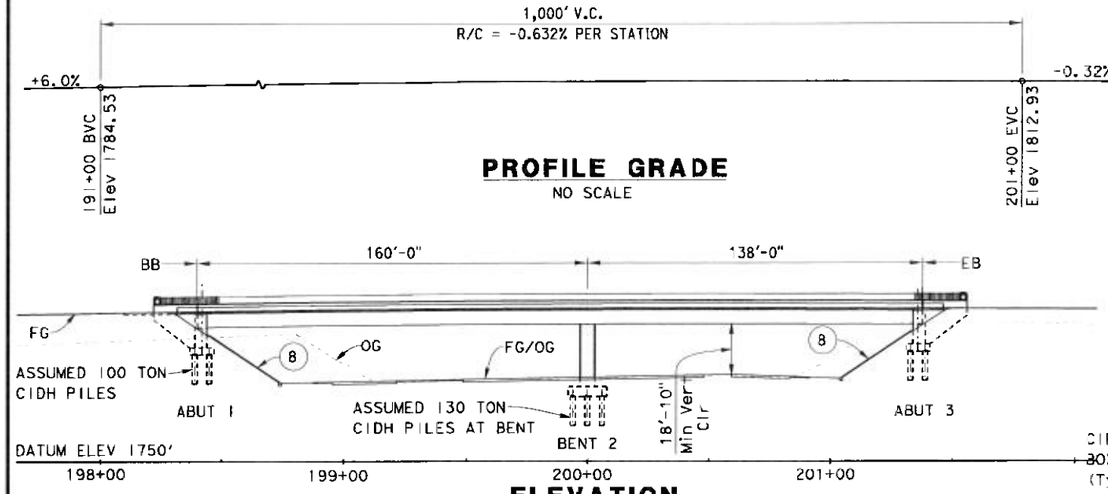
Attachment 4

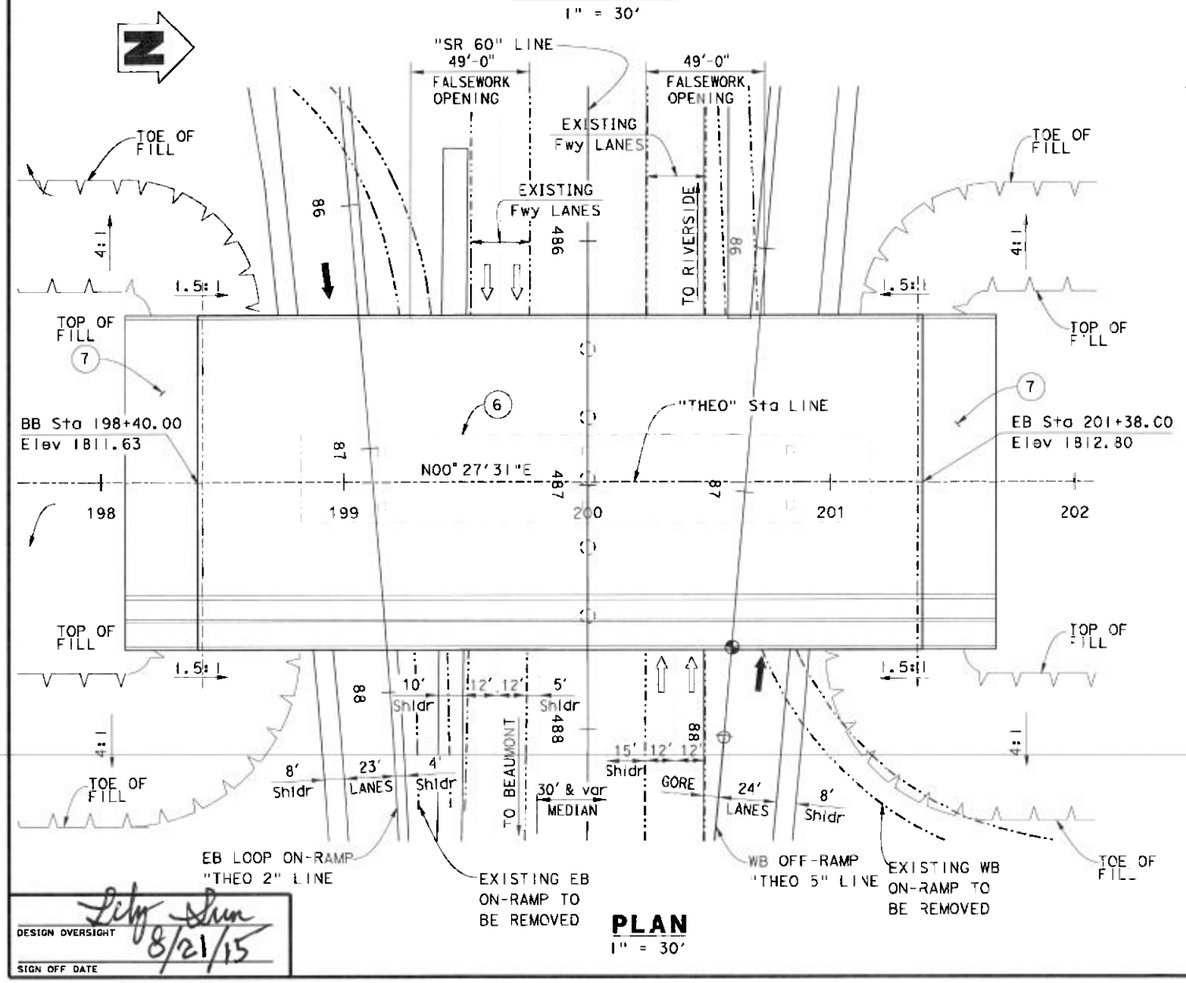
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

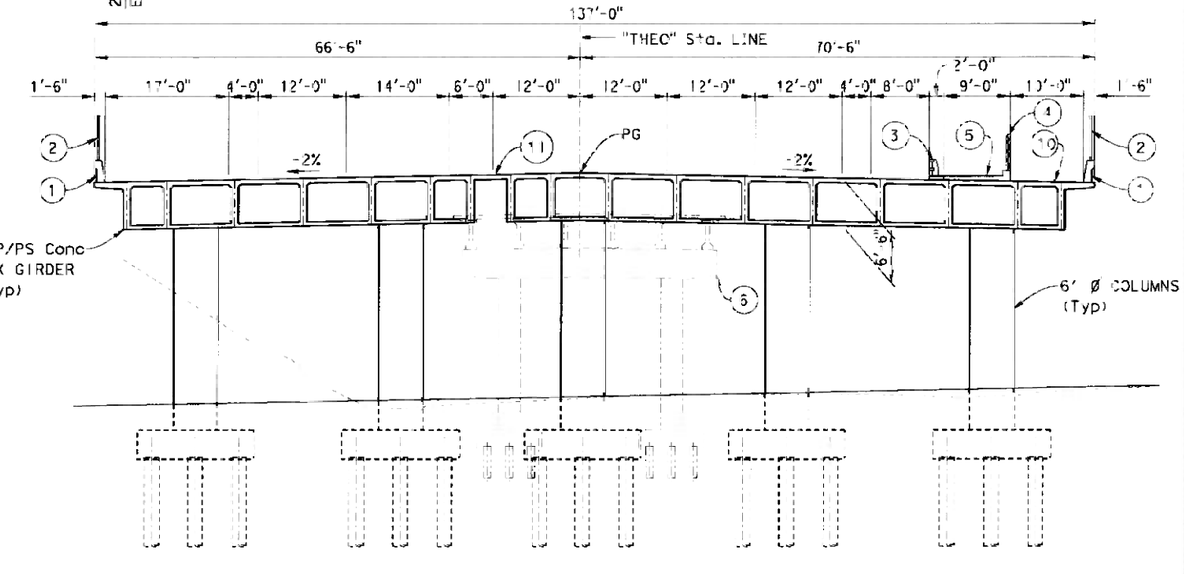
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	RIV	60	20.0-22.0

CITY OF MORENO VALLEY
14177 FREDERICK ST
MORENO VALLEY, CA 92553

RBF / MICHAEL BAKER INTL.
14725 ALTON PKWY
IRVINE, CA 92618







TYPICAL SECTION

1" = 10'

NOTES:

1. Conc Barrier Type 736 (Mod)
2. Black Picket Steel Fencing
3. California ST-10 Bridge Rail
4. 3' Rail PVC Fence, City of Moreno Valley
5. Sidewalk and Curb
6. Remove Existing Bridge No. 56-0488
7. Structure Approach Type N (30S)
8. Slope Paving Full Slope
9. Vehicle Traffic Will Pass Through Construction 15' min Vertical Clearance Required Under Falsework. Falsework to Accommodate 3 Lanes Each Direction
10. Multi Use Trail
11. Closure Pour
- Denotes Point of Minimum Vertical Clearance

COST DATA

DATE OF ESTIMATE	=	MAY 2015
BRIDGE REMOVAL	=	$300,000
STRUCTURE DEPTH	=	6'-6"
LENGTH	=	298'-0"
WIDTH	=	137'-0"
AREA	=	40,326 SF
COST / SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$280/SF
TOTAL COST NEW BRIDGE	=	$11,400,000

DESIGN OVERSIGHT — Lily Shu 8/21/15 — SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 7/16/10)

DESIGNED BY	J. MOSQUERA	DATE	4 - 2015
DRAWN BY	J. SALDANA	DATE	4 - 2015
CHECKED BY	B. MIELKE	DATE	4 - 2015
APPROVED		DATE	

J. MOSQUERA
PROJECT ENGINEER

PLANNING STUDY

THEODORE STREET OC ALT 2

BRIDGE NO. 56-190	UNIT:
SCALE: AS SHOWN	PROJECT NUMBER & PHASE: 0813000109

CONTRACT NO.:

FILE => 56-0488-a-gp01.dgn

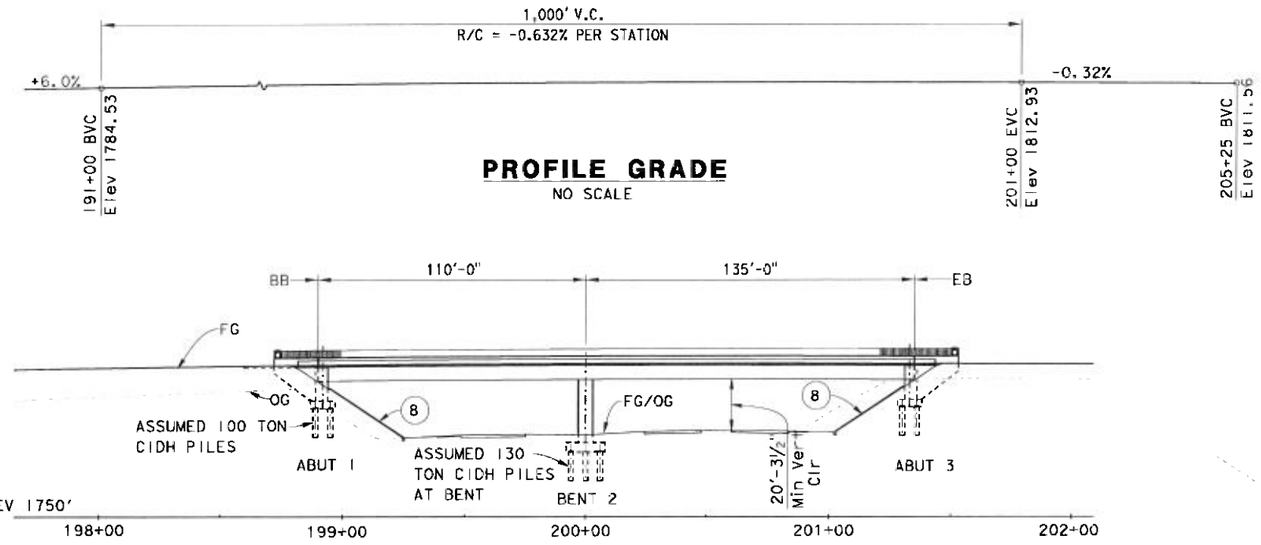
USERNAME => jsaldana DATE PLOTTED => 17-AUG-2015 TIME PLOTTED => 07:02

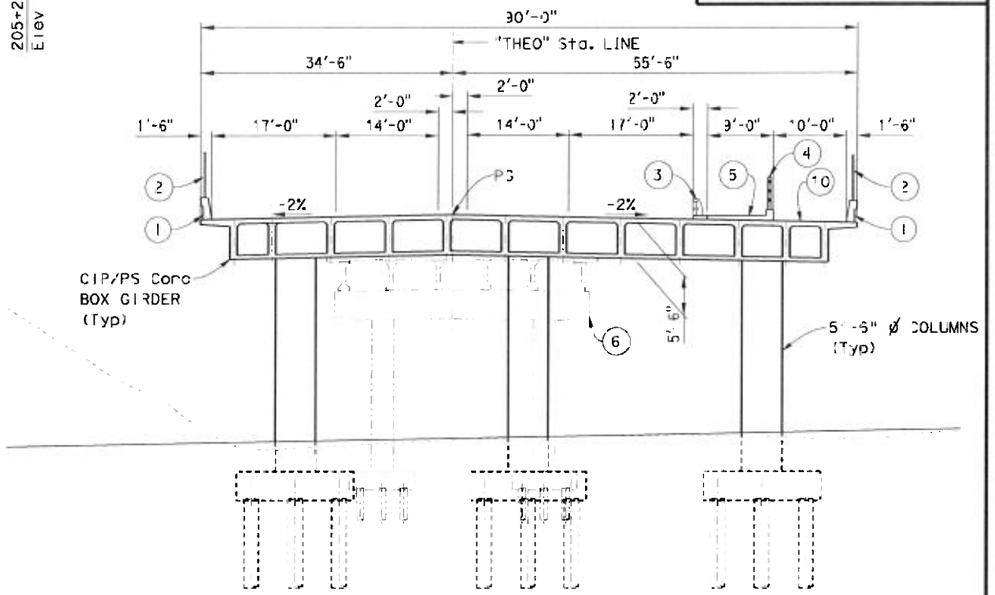
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	RIV	60	20.0-22.0

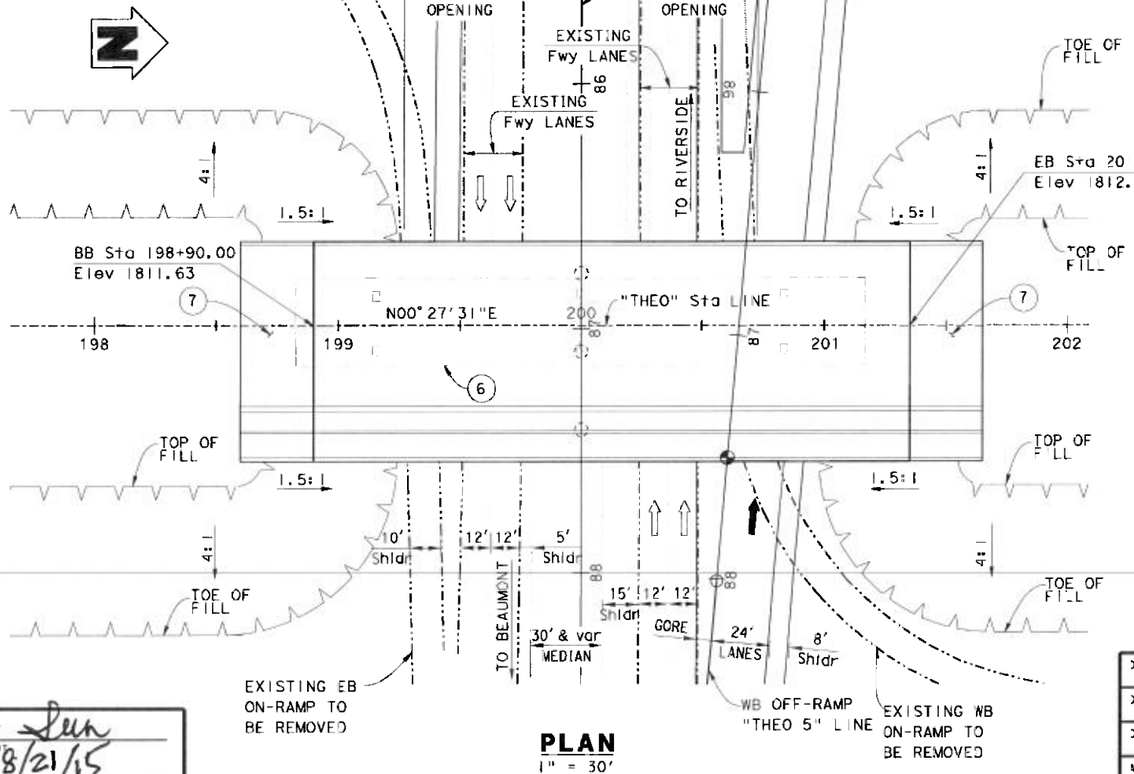
CITY OF MORENO VALLEY
14177 FREDERICK ST
MORENO VALLEY, CA 92553

RBF / MICHAEL BAKER INT'L.
14725 ALTON PKWY
IRVINE, CA 92618





TYPICAL SECTION
1" = 10



NOTES:

1. Conc Barrier Type 736 (Mod)
2. Black Picket Steel Fencing
3. California ST-10 Bridge Rail
4. 3' Rail PVC Fence, City of Moreno Valley
5. Sidewalk and Curb
6. Remove Existing Bridge No. 56-0488
7. Structure Approach Type N (30S)
8. Slope Paving Full Slope
9. Vehicle Traffic Will Pass Through Construction 15' min Vertical Clearance Required Under Falsework. Falsework to Accommodate 3 Lanes Each Direction
10. Multi Use Trail

Denotes Point of Minimum Vertical Clearance

COST DATA

DATE OF ESTIMATE		MAY 2015
BRIDGE REMOVAL	=	$300,000
STRUCTURE DEPTH	=	5'-6"
LENGTH	=	245'-0"
WIDTH	=	90'-0"
AREA	=	22,050 SF
COST / SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$288/SF
TOTAL COST NEW BRIDGE	=	$6,350,000

DESIGN OVERSIGHT
SIGN OFF DATE 8/21/15

DESIGNED BY	J. MOSQUERA	DATE	4 - 2015
DRAWN BY	J. SALDANA	DATE	4 - 2015
CHECKED BY	B. MIELKE	DATE	4 - 2015
APPROVED		DATE	

J. MOSQUERA
PROJECT ENGINEER

PLANNING STUDY

THEODORE STREET OC ALT 6

BRIDGE NO. 56-TBD	UNIT:
SCALE: AS SHOWN	PROJECT NUMBER & PHASE: 0813000109

CONTRACT NO.:

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 7/16/10)

FILE => 56-0488-a-gp01-Alt-6.dgn

USERNAME => 150 DGN DATE PLOTTED => 17 AUG 2015 TIME PLOTTED => 08:46

Preliminary Project Cost Estimate

Attachment 5

SR-60 / WORLD LOGISTIC CENTER PARKWAY

PLANNING COST ESTIMATE ©

EA: 08-0M590 PID: 813000109

EA: 08-0M590

PID: 813000109

District-County-Route: 08-Riv-60-20.0/22.0

PM: 20.0/22.0

Type of Estimate : PA/ED

Program Code : 800.100/HE11

Project Limits : 08-Riv-60-20.0/22.0

Project Description: Partial Cloverleaf - Entire Project

Scope :

Alternative : Alternative #2

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 54,640,200	$ 60,716,919
TOTAL STRUCTURES COST	$ 15,048,000	$ 16,721,538
SUBTOTAL CONSTRUCTION COST	$ 69,688,200	$ 77,438,458
TOTAL RIGHT OF WAY COST	$ 25,444,305	$ 26,973,835
TOTAL CAPITAL OUTLAY COSTS	$ 95,133,000	$ 104,413,000
PA/ED SUPPORT	$ 1,000,000	$ 1,000,000
PS&E SUPPORT	$ 5,000,000	$ 5,420,000
RIGHT OF WAY SUPPORT	$ 1,700,000	$ 1,842,800
CONSTRUCTION SUPPORT	$ 3,500,000	$ 3,941,000
TOTAL SUPPORT COST	$ 11,200,000	$ 12,204,000
TOTAL PROJECT COST	$ 107,000,000	$ 117,000,000

If Project has been programmed enter Programmed Amount $ 54,113,000

	Month	/	Year
Date of Estimate (Month/Year)	10	/	2019
Estimated Construction Start (Month/Year)	1	/	2022
Number of Working Days =	450		
Estimated Mid-Point of Construction (Month/Year)	11	/	2022
Estimated Construction End (Month/Year)	8	/	2023
Number of Plant Establishment Days			

Estimated Project Schedule

PID Approval	Approved 2012/2013
PA/ED Approval	5/20
PS&E	10/20
RTL	12/21
Begin Construction	1/22

Cost Estimate Certifier	Randy Ratzlaff, P.E.	12/4/2019	909-974-4973
	Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	10,772,000
2	**Pavement Structural Section**	$	15,281,500
3	**Drainage**	$	3,390,000
4	**Specialty Items**	$	83,500
5	**Environmental**	$	3,900,600
6	**Traffic Items**	$	5,155,000
7	**Detours**	$	150,000
8	**Minor Items**	$	387,400
9	**Roadway Mobilization**	$	1,956,000
10	**Supplemental Work**	$	883,800
11	**State Furnished**	$	922,300
12	**Time-Related Overhead**	$	2,651,400
13	**Roadway Contingency**	$	9,106,700
	TOTAL ROADWAY ITEMS	**$**	**54,640,200**

Estimate Prepared By :	Jerusalem Verano, P.E.	10/18/2019	909-974-4938
	Proejct Engineer	**Date**	**Phone**
Estimate Reviewed By :	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

EA: 08-0M590 PID: 813000109

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	68,600	x	20.00	=	$	1,372,000
170101	Develop Water Supply	LS	1	x	50,000.00	=	$	50,000
170103	Clearing & Grubbing	LS	1	x	50,000.00	=	$	50,000
198010	Imported Borrow	CY	600,000	x	15.00	=	$	9,000,000
XXXXXX	Bridge Removal	LS	1	x	300,000	=	$	300,000

TOTAL EARTHWORK SECTION ITEMS	**$**	**10,772,000**

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
401050	Jointed Plain Concrete Pavement	CY	33,100	x	250.00	=	$	8,275,000
390132	Hot Mix Asphalt (Type A)	TON	14,800	x	90.00	=	$	1,332,000
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	6,200	x	110.00	=	$	682,000
260203	Class 2 Aggregate Base	CY	19,600	x	55.00	=	$	1,078,000
280000	Lean Concrete Base	CY	9,300	x	200.00	=	$	1,860,000
390100	Prime Coat	TON	49	x	2,000.00	=	$	98,000
397005	Tack Coat	TON	6	x	1,500.00	=	$	9,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	36,300	x	5.00	=	$	181,500
731504	Minor Concrete (Curb and Gutter)	CY	1,100	x	600.00	=	$	660,000
731521	Minor Concrete (Sidewalk)	CY	1,400	x	600.00	=	$	840,000
XXXXXX	Multi-use Trail (Surface and Base Material)	CY	1,300	x	100.00	=	$	130,000
XXXXXX	Median Hardscape	SQFT	34,000	x	4	=	$	136,000

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	**$**	**15,281,500**

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
510502	Minor Concrete (Minor Structure)	CY	150	x	1,600.00	=	$	240,000
750001	Miscellaneous Iron and Steel	LB	30,000	x	2	=	$	60,000
XXXXXX	Extend 3-2x4 RCB	LF	25	x	2,200.00	=	$	55,000
	Extend 2-72" CMP	LF	40	x	1,500.00	=	$	60,000
	Remove 3-4x2 Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Remove 48" CMP Headwall & Entrance Structure	EA	2	x	30,000.00	=	$	60,000
	Remove 72" CMP Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Construct 3-4x2 Headwall & Entrance Structure	EA	1	x	75,000.00	=	$	75,000
	Construct 48" CMP Headwall & Entrance Structure	EA	2	x	60,000.00	=	$	120,000
	Construct 72" CMP Headwall & Entrance Structure	EA	1	x	110,000.00	=	$	110,000
	Construct 36" AP Culvert	LF	800	x	250.00	=	$	200,000
	Overside Drains	EA	20	x	2,000.00	=	$	40,000
	Bio-filtration Swales	LF	7,800	x	50.00	=	$	390,000
	Water Quality Basins & control structures	EA	5	x	150,000.00	=	$	750,000
	24-36" RCP Storm Drain	LF	5,500	x	200.00	=	$	1,100,000
	RSP	LS	1	x	50,000.00	=	$	50,000
	Extend 48" CMP	LF	40	x	500.00	=	$	20,000

TOTAL DRAINAGE ITEMS $ 3,390,000

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
070030	Lead Compliance Plan	LS	1	x	10,000.00	=	$	10,000
832006	Midwest Guardrail System (Steel Post)	LF	1,400	x	40.00	=	$	56,000
839584	Alternative In-line Terminal System	EA	3	x	3,500.00	=	$	10,500
839543	Transition Railing (WB-31)	EA	2	x	3,500.00	=	$	7,000

TOTAL SPECIALTY ITEMS $ 83,500

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
									Subtotal Environmental Mitigation	$ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
200001	Highway Planting	SQFT	126,000	x	4.00	=	$	504,000		
20XXXX	Highway Planting (Infield Areas)	SQFT	976,100	x	2.00	=	$	1,952,200		
									Subtotal Landscape and Irrigation	$ 2,456,200

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)			Cost		
2030XX	Erosion Control (TBD)	SQFT	1,293,700	x	0.50	=	$	646,850		
									Subtotal Erosion Control	$ 646,850

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)			Cost		
130100	Job Site Management	LS	1	x	10,000.00	=	$	10,000		
130200	Temporary Concrete Washout	EA	20	x	2,000.00	=	$	40,000		
130300	Prepare SWPPP	LS	1	x	50,000.00	=	$	50,000		
130710	Temporary Construction Entrance	EA	5	x	4,500.00	=	$	22,500		
XXXXX	Temporary Construction BMP	LS	1	x	675,000.00	=	$	675,000		
									Subtotal NPDES	$ 797,500

TOTAL ENVIRONMENTAL	**$**	**3,900,600**

Supplemental Work for NPDES

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

Subtotal Supplemental Work for NDPS	$	-

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
870200	Lighting System	LS	1	x	350,000.00	=	$	350,000
870200	Lighting System (Street Lights)	EA	86	x	6,000.00	=	$	516,000
870400	Signal and Lighting System	EA	5	x	200,000.00	=	$	1,000,000
870510	Ramp Metering System (Entrance Ramps)	EA	3	x	100,000.00	=	$	300,000
870600	Traffic Monitoring Station System (Type X)	EA	2	x	50,000.00	=	$	100,000
871900	Fiber Optic Cable System	LS	1	x	500,000.00	=	$	500,000
872130	Modifying Existing Electrical System	LS	1	x	13,000.00	=	$	13,000
XXXXX	Overhead Sign Structures	EA	4	x	150,000.00	=	$	600,000

Subtotal Traffic Electrical *$ 3,379,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
84XXXX	Signing and Striping	LS	1	x	1,000,000.00	=	$	1,000,000

Subtotal Traffic Signing and Striping *$ 1,000,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXX	TMP Strategies (Public Information and COZEEP cost accounted under Section 11)	LS	1	x	$ 176,000	=	$	176,000

Subtotal Traffic Management Plan *$ 176,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
120100	Traffic Control System	LS	1	x	600,000.00	=	$	600,000

Subtotal Stage Construction and Traffic Handling *$ 600,000*

TOTAL TRAFFIC ITEMS **$ 5,155,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)			Cost
1286XX	Temporary Signals	EA	1	x	150,000.00	=	$	150,000

* Includes constructing, maintaining, and removal

TOTAL DETOURS **$ 150,000**

SUBTOTAL SECTIONS 1 through 7 $ 38,732,600

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items							
	ADA Items			0.0%	$	-	
8B - Bike Path Items							
	Bike Path Items			0.0%	$	-	
8C - Other Minor Items							
	Other Minor Items			1.0%	$	387,326	
	Total of Section 1-7	$	38,732,600	x 1.0%	= $	387,326	

TOTAL MINOR ITEMS **$ 387,400**

SECTIONS 9: MOBILIZATION

Item code							
999990	Total Section 1-8	$	39,120,000	x 5%	= $	1,956,000	

TOTAL MOBILIZATION **$ 1,956,000**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)			Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	100,100.00	=	$	100,100
066094	Value Analysis	LS	1	x	10,000.00	=	$	10,000
066070	Maintain Traffic	LS	1	x	270,000.00	=	$	270,000
066919	Dispute Resolution Board	LS	1	x	22,500.00	=	$	22,500
066015	Federal Trainee Program	LS	1	x	20,000.00	=	$	20,000
066610	Partnering	LS	1	x	70,000.00	=	$	70,000
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					=	$	-
	Total Section 1-8	$	39,120,000		1%	= $	391,200	

TOTAL SUPPLEMENTAL WORK **$ 883,800**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066062	COZEEP Contract	LS	1	x	$ 422,072.00	=	$ 422,072.00
066063	Public Information	LS	1	x	$ 95,000.00	=	$ 95,000.00
066916	Annual Construction General Permit Fee	LS	1	x	$ 14,000.00	=	$ 14,000.00

Total Section 1-8 $ 39,120,000 1% = $ 391,200

TOTAL STATE FURNISHED $922,300

SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization $53,028,000 (used to calculate TRO)

Total Construction Cost (excluding TRO and Contingency) $57,930,100 (used to check if project is greater than $5 million excluding contingency)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **5%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	450	X	$5,892	=	$2,651,400

TOTAL TIME-RELATED OVERHEAD $2,651,400

Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Total Section 1-12 $ 45,533,500 x **20%** = $9,106,700

TOTAL CONTINGENCY $9,106,700

EA: 08-0M590 PID: 813000109

II. STRUCTURE ITEMS

	Bridge 1	Bridge 2	
DATE OF ESTIMATE	12/20/18	00/00/00	00/00/00
Bridge Name	WLC Parkway	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	56-0488	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	137 LF	0 LF	0 LF
Total Bridge Length (Feet)	298 LF	0 LF	0 LF
Total Area (Square Feet)	40826 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	6.5 LF	0 LF	0 LF
Footing Type (pile or spread)	pile	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$280	$0	$0
COST OF EACH	**$11,400,000**	**$0**	**$0**

	Building 1	Building 2	
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Building Name	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total Building Length (Feet)	0 LF	0 LF	0 LF
Total Area (Square Feet)	0 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	0 LF	0 LF	0 LF
Footing Type (pile or spread)	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0	$0	$0
COST OF EACH	**$0**	**$0**	**$0**

TOTAL COST OF BRIDGES		**$11,400,000**
TOTAL COST OF BUILDINGS		**$0**
Structures Mobilization Percentage	10%	**$1,140,000**

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Structures Contingency Percentage	20%	**$2,280,000**
Architectural Aesthetic Treatments	2%	**$228,000**

TOTAL COST OF STRUCTURES	**$15,048,000**

Estimate Prepared By: See APS

Date

EA: 08-0M590 PID: 813000109

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees		$	20,616,098
	A2)	SB-1210		$	0
B)	Acquisition of Offsite Mitigation			$	0
C)	C1)	Utility Relocation (State Share)		$	0
	C2)	Potholing (Design Phase)		$	0
D)	Railroad Acquisition			$	0
E)	Clearance / Demolition			$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)			$	0
G)	Title and Escrow			$	0
H)	Environmental Review			$	0
I)	Condemnation Settlements		0%	$	1,546,207
J)	Design Appreciation Factor		0%	$	0
K)	Utility Relocation (Construction Cost)			$	3,282,000

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$25,444,305**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$26,973,835**
N)	**RIGHT OF WAY SUPPORT**	**$1,700,000**

Support Cost Estimate Prepared By	n/a	n/a
	Project Coordinator[1]	Phone
Utility Estimate Prepared By	Jerusalem Verano, P.E.	909-974-4938
	Utility Coordinator[2]	Phone
R/W Acquisition Estimate Prepared By	Patti Feist, SR/WA	760-899-5569
	Right of Way Estimator[3]	Phone

Note: Items G & H applied to items A + B

[1] When estimate has Support Costs only [2] When estimate has Utility Relocation [3] When R/W Acquisition is required

SR-60 / WORLD LOGISTIC CENTER PARKWAY

PLANNING COST ESTIMATE ©

EA: 08-0M590 PID: 813000109

EA: 08-0M590

PID: 813000109

District-County-Route: 08-Riv-60-20.0/22.0

PM: 20.0/22.0

Type of Estimate : PA/ED

Program Code : 800.100/HE11

Project Limits : 08-Riv-60-20.0/22.0

Project Description: Partial Cloverleaf - Entire Project

Scope :

Alternative : Alternative #2a

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 55,602,300	$ 63,021,738
TOTAL STRUCTURES COST	$ 15,048,000	$ 17,055,969
SUBTOTAL CONSTRUCTION COST	$ 70,650,300	$ 80,077,707
TOTAL RIGHT OF WAY COST	$ 32,405,121	$ 34,131,829
TOTAL CAPITAL OUTLAY COSTS	$ 103,056,000	$ 114,210,000
PA/ED SUPPORT	$ 1,000,000	$ 1,000,000
PS&E SUPPORT	$ 5,000,000	$ 5,420,000
RIGHT OF WAY SUPPORT	$ 1,700,000	$ 1,842,800
CONSTRUCTION SUPPORT	$ 3,500,000	$ 3,941,000
TOTAL SUPPORT COST	$ 11,200,000	$ 12,204,000
TOTAL PROJECT COST	$ 115,000,000	$ 127,000,000

If Project has been programmed enter Programmed Amount $ 54,113,000

	Month	/	Year
Date of Estimate (Month/Year)	10	/	2019
Estimated Construction Start (Month/Year)	1	/	2022
Number of Working Days =	450		
Estimated Mid-Point of Construction (Month/Year)	11	/	2022
Estimated Construction End (Month/Year)	8	/	2023
Number of Plant Establishment Days			

Estimated Project Schedule

PID Approval	Approved 2012/2013
PA/ED Approval	5/20
PS&E	10/20
RTL	12/21
Begin Construction	1/22

Cost Estimate Certifier	Randy Ratzlaff, P.E.	12/4/2019	909-974-4973
	Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	10,772,000
2	**Pavement Structural Section**	$	15,668,200
3	**Drainage**	$	3,390,000
4	**Specialty Items**	$	83,500
5	**Environmental**	$	4,186,500
6	**Traffic Items**	$	5,191,000
7	**Detours**	$	150,000
8	**Minor Items**	$	394,500
9	**Roadway Mobilization**	$	1,991,800
10	**Supplemental Work**	$	891,000
11	**State Furnished**	$	929,500
12	**Time-Related Overhead**	$	2,687,200
13	**Roadway Contingency**	$	9,267,100
	TOTAL ROADWAY ITEMS	**$**	**55,602,300**

Estimate Prepared By :	Jerusalem Verano, P.E.	10/18/2019	909-974-4938
	Proejct Engineer	**Date**	**Phone**
Estimate Reviewed By :	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	68,600	x	20.00	=	$	1,372,000
170101	Develop Water Supply	LS	1	x	50,000.00	=	$	50,000
170103	Clearing & Grubbing	LS	1	x	50,000.00	=	$	50,000
198010	Imported Borrow	CY	600,000	x	15.00	=	$	9,000,000
XXXXXX	Bridge Removal	LS	1	x	300,000.00	=	$	300,000

TOTAL EARTHWORK SECTION ITEMS	**$**	**10,772,000**

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
401050	Jointed Plain Concrete Pavement	CY	29,500	x	250.00	=	$	7,375,000
390132	Hot Mix Asphalt (Type A)	TON	20,000	x	90.00	=	$	1,800,000
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	8,400	x	110.00	=	$	924,000
260203	Class 2 Aggregate Base	CY	26,700	x	55.00	=	$	1,468,500
280000	Lean Concrete Base	CY	8,400	x	200.00	=	$	1,680,000
390100	Prime Coat	TON	67	x	2,000.00	=	$	134,000
397005	Tack Coat	TON	8	x	1,500.00	=	$	12,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	36,300	x	5.00	=	$	181,500
731504	Minor Concrete (Curb and Gutter)	CY	1,300	x	600.00	=	$	780,000
731521	Minor Concrete (Sidewalk)	CY	1,400	x	600.00	=	$	840,000
XXXXXX	Multi-use Trail (Surface and Base Material)	CY	1,980	x	100.00	=	$	198,000
XXXXXX	Median Hardscape	SQFT	68,800	x	4	=	$	275,200

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	**$**	**15,668,200**

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
510502	Minor Concrete (Minor Structure)	CY	150	x	1,600.00	=	$	240,000
750001	Miscellaneous Iron and Steel	LB	30,000	x	2	=	$	60,000
XXXXXX	Extend 3-2x4 RCB	LF	25	x	2,200.00	=	$	55,000
	Extend 2-72" CMP	LF	40	x	1,500.00	=	$	60,000
	Remove 3-4x2 Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Remove 48" CMP Headwall & Entrance Structure	EA	2	x	30,000.00	=	$	60,000
	Remove 72" CMP Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Construct 3-4x2 Headwall & Entrance Structure	EA	1	x	75,000.00	=	$	75,000
	Construct 48" CMP Headwall & Entrance Structure	EA	2	x	60,000.00	=	$	120,000
	Construct 72" CMP Headwall & Entrance Structure	EA	1	x	110,000.00	=	$	110,000
	Construct 36" AP Culvert	LF	800	x	250.00	=	$	200,000
	Overside Drains	EA	20	x	2,000.00	=	$	40,000
	Bio-filtration Swales	LF	7,800	x	50.00	=	$	390,000
	Water Quality Basins & control structures	EA	5	x	150,000.00	=	$	750,000
	24-36" RCP Storm Drain	LF	5,500	x	200.00	=	$	1,100,000
	RSP	LS	1	x	50,000.00	=	$	50,000
	Extend 48" CMP	LF	40	x	500.00	=	$	20,000

TOTAL DRAINAGE ITEMS $ 3,390,000

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
070030	Lead Compliance Plan	LS	1	x	10,000.00	=	$	10,000
832006	Midwest Guardrail System (Steel Post)	LF	1,400	x	40.00	=	$	56,000
839585	Alternative Flared Terminal System	EA	3	x	3,500.00	=	$	10,500
839543	Transition Railing (WB-31)	EA	2	x	3,500.00	=	$	7,000

TOTAL SPECIALTY ITEMS $ 83,500

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
									Subtotal Environmental Mitigation	$ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
200001	Highway Planting	SQFT	175,000	x	4.00	=	$	700,000		
20XXXX	Highway Planting (Infield Areas)	SQFT	977,000	x	2.00	=	$	1,954,000		
									Subtotal Landscape and Irrigation	$ 2,654,000

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)			Cost		
2030XX	Erosion Control (TBD)	SQFT	1,420,000	x	0.50	=	$	710,000		
									Subtotal Erosion Control	$ 710,000

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)			Cost		
130100	Job Site Management	LS	1	x	10,000.00	=	$	10,000		
130200	Temporary Concrete Washout	EA	20	x	2,000.00	=	$	40,000		
130300	Prepare SWPPP	LS	1	x	50,000.00	=	$	50,000		
130710	Temporary Construction Entrance	EA	5	x	4,500.00	=	$	22,500		
XXXXX	Temporary Construction BMP	LS	1	x	700,000.00	=	$	700,000		
									Subtotal NPDES	$ 822,500

TOTAL ENVIRONMENTAL	**$**	**4,186,500**

Supplemental Work for NPDES

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

Subtotal Supplemental Work for NDPS	$	-

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
870200	Lighting System	LS	1	x	350,000.00	=	$	350,000
870200	Lighting System (Street Lights)	EA	92	x	6,000.00	=	$	552,000
870400	Signal and Lighting System	EA	5	x	200,000.00	=	$	1,000,000
870510	Ramp Metering System (Entrance Ramps)	EA	3	x	100,000.00	=	$	300,000
870600	Traffic Monitoring Station System (Type X)	EA	2	x	50,000.00	=	$	100,000
871900	Fiber Optic Cable System	LS	1	x	500,000.00	=	$	500,000
872130	Modifying Existing Electrical System	LS	1	x	13,000.00	=	$	13,000
XXXXX	Overhead Sign Structures	EA	4	x	150,000.00	=	$	600,000

Subtotal Traffic Electrical *$ 3,415,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
84XXXX	Signing and Striping	LS	1	x	1,000,000.00	=	$	1,000,000

Subtotal Traffic Signing and Striping *$ 1,000,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXX	TMP Strategies (Public Information and COZEEP cost accounted under Section 11)	LS	1	x	$ 176,000	=	$	176,000

Subtotal Traffic Management Plan *$ 176,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
120100	Traffic Control System	LS	1	x	600,000.00	=	$	600,000

Subtotal Stage Construction and Traffic Handling *$ 600,000*

TOTAL TRAFFIC ITEMS **$ 5,191,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
1286XX	Temporary Signals	EA	1	x	150,000.00	= $	150,000

* Includes constructing, maintaining, and removal

TOTAL DETOURS **$ 150,000**

SUBTOTAL SECTIONS 1 through 7 $ 39,441,200

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items							
	ADA Items				0.0%	$	-
8B - Bike Path Items							
	Bike Path Items				0.0%	$	-
8C - Other Minor Items							
	Other Minor Items				1.0%	$	394,412
	Total of Section 1-7		$ 39,441,200	x	1.0%	= $	394,412

TOTAL MINOR ITEMS **$ 394,500**

SECTIONS 9: MOBILIZATION

Item code							
999990	Total Section 1-8	$	39,835,700	x	5%	= $	1,991,785

TOTAL MOBILIZATION **$ 1,991,800**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	100,100.00	= $	100,100
066094	Value Analysis	LS	1	x	10,000.00	= $	10,000
066070	Maintain Traffic	LS	1	x	270,000.00	= $	270,000
066919	Dispute Resolution Board	LS	1	x	22,500.00	= $	22,500
066015	Federal Trainee Program	LS	1	x	20,000.00	= $	20,000
066610	Partnering	LS	1	x	70,000.00	= $	70,000
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					= $	-
	Total Section 1-8	$	39,835,700		1%	= $	398,357

TOTAL SUPPLEMENTAL WORK **$ 891,000**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066062	COZEEP Contract	LS	1	x	$ 422,072.00	=	$ 422,072.00
066063	Public Information	LS	1	x	$ 95,000.00	=	$ 95,000.00
066916	Annual Construction General Permit Fee	LS	1	x	$ 14,000.00	=	$ 14,000.00
	Total Section 1-8		$ 39,835,700		1%	=	$ 398,357

TOTAL STATE FURNISHED **$929,500**

SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization $53,743,700 (used to calculate TRO)

Total Construction Cost (excluding TRO and Contingency) $58,696,000 (used to check if project is greater than $5 million excluding contingency)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **5%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	450	X	$5,972	=	$2,687,200

TOTAL TIME-RELATED OVERHEAD **$2,687,200**

Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Total Section 1-12	$	46,335,200	x	**20%**	=	$9,267,040

TOTAL CONTINGENCY **$9,267,100**

EA: 08-0M590 PID: 813000109

II. STRUCTURE ITEMS

	Bridge 1	Bridge 2	
DATE OF ESTIMATE	12/20/18	00/00/00	00/00/00
Bridge Name	WLC Parkway	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	56-0488	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	137 LF	0 LF	0 LF
Total Bridge Length (Feet)	298 LF	0 LF	0 LF
Total Area (Square Feet)	40826 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	6.5 LF	0 LF	0 LF
Footing Type (pile or spread)	Pile	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$280	$0	$0
COST OF EACH	**$11,400,000**	**$0**	**$0**

	Building 1		
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Building Name	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF	0 LF	0 LF
Total Building Length (Feet)	0 LF	0 LF	0 LF
Total Area (Square Feet)	0 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	0 LF	0 LF	0 LF
Footing Type (pile or spread)	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0	$0	$0
COST OF EACH	**$0**	**$0**	**$0**

TOTAL COST OF BRIDGES		**$11,400,000**
TOTAL COST OF BUILDINGS		**$0**
Structures Mobilization Percentage	10%	**$1,140,000**

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Structures Contingency Percentage	20%	**$2,280,000**
Architectural Aesthetic Treatments	2%	**$228,000**

TOTAL COST OF STRUCTURES	**$15,048,000**

Estimate Prepared By: See APS

Date

EA: 08-0M590 PID: 813000109

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees		$	27,091,275
	A2)	SB-1210		$	0
B)	Acquisition of Offsite Mitigation			$	0
C)	C1)	Utility Relocation (State Share)		$	0
	C2)	Potholing (Design Phase)		$	0
D)	Railroad Acquisition			$	0
E)	Clearance / Demolition			$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)			$	0
G)	Title and Escrow			$	0
H)	Environmental Review			$	0
I)	Condemnation Settlements		0%	$	2,031,846
J)	Design Appreciation Factor		0%	$	0
K)	Utility Relocation (Construction Cost)			$	3,282,000

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$32,405,121**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$34,131,829**
N)	**RIGHT OF WAY SUPPORT**	**$1,700,000**

Support Cost Estimate Prepared By	n/a	n/a
	Project Coordinator[1]	Phone
Utility Estimate Prepared By	Jerusalem Verano, P.E.	909-974-4938
	Utility Coordinator[2]	Phone
R/W Acquisition Estimate Prepared By	Patti Feist, SR/WA	760-899-5569
	Right of Way Estimator[3]	Phone

Note: Items G & H applied to items A + B

[1] When estimate has Support Costs only [2] When estimate has Utility Relocation [3] When R/W Acquisition is required

SR-60 / WORLD LOGISTIC CENTER PARKWAY

PLANNING COST ESTIMATE ©

EA: 08-0M590 PID: 813000109

EA: 08-0M590

PID: 813000109

District-County-Route: 08-Riv-60-20.0/22.0

PM: 20.0/22.0

Type of Estimate : PA/ED

Program Code : 800.100/HE11

Project Limits : 08-Riv-60-20.0/22.0

Project Description: Partial Cloverleaf - Entire Project

Scope :

Alternative : Alternative #6

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 53,947,600	$ 61,146,239
TOTAL STRUCTURES COST	$ 8,184,000	$ 9,276,053
SUBTOTAL CONSTRUCTION COST	$ 62,131,600	$ 70,422,292
TOTAL RIGHT OF WAY COST	$ 25,585,980	$ 27,150,109
TOTAL CAPITAL OUTLAY COSTS	$ 87,718,000	$ 97,573,000
PA/ED SUPPORT	$ 1,000,000	$ 1,000,000
PS&E SUPPORT	$ 5,000,000	$ 5,420,000
RIGHT OF WAY SUPPORT	$ 1,700,000	$ 1,842,800
CONSTRUCTION SUPPORT	$ 3,500,000	$ 3,941,000
TOTAL SUPPORT COST	$ 11,200,000	$ 12,204,000
TOTAL PROJECT COST	$ 99,000,000	$ 110,000,000

If Project has been programmed enter Programmed Amount $ 54,113,000

	Month	/	Year
Date of Estimate (Month/Year)	10	/	2019
Estimated Construction Start (Month/Year)	1	/	2022
Number of Working Days =	450		
Estimated Mid-Point of Construction (Month/Year)	11	/	2022
Estimated Construction End (Month/Year)	8	/	2023
Number of Plant Establishment Days			

Estimated Project Schedule

PID Approval	Approved 2012/2013
PA/ED Approval	5/20
PS&E	10/20
RTL	12/21
Begin Construction	1/22

Cost Estimate Certifier	Randy Ratzlaff, P.E.	12/4/2019	909-974-4973
	Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	10,772,000
2	**Pavement Structural Section**	$	15,122,600
3	**Drainage**	$	3,390,000
4	**Specialty Items**	$	83,500
5	**Environmental**	$	3,865,600
6	**Traffic Items**	$	5,119,000
7	**Detours**	$	150,000
8	**Minor Items**	$	385,100
9	**Roadway Mobilization**	$	1,944,400
10	**Supplemental Work**	$	881,500
11	**State Furnished**	$	920,000
12	**Time-Related Overhead**	$	2,322,600
13	**Roadway Contingency**	$	8,991,300
	TOTAL ROADWAY ITEMS	**$**	**53,947,600**

Estimate Prepared By :	Jerusalem Verano, P.E.	10/18/2019	909-974-4938
	Proejct Engineer	**Date**	**Phone**
Estimate Reviewed By :	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

EA: 08-0M590 PID: 813000109

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	68,600	x	20.00	=	$	1,372,000
170101	Develop Water Supply	LS	1	x	50,000.00	=	$	50,000
170103	Clearing & Grubbing	LS	1	x	50,000.00	=	$	50,000
198010	Imported Borrow	CY	600,000	x	15.00	=	$	9,000,000
XXXXXX	Bridge Removal	LS	1	x	300,000.00	=	$	300,000

TOTAL EARTHWORK SECTION ITEMS	**$**	**10,772,000**

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
401050	Jointed Plain Concrete Pavement	CY	28,900	x	250.00	=	$	7,225,000
390132	Hot Mix Asphalt (Type A)	TON	14,500	x	90.00	=	$	1,305,000
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	6,100	x	110.00	=	$	671,000
260203	Class 2 Aggregate Base	CY	19,300	x	55.00	=	$	1,061,500
280000	Lean Concrete Base	CY	8,100	x	200.00	=	$	1,620,000
390100	Prime Coat	TON	49	x	2,000.00	=	$	98,000
397005	Tack Coat	TON	6	x	1,500.00	=	$	9,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	36,300	x	5.00	=	$	181,500
731504	Minor Concrete (Curb and Gutter)	CY	1,600	x	600.00	=	$	960,000
731521	Minor Concrete (Sidewalk)	CY	1,800	x	600.00	=	$	1,080,000
XXXXXX	Multi-use Trail (Surface and Base Material)	CY	1,100	x	100.00	=	$	110,000
XXXXXX	Median Hardscape	SQFT	200,400	x	4	=	$	801,600

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	**$**	**15,122,600**

EA: 08-0M590 PID: 813000109

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
510502	Minor Concrete (Minor Structure)	CY	150	x	1,600.00	=	$	240,000
750001	Miscellaneous Iron and Steel	LB	30,000	x	2	=	$	60,000
XXXXXX	Extend 3-2x4 RCB	LF	25	x	2,200.00	=	$	55,000
	Extend 2-72" CMP	LF	40	x	1,500.00	=	$	60,000
	Remove 3-4x2 Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Remove 48" CMP Headwall & Entrance Structure	EA	2	x	30,000.00	=	$	60,000
	Remove 72" CMP Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Construct 3-4x2 Headwall & Entrance Structure	EA	1	x	75,000.00	=	$	75,000
	Construct 48" CMP Headwall & Entrance Structure	EA	2	x	60,000.00	=	$	120,000
	Construct 72" CMP Headwall & Entrance Structure	EA	1	x	110,000.00	=	$	110,000
	Construct 36" AP Culvert	LF	800	x	250.00	=	$	200,000
	Overside Drains	EA	20	x	2,000.00	=	$	40,000
	Bio-filtration Swales	LF	7,800	x	50.00	=	$	390,000
	Water Quality Basins & control structures	EA	5	x	150,000.00	=	$	750,000
	24-36" RCP Storm Drain	LF	5,500	x	200.00	=	$	1,100,000
	RSP	LS	1	x	50,000.00	=	$	50,000
	Extend 48" CMP	LF	40	x	500.00	=	$	20,000

TOTAL DRAINAGE ITEMS $ 3,390,000

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
070030	Lead Compliance Plan	LS	1	x	10,000.00	=	$	10,000
832006	Midwest Guardrail System (Steel Post)	LF	1,400	x	40.00	=	$	56,000
839584	Alternative In-line Terminal System	EA	3	x	3,500.00	=	$	10,500
839543	Transition Railing (WB-31)	EA	2	x	3,500.00	=	$	7,000

TOTAL SPECIALTY ITEMS $ 83,500

EA: 08-0M590 PID: 813000109

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
									Subtotal Environmental Mitigation	$ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
200001	Highway Planting	SQFT	117,700	x	4.00	=	$	470,800		
20XXXX	Highway Planting (Infield Areas)	SQFT	961,300	x	2.00	=	$	1,922,600		
									Subtotal Landscape and Irrigation	$ 2,393,400

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)			Cost		
2030XX	Erosion Control (TBD)	SQFT	1,349,283	x	0.50	=	$	674,642		
									Subtotal Erosion Control	$ 674,642

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)			Cost		
130100	Job Site Management	LS	1	x	10,000.00	=	$	10,000		
130200	Temporary Concrete Washout	EA	20	x	2,000.00	=	$	40,000		
130300	Prepare SWPPP	LS	1	x	50,000.00	=	$	50,000		
130710	Temporary Construction Entrance	EA	5	x	4,500.00	=	$	22,500		
XXXXX	Temporary Construction BMP	LS	1	x	675,000.00	=	$	675,000		
									Subtotal NPDES	$ 797,500

TOTAL ENVIRONMENTAL $ 3,865,600

Supplemental Work for NPDES

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

Subtotal Supplemental Work for NDPS $ -

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
870200	Lighting System	LS	1	x	350,000.00	=	$	350,000
870200	Lighting System (Street Lights)	EA	80	x	6,000.00	=	$	480,000
870400	Signal and Lighting System	EA	5	x	200,000.00	=	$	1,000,000
870510	Ramp Metering System (Entrance Ramps)	EA	3	x	100,000.00	=	$	300,000
870600	Traffic Monitoring Station System (Type X)	EA	2	x	50,000.00	=	$	100,000
871900	Fiber Optic Cable System	LS	1	x	500,000.00	=	$	500,000
872130	Modifying Existing Electrical System	LS	1	x	13,000.00	=	$	13,000
XXXXX	Overhead Sign Structures	EA	4	x	150,000.00	=	$	600,000

Subtotal Traffic Electrical *$ 3,343,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXX	TMP Star	LS	1	x	1,000,000.00	=	$	1,000,000

Subtotal Traffic Signing and Striping *$ 1,000,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXX	TMP Strategies (Public Information and COZEEP cost accounted under Section 11)	LS	1	x	$ 176,000	=	$	176,000

Subtotal Traffic Management Plan *$ 176,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
120100	Traffic Control System	LS	1	x	600,000.00	=	$	600,000

Subtotal Stage Construction and Traffic Handling *$ 600,000*

TOTAL TRAFFIC ITEMS **$ 5,119,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
1286XX	Temporary Signals	EA	1	x	150,000.00	= $	150,000

* Includes constructing, maintaining, and removal

TOTAL DETOURS **$ 150,000**

SUBTOTAL SECTIONS 1 through 7 $ 38,502,700

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items							
	ADA Items				0.0%	$	-
8B - Bike Path Items							
	Bike Path Items				0.0%	$	-
8C - Other Minor Items							
	Other Minor Items				1.0%	$	385,027
	Total of Section 1-7		$ 38,502,700	x	1.0%	= $	385,027

TOTAL MINOR ITEMS **$ 385,100**

SECTIONS 9: MOBILIZATION

Item code							
999990	Total Section 1-8	$	38,887,800	x	5%	= $	1,944,390

TOTAL MOBILIZATION **$ 1,944,400**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	100,100.00	= $	100,100
066094	Value Analysis	LS	1	x	10,000.00	= $	10,000
066070	Maintain Traffic	LS	1	x	270,000.00	= $	270,000
066919	Dispute Resolution Board	LS	1	x	22,500.00	= $	22,500
066015	Federal Trainee Program	LS	1	x	20,000.00	= $	20,000
066610	Partnering	LS	1	x	70,000.00	= $	70,000
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					= $	-
	Total Section 1-8	$	38,887,800		1%	= $	388,878

TOTAL SUPPLEMENTAL WORK **$ 881,500**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066062	COZEEP Contract	LS	1	x	$ 422,072.00	=	$ 422,072.00
066063	Public Information	LS	1	x	$ 95,000.00	=	$ 95,000.00
066916	Annual Construction General Permit Fee	LS	1	x	$ 14,000.00	=	$ 14,000.00
	Total Section 1-8		$ 38,887,800		1%	=	$ 388,878

TOTAL STATE FURNISHED $ 920,000.00

SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization $46,451,800 (used to calculate TRO)

Total Construction Cost (excluding TRO and Contingency) $50,817,700 (used to check if project is greater than $5 million excluding contingency)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **5%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	450	X	$5,161	=	$2,322,600

TOTAL TIME-RELATED OVERHEAD $2,322,600

Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Total Section 1-12	$	44,956,300	x	**20%**	=	$8,991,260	

TOTAL CONTINGENCY $8,991,300

EA: 08-0M590 PID: 813000109

II. STRUCTURE ITEMS

Bridge 1

DATE OF ESTIMATE	12/20/18		00/00/00		00/00/00
Bridge Name	WLC Parkway		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	56-0488		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	90 LF		0 LF		0 LF
Total Bridge Length (Feet)	245 LF		0 LF		0 LF
Total Area (Square Feet)	22050 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	6.5 LF		0 LF		0 LF
Footing Type (pile or spread)	Pile		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$280		$0		$0
COST OF EACH	**$6,200,000**		**$0**		**$0**

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0		$0		$0
COST OF EACH	**$0**		**$0**		**$0**

TOTAL COST OF BRIDGES		**$6,200,000**
TOTAL COST OF BUILDINGS		**$0**
Structures Mobilization Percentage	10%	**$620,000**

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Structures Contingency Percentage	20%	**$1,240,000**
Architectural Aesthetic Treatments	2%	**$124,000**
TOTAL COST OF STRUCTURES		**$8,184,000**

Estimate Prepared By: See APS

Date

EA: 08-0M590 PID: 813000109

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees		$	20,747,888
	A2)	SB-1210		$	0
B)	Acquisition of Offsite Mitigation			$	0
C)	C1)	Utility Relocation (State Share)		$	0
	C2)	Potholing (Design Phase)		$	0
D)	Railroad Acquisition			$	0
E)	Clearance / Demolition			$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)			$	0
G)	Title and Escrow			$	0
H)	Environmental Review			$	0
I)	Condemnation Settlements		0%	$	1,556,092
J)	Design Appreciation Factor		0%	$	0
K)	Utility Relocation (Construction Cost)			$	3,282,000

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$25,585,980**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$27,150,109**
N)	**RIGHT OF WAY SUPPORT**	**$1,700,000**

Support Cost Estimate Prepared By	n/a	n/a
	Project Coordinator[1]	Phone
Utility Estimate Prepared By	Jerusalem Verano, P.E.	909-974-4938
	Utility Coordinator[2]	Phone
R/W Acquisition Estimate Prepared By	Patti Feist, SR/WA	760-899-5569
	Right of Way Estimator[3]	Phone

Note: Items G & H applied to items A + B

[1] When estimate has Support Costs only [2] When estimate has Utility Relocation [3] When R/W Acquisition is required

SR-60 / WORLD LOGISTIC CENTER PARKWAY

PLANNING COST ESTIMATE ©

EA: 08-0M590 PID: 813000109

EA: 08-0M590

PID: 813000109

District-County-Route: 08-Riv-60-20.0/22.0

PM: 20.0/22.0

Type of Estimate : PA/ED

Program Code : 800.100/HE11

Project Limits : 08-Riv-60-20.0/22.0

Project Description: Partial Cloverleaf - Entire Project

Scope :

Alternative : Alternative #6a

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 55,787,300	$ 63,231,424
TOTAL STRUCTURES COST	$ 8,184,000	$ 9,276,053
SUBTOTAL CONSTRUCTION COST	$ 63,971,300	$ 72,507,477
TOTAL RIGHT OF WAY COST	$ 31,369,379	$ 33,502,141
TOTAL CAPITAL OUTLAY COSTS	$ 95,341,000	$ 106,010,000
PA/ED SUPPORT	$ 1,000,000	$ 1,000,000
PS&E SUPPORT	$ 5,000,000	$ 5,420,000
RIGHT OF WAY SUPPORT	$ 1,700,000	$ 1,842,800
CONSTRUCTION SUPPORT	$ 3,500,000	$ 3,941,000
TOTAL SUPPORT COST	$ 11,200,000	$ 12,204,000
TOTAL PROJECT COST	$ 107,000,000	$ 119,000,000

If Project has been programmed enter Programmed Amount $ 54,113,000

	Month	Year
Date of Estimate (Month/Year)	10	2019
Estimated Construction Start (Month/Year)	1	2022
Number of Working Days =	450	
Estimated Mid-Point of Construction (Month/Year)	11	2022
Estimated Construction End (Month/Year)	8	2023

Number of Plant Establishment Days

Estimated Project Schedule

PID Approval	Approved 2012/2013
PA/ED Approval	5/20
PS&E	10/20
RTL	12/21
Begin Construction	1/22

Cost Estimate Certifier	Randy Ratzlaff, P.E.	12/4/2019	909-974-4973
	Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	10,772,000
2	**Pavement Structural Section**	$	16,074,300
3	**Drainage**	$	3,390,000
4	**Specialty Items**	$	83,500
5	**Environmental**	$	4,269,100
6	**Traffic Items**	$	5,119,000
7	**Detours**	$	150,000
8	**Minor Items**	$	398,600
9	**Roadway Mobilization**	$	2,012,900
10	**Supplemental Work**	$	895,200
11	**State Furnished**	$	933,700
12	**Time-Related Overhead**	$	2,391,100
13	**Roadway Contingency**	$	9,297,900
	TOTAL ROADWAY ITEMS	**$**	**55,787,300**

Estimate Prepared By :	Jerusalem Verano, P.E.	10/18/2019	909-974-4938
	Proejct Engineer	**Date**	**Phone**
Estimate Reviewed By :	Rebecca Young, P.E.	2/20/2020	909-974-4976
	Project Manager	**Date**	**Phone**

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY	68,600	x	20.00	=	$	1,372,000
170101	Develop Water Supply	LS	1	x	50,000.00	=	$	50,000
170103	Clearing & Grubbing	LS	1	x	50,000.00	=	$	50,000
198010	Imported Borrow	CY	600,000	x	15.00	=	$	9,000,000
XXXXXX	Bridge Removal	LS	1	x	300,000.00	=	$	300,000

TOTAL EARTHWORK SECTION ITEMS	**$**	**10,772,000**

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
401050	Jointed Plain Concrete Pavement	CY	28,600	x	250.00	=	$	7,150,000
390132	Hot Mix Asphalt (Type A)	TON	16,500	x	90.00	=	$	1,485,000
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	7,000	x	110.00	=	$	770,000
260203	Class 2 Aggregate Base	CY	22,000	x	55.00	=	$	1,210,000
280000	Lean Concrete Base	CY	8,000	x	200.00	=	$	1,600,000
390100	Prime Coat	TON	55	x	2,000.00	=	$	110,000
397005	Tack Coat	TON	6	x	1,500.00	=	$	9,000
398200	Cold Plane Asphalt Concrete Pavement	SQYD	36,300	x	5.00	=	$	181,500
731504	Minor Concrete (Curb and Gutter)	CY	1,900	x	600.00	=	$	1,140,000
731521	Minor Concrete (Sidewalk)	CY	2,000	x	600.00	=	$	1,200,000
XXXXXX	Multi-use Trail (Surface and Base Material)	CY	2,400	x	100.00	=	$	240,000
XXXXXX	Median Hardscape	SQFT	244,700	x	4	=	$	978,800

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	**$**	**16,074,300**

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
510502	Minor Concrete (Minor Structure)	CY	150	x	1,600.00	=	$	240,000
750001	Miscellaneous Iron and Steel	LB	30,000	x	2	=	$	60,000
XXXXXX	Extend 3-2x4 RCB	LF	25	x	2,200.00	=	$	55,000
	Extend 2-72" CMP	LF	40	x	1,500.00	=	$	60,000
	Remove 3-4x2 Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Remove 48" CMP Headwall & Entrance Structure	EA	2	x	30,000.00	=	$	60,000
	Remove 72" CMP Headwall & Entrance Structure	EA	1	x	30,000.00	=	$	30,000
	Construct 3-4x2 Headwall & Entrance Structure	EA	1	x	75,000.00	=	$	75,000
	Construct 48" CMP Headwall & Entrance Structure	EA	2	x	60,000.00	=	$	120,000
	Construct 72" CMP Headwall & Entrance Structure	EA	1	x	110,000.00	=	$	110,000
	Construct 36" AP Culvert	LF	800	x	250.00	=	$	200,000
	Overside Drains	EA	20	x	2,000.00	=	$	40,000
	Bio-filtration Swales	LF	7,800	x	50.00	=	$	390,000
	Water Quality Basins & control structures	EA	5	x	150,000.00	=	$	750,000
	24-36" RCP Storm Drain	LF	5,500	x	200.00	=	$	1,100,000
	RSP	LS	1	x	50,000.00	=	$	50,000
	Extend 48" CMP	LF	40	x	500.00	=	$	20,000

TOTAL DRAINAGE ITEMS $ 3,390,000

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
070030	Lead Compliance Plan	LS	1	x	10,000.00	=	$	10,000
832006	Midwest Guardrail System (Steel Post)	LF	1,400	x	40.00	=	$	56,000
839584	Alternative In-line Terminal System	EA	3	x	3,500.00	=	$	10,500
839543	Transition Railing (WB-31)	EA	2	x	3,500.00	=	$	7,000

TOTAL SPECIALTY ITEMS $ 83,500

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
									Subtotal Environmental Mitigation	$ -

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
200001	Highway Planting	SQFT	164,800	x	4.00	=	$	659,200		
20XXXX	Highway Planting (Infield Areas)	SQFT	965,400	x	2.00	=	$	1,930,800		
									Subtotal Landscape and Irrigation	$ 2,590,000

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)			Cost		
2030XX	Erosion Control (TBD)	SQFT	1,713,100	x	0.50	=	$	856,550		
									Subtotal Erosion Control	$ 856,550

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)			Cost		
130100	Job Site Management	LS	1	x	10,000.00	=	$	10,000		
130200	Temporary Concrete Washout	EA	20	x	2,000.00	=	$	40,000		
130300	Prepare SWPPP	LS	1	x	50,000.00	=	$	50,000		
130710	Temporary Construction Entrance	EA	5	x	4,500.00	=	$	22,500		
XXXXX	Temporary Construction BMP	LS	1	x	700,000.00	=	$	700,000		
									Subtotal NPDES	$ 822,500

TOTAL ENVIRONMENTAL	**$**	**4,269,100**

Supplemental Work for NPDES

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

Subtotal Supplemental Work for NDPS	$	-

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
870200	Lighting System	LS	1	x	350,000.00	=	$	350,000
870200	Lighting System (Street Lights)	EA	80	x	6,000.00	=	$	480,000
870400	Signal and Lighting System	EA	5	x	200,000.00	=	$	1,000,000
870510	Ramp Metering System (Entrance Ramps)	EA	3	x	100,000.00	=	$	300,000
870600	Traffic Monitoring Station System (Type X)	EA	2	x	50,000.00	=	$	100,000
871900	Fiber Optic Cable System	LS	1	x	500,000.00	=	$	500,000
872130	Modifying Existing Electrical System	LS	1	x	13,000.00	=	$	13,000
XXXXX	Overhead Sign Structures	EA	4	x	150,000.00	=	$	600,000

Subtotal Traffic Electrical *$ 3,343,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
84XXXX	Signing and Striping	LS	1	x	1,000,000.00	=	$	1,000,000

Subtotal Traffic Signing and Striping *$ 1,000,000*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
XXXXX	TMP Strategies (Public Information and COZEEP cost accounted under Section 11)	LS	1	x	$ 176,000	=	$	176,000

Subtotal Traffic Management Plan *$ 176,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
120100	Traffic Control System	LS	1	x	600,000.00	=	$	600,000

Subtotal Stage Construction and Traffic Handling *$ 600,000*

TOTAL TRAFFIC ITEMS **$ 5,119,000**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
1286XX	Temporary Signals	EA	1	x	150,000.00	= $	150,000

* Includes constructing, maintaining, and removal

TOTAL DETOURS **$ 150,000**

SUBTOTAL SECTIONS 1 through 7 $ 39,857,900

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items

ADA Items 0.0% $ -

8B - Bike Path Items

Bike Path Items 0.0% $ -

8C - Other Minor Items

Other Minor Items 1.0% $ 398,579

Total of Section 1-7 $ 39,857,900 x 1.0% = $ 398,579

TOTAL MINOR ITEMS **$ 398,600**

SECTIONS 9: MOBILIZATION

Item code							
999990	Total Section 1-8	$	40,256,500	x	5%	= $	2,012,825

TOTAL MOBILIZATION **$ 2,012,900**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	100,100	= $	100,100
066094	Value Analysis	LS	1	x	10,000	= $	10,000
066070	Maintain Traffic	LS	1	x	270,000	= $	270,000
066919	Dispute Resolution Board	LS	1	x	22,500	= $	22,500
066015	Federal Trainee Program	LS	1	x	20,000	= $	20,000
066610	Partnering	LS	1	x	70,000	= $	70,000

*Cost of **NPDES** Supplemental Work specified in Section 5D* = $ -

Total Section 1-8 $ 40,256,500 1% = $ 402,565

TOTAL SUPPLEMENTAL WORK **$ 895,200**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066062	COZEEP Contract	LS	1	x	$ 422,072.00	=	$ 422,072.00
066063	Public Information	LS	1	x	$ 95,000.00	=	$ 95,000.00
066916	Annual Construction General Permit Fee	LS	1	x	$ 14,000.00	=	$ 14,000.00

Total Section 1-8 $ 40,256,500 1% = $ 402,565

TOTAL STATE FURNISHED $933,700

SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization $47,820,500 (used to calculate TRO)

Total Construction Cost (excluding TRO and Contingency) $52,282,300 (used to check if project is greater than $5 million excluding contingency)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **5%**

Item code		Unit	Quantity		Unit Price ($)		Cost
090100	Time-Related Overhead	WD	450	X	$5,314	=	$2,391,100

TOTAL TIME-RELATED OVERHEAD $2,391,100

Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Total Section 1-12 $ 46,489,400 x **20%** = $9,297,880

TOTAL CONTINGENCY $9,297,900

EA: 08-0M590 PID: 813000109

II. STRUCTURE ITEMS

Bridge 1

DATE OF ESTIMATE	12/20/18		00/00/00		00/00/00
Bridge Name	WLC Parkway		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	56-0488		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	90 LF		0 LF		0 LF
Total Bridge Length (Feet)	245 LF		0 LF		0 LF
Total Area (Square Feet)	22050 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	6.5 LF		0 LF		0 LF
Footing Type (pile or spread)	Pile		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$280		$0		$0
COST OF EACH	**$6,200,000**		**$0**		**$0**

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$0		$0		$0
COST OF EACH	**$0**		**$0**		**$0**

TOTAL COST OF BRIDGES		**$6,200,000**
TOTAL COST OF BUILDINGS		**$0**
Structures Mobilization Percentage	10%	**$620,000**

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total recommended percentages includes any quantified risk based contingency from the risk register.

Structures Contingency Percentage	20%	**$1,240,000**
Architectural Aesthetic Treatments	2%	**$124,000**

TOTAL COST OF STRUCTURES	**$8,184,000**

Estimate Prepared By: See APS

Date

EA: 08-0M590 PID: 813000109

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees		$	26,060,818
	A2)	SB-1210		$	0
B)	Acquisition of Offsite Mitigation			$	0
C)	C1)	Utility Relocation (State Share)		$	0
	C2)	Potholing (Design Phase)		$	0
D)	Railroad Acquisition			$	0
E)	Clearance / Demolition			$	24,000
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)			$	48,000
G)	Title and Escrow			$	0
H)	Environmental Review			$	0
I)	Condemnation Settlements		0%	$	1,954,561
J)	Design Appreciation Factor		0%	$	0
K)	Utility Relocation (Construction Cost)			$	3,282,000

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$31,369,379**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$33,502,141**
N)	**RIGHT OF WAY SUPPORT**	**$1,700,000**

Support Cost Estimate Prepared By	n/a	n/a
	Project Coordinator[1]	Phone
Utility Estimate Prepared By	Jerusalem Verano, P.E.	909-974-4938
	Utility Coordinator[2]	Phone
R/W Acquisition Estimate Prepared By	Patti Feist, SR/WA	760-899-5569
	Right of Way Estimator[3]	Phone

Note: Items G & H applied to items A + B

[1] When estimate has Support Costs only [2] When estimate has Utility Relocation [3] When R/W Acquisition is required

Right of Way Data Sheet

Attachment 6

To: Rebecca Guirado
Deputy District Director
Division of Right of Way and Land Surveys

Date: 07-03-19

Co. Riv Rte. 60

Attn: Jackie Williams
Senior Right of Way Agent
Local Programs

Expense Authorization 0M590

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

Project Description: **State Route 60 at World Logistics Center Parkway (WLC Pkwy) Intersection Improvement Project – Alternative 2**
Post Mile: PM 20.0 – PM 22.0

Right of way necessary for the subject project will be the responsibility of the **City of Moreno Valley.**

The information in this data sheet was developed by **Overland, Pacific & Cutler, LLC., in collaboration with Michael Baker International.**

I. Right of Way Engineering

Will Right of Way Engineering be required for this project?

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

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

The final right of way has not been established at this time.

II. *Engineering Surveys*

1. Is any surveying or photogrammetric mapping required?
   No ☐ Yes ☒ if yes, complete the following:

   Photogrammetric mapping was completed in conjunction with the DPR. Engineering surveying will be performed in the PS&E Phase of the project.

2. Datum Requirements

   Yes ☒ Project will adhere to the following criteria:
   - Horizontal – Datum NAD 83, EPOCH 2007.00, English
   - Vertical – Datum NAD 83
   - Units – US Survey Feet

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

   Yes ☒
   No ☐ Provide explanation on additional page.

III. *Parcel Information (Land and Improvements)*

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

No ☐ Yes ☒ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels	25	6	$15,726,559
B. Number of Single Family Residential Units	0	0	$0
C. Number of Multifamily Residential Units	0	0	$0
D. Number of Commercial/Industrial Parcels	0	0	$0
E. Number of Farm/Agricultural Parcels	1	0	$119,581
F. Permanent and/or Temporary Easements	28	0	$6,015,376
G. Other Parcels (define in "Remarks" section)	1	0	$10,102
Totals*	**55**	**6**	**$21,871,618**

***Costs include 20% contingency & escalated 2 years at 3% per year.**

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

For this project alternative, right of way required for acquisition includes approximately 1,479,437 square feet of Temporary Construction Easement (TCE), approximately 936,513 square feet of Permanent Easement (PE) and approximately 1,919,859 square feet of fee is required. The impacted properties are comprised of commercial/industrial warehouse, single family residences and agricultural parcels, and a public road affecting a total of 61 parcels.

APN 488-350-041 (Skechers Warehouse and Retail) TCE area impacts a significant portion of customer parking. Although the TCE area depicts a loss of about approximately 50% of the parking stall areas during construction, it is assumed access will be maintained through at least one of the driveways during business hours. Loss of temporary parking may be mitigated by leasing space from adjacent vacant lot if necessary. It appears access to this lot currently exists from customer parking area and not employee parking. The facility has a newly built food vendor/food court and patio area. Plans have been reviewed and it is assumed proposed TCE will have minimal impacts. Assume major improvements such as water fountain, structures and landscape, irrigation and other privately-owned improvements are to be protected in place or replaced in-kind. Assume damaged pavement and other hardscape will be replaced in kind by contractor. Slope easement is located on an unimproved portion of parcel, causing no major impacts.

APN 422-020-010 (Raceway Prop) Agricultural Vineyard- A substantially large TCE area affects an agricultural parcel, which appears to be a vineyard. Assume that the impacts to the driveway and remote-controlled gate and keypad system will be protected in place. Assume their landscaping and lighting will not be impacted and or will be replaced by contractor. Assume farm operation will not be significantly impacted. Assume major improvements impacted by the TCE are protected in place. Assume access is maintained during construction and privately-owned improvements will be protected in place.

APN 422-040-014 (Partial Take- vacant land) There are several greenhouse structures which appear to be within the permanent slope easement area. They did not appear to be in operation at the time of inspection. There is also a single wide mobile home unit that also appears to be non-occupied. Assumed that the site improvements such as irrigation and unit may have to relocated possible within the remainder of the parcel. Assumed that no permanent or temporary relocation of residential or non-residential occupants will be necessary. It is possible that in the future the mobile home could be occupied and therefore may require the moving of personal property.

APN 422-040-015 (Partial Take- vacant land) MWD-Assume that the pump facility and appurtenances are protected in place and that access will be provided at all times.

APN 488-350-048 (Full Take- vacant land) There is a large monument sign that is impacted.

There are also five Single Family Residences affected by TCE areas on the North side of SR-60, on the south east corner of Ironwood and Theodore Street. It is assumed that access will be maintained during construction. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

APN 422-020-006 Residence appears to operate a business selling hay and is open to the public. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

IV. ***Dedications***

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

No ☒ Yes ☐ (Complete the following.)

Number of dedicated parcels 0

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

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

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

No ☒ Yes ☐ (Provide an explanation on additional page.)

VI. ***Relocation Information***

Are relocation displacements anticipated?

No ☒ Yes ☐ (Complete the Following.)

A. Number of Single Family Residential Units		
Estimated RAP Payments	0	$0
B. Number of Multifamily Residential Units		
Estimated RAP Payments	0	$0
C. Number of Business/Nonprofit		
Estimated RAP Payments	0	$0
D. Number of Farms		
Estimated RAP Payments	0	$0
E. Other (define in the "Remarks" section)		
Estimated RAP Payments	0	$0
Total* ***Costs Include 20% contingency & escalated 2 years at 3%**		**$0**

VII. *Utility Relocation Information*

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

No ☐ Yes ☒ (Complete the following.)

	Facility	Owner	Estimated Relocation Expense: State Obligation	Local Obligation	Utility Owner Obligation
A	Electric Transmission	Southern California Edison	$0	$1,205,000	$1,205,000
B	Electric Distribution	Southern California Edison	$0	$75,000	$75,000
C	Communication	Verizon	$0	$25,000	$25,000
D	Electric Distribution	Time Warner Cable	$0	$0	$50,000
E	Communication	Moreno Valley Electric	$0	$0	$35,000
F	Water	Eastern Municipal Water District	$0	$0	$40,000
	Sub-Total			$1,305,000	$1,430,000
	Contingency (20%)			$261,000	$286,000
	Grand Total			**$1,566,000**	**$1,716,000**
	Number of Facilities	**6**			

Any additional information concerning utility involvement on this project?

Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Rd. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

VIII. *Rail Information*

Are railroad facilities or railroad rights of way affected?

No ☒ Yes ☐ (Complete the following.)

Describe the railroad facilities to be affected.

	Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.	N/A	N/A	N/A

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

IX. *Clearance Information*

Are there improvements that require clearance?

No ☒ Yes ☐ (Complete the following.)

A. Number of structures to be Demolished _____
Estimated Cost of Demolition _____
(Including 20% Contingency and escalated 2 years at 3%)

X. *Hazardous Materials/Waste*

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

hazardous materials? None ☒ Yes ☐ (Explain in the "Remarks" section.)

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

hazardous waste? None ☒ Yes ☐ (Explain in the "Remarks" section.)

XI. *Project Scheduling*

	Proposed lead time		Completion Date
* Preliminary Engineering Surveys	3	months	3/2015
* R/W Engineering Submittals	6	months	02/2021
* R/W Appraisals/Acquisition	14	months	10/2021
Proposed Environmental Clearance	18	months	06/20/20
Proposed R/W Certification	24	months	01/2022

XII. *Proposed Funding*

	Local		State		Federal		Other
Acquisition	$23,511,989						
Utilities	$1,661,369						$1,716,000
Relocation Assistance Program	$0						
Loss of Business Goodwill	$0						
Structures Testing + Demolition	$0						
Condemnation	$0						
R/W Support Cost	$1,784,476						
TOTAL	$26,957,835						$1,716,000
COMBINED TOTAL	**$28,673,835**						

XIII. *Remarks*

In Section III above, the parcel described as "Other" represents a local public road assumed to be Sinclair Street.

Project Sponsor Consultant
Prepared by:

Patti Feist, SR/WA
Overland, Pacific & Cutler, LLC.

7/03/19
Date

Project Sponsor
Reviewed and Approved by:

Margery Lazarus, P.E.
Senior Engineer, P.E.
City of Moreno Valley / Public Works

7/5/19
Date

Caltrans
Reviewed and approved based on information provided to date:

Jackie Williams
Senior Right of Way Agent
Local Programs

7-9-19
Date

1. Name of utility companies involved in project:
Southern California Edison (Y)
Moreno Valley Electric (Y)
Verizon (Y)
Time Warner Cable (Y)
Eastern Municipal Water District (Y)
Municipal Water District (Y)
Southern California Gas Company(Y)

(N)=Utility Company **Not** Within Construction Area
(Y)=Utility Company **Is** Within Construction Area

2. Types of facilities and agreements required:

FACILITY TYPES AND AGREEMENTS			
Utility Company/Owner	**Utility Type**	**Agreement Required**	**Notes**
Southern California Edison	**Electric Transmission**	**Yes**	**Relocate**
Southern California Edison	**Electric Distribution**	**Yes**	**Relocate**
Verizon	**Communication**	**Yes**	**Relocate**
Moreno Valley Electric	**Electric Distribution**	**Yes**	**Relocate/Add ducts to bridge (future)**
Time Warner Cable	**Communication**	**Yes**	**Relocate/Add ducts to bridge (future)**
Eastern Municipal Water District	**Water**	**Yes**	**Relocate**
Municipal Water District	**Water**	**No**	**Protect in Place**
Southern California Gas Company	**Gas**	**No**	**Protect in Place**

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.
N/A

Disposition of longitudinal encroachment(s):
☐ Relocation required.
☐ Exception to policy needed.
☐ Other. Explain.
N/A

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).
Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Road. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

Note: The following estimate is based on preliminary plans and reports.

UTILITY RELOCATION AND POTHOLING ESTIMATE								
Utility	**Utility Company**	**Amount to Relocate**		**Price**		**Pothole**		**Cost**
		Est	**Unit**	**Est**	**Unit**	**Num**	**Price**	
115kv	SCE	4700	LF	$2,410,000	Total			$2,410,000
12kv	SCE	5700	LF	$150,000	Total			$150,000
Communication	Verizon	500	LF	$50,000	Total			$50,000
Communication	TWC	500	LF	$50,000	Total			$50,000
12kv	MVU	1300	LF	$35,000	Total			$35,000
8” water valve box and meter	EMWD	1	LS	$40,000	Total			$40,000
20% Contingency								**$547,000**
Grand Total								**$3,282,000**

It is estimated that Southern California Edison and Verizon will be responsible for 50% of the relocation costs. TWC, MVU, and EMWD will be responsible for 100% of the relocation costs.

5. PMCS Input Information
Total estimated cost of State’s obligation for utility relocation on this project:
$ 1,305,000

Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.

Utility Involvements:
U4-1 _____ (Total number of expected owner expense involvements)
-2 _____ (Total number of expected State expense involvements - conventional highway, no Federal aid)
-3 _____ (Total number of expected State expense involvements - freeway, no Federal aid)
-4 _____ (Total number of expected State expense involvements - conventional or freeway, with Federal aid)
U5-7 _____ (Total number of expected utility verifications, which will not result in involvements)
-8 _____ (Total number of expected utility verifications - 50% will result in involvements and 50% will not)
-9 _____ (Total number of expected utility verifications, which will result in involvements)

Prepared By:

Rebecca Young, PE — 2/25/2019
Right of Way Utility Estimator — Date
Michael Baker International

To: Rebecca Guirado
Deputy District Director
Division of Right of Way and Land Surveys

Date: 07-03-19

Co. Riv Rte. 60

Attn: Jackie Williams
Senior Right of Way Agent
Local Programs

Expense Authorization 0M590

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

Project Description: State Route 60 at World Logistics Center Parkway (WLC Pkwy) Intersection Improvement Project – Alternative 6
Post Mile: PM 20.0 – PM 22.0

Right of way necessary for the subject project will be the responsibility of the **City of Moreno Valley.**

The information in this data sheet was developed by **Overland, Pacific & Cutler, LLC., in collaboration with Michael Baker International.**

I. Right of Way Engineering

Will Right of Way Engineering be required for this project?

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

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

The final right of way has not been established at this time.

II. *Engineering Surveys*

1. Is any surveying or photogrammetric mapping required?
   No ☐ Yes ☒ if yes, complete the following:

   Photogrammetric mapping was completed in conjunction with the DPR. Engineering surveying will be performed in the PS&E Phase of the project.

2. Datum Requirements

   Yes ☒ Project will adhere to the following criteria:
   - Horizontal – Datum NAD 83, EPOCH 2007.00, English
   - Vertical – Datum NAD 83
   - Units – US Survey Feet

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

   Yes ☒
   No ☐ Provide explanation on additional page.

III. *Parcel Information (Land and Improvements)*

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

No ☐ Yes ☒ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels	26	6	$17,745,916
B. Number of Single Family Residential Units	0	0	$0
C. Number of Multifamily Residential Units	0	0	$0
D. Number of Commercial/Industrial Parcels	0	0	$0
E. Number of Farm/Agricultural Parcels	2	0	$794,385
F. Permanent and/or Temporary Easements	26	0	$3,461,032
G. Other Parcels (define in "Remarks" section)	1	0	$10,102
Totals*	**55**	**6**	**$22,011,435**

***Costs include 20% contingency & escalated 2 years at 3% per year.**

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

For this project alternative, right of way required for acquisition includes approximately 1,479,906 square feet of Temporary Construction Easement (TCE), approximately 899,594 square feet of Permanent Easement (PE) and approximately 1,975,492 square feet of fee is required. The impacted properties are comprised of commercial/industrial warehouse, single family residences and agricultural parcels, and a public road affecting a total of 61 parcels.

APN 488-350-041 (Skechers Warehouse and Retail) TCE area impacts a significant portion of customer parking. Although the TCE area depicts a loss of about approximately 50% of the parking stall areas during construction, it is assumed access will be maintained through at least one of the driveways during business hours. Loss of temporary parking may be mitigated by leasing space from adjacent vacant lot if necessary. It appears access to this lot currently exists from customer parking area and not employee parking. The facility has a newly built food vendor/food court and patio area. Plans have been reviewed and it is assumed proposed TCE will have minimal impacts. Assume major improvements such as water fountain, structures and landscape, irrigation and other privately-owned improvements are to be protected in place or replaced in-kind. Assume damaged pavement and other hardscape will be replaced in kind by contractor. Slope easement is located on an unimproved portion of parcel, causing no major impacts.

APN 422-020-010 (Raceway Prop) Agricultural Vineyard- A substantially large TCE area affects an agricultural parcel, which appears to be a vineyard. Assume that the impacts to the driveway and remote-controlled gate and keypad system will be protected in place. Assume their landscaping and lighting will not be impacted and or will be replaced by contractor. Assume farm operation will not be significantly impacted. Assume major improvements impacted by the TCE are protected in place. Assume access is maintained during construction and privately-owned improvements will be protected in place.

APN 422-040-014 (Partial Take- vacant land) There are several greenhouse structures which appear to be within the permanent slope easement area. They did not appear to be in operation at the time of inspection. There is also a single wide mobile home unit that also appears to be non-occupied. Assumed that the site improvements such as irrigation and unit may have to relocated possible within the remainder of the parcel. Assumed that no permanent or temporary relocation of residential or non-residential occupants will be necessary. It is possible that in the future the mobile home could be occupied and therefore may require the moving of personal property.

APN 422-040-015 (Partial Take- vacant land) MWD-Assume that the pump facility and appurtenances are protected in place and that access will be provided at all times.

APN 488-350-048 (Full Take- vacant land) There is a large monument sign that is impacted.

There are also five Single Family Residences affected by TCE areas on the North side of SR-60, on the south east corner of Ironwood and Theodore Street. It is assumed that access will be maintained during construction. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

APN 422-020-006 Residence appears to operate a business selling hay and is open to the public. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

IV. ***Dedications***

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

No ☒ Yes ☐ (Complete the following.)

Number of dedicated parcels 0

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

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

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

No ☒ Yes ☐ (Provide an explanation on additional page.)

Number of dedicated parcels 0

VI. ***Relocation Information***

Are relocation displacements anticipated?

No ☐ Yes ☒ (Complete the Following.)

A. Number of Single Family Residential Units		
Estimated RAP Payments	0	$0
B. Number of Multifamily Residential Units		
Estimated RAP Payments	0	$0
C. Number of Business/Nonprofit		
Estimated RAP Payments	0	$0
D. Number of Farms		
Estimated RAP Payments	0	$0
E. Other (define in the "Remarks" section)		
Estimated RAP Payments	0	$0
Total* ***Costs Include 20% contingency & escalated 2 years at 3%**		**$0**

VII. *Utility Relocation Information*

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

No ☐ Yes ☒ (Complete the following.)

	Facility	Owner	Estimated Relocation Expense: State Obligation	Local Obligation	Utility Owner Obligation
A	Electric Transmission	Southern California Edison	$0	$1,205,000	$1,205,000
B	Electric Distribution	Southern California Edison	$0	$75,000	$75,000
C	Communication	Verizon	$0	$25,000	$25,000
D	Electric Distribution	Time Warner Cable	$0	$0	$50,000
E	Communication	Moreno Valley Electric	$0	$0	$35,000
F	Water	Eastern Municipal Water District	$0	$0	$40,000
	Sub-Total			$1,305,000	$1,430,000
	Contingency (20%)			$261,000	$286,000
	Grand Total			**$1,566,000**	**$1,716,000**
	Number of Facilities	**6**			

Any additional information concerning utility involvement on this project?

Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Rd. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

VIII. *Rail Information*

Are railroad facilities or railroad rights of way affected?

No ☒ Yes ☐ (Complete the following.)

Describe the railroad facilities to be affected.

	Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.	N/A	N/A	N/A

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

IX. *Clearance Information*

Are there improvements that require clearance?

No ☒ Yes ☐ (Complete the following.)

A. Number of structures to be Demolished _____
Estimated Cost of Demolition _____
(Including 20% Contingency and escalated 2 years at 3%)

X. *Hazardous Materials/Waste*

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

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

XI. *Project Scheduling*

	Proposed lead time		Completion Date
* Preliminary Engineering Surveys	3	months	3/2015
* R/W Engineering Submittals	6	months	02/2021
* R/W Appraisals/Acquisition	14	months	10/2021
Proposed Environmental Clearance	18	months	06/2020
Proposed R/W Certification	24	months	01/2022

XII. *Proposed Funding*

	Local		State		Federal		Other
Acquisition	$23,662,293						
Utilities	$1,661,369						$1,716,000
Relocation Assistance Program	$0						
Loss of Business Goodwill	$0						
Structures Testing + Demolition	$0						
Condemnation	$0						
R/W Support Cost	$1,810,447						
TOTAL	$27,134,109						$1,716,000
COMBINED TOTAL	**$28,850,109**						

XIII. *Remarks*

In Section III above, the parcel described as "Other" represents a local public road assumed to be Sinclair Street.

Project Sponsor Consultant
Prepared by:

Patti Feist, SR/WA
Overland, Pacific & Cutler, LLC.

07/03/19
Date

Project Sponsor
Reviewed and Approved by:

Margery Lazarus, P.E.
Senior Engineer, P.E.
City of Moreno Valley / Public Works

7/5/19
Date

Caltrans
Reviewed and approved based on information provided to date:

Jackie Williams
Senior Right of Way Agent
Local Programs

7-9-19
Date

1. Name of utility companies involved in project:
Southern California Edison (Y)
Moreno Valley Electric (Y)
Verizon (Y)
Time Warner Cable (Y)
Eastern Municipal Water District (Y)
Municipal Water District (Y)
Southern California Gas Company(Y)

(N)=Utility Company **Not** Within Construction Area
(Y)=Utility Company **Is** Within Construction Area

2. Types of facilities and agreements required:

FACILITY TYPES AND AGREEMENTS			
Utility Company/Owner	**Utility Type**	**Agreement Required**	**Notes**
Southern California Edison	**Electric Transmission**	**Yes**	**Relocate**
Southern California Edison	**Electric Distribution**	**Yes**	**Relocate**
Verizon	**Communication**	**Yes**	**Relocate**
Moreno Valley Electric	**Electric Distribution**	**Yes**	**Relocate/Add ducts to bridge (future)**
Time Warner Cable	**Communication**	**Yes**	**Relocate/Add ducts to bridge (future)**
Eastern Municipal Water District	**Water**	**Yes**	**Relocate**
Municipal Water District	**Water**	**No**	**Protect in Place**
Southern California Gas Company	**Gas**	**No**	**Protect in Place**

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.
N/A

Disposition of longitudinal encroachment(s):
☐ Relocation required.
☐ Exception to policy needed.
☐ Other. Explain.
N/A

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).
Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Road. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

Note: The following estimate is based on preliminary plans and reports.

UTILITY RELOCATION AND POTHOLING ESTIMATE								
Utility	**Utility Company**	**Amount to Relocate**		**Price**		**Pothole**		**Cost**
		Est	**Unit**	**Est**	**Unit**	**Num**	**Price**	
115kv	SCE	4700	LF	$2,410,000	Total			$2,410,000
12kv	SCE	5700	LF	$150,000	Total			$150,000
Communication	Verizon	500	LF	$50,000	Total			$50,000
Communication	TWC	500	LF	$50,000	Total			$50,000
12kv	MVU	1300	LF	$35,000	Total			$35,000
8” water valve box and meter	EMWD	1	LS	$40,000	Total			$40,000
20% Contingency								**$547,000**
Grand Total								**$3,282,000**

It is estimated that Southern California Edison and Verizon will be responsible for 50% of the relocation costs. TWC, MVU, and EMWD will be responsible for 100% of the relocation costs.

5. PMCS Input Information
Total estimated cost of State’s obligation for utility relocation on this project:
$ 1,305,000

Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.

Utility Involvements:
U4-1 _____ (Total number of expected owner expense involvements)
-2 _____ (Total number of expected State expense involvements - conventional highway, no Federal aid)
-3 _____ (Total number of expected State expense involvements - freeway, no Federal aid)
-4 _____ (Total number of expected State expense involvements - conventional or freeway, with Federal aid)
U5-7 _____ (Total number of expected utility verifications, which will not result in involvements)
-8 _____ (Total number of expected utility verifications - 50% will result in involvements and 50% will not)
-9 _____ (Total number of expected utility verifications, which will result in involvements)

Prepared By:

Rebecca Young, PE — 2/25/2019
Right of Way Utility Estimator — Date
Michael Baker International

To: Rebecca Guirado
Deputy District Director
Division of Right of Way and Land Surveys

Date: 07-03-19

Co. Riv Rte. 60

Attn: Jackie Williams
Senior Right of Way Agent
Local Programs

Expense Authorization 0M590

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

Project Description: State Route 60 at World Logistics Center Parkway (WLC Pkwy) Intersection Improvement Project – Design Variation 2a
Post Mile: PM 20.0 – PM 22.0

Right of way necessary for the subject project will be the responsibility of the **City of Moreno Valley.**

The information in this data sheet was developed by **Overland, Pacific & Cutler, LLC., in collaboration with Michael Baker International.**

I. Right of Way Engineering

Will Right of Way Engineering be required for this project?

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

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

The final right of way has not been established at this time.

II. *Engineering Surveys*

1. Is any surveying or photogrammetric mapping required?
   No ☐ Yes ☒ if yes, complete the following:

   Photogrammetric mapping was completed in conjunction with the DPR. Engineering surveying will be performed in the PS&E Phase of the project.

2. Datum Requirements

   Yes ☒ Project will adhere to the following criteria:
   - Horizontal – Datum NAD 83, EPOCH 2007.00, English
   - Vertical – Datum NAD 83
   - Units – US Survey Feet

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

   Yes ☒
   No ☐ Provide explanation on additional page.

III. *Parcel Information (Land and Improvements)*

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

No ☐ Yes ☒ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels	28	6	$18,636,878
B. Number of Single Family Residential Units	1	0	$74,402
C. Number of Multifamily Residential Units	0	0	$0
D. Number of Commercial/Industrial Parcels	0	0	$0
E. Number of Farm/Agricultural Parcels	1	0	$119,581
F. Permanent and/or Temporary Easements	30	0	$9,902,192
G. Other Parcels (define in "Remarks" section)	1	0	$8,082
Totals*	**61**	**6**	**$28,741,134**

***Costs include 20% contingency & escalated 2 years at 3% per year.**

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

For this project design variation 2a, right of way required for acquisition includes approximately 1,455,347 square feet of Temporary Construction Easement (TCE), approximately 1,948,081 square feet of Permanent Slope Easement (PE) and approximately 2,154,689 square feet of fee is required. The impacted properties are comprised of commercial/industrial warehouse, single family residences and agricultural parcels, and a public road affecting a total of 67 parcels.

APN 488-350-041 (Skechers Warehouse and Retail) TCE area impacts a significant portion of customer parking. Although the TCE area depicts a loss of about approximately 50% of the parking stall areas during construction, it is assumed access will be maintained through at least one of the driveways during business hours. Loss of temporary parking may be mitigated by leasing space from adjacent vacant lot if necessary. It appears access to this lot currently exists from customer parking area and not employee parking. The facility has a newly built food vendor/food court and patio area. Plans have been reviewed and it is assumed proposed TCE will have minimal impacts. Assume major improvements such as water fountain, structures and landscape, irrigation and other privately-owned improvements are to be protected in place or replaced in-kind. Assume damaged pavement and other hardscape will be replaced in kind by contractor. Slope easement is located on an unimproved portion of parcel, causing no major impacts.

APN 422-020-010 (Raceway Prop) Agricultural Vineyard- A substantially large TCE area affects an agricultural parcel, which appears to be a vineyard. Assume that the impacts to the driveway and remote-controlled gate and keypad system will be protected in place. Assume their landscaping and lighting will not be impacted and or will be replaced by contractor. Assume farm operation will not be significantly impacted. Assume major improvements impacted by the TCE are protected in place. Assume access is maintained during construction and privately-owned improvements will be protected in place.

APN 422-040-014 (Partial Take- vacant land) There are several greenhouse structures which appear to be within the permanent slope easement area. They did not appear to be in operation at the time of inspection. There is also a single wide mobile home unit that also appears to be non-occupied. Assumed that the site improvements such as irrigation and unit may have to relocated possible within the remainder of the parcel. Assumed that no permanent or temporary relocation of residential or non-residential occupants will be necessary. It is possible that in the future the mobile home could be occupied and therefore may require the moving of personal property.

APN 422-040-015 (Partial Take- vacant land) MWD-Assume that the pump facility and appurtenances are protected in place and that access will be provided at all times.

APN 422-070-029 (Partial Take) Assume this residential lot part take does not affect the mobile home. Further analysis is required if the mobile home septic, water, or any other utility conflict that may require a temporary relocation of the mobile home occupants.

APN 488-350-048 (Full Take- vacant land) There is a large monument sign that is impacted and needs to be relocated.

There are also five Single Family Residences affected by TCE areas on the North side of SR-60, on the south east corner of Ironwood and Theodore Street. It is assumed that access will be maintained during construction. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

APN 422-020-006 Residence appears to operate a business selling hay and is open to the public. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

IV. ***Dedications***

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

No ☒ Yes ☐ (Complete the following.)

Number of dedicated parcels 0

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

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

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

No ☒ Yes ☐ (Provide an explanation on additional page.)

VI. *Relocation Information*

Are relocation displacements anticipated?

No ☒ Yes ☐ (Complete the Following.)

A. Number of Single Family Residential Units		
Estimated RAP Payments	0	$0
B. Number of Multifamily Residential Units		
Estimated RAP Payments	0	$0
C. Number of Business/Nonprofit		
Estimated RAP Payments	0	$0
D. Number of Farms		
Estimated RAP Payments	0	$0
E. Other (define in the "Remarks" section)		
Estimated RAP Payments	0	$0
Total*		
***Costs Include 20% contingency & escalated 2 years at 3%**		**$0**

VII. *Utility Relocation Information*

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

No ☐ Yes ☒ (Complete the following.)

	Facility	Owner	Estimated Relocation Expense: State Obligation	Local Obligation	Utility Owner Obligation
A	Electric Transmission	Southern California Edison	$0	$1,205,000	$1,205,000
B	Electric Distribution	Southern California Edison	$0	$75,000	$75,000
C	Communication	Verizon	$0	$25,000	$25,000
D	Electric Distribution	Time Warner Cable	$0	$0	$50,000
E	Communication	Moreno Valley Electric	$0	$0	$35,000
F	Water	Eastern Municipal Water District	$0	$0	$40,000
	Sub-Total			$1,305,000	$1,430,000
	Contingency (20%)			$261,000	$286,000
	Grand Total			**$1,566,000**	**$1,716,000**
	Number of Facilities	**6**			

Any additional information concerning utility involvement on this project?

Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Rd. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

VIII. *Rail Information*

Are railroad facilities or railroad rights of way affected?

No ☒ Yes ☐ (Complete the following.)

Describe the railroad facilities to be affected.

	Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.	N/A	N/A	N/A

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

IX. *Clearance Information*

Are there improvements that require clearance?

No ☒ Yes ☐ (Complete the following.)

A. Number of structures to be Demolished _____
Estimated Cost of Demolition _____
(Including 20% Contingency and escalated 2 years at 3%)

X. *Hazardous Materials/Waste*

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

hazardous materials? None ☒ Yes ☐ (Explain in the "Remarks" section.)

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

hazardous waste? None ☒ Yes ☐ (Explain in the "Remarks" section.)

XI. *Project Scheduling*

	Proposed lead time		Completion Date
* Preliminary Engineering Surveys	3	months	3/2015
* R/W Engineering Submittals	6	months	02/2021
* R/W Appraisals/Acquisition	14	months	10/2021
Proposed Environmental Clearance	18	months	06/2020
Proposed R/W Certification	24	months	01/2022

XII. *Proposed Funding*

	Local		State		Federal		Other
Acquisition	$30,896,719						
Utilities	$1,661,369						$1,716,000
Relocation Assistance Program	$0						
Loss of Business Goodwill	$0						
Structures Testing + Demolition	$0						
Condemnation	$0						
R/W Support Cost	$1,557,741						
TOTAL	$34,115,829						$1,716,000
COMBINED TOTAL	**$35,831,829**						

XIII. *Remarks*

In Section III above, the parcel described as "Other" represents a local public road assumed to be Sinclair Street.

Project Sponsor Consultant
Prepared by:

Patti Feist, SR/WA
Overland, Pacific & Cutler, LLC.

07/03/19
Date

Project Sponsor
Reviewed and Approved by:

Margery Lazarus, P.E.
Senior Engineer, P.E.
City of Moreno Valley / Public Works

7/5/19
Date

Caltrans
Reviewed and approved based on information provided to date:

Jackie Williams
Senior Right of Way Agent
Local Programs

7-9-19
Date

1. Name of utility companies involved in project:
Southern California Edison (Y)
Moreno Valley Electric (Y)
Verizon (Y)
Time Warner Cable (Y)
Eastern Municipal Water District (Y)
Municipal Water District (Y)
Southern California Gas Company(Y)

(N)=Utility Company **Not** Within Construction Area
(Y)=Utility Company **Is** Within Construction Area

2. Types of facilities and agreements required:

FACILITY TYPES AND AGREEMENTS			
Utility Company/Owner	**Utility Type**	**Agreement Required**	**Notes**
Southern California Edison	**Electric Transmission**	**Yes**	**Relocate**
Southern California Edison	**Electric Distribution**	**Yes**	**Relocate**
Verizon	**Communication**	**Yes**	**Relocate**
Moreno Valley Electric	**Electric Distribution**	**Yes**	**Relocate/Add ducts to bridge (future)**
Time Warner Cable	**Communication**	**Yes**	**Relocate/Add ducts to bridge (future)**
Eastern Municipal Water District	**Water**	**Yes**	**Relocate**
Municipal Water District	**Water**	**No**	**Protect in Place**
Southern California Gas Company	**Gas**	**No**	**Protect in Place**

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.
N/A

Disposition of longitudinal encroachment(s):
☐ Relocation required.
☐ Exception to policy needed.
☐ Other. Explain.
N/A

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).
Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Road. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

Note: The following estimate is based on preliminary plans and reports.

UTILITY RELOCATION AND POTHOLING ESTIMATE								
Utility	**Utility Company**	**Amount to Relocate**		**Price**		**Pothole**		**Cost**
		Est	**Unit**	**Est**	**Unit**	**Num**	**Price**	
115kv	SCE	4700	LF	$2,410,000	Total			$2,410,000
12kv	SCE	5700	LF	$150,000	Total			$150,000
Communication	Verizon	500	LF	$50,000	Total			$50,000
Communication	TWC	500	LF	$50,000	Total			$50,000
12kv	MVU	1300	LF	$35,000	Total			$35,000
8” water valve box and meter	EMWD	1	LS	$40,000	Total			$40,000
20% Contingency								**$547,000**
Grand Total								**$3,282,000**

It is estimated that Southern California Edison and Verizon will be responsible for 50% of the relocation costs. TWC, MVU, and EMWD will be responsible for 100% of the relocation costs.

5. PMCS Input Information
Total estimated cost of State’s obligation for utility relocation on this project:
$ 1,305,000

Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.

Utility Involvements:
U4-1 _____ (Total number of expected owner expense involvements)
-2 _____ (Total number of expected State expense involvements - conventional highway, no Federal aid)
-3 _____ (Total number of expected State expense involvements - freeway, no Federal aid)
-4 _____ (Total number of expected State expense involvements - conventional or freeway, with Federal aid)
U5-7 _____ (Total number of expected utility verifications, which will not result in involvements)
-8 _____ (Total number of expected utility verifications - 50% will result in involvements and 50% will not)
-9 _____ (Total number of expected utility verifications, which will result in involvements)

Prepared By:

Rebecca Young, PE — 2/25/2019
Right of Way Utility Estimator — Date
Michael Baker International

To: Rebecca Guirado
Deputy District Director
Right of Way Agent

Date: 07-03-19

Co. Riv Rte. 60

Attn: Jackie Williams
Senior Right of Way Agent
Local Programs

Expense Authorization 0M590

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

Project Description: State Route 60 at World Logistics Center Parkway (WLC Pkwy) Improvement Project - Design Variation 6a
Post Mile: PM 20.0 – PM 22.0

Right of way necessary for the subject project will be the responsibility of the **City of Moreno Valley.**

The information in this data sheet was developed by **Overland, Pacific & Cutler, LLC., in collaboration with Michael Baker International.**

I. Right of Way Engineering

Will Right of Way Engineering be required for this project?

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

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

The final right of way has not been established at this time.

II. *Engineering Surveys*

1. Is any surveying or photogrammetric mapping required?
   No ☐ Yes ☒ if yes, complete the following:

   Photogrammetric mapping was completed in conjunction with the DPR. Engineering surveying will be performed in the PS&E Phase of the project.

2. Datum Requirements

   Yes ☒ Project will adhere to the following criteria:
   - Horizontal – Datum NAD 83, EPOCH 2007.00, English
   - Vertical – Datum NAD 83
   - Units – US Survey Feet

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

   Yes ☒
   No ☐ Provide explanation on additional page.

III. *Parcel Information (Land and Improvements)*

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

No ☐ Yes ☒ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels	29	6	$20,549,286
B. Number of Single Family Residential Units		1	$942,064
C. Number of Multifamily Residential Units	0	0	$0
D. Number of Commercial/Industrial Parcels	0	0	$0
E. Number of Farm/Agricultural Parcels	2	0	$794,385
F. Permanent and/or Temporary Easements	28	0	$5,352,086
G. Other Parcels (define in "Remarks" section)	1	0	$10,102
Totals*	**60**	**7**	**$27,647,922**

***Costs include 20% contingency & escalated 2 years at 3% per year.**

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

For this project design variation 6a, right of way required for acquisition includes approximately 1,409,208 square feet of Temporary Construction Easement (TCE), approximately 1,457,494 square feet of Permanent Slope Easement and approximately 2,253,532 square feet of fee is required. The impacted properties are comprised of commercial/industrial warehouse, single family residences and agricultural parcels, and a public road affecting a total of 67 parcels.

APN 488-350-041 (Skechers Warehouse and Retail) TCE area impacts a significant portion of customer parking. Although the TCE area depicts a loss of about approximately 50% of the parking stall areas during construction, it is assumed access will be maintained through at least one of the driveways during business hours. Loss of temporary parking may be mitigated by leasing space from adjacent vacant lot if necessary. It appears access to this lot currently exists from customer parking area and not employee parking. The facility has a newly built food vendor/food court and patio area. Plans have been reviewed and it is assumed proposed TCE will have minimal impacts. Assume major improvements such as water fountain, structures and landscape, irrigation and other privately-owned improvements are to be protected in place or replaced in-kind. Assume damaged pavement and other hardscape will be replaced in kind by contractor. Slope easement is located on an unimproved portion of parcel, causing no major impacts.

APN 422-020-010 (Raceway Prop) Agricultural Vineyard- A substantially large TCE area affects an agricultural parcel, which appears to be a vineyard. Assume that the impacts to the driveway and remote-controlled gate and keypad system will be protected in place. Assume their landscaping and lighting will not be impacted and or will be replaced by contractor. Assume farm operation will not be significantly impacted. Assume major improvements impacted by the TCE are protected in place. Assume access is maintained during construction and privately-owned improvements will be protected in place.

APN 422-040-014 (Partial Take- vacant land) There are several greenhouse structures which appear to be within the permanent slope easement area. They did not appear to be in operation at the time of inspection. There is also a single wide mobile home unit that also appears to be non-occupied. Assumed that the site improvements such as irrigation and unit may have to relocated possible within the remainder of the parcel. Assumed that no permanent or temporary relocation of residential or non-residential occupants will be necessary. It is possible that in the future the mobile home could be occupied and therefore may require the moving of personal property.

APN 422-040-015 (Partial Take- vacant land) MWD-Assume that the pump facility and appurtenances are protected in place and that access will be provided at all times.

APN 422-070-029 (Full Take) Full take of residential lot with mobile home and several structures on the property. Assume value is in the land. Additional cost was assumed for a relocation plan and moving of personal property. Assume only one household relocation.

APN 488-350-048 (Full Take- vacant land) There is a large monument sign that is impacted and needs to be relocated.

There are also five Single Family Residences affected by TCE areas on the North side of SR-60, on the south east corner of Ironwood and Theodore Street. It is assumed that access will be maintained during construction. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

APN 422-020-006 Residence appears to operate a business selling hay and is open to the public. It is assumed that no temporary or permanent residential or business relocations are required. It is assumed that access to the properties will be maintained during construction.

IV. ***Dedications***

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

No ☒ Yes ☐ (Complete the following.)

Number of dedicated parcels 0

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

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

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

No ☒ Yes ☐ (Provide an explanation on additional page.)

VI. *Relocation Information*

Are relocation displacements anticipated?

No ☐ Yes ☒ (Complete the Following.)

A. Number of Single Family Residential Units		
Estimated RAP Payments	1	$50,923
B. Number of Multifamily Residential Units		
Estimated RAP Payments	0	$0
C. Number of Business/Nonprofit		
Estimated RAP Payments	0	$0
D. Number of Farms		
Estimated RAP Payments	0	$0
E. Other (define in the "Remarks" section)		
Estimated RAP Payments	0	$0
Total*		
***Costs Include 20% contingency & escalated 2 years at 3%**	1	**$50,923**

VII. *Utility Relocation Information*

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

No ☐ Yes ☒ (Complete the following.)

	Facility	Owner	Estimated Relocation Expense: State Obligation	Local Obligation	Utility Owner Obligation
A	Electric Transmission	Southern California Edison	$0	$1,205,000	$1,205,000
B	Electric Distribution	Southern California Edison	$0	$75,000	$75,000
C	Communication	Verizon	$0	$25,000	$25,000
D	Electric Distribution	Time Warner Cable	$0	$0	$50,000
E	Communication	Moreno Valley Electric	$0	$0	$35,000
F	Water	Eastern Municipal Water District	$0	$0	$40,000
	Sub-Total			$1,305,000	$1,430,000
	Contingency (20%)			$261,000	$286,000
	Grand Total			**$1,566,000**	**$1,716,000**
	Number of Facilities	**6**			

Any additional information concerning utility involvement on this project?

Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Rd. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

VIII. *Rail Information*

Are railroad facilities or railroad rights of way affected?

No ☒ Yes ☐ (Complete the following.)

Describe the railroad facilities to be affected.

	Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.	N/A	N/A	N/A

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

IX. *Clearance Information*

Are there improvements that require clearance?

No ☐ Yes ☒ (Complete the following.)

A. Number of structures to be Demolished 1
Estimated Cost of Demolition 25,462.00
(Including 20% Contingency and escalated 2 years at 3%)

X. *Hazardous Materials/Waste*

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

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

XI. *Project Scheduling*

	Proposed lead time		Completion Date
* Preliminary Engineering Surveys	3	months	3/2015
* R/W Engineering Submittals	6	months	02/2021
* R/W Appraisals/Acquisition	14	months	10/2021
Proposed Environmental Clearance	18	months	06/2020
Proposed R/W Certification	24	months	01/2022

XII. *Proposed Funding*

	Local		State		Federal		Other
Acquisition	$29,721,516						
Utilities	$1,661,369						$1,716,000
Relocation Assistance Program	$50,923						
Loss of Business Goodwill	$0						
Structures Testing + Demolition	$25,462						
Condemnation	$0						
R/W Support Cost	$2,026,871						
TOTAL	$33,486,141						$1,716,000
COMBINED TOTAL	**$35,202,141**						

XIII. *Remarks*

In Section III above, the parcel described as "Other" represents a local public road assumed to be Sinclair Street.

Project Sponsor Consultant
Prepared by:

Patti Feist, SR/WA
Overland, Pacific & Cutler, LLC.

07/03/19
Date

Project Sponsor
Reviewed and Approved by:

Margery Lazarus, P.E.
Senior Engineer, P.E.
City of Moreno Valley / Public Works

7/5/19
Date

Caltrans
Reviewed and approved based on information provided to date:

Jackie Williams
Senior Right of Way Agent
Local Programs

7-9-19
Date

1. Name of utility companies involved in project:
Southern California Edison (Y)
Moreno Valley Electric (Y)
Verizon (Y)
Time Warner Cable (Y)
Eastern Municipal Water District (Y)
Municipal Water District (Y)
Southern California Gas Company(Y)

(N)=Utility Company **Not** Within Construction Area
(Y)=Utility Company **Is** Within Construction Area

2. Types of facilities and agreements required:

FACILITY TYPES AND AGREEMENTS			
Utility Company/Owner	**Utility Type**	**Agreement Required**	**Notes**
Southern California Edison	**Electric Transmission**	**Yes**	**Relocate**
Southern California Edison	**Electric Distribution**	**Yes**	**Relocate**
Verizon	**Communication**	**Yes**	**Relocate**
Moreno Valley Electric	**Electric Distribution**	**Yes**	**Relocate/Add ducts to bridge (future)**
Time Warner Cable	**Communication**	**Yes**	**Relocate/Add ducts to bridge (future)**
Eastern Municipal Water District	**Water**	**Yes**	**Relocate**
Municipal Water District	**Water**	**No**	**Protect in Place**
Southern California Gas Company	**Gas**	**No**	**Protect in Place**

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.
N/A

Disposition of longitudinal encroachment(s):
☐ Relocation required.
☐ Exception to policy needed.
☐ Other. Explain.
N/A

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).
Relocation of the SCE115kv system will require steel poles which are a long lead time item, design and procurement may require eighteen (18) months. Additional relocations will be required at the detour route intersections of Redlands Blvd/Ironwood Ave, Redlands Blvd/Eucalyptus Blvd, WLC Pkwy/Alessandro Blvd and Alessandro Blvd/Gilman Springs Road. Construction is not scheduled to take place during summer months. Municipal Water District and Southern California Gas Company utilities are to be protected in place.

Note: The following estimate is based on preliminary plans and reports.

UTILITY RELOCATION AND POTHOLING ESTIMATE								
Utility	**Utility Company**	**Amount to Relocate**		**Price**		**Pothole**		**Cost**
		Est	**Unit**	**Est**	**Unit**	**Num**	**Price**	
115kv	SCE	4700	LF	$2,410,000	Total			$2,410,000
12kv	SCE	5700	LF	$150,000	Total			$150,000
Communication	Verizon	500	LF	$50,000	Total			$50,000
Communication	TWC	500	LF	$50,000	Total			$50,000
12kv	MVU	1300	LF	$35,000	Total			$35,000
8” water valve box and meter	EMWD	1	LS	$40,000	Total			$40,000
20% Contingency								**$547,000**
Grand Total								**$3,282,000**

It is estimated that Southern California Edison and Verizon will be responsible for 50% of the relocation costs. TWC, MVU, and EMWD will be responsible for 100% of the relocation costs.

5. PMCS Input Information
Total estimated cost of State’s obligation for utility relocation on this project:
$ 1,305,000

Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any necessary utility easements.

Utility Involvements:
U4-1 _____ (Total number of expected owner expense involvements)
-2 _____ (Total number of expected State expense involvements - conventional highway, no Federal aid)
-3 _____ (Total number of expected State expense involvements - freeway, no Federal aid)
-4 _____ (Total number of expected State expense involvements - conventional or freeway, with Federal aid)
U5-7 _____ (Total number of expected utility verifications, which will not result in involvements)
-8 _____ (Total number of expected utility verifications - 50% will result in involvements and 50% will not)
-9 _____ (Total number of expected utility verifications, which will result in involvements)

Prepared By:

Rebecca Young, PE — 2/25/2019
Right of Way Utility Estimator — Date
Michael Baker International

Transportation Management Plan Data Sheet

Attachment 7

For DTM use		Caltrans District 8 (Riverside & San Bernardino)	
Developer		TMP Data Sheet (Ver. Mar. 2018)	

Transportation Management Plan (TMP) Data Sheet is for PID, PSR, PR and PS&E considering DTM's requirements. The validity of this TMP expires at the same time the associated LRCs expires.

The TMP Data Sheet includes background & signature, TMP elements & TMP estimate

Requester: *Complete section (A) & (B) of this page only*

Requester: Submit separate request for each roadway (Type the information in the cells below with yellow background ONLY)

TMP receiver: Please note that

Project shall not be certified without the approval of the Lane Requirement Charts (LRCs) & the TMP by the DTM

(A) Requester's info.

1 - Date of request	10/23/2018	**2** - Department	Traffic
3 - Full name	Joe De La Garza	**4** - Phone No.	619-338-9376
5 - email address	joe.delagarza@wsp.com		
6 - Project Manager's name	Brandon Reyes		
7 - Project Manager's email	brandon.reyes@mbakerintl.com		

(B) Project information

		1-EA#/ID#	0M590/0813000109
2-County/Route	Riverside/SR-60	**3**-phase/sub object	PA/ED
4-Post mile (From-To)	PM R14.1/R15.26		
5-Short description of job	Reconstruct Interchange at World Logistics Center Parkway in the City of Moreno Valley		

Construction period per WPS			
6-Estimated start date	07/01/22	**8**-# of working days	450
7-Estimated end date	07/30/24	**9**-Estimated Proj. cost	$ 90,000,000

10- Requester: Use section (H), in the bottom of the page, to add any other information that helps developing the TMP

11- Documents to send — *Requester: Please attach the location map in jpeg/pdf format to your E-mail*

12- If hard copies are requested, Send or bring them to the DTM office located on the south side of 11th. Floor, Attn: Al Afaneh. Questions: call 383-6262

13- E-mail the request to: al_afaneh@dot.ca.gov

Following is for DTM use >>>>>>>>>>> Developer: Fill info in green cells only

C) BACKGROUND INFORMATION				Date request received		Job assigned to	
# of working days	450						
Estimated Project cost ($)	90,000,000	Per E-mail dated					
TMP estimate($)	**$693,072**	Equal to	**0.77%**	Of the project cost			

D) IMPACT	High	Medium	Low	N/A	Developer: (*Briefly, explain the high impact/mitigation): Closure of the SR-60/Theodore St/World Logistics Center Pkwy interchange will impact the State Highway and local roads that connect to the interchange. Proposed detours have been developed to reduce the impacts to traffic circulation.*
State Hwy.	X				
Local road	X				
Ramp/connector	X				

E) Developer: Complete the info

Developed by	Joe De La Garza	Original signed by:	x	Date	10/23/2018
Title	Senior Transportation Engineer				
E-mail	joe.delagarza@wsp.com				
Phone/Fax	(619) 338-9376				

F) Approved by		Original signed by:	Al Afaneh	Date	10/23/18
Name:	Al Afaneh				
Title	District Traffic Manager				
E-mail	al.afaneh@dot.ca.gov				
Phone/Fax	909-383-6262				

G) District's info:

Department of Transportation		
District:	8	
Address:	464 W. Fourth St., San Bernardino, Ca., 92401-1400	
Operations, DTM, MS >>>>	711	

DTM is located on the North side of 7th. Fl. Enter from the open door & turn left. MS: 711

H) Remarks

Form was developed by Saleh Yadegari (September 2014)

TMP Elements	EA #/ID#	0M590/0813000109	Date	10/23/2018

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

Public Affairs officer's 1st. & last name		Phone number

1 Public Information/Public Awareness Campaign (PAC).

Developer: Remember to obtain the estimate from Public affairs by contacting Terri Kasinga. Procedure is in the file under 3- TMP matters

BEES 066063 (Traffic Management Plan-Public Information). Cost to be reduced by Public Affairs (PA) and Construction Liaison (CL) only. Show under **State Furnished** as the **total** of PA+CL.

			Estimated Cost
1.1	☐	Include Rideshare information in PA/CL project material to encourage vehicles reduction in work area	
1.2	☑	Brochures and Mailers	$ 15,000
1.3	☑	Media Releases (& minority media sources)	$ 10,000
1.4	☑	Paid Advertising	$ 5,000
1.5	☑	Public Meetings/PAC Mtgs./Speakers Bureau (show cost also for room rental)	$ 30,000
1.6	☑	Hand deliver notices to vicinity	$ 10,000
1.7	☐	Broadcast fax service	
1.8	☑	Telephone Hotline OR	$ 10,000
1.9	☐	1-800-COMMUTE (The telephone number is shown on CS-Info signs) -	
1.10	☐	Visual Information (videos, slide shows, etc.)	
1.11	☑	Local cable TV and News	$ 5,000
1.12	☑	Traveler Information System (Internet)	
1.13	☑	Internet, E-mail, Social Media	$ 10,000
1.14	☐	Notification to targeted groups:	
	☐	Revised Transit Schedules/maps	
	☐	Rideshare organizations	
	☐	schools	
	☐	organizations representing people with disabilities	
	☐	bicycle organizations	
1.15	☐	Include PA/CL/Consultant resources in WPS	
1.16	☑	Commercial traffic reporters/feeds - e.g. brief Traffic Information people (TIP) group	$ -
1.17	☑	Insert SSP's	$ -

"A representative of the Contractor, at Superintendent level or higher, and authorized to commit the Contractor, shall attend and participate in all Public Awareness Campaign meetings. Time commitment for the meeting(s) varies from two to four hours per month."

1.18	☐	Other	
		Section 1 Total	$ 95,000

2 Traveler Information Strategies

Project team needs to coordinate with Traffic Design!

2.1	☑	Existing Overhead Changeable Message Signs (Stationary)	
	☐	New Installation (Stationary) - BEES 860532 CHANGEABLE MESSAGE SIGN SYSTEM - list locations	
2.2	☑	Portable Changeable Message Signs (PCMS) - BEES 066578	

This strategy is in addition to Traffic Design's PCMS for regular traffic handling within the project limits and is used for advising motorists to divert at remote advance decision points - outside the usual project limits. This also allows for advanced motorist information - e.g. a week ahead. Their placement may need to be cleared **environmentally.** Placement should be of sufficient distance prior to decision points as determined by the Resident Engineer.

# of PCMS	Unit cost/month	Months needed	
4	$ 1,000.00	19	$ 76,000

2.3	☑	Lane Closure System Website	$ -
2.4	☑	Caltrans Highway Information Network (CHIN)	$ -
2.5	☐	Radar Speed Message Sign (Specter sign) BEES 066064 (approx. EA @ $30,000)	
2.6	☐	Bicycle and pedestrian information, e.g. Detour maps	
2.7	☐	Automated Workzone Information System (AWIS) BEES 120105	
		- consult with TMP Developer prior to updating SSP 12-3.35A(1) for AWIS	
		- refer to Section 12-3.35, page 156 to 158 of the 2015 Standard Spec.	

2.8 ☐ Other

Section 2 Total	$ 76,000

3 Incident Management

3.1 CHP's Construction or Maintenance Zone Enhanced Enforcement Program – COZEEP or MAZEEP. BEES 066062 - show under "State or Agency furnished" in the Cost Estimate.

Make sure to consider the LC hours and add CHP driving time to/from their office

Day COZEEP: To protect active closures

	hours/day	CHP vehicles	# of officers.	Rate/Hr.	
0	8	2	2	$ 100	$ -

Night COZEEP: To protect active closures

# of nights		hours/night	CHP vehicles	# of officers. Nights need 2 per car	Rate/Hr.	
130		8	2	2	$ 100	$ 416,000

3.2 **Freeway Service Patrol (FSP) for Construction (CFSP)** $/hr./truck $55

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

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

	# of trucks	# of days	Hours per day	
A For service within the regular FSP hours	0	0	0	$0
For service outside the regular FSP hours				
B Extended Peak hour coverage	0	0	0	$0
C Support during night closures	1	10	8	$4,400
D Weekend support	0	0	0	$0

Local agency (SAFE) support 8% $352

8% of truck cost

CFSP CHP support 5% $0

5% of truck cost only if within regular FSP and area

Equipment/Supplies 10% $440

% of truck cost unless more detail available

Consult with the Inland Empire division of CHP or the border division in the southern Riverside county to select the method which is acceptable for the B,C,D that are outside the regular FSP hours or area.

Method 1

CFSP/CHP support 20% $880

20% of truck cost or

CFSP Dispatcher @

# of days		# of nights	hours	# of FSP	Rate	# of FSP vehicles	
					$ 45.00		$ -

CFSP CHP Officers (See Cozeep rate)

# of days		# of nights	hours	# of officers	Rate	# of CHP vehicles	
					$ 45.00		$ -
							$ -

☑ Cooperative Agreement or Task Order with SAFE for $4,752

☑ Task Order with CHP (State-wide Master Agreement for FSP support). for $880

☐ Contact District FSP Coordinator for task orders.

☐ Service Contract

☐ Local Agency will arrange CFSP with SAFE

☐ Local Agency will arrange CFSP administration with CHP

TMP Elements	EA #/ID#	0M590/0813000109	Date	10/23/2018

3.2 Total $6,072

3.3 ☐ Other

Section 3 Total $ 422,072

4 Construction Strategies

Contact DTM, at 909-383-6262, to get Delay Calculations, Lane Requirement Charts (LRC), Table Z and Special events list. Inform DTM of any concerns/commitments regarding special LC days, times, seasons, events; environmental restrictions; if work may be affected by snow and low or high temperatures. E.g. excessive heat may delay HMA operations lane openings which may increase traffic impact when vehicles overheat in the queue; etc. If traffic volumes vary significantly between seasons, consider 2 sets of LRCs to avoid CCOs.

4.1 This TMP presumes that work is planned as below. If different, TMP needs to be revised. The Project Engineer shall ensure all appropriate lane requirement charts are included.

- ☑ Off peak
- ☑ Night
- ☑ Weekend

4.2 Expected facility closures and requirements

- ☐ Flagging
- ☑ Shoulder
- ☑ Lane
- ☑ Street
- ☑ Ramp
- ☑ Connector*
- ☑ Extended Weekend Closures*
- ☑ Total Facility Closures*

*Consult with TMP developer and the DTM regarding COZEEP & other costs. Provide proposed detour and traffic diversion plans for review.

CAUTION: If the Lane Requirement Chart (LRC) for full mainline closures, of one or both directions on a highway or freeway, does not show the maximum number of allowable closures, the PS&E shall not be certified by DTM/TMP.

4.3 ☑ Coordinate with adjacent ongoing and planned construction projects - also on detour routes.

4.4 ☑ BEES 066008 Incentives

4.5 ☑ Strictly enforce construction CPM schedule

4.6 ☑ 10-Min. Delay Penalty — Contact DTM at 909-838-6262 for 10 Min. Delay Penalty Calculations.

4.7 ☐ Other

Section 4 Total $ -

5 Demand Management (DM)

Project team needs to coordinate with RCTC/SANBAG/CVAG

Traffic diversion may increase available work hours.

5.1 ☑ A co-op will be executed - mentioned in PSR or PR.

☐ Instead of a co-op, 15% is added to the cost of DM elements since the payment to the local agency will be routed through the contractor.

Instead of a co-op, the local agency will make their own arrangements with RCTC/SANBAG/CVAG.

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

5.2 ☐ HOV Lanes/Ramps (New or Convert)

5.3 ☐ Park-and-Ride Lots

5.4 ☐ Parking Management/Pricing (Coordination with local agency is required)

5.5 ☐ BEES 066067 Rideshare Promotion

5.6 ☑ Other

Section 5 Total $ -

6 Alternate Route Strategies

Caution - signed detours may require environmental clearance. Traffic diversion may increase available work hours. Please work with Traffic Design. BEES 066060 - ADITIONAL TRAFFIC CONTROL

6.1 ☐ Add Capacity to Freeway connector

6.2 ☑ Ramp Closures

6.3 ☑ Temporary Highway Lanes or Shoulder Use

6.4 ☐ Parking Restrictions

6.5 ☑ Street Improvements $ 50,000

- ☐ State R/W - Signals, Widen, etc.
- ☐ Local R/W - Signals, Widen, etc. co-op or permit may be needed

6.6 ☑ Local Street USE - co-op or Permit may be needed

6.7 ☑ Traffic Control Officers (see 3.1 COZEEP)

6.8 ☐ Signed detour - using State routes

6.9 ☑ Signed detour - using local streets and roads. Coordinate with corresponding local agency. $ 50,000

6.10 ☑ Adjust signals

6.11 ☐ Temporary bicycle or pedestrian facilities

6.12 ☑ Other

Section 6 Total $ 100,000

TMP Estimate

Developed by	Joe De La Garza	EA#/ID#	0M590/0813000109	Date	10/23/2018

TMP developer: Amounts under the cost column will automatically be copied from the TMP elements

TMP Elements	Cost
1. Public Information	$95,000
2. Motorist Information Strategies	$76,000
3. Incident Management	$422,072
4. Construction Strategies	$0
5. Demand Management (DM)	$0
6. Alternate Route Strategies	$100,000
Total TMP Estimate	$ 693,072

Cooperative Agreement

Attachment 8

COOPERATIVE AGREEMENT
State Independent Quality Assurance (IQA)

This Agreement, effective on August 22, 2013, is between the State of California, acting through its Department of Transportation, referred to as CALTRANS, and:

City of Moreno Valley, a body politic and municipal corporation or chartered city of the State of California, referred to hereinafter as CITY.

RECITALS

1. PARTNERS are authorized to enter into a cooperative agreement for improvements to the state highway system (SHS) per the California Streets and Highways Code sections 114 and 130.

2. For the purpose of this Agreement, reconstruction interchange on State Route 60 and Theodore Street, in Riverside County, will be referred to hereinafter as PROJECT.

3. All responsibilities assigned in this Agreement will be referred to hereinafter as OBLIGATIONS.

4. This Agreement includes the following PROJECT COMPONENTS:
   - Project Approval and Environmental Document (PA&ED)
   - Plans, Specifications, and Estimate (PS&E)
   - Right of Way Support (R/W SUPPORT)
   - Right of Way Capital (R/W CAPITAL)

5. This Agreement is separate from and does not modify or replace any other cooperative agreement or memorandum of understanding between PARTNERS regarding the PROJECT.

6. No PROJECT deliverables have been completed prior to this Agreement.

7. In this Agreement capitalized words represent defined terms and acronyms.

8. PARTNERS hereby set forth the terms, covenants, and conditions of this Agreement, under which they will accomplish OBLIGATIONS.

RESPONSIBILITIES

9. CITY is SPONSOR for 100% of PROJECT.

10. CITY is the only FUNDING PARTNER for this Agreement. CITY will fund work activities using local fund sources. PARTIES agree to amend this Agreement prior to the expenditure of state or federal funds.

11. CITY is the IMPLEMENTING AGENCY for:
    - Project Approval and Environmental Document (PA&ED)
    - Plans, Specifications, and Estimate (PS&E)
    - Right of Way Support (R/W SUPPORT)
    - Right of Way Capital (R/W CAPITAL)

12. CALTRANS is the CEQA lead agency for PROJECT.

13. CALTRANS is the NEPA lead agency for PROJECT.

14. CITY will prepare the environmental documentation for the PROJECT.

15. CALTRANS will provide Independent Quality Assurance (IQA) for the portions of WORK within existing and proposed SHS right-of-way. Per NEPA assignment and CEQA statutes, CALTRANS will perform its QC/QAP process review for environmental documentation.

SCOPE

Scope: General

16. CITY will perform all OBLIGATIONS in accordance with federal and California laws, regulations, and standards; FHWA STANDARDS; and CALTRANS STANDARDS.

17. 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.

18. CITY will ensure that personnel participating in OBLIGATIONS are appropriately qualified or licensed to perform the tasks assigned to them.

19. PARTNERS will invite each other to participate in the selection of any consultants who participate in OBLIGATIONS.

20. If WORK is done under contract (not completed by CITY's own employees) and is governed by the California Labor Code's definition of "public works" (section 1720(a)), CITY 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.

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 activities within the SHS right-of-way without an encroachment permit issued in their name.

22. If CITY discovers unanticipated cultural, archaeological, paleontological, or other protected resources during WORK, all WORK in that area will stop and CITY will notify CALTRANS 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 drafts and administrative final reports, studies, materials, and documentation relied upon, produced, created, or utilized for PROJECT in confidence to the extent permitted by law and where applicable, the provisions of California Government Code section 6254.5(e) shall protect the confidentiality of such documents in the event that said documents are shared between PARTNERS.

    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 a 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 documents. 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 any PROJECT COMPONENT, CITY will immediately notify CALTRANS.

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. CITY, independent of PROJECT, is responsible for any HM-1 found within PROJECT limits and outside the existing SHS right-of-way. CITY will undertake or cause to be undertaken HM MANAGEMENT ACTIVITIES related to HM-1 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. 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.

32. CITY will accept, reject, compromise, settle, or litigate claims of any non-Agreement parties hired to do WORK in that component.

33. If WORK stops for any reason, CITY will place PROJECT right-of-way in a safe and operable condition acceptable to CALTRANS.

34. If WORK stops for any reason, CITY 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 CITY's responsibilities in this Agreement, in order to keep PROJECT in environmental compliance until WORK resumes.

35. CITY will furnish CALTRANS with all relevant deliverables and history files related to PROJECT facilities on the SHS within one hundred eighty (180) days following the completion of each PROJECT COMPONENT.

Scope: Environmental Permits, Approvals and Agreements

36. Each PARTNER identified in the Environmental Permits table below accepts the responsibility to complete the assigned activities. If PARTNERS later determine that an environmental permit, approval or agreement is necessary PARTNERS will amend this Agreement to ensure completion and implementation of all environmental permits, approvals, and agreements.

ENVIRONMENTAL PERMITS						
Permit	Coordinate	Prepare	Obtain	Implement	Renew	Amend
NPDES SWRCB	CITY	CITY	CITY	CITY	CITY	CITY
FESA Section 7 USFWS	CALTRANS	CITY	CALTRANS	CITY	CALTRANS	CALTRANS
1602 CA Dept of Fish & Wildlife	CITY	CITY	CITY	CITY	CITY	CITY
404 Corps of Engineers	CITY	CITY	CITY	CITY	CITY	CITY

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

California Environmental Quality Act (CEQA)

37. CALTRANS will determine the type of environmental documentation required and will cause that documentation to be prepared.

38. 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.

39. CITY will prepare the appropriate CEQA environmental documentation to meet CEQA requirements.

40. Any portion of the CEQA environmental documentation prepared by CITY, including any studies and reports, will be submitted to the CALTRANS for review, comment, and approval at appropriate stages of development prior to public availability.

41. CITY will prepare, publicize, and circulate all CEQA-related public notices and will submit said notices to CALTRANS for review, comment, and approval prior to publication and circulation.

42. CITY will plan, schedule, prepare materials for, and host all CEQA-related public meetings and will submit all materials to CALTRANS for review, comment, and approval at least 10 working days prior to the public meeting date.

43. The CEQA lead agency will attend all CEQA-related public meetings.

National Environmental Policy Act (NEPA)

44. Pursuant to Chapter 3 of title 23, United States Code (23 U.S.C 326) and23 U.S.C 327, CALTRANS is the NEPA lead agency for the PROJECT and is responsible for NEPA compliance.

45. Any NEPA environmental documentation prepared by CITY will follow FHWA and CALTRANS 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) and the Standard Environmental Reference (SER available at http://www.dot.ca.gov/ser/).

46. CITY will prepare the appropriate NEPA environmental documentation to meet NEPA requirements.

47. NEPA environmental documentation prepared by CITY (including, but not limited to, studies, reports, public notices, and public meeting materials, determinations, administrative drafts, and final environmental documents) will be submitted to CALTRANS for review, comment, and approval prior to public availability.

48. CITY will prepare, publicize, and circulate all NEPA-related public notices, except Federal Register notices. CITY 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.

49. The NEPA lead agency will attend all NEPA-related public meetings.

50. If CITY holds a public meeting about PROJECT, CITY must clearly state its role in PROJECT and identify 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.

    CITY 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 CITY 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.

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

51. Any PARTNER preparing 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)

There are no applicable articles in this section.

Scope: Right-of-way (R/W)

52. CITY will provide a land surveyor licensed in the State of California to be responsible for surveying and right-of-way engineering. All survey and right-of-way engineering documents will bear the professional seal, certificate number, registration classification, expiration date of certificate, and signature of the responsible surveyor.

53. CITY will provide CALTRANS a copy of conflict maps, Relocation Plan, proposed Notices to Owner, Report of Investigation, and Utility Agreement (if applicable) for CALTRANS' concurrence prior to issuing the Notices to Owner and executing the Utility Agreement. All utility conflicts will be fully addressed prior to R/W Certification and all arrangements for the protection, relocation, or removal of all conflicting facilities will be completed prior to construction contract award and included in the PROJECT plans, specifications, and estimate.

54. CITY will utilize a public agency currently qualified by CALTRANS or a properly licensed consultant for all right-of-way activities. A qualified right-of-way agent will administer all right-of-way consultant contracts.

CITY will submit a draft Right-of-way Certification document to CALTRANS six weeks prior to the scheduled milestone date for review.

CITY will submit a final Right-of-way certification document to CALTRANS prior to PROJECT advertisement for approval.

55. Physical and legal possession of right of way must be completed prior to construction advertisement, unless PARTNERS mutually agree to other arrangements in writing.

56. CALTRANS' acceptance of right-of-way title is subject to review of an Updated Preliminary Title Report provided by CITY verifying that the title is free of all encumbrances and liens. Upon acceptance, CITY will provide CALTRANS with a Policy of Title Insurance in CALTRANS' name.

57. The California Transportation Commission will hear and may adopt Resolutions of Necessity. However, the authorization to hear and adopt Resolutions of Necessity may be assigned to CITY if such assignment is approved in writing by CALTRANS.

COST

Cost: General

58. All costs associated with completing the PROJECT, except where otherwise noted in this agreement, are the responsibility of CITY including, but not limited to:
- Public meetings.
- Environmental commitments and compliance.
- Obtaining, implementing and renewing resource agency permits.
- Preparing, publicizing, and circulating all CEQA and NEPA related public notices.
- Planning, scheduling, and hosting all CEQA and NEPA related public hearings.

59. 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.

60. CALTRANS, independent of PROJECT, will pay, or cause to be paid, all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within the existing SHS right-of-way.

61. CITY, independent of PROJECT, will pay, or cause to be paid, all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within PROJECT limits and outside of the existing SHS right-of-way.

62. 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.

    Independent of OBLIGATIONS cost, CALTRANS will fund the cost of its QC/QAP process review for environmental documentation.

63. CALTRANS will provide encroachment permits to PARTNERS, their contractors, consultants and agents, at no cost.

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

There are no applicable articles in this section.

Cost: Right-of-way (R/W) Support

64. The cost to perform R/W activities, whether inside or outside SHS right-of-way, will be determined in accordance with federal and California laws and regulations, and CALTRANS' policies, procedures, standards, practices, and applicable agreements.

Cost: Right-of-way (R/W) Capital

65. CITY 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 the applicable CALTRANS' policies, procedures, standards, practices, and applicable agreements, including, but not limited to, Freeway Master Contracts.

SCHEDULE

66. CITY will manage the schedule for OBLIGATIONS through the work plan included in the PROJECT MANAGEMENT PLAN.

GENERAL CONDITIONS

67. 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.

68. 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.

69. When CALTRANS performs IQA activities it does so for its own benefit. No one can assign liability to CALTRANS due to its IQA activities.

70. Neither CITY nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by CALTRANS 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, to the extent permitted by law, will defend, indemnify, and save harmless CITY 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.

71. Neither CALTRANS nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by CITY and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon CITY under this Agreement.

It is understood and agreed that CITY, to the extent permitted by law, will 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 CITY and/or its agents under this Agreement.

72. 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.

73. PARTNERS will not assign or attempt to assign OBLIGATIONS to parties not signatory to this Agreement.

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

75. 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.

76. 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.

77. 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.

78. 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 CITY 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.

79. 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 or in the Superior Court of the county in which PROJECT is physically located. 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.

80. PARTNERS maintain the ability to pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.

81. If any provisions in this Agreement are found by a court of competent jurisdiction 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 those provisions will be automatically severed from this Agreement.

82. PARTNERS intend this Agreement to be their final expression and supersedes any oral understanding or writings pertaining to OBLIGATIONS.

83. 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.

84. Except as otherwise provided in the Agreement, PARTNERS will execute a formal written amendment if there are any changes to OBLIGATIONS.

85. PARTNERS agree to sign a COOPERATIVE AGREEMENT CLOSURE STATEMENT to terminate this Agreement. However, all indemnification, document retention, audit, claims, environmental commitment, legal challenge, maintenance and ownership articles will remain in effect until terminated or modified in writing by mutual agreement.

DEFINITIONS

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 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.

CONSTRUCTION CAPITAL – See PROJECT COMPONENT.

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.

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 funds to fulfill OBLIGATIONS. Each FUNDING PARTNER accepts responsibility to provide the funds it commits in this Agreement.

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 is 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 the 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) – This federal act 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.

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 PARTNER.

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 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.

QC/QAP (QUALITY CONTROL/QUALITY ASSURANCE PROGRAM) – Per NEPA assignment CALTRANS will review all environmental documents as described in the Jay Norvell Memos dated October 1, 2012 (available at http://www.dot.ca.gov/ser/memos.htm). This also includes the independent judgment, analysis, and determination under CEQA that the environmental documentation meets CEQA statute and Guideline requirements.

R/W (Right-of-way) CAPITAL – See PROJECT COMPONENT.

R/W (Right-of-way) SUPPORT – See PROJECT COMPONENT.

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 information 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:
Emad Makar, Project Manager
464 West 4th Street, 6th Floor (MS 1229)
San Bernardino, CA 92401-1400
Office Phone: (909) 383-4978
Email: emad_makar@dot.ca.gov

The primary Agreement contact person for CITY is:
Margery Lazarus, Senior Engineer
14177 Frederick Street
Moreno Valley, CA 92553
Office Phone: (951) 413-3133
Email: margeryl@moval.org

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

RS
By: _____
Basem E. Muallem, P.E.
District Director

CITY OF MORENO VALLEY

By: _____
Michelle Dawson
City Manager

CERTIFIED AS TO FUNDS:

By: _____
Lisa Pacheco
District Budget Manager

APPROVED AS TO FORM AND PROCEDURE:

By: _____
Suzanne Bryant
City Attorney

Life Cycle Cost Analysis for Pavement

Attachment 9

LIFE CYCLE COST ANALYSIS FOR PAVEMENT

FOR THE
SR-60/WORLD LOGISTIC CENTER PARKWAY INTERCHANGE IMPROVEMENT PROJECT

EA: 08-OM590
PROJECT NO. 0813000109
08-RIV-60 PM 20.0/22.0

City of Moreno Valley
County of Riverside, State of California

PREPARED FOR:
CALIFORNIA DEPARTMENT OF TRANSPORTATION - DISTRICT 8
464 West 4th Street
San Bernardino, CA 92401-1400

PREPARED BY:
SHATEC ENGINEERING CONSULTANTS

for
MICHAEL BAKER INTERNATIONAL
3536 Concours, Suite 100
Ontario, CA 91764

October 4, 2019

SR-60/WLC Pkwy Interchange Improvement Project

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

10/04/2019

Shakir Shatnawi, Ph.D., P.E.
REGISTERED CIVIL ENGINEER

DATE

TABLE OF CONTENTS

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2. EXISTING FACILITY & PLANNED IMPROVEMENTS 4
3. TRAFFIC 5
4. PAVEMENT ALTERNATIVES 5
5. ANALYSIS 6
6. CONCLUSIONS 8
7. ATTACHMENTS 8

LIFE CYCLE COST ANALYSIS FOR PAVEMENT DESIGN ALTERNATIVES OF SR-60/WORLD LOGISTIC CENTER PARKWAY INTERCHANGE IMPROVEMENT PROJECT

REVISED REPORT - OCTOBER 4, 2019

1. INTRODUCTION

This report presents the results of the life cycle cost analysis (LCCA) performed on various pavement designs for the three improvement areas in the District 8 "*SR-60/World Logistic Center Parkway (WLC Pkwy) Interchange Improvement Project*". This report provides a revised version of the previously published report dated May 4, 2016.

The subject project location is anticipated to experience substantial growth. The economic development and the increased shipping traffic through the area are predicted to generate additional traffic on the freeway and at the interchange. The City of Moreno Valley (City), in cooperation with the California Department of Transportation (Caltrans), District 8, proposes to reconstruct and improve the State Route 60 (SR-60)/WLC Pkwy interchange. The purpose of the project is to alleviate both the existing and future traffic congestion at the SR-60/WLC Pkwy interchange ramps during peak hours, to improve traffic flow along the freeway and through the interchange, to improve safety by upgrading the geometry at the current interchange, and to provide standard vertical clearance for the WLC Pkwy overcrossing. The reconstruction of the interchange will proactively and effectively address existing deficiencies and accommodate projected traffic growth. The new interchange will serve as a gateway interchange to the City of Moreno Valley in Riverside County and will display aesthetic features per the City of Moreno Valley Corridor Master Plan.

According to the Caltrans' Highway Design Manual (HDM), the proposed project is located in the "Inland Valley" climate region; which was used in developing all design alternatives.

2. EXISTING FACILITY & PLANNED IMPROVEMENTS

The majority of the project site is located in the City of Moreno Valley; however, the northeast quadrant of the site is located within unincorporated Riverside County (County) but within the City's Sphere of Influence. Both directions of the SR-60 between Redland Blvd and WLC Pkwy and between WLC Pkwy and Gilman Springs Rd interchanges does not have auxiliary lanes in either direction that have been found to be necessary for the growing traffic demand. The WLC Pkwy currently has two lanes in each direction. This proposed project was initiated in response to these expected developments, and includes a number of improvement activities: (1) widening SR-60 with new auxiliary lanes in both directions, (2) reconstruction of WLC Pkwy, and (3) construction of new off-ramps and on-ramps to SR-60. Therefore, an auxiliary lane would be added to both directions of SR-60, and new on- and off-ramps within the project limits will be added. In addition, WLC Pkwy will be reconstructed and widened to have three lanes in each direction.

3. TRAFFIC

The traffic projection study reports (Parsons 2013; Parsons 2015)[1] provide detailed traffic information and data both for the existing facilities and projected improvements. Table 1 provides a summary of the annual average daily traffic (AADT) for the base year (2017), current year (2019), construction year (estimated to be 2022), and projected AADT values for a number of future years. The annual average daily truck traffic in base year ($AADTT_{BY}$), traffic index, design life, growth factors, and lane distribution factors used in pavement design along with detailed calculations are available in the design report titled:" *Pavement Structure Designs for SR-60/Theodore Street Interchange Improvement Project*". The future years' AADT shown in Table 1 were calculated from the compound traffic growth model (discussed in the pavement design report) using the base year AADT and growth factors used in the life cycle cost analysis. Other traffic data pertinent to the LCCA evaluations can be found in Attachment A.

Table 1. Current and projected future AADT values for the three locations

	Annual Average Daily Traffic (AADT)						
Location	2017 base year	2019 current year	2022 construction year	2030	2040	2050	2060
SR-60	71,000	74,304	79,549	95,420	119,784	150,368	188,760
WLC Pkwy	4,760	5,960	8,351	20,530	63,197	194,536	598,826
Ramps	65,951	71,223	79,931	108,720	159,699	234,581	344,575

Base year is the year with known of estimated traffic counts (from the traffic study by Parsons 2013 & 2015, see pavement design report)
AADT obtained using the compound growth model discussed in the pavement design report with growth factors used in LCCA.

4. PAVEMENT DESIGN ALTERNATIVES

A previously completed pavement structural design report titled "*Pavement Structural Designs for SR-60/World Logistics Center (WLC) Parkway Interchange Improvement Project*" dated May 16, 2019 presented all the pavement designs (about 50 design alternatives) developed for these improvement areas. Most of the designs were for 40 years of service, and some were for 20 years. Several meetings between the involved parties resulted in the selection of a smaller number of design alternatives for consideration in the LCCA process. Table 2 summarizes those selected alternatives. The costs given in Table 2 represent the cost per lane-mile of pavement structure, and not the actual cost for the improvement. There are 13 design alternatives selected for the LCCA process:

1. For SR-60 auxiliary lanes, there are 6 design alternatives to be analyzed with LCCA; both rigid and flexible pavements and with 40- and 20-year design lives. Notice that the 20-year and 40-year CRCP designs are identical for both 20-year and 40-year traffic index (TI)

[1] Parsons (2015). SR-60/Theodore Interchange PA/ED Traffic Impact Analysis for Caltrans No.: 0813000109, Caltrans EA: 0M590. Report prepared for the City of Moreno Valley, 126 p. Parsons (2013). SR-60/Theodore Interchange PA/ED Traffic Volumes Analysis. Report prepared for the City of Moreno Valley, 40 p.

values based on the Highway Design manual (HDM) rigid pavement catalog (Chapter 620). It is to be noted that these designs selected for LCCA may be more than what is normally selected with the LCCA Procedure Manual (Figure 2-1 in Appendix 8) for connector or mainline; which are 40-year flexible and 40-year CRCP.

2. For the ramps, there are 2 rigid pavement designs and 1 flexible pavement design; all providing 40-year of service life. Note in Table 2 below that per the Caltrans' LCCA Manual (Appendix 3) only the Eastbound off-ramp will be evaluated as it has the largest traffic volumes. Also, the selected design alternatives for evaluation may be different from what is recommended for a new ramp by the LCCA Procedure Manual; which are the 20-year flexible and 40-year flexible. This selection was based on agreement with the parties involved in the project.
3. For WLC Pkwy, there are 2 rigid and 1 flexible design alternatives for 40-year life; and 1 flexible design for 20-year life.

5. ANALYSIS

The Caltrans LCCA software *RealCost version 2.5.4CA*[2] was used in the analysis along with the LCCA Procedures Manual. This version of the software is a newer version of the software initially used in the first edition of the LCCA report (*RealCost version 2.5.2CA).* According to the Caltrans LCCA webpage, the newer 2.54.CA versions offers some changes compared to the original 2.5.2CA version, including: (i) windows 10 compatibility, (ii) units cost updates for major materials based on 2016 Caltrans contract cost data, and (iii) report function to create the results in an MS Word file. To perform LCCA, the cost of each in-place material would be needed to calculate the total cost of each alternative. Caltrans District 8 provided the most up to date unit costs for all the materials used in designing the pavement structural sections. These unit costs are shown in Table A-1 of Attachment A. In addition, Table A-2 in Attachment A provides the total initial cost of each improvement locations was calculated based on these agreed-upon unit costs, project location dimensions, and layers thicknesses. An additional set of inputs necessary for running life cycle cost analysis were also used and they are also given in Attachment A. These inputs are common between the various improvement locations. Maintenance and rehabilitation (M&R) costs were determined using the methodology outlined in the LCCA Procedures Manual. The selected design alternatives for each improvement location were compared directly using the same methodology and using an analysis period of 55 years for the both the 40- and 20-year design lives; which was determined using Table 2-1 of the LCCA Procedures Manual.

Table 3 presents a summary of the LCCA results for all the analyzed alternatives and for all the three construction locations. The RealCost analysis provided the calculations for the user cost of each alternative. The two life-cycle costs involved in the LCCA process; agency cost and user cost as well as the total cost (the sum of both costs) are shown in Table 3. User costs were used in conjunction with agency costs to determine the alternative with the lowest life-cycle cost. The ranking of the alternatives is also given in Table 3 based on the agency cost alone and based on the total cost.

[2] http://www.dot.ca.gov/hq/maint/Pavement/Offices/Pavement_Engineering/LCCA_index.html.

Table 2. The pavement design alternatives selected for life cycle cost analysis (LCCA) with their corresponding initial costs per lane-mile (based on 2018 unit cost data provided by District 8) based on the material thicknesses provided in the table.

Location	LCCA Alt #	Design Life & TI	Pavement Section		Cost per Lane-Mile
SR-60 Auxiliary Lane with Shoulder (New Construction)	LCCA Alt# 1– CRCP	40 years TI=18.5	CRCP HMA-A	1.10' 0.25'	$732,380
	LCCA Alt# 2– RHMA/FDHMA	40 years TI=18.5	RHMA-G HMA-A AB-Class 2	0.20' 1.60' 0.50'	$883,285
	LCCA Alt# 3– JPCP	40 years TI=18.5	JPCP BB LCB	1.30' 0.10’ 0.35'	$698,104
	LCCA Alt# 4– RHMA/FDHMA	20 years TI=17.0	RHMA-G HMA-A AB-Class 2	0.20' 1.15' 0.50'	$680,137
	LCCA Alt# 5– CRCP	20 years TI=17.0	CRCP HMA-A	1.10' 0.25'	$732,380
	LCCA Alt# 6– JPCP	20 years TI=17.0	JPCP BB LCB	1.25' 0.10’ 0.35'	$677,570
On-Ramps & Off-Ramps to SR-60 with Shoulder (New Construction)	LCCA Alt# 1– CRCP	40 years TI=17.5	CRCP HMA-A	1.05' 0.25'	$704,220
	LCCA Alt# 2– RHMA/FDHMA	40 years TI=17.5	RHMA-G HMA-A AB-Class 2	0.10' 1.20' 0.50'	$645,685
	LCCA Alt# 3– JPCP	40 years TI=17.5	JPCP BB LCB	1.20' 0.10’ 0.35'	$657,037
WLC Pkwy (New Construction)	LCCA Alt# 1– CRCP	40 years TI=15.5	CRCP HMA-A	1.10' 0.25'	$732,380
	LCCA Alt# 2– RHMA-FDHMA	40 years TI=15.5	RHMA-G HMA-A AB-Class 2	0.20' 1.50' 0.50'	$838,141
	LCCA Alt# 3– JPCP	40 years TI=15.5	JPCP BB LCB	1.30' 0.10’ 0.35'	$698,104
	LCCA Alt# 4– RHMA/FDHMA	20 years TI=14.5	RHMA-G HMA-A AB-Class 2	0.20' 1.00' 0.50'	$612,421

CRCP: continuously reinforced concrete pavement. JPCP: jointed plain concrete pavement. RHMA-G: rubberized hot mix asphalt-Gap graded. HMA-A: hot mix asphalt-Type A. FDHMA: full depth hot mix asphalt. AB-Class 2: aggregate base-Class 2. BB: bond breaker (HMA-A). LCB: lean concrete base.

Note: Should CRCP sections be recommended for construction, HMA-A base sections for CRCP sections will be increased to 0.30 ft from 0.25 ft per the recommendation of District 8 Materials.

Federal directives encourage state DOTs to consider both costs in selecting the most cost-effective alternative. The relative importance of agency costs compared to user costs depends on the alternative being analyzed, project size, traffic, etc. The agency costs may significantly exceed the user cost (e.g., for highways with low AADT and large size projects), and sometimes the opposite can happen (for high AADT highways and small sized projects). The variation in importance in agency and user life-cycle costs is also observed in Table 3. The present value M&R costs shown in Table 3 are calculated as the numerical difference between the present value agency cost and the initial cost for each alternative. The details of the analysis in terms of screen captures taken from the RealCost software for each improvement location are provided in Attachment B. With these screenshots it is possible to conveniently verify all the analyses by running the software and duplicating these values. In addition, Attachment C provides the results reports (generated by the RealCost software as an MS Word file) for these locations.

6. CONCLUSIONS

Based on the LCCA results, the most cost-effective alternatives using the combined (agency + user costs) are the 40-year CRCP alternatives for all three improvement locations. For the SR-60 auxiliary lanes and ramps, this alternative will be selected for construction. However, for the WLC Pkwy reconstruction, the 20-year "RHMA/FDHMA" alternative has been selected in lieu of 40-year CRCP because of the City's maintenance capabilities in this type of pavement. Refer to Table 3 for the results summary.

Per the recommendation of District 8 Materials, a 0.30 ft HMA-A base will be used in lieu of a 0.25 ft HMA-A base for all CRCP sections shown in Table 2 if CRCP is selected for construction in final design. This change will have no impact on the results of this LCCA.

7. ATTACHMENTS

- Attachment A: Traffic data, cost related items, assumptions, and input data file preparation
- Attachment B: RealCost screenshots and traffic input calculations for the three locations.
- Attachment C: RealCost inputs and outputs reports.
- Attachment D: Materials Report Recommendations

Table 3. LCCA Results Summary (of all three locations).

Facility or location (1)	Alternative # (2)	Pavement structural Section (3)	Initial construction cost ($1,000) (4)	Present value M&R cost ($1,000) (5)=(6)-(4)	Present value agency cost ($1,000) (6) & (RANK)	Present value user cost ($1,000) (7)	Sum of Agency & User costs ($1,000) (8) & (RANK)
SR-60 Auxiliary Lane with Shoulder (New Construction)	Alt# 1: 40-year CRCP	CRCP 1.10' HMA-A 0.25'	634.3	1.7	636 (2)	0.0	636* (1)
	Alt# 2:40-year RHMA/FDHMA	RHMA-G 0.20' HMA-A 1.60' AB-Class 2 0.50'	764.9	131.1	896 (5)	65	961 (2)
	Alt# 3: 40-year JPCP	JPCP 1.30' BB 0.10' LCB 0.35'	604.6	15.4	620# (1)	902	1,222 (4)
	Alt# 4: 20-year RHMA/FDHMA	RHMA-G 0.20' HMA-A 1.15' AB-Class 2 0.50'	589.0	219.0	808 (4)	397	1,205 (5)
	Alt# 5: 20-year CRCP	CRCP 1.10' HMA-A 0.25'	634.3	THIS ALTERNATIVE WAS ELIMINATED FROM LCCA AS IT IS IDENTICAL TO ALT#1.			
	Alt# 6: 20-year JPCP	JPCP 1.25' BB 0.10' LCB 0.35'	586.8	173.2	760 (3)	444	1,204 (3)
On-Ramps & Off-Ramps to SR-60 with Shoulder (New Construction)	Alt# 1: 40-year CRCP	CRCP 1.05' HMA-A 0.25'	852.4	5.6	858 (2)	0.0	858* (1)
	Alt# 2: 40-year RHMA/FDHMA	RHMA-G 0.10' HMA-A 1.20' AB-Class 2 0.50'	782.9	305.1	1,088 (3)	191	1,279 (4)
	Alt# 3: 40-year JPCP	JPCP 1.20' BB 0.10' LCB 0.35'	795.3	34.7	830# (1)	143	973 (2)
WLC Pkwy (New Construction)	Alt# 1: 40-year CRCP	CRCP 1.10' HMA-A 0.25'	6,497.0	41.0	6,538 (2)	0.0	6,538* (1)
	Alt# 2: 40-year RHMA-FDHMA	RHMA-G 0.20' HMA-A 1.50' AB-Class 2 0.50'	7,435.2	2,266.8	9,702 (4)	15,954	25,656 (4)
	Alt# 3: 40-year JPCP	JPCP 1.30' BB 0.10' LCB 0.35'	5,940.8	254.2	6,195# (1)	9,565	15,760 (3)
	Alt# 4: 20-year RHMA/FDHMA	RHMA-G 0.20' HMA-A 1.00' AB-Class 2 0.50'	5,432.8	3,799.2	9,232 (3)	3,539	12,771 (2)

Lowest present value agency cost. *Lowest combined present value costs.
CRCP: continuously reinforced concrete pavement. JPCP: jointed plain concrete pavement. RHMA-G: rubberized hot mix asphalt-Gap graded.
HMA-A: hot mix asphalt-Type A. FDHMA: full depth hot mix asphalt. AB-Class 2: aggregate base-Class 2. BB: bond breaker (HMA-A).
LCB: lean concrete base

Category Determination Request Approval Letter

Attachment 10

TEL: 951.413.3100
WWW.MOVAL.ORG

MORENO VALLEY
WHERE DREAMS SOAR

14177 FREDERICK STREET
P.O. BOX 88005
MORENO VALLEY, CA 92552-0805

10/28/15

Christy Connors
Deputy District Director, Design
464 West Fourth Street
San Bernardino, CA 92401-1400

Subject: SR-60/Theodore Street Interchange Improvements
EA 0M590/PN 08-13000109

Reference: **Category Determination Request**

Dear Ms. Connors,

The City of Moreno Valley requests approval of the Project Category Determination for the SR-60/Theodore Street Interchange Improvement project. According to Caltrans' Project Development Procedures Manual, Chapter 8, Section 5, Project Development Categories (dated 03/02/2014L), the Project is a Category 4A project based on the following items:

1. The SR-60/Theodore Street interchange is an existing facility
2. Substantial new right-of-way is required
3. A revised freeway agreement will not be required
4. Route adoption is not required

Should you need further information, please contact Tim Haile of Michael Baker International at (909) 974-4922.

Thank you.

Categorical Determination Approval

Submitted by: _____
Margery Lazarus
Senior Engineer, P.E.
City of Moreno Valley

Concurred by: _____
Christy Connors
Deputy District Director, Design
Caltrans, District 8

PENDING APPROVAL

Signature Approval of the Draft Initial Study/Environmental Assessment

Attachment 11

Utility Exhibits

Attachment 12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

REDLANDS Blvd

STATE ROUTE 60 WESTBOUND

STATE ROUTE 60 EASTBOUND

MATCH LINE "SR60" Sta 455+50
SEE EU-2

LEGEND

gs	SCG 4" PE PIPE
tv	TWC (OH)
fo	VERIZON FIBER OPTIC
w	EMWD DOMESTIC WATER
rcw	EMWD RECLAIMED WATER
s	EMWD SEWER
e	SCE - 115 kV
e	SCE - 12 kV
e	MORENO VALLEY ELECTRIC
sd	RCFC & WCD STORM DRAIN
	MWD INLAND FEEDER PIPELINE

EXISTING UTILITIES

SR-60 / WORLD LOGISTICS CENTER PARKWAY

SCALE: 1" = 100'

EU-1

REVISED BY	H. SALCEDO	CONSULTANT FUNCTIONAL SUPERVISOR	R. YOUNG
DATE REVISED	R. RATZLAFF	CALCULATED-DESIGNED BY	
		CHECKED BY	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 05-NOV-2018
TIME PLOTTED => 09:26

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 08130001090ea001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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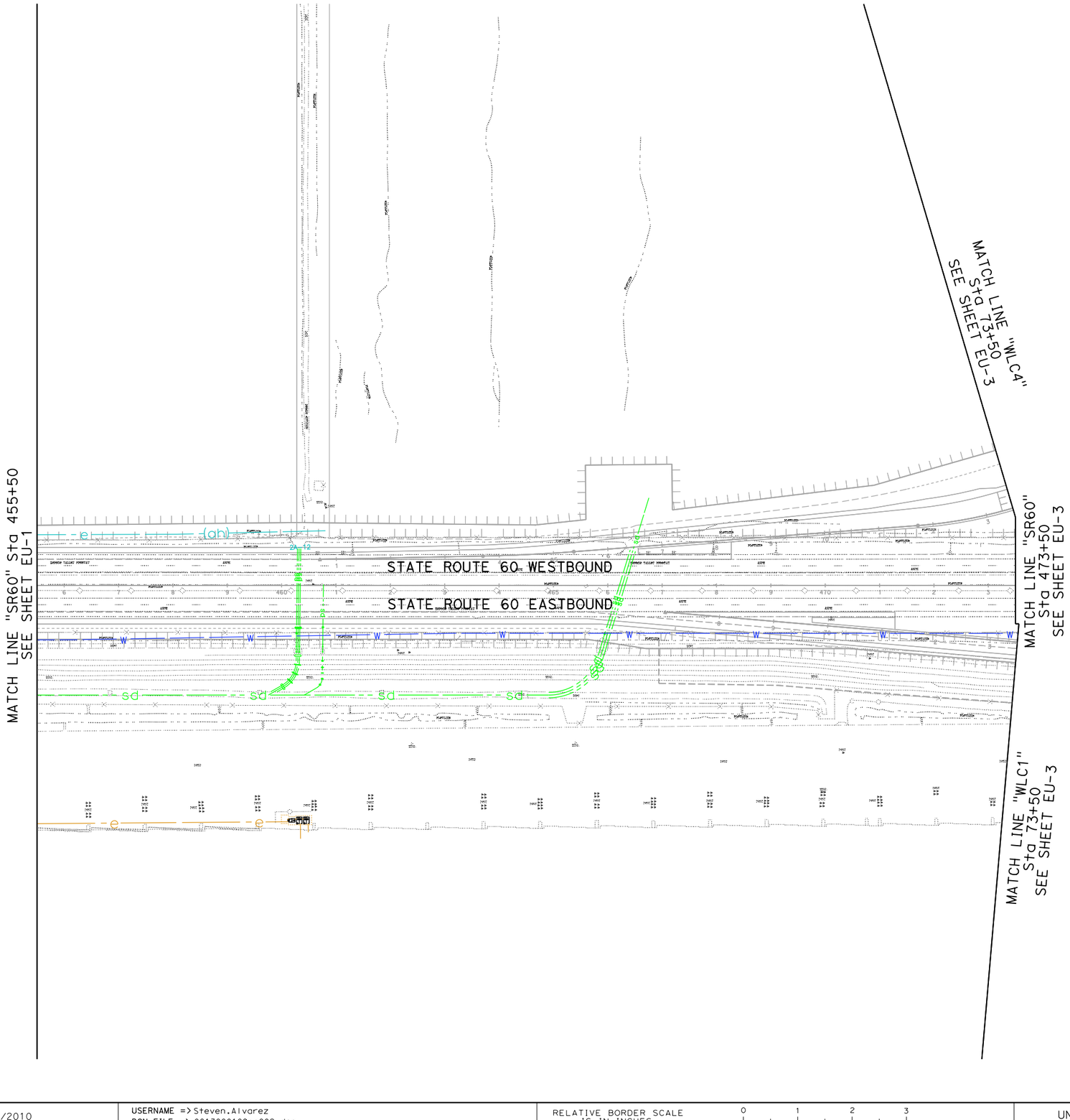
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



EXISTING UTILITIES

SR-60 / WORLD LOGISTICS CENTER PARKWAY

SCALE: 1" = 100'

EU-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY	DATE REVISED

LAST REVISION DATE PLOTTED => 05-NOV-2018
00-00-00 TIME PLOTTED => 09:26

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UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

MATCH LINE "WLC" Sta 208+50
SEE EU-5

MATCH LINE "WLC4"
Sta 73+50
SEE EU-2

MATCH LINE "SR60"
Sta 497+50
SEE EU-6

MATCH LINE "WLC1"
Sta 473+50
SEE EU-2

MATCH LINE "WLC1"
Sta 73+50
SEE EU-2

MATCH LINE "WLC3"
Sta 91+50
SEE EU-6

STATE ROUTE 60 WESTBOUND

STATE ROUTE 60 EASTBOUND

THEODORE St

VALLEY-MAYBERRY-MORENO-VISTA
52601

MATCH LINE "WLC" Sta 192+50
SEE EU-4

EXISTING UTILITIES

SR-60 / WORLD LOGISTICS CENTER PARKWAY

SCALE: 1" = 100'

EU-3

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: H. SALCEDO
CHECKED BY: R. RATZLAFF
CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

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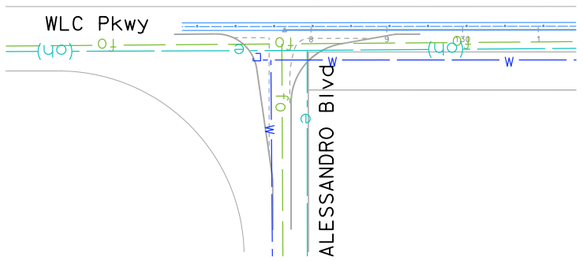
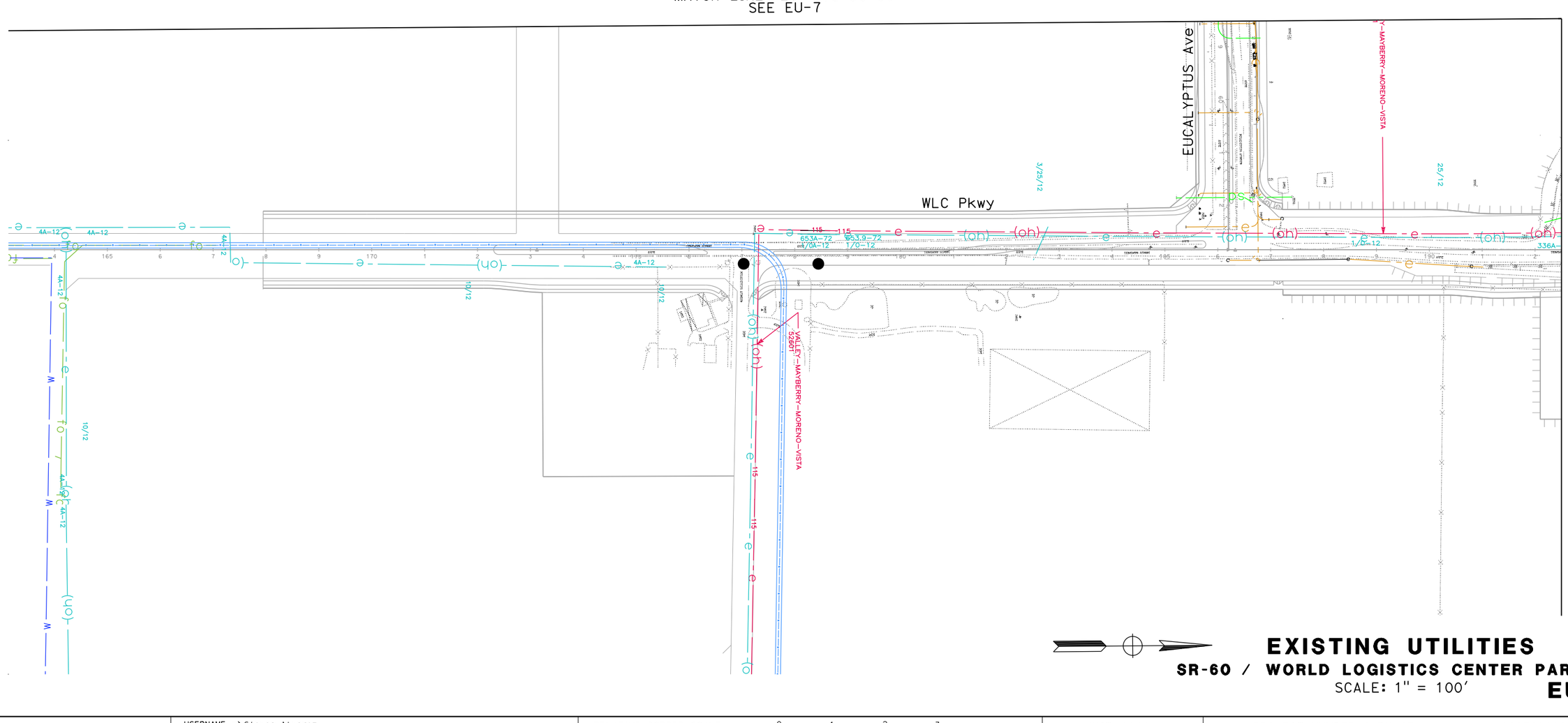
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



WLC Pkwy AND ALESSANDRO Blvd

MATCH LINE "EU" Sta 58+50
SEE EU-7



EXISTING UTILITIES

SR-60 / WORLD LOGISTICS CENTER PARKWAY

SCALE: 1" = 100'

EU-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONSULTANT FUNCTIONAL SUPERVISOR: R. YOUNG

CALCULATED-DESIGNED BY: H. SALCEDO

CHECKED BY: R. RATZLAFF

REVISED BY	DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 05-NOV-2018
TIME PLOTTED => 09:26

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 0813000109ea004.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

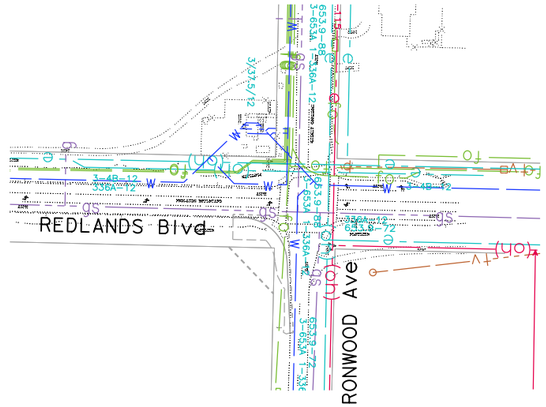
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
XXX
No. XXX
CIVIL
STATE OF CALIFORNIA

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

MICHAEL BAKER INTL
3536 CONCOURS
SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552



REDLANDS Blvd AND IRONWOOD Ave

EXISITING UTILITIES

SR-60 / WORLD LOGISTICS CENTER PARKWAY

SCALE: 1" = 100'

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CALCULATED-DESIGNED BY	H. SALCEDO
CONSULTANT FUNCTIONAL SUPERVISOR	CHECKED BY	R. RATZLAFF
R. YOUNG	REVISED BY	DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 05-NOV-2018
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BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 08130000109ea005.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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SUITE 100
ONTARIO, CA 91764

CITY OF MORENO VALLEY
14177 FREDERICK STREET
MORENO VALLEY, CA 92552

GILMAN SPRINGS Rd

ALESSANDRO Blvd

ALESSANDRO Blvd AND GILMAN SPRINGS Rd

MATCH LINE "SR60" Sta 497+50
SEE L-3

MATCH LINE "WLC3" Sta 91+50
SEE L-3

STATE ROUTE 60 WESTBOUND

STATE ROUTE 60 EASTBOUND

EXISITING UTILITIES

SR-60 / WORLD LOGISTICS CENTER PARKWAY

SCALE: 1" = 100'

L-6

REVISED BY	
DATE REVISED	
CALCULATED-DESIGNED BY	H. SALCEDO
CHECKED BY	R. RATZLAFF
CONSULTANT FUNCTIONAL SUPERVISOR	R. YOUNG
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	Caltrans

LAST REVISION 00-00-00
DATE PLOTTED => 05-NOV-2018
TIME PLOTTED => 09:27

BORDER LAST REVISED 7/2/2010

USERNAME => Steven.Alvarez
DGN FILE => 08130001090ea006.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000

PROJECT NUMBER & PHASE 08130001090

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Riv	60	20.0-22.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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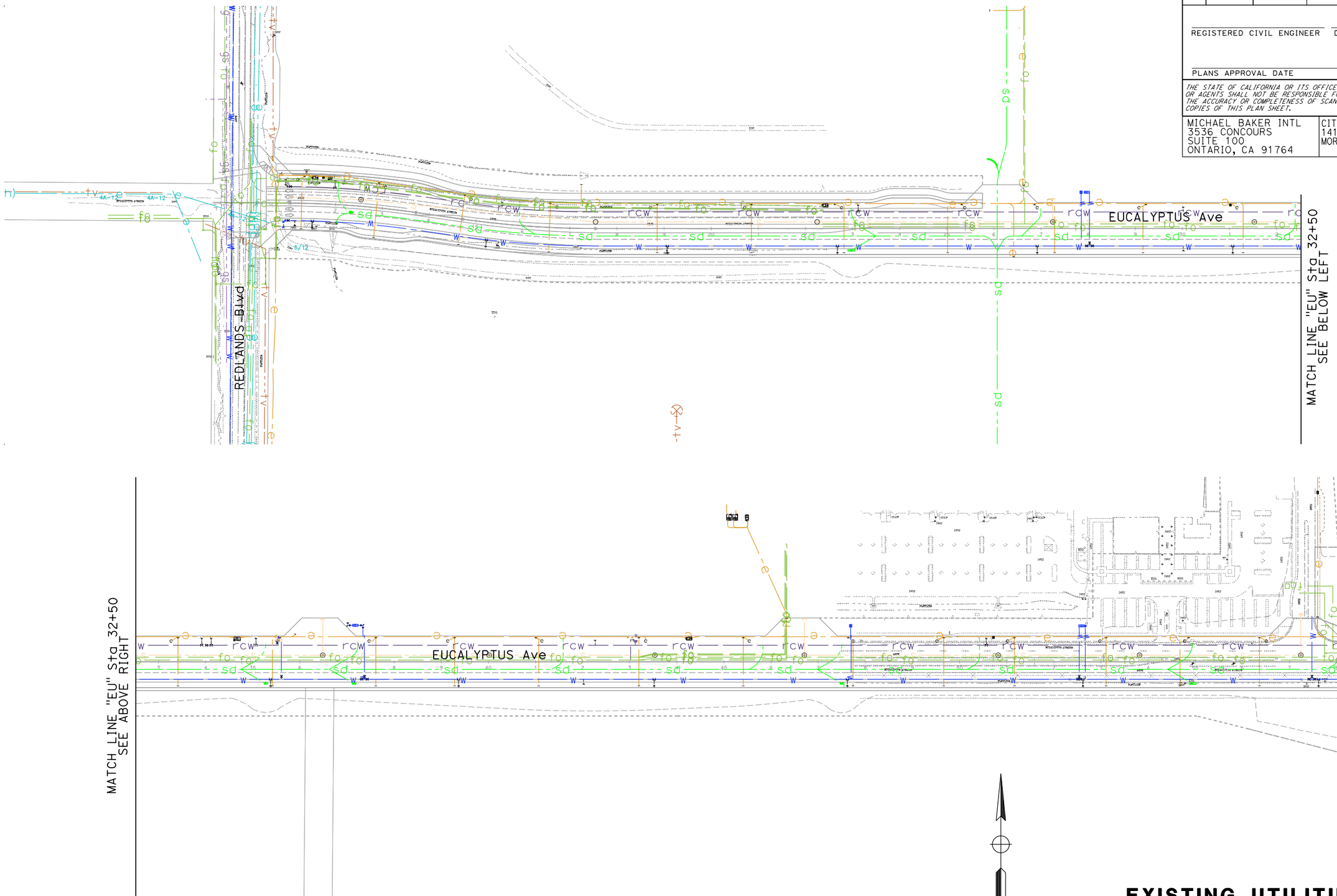

EXISTING UTILITIES

SR-60 / WORLD LOGISTICS CENTER PARKWAY

SCALE: 1" = 100'

L-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	Caltrans
CONSULTANT FUNCTIONAL SUPERVISOR	R. YOUNG
CALCULATED-DESIGNED BY	H. SALCEDO
CHECKED BY	R. RATZLAFF
REVISED BY	
DATE REVISED	

LAST REVISION 00-00-00 | DATE PLOTTED => 05-NOV-2018 | TIME PLOTTED => 09:27

BORDER LAST REVISED 7/2/2010 | USERNAME => Steven.Alvarez | DGN FILE => 0813000109ea007.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 08130001090

Project Risk Register

Attachment 13

LEVEL 2 - RISK REGISTER		Project Name:	SR-60/WLC Pkwy			DIST- EA	08-0M590	Project Manager	Elaheh Hadipour							
Risk Identification							Risk Assessment						Risk Response			
Status	ID #	Type	Category	Title	Risk Statement	Current status/assumptions	Probability	Cost Impact	Cost Score	Time Impact	Time Score	Rationale	Strategy	Response Actions	Risk Owner	Updated
Active	1	Threat	ROW	Right of Way Acquisition Delays	Property acquisitions required from MWD	-	2-Low	2 -Low	4	4 -Moderate	8	Do not anticipate risk occurring	Mitigate	Resolve objections to Right of Way acquisition in a timely manner.	R/W Manager	11/5/2018
Active	2	Threat	PM	Lack of Project Funding	Allocation of funds for the construction of the project.	Construction is not yet fully approved	1-Very Low	1 -Very Low	1	16 - Very High	16	Do not anticipate risk occurring	Accept	Rescope the project to reduce cost to meet available funds.	Project Manager	11/5/2018
Active	3	Threat	Design	Utility Relocation Difficulties	Relocation of OH power lines could impact schedule and/or cost.	There is an OH Edison Line along/above the existing WLC Pkwy Bridge.	3-Moderate	4 -Moderate	12	8 -High	24	Edison Line will need to be relocated, mitigative action will need to be taken.	Mitigate	Work with Utility agency to find solution and/or agreement.	Project Manager	11/5/2018
Active	4	Threat	DES	Aesthetic Plan	Proposed aesthetics may require additional approval by Caltrans and City.	-	2-Low	2 -Low	4	8 -High	16	0	Mitigate	Incorporate the City's Route 60 Corridor Master Plan of Aesthetics and Landscaping (Aug 2010) to project aesthetics.	Project Manager	11/5/2018
Active	6	Threat	Organizational	World Logistics Center (WLC)	WLC is a proposed development, may influence the timing and public input of SR-60/WLC Pkwy. May also affect stage construction and detour plan	Public comments may delay project	3-Moderate	2 -Low	6	4 -Moderate	12	Traffic Study and geometric design accommodates current WLC Plan project circulation and City Council meetings	Mitigate	-	Project Manager	11/5/2018
Active	7	Threat	Organizational	Local Communities oppose project	Public may assume SR-60/WLC Pkwy is needed for WLC project	-	3-Moderate	2 -Low	6	4 -Moderate	12	Traffic Study and geometric design accommodates current WLC Plan project circulation and City Council meetings	Mitigate	Public outreach meetings	Project Manager	11/5/2018
Active	10	Threat	Environmental	Project may encroach into a floodplain or a regulatory floodway	Project encroaches in a DWR Awareness Floodplain boundary	Awareness Floodplains within Unincorporated Riverside County are regulated as floodplains by Riverside County Flood Control and Water Conservation District (RCFC&WCD). Revisions to the Awareness Floodplain boundaries must be processed as a map revision through RCFC&WCD. Processing map revisions could have a schedule impact.	5-Very High	2 -Low	10	2 -Low	10	Will process map revision.	Mitigate	-	Design Manager	11/5/2018
Active	14	Threat	Organizational	Political factors or support for project changes	City Management may oppose project	-	3-Moderate	2 -Low	6	2 -Low	6	Do not anticipate risk occurring	Mitigate	Public outreach and City Council Sessions	Project Manager	11/5/2018
Active	16	Threat	Design	New or revised design standard	-	-	1-Very Low	2 -Low	2	2 -Low	2	Will update design as needed	Accept	-	Design Manager	11/5/2018
Active	20	Threat	Construction	Closing of IC for 4 month duration of construction	As a result of the raised profile, the existing IC may be closed for approximately 4 months during construction	Ramp Closure Study approved Existing ramps to be open during loop ramp construction	5-Very High	4 -Moderate	20	16 - Very High	80	IC to be closed during construction	Mitigate	-	Design Manager	11/5/2018
Active	21	Threat	PM	Federal Funds Timing	Applied federal funds to project and process E-76 through Local Assistance	-	1-Very Low	1 -Very Low	1	4 -Moderate	4	Federal Funds delegated, risk mitigated	Accept	-	Project Manager	11/5/2018
Active	22	Threat	PM	Change in City Council Direction/Staff	Change in the Moreno Valley City Council direction will cause delay in the project	Maintain communication with City Council throughout the project	5-Very High	16 - Very High	80	16 - Very High	80	Maintain communication with City Council throughout the project	Mitigate	-	Project Manager	11/5/2018
Active	23	Threat	R/W	Right of Way Acquisition Delays	Potential condemnation	-	3-Moderate	8 -High	24	4 -Moderate	12	Do not anticipate risk occurring	Avoid	-	Project Manager	11/5/2018
Active	24	Threat	Design	Design Standards	No approval of non-standard bold face and underline standards	Early coordination with geometrician	2-Low	1 -Very Low	2	4 -Moderate	8	Do not anticipate risk occurring	Mitigate	-	Design Manager	11/5/2018
Active	25	Threat	Design	Fault investigation	Results of investigation may increase structure costs	Testing to occur during final design	1-Very Low	4 -Moderate	4	2 -Low	2	Do not anticipate risk occurring	Mitigate	-	Project Manager	11/5/2018
Active	26	Threat	Environmental	MWD spoil investigation	Spoil investigation may result in hazardous waste contamination	MWD spoil investigation was completed, results are pending.	2-Low	8 -High	16	8 -High	16	Do not anticipate risk occurring	Avoid	-	Project Manager	11/5/2018
Active	27	Threat	PM	Stakeholders	Stakeholders request late changes to the project	-	2-Low	1 -Very Low	2	4 -Moderate	8	Do not anticipate risk occurring	Mitigate	-	Project Manager	11/5/2018
Active	28	Threat	PM	Stakeholders	New stakeholders emerge and request new/additional work	-	1-Very Low	4 -Moderate	4	4 -Moderate	4	Do not anticipate risk occurring	Mitigate	-	Project Manager	11/5/2018
Active	29	Threat	Environmental	Permits	New information is required for permits	-	1-Very Low	1 -Very Low	1	4 -Moderate	4	Will comply to new permit	Accept	-	Project Manager	11/5/2018
Active	30	Threat	Environmental	Environmental	Environmental regulations change	-	1-Very Low	1 -Very Low	1	4 -Moderate	4	Do not anticipate risk occurring	Mitigate	-	Project Manager	11/5/2018
Active	31	Threat	Design	Special Bridge Aesthetics Design Variation	The project may include special bridge aesthetics that can impact the schedule and cost of the project	-	2-Low	3 -Low	6	9 -High	18	Design variations will require re-submittals of some technical studies in future phases once aesthetics are defined.	Accept	Begin early coordination with Caltrans Structures	Project Manager	11/5/2018

LEVEL 2 - RISK REGISTER		Project Name:	SR-60/WLC Pkwy		DIST- EA	08-0M590	Project Manager	Elaheh Hadipour						
Risk Identification						Risk Assessment						Risk Response		
Status	ID #	Type	Category	Title	Risk Statement	Current status/assumptions	Probability	Cost Impact	Cost Score	Time Impact	Time Score	Rationale	Strategy	Response Actions	Risk Owner	Updated
Active	34	Threat	Design	Possible conflict with Truck Lane project EA 0N69U	EA 0N69U SR-60 Truck Lanes project is scheduled to complete construction in November 2022. The project will reconstruct the mainline roadway with rigid pavement through the proposed project limits and may affect the current schedule and design.	EA 0M590 is currently in PA/ED and subsequent project phases are not funded.	1-Very Low	2 -Low	2	2 -Low	2	Proposed project improvements will be coordinated through PS&E with truck lane project and construction is anticipated to begin in 2022 at the earliest.	Accept	Accept EA 0N69U improvements and coordinate design in PS&E.	Project Manager	7/29/2019
Active	35	Threat	Design	EB Off-Ramp Right-of-Way Location	Proposed right-of-way is placed at the top of slope which may have a low likelihood for approval from Design Oversight which may cause a delay in circulation.	The PDT, at the September 2019 PDT meeting, agreed to schedule a focus meeting after circulation of the environmental document to discuss right-of-way placement along the EB off-ramp.	4-High	2 -Low	8	2 -Low	8	Design oversight commented / noted (second DPR review) that the proposed right-of-way ought to be placed at the toe of slope and a 10' maintenance access path be provided.	Mitigate	Team will schedule a focus meeting to discuss placement and mitigate potential approval delays.	Project Manager	9/20/2019
Retired	5	Threat	Design	Non-Standard Left Shoulder on WB SR-60	As a result of adding an auxiliary lane to westbound SR-60, Caltrans HDM requires a minimum left shoulder width of 10 feet. The existing shoulder is 5-6 feet wide, and will not be widened as part of this project.	The auxiliary lane shoulder will be 10-feet wide meeting standards. The risk is retired.	1-Very Low	1 -Very Low	1	1 -Very Low	1	10-foot shoulder. Risk retired.	Avoid	Avoid design exception by constructing standard shoulder.	Design Manager	12/4/2019
Retired	8	Threat	Environmental	Environmental clearance for staging or borrow sites required	Raised profile may require large import	The City stock pile borrow site will be included	1-Very Low	4 -Moderate	4	4 -Moderate	4	Do not anticipate risk occurring	Mitigate	Include borrow site in environmental clearance	Design Manager	11/5/2018
Retired	9	Threat	Environmental	Historic Site	Potential historic places within project limits	No historic properties in project limits	2-Low	2 -Low	4	2 -Low	4	Risk avoided	Avoid	Cultural studies were negative	Design Manager	11/5/2018
Retired	11	Threat	Organizational	Changes to storm-water requirements	Final design level requirements in PA/ED SWDR	-	3-Moderate	2 -Low	6	2 -Low	6	Will comply with requirements	Mitigate	-	Design Manager	11/5/2018
Retired	12	Threat	Organizational	Increase in material cost due to market forces	Unpredictable economic conditions	-	2-Low	2 -Low	4	2 -Low	4	Do not anticipate risk occurring	Accept	-	Project Manager	11/5/2018
Retired	13	Threat	Organizational	Threat of lawsuits	WLC may undergo lawsuits	SR-60/WLC Pkwy design not dependant on WLC.	3-Moderate	2 -Low	6	2 -Low	6	SR-60/WLC Pkwy design not dependent on WLC	Mitigate	-	Project Manager	11/5/2018
Retired	15	Threat	Design	Unforeseen design exceptions required	Design exceptions have been evaluated	-	1-Very Low	2 -Low	2	2 -Low	2	Do not anticipate risk occurring	Accept	-	Design Manager	11/5/2018
Retired	17	Threat	Design	Bridge is a habitat to bats or other species requiring mitigation or seasonal construction	-	Bats are currently not present	1-Very Low	2 -Low	2	2 -Low	2	Do not anticipate risk occurring	Mitigate	Pre-construction surveys will be performed	Design Manager	11/5/2018
Retired	18	Threat	Design	Delay due to traffic management and lane closure for geotechnical subsurface exploration	Geotechnical work plan to be created	Geotechnical work plan has been completed for this phase of the project.	1-Very Low	2 -Low	2	1 -Very Low	1	Do not anticipate risk occurring	Mitigate	-	Project Manager	11/5/2018
Retired	19	Threat	Construction	Buried man-made objects	Native American Consultation to be initiated	Native American consultation has been completed for this project.	1-Very Low	2 -Low	2	2 -Low	2	Do not anticipate risk occurring	Mitigate	-	Project Manager	11/5/2018
Retired	32	Threat	Design	Traffic Study	Prepare new Traffic Study due to a change In exisiting volumes greater than 10%	Forecasted volumes are lower than the previous report. Report approved.	2-Low	4 -Low	8	10 -High	20	Coordinate with Caltrans on Traffic Study Updates	Accept	-	Design Manager	11/5/2018
Retired	33	Threat	Environmental	Cultural APE	Update to APE boundary to include detour route may extend cultural consultation and reviews	Native American consultation has been completed for this project.	2-Low	5 -Low	10	11 -High	22	-	Accept	-	Project Manager	11/5/2018