07 -LA - 60, PM R23.3/R26.5 07-LA-57, PM R4.3/R4.5 & R4.5/R4.8 EA-279100 HE-12 September 2013



PROJECT REPORT

 SR-60

 From
 SR-57/SR-60 West Interchange

 To
 1.1 mile East of SR-57/SR-60 East Junction

The Right-of-Way Data Sheet was completed by a consultant. I have reviewed the right-of-way information contained in this Project Report and the Right-of-Wey Data Sheet attached hereto, and find the data to be complete as to form and procedures only. No inferences or assertions are made as to the validity of the data or the values implied by the W Data Sheets.

Andrew P. Nierenberg, Deputy District Director, Right-of-Way APPROVAL RECOMMENDED BY: Jiwanjit Palaha Project Manager -25-13 APPROVED BY: Greg-Farr Date Deputy District Director, Division of Design

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

REGISTERED CIVIL ENGINEER

9/26/2013 DATE



Table of Contents

INTRODUCTION	1
RECOMMENDATION	1
BACKGROUND	1
NEED AND PURPOSE	6
 A. Problem, Deficiencies, Justification B. Regional & System Planning C. Traffic 	
ALTERNATIVES	17
A. Viable AlternativesB. Rejected Alternatives	17 39
CONSIDERATIONS REQUIRING DISCUSSION	
 A. Hazardous Waste B. Value Analysis C. Resource Conservation D. Right-of-way Issues E. Environmental Issues F. Air Quality Conformity G. Title VI Considerations H. Noise Abatement Decision Report 	
OTHER CONSIDERATIONS AS APPROPRIATE	
 A. Public Hearing Process. B. Route Matters	
PROGRAMMING	
PEVIEWS	
PROIFCT PERSONNEL	
LIST ATTACHMENTS	
	INTRODUCTION RECOMMENDATION

1. INTRODUCTION

The City of Industry and the city of Diamond Bar (Diamond Bar), in cooperation with the California Department of Transportation (Caltrans), propose freeway improvements to the State Route (SR) 57/SR-60 confluence at the Grand Avenue interchange in Los Angeles County. The primary purpose of the proposed project is to improve traffic operations and safety on SR-57 and SR-60 at the Grand Avenue interchange. Portions of the proposed project are located within City of Industry and Diamond Bar (the City), with the project limits on SR-60 from 0.4 miles east of Brea Canyon Rd to 0.5 miles east of Diamond Bar Blvd, and on SR-57 from 0.8 miles south of Sunset Blvd to 1.2 miles north of Pathfinder Road.

This Project Report (PR) is prepared to address the need for improvements on SR-60 and SR-57, herein referred to as "the Confluence Project". The preferred alternative (Alternative 3) proposes constructing a new eastbound SR-60 bypass off-ramp to Grand Avenue, a new eastbound bypass connector to SR-60, widening Grand Avenue from Golden Springs Drive to the westbound SR-60 on and off-ramps, reconstructing the Grand Avenue Overcrossing, and reconfiguring the eastbound and westbound ramps at Grand Avenue, including adding a southbound Grand Avenue to eastbound SR-60 loop on-ramp. The project would accommodate the projected traffic volume in the 2008 regional Southern California Association of Governments (SCAG) model for the future year 2037.

The project cost is estimated at \$233.5 million (in 2013), which includes \$38.8 million (in 2017) for right-of-way and utility relocation, and \$38.9 million (in 2013) in support costs. The project is proposed to be funded by a mixture of local, state, and Federal funds in fiscal years 2013/2014 to 2017/2018. This project has been assigned a Project Development Category 4A because it requires substantial right-of-way with no amendment to the existing freeway agreement.

2. RECOMMENDATION

It is recommended that the project be approved using the preferred alternative and the project proceed to the design phase. The affected local agencies (Diamond Bar and City of Industry) have been consulted with respect to the recommended plan, their views have been considered, and they are in general accord with the plan as presented.

3. BACKGROUND

A. Project History

A Project Study Report (PSR) was approved on March 27, 2009 for the conceptual interchange modification of SR-60 between the SR-57/SR-60 West Junction and the SR-57/SR-60 East Junction. The PSR identified the westbound SR-60 slip on-ramp from Grand Avenue as the first phase of the project as it was common to all the build alternatives in the PSR, and has independent utility. A Project Report for the westbound SR-60 slip on-ramp (EA255100) was prepared by the City and approved by Caltrans on September 12, 2011. The PSR also identified the westbound the project as it was commended they be studied further.

beginning of the project on SR-60 as postmile R23.7, to more accurately reflect the construction limits of the build alternatives evaluated in this Project Report, the beginning of the project has been changed to postmile R23.3.

B. Community Interaction

The Notice of Preparation of a Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) for the project was advertised to the public on August 4, 2009. A public scoping meeting was held by Caltrans at the Diamond Bar Community center on September 2, 2009. The scoping meeting provided the public with an opportunity to review the three alternatives in the PSR, and allow the public to ask questions and provide comments on the project.

The most common public concerns included the following:

- Concerns about noise, air quality and traffic during construction
- The project does not address the potential deficiency on NB SR-57
- Lack of a HOV off-ramp to Diamond Bar Boulevard
- Concern of the State using emminent domain to acquire the necessary right-of-way
- Cumulative impacts of traffic generated by other projects

The DEIR/EA disclosed the analysis of project impacts on the natural and human environment resulting from construction and project operation. Where applicable, mitigation measures were proposed to offset those impacts. The above concerns were considered during the project initiation document phase. Both build alternatives studied in the DEIR/EA minimize the impact to existing properties along SR-60 with no new right-of-way acquired from private residences.

The DEIR/EA was circulated to the public from February 19, 2013 to April 5, 2013. A public hearing was held on March 6, 2013. Notification of the public hearing was provided via newspaper and direct mailings.

C. Local Agency Coordination

Diamond Bar and City of Industry participated in the Project Development Team (PDT) meetings. Both cities were given the opportunity to review the traffic report and provide input on the proposed improvements. The two build alternatives were presented by the city staff to the Diamond Bar city council on April 3rd, 2012.

The proposed improvements of Grand Avenue Interchange on SR-60 have been coordinated with City of Industry, who is planning a large industrial and commercial development north of SR-60 adjacent to Grand Avenue. As a result of the coordination, Old Brea Canyon Road will be relocated to align with the proposed westbound on and off-ramps on SR-60 at Grand Avenue.

Caltrans has held several coordination meetings with City of Industry and Los Angeles County Department of Parks and Recreation (County). A list of meetings conducted so far with local elected officials and public agency staff members is provided below.

- **December 9, 2009:** Meeting with County Supervisor Don Knabe and County of Los Angeles Parks and Recreation staff to review the project alternatives and their impact on the community.
- January 26, 2010: Meeting with representatives from the Los Angeles County Department of Parks and Recreation and the cities of Diamond Bar and Industry to present the reconfiguration options for the golf course.
- April 27, 2010: Meeting with representatives from the Los Angeles County Department of Parks and Recreation to discuss the reconfiguration options in detail, with feedback received at the January 26, 2010, meeting.
- October 13, 2010: Meeting with Supervisor Knabe and staff to discuss the reconfiguration design's progress.
- June 8, 2011: Meeting with representatives from the Los Angeles County Department of Parks and Recreation to discuss the county's March 15, 2011, letter regarding golf course improvements.
- March 1, 2012: Meeting with representatives from the Los Angeles County Department of Parks and Recreation to discuss the Caltrans letter dated December 19, 2011, and request letter of concurrence from the County regarding golf course improvements. The County subsequently provided a concurrence letter on March 5, 2012.

At these meetings, various design options for reconfiguration of the golf course were presented to county representatives for their input. The mitigation measures presented in this report incorporate feedback received from the county.

D. Existing Facility

SR-60 (Pomona Freeway) is a major east-west freeway connecting Los Angeles County and Riverside County. SR-60 begins at Interstate 5 (I-5) near downtown Los Angeles and terminates at Interstate 10 (I-10) in Riverside County. The route spans approximately 68 miles.

SR-57 (Orange Freeway) is a major north-south freeway connecting Orange County and Los Angeles County. SR-57 begins at I-5 in Orange County and terminates at Interstate 210 (I-210) in Los Angeles County. The route spans approximately 25 miles. In City of Industry and Diamond Bar, SR-57 has a two mile break in the route at SR-60. SR-60 eastbound west of SR-57 has four general purpose lanes and one HOV lane. With three lanes from northbound SR-57, SR-60 becomes a wide freeway with seven general purpose lanes and two HOV lanes. The HOV lanes merge into a single lane at the Grand Avenue Overcrossing (OC). The rightmost lane from SR-57 exits at Grand Avenue, leaving six general purpose lanes and one HOV lane at Grand Avenue OC. The two lane Grand Avenue on-ramp merges into the outside lane of SR-60 approximately 1,500 feet before the northbound SR-57 connector split. A 7th lane is added 400 feet before the northbound SR-57 connector on the outside.

Westbound SR-60 consists of four general purpose lanes and one HOV lane as it approaches the confluence area. Southbound SR-57 consists of three lanes north of SR-60. The right lane on SR-57 is dropped as it merges with westbound SR-60. SR-60 continues as six general purpose lanes and one HOV lane beyond the SR-57 merge. Near the Grand Avenue OC, a second westbound HOV lane is added. The second HOV lane exits to the southbound SR-57 HOV connector. West of the Grand Avenue OC, three additional lanes are added to the right, for a

total of nine lanes at the southbound SR-57 split. The two right lanes continue to the Brea Canyon bypass off-ramp, three lanes connect to the southbound SR-57, and four lanes continue on SR-60.

Grand Avenue is a major north-south arterial highway with four through lanes throughout the project limits. The Grand Avenue interchange has full access to SR-60 and SR-57 freeways. The westbound SR-60 on and off-ramps at Grand Avenue form a "partial-cloverleaf" interchange with a westbound loop on-ramp to SR-60. The eastbound SR-60 on and off-ramps intersect Grand Avenue as a tight diamond interchange.

The existing right-of-way width along SR-60 from PM R23.3 to 23.8 varies from 250 feet to 580 feet. The existing right-of-way width along SR-60 from postmile R23.8 to 25.7 varies from 260 feet to 920 feet. The existing right-of-way width along SR-60 from postmile 25.7 to 26.5 varies from 240 feet to 1,100 feet. The existing right-of-way width along SR-57 from postmile R4.3 to R4.5 varies from 250 feet to 580 feet. The existing right-of-way width along SR-57 from postmile R4.5 to R4.8 varies from 240 feet to 1,000 feet.

Existing Drainage Conditions

Diamond Bar Creek is a major flood control facility along the north side of SR-60 through the Grand Avenue Interchange. The tributaries to Diamond Bar Creek are mostly located south of SR-60. There are three cross drain box culverts under SR-60 at stations 1260+50, 1279+00 & 1304+00, that carry water south of SR-60 to Diamond Bar Creek. Open concrete box culverts within along the south edge of SR-60 collect water from the golf course and from SR-60. These culverts feed into the cross drains. Drainage within Diamond Bar Golf Course consists of reinforced box culvers and open concrete ditches that feed the open concrete box culverts.

Existing Structures

Within the project limits there are eight (8) bridge structures consisting of overcrossings, undercrossings, and connectors. Each structure is described below.

- Golden Springs Drive Undercrossing Northbound SR-57 (BR 53-2149R) The existing bridge built in 1969 carries northbound SR-57 traffic over Golden Springs Drive. The 56 feet wide bridge is a reinforced concrete box supported on spread footings. Columns are located in the median of Golden Springs Drive and along the north side of the street at a skew of 64 degrees. The two span bridge has a total length of 321.7 feet.
- Route 57/60 HOV Connector (South) (BR 53-2918) Construction of the HOV connector was completed in 2008. The connector carries one HOV lane from northbound SR-57 to eastbound SR-60, and westbound SR-60 to southbound SR-57. The 56 feet wide bridge has 19 spans for a total length of 3,133 feet. The structure crosses over Golden Springs Drive and SR-60. The columns are founded on single shaft large diameter CIDH piles. Three bents consist of straddle bents, spanning the WB SR-60, limiting any future widening. The approach structure at the north end is supported on 385 feet long MSE walls.

- SR-57/60 Separation (South) (BR 53-2150L) The existing bridge is a five span, 593 feet long, cast in place concrete box girder structure constructed in 1969. The central frame (spans 3 and 4) spanning SR-60 is prestressed. The three column bents are founded on 70 ton precast concrete piles. The structure is 56 feet wide, carrying 3 lanes of southbound SR-57 traffic over the SR-60 at the south end of the project.
- Grand Avenue Overcrossing (BR53-1864) –The existing bridge was built in 1965. The structure carries three northbound and two southbound lanes, two left turn lanes, and sidewalks over SR-60. The bridge is a cast in place reinforced concrete box girder founded on four column bents and concrete pile supported footings. The 92 feet wide bridge has two spans, and a total length of 310 feet. In 1986 a seismic retrofit was constructed. In 1987 all four wingwalls were rehabilitated, adding new concrete walls founded on three 70 ton piles. Tieback walls were constructed in front of the abutments in a 2004 widening of the freeway to make room for the HOV lanes.
- Prospectors Road Undercrossing (BR 53-1873) The existing structure carries SR-60 in both directions and the southbound SR-57 connector over Prospectors Road. The three span bridge varies from 202 feet to 222 feet wide, is 133 feet long, founded on driven pile footings. There are two longitudinal expansion joints, one in the median of SR-60 and one between westbound SR-60 and the SR-57 SB connector. A soundwall was added on the bridge in 1992 along the outside edge of the southbound SR-57. A soundwall was added on the north edge of the bridge in 1993.
- Prospectors Road Undercrossing (BR 53-1873G) –The existing bridge is a three span reinforced concrete box girder structure carrying the northbound SR-57 connector over Prospectors Rd. Built in 1969, the 51 feet wide bridge carries 3 lanes of SR-57 traffic has a total length of 153 feet.
- SR 57/60 Separation (North) (BR 53-1905) The existing structure carries SR-60 over the SR-57 northbound connector at a very large skew. The bridge was constructed in 1969 as a tunnel structure, 74 feet wide by 630 feet long. The SR-57 connector is on a 3,000 foot radius curved alignment, with three lanes and a wide left shoulder which provides standard sight distance The abutment and columns are founded on spread footings. Minimum vertical clearance is 17'-0" with astructure depth of 4 feet. Approach slabs were reconstructed on SR-60 against the tunnel walls in 1996.
- Diamond Bar Blvd UC (BR 53-1899) The existing structure is a 156 foot long cast in place prestressed concrete box girder bridge built in 1969. The structure carries SR-60 and the Diamond Bar Blvd on-ramp over Diamond Bar Blvd. The bridge is single span and varying in width from 148feet to 156 feet. The abutment alignments are curved to match the Diamond Bar Blvd roadway radius of 1650feet. The approach slabs were reconstructed on SR-60 in 1996.

4. NEED AND PURPOSE

A. Problem, Deficiencies, Justification

The existing SR57/SR60 Confluence and the Grand Avenue interchange currently exhibit operational deficiencies in the morning (AM) and afternoon (PM) peak periods. The SCAG travel forecasting model estimates regional population and employment growth between the years 2008 and 2035 to result in traffic growth approximately 10% to 25% higher than the existing volumes for the SR-60 mainline and the recently constructed HOV lanes.

The existing AM and PM peak period Level of Service (LOS) for the eastbound SR-60 are D and F respectively. The existing AM and PM peak period LOS for the westbound SR-60 are F and D respectively. Forecast traffic in 2037 would result in further deterioration of freeway operations to an estimated LOS of F for both AM and PM peak periods on the mainline of the SR-57/SR-60 confluence in both the westbound and eastbound direction. Similarly, the LOS of the Grand Avenue interchanges range from B at the eastbound on and off-ramp to D at the westbound on and off-ramps. The 2037 future LOS are projected to be F. Therefore, improvements are needed at the SR-57/SR-60 confluence and Grand Avenue interchanges to accommodate expected traffic growth.

The purpose of the project is:

- Reduce congestion and delays on Grand Avenue from Golden Springs Drive to the interchange at SR-60.
- Reduce congestion and delays at the Grand Avenue interchange.
- Reduce congestion and delays on the SR-57/SR-60 freeway mainline.
- Reduce weaving within the SR-57/SR-60 confluence.
- Improve safety by reducing weaving movements and increasing weaving distances along the SR-57/SR-60 confluence.

B. Regional & System Planning

SR-60 is part of the National Highway System (NHS) and the State Freeway and Expressway (F&E) System.

i. State Planning

The SR-60 Ultimate Transportation Corridor (UTC) for 2025 as identified in the SR-60 Transportation Concept Report (TCR) was approved in July 2005. The TCR identified seven distinct segments for improvements on SR-60. The Grand Avenue interchange is within Segment 5 of the approved TCR report. The UTC for Segment 5 recommends six mixed-flow lanes, plus two HOV lanes, and two truck lanes. The existing SR-60 contains the six mixed-flow and two HOV lanes suggested in the UTC. It is anticipated that truck lanes, if required, would follow a separate corridor alignment outside the existing or proposed Caltrans right-of-way. However, space under Grand Avenue OC should provide adequate clearance for 8 lanes plus two HOV lanes in each direction with standard left and right shoulders.

ii. Regional and System Planning

The proposed project is identified in the 2012 Transportation Plan (RTP) prepared by the Southern California Association of Governments (SCAG).

In 2005, the Los Angeles County Metropolitan Transportation Authority (Metro), in conjunction with Caltrans, City of Industry and Diamond Bar, prepared a Project Feasibility Study (PFS). The PFS presented concepts to improve the SR-57 and SR-60 freeways. Specifically, the purpose of the PFS was to develop a long-range plan by evaluating concepts for improving the SR-57/SR-60 confluence. The study concluded that the primary issue was not a shortage of through lanes, but a high volume of weaving traffic within the interchange. The two sources of weaving are from vehicles exiting and entering Grand Avenue, and from missing the HOV connectors to SR-57 on the east end of the confluence. A subset of the study identified opportunities to improve interchange operations at Grand Avenue and reduce weaving between the mainline and the on- and off-ramps. The study also evaluated a concept for completing the missing connectors between the two freeway-to-freeway interchanges, from westbound SR-60 to northbound SR-57 and the reverse move from southbound SR-57 to eastbound SR-60, and the HOV connectors from northbound SR-57 to westbound SR-60 and the reverse move from eastbound SR-60 to southbound SR-57. Metro completed and approved the report in August 2010. The Grand Avenue interchange improvement alternatives have been coordinated with the concepts developed in the PFS.

iii. Local Planning

A new interchange on SR-60 at Lemon Avenue is planned. The interchange is located approximately two miles west of the Grand Avenue interchange in Diamond Bar. A Project Report for interchange improvements was approved by Caltrans District 7 on October 12, 2010. The Lemon Avenue project would not have a direct impact on the proposed Grand Avenue project.

A new slip on-ramp from Grand Avenue to westbound SR-60 is planned. A Project Report was approved by Caltrans District 7 on September 12, 2011. This planned Grand Avenue slip on-ramp has been incorporated into the proposed project build alternatives. The location and design of the new on-ramp retaining walls have been coordinated with the alternatives presented herein to minimize potential reconstruction.

In the vicinity of the project, the Industry Urban Development Agency is in the process of developing the 592-acre Industry Business Center (IBC). The project is consistent with the Environmental Impact Statement/ Environmental Impact (EIS/EIR) approved in 2004 and the supplemental EIS/EIR of 2008 covering the IBC. The project will continue to be coordinated with the IBC which plans to realign the Old Brea Canyon Rd and rename it Grand Crossing. Forecast traffic volumes from the planned IBC have been incorporated into all alternatives of the traffic report.

The alternatives evaluated in this project report adhere to City of Industry's long range plan to improve traffic circulation along Grand Avenue.

C. Traffic

KOA Corporation developed a Traffic Report (dated December 2011) to evaluate the existing and forecast future conditions in the vicinity of the SR-57/SR-60 Confluence project. Three alternatives including a No-Build alternative were assessed for operational performance. Each of the three alternatives was analyzed for level of service and delays in the existing year (2009), opening year (2017), and horizon year (2037).

i. Existing Traffic Data

Existing turning movement volumes for the AM and PM peak periods were collected for the project intersections in February 2008 and extrapolated to the project initation year, 2009. The 2009 Average Daily Traffic (ADT) volume for Grand Avenue is shown in Table 1.

	Average Daily Traffic	AM Peak Hour	PM Peak Hour
Grand Avenue, North of SR-60 WB Ramps	30,920	3,092	2,861
Grand Avenue, Between SR-60 WB Ramps and SR- 60 EB Ramps	31,500	3,150	2,626
Grand Avenue, South of SR-60 EB Ramps	27,500	2,750	2,569
SR-60 Freeway west of SR-57	213,000	9,867	10,569
SR-60 Freeway between Grand Ave Ramps	340,000	18,204	18,370
SR-60 Freeway east of SR-57	223,000	10,987	11,851
SR-57 South of SR-60	202,000	10,379	9,955
SR-57 North of SR-60	129,000	8,054	13,812

Table 1 - Existing 2009 Traffic Volumes*

* Volumes include both directions (KOA 2011)

A truck count on SR-60 at Grand Avenue was conducted April 16, 2009. From the truck count and the Caltrans PeMS database for the week of April 20-24, the truck volumes as a percentage of the total volumes were developed, and are shown in Table 2 of the next page.

	% Trucks			
	EB	SB	WB	NB
Grand Avenue,		10%		10%
North of SR-60 WB Ramps				
Grand Avenue,		10%		10%
Between SR-60 WB Ramps and SR-60 EB Ramps				
Grand Avenue,		2%		2%
South of SR-60 EB Ramps				
SR-60 West of SR-57	6.2%		8%	
SR-60 Between Grand Ave Ramps	5.2%		8%	
SR-60 East of SR-57	5.2%		8.2%	
SR-57 South of SR-60		8.5%		2.4%
SR-57 North of SR-60		4.6%		8%
SR-60 off-ramp at Grand Ave	5.2%		8%	
SR-60 EB on-ramp at Grand Ave	5.2%		5.2%	

Table 2 - Existing Truck Volumes

Existing Weaving Conditions, Eastbound

Tables 3 and 4 show the results of the weaving level of service analysis for eastbound SR-60 and northbound SR-57 under existing conditions. The weaving analysis shows that the weave between Grand Avenue and the freeway split to the east contributes to a Level of Service F, in the PM peak period.

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	56	19	В
SR-57 SB Connector Ramp to HOV Lane Start	BF	60	17	В
HOV Lane Start to SR-57 NB Merge	BF	62	20	С
SR-57 NB Merge to Grand Ave Off-ramp	WS	61	21	С
Grand Ave Off-ramp to Grand Ave On-ramp	WS	52	29	D
Grand Ave On-ramp Merge Segment	WS	45	34	D
Grand Ave On-ramp Merge Lane Drop to Additional	WS	49	32	D
Lane Opening				
Additional Lane Opening to SR-57 NB Diverge	WS	56	23	С
SR-57 NB Diverge to Diamond Bar Blvd On-ramp	BF	61	20	С
PM				
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	57	20	В
SR-57 SB Connector Ramp to HOV Lane Start	BF	59	18	С
HOV Lane Start to SR-57 NB Merge	BF	61	22	С
SR-57 NB Merge to Grand Ave Off-ramp	WS	17	85	F
Grand Ave Off-ramp to Grand Ave On-ramp	WS	14	117	F
Grand Ave On-ramp Merge Segment	WS	14	208	F
Grand Ave On-ramp Merge Lane Drop to Additional	WS	24	72	F
Lane Opening				
Additional Lane Opening to SR-57 NB Diverge	WS	47	32	D
SR-57 NB Diverge to Diamond Bar Blvd On-ramp	BF	61	23	С

Table 3 - Eastbound SR-60 Existing Traffic Conditions

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	60	22	С
SR-60 EB Merge to Grand Ave Off-ramp	WS	61	21	С
Grand Ave Off-ramp to Grand Ave On-ramp	WS	52	29	D
Grand Ave On-ramp Merge Segment	WS	45	34	D
Grand Ave Merge Lane Drop to Additional Lane	WS	49	32	D
Opening				
Additional Lane Opening to SR-60 Diverge	WS	56	23	С
SR-60 EB Diverge to 4-Lane Opening	BF	62	20	С
PM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	18	89	F
SR-60 EB Merge to Grand Ave Off-ramp	WS	17	85	F
Grand Ave Off-ramp to Grand Ave On-ramp	WS	14	117	F
Grand Ave On-ramp Merge Segment	WS	14	108	F
Grand Ave Merge Lane Drop to Additional Lane	WS	24	72	F
Opening				
Additional Lane Opening to SR-60 Diverge	WS	47	32	D
SR-60 EB Diverge to 4-Lane Opening	BF	61	25	С

|--|

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Field observations indicate that there is a large queue of eastbound vehicles that regularly extend back for 10 miles on SR-60 and for 5 miles on SR-57 during the PM peak. Analysis shows that the queue may be primarily due to the configuration of the NB -57 connector, and secondarily due to the SR-60 traffic weave to Grand Avenue. The reduced lanes clearly cause congestion on the merged SR-57/60 segment in the project vicinity as traffic flow generally improves about 1,500 feet east of the Grand Ave interchange in the PM peak.

Existing Weaving Conditions, Westbound

Tables 5 and 6 show westbound and southbound existing weaving conditions for SR-60 and SR-57 traffic respectively. The tables indicate that both segments are at LOS "F" in the AM peak hour. The westerly segment (near SR-57 south leg) is at LOS "F" in the AM while the easterly segment (near SR-57 north leg) is at LOS "E" in the PM.

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS	
AM					
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	13	107	F	
Merge					
SR-57 Merge to Lane Drop	WS	17	83	F	
Lane Drop to Grand Ave On-ramp	WS	37	44	F	
Grand Ave On-ramp to Additional Lane Opening	WS	52	28	С	
Additional Lane Opening to SR-57 SB Diverge	WS	55	23	С	
SR-57 SB Diverge to HOV Lane Merge	BF	62	16	В	
PM					
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	61	17	В	
Merge					
SR-57 Merge to Lane Drop	WS	40	35	D	
Lane Drop to Grand Ave On-ramp	WS	54	26	С	
Grand Ave On-ramp to Additional Lane Opening	WS	61	21	С	
Additional Lane Opening to SR-57 SB Diverge	WS	61	18	В	
SR-57 SB Diverge to HOV Lane Merge	BF	62	17	В	

Table 5 - Westbound SR-60 Existing Traffic Conditions

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Table 6 - Southbound SR-57 Existing Traffic Conditions

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	13	109	F
Merge				
SR-60 WB Merge to Lane Drop	WS	17	83	F
Lane Drop to Grand Ave On-ramp	WS	37	44	F
Grand Ave On-ramp to Additional Lane Opening	WS	52	28	С
Additional Lane Opening to SR-60 WB Diverge	WS	55	23	С
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	60	34	D
PM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	53	31	Е
Merge				
SR-60 WB Merge to Lane Drop	WS	40	35	D
Lane Drop to Grand Ave On-ramp	WS	54	26	С
Grand Ave On-ramp to Additional Lane Opening	WS	61	21	С
Additional Lane Opening to SR-60 WB Diverge	WS	61	18	В
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	61	25	С

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Table 5 shows that in the AM peak hour the speed picks up after the SR-57 lane drop, indicating that merging traffic from SR-57 due to the short distance to the lane drop is contributing to the poor level of service. Table 6 indicates that in both the AM and PM peak hours the approach to the merge operates at a poor level of service, likely due to the lane drop on southbound SR-57.

Local Streets Analysis

LOS and delay queue length calculations along Grand Avenue were performed based on existing peak hour turning movement volumes. Table 7 shows the results of this analysis.

	AM Peak Hour			PM Peak Hour			
Intersection	Queue	Delay	Level of	Queue Length	Delay	Level of	
Intersection	Length ⁽¹⁾	(sec)	Service	(1)	(sec)	Service	
Grand Ave. at SR-60 Westbound Ramps	283 ft (WB)	42.2	D	192 ft (WB)	20.1	С	
Grand Ave. at SR-60 Eastbound Ramps	220 ft (EB)	16.2	В	88 ft (EB)	11.3	В	
Grand Ave. at Golden Springs Drive	349 ft (SB)	38.6	D	306 ft (SB)	54.0	D	

Table 7 – Grand Ave Existing 2009 Traffic Conditions

Note 1: 95th Percentile Queue lengths for critical approaches are given as indicated

ii. Forecasted Traffic Data

The traffic forecasts are based on the SCAG RTP 2008 Year 2035 Regional Conformity Model. The regional model includes all approved projects on the 2008 RTP planned to be completed by 2035, along with the projected socioeconomic changes in the region. The SCAG year 2035 model socio economic input was adjusted to account for project trips expected to be generated by the planned IBC project north of the freeway interchange, which were not already incorporated into the model by SCAG. The IBC project trip information was obtained from the approved 2004 EIR. Finally, the traffic forecast was then extrapolated out to 2037 by applying a growth rate of approximately 1% per year.

The build alternatives include additional auxiliary lanes and an additional eastbound SR-60 through lane, which may increase the capacity of the freeway within the project, attracting additional vehicles. To adequately forecast the potential volume change, the 2035 regional model geometry was revised to incorporate the proposed alternative 3 build modifications. The results of this model were then utilized in the build alternative traffic analysis.

Using the traffic growth provided by the regional models as described above, traffic analysis of the freeway mainline using VISSM and intersection analysis using SYNCHRO were prepared for the project horizon year (2037). Tables 8 through 13 summarize the level of service results in 2037 in the AM and PM peak hour conditions for the no-build scenario (alternative 1).

Table 8 - Intersection	Year 2037	Traffic Condit	ions for Alternative 1
-------------------------------	-----------	-----------------------	------------------------

	AM Peak Hour			PM Peak Hour		
Intersection	Queue	Delay	Level of	Queue Length	Delay	Level of
Intersection	Length ⁽¹⁾	(sec)	Service	(1)	(sec)	Service
Grand Ave. at SR-60 Westbound Ramps	1,005 ft	99.7	F	700 ft	178.9	F
Grand Ave. at SR-60 Eastbound Ramps	628 ft	81.9	F	268 ft	84.3	F
Grand Ave. at Golden Springs Drive	615 ft	111.6	F	673 ft	103.6	F

Note 1: 95th Percentile Queue lengths for critical approaches are given as indicated

		AM Peak Ho	our		PM Peak Hour	•	
Intersection		Queue	Delay	Level of	Queue Length	Delay	Level of
Intersection		Length ⁽¹⁾	(sec)	Service	(1)	(sec)	Service
Currend Asso at	NB	1,672 ft	107.0	F	646 ft	45.9	D
Grand Ave. at	SB	558 ft	37.4	D	1,793 ft	21.1	F
Off romp	EB	184 ft	73.7	Е	672 ft	301.3	F
On-ramp	WB	1,005 ft	152.8	F	700 ft	247.3	F
Intersection Averag	e	N/A	99.7	F	N/A	178.9	F
Grand Ave. at	NB	1,288 ft	118.4	F	1,140 ft	111.8	F
SR-60 Eastbound	SB	365 ft	22.4	С	736 ft	70.3	Е
Ramps	EB	628 ft	93.5	F	268 ft	40.2	D
Intersection Averag	e	N/A	81.9	F	N/A	84.3	F
	NB	1,364 ft	143.7	F	918 ft	132.7	F
Grand Ave. at Golden	SB	615 ft	71.0	Е	673 ft	87.7	F
Springs Drive	EB	339 ft	74.2	Е	654 ft	88.1	F
	WB	1,025 ft	131.3	F	777 ft	116.6	F
Intersection Average	e	N/A	111.6	F	N/A	103.6	F

 Table 9 - Detailed Intersection Year 2037 Traffic Conditions for Alternative 1

Note 1: 95th Percentile Queue lengths for critical approaches are given as indicated

Table 10 - Eastbound SR-60 Year 2037 Traffic Conditions, Alternative 1

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veb/Mi/Ln)	LOS
AM	Type	(mpn)		
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	48	31	D
SR-57 SB Connector Ramp to HOV Lane Start	BF	56	25	С
HOV Lane Start to SR-57 NB Merge	BF	56	30	D
SR-57 NB Merge to Grand Ave Off-ramp	WS	22	73	F
Grand Ave Off-ramp to Grand Ave On-ramp	WS	36	47	F
Grand Ave On-ramp Merge Segment	WS	38	42	Е
Grand Ave On-ramp Merge Lane Drop to Additional	WS	50	37	Е
Lane Opening				
Additional Lane Opening to SR-57 NB Diverge	WS	60	26	С
SR-57 NB Diverge to Diamond Bar Blvd On-ramp	BF	60	27	С
PM				
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	58	20	В
SR-57 SB Connector Ramp to HOV Lane Start	BF	59	20	В
HOV Lane Start to SR-57 NB Merge	BF	59	24	С
SR-57 NB Merge to Grand Ave Off-ramp	WS	14	98	F
Grand Ave Off-ramp to Grand Ave On-ramp	WS	12	124	F
Grand Ave On-ramp Merge Segment	WS	12	115	F
Grand Ave On-ramp Merge Lane Drop to Additional	WS	26	63	F
Lane Opening				
Additional Lane Opening to SR-57 NB Diverge	WS	51	28	С
SR-57 NB Diverge to Diamond Bar Blvd On-ramp	BF	61	24	С

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	13	116	F
SR-60 EB Merge to Grand Ave Off-ramp	WS	22	73	F
Grand Ave Off-ramp to Grand Ave On-ramp	WS	36	47	F
Grand Ave On-ramp Merge Segment	WS	38	42	Е
Grand Ave Merge Lane Drop to Additional Lane	WS	50	37	Е
Opening				
Additional Lane Opening to SR-60 Diverge	WS	60	26	С
SR-60 EB Diverge to 4-Lane Opening	BF	62	23	С
PM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	15	99	F
SR-60 EB Merge to Grand Ave Off-ramp	WS	14	98	F
Grand Ave Off-ramp to Grand Ave On-ramp	WS	12	124	F
Grand Ave On-ramp Merge Segment	WS	12	115	F
Grand Ave Merge Lane Drop to Additional Lane	WS	26	63	F
Opening				
Additional Lane Opening to SR-60 Diverge	WS	51	28	С
SR-60 EB Diverge to 4-Lane Opening	BF	62	22	С

 Table 11 - Northbound SR-57 Year 2037 Traffic Conditions, Alternative 1

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Table 12 - Westbound SR-60 Year 2037 Traffic Conditions, Alternative 1

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	9	115	F
Merge				
SR-57 Merge to Lane Drop	WS	21	95	F
Lane Drop to Grand Ave On-ramp	WS	27	55	F
Grand Ave On-ramp to Additional Lane Opening	WS	60	20	В
Additional Lane Opening to SR-57 SB Diverge	WS	61	18	В
SR-57 SB Diverge to HOV Lane Merge	BF	62	13	В
PM				
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	58	26	С
Merge				
SR-57 Merge to Lane Drop	WS	26	59	F
Lane Drop to Grand Ave On-ramp	WS	31	56	F
Grand Ave On-ramp to Additional Lane Opening	WS	60	25	С
Additional Lane Opening to SR-57 SB Diverge	WS	60	23	C
SR-57 SB Diverge to HOV Lane Merge	BF	61	20	C

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	11	115	F
Merge				
SR-60 WB Merge to Lane Drop	WS	21	95	F
Lane Drop to Grand Ave On-ramp	WS	27	55	F
Grand Ave On-ramp to Additional Lane Opening	WS	60	20	В
Additional Lane Opening to SR-60 WB Diverge	WS	61	18	В
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	61	28	С
PM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	13	114	F
Merge				
SR-60 WB Merge to Lane Drop	WS	26	59	F
Lane Drop to Grand Ave On-ramp	WS	31	56	С
Grand Ave On-ramp to Additional Lane Opening	WS	60	25	С
Additional Lane Opening to SR-60 WB Diverge	WS	60	23	С
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	60	31	D

Table 13 - Southbound SR-57 Year 2037 Traffic Conditions, Alternative 1

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Table 9 shows that by 2037 the intersections along Grand Avenue are projected to reach LOS F at all intersections in the morning and evening peak hours with average delays as much as 179 seconds. In the eastbound direction through the shared corridor, the speeds are projected to reduce from 14 MPH down to 12 MPH in the evening peak hour. Additionally traffic in the morning would slow from 61 mph down to 22 mph with a LOS of F by 2037.

iii. Accident Rates and Analysis

Traffic Accident Surveillance and Analysis System (TASAS) data was provided by Caltrans District 7. The data covers the 36-month period from July 1, 2008 through June 30, 2011. The table below provides the actual accident rates for fatal, fatal plus injury, and total accidents to the average rate for mainline per million vehicle miles, and for ramps and connectors per million vehicles.

Accident Summary										
T .			Total No.	AC (acc. /m	CTUAL R	ATE icle miles)	AVE (acc. /mil	RAGE RA	ATE le miles)	
Locat	ion	Post Mile	of Accidents	F	F+I	TOTAL	F	F+I	TOTAL	
Grand Avenue	Br No. 53-1864	R24.451	(Grand Ave would be included as part of the ramp data						
	WB Off- Ramp	R24.712	17	0.000	0.26	1.49	0.003	0.35	1.01	
Grand	WB On- Ramp	R24.551	6	0.000	0.09	0.55	0.003	0.24	0.72	
Ramps	EB Off- Ramp	R24.277	35	0.000	0.36	3.17	0.003	0.36	1.01	
	EB On- Ramp	R24.552	22	0.000	0.07	1.61	0.002	0.22	0.63	
	WB Off- Ramp	R25.876	21	0.000	0.60	1.59	0.003	0.35	1.01	
Diamond Bar Blyd	WB On- Ramp	R25.659	11	0.000	0.00	1.93	0.003	0.24	0.72	
Ramps	EB Off- Ramp	R25.440	6	0.000	0.18	1.07	0.003	0.35	1.01	
	EB On- Ramp	R25.706	12	0.000	0.00	0.99	0.002	0.22	0.63	
	NB57 to WB60	R4.160	14	0.000	0.14	0.64	0.004	0.16	0.49	
	SB57 to WB60	R25.372	4	0.000	0.01	0.06	0.003	0.11	0.32	
Connectors	WB60 to SB57	R23.884	32	0.000	0.08	0.37	0.004	0.16	0.49	
57/SR-60	NB57 to EB60	R23.708	16	0.000	0.06	0.19	0.003	0.11	0.32	
	EB60 to SB57	R23.252	19	0.000	0.33	0.91	0.005	0.13	0.38	
	EB60 to NB57	R25.157	9	0.000	0.01	0.13	0.004	0.16	0.49	
SR-60	WB	R23.173- R26.527	921	0.004	0.45	1.72	0.004	0.32	1.07	
517-00	EB	R23.173- R26.527	496	0.007	0.26	0.93	0.004	0.32	1.07	
SP 57	NB	R4.160- 4.519	99	0.000	0.85	3.99	0.003	0.24	0.77	
51-57	SB	R4.160- 4.519	19	0.000	0.20	0.77	0.004	0.25	0.82	
SP 57	NB	R4.518- 5.272	32	0.000	0.20	0.58	0.004	0.26	0.82	
SR-57	SB	R4.518- 5.272	72	0.00	0.36	1.30	0.004	0.26	0.82	

Table 14 - TASAS Accident Rate from July 2008 through June 2011

The summary in Table 14 provides a comparison to the average rates as provided in the TASAS reports. Based on the data provided, the following 12 locations have been identified with higher than average accident rates within the specified period:

- Westbound Grand Avenue Off-Ramp
- Eastbound Grand Avenue Off-Ramp
- Eastbound Grand Avenue On-Ramp
- Westbound Diamond Blvd Off-Ramp
- Westbound Diamond Blvd On-Ramp
- Eastbound Diamond Blvd Off-Ramp
- Eastbound Diamond Blvd On-Ramp
- Northbound SR-57 to Westbound SR-60
- Eastbound SR-60 to Southbound SR-57
- Westbound SR-60
- Northbound SR-57 approaching SR-60
- Southbound SR-57 approaching SR-60

Based on the data provided, the following five locations have been identified with higher than average injury rates:

- Westbound Diamond Blvd Off-Ramp
- Eastbound SR-60 to Southbound SR-57
- Westbound SR-60
- Northbound SR-57 approaching SR-60
- Southbound SR-57 approaching SR-60

Based on the data provided, one location was identified with higher than average fatality rates, which was eastbound SR-60.

The predominant collision types for the northbound SR-57 connector to westbound SR-60 and for the eastbound SR-60 to southbound SR-57 was hit object. Hit object collisions are typically associated with inadequate sight distance and inadequate shoulder.

The predominant collision type was rear-end for the other eleven locations listed above. Rearend collisions are typically associated with congestion.

5. ALTERNATIVES

A. Viable Alternatives

Two build alternatives were developed considering the project need, purpose, and surrounding environment. The decision regarding choosing a Preferred Alternative was made by the Project Development Team based on the merits of alternatives, consideration of environmental impacts, and public input provided through the environmental review process. Public and agency comments and any expressed concerns regarding the proposed build alternatives were given serious consideration. The preferred alternative is Alternative 3. Alternative 3 provides greater traffic operation improvements for the Grand Avenue Interchange to a greater extent than Alternatives 1 and 2. The additional impact to the golf course due to constructing Alternative 3 over Alternative 2 was not a concern expressed by the public, who did express support of Alternative 3 over Alternative 2. Further the County agrees to the mitigation features proposed by the project to minimize harm to the golf course. Alternative 3 was also selected as the preferred alternative because it provided a much greater improvement in operational traffic flow at a marginal increase in cost compared to Alternative 2. Although the No-Build Alternative would not result in the impacts that would occur under the build alternatives, this alternative would not achieve the identified objective of the project. The project study area would continue to experience unacceptable levels of service in the peak hours, which would only worsen over time because of projected local and regional growth. No changes to the project design or mitigation features were made as a result of the public comments.

i. Common Proposed Engineering Features

The two build alternatives, 2 and 3, have the following improvements in common:

For the two build alternatives, a new bypass off-ramp is proposed for eastbound SR-60 west of the southern/western SR-57/SR-60 interchange. The bypass off-ramp contains a single ramp lane that is barrier separated from the mainline freeway traffic until passing the exit gore of the Grand Avenue off-ramp from SR-57. Traffic from northbound SR-57 would have an optional exit to Grand Avenue. The SR-57 off-ramp lane would join the one lane bypass off-ramp to form a two lane off-ramp to Grand Avenue. The off-ramp would widen to three lanes at the final approach to the intersection at Grand Avenue. All three lanes that originated from northbound SR-57 would continue through the Grand Avenue Interchange.

The eastbound on-ramp from Grand Avenue would be built as an auxiliary lane that would exit to a new two-lane connector to eastbound SR-60 which would bypass the northbound 57 connector. The eastbound bypass connector would require a new overcrossing structure at Prospector Road and Diamond Bar Boulevard off-ramp and Diamond Bar Boulevard. The Diamond Bar Blvd on-ramp would be realigned to accommodate the new bypass connector.

In the westbound direction of SR-60, all three lanes of SR-57 would be maintained by extending the existing dropped lane on SR-57 for approximately 2,500 feet to the Grand Avenue off-ramp. This lane would exit to the Grand Avenue off-ramp. The adjacent right lane would be an optional exit to Grand Avenue, creating a two-lane exit ramp at Grand Avenue. The off-ramp would transition to five lanes at the Grand Avenue intersection. The interchange configuration for the westbound SR_60 at Grand Avenue would remain as a combination of partial cloverleaf. Widening of Grand Avenue to the east requires reconstruction of the loop on-ramp and corresponding relocation northward of the intersection with Grand Avenue.

Grand Avenue would be widened to four through lanes in each direction. Grand Avenue centerline would be shifted to the east as it crosses SR-60 in order to avoid a right-of-way acquisition from a vacant automobile dealership. The centerline shift would require realigning the eastbound loop on-ramp approximately 100 feet north of the existing intersection. The

intersection relocation would also require realigning westbound off-ramp and the Old Brea Canyon Road (to be renamed Grand Crossing Parkway) by the same distance.

The existing Grand Avenue Overcrossing (Br. No. 53-1864) does not have sufficient length to accommodate the proposed widening of SR-60. A new overcrossing would be required with longer span and higher vertical clearance that meets the design standard. Because of the longer span, the new overcrossing bridge would be deeper than the existing structure. This would require Grand Avenue profile be raised by 9 feet over the existing bridge, and transitioned back to the existing profile at the westbound off-ramp intersection to the north, and the Golden Springs Drive intersection to the south.

The widening of Grand Avenue would continue south to Golden Springs Drive. Golden Springs Drive would be widened to allow additional through lanes, double left-turn lanes, and one right-turn lane on three legs of the intersection of Grand Avenue and Golden Springs Drive. One right-turn lane would be provided on Grand Avenue on the northbound approach to Golden Springs Drive. Approximately 600 feet of Grand Avenue in the northbound direction south of the intersection at Golden Springs Drive would be reconfigured to accommodate three lanes in each direction.

A continuous pedestrian walkway is currently provided on the west side of Grand Avenue between Golden Springs Drive and Old Brea Canyon Road. Eight feet wide sidewalks would be provided on both sides of Grand Avenue, constructed from Golden Springs Drive to the new westbound ramp intersection.

ii. Alternative 3 Proposed Engineering Features

In addition to the above features, Alternative 3 would change the eastbound on and off-ramp configuration from a tight diamond to a partial cloverleaf interchange that includes a new eastbound loop on-ramp serving southbound Grand Avenue traffic. The partial cloverleaf on and off-ramps would eliminate the need for the existing southbound left turn lanes on Grand Avenue Overcrossing. In order to provide space for the new loop on-ramp, the off-ramp intersection with Grand Avenue would be shifted approximately 500 feet south of the existing intersection... The new eastbound loop on-ramp would join SR-60 as a new eastbound auxiliary lane. The existing eastbound slip on-ramp would be realigned to accommodate the widened Grand Avenue and the additional freeway lanes, and would merge into the eastbound auxiliary lane on SR-60.

The existing Grand Avenue Overcrossing would be replaced with a new overcrossing structure over SR-60, 136 feet-wide accommodating eight through lanes, a median and two eight-foot sidewalks.

iii. Alternative 2 Proposed Engineering Features

The main difference of Alternative 2 when compared to Alternative 3 is the eastbound SR-60 interchange at Grand Avenue. Alternative 2 would maintain the existing interchange configuration (compact-diamond) for the eastbound on and off-ramps on SR-60. The ramps would be relocated to provide room for the additional SR-60 through lane. A third lane would be added to the eastbound on-ramp. An auxiliary lane would be added connecting the relocated

eastbound SR-60 on-ramp from Grand Avenue to the new connector that bypasses the north/east SR-57/SR-60 interchange.

The existing Grand Avenue Overcrossing (Br. No. 53-1864) would be replaced with a new structure, 148 feet-wide accommodating ten lanes and eight foot sidewalk on both sides of the structure. The ten lanes would be striped for eight through lanes and two 450-foot-long double left turn lanes for the southbound Grand Avenue left turn to the eastbound on-ramp.

iv. Analysis of Alternatives

The build alternatives were evaluated against the purpose and need including operational efficiency, safety performance, constructability, cost effectiveness and impact to the environment. Alternative 3 improves the operational efficiency of both the mainline and Grand Avenue more than improvements realized by Alternative 2.

Alternative 3

Local Intersection Analysis

Local street intersection LOS was prepared using 2037 forecast volumes to assess the impact of the improvements along Grand Avenue. Operation along Grand Avenue at the intersections of the westbound on and off-ramps and the eastbound on and off-ramps through the intersections would be improved from LOS "F" with Alternative 1 to LOS "D" with this alternative for both AM and PM peak hours. The calculated trip delays on Grand Avenue would be improved by a factor of three at the westbound on and off-ramp intersection from 179 sec to 51.4 sec. A significant improvement can be seen at the eastbound off-ramp intersection in the PM peak hour, which would reduce the trip delays from 84.3 seconds to 10.3 seconds per vehicle. Alternative 3 would also improve operations along Golden Springs Drive, cutting the delay time by half.

	AM Peak Hour			PM Peak Hour			
Intersection	Queue	Delay	Level of	Queue Length	Delay	Level of	
Intersection	Length ⁽¹⁾	(sec)	Service	(1)	(sec)	Service	
Grand Ave. at SR-60 Westbound Ramps	527 ft	37.5	D	305 ft	51.4	D	
Grand Ave. at	443 ft	20.0	C	172 ft	10.3	B	
SR-60 Eastbound Ramps	445 R	445 ft 20.0		172 It	10.5	В	
Grand Ave. at Golden	372 ft	40.6	D	460 ft	53.0	D	
Springs Drive	572 ft	49.0	D	D 409 II		D	

 Table 15 - Intersection Year 2037 Traffic Conditions for Alternative 3

Note 1: 95th Percentile Queue lengths for critical approaches are given as indicated

		AM Peak Hour			PM Peak Hour	•	
Intersection		Queue	Delay	Level of	Queue Length	Delay	Level of
Intersection		Length ⁽¹⁾	(sec)	Service	(1)	(sec)	Service
Creard Asso, at	NB	743 ft	36.3	D	251 ft	26.5	С
Grand Ave. at	SB	338 ft	27.4	С	739 ft	68.2	Е
Off romp	EB	106 ft	58.9	Е	333 ft	48.7	D
On-ramp	WB	527 ft	48.2	D	305 ft	43.6	D
Intersection Average		N/A	37.5	D	N/A	51.4	D
Grand Ave. at	NB	446 ft	22.8	С	231 ft	10.2	В
SR-60 Eastbound	SB	242 ft	12.3	В	216 ft	8.2	А
Ramps	EB	443 ft	26.1	С	172 ft	17.3	В
Intersection Averag	e	N/A	20.0	С	N/A	10.3	В
	NB	667 ft	43.1	D	671 ft	62.5	Е
Grand Ave. at Golden	SB	372 ft	65.8	Е	469 ft	39.4	D
Springs Drive	EB	236 ft	44.9	D	663 ft	62.9	Е
	WB	406 ft	41.9	D	349 ft	49.1	D
Intersection Average		N/A	49.6	D	N/A	53.9	D

 Table 16 - Detailed Intersection Year 2037 Traffic Conditions for Alternative 3

Note 1: 95th Percentile Queue lengths for critical approaches are given as indicated

Mainline Analysis

Within the project vicinity, operation of SR-57 and SR-60 were analyzed for the project horizon year of 2037 traffic forecast. The traffic operation analyses were performed with microsimulation model (VISSM) software that followed the HCM2000 freeway segment analysis methodology. The results of the analysis are presented in the following four tables (Tables 24-27).

Alternative 2

Grand Ave. at

Grand Ave.

Springs Drive

SR-60 Eastbound Ramps

at

Local Street Intersection Analysis

Local street intersection LOS was prepared using 2037 forecast volumes to assess the impact of the improvements on Grand Avenue. Operation along Grand Avenue at the intersections of the westbound on and off-ramps and the eastbound on and off-ramps, traffic through the intersections would be improved from LOS "F" under the no-build alternative to LOS "D" in the AM peak hour and LOS "E" in the PM peak hour under alternative 2.

AM Peak Hour PM Peak Hour Queue Delay Level of Queue Length Delay Level of Intersection Length (1) (1)Service Service (sec) (sec) Grand Ave. SR-60 at 508 ft 35.7 D 361 ft 46.8 D Westbound Ramps

49.6

50.6

D

D

432 ft

558 ft

55.4

64.6

E

Е

 Table 17 – Intersection Year 2037 Traffic Conditions for Alternative 2

Note 1: 95th Percentile Queue lengths for critical approaches are given as indicated

Golden

635 ft

523 ft

		AM Peak Ho	our		PM Peak Hour	•	
Intersection		Queue	Delay	Level of	Queue Length	Delay	Level of
Intersection		Length ⁽¹⁾	(sec)	Service	(1)	(sec)	Service
Crand Ave. at	NB	620 ft	38.5	D	300 ft	29.8	С
SP 60 Westbound	SB	260 ft	23.1	С	817 ft	49.4	D
Off ramp	EB	75 ft	42.0	D	351 ft	73.4	Е
On-ramp	WB	508 ft	44.0	D	361 ft	53.9	D
Intersection Average		N/A	35.7	D	N/A	46.8	D
Grand Ave. at	NB	618 ft	68.9	Е	767 ft	89.6	F
SR-60 Eastbound	SB	336 ft	31.6	С	682 ft	32.1	С
Ramps	EB	635 ft	42.7	D	432 ft	43.3	D
Intersection Averag	e	N/A	49.6	D	N/A	55.4	Е
	NB	741 ft	72.9	Е	721 ft	79.0	Е
Grand Ave. at Golden	SB	523 ft	37.8	D	558 ft	64.4	Е
Springs Drive	EB	211 ft	37.6	D	680 ft	62.3	Е
	WB	340 ft	34.1	С	362 ft	46.3	D
Intersection Average		N/A	50.6	D	N/A	64.6	Е

 Table 18 – Detailed Intersection Year 2037 Traffic Conditions for Alternative 2

Note 1: 95th Percentile Queue lengths for critical approaches are given as indicated

Alternative 2 meets the project purpose, and would reduce congestion and delays along Grand Avenue and the SR-60 Interchange. Comparing Table 9 (2037 traffic no-build alternative) and Table 16 indicates that delays along Grand Avenue are significantly reduced with Alternative 2. The calculated intersection delays are improved by a factor of 1.6 to 3.8. The most significant improvement on Grand Avenue is at the westbound off-ramp intersection where the traffic delay would be reduced from 178.9 seconds to 46.8 seconds. The overall intersection level of service is improved from "F" to "D" or "E".

Mainline Analysis

Within the project vicinity, operation of SR-57 and SR-60 were analyzed for the project horizon year of 2037 traffic forecast. The traffic operation analyses were performed with microsimulation model (VISSM) software that followed the HCM2000 freeway segment analysis methodology. The results of the analysis are presented in the following four tables (Tables 18-21).

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	59	26	С
SR-57 SB Connector Ramp to EB Bypass Off-ramp	BF	58	25	С
EB Bypass Off-ramp to SR-57 NB Merge	BF	61	27	С
SR-57 NB Merge to Grand Ave Off-ramp	WS	61	28	С
Grand Ave Off-ramp to Grand Ave On-ramp	WS	55	30	D
Grand Ave On-ramp to SR-57 NB Diverge	M/D	60	26	С
SR-57 NB Diverge to EB Bypass Connector	M/D	61	27	С
EB Bypass Connector to Diamond Bar Off-Ramp	BF	61	27	С
Diamond Bar Off-Ramp to Diamond Bar On-Ramp	BF	61	27	С
Diamond Bar On-Ramp to EB Bypass Connector	M/D	62	23	С
EB Bypass Connector to Phillips Ranch Off-Ramp	BF	62	23	С
PM				
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	57	24	С
SR-57 SB Connector Ramp to EB Bypass Off-ramp	BF	54	25	С
EB Bypass Off-ramp to SR-57 NB Merge	BF	63	24	С
SR-57 NB Merge to Grand Ave Off-ramp	WS	60	27	С
Grand Ave Off-ramp to Grand Ave On-ramp	WS	60	26	С
Grand Ave On-ramp to SR-57 NB Diverge	M/D	60	27	С
SR-57 NB Diverge to EB Bypass Connector	M/D	61	24	С
EB Bypass Connector to Diamond Bar Off-Ramp	BF	61	24	С
Diamond Bar Off-Ramp to Diamond Bar On-Ramp	BF	61	24	С
Diamond Bar On-Ramp to EB Bypass Connector	M/D	61	26	С
EB Bypass Connector to Phillips Ranch Off-Ramp	BF	61	26	С

Table 19 - Eastbound SR-60 Year 2037 Traffic Conditions, Alternative 2

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Table 20 - Northbound SR-57 Year 2037 Traffic Conditions, Alternative 2

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	61	28	С
SR-60 EB Merge to Grand Ave Off-ramp	WS	61	28	С
Grand Ave Off-ramp to Grand Ave On-ramp	WS	56	30	D
Grand Ave On-ramp to SR-60 EB Diverge	WS	60	26	С
SR-60 EB Diverge to EB Bypass Connector	BF	62	22	С
EB Bypass Connector to 4 Lane Opening	BF	61	27	С
PM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	60	29	D
SR-60 EB Merge to Grand Ave Off-ramp	WS	60	27	С
Grand Ave Off-ramp to Grand Ave On-ramp	WS	60	26	С
Grand Ave On-ramp to SR-60 EB Diverge	WS	60	27	С
SR-60 EB Diverge to EB Bypass Connector	BF	59	29	D
EB Bypass Connector to 4 Lane Opening	BF	60	33	D

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	58	25	С
Merge				
SR-57 Merge to Lane Drop	WS	57	34	D
Lane Drop to Grand Ave On-ramp	WS	61	26	С
Grand Ave On-ramp to Additional Lane Opening	WS	60	23	С
Additional Lane Opening to SR-57 SB Diverge	WS	60	21	С
SR-57 SB Diverge to HOV Lane Merge	BF	63	15	В
PM				
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	61	23	С
Merge				
SR-57 Merge to Lane Drop	WS	61	29	D
Lane Drop to Grand Ave On-ramp	WS	56	32	D
Grand Ave On-ramp to Additional Lane Opening	WS	60	29	D
Additional Lane Opening to SR-57 SB Diverge	WS	60	27	С
SR-57 SB Diverge to HOV Lane Merge	BF	62	24	C

Table 21 - Westbound SR-60 Year 2037 Traffic Conditions, Alternative 2

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Table 22 - Southbound SR-57 Year 2037 Traffic Conditions, Alternative 2

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	56	36	Е
Merge				
SR-60 WB Merge to Lane Drop	WS	57	34	D
Lane Drop to Grand Ave On-ramp	WS	61	26	С
Grand Ave On-ramp to Additional Lane Opening	WS	60	23	С
Additional Lane Opening to SR-60 WB Diverge	WS	60	21	С
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	60	33	D
PM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	60	37	Е
Merge				
SR-60 WB Merge to Lane Drop	WS	61	29	D
Lane Drop to Grand Ave On-ramp	WS	56	32	D
Grand Ave On-ramp to Additional Lane Opening	WS	60	29	D
Additional Lane Opening to SR-60 WB Diverge	WS	60	27	С
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	60	34	D

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Alternative 2 improvements would remove the congestion on the eastbound SR-60 up to the Grand Avenue off-ramp. The eastbound SR-60 PM peak hour speeds leading to Grand Avenue would operate above 55 mph. Segments that would have a LOS "F" with Alternative 1 would be improved to LOS "C" or "D". Average speed on the northbound SR-57 immediately south of the 57/60 interchange would be over 55 mph, indicating operation improvements on the SR-57 as result of the proposed Alternative 2 improvements.

The proposed alternative 2 would also improve the traffic operation on SR-60 as it approaches the northbound SR-57 connector. The LOS during the PM peak is expected to be improved from a "F" to a "C", and average speed through this segment would be increase by about 35 mph.

In the westbound SR-60 direction, Alternative 2 would reduce the AM peak hours lane density for the merge segment with SR-57 from over 100 vehicles per mile per lane to around 25 vehicles per lane per mile. This corresponds to a significant speed increase from 9 mph to 58 mph in the SR-57 merge segment of SR-60.

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM		• • • • •		
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	59	26	С
SR-57 SB Connector Ramp to EB Bypass Off-ramp	BF	58	25	С
EB Bypass Off-ramp to SR-57 NB Merge	BF	62	27	С
SR-57 NB Merge to Grand Ave Off-ramp	WS	60	28	С
Grand Ave Off-ramp to Grand Ave Loop On-ramp	WS	57	28	С
Grand Ave Loop On-ramp to Slip On-ramp	WS	56	27	С
Grand Ave Slip On-ramp to SR-57 NB Diverge	M/D	56	27	С
SR-57 NB Diverge to EB Bypass Connector	M/D	61	27	С
EB Bypass Connector to Diamond Bar Off-Ramp	BF	61	27	С
Diamond Bar Off-Ramp to Diamond Bar On-Ramp	BF	61	27	С
Diamond Bar On-Ramp to EB Bypass Connector	M/D	62	23	С
EB Bypass Connector to Phillips Ranch Off-Ramp	BF	62	23	С
PM				
Brea Canyon On-ramp to SR-57 SB Connector Ramp	WS	58	24	С
SR-57 SB Connector Ramp to EB Bypass Off-ramp	BF	55	25	С
EB Bypass Off-ramp to SR-57 NB Merge	BF	63	24	С
SR-57 NB Merge to Grand Ave Off-ramp	WS	59	28	С
Grand Ave Off-ramp to Grand Ave Loop On-ramp	WS	58	27	С
Grand Ave Loop On-ramp to Slip On-ramp	WS	60	26	С
Grand Ave Slip On-ramp to SR-57 NB Diverge	M/D	60	26	С
SR-57 NB Diverge to EB Bypass Connector	M/D	61	25	С
EB Bypass Connector to Diamond Bar Off-Ramp	BF	61	25	С
Diamond Bar Off-Ramp to Diamond Bar On-Ramp	BF	62	24	С
Diamond Bar On-Ramp to EB Bypass Connector	M/D	61	25	С
EB Bypass Connector to Phillips Ranch Off-Ramp	BF	61	25	С

Table 25 - Eastboully SK-00 Teat 205/ Traffic Conditions, Alternativ	Table	23 -	Eastbound	SR-60	Year	2037	Traffic	Conditions	Alternative
--	-------	------	-----------	-------	------	------	---------	------------	-------------

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	61	28	С
SR-60 EB Merge to Grand Ave Off-ramp	WS	60	28	С
Grand Ave Off-ramp to Grand Ave Loop On-ramp	WS	57	28	С
Grand Ave Loop On-ramp to Slip On-ramp	WS	56	27	С
Grand Ave Slip On-ramp SR-60 Diverge	WS	56	27	С
SR-60 EB Diverge to EB Bypass Connector	BF	61	22	С
EB Bypass Connector to 4-Lane Opening	BF	61	27	С
PM				
SR-60 WB Connector Ramp to SR-60 EB Merge	BF	60	30	D
SR-60 EB Merge to Grand Ave Off-ramp	WS	59	28	С
Grand Ave Off-ramp to Grand Ave Loop On-ramp	WS	58	27	С
Grand Ave Loop On-ramp to Slip On-ramp	WS	60	26	С
Grand Ave Slip On-ramp SR-60 Diverge	WS	60	26	С
SR-60 EB Diverge to EB Bypass Connector	BF	59	29	D
EB Bypass Connector to 4-Lane Opening	BF	60	34	D

Table 24 - Northbound SR-57 Year 2037 Traffic Conditions, Alternative 3

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Table 25 - Westbound SR-60 Year 2037 Traffic Conditions, Alternative 3

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	62	23	С
Merge				
SR-57 Merge to Lane Drop	WS	57	29	D
Lane Drop to Grand Ave On-ramp	WS	60	26	С
Grand Ave On-ramp to Additional Lane Opening	WS	60	23	С
Additional Lane Opening to SR-57 SB Diverge	WS	60	22	С
SR-57 SB Diverge to HOV Lane Merge	BF	64	14	В
Diamond Bar Blvd On-ramp Merge Lane End to SR-57	BF	60	24	С
Merge				
SR-57 Merge to Lane Drop	WS	56	31	D
Lane Drop to Grand Ave On-ramp	WS	56	31	D
Grand Ave On-ramp to Additional Lane Opening	WS	60	27	С
Additional Lane Opening to SR-57 SB Diverge	WS	60	26	С
SR-57 SB Diverge to HOV Lane Merge	BF	62	24	С

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Freeway Segment	Freeway Type ¹	Speed (mph)	Density (Veh/Mi/Ln)	LOS
AM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	58	33	D
Merge				
SR-60 WB Merge to Lane Drop	WS	57	29	D
Lane Drop to Grand Ave On-ramp	WS	60	26	С
Grand Ave On-ramp to Additional Lane Opening	WS	60	23	С
Additional Lane Opening to SR-60 WB Diverge	WS	60	22	С
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	60	33	D
PM				
Sunset Crossing On-ramp Merge Lane End to SR-60 WB	BF	60	33	D
Merge				
SR-60 WB Merge to Lane Drop	WS	56	31	D
Lane Drop to Grand Ave On-ramp	WS	56	31	D
Grand Ave On-ramp to Additional Lane Opening	WS	60	27	С
Additional Lane Opening to SR-60 WB Diverge	WS	60	26	С
SR-60 WB Diverge to SR-60 EB Connector Ramp	BF	61	30	D

Table 26 - Southbound SR-57 Year 2037 Traffic Conditions, Alternative 3

Note 1: BF=Basic Freeway, WS = Weaving Segment M/D=Merge/Diverge

Alternative 3 improvements would remove the congestion on eastbound SR-60 up to the Grand Avenue off-ramp. The eastbound SR-60 PM peak hour speeds leading to Grand Avenue Interchange would operate above 59 mph. SR-60 segments that would have a LOS "F" with Alternative 1 would be improved to LOS "C" or "D". The average speed on northbound SR-57 immediately south of the 57/60 Interchange would be over 50 mph, indicating operation improvements on the SR-57 as result of the proposed Alternative 3 improvements.

In the westbound SR-60 direction, Alternative 3 would reduce the AM peak hours lane density for the merge segment with SR-57 from over 100 vehicles per mile per lane to around 25 vehicles per lane per mile. This corresponds to a significant speed increase from 9 mph to 58 mph in the SR-57 merge with SR-60.

The proposed alternative 3 would also improve the traffic operation on eastbound SR-60 as it approaches the northbound SR-57 Connector. The LOS during the PM peak hours is expected to improve from a "D" to a "C" and the average through this segment by about 10 mph.

v. Non-Standard Mandatory and Advisory Design Features

The project includes several non-standard design features based on design standards described in the 2006 Highway Design Manual (HDM), Sixth Edition. Fact Sheet Exceptions for Mandatory Design Standards were approved on March 19, 2009 to document the non-standard features. Three separate Fact Sheet Exceptions for Advisory Design Standards were approved on March 25, 2009, February 22, 2011, and July 27, 2012 to document the non-standard features. Both alternative 2 and alternative 3 have the following non-standard features:

a. <u>Traveled Way Width</u>

The Mandatory Standard in HDM Index 301.1 states, **"The basic lane width for new construction on two-lane and multilane highways, ramp, collector roads, and other appurtenance roadways shall be 12 feet."** The proposed project would maintain or relocate the existing non-standard lane widths on WB SR-60 at 10.8' (SR-60 lanes) and 11.8' wide (SR-57 lanes).

Location	Traveled Way Width			
Location	Standard	Existing	Proposed	
WR SP 60 Sta 240+00 TO Sta 288+00	12 foot	10.8 feet &	10.8 feet &	
WB 5R-00 Sta 240+00 TO Sta 388+00	0 Sta 388+00 12 leet	11.8 feet	11.8 feet	
ED SD 60 Sto 240 \pm 00 TO Sto 289 \pm 00	12 fast	10.8 feet &	10.8 feet &	
EB SR-60 Sta 240+00 TO Sta 388+00	12 leet	11.8 feet	11.8 feet	

b. <u>Superelevation</u>

The Mandatory Standard in HDM Index 202.2 states, "Based on an e_{max} selected by the designer for one of the conditions, superelevation rates from Table 202.2 shall be used within the given range of curve radii. If less than standard superelevation rates are approved (see Index 82.1), Figure 202.2 shall be used to determine superelevation based on the curve radius and maximum comfortable speed." The proposed project would maintain the existing non-standard superelevation.

	Existing	Superelevation Rate "e"			
Location	Curve Radius	Standard	Existing	Proposed	
"A" Line Sta 271+94 to Sta 285+01	10,000 feet	2%	-1.5% (adverse)	-1.5% (adverse)	
"A" Line Sta 303+07 to Sta 317+26	10,000 feet	2%	-1.5% (adverse)	-1.5% (adverse)	

c. Interchange Spacing

The Mandatory Standard in HDM Index 501.3 states, **"The minimum interchange spacing shall be one mile for urban areas, two miles in rural area, and two miles between freeway-to-freeway interchanges and local interchanges."** Supplement to Index 501.3 is the Caltrans Design Information Bulletin Number 77 that states, the minimum weaving length for a 2.0-mile interchange spacing shall be 4922 feet." The existing interchange spacing between the SR-60/SR-57 junctions and Grand Avenue is not proposed to change.

	Interchange Spacing			
Location	Standard	Existing	Proposed	
SR-60 West Junction to Grand Avenue	2.0 miles	1.0 mile	1.0 mile	
Grand Avenue to SR-60 East Junction	2.0 miles	1.0 mile	1.0 mile	

Location		Weaving Length		
Location	Standard	Existing	Proposed	
WB SR-60 from SB SR-57 merge to Grand Avenue WB off-ramp	4920 feet	3168 feet	3168feet	
WB Grand Avenue direct on-ramp to SR-60/SB SR-57 split	4922 feet	1584 feet	1584 feet	

d. Shoulder Widths, Horizontal Clearances, and Median Widths

Highway Design Manual Sixth Edition, (HDM) Index 302.1 states:

"The shoulder widths given in table 302.1 shall be the minimum continuous usable width of paved shoulder." In accordance with table 302.1, for a freeway of 6 lanes or more, the left and right shoulder widths shall be 10 feet.

Highway Design Manual Sixth Edition, (HDM) Index 308.1 states:

"The minimum design standards for the cross section of the local facility shall be at least equal to those for a conventional highway with the exception that the outside shoulder width shall match the approach roadway, but not less than 4 feet." In accordance with 308.1, for local facility that crosses over the State facility, the minimum right shoulder width shall be feet.

Highway Design Manual Sixth Edition, (HDM) Index 309.1(3)(a) states:

"The minimum horizontal clearance to fixed objects, such as bridge rails and safetyshaped concrete barriers, on all freeway and expressway facilities... shall be equal to the standard shoulder width of the highway facility as stated in Table 302.1." In accordance with table 302.1, for a freeway of 6 lanes or more, the left and right shoulder widths and thus the horizontal clearance, shall be 10 feet.

The project does not propose to realign SR-60 and SR-57 through the entire confluence project area to increase the median width, left shoulders and left horizontal clearances due to restrictions at each end. A portion of the eastbound SR-60 will be realigned under the new Grand Avenue OC to provide room for the new bridge

Location		Shoulder Width	
	Standard	Existing	Proposed
EB & WB SR-60, Station 240+00 to 251+00	10'	2', <10' & Var	2', <10' & Var
EB & WB SR-60, Station 267+00 to 290+00	10'	2', 5.5' & Var	2', 5.5' & Var
WB SR-60, Station 290+00 to 300+00	10'	2' left shoulder	8.3' left shoulder
EB & WB SR-60, Station 307+70 to 348+20	10'	1' & Var	1' & Var
EB & WB SR-60, Station 348+20 to 388+00	10'	1' & Var	1' & Var

Location	H	orizontal Clearan	ance		
Location	Standard	Existing	Proposed		
EB & WB SR-60, Station 240+00 to 251+00	10'	2', <10' & Var	2', <10' & Var		
EB & WB SR-60, Station 267+00 to 290+00	10'	2', 5.5' & Var	2', 5.5' & Var		
WB SR-60, Station 290+00 to 300+00	10'	2' left shoulder	8.3' left shoulder		
EB & WB SR-60, Station 307+70 to 348+20	10'	1' & Var	1' & Var		
EB & WB SR-60, Station 348+20 to 388+00	10'	1' & Var	1' & Var		

Location	Median Width			
Location	Standard	Existing	Proposed	
EB & WB SR-60, Station 240+00 to 251+00	22'	6', <22' & Var	6', <22' & Var	
EB & WB SR-60, Station 307+70 to 348+20	22'	4' & Var	4' & Var	
EB & WB SR-60, Station 348+20 to 388+00	22'	4' & Var	4' & Var	

e. Side Slope Standards

The Advisory Standard in HDM Index 304.1 states, <u>"For new construction, widening, or where slopes are otherwise being modified, embankment (fill) slopes should be 4:1 or flatter.</u>" The slope between the westbound slip ramp and SR-60 is 2:1.

Location	Side Slope Standard		
	Standard	Existing	Proposed
Along Ramp "EG-1"	4:1	2:1	2:1

f. Access Control

The Advisory Standard in HDM Index 504.8 states, <u>"For new construction or major reconstruction access right should be acquired on the opposite side of the local road from ramp terminals to preclude the construction of future driveways or local roads within the ramp intersection." The existing westbound SR-60 off-ramp and Grand Avenue terminates across from Old Brea Canyon Road. This condition is not proposed to change as part of this project.</u>
Location	Access Control Standard			
	Standard	Existing	Proposed	
Westbound SR-60 Off-ramp Terminal	No Access	City Street	City Street	
	NO ACCESS	Access	Access	

g. Single Lane Ramps

The Advisory Standard in HDM Index 504.3(5) states, <u>"If the length of a single lane ramp exceeds 1,000 feet, an additional lane should be provided on the ramp to permit passing maneuvers.</u>" The eastbound SR-60 bypass off-ramp to Grand Avenue is proposed as a single lane ramp.

h. <u>Mainline Lane Reduction at Interchanges</u>

Highway Design Manual Sixth Edition, September 01, 2006 (HDM) Index 504.6 states: "<u>The basic number of mainline lanes should not be dropped through a local service interchange.</u>" The proposed extension of the southbound SR-57 lane would be dropped at the Grand Avenue off-ramp.

vi. Interim Features

Interim features are not proposed as part of this project.

vii. High Occupancy Vehicle (HOV) Lanes

The two build alternatives would maintain existing HOV lanes and connectors. Currently in the eastbound direction, there is insufficient space for two HOV lanes under the Grand Avenue OC. The build alternatives would provide two standard HOV lanes through the Grand Avenue Overcrossing

An HOV preferential ramp meter bypass lane would be constructed on the eastbound SR-60 slip on-ramp from Grand Avenue, the westbound SR-60 loop on-ramp from Grand Avenue, and the eastbound SR-60 on-ramp from Diamond Bar Blvd. The proposed eastbound loop on-ramp from Grand Avenue for alternative 3 would not include a HOV preferential lane. Both build alternatives would require reconstructing portion of the westbound SR-60 slip on-ramp, which does not include a HOV preferential lane due to right-of-way and natural habitat impact limitations. "Exceptions to Ramp Metering Policy" Fact Sheets were approved for both of these locations.

viii. Ramp Metering

The build alternatives would provide ramp meters at all new and reconstructed on-ramps. In coordination with Caltrans traffic operations, a ramp meter would also be added to the new two-lane eastbound bypass connector. A summary of ramp meter locations is as follows:

Ramp Meter LocationAlternativeWestbound SR-60 slip on-ramp at Grand AveAlternatives 2 & 3Westbound SR-60 loop on-ramp at Grand AveAlternatives 2 & 3Eastbound SR-60 slip on-ramp at Grand AveAlternatives 2 & 3Eastbound SR-60 loop on-ramp at Grand AveAlternatives 2 & 3Eastbound SR-60 loop on-ramp at Grand AveAlternatives 2 & 3Eastbound SR-60 loop on-ramp at Grand AveAlternatives 2 & 3Eastbound SR-60 loop on-ramp at Grand AveAlternatives 3Eastbound SR-60 on-ramp from Diamond Bar BlvdAlternatives 2 & 3Eastbound SR-60 Bypass ConnectorAlternatives 2 & 3

Table 27 - Ramp Meter Locations

ix. CHP Enforcement Areas

CHP enforcement areas would be constructed at each of the new or reconstructed ramp meter locations per the Caltrans Ramp Meter Design Manual. These are included on the layout plans in the appendices.

x. Park and Ride Facilities

A Park and Ride facility is located along Diamond Bar Blvd within the westbound loop on-ramp to SR-60. Operation of the existing facility would not be affected by the proposed project. No new Park and Ride facility is being proposed for the project.

xi. Utilities

Notice letters were sent to all utilities located in the City of Industry. Based on responses from the utilities and other research of the project area the following utility owners were identified:

- 1. Southern California Edison (SCE)
- 2. Walnut Valley Water District (WVWD)
- 3. Verizon Telephone
- 4. Los Angeles County Sanitation District (LACSD)
- 5. Southern California Gas Company

The majority of the utility conflicts identified are within the local streets and would be relocated within the same streets. The exceptions are SCE distribution lines within the golf course, SCE transmission lines within the Golf course, and a LACSD sewer line in an easement on the Ayres Hotel property. The power distribution line would be shifted south and require a new utility easement within the golf courses.

The existing LA Sanitation District (LASD) trunk sewer (15 to 18" VCP approximately 2,200ft long) extends down Golden Springs Drive from Copley Drive, runs at the bottom of the slope of the Ayres Hotel parallel to SR-60, and connects to Gateway Center Drive. An existing City of Industry sewer line (12" VCP) crosses under the SR-60 and connects to this LASD trunk sewer. Widening of the freeway would require abandonment of the portion of the existing LASD trunk sewer adjacent to the Ayres Hotel. The LASD trunk line would be relocated to Golden Springs Drive, and a new service lateral from the Ayres Hotel would be re-connected. The existing City of Industry 12" sewer line would be extended approximately 200 feet to connect to the relocated LASD trunk sewer.

There is an array of 66 kV transmission lines owned by Southern California Edison (SCE) that cross SR-60 to the west of Grand Avenue. The transmission lines are hung on a high steel pole in the Diamond Bar Golf Course. Both Alternative 2 and Alternative 3 would require relocating the steel pole within the golf course.

No utility encroachment exception would be required for this project. At the west end of the project, a 650 feet long segment of SCE distribution power line runs along the north edge of the state right-of-way. During PS&E phase, the exact location of these poles would be surveyed to verify they are outside of the state right-of-way. The project would not otherwise impact these poles or require their relocation.

xii. Railroad Involvement

No railroad tracks, crossings, or properties are in the vicinity of the project limits.

xiii. Highway Planting

The project is not included in the Quality for Landscaping Area. Both build alternatives would include new highway planting and vegetation measures within the project limits. This includes landscaping all new or graded slopes that meet Caltrans standard landscaping requirements. Native trees, including coastal live oak present within the existing Caltrans landscaped areas, that require removal would be replaced in proximity to the project at a 1:1 ratio. Diamond Bar's Tree Removal Permit process would be applicable for the removal of any of these trees outside of the freeway right-of-way. All native trees located outside of Caltrans landscaped areas removed would be replaced with the same species at a 2:1 ratio. A qualified biological monitor would be provided during construction to flag and stake adjacent native trees to be protected. The biological monitor would be onsite during construction to ensure the protection of the drip line area of adjacent native trees and that construction limits are enforced.

If Diamond Bar elects to provide special landscape within the new State right-of-way, a new Maintenance Agreement between Caltrans and Diamond Bar is required to assign maintenance responsibilities of the special landscape required by Diamond Bar.

xiv. Erosion Control

The soil along the project alignment has the potential to be erosive. Erosion control measures would be required during and after construction activities and would be included in the design plans and cost estimate during PS&E. Provisions for temporary and permanent erosion control measures would be included in the project.

Storm water runoff requirements of the National Pollutant Discharge Elimination System (NPDES) are included and accounted for in the project design and cost estimate. These measures addressing erosion control would include construction best management practices for temporary control of runoff from the construction site such as the application of fertilizer-seed mulch to exposed soils during or soon after construction, punched-in straw or jute netting to protect soils

during the re-vegetation period, and/or other established erosion control methods. Landscaping would be included as part of the proposed project as an erosion control strategy.

xv. Noise Barrier

A Noise Study Report was prepared for the build alternatives. The noise study report discussed potential noise impacts and related noise abatement measures associated with construction and operation of improvements to the State Route 57/State Route 60 (SR-57/SR-60) confluence. For the build alternatives, the report studied the locations where frequent human use occurs and where a reduced noise level would be beneficial. Locations of studied areas are designated by land use and project locations. Total of seven possible noise barrier locations were studied. Five of the noise barriers studied were found to be feasible from an acoustic perspective.

The Protocol establishes a process for assessing the reasonableness and feasibility of noise abatement. Summary of the estimated construction costs and the maximum calculated cost allowances are shown in table below.

Noise		No. of		
Barrier	Wall	Benefited	Estimated Cost	Maximum Cost
Designation	Height	Residences		Allowance
A-2	6 ft	36	\$3,068,000	\$1,980,000
С	12 ft- 14 ft	35	\$2,825,000	\$1,925,000
C-2	6 ft	16	\$1,367,000	\$880,000
G-1	12 ft	7	\$1,061,000	\$385,000
G-2	12ft	1	\$933,000	\$55,000

	Table	28 –	Noise	Barrier	Costs
--	-------	------	-------	---------	-------

The engineering analysis of the five noise barriers indicate that all five noise barriers would exceed the cost reasonableness criteria. Noise barrier G-1 (east half of the golf course) was recommended as a "measure to minimize harm to the Section 4(f) property" as identified in the Programmatic Section 4(f) Evaluation report for the Confluence Project. Therefore, noise wall G-1 is considered reasonable because it satisfies a project requirement as stated in the referenced 4(f) report.

xvi. Drainage

Diamond Bar Creek runs through the Diamond Bar Golf Course south of SR-60 where the flows are split in two drainage channels before they are interrupted by the freeway. The creek crosses under SR-60 in two separate reinforced concrete box culverts (RCB); namely a double 6'x4' RCB SR-60 Station 1304+25, and a triple 6' x 6' RCB at SR-60 Station 1279+90. Both RCB cross diagonally underneath SR-60. At the north side of SR-60, Diamond Bar Creek continue to flow westward in a natural meandering channel approximately 150 to 350 feet north of SR-60. Alternaitve 3 would require the extension of the south end of the existing triple 6'x6' RCB located at Station 1279+90 SR-60, and the extension of the south end of the existing double 6'x4' RCB located at Station 1304+25 SR-60.

Along the eastbound SR-60 east of Grand Avenue, there are series of existing drainage inlets in the shoulders that drain into a 60-inch reinforced concrete pipe (RCP) underneath the shoulder.

The pipe outlets to the SR-60 cross-drain box culvert. The project would relocate the 60-inch RCP underneath the shoulder of the widened freeway.

The existing eastbound on-ramp at Grand Avenue has several drainage inlets that drain to a 24" corrugated metal pipe (CMP) and crosses under SR-60 and outlets to a drainage ditch on the north side of SR-60. A new drainage pipe is proposed to replace the existing 24" CMP cross-drain, and would outlet to be pre-treated with a detention basin proposed in the new eastbound loop on-ramp area and eventually discharge to the existing reinforced concrete box cross-drain west of Grand Avenue to the west.

Along the eastbound SR-60 at Grand Avenue, there is an existing inlet that drains to a 24-inch CMP that crosses SR-60 and outlet to a drainage ditch on the north side of SR-60. The project proposes to divert the 24-inch CMP to a new infiltration basin adjacent to the westbound Grand Avenue slip on-ramp.

Along the eastbound SR-60 between Stations 1260+60 and 1272+60, there is an existing 12-feet wide open reinforced concrete channel at the toe of the freeway embankment that runs for approximately 1,100 feet along the Diamond Bar Golf Course, and it terminates at an 12'x3' RCB that crosses SR-60 leading to the Diamond Bar Creek north of SR-60. There are two existing inlets on the freeway shoulder that drain through a 24" CMP to the open concrete channel. The project proposes to reconstruct the open concrete channel along the new bypass ramp shoulders within the State right-of-way. The new channel would connect to the existing RCB cross-drain.

Along the westbound SR-60, east of Grand Avenue, the freeway runoff sheet flows into a dirt "v-ditch". The "v-ditch" drains to two separate cross pipes feeding into Diamond Bar Creek. The project would maintain this drainage pattern.

Runoff at the westbound off-ramp and the loop on-ramp currently drains directly into Diamond Bar Creek through a series of drainage inlets in the shoulders. The project would incorporate an Austin sand filter to pre-treat runoff from Grand Avenue and portions of the off-ramp and loop on-ramp. Runoff on the lower portions of the on and off-ramps and some inlets from the westbound SR-60 would be pre-treated with bio swales prior to flowing into Diamond Bar Creek.

Along the westbound SR-60 west of Grand Avenue, there is a series of drainage inlets along the shoulder. The existing inlets currently discharge into Diamond Bar Creek. The project would divert this flow to be, pre-treated with an existing bio-swale before discharging to Diamond Bar Creek.

xvii. Non-Motorized and Pedestrian Features

The project would improve pedestrian circulations on Grand Avenue. The sidewalks along Grand Avenue would be widened from existing five feet to eight feet between Golden Springs Drive and Old Brea Canyon Rd. There is no existing sidewalk on the northbound side of Grand Avenue between the Grand Avenue OC and the westbound off-ramp intersection. The project

would build a new eight foot sidewalk on the Grand Avenue OC through the new westbound offramp intersection, and a new crosswalk north of the westbound off-ramp intersection.

Pedestrian safety at the intersection of Grand Avenue and Golden Springs Drive would be improved with the installation of countdown timers at all four crosswalks. All curb returns would be reconstructed with curb ramps at the intersections to be designed in compliance with Americans with Disabilities Act (ADA) requirements.

Grand Avenue is not designated as a bike route; however, bicycle safety would be improved along Grand Avenue by providing standard four foot shoulders. Golden Springs Drive has class 2 bike lanes to the east and west of the Grand Avenue intersection. The project would replace bike lanes where widening occurs, though the lanes would not be continued through the intersection in order to limit the golf course right-of-way impacts.

xviii. Needed Roadway Rehabilitation and Upgrading

The "Caltrans 2009 Pavement Condition Survey Inventory" reports on the pavement condition for SR-60 between PM R23.380 and R24.000 as of September 29, 2011indicates that most lanes are rated in Good Condition with no defects. The exceptions are on lane L5 with 12 percent of the pavement in a first stage cracking, one percent of pavement in a third stage cracking and two percent of pavement showed corner cracking; lane R7 has unsealed cracks.

The pavement condition report for SR-60 between PM R24.000 and R25.000 indicates that most lanes are rated in Good Condition with no defects. The exceptions are on lane L5 that has about four percent of the pavement in a first stage cracking; lane R7 has unsealed cracks. SR-60 between PM R25.00 and R25.036 indicates that lane L5 has about 25 percent of pavement in first stage cracking; 21 percent of pavement are in third stage cracking and 22 percent of pavement with corner cracking. From SR-60 PM R25.036 to R25.389 lane, lane L5 has about 25 percent of pavement in first stage cracking, 21 percent of pavement in third stage cracking and 22 percent of pavement in first stage cracking. On SR-60 between PM R25.597 and R26.526, the AC pavement exhibits high percentage of Type A & B alligator cracks in lanes L5, L6, R5, and R6. On SR-57 between PM R4.296 to R4.45, no northbound lanes are reported to have defects. On SR-57 from R4.518 to R4.977, the southbound lane No. 3 exhibits 18 percent of 1st stage slab cracking and 2% corner cracking.

A pavement rehabilitation project (EA 07-253304) is currently under construction on Route 60. The rehabilitation project plans to reconstruct distressed PCC pavement panels in lanes 1 through 5 as needed on SR-60 between PM R23.9 and R30.5. The project was awarded on October 10, 2010.

As a current project is underway to rehabilitate the mainline pavement within the project limits this proposed project does not include roadway or pavement rehabilitation.

xix. Needed Structure Rehabilitation and Upgrading

Bridge inspection Reports from 2011 were reviewed for each structure within the project limits. Table 29 lists the recommended work as well as the work proposed as part of this project. Routine maintenance work is not proposed to be completed by this project.

	Bridge		
Structure Name	Number	Work Needed	Work Proposed
Prospector Rd UC	53-1873	1) Eastbound Approach slabs in lanes 1 to 4 have	None
		settled. It is recommended that the approach slabs	
		be replaced "reduce impact on the structure and to	
		improve rideability."	
E60-N57	53-1905	1) The westbound hinge joint seal is failing and	None
Connector UC		needs replacement.	
(north)			
Prospector Rd OC	53-1873G	1) Replace Type "A" joint seals at the abutments	None
		2) Methacrylate bridge deck.	
Diamond Bar UC	53-1899	1) No work recommended	NA
Golden Springs	53-2149R	1) Replace all joint seals	Replace Bridge
Drive UC			
S57/60 Separation	53-2150L	1) Repair spalls at soffit and along the railing.	None
(south)			
Grand Ave OC	53-1864	1) Repair soffit four spalls	Replace Bridge
		2) Level roadway at approaches.	

Table 2	9 - Summarv	of Needed	Structure	Rehabilitation	and Upgrading

xx. Right-of-Way Data

New right-of-way and easements would be required. It is anticipated that all right-of-way acquisitions would be partial takes, with no full takes required. The right-of-way requirements are similar for alternatives 2 and 3 except for the required takes from the county golf course.

The eastbound bypass connector would require an aerial easement from four commercial parcels. Constructing the bypass connector bridge would temporarily eliminate 92 parking in the Best Western Motel and an adjacent restaurant. The aerial easement would permanently eliminate four parking spaces from these two parcels to accommodate the bridge columns and relocated trash receptacles. Both parking lots are currently underutilized. An aerial utility easement would be relocated within the parking lots of the businesses between Prospector Rd and Diamond Bar Blvd.

Relocation of Diamond Bar on-ramp would require partial acquisition of slopes from business center on Palomino Drive.

Relocation of the northbound SR-57 connector to eastbound SR-60 requires partial takes of the landscaped slope near Golden Springs Drive, maintenance easements, and a footing easement for the proposed retaining walls. Construction of the eastbound SR-60 bypass off-ramp to Grand Avenue would require the partial acquisition of the slope adjacent to the Ayres Hotel.

A narrow strip of a landscaped area would be needed from a strip mall on Grand Avenue near the intersection with Golden Springs Drive. The westbound off-ramp to Grand Avenue would require a 115 foot wide undeveloped slope from City of Industry. The slope would be re-graded to eliminate the need for a retaining wall. The driveway into the former Honda dealership would be relocated to the north to accommodate the vertical profile change in Grand Avenue. No access would change as a result of the project.

Alternative 2 would require 7.3 acres from the Diamond Bar Golf Course. Four existing fairways affected by the freeway construction would be reconstructed. Alternative 3 would require 10.1 acres from the Diamond Bar Golf Course. Six existing fairways directly affected by the freeway construction would be completely replaced with new fairways and green complexes. All remaining twelve fairways would be partially reconstructed and all fairways would be improved with new greens and fairway hazards. There would be no loss of clubhouse parking. A driveway to Grand Avenue from the parking lot would be relocated to accommodate the widened Grand Avenue. Alternative 2 would extend the existing golf cart tunnel under Grand Avenue, while Alternative 3 would relocate the tunnel outside the proposed Caltrans right-of-way needed for the eastbound loop on-ramp. Both alternatives require drainage maintenance easements to allow access at the ends of the two box culvert extensions within the golf course.

With the exception of the westbound off-ramp, retaining walls are proposed to minimize rightof-way impact on all affected parcels. Retaining wall construction would require temporary construction easements between ten and fifteen feet beyond the proposed right-of-way line. Except for the retaining walls built along the perimeters of the Diamond Golf Course, a ten foot permanent maintenance or footing easement would be required along the new retaining walls.

Total right-of-way costs include all acquisitions, utility relocations, relocation expenses, demolition costs and title and escrow fees are estimated at approximately \$35,153,000 for alternative 2, and \$38,749,000 for alternative 3. The right-of-way data sheet is presented in attachment F. Right-of-way costs were calculated in 2012 and escalated to the construction year of 2017 by applying an increase of 7% per year.

xxi. Cost Estimates

The preliminary capital cost estimate, which includes detailed roadway, structure, and right-ofway, was prepared for the project. A detailed cost breakdown can be found in Attachment E. The costs were prepared using standard percentages for the addition of minor items, supplemental work, mobilization, and contingencies. The project capital cost estimate in 2012 dollars is summarized below:

Item	Alternative 2	Alternative 3
Roadway	\$105,000,000	\$110,000,000
Structures	\$46,600,000	\$45,800,000
R/W Acquisition/Utilities (in 2017)	\$35,152,000	\$38,753,000
TOTAL CAPITAL COST	\$186,752,000	\$194,553,000

 Table 30 – Capital Cost Estimates (in 2012)

xxii. Effect of Projects Funded by Others on State Highway

The project does not have adverse impacts to the state highway system. The build alternatives contain a number of elements designed to improve state highway operations, including a bypass off-ramp, bypass connector, auxiliary lanes, and closing a gap in the number of eastbound through lanes. The traffic analysis results show that both build alternatives would reduce vehicle density on the mainline lanes and increase speeds during peak hours, thus improving state highway operations.

B. Rejected Alternatives

i. Alternative 3B (From PSR)

Alternative 3B presented in the PSR is similar to alternative 3, with a partial cloverleaf design at Grand Avenue. The main difference is the proposed use of a collector/distributor road to separate the Grand Avenue on-ramp traffic from the eastbound SR-60 mainline. The loop on-ramp traffic and the direct on-ramp traffic would form a two lane eastbound collector distributor road to the east of Grand Avenue. One lane would merge into the northbound SR-57 lanes after the split with the SR-60. The benefit of this alternative was the prevention of SR-60 traffic from crossing the 3 SR-57 lanes to use the bypass connector. However, the relatively short lane drop into the outside SR-57would result in poor operational characteristics that would not meet the project need and purpose. Additionally, this alternative required an additional 25 to 50 feet from the golf course property which would substantially impact the quality of the course. For these reasons alternative 3B was dropped from further consideration.

6. CONSIDERATIONS REQUIRING DISCUSSION

A. Hazardous Waste

An Initial Site Assessment (ISA) was prepared for the project. See attachment K for the ISA checklist. The ISA memo was updated August 8, 2012 to confirm the findings within the project footprint of the two proposed build alternatives. Potential hazardous wastes for the proposed alternative were identified as follows:

- Aerially Deposited Lead
- Potential Groundwater Contamination
- Lead-Based Paints
- Asbestos Containing Materials
- Pole-mounted Transformers and Electrical Boxes

These potential hazardous wastes are considered low to medium risk issues.

i. Aerially Deposited Lead

Areas of exposed soils within the State's ROW, which would be disturbed during excavation/grading activities, should be sampled and tested for lead, so that any special handling, treatment, or disposal provisions associated with aerially deposited lead may be included in construction documents (if aerially deposited lead is present). The areas of exposed soils within the State's R/W has likely resulted in aerially deposited lead contamination in on-site soils.

A site investigation was prepared for the HOV Direct Connector Project on SR-60 and SR-57, EA 43A0078, dated July 2002. The area included the unpaved soil within Caltrans R/W adjacent to the mainline near Grand Avenue OC. The report identified Aerially Deposited Lead exceeding allowable limits within the top three feet. The report indicated the soil could be re-used following the Lead Contaminated Soil Variance from the California Department of Toxic Substance Control. The SR-60 westbound slip-ramp project (EA255100) is scheduled to remove the top three feet of contaminated soil west of Grand Avenue OC and ship offsite to an approved hazardous material handling facility.

Due to the above finding, the cost estimate assumes the top two feet of excavation within unpaved areas would be handled as ADL (Type Z-2) soil and shipped off-site to an approved landfill. A comprehensive ADL testing of exposed soil will be performed during the PS&E phase when the exact location and limits of excavation has been determined. A Lead Compliance Plan requirement will be incorporated into the PS&E specifications to address both non-hazardous and hazardous levels of lead in disturbed soil.

ii. Groundwater Contamination

The ISA identified the off-site regulatory properties 206 South Diamond Bar, 301 South Diamond Bar Boulevard, 22628 East Golden Springs Drive and 23525 East Palomino Drive (dry cleaner facility), and 525 Grand Avenue have likely resulted in groundwater contamination underlying the subject site. Thus off-site regulatory properties have resulted in a Recognized Environmental Condition. Subsequent to the ISA, documentation from Los Angeles County shows that the associated 525 Grand Ave UST was never installed, and ht epermit from the County expired in 2005. Thus is there is no potential for ground water contamination at 525 Grand Ave.

During the PS&E phase, a Site Investigation will be completed for the project footprint to research all existing regulatory documentation to determine if any groundwater contamination plumes either have impacted or have the potential of impacting the project area. The potential for required dewatering will be determined using the foundation soil boring test results durig the PS&E phase.

Should construction require dewatering activities, or if groundwater is expected to be encountered on-site, a qualified hazardous materials consultant with Phase II and Phase III experience should review all available files for the reported addresses 206 South Diamond Bar, 301 South Diamond Bar Boulevard, 22628 East Golden Springs Drive, and 23525 East Palomino Drive.

iii. Lead-Based Paints

Due to the age of the on-site structures (including bridge structures), LBPs may be present and should be tested. Evidence of chipping paints was not observed during the site inspections, and thus the potential presence of LBPs at the subject site is de minimus.

Should construction activities result in the removal of yellow paint or thermoplastic traffic stripes, the age of the traffic striping and the presence of lead and/or chromium should be determined prior to construction. A Lead Compliance Plan requirement will be incorporated into the PS&E specifications both hazardous and non-hazardous lead levels for disturbance of yellow and non-yellow paint.

iv. Asbestos

Pursuant to SCAQMD regulations, an asbestos survey must be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and Cal OSHA certified building inspector to determine the levels of asbestos in structures (including bridge structures) should renovation or demolition occur and should be tested during the PS&E phase. Evidence of exposed ACMs were not observed during the site inspections, thus the potential presence of ACMs at the subject site is de minimus. If Asbestos is found, Asbestos Compliance Plan requirements will be incorporated into the PS&E specifications.

v. Pole Mounted Transformers and Electrical Boxes

Any transformers and/or high voltage power boxes to be relocated during site construction/demolitions should be conducted under the purview of the local utility purveyor to identify proper handling procedures regarding potential PCBs. Should an on-site transformer (that may be required to be relocated as part of the project) be located under bare soil, the underlying soils should be sampled by a qualified hazardous materials specialist during the PS&E phase.

vi. Project Site Investigation

A project-specific (site wide) site investigation (SI), will be conducted during PS&E phase. The SI will include the proposed comprehensive ADL testing as well as any recognized environmental conditions (REC's) or impacts identified on any properties either in existing Caltrans right of way, or on properties to be dedicated to Caltrans. The scope of the SI will include sampling and analysis of soil per the construction footprint, as well as research existing regulatory documentation to determine if any groundwater contamination plumes either have impacted or have the potential of impacting the project area. Any REC's identified must be remediated prior to property dedicated to Caltrans.

B. Value Analysis

There is no federal cost participation at this time, thus a VA report is not required at this time. If federal funding participation is secured for the project, a Value Analysis (VA) study would be conducted during the PS&E phase.

C. Resource Conservation

It is the objective of the project to reduce congestion, which may lower travel time, and reduce fuel consumptions and vehicular emissions. Existing concrete pavement that would be removed for this project would be crushed and re-used as aggregate base material, or for the embankment fill to construct the new on-ramp. It is the intent of the project to maximize the use of existing hardware items, such as the overhead signs. The project has identified local fill material from adjacent developments which would minimize the fuel required for earth hauling.

This project has coordinated with the design of the westbound on-ramp (EA255101) as the build alternatives require Grand Avenue to be raised. The ramp project retaining walls are designed to support the ultimate fill height proposed in the build alternative 3. This would avoid complete demolition and reconstruction of the retaining wall under either build alternative. This would conserve concrete, reinforcing steel, and fuel that would otherwise be needed to reconstruct these walls.

D. Right-of-way Issues

The project would involve partial right-of-way acquisitions of commercial properties and the Los Angeles County Golf Course. No businesses are expected to be relocated as a result of the partial acquisitions.

The Right-of-Way Data Sheet has been prepared for the project alternatives, and includes all the associated costs such as acquisition cost, title and escrow fees as well as utility relocation costs. The Right-of-Way Data Sheet and right-of-way plan sheets for the preferred alternative (Alternative 3) are included in Attachment F. The project right-of-way requirements are shown in Table 31 below.

Table 31 – Right-o	of-way Req	uirements	

Description	Alt 2 No. of	Alt 3 No. of
	Appraisals	Appraisals
Partial R/W Acquisition	8	9
Temporary Construction Easement	11	12
Permanent Easement	9	9

E. Environmental Issues

i. United States Army Corps of Engineers (ACOE) Jurisdiction

Implementation of Alternative 2 would result in the permanent loss of 0.12 acres of wetlands due to culvert extensions to accommodate the widening of SR-60 and Grand Avenue. Implementation of Alternative 3 would result in the permanent loss of 0.16 acres of waters of the United States and State, including 0.12 acres of wetlands, due to culvert extensions to accommodate the widening of SR-60 and Grand Avenue, and installation of the new SR-60/Grand Avenue eastbound loop on-ramp. Retaining walls are proposed along the roadway at the cross drains to limit the impacted wetlands area. Biological resources mitigations described below for the channel relocations would be coordinated with ACOE.

ii. California Department of Fish and Game (CDFG) Jurisdiction

The areas described above would also be subject to California Department of Fish and Game pursuant to Section 1600 of the California Fish and Game Code. A streambed alteration agreement under Section 1600 would be required. Biological resources mitigations described below for the channel relocations would be coordinated with CDFG.

iii. Biological Resources

Biological resources found within the biological study area (BSA) include a few scattered native riparian tree species located within and around the tributaries to Diamond Bar Creek, raptor foraging and jurisdictional waters/wetlands. Two concrete-lined channels present within the BSA would be relocated as part of the project. It is anticipated that resource agency permits would be required from the United States Army Corps of Engineers (ACOE), California Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG) under Sections 404 and 401 of the federal Clean Water Act (CWA) and Section 1600 of the State

Fish and Game Code, respectively, for the channel relocations. Native birds protected under the Migratory Bird Treaty Act (MBTA) may also nest within and adjacent to the BSA.

The project would fund a native habitat replacement program at a 2:1 ratio for impacts to waters and wetlands is anticipated. The downstream portion of Diamond Bar Creek owned by City of Industry is proposed as the mitigation site. A 5-year Habitat Mitigation and Monitoring Program (HMMP) would be developed in consultation with the resource agencies (ACOE,CDFG, RWQCB, FWS) to ensure the success of the native habitat replacement program. The HMMP would include provisions for initial planting, performance monitoring and success criteria.

Mitigation measures for native birds includes limiting grubbing of vegetation to occur outside of the bird nesting season, generally defined as February 1 to September 1, to avoid potential impacts to nesting birds. However, work may occur during the nesting season if a preconstruction nest survey is conducted by a qualified biologist within three days prior to the start of construction to ensure no impacts to nesting birds occur.

Mitigation measures for tree removal include a tree replacement ratio of 1:1 for landscaped areas inside state right-of-way, and a tree replacement ratio of 2:1 for trees outside of state right-of-way.

iv. Parkland

A Programmatic Section 4(f) evaluation has been prepared in accordance with 49 United States Code Section 303 and the Federal Highway Administration (FHWA) regulations for Section 4(f) compliance codified at 23 Code of Federal Regulations Part 774. The study evaluates the effects of the two build alternatives on a public golf course, Diamond Bar Golf Course. The combination cloverleaf/diamond interchange configuration alternative (Build Alternative 2) would require direct use of Diamond Bar Golf Course because of the permanent loss of approximately 7.3 acres of golf course property. The partial cloverleaf interchange configuration alternative (Build Alternative 3) would result in direct use of Diamond Bar Golf Course because of the permanent loss of approximately 10.1 acres of golf course property. The proposed project's minor use of a protected Section 4(f) property satisfies the applicability criteria of FHWA's Section 4(f) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4(f) Property.

The lead agency (California Department of Transportation) has been in consultation with the County of Los Angeles (owner of Diamond Bar Golf Course) regarding potential effects on this Section 4(f) property (Diamond Bar Golf Course) as well as enhancements and measures to minimize harm. The minimization measures identified in the Section 4(f) evaluation include reconfiguring the golf course so that it continues to function as an 18-hole golf course and the user experience is not diminished, constructing a noise barrier on the east half of the course, converting the concrete surface drains to underground pipes, protective netting, compensation or reasonable functional replacement of parkland, and consideration of lost revenue through a Loss of Business Goodwill claim. A detailed list of minimization measures is presented in the Section 4(f) evaluation of the Environmental Document.

F. Air Quality Conformity

This project conforms and is compatible with the State Implementation Plan (SIP) for air quality because it was included in the 2011 Federal Transportation Improvement Program (FTIP), as prepared by SCAG and approved by FHWA.

The project was proposed and is included in the 2012 Regional Transportation Plan (RTP), which was found to be conforming by the Federal Highway Administration (FHWA)/Federal Transit Administration (FTA) on June 4, 2012. The project (Project ID# LA0D450) is included in the 2013 FTIP approved by SCAG on September 12, 2012, which was found conforming by the FHWA/FTA on December 14, 2012.

A project-level conformity determination was provided by FHWA on June 26, 2013. A copy of the determination is provided in Attachment L.

The Environmental Impact Report/Environmental Assessment identified two minimization measures required to be implemented as part of the project. The minimization measures are to implement California Department of Transportation standard specifications (2010), section 14 and to comply with SCAQMD's Rule 403 requirements to control construction Emissions of fugitive dust.

G. Title VI Considerations

A Community Impact Analysis was prepared for this project finding that the SR-57/SR-60 Confluence Project would not result in significant long-term adverse impacts on population and housing within the study area. There are no schools or places of worship within the project study area. No populations of minority low income residents were found to be impacted by the project.

Access through the site for low mobility individuals would be maintained through the project during and after construction. The proposed sidewalks and curb ramps along Grand Avenue would be reconstructed to meet the requirements of the Americans with Disabilities Act (ADA).

H. Noise Abatement Decision Report

This section summarizes the Noise Abatement Decision Report (NADR) which:

- Is an evaluation of the reasonableness and feasibility of incorporating noise abatement measures into this project;
- Constituted the preliminary decision on noise abatement measures incorporated into the Environmental Document; and
- Is required for Caltrans to meet Title 23, Code of Federal Regulation, Part 772 of the Federal Highway Administration standards.

The Noise Study Report (NSR) prepared by ICF International has been approved by Jin S. Lee, Noise and Vibration Branch Chief, on May 23, 2012. Five noise barriers were evaluated in the noise analyses, Barrier A-1 could benefit residences along Palomino Drive, Barrier A-2 could benefit residences along Decorah Road, Barriers C and C-2 could benefit residences along Rock River Road, Barriers G-1 and G-2 could benefit the golf course. Five barriers were found to be

feasible from an acoustical perspective: noise barriers A-2, C, C-2 and G-1 and G-2. Summary of these five walls is shown in Table 32 below.

Noise Barrier Designation	Location (by street)	Wall Height	Length
A-2	Decorah Road	6 ft	2,640 ft
С	Rock River Drive west of Prospectors Road	12 ft- 14 ft	2,150 ft
C-2	Rock River Drive east of Prospectors Road	6 ft	1,280 ft
G-1	Diamond Bar Golf Course east of Grand Avenue	12 ft	2,970 ft
G-2	Diamond Bar Golf Course west of Grand Avenue	12 ft	2,220 ft

 Table 32 - Summary of Noise Abatement Data

A noise abatement decision report (NADR) was prepared for the five noise barriers that were found feasible. The NADR has been approved by Jin S. Lee, Noise and Vibration Branch Chief, on June 28, 2012. The NADR evaluated the cost reasonableness of the noise barriers based on the requirements of Title 23 of the Code of Federal Regulations. A reasonable cost allowance for each benefitted receiver was calculated for one receiver per residential property, or in the case of the golf course one receiver per fairway. When the estimated sound barrier construction cost is equal or less than the reasonable allowance, the sound barrier is deemed preliminarily reasonable. Conversely, when the estimated construction cost exceeds the reasonable allowance, it is deemed unreasonable. The engineering evaluations of the five acoustically feasible barriers provided the estimated construction costs of the five barriers. The summary is shown in Table 33 below.

Noise	Wall	No. of	Estimated	Maximum
Barrier	Height	Benefited	Construction	Cost
Designation		Residences	Cost	Allowance
A-2	6 ft	36	\$3,068,000	\$1,980,000
С	12 ft- 14 ft	35	\$2,825,000	\$1,925,000
C-2	6 ft	16	\$1,367,000	\$880,000
G-1	12 ft	7	\$1,061,000	\$385,000
G-2	12ft	1	\$933.000	\$55.000

Table 33- Noise Barrier Estimated Cost and Reasonableness Check

The engineering analyses of the acoustically feasible noise barriers indicated that all five barriers were deemed not cost reasonable. The Programmatic Section 4 (f) Evaluation report for required noise barrier G-1 (east half of the gold course) is to be included in the project as an enhancement measure for the Section 4(f) property. None of the other noise walls are included in the project.

7. OTHER CONSIDERATIONS AS APPROPRIATE

A. Public Hearing Process

A public meeting was held on March 6, 2013 to present the two build alternatives. During the public circulation period, 21 comments were received from the public. The comments were mixed, with those favoring the project, choosing Alternative 3. Those in support of Alternative 1 in general wanted a larger project for the interchange implemented. Suggestions include full connection HOV lanes at each end of the confluence, separation of the two routes through the confluence, and construction of eastbound SR-60 to northbound SR-57. These suggestions are outside the scope of this project and do not address the need and purpose.

The City of Industry supports the project. Diamond Bar had a comment to ensure the ambiance of the city entrance is maintained. Los Angeles County had several comments to clarify the text of the environmental document in regards to the project impacts and mitigation measures to the Golf Course. The comments did not result in any substantial design or mitigation feature changes.

B. Route Matters

A freeway agreement has been executed with Diamond Bar along Route 60 from the south/ west SR-57/SR-60 interchange to the eastern city limits. The proposed project does not change the freeway connections and does not require an update to the existing freeway agreement with Diamond Bar.

C. Permits

The permits, reviews, and approvals listed in Table 34 would be required for project construction.

Table 34 – I crimting Require	nenus
Agency	Permit/Approval
U.S. Fish and Wildlife Service	Endangered Species Act, Section 7
U.S. Army Corps of Engineers	Clean Water Act, Section 404
California Department of Fish and Game	Section 1600 Agreement for Streambed Alteration
State Water Resources Control Board	Clean Water Act, Section 401
Los Angeles Regional Water Quality Control Board	National Pollutant Discharge Elimination System permit
Los Angeles County	Right of Entry Permit, concurrence regarding parkland conveyance

Table 34 – Permitting Requirements

D. Cooperative Agreements

A cooperative agreement with City of Industry for the PA/ED phase was approved on June 9, 2009. A PS&E and right-of-way cooperative agreement is needed with City of Industry. A

construction Cooperative Agreement for the approved project would be prepared during the PS&E phase.

E. Involvement with a Navigable Waterway

There are no navigable waterways within the project area.

F. Transportation Management Plan for use During Construction

Transportation Management Plan (TMP) Data Sheets have been prepared based upon the planned stage construction presented below to reduce potential construction related traffic conflicts and delays. The TMP identifies several elements to handle traffic on the existing freeways and local streets during construction including the following strategies:

- <u>Public Awareness Campaign</u>: Development of a public awareness campaign to sufficiently inform residents and motorists prior to construction. This campaign, utilizing local media, telephone hotline mailers, direct advertising, and internet updates would inform the public of construction related congestion.
- <u>Real-time communications:</u> Real time communications with motorists advising them of construction activities, closures, and delays would be conducted using portable changeable message signs and fixed changeable message signs.
- <u>Freeway Service Patrol</u>: Provisions would be made to extend the working hours of the Freeway Service Patrol to assist motorists involved in minor incidents or vehicle breakdowns.
- <u>COZEEP</u>: Implementation of a Construction Zone Enhanced Enforcement Program (COZEEP) to provide police assistance and surveillance within construction areas. The officers can enforce speed reductions within work zones and provide emergency response support.

The costs associated with implementing these TMP strategies are included in the Transportation Management Plan Data Sheet as Attachment H. The construction staging traffic control and detour and signing plans for the project would be developed as part of the PS&E phase.

G. Stage Construction

Continued traffic operations throughout construction is a requirement of the project. The geometry of the proposed improvements was developed with consideration for maintaining traffic operations, minimizing detours and closures during construction. The mainline lanes would not be closed during peak hours, however temporary night and weekend closures may be required. Majority of the project would be constructed outside the existing travel lanes which would permit the construction to be sequenced to minimize disruption to the mainline freeway traffic. Staged construction would be required to construct the following improvements:

- Reconstructing the northbound SR-57 to eastbound SR-60 connector
- Reconstructing the Grand Avenue Overcrossing Structure
- Reconstructing Grand Avenue and the on and off-ramps on SR-60

A set of preliminary stage construction plans have been developed for the project to identify potential temporary detours, lane closures, and ramp closures and the potential environmental effects related to the project construction. The proposed construction stages are described herein.

Stage 1- Reconstruct Grand Avenue and Golden Springs Drive

- Widen Grand Avenue south of the SR-60 Interchange;
- Construct a new golf cart tunnel under Grand Avenue;
- Widen Golden Springs Drive;
- Reconstruct street intersection of Grand Avenue and Golden Spring Drive

Traffic Impact:

• Temporarily reduce Grand Avenue from five lanes to four lanes for tunnel construction.

Stage 2- Construct the Eastbound Bypass Off-Ramp to Grand Avenue

Constructing the new eastbound bypass off-ramp to Grand Avenue would require two sub-stages as described below:

2A- Reconstruct the SR-57 / Golden Spring Drive UC

• Construct the northbound SR-57 connector and Golden Springs Drive Undercrossing

Traffic Impact:

- Reduced lane width and shoulder width on the existing SR-57 connector;
- Nighttime closures of Golden Spring Drive for bridge falsework;
- Nighttime lane closure on SR-57 during bridge construction.

2B- Construct the Eastbound Bypass Off-Ramp to Grand Avenue

- Route the northbound SR-57 traffic to the new connector undercrossing in 2A;
- Construct the eastbound SR-60 bypass off-ramp to Grand Avenue;
- Construct the new eastbound off-ramp exit at Grand Avenue.

Traffic Impact:

- Nighttime closures of Golden Spring Drive during bridge removal;
- Nighttime lane closures of SR-57 and SR-60 during lane shifting.

Stage 3- Reconstruct the Grand Ave Interchange

Grand Avenue Interchange would be reconstructed with a new overcrossing at SR-60, new eastbound on and off-ramps, and the westbound off and loop on-ramp at Grand Avenue. The interchange would be constructed in two sub-staging as described below:

3A- Construct Portion of Grand Avenue OC

- Construct the east portion of the Grand Avenue OC replacement structure;
- Reconstruct the westbound off-ramp and the westbound loop on-ramp;
- Construct the westbound auxiliary lane on SR-60;
- Reconstruct the eastbound slip on-ramp adjacent to the existing ramp;
- Construct the new eastbound loop on-ramp up to the bridge abutment.

Traffic Impact:

- Nighttime lane closures of SR-60 during bridge falsework erection;
- A 30-day ramp closure of the eastbound slip on-ramp; on-ramp traffic would be detoured to the eastbound Diamond Bar Boulevard on-ramp;
- Maintain four through lanes and a left-turn lane on existing Grand Avenue OC;
- Nighttime ramp closures of the westbound off-ramp and the loop on-ramp to construct transition pavement.

3B- Construct Full Grand Avenue OC and On and Off-Ramps

- Remove and reconstruct the remaining Grand Avenue OC;
- Complete the construction of the Grand Avenue eastbound loop on-ramp;
- Raise Grand Avenue profile to match the new bridge profile;
- Complete Grand Avenue widening between the westbound off-ramp and the new eastbound off-ramp;
- Raise the profile of existing westbound slip on-ramp.

Traffic Impact:

- Nighttime closure of SR-60 during bridge removal and falsework erection;
- Weekend closures of the eastbound slip on-ramp to SR-60 for lane shift from Stage 3A to 3B;
- Two week closure of the westbound slip ramp during ramp reconstruction; detour traffic to the westbound loop on-ramp constructed in Stage 3A;
- Alt 2 –Full closure of the southbound Grand Avenue traffic to the eastbound on-ramp; on-ramp traffic detoured to Diamond Bar Boulevard on-ramp;
- Alt 3 –Eight-week closure of southbound Grand Avenue traffic to the eastbound on-ramp until the eastbound loop on-ramp is fully constructed; traffic to SR-57 detoured to the West Temple Avenue Interchange on SR-57 via Valley Blvd.

Stage 4- Construct Eastbound SR-60 Bypass Connector

The eastbound SR-60 bypass connector would be constructed in two sub-stages as described below:

4A- Construct Eastbound SR-60 Bypass Connector Overcrossing

- Construct the bypass connector overcrossing structure over the South Prospector Road and Diamond Bar Boulevard;
- Construct the auxiliary lane from the new Grand Avenue on-ramp.

Traffic Impact:

- Temporarily restripe eastbound SR-60 to northbound SR-57 gore;
- Reduce Diamond Bar Boulevard eastbound on-ramp to one lane;
- Nighttime lane closures of eastbound SR-60 between Grand Avenue and SR-57 during pavement construction;
- Nighttime closures of South Prospector Road, Diamond Bar Boulevard and the eastbound SR-60 off-ramp to Diamond Bar Boulevard;

• Nighttime and weekend lane closures on eastbound SR-60 east of Diamond Bar Blvd.

4B- Complete Eastbound Bypass Connector

- Construct the eastbound approach and the merge with SR-60 east of Diamond Bar Boulevard;
- Complete realignment of Diamond Bar Blvd on-ramp to eastbound SR-60.

Traffic Impact:

- Nighttime closures of the eastbound Diamond Bar Boulevard on-ramp during the ramp reconstruction;
- Temporary lane closures of eastbound SR-60 at the merge of the eastbound SR-60 bypass connector.

H. Accommodation of Oversize Loads

The proposed project would construct new lanes and interchanges with standard lane widths, and standard vertical and horizontal clearances. Existing non-standard lane widths would be maintained. As such, the project would not affect the ability of the freeway mainline and ramps to transport oversized loads.

During construction of the Grand Avenue OC, the falsework clearance over the highway would be the standard 15'-6", which may restrict the use of oversize loads over 15'-3" in height. The existing lane widths would be maintained during construction which would not change the ability to carry oversized loads. No known industries utilize this route as an unlimited vertical clearance route since the Existing Grand Avenue vertical clearance is 16'-3", and there are numerous overcrossing structures along SR-57 and SR-60.

I. Graffiti Control

The project is located in an urban area, which is an identified graffiti-prone area. Standard deterrent techniques would be used as part of the proposed design. The project would utilize architectural treatments, such as Fracture Rib Texture, on the face of retaining walls. To prevent vandalism and theft of electrical systems, theft deterrent security pull boxes would be installed.

J. Best Management Practices (BMPs)

A Corridor Stormwater Management Study for SR-60 was published in late 2010. Permanent treatment BMPs have been considered for the project that are consistent with the Corridor Storm Water Management Study. The Storm Water Data Report (SWDR) prepared for this project recommends several permanent BMPS that would result in 25% more treatment credit than proposed in the Corridor Study.

The SWDR recommendations include modifying the westbound SR-60 drainage system west of Grand Avenue OC to divert additional runoff to the biofiltration swale currently planned to be constructed in EA255101. The report also identifies the construction of an infiltration basin within the proposed loop on-ramp for alternative 3, and an Austin Sand Filter within the existing westbound loop on-ramp area. New bioswales near the westbound off-ramp would be constructed with the inclusion of a Linear Radial GSRD in series. The total treatment area of 14.6 acres of paved tributary area would exceed the added paved tributary area of 12.9 acres.

The total treated tributary area would be over 22% of the total proposed project impervious area of 64.3 acres.

Right-of-way cost required for the permanent BMPs is included Right-of-way Data Sheet (Attachment F). The permanent treatment BMP cost along with construction BMP costs identified in the Storm Water Data Report (Attachment I) are accounted for in the Project Cost Estimate (Attachment E).

K. Pavement Design

Life-cycle cost analyses (LCCA) were conducted to determine the long term cost effectiveness of various pavement designs. LCCA generates the total lifetime cost of the pavement converted to its present value, including initial construction costs, as well as future maintenance and user delay costs. The alternative with the lowest life-cycle cost is viewed as the most cost effective pavement type even if it has a higher initial cost.

The project was divided into four typical pavement uses, eastbound mainline, westbound mainline, on/off-ramps with heavy truck usage and on/off-ramps with light truck usage. A pavement life cycle analysis over 55 years was performed for a sample segment of each of these four typical pavement uses. The Life Cycle Analysis followed the Caltrans Life-Cycle Cost Analysis Procedures Manual, updated August 2010, and utilized the *RealCost(Ver 2.2)* software. The Life-Cycle Cost Analysis comparison forms are provided in Attachment J, and the information is summarized in Table 35 below.

Table 5.	Juiiii	ary of raveline	int Life Cycle Costs		
		Pavement			Life Cycle
Location	Option	Type and	Pavement Section	Initial	Cost
		Life		Cost	(2017)
Eastbound	1	JPCP	1.10' JPCP/0.50' LCB/0.70'	\$1,917,779	\$1,960,610
SR-60		(40 Year)	AB		
Mainline	2	JPCP	1.00' JPCP/0.50' LCB/0.70'	\$1,798,155	\$2,103,960
		(20 Year)	AB		
Eastbound	1	JPCP	1.10' JPCP/0.50' LCB/0.70'	\$2,567,852	\$2,625,410
SR-60		(40 Year)	AB		
Mainline	2	JPCP	1.00' JPCP/0.50' LCB/0.70'	\$2,407,606	\$2,818,700
		(20 Year)	AB		
Eastbound	1	RHMA	0.20'	\$839,038	\$994,140
SR-60 Grand		(40 Year)	RHMA/0.35'HMA/0.55'		
Ave On-			LCB/1.05' AB		
Ramp (low	2	RHMA	0.20' RHMA/0.30'	\$781,659	\$1,001,120
truck usage)		(20 Year)	HMA/0.50' LCB/0.90' AB		
Eastbound	1	RHMA	0.20'RHMA/0.50HMA/0.70'	\$1,051,984	\$1,276,830
SR-60 Grand		(40 Year)	LCB/1.40' AB		
Ave Off-	2	RHMA	0.20'RHMA/0.40HMA/0.65'	\$954,494	\$1,250,150
Ramp (high		(20 Year)	LCB/1.25' AB		
truck usage)					

Table 35 - Summary of Pavement Life Cycle Costs

Note: Bold rows indicate pavement type selected

For the mainline lanes the 40 year pavement life cycle costs are lower and therefore the preferred pavement type. The low truck usage ramps, the northbound Grand Avenue to eastbound SR-60 direct on-ramp and westbound loop on-ramp, the 40 year pavement life cycle costs are lower and therefore the preferred pavement type. On the high truck usage ramps, the difference in life cycle cost for the two pavement alternatives is minor, while the 40 year RHMA reduced road user delay costs by 70% for the on and off-ramps. Thus, the 40 year RHMA is the preferred alternative for the off-ramps, bypass connector, eastbound SR-60 loop on-ramp, and the westbound SR-60 slip on-ramp. Geosynthetic Pavement Interlayer will be constructed within the HMA layers under all new ramp meter pads.

The westbound direct on-ramp from Grand Avenue (WG-03) will be partially re-constructed using the structure section developed during its design in 2012 (see EA255101). The section consists of 0.60' HMA, Type A/0.65 LCB/1.15'AB, Class 3/Subgrade Enhancement Geotextiles.

8. PROGRAMMING

i. Programming

The Project was programmed in the SCAG adopted 2011 FTIP/RTP, ID# LA0D450. However, the project scope changed. The updated project scope is programmed in the 2011 FTIP amendment #24, and 2012 RTP which were adopted in April 4 2012 by SCAG. The updated project description in the RTP reads "Reconstruct SR 60/Grand Ave Interchange - widen Grand Ave: SB add 1Thru Ln (2 exstng); NB add 1 thru ln (3 exstng), replace Grand Av OC, add EB loop on-ramp, construct Additional EB thru ln from Grand Ave trap ln to SR57 add ln, add two bypass ramp connectors, add aux lns EB and WB from east to west junction of the confluence." The project is included in the FTIP/RTP for a total amount of \$257.9 million.

ii. Funding

The project planning costs would be funded entirely by City of Industry using local funds. The project design costs would be partially funded by City of Industry local funds. The project design costs and capital improvement phases are also partially funded through Regional Surface Transportation Improvement Program (2011 METRO Call for projects) in the amount of \$5.89 million. The remaining portion would be funded by a mixture of local funds, METRO funds, and Federal funds.

iii. Schedule

The target milestones for the project are as follows:

Milestone	Delivery Date
Project Approval & Environmental Document (PA/ED)	September 2013
Project Plans Specifications & Estimates (PS&E)	September 2014
Right-of-Way Certification	January 2015
Ready to List	March 2015
Construction Completion	Dec 2017

Table 36 – Project Schedule

9. **REVIEWS**

This project has been reviewed by the Project Development Team during a series of PDT meetings. Fact Sheets for the exception to design standards were prepared to document nonstandard features. The HQ Project Development Coordinator approved the Fact Sheet for Mandatory Design Standards exception on March 19, 2009. The District Office of Design A Chief approved the Fact Sheet for Advisory Design Standard exceptions on March 25, 2009 February 22, 2011. All project design considerations were also discussed with and reviewed by Caltrans District 7 staff. The project has been reviewed by City of Industry and Diamond Bar representatives, who have also contributed to its development.

10. PROJECT PERSONNEL

Name	Organization / Branch	Phone No.
Jiwanjit Palaha, P.E.	Project Manager	(213) 897-6926
Amir Elsharief, Ph.d., P.E.	Design Manager, Office of Design C	(213) 897-2752
Godfrey Nzeogu, P.E.	Project Engineer, Office of Design C	(213) 897-7515
Zoltan Elo	R/W Planning & Management, Local Program	(213) 897-0790
Dawn Kukla	Environmental Planning	(213) 897-3646
Agustin Barajas	Environmental Planning	(213) 897-7665
John Ballas, P.E.	City Engineer, City of Industry	(626) 333-2211
Eduardo Pereira, P.E.	CNC Engineering/City of Industry	(626) 333-0336
David Liu, P.E.	Director of Public Works/ City Engineer, Diamond Bar	(909) 839-7041
Wei Koo, P.E.	Project Manager, WKE, Inc.	(714) 953-1008
Hank Nguyen, P.E.	Project Engineer, WKE, Inc.	(714) 953-1015
Lee Lisecki	Environmental Planner, ICF Jones and Stokes	(213) 627-5376
Shilpa Trisal	Environmental Planner, ICF Jones and Stokes	(408) 216-2812
Ronn Knox, AICP	Traffic Engineer, KOA Corporation	(714) 573-0317

Principal contacts for the project are as follows:

11. LIST ATTACHMENTS

- Attachment A Vicinity Map
- Attachment B Alternative 2 Geometrics
- Attachment C Alternative 3 Geometrics
- Attachment D Advanced Planning Studies
- Attachment E Project Cost Estimate
- Attachment F Right-of-Way Data Sheet
- Attachment G TASAS
- Attachment H Transportation Management Plan Data Sheet
- Attachment I Storm Water Data Report (Cover Page)
- Attachment J Life-Cycle Cost Analysis for Pavement
- Attachment K Initial Site Assessment (ISA) Checklist
- Attachment L FHWA Air Quality Project Level Conformity Letter
- Attachment M Final Environmental Impact Report /Finding of No Significant Impact (EIR/FONSI) and Section 4(f) Evaluation Cover Sheet

07 -LA - 60, PM R23.3/R26.5 07-LA-57, PM R4.3/R4.5 & R4.5/R4.8 EA-279100 HE-12





ON SR-60

Between SR-57/SR60 West Junction and SR-57/SR60 East Junction













C	CU 00000	EA 279100	

DATE


×

RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

=> \$DA => \$TI

DATE TIME

8



×





RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

EA 279100 CU 00000



USERNAME => \$USER

		<u> </u>
CU 00000	EA 279100	



 ROUTE
 POST MILES TOTAL PROJECT
 SHEET No.
 TOTAL SHEETS

 SR-57
 R4.3-4.5/4.5-4.8 SR-60
 R23.3-R26.5
 Image: Comparison of the second s Dist COUNTY 07 LA REGISTERED CIVIL ENGINEER DATE HANK T. NGUYEN . <u>C 61227</u> PLANS APPROVAL DATE Exp. 06-30-13 THE STATE OF CALIFORNIA OR ITS OFFICERS OF ACENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET. F CAL WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705 CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 GRAND AVENUE END CONSTRUCTION R=2000.00 Delto=7°02'52.67" L=246.02 T=123.17 ATTACHMENT B (ALTERNATIVE 2) LAYOUT Scale 1"=100' L-12 s CU 00000 EA 279100

×			
	BY	SED	MATCHLINE STA
	REVISED 6	DATE REVIS	
×			Property and the property of t
			673.5 672.557 674
	JLATED- ;NED BY	KED BY	
×	/ISOR CALCI DESIG	СНЕСІ	RW No. 280
	IONAL SUPER		673.6 RW.No. 288 (MSE)
	ULTANT FUNCT		5 67 _{4.9}
	LION CONSI		R=2500.00 Deltg=20°49′39.46"
×	TRANSPORTA		R=2300.00 DETIG=20 49 33.40 L=908.78 T=459.46
	PARTMENT OF		PROP R/W
	<u> NIA - DEF</u>	ŝ	SEE SHEET L-14
×	OF CALIFOR	arar	
	STATE		

RELATIVE BORDER SCALE O IS IN INCHES

2 3 USI

USERNAME => \$USER DGN FILE => \$REQUEST

Dist	COUNTY	ROUTE	POST TOTAL	MILES PROJECT	SHEET No.	TOTAL SHEETS			
REC PL4	REGISTERED CIVIL ENGINEER DATE								
THE S OR AC THE A COPIE	THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT DE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED THE ACCURACY OR COMPLETENESS OF SCANNED								
			WKE 400 N SUITE SANTA	, INC I. TUSTIN AV 275 ANA, CA 92	'ENUE 1705				

(ALTERNATIVE 2)						
LAYOUT						
SCALE 1"=100'						
L-13						

CU 00000 EA 279100

X X X X X X X X X X X X X X X X X X X	DESIGNED BY DESIGNED BY DESIGNED BY DESIGNED BY DATE REVISED	
× <u> <u> <u> x</u> <u> x</u> <u> x</u> <u> x</u> <u> x</u> <u> x</u> <u> x</u></u></u>	Geodenes	SEE SHEEL

USERNAME => \$USER DGN FILE => \$REQUEST

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS			
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5					
PLA THE S OR AG THE A	REGISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OF AGENTS SHALL NOT BE RESPONSIBLE FOR OF AGENTS SHALL NOT BE RESPONSIBLE FOR OF AGENTS SHALL NOT BE RESPONSIBLE FOR OF AGENTS SHALL NOT BE RESPONSIBLE FOR DATE							
CIT 1565	Y OF INDU 1 EAST STAF	JSTRY Ford street	WKE, INC 400 N. TUSTIN AV SULTE 275	/ENUE				
CITY	OF INDUSTR	Y, CA 91744	4 SANTA ANA, CA 92705					





=> \$DATE => \$TIME

CU 00000	EA 279100

REVISED BY DATE REVISED	LAVENDER	
LESIGNED BY	PC76+32.85	ГОРИССИИ ПОЛИТИТИТИТИТИТИТИТИТИТИТИТИТИТИТИТИТИТИТ
	3 T6+32.85 END CONSTRUCTION	
Ge Cathans		

2 3 USERN DGN F

USERNAME => \$USER DGN FILE => \$REQUEST

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
REGISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCOMPLETENESS OF SCANNED							
CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705							



ATTACHMENT	В
(ALTERNATIVE	2)
LAYOUT	
Scale 1"=100'	L-18

		\sim
CU 00000	EA 279100	



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS			
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5					
REC PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OF JIS OFFICERS OF AGENIS SHALL NOT GE RESPONSIBLE FOR THE COLURACY OF COMPLETENESS OF SCANNED							
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	JSTRY FORD STREET Y, CA 91744	WKE, INC 400 N. TUSTIN AN SUITE 275 SANTA ANA, CA 92	/ENUE 2705				



CU 00000





×

RELATIVE BORDER SCALE IS IN INCHES



×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER

DGN FILE => \$REQUEST

EA 279100



×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

	Dist	COUNTY	ROUTE	POST TOTAL F	MILES PROJECT	SHEET No.	TOTAL SHEETS
	07	LA	SR-57 SR-60	R4.3-4.5 R23.3-R2	/4.5-4.8 6.5		
	REC	GISTERED (CIVIL ENGIN	IEER DAT	E PRO	FESSION	47
					HANK	T. NGUY	EN
	PLA	ANS APPRO	VAL DATE		₩ No Exp.	<u>C 61227</u> 06-30-1	<u>,</u>
	OR AC THE A	STATE OF CAL GENTS SHALL ACCURACY OR	IFORNIA OR TI NOT BE RESPO COMPLETENESS	S OFFICERS WSIBLE FOR OF SCANNED	STATE OF	IVIL	NIP .
	COPIE	S OF THIS P	LAN SHEET.	WKE.		CAL	/
	1565	Y OF INDUSTR	FORD STREET	400 N. SUITE	TUSTIN AV 275	ENUE	
	CIT	OF INDUSTR	1, CA 91744	SANTA	ANA, CA 92	705	
							720
							120
					N		
					יי ר ע	5.37	710
						69	
						- le	700
	0.00				Ó	- -	
<u>Grade =</u>	0.96%						600
							690
							680
							670
							5,5
			ATTAC	HMEN	ΤВ		
		()	ALTER	NATIV	E 2)		
			PR	OFILE			
			Scale: H	loriz 1" Vert 1"	=501 =101		
					D	- 4	
22+00	23+00		24+00		25+00		TOTAL



RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

Dist 07		ROUTE	POST TOTAL R4.3-4.5	MILES PROJECT	SHEET NO.	TOTAL SHEETS
REC	L GISTERED (I SK-60	EER DA		FESSION	
	ANS APPRO	VAL DATE		HANK No.	T. NGUY C 61227	EN INEER
THE S OR AC THE A	STATE OF CAL GENTS SHALL ACCURACY OR	FORNIA OR 11 NOT BE RESPO COMPLETENESS	S OFFICERS NSIBLE FOR OF SCANNED	Exp.	06-30-1	3/*
CIT 1565 CITY	Y OF INDI	USTRY FORD STREET	WKE, 400 n Suite	INC TUSTIN AV 275	ENUE	
			SANTA	ANA, CA 92	705	
						700
						690
						680
						720
						710
						700
						690
						680
		АТТАС	HMEN	тв		670
		ALTERI PRO	NATIV DFILI	'E 2) E		
		Scale: H	oriz 1" Vert 1"	=50' =10'		
				P	-6	

EA 279100 CU 00000



×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

Dist		ROUTE	POST TOTAL F R4.3-4.5	MILES PROJECT /4.5-4.8	SHEET No.	TOTAL SHEETS
		SR-60	R23.3-R2	6.5		L
REG	ISTERED C	IVIL ENGIN	EER DAT	E PRO	T. NGUY	EN IN
PLA THE S	NS APPRO	VAL DATE	S OFFICERS	W No	<u>C 61227</u> 06-30-1	 3∕_≭/−
OR AG. THE A COPIE.	ENTS SHALL CCURACY OR S OF THIS PL	NOT BE RESPO COMPLETENESS AN SHEET.	NSIBLE FOR OF SCANNED	STATE OF	CAL IFOR	NIL .
CITY 1565 CITY	Y OF IND 1 EAST STAF OF INDUSTR	JSTRY Ford street Y, CA 91744	WKE, 400 N. SUITE SANTA	INC TUSTIN AV 275 ANA, CA 92	ENUE 705	
_						
					•	
					•	
_						710
						700
						100
						600
						שרט
						600
						ତଥାମ
					-	070
						6/0
		ATTAC	HMEN	ТВ		660
		AL FERN	NATIV Deii e	E 2) :		
		Scale: H	oriz 1"	• =50′		650
			Vert 1"	=10'	_	
				۲	-/	ΤΟΤΔΙ

CU 00000 EA 279100 00-00-00 TIME PLOTTED => \$D



RELATIVE BORDER SCALE IS IN INCHES

07 LA SR-57 R4.3-4.574.574.54.8 REGISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR COPIES OF THIS PLAN SHEET. CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705	CNO INEER
REGISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED No. C 61227 CITY OF INDUSTRY VARCHAR (TO CALIFORNIA OR ITS OFFICERS) CITY OF INDUSTRY WKE, INC 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 VARCHAR (TO FORD STREET) VARCHAR (TO FORD STREET) CITY OF INDUSTRY, CA 91744 SANTA ANA, CA 92705	CHG INEER
REGISTERED CIVIL ENGINEER DATE PROVISION (Construction) PLANS APPROVAL DATE PLANS APPROVAL DATE No. C 61227 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR SCANNED COPIES OF THIS PLAN SHEET. No. C 61227 CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705	CING INEER
PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THIS PLAN SHEET. CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SANTA ANA, CA 92705	CINEER #
PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS THE STATE OF CALIFORNIA OR ITS OFFICERS OF AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705	<i>№</i>
CITY OF INDUSTRY, CA 91744	
CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705	
15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705	
SANIA ANA, CA 92705	
	700
	730
	720
	710
	/10
	_
	700
	690
	680
	670
ATTACUMENT D	
(ALTEDNATIVE 2)	
Scale: Horiz 1"-501	
Vert 1"=10	
P-8	
298+00 TC	OTAL
CU 00000 FA 279100	



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

PLOTTED PLOTTED DATE TIME 00 8



EA 279100

PLOTTED PLOTTED DATE TIME 8 8



ATE OF CALIFORNI	 A - DEPARTMENT OF TRANSPORTATION A - DEPARTMENT OF TRANSPORTATION CONSULTANT FUNCTIONAL SUPERVISOR CALCULATED- DESIGNED BY 	KEVISED BY	×
t ditrans	CHECKED BY	DATE REVISED	
STATION.	650 640 630 620 610		
34+00	E 5 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 2 4 4 1 2 4 1 1 2 4 1 1 2 4 1 1 2 4 1 1 1 1		
	200 200 200 200 200 200 200 200		
35+00	L 200.00' C1 -0.300? G2 1.696% SD 1623.31' % % % % % % % % % % % % %		
36+00			
37+00			
38+00			
39+00		Image: section of the sectio	
40+00	Image Image Image Image Image Image	Image: Section of the sectio	
41+00			
42+00	PG PROFILE CONN "A" EGO CONNECTOR N SPRINGS DRIVI		
43+00			
44+00			

RELATIVE BORDER SCALE IS IN INCHES

3 USERNAME => \$ DGN FILE => \$

USERNAME => \$USER DGN FILE => \$REQUEST





RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER



RELATIVE BORDER SCALE IS IN INCHES



×

×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

		Dist COUNTY 07 LA	ROUTE SR-57 SR-60	POST MILES TOTAL PROJECT R4.3-4.5/4.5-4.8 R23.3-R26.5	SHEET TOTAL NO. SHEETS
		REGISTERED	CIVIL ENGIN	EER DATE	ESS IONAT CHE
		PLANS APPR	ROVAL DATE		61227
		THE STATE OF CO OR AGENTS SHALL	ALIFORNIA OR IT	S OFFICERS	
		COPIES OF THIS	PLAN SHEET.	OF SCAIWAED	CAL IFON
		CITY OF IN 15651 EAST ST CITY OF INDUS	DUSTRY AFFORD STREET TRY, CA 91744	WKE, INC 400 N. TUSTIN AVE SUITE 275 SANTA ANA, CA 927	NUE 105
		ی ری	N		
		5+09.8			770
			> - -		760
= 2.9	93%				
PG					750
					740
	54+00	55+00			
					780
				52+00 EFT	770
			1+55.54 748.04	3" STA BOVE	760
			Elev 5		750
				SHE	
				SEE	740
			АТТАС	≥ Hment b	730
			ALTERI	NATIVE 2)	
			PRO		
			Scale: H	oriz 1"=501	1
E POI	NT			Ver† 1"=10'	
E POI	NT			Vert 1"=10' P-	15

EA 279100

CU 00000



×

RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

DATE TIME 8 8



RELATIVE BORDER SCALE IS IN INCHES 3 USERNAME => \$USER DGN FILE => \$REQUEST

07 LA SR-57 Red:3-4,3-4,3-4,3-4,8 REGISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE DATE PLANS APPROVAL DATE DATE OF 100 SULT, IN ADDRESS DATE OTH 10 SULT, IN ADDRESS DATE DIAL AM, CA 2070 DATE OTH 10 SULT, CA 2012 DATE DIAL AM, CA 2070 DATE DIAL AM, CA 2070 DATE DIAL AM, CA 2070 DATE OTH 10 DATE OTH 10 DATE OTH 10 DATE OTH 10 DATE	 Dist	COUNTY	ROUTE	POST TOTAL	MILES PROJECT	SHEET No.	TOTAL SHEETS
REGISTERED CIVIL ENGINEER DATE LINIS APPROVAL DATE Mart 1, Marting 1, Mart 1, M	07	LA	SR-57 SR-60	R4.3-4. R23.3-R	5/4.5-4.8 26.5		
RECISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE No. C. 6220- International de la construction international de la construction intern	-			·			
PLANS APPROVAL DATE PLANS APP	REC	SISTERED C	CIVIL ENGIN	EER DA	TE ALD PRO	FESSION	42
PLANS APPROVAL DATE PLANS APP	1				LSI 0	T. NGUY	EN
CITY OF INDUSTRY ISSI LAST STAFFORD STRET CITY OF INDUSTRY ISSI LAST STAFFORD STRET UNCE, INC. WCR, INC.	PLA	ANS APPRO	VAL DATE		- ₩ No	<u>C 61227</u> 06-30-1	зЛЯ́Н
Contra of instruction WKE, INC. Integration Integration Integration <t< td=""><td>THE S OR AC THE A</td><td>STATE OF CAL GENTS SHALL ICCURACY OR</td><td>IFORNIA OR II NOT BE RESPO COMPLETENESS</td><td>'S OFFICERS NSIBLE FOR OF SCANNE</td><td>STATE OF</td><td></td><td>NIT</td></t<>	THE S OR AC THE A	STATE OF CAL GENTS SHALL ICCURACY OR	IFORNIA OR II NOT BE RESPO COMPLETENESS	'S OFFICERS NSIBLE FOR OF SCANNE	STATE OF		NIT
Both Workshows Both Workshows 100 W. 1025 IN AUGRACE SMTA AMA, G. 8 2705 SMTA AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705 Image: Smta AMA, G. 8 2705	COPIE	S OF THIS PL	LAN SHEET.	WKE			/
CITO & RUSSIRY, LA 91/4 SANTA ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705 Image: Santa ANA, CA 92705	1565	Y OF IND	USTRY Ford Street	400 N SUITE	. TUSTIN AV 275	ENUE	
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Yer: 1"=10 P-17 TOTAL	CITY	OF INDUSTR	Y, CA 91744	SANTA	ANA, CA 92	705	
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 P-17 TOTAL	-						
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Vert 1"=50 P-17							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Vert 1"=10 P-17							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P-17							
ATTACHMENT B (ALTERNATIVE 2) PROFIL 1"=50' Vert 1"=50' Vert 1"=50' TOTAL							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1":500 P-17 TOTAL	-						
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50) P - 17 TOTAL							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' P - 17 TOTAL							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Vert 1"=10 P - 17 TOTAL							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P - 17 TOTAL							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scole: Horiz 1"=50' Vert 1"=10' P-17							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P-17							
800 790 780 740 730 7							
800 790 790 780 780 780 780 780 780 780 780 780 780 780 780 780 780 780 780 780 750 750 750 750 730 730 ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P-17 TOTAL							
790 780 780 780 780 780 770 770 760 750 730 7							800
790 780 780 770 760 770 760 750 750 750 750 750 750 750 750 750 750 750 730 7							
780 770 770 760 750 750 750 750 750 750 750 750 750 750 750 750 750 750 730 730 ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P-17 TOTAL							790
780 770 770 760 750 750 750 740 730 730 ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P-17							
780 770 770 760 750 730 7							700
770 760 750 750 750 750 750 750 740 730 ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' TOTAL	-						/80
770 760 750 750 750 750 750 730 730 ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50; Vert 1"=10 P-17							
760 750 750 740 730 7							770
760 750 750 740 730 730 730 PROFILE Scale: Horiz 1"=50' Vert 1"=10 P-17 TOTAL							
ATTACHMENT B 730 ATTACHMENT B 730 CALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' P-17 TOTAL TOTAL							760
ATTACHMENT B 730 ATTACHMENT B 730 CALTERNATIVE 2) PROFILE Scale: Horiz 1"=50; Vert 1"=10 P-17							/ שס
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50; Vert 1"=10 P-17	-						
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50', Vert 1"=10' P-17 TOTAL	_						750
ATTACHMENT B 730 ATTACHMENT B 730 (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50; Vert 1"=10 P-17	-						
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Vert 1"=10 P-17							740
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Vert 1"=10 P-17							
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Vert 1"=10 P-17	-						
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50 Vert 1"=10 P-17							730
ATTACHMENT B (ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P-17							
(ALTERNATIVE 2) PROFILE Scale: Horiz 1"=50' Vert 1"=10' P-17				HMEN	IT R		
PROFILE PROFILE Scale: Horiz 1"=50' P-17 Protation P-17			ALTER		/E 2)		
Scale: Horiz 1"=50' Vert 1"=10 P-17			DD/		F		
Verit i"=10 P-17 TOTAL			Scale: H	oriz 1	'=50 '		
P-17				Vert 1	'=10′		
					P -	17	
							TOTAL

CU 00000	ΕA	279100
----------	----	--------



×

RELATIVE BORDER SCALE IS IN INCHES



x

×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

EA 279100



×

×

x

x

	Dist	COUNTY	ROUTE	POST MIL TOTAL PRO	LES DJECT	SHEET No.	TOTAL SHEETS
	07	LA	SR-57 SR-60	R4.3-4.5/4 R23.3-R26.	.5-4.8 5		
					PROF	ESSION	
	REC	JISTERED C	IVIL ENGINE		HANK 1	T. NGUY	EN IZ
	PLA	ANS APPRO	VAL DATE			C 61227 D6-30-1	
	OR AC THE A COPIE	SENTS SHALL SENTS SHALL SCCURACY OR S OF THIS PI	TFORNTA OR TT. NOT BE RESPO COMPLETENESS LAN SHEET.	S OFFICERS VSIBLE FOR OF SCANNED	STATE OF	CAL IFOR	NIL
	CIT 1565 CITY	Y OF INDU 1 EAST STAFI 0F INDUSTR	JSTRY Ford street Y, CA 91744	WKE, IN 400 N. TU Suite 275 Santa Ana	IC JSTIN AVE 5 4, CA 92 ⁻	ENUE 705	
1] 1.10' 0.50' 0.70'		९९ ३				
2	0.70 0.20' 0.50' 0.70'	RHMA, T HMA, TY LCB	YPE G PE A				
3	1.40′ 0.20′ 0.35′ 0.55′ 1.05′	AB, CLA RHMA, T HMA, TY LCB AB, CLA	SS 3 YPE G PE A SS 3				
4	0.55	HMA, TY LCB AB. CLA	PE A SS 3				
* 5] 0.20′ 0.15′	RHMA, T HMA, TY	YPE G PE A				
- OG	0.35	GEOSYNI HMA, TY LCB	FHETIC PA PE A	VEMENT IN	NTERL4	AYER	
* 6] 0.20' 0.15' 0.20'	RHMA, T HMA, TY GEOSYNI HMA, TY	SS S PE G THETIC PA PE A	VEMENT IN	NTERL4	YER	
7	0.55 1.05' 0.60' 0.65' 1.15'	AB, CLA HMA, TY LCB AB, CLA	SS 3 PE A SS 3	ENENT CE	οτεντ	11 5 5	
* 8	0.30' 0.30' 0.65' 1.15'	HMA, TY GEOSYNI HMA, TY LCB AB, CLA	PE A THETIC PA PE A SS 3	VEMENT IN	ITERL4	AYER	
YOUT SHEETS] 1.10' 0.50' 0.70	SUBGRAE JPCP (R LCBRS AB, CLA	DE ENHANC SC)	EMENT GE	οτεχτ	ILES	
	NOTE * SE	: CTION AT	RAMP ME	TER PAD			
R	NOTE CUT LOWES PLAC INTEF	: TRAFFIC ST LAYEF ING GEOS RLAYER A	LOOP AND OF HMA YNTHETIC	EPOXY FI PRIOR TO PAVEMENT HMA LAYE	ILL T		
ТҮ	(PIC	ATTA Altef Al C No	CHMEN RNATIV ROSS SCALE	T B E 2) SEC]	[10]	N X	1

CU 00000 EA 279100

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



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS				
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5						
REGISTERED CIVIL ENGINEER DATE									
OR AGENTS SHALL NOT EE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.									
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	JSTRY FORD STREET Y, CA 91744	WKE, INC 400 N. TUSTIN AN SUITE 275 SANTA ANA, CA 92	/ENUE 2705					

ATTACHMENT B (ALTERNATIVE 2) TYPICAL CROSS SECTION

NO SCALE

X - 2

|--|

LAST REVISION DATE PLOTTED => \$DATE 00-00-00 TIME PLOTTED => \$TIM



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5		
REG PLA THE S OR AG THE A COPIE	ANS APPRO TATE OF CAL ENTS SHALL ICCURACY OR S OF THIS PL	VAL DATE IFORNIA OR ITS NOT BE RESPON COMPLETENESS AN SHEET.	S OFFICERS SIBLE FOR OF SCANNED	T. NGUY C 61227 06-30-1 C 1VIL F CAL IFOR	This INEER
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	JSTRY Ford street Y, CA 91744	WKE, INC 400 n. tustin a suite 275 santa ana, ca 93	/ENUE 2705	

ATTACHMENT B (Alternative 2) Typical cross section

NO SCALE

X-3

CU 00000	EA 279100	



USERNAME => \$USER DGN FILE => 279100-2-X-04.dgn RELATIVE BORDER SCALE IS IN INCHES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5		
REC PLA THE S OR AC THE A COPIE	ANS APPRO TATE OF CAL ENTS SHALL ICCURACY OR S OF THIS PL	VAL DATE IFORNIA OR IT. NOT BE RESPOI COMPLETENESS AN SHEET.	S OFFICERS SIBLE FOR OF SCANNED	T. NGUY C 61227 06-30-1 IVIL F CAL IFOR	AL LING INEER
CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744			WKE, INC 400 N. TUSTIN AN SUITE 275 SANTA ANA, CA 92	/ENUE 2705	

CU 00000 EA 279100	

10\$ \$T DATE PLOTTED LAST REVISION 00-00-00



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => 279100-2-X-05.dgn

8



	Dist	COUNTY	ROUTE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS
	07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5
	REGISTERED CIVIL ENGINEER DATE			
SHEETS	CIT 1565 CITY	Y OF IND 1 EAST STAF OF INDUSTR	JSTRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705
ETAILS	L			1
×

x

1 2 3



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
REC PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS THE ACCURACY OR COMPLETENESS OF SCANNED THE ACCURACY OR COMPLETENESS OF SCANNED						
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J 8TRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN A SUITE 275 SANTA ANA, CA 92	/ENUE 2705			

ATTACHMENT B (Alternative 2) Typical cross section

NO SCALE

X - 7

|--|



×

RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => 279100-2-X-08.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
REC PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR JTS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED						
CIT 1565 CITY	CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705						

ATTACHMENT B (ALTERNATIVE 2) **TYPICAL CROSS SECTION**

NO SCALE

X-8

DATE TIME

00-

00

CU 00000	EA 279100	-



RELATIVE BORDER SCALE IS IN INCHES USERNAME => \$USER DGN FILE => 279100-2-X-09.dgn



CU 00000	EA 279100	



CU 00000 EA 279100



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => 279100-2-X-11.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
REC PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS THE ACCURACY OR COMPLETENESS OF SCANNED THE ACCURACY OR COMPLETENESS OF SCANNED						
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J 8TRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN A SUITE 275 SANTA ANA, CA 92	/ENUE 2705			

ATTACHMENT B (ALTERNATIVE 2) **TYPICAL CROSS SECTION**

NO SCALE

X-11

\$D/

PLOTTED PLOTTED

DATE TIME

8

	CU 00000	EA 279100	
--	----------	-----------	--















x

DGN FILE => \$REQUEST

\$D/

^ ^

DATE TIME



×





RELATIVE BORDER SCALE IS IN INCHES



RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER

		CU 00000	EA 279100	
--	--	----------	-----------	--



 ROUTE
 POST MILES TOTAL PROJECT
 SHEET NO.
 SHEET SHEETS

 SR-57
 R4.3-4.5/4.5-4.8 SR-60
 R23.3-R26.5
 Image: Constraint of the second s Dist COUNTY 07 LA REGISTERED CIVIL ENGINEER DATE HANK T. NGUYEN . <u>C 61227</u> PLANS APPROVAL DATE Exp. 06-30-13 THE STATE OF CALIFORNIA OR ITS OFFICERS OF ACENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET. F CAL WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705 CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 GRAND AVENUE END CONSTRUCTION R=2000.00 Delto=7°02'52.67" L=246.02 T=123.17 ATTACHMENT C (ALTERNATIVE 3) LAYOUT Scale 1"=100' L-12 CU 00000 EA 279100



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
REC PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OF ACEURIS SHALL NOT GE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED THE ACCURACY OR COMPLETENESS OF SCANNED						
CIT 1565 CITY	CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705						

С
3)
-13

CU 00000	EA 279100	

×		
×	DATE REVISED	MATCH INE STA 88+00 PROP R/W PROP R/W PROP R/W
× DEPARTMENT OF TRANSPORTATION CONSULTANT FUNCTIONAL SUPERVISOR CALCULATED-	DESIGNED BY CHECKED BY	R/W HITZERGO AGO AGO HIT HIT HIT HIT HIT HIT HIT HIT
× STATE OF CALIFORNIA	et chtars	

USERNAME => \$USER DGN FILE => \$REQUEST

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS				
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5						
REC PL4	REGISTERED CIVIL ENGINEER DATE								
THE S OR AC THE A COPIE	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.								
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J 8TRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN AV SUITE 275 SANTA ANA, CA 92	'ENUE 1705					





=> \$DATE => \$TIME

TED

CU 00000	EA 279100	

REVISED BY DATE REVISED				
		GRAND AVENUE		
CHECKED BY		PC76+32.89 76+32.85 END CONSTRUCTION	R=29 L=97	32.96 Delto=18°45'04.83' 5.24 T=492.52
ICALIFUMIA - ULFANIA				

2 3 USERN DGN F

USERNAME => \$USER DGN FILE => \$REQUEST

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5		
REG PLA THE S OR AG THE A COPIE	ISTERED C INS APPRO TATE OF CAL ENTS SHALL CCURACY OR S OF THIS PL	VAL DATE IFORNIA OR IT. NOT BE RESPOI COMPLETENESS AN SHET.	EER DATE	T. NGUY C 61227 06-30-1 IVIL CALIFOR	TY CING INEER
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	JSTRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN AN SUITE 275 SANTA ANA, CA 92	/ENUE ?705	



ATTACHMENT (Alternative	C 3)
LAYOUT	
Scale 1"=100'	L-15

			_
CU	00000	EA 279100	



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5		
REC PLA THE S OR AC THE A COPIE	ANS APPRO TATE OF CAL TENTS SHALL CEURACY OR S OF THIS PL	VAL DATE IFORNIA OR IT. NOT BE RESPOI COMPLETENESS AN SHEET.	S OFFICERS VISIBLE FOR OF SCANNED	T. NGUY C 61227 06-30-1 IVIL	A - ENGINEER
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J8TRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN AN SUITE 275 SANTA ANA, CA 92	/ENUE ?705	

	C 2)
LAYOUT	37
Scale 1"=100'	L-16

	_
CU 00000 EA 279100	





×

RELATIVE BORDER SCALE IS IN INCHES



×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER



×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

	Dist	COUNTY	ROUTE	POST M TOTAL PI	IILES ROJECT	SHEET No.	TOTAL SHEETS
	07	LA	SR-57 SR-60	R4.3-4.5/ R23.3-R26	4.5-4.8 .5		
							/
	REC	GISTERED C	IVIL ENGIN	EER DATE	ALD PRO	FESS ION	42 C
					SI HANK	T. NGUY	EN
	PLA	ANS APPRO	VAL DATE		₩ No Exp.:	<u>C 61227</u> 06-30-1	3/5/L
	THE S OR AU THE A	STATE OF CAL GENTS SHALL ACCURACY OR	IFORNIA OR IT NOT BE RESPO COMPLETENESS	S OFFICERS NSIBLE FOR OF SCANNED	STATE OF	IVIL	NIT A
	COPIE	s of this p	LAN SHEET.	WKE		CAL	/
	1565	Y OF INDU 51 EAST STAF	JSTRY FORD STREET	400 N. SUITE 2	TUSTIN AV 75	ENUE	
	CIT	I OF INDUSTR	T, CA 91744	SANTA A	NA, CA 92	705	
							700
							1210
					P 7	.37	710
						696	
						- 0	700
						μ	_ *
Grade =	0.96%						
							690
							680
							076
							670
			ATTAC	HMENT	гс		
		()	LTER	NATIV	E 3)		
			PRO	OFILE			
			Scale: H	loriz 1"=	501		
				Vert 1"=	10'		
					P	-4	
22+00	22700		21+00		25+00		TOT **



RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER

DGN FILE => \$REQUEST

^ ^ PLOTTED PLOTTED DATE TIME 00



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

	Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
	07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5	5
					NESS /
	REG	ISTERED C	IVIL ENGIN	EER DATE	51 233 10NA
					T. NGUYEN
		NS APPRO	VAL DATE		.06-30-13 ×
	OR AG THE A	ENTS SHALL	NOT BE RESPO COMPLETENESS	NSIBLE FOR	CIVIL DF CAL IFORNIA
	GIT	Y OF IND	JSTRY	WKE, INC	
	1565 CITY	1 EAST STAF OF INDUSTR	FORD STREET Y, CA 91744	400 N. TUSTIN A SUITE 275 SANTA ANA CA 9	2705
5					
- J					700
Į					
, 					690
J					
					680
					900
					720
					710
					/10
					700
					690
					690
					900
			ATTAC	HMENT C	670
		()	LTER	NATIVE 3)	
			PRO	DFILE	
			Scale: H	loriz 1"=50' Vert 1"=10'	
				P	-6
400+00					TOTAL
	011	20000		FA 070100	
	() (00000		LA 219100	

EA 279100



×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

Dist	COUNTY	ROI	UTE	ТС R4 -	POST DTAL 3-4-5	MILE PROJE	S .CT -4.8	SHEET No.	TOTAL SHEETS
07	LA	SR	-60	R23	.3-R2	6.5			
			FNGING	FP		F /	PRO	ESSIO	
	ISTERED		ENGINE		DAI	Leve	$^{\circ}$		TE S
		יי וגער	ATE			RE G IS	<u>HANK</u> No	1. NGUY C 61227	
THE S	TATE OF CA	LIFORNIA	A OR ITS	S OFF		-{*	Exp.	06-30-1 IVIL⊿	3/*/-
THE A	ENIS SHALL CCURACY OR S OF THIS I	, COMPLE PLAN SHE	TENESS (EET.	OF S	E FOR SCANNEL	, /	TATE OF	CAL IFOR	NIA
СІТ	r of IND	USTRY	,	Т	WKE ,	INC		ENLIE	
- 1565 - CITY	1 EAST STA OF INDUST	FFORD S RY, CA 1	TREET 91744		SUITE SANTA	275 ANA,	CA 92	705	
				_					
				_					
				_					
									710
									700
				_					
									690
									680
				_					670
		АТТ	ACI	HM	IEN	т	С		660
	(ALT	ERN	IA	тіу	Έ	3)		
		-	PRO)F	ILE				650
		Sca	le: Ho	or i	z 1"	=50			920
+			V	/er	† 1"	=10'	_	-	
							μ	- /	TOTAL

CU 00000 EA 279100



RELATIVE BORDER SCALE IS IN INCHES

	Dist COL	JNTY ROUTE	TOTAL PROJECT	NO. SHEETS
	07L	A SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5	
	—			FESSIO
	REGISTE	RED CIVIL ENGIN		NONAL CL
	_			T. NGUYEN
	PLANS A	OF CALIFORNIA OF 1	TS OFFICERS	06-30-13 ×
	OR AGENTS THE ACCURA	SHALL NOT BE RESPO	ONSIBLE FOR OF SCANNED	F CAL IFORNIA
			WKE, INC	
	15651 EAS CITY OF I	T STAFFORD STREET NDUSTRY. CA 91744	400 N. TUSTIN A SUITE 275	VENUE
			SANTA ANA, CA 9	2705
				730
				720
				710
				/10
				700
				690
				000
				680
				670
		AITAU (ALTED	NATIVE 21	
			ALLE	
		Scole: L	OFILE	
		500100	Vert 1"=10'	
			P	-8
				TOTAL
298+00				



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

PLOTTED PLOTTED DATE TIME 00 8



DGN FILE => \$REQUEST

EA 279100

PLOTTED PLOTTED DATE TIME 8 8



× ATE OF CALIFORNI/	 A - DEPARTMENT OF TRANSPORTATION A - DEPARTMENT OF TRANSPORTATION CONSULTANT FUNCTIONAL SUPERVISOR CALCULATED- DESIGNED BY 	× Revised BY	×
t ditrans	CHECKED BY	DATE REVISED	
STATION.	650 640 630 610 610		
34+00	0 0 0 0 1 0 0	Image: Section of the sectio	
	0 PVC 34+36.58	Image:	
35+00	L 200.00' G1 -0.3009 G2 1.696% SD 1623.31'		
36+00	Elev 627.43		
37+00			
38+00			
39+00		Image: section of the sectio	
40+00	Image Image Image Image Image Image	Image: Section of the sectio	
41+00			
42+00	PG PROFILE CONN "A" E60 CONNECTOR I SPRINGS DRIVI		
43+00			
44+00			

RELATIVE BORDER SCALE IS IN INCHES

3 USERNAME => \$ DGN FILE => \$

USERNAME => \$USER DGN FILE => \$REQUEST




RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER

DGN FILE => \$REQUEST



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST



×

×

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

		Dist COUN	ITY ROUTE	POST MILE	ES SHEET T IECT NO.SI	OTAL HEETS
		- 07 L/	SR-5	7 R4.3-4.5/4.	5-4.8	
		REGISTER	ED CIVIL EN	GINEER DATE	PROFESSIONAL HANK T. NGUYEN	ENG IN
		PLANS AF	PROVAL DATE	RE G I	No. <u>C 61227</u>	NEER
		THE STATE ON OR AGENTS S	F CALIFORNIA OF HALL NOT BE RE	R ITS OFFICERS	Exp. 06-30-13	*/
		COPIES OF TH	Y OR COMPLETEN HIS PLAN SHEET.	ESS OF SCANNED	OF CAL IFORM	/
		CITY OF 15651 EAST CITY OF INI	INDUSTRY STAFFORD STRE DUSTRY, CA 917	400 N. TUS SUITE 275 SANTA ANA,	CA 92705	
			758.42		;	70
			л 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		;	⁷ 60
= 2,9 PG	13%				;	'50
					;	'40
	54+00	55+	00			
			D			/80
				0		
				<u> </u>		
				A 52+	7	70
			1+55.54 748.04	3" STA 52+ ABOVE LEFT	7	70 '60
			PVT 51+55.54 E1ev 748.04		7	770 7 <u>60</u> 7 <u>50</u>
			PVT 51+55.54 Elev 748.04	MATCHLINE "A-3" STA 52+ SEE SHEET ABOVE LEFT		270 260 250 240
			PVT 51+55.54	MATCHLINE "A-3" STA 52+ SEE SHEET ABOVE LEFT	7 7 7 7 7 7 7 7 7 7	770 760 750 740 730
			PLT 51+55.54	MATCHLINE "A-3" STA 52+	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	770 760 7 <u>50</u> 7 <u>40</u> 7 <u>30</u>
			PVT 51+55.54 PVT 51+55.54 Elev 748.04	MATCHLINE "A-3" STA 52+ SEE SHEET ABOVE LEFT	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	270 260 250 250 240 230
			ATTA (ALTE PI Scole	CHMENT RNATIVE ROFILE Horiz 1"=50	C 7	270 260 250 250 240 230
E POIN			ATTA (ALTE PI Scole	CHMENT RNATIVE ROFILE Horiz 1"=50 Vert 1"=10	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	270 260 250 250 240 230
E POIN			ATTA ALTE PI Scale	CHMENT RNATIVE ROFILE Horiz 1"=50 Vert 1"=10	C 7 3) P-15	270 260 250 250 240 230

EA 279100

CU 00000



×

RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => \$REQUEST

PL01 DATE TIME 8 8



RELATIVE BORDER SCALE IS IN INCHES 3 USERNAME => \$USER DGN FILE => \$REQUEST

Dist 07		ROUTE SR-57 SR-60	POST MILES TOTAL PROJECT R4.3-4.5/4.5-4. R23.3-R26.5	SHEET No.	TOTAL SHEETS	
REG	ISTERED C	IVIL ENGIN		OFESS ION	7	
_			No.	K T. NGUY C 61227	IN INEED	
THE S OR AG	THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURENCE ONE ETENESS OF SCANNED					
COPIE.	CLUMALT ON S OF THIS PL	LAN SHEET.	WKE, INC	OF CAL IFON	/	
1565 CITY	1 EAST STAF OF INDUSTR	FORD STREET Y, CA 91744	400 N. TUSTIN SUITE 275 SANTA ANA, CA	AVENUE 92705		
					800	
_						
					790	
					790	
					/00	
					770	
_					760	
					750	
					740	
					/40	
					730	
		ATTAC	HMENT C			
	()	LTER	NATIVE 3			
		PR(Scale: H	JFILE loriz 1"=50'			
			Vert 1"=10'	- 17		
				• *	TOTAL	
 					10 131	

CU 00000	EA 279100
----------	-----------



	Dist COUNTY	ROUTE	TOTAL PROJECT	NO. SHEETS
	07 LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5	5
	REGISTERED	CIVIL ENGIN		DEESS IONAL
	PLANS APPRO	OVAL DATE		<u>C 61227</u>
	THE STATE OF CA. OR AGENTS SHALL	LIFORNIA OR IT. NOT BE RESPOI	S OFFICERS	.06-30-13 x
	THE ACCURACY OR COPIES OF THIS P	COMPLETENESS PLAN SHEET.	OF SCANNED	DF CAL IFORM
	CITY OF IND 15651 EAST STAR CITY OF INDUSTI	USTRY FFORD STREET RY, CA 91744	WKE, INC 400 N. TUSTIN A SUITE 275 SANTA ANA, CA 9	VENUE 2705
1 1 0 0	.10' JPCP .50' LCB .70' AB, CLA	ASS 3		
2 0 0 0	0.20' RHMA, 1 0.50' HMA, TY 0.70' LCB	TYPE G PE A		
1 3 0 0 0	.40′ AB, CLA .20′ RHMA, 1 .35′ HMA, TY .55′ LCB	ASS 3 TYPE G TPE A		
1 م	.05' AB, CLA	ASS 3		
(-) 0 1	.55' LCB .05' AB, CLA	ASS 3		
*5 0	20' RHMA, 1	TYPE G		
- OG -	GEOSYN -35' HMA, TY	THETIC PA	VEMENT INTERL	AYER
— — — 1	.70' LCB .40' AB. CLA	ASS 3		
*6 0 	.20' RHMA, 1 .15' HMA, TY GEOSYN	TYPE G PE A THETIC PA	VEMENT INTERL	AYER
0 0 1	0.20' HMA, TY 0.55' LCB .05' AB, CLA	ASS 3		
7 0 0 1	0.60' HMA, TY 0.65' LCB .15' AB, CLA	(PE A ASS 3	CEMENT CENTER	T 11 E S
*8 o - 0	.30' HMA, T) GEOSYN	PE Α THETIC PA	VEMENT INTERL	AYER
0 1 -	.65' LCB .15' AB, CLA SUBGRA	ASS 3 DE ENHANC	EMENT GEOTEX	TILES
OUT SHEETS L DETAILS	.10' JPCP (F .50' LCBRS .70 AB, CLA	RSC) NSS 3		
N ×	OTE: SECTION A	T RAMP ME	TER PAD	
	OTE: OT TRAFFIC OWEST LAYE LACING GEOS NTERLAYER	LOOP AND R OF HMA SYNTHETIC AND UPPER	EPOXY FILL PRIOR TO PAVEMENT HMA LAYERS.	
				Ξ
	ΔΤΤΔ	CHMEN	тс	ED => \$D/
	(ALTE	RNATIV	'E 3)	PLOTT
ТҮР	ICAL C	ROSS	SECTIO	N ATE
	NC	SCALE		NOI
				X - 1

CU 00000 EA 279100



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5		
REG PLA THE S OR AG THE A COPIE	ISTERED C INS APPRO TATE OF CAL ENTS SHALL CEURACY OR S OF THIS PL	VAL DATE IFORNIA OR IT. NOT BE RESPO COMPLETENESS AN SHEET.	EER DATE	T. NGUY C 61227 06-30-1 IVIL CAL IFOR	A- FING INEER
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J 8TRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN AV SUITE 275 SANTA ANA, CA 92	'ENUE 1705	

ATTACHMENT C (ALTERNATIVE 3) **TYPICAL CROSS SECTION**

X-2

CU 00000 EA 279100	
--------------------	--

PLO PLO DATE TIME -00 00-00-



USERNAME => \$USER DGN FILE => 279100-3-X-03.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS			
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5					
REC PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OF ITS OFFICERS OF AGENTS SHALL NOT GE RESPONSIBLE FOR THE ACCURACY OF COMPLETENESS OF SCANNED							
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J STRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN AV SUITE 275 SANTA ANA, CA 92	/ENUE 2705				

ATTACHMENT C (ALTERNATIVE 3) **TYPICAL CROSS SECTION**

NO SCALE

X-3

CU 00000	EA 279100	



USERNAME => \$USER DGN FILE => 279100-3-X-04.dgn RELATIVE BORDER SCALE IS IN INCHES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS	
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5			
REC PLA THE S OR AC THE A COPIE	ANS APPRO TATE OF CAL ENTS SHALL ICCURACY OR S OF THIS PL	VAL DATE IFORNIA OR IT. NOT BE RESPOI COMPLETENESS AN SHEET.	S OFFICERS SIBLE FOR OF SCANNED	T. NGUY C 61227 06-30-1 IVIL F CAL IFOR	AL LING INEER	
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J 8TRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN AN SUITE 275 SANTA ANA, CA 92	/ENUE 2705		

\$D/

DATE PLOTTED

NO SCALE	X - 4	LAST REVISION 00-00-00
CU 00000	EA 279100	-



DGN FILE => 279100-3-X-05.dgn

	CU 00000	EA 279100
--	----------	-----------

8

8



Dist	COUNTY	ROUTE	POST MILES SI TOTAL PROJECT	NO. SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5			
REGISTERED CIVIL ENGINEER DATE						
OR AG THE A COPIE	THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETIENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
CIT 1565 CITY	Y OF INDU 1 EAST STAF OF INDUSTR	JSTRY Ford Street Y, CA 91744	WKE, INC 400 N. TUSTIN AVEN SUITE 275 SANTA ANA, CA 9270	IUE		
	Dist 07 REC PLA THE S OR ACA COPIE CITY	Dist COUNTY 07 LA REGISTERED C PLANS APPRO THE STATE OF CAL OR AGENTS SHALL THE ACCUPACY OR COPIES OF THIS PA 15651 EAST STAF CITY OF INDUSTR	Dist COUNTY ROUTE 07 LA SR-57 SR-60 REGISTERED CIVIL ENGIN PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR II OF ACENTS SHALL NOT BE RESPONTHE ACCURACY OF COMPLETENESS COPIES OF THIS PLAN SHEET CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744	Dist COUNTY ROUTE POST MILES 07 LA SR-57 R4.3-4.5/4.5-4.8 REGISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE THE STATE OF CALIFORMIA OR ITS OFFICERS OR ACENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744		



RELATIVE BORDER SCALE IS IN INCHES USERNAME => \$USER DGN FILE => 279100-3-X-07.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
REG PLA THE S OR AG THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OF ACENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED THE ACCURACY OR COMPLETENESS OF SCANNED						
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	JSTRY Ford street Y, CA 91744	WKE, INC 400 n. tustin a suite 275 santa ana, ca 93	/ENUE 2705			

ATTACHMENT C (Alternative 3) Typical cross section

NO SCALE

X - 7



x

DGN FILE => 279100-3-X-08.dgn

Dist	COUNTY	ROUTE	POST MILES SHEET TOTA TOTAL PROJECT No. SHEE	ιL TS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5			
REC PLA THE S OR AC THE A	REGISTERED CIVIL ENGINEER DATE					
COPIE	WKE INC					
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	JSTRY Ford street Y, CA 91744	400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705			

GOLF COURSE

ATTACHMENT C (ALTERNATIVE 3) **TYPICAL CROSS SECTION**

NO SCALE

X - 8

CU 00000	EA 279100



REVISED

DATE

В≺

CHECKED

ANT

×

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

x

t ditans

J

REVISED BY

"A" LINE

RELATIVE BORDER SCALE IS IN INCHES 1 2 3

USERNAME => \$USER DGN FILE => 279100-3-X-09.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OF ACENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED THE ACCURACY OR COMPLETENESS OF SCANNED						
CIT 1565 CITY	CITY OF INDUSTRY 15651 EAST STAFFORD STREET CITY OF INDUSTRY, CA 91744 WKE, INC 400 N. TUSTIN AVENUE SUITE 275 SANTA ANA, CA 92705						

ATTACHMENT C (Alternative 3) Typical cross section

NO SCALE

X - 9

CU 00000	EA 279100	



RELATIVE BORDER SCALE IS IN INCHES USERNAME => \$USER DGN FILE => 279100-3-X-10.dgn



CU 00000	EA 279100	



RELATIVE BORDER SCALE IS IN INCHES

DGN FILE => 279100-3-X-11.dgn

CU 00000	EA 279100



RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => 279100-3-X-12.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS		
07	LA	SR-57 SR-60	R4.3-4.5/4.5-4.8 R23.3-R26.5				
REC PLA THE S OR AC THE A COPIE	REGISTERED CIVIL ENGINEER PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS THE ACCURACY OR COMPLETENESS OF SCANNED THE ACCURACY OR COMPLETENESS OF SCANNED						
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J 8TRY Ford street Y, CA 91744	WKE, INC 400 N. TUSTIN A SUITE 275 SANTA ANA, CA 92	/ENUE 2705			

ATTACHMENT C (Alternative 3) Typical cross section

NO SCALE

X-12

\$D/

PLOTTED PLOTTED

DATE TIME

8







ATTACHMENT D







07-LA-60 PM R23.3/26.5 EA279100

PROJECT REPORT COST ESTIMATE

DIST-CO-RTE	07-LA-60
PM	R23.3/R26.5
EA	279100
Program Code:	HE-12

Project Description:

Limits: Between SR-57/60 south junction and Diamond Bar Blvd on-ramp in the City of Industry/Diamond Bar

Proposed SR-57/SR-60 Confluence - Grand Ave Interchange Improvement

 Improvement (Scope):
 Grand Ave EB Bypass off-ramp, reconstruct Grand Ave Interchange with EB tight diamond, add

 EB bypass connector at north/east SR-57 interchange.

Alternate:

Alternative 2

SUMMARY OF PROJECT COST ESTIMATES

TOTAL ROADWAY ITEMS (Year 2013)	\$105,000,000
TOTAL STRUCTURE ITEMS (Year 2013)	\$46.600.000
	¢151 c00 000
SUBTOTAL CONSTRUCTION COSTS (Year 2013)	\$151,600,000
TOTAL RIGHT OF WAY ITEMS (Year 2017)	\$35,152,107
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$186,752,107

DIST-CO-RTE	07-LA-60
PM	R23.3/R26.5
EA	279100

I. ROADWAY ITEMS

Section 1 Earthwork	Quantity	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Roadway Excavation	220,715	CY	\$40.00	\$8,828,600	
Clearing & Grubbing	1	LS	\$150,000.00	\$150,000	
Remove Concrete	266,100	SF	\$5.65	\$1,503,465	
(Pavement, Curb, Sidewalk, Barrier)					
Roadway Excavation for contaminated	14,800	CY	\$180.00	\$2,664,000	
soil (ADL, Type Z-2)					
			Su	btotal Earthwork	\$13,146,065
Section 2. Standard Section*	Oracartitas	TT-: 4	Unit Duin	Unit Cost	Santian Cant
PCC Pavement (Depth)	Quantity	<u>Unit</u>	Unit Price	<u>Unit Cost</u> \$0	Section Cost
PCC Pavement (Depth)				\$0	
Asphalt Concrete				\$0	
Lean Concrete Base (6" Depth)	27,200	СҮ	\$138.00	\$3,753,600	
LCB Rapid Setting	300	CY	\$400.00	\$120,000	
Aggregate Base -Class 3	50,300	CY	\$35.00	\$1,760,500	
Edge Drains				\$0	
JPC Pavement (14" Depth)	16,350	CY	\$150.00	\$2,452,500	
JPCP (Rapid Set Concrete)	650	CY	\$425.00	\$276,250	
Hot Mix Asphalt (Type A)	35,850	Ton	\$110.00	\$3,943,500	
Rubberized Hot Mix Asphalt (Gap Graded)	5,980	Ton	\$120.00	\$717,600	
Grind Existing Concrete Pavement	2,500	SQ YD	\$10.00	\$25,000	
Minor Concrete	1,500	CY	\$370.00	\$555,000	
			Subtotal Structur	al Section Items	\$13,603,950
Section 3 Drainage	Quantity	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Large Drainage Facilities					
Storm Drains				<u>\$0</u>	
Pumping Plants				\$0	
Drainage	1	LS	\$4,171,120.00	\$4,171,120	

(X-Drains, oversize, etc.)

* See plans X-1 through X-3 of project report for detailed cross section information.

Subtotal Drainage \$4,171,120

07-LA-60 PM R23.3/26.5 EA279100

Section 4 Specialty Items	Quantity	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Retaining Walls **	1	LS	\$11,100,000.00	\$11,100,000	
Noise Barriers	1	LS	\$933,000.00	\$933,000	
Barriers and Guard Rails	1	LS	\$162,400.00	\$162,400	
Water Pollution Control (Include Treatement BMP)	1	LS	\$2,790,000.00	\$2,790,000	
Concentrated Flow Conveyance Systems	1	LS	\$69,800.00	\$69,800	
Lead Compliance Plan (ADL Handling,					
Traffic Stripe/Marking Removal)	1	LS	\$5,000.00	\$5,000	
Manage contamintaed groundwater (contingecny)	1	LS	\$100,000.00	\$100,000	
Asbestos Abatement (contingency)	1	LS	\$20,000.00	\$20,000	
Resident Engineer Office Fund	1	LS	\$352,000.00	\$352,000	
TRO	1	LS	\$5,344,000.00	\$5,344,000	
			a 1		**

** Cost of wall is not included in the Structures Items (Sheet 6 of 7)

Subtotal Specialty Items \$20,876,200

Section 5 Traffic Items	<u>Quantity</u>	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Striping Removal	1	LS	\$350,000.00	\$350,000	
Striping Installation	1	LS	\$476,000.00	\$476,000	
Transportation Management Plan	1	LS	\$1,448,500.00	\$1,448,500	
Chain link Fence	12,600	LF	\$21.00	\$264,600	
Remove Metal Beam Guard Railing	1	LS	\$110,000.00	\$110,000	
Temporary Signing	1	LS	\$150,000.00	\$150,000	
K-Rail	25,500	LF	\$13.00	\$331,500	
Traffic Control System	1	LS	\$1,000,000.00	\$1,000,000	
Roadside Sign	1	LS	\$360,000.00	\$360,000	
Temporary Crash Cushions	1	LS	\$262,000.00	\$262,000	
Overhead Sign	1	LS	\$2,620,000.00	\$2,620,000	
Modify traffic signal and lighting systems	1	LS	\$1,020,000.00	\$1,020,000	
Ramp metering Systems	5	EA	\$100,000.00	\$500,000	
Modify Highway Lighting Sign Illumination				\$0	
Highway Lighting Sign Illumination	1	LS	\$580,000.00	\$580,000	
Temporary traffic signal and lighting systems	69	EA	\$5,000.00	\$345,000	
Modify Ramp Metering Systems				\$0	
Modify CommunicationSystem (Fiber Optics)	1	LS	\$1,600,000.00	\$1,600,000	
			Subto	otal Traffic Items	\$11,417,600

Section 6 Planting and Irrigation	Quantity	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Highway Planting	1,146,500	SF	\$4.00	\$4,586,000	
Replacement Planting				\$0	
Irrigation Modification				\$0	
Relocate Existing Irrigation				\$0	
Facilities					
Irrigation Crossovers	4	EA	\$2,500.00	\$10,000	
		S	ubtotal Planting and I	rrigation Section	\$4,596,000
Section 7: Roadside Management	Quantity	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
and Safety Section					
Vegetation Control Treatments	600	SQYD	\$36.00	\$21,600	
Gore Area Pavement	770	CY	\$80.00	\$61,600	
Pavement beyond the gore area				\$0	
Miscellaneous Paving				\$0	
Erosion Control					
Slope Protection				\$0	
Side Slopes/Embankment Slopes				\$0	
Maintenance Vehicle Pullouts					
Off-Freeway Access (gates,					
stairways, etc.)***					
Roadside Facilities (Vista Points,				\$0	
Transit, Park and Ride, etc.)					
Relocating roadside				\$0	
facilities/features					
		Subtotal Roa	dside Management an	d Safety Section	\$83,200
			SUBTOTAL	SECTIONS 1-7	\$67.894.135

COMMENTS:

\$67,894,1

*** Access Gate included herein. Maintenance Pullout included in retaining wall and paving costs.

Section 8 Minor Items

		\$67,894,135	Х	10.00% =	\$6,789,414	
		(Subtotal Sections 1-7)		(5% - 10%)		
				TOTAL MI	NOR ITEMS	\$6,789,414
Section 9 Roadway Mobilizati	on					
		\$74,683,549	Х	10.00% =	\$7,468,355	
		(Subtotal Sections 1-8)				
			ТОТ	AL ROADWAY MO	BILIZATION	\$7,468,355
Section 10 Roadway Additions	<u>S</u>				-	
Supplemental Work		\$74,683,549	Х	10.00% =	\$7,468,355	
		(Subtotal Sections 1-8)		(5% - 10%)		
Contingencies		\$74,683,549	Х	20.00%	\$14,936,710	
		(Subtotal Sections 1-8)				
				TOTAL ROADWAY	ADDITIONS	\$22,405,065
				TOTAL ROAI	OWAY ITEMS	\$104,556,968
				(Subtotal Sect	tions 1 thru 10)	
					USE	105,000,000
Estimate Prepared By	Hank Nguyen		Phone #	ŧ (714) 953-1015	Date	8/20/2013
	(Print Name)					
Estimate Checked By	Daniel Weddell		Phone #	ŧ <u>(714) 953-1020</u>	Date	8/23/2013
	(Print Name)					

II. STRUCTURES ITEMS		STRUCTURE			
	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	<u>No. 4</u>	<u>No. 5</u>
Structure Name	Golden Springs UC (Conn A)	Grand Ave OC	Diamond Bar UC (Conn B)	Golf Course Tunnel	Architectural Treatment
Structure Type			CIP PS Box Girde	r	
Widening Width - (ft)					
Span Lengths - (ft)					
Total Area - (sf)					
Footing Type (Pile/Spread)					
Total Cost for Structure	\$7,766,000	\$12,594,000	\$10,558,000	\$2,000,000	\$443,000
Removal Cost					
Structure Name	<u>No. 6</u> Retaining Wall No. 40	<u>No. 7</u> Retaining Wall No. 244B	<u>No. 8</u> Retaining Wall No. 250	<u>No.9</u> Retaining Wall No. 258	<u>No.10</u> Retaining Wall No. 280
Structure Type	Tie Back	Secant Pile	MSE	MSE	MSE
Widening Width - (ft)	The Buck	becant i ne	mon	mpl	MBE
Span Lengths - (ft)			·	·	
Total Area - (sf)	6,400	34,000	4,600	14,000	12,000
Footing Type (Pile/Spread)					
Total Cost for Structure	\$1,815,000	\$278,000	\$411,000	\$2,006,000	\$1,367,000
Removal Cost					
	<u>No.11</u>	<u>No.12</u>	<u>No.13</u>	<u>No.14</u>	
Structure Name	No. 282	No. 287	No. 288	No. 352	
Structure Type	MSE	MSE	MSE	MSE	
Widening Width - (ft)					
Span Lengths - (ft)				·	
Total Area - (sf)	30,000	3,600	22,000	4,600	
Footing Type (Pile/Spread)				<u> </u>	
Total Cost for Structure	\$3,482,000	\$440,000	\$3,057,000	\$417,000	
Removal Cost					
		SU	BTOTAL STRUC	CTURES ITEMS	\$46,634,000
Railroad Related Costs					\$0
			SUBIUIAL KAI	LKUAD ITEMS	\$U
COMMENTS			TOTAL STRUC	UKES ITEMS	\$40,034,000
COMMENTS: Estimate Prepared By	Vinh Trinh		(714) 0	USE _ 53-1019	⊅40,000,000 7/24/2012
	Print Name		Pho	one #	Date
			1 110		

III. RIGHT OF WAY

	Current Values	Escalation	Escalated Values*
	(Future Use)	Rates	(5 Years)
A. Acquisition, including excess lands,			
damages to remainder(s), and Goodwill	\$20,915,776	7.00%	\$29,335,459
B. Acquisition of Offset Mitigation	\$0	0.00%	\$0
C. Utility Relocation	\$3,789,500	8.00%	\$5,568,019
D. Relocation Assistance	\$0	3.00%	\$0
E. Clearance/Demolition	\$0	3.00%	\$0
F. Title and Escrow Fees	\$214,469	3.00%	\$248,629
G. Project Permit Fees	\$0	3.00%	\$0
H. Condemnation Cost	\$0	3.00%	\$0
I. 'TOTAL RIGHT OF WAY		тот.	
(CURRENT VALUES)	\$24,919,745	ESC. R/W	\$35,152,107
Use			\$35,153,000

*Escalated to assumed year of advertising of 2017

Estimate Prepared By	Ray Armstrong	(562) 304-2000	5/22/2013
-	(Print Name)	Phone #	Date
(If appropriate, attach additional	pages and backup)		
07-LA-60 PM R23.3/26.5 EA279100

PROJECT REPORT COST ESTIMATE

DIST-CO-RTE	07-LA-60
PM	R23.3/R26.5
EA	279100
Program Code:	HE-12

Project Description:

Limits: Between SR-57/60 south junction and Diamond Bar Blvd on-ramp in the City of Industry/Diamond Bar

Proposed SR-57/SR-60 Confluence - Grand Ave Interchange Improvement

 Improvement (Scope):
 Grand Ave EB Bypass off-ramp, reconstruct Grand Ave Interchange with EB loop on ramp, add

 EB bypass connector at north/east SR-57 interchange.

Alternate:

Alternative 3

SUMMARY OF PROJECT COST ESTIMATES

TOTAL ROADWAY ITEMS (Year 2013)	\$110,000,000
TOTAL STRUCTURE ITEMS (Year 2013)	\$45.800.000
SUDTOTAL CONSTRUCTION COSTS (Mars 2012)	¢155 800 000
SUBTOTAL CONSTRUCTION COSTS (Year 2013)	\$155,800,000
TOTAL RIGHT OF WAY ITEMS (Year 2017)	\$38,752,888
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$194,552,888

DIST-CO-RTE	07-LA-60
PM	R23.3/R26.5
EA	279100

I. ROADWAY ITEMS

Section 1 Earthwork	Quantity	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Roadway Excavation	254,575	CY	\$40.00	\$10,183,000	
Clearing & Grubbing	1	LS	\$150,000.00	\$150,000	
Remove Concrete	291,400	SF	\$5.65	\$1,646,410	
(Pavement, Curb, Sidewalk, Barrier)					
Roadway Excavation for contaminated	14,800	CY	\$175.00	\$2,590,000	
soil (ADL, Type Z-2)					
			Sul	ototal Earthwork	\$14,569,410
Section 2 Structural Section*	Quantity	<u>Unit</u>	Unit Price	Unit Cost	Section Cost

PCC Pavement (Depth)				\$0	
PCC Pavement (Depth)				\$0	
Asphalt Concrete				\$0	
Lean Concrete Base (6" Depth)	29,000	CY	\$138.00	\$4,002,000	
LCB Rapid Setting	300	CY	\$400.00	\$120,000	
Aggregate Base -Class 3	53,600	CY	\$35.00	\$1,876,000	
Edge Drains				\$0	
JPC Pavement (14" Depth)	17,750	CY	\$150.00	\$2,662,500	
JPCP (Rapid Set Concrete)	650	CY	\$425.00	\$276,250	
Hot Mix Asphalt (Type A)	37,650	Ton	\$105.00	\$3,953,250	
Rubberized Hot Mix Asphalt (Gap Graded)	6,680	Ton	\$120.00	\$801,600	
Grind Existing Concrete Pavement	2,500	SQ YD	\$10.00	\$25,000	
Minor Concrete	1,500	CY	\$370.00	\$555,000	

Section 3 Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Large Drainage Facilities					
Storm Drains				\$0	
Pumping Plants				\$0	
Drainage	1	LS	\$4,171,120.00	\$4,171,120	

(X-Drains, oversize, etc.)

* See plans X-1 through X-3 of project report for detailed cross section information.

Subtotal Drainage \$4,171,120

07-LA-60 PM R23.3/26.5 EA279100

Section 4 Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Walls **	1	LS	\$11,100,000.00	\$11,100,000	
Noise Barriers	1	LS	\$933,000.00	\$933,000	
Barriers and Guard Rails	1	LS	\$331,000.00	\$331,000	
Water Pollution Control (Include Treatement BMP)	1	LS	\$2,790,000.00	\$2,790,000	
Concentrated Flow Conveyance Systems	1	LS	\$69,800.00	\$69,800	
Lead Compliance Plan (ADL Handling, Traffic Stripe/Marking Removal)	1	LS	\$5,000.00	\$5,000	
Manage contamintaed groundwater (contingecny)	1	LS	\$100,000.00	\$100,000	
Asbestos Abatement (contingency)	1	LS	\$20,000.00	\$20,000	
Resident Engineer Office Fund	1	LS	\$352,000.00	\$352,000	
TRO	1	LS	\$5,700,000.00	\$5,700,000	
			~ .		** *

** Cost of wall is not included in the Structures Items (Sheet 6 of 7)

Subtotal Specialty Items \$21,400,800

Section 5 Traffic Items	<u>Quantity</u>	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Striping Removal	1	LS	\$380,000.00	\$380,000	
Striping Installation	1	LS	\$485,000.00	\$485,000	
Transportation Management Plan	1	LS	\$1,432,100.00	\$1,432,100	
Chain link Fence	14,000	LF	\$21.00	\$294,000	
Remove Metal Beam Guard Railing	1	LS	\$110,200.00	\$110,200	
Temporary Signing	1	LS	\$150,000.00	\$150,000	
K-Rail	30,000	LF	\$13.00	\$390,000	
Traffic Control System	1	LS	\$1,000,000.00	\$1,000,000	
Roadside Sign	1	LS	\$400,000.00	\$400,000	
Temporary Crash Cushions	1	LS	\$300,000.00	\$300,000	
Overhead Sign	1	LS	\$2,620,000.00	\$2,620,000	
Modify traffic signal and lighting systems	1	LS	\$1,020,000.00	\$1,020,000	
Ramp metering Systems	6	EA	\$100,000.00	\$600,000	
Modify Highway Lighting Sign Illumination				\$0	
Highway Lighting Sign Illumination	1	LS	\$640,000.00	\$640,000	
Temporary traffic signal and lighting systems	69	EA	\$5,000.00	\$345,000	
Modify Ramp Metering Systems				\$0	
Modify CommunicationSystem (Fiber Optics)	1	LS	\$1,600,000.00	\$1,600,000	
			Cubto	tal Traffia Itama	¢11 766 200

Subtotal Traffic Items \$11,766,300

Section 6 Planting and Irrigation	<u>Quantity</u>	<u>Unit</u>	Unit Price	Unit Cost	Section Cost
Highway Planting	1,261,500	SF	\$4.00	\$5,046,000	
Replacement Planting				\$0	
Irrigation Modification				\$0	
Relocate Existing Irrigation				\$0	
Facilities					
Irrigation Crossovers	4	EA	\$2,500.00	\$10,000	
		Sı	btotal Planting and I	rrigation Section	\$5,056,000
Section 7: Roadside Management	Quantity	Unit	Unit Price	Unit Cost	Section Cost
and Safety Section					
Vegetation Control Treatments	600	SQYD	\$36.00	\$21,600	
Gore Area Pavement	840	CY	\$80.00	\$67,200	
Pavement beyond the gore area				\$0	
Miscellaneous Paving				\$0	
Erosion Control					
Slope Protection				\$0	
Side Slopes/Embankment Slopes				\$0	
Maintenance Vehicle Pullouts					
Off-Freeway Access (gates,					
stairways, etc.)***					
Roadside Facilities (Vista Points,				\$0	
Transit, Park and Ride, etc.)					
Relocating roadside				\$0	
facilities/features					
		Subtotal Road	dside Management an	d Safety Section	\$88,800

COMMENTS:

SUBTOTAL SECTIONS 1-7 \$71,324,030

*** Access Gate included herein. Maintenance Pullout included in retaining wall and paving costs.

Section 8 Minor Items

		\$71,324,030	Х	10.00% =	\$7,132,403	
		(Subtotal Sections 1-7)		(5% - 10%)		
				TOTAL N	MINOR ITEMS	\$7,132,403
Section 9 Roadway Mobilization	<u>1</u>					
		\$78,456,433	Х	10.00% =	\$7,845,643	
		(Subtotal Sections 1-8)				
			TOT	AL ROADWAY M	OBILIZATION	\$7,845,643
Section 10 Roadway Additions						
Supplemental Work		\$78,456,433	Х	10.00% =	\$7,845,643	
		(Subtotal Sections 1-8)		(5% - 10%)		
Contingencies		\$78,456,433	х	20.00%	\$15.691.287	
Contingeneres		(Subtotal Sections 1-8)		2010070	<i>Q10,031,207</i>	
				TOTAL ROADWA	Y ADDITIONS	\$23,536,930
				TOTAL ROA	ADWAY ITEMS	\$109,839,006
				(Subtotal Se	ections 1 thru 10)	
					USE	110,000,000
Estimate Prepared By	Hank Nguyen		Phone #	(714) 953-1015	Date	8/20/2013
	(Print Name)					
Estimate Checked By	Daniel Weddell		Phone #	ŧ (714) 953-1020	Date	8/23/2013
	(Print Name)		1 110110	(,)>00 1000	- Late	5, 20, 2010

II. STRUCTURES ITEMS STRUCTURE					
	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	<u>No. 4</u>	<u>No. 5</u>
Structure Name	Golden Springs UC (Conn A)	Grand Ave OC	Diamond Bar UC (Conn B)	Golf Course Tunnel	Architectural Treatment
Structure Type			CIP PS Box Girde	r	
Widening Width - (ft)					
Span Lengths - (ft)					
Total Area - (sf)					
Footing Type (Pile/Spread)					
Total Cost for Structure	\$7,766,000	\$12,189,000	\$10,558,000	\$3,500,000	\$443,000
Removal Cost					
Structure Name	<u>No. 6</u> Retaining Wall No. 40	<u>No. 7</u> Retaining Wall No. 244B	<u>No. 8</u> Retaining Wall No. 250	<u>No.9</u> Retaining Wall No. 258	<u>No.10</u> Retaining Wall No. 280
Structure Type	Tie Back	Secant Pile	MSE	MSE	MSE
Widening Width - (ft)		Securit 1 ne			
Span Lengths - (ft)					
Total Area - (sf)	6.400	34.000	4.600	14.000	12.000
Footing Type (Pile/Spread)			,		,
Total Cost for Structure	\$1,815,000	\$278,000	\$411,000	\$2,006,000	\$1,059,000
Removal Cost					
Structure Name	<u>No.11</u> Retaining Wall No. 282	<u>No.12</u> Retaining Wall No. 287	<u>No.13</u> Retaining Wall No. 288	<u>No.14</u> Retaining Wall No. 352	
Structure Type	MSE	MSE	MSE	MSE	
Widening Width - (ft)					
Span Lengths - (ft)					
Total Area - (sf)	30,000	3,600	22,000	4,600	
Footing Type (Pile/Spread)					
Total Cost for Structure	\$2,755,000	\$440,000	\$2,138,000	\$417,000	
Removal Cost					
		SU	BTOTAL STRUC	TURES ITEMS	\$45,775,000
Railroad Related Costs					\$0
		\$	SUBTOTAL RAI	LROAD ITEMS	\$0
			TOTAL STRUC	TURES ITEMS	\$45,775,000
COMMENTS:	T 7 °1T° . 1		/#4.15. A	USE	\$45,800,000
Estimate Prepared By	vinn Trinh		(714) 9	53-1019	7/24/2012

Print Name

Sheet 6 of 7 Alternative 3 ATTACHMENT E

Date

Phone #

III. RIGHT OF WAY

	Current Values	Escalation	Escalated Values*
	(Future Use)	Rates	(5 Years)
A. Acquisition, including excess lands,			
damages to remainder(s), and Goodwill	\$23,145,934	7.00%	\$32,463,370
B. Acquisition of Offset Mitigation	\$0	0.00%	\$0
C. Utility Relocation	\$4,102,000	8.00%	\$6,027,184
D. Relocation Assistance	\$0	3.00%	\$0
E. Clearance/Demolition	\$0	3.00%	\$0
F. Title and Escrow Fees	\$222,898	3.00%	\$258,400
G. Project Permit Fees	\$0	3.00%	\$0
H. Condemnation Cost	\$0	3.00%	\$0
I. 'TOTAL RIGHT OF WAY		ТОТ.	
(CURRENT VALUES)	\$27,470,832	ESC. R/W	\$38,748,954
Use			\$38,749,000

*Escalated to assumed year of advertising of 2017

Estimate Prepared By	Ray Armstrong	(562) 304-2000	5/22/2013
	(Print Name)	Phone #	Date

(If appropriate, attach additional pages and backup)

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION **RIGHT OF WAY DATA SHEET**

(Form #)

To: Andrew	w Nierenberg	Date	May 2	21, 20	13				
		Dist	07	Co	LA	Rte	57, 60	P/M	R4.3/R4.8; R23.3/R26.5
Attention: 1	Linda Tong	EA	27910	00					
		Project	Descri	ption	Reco	nstruct	Grand Ave	nue Inte	rchange
Subject:	Right of Way Data								
		Alterna	ate No. 2 (No Soundwalls)						

This Alternate meets the criteria for a Design/Build Project: Yes 🗌 No 🔀

1. Right of Way Cost Estimate: To be entered into PMCS COST RW1-5 Screens

			Current Value Future Use	Escalation Rate			Escalated Value (5 Years)
A.	Total Acquisition Cost					\$	29,335,458
	Acquisition, including Excess Lands, Damages, and Goodwill (includes 25% contingency)	\$_	20,915,776	7	%	\$	29,335,459
	Project Permit Fees.					\$	0
B.	Utility Relocation (City Share) (includes 25% contingency)	\$_	3,789,500	8	%	\$	5,568,019
C.	Relocation Assistance	\$	0	3	%	\$	0
D.	Clearance/Demolition	\$	0	3	%	\$	0
E.	Title and Escrow (includes 25% contingency)	\$	214,469	3	%	\$	248,629
F	Total Estimated Cost	\$	24,919,745	_		\$	35,152,107
G.	Construction Contract Work	\$	0	(These are const included in the p	ruction rojects	costs ti PS&E)	hat are to be

2. Current Date of Right of Way Certification January 30, 2015

3. Parcel Data: To be entered into PMCS EVNT RW Screen

<u>Ty</u>	pe	Dual/Appr	Utilities		RR Involvements		
Х			U4-1	12	None		X
А			-2		C&M Agrmt		
В	25	2	-3		Svc Contract		
С	1	1	-4		Design		
D			U5-7		Const.		
Е	XXXX		-8		Lic/RE/Clauses		
F	XXXX		-9	12			
			_		Misc R/W Work		
To	tal	29			RAP Displ		0
					Clear/Demo		0
					Const Permits		0
					Condemnation		1
					Excess		0
Are	eas: R/W (Caltrans Takes)		409,494 sf	No. Excess	0	
	R/W	(City of Industry T	akes)	34,122 sf	Pcls:	0	
	R/W	(City of Diamond I	Bar Takes)	41,855 sf		0	
	Trans	fer to Caltrans (Cit	y of Industry)	17,566 sf		0	
	Trans	fer to Caltrans (Cit	y of D.B.)	3,078 sf		0	
En	tered PCM	IS Screens//_	_ by				
En	tered AGR	E Screen (Railroad	d data only) $_/$	/ by			

ATTACHMENT F

(Form #)

- 4. Are there any major items of construction contract work? Yes □ No ⊠ (If yes, explain.)
- 5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.) No right of way required

In addition to the below project information, please see attached cost estimate identifying parcel impacts and per parcel costs (Right of Way Data Sheet Cost Estimate).

All acquisitions described herein are identified by ID number, which is located and described in the Right-of-Way Estimate Worksheet.

Various easements - Temporary construction easements (TCE), footing easements, Los Angeles County Sewer Department (LACSD) easements), public utility easement (PUE), and aerial easements are required for the construction of the project.

Acquisitions consisting of privately held commercial property owned by Oak Creek must be made and transferred to Caltrans (ID# 1a & 1b). Partial takes of APN# 8293-050-032 and APN# 8293-050-003 are required. The land affected is currently landscaped and is likely covered by the existing slope easement for the freeway.

An acquisition consisting of privately held commercial property owned by Ayres Holdings (ID# 2) must be made and transferred to Caltrans. A partial take of APN# 8717-001-085 is required. The land affected is currently landscaped and is likely covered by the existing slope easement for the freeway.

An acquisition consisting of public property owned by Los Angeles County must be made and transferred to Caltrans (ID# 3a, 3b & 3d) and the City of Diamond Bar (ID# 3c & 3e). Partial takes of APN# 8717-001-907, APN# 8717-001-908 and APN# 8717-002-905 are required. The land affected impacts active areas of the Diamond Bar Golf Course and other supporting improvements to be reconstructed to preserve play as determined by a Golf Course architect.

A property absorption under California Streets and Highway Code-83 must be made and transferred to Caltrans (ID# 4). The land affected consists of a portion of Grand Avenue located within the City of Diamond Bar.

Acquisitions consisting of undeveloped property owned by the Industry Urban Development Agency must be made and transferred to Caltrans (ID# 5a, 5b & 5d) and the City of Industry (ID# 5c & 5e). Partial takes of APN# 8719-007-907, APN# 8719-007-917, and APN# 8719-007-922 are required. This acquisition is considered a transfer because there is no cost.

An acquisition consisting of privately held commercial property owned by AP Diamond Bar, LLC must be made and transferred to Caltrans (ID# 8). A partial take of APN# 8281-024-053 is required. The land affected consists of undeveloped slope area and a 30-foot double illuminated marquis sign advertising a business.

A property absorption under California Streets and Highway Code-83 must be made and transferred to Caltrans (ID# 9). The land affected consists of a portion of Grand Avenue located within the City of Industry.

An acquisition consisting of privately held commercial property owned by Perasso Tommy Family T&M must be made and transferred to the City of Diamond Bar (ID# 10). A partial take of APN# 8293-045-131 is required. The land affected consists of sidewalk and landscaping for Chili's Bar and Grill Restaurant.

STATE RIGH	OF CALIFORNIA • DEPARTMENT OF TRANSPORTA HT OF WAY DATA SHEET	TION	EXHIBIT 4-EX-1 (REV 3/2004)						
(Form #) 6.) Is there an effect on assessed valuation? Yes	s 🗌 Not significant 🗌	Page 3 of 4 No \boxtimes (If yes, explain.)						
7.	Are utility facilities or rights of way affected? Yes No (If yes, attach Utility Information Sheet Exhibit 4-EX-5) The following checked items may seriously impact lead time for utility relocation: Longitudinal policy conflict(s) Environmental concerns impacting acquisition of potential easements Power lines operating in excess of 50 KV and substations (See attached Exhibit 4-EX-5 for explanation)								
8.	Are Railroad facilities or rights of way affec Yes No X (If yes, attach Utility Info	ted? mation Sheet Exhibit 4-EX	-6)						
9.	Were any previously unidentified sites with hazardous waste and/or material found? Yes None Evident X (If yes, attach memorandum per R/W Manual, Chapter 4, Section 4.01.10.00.)								
10.	Are RAP displacements required Yes	No 🛛 (If yes, provide the	following information.)						
	No. of single family No. of multi-family	No. of business/nonprofit No. of farms							
E	Based on Draft/Final Relocation Impact Stateme eplacement housing (will/will not) be available	ent/Study dated <u>N/A</u> , without Last Resort Housing	it is anticipated that sufficient ng.						
11.	Are there material borrow and/or disposal sin	ted required? Yes 🗌 No	(If yes, explain.)						
12.	Are there potential relinquishments and/or a	bandonments? Yes 🗌 No	rightarrow [If yes, explain.]						
13.	Are there any existing and/or potential airspa	ace sites? Yes 🗌 No 🔀	(If yes, explain.)						
14.	Indicate the anticipated Right of Way scl proposes less than PMCS lead time and/o anticipated).	nedule and lead time requ or if significant pressures	irements. (Discuss if district for project advancement are						
	Based on R/W requirements on Page 1 of the months from the date regular appraisals can	nis Data Sheet, R/W will re begin to project certification	equire a lead time of <u>18</u> .						
	In any event, RW Maps will require <u>15</u>	months from Final Maps	to project certification.						
15.	Is it anticipated that CALTRANS staff will p (If no, discuss.)	perform all Right of Way w	ork? Yes 🛛 No 🗌						
	A qualified appraiser and specialty FF&E / Industry. It is anticipated that Caltrans stafj project certification.	Goodwill appraisers will b f will perform appraisal rev	e retained by the City of iew, acquisition services and						

ATTACHMENT F

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION **RIGHT OF WAY DATA SHEET**

Name

Name

(Form #)

EXHIBIT 4-EX-1 (REV 3/2004) Page 4 of 4

Evaluation Prepared By:

Date May 22, 2013

Right of Way

Ray Armstrong, SR/WA Overland, Pacific & Cutler, Inc.

Utilities

Date 5-22-13

Marie Marston, PE Civil Works Engineers

Recommended for Approval:

Date 5-22-13 Daniel S. Weddell, PE

WKE, Inc.

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

John D. Ballas, PE City Engineer, City of Industry

Date 5-24-2013

- 1. Name of the utility companies involved in project:
 - a. Los Angeles County Sanitation District (LACSD)
 - b. Southern California Edison (SCE)
 - c. Verizon Telephone
 - d. Walnut Valley Water District (WVWD)
- 2. Type of facilities and agreements required:

a. Sanitation District of Los Angeles County (LACSD)

- *i.* 1350' of 15" vitrified clay pipe (VCP) sewer and manholes located between Golden Springs Drive and the SR-57/SR-60 freeway – to be relocated south of EB SR-60 Grand Avenue offramp. VCP will be replaced with polyvinyl chloride (PVC) pipe.
- *ii.* 150' of 12" LACSD VCP sewer (in encasement) crossing SR-57/SR-60 freeway and manhole located south of freeway line to be extended southward and manhole relocated to accommodate new EB SR-60 Grand Avenue off-ramp.

b. Southern California Edison (SCE)

- *i.* 66kv overhead transmission pole located south of freeway west of Grand Avenue interchange To be relocated because of proposed EB SR-60 Grand Avenue off-ramp.
- *ii.* 800' of underground 12 kV distribution along SB Grand Avenue To be relocated for Grand Avenue bridge construction.
- *iii.* 650' of underground 12 kV distribution along Grand Avenue located north of WB freeway ramps To be relocated to edge of Grand Avenue.
- iv. 1550' underground 12 kV distribution located south of EB SR-57/SR-60 Grand Avenue onramp, along northbound Grand Avenue south of the interchange, and along westbound Golden Springs Drive – to be relocated to the edge of proposed roadway.
- v. 2700' overhead distribution located south of EB SR-57/SR-60 Grand Avenue on-ramp to be relocated south outside of Caltrans right of way.
- vi. 800' overhead distribution located south of freeway west of Diamond Bar Boulevard interchange to be relocated because of proposed bypass connector to SR-60.
- vii. 900' overhead distribution located south of freeway east of Diamond Bar Boulevard interchange to be relocated because of proposed bypass connector to SR-60.

c. Verizon Telephone

i. 800' of communication line along SB Grand Avenue - To be relocated for bridge reconstruction.

d. Walnut Valley Water District

Fire hydrants and water meters located on local streets to be relocated where appropriate

- *i.* 800' of 12" ACP water line in 20" steel casing Line to be relocated for Grand Avenue bridge construction. ACP will be replaced with PVC in relocated line.
- *ii.* 700' of 12" PVC water line in 20" steel casing and 2000' of 12" PVC reclaimed water line in 20" steel casing Line to be relocated for Grand Avenue bridge construction.

Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? 3. Explain.

Existing SCE power poles and overhead facilities are located near the right of way adjacent to the WB Bypass Connector. For an approximate length of 650 feet, the overhead facilities may cross portions of the right of way.

Disposition of longitudinal encroachment(s):

- Relocation required.
 - Exception to policy needed.
- $\overline{\boxtimes}$ Other. Explain.

No longitudinal utility encroachment will be required for this project. It is expected the facilities are actually outside the right of way. During the final PS&E phase, the exact location of the power poles and overhead facilities will be determined by survey and the locations will be updated. If the facilities are within the state right of way, they will be relocated as part of the project. The proposed project improvements will not otherwise impact these poles or require relocations.

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).

None

PMCS Input Information 5. \$____

Total estimated cost of City's obligation for utility relocation on this project:

Total estimated cost to include any Department obligation to relocate longitudinal Note: encroachments in access controlled right of way and acquire any utility easements.

Utility Involvements



Prepared By:

Marie leant Marie Marston, PE

Civil Works Engineers

5-22-13 Date

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION **RIGHT OF WAY DATA SHEET**

(Form #)

To: Andrew	w Nierenberg	Date	May	21, 20	13				
		Dist	07	Co	LA	Rte	57, 60	P/M	R4.3/R4.8; R23.3/R26.5
Attention: 1	Linda Tong	EA	27910	00					
		Project	Descri	ption	Reco	nstruct	Grand Ave	nue Inte	rchange
Subject:	Right of Way Data								
		Alterna	ate No. 3 (No Soundwalls)						

This Alternate meets the criteria for a Design/Build Project: Yes 🗌 No 🔀

1. Right of Way Cost Estimate: To be entered into PMCS COST RW1-5 Screens

		Current Value Future Use	Escalation Rate			Escalated Value (5 Years)
A.	Total Acquisition Cost				\$	32,463,370
	Acquisition, including Excess Lands, Damages, and Goodwill (includes 25% contingency)	\$ 23,145,934	7	%	\$	32,463,370
	Project Permit Fees.				\$	0
B.	Utility Relocation (City Share) (includes 25% contingency)	\$ 4,102,000	8	%	\$	6,027,184
C.	Relocation Assistance	\$ 0	3	%	\$	0
D.	Clearance/Demolition	\$ 0	3	%	\$	0
E.	Title and Escrow (includes 25% contingency)	\$ 222,898	3	%	\$	258,400
F	Total Estimated Cost	\$ 27,470,832	<u>-</u>		\$	38,748,954
G.	Construction Contract Work	\$ 0	(These are construction costs that are to be included in the projects PS&E)			

2. Current Date of Right of Way Certification January 30, 2015

3. Parcel Data: To be entered into PMCS EVNT RW Screen

Typ	be	Dual/Appr	<u>Utilities</u>		RR Involvements		
X			U4-1	12	None		X
Α			-2		C&M Agrmt		
В	26	2	-3		Svc Contract		
C	1	1	-4		Design		
D			U5-7		Const.		
E	XXXX		-8		Lic/RE/Clauses		
F	XXXX		-9	12			
					Misc R/W Work		
Tot	al	31			RAP Displ		0
	_				Clear/Demo		0
					Const Permits		0
					Condemnation		1
					Excess		0
Are	as: R/W (C	Caltrans Takes)		554,697 sf	No. Excess	0	
	R/W (0	City of Industry T	akes)	34,122 sf	Pcls:	0	
	R/W (0	City of Diamond I	Bar Takes)	36,951 sf		0	
	Transf	er to Caltrans (Cit	ty of Industry)	17,566 sf		0	
	Transf	er to Caltrans (Cit	ty of D.B.)	40,404 sf		0	
Ent	ered PCMS	S Screens//_	_ by _				
Ent	ered AGRI	E Screen (Railroa	d data only) _/	/ by			

ATTACHMENT F

(Form #)

- 4. Are there any major items of construction contract work? Yes □ No ⊠ (If yes, explain.)
- 5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.) No right of way required

In addition to the below project information, please see attached cost estimate identifying parcel impacts and per parcel costs (Right of Way Data Sheet Cost Estimate).

All acquisitions described herein are identified by ID number, which is located and described in the Right-of-Way Estimate Worksheet.

Various easements - Temporary construction easements (TCE), footing easements, Los Angeles County Sewer Department (LACSD) easements), public utility easement (PUE), and aerial easements are required for the construction of the project.

Acquisitions consisting of privately held commercial property owned by Oak Creek must be made and transferred to Caltrans (ID# 1a & 1b). Partial takes of APN# 8293-050-032 and APN# 8293-050-003 are required. The land affected is currently landscaped and is likely covered by the existing slope easement for the freeway.

An acquisition consisting of privately held commercial property owned by Ayres Holdings (ID# 2) must be made and transferred to Caltrans. A partial take of APN# 8717-001-085 is required. The land affected is currently landscaped and is likely covered by the existing slope easement for the freeway.

An acquisition consisting of public property owned by Los Angeles County must be made and transferred to Caltrans (ID# 3a, 3b & 3d) and the City of Diamond Bar (ID# 3c & 3e). Partial takes of APN# 8717-001-907, APN# 8717-001-908 and APN# 8717-002-905 are required. The land affected impacts active areas of the Diamond Bar Golf Course and other supporting improvements to be reconstructed to preserve play as determined by a Golf Course architect.

A property absorption under California Streets and Highway Code-83 must be made and transferred to Caltrans (ID# 4). The land affected consists of a portion of Grand Avenue located within the City of Diamond Bar.

Acquisitions consisting of undeveloped property owned by the Industry Urban Development Agency must be made and transferred to Caltrans (ID# 5a, 5b & 5d) and the City of Industry (ID# 5c & 5e). Partial takes of APN# 8719-007-907, APN# 8719-007-917, and APN# 8719-007-922 are required. This acquisition is considered a transfer because there is no cost.

An acquisition consisting of privately held commercial property owned by AP Diamond Bar, LLC must be made and transferred to Caltrans (ID# 8). A partial take of APN# 8281-024-053 is required. The land affected consists of undeveloped slope area and a 30-foot double illuminated marquis sign advertising a business.

A property absorption under California Streets and Highway Code-83 must be made and transferred to Caltrans (ID# 9). The land affected consists of a portion of Grand Avenue located within the City of Industry.

An acquisition consisting of privately held commercial property owned by Perasso Tommy Family T&M must be made and transferred to the City of Diamond Bar (ID# 10). A partial take of APN# 8293-045-131 is required. The land affected consists of sidewalk and landscaping for Chili's Bar and Grill Restaurant.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET
(Form #)

project certification.

6.	Is there an effect on assessed valuation? Yes \Box Not significant \Box No \boxtimes (If yes, explain.)								
7.	Are utility facilities or rights of way affected? Yes ⊠ No □ (If yes, attach Utility Information Sheet Exhibit 4-EX-5) The following checked items may seriously impact lead time for utility relocation: □ Longitudinal policy conflict(s) □ Environmental concerns impacting acquisition of potential easements ⊠ Power lines operating in excess of 50 KV and substations (See attached Exhibit 4-EX-5 for explanation)								
8.	Are Railroad facilities or rights of way affected? Yes No X (If yes, attach Utility Information Sheet Exhibit 4-EX-6)								
9.	Were any previously unidentified sites with hazardous waste and/or material found? Yes None Evident (If yes, attach memorandum per R/W Manual, Chapter 4, Section 4.01.10.00.)								
10.	Are RAP displacements required Yes No X (If yes, provide the following information.)								
	No. of single familyNo. of business/nonprofitNo. of multi-familyNo. of farms								
	Based on Draft/Final Relocation Impact Statement/Study dated N/A , it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.								
11.	Are there material borrow and/or disposal sited required? Yes 🗌 No 🔀 (If yes, explain.)								
12.	Are there potential relinquishments and/or abandonments? Yes 🗌 No 🔀 (If yes, explain.)								
13.	Are there any existing and/or potential airspace sites? Yes \Box No \boxtimes (If yes, explain.)								
14.	Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated).								
	Based on R/W requirements on Page 1 of this Data Sheet, R/W will require a lead time of <u>18</u> months from the date regular appraisals can begin to project certification.								
	In any event, RW Maps will require <u>15</u> months from Final Maps to project certification.								
15.	Is it anticipated that CALTRANS staff will perform all Right of Way work? Yes No 🗌 (If no, discuss.)								
	A qualified appraiser and specialty FF &E / Goodwill appraisers will be retained by the City of Industry. It is anticipated that Caltrans staff will perform appraisal review, acquisition services and								

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DATA SHEET

Name

Name

(Form #)

EXHIBIT 4-EX-1 (REV 3/2004) Page 4 of 4

Evaluation Prepared By:

Right of Way

Date May 22, 2013

Ray Armstrong, SR/WA Overland, Pacific & Cutler, Inc.

Utilities

Marie Mant Marie Marston, PE

Civil Works Engineers

Date 5-22-13

Recommended for Approval:

Date 5-22-13

Daniel S. Weddell, PE WKE, Inc.

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

allas ohn D. Ballas, PE

City Engineer, City of Industry

Date

- 1. Name of the utility companies involved in project:
 - a. Los Angeles County Sanitation District (LACSD)
 - b. Southern California Edison (SCE)
 - c. Verizon Telephone
 - d. Walnut Valley Water District (WVWD)
- 2. Type of facilities and agreements required:

a. Sanitation District of Los Angeles County (LACSD)

- *i.* 1350' of 15" vitrified clay pipe (VCP) sewer and manholes located between Golden Springs Drive and the SR-57/SR-60 freeway – to be relocated south of EB SR-60 Grand Avenue offramp. VCP will be replaced with polyvinyl chloride (PVC) pipe.
- *ii.* 150' of 12" LACSD VCP sewer (in encasement) crossing SR-57/SR-60 freeway and manhole located south of freeway line to be extended southward and manhole relocated to accommodate new EB SR-60 Grand Avenue off-ramp.

b. Southern California Edison (SCE)

- *i.* 66kv overhead transmission pole located south of freeway west of Grand Avenue interchange To be relocated because of proposed EB SR-60 Grand Avenue off-ramp.
- *ii.* 800' of underground 12 kV distribution along SB Grand Avenue To be relocated for Grand Avenue bridge construction.
- *iii.* 650' of underground 12 kV distribution along Grand Avenue located north of WB freeway ramps To be relocated to edge of Grand Avenue.
- iv. 1550' underground 12 kV distribution located south of EB SR-57/SR-60 Grand Avenue onramp, along northbound Grand Avenue south of the interchange, and along westbound Golden Springs Drive – to be relocated to the edge of proposed roadway.
- v. 2700' overhead distribution located south of EB SR-57/SR-60 Grand Avenue on-ramp to be relocated south outside of Caltrans right of way.
- vi. 800' overhead distribution located south of freeway west of Diamond Bar Boulevard interchange to be relocated because of proposed bypass connector to SR-60.
- vii. 900' overhead distribution located south of freeway east of Diamond Bar Boulevard interchange to be relocated because of proposed bypass connector to SR-60.

c. Verizon Telephone

i. 800' of communication line along SB Grand Avenue - To be relocated for bridge reconstruction.

d. Walnut Valley Water District

Fire hydrants and water meters located on local streets to be relocated where appropriate

- *i.* 800' of 12" ACP water line in 20" steel casing Line to be relocated for Grand Avenue bridge construction. ACP will be replaced with PVC in relocated line.
- *ii.* 700' of 12" PVC water line in 20" steel casing and 2000' of 12" PVC reclaimed water line in 20" steel casing Line to be relocated for Grand Avenue bridge construction.

EXHIBIT 4-EX-5 Page 2 of 2

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.

Existing SCE power poles and overhead facilities are located near the right of way adjacent to the WB Bypass Connector. For an approximate length of 650 feet, the overhead facilities may cross portions of the right of way.

Disposition of longitudinal encroachment(s):

Relocation required.

Exception to policy needed.

Other. Explain.

No longitudinal utility encroachment will be required for this project. It is expected the facilities are actually outside the right of way. During the final PS&E phase, the exact location of the power poles and overhead facilities will be determined by survey and the locations will be updated. If the facilities are within the state right of way, they will be relocated as part of the project. The proposed project improvements will not otherwise impact these poles or require relocations.

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).

None

 \boxtimes

5. PMCS Input Information

Total estimated cost of City's obligation for utility relocation on this project: \$_____

Note: Total estimated cost to include any Department obligation to relocate longitudinal encroachments in access controlled right of way and acquire any utility easements.

Utility Involvements



Prepared By:

e Mart

Marie Marston, PE Civil Works Engineers

Date

























BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

Dis†	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
07	LA	SR-57 SR-60	R4.3 / R4.8 R23.6 / R26.5	
REG PLA THE OR A THE COPU	SISTERED C NNS APPRO STATE OF CAL GENTS SHALL ACCURACY OR SS OF THIS A	IVIL ENGINE VAL DATE LIFORNIA OR II NOT BE RESPO COMPLETENESS 24 N SHEFT.	ER DATE	CIVIL CLIVIL CLIVIL
CITY 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	JSTRY FORD STREET Y, CA 91744	CIVIL WORKS 3151 AIRWAY AVEN SUITE T-1 COSTA MESA, CA S	ENGINEER8 NUE 92626

DATE PLOTTED => \$DATE TIME PLOTTED => \$TIME

CU 00000	EA 279100
	1



x REVISED BY	DATE REVISED	MATCHLINE STA 94+00 SEE SHEET RW-5
<pre>x FUNCTIONAL SUPERVISOR CALCULATED- </pre>	CHECKED BY	PROP P-MU 133- PROP P
× STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	Ct (altrans	RIVELATIVE PORDER SCALE 2 1 2 3 USERNAME => RUSER

Dist	COUNTY	LOCATION CODE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS	
07	LA	SR-57 SR-60	R4.3 / R4.8 R23.6 / R26.5	
REGISTERED CIVIL ENGINEER DATE				
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.				
CIT 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J STRY Ford Street Y, CA 91744	CIVIL WORKS ENGINEERS 3151 AIRWAY AVENUE SUITE T-1 COSTA MESA, CA 92626	

(ALTERNATIVE 3) RIGHT-OF-WAY

SCALE 1"=100'

ATTACHMENT F RW-13

CU 00000 EA 279100

x x REVISED BY	DATE REVISED		MATCHLINE MATCHLINE	EET RW-13 STA 88+00	٥	sc.
A - DEPARTMENT OF TRANSPORTATION FUNCTIONAL SUPERVISOR CALCULATED- DESIGNED BY	CHECKED BY	THUR SEE SHEET RU- 10	TCE PROP R/W A COUNTY A COUNTY	PROP R/W COLDEN SPRINGS CONC R/W BR/T7-025-011 CONC BR/W BR/T7-025-011 CONC BR/W BR/T7-025-011 CONC BR/T7-025-053 CONC BR/T7-025-053 CONC BR/T7-025-053	ASPH A COUNTY A COUNTY ASPH DRIVE ASPH DRIVE ASPH DRIVE ASPH CONC C	ASPH
× × STATE OF CALIFORNI	ER LA	ST REVISED 3/1/2007		RELATIVE BORDER SCALE IS IN INCHES		3 USERNAME => \$USER □ DGN_FILE => \$PREQUEST

•

Dis†	COUNTY	LOCATION CODE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS
07	1.4	SR-57	R4.3 / R4.8
01		SR-60	R23.6 / R26.5
REGISTERED CIVIL ENGINEER DATE			
CITY 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J STRY FORD STREET Y, CA 91744	CIVIL WORKS ENGINEERS 3151 AIRWAY AVENUE SUITE T-1 COSTA MESA, CA 92626



Å

CU 00000 EA 279100
DATE REVISED	
	R/W OWNER 127 R/W OWNER 045- 127 R/W OWNER 045- 127 R/W
	HdSV SCE EASEMENT
СНЕСКЕД ВҮ	HdSV CNV8D HdSV CNV8D HdSV CNV8D HdSV CNV8D HdSV CNV8D
	8717-001-031 To 8717-001-084 025- 055
ومعالة	
	IST DEVISED 7.4 (2007 RELATIVE BORDER SCALE 0 1 2 3 USERNAME => \$USER







CU 00000

EA 279100



RELATIVE BORDER SCALE 0 1 IS IN INCHES L

USERNAME => \$USER DGN FILE => \$REQUEST

Dis†	COUNTY	LOCATION CODE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS
07	١A	SR-57	R4.3 / R4.8
Ľ	24	SR-60	R23.6 / R26.5
REC PLA THE COPJ	ANS APPRO STATE OF CA GENTS SHALL ACCURACY OR ES OF THIS P	VAL DATE LIFORNIA OR II NOT BE RESPO COMPLETENESS PLAN SHEET.	ER DATE
CIT 1565 CITY	Y OF IND 1 EAST STAF OF INDUSTR	J STRY Ford street Y, CA 91744	CIVIL WORKS ENGINEERS 3151 AIRWAY AVENUE SUITE T-1 COSTA MESA, CA 92626



CU 00000 EA 279100

SUMMARY OF ACQUISITIONS							
OWNER	APN	ID#	SHEET #	ACQUISITIO SF	N AREA ACRES	ΤΑΚΕ	TYPE
OAK CREEK	8293-050-032	1a	2	775	0.02	PARTIAL	CT FEE
OAK CREEK	8293-050-003	1b	2	1,770	0.04	PARTIAL	CT FEE
AYRES HOLDINGS LT PTNSHP	8717-001-085	2	2-3	53,835	1.24	PARTIAL	CT FEE
LOS ANGELES COUNTY	8717-001-907	3а	2-3	47,924	1.10	PARTIAL	CT FEE
LOS ANGELES COUNTY	8719-001-908	3b	4-5, 13	261,997	6.01	PARTIAL	CT FEE
LOS ANGELES COUNTY	8717-001-908	3c	13-14, 16	21,598	0.50	PARTIAL	CITY DB FEE
LOS ANGELES COUNTY	8717-002-905	3d	5-7, 13	90,025	2.07	PARTIAL	CT FEE
LOS ANGELES COUNTY	8717-002-905	3e	13-14	15,353	0.35	PARTIAL	CITY DB FEE
CITY OF DIAMOND BAR	CITY OF DIAMOND BAR	4	5,13	40,404	0.93	PARTIAL	CITY TO CT
INDUSTRY URBAN DEVELOPMENT AGENCY	8719-007-907	5a	6,12	55,275	1.27	PARTIAL	CT FEE
INDUSTRY URBAN DEVELOPMENT AGENCY	8719-007-917	5b	12	38,013	0.87	PARTIAL	CT FEE
INDUSTRY URBAN DEVELOPMENT AGENCY	8719-007-917	5c	12	30,454	0.70	PARTIAL	CITY IND FEE
INDUSTRY URBAN DEVELOPMENT AGENCY	8719-007-922	5d	12	4,364	0.10	PARTIAL	CT FEE
INDUSTRY URBAN DEVELOPMENT AGENCY	8719-007-922	5e	12	3,668	0.08	PARTIAL	CITY IND FEE
AP DIAMOND BAR, LLC	8281-024-053	8	10	719	0.02	PARTIAL	CT FEE
CITY OF INDUSTRY	CITY OF INDUSTRY	9	12	17,566	0.40	PARTIAL	CITY TO CT
PERASSO TOMMY FAMILY T&M	8293-045-131	10	14	532	0.01	PARTIAL	CITY DB FEE

.

×

х

CALCULATED-DESIGNED BY

FUNCTIONAL SUPERVISOR

×

СНЕСКЕД ВҮ

•

DATE REVISED REVISED BY

Dist	COUNTY	LOCATION CODE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS
07	LA	SR-57 SR-60	R4.3 / R4.8 R23.6 / R26.5
REG PLA THE OR A THE COPIL	ISTERED C INS APPRO STATE OF CA GENTS SHALL ACCURACY OR ES OF THIS I	IVIL ENGINE VAL DATE LIFORNIA OR IT. NOT BE RESPO COMPLETENESS PLAN SHEET.	ER DATE
CITY 1565 CITY	Y OF INDU 1 EAST STAFI OF INDUSTR	J STRY Ford street Y, CA 91744	CIVIL WORKS ENGINEERS 3151 AIRWAY AVENUE SUITE T-1 COSTA MESA, CA 92626

(ALTERNATIVE 3) RIGHT-OF-WAY SCALE 1"=100' ATTACHMENT F RW-17

CU	00000	
CΟ	00000	





















×



RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

Dis†	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
07	LA	SR-57 SR-60	R4.3 / R4.8 R23.6 / R26.5	
REG PLA THE OR A THE COPIL	ISTERED C INS APPRO STATE OF CA GEOVITS SHALL GEOCURACY OR ES OF THIS I	VAL DATE LIFORNIA OR IT NOT BE RESPO COMPLETENESS PLAN SHEET.	ER DATE	OFESSIONAL PROVINE CIVIL
CITY 1565 CITY	Y OF IND 1 EAST STAF OF INDUSTR	JSTRY Ford street Y, CA 91744	CIVIL WORKS 3151 AIRWAY AVEN SUITE T-1 COSTA MESA, CA S	ENGINEER8 NUE 92626
			,	

CU 00000 EA 279100

DATE PLOTTED => \$DATE TIME PLOTTED => \$TIME

00



×			
			MATCHLING
	REVISED BY DATE REVISED		
×			OG H H H H H H H H H H H H H
×	CALCULATED- DESIGNED BY CHECKED BY		SNUTHOUSE AND AVENUE BUSINE R/W
	FUNCTIONAL SUPERVISOR		R/W H H R K K K K K K K K K K K K K K K K K
×	T OF TRANSPORTATION		VERIZON TELEPHONE UG
×	STATE OF CALIFORNIA - DEPARTMEN		MATCHLINE STA 88+00 SEE SHEET U-14
	BORDER I	ASI REVISED 3/1/2007	IS IN INCHES

Dis†	COUNTY	LOCATION CODE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS
07	LA	SR-57 SR-60	R4.3 / R4.8 R23.6 / R26.5
REC PLA THE OR A THE COPI	SISTERED C ANS APPRO STATE OF CA GENTS SHALL ACCURACY OR ES OF THIS H	VAL DATE LIFORNIA OR II NOT BE RESPO COMPLETENESS PLAN SHEET.	ER DATE
CIT 1565 CITY	Y OF IND 1 EAST STAF OF INDUSTR	JSTRY Ford street Y, CA 91744	CIVIL WORKS ENGINEERS 3151 AIRWAY AVENUE SUITE T-1 COSTA MESA, CA 92626

(ALTERNATIVE 3) UTILITIES

ATTACHMENT F U-13

CU	00000

RELATIVE	BORDER	SCALE
IS IN	INCHES	5

2 3

USERNAME => \$USER DGN FILE => \$REQUEST



Dis†	COUNTY	LOCATION CODE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS
07	1.4	SR-57	R4.3 / R4.8
01		SR-60	R23.6 / R26.5
REG PLA THE OR A THE COPIL	ISTERED C INS APPRO STATE OF CA. GENTS SHALL ACCURACY OR S OF THIS F	IVIL ENGINE VAL DATE LIFORNIA OR II NOT BE RESPO COMPLETENESS ZLAN SHEET.	ER DATE
CITY 1565 CITY	Y OF INDU 1 EAST STAF OF INDUSTR	J STRY Ford street Y, CA 91744	CIVIL WORKS ENGINEERS 3151 AIRWAY AVENUE SUITE T-1 COSTA MESA, CA 92626

(ALTERNATIVE 3) UTILITIES SCALE 1"=100'

ATTACHMENT F U-14

CU 00000 EA 279100

×			
	REVISED BY DATE REVISED		
×			AT PEM-LOW RISK TELEPHONE UG AT PEM-LOW RISK TELEPHONE UG R/W TRANSMISSION R/W TR
×	CALCULATED- DESIGNED BY CHECKED BY		RECLAIMED WATER
	FUNCTIONAL SUPERVISOR		B B D D D D D D D D D D D D D D D D D D
×	 DEPARTMENT OF TRANSPORTATION 		
×	STATE OF CALIFORNIA	AST REVISED 3/1/2007	RELATIVE BORDER SCALE 0 1 2 3 USERNAME => \$USER





(ALTERNATIVE 3) UTILITIES



CU	00000	
00	00000	



RELATIVE BORDER SCALE IS IN INCHES

USERNAME => \$USER DGN FILE => \$REQUEST

Dis†	COUNTY	LOCATION CODE	POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS
07	LA	SR-57	R4.3 / R4.8
		24-20	R23.0 / R20.3
REG PLA THE OR A THE COPIL	NS APPRO STATE OF CA GENTS SHALL ACCURACY OR ES OF THIS F	IVIL ENGINE VAL DATE LIFORNIA OR IT NOT BE RESPO COMPLETENESS LAN SHEET.	ER DATE
CITY 1565 CITY	Y OF INDU 1 EAST STAF OF INDUSTR	JSTRY Ford street Y, CA 91744	CIVIL WORKS ENGINEERS 3151 AIRWAY AVENUE SUITE T-1 COSTA MESA, CA 92626

(ALTERNATIVE 3)

UTILITIES SCALE 1"=100' ATTACHMENT F U-16

CU 00000

EA 279100

Attachment G – TASAS

Report Parameters-

Event ID: 3540204

Request Name: SHAW #603

Ref Date: 05/30/2013

Request-						Pata	Out	Over	ride Ra	tes	Override	ADT	Dog	C	Eval
& Line	Ċ I	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	R	тι	07 LA 057 R004.160 - 07 LA 057 R004.161	01-JUL-08	30-JUN-11	Ν	L						N	N	Ν
Event Laws															

Event Log:

Job id is : 504985 Accidents Table B Request SHAW #603 Submitted by T7GTRAN 07 LA 057 R 4.16 - 07 LA 057 R 4.161 07/01/2008 TO 06/30/2011

OTM22130 05/30/2013

04:11 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1 Event ID: 3540204

		Rate Group		N	lo. of /	Accide	ents / Sig Multi	gnifica	ince	Pers Kld	ADT Main	Total MV+ or	,	Actual	Accide	ent Rates Ave	rage	
Location Description	(RUS)	Tot	Fat	Inj	F+1	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot	
07 LA 057 R004.160 057/NBOFF TO WB 60/BREA CY 0001-0001 2008-07-01 2011-06-30	36 mo.	R 06 U	14	0	3	3	6	2	5	0 3	20.2 .0	22.06 +	0.000	.14	.64	0.004	.16	.49

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

4 H

4

Event ID: 3540312

Request Name: SHAW #604

Ref Date: 05/31/2013

Poquoct	L	DL				Poto	Out	Over	ride Ra	ites	Override	ADT	Pog	Com	Exel
& Line	č	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	Н	INI	07 LA 057 R004.160 - 07 LA 057 R004.520	01-JUL-08	30-JUN-11	N	L						N	Ν	Y
12	Н	ISI	07 LA 057 R004.160 - 07 LA 057 R004.520	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	Y

Event Log:

Job id is : 505023 Accidents Table B Request SHAW #604 Submitted by T7GTRAN 07 LA 057 R 4.16 - 07 LA 057 R 4.52 07/01/2008 TO 06/30/2011 07 LA 057 R 4.16 - 07 LA 057 R 4.52 07/01/2008 TO 06/30/2011

OTM22130 05/31/2013

A. (1)

01:14 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1 Event ID: 3540312

		Rate			lo of	Accide	nts / Sid	anifics	ance	Pers	ADT	Total			Accide	ent Rates		
		Group				Autorac	Multi	giinio		Kid	Main	MV+ or	· ·	Actual		Ave	rage	
Location Description		(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 057 R004.160 - 07 LA 057 R004.519 0001-0001 2008-07-01 2011	1-06-30 36 mo.	.360 MI H NORTH U	99 H99	0	21 H99	21 H99	91	3	29 H99	0 25	63.0	24.83	0.000	.85	3.99	0.003	.24	.77
07 LA 057 R004.160 - 07 LA 057 R004.519 0001-0002 2008-07-01 2011	1-06-30 36 mo.	.360 MI H SOUTH U	19	0	5	5	15	0	3	0 8	63.0	24.83	0.000	.20	.77	0.004	.25	.82

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

Event ID: 3540448

Request Name: SHAW #605

Ref Date: 05/31/2013

Request-	L O	D L I S				Rate	Out -	Overr	ide Ra	tes	Override	ADT	Pog	Com	Evol
& Line	С	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	Н	ΤI	07 LA 057 R004.450 R - 07 LA 057 R004.518 R	01-JUL-08	30-JUN-11	Ν	L						N	Ν	Y
12	Н	ТΙ	07 LA 057 R004.450 L - 07 LA 057 R004.518 L	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	Y
13	Н	ΝI	07 LA 057 R004.518 - 07 LA 057 005.273	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	Y
14	Н	S I	07 LA 057 R004.518 - 07 LA 057 005.273	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	Y

Event Log:

Job id is : 505102 Accidents Table B Request SHAW #605 Submitted by T7GTRAN 07 LA 057 R 4.45R - 07 LA 057 R 4.518R 07/01/2008 TO 06/30/2011 07 LA 057 R 4.45L - 07 LA 057 R 4.518L 07/01/2008 TO 06/30/2011 07 LA 057 R 4.518 - 07 LA 057 5.273 07/01/2008 TO 06/30/2011 07 LA 057 R 4.518 - 07 LA 057 5.273 07/01/2008 TO 06/30/2011 OTM22130 05/31/2013 05:32 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540448

	ecation Description		Rate Group		I	No. of	Accide	ents / Sig Multi	gnifica	ance	Pers	ADT Main	Total		Actual	Accide	ent Rates	rago	
Location Descriptior	1		(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 057 R004.450 R- 07 0001-0001 2008-07	7 LA 057 R004.517 R -01 2011-06-30	36 mo.	.068 MI H U	24 H99	0	5 H95	5 H95	18	2	14 H99	0 5	99.8	7.43	0.000	.67	3.23	0.004	.24	.79
07 LA 057 R004.450 L- 07 0001-0002 2008-07	LA 057 R004.51 7 L -01 2011-06-30	36 mo.	.068 MIH 64 U	3	0	0	0	3	0	0	0 0	99.8	7.43	0.000	.00	.40	0.004	.24	.79
07 LA 057 R004.518 - 07 L 0001-0003 2008-07	.A 057 005.272 -01 2011-06-30	36 mo.	. 755 MI H NORTH U	32	0	11	11	19	1	14	0 15	6 7 .2	55.58	0.000	.20	.58	0.004	.26	.82
07 LA 057 R004.518 - 07 L 0001-0004 2008-07	.A 057 005.2 7 2 -01 2011-06-30	36 mo.	.755 MI H SOUTH U	72 H99	0	20 H90	20 H90	56	10 H9 7	30 H99	0 26	67.2	55.58	0.000	.36	1.30	0.004	.26	.82

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

Event ID: 3540431

Request Name: SHAW #606

Ref Date: 05/31/2013

Roquest-	L					Pata	0 +	Over	ride Ra	ites	Override	ADT	Peg	Com-	Eval
& Line	č	RČ	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	туре	bine?	Ramp?
11	н	IWI	07 LA 060 R023.173 - 07 LA 060 R026.528	01-JUL-08	30-JUN-11	Ν	L						N	N	Y
12	H	IEI	07 LA 060 R023.173 - 07 LA 060 R026.528	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	Υ

Event Log:

Job id is : 505092 Accidents Table B Request SHAW #606 Submitted by T7GTRAN 07 LA 060 R 23.173 - 07 LA 060 R 26.528 07/01/2008 TO 06/30/2011 07 LA 060 R 23.173 - 07 LA 060 R 26.528 07/01/2008 TO 06/30/2011

25 1 1

OTM22130 05/31/2013 04:06 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540431

					No. of	Accide	ents / Sig	gnifica	ance	Pers	ADT	Total			Accide	nt Rates		
Location Description		Group (RUS)	Tot	Eat	Ini	C-1	Multi	Mot	Dork	Kld	Main	MV+ or		Actual	T (Ave	rage	-
		(105)	100	га	11)		ven	vvel	Dark		X-St	MVM .	Fat	F+I	lot	⊢at	►+I	Tot
07 LA 060 R023.173 - 07 LA 060 R0 0001-0001 2008-07-01)26.527 2011-06-30	3.355 MIH 36 mo, WEST U	921 H99	2	238 H99	240 H99	826	54	245 H95	2 355	145.9	535.84	0.004	.45	1.72	0.004	.32	1.07
07 LA 060 R023.173 - 07 LA 060 R0 0001-0002 2008-07-01	026.527 2011-06-30	3.355 MI H 36 <i>mo</i> , EAST U	496	4	135	139	419	25	180	4 197	145.9	535.84	0.007	.26	.93	0.004	.32	1.07

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

Event ID: 3540442

Request Name: SHAW #607

Ref Date: 05/31/2013

Request-	L D L O I S				Pato	Out	Over	ride Ra	tes	Override	ADT	Dee	C	 1
& Line	CRC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кеq. Туре	bine?	Ramp?
11	RTI	07 LA 060 R023.252 - 07 LA 060 R023.253	01-JUL-08	30-JUN-11	Ν	Ĺ						N	N	Ν
F														

Event Log:

Job id is : 505098 Accidents Table B Request SHAW #607 Submitted by T7GTRAN 07 LA 060 R 23.252 - 07 LA 060 R 23.253 07/01/2008 TO 06/30/2011

OTM22130 05/31/2013 04:25 PM

109

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540442

Logation Description			Rate Group		4	No. of ,	Accide	ents / Sig Multi	gnifica	nce	Pers Kld	ADT Main	Total MV+ or		Actual	Accide	nt Rates Ave	rage	
Location Description			(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+i	Tot	Fat	F+I	Tot
07 LA 060 R023.252 060/EB OFF 1 0001-0001 2008-07-01	O SB RTE 57 2011-06-30	36 mo.	R 62 U	19 H99	0	7 H97	7 H97	3	4 H97	9 H99	0 7	19.1 .0	20.92 +	0.000	.33	.91	0.005	.13	.38

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

Event ID: 3540445

Request Name: SHAW #608

Ref Date: 05/31/2013

Request-		-			Rate Type	O 114	Override Rates			Override	ADT	Dag	Com	Eval
& Line	CRO	Route/Location	Begin Date	End Date		Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	RΤ	I 07 LA 060 R023.708 - 07 LA 060 R023.709	01-JUL-08	30-JUN-11	Ν	L						N	Ν	Ν
Event Log	:													

Job id is : 505100 Accidents Table B Request SHAW #608 Submitted by T7GTRAN 07 LA 060 R 23.708 - 07 LA 060 R 23.709 07/01/2008 TO 06/30/2011

OTM22130 05/31/2013

7 . 10

04:30 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1 Event ID: 3540445

				N	lo. of /	Accide	nts / Significance Multi		Pers Kld	ADT Main	Total MV+ or	Accident Rates Actual Average						
Location Description		(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	lnj	lnj X-St M∨M	Fat	F+I	Tot	Fat	F+I	Tot	
07 LA 060 R023.708 060/EB ON FR NB RTE 57 0001-0001 2008-07-01 2011-06-3	30 36 mo.	R 64 U	16	0	5	5	14	0	4	0 5	79.0 .0	86.51 +	0.000	.06	.19	0.003	.11	.32

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

÷

Event ID: 3540880

Request Name: SHAW #609

Ref Date: 06/04/2013

Request-	L O	D L I S				Pate	Out	Override Rates			Override	ADT	Dor	C	F 1
& Line	С	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	Type bine?	bine?	Ramp?
11	F	ודא	07 LA 060 R024.277 - 07 LA 060 R024.278	01-JUL-08	30-JUN-11	Ν	L						N	N	N

Event Log:

Job id is : 505418 Accidents Table B Request SHAW #609 Submitted by T7GTRAN 07 LA 060 R 24.277 - 07 LA 060 R 24.278 07/01/2008 TO 06/30/2011

OTM22130 06/04/2013 02:45 PM

*

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540880

Location Description			Rate Group		N	lo. of /	Accide	nts / Sig Multi	gnifica	ince	Pers Kld	ADT Main	Total MV+ or	Accident Rates Actual Average					
			(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R024.277 060/EB OFF (0001-0001 2008-07-01	GRAND AVE 2011-06-30	36 mo.	R 10 U	35 H99	0	4	4	32	2	10 H97	0 4	10.1 .0	11.06 +	0.000	.36	3.17	0.003	.35	1.01

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)
Report Parameters-

s

Event ID: 3540900

Request Name: SHAW #610

Ref Date: 06/04/2013

Request-	L O	D L I S				Pata	Out	Over	ride Ra	tes	Override /	ADT	D	C	F 1
& Line	С	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кеq. Туре	bine?	Excl Ramp?
11	F	кті	07 LA 060 R024.551 - 07 LA 060 R024.552	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	Ν
- / -															

Event Log:

Job id is : 505430 Accidents Table B Request SHAW #610 Submitted by T7GTRAN 07 LA 060 R 24.551 - 07 LA 060 R 24.552 07/01/2008 TO 06/30/2011

OTM22130* 06/04/2013 03:23 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540900

		Rate Group		N	o. of <i>i</i>	Accide	nts / Sig Multi	gnifica	ince	Pers Kld	ADT Main	Total MV+ or	,	Actual	Accide	nt Rates Aver	rage	
		(RUS)	Tot	Fat	Inj	F+!	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R024.551 060/WB ON GRAND AVE 0001-0001 2008-07-01 2011-06-30	36 mo.	R 24 U	6	0	1	1	6	0	1	0 1	9.9 .0	10.84 +	0.000	.09	.55	0.003	.24	.72

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

Report Parameters-

7

Event ID: 3540904

Request Name: SHAW #611

Ref Date: 06/04/2013

Request-	L O	DL				Rate	Out	Over	ride Ra	tes	Override	ADT	Dog	Com	Eval
& Line	С	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	F	хт	07 LA 060 R024.552 - 07 LA 060 R024.553	01-JUL-08	30-JUN-11	Ν	L						N	N	Ν
E															

Event Log:

Job id is : 505433 Accidents Table B Request SHAW #611 Submitted by T7GTRAN 07 LA 060 R 24.552 - 07 LA 060 R 24.553 07/01/2008 TO 06/30/2011

OTM22130 06/04/2013 03:31 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1 Event ID: 3540904

Location Decor	rintian			Rate Group		N	o. of A	Accide	nts / Sig Multi	Inificar	nce	Pers Kld	ADT Main	Total MV+ or		Actual	Accide	ent Rates Ave	rage	
				(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R024.552 0001-0001 200	2 060/EB ON GR. 08-07-01	AND AVE 2011-06-30	36 mo.	R 12 U	22 H99	0	1	1	22	1	4	0 3	12.5 .0	13.69 +	0.000	.07	1.61	0.002	.22	.63

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

Report Parameters-

Event ID: 3540914

Request Name: SHAW #612

Ref Date: 06/04/2013

Request-	L					Pata	Out	Over	ride Ra	tes	Override	ADT	Pog	Com	Eval
& Line	č	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	R	ті	07 LA 060 R024.712 - 07 LA 060 R024.713	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	Ν
Event Log	:														

Job id is : 505439 Accidents Table B Request SHAW #612 Submitted by T7GTRAN 07 LA 060 R 24.712 - 07 LA 060 R 24.713 07/01/2008 TO 06/30/2011

OTM22130 06/04/2013 03:55 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540914

		Rate Group		N	lo. of /	Accide	ents / Sig Multi	gnifica	ance	Pers Kld	ADT Main	Total MV+ or		Actual	Accide	ent Rates Ave	rage	
_ocation Description		(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R024.712 060/WB OFF GRAND AVE 0001-0001 2008-07-01 2011-06-30	36 mo.	R 10 U	17 H90	0	3	3	14	2	8 H90	0 3	10.4 .0	11.39 +	0.000	.26	1.49	0.003	.35	1.01

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

 \sim

Event ID: 3540917

Request Name: SHAW #613

Ref Date: 06/04/2013

Request-	L O	D L I S				Rato	Out	Over	ride Ra	tes	Override	ADT	Bag	Com	Eval
& Line	С	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	F	кті	07 LA 060 R025.157 - 07 LA 060 R025.158	01-JUL-08	30-JUN-11	Ν	L						N	Ν	Ν
Eventles															

Event Log:

Job id is : 505441 Accidents Table B Request SHAW #613 Submitted by T7GTRAN 07 LA 060 R 25.157 - 07 LA 060 R 25.158 07/01/2008 TO 06/30/2011

OTM22130 06/04/2013 04:02 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540917

		Rate Group		N	lo. of /	Accide	ents / Sig Multi	gnifica	ance	Pers	ADT Main	Total		Actual	Accide	nt Rates	1200	
Location Description		(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R025.157 060/EB OFF TO NB RTE 57 0001-0001 2008-07-01 2011-06-30	36 mo.	R 06 U	9	0	1	1	7	2	2	0 2	63.0 .0	68.97 +	0.000	.01	.13	0.004	.16	.49

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

Report Parameters-

14

Event ID: 3540922

Request Name: SHAW #614

Ref Date: 06/04/2013

Request-	L O	D L I S				Rato	Out	Over	ride Ra	tes	Override /	ADT	Pog	Com	Eval
& Line	č	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	F	ктι	07 LA 060 R025.372 - 07 LA 060 R025.373	01-JUL-08	30-JUN-11	Ν	L						N	N	Ν
E /1															

Event Log:

Job id is : 505444 Accidents Table B Request SHAW #614 Submitted by T7GTRAN 07 LA 060 R 25.372 - 07 LA 060 R 25.373 07/01/2008 TO 06/30/2011

OTM22130 06/04/2013 04:08 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540922

			Rate Group		N	lo. of /	Accide	e nts / Sig Multi	gnifica	ince	Pers Kld	ADT Main	Total MV+ or		Actual	Accide	nt Rates Ave	rage	
Location Description			(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R025.372 060/WBON FR 0001-0001 2008-07-01	SB RTE 57 2011-06-30	36 mo.	R 64 U	4	0	1	1	3	0	2	0 2	67.0 .0	73.37 +	0.000	.01	.06	0.003	.11	.32

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Report Parameters-

Event ID: 3540925

Request Name: SHAW #615

Ref Date: 06/04/2013

Request-	L O					Pata	0+	Over	ride Ra	tes	Override	ADT	Dom	C	Eval
& Line	Ċ	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
11	F	кті	07 LA 060 R025.440 - 07 LA 060 R025.441	01-JUL-08	30-JUN-11	Ν	L						N	N	Ν

Event Log:

Job id is : 505446 Accidents Table B Request SHAW #615 Submitted by T7GTRAN 07 LA 060 R 25.44 - 07 LA 060 R 25.441 07/01/2008 TO 06/30/2011

÷ OTM22130 06/04/2013 04:16 PM

878

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540925

		Rate Group		N	lo. of /	Accide	nts / Sig Multi	gnifica	nce	Pers Kid	ADT Main	Total MV+ or	,	Actual	Accide	nt Rates Ave	rage	
Location Description		(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R025.440 060/EB OFF DIAMOND BAR BLVD 0001-0001 2008-07-01 2011-06-30	36 mo.	R 10 U	6	0	1	1	6	0	3	0 1	5.1 .0	5.59 +	0.000	.18	1.07	0.003	.35	1.01

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

Report Parameters-

Event ID: 3540928

Request Name: SHAW #616

Ref Date: 06/04/2013

Request-	L O	D L I S				Pata	Out	Over	ride Ra	tes	Override	ADT	Dea	C	Eval
& Line	Ċ	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кеq. Туре	bine?	Ramp?
11	R	ктι	07 LA 060 R025.659 - 07 LA 060 R025.660	01-JUL-08	30-JUN-11	Ν	L						Ν	N	Ν
F (1)															

Event Log:

Job id is : 505448 Accidents Table B Request SHAW #616 Submitted by T7GTRAN 07 LA 060 R 25.659 - 07 LA 060 R 25.66 07/01/2008 TO 06/30/2011

OTM22130 06/04/2013 04:21 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540928

Leasting Description		Rate Group		N	lo. of /	Accide	ents / Sig Multi	gnifica	ince	Pers Kld	ADT Main	Total MV+ or		Actual	Accide	nt Rates Ave	age	
		(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R025.659 060/WB ON DIAMOND BAR BLVD 0001-0001 2008-07-01 2011-06-30	36 mo.	R 24 U	11 H99	0	0	0	9	2 H90	3	0 0	5.2 .0	5.69 +	0.000	.00	1.93	0.003	.24	.72

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

Report Parameters-

÷

Event ID: 3540931

Request Name: SHAW #617

Ref Date: 06/04/2013

Request-	L O	D L I S				Rate	Out	Over	ride Ra	tes	Override	ADT	Dog	C	F wal
& Line	С	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кед. Туре	bine?	Ramp?
11	F	RTI	07 ∟A 060 R025.706 - 07 ∟A 060 R025.707	01-JUL-08	30-JUN-11	N	L						N	Ν	Ν

Event Log:

Job id is : 505450 Accidents Table B Request SHAW #617 Submitted by T7GTRAN 07 LA 060 R 25.706 - 07 LA 060 R 25.707 07/01/2008 TO 06/30/2011

OTM22130

06/04/2013 04:27 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1 Event ID: 3540931

Location Decorintion			Rate Group	_	N	lo. of J	Accide	nts / Sig Multi	gnifica	nce	Pers Kld	ADT Main	Total MV+ or		Actual	Accide	nt Rates Ave	rage	
			(RUS)	Tot	Fat	Inj	F+1	Veh	Wet	Dark	lnj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R025.706 060/EB ON DIA 0001-0001 2008-07-01	MOND BAR BLVD 2011-06-30	36 mo.	R 12 U	12 H90	0	0	0	10	0	5	0 0	11.1 .0	12.16 +	0.000	.00	.99	0.002	.22	.63

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

Report Parameters-

Event ID: 3540936

Request Name: SHAW #618

Ref Date: 06/04/2013

Request-	L O	D L I S				Rate	Out	Over	ride Ra	tes	Override	ADT	Pog	Com	Eval
& Line	č	RC	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кец. Туре	bine?	Ramp?
1 1	R	тι	07 LA 060 R025.876 - 07 LA 060 R025.877	01-JUL-08	30-JUN-11	Ν	L						N	Ν	N
F															

Event Log:

Job id is : 505453 Accidents Table B Request SHAW #618 Submitted by T7GTRAN 07 LA 060 R 25.876 - 07 LA 060 R 25.877 07/01/2008 TO 06/30/2011

OTM22130 06/04/2013 04:34 PM

California Department of Transportation Table B - Selective Accident Rate Calculation

Page# 1

Event ID: 3540936

	Rate Group		N	lo. of /	Accide	ents / Sig Multi	gnifica	ince	Pers Kld	ADT Main	Total MV+ or		Actual	Accide	ent Rates Aver	rage	
	(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R025.876 060/WB OFF DIAMOND BAR BLVD 0001-0001 2008-07-01 2011-06-30 36 m	R 10 o. U	21 H95	0	8	8	20	0	6	0 10	12.1 .0	13.25 +	0.000	.60	1.59	0.003	.35	1.01

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

Report Parameters-

Event ID: 3552831

Request Name: PATRICIA #663

Ref Date: 06/20/2013

Boruget	L	DI	L				Data	0	Over	rride Ra	ites	Override	ADT	Der	C	Eval
& Line	c	R	C	Route/Location	Begin Date	End Date	Туре	Seq	Rate	Inj%	Fat%	Main	Cross	кеq. Туре	bine?	Ramp?
1 1	F	۲۶	I	07 LA 060 R023.884 - 07 LA 060 R023.885	01-JUL-08	30-JUN-11	Ν	L						Ν	Ν	N
1 2	F	۲۶	I	07 LA 060 R023.884 - 07 LA 060 R023.885	01-JUL-08	30-JUN-09	Ν	L						Ν	Ν	Ν
13	F	₹Т	1	07 LA 060 R023.884 - 07 LA 060 R023.885	01-JUL-09	30-JUN-10	Ν	L						Ν	Ν	Ν
14	F	۲۶	I	07 LA 060 R023.884 - 07 LA 060 R023.885	01-JUL-10	30-JUN-11	Ν	L						Ν	Ν	Ν

Event Log:

Job id is : 507566 Accidents Table B Request PATRICIA #663 Submitted by T7YSFAIL 07 LA 060 R 23.884 - 07 LA 060 R 23.885 07/01/2008 TO 06/30/2011 07 LA 060 R 23.884 - 07 LA 060 R 23.885 07/01/2008 TO 06/30/2009 07 LA 060 R 23.884 - 07 LA 060 R 23.885 07/01/2009 TO 06/30/2010 07 LA 060 R 23.884 - 07 LA 060 R 23.885 07/01/2010 TO 06/30/2011 OTM22130 06/20/2013 03:51 PM

э

ູ້ສະ

California Department of Transportation Table B - Selective Accident Rate Calculation Page# 1

Event ID: 3552831

:				Rate Group		N	lo. of /	Accide	nts / Sig Multi	gnifica	nce	Pers Kid	ADT Main	Total MV+ or		Actual	Accide	nt Rates Ave	rage	
Location De	scription			(RUS)	Tot	Fat	Inj	F+I	Veh	Wet	Dark	Inj	X-St	MVM	Fat	F+I	Tot	Fat	F+I	Tot
07 LA 060 R023 0001-0001	3.884 060/SEG WB C 2008-07-01	DFF TO SB 57 2011-06-30	36 mo.	R 06 U	. 32	0	7	7	24	0	5	0 10	80.0 0.	87.60 +	0.000	.08	.37	0.004	.16	.49
07 LA 060 R023 0001-0002	3.884 060/SEG WB C 2008-07-01	OFF TO SB 57 2009-06-30	12 mo.	R 06 U	8	0	2	2	5	0	1	0 3	80.0 0.	29.20 +	0.000	.07	.27	0.004	.16	.49
07 LA 060 R023 0001-0003	3.884 060/SEG WB C 2009-07-01	DFF TO SB 57 2010-06-30	12 mo.	R 06 U	12	0	4	4	9	0	1	0 6	80.0 0.	29.20 +	0.000	.14	.41	0.004	.16	.49
07 LA 060 R023 0001-0004	3.884 060/SEG WB C 2010-07-01	DFF TO SB 57 2011-06-30	12 mo.	R 06 U	12	0	1	1	10	0	3	0 1	80.0 0.	29.20+	0.000	.03	.41	0.004	.16	.49

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Attachment H – Transportation Management Plan Data Sheet

TRANSPORTATION MANAGEMENT PLAN DATA SHEET (Preliminary TMP Elements and Costs)

Co/Rte/PM	07-LA-60 PM-R24.5/R30.4	EA <u>279100</u>	Alternat	tive No. <u>3</u>
Project Limit				
Project Descrip	tion SR-57/SR-60 Confluence @ Gr	and Avenue		
1) Pub	lic Information			
	\ge a. Brochures and Mailers			\$
	🔀 b. Press Release			
	\ge c. Paid Advertising			\$
	d. Public Information Center/Kiosk			\$
	🔀 e. Public Meeting/Speakers Bureau			
	f. Telephone Hotline			
	g. Internet			
	\times h. Others <u>Total cost for Public Ir</u>	1formation		\$185,000
2) Mot	orists Information Strategies			
	🖄 a. Changeable Message Signs (Fixe	d)		\$Use existing
ļ	🖄 b. Changeable Message Signs (Port	able)		\$361,200
	\times c. Ground Mounted Signs			\$39,500
ļ	d. Highway Advisory Radio			\$
	$\underline{\times}$ e. Caltrans Highway Information N	etwork (CHIN)		
l	f. Others			\$
3) Incie	lent Management			
	\times a. Construction Zone Enhance	ed Enforcement	Program	
r	(COZEEP)			\$251,400
ļ	b. Freeway Service Patrol			\$210,000
	c. Traffic Management Team			
Ĺ	d. Helicopter Surveillance			
l	e. Traffic Surveillance Stations			¢
Г	(Loop Detector and CCTV)			<u>ф</u>
L				2

|--|

2

🖂 a. Lane Closure Chart	
b. Reversible Lanes	
c. Total Facility Closure	
d. Contra Flow	
e. Truck Traffic Restrictions	\$
f. Reduced Speed Zone	\$
g. Connector and Ramp Closures	
h. Incentive and Disincentive	\$
i. Moveable Barrier	\$
j. Others	\$
5) Demand Management	
a. HOV Lanes/Ramps (New or Convert)	\$
b. Park and Ride Lots	\$
c. Rideshare Incentives	\$
d. Variable Work Hours	
e. Telecommute	
f. Ramp Metering (Temporary Installation)	\$
g. Ramp Metering (Modify Existing)	\$
h. Others <u>Rideshare information</u>	\$Included in (
6) Alternative Route Strategies	
a. Add Capacity to Freeway Connector	\$
b. Street Improvement (widening, traffic signal etc)	\$175,000
🔀 c. Traffic Control Officers	\$210,000
d. Parking Restrictions	
e. Others	\$
7) Other Strategies	
a. Application of New Technology	\$
b. Others	\$

Project Notes:

1. Caltrans will be responsible for developing and implementing the public awareness campaign, with input from Caltrans Office of Media Relations and Public Affairs.

2(b): Cost of portable CMS: 4 PCMS for 31 months @ 1200/month + 8 PCMS for 21 months @ 1200/month + 3 PCMS for 3 months @ 1200/month = 361,200

2(c): Detour ground mounted signs: 79 signs @ \$500/sign = \$39,500

3(a): COZEEP: 1 unit @ 12 nights and 17 weekend closures @ 8 hour night and 36 hour weekend shift + 2units @ 11 nights and 11 weekend closures @ 8 hour night and 36 hour weekend shift @ \$150/hour = \$251,400

3(b): Extra hour of FSP: 700 weekdays @ 4 hours/day @ \$75/hour = \$210,000

6(b): Street Improvement: 7 intersection to be improved @ \$25,000/intersection = \$175,000

6(c): Traffic control officers: 35 months @ 40 hours/month @ 150/hour = 210,000

PREPARED BY	Hank Nguyen, P.E.	DATE 1/5/12
APPROVAL RECOMMENDED BY	WKE, Inc. Mart Oregel Martin Oregel, TMP Coordinator.	DATE 1/5/12
APPROVED BY	North Area John Yang, District Traffic Manager	DATE 1/18/12

Attachment I – Storm Water Data Report (Cover Page)

Long Form – Storm Water Data Report

	12					
	Dist-County-	Route: 07-L	<u>A-60 ; 07-LA</u>	-57		
	Post Mile Lir	nits: <u>R23.3/R</u> 2	26.5: R4.3/I	R4.8		
Project Type: Interchange Improvement						
	Project ID (o	r EA): <u>2791(</u>	00	·		
	Program Ide	ntification: <u>I</u>	HE12			
	Phase:		PID			
C-ll-c-	•		PA/ED			
undare.			PS&F			
		. L_4	TOUL		×	
Regional Water Quality Control Board(s):_	Los Angeles	- Region 4				
Is the Project required to consider Treatm	ent BMPs?			Yes 🕅	No 🗖	
If yes, can Treatment BMPs	s be incorporat	ed into the pro	piect?	Yes 🖂		
If No. a Technical	Data Report m	ust he submitt	ad to the Pl			
at least 30 days p	rior to the proje	ects RTL date		List RTL Date		
				LISCITTE Dute		
Total Disturbed Soil Area: 42.1 Ac	res (38.9 Acres	s Within Caltra	ns ROW)	Risk Le	vel: 2	
Estimated: Construction Start Date: 4/2	22/14	Constructi	on Completi	on Date: 10/	24/16	
Notice of Intent (NOI) Date to be submitte	d: 3/22/14		on complet	on Date0/2		<u> </u>
	<u></u>			· · · · · · · ·		
Erosivity Waiver		Yes 🗖	Date:		No 🖂	
Notification of ADL reuse (if Yes, provide d	late)	Yes 🔲	Date:	T.B.D.	No □	
Separate Dewatering Permit (if yes, permi	t number)	Yes 🗖	Permit #	T.B.D.	No 🗆	
Marie Marston, P.E. Da	<u>-12</u> ate (Godfrey Nzeog	ju, P.E.	~~~	11/29/	/ 2012 Date
Registered Project Engineer	(Caltrans Desig	nated Overs	ght Representa	tive	
I have reviewed the stormwater quality desig	en issues and fi	ind this report t	o be comple	te. current and a	ccurate:	
	· A-CP		`		u la	
	m/ y	<u>aler</u>	2		11/24	<u>1 201</u> 2
Jiwanji	1 S. Palana, Pro	iject ivlanager			Date	
		>			12 01	117
Boger	Castillo, Design	ated Maintena	nce Represe	ntative	Date	1-12
7	10 -	1			17 5	d) 3 a -
					12.04	+-12
Ron Ru	ussak, Designat	ed Landscape	Architect Re	presentative	Date	
	IVNI				1.1	
(Stamp Boguirad for DS8 E ank)	A Vok	a dia mat Danistra	011/0		12/4/20	12
Shirley	rak, District/R	egional Design	SW Coordina	ator or Designee	Date	
Caltrans Storm Water Quality	Handbooks					
Project Planning and Design	Guide					
July 2010					·	
				Α	ГТАСНИ	IENT

. .

Alternative 1 (Preferred Alternative)

Mainline EB SR-60 40-Year Rigid Pavement (1.10' JPCP/0.50' LCB/0.70' AB)

Pavement Design Life: 40 Years			
Initial Construction Costs:	\$ 1,917,779		
Initial Project Support Costs:	\$ 0		
Future Maintenance & Rehabilitation			
Costs: *	\$ 42,661	_	
TOTAL AGENCY COSTS:		\$	1,960,440
USER COSTS:		\$	170
TOTAL LIFE-CYCLE COSTS:		\$	1,960,610

Alternative 2:

Mainline EB SR-60 20-Year Rigid Pavement (1.00' JPCP/0.50' LCB/0.70' AB)

Pavement Design Life: 20 Years			
Initial Construction Costs:	\$ 1,798,155		
Initial Project Support Costs:	\$ 0		
Future Maintenance & Rehabilitation		_	
Costs: *	\$ 304,005		
TOTAL AGENCY COSTS:		\$	2,102,160
USER COSTS:		\$	1,800
TOTAL LIFE-CYCLE COSTS:		\$	2,103,960

Reason that this is not Alternative 1:

Initial Construction Cost, Future Maint Costs, and User Costs greater than Alt 1.



^{*} Includes both future maintenance, construction, and project support costs.

Alternative 1 (Preferred Alternative)

Mainline WB SR-60 40-Year Rigid Pavement (1.10' JPCP/0.50' LCB/0.70' AB)

Pavement Design Life: 40 Years			
Initial Construction Costs:	\$ 2,567,852		
Initial Project Support Costs:	\$ 0		
Future Maintenance & Rehabilitation			
Costs: *	\$ 57,318	_	
TOTAL AGENCY COSTS:		\$	2,625,170
USER COSTS:		\$	240
TOTAL LIFE-CYCLE COSTS:		\$	2,625,410

Alternative 2:

Mainline WB SR-60 20-Year Rigid Pavement (1.00' JPCP/0.50' LCB/0.70' AB)

Pavement Design Life: 20	Years		
Initial Construction Costs:	9	\$ 2,407,606	
Initial Project Support Costs:	9	\$ 0	
Future Maintenance & Rehabilitati	on		
Costs: *		\$ 408,434	
TOTAL AGENCY COSTS:			\$ 2,816,040
USER COSTS:			\$ 2,660
TOTAL LIFE-CYCLE COSTS:			\$ 2,818,700

Reason that this is not Alternative 1:

Initial Construction Cost, Future Maint Costs, and User Costs greater than Alt 1.

^{*} Includes both future maintenance, construction, and project support costs. Note: All costs are adjusted to 2017 costs using 3% inflation rate.



Alternative 1 (Preferred Alternative)

EG-1 On-Ramp 40-Year Flexible Pavement without Trucks (0.20' RHMA/0.35' HMA/0.55' LCB/1.05' AB)

Pavement Design Life: 40 Y	Years		
Initial Construction Costs:		\$ 839,038	
Initial Project Support Costs:		\$ 0	
Future Maintenance & Rehabilitation	on		
Costs: *		\$ 162,002	
TOTAL AGENCY COSTS:			\$ 1,001,040
USER COSTS:			\$ 80
TOTAL LIFE-CYCLE COSTS:			\$ 1,001,120

Alternative 2:

EG-1 On-Ramp 20-Year Flexible Pavement without Trucks (0.20' RHMA/0.30' HMA/0.50' LCB/0.90' AB)

Pavement Design Life: 20 Yea	ars		
Initial Construction Costs:	\$	781,659	
Initial Project Support Costs:	\$	0	
Future Maintenance & Rehabilitation			
Costs: *	\$	212,221	
TOTAL AGENCY COSTS:			\$ 993,880
USER COSTS:			\$ 260
TOTAL LIFE-CYCLE COSTS:			\$ 994,140

Reason that this is not Alternative 1:

Difference in LCC is less than 1% of the whole project, and the 40 year option would require 70% less user delay.

^{*} Includes both future maintenance, construction, and project support costs. Note: All costs are adjusted to 2017 costs using 3% inflation rate.

Alternative 1 (Preferred Alternative)

WG-2 Off-Ramp 40-Year Flexible Pavement with Trucks(0.20' RHMA/0.50HMA/0.70' LCB/1.40' AB)

Pavement Design Life: 40 Y	lears		
Initial Construction Costs:		\$ 1,051,984	
Initial Project Support Costs:		\$ 0	
Future Maintenance & Rehabilitation	on		
Costs: *		\$ 224,306	
TOTAL AGENCY COSTS:			\$ 1,276,290
USER COSTS:			\$ 540
TOTAL LIFE-CYCLE COSTS:			\$ 1,276,830

Alternative 2:

WG-2 Off-Ramp 20-Year Flexible Pavement with Trucks(0.20' RHMA/0.40HMA/0.65' LCB/1.25' AB)

20	Years				
	_	\$	954,494		
ts:		\$	0		
nabilita	ation				
		\$	293,846		
S:				\$	1,248,340
				\$	1,810
OSTS	S:			\$	1,250,150
	20 ts: nabilita S: COSTS	20 Years ts: nabilitation S: COSTS:	20 Years ts: \$ abilitation \$ S: \$	20 Years \$ 954,494 \$ 0 abilitation \$ \$ 293,846 S: COSTS:	20 Years \$ 954,494 ts: \$ abilitation \$ \$ 293,846 S: \$ \$ 293,846 S: \$ \$ 293,846 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Reason that this is not Alternative 1:

Difference in total LCC is less around 2% of the paving, the 40 year RHMA would increase the total project by less than 0.1%, and would reduce future user delay by 70%.

^{*} Includes both future maintenance, construction, and project support costs. Note: All costs are adjusted to 2017 costs using 3% inflation rate.


Attachment K – Initial Site Assessment (ISA) Checklist



Initial Site Assessment (ISA) Checklist

Project Information

District 07 County Los Angeles Route SR-57/SR-60 Confluence at Grand Avenue

Description: The project will replace the existing 4-lane overcrossing with a wider overcrossing on Grand Avenue that will meet the travel and turn lane needs of the interchange. The bridge will also be lengthened to accommodate a potential six (6) mixed-flow lanes and two (2) HOV lanes in each direction on the freeway confluence. The project will include features that will enhance operations and safety as well as reduce mainline weaving and congestion along the State Route 57 (SR-57)/State Route 60 (SR-60) mainline.

One (1) No Build and three (3) Build Alternatives are under consideration for the modification of the SR-57/SR-60 Confluence at the Grand Avenue Overcrossing within the Cities of Industry and Diamond Bar (refer to *Phase I Initial Site Assessment*). The Build Alternatives include additional features to the east and west of the Grand Avenue Interchange that will alleviate main line weaving across the lanes that serve SR-57 in order to use lanes that serve SR-60. Currently the Grand Avenue Interchange is a Type L-7 configuration to the north of the confluence and a type L-1 configuration to the south of the confluence. The three (3) build alternatives are considered to be reasonable feasible alternatives for the project.

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

Project Manager Mr. Richard Beck, REA phone # 949/855-3687

Project Engineer _____ phone # _____

Project Screening

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

1. Project Features: New R/W? YES Excavation? YES Railroad Involvement? NO

Structure demolition/modification? <u>YES (bridges)</u> Subsurface utility relocation? <u>POTENTIALLY</u>

2. Project Setting _____ SR-57/SR-60 Confluence at Grand Avenue, Cities of Diamond Bar and Industry

Rural or Urban Urban

Current land uses <u>Transportation and Vacant Land</u>

Adjacent land uses Transportation, Residential, Commercial, and Recreation

3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project. 4. Conduct Field Inspection. Date <u>2-13-2007, 8-15-2007, 4-8-2008</u> Use the attached map to locate potential or known HW sites.

STORAGE STRUCTURES / PIPELINES:

Underground tanks YES		Surface tanks	YES
Sumps	NO	Ponds	NO
Drums	NO	Basins	NO
Transformers	YES	Landfill	NO
Other	NO		

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

Surface	e staining	NONE	Oil sheen	NONE
Odors		NONE	Vegetation damage	NONE
Other_	Three (3) sp	oills reported on-si	te; all reported spills consi	idered to be de minimus.
Report	ed contamina	ation to groundwat	er from off-site properties.	

HAZARDOUS MATERIALS: (asbestos, lead, etc.)

Buildings	NONE	Spray-on fireproofing Friable tile		fing <u>N</u>	NON	E		
Pipe wrap	NONE				NONE			
Acoustical plaster	NONE	Serpentine			NONE			
Paint Potential LBPs	in traffic striping							
materials and thermo	oplastic traffic stripes	Other	Potential	LBPs	and	ACM	s in	bridge
			structures;	and	po	tential	for	aerially
			deposited	lead	in	State	righ	t-of-way
			<u>(R/W).</u>					

- 5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites.
- 6. Other comments and/or observations: None.

ISA Determination

Does the project have potential hazardous waste involvement? <u>YES</u> If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? <u>NO</u> If "YES," explain; then give an estimate of additional time required:

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

ISA Conducted by

Mr. Richard Beck, REA No. 08065

Date 01-12-2009

Attachment L – FHWA Air Quality Project Level Conformity Letter



California Division

June 26, 2013

650 Capitol Mall, Suite 4-100 Sacramento, CA 95814 (916) 498-5001 (916) 498-5008 (fax)

> In Reply Refer To: HDA-CA

Mr. Michael Miles District Director California Department of Transportation District 7 100 South Main Street, Suite 100 Los Angeles, CA 90012-3606

Attention: Andrew Yoon, Senior Transportation Engineer

SUBJECT: Project-Level Conformity Determination for the State Route 57/ State Route 60 Confluence at Grand Avenue Project

Dear Mr. Miles:

On June 4, 2013 the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for the project-level conformity determination for the State Route 57/ State Route 60 Confluence at Grand Avenue Project in Los Angeles County pursuant to 23 U.S.C. 327(a)(2)(B)(ii)(1). The project is in an area that is designated nonattainment for ozone (O₃), course particulate matter (PM₁₀), fine particulate matter (PM_{2.5}) and maintenance for carbon monoxide (CO) and nitrogen dioxide (NO₂).

The project-level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Southern California Association of Government's (SCAG) currently conforming 2012-2035 Regional Transportation Plan (RTP)/ Sustainable Communities Strategy (SCS), and the 2013 Federal Transportation Improvement Program (FTIP). The latest conformity determination for the 2012-2035 RTP/SCS and for the 2013 FTIP was approved by FHWA and the Federal Transit Administration (FTA) on December 14, 2012. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 C.F.R. 93.116 and 93.123, the localized CO and PM analyses are included in the documentation. The CO hotspot analysis was performed with the Caltrans' *Transportation Project-Level Carbon Monoxide Protocol*. The analyses demonstrate that the project will not create any new violation of the standards or increase the severity or number of existing violations. Based on the information provided, FHWA finds that the project-level conformity determination for the State Route 57/ State Route 60 Confluence at Grand Avenue Project in Los

ATTACHMENT L

Angeles County conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.

If you have any questions pertaining to this conformity finding, please contact Stew Sonnenberg, FHWA Air Quality Specialist, at (916) 498-5889 or by email at <u>Stew.Sonnenberg@dot.gov</u>.

Sincerely,

For: Vincent P. Mammano Division Administrator

Attachment M – Final Environmental Impact Report/Finding of No Significant Impact (EIR/FONSI) and Section 4(f) Evaluation Cover Sheet

SCH#2009081062 7-LA-60-PM R23.3/R26.5 7-LA-57-PM R4.3/R4.5 & R4.5/R4.8 EA279100

Improve the State Route 57 and State Route 60 Confluence at Grand Avenue, (State Route 60 postmile R23.3 to postmile R26.5 and State Route 57 postmile R4.3 to postmile R4.5, postmile R4.5 to postmile R4.8)

FINAL ENVIRONMENTAL IMPACT REPORT/FINDING OF NO SIGNIFICANT IMPACT and SECTION 4(f) EVALUATION

Submitted Pursuant to: (State) Division 13, California Public Resources Code (Federal) 42 USC 4332(2)(C) and 49 USC 303

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

The City of Industry and THE STATE OF CALIFORNIA Department of Transportation

Date of Approval

John D. Ballas City Engineer City of Industry Responsible/Local Agency

Date of Approval

Agustin Barajas Associate Environmental Planner Division of Environmental Planning District 7 California Department of Transportation NEPA and CEQA Lead Agency

The following persons may be contacted for additional information concerning this document:

Dawn Kukla Senior Environmental Planner California Department of Transportation – District 7 100 S. Main Street Los Angeles, CA 90012 (213) 897-7665 John D. Ballas City Engineer City of Industry 15651 E. Stafford St., #100 Industry, CA 91744 (626) 333-2211

Individuals who require special accommodation (American Sign Language interpreter, accessible seating, documentation in alternative formats, etc.) are requested to contact Caltrans' District 7 Public Affairs Office at (213) 897-3656 at least 21 days prior to the scheduled public meeting. TDD users may use the California Relay Service TDD line at 1 (800) 735-2929 or voice line at 1 (800) 735-2922.