PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

1. Project Information

District 8	**County** Riverside	**Route** SR-60	**PM** 21.37	**EA**
Project Title: Existing Interchange at SR-60 and Theodore Street in Moreno Valley				
Project Manager Sam Ekstrand & Rachel Yazawa			**Phone #**	
Project Engineer William Chenoweth			**Phone #**	
Environmental Office Chief/Manager Kristina Billedo			**Phone #**	
PEAR Preparer Kristina Billedo & Anthony Kreeger			**Phone #**	

2. Project Description

Purpose and Need

Write a concise statement of the project purpose and need. It should be consistent with the purpose and need statement in the PSR.

The purpose of the project is to:

- Relieve future congestion at the interchange and on local roads.
- Increase capacity.
- Improve roadway geometrics to accommodate truck traffic.
- Satisfy the needs of non-motorized traffic across the interchange.

The need of the project is to:

- Accommodate existing and future growth and development within and around the city of Moreno Valley in concert with the city's general plan.

Description of work

Write a brief summary of the proposed work that will be done. Include work required that is incidental to the project, such as: access roads, utility relocation, de-watering, etc

Together, the City and Caltrans, propose to improve the existing interchange at Theodore Street. A senior project has been assembled for the purpose of this project and has delivered a Project Study Report (PSR) for their respective interchanges. A PSR is the initial feasibility report that thoroughly investigates potential design alternatives that meet all project needs. The team worked on developing several design alternatives that meet or exceed the state, city, community, and future needs.

Alternatives

Identify all project alternatives (including no-build). If alternatives are no longer being considered, state why. Do not select or identify a preferred alternative. Describe each alternative still under consideration.

"No Build"

The no build alternative consists of keeping the current interchange configuration with no improvements. This alternative is used to compare the other four alternatives with the projected 2040 traffic volumes.

The No Build alternative means that there will be no construction for improvement, which is a large advantage because there will be no construction cost. However, with no improvement, the current interchange will not be able to accommodate for future traffic needs.

The current interchange consists of hook ramps that terminate onto Theodore Street. The tight turning radii are not suitable for trucks. The sidewalk on Theodore Street is only accessible on the left side of the street facing north and that does not have easy accessibility to pedestrians, bikes, and equestrians. Below is a figure of the current interchange along with the LOS table with future traffic volumes.

Partial Cloverleaf Interchange (ParClo)

The partial cloverleaf alternative as shown in **Figure 1** combines loop and diagonal ramps with which many local users are familiar. The final ramp configuration will reduce the impact of heavy turning demands, minimize weaving conflict, and simplify ease of use. This alternative is versatile for future expansion in that much of the space will be initially acquired.

Drawbacks include relatively large right-of-way impact due to the ramps, wasteful left turn signal phases for Theodore. However, certain ramp configurations allow for the use of center features, shifting these to right-turns and improving the through-traffic capacity of the local road.

Spread Diamond Interchange (SDI)

These traditional diamond interchanges are among the most common, eliminating user learning curves. The ramps are widely spaced to allow more storage length on Theodore Street. Furthermore, spread-diamond sections accommodate future expansion that may include addition of a loop ramp inside the diagonal ramps. The SDI alternative is depicted in **Figure 2**.

Although this ramp is very simple and requires only moderate right-of-way acquisition, it is still subject to the easterly weaving conflict between Theodore St. and the nearby Gilman Springs Rd. Another drawback is that the close spacing of ramp intersections on Theodore may not accommodate storage requirements for left-turning traffic from northbound Theodore to the westbound SR-60.

Diverging Diamond Interchange (DDI)

The diverging diamond interchange (DDI), also known as a double crossover diamond (DCD) differs from other diamond interchanges by allowing traffic from both directions to temporarily crossover to the left side between the crossover intersections controlled by two-phase signals. **Figure 3** shows the configuration for a DDI at Theodore Street. The directional freeway ramps to the local road improve traffic flow by eliminating the need for turning traffic to cross over oncoming traffic. For an overpass, pedestrians use a system of islands and median walkways, reducing intersection signal impact. The inclusion of directional ramps and 2-phase intersections allow traffic to flow freely, reducing conflict points common in typical diamond interchanges.

An unsignalized auxiliary lane on the bridge simplifies immediate U-turn maneuvers to reverse direction of freeway travel. However, exiting vehicles are not provided with immediate points of

re-entry in the same direction of freeway travel. The DDI's lower design speed and crossover sections serve as traffic-calming measures, reducing environmental impact but impeding through-traffic capacity of Theodore. Although its tight geometry complicates future lane additions, DDIs contain universal ramp access reducing needs for future expansion. Finally, this interchange is uncommon in the area presenting a learning curve to drivers and pedestrians.

Single Point Urban Interchange (SPUI)

The single point urban interchange (SPUI), also known as a single point diamond interchange (SPDI), is similar to a traditional tight diamond in ramp configuration, but differs by merging the two intersections with the local road into one. In turn, this allows opposing left turns exiting the freeway to proceed simultaneously, reducing travel time on the bridge. Because these turns are wide, they also better accommodate heavy good vehicle (truck) movement. In addition, all right turn movements flow freely with directional ramp sections. The SPUI thereby capacitates high traffic volume efficiently through a compact right-of-way on Theodore as depicted in **Figure 4**.

The major disadvantage of the SPUI is the increased cost due to the need for a wider and longer bridge. Because local users are not familiar with this design, the uncommonly large intersection may lead to confusion. Also, the additional time needed for cyclists to cross the large intersection may reduce its capacity. Similarly, pedestrian traffic may take up to four cycles to completely traverse the bridge.

Continuous Flow Interchange (CFI)

The main feature of the continuous flow intersection is the relocation of the left-turn movement on an approach to the other side of the opposing roadway, which consequently eliminates the left-turn phase for this approach at the main intersection.

Continuous flow intersections can help maximize capacity and decrease delay by allowing smoother traffic flow through the intersection. This design alters the intersection to separate left-turns and through traffic. Multiple traffic streams (turning and through) can proceed at the same time, reducing congestion when compared to traditional intersections.**Figure 5** shows the configuration for the CFI build alternative.

3. Anticipated Environmental Approval

Check the anticipated environmental determination or document for the proposed project in the table below.

CEQA		NEPA	
Environmental Determination			
Statutory Exemption	☐		
Categorical Exemption	☐	Categorical Exclusion	☐
Environmental Document			
Initial Study or Focused Initial Study with proposed Negative Declaration (ND) or Mitigated ND	☒	Routine Environmental Assessment with proposed Finding of No Significant Impact Complex Environmental Assessment with proposed Finding of No Significant Impact	☒ ☐
Environmental Impact Report	☐	Environmental Impact Statement	☐
CEQA Lead Agency (if determined):			

Estimated length of time (months) to obtain environmental approval:	
Estimated person hours to complete identified tasks:	

4. Special Environmental Considerations

For each viable alternative, summarize below any special processes such as NEPA/404, seasonal constraints, Section 7, Section 4(f) that may affect project delivery and require unusual, exceptional, or extended environmental processes.

All alternatives may require NEPA/404 permits as the project will involve the cutting and filling of soil within a wetland area. Section 7 consultation may be required due to endangered species possibly having habitats around the build site. In addition, there should be no seasonal constraints. No other circumstances requiring unusual or extended processes are expected.

5. Anticipated Environmental Commitments

For each viable alternative, briefly summarize the anticipated environmental commitments by impacted resource. If commitments have been made, include a copy of the ECR. For standard PSRs, include a cost estimate for each environmental commitment. Include the total cost of all environmental commitment costs in Item 8. PSR Summary Statement below. Reference PEAR Environmental Commitments Cost Estimate.

Anticipated environmental commitments will be thoroughly documented within the Environmental Document (ED) and an Initial Study/Environmental Assessment (IS/EA) will be performed in order to provide proper mitigation. The result of the IS/EA will be a Negative Declaration/Finding of No Significant Impact or FONSI. Compliance with the California Environmental Quality Act (CEWA) and National Environmental Policy Act (NEPA) will be ensured through the completion of this project. Environmental commitments will be necessary for the following:

- Land Use: Preliminary land use studies indicate there may be right-of-way impacts. Study involving land use compatibility required.
- Community Impacts: Displacement of community values may occur. Community Impact Assessment (CIA) needed.
- Visual/Aesthetics: Introduction of more lanes may affect designated scenic routes and City of Moreno Valley existing scenic resources. Visual Impact Assessment required.
- Cultural Resources: Properties considered historic located on Anco Ranch. Historic Properties Survey Report (HPSR) and Historic Resource Evaluation Report (HRER) will be required to confirm status of these properties.
- Hydrology and Floodplain: On-site hydrologic study of existing and proposed conditions must be prepared to assess increase in stormwater runoff as a result of increased impervious surfaces. Off-site hydrology analysis will need to be completed as well.
- Water Quality and Storm Water Runoff: Commitments necessary during construction in accordance with the Clean Water Act (CWA) through the use of Best Management Practices (BMPs) and the preparation of a Stormwater Pollution Prevention Plan (SWPPP).
- Geology, Soils, Seismic and Topography: Nearby San Jacinto Fault required geology study to determine precise location. Preliminary Geotechnical Study needed as well to analyze soil conditions and existing topography.
- Paleontology: Paleontological Identification Report (PIR) necessary.
- Hazardous Waste/Materials: Potential hazardous waste/materials will be analyzed and discussed.

- Air Quality: Traffic simulations and Air Quality Analysis will be performed.
- Noise and Vibration: Abatement is expected. Vibration Study will be required.
- Biological Environment: National Environmental Study must be prepared to ensure endangered animals such as the Burrowing Owl is not harmed in the construction of the proposed project.

6. Permits and Approvals

Include timelines for acquiring permits or agreements. Reference PEAR Environmental Commitments Cost Estimate.

Depending on the results of future field surveys, the proposed interchange improvement project may utilize the following permits and approvals:

- Caltrans NPDES Construction Permits: Stormwater runoff mitigation during and post-construction.
- State NPDES Construction General Permit: Preparation of Stormwater Pollution Prevention Plan Program (SWPPP) will be needed.
- Clean Water Act (CWA) Section 404 Permit Coordination: As required by the Regional Water Quality Control Board.
- Clean Water Act (CWA) Section 401 Certification Coordination: As required by the US Army Corp of Engineers.
- California Department Fish and Game 1602 Agreement: Potential impacts to Waters of the United States via passage through the San Jacinto River.

7. Level of Effort: Risks and Assumptions

See Section 5.2 PEAR Handbook regarding important considerations that can affect the level of effort and resources needed not only for the environmental document but also for the PEAR scoping document.

Risks include violating FESA section 7 regarding endangered species. The site must be thoroughly inspected for signs of the Stephens' kangaroo rat. Other risks involve the flood water surface flow. Two flow channels are located approximately one-half mile east and west of the build site. Care will be taken during construction not to have any harmful material travel to these flow lines.

Level of effort may be medium to high in the north-east section of the project. If any alternatives were to involve cutting into the hillside adjacent to the project site, the project could be costly and time consuming. The remaining area of the project site is flat and will require little effort.

8. PEAR Technical Summaries

Use brief paragraphs focused on topics that will need environmental review. Indicate the absence of issues to document that they were considered. Refer to the Environmental Studies Checklist when preparing the following summaries. Make a separate statement for each viable alternative. See the PEAR Handbook Exhibit 3 for examples. These paragraphs should be based upon the technical summary provided by each specialist to the generalist who is writing the PEAR.

8.1 Land Use: The purpose of the Theodore Street interchange project is to improve traffic flow and non-motorized mobility to accommodate existing and future build outs. The proposed build alternatives will modify the interchange without relocating existing developments and include the addition of an equestrian trail. These developments include Sketchers Factory and Anco Ranch located in the southwestern and northeastern quadrants, respectively. Land use goals outlined in the City of Moreno Valley General Plan were taken into design consideration. **Figure 6** in Appendix A depicts the specified land uses within the project study boundary.

Land use conflicts may arise for the Partial Cloverleaf Interchange (ParClo) and the Spread Diamond Hybrid Interchange build alternatives. For both, right-of-way will be largely impacted due to the ramp design requiring purchase of private lands. However, the Single Point Urban Interchange (SPUI) and Diverging Diamond Interchange (DDI) build alternatives are not expected to impact land use. The Environmental Document (ED) will cover more information regarding land use compatibility. No separate technical report is required.

8.2 Growth: Within the City, substantial growth is expected to occur with the introduction of the World Logistics Center (WLC). The center is expected to drastically increase truck traffic within the project limits. According to the Moreno Valley General Plan, truck traffic will be concentrated onto Theodore Street for the future area build out. **Figure 7** shows the projected employment forecasts for the City of Moreno Valley through 2035 where employment is expected to double. The proposed project is designed to accommodate these future needs in order to relieve nearby congestion and to improve traffic flow in accordance with the Riverside County Integrated Project (RCIP). Traffic operations will be improved to meet the expected region growth and to enhance the non-motorized transportation safety, which includes pedestrians, bicyclists, and equestrians. The project itself is not expected to lead to growth beyond what has been planned.

8.3 Farmlands/Timberlands: Farmlands of Local Importance exist within all four quadrants of the design boundary as shown in **Figure 8**. The ParClo and Tight/Spread Diamond Hybrid build alternatives may affect the existing farmland due to ROW conflicts. However, referencing the City of Moreno Valley Land use Map shown in **Figure 6**, plans for future development exist.

8.4 Community Impacts: The City is dominated by residential land use. The western portion has a relatively urban atmosphere whereas the east is primarily rural. Major impacts to the community is not expected to occur as a direct result from any of the design alternatives. A Community Impact Assessment (CIA) will be performed to confirm this assumption and its findings will be incorporated in the ED. The analysis will address impacts related to the

socioeconomic characteristics within the established project area and its surroundings. Relocation of existing developments or changes in future land uses as stated in the City General Plan is not anticipated and environmental justice communities will not be affected.

Special consideration will be made in ensuring the project does not result in a change of the community culture. The different interchange proposals include the addition of an equestrian trail to accommodate Moreno Valley's plan for a system of horse trails within the City. The inclusion of the trail is meant to incorporate the rural character of the eastern portion of the City and serve the needs of its residents. In addition, sidewalks and bikeways will be improved to facilitate an improved transportation network. Each build alternative will be designed to ensure the improvement is consistent with the City General Plan in retaining the agricultural aspect of the area as well as providing a buffer between the future land uses.

Temporary impacts such as lane closures and detours may arise during construction and as a result impact local residents with increased commute times. Traffic studies will be performed in order properly to mitigate these issues. Relocation of existing utilities running along the overpass will also be required. This includes an Edison line on the west side of Theodore and a MWD distribution water line on the southwest section of Theodore.

8.5 Visual/Aesthetics: A Visual Impact Assessment (VIA) will be performed to study the potential effects of each of the build alternatives. The SR-60 crossing Theodore Street and the interchange itself are designated as scenic routes as shown in **Figure 4**. The highway provides views of the major scenic resources within Moreno Valley, which includes the relatively flat valley to the west, "Badlands" hills to the east, and Russell Mountains to the south. Together, these areas provide the City with outstanding views. The "Badlands" forms the eastern boundary of the project area and provides a wide range of hills that act as a visual backdrop to the valley.

Although the project is an improvement of the existing interchange, each of the build alternatives would introduce a new ramp configuration, bridge widening, and higher profile. Special attention to the design and landscaping of the interchange will be made to protect and preserve the views of the "Badlands" and surrounding areas. Each of the alternatives is designed to minimize its visual impact on the community and instead enhance views from its roadways. Necessary aesthetic treatment and sustainable landscape design will be implemented. Temporary visual impacts will also arise during construction, but are not expected to cause permanent impacts to the City's scenic resources.

8.6 Cultural Resources: Within the project study boundary are three structures built in 1915 located inside the Anco Ranch property. **Figure 11** depicts the general location of these structures. According to **Figure 10**, the structures (12400 Theodore Street) are listed as part of the Moreno Valley Historic Resource Structural Inventory. Presently, the structures are no longer considered historic due to changes in their architectural integrity. Retrofitting the structures within Anco Ranch is recommended to reduce the potential impacts of the proposed project. The City General Plan states there are no sites within the City listed as state landmarks, however a Historic Properties Survey Report (HPSR) and Historic Resource Evaluation Report (HRER) will be prepared to confirm this statement. The project is expected to improve traffic flow to the nearby Badlands Landfill.

The Theodore overpass, which was built in 1962, is also not considered historic. Though the bridge is over fifty years of age, the bridge was recently struck on January 30, 2015 and is scheduled for demolition and rebuild. Since architectural and structural changes will be made to the overpass, the bridge will no longer be considered as potentially historic. Therefore, a No Historic Properties Affected or No Adverse Effect with Standard Conditions will be documented. In addition, no archeological sensitive areas exist with the project area as confirmed in **Figure 12**. No known human remains were also identified in the Study of Historical and Archeological Resources as stated in City of Moreno Valley Environmental Impact Report (EIR).

8.7 Hydrology and Floodplain: The improvement is expected to alter the local drainage of the project area. As such, a detailed on-site hydrologic analysis will need to be performed and be included within the ED. Each alternative involves expanding the bridge to a width more than double its current size, thereby increasing the amount of impervious surfaces. Overall, however, the project will not significantly affect the regional drainage area. The stormwater runoff will increase as a result of widening the bridge, though to a volume that is sustainable by existing drainage facilities. Some of these facilities include a box culvert underneath SR-60, culverts east and west of the interchange crossing SR-60, and a roadway channel running along the southern portion of the SR-60. Shown in **Figure 13**, the project site is located in between a natural drainage divide. East of the divide the water flows to the San Jacinto River while west of the divide, the water flows to the Santa Ana River. In order to minimize the impacts on nearby drainage facilities, the runoff will be effectively diverted east and west to preserve the natural drainage courses.

As for flood risks, the project site does not fall within the City of Moreno Valley's 100-year floodplains as indicated in **Figure 14**. However, the volume of additional runoff may serve as a potential flooding hazard during major rainstorms. An off-site drainage study will be completed to further analyze the overall hydrologic impact of the proposed project to surrounding areas.

8.8 Water Quality and Storm Water Runoff: The amount of stormwater runoff is expected to increase as a result of the widening of the bridge. The increase in impervious surface may potentially degrade water quality due to the additional runoff. In addition, the increase in impervious surfaces will increase the amount of pollution to waterways connected to existing drainage facilities. Blue line streams designated as Waters of the United States may be affected as a result of the project. The stream can be located within **Figure 13**, east of the project site between Gilman Springs and Theodore. Permitting will be required in compliance with Section 404 Section 401 of the Clean Water Act (CWA) in order to regulate possible pollutants that may be discharged into these waters during the construction of the project.

The Santa Ana Regional Water Quality Control Board establishes water quality standards for all the ground and surface waters within the region. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with these standards. Additionally, implementation of Best Management Practices (BMPs) is recommended to minimize stormwater runoff impacts to water quality in accordance with the National Pollutant Discharge Elimination Stormwater (NPDES) permits. Design of the interchange will incorporate the use of BMPs to retain and treat water before being discharged into the Waters of the United States. Not only will the BMPs aide in treating water, but they will assist in minimizing the impact of the project to existing drainage facilities and local

hydrology. In order to minimize maintenance costs, BMPs will be self-maintained through the use of native grasses and be placed in open areas. A Water Quality Assessment Report will be prepared and included within the ED.

8.9 Geology, Soils, Seismic and Topography: Special consideration is necessary for the "active" San Jacinto Fault which is in close proximity to the City of Moreno Valley. The fault runs along the eastern city limits directly on top of the northeastern portion of the project site as shown in **Figure 15**. As depicted in the figure, the fault cuts directly through the northeastern portion of the project site. The fault is considered the most active fault in California and an Alquist-Priolo Special Fault Zone has been established. The improvement of the existing interchange will account for the possibility of ground rupture and the structural design of the bridge will comply with current codes and regulations for seismic activity. A geologic study is necessary to determine the precise location and necessary setbacks from the fault. The project would have little to no effect on the local topography due to the rise in ramps for the bridge approaches and would have no effect on local soils. In regard to the soils and topography of the site, a Preliminary Geotechnical Study will be prepared in order to determine the site's soil characteristics and establish criteria for cut and fill slopes.

8.10 Paleontology: The future build site may consists of sedimentary rock that has the potential to contain paleontological fossils. The northeast quadrant has a high potential while the remaining site is categorized as low potential as shown in **Figure 16**. The two primary sedimentary rock-units within the area are referred to as the Mt. Eden Formation and the San Timoteo Formation. Sediments within these formations contain a variety of fossilized fauna including horse, peccary, antelope, camel, deer, mastodon, sloth, tortoise, sabertooth cat, bear, and rabbit. In addition, these areas are known to produce diverse fossil remains from as old as 5 million years to 1.3 million years or less. Any developments within the "Badlands" hillside could result in grading or excavation in areas with potential or known paleontological resources. If such impacts were to occur, the City will require measures to mitigate the impacts. In this case, the City would declare the project a significant impact. A Paleontological Identification Report (PIR) will need to be prepared to document the potential for presence of paleontological resources in the project area.

8.11 Hazardous Waste/Materials: An Initial Site Assessment (ISA) will be conducted to determine if there are any hazardous materials present within the project study area. Riverside County Waste Management Department's (RCWMD) Badlands Landfill, located near Theodore Street about 1.5 miles north of SR-60, may serve as a possible source of soil and/or groundwater contamination. The landfill is found on the Leaking Underground Storage Tank (LUST) database and is classified as a land disposal site. The cleanup status at the site is currently "open – operating". This description defines the landfill as a land disposal site that is accepting waste and have been issued waste discharge requirements by the appropriate Regional Water Board, which in this case is the Riverside Water Quality Control Board (RWQCB). A review of the general history of the landfill indicates the site suffers from drainage and erosion control issues and has been cited with unauthorized discharge of leachate. Appropriate measures to mitigate the possibility of contaminated soils and/or groundwater contamination will be prepared.

The removal of the existing bridge, which was built in the 1960s, should be carefully monitored for possible asbestos and lead contamination. In addition, the increased vehicle capacity may lead to added asbestos contamination from the continual breaking of cars and

trucks. Pesticide surveys will also be performed as the study area has a history of past and present farming operations. The proposed project will need to comply with current state and federal regulations concerning hazardous materials. Detailed analyses and discussion on hazardous wastes/materials will be presented within the ED to avoid or minimize possible impacts.

8.12 Air Quality: The project is located within the South Coast Air Basin (Basin) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). **Figure 17** depicts the location of the City within the Basin. The Basin is known to have some of the worst air quality problems in the nation and is known to retain pollutants for substantial periods of time. Due to this issue, the Basin continues to fail to meet state and federal standards and is currently a "non-attainment" area for ozone, nitrogen dioxide, carbon monoxide, and fine particulate matter.

The long term goal of this project is to reduce future congestion due to expected growth in the area, therefore, reducing the negative impact on air quality. However, the project is expected to have a minor short term impact during the construction phase. The project will comply with regulations established by the SCAQMD and an Air Quality Analysis as well as an Air Quality Conformity Analysis will be performed. Traffic assessments are being performed to analyze the effects of the increased truck traffic expected from the World Logistics Center. These assessments will study the amount of COs saved in connection with general traffic delay for each alternative in order to reduce potential cancer risks that may result from the truck traffic coming to and from WLC.

8.13 Noise and Vibration: The Theodore Street interchange improvement is expected to increase noise and vibration during and post-construction. According to Title 23: Highways within the Code of Federal Regulations (CFR) Part 772-Procedures for Abatement of Highway Traffic Noise and Construction Noise, the proposed project is classified as Type I. The Federal Highway Administration (FHWA) defines Type I projects as projects that involve construction of a highway on a new location or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. For such projects, noise regulations requires noise analyses to be performed.

Preliminary investigation indicates increased noise levels will result from the construction and use of the future interchange. As such, noise abatement will have to be considered in the design of the project to reduce noise impacts for the existing Anco Ranch and future residential developments. The noise analysis will focus on noise levels when traffic movement is fast (typically from 9AM-3PM), the effects of increased truck usage on the interchange, and noise sensitivity of the project study area. A vibration study will be performed to analyze the potential of increased vibration from expected truck growth. Both the noise analysis and vibration study will be included within the ED.

8.14 Energy and Climate Change: The proposed project is not expected to impact energy resources and thus, will not require a technical energy report. Air quality is expected to improve from the smother flow of traffic that this project aims to produce. Increased traffic flow created by this project will create fewer delays and less greenhouse gas emissions. A more detailed analysis of greenhouse gas emissions is done within the Air Quality portion of the PEAR.

8.15 Biological Environment: The project is contained in two biological geographic sections. The area south of SR-60 is considered a part of the central section, while the area to the north is a part of the Norton Younglove section.

The project area is considered to be in a field/croplands environment. These areas generally do not contain substantial native vegetation. The main concern is for the Riversidean Sage Shrub, which is decreasing in numbers throughout California. An on-site evaluation is required as this plant may be located within the build area.

In addition, there are many different species of reptiles, birds, and small land mammals that may be encountered in the project area. Two of the most notable are Stephens' Kangaroo Rat and San Bernardino Kangaroo Rat. Both of these animals are considered to be endangered by the federal government. Any development of land must comply with the long-term HCP for the Stephens' Kangaroo Rat. Another animal that may be found within the project boundary is the Burrowing Owl. The Burrowing Owl is a part of the Specific Habitats Endangered Species list. Therefore, an additional survey will be required to assess potential impacts to its habitats as required by the Western Riverside County Multiple Species Conservation Plan (MSHCP). A National Environmental Study will be prepared in order to assess the potential impacts to the biological environment prior to construction. The study will comply with Section 7 if of the Endangered Species Act of 1973

8.16 Cumulative Impacts: The improvement of the existing Theodore Street interchange and the associated frontage street intersections are not expected to result in negative cumulative impacts. In accordance with the City General Plan land use map shown in **Figure 6**, the proposed project will improve vehicle capacity and traffic operations for future developments. Not included within the General Plan is the construction of the World Logistics Center (WLC). The WLC is a planned development and is estimated to drastically increase truck traffic in the area. Each of the alternatives are designed to mitigate the potential traffic issues that may arise as a result of these future developments.

The impacts of the intersection improvement, combined with the construction of the planned developments, may be considerable to the local community. A detailed cumulative analysis is needed to further evaluate its effects to the area and its potential to lead to negative environmental impacts. The full analysis will be documented within the ED. The project is, however, expected to positively improve traffic operations.

8.17 Context Sensitive Solutions: Context Sensitive Solutions (CSS) are used by Caltrans as an approach to plan, design, construct, maintain, and operate its transportation system. The use of CSS balances community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. City values will be integrated into the design to incorporate and provide opportunities for public involvement. Additionally, traffic forecasts and safety considerations will be used to control the design of the project.

9. Summary Statement for PSR or PSR-PDS

For each practicable alternative write a brief summary of key environmental issues, studies required, permits, and anticipated environmental commitments for permanent impacts. Include a time and potential constraints or special considerations, such as construction windows, biological monitoring, Native American monitoring, acquisition of Permits to Enter, etc. For a standard PSR, include cost estimates for environmental permits and commitments. This statement will go directly into the PSR or PSR-PDS.

The anticipated environmental document for the proposed project would be a Negative Declaration/Finding of No Significant Impact. A FONSI was selected due to the project being an improvement to an existing interchange. Though the configuration of the interchange is being changed, no major modifications to the area will be made. In addition, the project is located in a rural area that is neither heavily populated nor dense, thus impacts to can be easily avoided. The project will not impact any environmental concerns severely to the extent that would deem the project a significant impact to the environment. Each alternative has shown to have a low potential to cause significant environmental impacts. The project is being designed to accordingly to existing constraints. As such, mitigation efforts to reduce potential impacts will be ensured in the selection of an alternative. Caltrans would serve as the lead agency in the preparation of the CEQA/NEPA environmental document. Technical field studies and reports would still be required to analyze topics requiring additional environmental review in order to gain environmental approval at Caltrans.

10. Disclaimer

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

11. List of Preparers

Land Use specialist Kristina Billedo	Date:
Growth specialist Kristina Billedo	Date:
Farmlands/Timberlands specialist Kristina Billedo	Date:
Community Impacts specialist Kristina Billedo	Date:
Visual/Aesthetics specialist Kristina Billedo	Date:
Cultural Resources specialist Kristina Billedo	Date:
Hydrology and Floodplain specialist Kristina Billedo	Date:
Water Quality and Storm Water Runoff specialist	Date:

Kristina Billedo	
Geology, Soils, Seismic and Topography specialist Kristina Billedo	Date:
Paleontology specialist/liaison Anthony Kreeger	Date:
Hazardous Waste/Materials specialist Anthony Kreeger	Date:
Air Quality specialist Anthony Kreeger	Date:
Noise and Vibration specialist Anthony Kreeger	Date:
Energy and Climate Change specialist Anthony Kreeger	Date:
Biological Environment specialist Anthony Kreeger	Date:
Cumulative Impacts specialist Anthony Kreeger	Date:
Context Sensitive Solutions specialist Anthony Kreeger	Date:
Other:	Date:
PEAR Preparer (Name and Title) Kristina Billedo (Environmental Lead)	Date:

12. Review and Approval

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

_____ Date: _____

Environmental Branch Chief

_____ Date: _____

Project Manager

REQUIRED ATTACHMENTS:

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

Appendix A: Figures

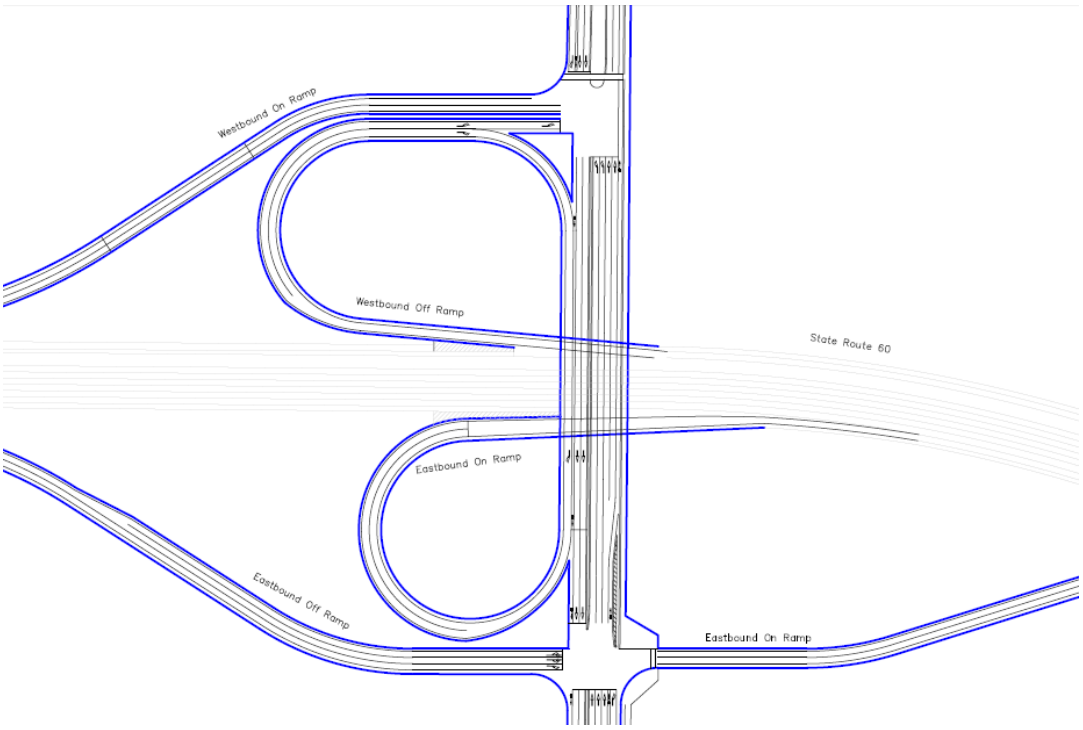

Figure 1. *Partial Cloverleaf Interchange.*

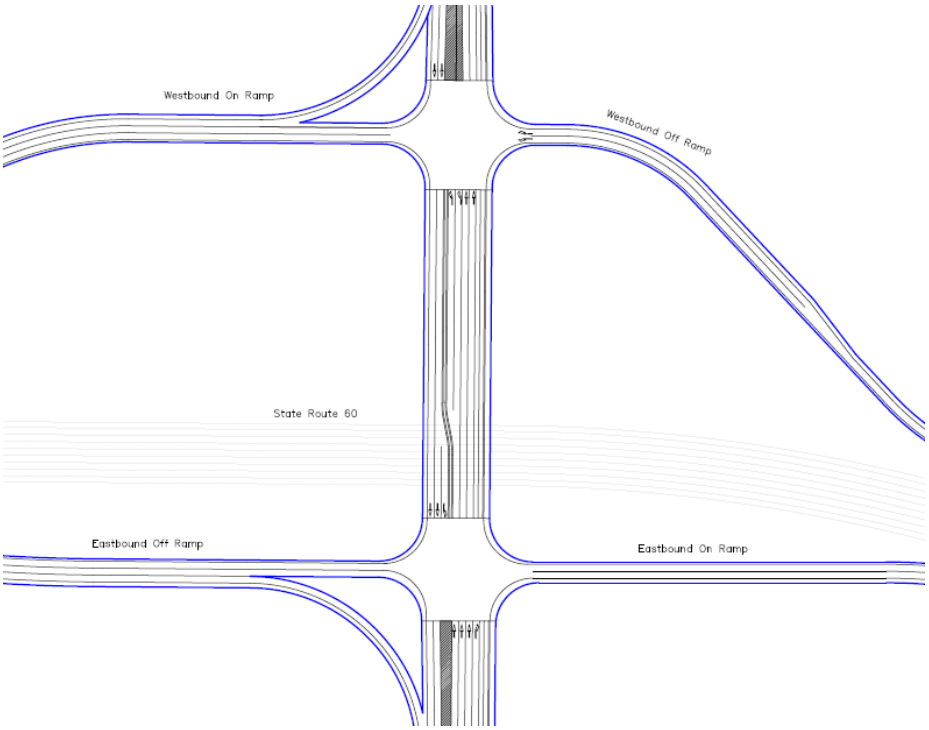

Figure 2*. Spread Diamond Interchange.*

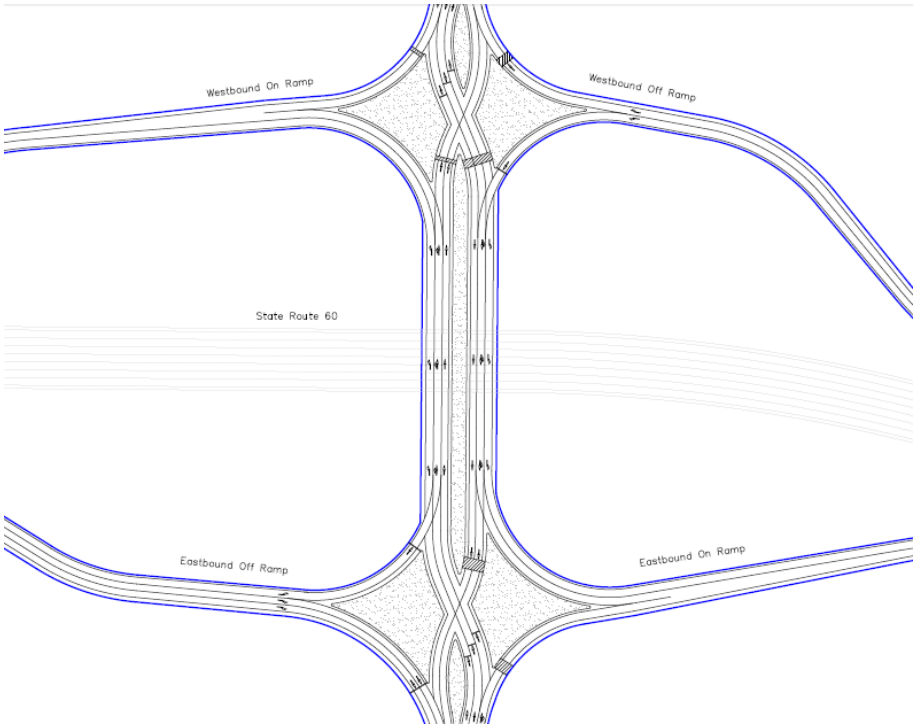

Figure 3. *Diverging Diamond Interchange.*

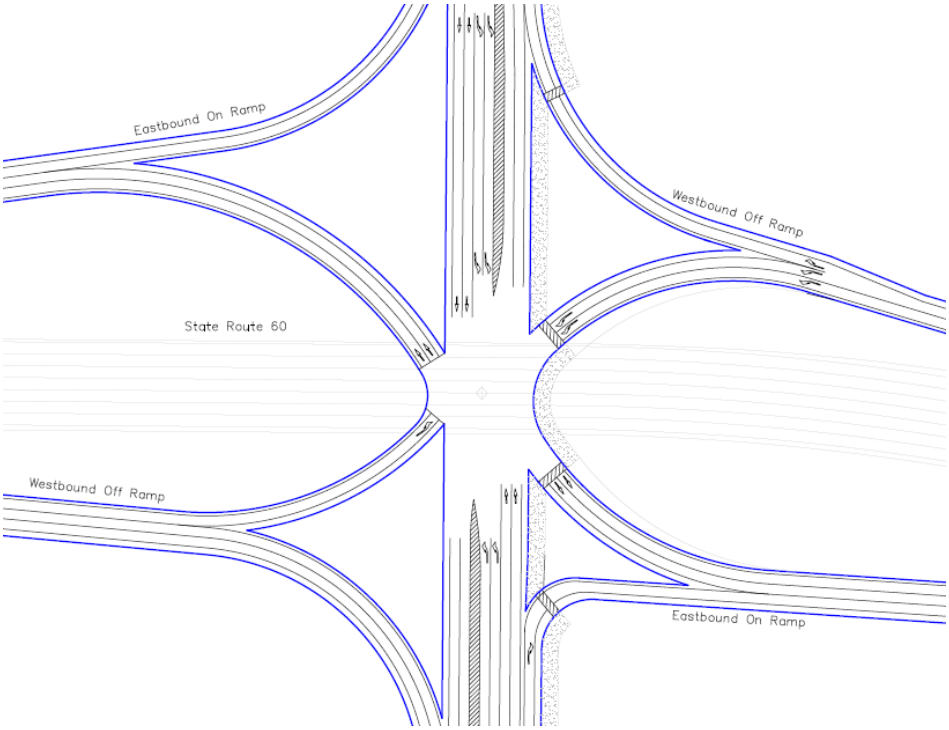

Figure 4. *Single Point Urban Interchange.*

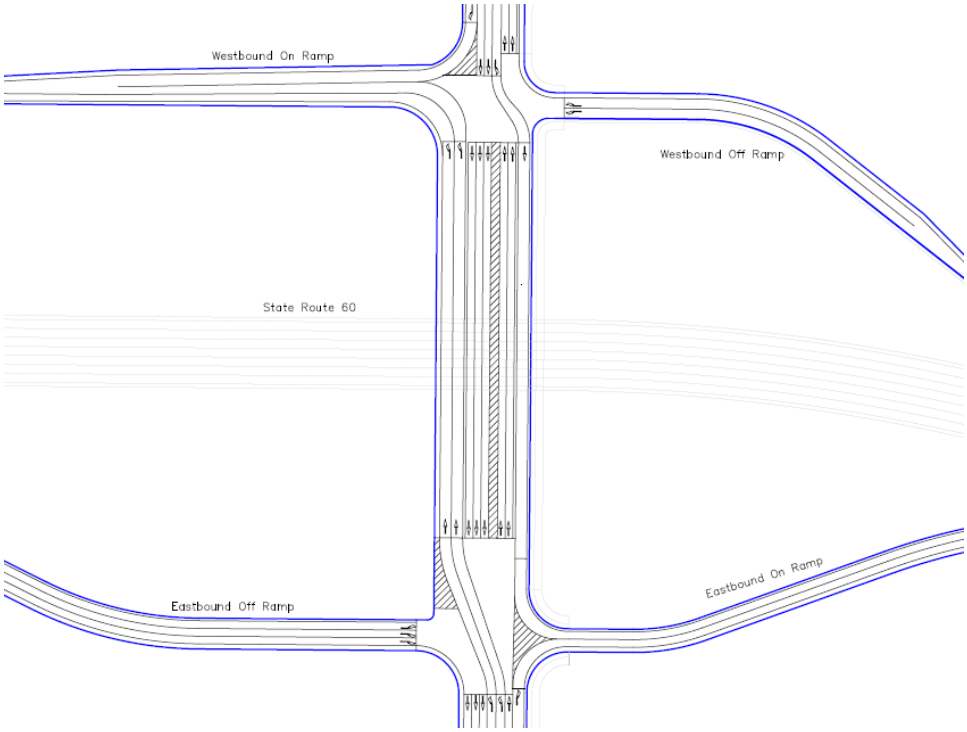

Figure 5. *Contraflow Interchange.*

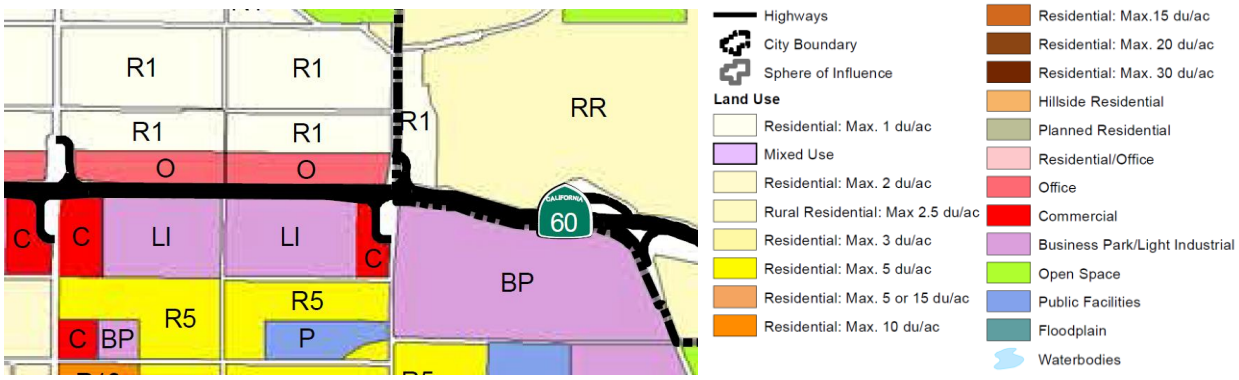

Figure 6. *Land Use Map.*

Table 2.E: Regional Population, Housing, and Employment Forecasts through 2035

Forecast Category	2011	2020	2035
Population			
City of Moreno Valley	195,216	213,700	255,200
Riverside County	2,217,778	2,592,000	3,324,000
SCAG	18,163,664	19,663,000	22,091,000
Housing Units			
City of Moreno Valley	55,635	60,000	72,800
Riverside County	804,915	834,000	1,092,000
SCAG	6,348,741	6,458,000	7,325,000
Employment			
City of Moreno Valley	30,001	48,000	64,400
Riverside County	586,234	939,000	1,243,000
SCAG	7,224,670	8,414,000	9,441,000
Jobs/Housing Ratio			
City of Moreno Valley	0.54	0.80	0.89
Riverside County	0.73	1.13	1.14
SCAG	1.14	1.30	1.29

Sources:
(1) 2010 Employment data for the is based on 2010 data presented in *Profile of the City of Moreno Valley*, Southern California Association of Governments, May 2011.
(2) *Draft 2012 RTP Growth Forecast*, Southern California Association of Governments, http://www.scag.ca.gov/forecast/index.htm, date accessed March 15, 2012.
(3) *Table 2: City/County Population and Housing Estimates, 1/1/2011*, State of California Department of Finance.
(4) *Table 1: Population, Age and Sex Characteristics, April 1, 2010, Incorporated Cities and Census Designated Places (CDP) by County in California*. State of California, Department of Finance, Sacramento, California, May 19, 2011.

Figure 7. *Regional Population, Housing, and Employment Forecasts (WLC Draft EIR 2013).*

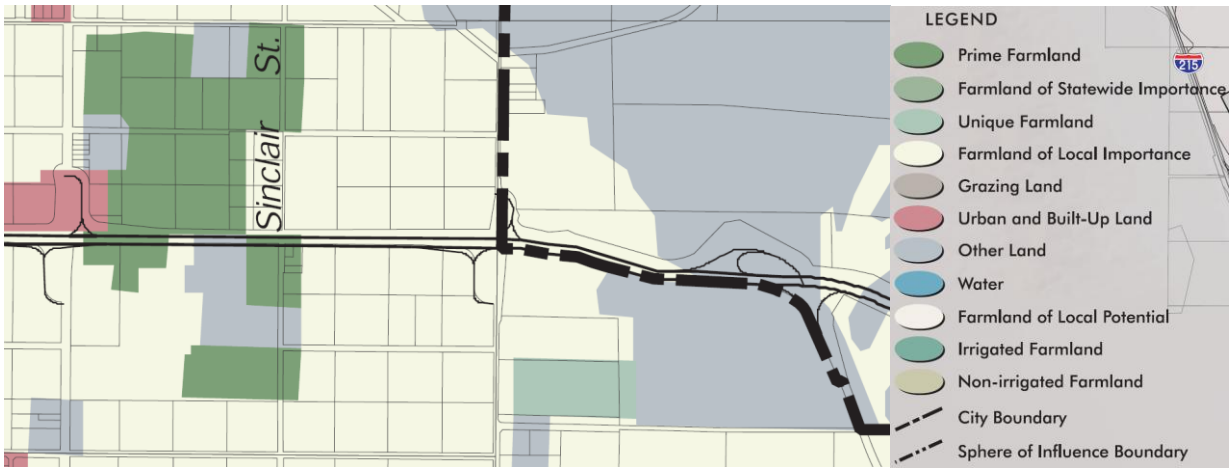

Figure 8. *Important Farmlands.*

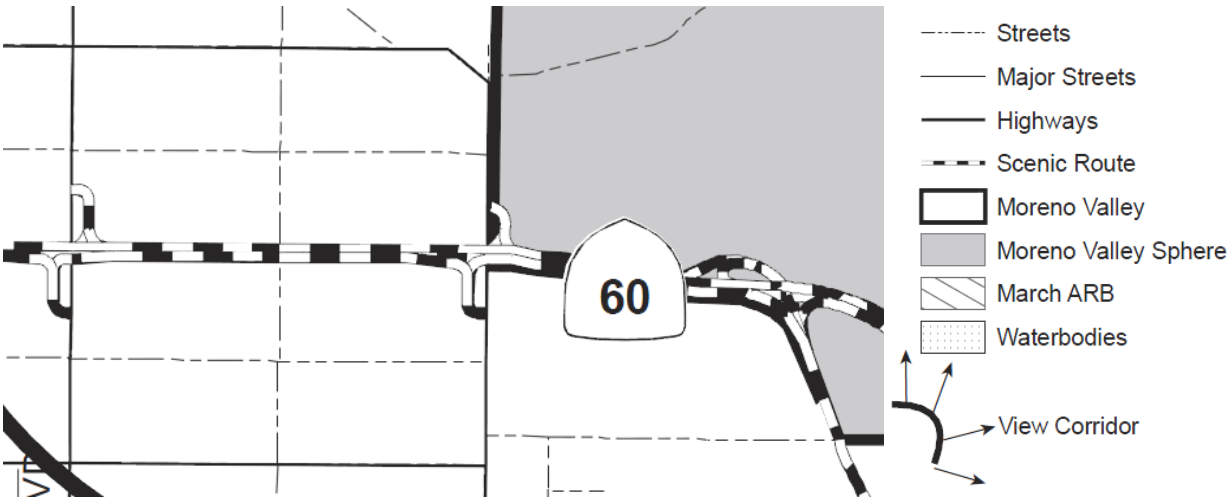

Figure 9. *Major Scenic Resources.*

Address	Map Location	Approximate Year Built	Style/ Comments
Edgemont			
21730 Bay Ave.	1	1947	Bungalow
21874 Bay Ave.	2	1938	Vernacular
21613 Cottonwood Ave.	3	1930	Vernacular
21678 Cottonwood Ave.	4	1941	Moorish
13694 Edgemont St.	5	1920	Vernacular
Sunnymead			
24638 Fir Ave.	6	~1915	Vernacular
23741 Hemlock Ave.	7	~1910	Vernacular
24215 Fir Ave.	8	1891	n.a.
Moreno			
28780 Allesandro Blvd.	9	1928	Mission Revival
Southeastern Sector			
27476 Cottonwood Ave.	10	~1928	Adobe
Eastern Sector			
12130 Theodore St.	11	1920	Vernacular
12400 Theodore St.	12	~1915	Vernacular Stone
12400 Theodore St.	13	~1915	Vernacular Wood
12400 Theodore St.	14	~1915	Stone

Source: Archaeological Associates, 2003 and City of Moreno Valley, 2003.

Figure 10. *Listed Historic Resource Inventory Structures in Moreno Valley (City of Moreno Valley General Plan 2006*).

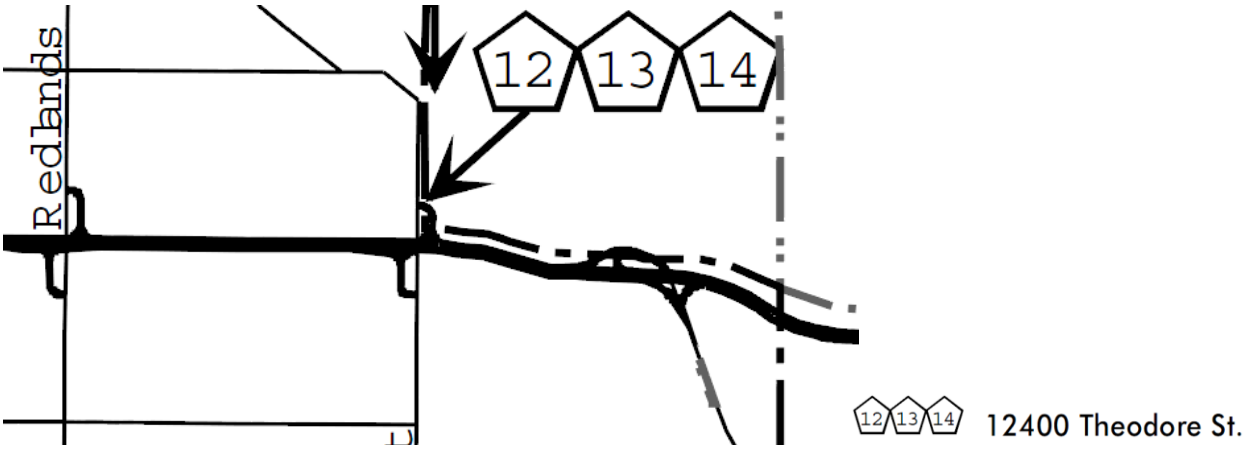

Figure 11. *Locations of Listed Historic Resource Inventory Structures (City of Moreno Valley General Plan 2006).*

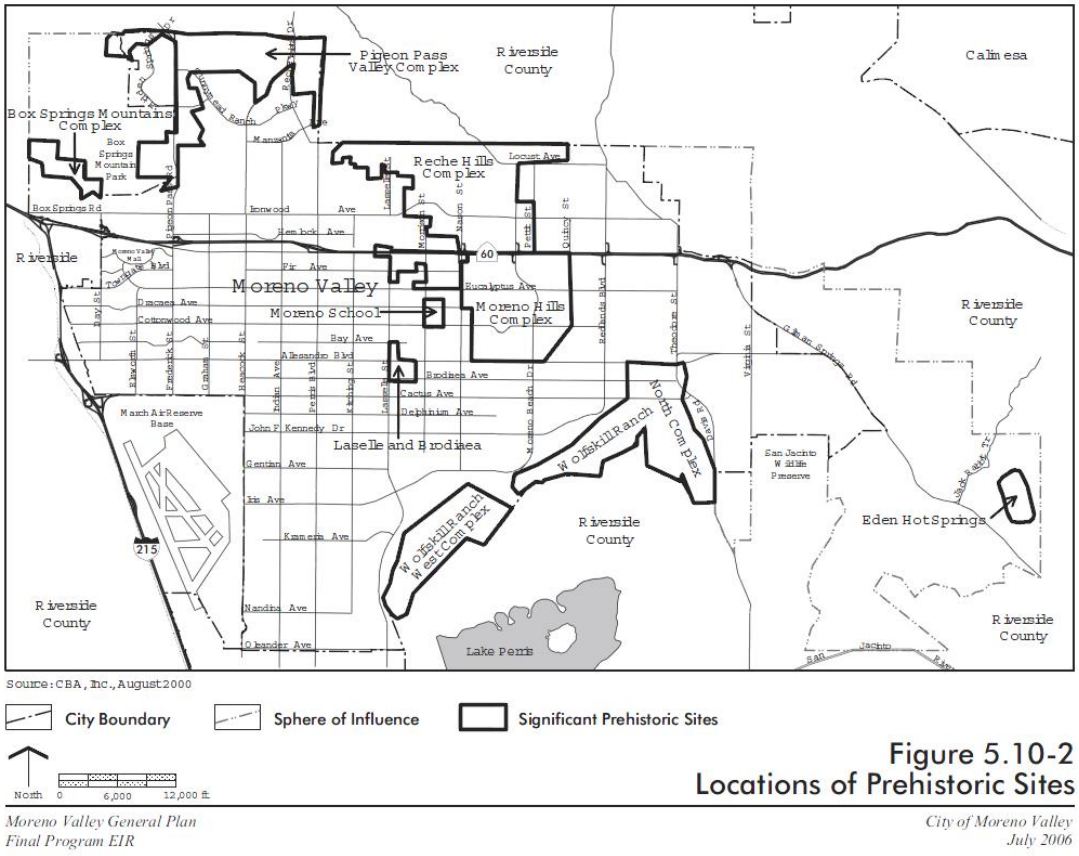

Figure 12. *Locations of Prehistoric Sites (Moreno Valley Final Program EIR 2006).*

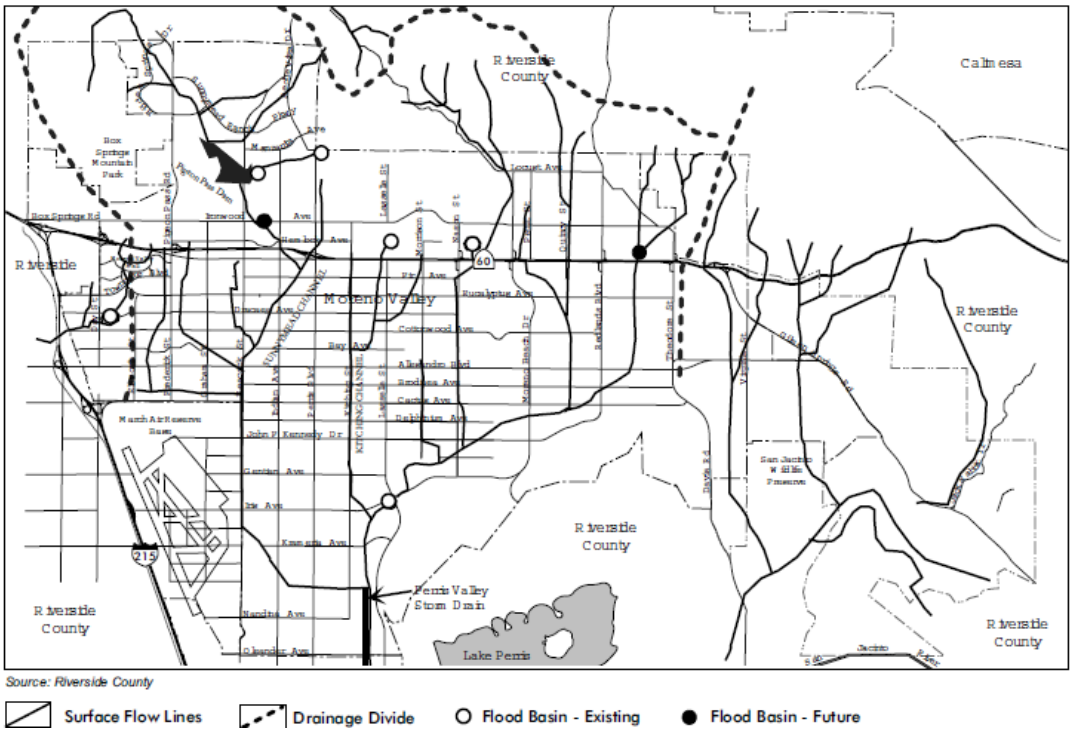

Figure 13. *Storm Water Flows and Major Drainage Facilities (Moreno Valley Final Program EIR 2006).*

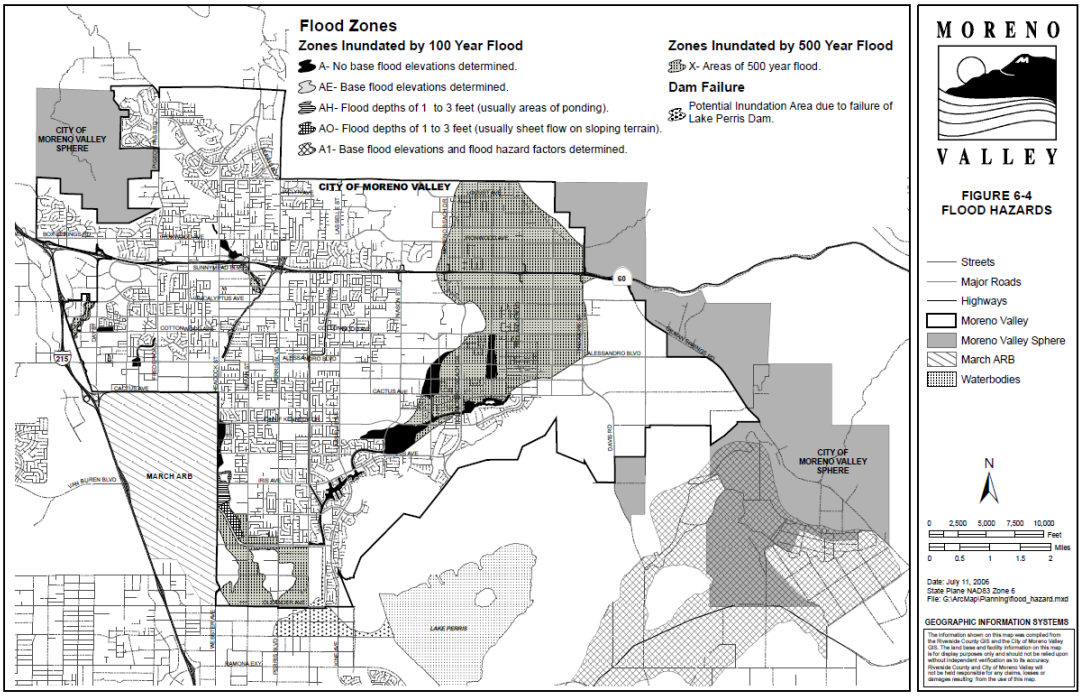

Figure 14. *Flood Hazards Facilities (City of Moreno Valley General Plan 2006).*

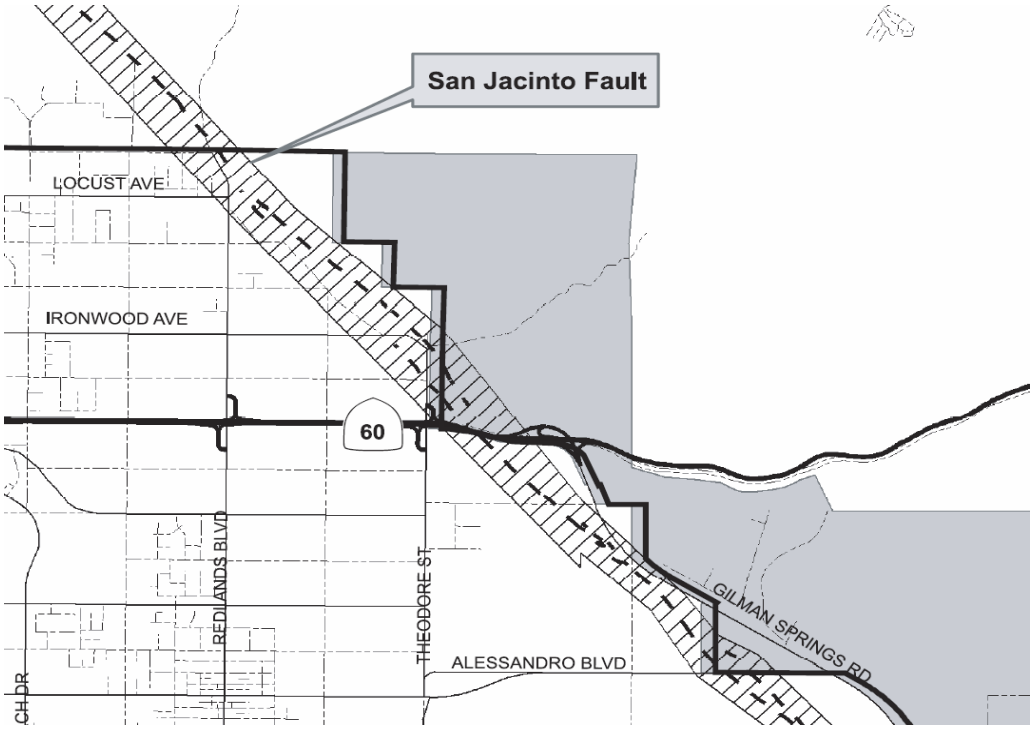

Figure 15. *Seismic Hazards (Moreno Valley Final Program EIR 2006).*

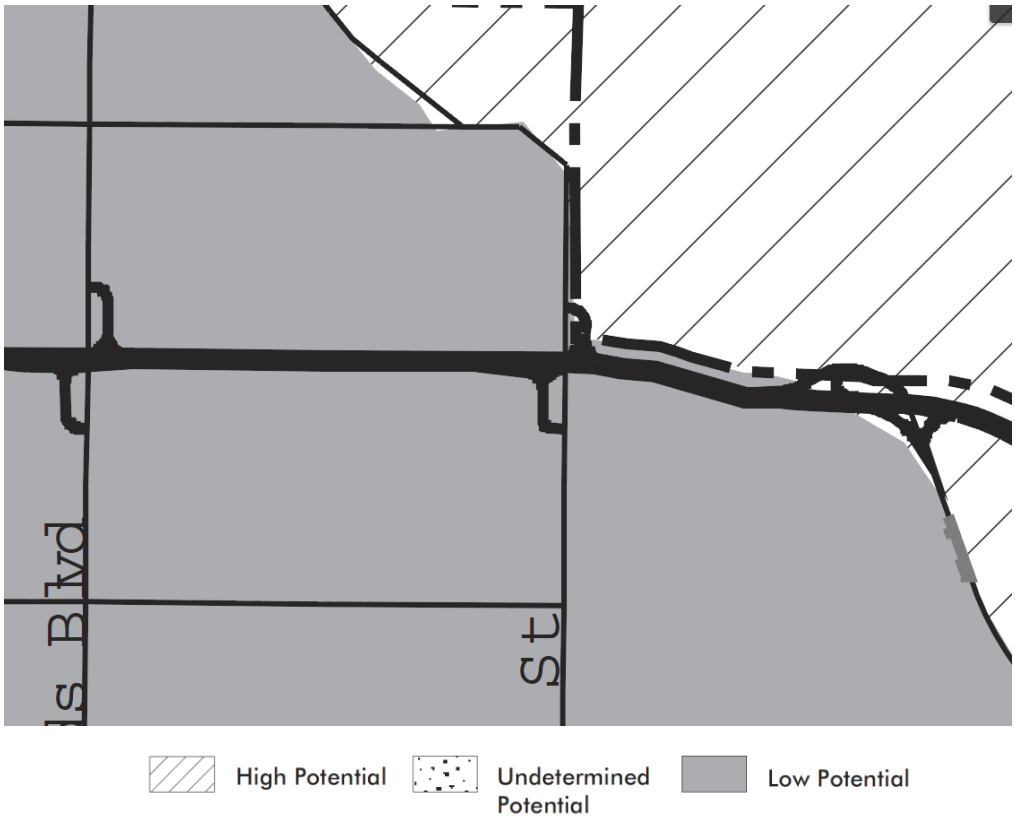

Figure 16. *Paleontologic Resource Sensitive Areas (Moreno Valley Final Program EIR 2006).*

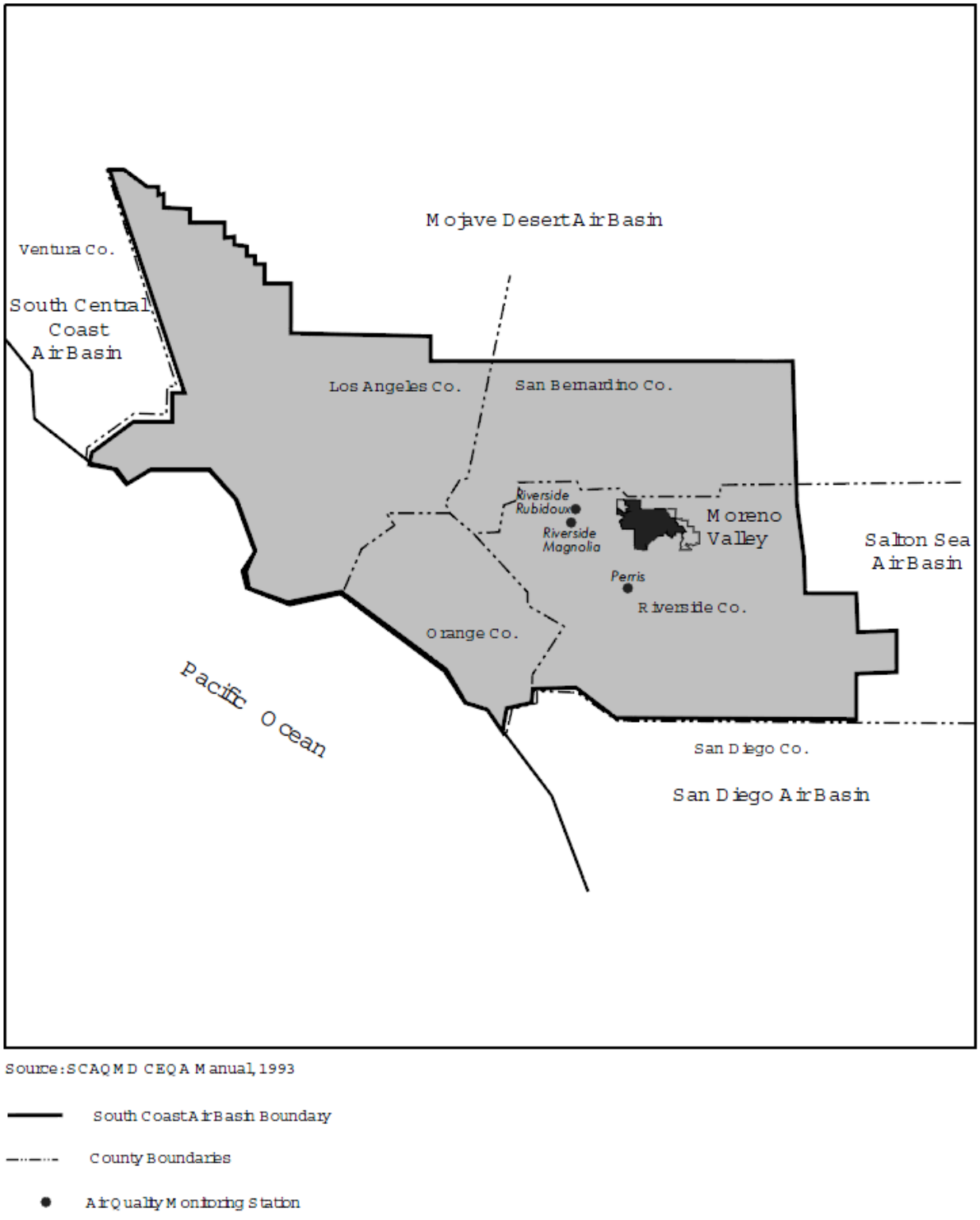

Figure 17. *South Coast Air Basin (Moreno Valley Final Program EIR 2006).*

Attachment A: PEAR Environmental Studies Checklist

Rev. 11/08

Environmental Studies for PA&ED Checklist					
	Not anticipated	Memo to file	Report required	Risk* L M H	Comments
Land Use	☐	☒	☐	L	
Growth	☒	☐	☐	L	
Farmlands/Timberlands	☐	☒	☐	L	
Community Impacts	☐	☐	☒	L	
Community Character and Cohesion	☐	☒	☐	L	
Relocations	☒	☐	☐	L	
Environmental Justice	☒	☐	☐	L	
Utilities/Emergency Services	☐	☒	☐	L	
Visual/Aesthetics	☐	☐	☒	L	
Cultural Resources:	☐	☐	☐	L	
Archaeological Survey Report	☐	☒	☐	L	
Historic Resources Evaluation Report	☐	☐	☒	L	
Historic Property Survey Report	☐	☐	☒	L	
Historic Resource Compliance Report	☒	☐	☐	L	
Section 106 / PRC 5024 & 5024.5	☒	☐	☐	L	
Native American Coordination	☒	☐	☐	L	
Finding of Effect	☒	☐	☐	L	
Data Recovery Plan	☒	☐	☐	L	
Memorandum of Agreement	☒	☐	☐	L	
Other:	☐	☐	☐	L	
Hydrology and Floodplain	☐	☐	☒	L	
Water Quality and Stormwater Runoff	☐	☐	☒	L	
Geology, Soils, Seismic and Topography	☐	☐	☒	L	
Paleontology:	☐	☐	☐	L	
PER	☒	☐	☐	L	
PMP	☒	☐	☐	L	
Hazardous Waste/Materials:	☐	☐	☐	L	
ISA (Additional)	☐	☐	☒	L	
PSI	☒	☐	☐	L	
Other:	☐	☐	☐	L	
Air Quality	☐	☐	☒	L	
Noise and Vibration	☐	☐	☒	L	
Energy and Climate Change	☐	☒	☐	L	
Biological Environment:	☐	☐	☐	L	
Natural Environment Study	☐	☐	☒	L	
Section 7:	☐	☐	☐	L	
Formal	☒	☐	☐	L	
Informal	☐	☐	☒	L	
No effect	☒	☐	☐	L	
Section 10	☒	☐	☐	L	
US Fish & Wildlife Service (USFWS) Consultation	☐	☒	☐	L	
National Marine Fisheries Services	☒	☐	☐	L	

Environmental Studies for PA&ED Checklist					
	Not anticipated	Memo to file	Report required	Risk* L M H	Comments
(NMFS) Consultation					
Species of Concern (CNPS, USFS, BLM, S, F)	☐	☐	☒	L	
Wetlands & Other Waters/Delineation	☐	☒	☐	L	
404(b)(1) Alternatives Analysis	☒	☐	☐	L	
Invasive Species	☒	☐	☐	L	
Wild & Scenic River Consistency	☒	☐	☐	L	
Coastal Management Plan	☒	☐	☐	L	
HMMP	☐	☐	☒	L	
DFG Consistency Determination	☒	☐	☐	L	
2081	☒	☐	☐	L	
Other:	☐	☐	☐	L	
Cumulative Impacts	☒	☐	☐	L	
Context Sensitive Solutions	☒	☐	☐	L	
Section 4(f) Evaluation	☐	☒	☐	L	
Permits:					
401 Certification Coordination	☐	☐	☒	L	
404 Permit Coordination, IP, NWP, or LOP	☐	☐	☒	L	
1602 Agreement Coordination	☐	☐	☒	L	
Local Coastal Development Permit Coordination	☒	☐	☐	L	
State Coastal Development Permit Coordination	☒	☐	☐	L	
NPDES Coordination	☐	☐	☒	L	
US Coast Guard (Section 10)	☒	☐	☐	L	
TRPA	☒	☐	☐	L	
BCDC	☒	☐	☐	L	

Attachment B: Resources by WBS Code

ATTACHMENT B - Resources by WBS Code

Project ID:
EA:
Description:

WBS Task Activity Code	Division Chief	Office Chief	Senior	Generalist	Biology	Cultural	Haz Waste	Socio-Economic	Storm Water	ECL	Steward-ship	Noise/Air	Sup Svcs	Design	Hydraulics	Landscape	Planning	Right of Way	Surveys	Total
Assigned Unit																				
Project Management																				
100.10 – Project Management - PA&ED	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
100.15 – Project Management - PS&E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
100.20 – Project Management - Construction	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
100.25 – Project Management - Right of Way	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Project Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perform Preliminary Engineering Studies and Draft Project Report																				
160.05 – Updated Project Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
160.10 – Engineering Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
160.15 – Draft Project Report	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
160.30 – Environmental Study Request	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
160.40 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Perform Prelim Eng Studies & Draft PR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perform Environmental Studies and Prepare Draft Environmental Document - Task Management Activities																				
165.05 – Env Scoping of Alternatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
165.10 – General Env Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
165.15 – Biological Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
165.20 – Cultural Resource Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
165.25 – Draft Env Document	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
165.30 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Perform Env Studies & Prepare DED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Obtain Permits, Licenses, Agreements and Certifications (PLACs) and Route Adoptions during PA&ED Component - Task Management Activities																				
170.05 – Reqired PLACs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.10 – PLACs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.15 – Railroad Agreements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.20 – Freeway Agreements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.25 – Agreement for Material Sites	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.30 – Executed Maintenance Agreements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.40 – Route Adoptions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.45 – MOU from TERO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
170.55 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Obtain PLACS & Rte Adoptions during PA&ED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Circulate Draft Environmental Document and Select Preferred Project Alternative - Task Management Activities																				
175.05 – DED Circulation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
175.10 – Public Hearing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
175.15 – Public Comment Responses & Corr	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
175.20 – Project Preferred Alternative	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
175.25 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Circ DED & Select Preferred Proj Alt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepare and Approve Project Report and Final Environmental Document																				
180.05 – Final Project Report	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
180.10 – Final Env Document	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
180.15 – Completed Env Document	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
180.20 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Prep and Approve PR & FED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepare Base Maps and Plan Sheets for PS&E Development																				
185.05 – Updated Project Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
185.15 – Preliminary Design	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Prep Base Maps & Plan Sheets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Right of Way Property Management and Excess Land																				
195.40 – Property Management	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
195.45 – Excess Land	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total RW Property Mgmt and Excess Land	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utility Relocation																				
200.15 – Approved Utility Relocation Plan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
200.20 – Utility Relocation Package	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Utility Coordination	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Obtain Permits, Licenses, Agreements, and Certifications (PLACs) during PS&E Component - Task Management Activities																				
205.05 – PLACs Determination	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
205.10 – PLACs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
205.15 – Railroad Agreements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
205.25 – Agreement for Material Sites	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
205.30 – Executed Maintenance Agreements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
205.45 – MOU from TERO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
205.55 – NEPA Delegation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Permits & Agreements during PS&E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Obtain Right of Way Interests for Project Right of Way Certification																				
225.75 – Right of Way Clearance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Obtain RW Interests for Proj RW Cert	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepare Draft PS&E																				
230.05 – Draft Roadway Plans	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
230.10 – Draft Highway Planting Plans	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
230.30 – Draft Drainage Plans	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
230.35 – Draft Specifications	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
230.60 – Updated Project Info for PS&E Pkg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
230.90 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
230.99 – Other Draft PS&E Products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Prepare Draft PS&E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mitigate Environmental Impacts and Clean-up Hazardous Waste - Task Management Actitivities																				
235.05 – Environmental Mitigation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.10 – Detailed Site Investigation for HW	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.15 – HW Management Plan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.20 – HW PS&E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.25 – HW Clean-up	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.30 – Haz Substances Disclosure Doc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.35 – Long Term Mitigation Monitoring	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.40 – Updated Env Commitments Record	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
235.45 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Mit Env Impacts & Clean-up HW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Post Right of Way Certification Work																					
245.75 – Right of Way Clearance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Post RW Clearance Work	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Circulate, Review and Prepare Final District PS&E Package																					
255.05 – Circ. & Rev. Draft Dist PS&E Package	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
255.10 – Updated PS&E Package	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
255.15 – Environmental Reevaluation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
255.20 – Final District PS&E Package	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
255.40 – Resident Engineer's Pending File	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
255.45 – NEPA Assignment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Circ, Rev and Prepare Final Dist PS&E Pkg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contract Bid Documents "Ready to List"																					
260.75 - Env Cert at RTL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Contract Bid Documents "RTL"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Engineering and General Contract Administration																					
270.15 – Construction Stakes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
270.33 – Construction Inspection	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
270.66 – Technical Support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Const Engineering & Gen Contract Admin.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administration of Permits, Licenses, Agreements and Certifications (PLACs) and Environmental Stewardship																					
280.10 – PLAC Compliance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
280.40 – PLAC Violations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
280.50 – Other Environmental Compliance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
280.60 – Other Environmental Violations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
280.70 – Updated ECR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
280.75 – Environmental Reevaluation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
280.80 – Updated PLACs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Admin of PLACs and Env Stewardship	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Change Order Administration																					
285.05 – Change Order Process	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
285.10 – Functional Support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Change Order Administration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disputes and Claims																					
290.40 – Potential Claim Record	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Disputes and Claims	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accept Contract/Prepare Final Construction Estimate and Final Report																					
295.35 – Certificate of Environmental Compliance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
295.40 – Long Term Env Mtl/Mont after CCA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Total Accept Contract	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Project Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Attachment D: PEAR Environmental Commitments Cost Estimate

Standard PSR Only

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

PART 1 PROJECT INFORMATION *rev. 11/08*

District-County-Route-Post Mile 08-RIV-SR60	EA:
Project Description: Existing Interchange at SR-60 and Theodore Street in Moreno Valley	
Form completed by (Name/District Office): Kristina Billedo	
Project Manager: Sam Ekstrand Rachel Yawaza	Phone Number:
Date: 3/24/2015	

PART 2 PERMITS AND AGREEMENTS

	Permits and Agreements **($$)**
☒ Fish and Game 1602 Agreement	
☐ Coastal Development Permit	
☐ State Lands Agreement	
☒ Section 401 Water Quality Certification	
☐ Section 404 Permit – Nationwide (U.S. Army Corps)	
☒ Section 404 Permit – Individual (U.S. Army Corps)	
☐ Section 10 Navigable Waters Permit (U.S. Army Corps)	
☐ Section 9 Permit (U.S. Coast Guard)	
☐ Other:	
Total (enter zeros if no cost)	

PART 3. ENVIRONMENTAL COMMITMENTS FOR PERMANENT IMPACTS

To complete the following information:

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

Environmental Commitments Alternative					
	Estimated Cost in $1,000's				Notes
	Phases				
	Design	ROW	Construction	Sub-Total	
Noise abatement or mitigation	N/A	N/A	N/A	N/A	
Special landscaping	N/A	N/A	N/A	N/A	
Archaeological resources	N/A	N/A	N/A	N/A	
Biological resources	N/A	N/A	N/A	N/A	
Historical resources	N/A	N/A	N/A	N/A	
Scenic resources	N/A	N/A	N/A	N/A	
Wetland/riparian resources	N/A	N/A	N/A	N/A	
Res./bus. relocations	N/A	N/A	N/A	N/A	
Other:					
Total (enter zeros if no cost)	N/A	N/A	N/A	N/A	