

I-15 / SR-74 (Central Avenue) Interchange Project PS&E

FINAL TECHNICAL SCOPE OF WORK

PROJECT DESCRIPTION

The Interstate 15 (I-15) / SR-74 (Central Avenue) Interchange improvements (Project) includes an interchange under the I-15 mainline providing a widened undercrossing street to 9-lanes between the existing tie-back walls. The existing SR-74 (Central Avenue) I-15 Undercrossing will remain in place, auxiliary lanes (acceleration/deceleration lanes) will be provided for a limited distances from Central Avenue toward Main Street Interchange (3,000 ft) and Nichols Road Interchange (3,000 (SB) / 4,300 ft (NB). Dexter Avenue will be widened westerly to provide 2-lanes in each direction, extend to join existing Dexter Avenue approaching 11th Street with the new hook ramp terminal intersection. The existing northbound entrance ramp will be removed under Alternative 3 as the preferred alternative to provide for the addition of the northbound loop exit ramp and dual hook ramps joining Dexter Avenue. ADA compliant pedestrian sidewalks and bicycle facilities will be installed Central and Dexter Avenue along the State Right-of-Way (R/W) and within Access Control Limits.

TASK 1 – PROJECT MANAGEMENT/COORDINATION/ADMINISTRATION

1-1 Coordination and Administration

This task covers project management services including the requirements for Site Visits, Document Control, Invoices, Subconsultant coordination, and administration of CONSULTANT's work for the defined 26-month period outlined in the City tentative PS&E milestone schedule which excludes construction support services. CONSULTANT shall direct & coordinate the work of its staff and subconsultants throughout the course of the final design delivery phase. CONSULTANT shall serve as the primary contact for the consultant team in communication with the City of Lake Elsinore (City), Caltrans, Federal highway Administration (FHWA) , Riverside County Flood Control District (RCFCD), U.S. Army Corp of Engineers (USACE) and other local, regional, and resource agencies.

1-1.1 Meetings

During the course of the contract, the CONSULTANT shall prepare for, and attend the following meetings:

- Monthly Project Development Team (PDT) (26 total).
- City Team Meetings or Focus Meetings to progress final design plans (26 total).
- Agency Coordination Meetings (10 total).

CONSULTANT will prepare meeting invitations, agendas, handouts, minutes, and progress plans and forms, reports, technical studies as appropriate for the type of meeting being held.

Deliverables:

- ***Meeting Agendas and Minutes***

Assumptions:

- *Meetings will be held virtually except for City Council Meetings and Public Outreach Meetings*

1.1-2 Schedule

CONSULTANT shall submit an initial Project Master Schedule. Following approval by the City, this schedule will become the Project Target Schedule. Project schedule will be updated after each PDT Meeting to aid in tracking submittals and review timelines and project milestones. The following elements will be included by CONSULTANT in the Schedule:

- Oversight Agency Review time
- Order of Sequence of significant work
- Major Milestones
- Critical Path Tasks

Deliverables:

- ***Baseline Schedule***

1-1.3 Project Control and Administration

Along with an invoice at the end of each month, CONSULTANT shall report the progress of the work with a narrative of the monthly Progress Report which shall describe the overall progress of the work, discuss significant project elements and present upcoming delivery efforts and identify the status of major project delivery changes.

CONSULTANT shall implement uniform document control policies necessary to retain project records and electronically stored files, and information associated with the work in ProjectWise.

Deliverables:

- ***Monthly Progress Reports and Invoices***

1-1.4 Quality Management Plan

CONSULTANT shall prepare a Caltrans Quality Management Plan (QMP) and implement and maintain a Quality Assurance/Quality Control process throughout the services under this Agreement. The QMP will establish Quality Assurance and Quality Control processes and procedures; describe how the quality of the work products will be managed to minimize errors; confirm that design reports, studies, plans, specifications, quantities, estimates and other design documents are complete, accurate, consistent, checked, and reviewed.

Deliverables:

- ***Quality Management Plan***

1-2 Project Management Plan

CONSULTANT will use a standard HDR Project Management Plan (PMP) for project team members to use throughout the project. The PMP will include the project schedule, key milestone dates, project organization chart, task listings, communication protocols, and quality control procedures. The PMP will also include the design criteria to be used for the project, along with the required standards of practice.

Deliverables:

- ***Project Management Plan***

1-3 Public Outreach

CONSULTANT Outreach Team will work with the HDR / City Team to help develop and conduct a public outreach program during the design phase. The outreach program will share with the public the general scope of the project, anticipated construction impacts, mitigation measures and traffic management plans, and project schedule. This outreach program will also gather meaningful and informed feedback from the community. CONSULTANT shall assist the CITY in the following:

Outreach Plan

- Develop one (1) public outreach plan building upon efforts completed in PA&ED.
- One community analytics report.
- One outreach schedule.
- One draft public outreach plan.
- One final public outreach plan.
- Database maintenance and support.

Collateral Materials

- Design and production of bilingual outreach informational materials.
- One open house/public meeting display boards for session stations.
- Content translation (Spanish).

Notification

- Digital engagement content (social media posts, StoryMap updates, website copy, and advertisements).
- One Social media schedule.
- Open house invitation flyer.
- Informational flyer/Door hangers.
- Postcard mailer to business/residents with 1,000 ft of project area.
- Community-Based Organization information sharing/Community Stakeholder Engagement.
- Dissemination of outreach materials and surveys through CBOs' social media and email list established in PA&ED and updated in final design.

Meetings

- Hosting one (1) public meeting, open house format & attend present project status at one (1) Council Meeting. Public meeting/open house venue, if needed, will be provided by the City (City Cultural Center).
- Spanish interpretation at public meeting.
- Producing one public outreach summary.

Pop-up Event

- Community event (participation) to educate the community and collect feedback.

Deliverables:

- ***Public Outreach Plan***

- **Outreach materials (bilingual)**
- **Digital engagement notification plan for Open House**
- **Public Outreach Summary**

Assumptions:

- *Attend one City Council Meetings and hold one Informational (Open House Style) Public Meeting.*
- *Public Outreach task is conducted during the Design Phase where the CITY will host the event and Consultant shall provide support, similar to PA&ED public outreach efforts.*
- *Public Relations can be provided during the construction phase as additional work and will be coordinated with CITY on the scope and fee, if required.*
- *Routine updates to the council will be made by CITY staff.*
- ***The public meeting/open house venue will be provided by the City of Lake Elsinore.***
- *Consultant will provide the digital content to CITY. CITY will coordinate internally to upload onto their website.*
- *Two agency reviews are planned for the outreach plan and outreach materials.*
- *Spanish interpretation and translation included. Other languages would require fee adjustments.*

TASK 2 – 30% PS&E

2-1 Data Collection

CONSULTANT will collect existing topographic maps from RCTC I-15 ELPSE, as-built drawings, reports, and other available materials. CONSULTANT will request data from Caltrans, City, RCTC, Riverside County, and other agencies, as appropriate.

2-2 Encroachment Permit Application

CONSULTANT will prepare and submit permit applications for surveying, geotechnical investigations, construction, and environmental clearances.

Deliverables:

- ***Encroachment Permit (rider)***

Assumptions:

- *A Parent Permit will be provided by the CITY. CONSULTANT shall apply for a rider or double permit and CITY will be or will identify an authorized agent to obtain both permits on behalf of the CITY from the CONSULTANT team.*

2-3 Design Surveys and Mapping

Horizontal and vertical project control will be established for the project area by the CONSULTANT. New survey controls to support the final design of the project will be established outside of anticipated construction area, where possible.

CONSULTANT will utilize existing Caltrans ABC approved aerial mapping from the I-15 Express Lanes Project Southern Extension. This aerial mapping covers more than 90% of the project area

and will be supplemental with ground surveys in areas that have changed or not included since the mapping was approved in June 2020

CONSULTANT will perform Pavement Surveys utilizing mobile LiDAR and conventional topographic survey methods to capture the edge of traveled way, edge of shoulder, edge of pavement, longitudinal concrete pavement joints, pavement cross fall and other topographic features within the pavement areas for the northbound and southbound directions of the I-15 within the project limits. The LiDAR will be captured in accordance with the Caltrans Surveys Manual. The LiDAR and topographic data will be downloaded, processed, and tied to the horizontal and vertical control established for this project. The topographic data will be plotted in CAD and a digital terrain model (DTM) created for the existing ground surface.

CONSULTANT will perform Ground Topographic Surveys utilizing conventional ground survey methods to supplement the existing aerial mapping and collect detailed topographic data at conform areas and within the areas of proposed improvements. The topographic data will be downloaded, processed, and tied to the horizontal and vertical control established for this project. The topographic data will be plotted in CAD, incorporated with the aerial mapping and a digital terrain model (DTM) created for the existing ground surface, if applicable.

CONSULTANT will perform drainage surveys to capture the invert elevations of up to 50 drain features throughout the project limits. Photographs and sketches for each drain feature will be captured and included with the CAD deliverables.

CONSULTANT will perform Utility Pothole Surveys utilizing conventional ground survey to collect up to 30 utility potholes, up to 9 OH Sign and select traffic signal pole test holes, and 30 geotechnical boings within the project limits. The utility potholes and geotechnical bore holes will be collected upon completion of each phase of the field utility and geotechnical investigations. Cross sections will be included for 9 OH Sign locations after completion of the 60% Sign Plans.

2-3.1 Survey Geotechnical/Utility Bore Hole Locations

CONSULTANT will perform Geotechnical Bore Hole Surveys utilizing conventional ground survey methods to collect up to 40 geotechnical bore holes within the project limits. The geotechnical bore holes will be collected upon completion of the underground utility and geotechnical investigations.

Deliverables:

- ***Topographic Mapping in MicroStation 3D DGN format***
- ***Mobile LiDAR ABC Submittal***
- ***Utility Pothole Data in CSV format***
- ***Geotechnical Bore Hole data in CSV format***
- ***Field Notes in PDF format***
- ***ASCII Point Files***

Assumptions:

- *The survey data will be tied to the Caltrans District 8 provided North American Datum of 1983 (NAD83), California Coordinate System Zone 6 and the North American Vertical Datum of 1988 (NAVD88) for the Interstate 15 corridor.*
- *An encroachment permit will be required to perform the field surveys. The Client will provide a parent permit and/or the full permit to advance the field surveys.*
- *Access to private property, if required, will be provided to the survey team during normal business hours (7a to 4p, Monday through Friday)*
- *Deliverables will be in accordance with the Caltrans CAD and Survey standards.*
- *Two (2) mobilizations for geotechnical bore holes have been included.*
- *Two (2) mobilizations for utility potholes have been included.*
- *Two (2) mobilization for OH Sign and traffic signal locations have been included.*
- *The geotechnical boring field activities will occur under the original NEPA/CEQA clearance document and only a CE/CE checklist will be needed.*

2-4 Supplemental Design Standard Decision Documents

CONSULTANT will prepare a Supplemental Design Standard Decision Document (DSDD) for Boldface and Underlined Design Exceptions for non-standard design features that may have changed since PA&ED if required to complete final design. This effort will be completed after 95% design plans have been reviewed to allow for a draft and final submittal of the Supplemental DSDD, followed by approval/concurrence by the CITY and Caltrans.

Deliverables:

- ***Draft Supplemental DSDD***
- ***Final Supplemental DSDD***
- ***Signed Supplemental DSDD for Caltrans Approval***

2-5 Roadway Plans – 30% Task Removed

2-6 Construction Cost Estimate – 30% Task Removed

2-7 Utility Coordination

CONSULTANT will coordinate and work closely with CITY and local utility owners to include coordination with City, as well as public and private utility agencies to determine the need to protect-in-place, provide positive protection, or relocate impacted facilities, using Caltrans policy for high- and low-priority utilities. It is assumed the utility companies will perform relocation design for their own facilities. Detailed utility relocation plans will not be part of the PS&E package developed by CONSULTANT.

CONSULTANT will perform potholing of up to 30 locations for existing high-priority utilities that are within 50 feet of the proposed underground improvements or cross the planned interchange improvements. The team will prepare and distribute utility base maps to affected utilities for confirmation and determination of necessary relocations. CONSULTANT will provide existing utility plans with defined line styles or exhibits to agencies to support the identification, protection or relocations as appropriate. Utilities that reside in local streets (Central Avenue, Collier Avenue & Dexter Avenue) will be adjusted to grade and remain in place with traffic rated vault lids if within the widened street section. Updated fire hydrant and blow-off

locations/setbacks including area where Access Control Limits are being obtained as part of the R/W process will occur to accommodate street widening. Existing utilities in public R/W are expected to be granted utility exceptions by Caltrans since utility relocations are not necessary to develop or improve ramp connections for proposed and existing freeway ramps as part of this interchange improvement project and no new public or private utilities are being added in conjunction with the interchange improvement project.

Deliverables:

- **Utility base maps and plans**
- **Utility conflict matrix**

Assumptions:

- *Thirty (30) potholes are assumed to be required. Preparation of potholes include traffic control and survey of pothole locations.*
- *Longitudinal Exceptions are expected to be retained at local street, ramp and mainline interfaces with the approval of the project plans included in this scope of work. It is anticipated existing utilities will remain in place as they exist in public City, State, and County of Riverside Roadway R/W to serve surrounding properties and the community.*

2-8 Draft Geotechnical Reports

2-8.1 Draft & Final Preliminary Foundation Reports

CONSULTANT will prepare a Preliminary Foundation Report (PFR) to provide preliminary geotechnical information to assist structural designers with wall design needs . This PFR will be prepared using the available subsurface data and the format will be in accordance with the current Caltrans Guidelines.

2-8.2 Geotechnical Investigation

CONSULTANT will perform a Geotechnical Investigation. Caltrans is enforcing the AASHTO recommendations of a soil boring along each proposed wall location; minimum of 2 borings are required per wall locations. For two ramp retaining walls and one noise barrier wall, a soil boring is required approximately 100 to 200 feet along the planned wall alignment. In addition, borings are considered for overhead signage, roadway improvements and infiltration basins. CONSULTANTS geotechnical field investigations plan is presented in Table 1.

Table 1. Proposed Soil Boring Information

Design Element	Proposed Number of Borings	Approximate Proposed Depth (feet)
Arroyo Del Toro Channel (RCB Extension)/RW No. 6 and No.7	1	35
	2	50
RW No. 1	1	35
RW No. 2	1	35
RW No. 3 (Removed w/Site Grading)	1	40
RW No. 4	1	35

Design Element	Proposed Number of Borings	Approximate Proposed Depth (feet)
RW No. 5	4	35
SW No. 1	1	35
Overhead Sign Structures	9	35
Infiltration	9	5
Roadway Improvements	9	10

CONSULTANT will prepare a boring location plan and this plan will be used to secure encroachment permits from Caltrans and City of Lake Elsinore. CONSULTANT will conduct subsurface investigation and evaluate the results in accordance with Caltrans testing criteria.

Deliverables:

- ***Draft and Final Preliminary Foundation Report (PFR)***
- ***Geotechnical Exploration Plan***

Assumptions:

- *Caltrans Standard Traffic Control Plans will be used during field exploration. Preparation of separate traffic control plans will not be required.*

2-9 Draft Hazardous Material Reports (ISA Addendum)

Initial Site Assessment (ISA) Review & Addendum

CONSULTANT will review ISA which will serve to evaluate current environmental conditions (i.e., hazardous materials and petroleum products) within the project footprint with respect to the approved project ISA in PA&ED and support environmental revalidation, as necessary.

Deliverable:

- ***ISA Review and Recommendation Addendum (see Task 3-9 for additional services)***

Assumptions:

- *No Traffic Control Plans will be used during field observations that will be accomplished from the public R/W outside the State R/W.*

2-10 Retaining Wall Type Selection, Meeting and Approval

CONSULTANT will prepare a Wall Type Selection document for retaining walls. CONSULTANT will also develop an order-of-magnitude construction cost estimate. Anticipated construction methods will be identified in the Wall Type Selection process and coordinated with the project geometry and adjacent property constraints.

CONSULTANT will submit a Wall Type Selection recommendation for review and approval to memorialize the wall types to be designed. CONSULTANT will also host a Wall Type Selection review meeting virtually with Caltrans staff to finalize wall structure type, anticipated foundations, seismic design, aesthetics on ramp adjacent walls, and define the adjacent business site and utility constraints.

Deliverable:

- ***Wall Type Selection Memo***

Assumptions:

- *No Bridge Structure improvements will occur for the I-15 / SR-74 (Central Avenue) Undercrossing (UC) Bridge or existing tie-back wall system.*
- *The extension of the Arroyo Del Torro Channel Reinforced Box Culvert (RCB) will not require a Type Selection Report and will be extended in kind consistent with the existing RCB configuration to accommodate widening on Dexter Avenue.*

2-11 Land Net Mapping

CONSULTANT will perform Land Net Surveys and Mapping: Cadastral research will be performed within Caltrans District 8, the County of Riverside, and other applicable entities for existing centerline and right-of-way files and/or available cadastral records in support of the centerline and right-of-way of Interstate 15, State Route 74 (Central Avenue & Collier Avenue), Dexter Avenue, Cambern Avenue, and other adjacent driveways, shopping center access points, and intersecting rights-of-way within the project limits.

CONSULTANT will request from Caltrans District 8 Surveys, available centerline and/or alignment files that have previously been developed and approved. Field surveys will be performed to locate centerline and right of monuments to confirm centerline and/or alignments received from Caltrans, calculate other centerlines, and calculate the rights-of-way affected by the proposed project.

The land net map will include centerlines, rights-of-way of the adjacent streets, and lots and easements taken from the tract and parcel map information and preliminary title reports, as well as underlying cadastral and ownership information as recorded with the Riverside County assessor's offices.

CONSULTANT shall prepare a Land Net Map to include the street centerlines and rights of way, existing Caltrans right of way, proposed Caltrans and street rights of way, full and partial fee takes and proposed temporary construction easements within the project area. The map will also include found monuments and record cadastral information used to establish property boundaries and related monumentation pertinent information necessary to prepare final acquisition documents.

CONSULTANT shall prepare a Pre-Conditions Record of Survey. A **record of survey** will be prepared to document boundary establishment, the monuments found, monuments within the construction influence that may be damaged or destroyed during construction, the cadastral and title information obtained, and the areas of proposed acquisition. The record of survey will be prepared in accordance with the Professional Land Surveyors Act and County of Riverside requirements.

Deliverables:

- ***Land Net Mapping in Microstation 3D dgn format***
- ***Field Notes in PDF format***
- ***ASCII Point Files***

Assumptions:

- *Both permanent acquisitions, permanent easements and temporary construction easements are anticipated to be required.*
- *Twenty (20) private parcels and five (5) public agency parcels were anticipated and is the basis for the right of way engineering activities herein.*

- *A record of survey supporting the right of way acquisition will be required in accordance with the California Professional Land Surveyors' Act Section 8762. This record of survey will be prepared and filed with the Riverside County Surveyor's Office.*

2-12 CE/CE (Geotechnical and Hazardous Material Field Sampling & Potholing)

CONSULTANT will prepare a NEPA Categorical Exclusion and CEQA Categorical Exemption (CE/CE) for required field testing efforts to include various test hole for geotechnical borings, ground water monitoring well, infiltration testing, hazardous material sampling, and potholing for positive location / avoidance of underground / overhead/ surface utilities, if required. The Air Quality Conformity Checklist will be included with the CE/CE.

Deliverables:

- *CEQA Notice of Exemption (NOE) Form*
- *California Department of Transportation (Caltrans) CEQA CE/NEPA CE Determination Form*
- *Caltrans CE Checklist*
- *Air Quality Conformity Checklist*
- *Environmental Commitments Record or equivalent*

Assumptions:

- *No change to project location/vicinity figures in the adopted Final Environmental Document. Potential areas of disturbance will be provided, including depths and ingress and egress routes.*
- *No additional surveys, technical studies, analysis, regulatory agency or tribal government consultation or coordination will be required. The adopted Final Environmental Document and supporting technical studies will be used to prepare the CE/CE.*
- *CONSULTANT will attend up to two virtual meetings with the City and/or Caltrans.*
- *Deliverables will be submitted electronically via email or file sharing. No hard copies will be prepared.*
- *CITY and/or Caltrans will file the NOE Form with the County and State Clearinghouse if necessary.*
- *Caltrans Forms are assumed to be Section 508 or PAC3 compliant.*

TASK 3 – 60% PS&E

3-1 Roadway Plans

CONSULTANT will develop the 60% submittal as the first submittal package of design plans. CONSULTANT will also develop a 60% construction cost estimate.

Deliverables:

- *60% Roadway Plans (1 T Sht / 1 KM Sht / 5 TS Shts / 12 L,U,PD Shts / 10 PS Shts / 24 CD Shts / 8 Q Shts)*
- *Draft Drainage Plans (12 D Shts / 12 DP Shts / 20 DD Shts / 24 DQ Shts)*
- *Draft Stage Construction Plans (36 SC & 18 SCQ Shts)*
- *Draft Sign Plans (12 S Shts / 12 SD & 12 SQ Sht)*
- *Draft Retaining Wall Plans (27 RW Shts)*

- **Draft Sound Wall Plans (6 SW Shts)**

3-1.1 Lighting, Ramp Metering, Signals, and Communication Systems Plans

CONSULTANT will collect record drawings for electrical systems from Caltrans, City of Lake Elsinore, and Riverside County, including Traffic Signals, Street Lighting, Highway Lighting, Traffic Signal Interconnections, Ramp Metering, and Caltrans Fiber Optic Communications. CONSULTANT will perform a field visit to confirm (where possible) the data described in the record drawings and collect information that will be needed to perform the design.

CONSULTANT will prepare 60% plans, quantity sheets and project specific details for Highway lighting, ramp metering, traffic signals, communication systems, the identification of the existing traffic monitoring system located within State Highway right of way north of Wasson Wash which is unimpacted by the Project, in compliance with Caltrans and City standards.

Deliverables:

- **60% Lighting Plans and Details (12 sheets; 5 for City Roadway Lighting, 7 for Caltrans Highway Lighting.)**
 - *Assume up to 15 temporary lighting plans for ramp lighting*
- **60% Ramp Metering Plans and Details (two sheets per on-ramp, total of 4 sheets)**
- **60% Traffic Signal Plans and Details (3 new signals, 5 signal modifications, 16 sheets)**
 - *Temporary Traffic Signal Plans (Up to 10 sheets for the five existing signals to be modified)*
- **60% Traffic Monitoring System (Mainline Loops for Ramps Meters) (7 sheets)**
- **Preserve or Modify CCTV and F/O Communication System (7 sheets)**
- **City Traffic Signal Coordination Plan with a Timing Model and identification of required equipment for contractor installation.**
- **City Traffic Signal Interconnect (3 sheets)**

Assumptions:

- *It is assumed no Changeable Message Sign (CMS) or Traffic Monitoring System (TMS) features exist for the project, but CONSULTANT will coordinate with Caltrans to confirm that ramp meter and electrical designs will not preclude future I-15 traffic monitoring features within the project limits, if/where applicable.*
- *Temporary electrical design is anticipated for the existing traffic signals and ramp lighting. Additional sheets based on construction phasing and/or temporary electrical or communications, if needed, can be included for an additional fee.*
- *No Existing Electrical Services (Irrigation) System – see Planting & Irrigation
No Parking Lot Lighting/Electrical – removals noted and property owner is responsible for replacement lighting and/or other electrical private improvements through Just Compensation of R/W.*

3-1.2 Planting and Irrigation Plans

CONSULTANT will prepare Planting and Irrigation Plans per Caltrans Plans Preparation Manual and the latest Construction Contract Standards.

Conceptual Landscape Plan

CONSULTANT will develop a conceptual landscape plan for areas in the State R/W between ramps and the freeway as well as newly developed entry and exit ramp points on local roads. Landscaping and irrigation on private properties will be accomplished by individual owners with just compensation for any private replacement planting, irrigation, or other hardscape improvements by others through R/W Cost Negotiations. This plan will designate the location of proposed “low maintenance” trees, shrub areas, ground cover and inert materials (such as wood mulch, rock blanket, crushed rock, etc.). A proposed plant palette will also be provided for review and approval by the City and Caltrans. Preliminary points of connection for permanent irrigation and controller locations will be shown. Upon approval of this plan, CONSULTANT will move forward with final planting and irrigation plans. The final conceptual plan will be prepared in color with images of the proposed plant materials. This task includes one set of revisions to the conceptual plan to obtain approval prior to moving forward with the final design plans for landscaping and irrigation for use in the State R/W.

Planting Plans

Planting plans will provide an integrated palette of material in accordance with City / County landscape guidelines, Caltrans and FHWA guidelines, in addition to a seamless palette as that within the City.

Irrigation Plans

The Irrigation plans for State R/W will indicate new points of connection based upon Caltrans / City / Local water department / district requirements, backflow prevention, pressure regulation (as necessary), and equipment size and type in the irrigation legend. This task includes one site visit with Agency maintenance representatives to determine the placement and preferred type of proposed equipment. CONSULTANT anticipates providing the following information in accordance with the State Water Ordinance (MWELO) and / or the City of Lake Elsinore adopted ordinance:

- Prepare water usage calculations (MAWA and ETWU) based on the water ordinance.
- Provide water efficient landscape worksheet and hydrozone table for each remote control valve per ordinance (water use category, area served in s.f., controller number, valve size and flow).
- Obtain horticultural soils report (Agronomic data) based on soil samples obtained from site by CONSULTANT. Report to be provided by Soil and Plant Laboratory in Orange, CA. or equal.
- Provide irrigation run time schedule per ordinance based on soil type.
- Rain and wind sensors will be added per ordinance.
- Statement note will be added regarding ordinance.
- Add WUCOLS water use classifications for plant material.
- WELCP – Water Efficient Landscape Calculation Plan (per Caltrans)

If it is determined that the cost for highway planting and irrigation will exceed \$200,000, a separate highway planting contract for construction will be required. The contract documents will include necessary items for a standalone PS&E for CITY to bid the highway planting as a separate contract.

Deliverables:

- ***60% Highway Planting and Irrigation Plans, Details, Plant List, and Quantity Sheets***
- ***90% Highway Planting and Irrigation Plans, Details, Plant List, and Quantity Sheets***
- ***100% Highway Planting and Irrigation Plans, Details, Plant List, and Quantity Sheets***

Assumptions

- *If irrigation lines are not installed along an entrance/exit ramp, irrigation cross-overs will be placed at each new ramp terminal and at existing ramp terminals only if full depth pavement structural sections are constructed to accommodate future irrigation system installations.*
- *Landscape, Irrigation and other Hardscape improvements will be the property owner responsibility for replacement through Just Compensation of R/W*

3-1.3 Water Pollution Control Plans

CONSULTANT will prepare Water Pollution Control Plans per Caltrans Plans Preparation Manual and the latest Construction Contract Standards. Consultant will coordinate with the city for acceptable erosion control measures within city right-of-way or disturbed frontage along undeveloped and un-landscaped parcels.

Deliverables:

- ***60% Water Pollution Control Plans and Quantity sheet (10 TWPC sheets, 1 TWPCQ sheet)***
- ***90% Water Pollution Control Plans and Quantity sheet (10 TWPC sheets, 1 TWPCQ sheet)***
- ***100% Water Pollution Control Plans and Quantity sheet (10 TWPC sheets, 1 TWPCQ sheet)***

3-2 Draft Drainage Report

CONSULTANT will prepare an updated Drainage Report for drainage improvements needed to accommodate I-15/SR-74 (Central Avenue) Interchange Project. The drainage improvements within Caltrans right-of-way will be designed in accordance with current Caltrans procedures and design guidelines. The drainage improvements within City right-of-way will be prepared in accordance with Riverside County Flood Control and Water Conservation District design guidelines. The updated Drainage Report will evaluate existing drainage systems within the project limits and will be used to support the drainage improvement plans. Hydrology maps, hydrology and hydraulic calculations for the proposed drainage systems will be included as an appendix in the Drainage Report.

Deliverable:

- ***Draft Drainage Report***

Assumptions

- *Detention basins and storage features will not be expanded beyond the size needed to address water quality. The effectiveness of the multi-barrel cross culvert system serving the Arroyo Del Toro will be evaluated based on the modifications proposed as part of the*

project however improvements to this regional drainage system, if found to be deficient are not included in this scope of work. Existing basins volumes and channel conveyance will be maintained consistent with the treatment and flow of stormwater for the water quality event based on current site conditions and Caltrans Guidance.

- *Offsite flow volumes conveyed into Caltrans Right of Way will be provided by others if needed. No offsite hydrology will be performed and the net fill in the Arroyo Del Toro floodplain is zero as documented in the approved PA&ED Location Hydraulics Study for the project.*
- *Culvert crossings I-15 and local roads, RCB westerly extension at Arroyo Del Toro Channel, and other drainage features will be able to utilize standard plans and existing details (no structural analysis or design is required beyond a reinforcement connection details for the RCB extension).*
- *Preparation of a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) to document a revision to the floodplain boundaries is not expected or included.*
- *Temporary Drainage Plans for construction phasing are not expected or included.*
- *Preparation of a Storm Water Pollution Prevention Plan (SWPPP) is not included.*
- *No Edge Drain work is included in the scope of work.*

3-3 Draft Storm Water Data Report

CONSULTANT will prepare an updated Storm Water Data Report in accordance with the current Caltrans Project Planning and Design Guide (PPDG). The SWDR will identify specific measure that can be taken to handle stormwater flows within Caltrans and city Right of Way.

Deliverable:

- ***Draft Storm Water Data Report***

3-4 Structures Aesthetic Concepts

CONSULTANT will prepare aesthetic treatment concept plans for two ramp retaining walls and one noise barrier to construction of cement masonry units (define block color / tan split face texture / colored of textured or smooth ribbon other than split face and three fluted top courses). CONSULTANT will prepare two conceptual sketches for each of the structure aesthetic elements, which may include the following: soundwalls or barrier recess (inset) enhancements. Proposed aesthetics will blend with the City's existing features such as branding and transportation art and will represent the City's Community identity.

Deliverables:

- ***Two (2) aesthetic concept sketches for the two ramp adjacent retaining walls and one noise barrier along the NB Hook Entrance Ramp***

3-5 Utility Plans, Potholes and Coordination

CONSULTANT will identify utilities in the project area and obtain as-built plans or inventory maps from the utility owners for their existing facilities. This will involve preparing and mailing preliminary and follow-up letters requesting current information on owners with existing facilities within the project limits. This information, along with performing site verifications and

working with design, will be used to identify locations and initial dispositions of utilities. Below is a list of utility owners identified being within the project area that notices will be sent to:

- City of Lake Elsinore
- Eastern Municipal Water District - (surface feature impacts – hydrants / blow-offs)
- Elsinore Valley Municipal Water District
- Frontier Communications
- Charter Communications
- Crown Castle Communications
- Southern California Edison – Distribution & Transmission - (OH span revision & Transformer)
- Southern California Gas – Distribution
- Spectrum

3-6 Retaining Wall Plans

CONSULTANT will prepare retaining wall layout plans, profiles and structural details, if necessary, for the six walls specified in the project (wall number 3 removed with site grading).

CONSULTANT will prepare draft technical special provisions for the six retaining walls and one soundwall (replacement sound wall).

Deliverables:

- ***Retaining Wall Plans, Details, and Quantities***
- ***Wall aesthetic treatment detail from Landscape Architect City preferred sketch***

Assumptions:

- *Retaining Wall (RW 1; max. H = 4 feet) Approximately 250 feet long Caltrans Type 6*
- *Retaining Wall (RW 2; max. H = 4 feet) Approximately 200 feet long Caltrans Type 6*
- ~~*Retaining Wall (RW 3; max. H = 4 feet) Approximately 150 feet long Caltrans Type 6*~~
- *Retaining Wall (RW 4; max. H = 8 feet) Approximately 130 feet long Caltrans Type 5*
- *Retaining Wall (RW 5; max. H = 10 feet); Approximately 910 feet long Caltrans Type 1*
- *Retaining Wall (RW 6; max. H = 12 feet); Approximately 500 feet long Caltrans Type 1*
- *Retaining Wall (RW 7; max. H = 12 feet); Approximately 185 feet long Caltrans Type 1*

- ***Sound Wall (SW N1202B); Approximately 720 feet long Caltrans Standard (24 ft H max) – Roadway Plan Sheet since this is a standard plan noise barrier along NB Hook On-Ramp to replace noise barrier on berm being removed by this project.***

3-7 Transportation Management Plan

CONSULTANT will work with Caltrans District 8 to prepare a TMP that includes elements for traffic handling during construction. The TMP will be coordinated with the City, Caltrans, and other stakeholders. The TMP will include Stage Construction and Detour Plans.

Deliverables:

- ***Transportation Management Plan***
- ***Stage construction and traffic handling***
- ***Detour layouts***

- **Construction area signs**

3-8 Draft Geotechnical Reports

Results obtained from the field investigation and laboratory testing will be used to characterize subsurface soils and conditions and create idealized soil profiles for design purpose. The following analyses will be performed for the project:

- Evaluation of seismicity and estimation of Peak Ground Acceleration based on the Caltrans design criteria, and recommendations of an ARS curve for the bridge structural design.
- Assessment of soil liquefaction potential, seismic settlement, and lateral spreading.
- Foundation analysis for bridge, retaining walls, and overhead signs.
- Assessment of global slope stability and settlement of embankments.
- Evaluation of soil corrosivity conditions and recommendations for mitigation measures.
- Design of pavement structural section in accordance with the Caltrans method.

CONSULTANT will prepare the reports listed in Table 2 for the 60% PS&E submittal.

Table 2. Design Reports

Design Element	Review Agency	Deliverables
Non-standard Retaining Walls	Caltrans	Foundation Report (FR)
Arroyo Del Toro Channel (RCB Extension), Standard Retaining Walls, Sound Wall, Overhead Signs, Roadway Cuts/Embankments, and Infiltration Test Results	Caltrans	Geotechnical Design Report (GDR)
Pavement Structural Sections	Caltrans	Materials Report (MR)

Deliverables:

- **Draft Geotechnical Design Report**
- **Draft Materials Report**
- **Draft Preliminary Foundation Report and Foundation Report**

3-9 Hazardous Materials Reports

3-9.1 Initial Site Assessment Update

Initial Site Assessment (ISA) Addendum

CONSULTANT will prepare the ISA Addendum which will serve to evaluate current environmental conditions (i.e., hazardous materials and petroleum products) within the project footprint with respect to the approved project ISA in PA&ED and support environmental revalidation, as necessary.

CONSULTANT will conduct a review of environmental databases, historical records, and previous project reports related to the Interstate 15/State Route 74 (I-15/SR-74) Interchange Improvement Project (Project).

CONSULTANT will also conduct a site reconnaissance visit to observe existing conditions. This site reconnaissance will include an inspection of utility pole-mounted transformers and ground-based units near NB entrance ramp terminal that will be relocated or removed as part of the project must be evaluated. Identified leaking transformers or stained soil will be considered a potential PCB hazard, and the underlying soil must be sampled due to transformers having historically contained polychlorinated biphenyls (PCBs).

Research methodologies will be based on those described in ASTM E1527-21 Standard Practice for Phase I Environmental Site Assessments. This review will constitute a fully ASTM-conforming ISA as Caltrans intends to acquire various parcels, either partially or fully, within the Project footprint.

CONSULTANT will prepare the ISA Addendum Report that describes the methodology, summarizes the findings of the study, and lists current environmental conditions that are determined to be potentially significant or may pose a hazardous waste risk to the proposed project.

Deliverables:

- ***ISA Addendum Report***

Assumptions:

- *Site reconnaissance will be conducted in a single day from public rights-of-way and other publicly accessible areas.*
- *No Caltrans encroachment permit or site access agreements will be required.*
- *A hazardous materials survey for lead-based paint or asbestos containing materials is not included in this addendum report.*

3-9.2 ACM/LBP Survey

Asbestos-containing materials (ACM), lead-based paint (LBP), and other hazardous materials may be present on roadside features where the modified interchange is planned. Because the structures will not be modified or removed, an ACM, LBP, and Universal Waste Rule materials investigation is not required to be performed. However, this will be identified as an **optional task** until expectations are finalized in the ISA Addendum. A lead and electrical waste specification and contractor lead and electrical waste compliance plan should be adequate for the Project for other basic items expected as part of the interchange reconstruction package.

If the ACM & LBP sampling and material testing task is deemed necessary following the draft ISA Addendum, CONSULTANT will initiate the **optional task identified herein** utilizing our California Division of Occupational Safety and Health Administration (Cal-OSHA) Certified Asbestos Consultant (CAC) or Certified Site Surveillance Technician (CSST) to update the Initial Site Assessment conducted in PA&ED coupled with site reconnaissance to identify the locations of potential ACMs and our California Department of Public Health (CDPH) certified inspector/assessor to conduct supplemental site reconnaissance to identify the locations of potential LBP and collect samples. CONSULTANT will prepare an ACM, LBP, and Universal Waste Rule investigation report summarizing our findings.

Deliverables:

- **ACM, LBP, and Universal Waste Rule Investigation Report, if found necessary following the completion of the ISA Addendum report**

Assumptions:

- *Access and rights of entry to properties will be provided by the City.*
- *Drawings of structures for removal will be provided to HDR, and a meeting with the building engineer (as available) will be conducted prior to the site reconnaissance.*
- *A Hazardous Materials Inspection is a survey of existing conditions and will be conducted first, with no sampling. Field sampling and analysis will be recommended based upon the observations of the structures in the field.*
- *The site reconnaissance will be performed during work hours and areas will be accessible to HDR staff.*
- *The hazardous materials sampling is dependent on conditions at the building, and additional costs will be disclosed prior to the start of the sampling task (following the hazardous materials inspection) and the number of samples will be verified by the CAC/CLIA.*
- *Laboratory analysis will be conducted using standard turnaround times.*

3-9.3 Preliminary Site Investigation

CONSULTANT will provide as-needed assistance to CITY for coordination of field work and site access including boring location plans, insurance certificates, etc. CONSULTANT will mark exploration boring locations and notify Underground Service Alert (USA) to identify public utilities in the planned area.

Prior to start of the project, CONSULTANT will prepare comprehensive project-wide work plan including a health and safety plan (HASP) for the Project. The work plan will provide details and guidelines related to the Preliminary Site Investigation and will be submitted to and approved by the CITY and Caltrans prior to start of the field work.

CONSULTANT conduct sampling and analysis of environmental media – soil and groundwater – that may be affected by earthwork and grading activities associated with the proposed design. The purpose of the work will be to confirm the presence of suspected contamination as detailed in the Hazardous Waste Review Report, inform the development of earthwork and grading specifications and plans, and assist with estimating the cost of waste disposal. CONSULTANT will not test unpaved areas of the project footprint for aerially deposited lead (ADL) contamination, as this was completed in PA&ED for the Project.

CONSULTANT will collect samples of soil and groundwater to be analyzed by an environmental laboratory certified by the National Environmental Laboratory Accreditation Program. The locations and depths of sampling will be determined by the findings of the ISA Addendum Report, coupled with information related to the design of Alternative 3. The analytical requirements for the samples will be aligned with the contaminants of concern identified in the ISA Addendum Report. A Preliminary Site Investigation Report will be prepared that describes the methodology, summarizes the findings, and discusses the nature of wastes expected to be encountered in the subsurface during project construction.

CONSULTANT will not test unpaved areas of the project footprint for aerially deposited lead (ADL) contamination as this was completed in PA&ED for the Project. It is assumed no borings will be required by Caltrans for impacted areas along the I-15 mainline, the existing ramps, and public ROW since sampling was already conducted in PA&ED. CONSULTANT will review the approved ADL report summarizing the findings of the field investigation. The review of the approved ADL Report will be used to observe where soil was classified for re-use or disposal in accordance with hazardous waste criteria and Caltrans soil classifications.

The scope and cost of a sampling and analysis plan is inherently difficult to determine prior to the completion of the initial desktop study. However, the assumptions below are being included here for the purposes of an estimate, and they are subject to significant changes after the completion of the ISA Addendum Report.

Deliverables:

- ***Preliminary Site Investigation Work Plan***
- ***Site-Specific Safety, Health, and Environmental Plan (HASP)***
- ***Preliminary Site Investigation Report (Phase II Environmental Site Assessment)***

Assumptions:

- *A site-specific Health and Safety Plan will be prepared for the investigation*
- *CONSULTANT will attempt to place boring locations at parcels being impacted by this Project.*
 1. *Those parcels are assumed to be the 22 parcels listed under Alternative 3 in Table 4-18 of the Community Impact Assessment.*
 2. *Full and partial acquisitions will be investigated, with limited sampling depths for curb, gutter, driveway, and sidewalk replacement along existing public right-of-way.*
 3. *Temporary construction easements will be excluded.*
- *Up to 52 borings may be advanced.*
- *The maximum depth of borings will be 10 to 25 feet below ground surface*
- *Soil samples will be collected at 5-foot intervals, and groundwater is not expected to be encountered*
- *The borings will be advanced with a direct push Geoprobe rig operated by a C-57 licensed driller*
- *Work hours are assumed to be 7AM to 5PM, Monday through Friday.*
- *Up to 3 days of geophysical utility clearance of boring locations*
- *Up to 12 days of drilling and sampling at prevailing wage rates*
- *It is assumed that the City will provide required encroachment permits for City ROW without fees. Soil samples will be analyzed for hydrocarbons, VOCs, and metals. Additional analysis will be determined based on the findings of the ISA Addendum*
- *Laboratory analysis will be conducted using standard turnaround times.*
- *If significant additional sampling depth intervals or locations are required, additional laboratory costs may be incurred that are not included.*
- *Striping will be managed using Caltrans Standard Special Provisions and does not require sampling.*

3-10 Environmental Re-Validation

Approach Memorandum

CONSULTANT will prepare an Approach Memorandum outlining each resource area addressed in the Project's approved Final Environmental Document and the work that will be performed related to that resource area based on the finalized project layout, or conversely the reason why no additional effort would be required. No detailed discussion or analyses are assumed to be included in this document. This Memorandum will be used to obtain concurrence from the Caltrans on the analyses to be performed during the Project's PS&E phase.

Deliverable:

- *Draft and Final Approach Memorandum*

Assumptions:

- *CITY and Caltrans will contemporaneously review deliverables.*
- *Potential areas of disturbance will be provided, including depths and ingress and egress routes.*
- *No additional surveys, technical studies, analysis, or consultation will be required; adopted Final Environmental Document and supporting technical studies can be used to prepare the Approach Memorandum.*
- *CONSULTANT will attend up to two virtual meetings with the City and/or Caltrans.*
- *Deliverables will be submitted electronically via email or file sharing. No hard copies will be prepared.*
- *Deliverable will not need to be Section 508 or PAC3 compliant.*

Biological Resources

CONSULTANT will conduct an updated literature search, perform a field review, and prepare a biological resources assessment and impact analysis for inclusion within the Environmental Re-Validation.

A literature review will be conducted to identify new special-status species known or reported from the project area, and/or new species that is listed on the updated species lists. The literature review will include:

- Updated special status species list from the U.S. Fish and Wildlife Service (USFWS).
- Database searches of current versions of the California Natural Diversity Database (CNDDDB) and the Online Inventory of Rare and Endangered Plants of the California Native Plant Society (CNPS).
- Existing documentation of biological resources within the study area including past Natural Environment Studies for the project; and
- The Western Riverside County Multi Species Habitat Conservation Plan (MSHCP). DBESP has been submitted. Joint Project Review still needed.

The project area will be evaluated with a field reconnaissance survey covering the revised design portions of the project layout, relevant to potential biological resources. The revised

design area and buffer will be evaluated regarding the presence, absence, or likelihood of occurrence of special-status species, habitats, or sensitive biological resources for which impacts may change as a result of the updated design. Results of the literature review and field reconnaissance will be summarized in the Environmental Re-Validation.

Assumptions:

- *No additional special status surveys will be required, except preconstruction surveys.*
- *Western Riverside County Multiple Species Habitat Conservation Plan analysis, documentation, coordination, or compliance related activities have been completed with the exception of Joint Project Review*
- *Biological technical analysis included in the Environmental Re-Validation (no separate document or submittals related to biological documentation are assumed or included)*

Jurisdictional Resources

A field verification of the previous jurisdictional delineation will be conducted to confirm the location, extent and type of jurisdiction resources within the project study area and to confirm conformance with current resource agency standard delineation methods. During the field visit, where needed, CONSULTANT will capture updated resource data, utilizing routine on-site methods. For the verification, CONSULTANT will confirm that procedures and practices utilized are consistent with the following publications and agency guidance documents: United States Army Corps of Engineers (USACE) Wetland Delineation Manual (1987); USACE Regional Supplement to the Wetland Delineation Manual, Arid West Region, Version 2.0 (2008); as well as other current guidance and standard practices from each agency.

Due to the potential for wetlands within the study area, CONSULTANT will mark the corner boundaries of each parcel within the study area the first day of fieldwork and will notify DigAlert to enable the utility operators to either mark their infrastructure onsite or confirm that no infrastructure is present (pursuant to State and federal health and safety laws). After completing the required DigAlert notification, CONSULTANT will perform needed subsurface sampling required to verify or update the wetland data forms.

The field survey results will be compiled and presented in a Jurisdictional Delineation Verification Memo that will confirm the findings of the previous jurisdictional delineation report and/or update the type and quantity of aquatic resources as they pertain to each agency.

Deliverables:

- *Draft and Final Jurisdictional Delineation Verification Memo*
- *MSHCP Joint Project Review submittal*

Environmental Re-Validation

CONSULTANT will prepare a single NEPA/CEQA Re-Validation Form based on the form that is available on the Caltrans Standard Environmental Reference (SER) at the time that the revalidation is initiated. The revalidation will address modifications to the Project that are included in the

Project Design since the adoption of the Final Environmental Document for the Project. The revalidation will document the following items:

- Changes in project design (e.g., substantial scope change; a new alternative; change in project alignment)
- Changes in environmental setting (e.g., new development affecting traffic or air quality)
- Changes in environmental circumstances (e.g., a new law or regulation; change in the status of a listed species)
- Changes to environmental impacts of the project (e.g., a new type of impact, or a change in the magnitude of an existing impact)
- Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.

CONSULTANT will include in the revalidation that the I-15/Railroad Canyon Interchange and Main Street Interchange has been constructed as well as potential changes to the Opening Year and/or Design Year. Based on the results of the above analyses a determination will be provided on the NEPA/CEQA Re-Validation Form regarding the validity of the existing CEQA and NEPA documents and findings.

Deliverables:

- *Administrative Draft and Draft NEPA/CEQA Re-Validation Form with Continuation Sheets*

Assumptions:

- *Upon Notice to Proceed, CITY will provide copies of environmental technical studies, report, documents, approvals, etc. prepared to date for the Project.*
- *CITY and Caltrans will perform contemporaneous reviews of deliverables.*
- *This scope and cost estimate are based on a fair and reasoned estimate of the effort required to advance the NEPA/CEQA Revalidation for the Project on behalf of the CITY. This scope and cost estimate is based on the project information in the draft Final Environmental Document and selection of Alternative 3 as the Preferred Alternative for the Project, and may need to be revised following approval of the Final Environmental Document.*
- *CONSULTANT will attend up to two virtual meetings with the CITY and/or Caltrans. In order to minimize costs, this scope and cost estimate does not include in-person meetings. Additional scope and budget will be required should in-person meetings be needed under this task.*
- *Deliverables will be submitted electronically via email or file sharing. No hard copies will be prepared.*
- *The findings and determinations in the draft Final Environmental Document will remain valid. No further environmental documentation (e.g., subsequent or supplemental environmental document) will be prepared. Minor changes or new information will be captured on the NEPA/CEQA Re-Validation Form Continuation Sheets.*
- *Additional scope and budget may be required if the limits of the project or scope of the*

- project change substantially, or if currently unknown circumstances arise in a manner affecting the technical studies or draft Final Environmental Document that was prepared during PA&ED.*
- *The Project's purpose and need as stated in the draft Final Environmental Document will not be revisited or revised.*
 - *The Project's mitigation as stated in the draft Final Environmental Document will not be revisited or revised. No new mitigation or elimination or reduction of current mitigation commitments will be identified or required.*
 - *Circulation, recirculation, or public availability of the Draft or Final Environmental Document or supporting technical study will not be required.*
 - *No areas containing sensitive environmental resources will be affected or impacted.*
 - *No new laws or regulations will need to be addressed since preparation of the draft Final Environmental Document.*
 - *Modifications/improvements will be located within the limits of disturbance (LOD) (and Area of Potential Effect [APE]) as identified in the draft Final Environmental Document and approved Historic Property Survey Report. No work will be conducted outside the Project's APE, which will not need to be modified during PS&E. No archaeological or historical resource surveys, identification, or technical documentation will be required.*
 - *No Native American tribal consultation or coordination will be required.*
 - *The Traffic Re-Validation will conclude that the traffic included for the Opening Year and Design Year in the adopted Final Environmental Document remain valid. No vehicles miles travelled (VMT) or Senate Bill 743 analysis or documentation will be required for the Project during PS&E.*
 - *Noise modeling is not included. The Project's Noise Study Report(NSR)/Noise Abatement Decision Report (NADR) will not need to be updated or revised. No changes to these reports will be required because Alternative 3 is consistent with the I-15 ELPSE NSR and NADR.*
 - *Air quality and greenhouse gas modeling is not included. The Project's Air Quality Report will not need to be updated or revised. Air quality will be qualitatively discussed in the Environmental Re-Validation. No separate deliverable related to air quality will be prepared. The Project's air quality conformity determination will not need to be updated or revised. CITY will update the opening year/design year in the RTP/SCS if required.*
 - *No analysis related to phasing will be required.*
 - *Focused or protocol surveys are not anticipated or included. If focused surveys are identified, then this will be communicated immediately and a scope and cost for this work will be provided prior to conducting this work.*
 - *It is assumed that rights of entry and access for field work shall be obtained and provided by CITY, if required.*
 - *Deliverables will not need to be Section 508 or PAC3 compliant.*

Traffic Study

Fehr & Peers will assist with revalidation of the traffic study. The previous study was completed using the LETAM model, which had a base year of 2008 and a future year of 2040. Additionally, traffic counts in the study area were collected in 2018 and are more than three years old.

Given the length of time that has passed since traffic counts were collected, we will collect new counts at some study intersections that were evaluated in the TOAR for the project. New forecasts will be developed using the RIVCOM model, which has is consistent with the 2020 SCAG RTP/SCS (LETAM was consistent with the 2008 RTP/SCS). Fehr & Peers will review the model land use assumptions to confirm that it currently proposed projects in the City and surrounding area.

The following intersections will be counted in the study area and included in the volume comparison analyses:

1. Central Avenue (SR-74) at Collier Avenue (SR-74)
2. Central Avenue (SR-74) at I-15 Southbound Ramps
3. Central Avenue (SR-74) at I-15 Northbound Ramps
4. Central Avenue (SR-74) at Dexter Avenue
5. Central Avenue (SR-74) at Central Plaza Shopping Center Driveway
6. Central Avenue (SR-74) at Lowe's Shopping Center Driveway
7. Central Avenue (SR-74) at Cambern Avenue
8. Crane Street at Dexter Avenue
9. 3rd Street at Dexter Avenue
10. Main Street at I-15 Northbound Ramps - Note this count will only be used to balance mainline volumes back to the Central Avenue (SR-74) interchange
11. Main Street at I-15 Southbound Ramps - Note this count will only be used to balance mainline volumes back to the Central Avenue (SR-74) interchange

Freeway mainline traffic counts will be obtained from the revalidation being completed for the Franklin Street interchange revalidation effort and, as noted above, the Main Street interchange traffic volumes will be utilized to balance mainline volumes from the Franklin Street overcrossing north to the SR-74 (Central Avenue) interchange.

We will document the results of our volumes comparison in a brief memorandum and work with the project team and Caltrans to identify that the traffic report will not need to be reopened and that the previous traffic volumes are still "valid". Caltrans typically utilizes a threshold of within 10% to identify consistency in the traffic volumes (either up or down). Please note, although the opening year and future year have been extended slightly, we have generally seen that regional growth forecasts have gone down compared to the 2008 RTP/SCS forecasts and we expect that volumes will be consistent with what was completed previously and that environmental will not need to be reopened.

In addition to the forecasting effort above, for project intersections where traffic volumes are projected to increase, Fehr & Peers will update the Synchro/SimTraffic assessment completed for the PA&ED effort to verify that the project will still meet operational performance needs (and no geometric modifications are required) and we will verify that queuing has not significantly changed

either. The abbreviated operations analysis report will be packaged as a supplemental TOAR and submitted to Caltrans for review and approval. Additionally, we will evaluate the freeway ramp merge/diverge/weave assessment at the interchange to verify it still operates consistent with the previous TOAR findings.

Deliverables:

- ***Volume Comparison Memorandum Comparing Existing Traffic Counts, Opening Year Volumes, and Design Year Volumes***
- ***Draft and Final Supplemental TOAR***

3-11 Environmental Permitting

Aquatic Resources Permitting

Aquatic Resource Impact Analysis

As part of the application preparation for the project, CONSULTANT will create an impact analysis summary that quantifies the proposed project impacts, using the GIS files generated from the jurisdictional delineation and the updated project design. The analysis will include the impacts categorized by permanent and temporary, by jurisdiction (USACE, Regional Water Quality Control Board [RWQCB] and California Department of Fish and Wildlife [CDFW]), and by resource type.

USACE Clean Water Act (CWA) 404 Nationwide Permit Authorization Request

It is assumed that the project will be processed under the U.S. Army Corps of Engineers Nationwide Permit (NWP) Program. A written request for authorization (a PCN) under the NWP Program will be prepared for review and submitted to the USACE. Should the project exceed the limits of a NWP, an Individual Permit may be required from the Corps, which is not included in this scope of work.

Deliverables:

- *Draft PCN documentation for client and then USACE review*
- *Final PCN documentation for client review and then USACE review and issuance of permit*

Assumptions

- *404, 401, 1602 will not require additional mitigation above what was outlined in DBESP*

RWQCB Water Quality Order Application

An application for a Water Quality Order will be prepared and submitted to the RWQCB for review. The project is expected to require an alternatives analysis and to qualify as a Tier 2 project. Tier 2 projects include projects that inherently cannot be located at an alternate location and require an analysis of on-site alternatives. The alternative analysis is assumed to consist of three alternatives: the proposed project, the no-project alternative and one additional on-site alternative.

Deliverables:

- *Draft Water Quality Order application including Cram Report*
- *Final Water Quality Order application and RWQCB issuance of permit*

CDFW Section 1602 Lake or Streambed Alteration Notification

CONSULTANT will prepare a Notification of Lake or Streambed Alteration for the project. The request will include a completed notification form; detailed project description; description of project impacts; CEQA documentation; and a brief description of the mitigation proposal.

A processing fee must be provided to CDFW with the notification; this fee is based on the cost of the project. CONSULTANT assumes that the client will provide the appropriate fee.

Deliverables:

- ***Draft and Final Notification of Streambed Alteration Agreement***
- ***Draft and Final Restoration Plan***

Compensatory Mitigation Strategy Plan

CONSULTANT will prepare a plan to summarize how the client intends to comply with compensatory mitigation requirements, including temporary impacts. CONSULTANT will work with the client to develop a mitigation strategy that will meet the project needs and that can be presented to the aquatic resource agencies for approval. CONSULTANT will evaluate the options regarding availability of appropriate mitigation, pricing, agency preference and efficiency of fulfilling the mitigation needs and provide recommendations to the project proponent and the associated agencies.

CONSULTANT to work with the client to identify agency approved mitigation banks or in-lieu fee programs to mitigate the permanent impacts on aquatic resources. The draft compensatory mitigation plan is required to include the following:

1. A watershed profile for the project evaluation area for both the proposed dredged or fill project and the proposed compensatory mitigation project.
2. An assessment of the overall condition of aquatic resources proposed to be impacted by the project and their likely stressors, using an assessment method approved by the permitting authority.
3. A description of how the project impacts and compensatory mitigation would not cause a net loss of the overall abundance, diversity, and condition of aquatic resources, based on the watershed profile.

CONSULTANT will prepare the draft compensatory mitigation plan, addressing the items above, and submit it as part of the RWQCB application. A draft compensatory mitigation plan is required as part of the application. To inform the approach and recommendations in the draft compensatory mitigation plan, a California Rapid Assessment Method (CRAM) of the aquatic resources proposed to be impacted assessing the condition of those resources will be performed.

Deliverables:

- *Draft and Final Compensatory Mitigation Strategy Plan*

Regulatory Agency Coordination

Regulatory agency (USACE, RWQCB, and CDFW) coordination will commence immediately upon receipt of Notice to Proceed and will continue throughout the permit processing period. The primary objective of initiating agency coordination at the start of the project is to explain the proposed project and project schedule, receive agency buy-in of the permit approach, and identify specific agency staff assigned to the project in advance of submitting permit applications. CONSULTANT has found that early coordination with the agencies and identification of assigned agency staff prior to submitting applications has led to quicker agency review of submitted materials and faster response times.

Assumptions:

- *Coordination with the State Historic Preservation Office or tribal representatives for Section 106 of the National Historic Preservation Act is not included. Any cultural resources effort would be considered out of scope.*
- *To address formal or informal consultation with the wildlife agencies will not be required to demonstrate compliance with federal Endangered Species Act (FESA) or California Endangered Species Act (CESA), a Joint Project Review application will be completed.*
- *The applicant (CITY) will pay application, mitigation, and/or permit fees directly.*
- *It is assumed that rights of entry and access for field work shall be obtained and provided by CITY, if required.*
- *No costs for compensatory mitigation and/or implementation of aquatic resource restoration or mitigation are included. Only the preparation of the Restoration Plan and Compensatory Mitigation Strategy Plan themselves are included.*
- *Lack of availability of adequate mitigation options for the project will not be the responsibility of the CONSULTANT.*
- *Mitigation options will be identified with a reasonable amount of effort. Mitigation for the Project, if required, will be identified, negotiated, secured, and purchased by CITY.*
- *No mitigation land siting, negotiation, or acquisition is included.*
- *Compliance or effort associated with the implementation of permit compliance requirements or measures are not included in this scope of work.*
- *The proposed project will not require a Section 408 authorization by the USACE.*
- *Permit fees will be paid directly by CITY. No fees are included in this scope of work or associated cost estimate.*

3-12 Right of Way Engineering

CONSULTANT will develop Right of Way documents for support in acquisition. Right-of-Way Engineering Services will be conducted per Caltrans latest Standards.

Cadastral and Title Research:

Once acquisitions are identified by the CONSULTANT, additional cadastral research will be performed, as needed. Preliminary title reports will be obtained to support the acquisitions. The information contained in the title reports will be plotted and included on the land net mapping. The title reports will be ordered per property owner following development of the Draft R/W Requirement Maps.

Pre-Conditions Record of Survey:

The land net prepared for the existing conditions of I-15 / SR-74 (Central Avenue) Interchange and other critical rights of way will be documented on a record of survey and filed with the Riverside County Surveyor's Office. This record of survey will be prepared to document this establishment, the monuments found, the cadastral and title information obtained, and the areas of proposed acquisition. The record of survey will be prepared in accordance with the Professional Land Surveyors Act and County of Riverside requirements.

Right of Way Appraisal Mapping:

CONSULTANT will prepare appraisal maps in support of the acquisition of full or partial takes, easements, and temporary construction easements in accordance with Caltrans District 8 right of way standards. These appraisal maps will include the affected parcels, right of way establishment, cadastral\title information, and proposed acquisition areas.

Legal Descriptions and Plats:

CONSULTANT will prepare legal descriptions and plats to support the acquisition of full or partial takes and easements. The Legal descriptions will be prepared in accordance with Caltrans District 8 right of way standards.

Parcel Files:

Throughout the course of the project and right of way engineering process, parcel files will be maintained by CONSULTANT to support the boundary research, boundary establishment, mapping and documents prepared for each affected parcel.

Deliverables:

- ***Updated Land Net Mapping in CAD format***
- ***Record of Survey in PDF format***
- ***Appraisal Mapping in CAD and PDF format***
- ***Legal Descriptions / Plats in PDF format***
- ***Title Reports in PDF format***
- ***Parcel Files***

Assumptions:

- ***14 legal descriptions and plats are included for various acquisition purposes.***
- ***14 title reports have been assumed.***

3-13 Special Provisions

CONSULTANT will prepare unedited Special Provisions per the latest Caltrans guidelines.

Deliverables:

- ***Draft Special Provisions***

3-14 Construction Cost Estimate

CONSULTANT will prepare a 60% construction cost estimate using Caltrans standard BEES Items List and using the latest Caltrans Contract Cost Data.

Deliverables:

- ***Draft Cost Estimate***

3-15 Draft Constructability Review

CONSULTANT will review the 60% PS&E package for contractor constructability and incorporate the requirements as needed.

3-16 Agreements (Freeway, Maintenance, Landscape, Electrical)

CONSULTANT will revise agreements and make updates to required exhibits/attachments in coordination with CITY and Caltrans for project acceptance.

Deliverables:

- ***Freeway Maintenance Agreement (Amendment by HDR)***
- ***Maintenance Agreement (Amendment by HDR)***
- ***Electrical Maintenance Agreement (Amendment by HDR and F&P)***
- ***Landscape Maintenance Agreement (New MBI and City no existing landscaping present in State R/W)***

TASK 4 – 90% PS&E

4-1 Roadway Plans

This submittal will include comments, reviews, coordination efforts, and updated information. CONSULTANT will update the Roadway Plans. Response and resolution of oversight review comments for each deliverable from the 60% submittal will take place prior to 90% submittal. Roadway quantities shall be independently checked, and issues raised by independent quantity checker(s) will be resolved prior to the submittal. Estimating 400 total sheets combining all disciplines from 60% submittal for inclusion in the 90% and 100% PS&E plan sets.

Deliverables:

- ***90% Roadway Plans***
- ***90% Traffic Electrical Plans per Task 3 (60% PS&E) (F&P)***
- ***90% Drainage Plans per Task 2.5 (MBI)***

4-2 Retaining Wall Plans

CONSULTANT will finalize the retaining wall plans based on comments received from Caltrans.

Deliverables:

- ***Final Updated Retaining Wall Plans and aesthetic details from preferred City treatment on ramp adjacent retaining walls of adequate height to provide treatments***

4-3 Finalize Reports

4-3.1 Finalize Drainage Report and SWDR

CONSULTANT will finalize the Drainage Report based on comments received from Caltrans.
CONSULTANT will finalize the SWDR based on comments received from Caltrans.

Deliverables:

- ***Final Drainage Report***
- ***Final SWDR***

4-3.2 Finalize TMP

CONSULTANT will finalize the TMP based on comments received from Caltrans.

Deliverables:

- ***Final TMP***
- ***Obtain Caltrans Generated Lane Closure Charts for inclusion in specifications package***
- ***Final Lane Closure Charts***

4-4 Utility Agreements and Coordination

CONSULTANT will act as the primary point of contact with the utility owners identified on the utility plans. CONSULTANT will prepare and send the Relocation Claim Letter to utility owner and coordinate and plan a meeting amongst the utility owners, as needed to discuss the project design, the utility conflict, relocation alternatives, and a plan to resolve the conflict.

CONSULTANT will determine the liability for the conflict facilities impacting the project and obtain detailed relocation plans from utility owners.

CONSULTANT will draft and issue Notice to Owner to relocate (estimate 6 notices) and draft and issue No Conflict to utility owner letters; as needed.

Deliverables:

- *Utility relocation notifications*

Assumptions:

- *Project will pay for as-built plans or special processing fees if required by the utility owner.*
- *Prepare the Introductory as-built request Notices (10 letters)*
- *Attended PDT or Focus Meetings (24 meetings)*
- *Prepare and send Relocation Claim Letter to utility Owners (6 letters)*
- *Determine liability for conflicts facilities impacting the project (6 conflicts)*
- *Draft and issue Notice to Owner to Relocate (6 letters for 6 conflicts)*
- *Draft and issue No Conflict Letters (4 letters)*
- *Design for new and relocated utilities will be performed by the respective utility owners.*
- *Inspection of utility relocation construction, including as necessary as-built survey will be done by others.*
- *Utility services meters are acquisition costs and not public utilities, and utility companies will replace the new service to their requirements and new connections will be required for the new signalized ramp terminal and two local street traffic signals constructed on Dexter Avenue and one new mid-block ½ signal on Central Avenue.*

- *Costs and negation efforts associated with the need for utility replacement easements or additional property rights for the utility owner are not included with in the utility coordination.*
- *Does not include fees associated with the actual relocation of the utility facilities and/or construction management/inspection.*

4-5 Update Environmental Re-Validation and Permitting

Update Re-Validation Form

CONSULTANT will address 2 rounds of review comments resulting from the Caltrans review of the Re-Validation Form and prepare Updated Re-Validation Form for the Project.

4.5-1 Environmental Commitment Record

CONSULTANT will update the Environmental Commitment Record (ECR) from the adopted Final Environmental Document, which would be attached to the Final Environmental Re-Validation Form. CONSULTANT will update project commitments to reflect changes noted in the Environmental Re-Validation and Final Agency Agreements (See Task 4-9).

It is expected that once CEQA mitigation measures are finalized, a close out memorandum may be requested, which CONSULTANT will prepare and submit to CITY and then to Caltrans for concurrence that CEQA mitigation measure has been completed.

Deliverables:

- *Draft Final and Final Re-Validation Form with Continuation Sheets*
- *Environmental Commitment Record*
- *Close out Memorandums for CEQA Mitigation Measures*

Assumptions:

- *Minimal project design changes between 60% Design and 90% Design.*
- *Minimal comments from Caltrans and CITY on the Draft Re-Validation Form.*
- *The findings and determinations in the draft Final Environmental Document will remain valid. No further environmental documentation (e.g., subsequent or supplemental environmental document) will be prepared.*
- *Deliverables will not need to be Section 508 or PAC3 compliant.*
- *Deliverables will be submitted electronically via email or file sharing.*

4-6 Right of Way Acquisitions

CONSULTANT will provide comprehensive right of way services, including, appraisal, appraisal review, acquisition and negotiations, escrow coordination, condemnation support and right-of-way certification. CONSULTANT will meet with relevant parties regarding proposed Project to identify acquisition issues, and/or to discuss project status, procedural issues, budget, and schedules.

CONSULTANT will prepare and implement an effective Acquisition Management Plan to confirm the Project is delivered efficiently, effectively, and in compliance with applicable laws, regulations and procedures. CONSULTANT will prepare and deliver written progress status reports for

acquisition cases. CONSULTANT will participate in project related meetings, make public presentations to individuals and organizations and represent CITY in presentations and public hearing on technical matters pertaining to the acquisition process.

Fee Appraisal

The appraisal will be prepared by individuals licensed with the State of California, Office of Real Estate Appraisers, as a Certified General Real Estate Appraiser. Our appraisers both retain the requisite qualifications and experience necessary to competently complete appraisals in a competent and professional manner, in accordance with applicable laws and policies.

Prepare the Notice of Decision to Appraiser letter for each property, advising the property owner of the proposed project, introducing the appraiser, enclosing an Acquisition Brochure describing CITY's acquisition process, and contract information to answer questions and concerns.

The appraisal report will comply with laws that are applicable to the specific appraisal assignment and the Uniform Standards of Professional Appraisal Practice (USPAP). Afford the property owner or the owner's designated representative the opportunity to accompany the appraiser on the inspection of the property. Perform an inspection of the subject property. The inspection should be appropriate for the appraisal problem, and should address:

- The extent of the inspection and description of the neighborhood and proposed project area,
- The extent of the subject property inspection, including interior and exterior areas,
- The level of detail of the description of the physical characteristics of the property being appraised (and, in the case of a partial acquisition, the remaining property).

In the appraisal report, identify the highest and best use consistent with property evaluations. If highest and best use evaluation is in question or different from the existing use, provide an appropriate analysis identifying the market-based highest and best use for the specific property. Present and analyze relevant market information. In developing and reporting the appraisal, disregard decreases or increases in the fair market value of the real property caused by the project for which the property is to be acquired, or by the likelihood that the property would be acquired for the project. Report the appraiser's analysis, opinions, and conclusions in the appraisal report.

Appraisal Review

Review appraisals will be provided for each appraisal, and in accordance with State and Federal law and CITY policy as required. The review appraiser will, as appropriate:

- Identify the reviewer's client and intended users, the intended use of the reviewer's opinions and conclusions, and the purpose of the assignment.
- Identify the following:
 1. Subject of the appraisal review assignment.
 2. Effective date of the review.
 3. Property and ownership interest appraised (if required) in the work under review.
 4. Date of the work under review and the effective date of the opinion or conclusion in the work under review.
 5. Appraiser(s) who completed the work under review, unless the identity was withheld.

- Identify the scope of work to be performed.
- Develop an opinion as to the completeness of the material under review, given the scope of work applicable in the assignment.
- Develop an opinion as to the apparent adequacy and relevance of the data and the propriety of necessary adjustments to the data, given the scope of work applicable in the assignment.
- Develop an opinion as to the appropriateness of the appraisal methods and techniques used, given the scope of work applicable in the assignment, and identify reasons for disagreement.
- Develop an opinion as to whether the analyses, opinions, and conclusions are appropriate and reasonable, given the scope of work applicable in the assignment, and identify the reasons for disagreement.
- Review appraisals will be forwarded to CITY for establishment of just compensation prior to the preparation of offers to acquire the proposed land rights for the project.

Acquisition and Negotiation

CONSULTANT will provide right-of-way delivery services required for CITY to purchase right-of-way required to construct the Project. The tasks will be performed in accordance with applicable Federal, State and local regulations, Caltrans Policies and Procedures and CITY's R/W Policies and Procedures.

CONSULTANT will provide the following services under the direction of CITY staff:

- Provide the Acquisition and Negotiations Services to acquire the property interests required for the Project in a timely, efficient manner and at a reasonable cost. Work shall be performed in accordance with Caltrans and CITY's Policies and Procedures and applicable Federal, State and local regulations.
- Coordinate the acquisition process with CITY, legal counsel, design team, property owners, and tenants along with the title company, appraisers and other consultants to confirm effective cross-discipline communications.
- Review right-of-way plans, appraisal reports, title reports, appraisal maps and legal descriptions and required acquisition documents.
- Prepare acquisition offer packages consisting of CITY's written purchase offer, appraisal summary statement, acquisition brochure, acquisition agreement, conveying instruments (Grant Deed, Permanent and/or Temporary Easements, etc.), Certificate of Acceptance, recommendation of Amount of Just Compensation, plat maps and legal descriptions, and Title VI Information.
- CONSULTANTS acquisition agent will meet personally with each property owner to present CITY's purchase offer, explain the project design requirement and inform the property owner of CITY's right-of-way acquisition process.
- Negotiate personally in good faith with each property owner, owners agent or representative and discuss appraisal and valuation of the property interests, gather information from the property for consideration and address written questions or inquiries that may arise during the acquisition process.

- Establish and maintain an acquisition file for each property owner or property interest acquired and maintain a file checklist pursuant to CITY's specifications.
- As may be required to secure Right of Entry Agreements; licenses or permits from property owners for purposes of performing hazardous material / waste, archeological and other inspections.
- Promptly transmit executed documents (acquisition agreements, executed deeds, rental agreements, statements of information, offset statements, and the like) to CITY for acceptance and processing. A report summarizing the pertinent information relative to the transaction will be included.
- Prepare and submit a Letter of Recommendation to CITY for proposed administrative settlements with property owners. The letter will include a chronology of the negotiation efforts, provide supporting evidence and documentation and an explanation of the benefits and rationale behind the recommendation.
- Escrow Coordination - Coordinate opening of escrows with direction from the project manager, assist the escrow company in obtaining additional documentation as necessary to provide clear title to CITY, observe the closing of escrows, and review closing statements for completeness and accuracy. We will serve as liaison between the title company, escrow holder, and CITY. Upon closing of escrow, tax cancellation letters will be prepared for CITY signature, as necessary, for fee interest acquisitions.
- Recommend condemnation action when negotiations have reached an impasse. The required justification will be submitted in writing to CITY. Our primary goal will be to reach an acceptance of the offer with each property owner. We will work with CITY in recommending solutions to achieve acceptance of the offer.
- Eminent Domain Support – If requested, coordinate with CITY's condemnation counsel, as required, to support the condemnation activities until the Resolution of Necessity is adopted and possession is granted by the courts. Litigation support after the hearing for the Resolution of Necessity, such as depositions, mediation appearances and expert testimony, can be provided on a time-and-materials basis.
- Perform normal procedures and processes to implement the acquisition assignment and provide supporting documentation, reports, and/or correspondence required by CITY.
- Provide bilingual acquisition agents, if necessary.
- Prepare applicable forms, secure property owner's approval and signature and submit the forms to CITY for review and acceptance.

Upon completion of the acquisition process for each property or property interest, or at project completion, CONSULTANT will provide CITY with the original acquisition file as well as electronic copy of files for future audit purposes.

Assumptions:

- *The project will require the acquisition of up to 14 partial take parcels. No residential or business relocations are anticipated given one full take site has a modular field office / trailer that is expected as "owner removed" as part of the acquisition and site vacation effort by the business owner/property occupant.*

- *The project involves the acquisition and good faith negotiations for up to 14 affected properties.*
- *14 individual USPAP compliant appraisal reports will be prepared for each acquisition.*
- *Formal appraisal review reports will be conducted for each of the 14 fee appraisals based upon federal and Caltrans requirements.*
- *It is anticipated that no advertising billboard will be impacted by the proposed improvements and no billboard signs are identified for relocation or removal. Cell towers adjacent to the project will be avoided.*
- *A right-of-way cost estimate will be prepared prior to the 60% submittal following R/W Requirement Map development and adjusted at 90% design as formal offers are finalized. Caltrans R/W Data Sheets will not be required and are adequate as prepared in PA&ED.*
- *Property management and debris removal services are not included in the scope of work.*
- *CONSULTANT will participate in bi-weekly project update meetings specifically to R/W acquisitions with CITY staff for up to 20 months.*
- *CITY will be responsible for a legal review of property acquisition documents.*
- *It is anticipated that private improvements will be the responsibility of the property owners and covered with Just Compensation to the property owner for any impacts to private improvement as a result of the project.*

4-7 Update Special Provisions and Construction Cost Estimate

4-7.1 Special Provisions

CONSULTANT will prepare edited Special Provisions and nSSP's for Caltrans District and Headquarters' review as appropriate.

4-7.2 Construction Cost Estimate

CONSULTANT will update the construction cost estimate based on comments received from Caltrans.

Deliverables:

- ***90% Cost Estimate and Specifications***

4-8 Final Constructability Review and Schedule

4-8.1 Constructability Review

CONSULTANT will review the 90% PS&E package for contractor constructability of the SSP's and nSSP's and incorporate the requirements as needed.

4-8.2 Construction Schedule

CONSULTANT will validate the estimated working days for determination of the expected construction schedule in consultation with CITY and Caltrans.

Deliverables:

- ***Estimated Working Day Schedule (PDF)***

4-9 Final Agency Agreements

CONSULTANT will finalize agreements in coordination with CITY and Caltrans for project acceptance.

TASK 5 – 100% PS&E

5-1 Finalize PS&E Package

CONSULTANT will submit the Final PS&E package to CITY and Caltrans District 8 for final approval and signature. The submittal will only incorporate the applicable previous comments, and no further agency review is accepted. Electronic signatures will be included on the Final 100% submittal of the estimated plan set (400 total plan sheets).

Deliverables:

- ***Final Project PS&E (Combined Roadway, Drainage, Electrical, Walls)***
- ***Final Project PS&E (Traffic & Electrical) (F&P)***
- ***Final Project PS&E (Drainage, Landscape & Irrigation in State R/W, Water Pollution Control) (MBI)***
- ***Final ECR***

In addition, CONSULTANT will provide electronic version of the final plans, special provisions, estimates and schedules (DGN and PDF formats). The final BEES will be provided as a Microsoft Excel file.

5-2 Finalize Reports

CONSULTANT will validate items are completed per the District 8 PS&E Checklist including project filing following concurrence from Caltrans on Final Reports completed for the Project.

5-3 Resident Engineer File & Materials Handout

5-3.1 Resident Engineer File

CONSULTANT will meet with the Resident Engineer (RE) and functional units and provide the following information for the RE file. This list is not comprehensive, and CONSULTANT shall provide additional information as appropriate:

- Surveying Notes, Survey Control Map, and Construction Alignment Reports
- Geotechnical (GDR) and Foundation (FDR) Reports
- Drainage Report
- Relevant correspondence and memoranda
- Engineering calculations (horizontal and vertical alignments, earthwork quantities, etc.)
- Environmental Agreements, Agency Permits, and Reports
- Summary of Environmental Issues, ECR, and project specific monitoring plans (i.e. PMP)
- Transportation Management Plan and supplements
- Storm Water Data Report
- Right-of-Way Maps & Agreements
- Utility Relocation Plans and Agreements
- Grid Grades for Major Ramp & Mainline Improvements
- No Bridge Plans Required

Deliverables:

- ***Electronic version of RE file information***

5-3.2 Materials Handout

CONSULTANT will prepare materials handout information per Caltrans HDM, Section 111.3 Materials Information Furnished to Prospective Bidders

Deliverables:

- ***Material Handouts***

5-4 Environmental Certification

It is assumed that Caltrans will prepare the Environmental Certification as part of their internal process. CONSULTANT will support Caltrans by providing design plans and reports prepared by the CONSULTANT related to the Environmental Re-validation and permitting described elsewhere in this scope of work. This could include electronic copies of documents and/or approval dates to be provided to Caltrans, as requested, for completion of the Environmental Certification.

5-5 Utility Certification

CONSULTANT will prepare utility certification package and submit to Caltrans a utility certification form and other required documents in accordance with the Caltrans Right of Way Manuals.

Deliverables:

- ***Utility Certification***

5-6 Right of Way Certification

CONSULTANT will prepare and submit to Caltrans, and FHWA, if necessary, a right-of-way certification form and other required documents in accordance with the Caltrans Right of Way Manual and FHWA requirements.

Deliverables:

- ***Right of Way Certification***

5-7 Paleontological Mitigation Plan

CONSULTANT will prepare a Paleontological Mitigation Plan (PMP) that conforms to the requirements outlined in the Caltrans SER Volume 1 Chapter 8 (Paleontology), addresses the mitigation measures and recommendations outlined in the adopted Final Environmental Document, and identifies necessary paleontological tasks and procedures that will be required in order to reduce potential impacts to paleontological resources should they be discovered. The PMP will include project background information and recovery goals; description of when and where paleontological monitoring will be required (with accompanying GIS maps); pre-construction measures such as a pre-construction meeting and workers environmental awareness program training (WEAP); monitoring methods and safety requirements; unanticipated discovery procedures to be implemented in the event that fossils are discovered

when a monitor is not present; procedures for sampling, fossil and data recovery, and laboratory work (including preparation, identification, and analysis) that will conform to conditions set forth by the designated fossil repository; fossil curation agreement with a certified repository; and weekly, monthly, and final monitoring report requirements. Implementation of items or measures included in the PMP are not included in this scope of work.

Deliverables:

- ***Draft and Final Paleontological Mitigation Plan***

SCOPE OF WORK NOT INCLUDED

Geotechnical Reports (Pavement Deflection Study)

It is assumed that widened pavement on the local roads connecting into the new pavement along Central Avenue or Dexter Avenue will utilize the existing pavement section or better. It is not anticipated that a Pavement Deflection Study is required to upgrade, widen and reconstruct the existing roadways.

Modified Access Report (MAR)

It is assumed that the Modified Access Report update is not required since Alternative 3 matches the geometry previously approved by Caltrans District 8 and FHWA as depicted during Public Circulation and formal selection of the Preferred Alternative on January 4, 2024 by the PDT. The geometry for the location of the ramps along the mainline I-15 for the additional or removed interchange ramps have not modified since the MAR was approved as part of the original PA&ED document and is not anticipated to need revision.

\$ 80.95		\$ 252.28												Subconsultants					
RES Tech	Sr. BIM Operator	TOTAL LABOR HOURS	TOTAL HDR LABOR DOLLARS	Total HDR ODC	Mileage	Postage / Ship / Delivery	Reproduction / Printing / Data	Travel / Translation / County Checking / Permit Fees	Field / Event Supplies / Lab	Advertisement / Appraisal / As-Builts	BESS	FP	AA	Guida	Bargas	MBI	TOTAL COST		
		0	\$0.00	\$0.00													\$0.00		
		120	\$50,315.54	\$400.00	\$400.00												\$50,715.54		
		114	\$35,876.81	\$0.00													\$35,876.81		
		361	\$74,376.31	\$0.00													\$74,376.31		
		52	\$17,699.40	\$0.00													\$17,699.40		
		4	\$26,308.41	\$0.00													\$26,308.41		
		142	\$39,992.71	\$2,500.00	\$500.00		\$2,000.00					\$61,753					\$104,246.19		
		0	\$0.00	\$0.00													\$0.00		
		8	\$244,569.16	\$0.00													\$244,569.16		
\$	\$	2,018.24	\$ 244,569.16	\$2,900.00	\$900.00	\$0.00	\$2,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$61,753.49	\$0.00	\$0.00	\$0.00	\$309,222.65		
		12	\$16,172.83	\$0.00												\$4,998.69	\$21,171.52		
		30	\$7,470.64	\$0.00													\$7,470.64		
		69	\$17,810.31	\$0.00									\$171,036				\$188,845.85		
		8	\$21,022.96	\$0.00									\$26,387				\$105,409.63		
		248	\$60,602.05	\$0.00							\$58,000.00						\$60,602.05		
		0	\$0.00	\$0.00													\$0.00		
		0	\$0.00	\$0.00													\$0.00		
		4	\$81,633.69	\$600.00	\$500.00				\$100.00								\$82,233.69		
		0	\$0.00	\$255,000.00					\$255,000.00								\$255,000.00		
		395	\$92,217.03	\$0.00													\$92,217.03		
		377	\$86,329.51	\$0.00													\$86,329.51		
		16	\$67,688.26	\$4,100.00	\$400.00			\$2,100.00	\$1,600.00								\$71,788.26		
		0	\$0.00	\$0.00													\$0.00		
		4	\$2,710.24	\$0.00									\$159,246				\$161,956.08		
		258	\$53,961.37	\$300.00	\$300.00												\$54,261.37		
		56	\$507,618.89	\$0.00													\$507,618.89		
\$	\$	14,127.65	\$ 507,618.89	\$260,000.00	\$1,200.00	\$0.00	\$0.00	\$2,100.00	\$256,700.00	\$0.00	\$58,000.00	\$0.00	\$0.00	\$356,668.06	\$0.00	\$4,998.69	\$1,187,285.63		
		3206	\$652,607.63	\$1,000.00	\$1,000.00											\$81,823	\$735,430.84		
		2	\$9,076.51	\$0.00								\$260,000					\$269,076.51		
		12	\$3,241.50	\$0.00											\$81,356.10		\$84,597.60		
		12	\$3,241.50	\$0.00											\$43,892.99		\$47,134.49		
		12	\$3,353.46	\$0.00											\$80,907.41		\$84,260.87		
		12	\$3,353.46	\$0.00											\$42,143.08		\$45,496.54		
		14	\$3,830.70	\$0.00											\$7,677.01		\$11,507.71		
		4	\$33,895.77	\$500.00	\$500.00												\$34,395.77		
		2	\$134,128.43	\$0.00													\$134,128.43		
		18	\$4,416.26	\$0.00													\$4,416.26		
		513	\$107,294.77	\$0.00													\$107,294.77		
		574	\$130,876.19	\$187,030.00	\$2,000.00			\$12,700.00	\$172,330.00								\$317,906.19		
		550	\$114,035.17	\$3,000.00	\$1,000.00												\$203,790.21		
		442	\$88,903.61	\$1,360.00	\$300.00	\$400.00	\$660.00				\$86,755						\$90,263.61		
		56	\$15,297.48	\$1,600.00	\$800.00	\$500.00	\$300.00						\$113,449				\$130,346.46		
		182	\$50,191.52	\$0.00												\$9,022.76	\$79,214.28		
		6	\$42,378.80	\$0.00												\$9,919.53	\$80,298.33		
		4	\$23,662.57	\$200.00	\$200.00												\$23,862.57		
		80	\$22,429.99	\$0.00													\$24,548.18		
		46	\$1,446,215.30	\$0.00												\$2,118.19	\$1,446,215.30		
\$	\$	11,604.86	\$ 1,446,215.30	\$194,690.00	\$5,800.00	\$900.00	\$2,960.00	\$12,700.00	\$172,330.00	\$0.00	\$0.00	\$394,755.04	\$0.00	\$113,448.98	\$0.00	\$358,860.28	\$2,507,969.60		
		16	\$405,617.07	\$500.00	\$500.00							\$82,960				\$74,236	\$563,312.16		
		4	\$157,751.86	\$0.00													\$157,751.86		
		0	\$0.00	\$0.00													\$0.00		
		80	\$21,862.05	\$0.00											\$50,415		\$72,276.58		
		34	\$9,658.71	\$0.00													\$9,658.71		
		124	\$25,132.63	\$0.00													\$25,132.63		
		385	\$99,971.45	\$500.00	\$500.00												\$100,471.45		
		94	\$25,141.91	\$0.00													\$25,141.91		
		236	\$42,013.36	\$0.00													\$42,013.36		
450		2662	\$384,602.27	\$267,800.00	\$1,200.00	\$500.00	\$300.00			\$265,800.00							\$652,402.27		
		0	\$0.00	\$0.00													\$0.00		
		132	\$38,215.08	\$0.00								\$18,000				\$6,045	\$62,260.13		
		128	\$33,616.10	\$0.00								\$24,000				\$5,625	\$63,241.11		
		0	\$0.00	\$0.00													\$0.00		
		64	\$17,101.08	\$0.00													\$17,101.08		
		48	\$13,966.47	\$0.00													\$13,966.47		
		44	\$11,693.30	\$0.00													\$11,693.30		
450		28	\$1,286,343.34	\$0.00													\$1,286,343.34		
\$	\$	36,427.82	\$ 7,063.83	\$ 1,286,343.34	\$268,800.00	\$2,200.00	\$500.00	\$300.00	\$0.00	\$0.00	\$265,800.00	\$0.00	\$124,959.51	\$0.00	\$0.00	\$0.00	\$136,320.17	\$1,816,423.02	
		0	\$355,473.48	\$0.00								\$86,000				\$34,235	\$475,708.56		
		36	\$6,511.86	\$0.00												\$19,958	\$26,469.54		
		36	\$6,511.86	\$0.00													\$6,511.86		
		182	\$46,733.96	\$0.00													\$46,733.96		
		44	\$13,871.99	\$0.00													\$13,871.99		
		64	\$12,809.84	\$0.00													\$12,809.84		
		92	\$25,076.16	\$0.00													\$25,076.16		
		140	\$80,866.33	\$0.00									\$60,091				\$140,957.30		
		20	\$4,718.46	\$0.00										\$5,800			\$10,518.46		
140		4	\$552,573.95	\$0.00													\$552,573.95		
\$	\$	11,333.10	\$ 552,573.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$86,000.00	\$0.00	\$60,090.97	\$5,800.00	\$54,192.76	\$758,657.68		
		590	\$4,037,320.64	\$0.00								\$58,000.00	\$605,714.55	\$61,753.49	\$530,208.01	\$5,800.00	\$554,371.90	\$1,815,847.94	
\$	\$	47,760.92	\$ 35,823.69	\$ 4,037,320.64	\$726,390.00	\$10,100.00	\$1,400.00	\$5,260.00	\$14,800.00	\$429,030.00	\$265,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,037,320.64	\$6,579,558.58	