PROPOSAL

PROFESSIONAL DESIGN CONSULTING SERVICES FOR

I-10 AND OAK VALLEY PARKWAY INTERCHANGE

SUBMITTED TO:
Robert Vestal
Director of Public Works
City of Beaumont
550 E. 6th Street
Beaumont, CA 92223
rvestal@beaumontca.gov

February 1, 2024

SUBMITTED BY:

DOKKEN ENGINEERING

Darwin Cruz, PE
1450 Frazee Road, Suite 100
San Diego, CA 92108
(858) 514-8377
dcruz@dokkenengineering.com

DOKKEN ENGINEERING

Transportation Solutions from Concept to Construction

February 1, 2024

Robert Vestal, PE
Director of Public Works
CITY OF BEAUMONT
550 E. 6th Street
Beaumont, CA 92223

Authorized Contact

Darwin Cruz, PE | Project Manager
Address: 1450 Frazee Road, Suite 100
San Diego, CA 92108
Telephone: (858) 514-8377 (o); (858) 264-8235 (c)
Email: dcruz@dokkenengineering.com

RE: Proposal For Professional Design Consulting Services for I-10 and Oak Valley Parkway Interchange

Dear Mr. Vestal:

We are familiar with the City's ambitious General Plan and the many on-going infrastructure, public works, and large-scale private development projects occurring within the City limits. We understand that rapid growth in the region since the late 90s has resulted in an ever-increasing demand for projects to serve your community and commend City staff in their efforts to implement the CIP. In this current environment in the transportation and public works industry, we also know that you are extremely busy. We are committed to serving as a liaison for the City of Beaumont's Project Management team for collaboration, reviews, and approvals with Caltrans District 8, Caltrans Headquarters, FHWA, RCTC and other key stakeholder agencies throughout the project development process. Dokken Engineering is pleased to submit this proposal to provide all-inclusive preliminary engineering and environmental services to complete PA&ED for the I-10/Oak Valley Parkway Interchange Project. We have assembled a team of industry experts that are exceptionally qualified for this project in several important respects:

- **Strong Leadership and Management Capabilities –** Our Project Manager, Darwin Cruz, PE, has 17 years of project development and delivery experience, from which he has developed a reputation for schedule/ budget-focused delivery, superior customer service, accountability, collaboration, and attention to detail. **Darwin has extensive Caltrans and FHWA experience and a proven track record in delivering projects for on-system local agency projects with Caltrans Oversight**.
- **Familiar and Experienced Team –** Dokken Engineering will provide a multifaceted team having unrivaled experience with PA&ED approval for interchange projects in District 8. Most recently, our team completed the PA&ED and PS&E phases of the I-215/Scott Road Interchange improvements in the County of Riverside, opened in the Fall of 2022. Our environmental lead, Zach Liptak, is actively providing PA&ED services for the City of Menifee for the I-215/McCall Boulevard Interchange Project. **Dokken has gained approval of over 70 projects with Caltrans in District 8**. The I-10/Oak Valley Parkway Interchange Project will be assigned to our experienced staff in our San Diego and Folsom offices, who together have completed over 50 interchanges. We have supplemented our team with subconsultants Fehr & Peers for Traffic, Geocon Consultants for Geotechnical and Hazardous Material Testing, RE Services for Landscape and Visual, and UNICO Engineering for Surveying and R/W engineering, whom we have outstanding working relationships and can attest to their commitment to provide high quality services to the City.
- **Carefully Planned Approach –** Dokken has a clear understanding of the City's objectives for the I-10/Oak Valley Parkway Interchange Project and a complete understanding of the scope of services. Our comprehensive approach provides:
  - Multiple strategies for improving the design and streamlining approval through Caltrans District 8
  - A systematic plan to evaluate and screen alternatives prior to investment in technical studies
  - A careful assessment of potential environmental impacts and risks to environmental approval
  - An alternate approval path to quickly pivot to an EIR under CEQA, if required, due to VMT impacts
  - **A fully developed and Quality Reviewed scope of services that is ready for NTP**

We truly appreciate the opportunity to serve the City to complete PA&ED for I-10/Oak Valley Parkway Interchange Project. Our President, John Klemunes, is an authorized to sign and negotiate on behalf of Dokken Engineering.

Sincerely,
DOKKEN ENGINEERING

John Klemunes, Jr., PE
President

Darwin Cruz, PE
Project Manager

5053/JAK/DWC/ZL

B. Introduction/Information

As is evidence throughout our proposal, the objective of the Dokken Engineering team is to streamline the Project Approval and Environmental Document (PA&ED) phase of the project and provide expedited and cost-effective engineering and environmental services for successful project delivery. We will accomplish this by leveraging a unique combination of – industry best experience with environmental clearance and final design for interchange projects throughout California; our comprehensive understanding of the scope of services for locally funded projects on the interstate highway system; our unparalleled strength in project management and assigned key personnel; and our meticulously developed work plan for delivery of PA&ED through the Caltrans Local Assistance process. The core objectives of PA&ED for the I-10/Oak Valley Parkway Interchange Project are to:

- Identify a preferred alternative to replace and modernize the I-10/Oak Valley Parkway Interchange.
- Define future right of way requirements for improvements at the I-10/Oak Valley Parkway Interchange and ensure that adjacent private projects do not preclude the needed improvements.
- Recommend strategic design elements and provide expedited NEPA environmental approval to position the project for future funding opportunities under DOT/FHWA discretionary grant programs.
- Identify avoidance, minimization, and mitigation requirements to address all potential project related environmental impacts, including Vehicle Miles Travelled, air quality, and noise.
- Provide an opportunity for public input on the project to maximize public participation and provide a finished product meeting the diverse needs of the citizens of Beaumont.
- Develop an accurate cost estimate for design support, right of way, and capital construction for programing and identification of local, State, and Federal funding sources.
- Prepare cooperative agreements for final design, right of way, and construction that will be required between the City of Beaumont, Caltrans, and FHWA.
- Assess potential impacts to third parties, such as private utility owners, and the level of involvement required to achieve project delivery.

OUR APPROACH TO MEETING THE PROJECT AND SCOPE OBJECTIVES

We have included a detailed discussion of the key project challenges, constraints, and solutions under the project approach section that follows. The notable project milestones required to achieve PA&ED approval are highlighted below, along with how we will be able to deliver the Final Project Report and National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) certification.

Milestones & Approvals

- Scoping Meeting with Caltrans
- Permitting for Field Investigations
- Perform Field Investigations
- Alternatives Screening
- Engineering Technical Studies
- Environmental Technical Studies
- Complete Draft Project Report
- Complete Draft Environmental Document
- Public Circulation of Draft ED
- Conduct Public Meeting/Hearing
- Final Project Report
- Final NEPA/CEQA Document

Successful delivery is a team effort. The Dokken team brings together the civil, structural, electrical, hydraulic/drainage/storm water designers, environmental planners/biologists/archaeologists/arborists, public outreach experts, utility engineers, and right of way professionals as one company, under one manager, to streamline the delivery of the project, saving the City considerable time and money from

PA&ED through construction support. However, it also requires an experienced and hands on project manager to provide project administration/oversight, project cost and schedule management, and implementation of a thorough Quality Assurance/ Quality Control program.

Leading our team and coordinating our team's resources is Project Manager Darwin Cruz, PE. Darwin brings nearly 17 years of experience in providing civil engineering services for public agency projects. His management priorities include aggressively managing project schedules, keeping you informed of project progress, delivering the scope of work, keeping your project moving forward to completion, monitoring team performance, and keeping your project on budget through careful monitoring of dollars spent. Darwin has extensive knowledge of how to deliver the I-10/Oak Valley Parkway Interchange Project and will oversee the performance of all tasks critical to the successful completion of this project. Through proactive project management techniques, he will:

Work with City's Project Manager to develop and negotiate a realistic scope and budget for the project.

Prepare and Execute a Project Work Plan that informs the project team and includes specific instructions regarding means/methods and assumptions included in the scope of work. The work plan includes the detailed scope of services, basis of design, and deliverables matrix outlining task leads and responsibilities.

Implement Communication Protocols that facilitate communication between the City, Caltrans, and the Dokken team, including face-to-face meetings, phone calls, email, written documents, and virtual meetings to meet the project needs. Since many of our services are in-house, including roadway design, structural design, environmental, right of way, and drainage, team collaboration is easy and efficient.

Perform project cost management and routine contract health checks to compare scope and budget vs. actual real-time expenses. This also includes project construction cost management from preliminary engineering through Final PS&E, to ensure the most economical project is realized meeting the project goals. We know that budget overruns can be very difficult for agencies to process, so we regularly analyze pre-construction budget and construction/right of way costs to ensure there are no surprises for the City.

Conduct frequent project team meetings both internally and externally to facilitate informed discussions and gain team consensus on solutions and action items. Schedule, including milestones and deliverables, is discussed at every team meeting. We come prepared to present project progress and actions, communicate critical challenges, and provide clear exhibits that promote project understanding and decision making.

Consistently use project tracking tools, such as Issues/Decision Logs, progress reports and schedule updates. The project's schedule will be monitored, and staffing adjusted as needed, to meet milestones. Performance is monitored through quality control checks, review of actual versus planned progress, completion of action items prepared after meetings, monthly invoicing, and progress reporting.

Schedule QC activities with Juann Ramos, PE the project quality assurance/quality control (QA/QC) Manager, to ensure the project is meeting the project performance goals at key milestones in the project development process. Our project management team will implement proven QA/QC methods and comprehensive constructability reviews, as required, to ensure that the City receives the best possible products within your set budget.

TRUSTED SUBCCONSULTANTS

Dokken has partnered with the following subconsultants to provide the City a comprehensive team, capable of delivering all services required for the I-10 and Oak Valley Parkway Interchange Project PA&ED phase. Each subconsultant was hand-selected based on our excellent working relationship and their history of providing exceptional service to their public agency clients.

SUBCONSULTANT FIRM & ROLE ON THIS PROJECT	AREAS OF EXPERTISE	STAFF ASSIGNED & THEIR ROLE
FEHR & PEERS **Fehr & Peers** *Traffic Engineering*	• Long-Range Transportation Planning • Freeway/Corridor Studies • Transportation Studies for EIRs • Traffic Impact/Parking Assessments • SB 743 VMT Analyses/Mitigation	• Jason Pack, TE, *Traffic Oversight/ QA/QC* • Diwu Zhou, PE, RSP1, *Traffic Lead*
GEOCON **Geocon Consultants** *Geotechnical Engineering/ Hazardous Waste*	• Geotechnical Engineering • Environmental Services • Engineering Geology • Construction Inspection	• Yong Wang, PE, GE, *Senior Engineer* • Richard Day, PG, CEG, CHG, *Senior Geologist*
RE SERVICES **Reddy Engineering Services** *Visual Impacts/Landscape Design*	• 3D Modeling & Visualization/ Simulation Graphics • Visual Impact Assessments • Landscape Concept Plan • Landscape/Irrigation Design	• David Preciado, PLA *Landscape Architect* • Jamie Sandoval, PLA *Landscape Architect*
UNICO ENGINEERING **UNICO Engineering, Inc.** *Survey/Right of Way Engineering*	• Topographic Land Surveying • Right of Way Surveys/Mapping • Right of Way Engineering • Construction Management	• Rob Markes, *Survey Manager* • Ryan Ming, PLS, *Senior Land Surveyor*

C. Approach to Delivering Scope of Services

The Oak Valley Parkway interchange with I-10, originally constructed in the 1960s to serve the agricultural and predominantly rural areas within the western portions of the City of Beaumont, has not been improved since its original opening and has reached the intended service life. To accommodate near term planned developments and future growth within the area, the City of Beaumont is seeking to replace and modernize the existing tight diamond interchange and 2-lane Oak Valley Parkway overcrossing by widening/realigning the freeway ramps to include HOV lanes, full replacement with widening and raising of the Oak Valley Parkway bridge, installation of new traffic signals and ramp metering systems, and incorporating Complete Streets design elements to meet current industry standards and the needs of a rapidly growing population.

Our team brings the breadth of engineering expertise and intimate knowledge of the State's on-system project delivery process necessary to obtain Environmental Certification and position the I-10/Oak Valley Parkway Interchange Project for expedited final design and future grant funding opportunities. Our Project Manager Darwin Cruz, PE has selected a team comprised of seasoned roadway designers, structural engineers, traffic engineers, utility coordinators, environmental specialists, NEPA/CEQA experts and right of way agents to provide the City with "turn-key" services and meet the unique challenges of the project. Based on our review of the project constraints/information, and our visit to the site, and understanding of project goals, we have developed **Figures 1 and 2 in the Appendix A** to provide an overview of key considerations and recommendations to enhance the alternatives evaluated in the PSR phase. The table below is a summary of the notable project challenges along with the experience and benefits that the Dokken Engineering team will bring to the City. Our firm's approach to delivering the scope of services is to address these items continually throughout the project development process, to ensure cost effective and on time completion of PA&ED through Environmental Certification.

Challenge	Team Experience	Benefit
Changes in Design Standards		
Significant changes in Caltrans policies, procedure, standards, and guidelines over 15-year period since PSR approval (2009).	Our team has complete knowledge of current Caltrans standards, Design Information Bulletins, Project Delivery Directives, Memos, and guidelines. We have many active "on system" projects and are current on Caltrans and FHWA requirements.	There is no lead up time necessary to familiarize with design and process requirements for the PA&ED phase and we have used this knowledge to develop an all-encompassing scope of work to ensure streamlined project delivery.
Alternatives Evaluation and Selection Process		
With the many stakeholders involved in the project, including Caltrans, FHWA, RCTC, U.S. ACE, U.S. Fish & Wildlife, County of Riverside, and Santa Ana RWQCB, consensus on a locally preferred alternative may be difficult to secure.	80% of Dokken's interchange projects involve evaluation of multiple alternatives to meet a projects purpose and need. We develop clear-cut and effective alternative evaluation/comparison matrices to serve as a tool for both agency and community decision making on alternatives screening.	We understand the importance of identifying key differentiating metrics for weighing multiple alternatives against the project goals and objectives. We ensure measurable data points are established that clearly convey the benefits and impacts of each alternative.
Cooperative Agreements and Approvals Through Caltrans District 8		
The process for obtaining project approval through Caltrans is complex and arduous. It is critically important to the project schedule to fully understand the forms, documents, reports and approvals necessary for the Final Project Report and Environmental Certification.	Our team has extensive experience navigating the Caltrans Local Assistance process. We have worked with the District 8 staff on multiple projects in the PA&ED phase in recent years such as the I-215/ McCall Blvd Interchange, I-215/ Scott Rd Interchange, I-15/ Limonite Ave Interchange, I-10/ Portola Ave Interchange, and SR-111/Avenue 66 Grade Separation.	We have invaluable insight into the local agency side of project funding, programming, authorization paperwork, and Federal regulations that apply to local agency project delivery with Caltrans oversight. We are Caltrans Local Assistance and Quality Management Assessment Process experts with the experience necessary to keep the PA&ED on schedule.
VMT, Induced Travel Study, Mitigation Measures		
If unmitigable impacts in the form or Vehicle Miles Travelled are identified under CEQA, District 8 could elevate the environmental document to an EIR.	The Dokken Environmental Team, together with Fehr & Peers, have routinely developed VMT analyses using the RIVTAM or RIVCOM traffic model to demonstrate a project's regional travel benefits and determine if a significant impact related to VMT would occur.	Our team is highly experienced in preparing all levels of CEQA and NEPA documentation. We have pre-emptively outlined a strategy to quickly pivot to an EIR under CEQA, if necessary, and can ensure a smooth transition with minimal additional effort.
FHWA Approval of Modified Access Report		
A Modified Access Report (MAR) must be developed for alternatives proposing new freeway ramp connections and approved through the FHWA.	We have worked as a liaison to FHWA for our local agency clients to obtain approval of over 20 Modified Access Reports in the past decade for our interchange projects located throughout the State of California.	We will pull the technical write-ups from the Final Project Report to prepare an expedited MAR submittal and will use our FHWA contacts to obtain approval with minimal time/effort from the City.
Impacts to Adjacent Lands and Right of Way Considerations		
Adjacent properties are slated for development, which could unnecessarily constrain or precluded necessary features for the interchange improvements.	Dokken's Engineering employes a full-service Right of Way/Real Estate team, with in-house brokers/agents, appraisers, Railroad and PUC experts, and public outreach leads.	We can establish dependable temporary/permanent right of way requirements early in the preliminary design process and support critical collaboration with adjacent projects.

IMPROVEMENTS TO DESIGN ELEMENTS AND ADHERENCE TO CURRENT STANDARDS

Dokken Engineering has performed a detailed engineering analysis of the conceptual alternatives developed with the PSR and identified improved versions of the Alternative 2B Modified Partial Cloverleaf Interchange and Alternative 3 Tight Diamond Interchange as worthy of further evaluation during the PA&ED phase. The proposed build alternatives have been evaluated against current Caltrans standards utilizing the Design Information Bulletin (DIB) 78-04 "Design Checklist for the Development of Geometric Plans", DIB 82-06 "Pedestrian Accessibility Guidelines for Highway Projects", Highway Design Manual (HDM), Traffic Safety Systems Manual, Ramp Metering Design Manual, Right of Way Manual and Complete Streets Deputy Directive 64-R2. We have identified several design deficiencies with the conceptual project alternatives that are summarized in the following sections.

Oak Valley Parkway lane configurations: Oak Valley Parkway is classified as a 4-lane Arterial Highway in the City of Beaumont's 2040 General Plan update and planned as a 6-lane arterial roadway within the project limits. The Alternative 3 Tight Diamond Interchange option studied in the PSR does not address left turning traffic movements at the northbound and southbound on-ramps. The Dokken team has obtained recent year 2035 traffic volume projections for the I-10/Oak Valley Parkway interchange ramp intersections and identified 581 AM peak hour vehicles for the I-10 westbound ramp left turn, and 476 AM peak hour vehicles for the I-10 eastbound ramp left turn. With incorporation of adaptive traffic signal technology, it is anticipated that dual-left turn lanes on Oak Valley Parkway would provide acceptable traffic operations at the ramp intersections in the Design Year. Based on our revised intersection geometry, vehicle queuing is not expected to spill beyond the left turn lanes and impact through traffic on Oak Valley Parkway.

Freeway entrance and exit ramp geometry: The intersecting angles of the I-10 freeway on and off-ramps with Oak Valley Parkway proposed with the PSR conceptual geometry do not meet Caltrans requirements for ramp alignment minimum skew angle with the local roadway. This is a critical design consideration as the intersection skew angle is essential to ensuring design standards for corner sight distance, truck turning movements, pedestrian cross walks, and ADA curb ramps can be achieved. The Dokken team has developed improved roadway geometry for both alternatives that meet the minimum HDM requirement of 75 degrees for all interchange ramps.

In addition, the free right turn configuration for traffic entering the proposed loop on-ramps from Oak Valley Parkway to I-10 are now discouraged by Caltrans for new construction projects. This is due to conflicts that occur between right turning vehicles and through pedestrian/bicycle traffic at free right turns. The enhanced Alternative 2B geometry includes perpendicular alignments at the ramp termini with dedicated right turn pockets on Oak Valley Parkway to slow traffic at the approaches to the loop on-ramps.

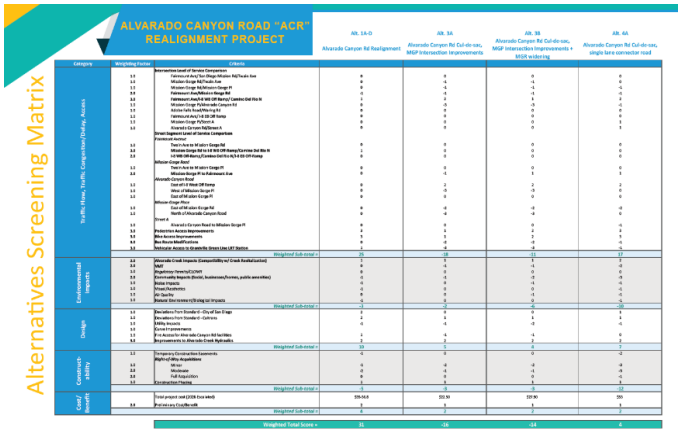
Ramp Metering Systems and Auxiliary Lanes: The proposed I-10/Oak Valley Parkway on-ramps, regardless of interchange configuration, will require the same improvements, including the addition of High Occupancy Vehicle (HOV) lanes with ramp metering and merging auxiliary lanes at the connection to the I-10 freeway mainline. New ramp metering systems were not identified in the PSR and must be included to meet the Caltrans Ramp Metering Design Guidelines and support the new HOV lanes. In addition, the eastbound loop on-ramp proposed under the Alternative 2 variations in the PSR does not provide an auxiliary lane for

vehicle acceleration and merging onto the I-10 mainline. Due to the relatively low anticipated comfort speed associated with the short radius horizontal curve for the eastbound loop on-ramp and the short 850ft distance between the proposed eastbound loop and tight diamond on ramp gore points on I-10, an auxiliary lane beyond the gore point may be necessary for safety and operations. The Dokken Engineering team has evaluated shifting of the eastbound diamond on-ramp to accommodate a 3,000 ft auxiliary lane with the modified partial clover leaf interchange configuration. This design enhancement will require additional widening of the Middle Fork San Timoteo Creek Bridge but will ensure a full standard design for the I-10 freeway mainline connections with the improved Alternative 2B design.

Caltrans Access Control: The PSR Alternative 2B proposes realignment of the I-10 eastbound off-ramp to intersect with the eastern segment of Desert Lawn Drive. Per HDM Index 508.8, "For new construction or major reconstruction, access rights shall be acquired on the opposite side of the local road from ramp terminals to preclude driveways or local roads within the ramp intersection". Access rights cannot be secured with the PSR Alternative 2B off-ramp geometry, and there is a high risk to approval by District 8. We have developed revised ramp geometry to connect the eastbound ramps at a single intersection with Oak Valley Parkway to comply with Caltrans access control requirements. This will require reduction of the eastbound loop on-ramp radius to 120ft and a design exception for reduced maximum super elevation rate and runoff length, both of which have low risk of approval by District 8. The construction of a retaining wall along this eastbound on ramp will be needed to avoid impacts to the adjacent private property.

ALTERNATIVES EVALUATION AND SCREENING PROCESS

Early identification of viable alternatives to be carried forward in the Draft Environmental Document and supporting engineering/environmental technical studies is critical to timely completion of the PA&ED phase As discussed previously, the alternatives from the Project Initiation Document (PID) phase have been evaluated against current Caltrans standards to identify any fatal flaws and assess the risk to approval. With implementation of the recommended design enhancements, both Alternative 2B and Alternative 3 are suitable solutions to meeting the key objectives for reduced traffic congestion and improved operations in the project Design Year. We have also initiated conceptual review of alternate interchange configurations that may be suitable, including single point and diverging diamond interchange configurations.



To ensure expeditious development of the draft engineering and environmental technical studies, our team will prepare a detailed alternatives evaluation/screening matrix to compare the conceptual level Build Alternatives and the No Build Alternative with consideration for traffic operations, roadway geometry, safety, bicycle/pedestrian access, property access, right of way and property owner interests, drainage/hydraulics/storm water quality, utility impacts, environmental impacts, costs, and risks. The alternatives evaluation/screening matrix will provide the basis for determining the build alternatives to be reviewed in the draft technical studies. Our team will also facilitate the selection of the

viable build alternatives with all key stakeholder agencies, including the City of Beaumont, Caltrans District 8, Caltrans Office of Specially Funded Projects, RCTC, and the FHWA. We will assemble any data requested, respond to comments or concerns from the deciding agencies, and prepare illustrative exhibits as needed to gain consensus on the build alternatives. An alternatives screening workshop will be held with key agency representatives to formally document decisions. This systematic approach to alternatives screening will allow for early input from all affected stakeholders and promote timely initiation of all formal studies.

PUBLIC OUTREACH IN PA&ED

To address the local communities' questions and concerns throughout the design and approval process, Dokken will take a hands-on approach to ensure that the concerns and desires of residents, businesses, and interested community members are accurately reflected in the design. To that end, we will coordinate with the Caltrans Public Information Officer (PIO) and provide public outreach that engages stakeholders, solicits feedback, provides two-way communication, and delivers timely information and updates. Allowing the stakeholders and community to be involved in the development process is critical to gaining public support and in avoiding opposition that could delay the project.

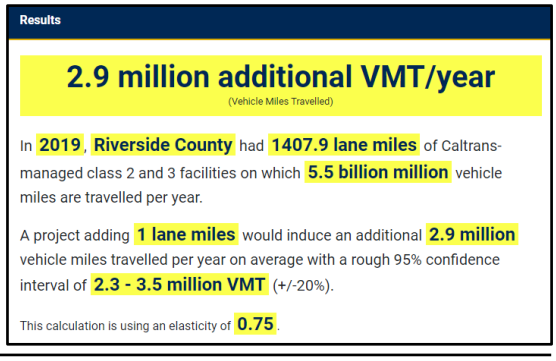
ENVIRONMENTAL CONSIDERATIONS

The September 2007 Preliminary Environmental Analysis Report (PEAR) completed in support of the PSR indicates environmental compliance for the project was anticipated to be an Initial Study with Mitigated Negative Declaration (ISMND) under CEQA and an Environmental Assessment (EA) with a Finding of No Significant Impact (FONSI) under NEPA. The project's environmental constraints include biological resources, tribal/cultural resources, visual, noise, and hazardous waste; however, the primary potential impact is vehicle miles travelled (VMT) requirements. While scoped as a CEQA ISMND, with Caltrans acting as the CEQA Lead Agency, there is a high probability that the latest requirements under SB-743 would require Caltrans to elevate the CEQA environmental document to an EIR due to potential increases in VMT. **Recent discussions with Caltrans District 8 Design Oversight staff on the I 215/McCall Boulevard Interchange Improvements Project have indicated any projects with VMT impacts, regardless of mitigation, are being elevated to EIRs due to potential public controversy.**

Zach Liptak, the environmental lead has significant experience working with Caltrans District 8 and the various regulatory agencies overseeing environmental resources in the region. Zach has been involved in securing approval for multiple interchange projects in the region including I 10/Portola Ave Interchange, I-215/Scott Road Interchange, is currently working towards approval for the I-215/McCall Boulevard Interchange. Additionally, our biological, cultural resource, visual, air quality, and noise specialists have the expertise required to streamline all technical studies through Caltrans approval to begin preparation of the combination CEQA environmental document and NEPA Environmental Assessment as efficiently as possible.

Potential Environmental Resources Affected

Vehicle Miles Traveled – Dokken and Fehr & Peers will place a high priority on completing a VMT analysis using the RIVCOM traffic model and National Center for Sustainable Transportation (NCST) VMT Calculator to demonstrate the project's regional travel benefits and determine if a significant impact related to VMT would occur under CEQA. The project proposes to increase the capacity along Oak Valley Parkway, and based on preliminary data, the California Induced Travel Calculator produced by the NCST at UC Davis estimates that this increase in capacity typically results in approximately 2.9 million induced VMTs. If during



project development it is confirmed that VMT would increase with the project, Dokken and Fehr & Peers would explore all outlets to avoid, minimize, or mitigate the potentially significant impact related to VMT under CEQA. In 2023, this same team recently secured approval from Caltrans Headquarters SB 743 Working Group for VMT mitigation on the I-215/McCall Boulevard Interchange. As Zach is highly experienced in preparing all levels of CEQA and NEPA documentation for freeway interchange improvements in Caltrans District 8, we can quickly pivot to an EIR under CEQA, if necessary, and can ensure a smooth transition with minimal additional effort in the event District 8 requires an EIR. ***Dokken has the advantage of close collaboration between the in house environmental and engineering design team that allows us to identify any design implications of the interchange*** related to SB 743 and its potential cascading effect on the project's environmental clearance timeline.

Biological Resources - The Project is within the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) Criteria Cell 940 and will impact the Middle Fork of the San Timoteo Creek and Township Creek (Little San Gorgonio Creek). Due to these impacts to riparian/riverine habitat types, a Joint Project Review (JPR) with a Determination of Biologically Equivalent or Superior Preservation (DBESP) Report and Consistency Analysis is required. These creeks also support potential habitat for Least Bell's vireo (LBVI) and Southwestern willow flycatcher (SWFL). Surveys for burrowing owl, Los Angeles pocket mouse, San Bernardino kangaroo mouse, and narrow endemic plant species (NEPSSA) are also required. Zach recently secured JPR and DBESP approvals for multiple projects from WRMSHCP, including the Market Street Bridge Replacement and the Skyview Pedestrian Bridge in French Valley.

If necessary for geotechnical investigations within the creeks, Dokken will also secure all necessary regulatory permitting including a Section 401, Section 404, and a Section 1602 permits. Dokken routinely meets with these regulatory agencies at Riverside Conservation Authority meetings and Zach has recently secured similar geotechnical permits for the Market Street Bridge Replacement Project. Based on his experience, Dokken will coordinate with the agencies and secure the permits without delay.

Hazardous Waste – Potentially hazardous wastes identified include asbestos containing material in structural concrete given the age of the existing bridge, lead-based paint on the bridge and roadway striping, aerially deposited lead (ADL), and other heavy metals associated with the nearby railroad. Review of hazardous waste databases and summary of the Phase I Initial Site Assessment in the PEAR indicate that no other known contaminations exist within the Project footprint. Phase II testing for identified potential hazardous wastes will be conducted to identify any necessary avoidance and minimization measures and summarized in the Site Investigation.

Noise - We will address any concerns related to traffic noise by coordinating closely with Caltrans to develop a noise analysis work plan which accounts for all potentially impacted homes at the northwest corner of Oak Valley Parkway and Desert Lawn Drive or the hotel in the northeast quadrant of the interchange. Under Caltrans' noise analysis criteria, a noise abatement analysis may be required for the Holiday Inn as they currently do not have a soundwall; however, it is not anticipated the project would result in a substantial noise increase or exceedance of federal noise abatement criteria (NAC) thresholds for the nearby homes. Dokken's familiarity with Femi and Farhana's requirements to secure approval of the Noise Study Report will ensure there will be minimal rounds of remodeling and rereviews.

Visual Impacts - Additionally, based on our frequency of work with Caltrans District 8, we believe a moderate level of Visual Impact Analysis (VIA) would be required. Visual simulations of the proposed interchange improvements will be included as part of the analysis. Dokken has secured approval of VIAs for similar interchange projects from Caltrans District 8's landscape architects for the aforementioned projects.

DOKKEN FAST FACTS

Firm's Complete Name:
Dokken Engineering, Inc.

Headquarters:
110 Blue Ravine Road, Suite 200
Folsom, CA 95630
Tel: (916) 858-0642
Fax: (916) 858-0643

Branch Offices:
1450 Frazee Road, Suite 100
San Diego, CA 92108

2192 Civic Center Drive
Redding, CA 96001

Business Classification: California Corporation
Year of Incorporation: 1986
Number of Employees: 130+

Areas of Expertise:
- Project Management
- Interchange/Highway Design
- Caltrans D8 PA&ED and PS&E Approvals
- Structures Design
- NEPA/CEQA Environmental Approvals
- Right of Way Acquisition & Relocation Assistance
- Utility Coordination, Public Outreach, & Stakeholder Coordination
- Hydraulics/Drainage/Stormwater
- Funding Assistance/Grant Writing
- Construction Support

www.dokkenengineering.com

D. Firm Profile

Founded in 1986, Dokken is a multi-discipline, professional services firm specializing in all phases of project development, including preliminary engineering, feasibility studies, PSRs, PA&EDs, PS&Es, and construction management for public agency clients. During the past 37 years, we have developed an exceptional depth of experience and expertise, having engineered and obtained environmental compliance on more than 3,000 infrastructure projects, including more than 2,000 federally funded projects. One specific example of our excellent ability to get projects from design and into construction is the I-215/Scott Road Interchange. Our team provided engineering and environmental services for PA&ED and PS&E for this very similar project.

Dokken almost exclusively works with public agencies, including cities, counties, municipal and joint agencies. Many of our staff have experience working directly with and previously for local agencies or resource agencies. Through this combined experience, we understand the circumstances of our clients' projects and meet their needs by developing the best approach and innovative solutions for project delivery. **As a result of our collective experience, we save our clients valuable time and money in delivering their projects.**

FIRM RESOURCES & CAPABILITIES

Dokken employs a diverse group of **over 130 civil, traffic, structural, hydraulics/hydrology, and drainage designers, as well as environmental planners, community outreach experts, funding and right of way specialists**, who together provide seamless and cost-effective project delivery. With the majority of project work being performed by one firm, under one roof, project coordination and communication is maximized. Dokken has worked extensively with Caltrans on projects involving design oversight, Local Assistance and Caltrans staff augmentation. We are very familiar with Caltrans' Highway Design Manual, Standard Plans and Specifications, and LAPM. Our in-house right of way team has significant knowledge and experience with the Uniform Relocation Act.

E. Location of Principal Office

The principal office responsible for the implementation of this contract will be our San Diego location:

1450 Frazee Road, Suite 100
San Diego, CA 92108
T: (858) 514-8377 | F: (858) 514-8608

F. Resume of Lead Consultant

INTERCHANGE EXPERIENCE IN CALTRANS DISTRICT 8

Dokken has delivered **over 70 projects in Caltrans District 8, including 17 interchanges** in the area and over 50 interchanges throughout California. The below table illustrates our capabilities and experience working on similar projects with local, state, and federal agencies.

INTERCHANGES IN CALTRANS DISTRICT 8	PSR	PA&ED	PS&E	PERMITS	ROW
McCall Boulevard & I-215 Interchange		●	●	●	●
I-10/Indian Canyon Drive Interchange | Palm Springs		●	●	●	●
I-10/Portola Avenue Interchange | Palm Desert		●	●	●	●
I-10/Calimesa Interchange | Calimesa			●		
I-15/Limonite Avenue Interchange | Riverside County	●	●	●	●	
I-15/Main Street Interchange | Hesperia	●	●	●	●	●
I-15/Eucalyptus Street Interchange | Victorville	●				
I-15/Nisqualli Road-La Mesa Road Interchange | Victorville	●				
I-15/Old Highway 58 Interchange | Barstow	●	●		●	
I-15/Roy Rogers Interchange | Victorville	●	●	●		
I-15/Schleisman Road Interchange | Riverside County	●				
I-215/Ethanac Road Interchange | Riverside County	●	●	●	●	●
I-215/Evans Road Interchange | Perris	●	●		●	
I-215/Scott Road Interchange | Riverside County	●	●	●	●	
SR-60/71 Interchange | San Bernardino County	●	●	●		
SR-79/Record Road Interchange | Gilman Hot Springs			●		
SR-86/Avenue 66 Interchange | Riverside County	●	●	●	●	
INTERCHANGES OF NOTE OUTSIDE OF DISTRICT 8					
I-5/Arena Boulevard Interchange | Sacramento	●	●	●	●	●
I-5/Lomas Santa Fe Interchange | Solana Beach	●	●	●	●	●
I-80/Truxel Road Interchange | Sacramento	●	●	●	●	●
SR-132 Freeway/Expressway New Interchange | Modesto		●	●	●	●
SR-163/Friars Road New Interchange | San Diego County		●	●	●	●
SR-99/Pelandale Avenue New Interchange | Modesto	●	●	●	●	●
US-50 Western Placerville Interchanges | Placerville	●	●	●	●	●
I-5/SR-56 Interchange Project | San Diego	●				

PROJECT EXPERIENCE

In addition to the projects listed in the previous table, the following examples highlight Dokken's ability to provide services similar in size, scope, and complexity to the I-10 and Oak Valley Parkway Interchange project. Together, with the technical specialties of our subconsultants, the Dokken team assures the City that our proven project management and quality engineering/environmental services will be provided.

SR-163/Friars Road Interchange | San Diego

Dokken prepared the Project Report and coordinated preparation of the Environmental Document for the interchange project. Due to funding constraints, the project will be designed and constructed in three phases. Dokken Engineering completed Final Design PS&E for Phase 1. Phase 1 of the project includes local road improvements such as widening Friars Road and the overcrossing, adding Class II bike lanes and 10-foot-wide sidewalks, improving Frazee Road and Ulric Street, coordinating signal timing, constructing retaining walls, improving freeway ramp connections, and providing additional pedestrian and bicycle facilities. At the ramp termini, shaded "pedestrian nodes" were constructed and over 30 curb ramps were upgraded to meet ADA design standards.

I-5/SR-56 Interchange | San Diego

Dokken Engineering prepared the engineering technical studies and Project Report for improvements at the I-5/SR 56 interchange. In addition, Dokken provided engineering support and oversight for preparation of the environmental technical studies and Environmental Document (EIR/EIS). Dokken's bridge and road team developed multiple project alternatives to address the existing and future interchange deficiencies due to the missing direct freeway to freeway ramps connecting southbound I-5 with eastbound SR 56 and westbound SR 56 with northbound I-5. Dokken's team completed the preliminary roadway geometrics, Preliminary Drainage Report, Draft Storm Water Data Report, preliminary signing and striping plans, conceptual phasing plans, Preliminary Geotechnical Design Report, Design Exception Fact Sheets, Right of Way Data Sheets, Preliminary Engineer's Cost Estimates, Bridge Advance Planning Studies, Traffic Volumes and Operations Report, Preliminary Traffic Management Plan, Landscape Concept Plan, Visual Impact Assessment, and Noise Abatement Decision Report to support the Final EIR/EIS and Project Report. Dokken Engineering also attended quarterly steering committee meetings and held public workshops to present the proposed project alternatives and improvements to community residents and obtain design input from the stakeholder groups.

I-10/Potola Avenue Interchange | Palm Desert

The City of Palm Desert, in cooperation with the County of Riverside and Caltrans District 8, proposed to build a new interchange on I-10 at Portola Avenue. Dokken performed alternatives evaluation, prepared the Draft/Final PA&ED documents, and is currently providing final design services for the project, which includes the extension of the existing Portola Avenue and realignment of the adjacent frontage road. The project will construct a new six through-lane overpass and railroad grade separation extending Portola Avenue over I-10 and UPRR. Construction of associated on-ramps and off-ramps, as well as the widening of Varner Road from two to four lanes is also proposed. The project includes the relocation of various underground and overhead utilities, including large transmission towers. The project also requires acquisition of new right of way, including a portion of the railroad right of way, as well as in depth hydraulic modeling of offsite flows, noise modeling and sound wall cost evaluations, and extensive coordination with adjacent projects. The project is currently at 100% PS&E with on-going final coordination with UPRR.

I-215/Scott Road Interchange | Riverside County

Dokken provided preliminary engineering, environmental support and final PS&E services for the I-215/Scott Road Interchange Reconstruction in Riverside County. The purpose of this project was to relieve existing traffic congestion and to prevent future degradation of the Scott Road Interchange due to anticipated population growth from recent proposed land development in surrounding communities and to improve operating conditions, reduce accidents, increase capacity, and reduce response time for emergency service vehicles. Dokken developed and studied the preferred alternative involving: a 10-lane bridge structure, roadway alignments, retaining walls, roadway geometrics, drainage, pavement delineation, contour grading, stage construction, cost estimates, coordination right of way acquisition services, environmental revalidations, regulatory permitting, and project approval through Caltrans District 8. Dokken supported this project all the way from PA&ED through construction, which concluded Summer 2020.

McCall Boulevard & I-215 Interchange | Menifee

The City of Menifee, in cooperation with Caltrans, proposes operational improvements at the I-215/McCall Boulevard interchange. The improvements include widening McCall Boulevard from 4 to 6 lanes over I-215, adding a bike/Neighborhood Electric Vehicle (NEV) lane on both sides of the road/bridge, adding sidewalk on the north side of the road/bridge, modifying the associated on- and off-ramps, and improving the nearby intersections of McCall Boulevard/Bradley Road and McCall Boulevard/Encanto Drive. Dokken is providing PA&ED and PS&E services through the Caltrans delivery process. This involves balancing design enhancements with environmental considerations, overseeing the development of design and environmental documentation, managing project phasing, providing technical supervision for drainage and stormwater design, and handling the project's scope, schedule, and budget. As this project increases capacity due to the roadway widening, it will induce vehicle miles traveled. Dokken along with Fehr & Peers worked closely with the City of Menifee to identify feasibility mitigation utilizing a road diet on a local roadway which was approved by the Caltrans Headquarter SB 743 Sustainability Working Group and recently added to the Caltrans VMT Mitigation Playbook as a result.

G. Key Personnel

Dokken has assembled a highly qualified team to provide the design services needed to deliver the I-10 and Oak Valley Parkway Interchange project. The following organizational chart visually represents the structure of our proposed team and relationship between the City and Dokken's Project Manager, design and environmental staff, and subconsultants.

Darwin will be directly responsible for project management and the coordination of all technical work to ensure that project issues and action items are addressed. Our key staff are committed to accurate and efficient delivery of your project and staying with the project for the entire contract duration. The following table summarizes the qualifications, similar project experience, and amount of relevant of experience of our key staff. Detailed resumes are in the **Appendix B**.

BEAUMONT California

Mark Tarrall, PE
PRINCIPAL-IN-CHARGE

Juann Ramos, PE
CIVIL & STRUCTURES QA/QC

Sarah Holm
ENVIRONMENTAL QA/QC

Darwin Cruz, PE
PROJECT MANAGER

- Indicates Key Staff

Roadway Design	Bridge Design	Environmental
Roadway Project Engineer Mary Elizabeth Westrum, PE **Roadway Design Engineers** Matt Madril, PE Frank Flores, PE Christian Santos, EIT	**Structures Project Engineer** Charles Tornaci, PE **Structures Design Engineers** Gabriel Hoxmeier, PE	**Environmental Lead** Zach Liptak **CEQA/NEPA Clearance** Amy Bakker **Biological Resources** Scott Salembier Hanna Sheldon Vincent Chevreuil **Permitting** Aliana Hale **Cultural Resources** Amy Dunay Michelle Campbell **Noise/Air/GHG Compliance** Ken Chen **Visual Impacts/Landscape Design** David Preciado, PLA (RES) Jaime Sandoval, PLA (RES)
Stage Construction/TMP Michael Greer, PE, TE	**Drainage/Hydrology/ Stormwater** Pamela Dalcin-Walling, PE, QSD/P	
Utility Engineering & Coordination Jena Addenbrooke, PE	**Right of Way/ROE** Jamie Formico, SR/WA Vanessa Cothran, SR/WA	
Survey/Right of Way Engineering Rob Markes (UEI) Ryan Ming, PLS (UEI)	**Traffic Analysis** Jason Pack, TE (F&P) Diwu Zhou, PE, RSP1 (F&P)	
Geotechnical Engineering/ Hazardous Waste Yong Wang, PE, GE (GEO) Richard Day, PG, CEG, CHG (GEO)		

Subconsultants

(F&P)	Fehr & Peers
(GEO)	Geocon Consultants, Inc.
(RES)	RE Services
(UEI)	UNICO Engineering, Inc.

KEY STAFF ROLE	RELEVANT PROJECT EXPERIENCE	SERVICES PROVIDED	AREAS OF EXPERTISE
DARWIN CRUZ, PE *Project Manager*	• I-5/SR-56 Interchange Project • Friars Road/SR-163 Interchange	• Prelim, Project Report • Prelim, PS&E, Construction Support	• Project Management • Interchanges
	Qualifications: Mr. Cruz has experience in all aspects of project design and project management for various transportation, utility infrastructure, and safety improvement projects in southern California. He has lead development of project planning reports, preliminary engineering studies and environmental documents, and PS&E packages for various City, County, University, regional agency, and Caltrans transportation projects.		
MARY E. WESTRUM, PE *Roadway Project Engineer*	• Friars Road/SR-163 Interchange • I-10/Indian Canyon Drive Interchange	• Prelim, PS&E, Construction Support • Prelim, PS&E, Construction Support	• Civil Design • ADA Design
	Qualifications: Ms. Westrum has significant experience in preparing PS&E packages and providing design support during construction. Her duties have included preparing various aspects of roadway design such as the design of horizontal alignments, vertical profiles and superelevation diagrams, roadway alternative analysis, stage construction and traffic handling, right-of-way engineering support, and preparation of cost estimates.		
FRANK FLORES, PE *Roadway Design Engineer*	• Friars Road/SR-163 Interchange • I-215/Scott Road Interchange	• Prelim, PS&E, Construction Support • Prelim, PS&E, Construction Support	• Roadway Design • Stage Construction
	Qualifications: Mr. Flores has design experience in many aspects of roadway, interchange, and highway design. His duties have included assisting in various aspects of roadway and highway design such as the design of horizontal alignments, vertical profiles, roadway and overhead signs, superelevation diagrams, roadway alternative analysis, and preparation of cost estimates.		
CHARLES TORNACI *Structures Project Engineer*	• Friars Road/SR-163 Interchange • I-215/Scott Road Interchange	• Prelim, PS&E, Construction Support • Prelim, PS&E, Construction Support	• Bridge/Structure Design • Planning Studies
	Qualifications: Mr. Tornaci is Dokken's San Diego structures team leader, both overseeing and performing the structural analysis and design efforts for bridge projects in Southern California. He has been involved in projects involving planning, design, construction, and seismic retrofits of vehicular and pedestrian bridges, retaining walls, stairways, and bike trails.		
VANESSA COTHRAN, SR/WA *Right of Way/ROE*	• I-80 Auxiliary Lanes • Indian Canyon Drive and Bridge at UPRR	• Right of Way Engineering, PS&E • Right of Way Engineering, PS&E	• Negotiations • Relocation Assistance
	Qualifications: Ms. Cothran has worked in the right of way industry on a variety of public projects. Vanessa has demonstrated expertise in providing acquisition and relocation assistance services in a timely and cost-effective manner and is knowledgeable regarding the requirements of the Uniform Act and Caltrans policies and procedures.		
ZACH LIPTAK *Environmental Lead*	• I-215/Scott Road Interchange • McCall Boulevard & I-215 Interchange	• Prelim, PS&E, Construction Support • Prelim, PS&E	• CEQA/NEPA • Noise & Air
	Qualifications: Mr. Liptak is a Senior Environmental Planner with experience in the various stages of environmental compliance including securing regulatory permits for projects, preparing and finalizing NEPA/CEQA environmental documents, environmental technical studies, and regulatory permitting. Zach has extensive experience in assisting with Federal and State of California regulatory permitting and compliance with environmental laws and regulations, especially in Caltrans District 8.		
JASON PACK, TE *Traffic Analysis*	• I-15 Express Lanes (ELPSE) • McCall Boulevard & I-215 Interchange	• PA/ED • PSR/PDS and PA/ED	• Traffic Analysis • Traffic Engineering
	Qualifications: Mr. Pack is a Principal with Fehr & Peers located in Southern California. Jason has an extensive background in travel demand forecasting, traffic operations assessment (including micro-simulation assessment), VMT analysis, big data analysis, transit ridership forecasting, and transportation impact studies involving NEPA and CEQA. Jason has been working directly with Caltrans D8 on infrastructure projects for the past ten years.		

H. References

We are proud to include the following references in response to your RFP. Each can attest to our firm and key team member's responsiveness and project, cost, and schedule management capabilities. We encourage you to contact each for a thorough discussion of their experience with our team.

CLIENT REPRESENTATIVE	CONTACT INFORMATION	RELEVANT PROJECTS
Roger Carlin *Design Manager* Caltrans District 11	**Caltrans District 11** 4050 Taylor Street San Diego, CA 92110 (619) 606-3392 mobile roger.carlin@dot.ca.gov	• I-805/Palm Avenue Interchange
Ronak Rekani *Senior Civil Engineer* City of San Diego	**City of San Diego** 525 B Street, Suite 750 San Diego, CA 92101 (619) 236-6251 RFRekani@sandiego.gov	• City of San Diego As Needed • I-805/Palm Avenue Interchange • North Park Mini Park
Carlos Geronimo *Principal Engineer* City of Menifee	**City of Menifee** 29844 Haun Road Menifee, CA 92586 (951) 672-6777 cgeronimo@cityofmenifee.com	• I-215/Scott Road Interchange
John Ashlock *Project Manager* County of Riverside	**County of Riverside** 4080 Lemon Street Riverside, CA 92501 (951) 955-1511 jashlock@rivco.org	• I-10/Portola Avenue Interchange
Tonya Carter *Project Manager* Caltrans District 11	**Caltrans District 11** 4050 Taylor Street San Diego, CA 92110 (619) 688-6714 tonya_carter@dot.ca.gov	• E Palomar Street Transit Station, Park & Ride and DAR at I-805

I. Scope of Services

ABBREVIATED SCOPE OF WORK

Dokken Engineering has evaluated the draft Scope of Services developed by the City of Beaumont and provided with the RFP, together with the Caltrans Project Development Procedures Manual, Workplan Standards Guide (WSG), the Project Delivery Quality Management Assessment Process, and Right of Way Manual requirements, to ensure a complete and accurate Scope of Services for the I-10/Oak Valley Parkway Project's PA&ED phase. Through our extensive experience with Caltrans District 8 and under the Caltrans Oversight process, we can anticipate all formal deliverables required to support the PA&ED milestone. We also understand the value of maintaining flexibility within the Scope of Services to accommodate issues that may not be fully identified from the Project Initiation Document phase. Where noted, several **Optional** tasks have been provided to account for unknowns that will be defined as the project development progresses. The scope has been abbreviated to meet the page limitations of this proposal. A detailed scope is included in **Appendix C** for use in the Contract/Agreement.

The Dokken Engineering Project Manager and Key Personnel will provide liaison with all stakeholder agencies, including but not limited to Caltrans District 8, the Caltrans Office of Specially Funded Projects,

RCTC, the County of Riverside, FHWA, the Santa Ana Regional Water Quality Control Board, the U.S. Army Corp of Engineers, Fish & Wildlife Servies, SHPO, the California Department of Fish & Wildlife, and impacted utility owners. Our primary objective for the project is to provide a seamless extension of staff to the City of Beaumont's Project Manager for cost effective and timely delivery of the scope of services and the many agency approvals required for Environmental Certification for the project.

TASK A – PROJECT ADMINISTRATION AND PROJECT MANAGEMENT

Dokken Engineering will provide project management services for the duration of PA&ED. Management of the project team will occur through a focused effort involving continuous communication, active team coordination, regular virtual and in-person meetings, budget monitoring and planning.

Subtasks will include:

- A.1 PDT and Kick-off Meetings
- A.2 Permits and Right of Entries
  - A.2.1 Caltrans Encroachment Permits for Pre-con field work
  - A.2.2 Right of Entry Permits from property owners
- A.3 Project Delivery Schedule
- A.4 Contract Administration (Invoices, Progress Reports, management of scope/budget, etc.)
- A.5 Agency Coordination (Caltrans, RCTC, FHWA, USACE, USFWS, utility companies, etc.)
- A.6 Bi-weekly City Briefing and Focus Group Meetings
- A.7 Quality Management Plan/Memorandum
- A.8 Agreement Support (Coops with Caltrans)
- *A.9 Funding Assistance (Optional Service)*

TASK B – RESEARCH AND DATA GATHERING

Dokken Engineering will research, organize, and review all record project information. Existing topographic mapping, photos, bridge reports, maintenance reports, Caltrans Right- of-Way maps, "as-built" drawings, record maps and surveys, study reports, assessor maps, contract documents, and any other pertinent data will be obtained and reviewed. Info gathered will be submitted to the City of Beaumont for their project file.

TASK C – TOPOGRAPHIC & RIGHT OF WAY SURVEYS

Dokken Engineering will perform field surveys, establish ground control, and prepare topographic base mapping intended for use in the Project Report and Environmental Documents.

Subtasks will include:

- C.1 Horizontal and Vertical Control Surveys
- C.2 Aerial Photogrammetric Survey
- C.3 Topographic Design Survey/Mapping
- C.4 Preliminary Right of Way and Boundary Mapping

TASK D – PRELIMINARY ENGINEERING STUDIES

Dokken Engineering will prepare all preliminary engineering studies required by Caltrans and the City of Beaumont, in support of the Project Report and Environmental Document and compliant with CEQA/NEPA.

Subtasks will include:

- D.1 Preliminary Drainage/Hydrology Report
- D.2 Draft Storm Water Data Report
- D.3 Geotechnical Reports
  - D.3.1 Preliminary Geotechnical Design Report
  - D.5.3 Structure APS for San Gorgonio Creek Box Culvert Mods (Optional Service)
- D.6 Location Hydraulic Study for San Timoteo Creek
- D.7 Traffic Study

  - D.3.2 Structures Preliminary Geotechnical Report
  - D.3.3 Preliminary Materials Report
- D.4 Updated Geometric Approval Drawings
- D.5 Structures Advance Planning Studies
  - D.5.1 Update Structure APS for Oak Valley Parkway Overcrossing Bridge
  - D.5.2 Update Structure APS for I-10/ Middle Fork San Timoteo Creek Bridge Widening
  - D.7.1 Traffic Analysis Approach and Methodology Technical Memorandum
  - D.7.2 Data Collection and Existing Conditions Analysis
  - D.7.3 Traffic Volumes Report
  - D.7.4 Traffic Operations Analysis Report (TOAR)
- D.8 Intersection Control Evaluation (ICE)
- D.9 Vehicle Miles of Travel (VMT)

TASK E – ENVIRONMENTAL DOCUMENTATION AND TECHNICAL STUDIES

The environmental work for the project will be carried out in accordance with NEPA/CEQA requirements. The project team will conduct the necessary environmental studies and submit to Caltrans District 8 environmental staff and the City for review and approval. CEQA document is anticipated to be an Initial Study Mitigated Negative Declaration. Caltrans will ultimately certify the CEQA document and NEPA Environmental Assessment (EA).

Subtasks will include:

- E.1 Preliminary Environmental Evaluation and Caltrans Coordination
- E.2 Initial Public Scoping Meeting / Notice of Preparation
- E.3 Environmental Focus Group Meetings
- E.7 Historic Property/Archaeological Survey Report
- E.8 Noise Study Report
- *E.9 Noise Abatement Decision Report (Optional Service)*
- E.10 Air Quality Technical Report
- E.11 Community Impact Assessment
- E.12 Visual Impact Assessment
- E.13 Aquatic Resources Delineation Report
- E.14 Natural Environment Study
  - E.14.1-3 WRMSHCP SBKR, LAPM, LBVI, and *SWFL* Species Surveys
- E.15 WRMSHCP JPR, DBESP, Consistency Analysis
- E.16 Water Quality Assessment Report
- E.17 Draft IS/EA
- E.4 Hazardous Waste Phase I Initial Site Assessment Addendum and Phase II Preliminary Site Assessment
- E.5 Prepare Area of Potential Effects Exhibit
- E.6 Section 106/AB 52 Consultation
- E.18 Public Circulation of IS/EA /Public Notices and Meetings
- E.19 Record of Public Meeting
- E.20 Final IS/EA (CEQA MND and NEPA FONSI)
- *E.21 Draft EIR/EA (Optional Service)*
- *E.22 Public Circulation of EIR/EA /Public Hearing (Optional Service)*
- *E.23 Final EIR/EA (CEQA Statement of Overriding Consideration & Findings of Fact and NEPA FONSI (Optional Service)*
- *E.24 Section 404 Nationwide Permit (Optional Service)*
- *E.25 Section 401 Water Quality Certification (Optional Service)*
- *E.26 Section 1602 Lake and Streambed Alteration Agreement (Optional Service)*

TASK F – PROJECT REPORT

A Project Report and Project Approval Report (if required) will be developed following the procedures and requirements outlined in the Caltrans PDPM. The Draft Project Report will be published/circulated with the Draft Environmental Document and will evaluate Build Alternatives identified as worthy of further consideration, together with the No Build Alternative. The Final Project Report will be published with the Final Environmental Document and will include the selection of a Locally Preferred Alternative. The Draft

Project Report will be submitted to the City for review and comment prior to review by Caltrans and FHWA. The approval of the Final Project Report will conclude the PA&ED phase.

Subtasks will include:

- F.1 Draft Project Report
- F.2 Final Project Report

TASK G – PRELIMINARY RIGHT OF WAY MAPS

Dokken Engineering will develop preliminary right of way requirements maps to serve as a tool for project decision making and overall estimating efforts. At the City's direction, draft Plat Maps and Legal Descriptions will be prepared for future appraisals and property owner negotiations during the PS&E phase.

Subtasks will include:

- G.1 Preliminary Right of Way Requirements Maps
- G.2 Right of Way Data Sheet
- *G.3 Plat Maps and Legal Descriptions (Optional Service)*

TASK H – UTILITY COORDINATION

Preliminary utility efforts consist of preparing and distributing Letter Requests for Utility Mapping (Caltrans Letter No. 1), collecting utility information from the City, Caltrans and local utilities, organizing information for the project file, and mapping of existing/proposed utilities to identify potential utility conflicts.

Subtasks will include:

- H.1 Letter Requests to Utility Owners for Mapping
- H.2 Utility Mapping from Record Drawings and Permits
- H.3 Utility Information Sheet
- H.4 Preliminary Utility Conflict Identification Maps
- H.5 Preliminary Utility Management Matrix
- *H.6 Utility Coordination with Utility Owners (Optional Service)*

TASK I – PRELIMINARY DESIGN

Using the information obtained from the survey and Preliminary Engineering Studies, the Preliminary Design tasks will focus on developing/evaluating/estimating the viable build alternatives. The following elements will be summarized and presented in the Draft and Final Project Report.

Subtasks will include:

- I.1 Alternatives Evaluation and Screening Matrix
- I.2 DIB 78-04 Design Checklist and DSDD
- *I.3 Modified Access Report (MAR) (Optional Service)*
- I.4 11-Page Engineer's Cost Estimates
- I.5 Level II Risk Register (Per Delivery Directive PD-09)
- I.6 Preliminary Transportation Management Plan (Data Sheet, Elements, Costs)
- I.7 Highway Safety Manual Assessment

J. Cost Proposal

We have submitted our Cost Proposal in a separately sealed envelope, which includes a not to exceed fee amount and fee schedule for services and hourly billable costs.

K. Other Information

RELATIONSHIP WITH CALTRANS DISTRICT 8

Dokken has extensive experience in completing the Caltrans PA&ED phase and preparing the Caltrans documentation that will be required for this project, both within District 8 and throughout the State. We understand the multiple engineering reports and approvals that are required prior to circulation of the Draft Project Report and approval of the Final Project Report. Additionally, we have carried many of these PA&ED projects through final design and construction phases. We have worked with the District 8 staff on multiple projects in recent years such as the I-215/Scott Road Interchange, I-15/Limonite Avenue Interchange, I-10/Portola Avenue Interchange, SR-111/Avenue 66 Grade Separation, and I-215/McCall Boulevard Interchange and have developed a relationship with the reviewers and other District and Headquarters staff such that they trust our work product and we collaborate as a team to reach a solution that satisfies all parties involved. This trust will be advantageous in gaining the support of each Caltrans functional unit in efficiently moving the I-10/Oak Valley Parkway Interchange project through the entire approval process. **While there are other consultants that can ultimately design an interchange, Dokken's extensive experience and long-standing relationships within Caltrans District 8 allows us to develop complete, cost-effective designs from the outset and navigate the complicated Caltrans process to achieve expeditious approvals.**

PROJECT DELIVERY SCHEDULE

A detailed project delivery schedule has been developed indicating all scope deliverables, activity dependencies, and major PA&ED milestones. The schedule is included in **Appendix D**. The schedule assumes an NTP in March of 2024, per the RFP, 4–5-week timelines for review/approval actions by the City of Beaumont and Caltrans District 8 staff, that the environmental document is an ISMND/EA, and that consensus on the traffic approach, and approval of subsequent deliverables, is attained in a timely manner. The resulting schedule shows a duration of 23 months for PA&ED approval. This represents a realistic schedule based on our experience with similar projects in District 8 and reflects a streamlined approach in which project tasks are performed in tandem to the full extent possible. Additional reductions in schedule could be realized if the tight diamond interchange configuration is selected, since geometric approval and design will be more straightforward. Dokken will continually monitor and update the schedule to track the progress of the critical path tasks and will prioritize our work effort to ensure key milestones are met.

L. Insurance

Upon award of this engineering services contract for the I-10 and Oak valley Parkway Interchange project, Dokken will provide the City with a certificate of insurance and complete, *certified copies* of all required insurance policies, including endorsements effecting the coverage required.

APPENDIX A

Exhibits

BEAUMONT
California

1 HOV LANE WITH RAMP METERING

NEW RAMP METERING SYSTEMS WERE NOT IDENTIFIED IN THE PSR AND ARE REQUIRED TO MEET CALTRANS RAMP METERING DESIGN GUIDELINES AND TO SUPPORT THE NEW HOV LANES.

2 6 FT SIDEWALK WITH 6 FT CLASS II BIKE LANES

PER THE CITY OF BEAUMONT GENERAL PLAN, OAK VALLEY PARKWAY WILL REQUIRE CLASS II BIKE LANES. PER HDM INDEX 301.2(1), THE MINIMUM BIKE LANE WIDTH FOR THIS ROAD SHOULD BE 6 FT, AND PER HDM INDEX 208.4, THE MINIMUM WIDTH OF A BRIDGE SIDEWALK SHALL BE 6 FT.

3 PROPOSED RETAINING WALL

RETAINING WALL CONSTRUCTION TO PREVENT IMPACTS TO FUTURE COMMERCIAL DEVELOPMENT

4 IMPROVED INTERSECTION ANGLE PER CURRENT CALTRANS STANDARDS

PER HDM INDEX 403.3 THE INTERSECTION ANGLE WITH THE FREEWAY RAMPS SHOULD NOT BE LESS THAN 75 DEGREES.

5 ADAPTIVE TRAFFIC SIGNAL

PROPOSED TO IMPROVE INTERSECTION OPERATION BY CONTINUOUSLY DISTRIBUTING GREEN LIGHT TIME EQUITABLY FOR ALL TRAFFIC MOVEMENTS. BENEFITS INCLUDE IMPROVE TRAVEL TIME RELIABILITY, REDUCED CONGESTION, AND PROLONGED EFFECTIVENESS OF THE TRAFFIC SIGNAL TIMING.

6 AUXILIARY LANE ADDITION FOR LOOP ON-RAMPS

PER HDM INDEX 504.3(2)(a), A 1,000 - FOOT MINIMUM LENGTH OF AUXILIARY LANE SHOULD BE PROVIDED FOR METERED SINGLE OR MULTILANE FREEWAY ENTRANCE RAMPS.

7 AUXILIARY LANE ADDITION FOR 2 LANE OFF-RAMPS

PER HDM INDEX 504.3(6), APPROXIMATELY 1,300 FEET LONG AUXILIARY LANE SHOULD BE PROVIDED IN ADVANCE OF A 2-LANE EXIT.

8 WIDENED LANES FOR LOOP RAMP

PER HDM INDEX 504.3(1)(b), WHERE RAMPS HAVE CURVE RADII OF 350 FEET OR LESS THE TRAFFIC LANE SHALL BE WIDENED IN ACOORDANCE WITH TABLE 504.3 IN ORDER TO ACCOMMODATE LARGE TRUCK WHEEL PATHS.

9 SINGLE EASTBOUND RAMPS / OAK VALLEY PARKWAY INTERSECTION WITH ADEQUATE ACCESS CONTROL

PER HDM INDEX 504.8, ACCESS RIGHTS SHALL BE ACQUIRED ON THE OPPOSITE SIDE OF THE LOCAL ROAD FROM RAMP TERMINALS TO PRECLUDE DRIVEWAYS OR LOCAL ROADS WITHIN THE RAMP INTERSECTION.

10 MAINTENANCE VEHICLE PULLOUT

FOR ACCESS TO RAMP METERING AND IRRIGATION EQUIPMENT.

11 POTENTIAL HAZARDOUS WASTE

ASBESTOS CONTAINING MATERIAL IN STRUCTURAL CONCRETE, LEAD-BASED PAINT, AERIALLY DEPOSITED LEAD (ADL), AND OTHER HAEVY METALS ASSOCIATED WITH THE RAILROAD.

12 BIOLOGICAL IMPACTS TO RIPARIAN/RIVERINE RESOURCES

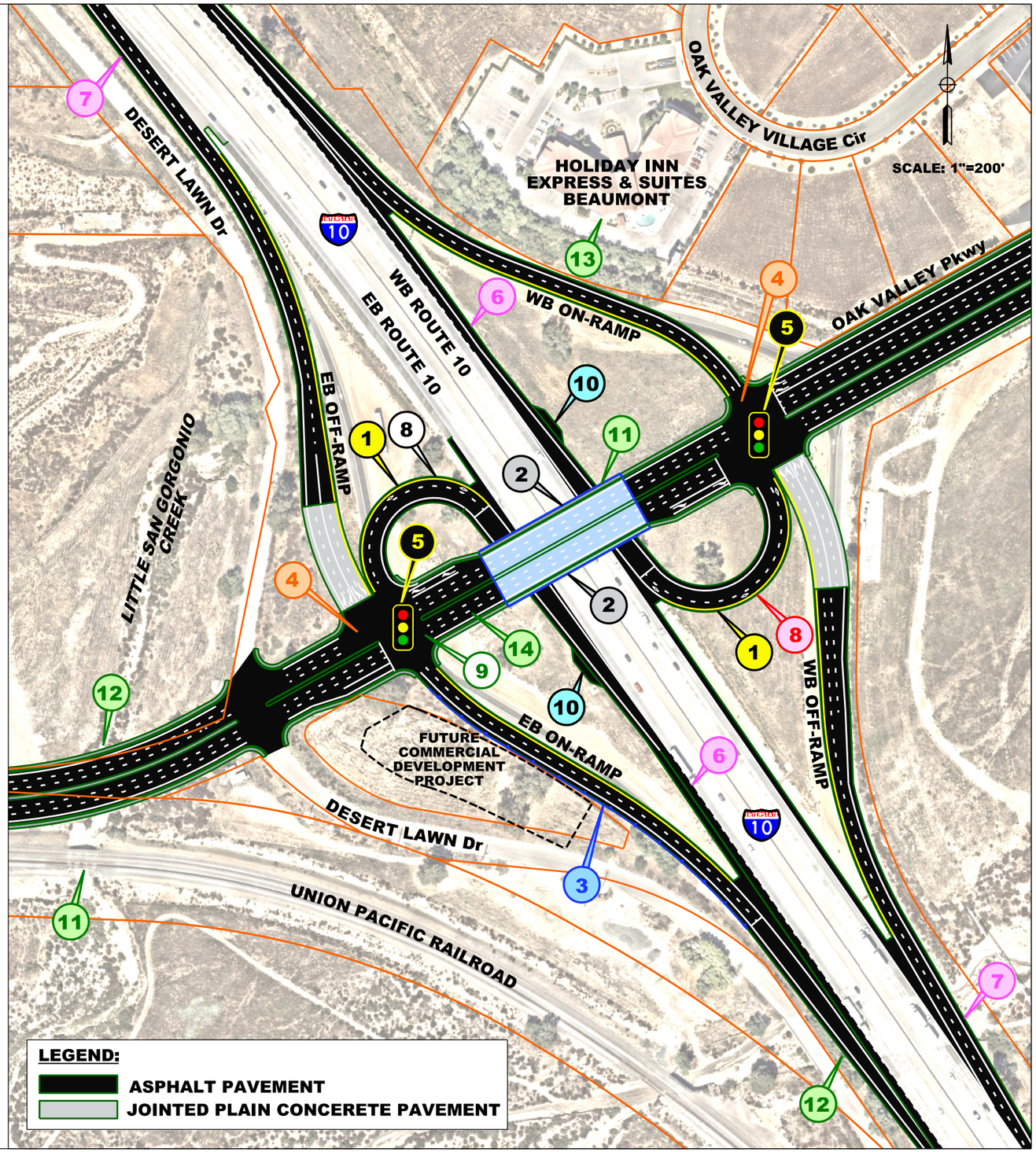
REQUIRES JOINT PROJECT REVIEW THROUGH RCA AND WILDLIFE AGENCY. POTENTIAL IMPACTS TO FEDERALLY ENDANGERED SPECIES.

13 POTENTIAL NOISE IMPACTS

CURRENTLY NO SOUNDWALL. NOISE STUDY WILL CONFIRM IF A SOUNDWALL NEEDS TO BE CONSTRUCTED FOR HOLIDAY INN.

14 VEHICLE MILES TRAVELED

DUE TO THE INCREASE IN CAPACITY, VMT ANALYSIS IS REQUIRED. ALL FEASIBLE MITIGATION WILL BE EXPLORED TO REDUCE IMPACTS TO LESS THAN SIGNIFICANT UNDER CEQA.



1 HOV LANE WITH RAMP METERING
NEW RAMP METERING SYSTEMS WERE NOT IDENTIFIED IN THE PSR AND ARE REQUIRED TO MEET CALTRANS RAMP METERING ESIGN GUIDELINES AND TO SUPPORT THE NEW HOV LANES.

2 6 FT SIDEWALK WITH 6 FT CLASS II BIKE LANES
PER THE CITY OF BEAUMONT GENERAL PLAN, OAK VALLEY PARKWAY WILL REQUIRE CLASS II BIKE LANES. PER HDM INDEX 301.2(1), THE MINIMUM BIKE LANE WIDTH FOR THIS ROAD SHOULD BE 6 FT, AND PER HDM INDEX 208.4, THE MINIMUM WIDTH OF A BRIDGE SIDEWALK SHALL BE 6 FT.

3 DUAL LEFT TURNS
IT IS ANTICIPATED THAT DUAL-LEFT TURN LANES IN CONJUNCTION WITH ADAPTIVE SIGNALS CAN BE INCORPORATED ON OAK VALLEY PARKWAY, AND WOULD ALLOW FOR LOS D OR BETTER OPERATIONS AT THE RAMP INTERSECTIONS.

4 IMPROVED INTERSECTION ANGLE PER CURRENT CALTRANS STANDARDS
PER HDM INDEX 403.3, THE INTERSECTION ANGLE WITH THE FREEWAY RAMPS SHOULD NOT BE LESS THAN 75 DEGREES.

5 ADAPTIVE TRAFFIC SIGNAL
PROPOSED TO IMPROVE INTERSECTION OPERATION BY CONTINUOUSLY DISTRIBUTING GREEN LIGHT TIME EQUITABLY FOR ALL TRAFFIC MOVEMENTS. BENEFITS INCLUDE IMPROVE TRAVEL TIME RELIABILITY, REDUCED CONGESTION, AND PROLONGED EFFECTIVENESS OF THE TRAFFIC SIGNAL TIMING.

6 AUXILIARY LANE ADDITION FOR ON-RAMPS
PER HDM INDEX504.3 (2)(a), A 1,000 - FOOT MINIMUM LENGTH OF AUXILIARY LANE SHOULD BE PROVIDED FOR METERED SINGLE OR MULTILANE FREEWAY ENTRANCE RAMPS.

7 AUXILIARY LANE ADDITION FOR 2 LANE OFF-RAMPS
PER HDM INDEX 504.3(6), APPROXIMATELY 1,300 FEET LONG AUXILIARY LANE SHOULD BE PROVIDED IN ADVANCE OF A 2-LANE EXIT.

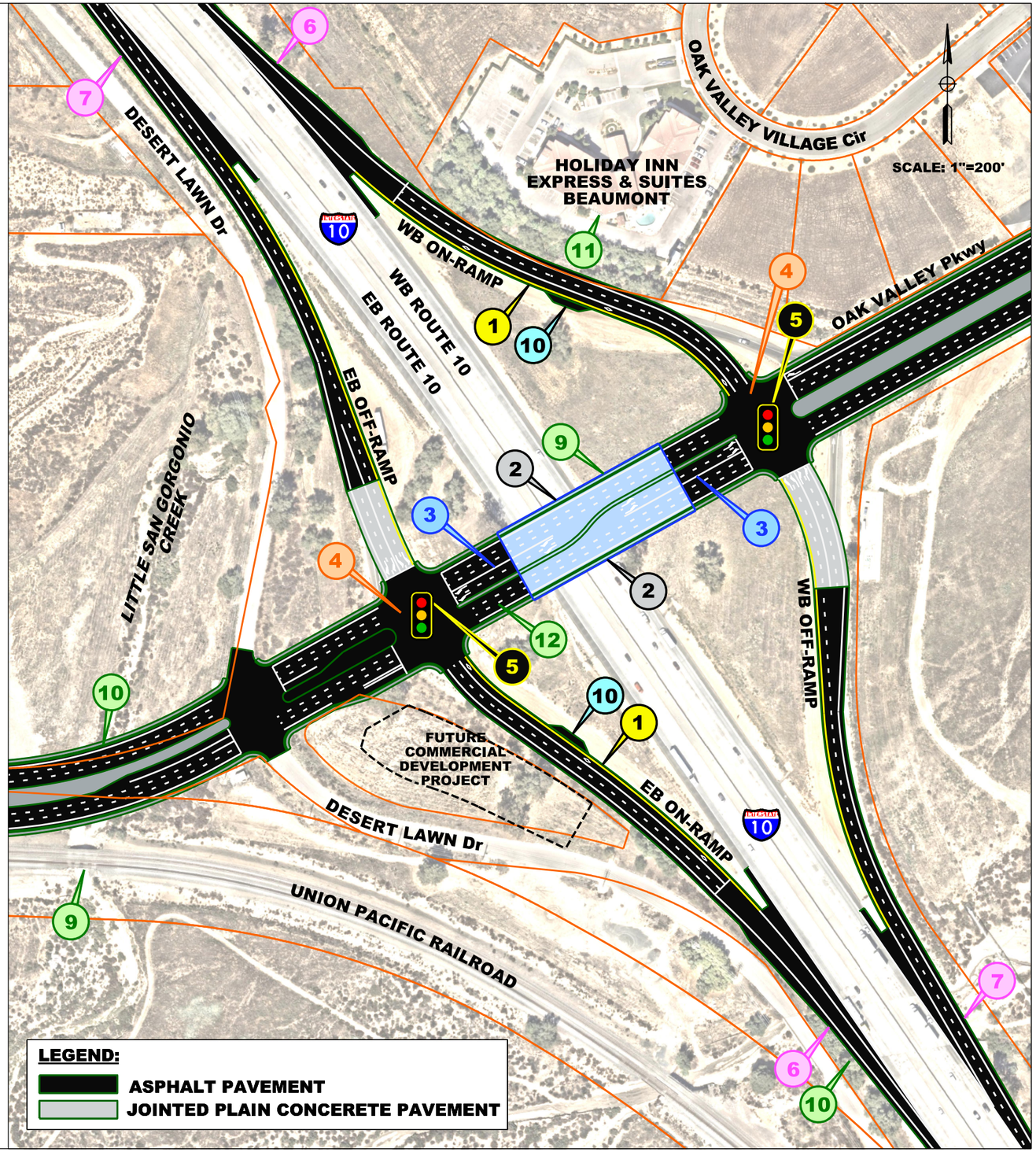
8 MAINTENANCE VEHICLE PULLOUT
FOR ACCESS TO RAMP METERING AND IRRIGATION EQUIPMENT.

9 POTENTIAL HAZARDOUS WASTE
ASBESTOS CONTAINING MATERIAL IN STRUCTURAL CONCRETE, LEAD-BASED PAINT, AERIALLY DEPOSITED LEAD (ADL), AND OTHER HAEVY METALS ASSOCIATED WITH THE RAILROAD.

10 BIOLOGICAL IMPACTS TO RIPARIAN/RIVERINE RESOURCES
REQUIRES JOINT PROJECT REVIEW THROUGH RCA AND WILDLIFE AGENCY. POTENTIAL IMPACTS TO FEDERALLY ENDANGERED SPECIES.

11 POTENTIAL NOISE IMPACTS
CURRENTLY NO SOUNDWALL. NOISE STUDY WILL CONFIRM IF A SOUNDWALL NEEDS TO BE CONSTRUCTED FOR HOLIDAY INN.

12 VEHICLE MILES TRAVELED
DUE TO THE INCREASE IN CAPACITY, VMT ANALYSIS IS REQUIRED. ALL FEASIBLE MITIGATION WILL BE EXPLORED TO REDUCE IMPACTS TO LESS THAN SIGNIFICANT UNDER CEQA.



APPENDIX B

Resumes

BEAUMONT
California

Appendix B: Resumes

DOKKEN ENGINEERING

DARWIN CRUZ, PE

PROJECT MANAGER

EDUCATION

2007, BS Civil Engineering
Cal Poly, San Luis Obispo

REGISTRATION

California Professional Civil Engineer, #C76601

EXPERIENCE

17 Years (All w/Dokken)

AFFILIATIONS

American Society of Civil Engineers (ASCE)

AREAS OF EXPERTISE

- Project Management
- Alternatives Evaluation
- Feasbility Studies
- Roadway/Interchange Design
- Bikeway Design
- Site/Parking Lot Design
- Pavement Engineering
- Cost Estimating
- Utility Relocation Coordination
- Stage Construction
- Construction Schedules
- Funding Assitance
- Grant Writing
- Design Support During Construction

Mr. Darwin Cruz has experience in all aspects of project design and project management for various transportation, utility infrastructure, and safety improvement projects in southern California. He has lead development of project planning reports, preliminary engineering studies and environmental documents, and PS&E packages for various City, County, University, regional agency, and Caltrans transportation projects.

As **Project Manager**, Darwin will ensure sufficient resources are available to the team to complete all assigned tasks on schedule, within budget, and to the City's satisfaction. He will be available to meet with and present to City leadership/stakeholders, assist with funding and obtain project approvals.

EXPERIENCE

I-5/SR-56 Interchange Project, San Diego, CA | Task Order Manager and Project Engineer developed design alternatives to meet the project's purpose and need, provided coordination, review, and oversight for preparation of engineering and environmental technical studies, and completed the Final Project Report. The I-5/SR-56 Interchange Project PA&ED phase analyzed multiple alternatives to address the "missing" direct freeway-to-freeway connectors to and from the north at the existing interchange.

Palm Avenue/I-805 Interchange, San Diego, CA | Project Manager for the PS&E phase for the modifications to improve traffic operations and alleviate future traffic congestion at the I-805/Palm Avenue interchange. The project includes complete street upgrades, modernization, and bridge widening/seismic retrofits of the existing interchange and Palm Ave overcrossing structure. The City of San Diego is the lead agency and Caltrans District 11 will Advertise, Award, and Administer construction. Darwin is managing a multi-disciplinary team for completion of the final design/specifications, right of way acquisition, and construction support. Dokken successfully secured a 2022 Bridge Investment Program Grant through the DOT/FHWA for $24M in Federal match funding.

Friars Road/SR-163 Interchange, San Diego, CA | Design Engineer responsible for development of stage construction and traffic handling plans, CPM construction schedule, and geometric design oversight for the Friars Road/SR-163 Interchange Project. Darwin also prepared the Transportation Management Plan and coordinated the lane closure requests with the Caltrans District 11 Traffic Management Branch. The project improved the interchange and bicycle, pedestrian, and vehicular traffic operations along Friars Road and at the ramp intersections.

MARY ELIZABETH WESTRUM, PE

ROADWAY PROJECT ENGINEER

EDUCATION

2006, BS Civil Engineering
Tufts University

REGISTRATION

California Professional Civil Engineer, #C75418

EXPERIENCE

18 Years (All w/Dokken)

Ms. Mary Elizabeth Westrum has design experience in many aspects of roadway, interchange, and highway design. Mary Elizabeth also has significant experience in the preparation of PSRs, PRs, Noise Abatement Decision Reports, Preliminary Engineering Reports, and PS&E packages. Her duties have included the design of horizontal alignments, vertical profiles and superelevation diagrams, roadway alternative analysis, stage construction, right of way engineering support, and preparation of cost estimates.

EXPERIENCE

Friars Road/SR-163 Interchange, San Diego, CA | Project Manager responsible for the preparation of the Project Report, coordination of the environmental efforts on the Environmental Document, production of the Phase I PS&E, and preparation of the Plan of Finance for this project, which improved the State Route 163/Friars Road interchange, enhanced traffic operations on Friars Road including the SR-163 ramp intersections with Friars Road, and improved bicycle and pedestrian operations.

I-215/Scott Road Interchange, Menifee | The project involves reconfiguration of the existing I-215 and Scott Road Interchange and replacing the existing Scott Road overcrossing. Mary Elizabeth assisted with roadway geometric design and was responsible for preparing the Preliminary NADR and updating the cost estimate.

I-10/Indian Canyon Drive Interchange, Palm Springs, CA| Design Engineer responsible for reviewing and adjusting geometrics, developing the Final Project Report, preparing PS&E, and providing design support during construction. The preferred alternative included a westbound loop on-ramp from Indian Avenue and a westbound hook off-ramp that joins with 20th Avenue, the frontage road. To ensure driver comfort, a short slip on-ramp was created at 20th Avenue allowing drivers to re-enter the freeway at the terminus of the westbound off-ramp. In the eastbound direction, both the on-ramp and off-ramp terminate at an intersection with Garnet Avenue, a frontage road; the ramps are both hook ramps.

Palm Avenue/I-805 Interchange, San Diego, CA | Project Engineer responsible for the PS&E design to improve traffic operations and alleviate future traffic congestion at the I-805/Palm Avenue interchange. The project includes widening of the local roadway and Palm Avenue overcrossing to provide additional storage capacity for dual-left turn lanes at the ramp intersections, widened sidewalks and new Class IV bikeways in both directions along Palm Ave, as well as modifications to the interchange ramps, including a new HOV lane, ramp metering and intersection traffic signaling. Bicycle and pedestrian circulation along Palm Avenue will also be improved within the project limits.

FRANKLIN FLORES, PE

ROADWAY DESIGN ENGINEER

EDUCATION

2008, BS Civil Engineering
San Diego State University

REGISTRATION

California Professional Civil Engineer, #C83968

EXPERIENCE

16 Years (All w/Dokken)

Mr. Franklin Flores has design experience in many aspects of roadway, interchange, and highway design. His duties have included leading design of horizontal alignments, vertical profiles, roadway and overhead/roadside signs, superelevation diagrams, bikeway facility designs, signing and striping, stage construction and traffic handling plans, ADA upgrades, roadway alternatives analysis, and preparation of cost estimates.

EXPERIENCE

Friars Road/SR-163 Interchange, San Diego, CA | Frank assisted senior engineers with preparation of stage construction and traffic handling plans during PS&E phase. Stage construction plans included temporary signing and striping plans, detour plans, and stage construction quantities. He also assisted with roadway geometric design. The project involves modifications to improve the State Route 163/Friars Road interchange, enhance traffic operations on Friars Road including the SR-163 ramp intersections with Friars Road, and improve bicycle and pedestrian operations.

I-215/Scott Road Interchange, Menifee | Frank assisted preparing stage construction and traffic handling plans during the PS&E phase. Stage construction plans included temporary signing and striping, detour plans, and stage construction quantities. The project involves reconfiguration of the existing I-215 and Scott Road Interchange and replacing the existing Scott Road overcrossing. He also assisted with roadway geometric design and signing plans.

I-5/SR-78 Preliminary Engineering Studies, San Diego, CA| Frank prepared preliminary roadway geometric design for several alternatives. He also assisted with alternatives evaluation and development of preliminary engineering studies for improvements at the I-5/SR 78 freeway-to-freeway interchange. The results were packaged in a Preliminary Engineering Feasibility Study to present to local agencies for possible further study.

E Palomar Street Transit Station, Park & Ride and DAR at I-805, Chula Vista, CA | Frank assisted in roadway geometric design and cost estimates. The project includes the addition of a new freeway access point via a direct access ramp (DAR) and reconstruction of the existing overcrossing structure at East Palomar Street. The project required close coordination with the City of Chula Vista, Caltrans, SANDAG, SDG&E and MTS. Additional project components include detailed drainage analysis and design, retaining wall and sound wall design, utility relocation coordination, stage construction, and right-of-way acquisition. Frank also provided construction support through project completion and closeout.

DOKKEN ENGINEERING

CHARLES TORNACI, PE

STRUCTURES PROJECT ENGINEER

EDUCATION

1999, BS Civil Engineering
Cal Poly San Luis Obispo

REGISTRATION

California Professional Civil Engineer, #C66058

EXPERIENCE

24 Years (All w/Dokken)

Mr. Charles Tornaci is Dokken's San Diego structures team leader, both overseeing and performing the structural analysis and design efforts for bridge projects in Southern California. With over 24 years of experience on structural transportation projects, he is very familiar with Caltrans Local Assistance and Division of Structures standards and practices, specializing in innovative and cost-effective design solutions. He has been involved in a range of projects involving planning, design, construction, and seismic retrofits of vehicular and pedestrian bridges, retaining walls, stairways, and bike trails.

EXPERIENCE

I-215/Scott Road Interchange, Riverside County, CA | Structures Project Engineer responsible for the design and PS&E delivery of a two-span bridge replacement as part of the Scott Road/I-215 Interchange project in the city of Menifee. Ultimate width replacement was revised to a phased approach to accommodate funding changes, requiring redesign following updated Caltrans design codes and standards, which was completed and approved in an 11-month timeframe.

Friars Road/SR-163 Interchange, San Diego, CA | Charles was responsible for the design and oversight of 3 overhead bridge mounted signs on Friars Road OC, 9 retaining walls along Friars Road, and a culvert extension within Caltrans right-of-way below Friars Road. The culvert extension required a realignment of the existing maintenance path, necessitating a soldier pile retaining wall to support the existing parking lot. Culvert extension and retaining walls also required special design to clear existing utilities (including numerous VCP sewer lines) and stay within existing right-of-way limits. Charles also was responsible for providing oversight and QA/QC for the Friars Road OC widening and associated sub-ground anchor retaining walls supporting the widening and realigned access ramps.

E Palomar Street Transit Station, Park & Ride and DAR at I-805, Chula Vista, CA | Charles was responsible for the Type Selection submittal and approval, as well as the Independent Design Check of the overcrossing and DAR structures, in addition to overseeing the design of 7 special design retaining walls incorporating architectural features developed by Caltrans. The improvements include the addition of a new Park and Ride facility, and a new freeway access point via a direct access ramp (DAR) and replacement of the existing overcrossing structure at East Palomar Street.

DOKKEN ENGINEERING

VANESSA COTHRAN, SR/WA

RIGHT OF WAY/ROE

EDUCATION

2011, BA Sociology
CSU Sacramento

Completed Courses:
Uniform Act: Appraisal, Acquisition & Relocation Requirements Overview Workshop (FHWA)

Eminent Domain Law Basics for the Right of Way Professional (IRWA)

REGISTRATION

CA Licensed Real Estate Salesperson, #01788740

CA Licensed Notary

Senior Right of Way Designation (SR/WA)

EXPERIENCE

19 Years (8 w/Dokken)

Ms. Vanessa Cothran has worked in the right of way industry on a variety of public projects. She has proven skills in delivering tasks working independently or as part of a team. She communicates and relates well with people to solve problems and accomplish her professional tasks on time. Vanessa has demonstrated expertise in providing acquisition and relocation assistance services in a timely and cost-effective manner and is knowledgeable regarding the requirements of the Uniform Act and Caltrans policies and procedures.

EXPERIENCE

I-80 Auxiliary Lanes, Placer County, CA | This project involves widening the existing Interstate 80 to add an eastbound auxiliary lane between State Route 65 and Rocklin Road, and a westbound 5th lane between Douglas Boulevard and Riverside Avenue. Vanessa's responsibilities include preparing a waiver valuation for 1 parcel.

Indian Canyon Drive and Bridge at UPRR, Palm Springs, CA | To improve traffic circulation and safety, Indian Canyon Drive was widened from 2 to 6 lanes from the Union Pacific Railroad (UPRR) overcrossing to Garnet Avenue. North and south bridge approaches were constructed, the existing 4-span UPRR overcrossing was demolished, and a new 2-span bridge structure was constructed over UPRR Right-of-Way. Vanessa was responsible for the acquisition of 9 parcels, including 6 temporary construction easements.

South Palm Canyon Drive Low Water Crossing, Palm Springs, CA | This project proposes to replace the existing low water crossing on South Palm Canyon Drive at Arenas Canyon South tributary, with a four-lane bridge structure to provide year-round access, improve safety, and improve operations on the facility. The existing low water crossing is located immediately north of the intersection of South Palm Canyon Drive and Bogert Trail. Currently, access is limited on South Palm Canyon Drive during storm events due to flooding. Vanessa was responsible for acquiring 2 environmental permit to enters and coordinating the acquisition and escrow of a conservation easement.

Highway 86 Water Transmission Line Phases 3 & 4, Imperial and Riverside County, CA | This project proposes to replace approximately 13.4 miles of existing 16- inch and 18-inch diameter transmission mains from 84th Avenue south to CVWD's Reservoir 1092 site located in Riverside and Imperial County. Vanessa is responsible for coordination with property owners regarding right of entry agreements, acquisition, and escrow coordination for approximately 90 parcels.

DOKKEN ENGINEERING

ZACH LIPTAK

ENVIRONMENTAL LEAD

EDUCATION

2014, BS Environmental Science, California State University, Sacramento

LICENSES/CERTIFICATIONS

- 2015, Institute of Noise Control Engineers (INCE)
- 2015, Environmental Applications of GIS for ESRI ArcMap GIS Mapping Software
- 2015 FHWA Traffic Noise Model 2.5 (TNM 2.5)

EXPERIENCE

12 Years (All w/Dokken)

Mr. Zach Liptak is a Senior Environmental Planner with 12 years of experience in the various stages of environmental compliance including securing regulatory permits for projects, preparing and finalizing NEPA/CEQA environmental documents, environmental technical studies, and regulatory permitting. Zach is skilled in scoping, inventory, analysis of environmental resources that may be impacted, securing approvals from WRMSHCP, and complex environmental documents such as EIRs and EISs.

EXPERIENCE

McCall Boulevard & I-215 Interchange, Menifee, CA | This project will reconstruct the McCall Boulevard/ I-215 interchange and widen McCall Boulevard to address traffic congestion and delays associated with surrounding developments. Zach is responsible for leading the environmental efforts on the project, oversight and preparation and approval of all technical studies including biological, cultural, air quality, noise, water quality, and visual/aesthetics. Caltrans District 8 is the CEQA and NEPA lead agency, and Zach is currently preparing the CEQA Initial Study and NEPA Environmental Assessment. Zach secured approval of VMT mitigation from Caltrans District 8 to ensure the environmental document would remain an Initial Study under CEQA even with a Vehicle VMT increase of 2.4 million additional VMT with the project.

I-215/Scott Road Interchange, Riverside County, CA | This project widened a rural two-lane connection between Interstate 215 and State Route 79 to a six-lane road, realigned the four diamond on- and off-ramps, and constructed a new loop on-ramp in the northwest quadrant and a new loop off-ramp in the northeast quadrant of the interchange. After environmental approval of the CEQA/NEPA document, the project was phased and required a revalidation. Zach prepared all the required environmental technical study addendums and submitted the CEQA/NEPA Revalidation to Caltrans for approval. Zach was also responsible for preparing and securing the required the required regulatory permits (401/404/1602) for construction of the interchange.

I-10/Portola Avenue Interchange, Palm Desert, CA | This project will construct a new interchange in Palm Desert along I-10 and will construct an overpass with freeway connectors at Varner Road and Dinah Shore Drive. The project will realign Varner, which currently serves as a frontage road, as well as a grade separation between traffic and the UPRR tracks paralleling the freeway. Due to the need for a large stormwater channel, extensive coordination with CVWD has been required for the project. Zach assisted in the preparation of technical studies, was responsible for coordinating and meeting with Caltrans staff to secure environmental approval of the IS/EA, and prepared technical revalidations during PS&E.

DOKKEN ENGINEERING

JASON PACK, TE

TRAFFIC ANALYSIS

EDUCATION

1999, BS Civil Engineering
UC Davis

REGISTRATION

California Professional Traffic Engineer, #TR 2402

EXPERIENCE

24 Years

Mr. Jason D. Pack is a Principal with Fehr & Peers located in Southern California. He is actively involved on a wide variety of project work but also finds time to lead the firm's research and development efforts in Emergency Evacuation assessment. Jason has an extensive background in travel demand forecasting, traffic operations assessment (including micro-simulation assessment), VMT analysis, big data analysis, transit ridership forecasting, and transportation impact studies involving NEPA and CEQA. His focus is to utilize his experience and the technical resources of the company to help clients answer their toughest questions related to mobility.

His recent work has included forecasting and operations assessment for large infrastructure improvements, developing recommendations for SB 743 implementation (California's requirements to consider VMT as an impact metric under CEQA), assisting agencies with establishing VMT banks/exchanges, emergency evacuation assessment to respond to new legislative requirements (SB 99 and AB 747) and development of innovative transportation policies to assist City's advancing transportation into the future.

EXPERIENCE

CEQA/NEPA Assessment | Jason has completed transportation assessments for over 150 projects in support of CEQA or NEPA documentation. These include impact assessment to support negative declarations, transportation sections for EIRs, and transportation sections for EISs or joint EIR/EISs. Jason has actively been involved in assisting jurisdictions with SB 743 implementation. Example projects are noted below:

- SBCTA SB 743 Countywide VMT SB 743 Implementation Phase I,
- SBCTA SB 743 Countywide VMT SB 743 Implementation Phase II (VMT mitigation bank/exchange program)
- WRCOG VMT SB 743 Implementation Study, CA

Interchange and Corridor Studies | Jason has completed the Traffic Study/Report for numerous transportation infrastructure studies throughout California. The most notable of these studies are described below:

- I-15 Express Lanes Southern Extension (ELPSE) PA/ED, Riverside County
- McCall Boulevard & I-215 Interchange
- I-15 Express Lanes PS&E, San Bernardino County
- I-15 Corridor Operations Project (COP) PA/ED, Corona
- I-15 Interim Corridor Operations Project (ICOP) PA/ED, Corona

APPENDIX C

Detailed Scope of Work

BEAUMONT
California

Appendix C: Detailed Scope of Work

Our team has developed a comprehensive scope of services for the City of Beaumont, to streamline approval by Caltrans District 8 and expedite NTP for the next Phase of the I-10/Oak Valley Parkway Interchange Project. With the preliminary engineering, environmental document, and design phases fully funded through local development contributions to the TUMF Program, CONSULTANT Engineering commends the City management team in its proactive approach to developing a NEPA certified and shovel ready project that will be well positioned for discretionary Federal grant opportunities. To allow the City to pursue potential Federal reimbursement of funds expended during the PA&ED phase, we have taken the time to develop a detailed scope of services utilizing Caltrans nomenclature and organization structure from the Caltrans Work Breakdown Structure Guidelines. This will allow for maximum leveraging of local monies with the FHWA and future federal match. Through our extensive experience with Caltrans District 8 and under the Caltrans Oversight process, we can anticipate all formal deliverables required to support the PA&ED milestone. We also understand the value of maintaining flexibility within the Scope of Services to accommodate issues that may not be fully identified from the Project Initiation Document phase. Several Optional tasks have been provided to account for unknowns that will be defined as the project progresses.

TASK A – PROJECT ADMINISTRATION AND PROJECT MANAGEMENT

Dokken Engineering will provide project management services for the duration of PA&ED. Management of the project team will occur through a focused effort involving continuous communication, active coordination, budget monitoring and planning. The project manager will facilitate internal and external meetings (kickoff, PDTs, focus meetings), manage subconsultants, monitor/drive the project schedule, and prepare/execute a Quality Control Plan throughout this phase of work. Written and verbal status reports will be provided to the client on a regular basis. A Kick-off Meeting and Monthly Project Development Team (PDT) meetings will be scheduled with key team members from Caltrans within 15 days of Notice to Proceed (NTP). Bi-weekly Management Briefings will be scheduled upon receipt of NTP.

A.1 PDT and Kick-off Meetings

CONSULTANT will organize, attend, and facilitate meetings, as necessary, to provide progress updates, coordinate among technical disciplines, and facilitate overall project communication. For each meeting, CONSULTANT will provide meeting notice, prepare meeting materials and agenda, attend and facilitate the meeting and prepare meeting minutes. CONSULTANT will consult with the City of Beaumont (CITY) project manager prior to each meeting to get input regarding the agenda. The following meetings are anticipated for this project:

- **Kickoff Meeting:** Within 15 days of Notice to Proceed (NTP), CONSULTANT will organize a kickoff meeting with all key personnel, design team members and representatives from Caltrans, (Caltrans) Office of Specially Funded Projects (OFSP), RCTC, and CITY. The purpose of this meeting will be to review the goals and objectives of the project, discuss each team member's roles and responsibilities, identify critical project issues, and obtain consensus project delivery schedule, including task directions. The kickoff meeting ensures that everyone on the project team is functioning with the same understanding regarding project delivery.
- **PDT Meetings:** The Project Development Team (PDT) meetings will serve as the primary forum for reviewing the status of the project and identifying and resolving project design issues. Attendees are anticipated to include CITY staff, Caltrans, CONSULTANT, and subconsultant task leads. Throughout the anticipated duration of the project, the CONSULTANT plans to hold monthly PDT meetings to review document submittals, resolve design issues, discuss comments and proposed resolutions, discuss

progress, and address any other concerns. Twenty two (22) PDT meetings are assumed, based on the preliminary project delivery schedule for PA&ED.

Deliverables: Meeting Notices, Agendas, Exhibits, and Minutes

A.2 Permits and Right of Entries

Following the receipt of the NTP, the CONSULTANT will submit an Encroachment Permit application, attachments, and supporting documentation to the City to be forwarded to Caltrans to allow field staff to conduct general site visits, geotechnical samplings for hazardous materials testing, and stie surveys within the freeway right-of-way. Concurrently, CONSULTANT will identify additional locations outside the freeway right-of-way where it will be necessary to obtain specific rights-of-entry from affected property owners for geotechnical sampling or placement of temporary equipment for noise measurements. CONSULTANT will provide a list of property owners that will be affected by the project and will inform the CITY if support is required to obtain the rights-of-entry permits.

Deliverables: Encroachment Permit Package, Right of Entry forms

A.3 Project Delivery Schedule

Within one (1) month of NTP CONSULTANT will provide a detailed project schedule, which indicates milestones, major activities, deliverables, task dependencies, and durations to the CITY for review and comments. The schedule shall be developed in Microsoft Project and in critical path method format with sufficient detail to support tracking of all major project deliverables and associated reviews/approvals. The schedule will reflect assumed review times by all agencies involved. Review of the schedule will occur at subsequent PDT meetings and adjustments will be made, if necessary, due to changing circumstances.

Deliverable: Project Delivery Schedule and Updates

A.4 Contract Administration (Invoice, Progress Reports, management of scope/budget, etc.)

CONSULTANT will schedule all work necessary to complete the project while administering, monitoring, and controlling the effort and progress of the proposed services as follows:

- Set up an internal project accounting, reporting, and invoicing system in accordance with the City's needs.
- Prepare monthly Progress Reports indicating work accomplished the previous month, anticipated work to be completed the next month, issues requiring resolution, milestones achieved, meetings held, actions taken, approval actions required, coordination issues and design schedule impacts to accompany invoices.
- Execute contracts with the proposed subconsultants for the scope of services described herein, track the work progress of the proposed subconsultants, and review their invoices for format and content compliance.

Deliverables: Progress Reports

A.5 Agency Coordination (CT, CDFW, FHWA, USFWS, utility companies, etc.)

CONSULTANT will coordinate with other agencies involved during the PA&ED phase for compatible design. Coordination may include but will not necessarily be limited to the following: Caltrans, California Dept. of Fish and Wildlife, Federal Highway Administration, Santa Ana Regional Water Quality Control Board, U.S. Fish & Wildlife Service, Utility Companies, Army Corps of Engineers. Caltrans will exercise review and approval functions through the CITY at key points in the development process. All contacts with Caltrans will be directed through CITY. The CITY will conduct reviews, in addition to the monthly project status

reports and meetings. All meetings with other outside agencies will be scheduled by CONSULTANT with approval from the CITY.

Deliverables: Correspondence, Meeting Minutes

A.6 Bi-weekly City Briefing and Focus Group Meetings
CONSULTANT will schedule and facilitate bi-weekly meetings with the CITY project manager and subconsultant task leads to coordinate elements of the preliminary design and technical studies, review upcoming deliverables, and resolve project issues. CONSULTANT will coordinate, attend, and present project specific updates to each stakeholder (utility agencies, various CITY Departments, Caltrans functional groups, and others) as needed to facilitate decisions to move the project forward. Written and verbal reports will be provided to the client on a regular basis.

Deliverables: Correspondence, Action Items List

A.7 Quality Management Plan/Memorandum
CONSULTANT will prepare a Quality Assurance/Quality Control Process Memorandum for the PA&ED phase to summarize QA/QC general criteria, company policy guidelines, project staff responsibilities, QA procedures, QC checklists, and QC deliverables. Exhibits and plans will also be checked, corrected, and backchecked for accuracy and completeness. CONSULTANT will review subconsultant environmental and engineering report submittals to ensure that appropriate background information, study methodology, interpretation of data, format and content are completed in accordance with current standards.

Deliverable: Quality Management Plan/Memo

A.8 Agreement Support (Coops with Caltrans)
CONSULTANT will assist with a Cooperative Work Agreement between the State of California and the City of Beaumont to establish a mechanism for CITY reimbursement to the State for oversight services during preliminary and final design phases. If necessary, CONSULTANT will provide further support to the CITY to outline and initiated any future cooperative agreements required with Caltrans for right of way acquisition coordination/oversight and construction advertise, award, and administration.

Deliverable: Draft Cooperative Agreement Coordination

A.9 Funding Assistance (Optional Service)
The CONSULTANT will assist the CITY in identifying grant funding opportunities. Potential sources for transportation funding include Solutions for Congested Corridors program, the Active Transportation Program, Local Partnership Program, State Transportation Improvement Program, local road funds, existing traffic impact fees in adjacent jurisdictions, transportation sales taxes, the Bridge Investment Program, and other Federal Funding opportunities. CONSULTANT will prepare up to one (1) funding application as requested by the City.

Deliverable: Funding Application

TASK B – RESEARCH AND DATA GATHERING

CONSULTANT shall research, organize, and review all record project information. This shall include existing topographic mapping, photos, Caltrans bridge and maintenance reports, Caltrans Right-of-Way Maps, “as-built” drawings, geotechnical logs and reports, utility facilities/asset maps, Caltrans Encroachment Permits, records of survey, assessor maps, contract documents, approved development projects for adjacent lands, RCTC Regional Transportation Plan, FEMA mapping and floodplain studies, and any other pertinent data for

the project. All information gathered under this task shall be organized into a logical file structure and submitted to the City of Beaumont for their project file.

TASK C – TOPOGRAPHIC & RIGHT OF WAY SURVEYS

Survey activities will be conducted to set control, provide preliminary elevations/topographic mapping, and identify preliminary Caltrans access controlled right of way and property boundaries. These activities will commence immediately upon NTP, and the results will provide the necessary information needed to conduct the planning-level analyses in the PA&ED phase of the project.

C.1 Horizontal and Vertical Control Surveys

CONSULTANT will coordinate with Caltrans and CITY to determine the approved project control for the project. CONSULTANT will perform field surveys to search for and tie approved control and benchmarks. CONSULTANT will prepare a control report, closures, and control diagram of all primary controls to be used for the project. CONSULTANT will set durable control points along the project limits and just beyond for utilization of future surveys and construction control. It is assumed the datum will be provided in California State Plane Coordinates, NAD83 and NAVD88 vertical datums.

Deliverables: Survey Base Files, Survey Control Report

C.2 Aerial Photogrammetric Survey

CONSULTANT will coordinate with Caltrans to facilitate the delivery of an overall photogrammetric, LiDAR supported aerial map and orthophotography. CONSULTANT will set and locate aerial control panels at locations and frequency adequate to meet Caltrans and National Mapping Accuracy Standards of 1" = 50' scale mapping, with 1' contour intervals based on the approved mapping limits. Aerial based topographic mapping will show all visible surface features, 1' contours, DTM ground surface and spot elevations within the mapping limits utilizing the current Caltrans mapping standards. Color photo background imagery will be prepared along the project limits utilizing the aerial photography. The imagery will be adjusted using ortho-correction within the mapping limits, and simple rectification within the ground control limits. It is anticipated that CONSULTANT and aerial firm will provide Caltrans and CITY with the necessary aerial layout and flight plan that will require approval in three stages (ABC Process) per the "Required Materials for Photogrammetric Mapping" standards.`

Deliverables: Aerial Topo Base File, DTM File, Orthophoto Imagery

C.3 Topographic Design Survey/Mapping

CONSULTANT will collect visible surface features (sidewalk, curb, gutter, medians, manholes, pull boxes, utility poles, cabinets, etc.) within the project limits utilizing GPS and conventional total station survey methods. Survey information will be used together with the results of the aerial photogrammetric survey to produce a preliminary topographic base map to support the preliminary design phase. The general limits are centered at the I-10/Oak Valley Interchange and will extend northwesterly along I-10 approximately 5000 feet and approximately 3500 feet southwesterly along I-10 and will extend along Oak Valley Parkway to a point just beyond the intersections of Desert Lawn Drive to the west and Golf Club Drive to the east, sufficient for realignment and widening.

Deliverables: Topographic Survey Data with DTM, Points Files

C.4 Preliminary Right of Way and Boundary Mapping

CONSULTANT will request from Caltrans current Right of Way Maps and Monument Maps along the project corridor. CONSULTANT establish project control and to resolve and map the Caltrans right of way along the project corridor. CONSULTANT will attain the necessary mapping and documentation from CITY to survey

and map all adjoining properties within the project limits. Preliminary Title Reports will be secured, as needed, for development of the right of way mapping. Field surveys will be performed to locate monuments, pins, wells and other boundary markers necessary to resolve and map adjoining parcels. An overall LANDNET base map will be prepared as the basis of the right of way and parcel boundaries. Base map will be prepared with sufficient detail and accuracy to be applicable to the development of plats and legal descriptions during later phases of the project.

Deliverables: Right of Way and Boundary Base Map (LANDNET), Preliminary Title Reports

TASK D – PRELIMINARY ENGINEERING STUDIES

As part of the preliminary engineering studies, the CONSULTANT shall utilize permits and right of entry approvals completed under Task A.2 to perform site visits, collect field data and conduct preliminary analyses for all technical aspects of the project, including geotechnical, pavement materials, roadway geometric, bridge design, traffic, drainage and storm water. Based on the findings of these studies, the CONSULTANT work collaboratively with all project stakeholders to identify the essential project elements that can be implemented within the available funding constraints. Once the project is defined, structure Advance Planning Studies and Geometric Approval Drawings will be updated and approved for inclusion in the Project Report and Environmental Document.

D.1 Preliminary Drainage/Hydrology Report

CONSULTANT will prepare a Preliminary Drainage and Hydrology Report to document the hydrology and hydraulic analysis based on the City's criteria. The preliminary report will provide a detailed discussion of the existing conditions, post-project drainage patterns and conditions, results of the on-site and off-site hydraulic analyses and any issues of special concern or significance. Boundary conditions for proposed drainage system outfalls for connections to existing systems will be taken from existing FEMA studies, or the CITY will provide or agree to assumed boundary conditions for use in the hydraulic analysis. A Draft Preliminary Drainage/Hydrology Report shall be submitted to the CITY and Caltrans for review, and a Final Preliminary Drainage/Hydrology Report shall be provided addressing all comment/concerns reviewed by the reviewing agencies.

Deliverable: Preliminary Drainage/Hydrology Report (Draft and Final)

D.2 Draft Storm Water Data Report

CONSULTANT will prepare a Draft Storm Water Data Report (SWDR) to address the potential for project impacts on water quality, floodplain, and wetlands based on current Caltrans guidelines (Environmental handbook Volume 1, Chapter 9, Water Quality). The report will discuss receiving water conditions, objectives, and beneficial uses, as well as Caltrans standard Best Management Practices (BMPs) and project design features in accordance with the current Caltrans Statewide Storm Water Management Plan. In accordance with the National Pollution Discharge Elimination System (NPEDES) general construction activity stormwater discharge permit, applicable requirements will be identified. A Draft SWDR shall be submitted to the CITY and Caltrans for review, and a Final Draft SWDR shall be provided addressing all comment/concerns reviewed by the reviewing agencies.

Deliverable: PA&ED Level Storm Water Data Report (Draft and Final)

D.3 Geotechnical Reports

- **Preliminary Geotechnical Design Report (PGDR):** CONSULTANT will perform geotechnical engineering analyses and evaluation and prepare a PGDR in accordance with Caltrans Geotechnical Manual for

Geotechnical Design Report. The PGDR will address the geologic hazards, existing site conditions, seismicity, and the feasibility of identified geotechnical options.

- **Structure Preliminary Geotechnical Report (SPGR):** CONSULTANT will perform a site visit and geotechnical engineering analyses and evaluation and prepare two SPGRs (one for Oak Valley Parkway OC Bridge No. 56-496 and one for Middle Fork San Timoteo Creek Bridge No. 56-215R/L) in accordance with Caltrans Geotechnical Manual for Foundation Reports for Bridges. The SPGRs will provide an overview of the existing foundations, site geology, seismicity, and recommendations regarding suitable and unsuitable foundations.
- **Preliminary Materials Report (PMR):** CONSULTANT will perform site visit and geotechnical engineering analyses and evaluation and prepare a PMR in accordance with Caltrans Highway Design Manual, Topic 114. The PMR will document the sources of information used and assumptions made. If the preliminary traffic projections and design designations and design traffic indexes become available, the PMR may address the preliminary pavement structure sections.

Deliverables: Preliminary Geotechnical Design Report (PGDR), Structure Preliminary Geotechnical Report (SPGR), Preliminary Materials Report (PMR)

D.4 Updated Geometric Approval Drawings

Based upon the results of the traffic analysis, project mapping, geotechnical study, available data, and input from the CITY and Caltrans, CONSULTAN will prepare a Geometric Approval Drawing (GAD) package to obtain approval of the interchange geometrics for each viable build alternative. The purpose of the GAD is to identify if the proposed design meets the requirements of the Highway Design Manual (HDM), identify grading and preliminary right of way limits, establish a project roadway geometric base map, and formally confirm that the design meets the operational needs of the facility. CONSULTAN will prepare a GAD in strip plot format. The GAD submittal package will include typical sections, plan view exhibits, profiles, superelevation diagrams, a signature block and a traffic volumes diagram. CONSULTAN will present the GAD exhibits and solicit comments from the City, Caltrans, and other stakeholders as approved by the City of Beaumont.

Deliverables: Draft and Final Geometric Approval Drawings for Build Alternatives

D.5 Updated Structures Advanced Planning Study

CONSULTANT will prepare Advance Planning Studies (APS) for up to two structure types for each bridge or culvert modification. The plans will adhere to current Caltrans detailing and formatting requirements as specified in Section 3-2 “Advance Planning Studies” of Caltrans OSFP Information and Procedures Guide as well as in Caltrans Memo to Designers 1-8 “Advance Planning Studies”.

In general, the APS consists of a single plan sheet, an itemized structure cost estimate, and completion of the “Consultant Prepared Structures Advance Planning Study Checklist”. The APS plan sheet (typically 11” x 17”) includes a plan view, elevation view, and typical section of the structure with sufficient detail to determine structure limits, feasible structure type, structure depth, foundation locations and costs. The itemized structure cost estimate will be based on approximate quantity estimates using tables from Caltrans Bridge Design Aids manual.

D.5.1 APS for Oak Valley Overcrossing Bridge at I-10

CONSULTANT will update the Structures Advanced Planning Study prepared from the PSR for the Oak Valley Parkway Overcrossing Bridge (San Timoteo Canyon Road/14th Street) replacement (Bridge No. 56-496).

D.5.2 APS for Middle Fork Timoteo Creek Bridge at I-10 Widening

CONSULTANT will update the Structures Advanced Planning Study prepared for the PSR for the I-10/Middle Fork San Timoteo Creek Bridge Widening (Bridge No. 56-215).

D.5.3 APS for San Gorgonio Creek Box Culvert (Optional)

If necessary, the CONSULTANT will develop a Structures Advance Planning Study for the Township Creek (San Gorgonio Creek Box Culvert) Reinforced Concrete Box (Bridge No. 56-279)

Deliverables: Structural Advanced Planning Study Oak Valley Overcrossing Bridge Replacement, Middle Fork San Timoteo Creek Bridge Widening, and San Gorgonio Creek Box Culvert (as needed)

D.6 Location Hydraulic Study for San Timoteo Creek

CONSULTANT will prepare a complete hydraulics analysis/study and report for San Timoteo Creek, within the limits of the project, as defined in the Final PSR. Updated project topography will be utilized/assumed for this task. The hydraulics and floodplain study for this task will include HEC-RAS models. The hydraulic study and supporting calculations for San Timoteo Creek will be compiled in a report which will also be used in subsequent FEMA applications (CLOMR and LOMR) for the project. To complete this task CONSULTAN will meet with City Stormwater Division Staff as needed to gain project and detailed concurrence on approach and details, and ultimately gain approval and community acknowledgement needed for the future CLOMR.

Deliverable: Location Hydraulic Study for San Timoteo Creek (Draft and Final)

D.7 Traffic Study

During the project scoping process, the CONSULTANT proposes to work with the CITY to review potentially viable alternatives that should be carried forward in the PA&ED process. We anticipate this initial screening to include up to six build alternatives. Up-front interchange layout considerations could reduce the number of viable alternatives to be carried out throughout PA&ED. The scope assumes three project build alternatives (plus the no-build alternative) will be identified and carried through full evaluation for all Caltrans deliverables.

This scope of services assumes analysis at up to the following study intersections:

1. Oak Valley Parkway/Desert Lawn Drive (west)
2. Oak Valley Parkway/Desert Lawn Drive (east)
3. Oak Valley Parkway/I-10 Eastbound Ramps
4. Oak Valley Parkway/I-10 Westbound Ramps
5. Oak Valley Parkway/Golf Club Drive
6. Cherry Valley Boulevard/I-10 Eastbound Ramps
7. Cherry Valley Boulevard/I-10 Westbound Ramps
8. 6th Street/Veile Avenue/I-10 Ramps
9. Beaumont Avenue/4th Street
10. Beaumont Avenue/I-10 Eastbound Ramps
11. Beaumont Avenue/I-10 Westbound Ramps
12. Beaumont Avenue/5th Street

This scope of services assumes analysis of the following freeway locations. Counts will be collected from Caltrans PeMS database:

1. Eastbound Freeway Basic, Merge, Diverge, and/or Weave assessment on I-10 from West of Cherry Valley Boulevard interchange to East of Beaumont Avenue interchange.

2. Westbound Freeway Basic, Merge, Diverge, and/or Weave assessment on I-10 from East of Beaumont Avenue interchange to west of Cherry Valley Boulevard interchange.

Traffic Volumes Report: The most current information available will be used to prepare traffic forecasts for this project. It is anticipated that RIVCOM, the updated version of RIVTAM consistent with the SCAG 2020 RTP/SCS, will be used in this project for traffic forecasting for project Opening Year and Design Year scenarios. A review of land use in the surrounding study area will be prepared and confirmed with the City. CONSULTANT will also compare the land use assumptions from RIVCOM to general plan land use assumptions from the City (like those incorporated into the RIVTAM model by CONSULTANT for the Beaumont General Plan assessment).

CONSULTANT will develop the Design Year forecasts by applying the growth calculated from the base year and future year models to the existing traffic volumes. The Opening Year forecasts will be developed using interpolation between existing and Design Year volumes. Given that we anticipate this project to add capacity to Oak Valley Parkway, CONSULTANT will develop different No Build and Build alternative volumes reflecting the added capacity to Oak Valley Parkway (e.g. different number of lanes on this segment of roadway). This is a relatively new requirement by Caltrans to ensure that forecasts are consistent with the lane assumptions between the No Build and Build scenarios.

The AM and PM peak hour and daily volumes will be developed at the study intersections and freeway analysis locations during both Opening Year and Design Year conditions that will be used for other resource categories. To aid in this effort, we will collect daily vehicle classification counts at the following locations that can be used to assist in developing these volumes:

1. Oak Valley Parkway Overcrossing
2. Cherry Valley Boulevard Overcrossing
3. 6th Street, just east of Viele Avenue
4. Beaumont Avenue Overcrossing

Traffic Operations Analysis Report (TOAR): The TOAR will provide summary and conduct operations analysis at study locations for study scenarios, as well as complete a safety review (looking at existing collision information).

This scope of services assumes that CONSULTANT will conduct intersection capacity and freeway capacity assessment using the VISSIM software intersection analysis. CONSULTANT will conduct the AM and PM peak hour LOS analysis at the study intersections and freeway mainline segments during the following scenarios:

- Existing Conditions
- Opening Year No Build Alternative
- Opening Year Build Alternative 1
- Opening Year Build Alternative 2
- Opening Year Build Alternative 3
- Design Year No Build Alternative
- Design Year Build Alternative 1
- Design Year Build Alternative 2
- Design Year Build Alternative 3

This scope assumes that delay and level of service will be reported at all intersections. Queuing estimates will be provided for movements along Oak Valley Parkway and at all off-ramps. CONSULTANT assumes two

rounds of draft submittal, review, and comments from Caltrans. CONSULTANT will respond to two rounds of consolidated comments and submit the Final Document.

Deliverables: Traffic Volumes Report, Traffic Operations Analysis Report (Draft and Final)

D.8 Intersection Control Evaluation (ICE)

CONSULTANT will evaluate the project in accordance with Caltrans Traffic Operations Policy Directive 13-02: Intersection Control Evaluation (ICE). This analysis will be performed at the I-10 ramp intersections with Oak Valley Parkway plus the adjacent intersections. Since the PSR predated the ICE requirement, we will complete a Step 1 (screening assessment) and Step 2 (full assessment) at the intersections on Oak Valley Parkway. CONSULTANT has assumed one set of comments on each submittal and resubmit both documents as final.

Deliverable: Intersection Control Evaluation

D.9 Vehicle Miles of Travel (VMT)

With SB-743, CEQA must now evaluate VMT as the impact metric associated with transportation. For the PA&ED phase of the project, Caltrans has defined the following key deliverables that will be completed by CONSULTANT as part of this effort:

- Induced Travel Study Methodology Memorandum – This will document and describe how the VMT assessment will be completed including the methodology employed for the effort.
- VMT Study, Draft – The draft quantitative VMT analysis results will be documented in a report. Any significant VMT impacts will be identified.
- VMT Study, Final – We will respond to Caltrans comments on the draft submittal as final. This document will be shared with Caltrans Headquarters for concurrence.
- Mitigation Scoping Plan - This step is only required if the project is determined to lead to a measurable and substantial increase in vehicle travel. However, this document will summarize any proposed mitigation associated with the project to off-set the induced travel impacts of the project.
- Induced Travel Risk Assessment - This step is only required if the project is determined to lead to a measurable and substantial increase in vehicle travel and the induced VMT is not fully mitigated. A subsequent memorandum summarizing the findings will be submitted to Caltrans Headquarters for review and concurrence documenting why VMT mitigation is not feasible with the project.

CONSULTANT budget assumes that we will submit two rounds of documents for review for each of these deliverables: a draft document submitted to Caltrans and a final document that responds to Caltrans comments. Based on other studies completed, CONSULTANT current recommended practice is to document induced VMT estimates from both the RIVCOM model and using the Caltrans NCST calculator and also document the limitations of both approaches. We will also reduce the induced VMT estimates associated with truck travel in both estimates as SB 743 only addressed induced travel associated with passenger cars. This nuance will change the level of mitigation and is important to distinguish as part of the VMT estimates. Finally, the VMT assessment and all draft documents will use the Caltrans TAF (Transportation Analysis Framework) and TAC (Traffic Analysis for CEQA) to guide the analysis process.

Deliverable: Travel Study Methodology Memo, VMT Study (Draft and Final)

TASK E – ENVIRONMENTAL DOCUMENTATION AND TECHNICAL STUDIES

The environmental work for the project will be carried out in accordance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements. Caltrans will serve as the CEQA lead agency and the NEPA lead agency for the I-10/Oak Valley Parkway Project PA&ED phase. Based on the

project scope defined during Project Initiation Document phase, the project team will conduct a field review and obtain concurrence on the necessary environmental technical studies via the Preliminary Environmental Study form. The project team will conduct the environmental studies, anticipated to include biology, cultural, hazardous waste, noise, visual, air/water quality, paleontological, community, vehicle miles traveled (VMT), and Native American consultation and submit to Caltrans District 8 environmental staff and the CITY for review and approval. Once completed, the technical studies will be summarized in the combined NEPA/CEQA document and circulated for public review. Caltrans will ultimately certify the CEQA document and NEPA EA. The CEQA document is anticipated to be an Initial Study Mitigated Negative Declaration. Optional tasks have been provided, including in the event that an Environmental Impact Report is required.

E.1 Preliminary Environmental Evaluation and Caltrans Coordination
CONSULTANT will review the previously prepared Preliminary Environmental Analysis Report and coordinate with Caltrans to confirm the required technical studies. A brief memorandum describing the technical studies anticipated will be prepared and submitted to the CITY and Caltrans for concurrence. CONSULTANT will also provide an updated Project Description and Purpose and Need to the CITY and Caltrans and coordinate approval of the Project Description to be included in the technical studies.

Deliverable: Environmental Scoping Memorandum

E.2 Initial Public Scoping Meeting / Notice of Preparation
An initial public scoping meeting will be held in which the stakeholders, responsible agencies, and community will be provided an opportunity to comment on the project and to determine the potential public support or opposition to the project. If it is determined that the project will experience significant unavoidable impacts due to VMT under CEQA, CONSULTANT will prepare a Notice of Preparation (NOP) for an Environmental Impact Report and will circulate the NOP to all responsible agencies. The review period of the NOP is 30 days and requires a Public Scoping Meeting included in this task. The NOP will include a description of the project, a location map, identification of potential environmental issues, and probable environmental effects of the project. Once the 30-day review is complete and agency comments have been received, preparation of the draft Environmental Document can commence.

Deliverables: Meeting Materials, Notice of Preparation

E.3 Environmental Focus Group Meetings
CONSULTANT will coordinate environmental focus group meetings, as needed, to solicit feedback and address concerns from stakeholders, potentially including emergency services and other transportation related personnel. These focus group meetings will establish rapport and help build support from this important group of stakeholders. CONSULTANT will coordinate and facilitate in-person or virtual stakeholder meetings. The focus group meetings will deliver project information and opportunities for individuals to provide feedback.

Deliverables: Meeting Materials

E.4 Phase I Initial Site Assessment Addendum and Hazardous Waste Phase II Preliminary Site Assessment (Title 22, ADL, Asbestos)
CONSULTANT will prepare an addendum to the previously prepared Phase I Initial Site Assessment (ISA) due to the age of the documentation. CONSULTANT will perform a reconnaissance of the Site to assess conditions for the presence or make visual observations of indicators of the potential existing presence, of hazardous materials, hazardous wastes, or soil and/or groundwater impacts on the Site. These indicators include, but are not limited to, 55-gallon drums, USTs and aboveground storage tanks, chemical containers,

waste storage and disposal areas, industrial facilities, discolored surficial soils, electrical transformers that may contain polychlorinated biphenyls (PCBs), and areas conspicuously absent of vegetation. CONSULTANT will also review the Standard Environmental Records Sources: Federal and State referenced in American Society for Testing and Materials (ASTM) Designation E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process to obtain information regarding the potential presence of hazardous materials/wastes on the Site or on properties located within the approximate minimum search distance specified for each source. Upon completion of these tasks, CONSULTANT will prepare a report summarizing the findings of the ISA which will qualitatively describe the potential for environmental impairment of the Site. The report will include a completed Caltrans ISA Checklist.

Additionally, CONSULTANT will perform a Phase II Preliminary Site Investigation addressing potential hazardous materials in general accordance with the Caltrans guidelines. Phase II soil sampling and analysis will be conducted to evaluate concentrations of Title 22 metals (including aerially deposited lead [ADL]), petroleum hydrocarbons, and organochlorine pesticide concentrations in soil within the proposed right-of-way take and project limits. Hazardous materials survey will be performed to evaluate suspect asbestos containing materials and suspect lead and chromium containing paints and traffic striping used in bridge and roadway constructions.

Deliverables: Phase I ISA Addendum and Phase II PSI Report

E.5 Prepare Area of Potential Effects Exhibit

CONSULTANT will prepare an Area of Potential Effect (APE) exhibit. The APE will determine the limits of field surveys and report documentation. CONSULTANT will coordinate with Caltrans cultural staff to receive feedback and ultimately approval and signature on the APE Map to be included in the cultural documentation.

Deliverable: APE Exhibit

E.6 Section 106/AB 52 Consultation

CONSULTANT will utilize the list provided by the Native American Heritage Commission and Caltrans' AB 52 Consultation List to contact Native American groups. With Caltrans approval, CONSULTANT, will contact each group via certified mail to initiate consultation under Section 106 and AB 52. After 28 days, CONSULTANT will follow up via telephone with those groups that have not responded to the initial letter. CONSULTANT will document all Native American consultation efforts in cultural resource and environmental documentation.

Deliverable: Native American Consultation Log

E.7 Historic Property/Archaeological Survey Report

CONSULTANT will to prepare cultural documentation in accordance with Section 106 of the National Historic Preservation Act and will follow the requirements set forth in the Caltrans Environmental Handbook Volume II, Cultural Resources and the Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it pertains to the administration of the Federal-Aid Highway Program in California. This work will include the efforts to record archaeological and historical resources identified within the study area. A Historic Property Survey Report (HPSR)/Archaeological Survey Report (ASR) will be prepared to identify and evaluate each cultural resource in the project area and evaluate the potential for impacts this project could have on those resources.

Deliverables: Historic Property Survey Report/Archaeological Survey Report

E.8 Noise Study Report

CONSULTANT will prepare a Caltrans format Noise Study Report pursuant to NEPA that assesses the project's potential effects on existing and future noise conditions, including construction impacts. CONSULTANT will review applicable Federal (Caltrans) and City noise and land use compatibility criteria for the project area. Noise standards regulating noise impacts including Federal Highways (FHWA) Noise Abatement Criteria (NAC) and standards included in the City's Noise Ordinance will be discussed for sensitive land uses adjacent to the project. The areas with potential future noise impacts have been identified using land use information and field reconnaissance. The project area contains adjacent sensitive noise receptors, and this project is changing the vertical and horizontal roadway alignment so noise impacts and potential abatement must be considered.

Deliverable: Noise Study Report

E.9 Noise Abatement Decision Report (Optional Service)

Based on the Noise Study Report, if noise impacts warrant abatement, CONSULTANT, will prepare a Noise Abatement Decision Report (NADR). The NADR will include design information and estimated costs of any proposed soundwalls, and applicable criteria to evaluate the reasonableness and feasibleness of constructing the noise abatement. This will be based on constructability of the barrier, cost of building the barriers, and allotment of abatement cost per resident. If a soundwall is evaluated as both reasonable and feasible, CONSULTANT, will coordinate with the public to determine if they want the wall.

Deliverable: Noise Abatement Decision Report

E.10 Air Quality Technical Report

CONSULTANT will prepare an Air Quality Report for the project's operation and construction in accordance with the Caltrans' Transportation Project Level Carbon Monoxide (CO) Protocol and the California Air Resources Board (CARB), Riverside County District, and CEQA regulations for the South Coast Air Basin (SCAB).

For the description of existing ambient air quality, the report will use baseline and project-setting meteorological and air quality data in the area developed through the CARB, along with climatological and air quality profile data gathered by the South Coast Air Quality Management District. Air quality data from the Lake Skinner, Lake Elsinore, and Perris monitoring stations (the nearest air quality monitoring stations) will be included to help highlight existing air quality local to the proposed project site. Other sources such as regulatory documents, professional publications, and previous experience in the project area will supplement background information.

The CITY is in non-attainment for PM2.5, PM10, and Ozone under California regulations and PM2.5 and 8-hour Ozone under Federal regulations. As a component of the Air Quality Report, the project will undergo Interagency Consultation with SCAG's Transportation Air Quality Conformity Group to confirm it is not a Project of Air Quality Concern, per the Environmental Protection Agency's Criteria for Projects of Air Quality Concern (40 CFR 93.123 (b)(1)). CONSULTANT will prepare and submit the required forms and information to SCAG and call in to the monthly project review and concurrence to represent the project. The results of this Interagency Consultation will be documented in the Air Quality Report and concurrence from SCAG's Transportation Air Quality Conformity Group will be attached as an appendix to the report.

After approval of the Air Quality Report and circulation of the Draft Environmental Document, CONSULTANT will prepare an Air Quality Conformity Analysis consistent with FHWA and Caltrans requirements to

demonstrate that the project meets the project level air quality conformity requirements. This subsequent analysis will be reviewed by Caltrans and forwarded to FHWA for review and concurrence with the project level conformity determination.

Deliverable: Air Quality Report

E. 11 Community Impact Assessment

CONSULTANT will prepare a Community Impact Assessment (CIA) to document the potential impacts of this project on the local community, minority, and low-income populations as well as evaluating the potential for public controversy. This report will evaluate the land acquisitions, changes in the noise and visual environment, and impacts on cultural/biological resources that may be important to the community. Pursuant to NEPA requirements, impacts to low-income population will be evaluated consistent with federal Environmental Justice policy. The CIA will be based on current Caltrans Guidelines (Environmental Guidelines Volume 1, Chapter 24 – Community Impacts) and will discuss social impacts, businesses and residences affected by the project, and community resources such as schools, parks, and emergency services. Residential relocations are not anticipated.

Deliverable: Community Impact Assessment

E.12 Visual Impact Assessment

CONSULTANT will oversee the landscape architect subconsultant, Reddy Engineering Services Inc., to prepare a Visual Impact Assessment (VIA). It is assumed the VIA would be a moderate level based on the preliminary Caltrans VIA Questionnaire. The VIA will evaluate viewpoints for: notable visual resources; the vividness, intactness, and unity of the project area; and the site's landscape units. The VIA will be prepared using methods and protocol developed by the FHWA and adopted by Caltrans. The VIA will include visual renderings of the proposed alternatives. The VIA will be reviewed and approved by the CITY prior to submittal to Caltrans for review and approval.

Deliverable: Visual Impact Assessment (Moderate Level)

E.13 Aquatic Resources Delineation Report

CONSULTANT will complete a focused wetlands delineation and a jurisdictional "waters of the U.S." determination according to the 2008 Army Corps of Engineers Wetland Delineation Manual Arid West Supplement, the currently accepted methodology. CONSULTANT will also determine the extent of any "waters of the State" including the streambed and associated riparian areas subject to review by CDFG under Section 1602 of the Fish and Game Code. It is assumed the Middle Fork of the San Timoteo Creek and Township Creek (Little San Gorgonio Creek) will be considered "waters of the U.S." while the entire undeveloped floodplain of the channel would be considered "waters of the State." The delineation results will be presented in a detailed report with appropriate technical documentation for use in permit applications.

Deliverable: Aquatic Resources Delineation Report

E.14 Natural Environment Study

CONSULTANT will prepare a Caltrans formatted Natural Environment Study (NES) that will include a description of the field methods used and the results of the biological assessment of the project area. The report will list plant and animal species present, along with a general description of the plant communities occurring within the project area. Surveys for burrowing owl, Los Angeles pocket mouse, San Bernardino kangaroo mouse, for Least Bell's vireo, Southwestern willow flycatcher, and narrow endemic plant species (NEPSSA) will be required and survey results will be attached to the NES. If any sensitive resources are found

on the site, CONSULTANT will prepare and include in the NES an exhibit displaying the location of the sensitive plant communities on-site and any sensitive biological resources observed. The report also will contain tables describing sensitive species and their habitats that are present or potentially present, and it will identify and assess project impacts on the existing biological resources, including any sensitive species. Minimization and mitigation measures will be included as necessary.

E.14.1 SBKR and LAPM Trapping Survey and Report

CONSULTANT will oversee a protocol San Bernardino kangaroo rat (SBKR) and Los Angeles pocket mouse (LAPM) trapping survey in compliance with WRMSHCP requirements. The trapping survey will be conducted by a biologist who is permitted to trap and handle SBKR and LAPM. Small mammal presence/absence surveys typically require five consecutive nights of trapping when the animal is active above ground between May 1 and September 15 and when the overnight temperature lows are 50 degrees Fahrenheit or higher, while avoiding periods of overnight precipitation. All captured animals will be identified to species and data will be taken for any SBKR or LAPM mouse captured, including age, sex, reproductive condition, and GPS point will be taken at the capture location. Following the completion of the trapping effort, a report will be prepared that documents the trapping methods, results of the trapping effort, a figure showing trap locations and, if applicable, SBKR and LAPM capture locations, and representative photographs.

E.14.2 Least Bell's Vireo Surveys and Report

CONSULTANT will oversee protocol surveys for least Bell's vireo (LBVI) by a qualified biologist(s) in compliance with WRMSHCP requirements. Eight surveys will be conducted at least ten days apart during the period between April 10 and July 31. Following the completion of the surveys, a brief letter report will be prepared to describe survey methodology, site conditions, and results, including the locations of any LBVI observations, extent of territories, and nests (if detected). The report will also include maps depicting the Project site, suitable riparian habitat included in the survey area, and the locations of any LBVI observations.

E.14.3 Southwestern Willow Flycatcher Surveys and Report (Optional Service)

If suitable habitat for Southwestern willow flycatcher (SWFL) is determined to be present, CONSULTANT will oversee protocol surveys by a qualified biologist(s) for SWFL in compliance with WRMSHCP requirements. A minimum of five surveys will be conducted at least five days apart, during the survey periods between May 15 and July 17. Following the completion of the surveys, a brief letter report will be prepared to describe survey methodology, site conditions, and results, including the locations of any SWFL observations, extent of territories, and nests (if detected). The report will also include maps depicting the Project site, suitable riparian habitat included in the survey area, and the locations of any LBVI observations.

Deliverables: Natural Environment Study, SBKR, LAPM, LBVI, and SWFL Survey Report Memorandums

E.15 WRMSHCP JPR, DBESP, and Consistency Analysis

CONSULTANT will prepare a Joint Project Review, Determination of Biological Equivalent or Superior Preservation (DBESP), and Consistency Analysis Reports to comply with the Western Riverside Multiple Species Habitat Conservation Plan (WRMSHCP). These documents will summarize the unavoidable impacts to riverine/riparian habitat associated with the drainages crossing under the project area and proposes mitigation as defined under Section 6.1.2 of the MSHCP. The JPR/DBESP/Consistency Analysis will incorporate proposed mitigation measure from the NES but will also provide a determination that this project would be consistent with each of the requirements of the WRMSHCP and a more thorough

description of any required mitigation such as off-site mitigation or on-site replanting and/or revegetation as well as any applicable USFWS and CDFW requirements for success rates and long-term monitoring. This scope does not include the preparation of revegetation plans to be prepared during PS&E. The JPR will be submitted to the Western Riverside County Regional Conservation Authority (RCA) and wildlife regulatory agencies. It is assumed at least two meetings with RCA will be held to present the project and proposed avoidance, minimization, and mitigation measures. If any federally listed species are discovered, it is anticipated Caltrans will utilize the DBESP to secure a Streamlined Biological Opinion from USFWS utilizing the WRMSHCP.

Deliverables: WRMSHCP Joint Project Review, Determination of Biological Equivalent or Superior Preservation (DBESP), and Consistency Analysis

E.16 Water Quality Assessment Report

CONSULTANT will prepare a Water Quality Assessment Report to address the potential for project impacts on water quality based on current Caltrans guidelines (Environmental Handbook Volume 1, Chapter 9, Water Quality). The report will discuss the drainages within the project area and the receiving waters conditions, objectives, and beneficial uses as well as Caltrans standard BMPs and project design features required in accordance with the current Caltrans Statewide Storm Water Management Plan.

Deliverable: Water Quality Assessment Report

E.17 Draft IS/EA

CONSULTANT will incorporate the purpose and need/project description and the technical studies into the draft document. Based upon available data, CONSULTANT will prepare sections for land use, public safety, public services, recreation, and utilities. The Draft Environmental Document will determine if the project has any significant adverse effects on the environment under both State and Federal standards, identify potential mitigation measures for such impacts, and determine if the mitigation measures reduce all impacts below a level of significance.

CONSULTANT will draft the IS/EA for public review. The Draft IS/EA has a critical objective of providing a means by which the general public and responsible agencies can participate in the environmental process by providing written comments on issues addressed in the EA/IS. CONSULTANT will prepare sections for Human Environment, Physical Environment, Biological Environment, and Cumulative Impacts. The IS/EA will determine that the project would not have any significant impacts on the environment under both State and Federal standards through implementation of mitigation measures to reduce all impacts below a level of significance.

Deliverable: Draft IS/EA

E.18 Public Circulation of IS/EA /Public Notices and Meetings

During the 30-day public review period, the CITY will have the opportunity to hold a Public Meeting to solicit comments about the project. The meeting will either be in-person or virtual. CONSULTANT will attend this meeting to answer any questions regarding the project, any potential environmental impacts, as well as the environmental schedule. All comments at this meeting will be recorded for inclusion in the final environmental document.

Deliverables: Notice of Availability/Notice of Intent, Meeting Materials

E.19 Record of Public Meeting

After conclusion of the public meeting, CONSULTANT will prepare a Record of Public Meeting for the project file. The document will contain all announcements and newspaper postings for the public meeting, the

exhibits presented at the public meeting, a list of attendees from the PDT at the public meeting, and a log of all comments received. Any materials handed out to the public will be included in the appendix along with sign-in sheets and photographs documenting the public meeting.

Deliverable: Record of Public Meeting

E.20 Final IS/EA (CEQA MND and NEPA FONSI)

At the close of the public review period for the Draft Environmental Document, CONSULTANT will meet with CITY and Caltrans staff to review any comments on the Draft Environmental Document that were received, and to discuss potential responses to these comments. CONSULTANT will then formulate responses to the comments on the Draft Environmental Document. Once draft responses to comments are completed, they will be submitted to the agencies' staff for review and comment. The agencies' comments will be incorporated into the response to comments document, which will be submitted to Caltrans as an appendix in the Final Environmental Document.

Additionally, a Final Environmental Document will be prepared by the CONSULTANT. The CEQA portion will be a Final IS, while the most likely outcome is the preparation of a FONSI under NEPA. Prior to action on the IS/EA and the MND, CONSULTANT will assist the CITY and Caltrans to prepare appropriate findings and the Administrative Record. For the Final IS/EA, a Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI) will be prepared by the CONSULTANT. The most likely outcome is the preparation of a "Finding of No Significant Impact" (FONSI) which will be filed on the Federal Register by Caltrans. To complete the CEQA process, CONSULTANT will file a Notice of Determination with the County Recorder's Office within 5 days of approval of the MND/FONSI (pursuant to CEQA guidelines).

Deliverables: Final IS/EA, CEQA Mitigated Negative Declaration, NEPA Finding of No Significant Impact, and Notice of Determination

E.21 Draft EIR/EA (Optional Service)

An EIR would be required if the project is determined to lead to a measurable and substantial increase in induced VMT and it is not fully mitigated. CONSULTANT will prepare a VMT Mitigation Scoping Plan and Induced Travel Risk Assessment to summarize any proposed mitigation the findings will be submitted to Caltrans Headquarters for review and concurrence documenting why VMT mitigation is not feasible with the project. CONSULTANT will incorporate the purpose and need, project description, and the technical studies into the draft EIR/EA. CONSULTANT will prepare sections for Human Environment, Physical Environment, Biological Environment, and Cumulative Impacts. The DRAFT EIR/EA will determine if the project has any other significant impacts on the environment under both State and Federal standards, identify potential mitigation measures for such impacts, and determine all feasible mitigation measures to reduce all other impacts below a level of significance.

Deliverables: Draft EIR/EA

E.22 Public Circulation of EIR/EA /Public Hearing (Optional Service)

The EIR/EA needs to be circulated for public review for a period of 45 days. Pursuant to CEQA requirements, CONSULTANT will prepare a Notice of Availability for the Draft EIR/EA. This notice, along with the Draft Environmental Document and technical studies, will be made available at the City offices, the Public Library, and electronically during the 45-day public circulation and review period. In addition, the document will be distributed to other reviewing government agencies through the California State Clearinghouse.

To satisfy the requirements of the CEQA EIR, CONSULTANT will conduct a public hearing during the 45-day circulation of the Draft Environmental Document. This hearing will explain the purpose of the project, why it

is needed, what is being proposed, and the environmental impacts of the proposed project. CONSULTANT will advertise the hearing in the local newspaper, with posted fliers, and direct mailings, as needed, to ensure maximum attendance and participation at the meeting. The hearing will either be in-person or virtual and will consist of a brief presentation followed by questions directed to technical experts on the project. Comments will be collected and summarized for the CITY and Caltrans' consideration. A Record of Public Hearing would be prepared in place of the Record of Public Meeting under Task E.19.

Deliverables: Notice of Availability/Notice of Intent, Meeting Materials, Record of Public Hearing

E.23 Final EIR/EA (CEQA Statement of Overriding Consideration & Findings of Fact and NEPA FONSI (Optional Service)

Following public review of the draft EIR/EA, a Final Environmental Document will be prepared by the CONSULTANT. The CEQA portion will be a Final EIR, while the most likely outcome is the preparation of a FONSI under NEPA. Prior to action on the EIR/EA, CONSULTANT will assist the CITY and Caltrans to prepare appropriate findings and the Administrative Record.

CONSULTANT will draft findings of fact pursuant to State CEQA Guidelines Section 15091 for each of the significant effects identified in the Final EIR. The findings will describe the effect, cite one or more applicable findings under Section 15091, and describe the evidence that supports the selected findings. The findings will also explain why other project alternatives have been found infeasible by the CITY and Caltrans. CONSULTANT will coordinate the drafting of these findings with CITY and Caltrans Staff.

CONSULTANT will prepare a Statement of Overriding Considerations to address any significant effects of the project that are unavoidable, explaining the economic, legal, social, technological, or other benefits of the project that outweigh its unavoidable environmental impacts. The statement will be based on substantial evidence in the record. CONSULTANT will work with the CITY's and Caltrans' legal counsel in preparing the findings and statement of overriding considerations.

To complete the CEQA process, CONSULTANT will file a Notice of Determination with the County Recorder's Office within 5 days of approval of the FEIR/FONSI (pursuant to CEQA guidelines).

Deliverables: Final IS/EA, CEQA Statement of Overriding Considerations, CEQA Findings of Fact, NEPA Finding of No Significant Impact, and Notice of Determination

E.24 Section 404 Nationwide Permit (Optional Service)

If required for geotechnical investigations during PA&ED, CONSULTANT will prepare a Clean Water Act Section 404 Nationwide Permit (NWP) 6, for Geotechnical Investigations. An NWP 6 is appropriate as the permanent impacts to waters of the United States for geotechnical investigations is less than 0.5 acre. CONSULTANT will prepare the Preconstruction Notification (PCN), which will include a project description, construction methodology, quantification of permanent and temporary impacts on waters of the United States, and information to demonstrate compliance with the specific and general conditions applicable to Nationwide Permit 14, including compliance with the federal Endangered Species Act (ESA), and with Section 106 of the National Historic Preservation Act (NHPA). The PCN will also include a copy of the delineation of waters of the United States. CONSULTANT will coordinate directly with USACE staff to ensure the permit is obtained. The PCN will be prepared for review and submitted to the U.S. Army Corps of Engineers.

Deliverable: Section 404 Nationwide Permit

E.25 Section 401 Water Quality Certification (Optional Service)

If required for geotechnical investigations during PA&ED, CONSULTANT will prepare a Notice of Intent (NOI) under the 401 General Water Quality Certification and Order of the 2022 USACE NWP 6 for Geotechnical Investigations. The NOI would be filed with the Santa Ana Regional Water Quality Control Board (RWQCB). The application will include the appropriate fee assumed to be paid for by the City. Issuance of a Section 401 Water Quality Certification (that may include waste discharge requirements) also generally constitutes compliance with the State Porter-Cologne Act. CONSULTANT will coordinate directly with RWQCB staff to ensure the certification is obtained on schedule for the geotechnical work and will ensure all permit requirements are adhered to. The permit fee is assumed to be paid by the City.

Deliverable: Section 401 Water Quality Certification

E.26 Section 1602 Lake and Streambed Alteration Agreement (Optional Service)

If required for geotechnical investigations during PA&ED, CONSULTANT will prepare the required notification package for a Streambed Alteration Agreement (SAA), in compliance with Section 1602 of the California Fish and Game, to be filed with CDFW online. The application package will describe, among other items, the project features; work period; geotechnical methods; and potential temporary impacts on vegetation, fish and wildlife. Detailed geotechnical plans and application fee based will accompany the notification package. CONSULTANT will coordinate directly with CDFW staff to ensure the agreement is obtained on schedule for the geotechnical work and will ensure all permit requirements are adhered to. The permit fee is assumed to be paid by the City.

Deliverable: Section 1602 Lake and Streambed Alteration Agreement

TASK F – PROJECT REPORT

The Project Report task will compile the information developed in the Preliminary Engineering Studies and Preliminary Design tasks and present the results in a comprehensive document.

F.1 Draft Project Report

CONSULTANT will prepare the Draft Project Report in accordance with Caltrans "Preparation Guidelines for Project Report." The document will discuss the proposed project, purpose and need, and provide an overview of impacts including environmental impacts and potential right of way impacts.

This task includes the preparation of a draft and final report for the Draft Project Report with a recommendation for circulation of the Environmental Document. The draft will be submitted to Caltrans and the City for review and comment. CONSULTANT will meet with Caltrans and City for comments resolution and make updates to the Draft Project Report.

CONSULTANT will prepare the Draft Project Report to be published/circulated with the Draft Environmental Document and will evaluate all Build Alternatives identified as worthy of further consideration through coordination with the City and Caltrans, together with the No Build Alternative.

Deliverables: Draft Project Report (Draft and Final)

F.2 Final Project Report

After circulation of the Draft Project Report, CONSULTANT will prepare a Final Project Report with the recommendation for selection of a preferred alternative and approval of the project to proceed to the final design (i.e. Plans, Specifications, and Estimate) phase. The draft will be submitted to Caltrans and the City for review and comment. CONSULTANT will address the comments and produce the Final Project Report.

CONSULTANT will meet with Caltrans and City for comments resolution and make updates to the Final Project Report and submit for approval.

The Final Project Report will be published with the Final Environmental Document and will include selection of a Locally Preferred Alternative through a formal alternatives screening process conducted with the Project Development Team. The approval of the Final Project Report will conclude the PA&ED phase of the project.

Deliverables: Final Project Report (Final Project Report)

TASK G – PRELIMINARY RIGHT OF WAY MAPS

Preliminary right of way activities will consist of developing preliminary right of way requirements maps from the preliminary land net mapping developed under Task C.4 and superimposing the proposed project improvements. Fee acquisitions, easements, and damages (if any) will be identified and estimated by the CONSULTANT real estate and engineering teams, which will serve as a tool for project decision making/overall estimating efforts. Preliminary right of way requirement maps shall be developed in a format agreeable to the City and the Caltrans District 8 Right of Way Department and shall be submitted in hard copy strip plot format to both the City and Caltrans for review and comment. At the City's direction, the CONSULTANT team may proceed with development of the draft Plat Maps and Legal Descriptions in support of future appraisals and property owner negotiations during the PS&E phase.

G.1 Preliminary Right of Way Requirements Maps

CONSULTANT will prepare a map showing anticipated right of way requirements for each Build Alternative. The right of way requirement map will provide enough detail to support the decision-making process in selecting an alignment and will define property acquisition/easement areas required for the Right of Way Data Sheet. CONSULTANT will review ownership details, title exceptions, dedications, easements, and area closure calculations for QC review.

Deliverable: Right of Way Requirement Maps

G.2 Right of Way Data Sheet

After the Preliminary Right of Way Requirement Maps are prepared, CONSULTANT will compare and summarize right of way impacts for the alternatives considered. Data sheets will summarize the number of parcels potentially affected, impacts to property access, and will include a preliminary estimate of right of way acquisition costs.

Deliverable: Right of Way Data Sheet

G.3 Plat Maps and Legal Descriptions (Optional Service)

If requested by the City, CONSULTANT will provide right-of-way support. This will include preparing plats and legal descriptions for properties requiring additional right of way and/or easements, including Temporary Construction Easements (TCE) along the project corridor. The exact number and locations will be determined upon design and project needs. All documents will be prepared according to Caltrans standards and requirements. For this proposal, CONSULTANT will assume that up to six (6) properties will be impacted by the project. CONSULTANT will prepare two (2) plats and legal descriptions for each of the 6 properties impacted by the project for right of way take and TCE, for a total of twelve (12) plats and legal descriptions. CONSULTANT will prepare preliminary PDF Plats, Legal Descriptions, and closure calculations for review. Upon approval, CONSULTANT will prepare final signed and stamped PDF Plats and Legal Descriptions.

Deliverables: Preliminary and Final Plats, Legal Descriptions, and Closure Calculations

TASK H – UTILITY COORDINATION

Preliminary utility efforts consist of preparing and distributing Letter Requests for Utility Mapping (Caltrans Letter No. 1), collecting utility information from the City and local service providers, organizing information for the project file, and mapping of existing/proposed utilities to identify potential utility conflicts.

H.1 Letter Requests to Utility Owners for Mapping
CONSULTANT's utility coordination process matches the state and federally approved processes. CONSULTANT will prepare a database of utility records indicating the type of utility, owner, drawing number, and other vital information. The identified utility companies will be sent a letter describing the proposed project, location, and anticipated features to request information regarding existing and proposed utilities.

Deliverables: Utility Correspondence and Letters Requests for Mapping

H.2 Utility Mapping from Record Drawings and Permits
CONSULTANT will perform a utility search for affected utilities in the project area, including a review of the utility work compiled for the PSR. The search will include a review of available as-builts and permits for the project area and verification field review. CONSULTANT will prepare a database of utility records indicating the type of utility, owner, drawing number, and other vital information. CONSULTANT will plot the location of all existing facilities on a utility CAD base map to serve as a basis for utility conflict determination and future conflict resolution.

Deliverable: Utility CAD Base Map

H.3 Utility Information Sheet
CONSULTANT will review the draft Utility Information Sheets prepared for the PSR and prepare an updated Utility Information Sheet for the Build Alternatives, to be included in the Draft and Final Project Study. The names of all utilities and points of contact will be developed and a description of the location, existing facility and potential conflicts with the project will be prepared.

Deliverable: Utility Information Sheet

H.4 Preliminary Utility Conflict Identification Maps
CONSULTANT will review the existing utilities against the proposed improvements to create the Utility Conflict Identification Maps. Based on the information gathered, CONSULTANT will prepare conflict maps for each utility highlighting the location of identified conflicts and preliminary recommendations to resolve utility conflicts, to be reviewed/approved by the CITY and Caltrans.

Deliverable: Preliminary Utility Conflict Identification Maps

H.5 Preliminary Utility Management Matrix
CONSULTANT will summarize utility owner information, anticipated conflicts, and proposed resolutions to utility conflicts in a Preliminary Utility Management Matrix (UMM) in Caltrans format, which will be used to prepare the Utility Information Sheet. The UMM will serve as a tool for project decision making/estimating purposes and future coordination between the CITY, CONSULTANT, and the affected utility owner.

Deliverable: Preliminary Utility Management Matrix

H.6 Utility Coordination with Utility Owners (Optional Service)
If determined necessary by the City, CONSULTANT will coordinate and meet with utility owners to develop utility protection measures or relocations during the design process. CONSULTANT will provide recommendations and schematic designs to aid in the utility coordination process.

Deliverable: Correspondence and utility coordination

TASK I – PRELIMINARY DESIGN

Using the information obtained from the survey and Preliminary Engineering Studies, the Preliminary Design tasks will focus on developing/evaluating/estimating the roadway geometric, structure, and pavement alternatives, identifying/documenting non-standard design elements, developing a preliminary opinion of project cost for each alternative, performing an alternatives screening evaluation, managing vehicular/pedestrian traffic during construction, and assessing the project risks through a Level II Risk Register, per the scalability requirements outlined in Caltrans Project Delivery Directive-09R1. These elements will be summarized and presented in the Draft and Final Project Report.

I.1 Alternatives Evaluation and Screening Matrix

CONSULTANT will develop a detailed Alternatives Evaluation and Screening Matrix to compare up to three proposed Build Alternatives and the No-Build Alternative with consideration for traffic operations, roadway geometry, safety, right of way and property owner interests, drainage, hydraulics, storm water quality, utility impacts, environmental impacts, costs, and risks. The Alternatives Evaluation and Screening Matrix will service as the basis for determining the build alternative to be carried forward in the environmental and engineering technical studies.

Deliverable: Alternatives Evaluation and Screening Matrix

I.2 DIB 78-04 Design Checklist and DSDD

CONSULTANT will evaluate the build alternative for all non-standard features (boldface and underlined) that are identified in the Caltrans Design Information Bulletin (DIB) 78-04 “Design Checklist for the Development of Geometric Plans” and DIB 82-06 “Pedestrian Accessibility Guidelines for Highway Projects”, in conjunction with the Caltrans Highway Design Manual. CONSULTANT will prepare Design Standard Decision Documents (DSDD) for any non-standard feature(s) in accordance with Chapter 21 of the Project Development Procedures Manual, “Design Standard Decisions.”

Deliverables: Design Checklist, DSDD (Draft and Final)

I.3 Modified Access Report (MAR)

CONSULTANT will prepare a Modified Access Report (MAR) following the PSR outline (Chapter 9 – Project Initiation). CONSULTANT will coordinate with the FHWA ensure that the proposed access change meets policy requirements. Once approved the FHWA will send a Determination of Engineering and Operational Acceptability. This separate report will follow an organizational structure similar to the Draft Project Report and must be accepted by FHWA to approval of the Final Project Report.

Deliverables: Modified Access Report (Draft and Final)

I.4 11-Page Engineer’s Cost Estimates

CONSULTANT will prepare the Caltrans standard ‘11-page’ format cost estimate for improvements within Caltrans right of way for the Build Alternatives. CONSULTANT will develop preliminary quantities and identify appropriate unit pricing to include pavement structural section, drainage, retaining walls, erosion control and water pollution control BMPs, traffic signals, ramp metering, signage, traffic management plan, structures, and right of way costs in the preliminary Engineer’s 11-Page Cost Estimate.

Deliverables: Preliminary Engineer’s 11-Page Cost Estimate

I.5 Level II Risk Register (Per Delivery Directive PD-09)

CONSULTANT will work with the PDT team and stakeholders to identify and record potential risk to the project in accordance with Caltrans Project Delivery Directive PD-09. The project has a Risk Register Scalability Level of II as defined in the Caltrans Project Risk Management Handbook and a Risk Register with qualitative analysis is required. The risk identified and quantitative risk assessment will be included as an attachment for the Draft and Final Project Report and will be recorded in the Risk Register by the assigned Caltrans District 8 Risk Management Coordinator.

Deliverable: Level II Risk Register

I.6 Preliminary Transportation Management Plan

CONSULTANT will develop a conceptual plan for traffic handling to ensure that traffic operations are not adversely impacted at the project site, including any California Highway Patrol (CHP) enforcement areas and other highway systems related equipment. CONSULTANT will prepare the Transportation Management Plan (TMP) Checklist to reflect the approved design elements, construction activities, and anticipated costs. The TMP Checklist will reflect consideration for the project's staging activities, traffic handling strategies, and other impacts to the public. CONSULTANT will submit the TMP Checklist to the CITY and Caltrans for review/approval.

Deliverable: Preliminary Transportation Management Plan Checklist (Data Sheet, TMP Elements, Budgetary Cost Estimates)

I.7 Highway Safety Manual Assessment

The HSM provides tools to conduct quantitative safety analyses, allowing for safety to be quantitatively evaluated alongside other transportation performance measures such as traffic operations, environmental impacts, and construction costs. CONSULTANT will complete the HSM process and will provide the results to the City and Caltrans.

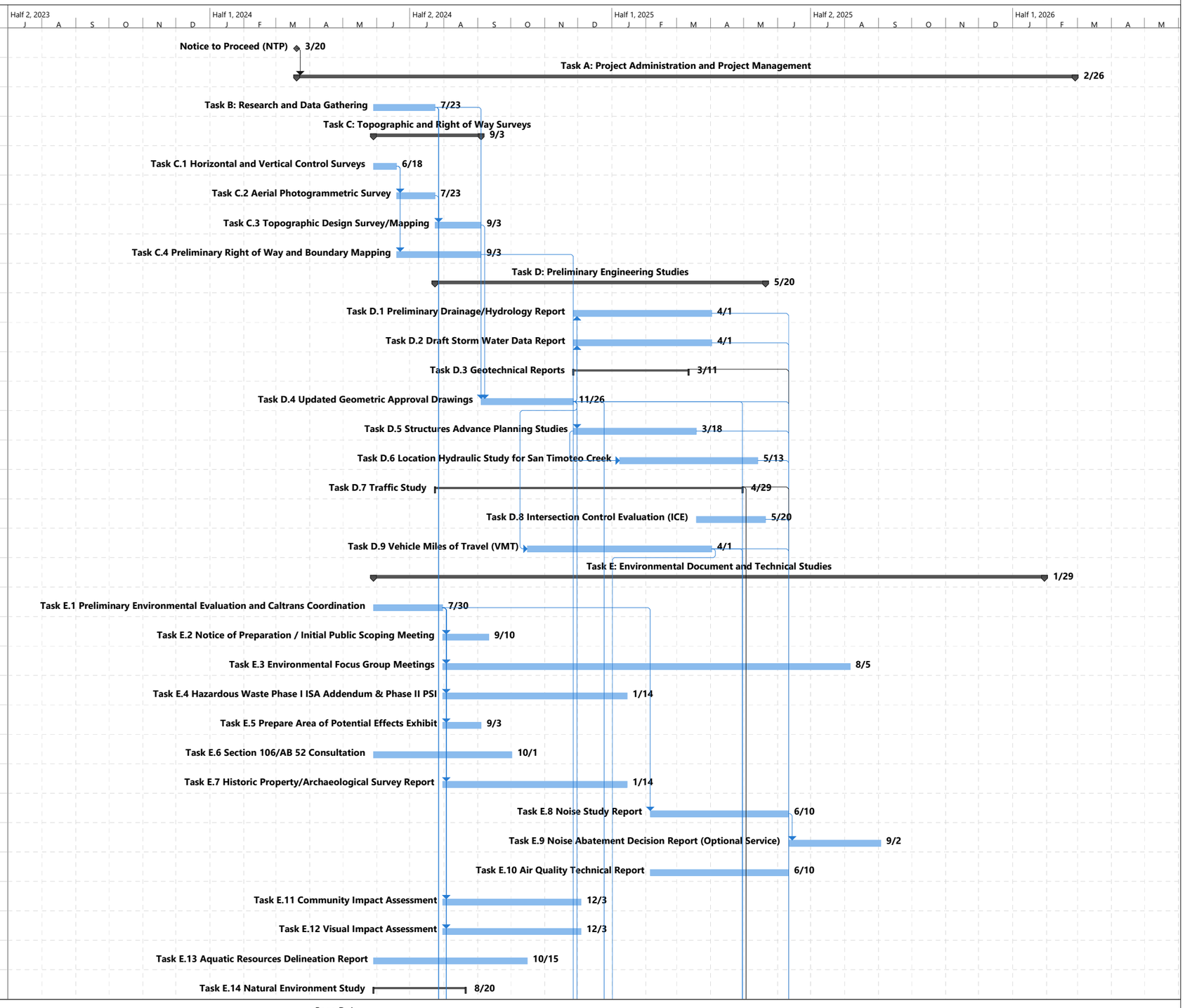
Deliverable: Highway Safety Manual Assessment

APPENDIX D

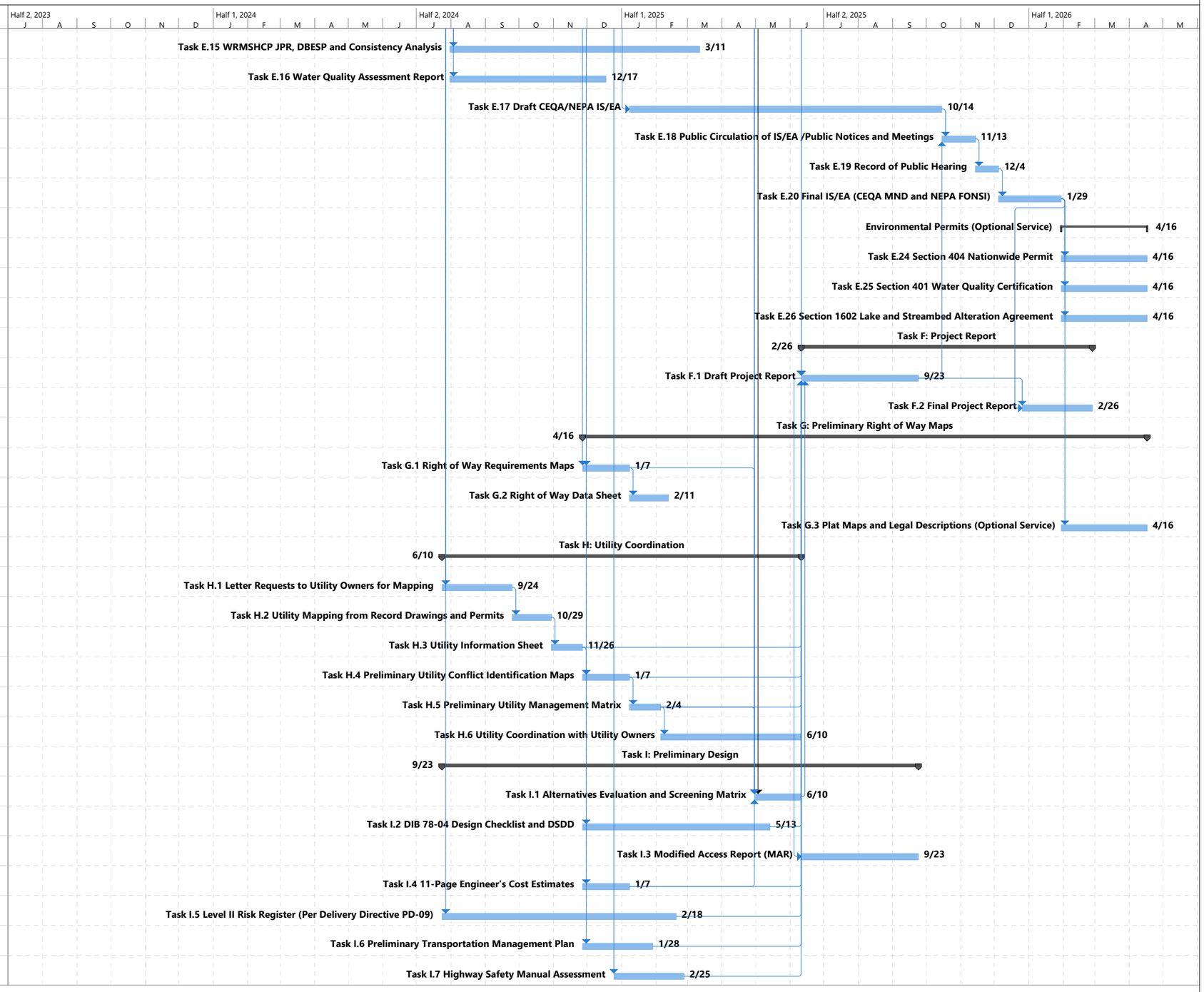
Schedule

BEAUMONT
California

ID	Task Name	Duration	Start	Finish
1	Notice to Proceed (NTP)	0 days	Wed 3/20/24	Wed 3/20/24
2	**Task A: Project Administration and Project Management**	**507 days**	**Wed 3/20/24**	**Thu 2/26/26**
12	**Task B: Research and Data Gathering**	**40 days**	**Wed 5/29/24**	**Tue 7/23/24**
13	**Task C: Topographic and Right of Way Surveys**	**70 days**	**Wed 5/29/24**	**Tue 9/3/24**
14	Task C.1 Horizontal and Vertical Control Surveys	15 days	Wed 5/29/24	Tue 6/18/24
15	Task C.2 Aerial Photogrammetric Survey	25 days	Wed 6/19/24	Tue 7/23/24
16	Task C.3 Topographic Design Survey/Mapping	30 days	Wed 7/24/24	Tue 9/3/24
17	Task C.4 Preliminary Right of Way and Boundary Mapping	55 days	Wed 6/19/24	Tue 9/3/24
18	**Task D: Preliminary Engineering Studies**	**215 days**	**Wed 7/24/24**	**Tue 5/20/25**
19	Task D.1 Preliminary Drainage/Hydrology Report	90 days	Wed 11/27/24	Tue 4/1/25
20	Task D.2 Draft Storm Water Data Report	90 days	Wed 11/27/24	Tue 4/1/25
21	Task D.3 Geotechnical Reports	75 days	Wed 11/27/24	Tue 3/11/25
25	Task D.4 Updated Geometric Approval Drawings	60 days	Wed 9/4/24	Tue 11/26/24
26	Task D.5 Structures Advance Planning Studies	80 days	Wed 11/27/24	Tue 3/18/25
27	Task D.6 Location Hydraulic Study for San Timoteo Creek	90 days	Wed 1/8/25	Tue 5/13/25
28	Task D.7 Traffic Study	200 days	Wed 7/24/24	Tue 4/29/25
33	Task D.8 Intersection Control Evaluation (ICE)	45 days	Wed 3/19/25	Tue 5/20/25
34	Task D.9 Vehicle Miles of Travel (VMT)	120 days	Wed 10/16/24	Tue 4/1/25
35	**Task E: Environmental Document and Technical Studies**	**437 days**	**Wed 5/29/24**	**Thu 1/29/26**
36	Task E.1 Preliminary Environmental Evaluation and Caltrans Coordination	45 days	Wed 5/29/24	Tue 7/30/24
37	Task E.2 Notice of Preparation / Initial Public Scoping Meeting	30 days	Wed 7/31/24	Tue 9/10/24
38	Task E.3 Environmental Focus Group Meetings	265 days	Wed 7/31/24	Tue 8/5/25
39	Task E.4 Hazardous Waste Phase I ISA Addendum & Phase II PSI	120 days	Wed 7/31/24	Tue 1/14/25
40	Task E.5 Prepare Area of Potential Effects Exhibit	25 days	Wed 7/31/24	Tue 9/3/24
41	Task E.6 Section 106/AB 52 Consultation	90 days	Wed 5/29/24	Tue 10/1/24
42	Task E.7 Historic Property/Archaeological Survey Report	120 days	Wed 7/31/24	Tue 1/14/25
43	Task E.8 Noise Study Report	90 days	Wed 2/5/25	Tue 6/10/25
44	Task E.9 Noise Abatement Decision Report (Optional Service)	60 days	Wed 6/11/25	Tue 9/2/25
45	Task E.10 Air Quality Technical Report	90 days	Wed 2/5/25	Tue 6/10/25
46	Task E.11 Community Impact Assessment	90 days	Wed 7/31/24	Tue 12/3/24
47	Task E.12 Visual Impact Assessment	90 days	Wed 7/31/24	Tue 12/3/24
48	Task E.13 Aquatic Resources Delineation Report	100 days	Wed 5/29/24	Tue 10/15/24
49	Task E.14 Natural Environment Study	60 days	Wed 5/29/24	Tue 8/20/24



ID	Task Name	Duration	Start	Finish
53	Task E.15 WRMSHCP JPR, DBESP and Consistency Analysis	160 days	Wed 7/31/24	Tue 3/11/25
54	Task E.16 Water Quality Assessment Report	100 days	Wed 7/31/24	Tue 12/17/24
55	Task E.17 Draft CEQA/NEPA IS/EA	200 days	Wed 1/8/25	Tue 10/14/25
56	Task E.18 Public Circulation of IS/EA /Public Notices and Meetings	30 edays	Tue 10/14/25	Thu 11/13/25
57	Task E.19 Record of Public Hearing	15 days	Fri 11/14/25	Thu 12/4/25
58	Task E.20 Final IS/EA (CEQA MND and NEPA FONSI)	40 days	Fri 12/5/25	Thu 1/29/26
59	**Environmental Permits (Optional Service)**	**55 days**	**Fri 1/30/26**	**Thu 4/16/26**
60	Task E.24 Section 404 Nationwide Permit	55 days	Fri 1/30/26	Thu 4/16/26
61	Task E.25 Section 401 Water Quality Certification	55 days	Fri 1/30/26	Thu 4/16/26
62	Task E.26 Section 1602 Lake and Streambed Alteration Agreement	55 days	Fri 1/30/26	Thu 4/16/26
63	**Task F: Project Report**	**187 days**	**Wed 6/11/25**	**Thu 2/26/26**
64	Task F.1 Draft Project Report	75 days	Wed 6/11/25	Tue 9/23/25
65	Task F.2 Final Project Report	45 days	Fri 12/26/25	Thu 2/26/26
66	**Task G: Preliminary Right of Way Maps**	**362 days**	**Wed 11/27/24**	**Thu 4/16/26**
67	Task G.1 Right of Way Requirements Maps	30 days	Wed 11/27/24	Tue 1/7/25
68	Task G.2 Right of Way Data Sheet	25 days	Wed 1/8/25	Tue 2/11/25
69	Task G.3 Plat Maps and Legal Descriptions (Optional Service)	55 days	Fri 1/30/26	Thu 4/16/26
70	**Task H: Utility Coordination**	**230 days**	**Wed 7/24/24**	**Tue 6/10/25**
71	Task H.1 Letter Requests to Utility Owners for Mapping	45 days	Wed 7/24/24	Tue 9/24/24
72	Task H.2 Utility Mapping from Record Drawings and Permits	25 days	Wed 9/25/24	Tue 10/29/24
73	Task H.3 Utility Information Sheet	20 days	Wed 10/30/24	Tue 11/26/24
74	Task H.4 Preliminary Utility Conflict Identification Maps	30 days	Wed 11/27/24	Tue 1/7/25
75	Task H.5 Preliminary Utility Management Matrix	20 days	Wed 1/8/25	Tue 2/4/25
76	Task H.6 Utility Coordination with Utility Owners	90 days	Wed 2/5/25	Tue 6/10/25
77	**Task I: Preliminary Design**	**305 days**	**Wed 7/24/24**	**Tue 9/23/25**
78	Task I.1 Alternatives Evaluation and Screening Matrix	30 days	Wed 4/30/25	Tue 6/10/25
79	Task I.2 DIB 78-04 Design Checklist and DSDD	120 days	Wed 11/27/24	Tue 5/13/25
80	Task I.3 Modified Access Report (MAR)	75 days	Wed 6/11/25	Tue 9/23/25
81	Task I.4 11-Page Engineer's Cost Estimates	30 days	Wed 11/27/24	Tue 1/7/25
82	Task I.5 Level II Risk Register (Per Delivery Directive PD-09)	150 days	Wed 7/24/24	Tue 2/18/25
83	Task I.6 Preliminary Transportation Management Plan	45 days	Wed 11/27/24	Tue 1/28/25
84	Task I.7 Highway Safety Manual Assessment	45 days	Wed 12/25/24	Tue 2/25/25



Appendix C: Detailed Scope of Work

Our team has developed a comprehensive scope of services for the City of Beaumont, to streamline approval by Caltrans District 8 and expedite NTP for the next Phase of the I-10/Oak Valley Parkway Interchange Project. With the preliminary engineering, environmental document, and design phases fully funded through local development contributions to the TUMF Program, Dokken Engineering commends the City management team in its proactive approach to developing a NEPA certified and shovel ready project that will be well positioned for discretionary Federal grant opportunities. To allow the City to pursue potential Federal reimbursement of funds expended during the PA&ED phase, we have taken the time to develop a detailed scope of services utilizing Caltrans nomenclature and organization structure from the Caltrans Work Breakdown Structure Guidelines. This will allow for maximum leveraging of local monies with the FHWA and future federal match. Through our extensive experience with Caltrans District 8 and under the Caltrans Oversight process, we can anticipate all formal deliverables required to support the PA&ED milestone. We also understand the value of maintaining flexibility within the Scope of Services to accommodate issues that may not be fully identified from the Project Initiation Document phase. Several Optional tasks have been provided to account for unknowns that will be defined as the project progresses.

TASK A – PROJECT ADMINISTRATION AND PROJECT MANAGEMENT

Dokken Engineering will provide project management services for the duration of PA&ED. Management of the project team will occur through a focused effort involving continuous communication, active coordination, budget monitoring and planning. The project manager will facilitate internal and external meetings (kickoff, PDTs, focus meetings), manage subconsultants, monitor/drive the project schedule, and prepare/execute a Quality Control Plan throughout this phase of work. Written and verbal status reports will be provided to the client on a regular basis. A Kick-off Meeting and Monthly Project Development Team (PDT) meetings will be scheduled with key team members from Caltrans within 15 days of Notice to Proceed (NTP). Bi-weekly Management Briefings will be scheduled upon receipt of NTP.

A.1 PDT and Kick-off Meetings

CONSULTANT will organize, attend, and facilitate meetings, as necessary, to provide progress updates, coordinate among technical disciplines, and facilitate overall project communication. For each meeting, CONSULTANT will provide meeting notice, prepare meeting materials and agenda, attend and facilitate the meeting and prepare meeting minutes. CONSULTANT will consult with the City of Beaumont (CITY) project manager prior to each meeting to get input regarding the agenda. The following meetings are anticipated for this project:

- **Kickoff Meeting:** Within 15 days of Notice to Proceed (NTP), CONSULTANT will organize a kickoff meeting with all key personnel, design team members and representatives from Caltrans, (Caltrans) Office of Specially Funded Projects (OFSP), RCTC, and CITY. The purpose of this meeting will be to review the goals and objectives of the project, discuss each team member's roles and responsibilities, identify critical project issues, and obtain consensus project delivery schedule, including task directions. The kickoff meeting ensures that everyone on the project team is functioning with the same understanding regarding project delivery.
- **PDT Meetings:** The Project Development Team (PDT) meetings will serve as the primary forum for reviewing the status of the project and identifying and resolving project design issues. Attendees are anticipated to include CITY staff, Caltrans, CONSULTANT, and subconsultant task leads. Throughout the anticipated duration of the project, the CONSULTANT plans to hold monthly PDT meetings to review document submittals, resolve design issues, discuss comments and proposed resolutions, discuss

progress, and address any other concerns. Twenty-two (22) PDT meetings are assumed, based on the preliminary project delivery schedule for PA&ED.

Deliverables: Meeting Notices, Agendas, Exhibits, and Minutes

A.2 Permits and Right of Entries

Following the receipt of the NTP, the CONSULTANT will submit an Encroachment Permit application, attachments, and supporting documentation to the City to be forwarded to Caltrans to allow field staff to conduct general site visits, geotechnical samplings for hazardous materials testing, and site surveys within the freeway right-of-way. Concurrently, CONSULTANT will identify additional locations outside the freeway right-of-way where it will be necessary to obtain specific rights-of-entry from affected property owners for geotechnical sampling or placement of temporary equipment for noise measurements. CONSULTANT will provide a list of property owners that will be affected by the project and will inform the CITY if support is required to obtain the rights-of-entry permits.

Deliverables: Encroachment Permit Package, Right of Entry forms

A.3 Project Delivery Schedule

Within one (1) month of NTP, CONSULTANT will provide a detailed project schedule which indicates milestones, major activities, deliverables, task dependencies, and durations to the CITY for review and comments. The schedule shall be developed in Microsoft Project and in critical path method format with sufficient detail to support tracking of all major project deliverables and associated reviews/approvals. The schedule will reflect assumed review times by all agencies involved. Review of the schedule will occur at subsequent PDT meetings and adjustments will be made, if necessary, due to changing circumstances.

Deliverable: Project Delivery Schedule and Updates

A.4 Contract Administration (Invoice, Progress Reports, management of scope/budget, etc.)

CONSULTANT will schedule all work necessary to complete the project while administering, monitoring, and controlling the effort and progress of the proposed services as follows:

- Set up an internal project accounting, reporting, and invoicing system in accordance with the City's needs.
- Prepare monthly Progress Reports indicating work accomplished the previous month, anticipated work to be completed the next month, issues requiring resolution, milestones achieved, meetings held, actions taken, approval actions required, coordination issues and design schedule impacts to accompany invoices.
- Execute contracts with the proposed subconsultants for the scope of services described herein, track the work progress of the proposed subconsultants, and review their invoices for format and content compliance.

Deliverables: Progress Reports

A.5 Agency Coordination (CT, CDFW, FHWA, USFWS, utility companies, etc.)

CONSULTANT will coordinate with other agencies involved during the PA&ED phase for compatible design. Coordination may include, but will not necessarily be limited to, the following: Caltrans, California Dept. of Fish and Wildlife, Federal Highway Administration, Santa Ana Regional Water Quality Control Board, U.S. Fish & Wildlife Service, Utility Companies, and Army Corps of Engineers. Caltrans will exercise review and approval functions through the CITY at key points in the development process. All contacts with Caltrans will be directed through the CITY. The CITY will conduct reviews, in addition to the monthly project status

reports and meetings. All meetings with other outside agencies will be scheduled by CONSULTANT with approval from the CITY.

Deliverables: Correspondence, Meeting Minutes

A.6 Bi-weekly City Briefing and Focus Group Meetings
CONSULTANT will schedule and facilitate bi-weekly meetings with the CITY project manager and subconsultant task leads to coordinate elements of the preliminary design and technical studies, review upcoming deliverables, and resolve project issues. CONSULTANT will coordinate, attend, and present project specific updates to each stakeholder (utility agencies, various CITY Departments, Caltrans functional groups, and others) as needed to facilitate decisions to move the project forward. Written and verbal reports will be provided to the client on a regular basis.

Deliverables: Correspondence, Action Items List

A.7 Quality Management Plan/Memorandum
CONSULTANT will prepare a Quality Assurance/Quality Control Process Memorandum for the PA&ED phase to summarize QA/QC general criteria, company policy guidelines, project staff responsibilities, QA procedures, QC checklists, and QC deliverables. Exhibits and plans will also be checked, corrected, and backchecked for accuracy and completeness. CONSULTANT will review subconsultant environmental and engineering report submittals to ensure that appropriate background information, study methodology, interpretation of data, format, and content are completed in accordance with current standards.

Deliverable: Quality Management Plan/Memo

A.8 Agreement Support (Coops with Caltrans)
CONSULTANT will assist with a Cooperative Work Agreement between the State of California and the City of Beaumont to establish a mechanism for CITY reimbursement to the State for oversight services during preliminary and final design phases. If necessary, CONSULTANT will provide further support to the CITY to outline and initiated any future cooperative agreements required with Caltrans for right of way acquisition coordination/oversight and construction advertise, award, and administration.

Deliverable: Draft Cooperative Agreement Coordination

A.9 Funding Assistance (Optional Service)
CONSULTANT will assist the CITY in identifying grant funding opportunities. Potential sources for transportation funding include Solutions for Congested Corridors program, the Active Transportation Program, Local Partnership Program, State Transportation Improvement Program, local road funds, existing traffic impact fees in adjacent jurisdictions, transportation sales taxes, the Bridge Investment Program, and other Federal Funding opportunities. CONSULTANT will prepare up to one (1) funding application as requested by the City.

Deliverable: Funding Application

TASK B – RESEARCH AND DATA GATHERING

CONSULTANT shall research, organize, and review all record project information. This shall include existing topographic mapping, photos, Caltrans bridge and maintenance reports, Caltrans Right-of-Way Maps, “as-built” drawings, geotechnical logs and reports, utility facilities/asset maps, Caltrans Encroachment Permits, records of survey, assessor maps, contract documents, approved development projects for adjacent lands, RCTC Regional Transportation Plan, FEMA mapping and floodplain studies, and any other pertinent data for

the project. All information gathered under this task shall be organized into a logical file structure and submitted to the City of Beaumont for their project file.

TASK C – TOPOGRAPHIC & RIGHT OF WAY SURVEYS

Survey activities will be conducted to set control, provide preliminary elevations/topographic mapping, and identify preliminary Caltrans access controlled right of way and property boundaries. These activities will commence immediately upon NTP, and the results will provide the necessary information needed to conduct the planning-level analyses in the PA&ED phase of the project.

C.1 Horizontal and Vertical Control Surveys

CONSULTANT will coordinate with Caltrans and CITY to determine the approved project control for the project. CONSULTANT will perform field surveys to search for and tie approved control and benchmarks. CONSULTANT will prepare a control report, closures, and control diagram of all primary controls to be used for the project. CONSULTANT will set durable control points along the project limits and just beyond for utilization of future surveys and construction control. It is assumed the datum will be provided in California State Plane Coordinates, NAD83 and NAVD88 vertical datums.

Deliverables: Survey Base Files, Survey Control Report

C.2 Aerial Photogrammetric Survey

CONSULTANT will coordinate with Caltrans to facilitate the delivery of an overall photogrammetric, LiDAR supported aerial map and orthophotography. CONSULTANT will set and locate aerial control panels at locations and frequency adequate to meet Caltrans and National Mapping Accuracy Standards of 1” = 50’ scale mapping, with 1’ contour intervals based on the approved mapping limits. Aerial based topographic mapping will show all visible surface features, 1’ contours, DTM ground surface and spot elevations within the mapping limits utilizing the current Caltrans mapping standards. Color photo background imagery will be prepared along the project limits utilizing the aerial photography. The imagery will be adjusted using ortho-correction within the mapping limits, and simple rectification within the ground control limits. It is anticipated that CONSULTANT and aerial firm will provide Caltrans and CITY with the necessary aerial layout and flight plan that will require approval in three stages (ABC Process) per the “Required Materials for Photogrammetric Mapping” standards.

Deliverables: Aerial Topo Base File, DTM File, Orthophoto Imagery

C.3 Topographic Design Survey/Mapping

CONSULTANT will collect visible surface features (sidewalk, curb, gutter, medians, manholes, pull boxes, utility poles, cabinets, etc.) within the project limits utilizing GPS and conventional total station survey methods. Survey information will be used together with the results of the aerial photogrammetric survey to produce a preliminary topographic base map to support the preliminary design phase. The general limits are centered at the I-10/Oak Valley Interchange and will extend northwesterly along I-10 approximately 5000 feet and approximately 3500 feet southwesterly along I-10 and will extend along Oak Valley Parkway to a point just beyond the intersections of Desert Lawn Drive to the west and Golf Club Drive to the east, sufficient for realignment and widening.

Deliverables: Topographic Survey Data with DTM, Points Files

C.4 Preliminary Right of Way and Boundary Mapping

CONSULTANT will request from Caltrans current Right of Way Maps and Monument Maps along the project corridor. CONSULTANT will establish project control to resolve and map the Caltrans right of way along the project corridor. CONSULTANT will attain the necessary mapping and documentation from CITY to survey

and map all adjoining properties within the project limits. Preliminary Title Reports will be secured, as needed, for development of the right of way mapping. Field surveys will be performed to locate monuments, pins, wells, and other boundary markers necessary to resolve and map adjoining parcels. An overall LANDNET base map will be prepared as the basis of the right of way and parcel boundaries. Base map will be prepared with sufficient detail and accuracy to be applicable to the development of plats and legal descriptions during later phases of the project.

Deliverables: Right of Way and Boundary Base Map (LANDNET), Preliminary Title Reports

TASK D – PRELIMINARY ENGINEERING STUDIES

As part of the preliminary engineering studies, the CONSULTANT shall utilize permits and right of entry approvals completed under Task A.2 to perform site visits, collect field data and conduct preliminary analyses for all technical aspects of the project, including geotechnical, pavement materials, roadway geometric, bridge design, traffic, drainage, and storm water. Based on the findings of these studies, the CONSULTANT will work collaboratively with all project stakeholders to identify the essential project elements that can be implemented within the available funding constraints. Once the project is defined, structure Advance Planning Studies and Geometric Approval Drawings will be updated and approved for inclusion in the Project Report and Environmental Document.

D.1 Preliminary Drainage/Hydrology Report

CONSULTANT will prepare a Preliminary Drainage and Hydrology Report to document the hydrology and hydraulic analysis based on the City's criteria. The preliminary report will provide a detailed discussion of the existing conditions, post-project drainage patterns and conditions, results of the on-site and off-site hydraulic analyses, and any issues of special concern or significance. Boundary conditions for proposed drainage system outfalls for connections to existing systems will be taken from existing FEMA studies, or the CITY will provide or agree to assumed boundary conditions for use in the hydraulic analysis. A Draft Preliminary Drainage/Hydrology Report shall be submitted to the CITY and Caltrans for review, and a Final Preliminary Drainage/Hydrology Report shall be provided addressing all comment/concerns reviewed by the reviewing agencies.

Deliverable: Preliminary Drainage/Hydrology Report (Draft and Final)

D.2 Draft Storm Water Data Report

CONSULTANT will prepare a Draft Storm Water Data Report (SWDR) to address the potential for project impacts on water quality, floodplain, and wetlands based on current Caltrans guidelines (Environmental handbook Volume 1, Chapter 9, Water Quality). The report will discuss receiving water conditions, objectives, and beneficial uses, as well as Caltrans standard Best Management Practices (BMPs) and project design features in accordance with the current Caltrans Statewide Storm Water Management Plan. In accordance with the National Pollution Discharge Elimination System (NPEDES) general construction activity stormwater discharge permit, applicable requirements will be identified. A Draft SWDR shall be submitted to the CITY and Caltrans for review, and a Final Draft SWDR shall be provided addressing all comment/concerns reviewed by the reviewing agencies.

Deliverable: PA&ED Level Storm Water Data Report (Draft and Final)

D.3 Geotechnical Reports

- **Preliminary Geotechnical Design Report (PGDR):** CONSULTANT will perform geotechnical engineering analyses and evaluation and prepare a PGDR in accordance with Caltrans Geotechnical Manual for

Geotechnical Design Report. The PGDR will address the geologic hazards, existing site conditions, seismicity, and the feasibility of identified geotechnical options.

- **Structure Preliminary Geotechnical Report (SPGR):** CONSULTANT will perform a site visit and geotechnical engineering analyses and evaluation and prepare two SPGRs (one for Oak Valley Parkway OC Bridge No. 56-496 and one for Middle Fork San Timoteo Creek Bridge No. 56-215R/L) in accordance with Caltrans Geotechnical Manual for Foundation Reports for Bridges. The SPGRs will provide an overview of the existing foundations, site geology, seismicity, and recommendations regarding suitable and unsuitable foundations.
- **Preliminary Materials Report (PMR):** CONSULTANT will perform site visit and geotechnical engineering analyses and evaluation and prepare a PMR in accordance with Caltrans Highway Design Manual, Topic 114. The PMR will document the sources of information used and assumptions made. If the preliminary traffic projections, design designations, and design traffic indexes become available, the PMR may address the preliminary pavement structure sections.

Deliverables: Preliminary Geotechnical Design Report (PGDR), Structure Preliminary Geotechnical Report (SPGR), Preliminary Materials Report (PMR)

D.4 Updated Geometric Approval Drawings

Based upon the results of the traffic analysis, project mapping, geotechnical study, available data, and input from the CITY and Caltrans, CONSULTANT will prepare a Geometric Approval Drawing (GAD) package to obtain approval of the interchange geometrics for each viable build alternative. The purpose of the GAD is to identify if the proposed design meets the requirements of the Highway Design Manual (HDM), identify grading and preliminary right of way limits, establish a project roadway geometric base map, and formally confirm that the design meets the operational needs of the facility. CONSULTANT will prepare a GAD in strip plot format. The GAD submittal package will include typical sections, plan view exhibits, profiles, superelevation diagrams, a signature block, and a traffic volumes diagram. CONSULTANT will present the GAD exhibits and solicit comments from the City, Caltrans, and other stakeholders as approved by the City of Beaumont.

Deliverables: Draft and Final Geometric Approval Drawings for Build Alternatives

D.5 Updated Structures Advanced Planning Study

CONSULTANT will prepare Advance Planning Studies (APS) for up to two structure types for each bridge or culvert modification. The plans will adhere to current Caltrans detailing and formatting requirements as specified in Section 3-2 “Advance Planning Studies” of Caltrans OSFP Information and Procedures Guide as well as in Caltrans Memo to Designers 1-8 “Advance Planning Studies”.

In general, the APS consists of a single plan sheet, an itemized structure cost estimate, and completion of the “Consultant Prepared Structures Advance Planning Study Checklist.” The APS plan sheet (typically 11” x 17”) includes a plan view, elevation view, and typical section of the structure with sufficient detail to determine structure limits, feasible structure type, structure depth, foundation locations and costs. The itemized structure cost estimate will be based on approximate quantity estimates using tables from Caltrans Bridge Design Aids manual.

D.5.1 APS for Oak Valley Overcrossing Bridge at I-10

CONSULTANT will update the Structures Advanced Planning Study prepared from the PSR for the Oak Valley Parkway Overcrossing Bridge (San Timoteo Canyon Road/14th Street) replacement (Bridge No. 56-496).

D.5.2 APS for Middle Fork Timoteo Creek Bridge at I-10 Widening

CONSULTANT will update the Structures Advanced Planning Study prepared for the PSR for the I-10/Middle Fork San Timoteo Creek Bridge Widening (Bridge No. 56-215).

D.5.3 APS for San Gorgonio Creek Box Culvert (Optional)

If necessary, the CONSULTANT will develop a Structures Advance Planning Study for the Township Creek (San Gorgonio Creek Box Culvert) Reinforced Concrete Box (Bridge No. 56-279)

Deliverables: Structural Advanced Planning Study Oak Valley Overcrossing Bridge Replacement, Middle Fork San Timoteo Creek Bridge Widening, and San Gorgonio Creek Box Culvert (as needed)

D.6 Location Hydraulic Study/Scour Analysis for San Timoteo Creek and Bridge at I-10

CONSULTANT will prepare a complete hydraulic analysis/study and report for San Timoteo Creek, within the limits of the project, as defined in the Final PSR. Updated project topography will be utilized/assumed for this task. The hydraulics and floodplain study for this task will include HEC-RAS models. The hydraulic study and supporting calculations for San Timoteo Creek will be compiled in a report which will also be used in subsequent FEMA applications (CLOMR and LOMR) for the project. To complete this task, CONSULTANT will meet with City Stormwater Division Staff, as needed, to gain project and detailed concurrence on approach and details, and ultimately gain approval and community acknowledgement needed for the future CLOMR.

CONSULTANT will perform a preliminary bridge scour analysis to determine scour potential for the proposed widening of the Middle Fork/San Timoteo Creek Bridge at I-10. Reporting shall address proposed mitigation to combat scour at the existing and proposed bridge support systems. Results and recommendations for the Scour Analysis shall be combined in the LHS/Scour Analysis report.

Deliverable: Location Hydraulic Study/Scour Analysis for San Timoteo Creek and Bridge at I-10 (Draft and Final)

D.7 Traffic Study

During the project scoping process, the CONSULTANT proposes to work with the CITY to review potentially viable alternatives that should be carried forward in the PA&ED process. We anticipate this initial screening to include up to six build alternatives. Up-front interchange layout considerations could reduce the number of viable alternatives to be carried out throughout PA&ED. The scope assumes three project build alternatives (plus the no-build alternative) will be identified and carried through full evaluation for all Caltrans deliverables.

This scope of services assumes analysis for the following intersections:

1. Oak Valley Parkway/Desert Lawn Drive (west)
2. Oak Valley Parkway/Desert Lawn Drive (east)
3. Oak Valley Parkway/I-10 Eastbound Ramps
4. Oak Valley Parkway/I-10 Westbound Ramps
5. Oak Valley Parkway/Golf Club Drive
6. Cherry Valley Boulevard/I-10 Eastbound Ramps
7. Cherry Valley Boulevard/I-10 Westbound Ramps
8. 6th Street/Veile Avenue/I-10 Ramps
9. Beaumont Avenue/4th Street
10. Beaumont Avenue/I-10 Eastbound Ramps
11. Beaumont Avenue/I-10 Westbound Ramps
12. Beaumont Avenue/5th Street

This scope of services assumes analysis of the following freeway locations. Counts will be collected from Caltrans PeMS database:

1. Eastbound Freeway Basic, Merge, Diverge, and/or Weave assessment on I-10 from West of Cherry Valley Boulevard interchange to East of Beaumont Avenue interchange.
2. Westbound Freeway Basic, Merge, Diverge, and/or Weave assessment on I-10 from East of Beaumont Avenue interchange to west of Cherry Valley Boulevard interchange.

Traffic Volumes Report: The most current information available will be used to prepare traffic forecasts for this project. It is anticipated that RIVCOM, the updated version of RIVTAM consistent with the SCAG 2020 RTP/SCS, will be used in this project for traffic forecasting for project Opening Year and Design Year scenarios. A review of land use in the surrounding study area will be prepared and confirmed with the City. CONSULTANT will also compare the land use assumptions from RIVCOM to general plan land use assumptions from the City (like those incorporated into the RIVTAM model by CONSULTANT for the Beaumont General Plan assessment).

CONSULTANT will develop the Design Year forecasts by applying the growth calculated from the base year and future year models to the existing traffic volumes. The Opening Year forecasts will be developed using interpolation between existing and Design Year volumes. Given that we anticipate this project to add capacity to Oak Valley Parkway, CONSULTANT will develop different No Build and Build alternative volumes reflecting the added capacity to Oak Valley Parkway (e.g. different number of lanes on this segment of roadway). This is a relatively new requirement by Caltrans to ensure that forecasts are consistent with the lane assumptions between the No Build and Build scenarios.

The AM and PM peak hour and daily volumes will be developed at the study intersections and freeway analysis locations during both Opening Year and Design Year conditions that will be used for other resource categories. To aid in this effort, we will collect daily vehicle classification counts at the following locations that can be used to assist in developing these volumes:

1. Oak Valley Parkway Overcrossing
2. Cherry Valley Boulevard Overcrossing
3. 6th Street, just east of Viele Avenue
4. Beaumont Avenue Overcrossing

Traffic Operations Analysis Report (TOAR): The TOAR will provide summary and conduct operations analysis at study locations for study scenarios, as well as complete a safety review (looking at existing collision information).

This scope of services assumes that CONSULTANT will conduct intersection capacity and freeway capacity assessment using the VISSIM software intersection analysis. CONSULTANT will conduct the AM and PM peak hour LOS analysis at the study intersections and freeway mainline segments during the following scenarios:

- Existing Conditions
- Opening Year No Build Alternative
- Opening Year Build Alternative 1
- Opening Year Build Alternative 2
- Opening Year Build Alternative 3
- Design Year No Build Alternative
- Design Year Build Alternative 1
- Design Year Build Alternative 2

- Design Year Build Alternative 3

This scope assumes that delay and level of service will be reported at all intersections. Queuing estimates will be provided for movements along Oak Valley Parkway and at all off-ramps. CONSULTANT assumes two rounds of draft submittals, review, and comments from Caltrans. CONSULTANT will respond to two rounds of consolidated comments and submit the Final Document.

Deliverables: Traffic Volumes Report, Traffic Operations Analysis Report (Draft and Final)

D.8 Intersection Control Evaluation (ICE)

CONSULTANT will evaluate the project in accordance with Caltrans Traffic Operations Policy Directive 13-02: Intersection Control Evaluation (ICE). This analysis will be performed at the I-10 ramp intersections with Oak Valley Parkway plus the adjacent intersections. Since the PSR predated the ICE requirement, we will complete a Step 1 (screening assessment) and Step 2 (full assessment) at the intersections on Oak Valley Parkway. CONSULTANT has assumed one set of comments on each submittal and resubmit both documents as final.

Deliverable: Intersection Control Evaluation

D.9 Vehicle Miles of Travel (VMT)

With SB-743, CEQA must now evaluate VMT as the impact metric associated with transportation. For the PA&ED phase of the project, Caltrans has defined the following key deliverables that will be completed by CONSULTANT as part of this effort:

- Induced Travel Study Methodology Memorandum – This will document and describe how the VMT assessment will be completed including the methodology employed for the effort.
- VMT Study, Draft – The draft quantitative VMT analysis results will be documented in a report. Any significant VMT impacts will be identified.
- VMT Study, Final – We will respond to Caltrans comments on the draft submittal as final. This document will be shared with Caltrans Headquarters for concurrence.
- Mitigation Scoping Plan - This step is only required if the project is determined to lead to a measurable and substantial increase in vehicle travel. However, this document will summarize any proposed mitigation associated with the project to off-set the induced travel impacts of the project.
- Induced Travel Risk Assessment - This step is only required if the project is determined to lead to a measurable and substantial increase in vehicle travel and the induced VMT is not fully mitigated. A subsequent memorandum summarizing the findings will be submitted to Caltrans Headquarters for review and concurrence documenting why VMT mitigation is not feasible with the project.

CONSULTANT budget assumes that we will submit two rounds of documents for review for each of these deliverables: a draft document submitted to Caltrans and a final document that responds to Caltrans comments. Based on other studies completed, CONSULTANT current recommended practice is to document induced VMT estimates from both the RIVCOM model and using the Caltrans NCST calculator and also document the limitations of both approaches. We will also reduce the induced VMT estimates associated with truck travel in both estimates as SB 743 only addressed induced travel associated with passenger cars. This nuance will change the level of mitigation and is important to distinguish as part of the VMT estimates. Finally, the VMT assessment and all draft documents will use the Caltrans TAF (Transportation Analysis Framework) and TAC (Traffic Analysis for CEQA) to guide the analysis process.

Deliverable: Travel Study Methodology Memo, VMT Study (Draft and Final)

TASK E – ENVIRONMENTAL DOCUMENTATION AND TECHNICAL STUDIES

The environmental work for the project will be carried out in accordance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements. Caltrans will serve as the CEQA lead agency and the NEPA lead agency for the I-10/Oak Valley Parkway Project PA&ED phase. Based on the project scope defined during Project Initiation Document phase, the project team will conduct a field review and obtain concurrence on the necessary environmental technical studies via the Preliminary Environmental Study form. The project team will conduct the environmental studies, anticipated to include biology, cultural, hazardous waste, noise, visual, air/water quality, paleontological, community, vehicle miles traveled (VMT), and Native American consultation and submit to Caltrans District 8 environmental staff and the CITY for review and approval. Once completed, the technical studies will be summarized in the combined NEPA/CEQA document and circulated for public review. Caltrans will ultimately certify the CEQA Environmental Impact Report (EIR) and NEPA Environmental Assessment (EA).

E.1 Preliminary Environmental Evaluation and Caltrans Coordination
CONSULTANT will review the previously prepared Preliminary Environmental Analysis Report and coordinate with Caltrans to confirm the required technical studies. A brief memorandum describing the technical studies anticipated will be prepared and submitted to the CITY and Caltrans for concurrence. CONSULTANT will also provide an updated Project Description and Purpose and Need to the CITY and Caltrans and coordinate approval of the Project Description to be included in the technical studies.

Deliverable: Environmental Scoping Memorandum

E.2 Initial Public Scoping Meeting / Notice of Preparation
An initial public scoping meeting will be held in which the stakeholders, responsible agencies, and community will be provided an opportunity to comment on the project and to determine the potential public support or opposition to the project. CONSULTANT will prepare a Notice of Preparation (NOP) for an Environmental Impact Report and will circulate the NOP to all responsible agencies. The review period of the NOP is 30 days and requires a Public Scoping Meeting included in this task. The NOP will include a description of the project, a location map, identification of potential environmental issues, and probable environmental effects of the project. Once the 30-day review is complete and agency comments have been received, preparation of the draft Environmental Document can commence.

Deliverables: Meeting Materials, Notice of Preparation

E.3 Environmental Focus Group Meetings
CONSULTANT will coordinate environmental focus group meetings, as needed, to solicit feedback and address concerns from stakeholders, potentially including emergency services and other transportation related personnel. These focus group meetings will establish rapport and help build support from this important group of stakeholders. CONSULTANT will coordinate and facilitate in-person or virtual stakeholder meetings. The focus group meetings will deliver project information and opportunities for individuals to provide feedback.

Deliverables: Meeting Materials

E.4 Phase I Initial Site Assessment Addendum and Hazardous Waste Phase II Preliminary Site Assessment (Title 22, ADL, Asbestos)
CONSULTANT will prepare an addendum to the previously prepared Phase I Initial Site Assessment (ISA) due to the age of the documentation. CONSULTANT will perform a reconnaissance of the Site to assess conditions for the presence or make visual observations of indicators of the potential existing presence, of

hazardous materials, hazardous wastes, or soil and/or groundwater impacts on the Site. These indicators include, but are not limited to, 55-gallon drums, USTs and aboveground storage tanks, chemical containers, waste storage and disposal areas, industrial facilities, discolored surficial soils, electrical transformers that may contain polychlorinated biphenyls (PCBs), and areas conspicuously absent of vegetation. CONSULTANT will also review the Standard Environmental Records Sources: Federal and State referenced in American Society for Testing and Materials (ASTM) Designation E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process to obtain information regarding the potential presence of hazardous materials/wastes on the Site or on properties located within the approximate minimum search distance specified for each source. Upon completion of these tasks, CONSULTANT will prepare a report summarizing the findings of the ISA which will qualitatively describe the potential for environmental impairment of the Site. The report will include a completed Caltrans ISA Checklist.

Additionally, CONSULTANT will perform a Phase II Preliminary Site Investigation addressing potential hazardous materials in general accordance with the Caltrans guidelines. Phase II soil sampling and analysis will be conducted to evaluate concentrations of Title 22 metals (including aerially deposited lead [ADL]), petroleum hydrocarbons, and organochlorine pesticide concentrations in soil within the proposed right-of-way take and project limits. Hazardous materials survey will be performed to evaluate suspect asbestos containing materials and suspect lead and chromium containing paints and traffic striping used in bridge and roadway constructions.

Deliverables: Phase I ISA Addendum and Phase II PSI Report

E.5 Prepare Area of Potential Effects Exhibit

CONSULTANT will prepare an Area of Potential Effect (APE) exhibit. The APE will determine the limits of field surveys and report documentation. CONSULTANT will coordinate with Caltrans cultural staff to receive feedback and ultimately approval and signature on the APE Map to be included in the cultural documentation.

Deliverable: APE Exhibit

E.6 Section 106/AB 52 Consultation

CONSULTANT will utilize the list provided by the Native American Heritage Commission and Caltrans' AB 52 Consultation List to contact Native American groups. With Caltrans approval, CONSULTANT will contact each group via certified mail to initiate consultation under Section 106 and AB 52. After 28 days, CONSULTANT will follow up via telephone with those groups that have not responded to the initial letter. CONSULTANT will document all Native American consultation efforts in cultural resource and environmental documentation.

Deliverable: Native American Consultation Log

E.7 Historic Property/Archaeological Survey Report

CONSULTANT will prepare cultural documentation in accordance with Section 106 of the National Historic Preservation Act and will follow the requirements set forth in the Caltrans Environmental Handbook Volume II, Cultural Resources and the Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it pertains to the administration of the Federal-Aid Highway Program in California. This work will include the efforts to record archaeological and historical resources identified within the study area. A Historic Property Survey Report (HPSR)/Archaeological Survey Report (ASR) will be prepared to

identify and evaluate each cultural resource in the project area and evaluate the potential for impacts this project could have on those resources.

Deliverables: Historic Property Survey Report/Archaeological Survey Report

E.8 Noise Study Report

CONSULTANT will prepare a Caltrans format Noise Study Report pursuant to NEPA that assesses the project's potential effects on existing and future noise conditions, including construction impacts. CONSULTANT will review applicable Federal (Caltrans) and City noise and land use compatibility criteria for the project area. Noise standards regulating noise impacts including Federal Highways (FHWA) Noise Abatement Criteria (NAC) and standards included in the City's Noise Ordinance will be discussed for sensitive land uses adjacent to the project. The areas with potential future noise impacts have been identified using land use information and field reconnaissance. The project area contains adjacent sensitive noise receptors, and this project is changing the vertical and horizontal roadway alignment so noise impacts and potential abatement must be considered.

Deliverable: Noise Study Report

E.9 Noise Abatement Decision Report

Based on the Noise Study Report, if noise impacts warrant abatement, CONSULTANT will prepare a Noise Abatement Decision Report (NADR). The NADR will include design information and estimated costs of any proposed soundwalls, and applicable criteria to evaluate the reasonableness and feasibleness of constructing the noise abatement. This will be based on constructability of the barrier, cost of building the barriers, and allotment of abatement cost per resident. If a soundwall is evaluated as both reasonable and feasible, CONSULTANT will coordinate with the public to determine if they want the wall.

Deliverable: Noise Abatement Decision Report

E.10 Air Quality Technical Report

CONSULTANT will prepare an Air Quality Report for the project's operation and construction in accordance with the Caltrans' Transportation Project Level Carbon Monoxide (CO) Protocol and the California Air Resources Board (CARB), Riverside County District, and CEQA regulations for the South Coast Air Basin (SCAB).

For the description of existing ambient air quality, the report will use baseline and project-setting meteorological and air quality data in the area developed through the CARB, along with climatological and air quality profile data gathered by the South Coast Air Quality Management District. Air quality data from the Lake Skinner, Lake Elsinore, and Perris monitoring stations (the nearest air quality monitoring stations) will be included to help highlight existing air quality local to the proposed project site. Other sources such as regulatory documents, professional publications, and previous experience in the project area will supplement background information.

The CITY is in non-attainment for PM2.5, PM10, and Ozone under California regulations and PM2.5 and 8-hour Ozone under Federal regulations. As a component of the Air Quality Report, the project will undergo Interagency Consultation with SCAG's Transportation Air Quality Conformity Group to confirm it is not a Project of Air Quality Concern, per the Environmental Protection Agency's Criteria for Projects of Air Quality Concern (40 CFR 93.123 (b)(1)). CONSULTANT will prepare and submit the required forms and information to SCAG and call in to the monthly project review and concurrence to represent the project. The results of this Interagency Consultation will be documented in the Air Quality Report and concurrence from SCAG's Transportation Air Quality Conformity Group will be attached as an appendix to the report.

After approval of the Air Quality Report and circulation of the Draft Environmental Document, CONSULTANT will prepare an Air Quality Conformity Analysis consistent with FHWA and Caltrans requirements to demonstrate that the project meets the project level air quality conformity requirements. This subsequent analysis will be reviewed by Caltrans and forwarded to FHWA for review and concurrence with the project level conformity determination.

Deliverable: Air Quality Report

E. 11 Community Impact Assessment

CONSULTANT will prepare a Community Impact Assessment (CIA) to document the potential impacts of this project on the local community, minority, and low-income populations as well as evaluating the potential for public controversy. This report will evaluate the land acquisitions, changes in the noise and visual environment, and impacts on cultural/biological resources that may be important to the community. Pursuant to NEPA requirements, impacts to low-income population will be evaluated consistent with federal Environmental Justice policy. The CIA will be based on current Caltrans Guidelines (Environmental Guidelines Volume 1, Chapter 24 – Community Impacts) and will discuss social impacts, businesses and residences affected by the project, and community resources such as schools, parks, and emergency services. Residential relocations are not anticipated.

Deliverable: Community Impact Assessment

E.12 Visual Impact Assessment

CONSULTANT will oversee the landscape architect subconsultant, Reddy Engineering Services Inc., to prepare a Visual Impact Assessment (VIA). It is assumed the VIA would be a moderate level based on the preliminary Caltrans VIA Questionnaire. The VIA will evaluate viewpoints for: notable visual resources; the vividness, intactness, and unity of the project area; and the site's landscape units. The VIA will be prepared using methods and protocol developed by the FHWA and adopted by Caltrans. The VIA will include visual renderings of the proposed alternatives. The VIA will be reviewed and approved by the CITY prior to submittal to Caltrans for review and approval.

Deliverable: Visual Impact Assessment (Moderate Level)

E.13 Aquatic Resources Delineation Report

CONSULTANT will complete a focused wetlands delineation and a jurisdictional "waters of the U.S." determination according to the 2008 Army Corps of Engineers Wetland Delineation Manual Arid West Supplement, and currently accepted methodology. CONSULTANT will also determine the extent of any "waters of the State" including the streambed and associated riparian areas subject to review by CDFG under Section 1602 of the Fish and Game Code. It is assumed the Middle Fork of the San Timoteo Creek and Township Creek (Little San Gorgonio Creek) will be considered "waters of the U.S." while the entire undeveloped floodplain of the channel would be considered "waters of the State." The delineation results will be presented in a detailed report with appropriate technical documentation for use in permit applications.

Deliverable: Aquatic Resources Delineation Report

E.14 Natural Environment Study

CONSULTANT will prepare a Caltrans formatted Natural Environment Study (NES) that will include a description of the field methods used and the results of the biological assessment of the project area. The report will list plant and animal species present, along with a general description of the plant communities occurring within the project area. Surveys for burrowing owl, Los Angeles pocket mouse, San Bernardino

kangaroo mouse, for Least Bell's vireo, Southwestern willow flycatcher, and narrow endemic plant species (NEPSSA) will be required and survey results will be attached to the NES. If any sensitive resources are found on the site, CONSULTANT will prepare and include in the NES an exhibit displaying the location of the sensitive plant communities on-site and any sensitive biological resources observed. The report also will contain tables describing sensitive species and their habitats that are present or potentially present, and will identify and assess project impacts on the existing biological resources, including any sensitive species. Minimization and mitigation measures will be included as necessary.

E.14.1 SBKR and LAPM Trapping Survey and Report

CONSULTANT will oversee a protocol San Bernardino kangaroo rat (SBKR) and Los Angeles pocket mouse (LAPM) trapping survey in compliance with WRMSHCP requirements. The trapping survey will be conducted by a biologist who is permitted to trap and handle SBKR and LAPM. Small mammal presence/absence surveys typically require five consecutive nights of trapping when the animal is active above ground between May 1 and September 15 and when the overnight temperature lows are 50 degrees Fahrenheit or higher, while avoiding periods of overnight precipitation. All captured animals will be identified to species and data will be taken for any SBKR or LAPM mouse captured, including age, sex, reproductive condition, and GPS point will be taken at the capture location. Following the completion of the trapping effort, a report will be prepared that documents the trapping methods, results of the trapping effort, a figure showing trap locations and, if applicable, SBKR and LAPM capture locations, and representative photographs.

E.14.2 Least Bell's Vireo Surveys and Report

CONSULTANT will oversee protocol surveys for least Bell's vireo (LBVI) by a qualified biologist(s) in compliance with WRMSHCP requirements. Eight surveys will be conducted at least ten days apart during the period between April 10 and July 31. Following the completion of the surveys, a brief letter report will be prepared to describe survey methodology, site conditions, and results, including the locations of any LBVI observations, extent of territories, and nests (if detected). The report will also include maps depicting the Project site, suitable riparian habitat included in the survey area, and the locations of any LBVI observations.

E.14.3 Southwestern Willow Flycatcher Surveys and Report (Optional Service)

If suitable habitat for Southwestern willow flycatcher (SWFL) is determined to be present, CONSULTANT will oversee protocol surveys by a qualified biologist(s) for SWFL in compliance with WRMSHCP requirements. A minimum of five surveys will be conducted at least five days apart, during the survey periods between May 15 and July 17. Following the completion of the surveys, a brief letter report will be prepared to describe survey methodology, site conditions, and results, including the locations of any SWFL observations, extent of territories, and nests (if detected). The report will also include maps depicting the Project site, suitable riparian habitat included in the survey area, and the locations of any LBVI observations.

Deliverables: Natural Environment Study, SBKR, LAPM, LBVI, and SWFL Survey Report Memorandums

E.15 WRMSHCP JPR, DBESP, and Consistency Analysis

CONSULTANT will prepare a Joint Project Review, Determination of Biological Equivalent or Superior Preservation (DBESP), and Consistency Analysis Reports to comply with the Western Riverside Multiple Species Habitat Conservation Plan (WRMSHCP). These documents will summarize the unavoidable impacts to riverine/riparian habitat associated with the drainage crossings under the project area and proposes mitigation as defined under Section 6.1.2 of the MSHCP. The JPR/DBESP/Consistency Analysis will

incorporate proposed mitigation measures from the NES but will also provide a determination that this project would be consistent with each of the requirements of the WRMSHCP and a more thorough description of any required mitigation such as off-site mitigation or on-site replanting and/or revegetation as well as any applicable USFWS and CDFW requirements for success rates and long-term monitoring. This scope does not include the preparation of revegetation plans to be prepared during PS&E. The JPR will be submitted to the Western Riverside County Regional Conservation Authority (RCA) and wildlife regulatory agencies. It is assumed at least two meetings with RCA will be held to present the project and proposed avoidance, minimization, and mitigation measures. If any federally listed species are discovered, it is anticipated Caltrans will utilize the DBESP to secure a Streamlined Biological Opinion from USFWS utilizing the WRMSHCP.

Deliverables: WRMSHCP Joint Project Review, Determination of Biological Equivalent or Superior Preservation (DBESP), and Consistency Analysis

E.16 Water Quality Assessment Report

CONSULTANT will prepare a Water Quality Assessment Report to address the potential for project impacts on water quality based on current Caltrans guidelines (Environmental Handbook Volume 1, Chapter 9, Water Quality). The report will discuss the drainages within the project area and the receiving waters conditions, objectives, and beneficial uses as well as Caltrans standard BMPs and project design features required in accordance with the current Caltrans Statewide Storm Water Management Plan.

Deliverable: Water Quality Assessment Report

E.17 Draft EIR/EA

CONSULTANT will draft the EIR/EA for public review. The Draft EIR/EA has a critical objective of providing a means by which the general public and responsible agencies can participate in the environmental process by providing written comments on issues addressed in the EIR/EA. CONSULTANT will incorporate the purpose and need/project description and the technical studies into the draft document. CONSULTANT will prepare a VMT Mitigation Scoping Plan and Induced Travel Risk Assessment to summarize any proposed mitigation the findings will be submitted to Caltrans Headquarters for review and concurrence documenting why VMT mitigation is not feasible with the project. Based upon available data, CONSULTANT will prepare sections for Human Environment, Physical Environment, Biological Environment, and Cumulative Impacts. The Draft Environmental Document will determine if the project has any significant adverse effects on the environment under both State and Federal standards, identify potential mitigation measures for such impacts, and determine if the mitigation measures reduce all impacts below a level of significance.

Deliverable: Draft EIR/EA

E.18 Public Circulation of EIR/EA /Public Notices and Hearing

The EIR/EA needs to be circulated for public review for a period of 45 days. Pursuant to CEQA requirements, CONSULTANT will prepare a Notice of Availability for the Draft EIR/EA. This notice, along with the Draft Environmental Document and technical studies, will be made available at the City offices, the Public Library, and electronically during the 45-day public circulation and review period. In addition, the document will be distributed to other reviewing government agencies through the California State Clearinghouse.

To satisfy the requirements of the CEQA EIR, CONSULTANT will conduct a public hearing during the 45-day circulation of the Draft Environmental Document. This hearing will explain the purpose of the project, why it is needed, what is being proposed, and the environmental impacts of the proposed project. CONSULTANT will advertise the hearing in the local newspaper, with posted fliers, and direct mailings, as needed, to ensure maximum attendance and participation at the meeting. The hearing will either be in-person or

virtual and will consist of a brief presentation followed by questions directed to technical experts on the project. Comments will be collected and summarized for the CITY and Caltrans' consideration.

Deliverables: Notice of Availability/Notice of Intent, Meeting Materials

E.19 Record of Public Hearing
After conclusion of the public meeting, CONSULTANT will prepare a Record of Public Hearing for the project file. The document will contain all announcements and newspaper postings for the public hearing, the exhibits presented at the public hearing, a list of attendees from the PDT at the public hearing, and a log of all comments received. Any materials handed out to the public will be included in the appendix along with sign-in sheets and photographs documenting the public meeting.

Deliverable: Record of Public Hearing

E.20 Final EIR/EA (CEQA Statement of Overriding Consideration & Findings of Fact and NEPA FONSI)
At the close of the public review period for the Draft Environmental Document, CONSULTANT will meet with CITY and Caltrans staff to review any comments on the Draft Environmental Document that were received, and to discuss potential responses to these comments. CONSULTANT will then formulate responses to the comments on the Draft Environmental Document. Once draft responses to comments are completed, they will be submitted to the agencies' staff for review and comment. The agencies' comments will be incorporated into the response to comments document, which will be submitted to Caltrans as an appendix in the Final Environmental Document.

A Final Environmental Document will be prepared by the CONSULTANT. The CEQA portion will be a Final EIR, while the most likely outcome is the preparation of a FONSI under NEPA. Prior to action on the EIR/EA, CONSULTANT will assist the CITY and Caltrans to prepare appropriate findings and the Administrative Record.

CONSULTANT will draft findings of fact pursuant to State CEQA Guidelines Section 15091 for each of the significant effects identified in the Final EIR. The findings will describe the effect, cite one or more applicable findings under Section 15091, and describe the evidence that supports the selected findings. The findings will also explain why other project alternatives have been found infeasible by the CITY and Caltrans. CONSULTANT will coordinate the drafting of these findings with CITY and Caltrans Staff.

CONSULTANT will prepare a Statement of Overriding Considerations to address any significant effects of the project that are unavoidable, explaining the economic, legal, social, technological, or other benefits of the project that outweigh its unavoidable environmental impacts. The statement will be based on substantial evidence in the record. CONSULTANT will work with the CITY's and Caltrans' legal counsel in preparing the findings and statement of overriding considerations.

To complete the CEQA process, CONSULTANT will file a Notice of Determination with the County Recorder's Office within 5 days of approval of the FEIR/FONSI (pursuant to CEQA guidelines).

Deliverables: Final EIR/EA, CEQA Statement of Overriding Considerations, CEQA Findings of Fact, NEPA Finding of No Significant Impact, and Notice of Determination

E.21 Section 404 Nationwide Permit (Optional Service)
If required for geotechnical investigations during PA&ED, CONSULTANT will prepare a Clean Water Act Section 404 Nationwide Permit (NWP) 6, for Geotechnical Investigations. An NWP 6 is appropriate as the permanent impacts to waters of the United States for geotechnical investigations is less than 0.5 acre. CONSULTANT will prepare the Preconstruction Notification (PCN), which will include a project description,

construction methodology, quantification of permanent and temporary impacts on waters of the United States, and information to demonstrate compliance with the specific and general conditions applicable to Nationwide Permit 14, including compliance with the federal Endangered Species Act (ESA), and with Section 106 of the National Historic Preservation Act (NHPA). The PCN will also include a copy of the delineation of waters of the United States. CONSULTANT will coordinate directly with USACE staff to ensure the permit is obtained. The PCN will be prepared for review and submitted to the U.S. Army Corps of Engineers.

Deliverable: Section 404 Nationwide Permit

E.22 Section 401 Water Quality Certification (Optional Service)

If required for geotechnical investigations during PA&ED, CONSULTANT will prepare a Notice of Intent (NOI) under the 401 General Water Quality Certification and Order of the 2022 USACE NWP 6 for Geotechnical Investigations. The NOI would be filed with the Santa Ana Regional Water Quality Control Board (RWQCB). The application will include the appropriate fee assumed to be paid for by the City. Issuance of a Section 401 Water Quality Certification (that may include waste discharge requirements) also generally constitutes compliance with the State Porter-Cologne Act. CONSULTANT will coordinate directly with RWQCB staff to ensure the certification is obtained on schedule for the geotechnical work and will ensure all permit requirements are adhered to. The permit fee is assumed to be paid by the City.

Deliverable: Section 401 Water Quality Certification

E.23 Section 1602 Lake and Streambed Alteration Agreement (Optional Service)

If required for geotechnical investigations during PA&ED, CONSULTANT will prepare the required notification package for a Streambed Alteration Agreement (SAA), in compliance with Section 1602 of the California Fish and Game, to be filed with CDFW online. The application package will describe, among other items, the project features; work period; geotechnical methods; and potential temporary impacts on vegetation, fish and wildlife. Detailed geotechnical plans and application fee based will accompany the notification package. CONSULTANT will coordinate directly with CDFW staff to ensure the agreement is obtained on schedule for the geotechnical work and will ensure all permit requirements are adhered to. The permit fee is assumed to be paid by the City.

Deliverable: Section 1602 Lake and Streambed Alteration Agreement

TASK F – PROJECT REPORT

The Project Report task will compile the information developed in the Preliminary Engineering Studies and Preliminary Design tasks and present the results in a comprehensive document.

F.1 Draft Project Report

CONSULTANT will prepare the Draft Project Report in accordance with Caltrans "Preparation Guidelines for Project Report." The document will discuss the proposed project, purpose and need, and provide an overview of impacts including environmental impacts and potential right of way impacts.

This task includes the preparation of a draft and final report for the Draft Project Report with a recommendation for circulation of the Environmental Document. The draft will be submitted to Caltrans and the City for review and comment. CONSULTANT will meet with Caltrans and City for comments resolution and make updates to the Draft Project Report.

CONSULTANT will prepare the Draft Project Report to be published/circulated with the Draft Environmental Document and will evaluate all Build Alternatives identified as worthy of further consideration through coordination with the City and Caltrans, together with the No Build Alternative.

Deliverables: Draft Project Report (Draft and Final)

F.2 Final Project Report

After circulation of the Draft Project Report, CONSULTANT will prepare a Final Project Report with the recommendation for selection of a preferred alternative and approval of the project to proceed to the final design (i.e. Plans, Specifications, and Estimate) phase. The draft will be submitted to Caltrans and the City for review and comment. CONSULTANT will address the comments and produce the Final Project Report. CONSULTANT will meet with Caltrans and City for comments resolution and make updates to the Final Project Report and submit for approval.

The Final Project Report will be published with the Final Environmental Document and will include selection of a Locally Preferred Alternative through a formal alternatives screening process conducted with the Project Development Team. The approval of the Final Project Report will conclude the PA&ED phase of the project.

Deliverables: Final Project Report (Final Project Report)

TASK G – PRELIMINARY RIGHT OF WAY MAPS

Preliminary right of way activities will consist of developing preliminary right of way requirements maps from the preliminary land net mapping developed under Task C.4 and superimposing the proposed project improvements. Fee acquisitions, easements, and damages (if any) will be identified and estimated by the CONSULTANT real estate and engineering teams, which will serve as a tool for project decision making/overall estimating efforts. Preliminary right of way requirement maps shall be developed in a format agreeable to the City and the Caltrans District 8 Right of Way Department and shall be submitted in hard copy strip plot format to both the City and Caltrans for review and comment. At the City's direction, the CONSULTANT team may proceed with development of the draft Plat Maps and Legal Descriptions in support of future appraisals and property owner negotiations during the PS&E phase.

G.1 Preliminary Right of Way Requirements Maps

CONSULTANT will prepare a map showing anticipated right of way requirements for each Build Alternative. The right of way requirement maps will provide enough detail to support the decision-making process in selecting an alignment and will define property acquisition/easement areas required for the Right of Way Data Sheet. CONSULTANT will review ownership details, title exceptions, dedications, easements, and area closure calculations for QC review.

Deliverable: Right of Way Requirement Maps

G.2 Right of Way Data Sheet

After the Preliminary Right of Way Requirement Maps are prepared, CONSULTANT will compare and summarize right of way impacts for the alternatives considered. Data sheets will summarize the number of parcels potentially affected, impacts to property access, and will include a preliminary estimate of right of way acquisition costs.

Deliverable: Right of Way Data Sheet

G.3 Plat Maps and Legal Descriptions (Optional Service)

If requested by the City, CONSULTANT will provide right-of-way support. This will include preparing plats and legal descriptions for properties requiring additional right of way and/or easements, including Temporary Construction Easements (TCE) along the project corridor. The exact number and locations will be determined upon design and project needs. All documents will be prepared according to Caltrans standards and requirements. For this proposal, CONSULTANT will assume that up to six (6) properties will be impacted by the project. CONSULTANT will prepare two (2) plats and legal descriptions for each of the 6 properties impacted by the project for right of way take and TCE, for a total of twelve (12) plats and legal descriptions. CONSULTANT will prepare preliminary PDF Plats, Legal Descriptions, and closure calculations for review. Upon approval, CONSULTANT will prepare final signed and stamped PDF Plats and Legal Descriptions.

Deliverables: Preliminary and Final Plats, Legal Descriptions, and Closure Calculations

TASK H – UTILITY COORDINATION

Preliminary utility efforts consist of preparing and distributing Letter Requests for Utility Mapping (Caltrans Letter No. 1), collecting utility information from the City and local service providers, organizing information for the project file, and mapping of existing/proposed utilities to identify potential utility conflicts.

H.1 Letter Requests to Utility Owners for Mapping

CONSULTANT's utility coordination process matches the state and federally approved processes. CONSULTANT will prepare a database of utility records indicating the type of utility, owner, drawing number, and other vital information. The identified utility companies will be sent a letter describing the proposed project, location, and anticipated features to request information regarding existing and proposed utilities.

Deliverables: Utility Correspondence and Letters Requests for Mapping

H.2 Utility Mapping from Record Drawings and Permits

CONSULTANT will perform a utility search for affected utilities in the project area, including a review of the utility work compiled for the PSR. The search will include a review of available as-builts and permits for the project area and verification field review. CONSULTANT will prepare a database of utility records indicating the type of utility, owner, drawing number, and other vital information. CONSULTANT will plot the location of all existing facilities on a utility CAD base map to serve as a basis for utility conflict determination and future conflict resolution.

Deliverable: Utility CAD Base Map

H.3 Utility Information Sheet

CONSULTANT will review the draft Utility Information Sheets prepared for the PSR and prepare an updated Utility Information Sheet for the Build Alternatives, to be included in the Draft and Final Project Study. The names of all utilities and points of contact will be developed and a description of the location, existing facility, and potential conflicts with the project will be prepared.

Deliverable: Utility Information Sheet

H.4 Preliminary Utility Conflict Identification Maps

CONSULTANT will review the existing utilities against the proposed improvements to create the Utility Conflict Identification Maps. Based on the information gathered, CONSULTANT will prepare conflict maps for each utility highlighting the location of identified conflicts and preliminary recommendations to resolve utility conflicts, to be reviewed/approved by the CITY and Caltrans.

Deliverable: Preliminary Utility Conflict Identification Maps

H.5 Preliminary Utility Management Matrix

CONSULTANT will summarize utility owner information, anticipated conflicts, and proposed resolutions to utility conflicts in a Preliminary Utility Management Matrix (UMM) in Caltrans format, which will be used to prepare the Utility Information Sheet. The UMM will serve as a tool for project decision making/estimating purposes and future coordination between the CITY, CONSULTANT, and the affected utility owner.

Deliverable: Preliminary Utility Management Matrix

H.6 Utility Coordination with Utility Owners (Optional Service)

If determined necessary by the City, CONSULTANT will coordinate and meet with utility owners to develop utility protection measures or relocations during the design process. CONSULTANT will provide recommendations and schematic designs to aid in the utility coordination process.

Deliverable: Correspondence and utility coordination

TASK I – PRELIMINARY DESIGN

Using the information obtained from the survey and Preliminary Engineering Studies, the Preliminary Design tasks will focus on developing/evaluating/estimating the roadway geometric, structure, and pavement alternatives, identifying/documenting non-standard design elements, developing a preliminary opinion of project cost for each alternative, performing an alternatives screening evaluation, managing vehicular/pedestrian traffic during construction, and assessing the project risks through a Level II Risk Register, per the scalability requirements outlined in Caltrans Project Delivery Directive-09R1. These elements will be summarized and presented in the Draft and Final Project Report.

I.1 Alternatives Evaluation and Screening Matrix

CONSULTANT will develop a detailed Alternatives Evaluation and Screening Matrix to compare up to three proposed Build Alternatives and the No-Build Alternative with consideration for traffic operations, roadway geometry, safety, right of way and property owner interests, drainage, hydraulics, storm water quality, utility impacts, environmental impacts, costs, and risks. The Alternatives Evaluation and Screening Matrix will service as the basis for determining the build alternative to be carried forward in the environmental and engineering technical studies.

Deliverable: Alternatives Evaluation and Screening Matrix

I.2 DIB 78-04 Design Checklist and DSDD

CONSULTANT will evaluate the build alternative for all non-standard features (boldface and underlined) that are identified in the Caltrans Design Information Bulletin (DIB) 78-04 “Design Checklist for the Development of Geometric Plans” and DIB 82-06 “Pedestrian Accessibility Guidelines for Highway Projects”, in conjunction with the Caltrans Highway Design Manual. CONSULTANT will prepare Design Standard Decision Documents (DSDD) for any non-standard feature(s) in accordance with Chapter 21 of the Project Development Procedures Manual, “Design Standard Decisions.”

Deliverables: Design Checklist, DSDD (Draft and Final)

I.3 Modified Access Report (MAR)

CONSULTANT will prepare a Modified Access Report (MAR) following the PSR outline (Chapter 9 – Project Initiation). CONSULTANT will coordinate with the FHWA to ensure that the proposed access change meets policy requirements. Once approved, the FHWA will send a Determination of Engineering and Operational Acceptability. This separate report will follow an organizational structure similar to the Draft Project Report and must be accepted by FHWA to approval of the Final Project Report.

Deliverables: Modified Access Report (Draft and Final)

I.4 11-Page Engineer's Cost Estimates

CONSULTANT will prepare the Caltrans standard '11-page' format cost estimate for improvements within Caltrans right of way for the Build Alternatives. CONSULTANT will develop preliminary quantities and identify appropriate unit pricing to include pavement structural section, drainage, retaining walls, erosion control and water pollution control BMPs, traffic signals, ramp metering, signage, traffic management plan, structures, and right of way costs in the preliminary Engineer's 11-Page Cost Estimate.

Deliverables: Preliminary Engineer's 11-Page Cost Estimate

I.5 Level II Risk Register (Per Delivery Directive PD-09)

CONSULTANT will work with the PDT team and stakeholders to identify and record potential risk to the project in accordance with Caltrans Project Delivery Directive PD-09. The project has a Risk Register Scalability Level of II as defined in the Caltrans Project Risk Management Handbook and a Risk Register with qualitative analysis is required. The risk identified and quantitative risk assessment will be included as an attachment for the Draft and Final Project Report and will be recorded in the Risk Register by the assigned Caltrans District 8 Risk Management Coordinator.

Deliverable: Level II Risk Register

I.6 Preliminary Transportation Management Plan

CONSULTANT will develop a conceptual plan for traffic handling to ensure that traffic operations are not adversely impacted at the project site, including any California Highway Patrol (CHP) enforcement areas and other highway systems related equipment. CONSULTANT will prepare the Transportation Management Plan (TMP) Checklist to reflect the approved design elements, construction activities, and anticipated costs. The TMP Checklist will reflect consideration for the project's staging activities, traffic handling strategies, and other impacts to the public. CONSULTANT will submit the TMP Checklist to the CITY and Caltrans for review/approval.

Deliverable: Preliminary Transportation Management Plan Checklist (Data Sheet, TMP Elements, Budgetary Cost Estimates)

I.7 Highway Safety Manual Assessment

The HSM provides tools to conduct quantitative safety analyses, allowing for safety to be quantitatively evaluated alongside other transportation performance measures such as traffic operations, environmental impacts, and construction costs. CONSULTANT will complete the HSM process and will provide the results to the City and Caltrans.

Deliverable: Highway Safety Manual Assessment

DOKKEN ENGINEERING

TASK DESCRIPTION	DOKKEN ENGINEERING																					FEHR & PEERS									
	Principal in Charge	QA / QC Manager	Darwin Cruz* Project Manager	Senior Engineer 2	Senior Engineer 1	Associate Engineer 2	Associate Engineer 1	Assistant Engineer 2	Assistant Engineer 1	CAD / Engineering Technician	Environmental Manager	Senior Environmental Planner	Associate Environmental Planner	Environmental Planner	Environmental Technician	Right of Way Manager	Senior Right of Way Agent	Right of Way Agent	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Principal in Charge	Principal QA/QC Manager	Associate	Senior Engineer	Engineer	Support Staff 1	Support Staff 2	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST
BILLING RATES*	$330	$320	$275	$255	$220	$190	$170	$140	$125	$145	$250	$170	$135	$105	$85	$210	$170	$115				$346	$252	$186	$157	$135	$153	$170			
TASK A – PROJECT ADMINISTRATION AND PROJECT MANAGEMENT	11	42	287	5	378		90	100	78	52	12	158	58			1	3	5	1,280		$266,005	28	4	28			8		68		$17,129
A.1 - PDT and Kick-off Meetings	4	6	52		70			100			12	48	20						312		$60,800	16		16					32		$8,514
A.2.1 - Permits and Right of Entries			5	5	26				46	32		4				1	3	5	127		$20,735										
A.2.1 - Caltrans Encroachment Permits for Pre-con Field Work			3		18				26	32		4							83		$13,355										
A.2.2 - Right of Entry Permits from Property Owners			2	5	8				20							1	3	5	44		$7,380										
A.3 - Project Delivery Schedule	1		12		16							6							35		$8,170										
A.4 - Contract Administration	3	6	60		44							16							129		$31,810	4					8		12		$2,607
A.5 - Agency Coordination			50		40		20					40	20						170		$35,450										
A.6 - Bi-weekly City Briefing and Focus Group Meetings			56		78				32			20							186		$39,960	8		8					16		$4,257
A.7 - Quality Management Plan /Memorandum		30	10		48		20												108		$26,310		4	4					8		$1,751
A.8 - Agreement Support (Coops with Caltrans)	2		24		24							12							62		$14,580										
A.9 - Funding Assistance (Optional Service)	1		18		32		50			20		12	18						151		$28,190										
TASK B – RESEARCH AND DATA GATHERING		1	5	2	4	3	8		20		1	2	5	8			2	6	67		$10,650										
B.1 - Research and Data Gathering		1	5	2	4	3	8		20		1	2	5	8			2	6	67		$10,650										
TASK C – TOPOGRAPHIC & RIGHT OF WAY SURVEYS		2	6			13		18		3						1	3	4	50	$7,500	$16,395										
C.1 - Horizontal and Vertical Control Surveys			1			2													3		$655										
C.2 - Aerial Photogrammetric Survey			1			2		4		1									8		$1,360										
C.3 - Topographic Design Survey/Mapping		1	2			4		10		2									19		$3,320										
C.4 - Preliminary Right of Way and Boundary Mapping		1	2			5		4								1	3	4	20	$7,500	$11,060										
TASK D - PRELIMINARY ENGINEERING STUDIES	2	11	71	87	139	191	216	664	240	170	2	20	8					12	1833		$303,450	32	68	84	224	540	96	42	1086	$16,000	$190,004
D.1 - Preliminary Drainage/Hydrology Report		1	4	16		8	80	60		20									189		$31,920										
D.2 - Draft Storm Water Data Report		1	3	8		5	36	48		18									119		$19,585										
D.3 - Geotechnical Reports		1	3	4	10	11													29		$6,455										
D.3.1 - Preliminary Geotechnical Design Report		1	2	1	3	6													13		$2,925										
D.3.2 - Structures Preliminary Geotechnical Report			1	3	5	2													11		$2,520										
D.3.3 - Preliminary Materials Report					2	3													5		$1,010										
D.4 - Updated Geometric Approval Drawings	2	4	24		32	88		360	240	80								12	842		$125,680										
D.5 - Structures Advance Planning Studies			5	24	62	23		116		28									258		$45,805										
D.5 - Updated Structures APS for Oak Valley Parkway Overcrossing Bridge			2	10	24	10		44		12									102		$18,180										
D.5 - Updated Structures APS I-10/Middle Fork San Timoteo Creek Bridge Widening			2	8	20	8		36		8									82		$14,710										
D.5 - Structures APS Little San Gorgonio Box Culvert Mods (Optional Service)			1	6	18	5		36		8									74		$12,915										
D.6 - Location Hydraulic Study/Scour Analysis for San Timoteo Creek		1	5	24		32	100	80		24									266		$45,575										
D.7 - Traffic Study		2	15	6	22	20													65		$14,935	16	60	52	152	380	76	36	772	$16,000	$139,427
D.7.1 - Traffic Analysis Approach and Methodology Technical Memorandum			2	1	5	4													12		$2,665	2	4	4	8	40	4	4	66		$10,410
D.7.2 - Data Collection and Existing Conditions Analysis			2	1	3	2													8		$1,845	2	8	8	24	80	12		134	$15,500	$36,138
D.7.3 - Traffic Volumes Report		1	5	2	6	6													20		$4,665	4	24	16	60	100	24	16	244	$500	$40,276
D.7.4 - Traffic Operations Analysis Report (TOAR)		1	6	2	8	8													25		$5,760	8	24	24	60	160	36	16	328		$52,604
D.8 - Intersection Control Evaluation (ICE)			2	1	3	2													8		$1,845	4	4	8	16	40	6	4	82		$13,411
D.9 - Vehicle Miles of Travel (VMT)		1	10	4	10	2					2	20	8						57		$11,650	12	4	24	56	120	14	2	232		$37,166
TASK E– ENVIRONMENTAL DOCUMENTATION AND TECHNICAL STUDIES	4	8	79	44	101	59	20	20		36	110	603	832	763	890	2	8		3579	$39,300	$520,850	16		28	56	120	12		232		$37,642
E.1 - Preliminary Environmental Evaluation and Caltrans Coordination		1	4	2	4	4					4	20	30	30	40				139		$18,570										
E.2 - Initial Public Scoping Meeting / Notice of Preparation			6	2	8	6				20	6	20	30	40	10				148		$21,960										
E.3 - Environmental Focus Group Meetings			6	2	6						6	40	40						100		$17,180										
E.4 - Hazardous Waste Phase I ISA Addendum and Phase II PSI			2	1	2	3					1	12	30	50					101	$300	$13,705										
E.5 - Prepare Area of Potential Effects Exhibit			1		3	2						6	10	18					40		$5,575										
E.6 - Section 106/AB 52 Consultation			3		8						4	40	40						95		$15,785										
E.7 - Historic Property/Archaeological Survey Report			3	1	6						8	40	120	20					198	$1,000	$30,500										
E.8 - Noise Study Report			6	4	8	4					4	35	120	20					201		$30,440	2		2	8	24	2		38		$5,879

TASK DESCRIPTION	DOKKEN ENGINEERING																				FEHR & PEERS									
	Principal in Charge	QA / QC Manager	Darwin Cruz* Project Manager	Senior Engineer 2	Senior Engineer 1	Associate Engineer 2	Associate Engineer 1	Assistant Engineer 2	Assistant Engineer 1	CAD / Engineering Technician	Environmental Manager	Senior Environmental Planner	Associate Environmental Planner	Environmental Planner	Environmental Technician	Right of Way Manager	Senior Right of Way Agent	Right of Way Agent	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Principal in Charge	Principal QA/QC Manager	Associate	Senior Engineer	Engineer	Support Staff 1	Support Staff 2	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST
BILLING RATES*	$330	$320	$275	$255	$220	$190	$170	$140	$125	$145	$250	$170	$135	$105	$85	$210	$170	$115				$346	$252	$186	$157	$135	$153	$170			
E.9 - Noise Abatement Decision Report (Optional Service)			4	8		3	20				2	20	50						107		$17,760									
E.10 - Air Quality Technical Report			1		2						2	16	10	60	100				191		$20,085	2		2	8	24	2		38		$5,879
E.11 - Community Impact Assessment			2		3	6					2	12	24	40	80	2	8		179		$20,910									
E.12 - Visual Impact Assessment			2		5	4						8	12						31		$5,390									
E.13 - Aquatic Resources Delineation Report					1						6	30	40	65					142		$19,045									
E.14 - Natural Environment Study			1		3	2					6	30	40	60	120				262		$29,815									
E.14.1 - SBKR and LAPM Trapping Survey and Report			1									6							7	$9,500	$10,795									
E.14.2 - Least Bell's Vireo Surveys and Report			1									6							7	$16,950	$18,245									
E.14.3 - Southwestern Willow Flycatcher Surveys and Report (Optional Service)			1									6							7	$10,550	$11,845									
E.15 - WRMSHCP JPR, DBESP, and Consistency Analysis			3	2	4						6	30	30	40	120				235		$27,265									
E.16 - Water Quality Assessment Report			1	1		1					4	40	40						87		$13,920									
E.17 - Draft EIR/EA	2	4	12	4	16	10					20	50	60	80	160				418		$55,280	4		16	24	40	4		88		$14,164
E.18 - Public Circulation of EIR/EA /Public Notices and Hearing	1	1	6	3	12	10		20		16	6	40	6	20	100				241	$1,000	$33,435									
E.19 - Record of Public Hearing			1		2						2	20		40	60				125		$13,915									
E.20 - Final EIR/EA (CEQA Statement of Overriding Consideration & Findings of Fact and NEPA FONSI)	1	2	6	2	8	4					15	40	40	60	100				278		$36,400	8		8	16	32	4		68		$11,720
E.21 - Section 404 Nationwide Permit (Optional Service)			2	4							2	12	20	40					80		$11,010									
E.22 - Section 401 Water Quality Certification (Optional Service)			2	4							2	12	20	40					80		$11,010									
E.23 - Section 1602 Lake and Streambed Alteration Agreement (Optional Service)			2	4							2	12	20	40					80		$11,010									
TASK F – PROJECT REPORT	3	6	24	66	17	180		120		16							3	7	442		$84,715									
F.1 - Draft Project Report	2	4	16	44	12	120		80		12							2	5	297		$56,855									
F.2 - Final Project Report	1	2	8	22	5	60		40		4							1	2	145		$27,860									
TASK G – PRELIMINARY RIGHT OF WAY MAPS		2	11	9	19	36		46		40						1	18	39	221	$5,000	$41,975									
G.1 - Right of Way Requirements Maps		1	5	3	7	14		30		40							3	6	109		$17,860									
G.2 - Right of Way Data Sheet		1	2	2	4	6		10									12	28	65		$10,060									
G.3 - Plat Maps and Legal Descriptions (Optional Service)			4	4	8	16		6								1	3	5	47	$5,000	$14,055									
TASK H – UTILITY COORDINATION			10	1	24	67	18	12	98	20							1	3	254		$41,420									
H.1 - Letter Requests to Utility Owners for Mapping				1	1	3			8										13		$2,045									
H.2 - Utility Mapping from Record Drawings and Permits			1		3	6	10		50										70		$10,025									
H.3 - Utility Information Sheet			1		2	8		12									1	3	27		$4,430									
H.4 - Preliminary Utility Conflict Identification Maps			2		4	6	8		24	20									64		$9,830									
H.5 - Preliminary Utility Management Matrix			1		2	12			16										31		$4,995									
H.6 - Utility Coordination with Utility Owners (Optional Service)			5		12	32													49		$10,095									
TASK I – PRELIMINARY DESIGN	5	4	61	52	88	134	120	230	8	36	2	12	17	4		3	6	8	790		$144,430	2	2	4	8	32	2	4	54		$8,518
I.1 - Alternatives Evaluation and Screening Matrix	2		24	20	28	20		10			2	8	10	4					128		$27,350	2	2	4	8	32	2	4	54		$8,518
I.2 - DIB 78-04 Design Checklist and DSDD	1	2	8	5	10	30	72	84		24									236		$39,825									
I.3 - Modified Access Report (MAR) (Optional Service)			4	8		36		48		12									108		$18,440									
I.4 - 11-Page Engineer's Cost Estimates	1	2	6	12	24		48	40	8			2	3			2	4	8	160		$28,485									
I.5 - Level II Risk Register (Per Delivery Directive PD-09)	1		12	4	18	18						2	4			1	2		62		$13,460									
I.6 - Preliminary Transportation Management Plan (Checklist/Data Sheet)			3	1	4	6		24											38		$6,460									
I.7 - Highway Safety Manual Assessment			4	2	4	24		24											58		$10,410									
TOTAL HOURS WITHOUT OPTIONAL TASKS	24	76	512	234	718	596	402	1,156	444	341	119	721	792	655	890	7	41	79	7,807			78	74	144	288	692	118	46	1,440		
TOTAL COST WITHOUT OPTIONAL TASKS	$7,920	$24,320	$140,800	$59,670	$157,960	$113,240	$68,340	$161,840	$55,500	$49,445	$29,750	$122,570	$106,920	$68,775	$75,650	$1,470	$6,970	$9,085		$36,250	$1,296,475	$27,016	$18,640	$26,751	$45,344	$93,702	$18,018	$7,821		$16,000	$253,292
TOTAL HOURS WITH OPTIONAL TASKS	25	76	554	266	770	683	472	1,210	444	373	127	795	920	775	890	8	44	84	8,516			78	74	144	288	692	118	46	1,440		
TOTAL COST WITH OPTIONAL TASKS	$8,250	$24,320	$152,350	$67,830	$169,400	$129,770	$80,240	$169,400	$55,500	$54,085	$31,750	$135,150	$124,200	$81,375	$75,650	$1,680	$7,480	$9,660		$51,800	$1,429,890	$27,016	$18,640	$26,751	$45,344	$93,702	$18,018	$7,821		$16,000	$253,292

DOKKEN ENGINEERING

COST PROPOSAL - HOURS BREAKDOWN BY TASK
CITY OF BEAUMONT
OAK VALLEY PARKWAY & I-10 INTERCHANGE

TASK DESCRIPTION	GEOCON CONSULTANTS, INC.									REDDY ENGINEERING						UNICO ENGINEERING									GRAND TOTAL HOURS	OTHER DIRECT COSTS	GRAND TOTAL COSTS
	Associate Engineer / Geologist / Scientist	Senior Engineer / Geologist / Scientist	Senior Project Engineer / Geologist / Scientist	Project Engineer / Geologist / Scientist	Senior Staff Engineer / Geologist / Scientist	Word Processor / Technical Editor / CAD	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Sr. Landscape Architect	Landscape Architect II	Landscape Architect I	Admin	TOTAL HOURS	TOTAL COST	Survey Manager	Senior Land Surveyor	Land Surveyor II	Land Surveyor I	Party Chief	Rodman	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST			
BILLING RATES*	$200	$190	$165	$150	$140	$90				$180	$150	$130	$50			$237	$190	$143	$109	$214	$211						
TASK A – PROJECT ADMINISTRATION AND PROJECT MANAGEMENT	1	13	16			15	45		$6,660	4	4		8	16	$1,720	2		4				6		$1,045	1415		$292,559
A.1 - PDT and Kick-off Meetings																									344		$69,314
A.2.1 - Permits and Right of Entries	1	10	10			9	30		$4,560																157		$25,295
A.2.1 - Caltrans Encroachment Permits for Pre-con Field Work	1	10	10			9	30		$4,560																113		$17,915
A.2.2 - Right of Entry Permits from Property Owners																									44		$7,380
A.3 - Project Delivery Schedule																									35		$8,170
A.4 - Contract Administration		2	4			6	12		$1,580	4	4		8	16	$1,720	2		4				6		$1,045	175		$38,762
A.5 - Agency Coordination																									170		$35,450
A.6 - Bi-weekly City Briefing and Focus Group Meetings																									202		$44,217
A.7 - Quality Management Plan /Memorandum		1	2				3		$520																119		$28,581
A.8 - Agreement Support (Coops with Caltrans)																									62		$14,580
A.9 - Funding Assistance (Optional Service)																									151		$28,190
TASK B – RESEARCH AND DATA GATHERING																									67		$10,650
B.1 - Research and Data Gathering																									67		$10,650
TASK C – TOPOGRAPHIC & RIGHT OF WAY SURVEYS																26	40	36	32	86	86	306	$21,398	$80,320	356	$28,898	$96,715
C.1 - Horizontal and Vertical Control Surveys																8		16		24	24	72		$14,380	75		$15,035
C.2 - Aerial Photogrammetric Survey																2		4		6	6	18	$17,350	$20,945	26	$17,350	$22,305
C.3 - Topographic Design Survey/Mapping																8		16		32	32	88		$17,779	107		$21,099
C.4 - Preliminary Right of Way and Boundary Mapping																8	40		32	24	24	128	$4,048	$27,216	148	$11,548	$38,276
TASK D - PRELIMINARY ENGINEERING STUDIES	5	120	60			34	219	$2,000	$38,760																3138	$18,000	$532,214
D.1 - Preliminary Drainage/Hydrology Report																									189		$31,920
D.2 - Draft Storm Water Data Report																									119		$19,585
D.3 - Geotechnical Reports	5	120	60			34	219	$2,000	$38,760																248	$2,000	$45,215
D.3.1 - Preliminary Geotechnical Design Report	2	50	26			10	88		$15,090																101		$18,015
D.3.2 - Structures Preliminary Geotechnical Report	2	50	18			16	86		$14,310																97		$16,830
D.3.3 - Preliminary Materials Report	1	20	16			8	45	$2,000	$9,360																50	$2,000	$10,370
D.4 - Updated Geometric Approval Drawings																									842		$125,680
D.5 - Structures Advance Planning Studies																									258		$45,805
D.5 - Updated Structures APS for Oak Valley Parkway Overcrossing Bridge																									102		$18,180
D.5 - Updated Structures APS I-10/Middle Fork San Timoteo Creek Bridge Widening																									82		$14,710
D.5 - Structures APS Little San Gorgonio Box Culvert Mods (Optional Service)																									74		$12,915
D.6 - Location Hydraulic Study/Scour Analysis for San Timoteo Creek																									266		$45,575
D.7 - Traffic Study																									837	$16,000	$154,362
D.7.1 - Traffic Analysis Approach and Methodology Technical Memorandum																									78		$13,075
D.7.2 - Data Collection and Existing Conditions Analysis																									142	$15,500	$37,983
D.7.3 - Traffic Volumes Report																									264	$500	$44,941
D.7.4 - Traffic Operations Analysis Report (TOAR)																									353		$58,364
D.8 - Intersection Control Evaluation (ICE)																									90		$15,256
D.9 - Vehicle Miles of Travel (VMT)																									289		$48,816
TASK E– ENVIRONMENTAL DOCUMENTATION AND TECHNICAL STUDIES		22	50	72	66	31	241	$46,475	$81,735	160	100	212		472	$71,360										4524	$85,775	$711,587
E.1 - Preliminary Environmental Evaluation and Caltrans Coordination																									139		$18,570
E.2 - Initial Public Scoping Meeting / Notice of Preparation																									148		$21,960
E.3 - Environmental Focus Group Meetings																									100		$17,180
E.4 - Hazardous Waste Phase I ISA Addendum and Phase II PSI		22	50	72	66	31	241	$46,475	$81,735																342	$46,775	$95,440
E.5 - Prepare Area of Potential Effects Exhibit																									40		$5,575
E.6 - Section 106/AB 52 Consultation																									95		$15,785
E.7 - Historic Property/Archaeological Survey Report																									198	$1,000	$30,500
E.8 - Noise Study Report																									239		$36,319

TASK DESCRIPTION	GEOCON CONSULTANTS, INC.									REDDY ENGINEERING						UNICO ENGINEERING									GRAND TOTAL HOURS	OTHER DIRECT COSTS	GRAND TOTAL COSTS
	Associate Engineer / Geologist / Scientist	Senior Engineer / Geologist / Scientist	Senior Project Engineer / Geologist / Scientist	Project Engineer / Geologist / Scientist	Senior Staff Engineer / Geologist / Scientist	Word Processor / Technical Editor / CAD	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Sr. Landscape Architect	Landscape Architect II	Landscape Architect I	Admin	TOTAL HOURS	TOTAL COST	Survey Manager	Senior Land Surveyor	Land Surveyor II	Land Surveyor I	Party Chief	Rodman	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST			
BILLING RATES*	$200	$190	$165	$150	$140	$90				$180	$150	$130	$50			$237	$190	$143	$109	$214	$211						
E.9 - Noise Abatement Decision Report (Optional Service)																									107		$17,760
E.10 - Air Quality Technical Report																									229		$25,964
E.11 - Community Impact Assessment																									179		$20,910
E.12 - Visual Impact Assessment										160	100	212		472	$71,360										503		$76,750
E.13 - Aquatic Resources Delineation Report																									142		$19,045
E.14 - Natural Environment Study																									262		$29,815
E.14.1 - SBKR and LAPM Trapping Survey and Report																									7	$9,500	$10,795
E.14.2 - Least Bell's Vireo Surveys and Report																									7	$16,950	$18,245
E.14.3 - Southwestern Willow Flycatcher Surveys and Report (Optional Service)																									7	$10,550	$11,845
E.15 - WRMSHCP JPR, DBESP, and Consistency Analysis																									235		$27,265
E.16 - Water Quality Assessment Report																									87		$13,920
E.17 - Draft EIR/EA																									506		$69,444
E.18 - Public Circulation of EIR/EA /Public Notices and Hearing																									241	$1,000	$33,435
E.19 - Record of Public Hearing																									125		$13,915
E.20 - Final EIR/EA (CEQA Statement of Overriding Consideration & Findings of Fact and NEPA FONSI)																									346		$48,120
E.21 - Section 404 Nationwide Permit (Optional Service)																									80		$11,010
E.22 - Section 401 Water Quality Certification (Optional Service)																									80		$11,010
E.23 - Section 1602 Lake and Streambed Alteration Agreement (Optional Service)																									80		$11,010
TASK F – PROJECT REPORT																									442		$84,715
F.1 - Draft Project Report																									297		$56,855
F.2 - Final Project Report																									145		$27,860
TASK G – PRELIMINARY RIGHT OF WAY MAPS																16	76		60			152		$24,744	373	$5,000	$66,719
G.1 - Right of Way Requirements Maps																4	16		24			44		$6,599	153		$24,459
G.2 - Right of Way Data Sheet																									65		$10,060
G.3 - Plat Maps and Legal Descriptions (Optional Service)																12	60		36			108		$18,145	155	$5,000	$32,200
TASK H – UTILITY COORDINATION																									254		$41,420
H.1 - Letter Requests to Utility Owners for Mapping																									13		$2,045
H.2 - Utility Mapping from Record Drawings and Permits																									70		$10,025
H.3 - Utility Information Sheet																									27		$4,430
H.4 - Preliminary Utility Conflict Identification Maps																									64		$9,830
H.5 - Preliminary Utility Management Matrix																									31		$4,995
H.6 - Utility Coordination with Utility Owners (Optional Service)																									49		$10,095
TASK I – PRELIMINARY DESIGN																									844		$152,948
I.1 - Alternatives Evaluation and Screening Matrix																									182		$35,868
I.2 - DIB 78-04 Design Checklist and DSDD																									236		$39,825
I.3 - Modified Access Report (MAR) (Optional Service)																									108		$18,440
I.4 - 11-Page Engineer's Cost Estimates																									160		$28,485
I.5 - Level II Risk Register (Per Delivery Directive PD-09)																									62		$13,460
I.6 - Preliminary Transportation Management Plan (Checklist/Data Sheet)																									38		$6,460
I.7 - Highway Safety Manual Assessment																									58		$10,410
TOTAL HOURS WITHOUT OPTIONAL TASKS	6	155	126	72	66	80	505			164	104	212	8	488		32	56	40	56	86	86	356			10,596		
TOTAL COST WITHOUT OPTIONAL TASKS	$1,200	$29,450	$20,790	$10,800	$9,240	$7,200		$48,475	$127,155	$29,520	$15,600	$27,560	$400		$73,080	$7,587	$10,614	$5,712	$6,110	$18,403	$18,142		$21,398	$87,965		$122,123	$1,837,967
TOTAL HOURS WITH OPTIONAL TASKS	6	155	126	72	66	80	505			164	104	212	8	488		44	116	40	92	86	86	464			11,413		
TOTAL COST WITH OPTIONAL TASKS	$1,200	$29,450	$20,790	$10,800	$9,240	$7,200		$48,475	$127,155	$29,520	$15,600	$27,560	$400		$73,080	$10,432	$21,985	$5,712	$10,038	$18,403	$18,142		$21,398	$106,110		$137,673	$1,989,526