### PROFESSIONAL CONSULTANT SERVICES AGREEMENT

### ADVANTEC CONSULTING ENGINEERS, INC.

Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services (RFP No. 2344)

THIS PROFESSION	IAL CONSULTA	ANT SERVICES A	AGREEM	ENT ("Agr	reement") is
made and entered into this	day of		_, 20	("Effective	Date"), by
and between the CITY OF	RIVERSIDE, a	California charter	city and	municipal	corporation
("City"), and ADVANTEO	CONSULTING	G ENGINEERS,	INC., a	California	corporation
("Consultant").					_

- 1. Scope of Services. City agrees to retain and does hereby retain Consultant and Consultant agrees to provide the services more particularly described in Exhibit "A," "Scope of Services" ("Services"), attached hereto and incorporated herein by reference, in conjunction with Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services, RFP No. 2344 ("Project").
- 2. Term. This Agreement shall be effective on the date first written above and shall remain in effect until June 30, 2026, with the option to extend for two (2) additional one-year terms not to exceed two (2) years based upon acceptable performance by the Consultant, acceptable fees and subject to the same terms and conditions of the Agreement, unless otherwise terminated pursuant to the provisions herein.
- 3. Compensation/Payment. Consultant shall perform the Services under this Agreement for the total sum not to exceed **Eight Hundred Eighty-Four Thousand Seven Hundred Twelve Dollars and Thirty-One Cents** (\$884,712.31), payable in accordance with the terms set forth in Exhibit "B." Said payment shall be made in accordance with City's usual accounting procedures upon receipt and approval of an itemized invoice setting forth the services performed. The invoices shall be delivered to City at the address set forth in Section 4 hereof.
- 4. **Notices**. Any notices required to be given, hereunder shall be in writing and shall be personally served or given by mail. Any notice given by mail shall be deemed given when deposited in the United States Mail, certified and postage prepaid, addressed to the party to be served as follows:

To City

To Consultant

Public Works Department City of Riverside Attn: Philip Nitollama 3900 Main Street, 4<sup>th</sup> Floor Riverside, CA 92522 Advantec Consulting Engineers, Inc. Attn: Mr. Carlos Ortiz 1200 Roosevelt Irvine, CA 92620

- 5. **Prevailing Wage**. If applicable, Consultant and all subcontractors are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code and implemented by Resolution No. 13346 of the City Council of the City of Riverside. The Director's determination is available on-line at <a href="https://www.dir.ca.gov/dlsr/DPreWageDetermination.htm">www.dir.ca.gov/dlsr/DPreWageDetermination.htm</a> and is referred to and made a part hereof; the wage rates therein ascertained, determined, and specified are referred to and made a part hereof as though fully set forth herein.
- 6. **Contract Administration**. A designee of the City will be appointed in writing by the City Manager or Department Director to administer this Agreement on behalf of City and shall be referred to herein as Contract Administrator.
- 7. **Standard of Performance**. While performing the Services, Consultant shall exercise the reasonable professional care and skill customarily exercised by reputable members of Consultant's profession practicing in the Metropolitan Southern California Area and shall use reasonable diligence and best judgment while exercising its professional skill and expertise.
- 8. **Personnel**. Consultant shall furnish all personnel necessary to perform the Services and shall be responsible for their performance and compensation. Consultant recognizes that the qualifications and experience of the personnel to be used are vital to professional and timely completion of the Services. The key personnel listed in Exhibit "C" attached hereto and incorporated herein by this reference and assigned to perform portions of the Services shall remain assigned through completion of the Services, unless otherwise mutually agreed by the parties in writing, or caused by hardship or resignation in which case substitutes shall be subject to City approval.
- 9. **Assignment and Subcontracting**. Neither party shall assign any right, interest, or obligation in or under this Agreement to any other entity without prior written consent of the other party. In any event, no assignment shall be made unless the assignee expressly assumes the obligations of assignor under this Agreement, in a writing satisfactory to the parties. Consultant acknowledges that any assignment may, at the City's sole discretion, require City Manager and/or City Council approval. Consultant shall not subcontract any portion of the work required by this Agreement without prior written approval by the responsible City Contract Administrator. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including without limitation, the insurance obligations set forth in Section 12. The Consultant acknowledges and agrees that the City is an intended beneficiary of any work performed by any subcontractor for purposes of establishing a duty of care between any subcontractor and the City.
- 10. **Independent Contractor**. In the performance of this Agreement, Consultant, and Consultant's employees, subcontractors and agents, shall act in an independent capacity as independent contractors, and not as officers or employees of the City of Riverside. Consultant acknowledges and agrees that the City has no obligation to pay or withhold state or federal taxes or to provide workers' compensation or unemployment insurance to Consultant, or to Consultant's employees, subcontractors and agents. Consultant, as an independent contractor, shall be responsible for any and all taxes that apply to Consultant as an employer.

### 11. **Indemnification**.

- 11.1 **Design Professional Defined**. For purposes of this Agreement, "Design Professional" includes the following:
  - A. An individual licensed as an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code, and a business entity offering architectural services in accordance with that chapter.
  - B. An individual licensed as a landscape architect pursuant to Chapter 3.5 (commencing with Section 5615) of Division 3 of the Business and Professions Code, and a business entity offering landscape architectural services in accordance with that chapter.
  - C. An individual registered as a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, and a business entity offering professional engineering services in accordance with that chapter.
  - D. An individual licensed as a professional land surveyor pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the Business and Professions Code, and a business entity offering professional land surveying services in accordance with that chapter.
- Defense Obligation For Design Professional Liability. 11.2 Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. Consultant will reimburse City for reasonable defense costs for claims arising out of Consultant's professional negligence based on the percentage of Consultant's liability. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.
- 11.3 Indemnity For Design Professional Liability. When the law establishes a professional standard of care for Consultant's services, to the fullest extent permitted by law, Consultant shall indemnify, protect and hold harmless the City and the City's employees, officers, managers, agents, and Council Members ("Indemnified Parties") from and against any and all claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fines and

penalties, liabilities or losses of any kind or nature whatsoever to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party.

Defense Obligation For Other Than Design Professional Liability. Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings which arise out of, or relate to, or are in any way connected with: 1) the Services, work, activities, operations, or duties of the Consultant, or of anyone employed by or working under the Consultant, or 2) any breach of the Agreement by the Consultant. This duty to defend shall apply whether or not such claims, allegations, lawsuits or proceedings have merit or are meritless, or which involve claims or allegations that any or all of the Parties to be Defended were actively, passively, or concurrently negligent, or which otherwise assert that the Parties to be Defended are responsible, in whole or in part, for any loss, damage or injury. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.

the sole negligence or willful misconduct of the City, Consultant agrees to indemnify, protect and hold harmless the Indemnified Parties from and against any claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fine and penalties, liabilities or losses of any kind or nature whatsoever whether actual, threatened or alleged, which arise out of, pertain to, or relate to, or are a consequence of, or are attributable to, or are in any manner connected with the performance of the Services, work, activities, operations or duties of the Consultant, or anyone employed by or working under the Consultant or for services rendered to Consultant in the performance of this Agreement, notwithstanding that the City may have benefited from its work or services. This indemnification provision shall apply to any acts, omissions, negligence, recklessness, or willful misconduct, whether active or passive, on the part of the Consultant or anyone employed or working under the Consultant.

### 12. Insurance.

12.1 **General Provisions**. Prior to the City's execution of this Agreement, Consultant shall provide satisfactory evidence of, and shall thereafter maintain during the term of this Agreement, such insurance policies and coverages in the types, limits, forms and ratings required herein. The rating and required insurance policies and coverages may be modified in writing by the City's Risk Manager or City Attorney, or a designee, unless such modification is prohibited by law.

- 12.1.1 **Limitations**. These minimum amounts of coverage shall not constitute any limitation or cap on Consultant's indemnification obligations under Section 11 hereof.
- 12.1.2 **Ratings**. Any insurance policy or coverage provided by Consultant or subcontractors as required by this Agreement shall be deemed inadequate and a material breach of this Agreement, unless such policy or coverage is issued by insurance companies authorized to transact insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class of VII or higher.
- 12.1.3 **Cancellation**. The policies shall not be canceled unless thirty (30) days' prior written notification of intended cancellation has been given to City by certified or registered mail, postage prepaid.
- 12.1.4 **Adequacy**. The City, its officers, employees and agents make no representation that the types or limits of insurance specified to be carried by Consultant pursuant to this Agreement are adequate to protect Consultant. If Consultant believes that any required insurance coverage is inadequate, Consultant will obtain such additional insurance coverage as Consultant deems adequate, at Consultant's sole expense.
- 12.2 **Workers' Compensation Insurance**. By executing this Agreement, Consultant certifies that Consultant is aware of and will comply with Section 3700 of the Labor Code of the State of California requiring every employer to be insured against liability for workers' compensation, or to undertake self-insurance before commencing any of the work. Consultant shall carry the insurance or provide for self-insurance required by California law to protect said Consultant from claims under the Workers' Compensation Act. Prior to City's execution of this Agreement, Consultant shall file with City either 1) a certificate of insurance showing that such insurance is in effect, or that Consultant is self-insured for such coverage, or 2) a certified statement that Consultant has no employees, and acknowledging that if Consultant does employ any person, the necessary certificate of insurance will immediately be filed with City. Any certificate filed with City shall provide that City will be given ten (10) days' prior written notice before modification or cancellation thereof.
- 12.3 Commercial General Liability and Automobile Insurance. Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, commercial general liability insurance and automobile liability insurance as required to insure Consultant against damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from or which may concern operations by anyone directly or indirectly employed by, connected with, or acting for or on behalf of Consultant. The City, and its officers, employees and agents, shall be named as additional insureds under the Consultant's insurance policies.
- 12.3.1 Consultant's commercial general liability insurance policy shall cover both bodily injury (including death) and property damage (including, but not limited to, premises operations liability, products-completed operations liability, independent contractor's liability, personal injury liability, and contractual liability) in an amount not less than \$1,000,000 per occurrence and a general aggregate limit in the amount of not less than \$2,000,000.

- 12.3.2 Consultant's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per occurrence and an aggregate limit of not less than \$1,000,000. All of Consultant's automobile and/or commercial general liability insurance policies shall cover all vehicles used in connection with Consultant's performance of this Agreement, which vehicles shall include, but are not limited to, Consultant owned vehicles, Consultant leased vehicles, Consultant's employee vehicles, non-Consultant owned vehicles and hired vehicles.
- 12.3.3 Prior to City's execution of this Agreement, copies of insurance policies or original certificates along with additional insured endorsements acceptable to the City evidencing the coverage required by this Agreement, for both commercial general and automobile liability insurance, shall be filed with City and shall include the City and its officers, employees and agents, as additional insureds. Said policies shall be in the usual form of commercial general and automobile liability insurance policies, but shall include the following provisions:

It is agreed that the City of Riverside, and its officers, employees and agents, are added as additional insureds under this policy, solely for work done by and on behalf of the named insured for the City of Riverside.

12.3.4 The insurance policy or policies shall also comply with the following provisions:

- a. The policy shall be endorsed to waive any right of subrogation against the City and its sub-consultants, employees, officers and agents for services performed under this Agreement.
- b. If the policy is written on a claims-made basis, the certificate should so specify and the policy must continue in force for one year after completion of the services. The retroactive date of coverage must also be listed.
- c. The policy shall specify that the insurance provided by Consultant will be considered primary and not contributory to any other insurance available to the City and Endorsement No. CG 20010413 shall be provided to the City.
- 12.4 **Errors and Omissions Insurance**. Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, errors and omissions professional liability insurance in the minimum amount of \$1,000,000 to protect the City from claims resulting from the Consultant's activities.
- 12.5 **Subcontractors' Insurance**. Consultant shall require all of its subcontractors to carry insurance, in an amount sufficient to cover the risk of injury, damage or loss that may be caused by the subcontractors' scope of work and activities provided in furtherance of this Agreement, including, but without limitation, the following coverages: Workers Compensation, Commercial General Liability, Errors and Omissions, and Automobile liability.

Upon City's request, Consultant shall provide City with satisfactory evidence that Subcontractors have obtained insurance policies and coverages required by this section.

- 13. **Business Tax**. Consultant understands that the Services performed under this Agreement constitutes doing business in the City of Riverside, and Consultant agrees that Consultant will register for and pay a business tax pursuant to Chapter 5.04 of the Riverside Municipal Code and keep such tax certificate current during the term of this Agreement.
- 14. **Time of Essence**. Time is of the essence for each and every provision of this Agreement.
- 15. City's Right to Employ Other Consultants. City reserves the right to employ other Consultants in connection with the Project. If the City is required to employ another consultant to complete Consultant's work, due to the failure of the Consultant to perform, or due to the breach of any of the provisions of this Agreement, the City reserves the right to seek reimbursement from Consultant.
- 16. **Accounting Records**. Consultant shall maintain complete and accurate records with respect to costs incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.
- 17. **Confidentiality**. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other materials either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant, except as otherwise directed by City's Contract Administrator. Nothing furnished to Consultant which is otherwise known to the Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production, website, or other similar medium without the prior written consent of the City.
- 18. **Ownership of Documents**. All reports, maps, drawings and other contract deliverables prepared under this Agreement by Consultant shall be and remain the property of City. Consultant shall not release to others information furnished by City without prior express written approval of City.
- 19. **Copyrights.** Consultant agrees that any work prepared for City which is eligible for copyright protection in the United States or elsewhere shall be a work made for hire. If any such work is deemed for any reason not to be a work made for hire, Consultant assigns all right, title and interest in the copyright in such work, and all extensions and renewals thereof, to City, and agrees to provide all assistance reasonably requested by City in the establishment, preservation and enforcement of its copyright in such work, such assistance to be provided at City's expense

but without any additional compensation to Consultant. Consultant agrees to waive all moral rights relating to the work developed or produced, including without limitation any and all rights of identification of authorship and any and all rights of approval, restriction or limitation on use or subsequent modifications.

- 20. **Conflict of Interest**. Consultant, for itself and on behalf of the individuals listed in Exhibit "C," represents and warrants that by the execution of this Agreement, they have no interest, present or contemplated, in the Project affected by the above-described Services. Consultant further warrants that neither Consultant, nor the individuals listed in Exhibit "C" have any real property, business interests or income interests that will be affected by this project or, alternatively, that Consultant will file with the City an affidavit disclosing any such interest.
- 21. **Solicitation**. Consultant warrants that Consultant has not employed or retained any person or agency to solicit or secure this Agreement, nor has it entered into any agreement or understanding for a commission, percentage, brokerage, or contingent fee to be paid to secure this Agreement. For breach of this warranty, City shall have the right to terminate this Agreement without liability and pay Consultant only for the value of work Consultant has actually performed, or, in its sole discretion, to deduct from the Agreement price or otherwise recover from Consultant the full amount of such commission, percentage, brokerage or commission fee. The remedies specified in this section shall be in addition to and not in lieu of those remedies otherwise specified in this Agreement.
- 22. **General Compliance With Laws**. Consultant shall keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Consultant, or in any way affect the performance of services by Consultant pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws, ordinances and regulations, and shall be solely responsible for any failure to comply with all applicable laws, ordinances and regulations. Consultant represents and warrants that Consultant has obtained all necessary licenses to perform the Scope of Services and that such licenses are in good standing. Consultant further represents and warrants that the services provided herein shall conform to all ordinances, policies and practices of the City of Riverside.
- 23. **Waiver**. No action or failure to act by the City shall constitute a waiver of any right or duty afforded City under this Agreement, nor shall any such action or failure to act constitute approval of or acquiescence in any breach thereunder, except as may be specifically, provided in this Agreement or as may be otherwise agreed in writing.
- 24. **Amendments**. This Agreement may be modified or amended only by a written agreement and/or change order executed by the Consultant and City.
- 25. **Termination**. City, by notifying Consultant in writing, shall have the right to terminate any or all of Consultant's services and work covered by this Agreement at any time. In the event of such termination, Consultant may submit Consultant's final written statement of the amount of Consultant's services as of the date of such termination based upon the ratio that the work completed bears to the total work required to make the report complete, subject to the City's rights under Sections 15 and 26 hereof. In ascertaining the work actually rendered through the

termination date, City shall consider completed work, work in progress and complete and incomplete reports and other documents only after delivered to City.

- 25.1 Other than as stated below, City shall give Consultant thirty (30) days' prior written notice prior to termination.
- 25.2 City may terminate this Agreement upon fifteen (15) days' written notice to Consultant, in the event:
- 25.2.1 Consultant substantially fails to perform or materially breaches the Agreement; or
  - 25.2.2 City decides to abandon or postpone the Project.
- Offsets. Consultant acknowledges and agrees that with respect to any business tax or penalties thereon, utility charges, invoiced fee or other debt which Consultant owes or may owe to the City, City reserves the right to withhold and offset said amounts from payments or refunds or reimbursements owed by City to Consultant. Notice of such withholding and offset, shall promptly be given to Consultant by City in writing. In the event of a dispute as to the amount owed or whether such amount is owed to the City, City will hold such disputed amount until either the appropriate appeal process has been completed or until the dispute has been resolved.
- 27. **Successors and Assigns**. This Agreement shall be binding upon City and its successors and assigns, and upon Consultant and its permitted successors and assigns, and shall not be assigned by Consultant, either in whole or in part, except as otherwise provided in paragraph 9 of this Agreement.
- 28. **Venue.** Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in the Superior Court, County of Riverside, State of California, and the parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county. In the event either party hereto shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party will bear their own attorney's fees and costs.
- 29. **Nondiscrimination**. During Consultant's performance of this Agreement, Consultant shall not discriminate on the grounds of race, religious creed, color, national origin, ancestry, age, physical disability, mental disability, medical condition, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sex, genetic information, gender, gender identity, gender expression, or sexual orientation, military and veteran status, in the selection and retention of employees and subcontractors and the procurement of materials and equipment, except as provided in Section 12940 of the California Government Code. Further, Consultant agrees to conform to the requirements of the Americans with Disabilities Act in the performance of this Agreement.
- 30. **Severability**. Each provision, term, condition, covenant and/or restriction, in whole and in part, of this Agreement shall be considered severable. In the event any provision, term, condition, covenant and/or restriction, in whole and/or in part, of this Agreement is declared

invalid, unconstitutional, or void for any reason, such provision or part thereof shall be severed from this Agreement and shall not affect any other provision, term, condition, covenant and/or restriction of this Agreement, and the remainder of the Agreement shall continue in full force and effect.

- 31. **Authority**. The individuals executing this Agreement and the instruments referenced herein on behalf of Consultant each represent and warrant that they have the legal power, right and actual authority to bind Consultant to the terms and conditions hereof and thereof.
- 32. **Entire Agreement**. This Agreement constitutes the final, complete, and exclusive statement of the terms of the agreement between the parties pertaining to the subject matter of this Agreement and supersedes all prior and contemporaneous understandings or agreements of the parties. Neither party has been induced to enter into this Agreement by and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.
- 33. **Digital and Counterpart Signatures**. Each party to this Agreement intends and agrees to the use of digital signatures that meet the requirements of the California Uniform Electronic Transactions Act (Civil Code §§ 1633.1, et seq.), California Government Code § 16.5, and California Code of Regulations Title 2 Division 7 Chapter 10, to execute this Agreement. The parties further agree that the digital signatures of the parties included in this Agreement are intended to authenticate this writing and to have the same force and effect as manual signatures for purposes of validity, enforceability, and admissibility. For purposes of this section, a "digital signature" is defined in subdivision (d) of Section 16.5 of the Government Code and is a type of "electronic signature" as defined in subdivision (h) of Section 1633.2 of the Civil Code. This Agreement may be executed in any number of counterparts, each of which will be an original, but all of which together will constitute one instrument. Each certified or authenticated electronic copy of an encrypted digital signature shall be deemed a duplicate original, constituting one and the same instrument and shall be binding on the parties hereto.
- 34. **Interpretation**. City and Consultant acknowledge and agree that this Agreement is the product of mutual arms-length negotiations and accordingly, the rule of construction, which provides that the ambiguities in a document shall be construed against the drafter of that document, shall have no application to the interpretation and enforcement of this Agreement.
- 34.1 Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of the Agreement or any of its terms. Reference to section numbers, are to sections in the Agreement unless expressly stated otherwise.
- 34.2 This Agreement shall be governed by and construed in accordance with the laws of the State of California in effect at the time of the execution of this Agreement.
- 34.3 In the event of a conflict between the body of this Agreement and Exhibit "A" Scope of Services hereto, the terms contained in Exhibit "A" shall be controlling.

35. **Exhibits**. The following exhibits attached hereto are incorporated herein to this Agreement by this reference:

Exhibit "A" - Scope of Services Exhibit "B" - Compensation Exhibit "C" - Key Personnel

[SIGNATURES ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, City and Consultant have caused this Agreement to be duly executed the day and year first above written.

CITY OF RIVERSIDE, a California
charter city and municipal corporation

# ADVANTEC CONSULTING ENGINEERS, INC., a California corporation

By:City Manager	By: AN A Series Ortin
City Manager	Print Name: Carlos Ortiz Title: CEO
Attest:City Clerk	and  By: Leo Lee (Jul 22, 2024 08:44 PDT)
	Print Name: Leo Lee
Certified as to Availability of Funds:	Title: Chairman
By: Chief Financial Officer	
Approved as to Form:	
By: Tank. Two	
Deputy City Attorney	

# EXHIBIT "A" SCOPE OF SERVICES



### SECTION A: PROJECT UNDERSTANDING AND APPROACH

### A.1 Our Project Understanding and Approach

The City of Riverside is requesting proposals from qualified professional firms to develop Lead Pedestrian Interval (LPI) Phasing Policy and Timing, prepare plans, specifications, and estimates (PS&E), and Environmental Services for the Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services Project. **Per the RFP**, **the project is broken down into three parts.** 

### Part I (Task A): Leading Pedestrian Interval (LPI) Phasing Policy Establishment & Implementation

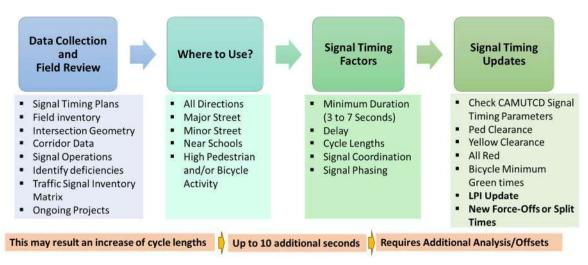
The improvements under this task include developing guidelines and policy for the implementation of LPI signal timing at 408 signalized intersections. Using the established and approved policy and data collected, each intersection will be evaluated to determine the length of time for the LPI. Signal timing plans shall be developed under this task and then implemented. The following is a summary of the tasks under Part I:

- Develop LPI Policy and Guidelines
- Evaluate Existing Conditions
- Data Collection
- Revise Existing Signal Timing Plans
- Implement LPI Signal Timing
- Pedestrian and Bicycle Elements Inventory
- Public Educational Material
- Before and After Memorandum
- Develop Synchro Network for Representative Corridor



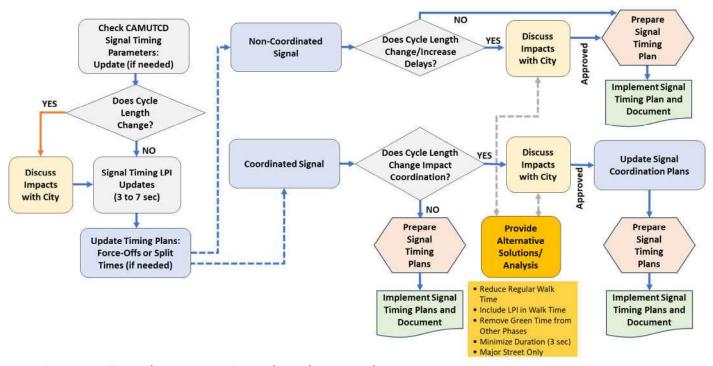
**Leading Pedestrian Interval (LPI) Phasing** – LPI phasing gives pedestrians the opportunity to enter the crosswalk at an intersection 3-7 seconds before vehicles are given a green indication. Pedestrians can better establish their presence in the crosswalk before vehicles have priority to turn right or left. We will work with the City to standardize our approach, which can be used for future projects. Since this project will be adding new lead pedestrian interval timing, it will also require new traffic signal timing plans to accommodate these changes as well as ensuring these timing plans are in conformance with the latest CAMUTCD standards. a clear advantage in crossing the street and making them more visible to drivers.

**ADVANTEC's Lead Pedestrian Interval Signal Timing Work Plan Provides the City with a Standardized Approach:** The graphic below illustrates our approach from data collection to signal timing updates. We also want to make sure the City understands that the implementation of LPI's may increase cycle lengths. If this occurs, we will work with the City to determine strategies to minimize impacts to signal cycle lengths and coordinated corridors.





The flow chart below illustrates our LPI process and coordination with City staff throughout our evaluation.



This information will be included as part of our LPI guidelines and policy.

### Part II (Task B): Retro-Reflective Signal Backplates and Right-Turn Overlap (RTO) Traffic Signal Design Plans, Specifications, and Engineering Cost Estimate (PS&E)

The improvements under this task include installing right-turn overlap signals and retroreflective backplates at select intersections. The following is a summary of the tasks under Part II:

- Traffic Signal Modification Plans for 18 Intersections
- Traffic Signal Improvement Plans for 7-12 Intersections
- Engineer's Estimate
- Specifications
- Environmental Clearance



Retroreflective signal backplates - Retroreflective backplates improve the visibility of the illuminated face of the signal by introducing a controlled-contrast background with a 1 to 3 inch yellow retroreflective border. Signal heads that have backplates equipped with retroreflective borders are more visible and conspicuous in both daytime and nighttime conditions. This treatment enhances traffic signal visibility, conspicuity, and orientation for both older and color vision deficient drivers. This countermeasure is also advantageous during periods of power outages when the signals would otherwise be dark, providing a visible cue for motorists to stop at the intersection ahead.

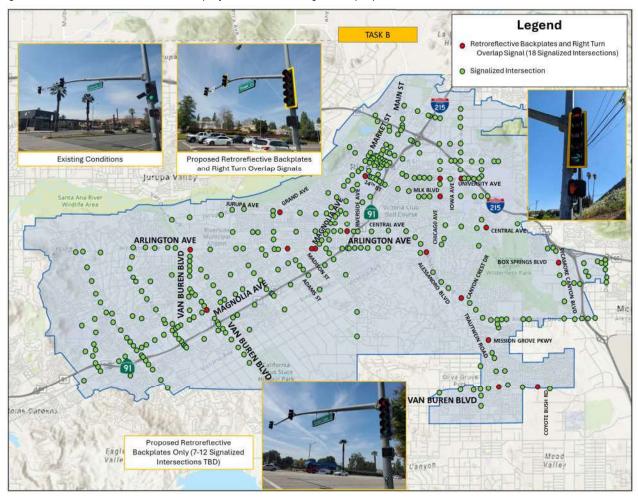


**Right Turn Overlap Signal** - Right turn overlap signals enhance traffic flow and safety at intersections. They provide dedicated time for right-turning vehicles, reducing conflicts with pedestrians and cyclists crossing the intersection. This dedicated phase increases efficiency by minimizing delays for all road users. Additionally, it enhances visibility and predictability, as drivers and pedestrians know when to expect right-turning traffic. By reducing the likelihood of conflicts and improving the overall flow of traffic, right turn overlap signals contribute to safer and more efficient intersections.

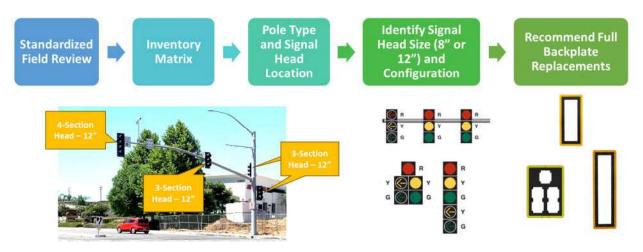




The figure below illustrates ADVANTEC's project understanding of the proposed elements under Task B.



The flow chart and graphics below illustrates our review process from the field to our inventory and recommendations.



**Example Intersection** 

**Example Signal Head Configurations and Retro-Reflective Backplates** 





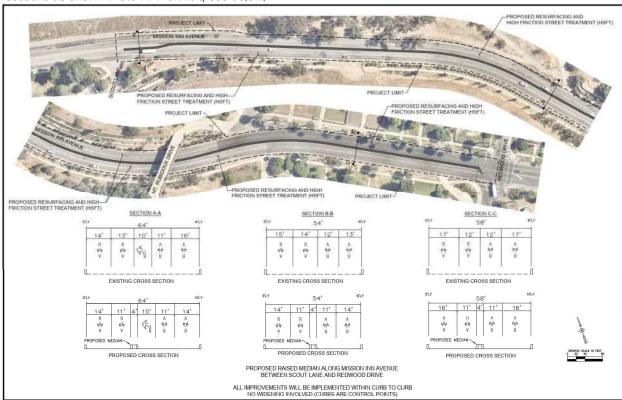
### Part III (Task C): New Raised Median and High Friction Surface Treatment on Mission Inn Avenue between Redwood Drive and Scout Lane – Plans, Specifications and Engineering Cost Estimates (PS&E)

The improvements under this section include constructing a 4" raised concrete median, pavement resurfacing, high friction surface treatment along horizontal curves, signing and striping and considerations for additional lighting. The following is a summary of the tasks under Part III:

- Surveying and Topographic Mapping
- Street Improvement Plans
- Signing and Striping Plans
- Engineer's Estimate
- Specifications
- Environmental Clearance

Raised Median - Raised medians provide numerous benefits for roadway safety, efficiency, and aesthetics. Firstly, they enhance safety by reducing the likelihood of head-on collisions and minimizing crossover crashes, as they physically separate opposing lanes of traffic. This separation also helps to prevent drivers from making illegal or dangerous left turns across multiple lanes of traffic. Additionally, raised medians can improve traffic flow by defining lanes and reducing weaving between lanes, thereby decreasing congestion and improving overall traffic efficiency.

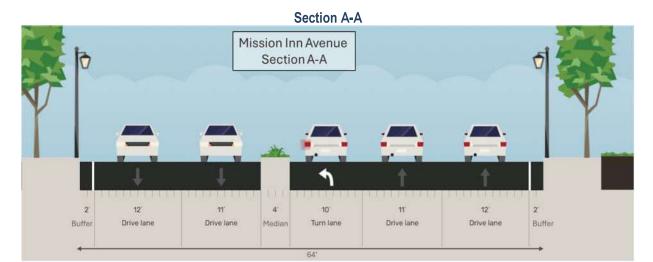
ADVANTEC has thoroughly reviewed the requirements for Task C per the RFP and performed field reconnaissance throughout the project limits. Through this compilation of information, ADVANTEC has gained an extensive understanding of the feasibility and technical aspects of the project. Based on our observations and field measurements, ADVANTEC recommends the following cross sections as shown in the RFP exhibit, see below.



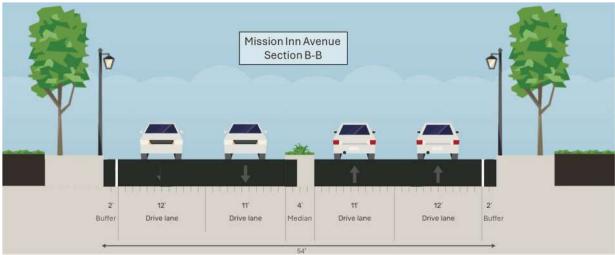
Our recommendations include installing a 2' buffer for each direction between the travel lane and the existing curb for Sections A-A and B-B. Based on our field measurements, the existing width of Section C-C is 60'. This allows for a 2' buffer with 14' outside lanes as shown below.







## **Section B-B**











In order to achieve the project goals, the selected firm must have experience with this type of work and a complete understanding of the project elements involved; a plan for future proofing the system; an understanding of the City's existing and proposed traffic signal and communication system; the proposed project elements and improvements, an understanding of local, state and federal requirements for HSIP grants; and most importantly a methodical and innovative preliminary engineering and planning process to successfully complete the final design and preparation of bid documents. We assure you that ADVANTEC is the best qualified firm to successfully deliver design services for the Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services Project.

### A.2 Key Project Elements and Strategies

Based on our project understanding, we have identified some key project elements and proposed strategies leading to the successful completion of the project. The strategies that we propose will reduce potential project impacts, including project delays, help facilitate the planning, design, and completion of the improvements, and provide cost savings solutions.

### Traffic Signal Timing Plans - Lead Pedestrian Interval (LPI)

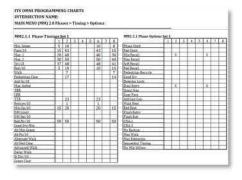
**Goal:** 1) To provide new traffic signal timing plans based on the new lead pedestrian interval (LPI) timing. 2) Ensure timing plans are in conformance with the latest CA MUTCD standards.

**Strategy:** Review the existing traffic signal timing plans, and prepare new timing plans that are based on the on the new LPI timing. Update timing parameters to be in conformance with the latest CAMUTCD standards (as necessary).

Leading pedestrian interval (LPI) gives pedestrians the opportunity to enter the crosswalk at an intersection 3-7 seconds before vehicles are given a green indication. Pedestrians can better establish their presence in the crosswalk before vehicles have priority to turn right or left. We will work with the City to standardize our approach, which can be used for future projects. Since this project will be adding new lead pedestrian interval timing, it will also require new traffic signal timing plans to accommodate these changes as well as ensuring these timing plans are in conformance with the latest CAMUTCD standards. Below is an example of timing calculations that we enter into a spreadsheet for the City's review and approval prior to updating the timing sheets.

								Pro	pose	ed W	alk (s	sec)					Exi	sting	FDW	(sec	)				c	alcu	ated	FDW	/ (sec	1				Pr	opos	ed FI	OW (se	ec)		
nt. 8	Signal ID	Jurisdiction	Major Street & Dire	ction	Intersection	Øı	Ø2	Øз	Ø4	øs	øs	Ø7	Øs	Øэ	Ø1	Ø2	Фз	04	Øs (	36	Ø7	Øs	Ø9 Ø	1 0	2 0	3 0	4 2	s Ø	6 ¢	12 6	de e	9 0	1 02	Ø3	Ø4	Øs	Øe	Ø7	Øs	Ø9
3.	6079	WESTMINISTER	Garden Grove Bvd	E-W	Edwards St		7:						7			16						54									14								14	
7	4229		Garden Grove Bvd	E-W	Western Ave				7		7							21		17								2							3.					
8	4228	WESTMINISTER	Garden Grove Bvd	E-W	Hoover St		7				7		7			16		20		11		23		1	6			1	1				16				11		574	
9	4231		Garden Grove Byd	E-W	Village Center Dr		7		7		7		7			18		20		18		20					9				18				19		2.0		18	
11	4232		Garden Grove Byd	E-W	Dale St		7		7							11		22		16.																				
12	4235		Garden Grove 8vd	E-W	Newland St						7		7	0						16		21					- 0						8						22	
13	4234		Garden Grove Bvd	E-W	Magnolia St		7		7		7		7			21		22		22		22		1 2	1				- 1	-			21		100	2-9	1		H	
14	4165		Garden Grove Byd	E-W	Casa Linda Ln						7					16	21	17		10											10		16			0				
15	4237		Garden Grove Byd	E-W	Gilbert 5t		7		7		7		7			13		21	i i	16		22							4						-14		16		(2)	
16	4154		Garden Grove Bvd	E-W	Galway St							0.7				9	21	21		12							18		ă i				9				12			
17	4166		Garden Grove Byd	E-W	Brookhurst Wy/Kerry St		7									14		21	1	12		21			8		0		1		10		14		21		12		21	
18	4238		Garden Grove Svd	N-5	Brookhurst St		7		7		7		.7			27		21		29		22			- 8		1	100	g				1				29		13	
19	4239		Garden Grove Bvd	E-W	Nutwood St		7		7		7					11		21		8							- 10						11				-8			
20	4236	GARDEN GROVE	Garden Grove Byd	E-W	Nelson St/Century Blvd		1	- 3		9.3						24		24		25		25		8			1		- 1						21				120	
21	4240	BANDEN GNUVE	Garden Grove Byd	E-W	Main St		7		7.		7	18	7			12		21		12		25 25			1		- 10		1				122				12		13.7	
22	4233		Garden Grove Byd	E-W	Euclid St		7		7		70		7			24		27		24		24						8	•					100			26		28	
23	4230		Garden Grove Byd	E-W	Ninth St/Nina Pi		*	2	9		7	1				16	15	16	1	15	00	200							5				16				16			
24	4227		Garden Grove Byd	E-W	Newhope St		7				-7	7	7			15	-2			17	23	22			. 8				7. 3	13			13			15	17	23		
25	4225		Garden Grove Bvd		West St											16	22	24		9					5								16	9	-		9			
26	4226		Garden Grove Byd	E-W	Harbor Blvd	2	7		7	. 9	7/		7			41	1381	28	1/8	32		24				1 2	8	3	2	-	24				28		32		24	
27	4163		Garden Grove Byd		Palm St.		7		7		7		7			11		21		10		21									100		1 (3)				10		21	

ADVANTEC will prepare updated timing plans under the current traffic signal operating scenarios: During AM, Midday, and PM peak hours and one weekend peak hour—for a total of 4 timing plans per intersection. ADVANTEC will ensure the new timing plans are in compliance with latest CAMUTCD requirements. Typically, the updated timing parameters include: Pedestrian Clearance; Yellow Clearance; All Red; and Bicycle Minimum Green times. To the right, is a sample timing sheet, we utilize the excel file for ease of use, and will submit to the City and the Contractor for implementation during construction. ADVANTEC can also be there on-site to assist with any adjustments in the field. ADVANTEC has recent experience with preparing lead pedestrian interval timing for the Cities of Claremont and Norwalk. This benefits the City by having a firm that has experience and can program the LPI timing upgrades with ease.







### Prepare Plans and Specifications per Caltrans LAPM Requirements

**Goal:** Minimize comments and extensive review time from Caltrans to release Request for Authorization (RFA) construction funds,

**Strategy:** Preparing plans and specifications that are in conformance with Exhibit 12-D PS&E Checklist from the Caltrans Local Assistance Procedures Manual (LAPM).

In order to minimize extended reviews from Caltrans, it is important to prepare plans and specifications properly that meet the LAPM criteria. The plans and specifications will be prepared per Exhibit 12-D PS&E Checklist from the Caltrans Local Assistance Procedures Manual (LAPM). There is specific information that needs to be included in the specifications, other than the City's boilerplate specifications, which is required for Caltrans approval. This requires additional research and reformatting specifications to include the required forms and information. The following summarizes some of these documents: DBE Running Total of Payments, Exhibit 9-F; Bidders List of Subcontractors, Exhibit 12-B; Required Federal-Aid Contract Language, Exhibit 12-G; Local Agency Bidder-DBE Commitment, Exhibit 15-G; DBE Information –



Good Faith Efforts, Exhibit 15-H; Report Utilization of DBE and First-Tier Subcontractors, Exhibit 17-F; DBE Certification Status Change, Exhibit 17-O; FHWA Form 1273; Prevailing Rates of Wages. **ADVANTEC has done this recently with the Cities of La Habra and Oceanside, and our specifications were approved on the first review. With our experience, ADVANTEC is ready to help the City of Riverside expedite this process.** 

### Field Review

Goal: To ensure consistency of the data collected during our field review and evaluation of existing conditions.

Strategy: ADVANTEC will conduct the field reviews and use standard field review forms to ensure consistency of field review.

ADVANTEC will perform an in-depth field review of the project intersections and identify any additional traffic signal safety elements that needed to be upgraded. Additionally, the location of existing traffic signal or communications equipment (conduit, pull boxes, advance detection loops, etc.) will be identified to limit disturbances by proposed improvements. ADVANTEC's task leaders and team members that are assigned to conduct the field





review and assessment are senior project engineers familiar with the process. This ensures results that are accurate and precise, which allows project decisions to be made concisely and with confidence.

### **Evaluation and Assessment of Existing Conditions to Implement Safety Improvements**

**Goal:** During the planning phase, obtain buy-off on improvements prior to design.

**Strategy:** Provide conceptual plans illustrating the proposed alternatives and recommended improvements that can be implemented within the project funding. This also may include other improvements that the City may want to provide or consider for the next phase of improvements.



ADVANTEC understands that taking a project from conceptual plans to its final design is a dynamic and intricate process that requires technical expertise and extensive collaboration with the City. This involves understanding the project's purpose, scope, and objectives. ADVANTEC is familiar with this process and has applied this method to a similar project: Culver City Unsignalized Intersection Improvements Project. The project began with the conceptual stage, where ideas between ADVANTEC and the City were brainstormed during the kick-off meeting and then translated into conceptual plans. Once the concept design was solidified and ADVANTEC received approval from the City, the project entered the final design phase. The design phase is a collaborative effort where finals plans are

prepared and refined. This process guarantees that the project progresses seamlessly through the design stages and subsequent



phases of construction. ADVANTEC has taken the initiative to begin the conceptual design phase by including additional project recommendations not included in the RFP, such as Audible Pedestrian Signals (APS), countdown pedestrian signals, and "yield to pedestrian" signage. The additional project improvements can be discussed during the initial project phase and will be up to the City's determination whether they proceed with the recommendations.

### A.3 Scope of Services

This section provides ADVANTEC's detailed approach and scope of work program to complete the City of Riverside's Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services Project. We have developed our scope of work by task, subtask and deliverables based on the following professional services indicated in the RFP and the project elements described "Section A.1 - Project Understanding".

### Task A Leading Pedestrian Interval (LPI) Phasing Policy Establishment and Implementation Leading Pedestrian Interval Policy and Guideline

ADVANTEC will prepare a Leading Pedestrian Interval (LPI) Policy and Guideline. Based on our evaluation, data collection, research, signal phasing operations, intersection geometry, adjacent land uses, signal infrastructure, and vulnerable populations, the policy and guidelines will provide guidance, procedures, standard practice, and policies for implementation. Supporting technical data, tables and graphical illustrations will be included in the report. It is envisioned that the report will include the sections below. We will work with City staff to determine the final outline:

### 1. INTRODUCTION

- a. Background
- b. Purpose and Need
- c. How to use this Document
- d. Objectives

### 2. BACKGROUND

- a. Existing Conditions
- b. Data Collection
- c. Previous Initiatives or Policies

### 3. POLICY FRAMEWORK

- a. Definition of LPI
- b. Benefits of LPI
- c. Legal and Regulatory Considerations
- d. Integration with Existing Traffic Control Systems

### 4. IMPLEMENTATION STRATEGY

- a. Identification of Priority Intersections
- b. Phased Implementation Approach
- c. Resource Allocation and Budgeting

### 5. MONITORING AND EVALUATION

- a. Data Collection Metrics
- b. Performance Indicators
- c. Evaluation and Adjustment of LPIs
- d. Reporting Mechanisms

### 6. COMMUNICATION AND EDUCATION

- a. Public Awareness Campaign
- b. Outreach to Stakeholders
- c. Educational Material

### 7. CONTINUOUS IMPROVEMENT

- a. Review of Policy Effectiveness
- b. Identification of Best Practices and Lessons Learned



**Deliverables:** Draft and Final Leading Pedestrian Interval Policy and Guidelines.

### Task A.2 Existing Crosswalk Evaluation

ADVANTEC will evaluate existing crosswalks for all of the City's 408 signalized intersections by assessing the crossing conditions to determine the length of lead time for LPI. The existing timing, crosswalk lengths, visibility and condition of signage, pavement markings, and collision data will be evaluated to develop the LPI signal timing plans. Additionally, we will gather feedback from the City and stakeholders to address any areas of concern.

**Deliverables:** Existing Crosswalk Evaluation at 408 signalized intersections,

### Task A.3 Data Collection

The ADVANTEC Team will gather all existing data/information pertinent to development of the LPI signal timing before conducting a field inventory for the 408 signalized intersections. The information to be collected from the City may include, but not be limited to the following:

- Existing timing sheets
- Review of the existing traffic signal operations, including pedestrian activity and compliance with CAMUTCD timing standards and policies with regards to pedestrians
- 2022 Turning Movements Counts for 167 intersections (of the 408 signalized intersections)
  - The 167 turning movement counts will be used for our analysis. ADVANTEC will collect the remaining 241 turning movement counts, see details below.
- Streetlight Data (existing license)
  - O ADVANTEC has recently used Steetlight Data for our current Monterey Park ITS and Adaptive/Responsive Traffic Control project. We know how to extract various traffic data that can be used for this project, which takes time to learn how to use this platform. This benefits the City by having a firm that can use this platform without a learning curve. We will use this data for comparison purposes with the traffic data we will collect.
- Collision Data / Crash History
- Other pertinent information to be provided by or for the City

Under this task we are proposing to obtain the following counts:

- Peak Hour Turning Movement Counts: AM, Midday, PM and One Weekend
  - Peak Hour Counts (241 intersections) Pedestrian, Bicycle, and Vehicle

### **Deliverables:**

Data Collection; 408 Signal Timing Sheets and Traffic Signal as-built plans; 2022 Turning Movements Counts for 167 intersections; StreetLight Data comparison; Crash History analysis; Peak Hour Turning Movement Counts: AM, Midday, PM and One Weekend (241 intersections); and Data Collection Summary Matrix.

### Task A.4 LPI Signal Timing Plans

ADVANTEC will provide new traffic signal timing plans with leading pedestrian interval (LPI) timing for up to 408 project intersections and ensure timing plans are in conformance with the established policy in Task A.1 and latest CAMUTCD standards. ADVANTEC will evaluate and prepare LPI timing plans for 167 signalized intersections. In addition, ADVANTEC will review the 241 signalized intersections with existing LPI phasing and determine if any revisions are necessary based on the developed policy, evaluation, and traffic counts.

ADVANTEC will prepare signal timing plans in the format compatible with the controller at each respective location. ADVANTEC will ensure the new timing plans are in compliance with latest CAMUTCD requirements, including: Pedestrian Clearance; Yellow Clearance; All Red; and Bicycle Minimum Green times. ADVANTEC will document these measurements, timing parameters, calculations, etc., in an Excel spreadsheet for the City's review and approval.

**Deliverables:** 

Evaluation of 241 signalized intersections with existing LPI phasing. Evaluation of 167 signalized intersections without LPI phasing. Signal timing plans for up to 408 signalized intersections.



### Task A.5 LPI Signal Timing Implementation

ADVANTEC staff will implement LPI Signal Timing Sheets for up to 408 signalized intersections from the City's TMC and in the field for signalized intersections that are not communicating to the TMC. ADVANTEC will assist the City with observations, implementation and fine-tuning of the new traffic signal timing plans. If needed, our staff will revise timing sheets to correct operational issues.

**Deliverables:** LPI Signal Timing Implementation (up to 408 signalized intersections).

### **LPI Supporting Documents**

### Task A.6 Pedestrian and Bicycle Infrastructure and Non-Infrastructure Inventory (LPI Supporting Documents )

ADVANTEC will conduct a thorough inventory of pedestrian and bicycle infrastructure and non-infrastructure elements at traffic signals within the City of Riverside. This inventory will encompass existing infrastructure such as crosswalks, pedestrian signals, pedestrian push buttons, bicycle push buttons, bicycle lanes, and signage, as well as non-infrastructure elements such as phasing, signal timing, and intersection geometry. The inventory will be organized into an excel spreadsheet showing all the elements mentioned. Analysis of the collected data will help the City of Riverside identify trends, gaps, and areas for improvement for future grant applications and project improvements.

ADVANTEC has completed full traffic signal, ITS, and communications inventory and non-infrastructure inventory for various improvements projects, and traffic signal and ITS master plans. We will use a similar template and expand as necessary to collect the required information for this task and for the City's use for future projects and grant applications.

**Deliverables:** Pedestrian and Bicycle Infrastructure and non-Infrastructure Inventory Matrix (Excel).

### Task A.7 Public Educational Material (LPI Supporting Documents )

ADVANTEC will prepare Public Educational Material for Leading Pedestrian Interval (LPI) Phasing. The material will illustrate engaging and informative content in the form of a brochure and a video. The brochure will serve as a concise yet comprehensive resource, providing key information about LPIs, their benefits, and pedestrian safety tips. It will include visually appealing graphics and easy-to-understand language to effectively communicate with a diverse audience. The video component will complement the brochure by offering dynamic visual content to reinforce the message of pedestrian safety and the importance of LPIs. It will feature real-life scenarios, testimonials, and demonstrations to illustrate the benefits of LPIs in enhancing pedestrian mobility and reducing traffic conflicts. Both the brochure and video will be designed to resonate with various demographics and will be accessible through multiple platforms to ensure widespread dissemination and maximum impact. Additionally, ADVANTEC will collaborate with stakeholders, including city officials, transportation experts, and community members, to ensure that the educational materials are tailored to local needs and effectively address specific concerns regarding pedestrian safety and mobility.

**Deliverables:** Public Educational Brochure and Video.

### Task A.8 Before and After Comparison (LPI Supporting Documents)

Upon completion of the LPI signal timing implementation, the ADVANTEC Team will perform "After Study" at select intersections (7-15) to obtain data for verifying the "measures of effectiveness". Tables and charts in Microsoft Excel will be used to analyze and compare the results of the "Before" and "After" studies, with a column showing the percentage of improvements for each MOE parameter. This will serve as a basis for evaluating the benefits of the improved signal timings. A draft and final technical memorandum will be prepared documenting our 'Before' and 'After' Study' results.

**Deliverables:** Before and After Comparison MOE.

### Task A.9 Develop Synchro Network (LPI Supporting Documents)

Using SYNCHRO software, the necessary parameters will be input to develop a traffic model of representative corridors or closely spaced intersections. Key parameters include:



- Existing geometry of network, including distance between intersections, number of lanes at each approach of each intersection, turn prohibitions, etc.
- AM and PM Peak turning movement counts at every intersection
- Existing speed limits, or prevailing 85th percentile travel speeds
- Existing phasing at each intersection, including any special treatment such as lead-lag phasing, or protected-permissive left-turns
- Existing green splits, offsets, and cycle lengths

Signal timing coordination is vital to maximizing the traffic flow. ADVANTEC clearly understands the City's objective of minimizing any delays caused by the deployment of the LPI signal timing. Representative corridors shall be thoroughly analyzed and monitored to determine whether signal timing modifications are necessary to balance the benefit of the LPI signal timing with the operational needs of the intersection or corridor. Systems or sub-systems that intersect or that are currently operating at optimum will have their timings "locked" in the model so that the intersecting systems will optimize to the "locked" existing systems.



**Deliverables:** Synchro Network and evaluation of LPI deployment impacts.

### Task B Retro-Reflective Signal Backplates and Right Turn-Overlap (RTO) Traffic Signal Design Plans, Specifications & Engineering Cost Estimates

### Task B.1 Traffic Signal Modification Plans (18 Locations)

ADVANTEC will prepare the traffic signal modification plans for 65%, 95%, and 100% submittals for the replacement of existing signal heads and installation of retro reflective backplates. The traffic signal modification plans will conform to the City's requirements and will be prepared in AutoCAD on 24"x36" City of Riverside title block. The design shall conform to requirements by the City of Riverside, -Caltrans standard plans and specifications (latest version), and California MUTCD. All plans will be prepared by a registered Civil Engineer in the State of California.

### Task B.2 Traffic Signal Improvement Plans (Up to 12 Locations)

ADVANTEC will prepare the traffic signal improvement plans for 65%, 95%, and 100% submittals for the installation of retro reflective backplates for up to 12 locations. The traffic signal improvement plans will conform to the City's requirements and will be prepared in AutoCAD on 24"x36" City of Riverside title block. The design shall conform to requirements by the City of Riverside, -Caltrans standard plans and specifications (latest version), and California MUTCD. All plans will be prepared by a registered Civil Engineer in the State of California.

The following table provides a breakdown of the number of sheets, the types of plans, and work or information associated with each plan. Based on our assessment of the proposed improvements and associated details, we have determined this task will require approximately 23 plan sheets.

Sheet Description	Scale	Number of Sheets
Title Sheet and General Notes	NA	1
Traffic Signal Modification Plans (18 Locations)	1"=20	18
Traffic Signal Improvement Plans (Up to 12 locations) – 4 Intersections per sheet)	1"=40'	3
Detail Sheet: Retroreflective Backplate Installation (Various Signal Heads	NA	1
Configurations)		
Total (Task B)		23

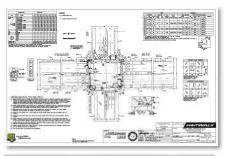
The following summarizes the layout for each plan type and details associated with pertinent detail and layout sheets:

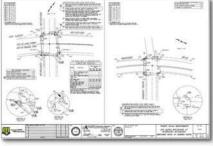


Title Sheet: ADVANTEC will prepare the project Title Sheet in accordance with City of Riverside requirements.

**Traffic Signal Modification Plans:** ADVANTEC will prepare traffic signal modification for 18 signalized intersections. The plans will include all items outlined in the RFP and grant applications. The traffic signal improvements will be shown at 1"=20" scale, showing the curb face, right-of-way, traffic signal poles and signal indications. The plans will show construction notes, pole/equipment schedule, conductor schedule, and phase diagram. We will also identify any other pertinent information including potential conflicts, concerns, and recommendations. An example is provided to the right.

**Traffic Signal Improvement Plans:** ADVANTEC will prepare traffic signal plans for up to 12 signalized intersections. The plans will include all items outlined in the RFP and grant applications. The traffic signal improvements will be shown at 1"=40" scale, with a sketch of each intersection showing the curb face, right-of-way, traffic signal poles and signal indications. The plans will show construction notes, modified pole/equipment schedule, phase diagram, and new quantities table. The plans will also show 2 intersections per sheet (6 sheets total). We will also identify any other pertinent information including potential conflicts, concerns, and recommendations. An example is provided to the right.





### Task B.3 Detailed Engineer's Estimate

Construction Quantities and Engineer's Estimate - ADVANTEC will prepare preliminary and final construction quantity takeoffs and construction cost estimates for the proposed traffic signal and signing and striping improvements. The unit costs will be based on current cost data and historical cost data associated with the identified bid items.

### Task B.4 Technical Specifications

**Technical Specifications -** ADVANTEC will prepare the project Technical Specifications and Bid Documents based on the project design plans and the associated improvements per the City of Riverside requirements and the latest Caltrans Standard Plans and Specifications; California Manual on Uniform Traffic Control Devices (CA MUTCD). The technical specifications will include a project description, preparation of bid schedules, bid item descriptions, payment methods, special provisions, technical specifications, and any specification detail sheets or standard plans. The project Technical Specifications will be prepared and signed by a registered Civil Engineer in the State of California.

### Summary of Deliverables for Task B.1-B.4 (PS&E)

Task B.1-B.2 65% Design

**Deliverables:** Design plans at 65% (23 Sheets this task) - Electronic copy (PDF). Preliminary Estimate.

Task B.3 95% Design

Deliverables: Design plans at 95% (23 Sheets this task) - 2 bond copies (24"x34") and electronic copy (PDF). Preliminary

Estimate, Technical Specifications, and Comment-Response Matrix.

Task B.4 100% Design

Deliverables: Final Design plans (23 Sheets this task) - 2 bond copies (24"x36") and electronic copy (PDF), and 1 Final Mylar

(as needed). Final Estimate, Technical Specifications, Comment-Response Matrix, and all AutoCAD files.

### Task B.5 Environmental Clearance

### Task B.5.1 Project Management, Coordination, and Meetings

Project Initiation and Kick-off Meeting - Dudek will attend one Project kick-off meeting (2 staff) via teleconference with City staff and ADVANTEC in attendance. As an integral element of Project kick-off, Dudek will begin preparation of a limited data needs request to support preparation of the project description (project improvement details), the draft PES form, and will confirm the



Project schedule and key milestones with ADVANTEC and the City. Due to the size of the project area (citywide), Dudek's project manager will only conduct a field review of project intersections and raised median area where more details are needed to support the PES findings (i.e., environmental constraints). Dudek will rely on site photos provided by ADVANTEC to document existing conditions at the remaining project intersections. This task assumes ADVANTEC and/or the City will provide Dudek with an adequate level of detailed information (e.g., features, applicable implementation methods, and any new materials/equipment) to prepare a detailed project description.

Caltrans Coordination – To ensure the City's approval and implementation schedule objectives are satisfied, Dudek assumes the required coordination will include three (3) meetings via virtual platform with the City, ADVANTEC, Caltrans Environmental Division, and the Local Assistance engineer, with follow-up correspondence occurring electronically via email and phone calls.

Coordination and Oversight – Dudek will attend up to three (3) project team meetings via virtual platform with City staff and ADVANTEC, in addition to the kick-off meeting and meetings with Caltrans. This task also includes Dudek's internal project management (internal coordination with staff), email coordination with the City and ADVANTEC, as well as tracking the project schedule and budget. Dudek will provide a project status report to ADVANTEC on a monthly basis via e-mail.

### **Assumptions**

- Consultant team field review would be completed in one day
- Data needs will be provided by ADVANTEC and/or the City as needed to support the environmental services.
- Project improvements would not involve any physical expansion or capacity increasing features and no improvements outside of the public ROW are proposed.
- Project improvements will not involve excavation beyond already disturbed soils
- No official field review with Caltrans (LAPM Chapter 7) will be required

### Task B.5.1 Preliminary Environmental Study (PES) and CEQA/NEPA Compliance

PES Form - Based on the project information provided as described under Task 1.1 above, Dudek will prepare the Draft PES Form consistent with the Local Assistance Procedures Manual (LAPM), Chapter 6 Environmental Procedures. Dudek staff will review existing information provided by City staff and ADVANTEC, including aerial and site photographs, additional relevant attachments, and design plans. We will use this information to develop a detailed project description for environmental analysis to be included in the PES Form.

Dudek will review existing GIS files for information such as flood zones, tribal lands, and other relevant data and will utilize this information to fill out the PES checklist, including a narrative discussion to justify the checklist findings (Yes, To Be Determined, No) for each impact topic. As part of this exercise, Dudek will prepare the Initial Site Assessment (ISA) checklist, a Visual Impact Assessment Questionnaire, and the required supplemental PES Form attachments. The referenced attachments will include the following:

- Project Location and Footprint Figures
- Project Site Photographs
- FTIP listing
- Hazardous Materials GeoTracker Figure
- IPaC Resource Listing
- FEMA Floodplain Designations Figure

These required materials will be informed through necessary research and by utilizing existing conditions documented during the field review and data gathered for impact analysis. In addition, Dudek will rely on compiled site photos provided by ADVANTEC where improvements are proposed at each intersection to provide an existing conditions baseline, as required for the most current version of the PES Form.

The Draft PES form, narrative and associated attachments will be provided to the City and ADVANTEC for review and Dudek will incorporate one round of consolidated comments from the City and ADVANTEC reviewers for incorporation into the final deliverable to Caltrans. Consistent with similar and recent Caltrans Local Assistance submittals, Dudek will submit an electronic copy of the PES form and attachments via email to the District 8 Local Assistance Engineer. Dudek assumes one (1) round of



consecutive reviews by the City and Caltrans, followed by a consecutive finalization review prior to approval signatures. Dudek assumes no technical studies will be required and the CEQA/NEPA approvals will be provided with a Categorical Exemption/Exclusion.

CEQA/NEPA Compliance - Once the PES for is approved, Dudek will draft the Categorical Exemption/Categorical Exclusion Determination Form to be reviewed and approved by the City (CEQA Only) and Caltrans (NEPA Only). The City and Caltrans reviews and approvals will occur concurrently with one (1) round of review included. Consistent with Caltrans environmental approval requirement Dudek will also prepare an Environmental Certification Form, along with an Environmental Commitments Record (ECR). Dudek will prepare those two additional documents for City and Caltrans concurrent review with one (1) round of review included.

Once the PES Form and CEQA/NEPA documents are approved, Dudek will assemble the complete package and provide the signed hard copies to the City and Caltrans for their records.

### <u>Assumptions</u>

- Compiled intersection site photos will be provided by ADVANTEC
- PES Form includes one (1) round of consecutive reviews by the City and Caltrans, followed by consecutive finalization reviews prior to approval signatures
- No technical studies will be required and the CEQA/NEPA approvals will be provided with a Categorical Exemption/Exclusion
- The City will utilize the combined Caltrans CEQA/NEPA Categorical Exemption/Exclusion form for their respective CEQA based approval.
- Draft CEQA/NEPA Categorical Exemption/Exclusion include concurrent City and Caltrans reviews and approvals with one (1) round of review included
- Environmental Certification Form and ECR include concurrent City and Caltrans reviews and approvals with one (1)
   round of review included

**Request for Authorization (RFA) to Proceed with Construction** - ADVANTEC will prepare the Caltrans Request for Authorization (RFA) package for construction and assist the City with processing the RFA through Caltrans District 8 Local Assistance. The RFA package will include the latest forms per the Caltrans Local Assistance Procedures Manual (LAPM). The RFA package will include:

- 1. Cover Page/Checklist
- 2. Request for Construction Authorization Data Sheet
- 3. Completed Finance Letter
- 4. Completed Field Review Form

- 5. Environmental Documentation
- 6. Right-of-way Certification
- 7. PS&E Package and Certification
- 8. Local Agency Construction Contract Admin Checklist

In order to prepare an accurate RFA package, it is assumed the City will provide the HSIP grant applications, PE E-76 from Caltrans, and PE Finance Letter from Caltrans.

Deliverables:

Draft / Final PES Form (electronically submitted), Draft / Final CEQA Categorical Exemption and Draft/ Final NEPA Categorical Exclusion, Draft / Final Environmental Certification Form, Draft/ Final ECR.

Caltrans Request for Authorization (RFA) Package E-76 for Construction.

### Task C Mission Inn Avenue Street Improvement and Traffic Design PS&E Task C.1.1 Topographic Surveying

Our subconsultant **CL Surveying and Mapping (CL)** will conduct the design surveying necessary for topographic base mapping, and ADA pedestrian ramp design and reconstruction. Cross-sections and topographic base maps will be produced by ground survey methods. The base maps will identify all existing street improvements, drainage structures, fire hydrants, utility facilities, landscaping (trees), signs, street lights, and other appurtenant improvements within the sphere of curb returns, and approximately



30 feet beyond the curb returns where the new pedestrian ramp and/or sidewalk improvements are proposed – base mapping beyond the design survey will be augmented by the ADVANTEC Teams data collection and field review.

The surveying and topographic mapping provided by our subconsultant, CL Surveying and Mapping, will consist of the following:

**Site Control -** CL will establish a site-wide network of horizontal/vertical control to serve as the basis for any subsequent boundary, topographic, or construction staking surveys that may be required throughout the course of the project. CL Surveying and Mapping will reference an assumed horizontal and vertical datum.

Centerline/Right-of-Way Establishment/Mapping – CL Surveying will conduct the field measurements necessary to re-trace the centerlines and rights-of-way of Mission Inn Avenue from Scout Lane to Redwood Drive. This effort does not constitute a full and complete boundary survey of the adjacent land parcels. Survey monuments located and indicated on the survey shall be limited to existing, centerline monuments found to be present along the streets and all associated ties as indicated.

**Topography and Survey -** CL will Perform a field topographic survey to document existing site topography and planimetrics along Mission Inn Avenue from Scout Lane to Redwood Drive. Substantial visible improvements will be located within the street right of way, including utilities, manholes, valve covers, utility vaults and covers, signposts, signs, trees, utility poles, traffic signal poles, cross gutters, local depressions, catch basins, driveway openings, sidewalks, corner access ramps, fire hydrants, parkway drains, etc. Visible indications of surface utilities lying within the project limits will be located, as will accurate lid/rim elevations for drainage structures present.

Street cross sections will be taken at 25-foot intervals. From Scout Lane to Mt. Rubidoux Drive the crosssectional data will go from curb face to curb face and from Mt. Rubidoux Drive to Redwood Drive the cross sectional data will go from back of back to back of walk.

This item does not include any potholing or excavation work that may be required to uncover existing facilities. Should there be concerns regarding the location of subsurface utilities, said pot-holing will be handled under a separate fee.

**Deliverables:** Surveying and topographic mapping in AutoCAD for project segment and ASCII point file.

### Task C1.2 Field Review

ADVANTEC will coordinate with City staff, collect and review available data for use and reference associated with the project improvements. ADVANTEC's Senior Traffic Engineers/Field Technicians will conduct a thorough field review of existing conditions at the project intersection that consists, but not limited to collecting the following:

- ✓ All roadway features including curb lines, property lines, edges of pavement, edges of paved sidewalks, curb returns, curb ramps, driveways and bus pads, signing and striping, street lighting, and power poles
- ✓ Traffic signal and associated equipment (e.g. conduit, cables, service enclosures, pull boxes, vaults, etc.)
- Communication and associated equipment (e.g. conduit, pull boxes, fiber optic cable, twist-pair/copper cable, etc.)
- ✓ Nearby underground utilities, cabinets, sub-structures, basements and vaults; and nearby aboveground structures (including bus shelters), aboveground cable and permanent street furniture
- ✓ ADA pedestrian ramps compliance and constraints
- ✓ Sidewalk and pavement conditions
- ✓ Photographs of signalized intersections and roadway features

Upon completion of the above items, ADVANTEC will create a digital field condition photobook and inventory matrix. ADVANTEC will identify potential constraints that may be encountered in relation to the proposed improvements. This information will be used for base mapping and proposed improvements at the project intersections. This information will also be used as the foundation for inventory and assessment of existing conditions, base mapping, and preliminary improvement plans.

**Deliverables:** Field review notes, field condition photobook, photos, and AutoCAD base map.





### Task C1.3 Utility Coordination

Utility notification and coordination will be required to ensure quality design and help eliminate utility conflicts during construction. Utility notifications will be provided to the various utility owners within the sphere of the project; the notifications will be prepared using the City's letterhead. ADVANTEC will request locations for existing and proposed underground and overhead utilities, including high risk utilities. The utility information provided by the agencies will be delineated on the plans based on their record drawings and our field review. The location of our proposed improvements will take into consideration of the existing utilities. In the event of any utility conflicts, ADVANTEC will coordinate the relocation of all utilities affected by the project. Our goal is to relocate their facilities prior to the start of construction of the project improvements. ADVANTEC will compile all utility coordination and information in a matrix format to include dates of notification, persons/utility notified and responses from the utility company. Letters will be sent to the utility companies requesting their review and verification of their facilities during the preliminary and final plan submittals to obtain their concurrence with the information shown on the plans. Copies of this information will be updated upon receipt and provided to the City of Riverside at the scheduled project meetings and/or as the information has been received. ADVANTEC will conduct utility coordination throughout the preliminary and final design phases of the project.

Please note: ADVANTEC's fees do not include fees or costs associated with the processing and collection of as-built plans or documentation from the utility companies. Typically, fees are waived when submitting utility requests using the City's letterhead.

**Deliverables:** Utility notification and Coordination, Utility letters and utility plans, and utility coordination matrix.

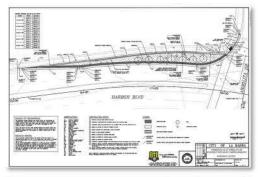
### Task C.2 Street Improvement and Traffic Plans

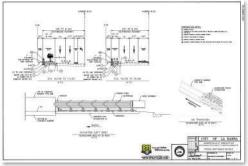
ADVANTEC will provide preliminary design plans (65%) for review and approval and advance to final PS&E stages (90% and 100% submittals). The roadway plans will conform to the City's requirements and will be prepared in AutoCAD at 1"=20' scale on 24"x36" City of Riverside title block. The PS&E will also be in conformance with the corresponding latest editions of Standard Specifications for Public Works Construction (Greenbook); American Public Works Association (APWA) Standard Plans for Public Works Construction; and Caltrans Standard Specifications and Standard Plans; California Manual on Uniform Traffic Control Devices (CA-MUTCD), Federal Highway Administration (FHWA) High Friction Surface Treatment Site Selection and Installation Guide, and applicable design standards. The plans will be submitted as 1 plan set with Task B.

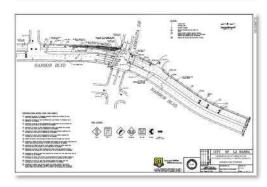
The roadway plan will show plan and profile for roadway improvements, utilities screened in background, existing topographical information from surveys, improved pavement markings, striping modifications, and signs, if any. Roadway plans will show sawcutting of existing asphalt concrete and the design for construction of a 4' raised concrete median, pavement resurfacing, and high friction surface treatment along horizontal curves.

Construction detail plans will be prepared at various scales depending on what is needed to be shown per the final improvements. The civil details may include cross sections, median improvements, curb and gutter detail, and asphalt/overlay details.

Signing and striping plans will be prepared at 1"=40' scale and match the layout of the roadway plans. The plans will show the installation of thermoplastic striping and signage along the project segments. Signing and striping will be plans will be prepared per CAMUTCD and Caltrans standards.

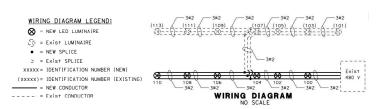








ADVANTEC will evaluate the existing lighting and determine if additional or upgraded lighting is necessary for the safety of the roadway segment. ADVANTEC will prepare details sheets for the work related to the lighting improvements. This includes, but not limited to, lighting poles, foundations, wiring diagrams, conductors, etc. for the work at the project segment. Construction notes and



other details will be provided to facilitate the project improvements.

Signing and striping plans will be prepared at 1"=40' scale and match the layout of the roadway plans. May have minor signage but more for striping to direct vehicles away from the outside curb, sidewalk, and property walls of homes.

The engineering plans will include the specified border, title block, signature block, general and construction notes, and any details necessary to facilitate recommended improvements for Mission Inn Avenue Street Improvements.

All plans will be prepared by a registered Civil Engineer in the State of California. Based on our assessment of the proposed improvements and associated details, we have determined this project will require approximately **12 additional plan sheets**. The following table provides a breakdown of the number of sheets, the types of plans, and work or information associated with each plan.

Sheet Description	Scale	Number of Sheets
General Notes, Construction Notes, Legend and Vicinity Map	NA	1
Roadway Plans (Plan & Profile)	1"=20'	5
Typical Cross-Sections	NA	2
Median Detail	1"=20'	1
Other Construction Details	NA	1
Signing and Striping Plans	NA	1
Lighting Plan	1"=40'	1
Total (Task C)		12

### Task C.3 Detailed Engineer's Estimate

ADVANTEC will prepare preliminary and final construction quantity take-offs and construction cost estimates for the proposed roadway and signing and striping improvements. The unit costs will be based on current cost data and historical cost data associated with the identified bid items.

### Task C.4 Technical Specifications

ADVANTEC will prepare the project Technical Specifications and Bid Documents based on the project design plans and the associated improvements per the City of Riverside and County of Riverside requirements and the latest Caltrans Standard Plans and Specifications; California Manual on Uniform Traffic Control Devices (CA MUTCD) and GREENBOOK; The technical specifications will include a project description, preparation of bid schedules, bid item descriptions, payment methods, special provisions, technical specifications, and any specification detail sheets or standard plans. The project Technical Specifications will be prepared and signed by a registered Civil Engineer in the State of California.

Note: The Plans, Specifications, and Estimates (PS&E) for Task B and Task C will submitted as one bid package.

### Summary of Deliverables for Task C.1-C.4 (PS&E)

Task C.1 65% Design

Deliverables: Design plans at 65% (12 Sheets this task) - Electronic copy (PDF). Preliminary Estimate.

Task C.2 95% Design



Deliverables: Design plans at 95% (12 Sheets this task) - 2 bond copies (24"x34") and electronic copy (PDF). Preliminary

Estimate, Technical Specifications, and Comment-Response Matrix.

Task C.3 100% Design

Deliverables: Final Design plans (12 Sheets this task) - 2 bond copies (24"x36") and electronic copy (PDF), and 1 Final Mylar

(as needed). Final Estimate, Technical Specifications, Comment-Response Matrix, and all AutoCAD files.

### Task C.5 Environmental Documentation

**Please see Task B.5.** Task B and Task C PS&E will be submitted as one bid package and therefore one environmental clearance package will be submitted.

### Project Administration, Coordination, and Meetings - TO BE INCLUDED UNDER VARIOUS TASKS

**Project Management** - ADVANTEC will provide Project Management activities through all the aspects of the project including project administration, invoices, and thorough quality control. ADVANTEC will prepare a detailed work plan, project schedule and prepare monthly progress reports. The progress reports will include accomplished tasks for the month, anticipated progress for the next month, pending issues and schedule completion target dates.

**Project Coordination** - ADVANTEC will also coordinate with City's Project Manager to set up bi-weekly conference calls to provide up-to-date project status, discuss any concerns or issues, and follow-ups on any requests or action items. This has been a successful project management strategy, it keeps everyone on the same page, and it helps develop a team relationship that contributes to the success of this project with quality work, and on-schedule within budget performance.

**Meetings** - ADVANTEC will schedule and conduct a project kick-off meeting with the City to discuss the overall project, planning and design objectives, constraints, requirements, project schedule, develop action items, and understanding next steps. During the kick-off meeting, ADVANTEC will coordinate with City staff to assemble a Project Development Team (PDT). ADVANTEC will schedule and conduct monthly PDT meetings to ensure all participants are aware of the project status, critical milestones and decision points including reviewing project schedules, planning activities, concepts, plans, and specifications. ADVANTEC will prepare and distribute meeting agendas, meeting minutes, attendee log, updated project schedule (as necessary), and an action item matrix to the project team for each meeting that is held. Under this task, we propose to conduct a project **kick-off meeting**, **up to five (5) virtual PDT meetings**.

**Project Schedule** – Our proposed project schedule is provided under Section B. We are anticipating that the design will be completed within six (6) months of award contract and anticipated that Caltrans will approve the Request for Funding Allocation package within the same period. Updated project schedules will be provided to the City at each PDT Meeting.

Deliverables: Project Management and Administration Meetings - kick-off meeting attendance, and five (5) virtual PDT

meetings; Monthly progress reports, invoices, project schedule updates, meeting agendas, meeting minutes,

and action item tracking table.



# EXHIBIT "B" COMPENSATION



April 18, 2024 (Rev. July 11, 2024)

### **City of Riverside**

Traffic Engineering Division, Public Works Department 3900 Main Street Riverside, CA 92522

Subject:

Fee Proposal for Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services (HSIP Cycle 11)

Dear City of Riverside Staff and Review Panel,

**ADVANTEC Consulting Engineers (ADVANTEC)** is pleased to submit the accompanying Fee Schedule, in response to the Request for Proposal (RFP) for the subject project issued by the City of Riverside. Our fee schedule is prepared in conjunction with the technical proposal, which is provided under a separate cover. This includes the following (in order):

- Fee Table for Task A: Leading Pedestrian Interval (LPI) Phasing
- Fee Table for Task B: Retro-Reflective Signal Backplates and Right-Turn Overlap (RTO)
- Fee Table for Task C: New Raised Median and High Friction Surface Treatment on Mission Inn Ave
- Summary of Fees for Tasks A, B, and C
- ADVANTEC: EXHIBIT 10-H1 COST PROPOSAL FORM
- DUDEK: EXHIBIT 10-H1 COST PROPOSAL FORM
- ADVANTEC: EXHIBIT 10-O1 CONSULTANT PROPOSAL DBE COMMITMENT
- ADVANTEC: EXHIBIT 10-02 CONSULTANT CONTRACT DBE COMMITMENT

We appreciate this opportunity work with the City of Riverside.

Sincerely,

Carlos A. Ortiz, PE, TE, PTOE

**CHIEF EXECUTIVE OFFICER and PRINCIPAL** 

Mr. Carlos Ortiz, PE, TE, PTOE Project Director/CEO

1200 Roosevelt, Irvine, CA 92620

cortiz@advantec-usa.com Phone No.: 949-861-4999 Mobile No.: 949-636-0646

Fax No.: 949-502-5522



# Task A: Leading Pedestrian Interval (LPI) Phasing Policy Establishment & Implementation Fee Proposal for the City of Riverside



							<u></u>	_	_	~~		~	_	~			_	г
	Total Cost				\$25,966	\$69,684	\$4,749	\$49,877	\$3,829	\$204,618	\$115,156	\$11,388	\$15,437	\$35,613	\$111,611		\$647,926.20	
	Total Hours				134	440	34	32	26	1344	640	89	72	224	750	3764		
	Other Direct Costs					\$3,484					\$4,020		\$335	\$670			\$8,509.00	
	Total							\$43,380									\$ 43,380.00	
Sub-Consultant	Counts Unlimited							\$43,380									\$43,380.00	
O-qns	CL Survey	Survey															\$	
	Dudek	Environ.															- \$	
Support Staff		Brandon Chin	\$115.00		24	80	24		16	320	200	16	16	80	180	926	\$ 109,940	
Support Staff		Ryan Miller	\$182,16		80	80	8	24	∞	220	200	16	24	80	160	006	\$ 163,944	
Signal Timing	Lead	Jose	\$265,65		24	16	2	8	2	120	160	80	24	20	62	446	\$118,480	
Support Staff		Dylan Sison	\$115.00			80				240	80	8		40	180	628	\$ 72,220	
Support Staff		Rachel Tam	\$138.00			80				240		8			160	488	\$ 67,344	
Support Staff		Nicholas Park	\$153.33	ntation		40				180		∞				228	\$ 34,960	
Support Staff		Frank Gomez	\$156.03	& Impleme		40										40	\$ 6,241	
Assistant Project	Manager	Madeleine Ortiz	\$190.44	tablishment		16										16	\$ 3,047	
Project Manager		John Dorado	\$314.33	ing Policy Es	4	∞				24		4	8	4	8	09	\$ 18,860	fees.
Project Director		Carlos Ortiz	Rate \$499.87	(LPI) Phasi	2											2		d printing
TASKS / SUB-TASKS			Rate	Task A: Leading Pedestrian Interval (LPI) Phasing Policy Establishment & Implementation	Leading Pedestrian Interval Policy and Guideline for implementation	Evaluate Existing Crossing Conditions for LPI Implementation (408 Intersections)	Data Collection	StreetLight Data	Peak Hour Traffic Counts (241 Intersections)	LPI Signal Timing Plans (Up to 408 Intersections)	LPI Signal Timing Implementation (Up to 408 Intersections)	Pedestrian and Bicycle Infrastructure and Non- Infrastructure Inventory	Public Educational Material	Before and After Comparison	Develop Synchro Network	Total Hours	Total Cost \$ 1,000	Other Direct Costs include mileage and printing fees.
				٨	A1	A2	А3			A4	A5	A6	<b>A</b>	A8	A9			Other

TOTAL FEE (Not-To-Exceed)

\$647,926.20



# Fee Proposal for the City of Riverside

Traffic Signal Design Plans, Specifications and Engineering Cost Estimates Task B: Retro-Reflective Signal Backplates and Right-Turn Overlap (RTO)

Date: 07/11/24

	TASKS / SUB-TASKS	Project Director	Project Manager	Assistant Project	Support Staff	Support Staff	Support Staff	Support Staff	Signal Timing	Support Staff	Support Staff		Sub-Consultant	sultant				
				Maria de la companya					Leau Leau			Dudek	CL Survey	Counts Unlimited	Total	Other Direct	Total Hours	Total Cost
		Carlos Ortiz	John Dorado	Madeleine Ortiz	Frank Gomez	Nicholas Park	Rachel Tam	Dylan Sison	Jose Guedes	Ryan Miller	Brandon	Environ.	Survey					
	Rate	Rate \$499.87	\$314.33	\$190.44	\$156.03	\$153.33	\$138.00	\$115.00	\$265.65	\$182.16	\$115.00							
В	Task B: Retro-Reflective Signal Backplates and Right-Turn Overlap (RTO) Traffic Signal Design PS&E	kplates and	d Right-Turr	ι Overlap (RT	O) Traffic Sig	gnal Design	PS&E											
B1	Traffic Signal Modification Plans (18 Locations)	2	24	40	48	48	09									\$536	222	\$39,827
B2	Retro-Reflective Signal Backplate Design Plans (Up to 12 Locations)		12	20			09	80								\$2,530	172	\$27,591
B3	Detailed Engineer's Estimate		4	12	4	8	8	8									44	\$7,417
B4	Technical Specifications		8	48				16									72	\$13,496
B5	Caltrans Environmental Clearance and Caltrans Request for Authorization (RFA) Forms		12	20			16					\$26,516			\$26,516		48	\$36,305
	Total Hours	2	09	140	52	56	144	104									558	
	Total Cost \$ 1,000   \$ 18,860	\$ 1,000	\$ 18,860	\$ 26,662 \$	\$ 8,114	\$ 8,587	\$ 19,872	\$ 11,960	- \$	\$	- \$	\$ 26,516,35	\$		\$ 26,516.35	\$ 3,066.00		\$124,636.21
Othe	Other Direct Costs include mileage and printing fees.	d printing	fees.															

\$124,636.21

TOTAL FEE (Not-To-Exceed)

Page 1 of 1

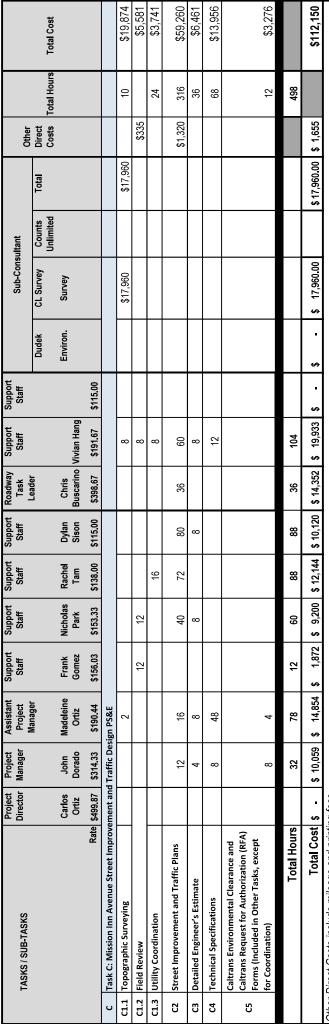


# Fee Proposal for the City of Riverside

# Task C: New Raised Median and High Friction Surface Treatment on Mission Inn Ave

Plans, Specifications, and Estimates (PS&E)

Date: 07/11/24



Other Direct Costs include mileage and printing fees.

\$112,149.90 TOTAL FEE (Not-To-Exceed)



# Fee Proposal for the City of Riverside FEE SUMMARY FOR TASKS A, B, AND C



Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services (HSIP Cycle 11)

TOTAL - Task A: Leading Pedestrian Interval (LPI) Phasing	\$647,926.20
TOTAL - Task B: Retro-Reflective Signal Backplates and Right-Turn Overlap (RTO)	\$124,636.21
TOTAL - Task C: New Raised Median & High Friction Surface on Mission Inn Ave	\$112,149.90
TOTAL (TASKS A, B, AND C)	\$884,712.31

#### EXHIBIT 10-H1 COST PROPOSAL PAGE 1 OF 3

#### ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS

	(DESIGN, ENGINEERING					
Note: Mark-ups are Not Allowed		Prime Consultant	Subconsultant	2nd	Tier Subconsu	ltant
Consultant Project No. ADVANTEC Consulting HSIP Cycle 11	Contract No.			-	Date	7/11/2024
DIRECT LABOR		SUMMARY				
Classification/Title	Namo		hours		al Hourly Rate	Total
Project Director	Carlos Ortiz, PE		4	\$	156.73	\$626.92
Task Leader - Roadway	Chris Buscarino, PE		36	\$	125.00	\$4,500.00
Project Manager	John Dorado, PE		152	\$	98.56	\$14,980.77
Task Leader - Signal Timing	Jose Guedes, TE		446	\$	83.29	\$37,148.80
Lead Project Engineer - Roadway	Vivian Hang, PE		104	\$	60.10	\$6,250.00
Assistant Project Manager	Madeleine Ortiz		234	\$	59.71	\$13,972.50
Lead Project Engineer - Signal Timing	Ryan Miller		900	\$	57.12	\$51,403.85
Support Staff - PS&E	Frank Gomez		104	\$	48.92	\$5,088.00
Support Staff - PS&E	Nicholas Park		344	\$	48.08	\$16,538.46
Support Staff - PS&E	Rachel Tam		720	\$	43.27	\$31,153.85
Support Staff - Signal Timing	Brandon Chin		956	\$	36.06	\$34,471.15
Support Staff - PS&E	Dylan Sison		820	\$	36.06	\$29,567.31
INDIRECT COSTS d) Fringe Benefits f) Overhead & G&A h) General and Administrative (Rate:  FIXED FEE l) CONSULTANT'S OTHER DIRECT		H Rate e) Total Fringe I g) ( i) Gen & j rFIXED PROFIT [(		\$ osts [(e)	155,553.69 311,131.94 \$0.00 + (g) + (i)]	\$245,701.61 \$466,685.63 \$71,238.72
Description		Quantity	Unit	Uı	nit Cost	Total
Mail/Delivery		1	lump sum	9	\$0.00	\$0.00
Printing		1	lump sum	\$4	,185.00	\$4,185.00
Mileage/Travel		13500	miles	\$	0.670	\$9,045.00
						\$0.00
						\$0.00
		1	) TOTAL OTHER	DIREC	CT COSTS	\$13,230.00
m) SUBCONSULTANTS' COSTS (Ad Subconsultant 1: Counts Unlimited Subconsultant 2: CL Surveying Subconsultant 3: DUDEK Subconsultant 4:	d additional pages if necessa		— — — TAL SUBCONSU	H TANT		\$43,380.00 \$17,960.00 \$26,516.35 \$0.00 \$87,856.35
	\ TOTAL OTHER RES	ŕ				
1	n) TOTAL OTHER DIRECT	r COSTS INCLUDI				\$101,086.35
NOTES:			TOTAL COST [	(c) + (J) -	+ (K) + (N)	\$884,712.31

- 1. Key personnel must be marked with an asterisk (\*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (\*\*). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
- 2. The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
- 3. Anticipated salary increases calculation (page 2) must accompany.

#### EXHIBIT 10-H1 COST PROPOSAL PAGE 2 OF 3

#### ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS

(DESIGN, ENGINEERING AND ENVIRONMENTAL STUDIES)

#### 1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direct Labor <u>Subtotal</u> per Cost Proposal	Total Hours per Cost Proposal		Avg Hourly Rate	5 Year Contract Duration
\$245,701.61	4820	=	\$50.98	Year 1 Avg Hourly Rate

#### 2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by propose

	Avg Hourly Rate		Proposed Escalation			
Year 1	\$50.98	+	0%	=	\$50.98	Year 2 Avg Hourly Rate
Year 2	\$50.98	+	0%	=	\$50.98	Year 3 Avg Hourly Rate
Year 3	\$50.98	+	0%	=	\$50.98	Year 4 Avg Hourly Rate
						5

#### 3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	100.00%	*	4820.00	=	4820.00	Estimated Hours Year 1
Year 2	0.00%	*	4820.00	=	0.00	Estimated Hours Year 2
Year 3	0.00%	*	4820.00	=	0.00	Estimated Hours Year 3
Year 4	0.00%	*	4820.00	=	0.00	Estimated Hours Year 4
Year 5	0.00%	*	4820.00	=	0.00	Estimated Hours Year 5
Total	100%		Total	=	4820.00	<del>_</del>

#### 4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$50.98	*	4820	=	\$245,701.61	Estimated Hours Year 1
Year 2	\$50.98	*	0	=	\$0.00	Estimated Hours Year 2
Year 3	\$50.98	*	0	=	\$0.00	Estimated Hours Year 3
Year 4	\$50.98	*	0	=	\$0.00	Estimated Hours Year 4
Year 5	\$50.98	*	0	=	\$0.00	Estimated Hours Year 5
	Total Direct Lab	or Cost v	vith Escalation	=	\$245,701.61	
	Direct Labor Sub	total bef	ore Escalation	###	\$245,701.61	
	Estimated total of Direct	: Labor S	alary Increase	=	\$0.00	Transfer to Page 1

#### NOTES:

- 1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
- 2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable.
  - (i.e.  $$250,000 \times 2\% \times 5 \text{ yrs} = $25,000 \text{ is not an acceptable methodology})$
- 3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- 4. Calculations for anticipated salary escalation must be provided.

#### EXHIBIT 10-H1 COST PROPOSAL PAGE 3 OF 3

#### **Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this conract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the

- 1. Generally Accepted Accounting Principles (GAAP)
- 2. Terms and conditions on the contract
- 3. Title 23 United States Code Section 112 Letter of Contracts
- 4. 48 Code of Federal Regulations Part 31 Contract Cost Principles and Procedures
- 5. 23 Code of Federal Regulartions Part 172 Procurement, Management, and Administration of Engineering and Desgin Related Service
- 6. 48 Code of Federal Regulartions Part 9904 Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

#### Prime Consultant or Subconsultant Certifying:

Name:	Carlos A Ortiz	Title *: CEO	
Signature		Date of Certification (mm/dd/yyyy):	7/11/2024
Email:	cortiz@advantec-usa.com	Phone Number: <u>949-861-4999</u>	
Address:	1200 Roosevelt, Irvine, CA 92620		
List condi	* An individual executive or financial officer of the lower than a Vice President or a Chief Financial financial information utilized to establish the content to providing under the prepared	I Officer, or equivalent, who has authority to rest proposal for the contract.	
LIST SELVIC	ces the consultant is providing under the propose	ed Contract.	
Traffic En	gineering and Signal Timing		

Page 3 of 9

Page 3 of 3 January 2020

									Cost Proposal 1
Nata Maria ya a sa Nata Mari			o: 0 # 4					Fixed	Fee or Lump Sum
Note: Mark-ups are Not Allow	vea	_ ⊔'	Prime Consultant	Subconsultant	2nd Tier Subco	onsulta	nt		
Consultant: <b>Dudek</b>						_			
Project No.			Contract No			_	Date		4/16/2024
DIRECT LABOR									
Classification	n/Title		Name	Range	Hours		Actual Irly Rate		Total
Project Director/Env	vironmenta <b>l</b>	Jaso	n Reynolds		20	\$	99.00	\$	1,980.00
Senior Specia	alist II	Joshu	a Saunders		46	\$	62.55	\$	2,877.30
Analyst I	ļ	Ov	ven Baer		54	\$	31.45	\$	1,698.30
GIS Analys	t III			\$40 - \$42	12	\$	40.99	\$	491.88
Technical Ed	litor II			\$41 - \$50	6	\$	45.07	\$	270.42
Publications Spe	ecialist II			\$37 <b>-</b> \$38	8	\$	37.66	\$	301.28
LABOR COSTS  a) Subtotal Direct Labo b) Anticipated Salary I		page 2 for calcu	ılation)	c) TOTAL DIR	ECT LABOR CO		7,619.18	· .	7,619.18
INDIRECT COSTS				o, . o			[(-)		.,0.01.0
d) Fringe Benefits	(Rate:	Y	•	e) Total Fringe B	enefits [(c) x (d)]	\$	_		
f) Overhead & G&A	(Rate:	201.22%	)	· -	erhead [(c) x (f)]		5,331.31		
h) General & Admin	(Rate:		)		Admin [(c) x (h)]		-		
				j) TOTAL IN	DIRECT COSTS	<b>S</b> [(e)	+ (g) + (i)]	\$	15,331.31
FIXED FEE			k	) TOTAL FIXED FEE [(c)	+ (j)] x fixed fee:		15%	\$	3,442.57
I) CONSULTANT'S OT	HER DIRECT	COSTS (ODC)	- ITEMIZE (Add	l additional pages if nec	essary)				
	Description	on of Item		Quantity	Unit	Ur	nit Cost		Total
	Mile	eage		184	Miles	\$	0.67	\$	123.28
				I) To	OTAL OTHER D	IREC	т соѕтѕ	\$	123.28
m) SUBCONSULTANT	TS' COSTS (A oconsu <b>i</b> tant 1		ages if necessa	ary)					
Our	Jooniga Runt 1			m) TOTAL	. SUBCONSULT	ΔΝΤΟ	COSTS	•	
				III) TOTAL	. JUDGUNGUL I	WILLS	, 00313	Ψ	-

NG SUBCONSULTANTS [(I) + (m)] \$ 123.28

TOTAL COST [(c) + (j) + (k) + (n)] \$ 26,516.35

#### NOTES:

- 1. Key personnel must be marked with an asterisk (\*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (\*\*). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
- 2. The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
- 3. Anticipated salary increases calculation (page 2) must accompany.

#### **CALCULATIONS FOR ANTICIPATED SALARY INCREASES**

#### 1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direc	Direct Labor <u>Subtotal</u> Total Hours				Hourly	5 Year Contract
per	Cost Proposal	per Cost Proposal		R	ate	Duration
\$	7,619.18	146	=	\$	52.19 Y	ear 1 Avg Hourly Rate

#### 2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly	Rate		Proposed Escalation		
Year 1	\$	52.19	+	0%	=	\$ 52.19 Year 2 Avg Hourly Rate
Year 2	\$	52.19	+	0%	=	\$ 52.19 Year 3 Avg Hourly Rate
Year 3	\$	52.19	+	0%	=	\$ 52.19 Year 4 Avg Hourly Rate
Year 4	\$	52.19	+	0%	=	\$ 52.19 Year 5 Avg Hourly Rate

#### 3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated %		Total Hours			
	Completed Each Year		per Cost Proposal		per Year	
Year 1	100.00%	*	146.0	=	146.0	Estimated Hours Year 1
Year 2	0.00%	*	146.0	=	0.0	Estimated Hours Year 2
Year 3	0.00%	*	146.0	=	0.0	Estimated Hours Year 3
Year 4	0.00%	*	146.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	146.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	146.0	

#### 4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)			Cos	st per Year	
Year 1	\$ 52.	9 *	146		=	\$	7,619.18	Estimated Hours Year 1
Year 2	\$ 52.	9 *	0		=	\$	-	Estimated Hours Year 2
Year 3	\$ 52.	9 *	0		=	\$	-	Estimated Hours Year 3
Year 4	\$ 52.	9 *	0		=	\$	-	Estimated Hours Year 4
Year 5	\$	- *	0		=	\$	-	Estimated Hours Year 5
Total Direct Labor Cost with Escalation			=	\$	7,619.18			
Direct Labor Subtotal before Escalation			=	\$	7,619.18			
Estimated total of Direct Labor Salary Increase			=	\$	-	Transfer to Page 1		

#### NOTES:

- 1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
- 2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology).
- 3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- 4. Calculations for anticipated salary escalation must be provided.

#### **Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

- 1. Generally Accepted Accounting Principles (GAAP)
- 2. Terms and conditions of the contract
- 3. Title 23 United States Code Section 112 Letting of Contracts
- 4. 48 Code of Federal Regulations Part 31 Contract Cost Principles and Proceedures
- 5. 23 Code of Federal Regulations Part 172 Procurement, Management and Administration of Engineering and Design Related Service
- 6. 48 Ccode of Federal Regulations Part 9904 Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency or Caltrans accepted Indirect Cost Rate(s).

#### **Prime Consultant or Subconsultant Certifying:**

Name:	Helder Guimaraes	Title *:	CFO			
Signature:	DocuSigned by: HULLIN GUMANUS 137517524158439	Date of Certification:	4/16/2024			
Emai <b>l</b> :	hguimaraes@dudek.com	Phone number:	760-492-0715			
Address:	s:605 3rd Street, Encinitas, CA 92024					
* An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.  List services the consultant is providing under the proposed contract:						
Environme	ental analysis and documentation.					

#### EXHIBIT 10-O1 CONSULTANT PROPOSAL DBE COMMITMENT

1. Local Agency: City of Riverside		2. Contract DBE Goal: $\frac{20\%}{}$			
e i roject Bescription:	gn Services HSIP Cycle 11				
4. Project Location: City of Riverside					
5. Consultant's Name: ADVANTEC Consulting	Engineers, Inc.	6. Prime Certified DBE:			
	T	1	_		
7. Description of Work, Service, or Materials Supplied	8. DBE Certification Number	9. DBE Contact Information	10. DBE %		
Traffic Engineering	30139	Leo Lee, Chairman LeoLee@advantec-usa.com; Tel: 949-861-4999	90.07		
Local Agency to Complete this	Section				
17. Local Agency Contract Number:		44 TOTAL OLAMATE DEFENANTION	90.07 %		
18. Federal-Aid Project Number:		11. TOTAL CLAIMED DBE PARTICIPATION	90.07 %		
Consultant's Ranking after Evaluation:		IMPORTANT: Identify all DBE firms being claimed for credit,			
Local Agency certifies that all DBE certifications are this form is complete and accurate.	e valid and information on	regardless of tier. Written confirmation of each list required.			
21. Local Agency Representative's Signature	22. Date	12. Preparer's Signature 13. Date	/11/2024 e -861-4999		
23. Local Agency Representative's Name	24. Phone	14. Preparer's Name T5. Pho			
25. Local Agency Representative's Title		16. Preparer's Title			

DISTRIBUTION: Original - Included with consultant's proposal to local agency.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

#### **EXHIBIT 10-O2 CONSULTANT CONTRACT DBE COMMITMENT**

1. Local Agency: City of Riverside		2. Contract DBE Goal: 20%	6	
3. Project Description: Traffic Engineering Description:	esign Services HSIP (	 Cycle 11		
4. Project Location: City of Riverside				
5. Consultant's Name: ADVANTEC	6. Prime Certifie	d DBE: 🗹 7. Total Contract A	ward Amount: \$	884,712.31
8. Total Dollar Amount for ALL Subconsultants: \$	9. Total Number of <u>ALL</u> Subconsultants: 3			
	T			
10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Info	ormation	13. DBE Dollar Amount
Traffic Engineering	30139	Leo Lee, Chairman ; Tel: LeoLee@advantec-usa.c		\$796,855.96
Local Agency to Complete this  20. Local Agency Contract	<b>\$</b> 7		<b>\$</b> 796,855 <b>.</b> 96	
Number: 21. Federal-Aid Project Number:	14. TOTAL CLAIMED DBE PARTICIPATION 90.			
22. Contract Execution  Date:				
Local Agency certifies that all DBE certifications are this form is complete and accurate.	IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.  7/11/24			
23. Local Agency Representative's Signature 24	4. Date	15. Preparer's Signature	16. Date	
		Carlos Ortiz		61-4999
25. Local Agency Representative's Name 20	6. Phone	17. Preparer's Name	18. Pho	ne
27. Local Agency Representative's Title		CEO 19. Preparer's Title		

DISTRIBUTION: 1. Original – Local Agency
2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

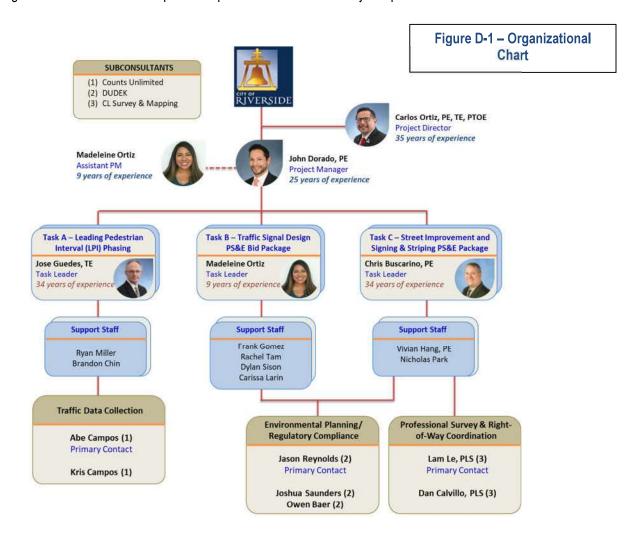
# EXHIBIT "C" KEY PERSONNEL

#### **SECTION D: COMPANY PERSONNEL**

#### D.1 Project Team Organization

Mobilizing appropriate staff quickly is essential to smooth performance of this important project for the City of Riverside. This requires a management approach that emphasizes streamlined communication and quality control. As a partner to the City, the ADVANTEC Team will commit to the delivery of this project within time and budget. We recognize City staff has high expectations for capability and performance. Our team brings together all of the skills and expertise required to ensure satisfactory completion of all elements of the Citywide Leading Pedestrian Interval (LPI) Signal Timing Implementation and Engineering Design Plan Preparation Services Project. The ADVANTEC Team has impeccable experience in the planning, design, construction, operations, maintenance, and management of various multi-modal traffic engineering projects. Our team brings together all of the skills and expertise required to ensure satisfactory completion of all elements under this contract. All staff members proposed are without long-range commitments which would interfere with the timely completion of the associated tasks.

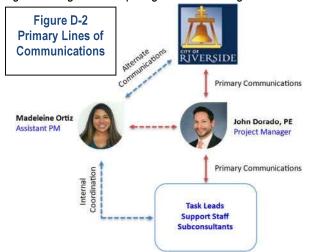
**Our organizational chart**, as shown on **Figure D-1**, illustrates the proposed organizational structure of our project team. Our team brings together all of the skills and expertise required to ensure satisfactory completion of all elements of the RFP.





Our **Project Manager** will be **Mr. John Dorado**, **PE.** Mr. Dorado brings his in-depth knowledge and experience of various traffic analyses, traffic planning, traffic engineering and design, and ITS planning and design for multiple agencies including construction

support services. During his 25 years of experience, Mr. Dorado has managed various traffic engineering projects for various agencies in southern California. Mr. Dorado also served as the project manager for the City of Norwalk Pioneer Boulevard HSIP Traffic Signal & Communications Improvements, Roadway Improvements, and Signal Synchronization Projects, City of Desert Hot Springs HSIP Pedestrian Signal Safety Enhancements, and City of Huntington Beach Signing and Striping Projects, which all entailed similar improvements as the ones indicated in the RFP and grant application. Mr. Carlos Ortiz, PE, TE, PTOE, will serve as our Project Director and as the CEO of the company, he will commit our resources to deliver the project on time and within budget. Any changes to key personnel will not be made without the written authorization from the City. Ms. Madeleine Ortiz will serve as Assistant Project Manager and Task Leader and will assist with internal coordination with Key Personnel and Support Staff.



**Figure D-2** illustrates the proposed lines of communication between the City's Project Manager/Team and our project manager, John Dorado. He will coordinate directly with the City Staff and with our key personnel and support staff. If our project manager is not available, the City's secondary point of contact will be **Madeleine Ortiz**. Providing an additional line of communication provides crucial support and coordination to ensure the smooth execution of project tasks and effective communication with the City.

#### D.2 Team Experience

The ADVANTEC Team brings a group of highly specialized personnel with a defined work history on previous similar traffic and HSIP projects. Our team of experts will provide the appropriate technical expertise as required for this project. ADVANTEC's proposed project team is committed to providing responsive services to the City of Riverside. The proposed key team members are intended to serve in their respective roles throughout the duration of the agreement. ADVANTEC has proposed a local team comprised of professionals with *that has successfully worked together on similar traffic engineering projects*. Our team members are familiar with City of Riverside traffic signals and signal communication system, roadway system and are knowledgeable about the community.

Our Project Director will be Mr. Carlos Ortiz, PE, TE, PTOE. Mr. Ortiz has over 35 years of experience and has managed similar traffic analyses, traffic engineering, civil engineering, and ITS projects involving the planning, selection, design, and implementation of various traffic signal equipment upgrades, signing/striping improvements, roadway improvements, and ITS technologies. Our Project Director, Mr. Ortiz, will serve as the key point of contact with the City of Riverside. Any changes to key personnel will not be made without the written authorization from the City. Mr. John Dorado, PE will serve as our Project Manager. Mr. Dorado brings his in-depth knowledge and experience of various traffic analyses, traffic planning, traffic engineering and design, and ITS planning and design for multiple agencies including construction support services. With over 25 years of experience, Mr. Dorado has managed various transportation planning, traffic engineering, public works, and ITS projects for various agencies in southern California. Mr. Dorado also serves as the project manager for the Cities of Desert Hot Springs, La Habra, Oceanside, Palm Springs, Cathedral City, and Norwalk Projects with similar a scope of work. Ms. Madeleine Ortiz will serve as our Assistant Project Manager (secondary contact if John is unavailable), and Traffic Engineering PS&E Task Lead. Ms. Ortiz has over 9 years of experience in traffic planning and design and will assist Mr. Dorado throughout all phases of the project, QA/QC, and coordination efforts.

**Table D-1** summarizes key team members' resumes including their education, certifications, role and responsibilities, firm, and relevant experience. Our Task Leaders/Key Personnel are committed to serving the City of Riverside for the entire duration of this contract.



#### TABLE D-1: Identification and Responsibilities of Key Personnel



CARLOS ORTIZ, PE, TE, PTOE PROJECT DIRECTOR P: (949) 636-0646 Availability: 85%

#### **RELEVANT EXPERIENCE:**

- Signing and Striping
- Intersection Improvements
- Traffic Engineering
- Traffic Signal Systems
- **Active Transportation**
- Transportation Planning
- Transportation Safety Planning
- Traffic Signal Communications
- Intelligent Transportation Systems
- Signal Timing
- Signal Operations
- Bicycle and Pedestrian Facilities
- ADA Ramp Design
- **Project Coordination**
- **Project Management**
- **Construction Management**
- Public Works

Years of Experience: 35 Years with Firm: 8 Registration:

Civil Engineer, CA, C057535 Traffic Engineer, CA, 2025 Civil Engineer, AZ, 34333 PTOE, US, 426

Education:

B.S., Civil Engineering, California State Polytechnic University, Pomona

Professional Affiliations:

Past Board Member, ITE International Past Board Member, ITE Western District

TSMO Council Member, ITE

International

Board Member, ITS California

Partnership Chair, Southern Section

Chair, ITS California

#### PROJECT EXPERIENCE

The ADVANTEC Team recognizes that successful delivery of a high quality and successful contract will rely heavily on the leadership of our Project Director and our Project Manager. Mr. Carlos Ortiz, PE, TE, PTOE will serve as Project Director and possesses superior technical, management, and leadership skills. . Through his current projects, Mr. Ortiz is assisting agencies to understand the Connected Vehicles and Automated Vehicles, and Smart Cities infrastructure. Carlos has been an active member and leaders of various professional organizations. These positions have offered him access to information regarding funding for advanced ITS, Connected/Automated Vehicles, and Smart Cities related projects. Carlos' proven leadership continuity on projects directly translates into ADVANTEC's ability to be responsive and to deliver a highquality design. Quite simply, Carlos has finished every project he has initiated. It also means maintaining project momentum, quality of work product, continuity of decision-making and maintaining institutional knowledge of the project delivery process as it moves from planning inception to final design, to construction.

- Coachella Valley Association of Governments (CVAG) Regional Traffic Signal Synchronization Program Phases I and II.
- Desert Hot Springs, HSIP Cycle 9, Palm Drive Pedestrian Safety Improvements.
- Cathedral City HSIP Cycle 9 Traffic Signal Improvements
- La Habra HSIP Cycle 9 Traffic Signal Upgrades
- Palm Springs HSIP Cycle 8 Environmental, Traffic Signal Upgrades
- Norwalk Pioneer HSIP Cycle 8 Traffic Signal, ITS, and Fiber Optic Improvements, and Signal Synchronization
- Oceanside HSIP Cycle 9 Traffic Signal Upgrades



JOHN DORADO, PE PROJECT MANAGER P: (714) 904-0067 Availability: 85%

#### **RELEVANT EXPERIENCE:**

- Signing and Striping
- Traffic Engineering
- Traffic Signal Systems
- Transportation Planning
- Transportation Safety Planning
- Traffic Signal Communications
- Intelligent Transportation Systems

- **Project Management**

- Intersection Improvements
- Active Transportation

- Signal Timing
- Bicycle and Pedestrian Facilities
- **Project Coordination**

#### Years of Experience: 25 Years with Firm: 8 Registration:

Civil Engineer, CA, 74405 IMSA Certified Traffic Signal Technician Level I and Level II

#### **Education:**

B.S., Civil Engineering, California State University, Fullerton

#### **Professional Affiliations:**

Institute of Transportation Engineers (ITE), Member

RELEVANT PROJECT EXPERIENCE





#### CITY OF RIVERSIDE

## Citywide Leading Pedestrian Interval Signal Timing Implementation and Engineering Design Plan Preparation Services (HSIP Cycle 11)



Mr. John Dorado is a highly accomplished Senior Project Manager with an extensive background spanning more than 25 years in the field of Intelligent Transportation Systems (ITS) engineering. His expertise encompasses various areas, including planning and design, traffic engineering, and transportation planning. Throughout his distinguished career, Mr. Dorado has consistently demonstrated dedication and technical ability in managing complex projects. His proficiency extends to both the public and private sectors, where he brings a comprehensive understanding of diverse projects. Mr. Dorado has established a track record of success in project management. His commitment to ensuring on-time and on-budget project delivery sets him has resulted in dozens of successful project deliveries. Additionally, he possesses a proven ability to cultivate strong and positive client relations, further enhancing the overall success of his endeavors.

- Desert Hot Springs, HSIP Cycle 9, Palm Drive Pedestrian Safety Improvements.
- Cathedral City HSIP Cycle 9 Traffic Signal Improvements
- Palm Springs HSIP Cycle 8 Environmental, Traffic Signal Upgrades
- Norwalk Pioneer HSIP Cycle 8 Traffic Signal, ITS, Fiber Optic & Roadway Improvements, and Signal Synchronization
- Oceanside HSIP Cycle 9 Traffic Signal Upgrades
- La Habra HSIP Cycle 9 Traffic Signal Upgrades
   Norwalk's Firestone Boulevard (HSIP Cycle 7) Traffic Signal, ITS, and Fiber Optic Improvements, and Signal Synchronization



MADELEINE ORTIZ ASSISTANT PROJECT MANAGER/TASK LEAD P: (760) 783-7732 Availability: 65%

#### **RELEVANT EXPERIENCE:**

- Signing and Striping
- Intersection Improvements
- Traffic Engineering
- Traffic Signal Systems
- Active Transportation
- Transportation Planning
- Transportation Safety PlanningIntelligent Transportation Systems
- ➤ Bicycle and Pedestrian Facilities
- Project Coordination

Years of Experience: 9 Years with Firm: 6 Registration:

EIT, CA, 161349

IMSA Certified Traffic Signal

Technician Level I

Education:

B.S. Civil Engineering, University of California, Irvine

Professional Affiliations:

Institute of Transportation Engineers (ITE), Member

#### RELEVANT PROJECT EXPERIENCE

Ms. Madeleine Ortiz is a Project Engineer at ADVANTEC with 9 years of experience specializing in transportation, traffic engineering, and Intelligent Transportation Systems (ITS) projects. Her professional journey has been marked by a profound expertise in assisting in overseeing projects related to ITS, traffic signal design, signing and striping, traffic control, traffic signal synchronization, and various transportation studies. Notably, Ms. Ortiz has been instrumental in the successful delivery of numerous projects, showcasing her skills in the field. Ms. Ortiz brings a variety of experience in assisting with project management, internal coordination, and quality assurance/quality control (QA/QC). She has actively contributed to the effective management of multiple projects, demonstrating a keen ability to ensure timely and budget-friendly project deliveries.

- Desert Hot Springs, HSIP Cycle 9, Palm Drive Pedestrian Safety Improvements.
- Cathedral City HSIP Cycle 9 Traffic Signal Improvements
- Palm Springs HSIP Cycle 8 Environmental, Traffic Signal Upgrades
- Norwalk Pioneer HSIP Cycle 8 Traffic Signal, ITS, Fiber Optic & Roadway Improvements, and Signal Synchronization
- Oceanside HSIP Cycle 9 Traffic Signal Upgrades
- La Habra HSIP Cycle 9 Traffic Signal Upgrades
   Norwalk's Firestone Boulevard (HSIP Cycle 7) Traffic Signal, ITS, and Fiber Optic Improvements, and Signal Synchronization





#### CITY OF RIVERSIDE

### Citywide Leading Pedestrian Interval Signal Timing Implementation and Engineering Design Plan Preparation Services (HSIP Cycle 11)





JOSE GUEDES, TE TASK LEADER – LPI PHASING TASK LEAD P: (949) 278-8899

Availability: 65%

#### SIGNAL TIMING EXPERIENCE:

- Inter-agency signal synchronization / Signal Timing | Corridor/Network Synchro Model
- Adaptive Control Systems
- Before & After Studies
- Traffic signal and communication systems
- Advanced Traffic Control (ATC) | Advanced Traffic Management Systems (ATMS)

Years of Experience: 34 Years with Firm: 13 Registration:

Traffic Engineer, CA, 1861

**Education:** 

M.S. Transportation Engineering, University of California, Irvine

Professional Affiliations:

Institute of Transportation Engineers (ITE), Member

#### RELEVANT PROJECT EXPERIENCE

Jose has over 30 years of experience in intelligent transportation systems, traffic operations and traffic engineering, including 23 years conducting and managing traffic signal synchronization and ITS projects. Jose prepared an Evaluation Study to assist the City of Lancaster in selecting an ATCS, and to analyze the cost-effectiveness of deploying an ATCS at selected corridors. Jose also developed functional specifications, Concept of Operations and System Requirements, and assisted in preparation of request for proposal for Culver City's Adaptive Traffic Control System in 2016. He has managed 10 regional signal synchronization projects for OCTA.

- Menifee Newport Road Signal Timing and Synchronization Improvements
- CVAG Regional Traffic Signal Synchronization Program Phases I and II, Coachella Valley, Riverside County
- Norwalk Pioneer HSIP Cycle 8 Traffic Signal, ITS, Fiber Optic & Roadway Improvements, and Signal Synchronization
- Norwalk's Firestone Boulevard (HSIP Cycle 7) Traffic Signal, ITS, and Fiber Optic Improvements, and Signal Synchronization
- Los Alisos Boulevard Traffic Signal Synchronization Design-Build, OCTA Garden Grove Boulevard Traffic Signal Synchronization Design-Build, OCTA



CHRIS BUSCARINO, PE TASK LEADER – STREET IMPROVEMENTS P: (562) 665-3138

Availability: 85%

#### ITS EXPERIENCE:

- Project Management
- Civil Engineering
- Public Works Projects
- Roadway and Highway Engineering
- Transportation Planning (PSRs,& PRs)
- Grading and Drainage design
- ADA Curb Ramp
- > Resource Agency Coordination
- Active Transportation
- Alignment Studies
- Community Outreach

Years of Experience: 34 Years with Firm: 2 Registration:

Civil Engineer, CA, 54878

**Education:** 

B.S. Civil Engineering, CSU,

Long Beach

**Professional Affiliations:** 

American Public Works
Association (APWA), Member

#### **RELEVANT PROJECT EXPERIENCE**

Chris brings more than 34 years of experience delivering design documents for public works and transportation projects in California. A skilled project manager with hands-on approach, he works to make sure that projects meet all client objectives by coordinating with multiple disciplines, county and cities, utility owners, and other stakeholders to meet schedule and budget goals. Chris has successfully delivered highway and roadway design projects or projects involving roadway design including grading, drainage, retaining walls, geometric alternatives, geotechnical reports, drainage reports, structural and bridge design, landscaping, utility engineering, and right of way engineering leading multi discipline teams and subconsultants coordinating with multiple agencies and stakeholders. He also has extensive experience working for many Southern CA cities involving Caltrans for PID, PA/ED, and PS&E. Menifee - Newport Road Signal Timing and Synchronization Improvements

- On-Call Transportation Engineering, Riverside County
- Pourroy Road Widening PS&E, French Valley, Riverside County
- Highway 74/Mountain Ave Intersection Improvements PS&E, Riverside County
- Corona's HAWK Traffic Signal and ADA Ramp Design PS&E



#### CITY OF RIVERSIDE

#### Citywide Leading Pedestrian Interval Signal Timing Implementation and Engineering Design Plan Preparation Services (HSIP Cycle 11)



**Key Support Staff:** Besides our key personnel, selection of qualified local team members is a crucial towards ensuring this project's success, and we have selected a team of highly qualified and respected individuals with ITS and Communications Master Plans, ITS, Traffic Engineering, and Signal Operations experience to assist, including:

Name/ Years of Experience/ Assignment/ Availability



Frank Gomez Years of Experience: 11 Years with Firm: 6 Assignment: Support Staff Position with Firm : Associate

Engineer Availability: 75%

#### **Equivalent Expertise**

- Cathedral City HSIP Cycle 9 Traffic Signal Improvements
- La Habra HSIP Cycle 9 Traffic Signal Upgrades
- Palm Springs HSIP Cycle 8 Traffic Signal Upgrades
- Norwalk Pioneer HSIP Cycle 8 Traffic Signal Improvement/TSS
- Oceanside HSIP Cycle 9 Traffic Signal Upgrades



Nicholas Park EIT, CA, 155179 Years of Experience: 8 Years with Firm: 6

Assignment: Support Staff Position with Firm: Associate Engineer Availability: 75%

- Desert Hot Spring Pedestrian Safety Intersection Improvements, Desert Hot Springs, CA
- Culver City Unsignalized Intersections Improvements, Culver
- Huntington Beach Signing and Striping Improvement Plans, Huntington Beach, CA
- Thompson Creek Trail Crossing Project, Claremont, CA
- La Habra HSIP Cycle 9 Pedestrian Signal Upgrades, La Habra,



Rachel Tam EIT. CA. 174449 Years of Experience: 2.5 Years with Firm: 1

Assignment: Support Staff Position with Firm: Associate

Engineer Availability: 65%

- Coachella Valley Association of Governments (CVAG) Regional Traffic Signal Synchronization Program
- Monterey Park Adaptive Traffic Responsive Control Systems
- Norwalk Pioneer Boulevard HSIP Traffic Signal Improvements **Project**
- Norwalk Pioneer Boulevard HSIP Fiber Optic Communications **Design Project**
- Corona Citywide Traffic Signal Optimization Project



Dylan Sison EIT. CA. 164523 Years of Experience: 1 Years with Firm: 1

Assignment: Support Staff Position with Firm : Assistant

Engineer Availability: 70%

- Coachella Valley Association of Governments (CVAG) Regional Traffic Signal Synchronization Program
- Monterey Park Adaptive Traffic Responsive Control Systems **Project**
- Corona Citywide Traffic Signal Optimization Project



Rvan Miller

Years of Experience: 12 Years with Firm: 11

Assignment: Support Staff

Position with Firm : Project Engineer

Availability: 75%

Vivian Hang, PE

Years with Firm: 1

- CVAG Regional Traffic Signal Synchronization Program -Phases I and II, Coachella Valley
- Culver City Adaptive Traffic Control System and **Automated Performance Measures**
- City of Orange Katella Ave ITS Extension and TSS
- OCTA Garden Grove Blvd Traffic Signal Synchronization
- OCTA Los Alisos Blvd Traffic Signal Synchronization



Assignment: Support Staff Position with Firm : Project Engineer

Availability: 65%

Years of Experience: 6

- Riverside County Grand Avenue at Sangston Improvements Project
- Riverside County Pourroy Road Widening PS&E
- Corona HAWK Signal Design
- La Habra Harbor Boulevard at Arbolita Drive Safety Improvements Project





#### D<sub>1</sub>3 Subcontractors

We bring outstanding professional firms to support us on this project. We have worked on similar federally funded projects with our subconsultants. The following table summarizes our team, their roles, and contact information.

ADVANTEC PROJECT TEAM						
FIRM	FIRM ROLE	CONTACT INFORMATION	YEARS WORKING WITH ADVANTEC			
DUDEK 605 Third Street, Encinitas, CA 92024	Environmental Documentation (CEQA/NEPA)	Mr. Jason Reynolds   Practice Director Ph: 760-479-4108  <u>ireynolds@dudek.com</u>	8			
CL Survey & Mapping, Inc. 400 East Rincon Street, Suite 202, Corona, CA 92879	Topographic Survey and Right-of-Way Engineering	Mr. Lam Le, PLS   Land Surveyor Ph: 909-484-4200   lam@cl-survey.com	8			
Counts Unlimited, Inc. PO Box 1178 Corona, CA 92878	Traffic Data Collection	Mr. Abe Campos Ph: 951-268-6267   counts@countsunlimited.com	9			

Dudek will support us with Environmental Services – Dudek has one of California's largest, most experienced teams for California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) document preparation. Combining comprehensive analysis and evidence-based findings, Dudek applies practical CEQA/NEPA knowledge to comply with current laws and regulations, and help clients creatively solve regulatory challenges within financial and scheduling constraints. Dudek is supporting ADVANTEC for City of Oceanside HSIP Cycle 9 Project, the CVAG Regional Traffic Signal Synchronization Program, and the City of Cathedral City HSIP Cycle 9 Project.

CL Surveying & Mapping will provide survey for the raised median design. CL Surveying & Mapping is a Certified DBE, MBE and SBE Land Surveying Firm. Their teams of qualified and experienced licensed surveyors provide their clients the most cost efficient, professional and personalized services in the industry. Their staff are well versed and proficient in the preparation of legal descriptions and exhibit maps for easements and property descriptions. Their staff provides field and office survey services for construction staking of utilities, street construction and site developments. They are experts in the integration of field survey and record data with digital aerial mapping and orthophotography. They have supported ADVANTEC for County of Riverside's Grand Avenue at Sangston Drive, the City of Claremont's College/Green St Intersection Improvements project, and City of Corona's HAWK Traffic Signal and ADA Ramp Design project.

Counts Unlimited, Inc. specializes in traffic data collection, and has been serving Southern California for the past 29 years. Headquartered in Riverside, CA, with an experienced full-time staff of 15 employees, and a support staff of 25 employees, Counts Unlimited has teamed with ADVANTEC's staff for the last 12 years, providing traffic counts and travel time study data. They have supported ADVANTEC for the CVAG Regional Traffic Signal Synchronization Program, City of Norwalk's Imperial Highway ITS Project, and most recently on Monterey Park Adaptive Traffic Responsive Control Systems Project.

#### D.4 Quality Assurance (QA) / Quality Control (QC) Plan

The ADVANTEC Team's QA / QC Program is a continuous process used not just at project milestones, but also on a daily basis as work flows from desk to desk, discipline to discipline and consultant to client. Our manager and task leaders will oversee their staff on a daily basis. Mr. John Dorado will work with Ms. Madeleine Ortiz and Mr. Carlos Ortiz with the management and implementation of our QA/QC plan. A sampling of these policies and procedures is identified below.



#### ACTION TAKEN BY WRITTEN CONSENT IN LIEU OF THE ANNUAL MEETING OF SHAREHOLDERS & DIRECTORS

#### ADVANTEC CONSULTING ENGINEERS INC.

A CALIFORNIA CORPORATION

We, the undersigned, being the SHAREHOLDERS, of **ADVANTEC CONSULTING ENGINEERS INC.**, (the "Corporation"), held the meeting at 1200 Roosevelt, Irvine, CA 92620, on the 1<sup>st</sup> July 2022 at 11:00 in the morning of said day. We hereby consent to the adoption of the following recitals and resolutions by written consent pursuant to Section 307(b) of the California Corporation Code and the Bylaws of the Corporation.

#### ATTENDANCE OF SHAREHOLDERS

LEO K LEE CARLOS ORTIZ PAULINE YIP

#### ELECTION OF TEMPORARY CHARIMAN AND SECRETARY

The meeting was called to order by Mr. LEO LEE. On motion and by unanimous vote, Mr. LEO LEE was selected as Temporary Chairman and Temporary Secretary.

#### APPOINTMENT OF CHAIRMAN, CHIEF EXECUTIVE OFFICER AND SECRETARY

Upon motion duly made, seconded, and unanimously carried, it was,

**RESOLVED,** that the Shareholders hereby ratify, approve, and confirm the following actions effective 1<sup>ST</sup> JULY 2022:

**LEO LEE** is appointed as the CHAIRMAN and resigned Chief Executive Officer. Leo Lee demonstrates the legal authority of the signature to bind any project related documents of the Corporation and any financial documents of the Corporation.

**CARLOS A ORTIZ** is appointed as the CHIEF EXECUTIVE OFFICER and resigned Chief Operating Officer. Carlos A Ortiz demonstrates the legal authority of the signature to bind any project related documents of the Corporation.

**PAULINE YIP** is appointed as the CORPORATE SECRETARY and BOARD MEMBER. She demonstrates the legal authority of the signature to bind any project related documents of the Corporation.

#### RATIFICATION OF GENERAL CORPORATE TRANSACTIONS

WHEREAS, the members of the Board of Directors have reviewed those certain actions taken by the officers on behalf of the Corporation during the past fiscal year; and

WHEREAS, it has been deemed advisable and in the best interest of the Corporation for the Board to ratify said transaction and to approve those certain actions taken by the officers, on behalf of the Corporation.

**RESOLVED**, that the acts of the officers, taken on behalf of the Corporation during the past fiscal year, are and they hereby are ratified, approved and confirmed.

**RESOLVED FURTHER**, that the officers of the Corporation be and they hereby are authorized and directed to take such actions as may be appropriate or necessary to carry out the above resolutions and the transactions ratified above.

The above-described action was taken without a meeting pursuant to the written consent to the Board of Directors of the Corporation as evidenced by the signatures appearing below, and such consent is executed pursuant to the powers given to the Board of Directors in the Bylaws of the Corporation, effective on 1<sup>st</sup> July 2022.

Leo Lee, Chairman

Pauline Yip, Secretary