

AGREEMENT FOR CONSULTANT SERVICES BETWEEN

CITY OF TEMECULA AND MARK THOMAS AND COMPANY, INC.

PW19-02 I-15 CONGESTION RELIEF

THIS AGREEMENT is made and effective as of **September 10, 2019**, between the **City of Temecula**, a municipal corporation hereinafter referred to as "City"), and **Mark Thomas and Company, Inc.**, a **Corporation** (hereinafter referred to as "Consultant"). In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

1. TERM

This Agreement shall commence on **September 10, 2019**, and shall remain and continue in effect until tasks described herein are completed, unless sooner terminated pursuant to the provisions of this Agreement.

2. SERVICES

Consultant shall perform the services and tasks described and set forth in Exhibit A, Scope of Work attached hereto and incorporated herein as though set forth in full.

3. PERFORMANCE

Consultant shall at all time faithfully, competently and to the best of his or her ability, experience, and talent, perform all tasks described herein. Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing similar services as are required of Consultant hereunder in meeting its obligations under this Agreement.

4. PREVAILING WAGES

Pursuant to the provisions of Section 1773 of the Labor Code of the State of California, the City Council has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in this locality for each craft, classification, or type of workman needed to execute this Contractor from the Director of the Department of Industrial Relations. Copies may be obtained from the California Department of Industrial Relations Internet website at <http://www.dir.ca.gov>. Contractor shall provide a copy of prevailing wage rates to any staff or sub-contractor hired, and shall pay the adopted prevailing wage rates as a minimum. Contractor shall comply with the provisions of Sections 1720, 1725.5, 1771.1(a), 1773.8, 1775, 1776, 1777.5, 1777.6, and 1813 of the Labor Code. Pursuant to the provisions of 1775 of the Labor Code, Contractor shall forfeit to the City, as a penalty, the sum of \$200.00 for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the stipulated prevailing rates for any work done under this Agreement, by him or by any subcontractor under him, in violation of the provisions of the Agreement. This project, work, or service will be subject to compliance monitoring and enforcement by the Department of Industrial Relations (DIR) pursuant to Labor Code Section 1771.4.

5. REGISTRATION WITH THE DEPARTMENT OF INDUSTRIAL RELATIONS

Registration with the Department of Industrial Relations (DIR) is mandatory as a condition for bidding, providing certain services, and working on a public works project as specified in Labor Code Section 1771.1(a). Contractor and any subcontractors must be registered with the Department of Industrial Relations to be qualified to bid, or provide a proposal and/or time and material quote or be listed in a bid, proposal or quote, subject to the requirements of Public Contract Code Section 4104; or engage in the performance of any contract that is subject to Labor Code Section 1720 et seq., unless currently registered and qualified to perform public work pursuant to Labor Code Section 1725.5. Contractor and subcontractors will be required to provide proof of registration with the DIR. For more information regarding registration with the Department of Industrial Relations, refer to <http://www.dir.ca.gov/Public-Works/PublicWorks.html>

6. PAYMENT

a. The City agrees to pay Consultant monthly, in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B, Payment Rates and Schedule, attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. Any terms in Exhibit B, other than the payment rates and schedule of payment, are null and void. This amount shall not exceed **One Million One Thousand Five Hundred Sixty-Eight Dollars and No Cents (\$1,001,568.00)** for the total term of this agreement unless additional payment is approved as provided in this Agreement.

b. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City Manager . Consultant shall be compensated for any additional services in the amounts and in the manner as agreed to by City Manager and Consultant at the time City's written authorization is given to Consultant for the performance of said services.

c. Consultant will submit invoices monthly for actual services performed. Invoices shall be submitted between the first and fifteenth business day of each month, for services provided in the previous month. Payment shall be made within thirty (30) days of receipt of each invoice as to all non-disputed fees. If the City disputes any of Consultant fees, it shall give written notice to Consultant within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. For all reimbursements authorized by this Agreement Consultant shall provide receipts on all reimbursable expenses in excess of fifty dollars (\$50) in such form as approved by the Director of Finance.

7. SUSPENSION OR TERMINATION OF AGREEMENT WITHOUT CAUSE

a. The City may at any time, for any reason, with or without cause, suspend or terminate this Agreement, or any portion hereof, by serving upon the Consultant at least ten (10) days prior written notice. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City suspends or terminates a portion of this Agreement such suspension or termination shall not make void or invalidate the remainder of this Agreement.

b. In the event this Agreement is terminated pursuant to this Section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, provided that the work performed is of value to the City. Upon termination of the Agreement

pursuant to this Section, the Consultant will submit an invoice to the City, pursuant to Section entitled "PAYMENT" herein.

8. DEFAULT OF CONSULTANT

a. The Consultant failure to comply with the provisions of this Agreement shall constitute a default. In the event that Consultant is in default for cause under the terms of this Agreement, City shall have no obligation or duty to continue compensating Consultant for any work performed after the date of default and can terminate this Agreement immediately by written notice to the Consultant. If such failure by the Consultant to make progress in the performance of work hereunder arises out of causes beyond the Consultant's control, and without fault or negligence of the Consultant, it shall not be considered a default.

b. If the City Manager or his delegate determines that the Consultant is in default in the performance of any of the terms or conditions of this Agreement, it shall serve the Consultant with written notice of the default. The Consultant shall have ten (10) days after service upon it of said notice in which to cure the default by rendering a satisfactory performance. In the event that the Consultant fails to cure its default within such period of time, the City shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

9. OWNERSHIP OF DOCUMENTS

a. Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the representatives of City or its designees at reasonable times to such books and records, shall give City the right to examine and audit said books and records, shall permit City to make transcripts there from as necessary, and shall allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

b. Upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files containing data generated for the work, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the City and may be used, reused or otherwise disposed of by the City without the permission of the Consultant. With respect to computer files containing data generated for the work, Consultant shall make available to the City, upon reasonable written request by the City, the necessary computer software and hardware for purposes of accessing, compiling, transferring and printing computer files.

c. With respect to the design of public improvements, the Consultant shall not be liable for any injuries or property damage resulting from the reuse of the design at a location other than that specified in Exhibit A, without the written consent of the Consultant.

10. INDEMNIFICATION, HOLD HARMLESS, AND DUTY TO DEFEND

a. Indemnity for Design Professional Services. In the connection with its design professional services, Consultant shall hold harmless and indemnify City, and its elected officials, officers, employees, servants, designated volunteers, and those City agents serving as independent contractors in the role of City officials (collectively, "Indemnitees"), with respect to any and all claims, demands, damages, liabilities, losses, costs or expenses, including reimbursement of attorneys' fees and costs of defense (collectively, "Claims" hereinafter), including but not limited to Claims relating to death or injury to any person and injury to any property, which arise out of, pertain to, or relate in whole or in part to the negligence, recklessness, or willful misconduct of Consultant or any of its officers, employees, sub-contractors, or agents in the performance of its professional services under this Agreement.

b. Other Indemnities. In connection with any and all claims, demands, damages, liabilities, losses, costs or expenses, including attorneys' fees and costs of defense (collectively, "Damages" hereinafter) not covered by Paragraph 10.a. above, Consultant shall defend, hold harmless and indemnify the Indemnitees with respect to any and all Damages, including but not limited to, Damages relating to death or injury to any person and injury to any property, which arise out of, pertain to, or relate to acts or omissions of Consultant or any of its officers, employees, subcontractors, or agents in the performance of this Agreement, except for such loss or damage arising from the sole negligence or willful misconduct of the City, as determined by final arbitration or court decision or by the agreement of the parties. Consultant shall defend Indemnitees in any action or actions filed in connection with any such Damages with counsel of City's choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant duty to defend pursuant to this Section 10.b. shall apply independent of any prior, concurrent or subsequent misconduct, negligent acts, errors or omissions of Indemnitees."

11. INSURANCE REQUIREMENTS

Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

a. Minimum Scope of Insurance. Coverage shall be at least as broad as:

i. Insurance Services Office Commercial General Liability form No. CG 00 01 11 85 or 88.

ii. Insurance Services Office Business Auto Coverage form CA 00 01 06 92 covering Automobile Liability, code 1 (any auto). If the Consultant owns no automobiles, a non-owned auto endorsement to the General Liability policy described above is acceptable.

iii. Worker's Compensation insurance as required by the State of California and Employer's Liability Insurance. If the Consultant has no employees while performing under this Agreement, worker's compensation insurance is not required, but Consultant shall execute a declaration that it has no employees.

iv. Professional Liability Insurance shall be written on a policy form providing professional liability for the Consultant's profession.

b. Minimum Limits of Insurance. Consultant shall maintain limits no less than:

1. General Liability: One million (\$1,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

2. Automobile Liability: One million (\$1,000,000) per accident for bodily injury and property damage.

3. Worker's Compensation as required by the State of California; Employer's Liability: One million dollars (\$1,000,000) per accident for bodily injury or disease.

4. Professional Liability Coverage: One million (\$1,000,000) per claim and in aggregate.

c. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions shall not exceed Twenty Five Thousand Dollars and No Cents (\$25,000).

d. Other Insurance Provisions. The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1) The City of Temecula, the Temecula Community Services District, the Successor Agency to the Temecula Redevelopment Agency, their officers, officials, employees and volunteers are to be covered as insured's, as respects: liability arising out of activities performed by or on behalf of the Consultant's products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City of Temecula, the Temecula Community Services District, the Successor Agency to the Temecula Redevelopment Agency, their officers, officials, employees or volunteers.

2) For any claims related to this project, the Consultant insurance coverage shall be primary insurance as respects the City, the Temecula Community Services District, the Successor Agency to the Temecula Redevelopment Agency, their officers, officials, employees and volunteers. Any insurance or self-insured maintained by the City of Temecula, Temecula Community Services District, and/or the Successor Agency to the Temecula Redevelopment Agency, its officers, officials, employees or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

3) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City of Temecula, the Temecula Community Services District, and/or the Successor Agency to the Temecula Redevelopment Agency, their officers, officials, employees or volunteers.

4) The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5) Each insurance policy required by this agreement shall be endorsed to state: should the policy be canceled before the expiration date the issuing insurer will endeavor to mail thirty (30) days' prior written notice to the City.

6) If insurance coverage is canceled or, reduced in coverage or in limits the Consultant shall within two (2) business days of notice from insurer phone, fax, and/or notify the City via certified mail, return receipt requested of the changes to or cancellation of the policy.

e. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best rating of A:VII or better, unless otherwise acceptable to the City. Self insurance shall not be considered to comply with these insurance requirements.

f. Verification of Coverage. Consultant shall furnish the City with original endorsements effecting coverage required by this clause. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by the City. All endorsements are to be received and approved by the City before work commences. As an alternative to the City's forms, the Consultant's insurer may provide complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications.

12. INDEPENDENT CONTRACTOR

a. Consultant is and shall at all times remain as to the City a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, agents, or volunteers shall have control over the conduct of Consultant or any of Consultant's officers, employees, or agents except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees or agents are in any manner officers, employees or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation or liability whatever against City, or bind City in any manner.

b. No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

13. LEGAL RESPONSIBILITIES

The Consultant shall keep itself informed of all local, State and Federal ordinances, laws and regulations which in any manner affect those employed by it or in any way affect the performance of its service pursuant to this Agreement. The Consultant shall at all times observe and comply with all such ordinances, laws and regulations. The City, and its officers and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this section.

14. RELEASE OF INFORMATION

a. All information gained by Consultant in performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents or subcontractors, shall not without written authorization from the City Manager or unless requested by the City Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena.

b. Consultant shall promptly notify City should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery

request, court order or subpoena from any party regarding this Agreement and the work performed there under or with respect to any project or property located within the City. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Consultant. However, City's right to review any such response does not imply or mean the right by City to control, direct, or rewrite said response.

15. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by (i) personal service, (ii) delivery by a reputable document delivery service, such as but not limited to, Federal Express, that provides a receipt showing date and time of delivery, or (iii) mailing in the United States Mail, certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by Notice. Notice shall be effective upon delivery to the addresses specified below or on the third business day following deposit with the document delivery service or United States Mail as provided above.

Mailing Address: City of Temecula
Attn: City Manager
41000 Main Street
Temecula, CA 92590

To Consultant: Mark Thomas and Company, Inc.
Attn: Bo Burick, Project Manager
16795 Von Karman Avenue, Suite 240
Irvine, CA 92606

16. ASSIGNMENT

The Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the City. Upon termination of this Agreement, Consultant sole compensation shall be payment for actual services performed up to, and including, the date of termination or as may be otherwise agreed to in writing between the City Council and the Consultant.

17. LICENSES

At all times during the term of this Agreement, Consultant shall have in full force and effect, all licenses required of it by law for the performance of the services described in this Agreement.

18. GOVERNING LAW

The City and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court with geographic jurisdiction over the City of Temecula. In the event such litigation is filed by one party against the other to enforce its rights under this Agreement, the prevailing party, as determined by the Court's judgment, shall be entitled to reasonable attorney fees and litigation expenses for the relief granted.

19. PROHIBITED INTEREST

No officer, or employee of the City of Temecula that has participated in the development of this agreement or its approval shall have any financial interest, direct or indirect, in this Agreement, the proceeds thereof, the Consultant, or Consultant's sub-contractors for this project, during his/her tenure or for one year thereafter. The Consultant hereby warrants and represents to the City that no officer or employee of the City of Temecula that has participated in the development of this agreement or its approval has any interest, whether contractual, non-contractual, financial or otherwise, in this transaction, the proceeds thereof, or in the business of the Consultant or Consultant's sub-contractors on this project. Consultant further agrees to notify the City in the event any such interest is discovered whether or not such interest is prohibited by law or this Agreement.

20. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, understandings, representations and statements, oral or written, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

21. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant warrants and represents that he or she has the authority to execute this Agreement on behalf of the Consultant and has the authority to bind Consultant to the performance of its obligations hereunder. The City Manager is authorized to enter into an amendment on behalf of the City to make the following non-substantive modifications to the agreement: (a) name changes; (b) extension of time; (c) non-monetary changes in scope of work; (d) agreement termination.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

CITY OF TEMECULA

Mark Thomas and Company, Inc.

(Two Signatures of corporate officers required unless corporate documents authorize only one person to sign the agreement on behalf of the corporation.)

By: _____
Michael S. Naggar, Mayor

By: R.M. Brogan
Matt Brogan, Secretary

ATTEST:

By: _____
RANDI JOHL, CITY CLERK

By: Rob Himes
Rob Himes, President

APPROVED AS TO FORM:

By: _____
Peter M. Thorson, City Attorney

Consultant

Mark Thomas and Company, Inc.

Bo Burick, Project Manager

16795 Von Karman Avenue, Suite 240

Irvine, CA 92606

949-677-7348

bburick@markthomas.com

PM Initials: MB
Date: 8/28/19

EXHIBIT A

SCOPE OF WORK

Mark Thomas will environmentally clear and design the improvements required to construct a northbound (NB) auxiliary lane along I-15 between the Temecula Parkway on-ramp and Rancho California Road off-ramp in the City of Temecula, a distance of 2,800 feet. Project improvements include:

- Mainline widening to provide (1) 12-foot auxiliary lane and (1) 10-foot outside shoulder in the NB direction;
- Sub-Horizontal Ground Anchor Wall under the Santiago Road Overcrossing;
- Drainage modifications; and
- Highway planting and irrigation improvements.

TASK 1. PROJECT MANAGEMENT

This task will include general project administration and management. It is assumed the project final design will take 18 months to complete starting in August 2019 and issuance of a Caltrans Encroachment Permit in February 2021.

Task 1.1. General Project Management

This task will include ongoing project management activities, including coordinating subconsultant activities and submittals. This task will also include obtaining the Caltrans encroachment permit for field investigations as necessary. Mark Thomas will organize and maintain project files and records to track correspondence, contractual matters, data requests, transmittals and other project data. Mark Thomas will prepare monthly invoices including a monthly progress report which will be included as part of the monthly invoice package.

Task 1.2. Project Coordination

Mark Thomas will coordinate design activities with consultant team members and stakeholders through regular communication via telephone calls, emails and other correspondence. Stakeholder coordination will include Caltrans, utility owners, and potentially other individuals. Mark Thomas will attend (either in person or via conference call) 30 minute bi-weekly check-in meetings with the City and will prepare and distribute conversation minutes and action items list as necessary. It is assumed these meetings will begin at the start of the project (August 2019) and continue until February 2021 when the Caltrans Encroachment Permit is issued.

Task 1.3. Meetings

Mark Thomas will lead ten (10) Project Development Team (PDT) meetings. PDT meetings will include representatives from the City, Caltrans, and other stakeholders as appropriate and as directed by the City. This task includes preparation of agendas, meeting minutes, log of action items, data request log, and design decision log. The project Critical Path Method (CPM) schedule identified below will be distributed and reviewed during PDT meetings.

Task 1.4. Project Schedule

Mark Thomas will prepare, update, maintain and distribute a CPM schedule on a monthly basis. The project schedule will include design activities, major milestones, quality control activities and agency review times. Mark Thomas will submit an updated electronic progress schedule on a monthly basis. Mark Thomas will notify the City of impacts that may affect schedule milestones in a timely manner. The initial project schedule will be prepared for and approved by the City at the outset of the project.

Task 1.5. Project Management Plan

Mark Thomas will prepare and distribute a Project Management Plan (PMP) consistent with Caltrans policies. The PMP will be prepared within one month of the start of the project and will be reviewed at a PDT meeting. Mark Thomas will update the plan on a quarterly basis in conjunction with City staff.

Task 1.6. Quality Assurance/Quality Control

Mark Thomas will perform quality control in accordance with our Quality Management Manual during the life of the project. All Mark Thomas team members will adhere to the established processes included in the plan. The plan will include conducting quality control reviews and checks of submittals prior to submitting to the City and Caltrans. This scope assumes that quality reviews will be performed on draft and final engineering reports and as part of the 35% PS&E, 95% PS&E, 100% PS&E and final bid set documents.

DELIVERABLES

- Monthly Project Progress Reports/Invoices (up to 18)
- PDT and other Meeting Agendas, Minutes and Action Item Lists, Data Request Log, Design Decision Log (up to 10 meetings)
- CPM Schedule, updated monthly (up to 16)

TASK 2. SURVEY, RIGHT OF WAY & UTILITIES

Task 2.1. Data Gathering

Mark Thomas will collect and review available data and reference materials pertinent to the project, including but not limited to record drawings, utility maps and right of way

documents. Mark Thomas will prepare a list of materials requested and collected, including date of request, agency and materials received with date. Data gathering will include existing utility facility request letters. It is assumed no utility relocations will be required as a part of this project.

Task 2.2. Survey

Overview: Towill shall perform survey control work and engineering surveys necessary to produce the mapping for final design. Towill will obtain record of surveys, topographic data, aerial mapping, and maps and plans of major utilities and proposed utilities within the Project area. Towill shall prepare an aerial topographic survey at 1"=40' scale for the project design and shall supplement the aerial mapping with field surveys and cross sections.

Control Survey: Towill will establish and target approximately eight (8) horizontal and vertical ground control points necessary for photogrammetric mapping. Each point will be set with a semi-permanent monument, such as rebar with a cap, PK nail with a washer, survey spike, 1-1/8" brass disk, or equivalent. On paved surfaces, control targets will be painted with white latex paint. Cloth (biodegradable) targets will be used on unpaved surfaces. It is assumed that Towill will not be required to remove control targets following acquisition of the aerial photography. Additional Project Control points will be set at this time for use by the project team throughout the duration of the project.

A combination of global positioning system (GPS) technology and "conventional" land surveying equipment and techniques (traversing using a total station instrument and differential leveling using an automatic or digital level) will be employed to establish horizontal and vertical control. For this project, Towill will establish horizontal coordinates referenced to the California Coordinate System of 1983 (CCS83, Epoch 2010), Zone 6 and elevations referenced to the North American Vertical Datum of 1988, unless other datums are specified prior to the commencement of the project.

Prepare Caltrans Compliant ABC Aerial LiDAR & Photogrammetric Mapping: Towill will acquire airborne LiDAR data of the site using our Optech Orion M-300 LiDAR sensor mounted in a helicopter. The system is capable of operating with a pulse rate at up to 300 kHz with as many as 4 returns collected from each pulse. These features typically allow the LiDAR data collected to penetrate vegetation.

The flight parameters for this project have been designed so that each flight swath will collect approximately 10 points per meter². Towill have also designed the project with greater than 50% sidelap between adjacent flight lines. This will enable collection of approximately 20 points per square meter throughout the project area.

Aerial photography of the site will be acquired using a PHASEONE IXU-RS-1000 100 mega-pixel medium-format digital camera simultaneous to the LiDAR data acquisition. The imagery will have 60% forward overlap along each flight line. Since the footprint of

the PHASEONE imagery is larger than the LiDAR swath, the photography typically has greater sidelap than the LiDAR swaths overlap.

The LiDAR data will be processed to provide a point cloud referenced to the project datums described under Task 1 and tiled for ease of use. The LiDAR data will be classified to separate points that form the bare ground surface from the points falling on other surfaces, such as vegetation or structures, using a variety of automated and manual classification tools. The points for the ground surface will then be processed through a keypointing algorithm that will identify the points needed to form the final ground surface terrain model within both horizontal and vertical tolerances. Towill anticipates that the tolerances used for this project will be that the keypoints are no further than 10 feet apart horizontally and that changes to the final terrain surface created by the elimination of ground points is no greater than ¼ foot (0.25 feet). The keypoints will be extracted from the LiDAR data tiles and placed in a MicroStation design file for incorporation into the final DTM surface for the project.

Upon completion of the ground control survey and aerial LiDAR and imagery, Towill will perform an analytical aerotriangulation on the aerial imagery. The inputs for the aerotriangulation process will be the AGPS/IMU data computed during the LiDAR data processing (since the data are collected simultaneously) and the "events" associated with each exposure, and the ground control points established under Task 1.

Planimetric data will be collected using a softcopy workstation interfaced directly with a CAD workstation. Planimetric features – such as buildings, roads, fences, vegetation, and the like – will be digitized at elevations that provide the best horizontal accuracy (which may or may not be at ground level). Planimetric features digitized will correspond to Caltrans' mapping specifications.

The keypoints created from the LiDAR data will be the primary source of topographic data for the project. Where needed due to sharp breaks in the terrain, breaklines will be digitized to model the terrain. The elevations of these breaklines will be verified to the LiDAR data and modified as needed to form a uniform terrain surface. Contours will be generated with a two-foot interval from the digital terrain model (DTM) formed from these data and merged with the planimetric features.

The final map data will be delivered in a MicroStation design file that complies with Caltrans' standards. The file will contain a horizontal coordinate grid, surveyed ground control, and appropriate notes.

Towill will prepare color digital orthophotography of the project area at a scale of 1" = 50' with a pixel ground resolution of 0.25-foot (200 pixels per inch). The orthophoto limits will extend 150 feet beyond the topographic mapping limits. In accordance with standard mapping practice, images will be rectified at ground level. Therefore, the top of above-ground features (rooftops, tops of trees, etc.) may not necessarily appear in their correct horizontal positions. The digital orthophoto will be georeferenced to the project horizontal datum for use with MicroStation.

ABC Processing & Supplemental Survey: Towill will provide supplemental surveys to locate on-site features that may not be adequately located/represent from the LiDAR and photogrammetric mapping. Surveys under this Task may include but is not limited to pavement elevations at tie locations, clearances at critical site features, utilities, bridge/overpass structures, features obscured from view in the aerial imagery, MH dips, etc. For the purpose of this scope of work, Towill is assuming 2-days of field work for a 2-person crew. Office personnel will also be required to merge this information with the photogrammetric map document.

All deliverables will be prepared and submitted in accordance with the Caltrans ABC process for photogrammetric Mapping.

- Part A Submittal: Flight and Control Plan for Caltrans Approval Proposed Schedule Sheet Layout for Caltrans Approval
- Part B Submittal: Photo Control Survey Results for Caltrans Approval Aerotriangulation Report for Caltrans Approval Two (2) sets of color contact prints with control and mapping limits annotated on one set.
- Part C Submittal: Original film to Caltrans Office of Photogrammetry. Digital map files and orthophotography on CD or DVD, formatted to Caltrans standards. One (1) hardcopy print of the full set of photo index sheets. Digital copy of the photo index in PDF format to Caltrans Office of Photogrammetry.

Task 2.3. Utility Coordination/Potholing

Mark Thomas will obtain utility mapping from utility companies and local agencies and prepare a utility base map. Mark Thomas will follow the Caltrans Utility Coordination Process (Caltrans Utility A-B-C Process). Based upon an examination of available record data and field inspection, it is assumed there will be no utility involvements and they will be protected in place. If it is determined that potholing of existing utilities is necessary to confirm the protect in place assumption, Mark Thomas will have underground exploratory potholing conducted to verify locations of existing utility facilities. Potholes will be collected at tie in points and at locations of possible conflict with existing utilities to remain in place. This scope of work assumes a total of two (2) pothole locations. Pothole locations will be field surveyed. Pothole information shall be added to record utility mapping and a base utility map will be prepared and submitted to the city and other utility companies as necessary. The exploratory potholing will be conducted in compliance with Caltrans policy on High Priority Utilities. Potholes will be collected at tie in points and at locations of possible conflict with existing utilities to remain in place.

DELIVERABLES

- Existing Utility/Topography Base Map

TASK 3. CALTRANS PEER DOCUMENTATION

This scope assumes that Caltrans project approvals will be achieved using the Caltrans Streamlined Permit Engineering Evaluation Report (PEER) process. Mark Thomas will lead this effort for the City and will help obtain a Caltrans construction encroachment permit for improvements within State right of way. Tasks are as follows:

Task 3.1. Caltrans PEER Process

Mark Thomas will coordinate with the City and Caltrans to formalize PEER approval through preparation of the PEER form and by compiling existing supporting information. Caltrans will review and will provide conditional approval of the PEER, providing project initiation and project approval clearance for the project. Upon completion of the PS&E, Mark Thomas will resubmit the PEER document in order to obtain final project approval which enables the issuance of a construction encroachment permit. Mark Thomas will prepare a signature ready construction encroachment permit application to be submitted with the final PEER document.

Task 3.2. Traffic Operations Analysis Report

Fehr & Peers will prepare a Caltrans standard Traffic Operations Analysis Report (TOAR) for use in PEER documentation and approval. The following study locations will be included in the operations analysis:

- I-15 Northbound On-Ramp Merge from Temecula Parkway
- I-15 Northbound Mainline between Temecula Parkway and Rancho California Road
- I-15 Northbound Diverge to Rancho California Road

Data Collection: Fehr & Peers will utilize Caltrans PeMS data to estimate northbound mainline traffic volumes and collect AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak period ramp counts at the following ramp intersections. Counts will include both vehicle and heavy vehicle counts at:

- Northbound I-15 Ramps at Temecula Parkway
- Northbound I-15 Ramps at Rancho California Road

Collision Summary: Fehr & Peers will prepare a collision summary based on Caltrans TASAS data for the most recent available three-year period for I-15 in the study area.

Analysis Scenario: This scope assumes that a No Build and one (1) Build Alternative will be evaluated in the PA/ ED phase. The analysis scenario includes:

- Existing Conditions
- Opening Year (2025 assumed) Conditions – No Build Alternative
- Opening Year (2025 assumed) Conditions – Build Alternative
- Design Year (2045 assumed) Conditions – No Build Alternative
- Design Year (2045 assumed) Conditions – Build Alternative
- Opening and Design Years will be determined by Caltrans and City

Traffic Forecasting Model Development: Fehr & Peers will apply the most recent version of the RIVTAM travel demand forecasting (TDF) model to develop future 2045 AM and PM peak hour traffic forecasts. The land use and roadway improvements assumptions contained in the TDF model will be reviewed prior to developing the traffic forecasts. Forecasts will be prepared for the I-15 mainline and ramps.

Since this is an operational improvement, the project is not expected to induce travel along the corridor. As such, the Year 2045 peak hour traffic forecasts for the No Build and Build Alternatives will be identical. Year 2025 forecasts will be developed using linear interpolation of traffic volumes between the base year and the future year model runs.

Traffic Operations Analysis Report: Fehr & Peers will analyze the study locations under AM and PM peak hour conditions using our proprietary spreadsheet application that is consistent with methodologies outlined in the Highway Capacity Manual (HCM). Density and level of service will be summarized for each study location using the merge, diverge, or weave analysis techniques as required by the analysis scenario. Traffic operations analysis will be conducted under existing, opening year, and design year conditions for the analysis scenarios identified above. Fehr & Peers will prepare the Traffic Operations Analysis Report summarizing the results and findings.

Task 3.3. Design Standard Decision Document

Mark Thomas shall prepare a Design Standard Decision Document (DSDD) for improvements not meeting Caltrans standards within Caltrans right of way. This scope assumes up to three (3) non-standard features. Mark Thomas will prepare and submit the DSDD with the 95% design submittal to Caltrans. Design exceptions within Caltrans right of way will be documented according to Caltrans format and requirements.

DELIVERABLES

- Traffic Operations Analysis Report
- Signature Ready Caltrans PEER Document
- Signature Ready Caltrans Encroachment Permit Application
- Design Standard Decision Document

Task 4. ENGINEERING REPORTS

The Mark Thomas Team will prepare and coordinate various engineering reports to support the design of the project as outlined in the tasks below.

Task 4.1. Geotechnical Investigation & Design

EMI will prepare the following reports per Caltrans guidelines:

Structure Preliminary Geotechnical Report/Foundation Report: EMI will prepare a Structure Preliminary Geotechnical Report (SPGR)/Foundation Report (FR) for the ground anchor wall and the adjoining cantilevered walls. EMI will provide preliminary

geotechnical information to assist structural designers in the Type Selection process for the Ground Anchor Wall and the adjoining cantilevered walls.

District Preliminary Geotechnical Report/Geotechnical Design Report: EMI will prepare a District Preliminary Geotechnical Report (DPGR) and Geotechnical Design Report documenting the site geotechnical and geologic conditions.

Preliminary Materials Report/Materials Report: EMI will prepare a Preliminary Materials Report (PMR) and Materials Report to provide pavement structural sections and alternatives, and corrosion potential of on-site soils and culvert materials requirements.

Task 4.2. Drainage Report

Mark Thomas will prepare a roadway drainage report as required by Caltrans District 8 for the proposed improvements. The report will include a delineation of existing and proposed drainage shed areas, calculations for proposed drainage conditions (based upon the Rational Method), and calculations for proposed channel/pipe sizes, inlet locations, and outfall areas based upon proposed modifications to the existing drainage system within Caltrans right of way. The drainage report will confirm that no upgrade to exist system is required based on the proposed project. For this project, it is assumed that there will be no upgrading of the existing system, just replace and relocate when necessary, which will be documented in the drainage report.

This scope assumes that design storm tailwater Hydraulic Grade Line (HGL) information will be available from Caltrans for the purposes of calculating required changes to the drainage system.

Draft and final drainage report (including calculations) will be submitted with the 95% and 100% submittals respectively. Mark Thomas will address and respond to comments received on each submittal. This scope assumes no drainage system modification and or upgrade of drainage system will be required beyond those facilities directly affected by the proposed improvements. In addition, exist drainage systems affected by the proposed project, will be relocated as required but will not be modified or upgraded any further than just the relocation.

Task 4.3. Storm Water Data Report

Mark Thomas will prepare a Storm Water Data Report (SWDR) in conformance with Caltrans SWDR guidelines to address post-construction storm water quantity and quality. Mark Thomas will prepare a draft and final SWDR. The SWDR will include a project risk level determination, storm water treatment sizing calculations including consideration of hydromodification, determination of disturbed soil area, impervious area calculation, and design checklists.

Task 4.4. Type Selection Report

Mark Thomas will develop a Type Selection Report. The report will discuss the proposed Sub-Horizontal Ground Anchor (SHGA) wall under the Santiago Road Overcrossing

necessary for the mainline widening. The report will identify constructability issues and foundation conflicts. The report will address current maintenance work recommendations and future maintenance needs, and it will also identify utility conflicts, environmental constraints and aesthetic options. The Type Selection Report will be submitted to Caltrans OSFP for review. A Type Selection meeting conference call will be held with Caltrans OSFP staff. Comments from the meeting will be incorporated into the proposed structure type and Caltrans will provide formal approval.

DELIVERABLES

- Draft and Final Drainage Report
- Draft and Final Storm Water Data Report
- Draft and Final Geotechnical Reports
- Draft and Final Type Selection Report

TASK 5. PLANS, SPECIFICATIONS & ESTIMATE

Mark Thomas shall develop the required documents to successfully design, gain approval for, bid and construct the project improvements. This task will include development of the project plans, specifications, bid item schedule and construction cost estimates at the following stages of project development:

- 35% (preliminary design)
- 95% (checked detailed design)
- 100% (draft final bid documents)
- Final (construction ready bid documents)

PS&E will be prepared consistent with the Caltrans Project Development Procedures Manual, Drafting Standards, and Highway Design Manual as well as design criteria and other codes as appropriate for a locally sponsored, funded encroachment permit project utilizing the Caltrans Streamlined PEER Process as described. At each development stage of the PS&E, plans will include the preparation of the following roadway, landscape, structure and electrical engineering plans. The following sheets are anticipated:

- Title (1)
- Typical Sections (1)
- Layouts (3)
- Profile/Superelevation (5)
- Construction Details (2)
- Drainage Layouts (3)
- Drainage Profiles (4)
- Drainage Details (4)
- Drainage Quantities (3)
- Utility Plan (3)
- Stage Construction & Traffic Handling (6)

- Construction Area Signs (1)
- Sign Plans (4)
- Sign Quantities (1)
- Pavement Delineation (3)
- Pavement Delineation Quantities (1)
- Electrical Plans and Details (2)
- Landscape and Irrigation Plans (10)
- Summary of Quantities (4)
- Structure Plans (8)
- Total Plans: 69

At each stage of plan development, Mark Thomas will review, respond and resolve to all comments received from the City, Caltrans and other approving/commenting agencies. Each design submittal shall incorporate comments received on the previous submittal. Mark Thomas will perform an internal, interdisciplinary QA/QC plan check and review as part of each submittal stage.

Task 5.1. 35% Plan

35% Plans will be prepared in general conformance with Caltrans drafting and design standards as is appropriate for 35% design. 35% plans will be prepared to confirm project geometrics and major design features. The 35% plan set will be prepared to facilitate a geometric workshop and will not be a formal submittal. The 35% plan set will include the following:

- Typical cross sections
- Layouts
- Profiles (as necessary)
- Pavement delineation

Task 5.2. 95% PS&E (Unchecked Detailed Design)

95% PS&E will be prepared as a detailed, complete set of plans, technical specifications and estimate. Mark Thomas will provide responses to comments and attend a comment review/resolution meeting at the outset of the 95% PS&E task. Key assumptions for plans sets are highlighted below.

Structure Plans: Mark Thomas will lead the preparation of the structure plans. To accommodate the new 12-ft wide auxiliary lane, a Sub-Horizontal Ground Anchor (SHGA) wall will be constructed in front of the existing bridge abutment. The wall tie-back anchors will be located to avoid conflict with the existing piles. Caltrans Standard Type 1 walls will be constructed as transitions to the SHGA wall.

Drainage Plans: Mark Thomas will lead the preparation of the drainage plans. Culverts, ditches, inlets and other drainage features will be shown on the drainage plans. Drainage systems will be numbered with letters assigned to individual

drainage items. Drainage profiles will be on separate sheets, followed by drainage details and quantities. Concrete drainage ditches are located at the top of the adjacent slopes. Mainline widening will necessitate realignment and reconstruction of the sections of the drainage system where new slopes are in conflict.

Stage Construction/Traffic Handling Plans: Mark Thomas will lead the preparation Stage Construction/Traffic handling plans. These plans, which will include temporary signing, assume that existing pavement grades will be maintained.

Electrical/Lighting Plans: Fehr & Peers will lead the preparation of Traffic Operations Systems (TOS) Plans for modification to the existing traffic monitoring station south of Santiago Road. Highway lighting PS&E will not be prepared as it is assumed that the existing electroliers will be protected in place.

Highway Planting & Irrigation: Existing landscaping and ground cover will be preserved to the greatest extent practicable. Replacement highway planting will be implemented, as necessary.

95% Specifications, Quantities and Estimate: Mark Thomas will prepare 95% technical specifications. Technical specifications shall be prepared as special provisions using Caltrans 2018 Standard Specifications format and will be draft specifications at the 95% submittal stage. Using Caltrans standard bid items and measurement quantities, Mark Thomas shall quantify the required bid item quantities for elements of work shown on the 95% plans and as specified in the 95% special provisions. Unit bid price estimates will be based upon appropriate recently published bid prices as posted on Caltrans website and other recent, relevant local agency project bids. A Caltrans Basic Engineering Estimating System (BEES) listing will be included with appropriate SSPs referenced adjacent to the contract item. The BEES listing will be update with each subsequent PS&E submittal.

Task 5.3. 100% PS&E (Draft Final Bid Documents)

100% PS&E will be prepared as draft final set of bid ready, complete bid documents. Mark Thomas shall provide responses to comments and attend a comment review/resolution meeting at the outset of the 100% PS&E task.

Task 5.4. Final Construction Documents

Task shall include updating the 100% plans, specifications and estimate, incorporating comments received. Mark Thomas shall verify the final bid quantities and perform independent spot checks of quantities based upon the 100% plans and specifications. Mark Thomas will update unit prices as appropriate. The final submittal will be a compliance submittal of the final bid ready documents and will be accompanied by a PS&E and RTL checklist.

Resident Engineer File: Following submittal of the final PS&E to Caltrans, Mark Thomas will prepare the Resident Engineer (RE) File and Survey File. The RE File will include a list of project contacts, memos to Resident Engineer, Quantity Calculations for use in releasing progress payments, utility agreements, permits, right of way contracts, and copies of relevant reports.

Survey File: The Survey File will include copies of all survey notes and calculations. Mark Thomas will prepare slope stake notes for slope staking. Control line traverses and ties to right of way lines will also be included.

Mark Thomas will submit general cross sections with the survey file.

DELIVERABLES

- 35% Plans
- 95% PS&E
- 100% PS&E
- Final PS&E

TASK 6. ENVIRONMENTAL DOCUMENT

ICF will lead the preparation of the environmental technical studies and Environmental Document for construction of the proposed improvements. The proposed project would be subject to the California Environmental Quality Act (CEQA) and will not be subject to National Environmental Policy Act (NEPA). It is assumed that the California Department of Transportation will be the CEQA lead agency. Upon completion of these studies, Caltrans will determine the appropriate CEQA action.

The proposed project would add one (1) auxiliary lane on Northbound I-15 connecting the Temecula Parkway on-ramp to the Rancho California Road off-ramp. The following assumptions have been made for the purposes of developing this scope of work and associated cost proposal. Should any of these assumptions prove inexact, then additional project development services will be scoped and subject to amendment to this agreement.

- The California Environmental Quality Act (CEQA) document will be Categorical Exemption (CE);
- Logical termini and independent utility will be determined to be appropriate for the project limits included in the RFP;
- The project will not increase capacity;
- The project will address one Build alternative;
- Focused protocol surveys for any species are not included;
- NEPA/404 integration process will not be required; and
- No public meetings/hearings will be conducted.

Task 6.1. Environmental Technical Studies

Preparation of all technical analyses and reports will follow local, state, and federal environmental guidelines, primarily consisting of the Caltrans Standard Environmental Reference (SER) website, Caltrans Project Development Procedures Manual, local and state CEQA Guidelines, and Federal Highway Administration (FHWA) Technical Advisory 6640.81 Guidance on Preparing and Processing Environmental and Section 4(f) Documents. The formats to be used for the technical studies will follow the guidance available on the Caltrans SER website as of the date that those studies are initiated.

For this scope of work, the technical studies for which a specific scope of work has been included have been assumed based on a review of existing project information and a preliminary review of the project site. If additional studies are identified during the environmental phase of the project a scope of work and cost will be submitted for approval prior to their initiation.

For each report the following submittals will be made.

- Draft Technical Study (electronically to City and Caltrans)
- Revised Draft Technical Study (electronically to City and Caltrans)
- Final Technical Study for approval (electronically to City and Caltrans)
- Final approved Technical Study for file (1 hardcopy to City and 2 to Caltrans)

To support the findings in the environmental document, the following environmental technical studies will be prepared:

- Noise Study Report
- Visual Impact Assessment Memorandum
- Air Quality Report
- Scoping Questionnaire for Water Quality Issues
- Paleontological Identification Report/Paleontological Evaluation Report
- Initial Site Assessment
- Jurisdictional Delineation Report
- Natural Environment Study (Minimal Impacts)
- Historic Property Survey Report (including an Archaeological Survey Report)
- MSHCP Consistency Compliance

The following assumptions have been made with regard to the technical studies and permits that are to be prepared.

Noise Study: ICF will prepare a Noise Study Report evaluating the noise impacts and potential mitigation measures, if any, associated with the proposed project. As the project is not anticipated to include Federal funding, but because Caltrans oversight is involved, the report will be prepared in accordance with procedures specified in the Caltrans Protocol for preparation of a CEQA-only Noise Study Report (NSR).

A field noise study will be performed to quantify and assess existing noise conditions at the potential noise-sensitive areas. It is estimated that short-term (10 to 15 minutes duration) sound-level data will be collected at up to twelve (12) representative noise-sensitive locations throughout the area. In addition, continuous 24-hour noise monitoring will be conducted at up to four (4) locations if secure measurement locations can be identified.

ICF will conduct traffic noise modeling related to the proposed project using the FHWA Traffic Noise Model (TNM) Version 2.5 and traffic data to be provided by the project traffic engineer. TNM will be used to model worst noise hour noise conditions at representative modeled receiver locations under existing conditions and design-year conditions with and without the proposed project. It is assumed that Caltrans will not require that traffic be counted lane by lane. If this is required, then a separate scope and cost will be provided for approval by the City prior to conducting this effort.

Traffic noise impacts of the proposed project will be assessed by determining if the proposed project is predicted to result in traffic noise levels under design-year conditions that result would in a substantial increase at noise-sensitive uses. Based on the understanding of the project design, substantial impacts are not anticipated. Therefore, it is assumed that no mitigation measures under CEQA would be necessary and none will be evaluated (i.e., no soundwalls will need to be considered). As such the findings of the NSR will be summarized in a CEQA summation memorandum in support of the environmental document. It should be noted that should the project design significantly change or result in the removal of shielding, additional scope and budget may be necessary. In addition, since the project is assumed to not be subject to NEPA, no Noise Abatement Decision Report (NADR) is assumed or included.

Visual Impact Assessment Memorandum: As determined by completing the Caltrans' Visual Impact Assessment Guide, a Visual Impact Analysis Memorandum (VIAM) will need to be prepared for the project based on the level of potential impact. The analysis will be performed using methods and protocol developed by the Federal Highway Administration (FHWA) and adopted by Caltrans. The analysis will define the project location and setting; describe existing visual resources, viewer groups, and viewer responses associate with the project; and evaluate potential visual impacts caused by the proposed project, including any proposed mitigation measures to reduce impacts. The VIAM will be used to support the environmental document.

A desktop review using Google Maps and Google Street View will be conducted to assess the existing visual resource conditions in the project area, for use in preparing the analysis. Therefore, a site visit will not be conducted.

It is assumed that no visual simulations will be included or required.

Air Quality Study: The air quality technical report will provide the following discussions and analyses:

Regulatory Setting and Existing Conditions. Summarize the existing federal, state, and local air quality regulatory environment as it affects the proposed project and describe the location of sensitive receptors in the project vicinity. Using data provided by the California Air Resources Board (CARB) and the South Coast Air Quality Management District (SCAQMD), characterize existing air quality conditions in the project area and explain how those conditions are affected by local climate and topography.

Evaluation of Construction Emissions. Quantify construction emissions to evaluate regional and localized mass emissions. Based on preliminary construction scheduling and phasing information, construction emissions will be quantified using the Road Construction Emissions Model (RCEM), then compared to SCAQMD thresholds to determine significance under CEQA.

Evaluation of Operations-Period Mass Emissions. Evaluate whether the project meets transportation conformity requirements by determining whether it is included, as currently defined, in the most recent Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) prepared by the Southern California Association of Governments (SCAG). Regional criteria pollutant emissions will be quantified using project-level VMT and EMFAC2017 emissions factors. Project-related criteria pollutant emissions will be compared to SCAQMD significance thresholds to determine significance under CEQA.

Localized Carbon Monoxide Hot Spot Analysis. Analyze the degree to which project-related traffic volumes have a potential to effect local carbon monoxide (CO) concentrations using the California Department of Transportation CO Hotspot Protocol. It is anticipated that the CO screening procedure will be appropriate, and that CALINE-4 dispersion modeling will not be required.

Localized PM2.5/PM10 Hot Spot Analysis. Analyze the degree to which project-related traffic volumes have a potential to affect local PM2.5 and PM10 concentrations. Based on our review of the proposed Project Description, this project does not appear to be a Project of Air Quality Concern (POAQC) as defined by EPA and FHWA. As such, this scope and cost assumes that a screening-level analysis that evaluates mobile-source and re-entrained dust emissions will be required by Caltrans to address PM2.5 and PM10.

Mobile Source Air Toxics. Evaluate proposed project-related mobile source air toxics (MSATs) emissions in accordance with FHWA interim guidance on how MSATs should be addressed. It is not assumed that extensive qualitative analyses would be required to address MSATs. If an extensive quantitative analysis is required for the project, then a scope and cost estimate would be provided for this additional effort, however, such an analysis is not anticipated.

Climate Change/Greenhouse Gas Emissions. A quantification of construction- and operational-period greenhouse gas (GHG) emissions associated with implementation of the proposed project will be conducted. Construction-period GHG emissions will be quantified using the Road Construction Emissions Model. Operations-period GHG emissions will be quantified using the projected change in project VMT and EMFAC2017 emissions factors. ICF will present a comparison of GHG emissions associated with the Build Alternative to the No-build Alternative to characterize effects of the proposed project on GHG emissions. The analysis of climate change also will incorporate the most recent guidance found on the Caltrans Standard Environmental Reference and Caltrans annotated outline.

Mitigation Measures. ICF will develop mitigation measures, where applicable, to address significant air quality impacts, if present.

Water Quality Assessment: The project site is located east of Murrieta Creek and north of Temecula Creek and Santa Margarita River, all of which are impaired water bodies. However, given that the project would increase the impervious surfaces associated with an existing roadway and would comply with the Caltrans MS4 Permit to implement post-construction BMPs, no significant water quality impacts are anticipated. ICF will prepare a Scoping Questionnaire for Water Quality Issues for the project based on the current Caltrans annotated outline for this document. The questionnaire will include responses to the questions included for Existing Conditions, Project Description and Impacts, and Temporary (Construction) Effects. It is assumed that no further water quality documentation, such as a Water Quality Assessment Report will be required given the limited scope of water quality impacts anticipated from the project's implementation. The water quality scoping questionnaire is anticipated to be completed via desktop research from available sources of information including topographic data, hydrologic characteristics of the site, and erosion potential, along with engineering information on the existing and proposed impervious surface areas and proposed best management practices required by the MS4 Permit.

The Stormwater Data Report will identify the total area of land disturbance; an estimate of the existing impervious surface area and the final proposed impervious surface area; as well as the intended operation-related Best Management Practices (BMPs) to include in the impact analysis to demonstrate that drainage and water quality during operation activities would not be adversely affected.

Paleontology (PIR/PER): PaleoSolutions will request an institutional records search from the Western Science Center (WSC) in Riverside County and the natural History Museum of Los Angeles County (LACM) to determine if previous fossil localities are known within or near the proposed project. Paleo Solutions will also review available online databases, literature, and geologic maps to determine the paleontological and geological context of the project area. The project area will be mapped onto the highest resolution geologic maps available. A windshield

reconnaissance survey will be conducted to check for any native sediments. If present, Paleo Solutions' will confirm the geologic units as mapped, record any new fossil localities, and re-evaluate previously recorded fossil localities, if any.

The results of the geologic map review, background research, and survey will be used to evaluate the significance of paleontological resources that may be impacted by Project construction and to perform a paleontology sensitivity analysis using Caltrans' tripartite system. Available construction plans and geotechnical reports will be reviewed to identify the locations and activities where excavations will potentially impact sensitive geologic units.

The results of the paleontological study will be compiled in a combined Paleontological Identification Report and Paleontological Evaluation Report (PIR/PER) that conforms to all requirements outlined in the Caltrans SER Volume 1, Chapter 8 (Paleontology).

If the PIR/PER recommends the preparation of a Paleontological Mitigation Plan (PMP), then a separate scope and cost will be submitted for approval by Mark Thomas and the City for prior to performing this effort.

Biological Studies: The project lies within the boundaries of the Western Riverside Multiple Species Habitat Conservation Plan (WRMSHCP/Plan) but is not within any survey areas (i.e., burrowing owl, narrow endemic plants, amphibian, mammal), core/linkage areas, or public and quasi-public (PQP) lands. The project does occur within portions of Criteria Cells 7079 and 7166; however, the freeway is not proposed for conservation and does not have any constraints in this regard. The project is also a covered activity under Section 7.3.5 of the Plan. ICF will conduct a literature search, perform field surveys, and prepare a Natural Environmental Study/Minimal Impact (NES/MI) report analyzing potential impacts to biological resources. The report will be prepared in accordance with Caltrans SER guidance and will conform to the Caltrans NES/MI annotated outline that is available at the time the NES/MI is initiated. The following tasks will be performed during the preparation of the reports.

Review of Project Information and Applicable Literature: A literature review will be conducted to identify special-status species known or reported from the project area. The literature review will include:

- 1) Special status species lists from the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS);
- 2) Database searches of current versions of the California Natural Diversity Database (CNDDB) and the Online Inventory of the California Native Plant Society (CNPS);
- 3) The WRMSHCP/Plan
- 4) Other available biological studies conducted in the vicinity of the project site

Field Evaluation for Biological Resource Constraints: After reviewing relevant information, the project area will be evaluated, with a thorough walkover covering all portions relevant to potential biological resource constraints. Detailed field notes will be compiled including conditions, visible disturbance factors, species, habitats, and general biological resources. The site will be evaluated regarding the presence, absence, or likelihood of occurrence for all special status species, habitats, or general biological resources posing a constraint to the project through applicable laws and regulations. Adjacent areas will also be briefly examined to provide context. The study area is assumed to be the proposed limits of disturbance plus a buffer ranging from 100 feet (aquatic resources) to 300 feet (special-status wildlife species). This task includes evaluations/determinations for bats and colonial nesting birds to extent that the Santiago Road overpass can be observed. A qualified biologist will look for any diagnostic sign or presence of suitable habitat (e.g., openings, hinges, weep holes, trees) within structures and trees.

Technical Report Preparation: A draft NES/MI will be developed based on results of the biological surveys and will describe:

- 1) The study methods used in identifying and assessing the biological resources at the project site, the personnel who conducted the studies, contacts made with agencies, and any limitations associated with the study;
- 2) The environmental setting including both the biological and physical setting at the project site;
- 3) The results, including special-status species present on the site, if any, and a discussion of impacts and mitigation, as necessary; and
- 4) The appropriate regulatory requirements and necessary permits, if any.

Focused protocol surveys are not anticipated or included, including rare plant surveys. Although not anticipated, if focused surveys are identified during the biological field reconnaissance, then this will be communicated immediately, and a scope and cost will be provided to Mark Thomas and the City for approval prior to conducting this work. It is assumed that no bat outflight or acoustic analysis will be required, and none is included.

It is further assumed that the project will be able to avoid all jurisdictional waters and that no permits (i.e., 404, 401, and 1602) will be required. If permits are required, then a scope and fee will be provided to Mark Thomas and the City for approval prior to conducting this work.

Jurisdictional Delineation: Based on a review of the study area, at least one drainage occurs just north of Santiago Road. For projects that may impact areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW, a formal jurisdictional delineation of potentially-jurisdictional drainage is required utilizing resource

agency standard delineation methods. ICF will delineate aquatic resources within the study area utilizing routine on-site methods. A pedestrian-based field survey of the study area will be conducted using sub-meter GPS accuracy to precisely delineate the boundaries of agency jurisdiction. The field delineation will be augmented through aerial photo review and GIS analysis. The study area will include the Project footprint plus a 100-foot buffer. For the delineation, ICF will utilize procedures and practices in the following publications and agency guidance documents: USACE Wetland Delineation Manual (1987); USACE Regional Supplement to the Wetland Delineation Manual, Arid West Region, Version 2.0 (2008); and USACE and Environmental Protection Agency's (EPA) Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* guidance document (2007) as well as standard practices to delineate CDFW lake and stream resources and associated riparian vegetation.

The field survey results will be compiled and presented in a Jurisdictional Delineation Report prepared for the Project that will identify and quantify the limits of USACE wetland and non-wetland waters of the U.S., RWQCB wetland and non-wetland waters of the State, CDFW stream features and associated riparian areas, and MSHCP Riparian/Riverine habitats within the study area boundaries, where present. It will also include figures and maps showing the location of potential jurisdictional resources and a photolog that documents site conditions of specific drainage features. The Jurisdictional Delineation Report will not quantify impacts to jurisdiction resources; rather, impacts will be quantified and included within the NES/MI. The purpose of excluding impacts from the Jurisdictional Delineation Report is to avoid revisiting a final JD document should the Project impact footprint change during subsequent design revisions. If impacts to jurisdictional resources will occur, then the project will submit a Preliminary Jurisdictional Determination (PJD) Form, which assumes the resources are jurisdictional; however, it is assumed for this scope of work that no impacts will occur to jurisdictional resources and no PJD Form will be prepared or submitted.

Historical Resources Compliance Report: The proposed project improvements will be subject to compliance with the California Environmental Quality Act.

A records search will be conducted at the appropriate Information Center of the California Historical Resources Information System; this records search will consult California's database of previous studies and previously recorded sites within the proposed project area and within a 0.5-mile radius, per Caltrans guidelines. Historic maps and photographs shall also be reviewed, if available. In addition, ICF will review the Caltrans historic bridge inventory. A Project Area Limits (PAL) map will be established in consultation with the City and Caltrans for obtaining Caltrans approval; the map will provide the survey boundaries for cultural resources to be evaluated during project studies. The PAL map will be based on

the total anticipated disturbance footprint associated with project activities (e.g., road widening/interchange construction, staging areas and other temporary construction easements, detours, drainage facilities, temporary construction activities, and parcels containing impacted structures, if any).

The Native American Heritage Commission will be contacted to request a review of the Sacred Lands File. No consultation with Native American tribes/groups is assumed or included as the project is not subject to Section 106 of National Historic Preservation Act and it is assumed that a CEQA CE will be appropriate for the project, thus eliminating the requirement for consultation under Assembly Bill 52

Following completion of the record search/review, a field survey of the PAL will be conducted for archaeological resources. It is assumed that Mark Thomas or the City will be responsible for obtaining access for conducting the surveys. This scope of work assumes that no archaeological sites will be identified in the APE and that no testing and/or evaluation will be required. It is anticipated that an Archaeological Survey Report (Finding of No Archaeological Resources Present) will be prepared and no additional documentation will be required. It is assumed that only a brief historical context will need to be included in the ASR. If anything more extensive is required by Caltrans, then a scope and cost for this effort will be provided for approval by the City prior to conducting this effort.

An ICF qualified architectural historian will review the records search and conduct desktop research to determine if any built environment resources that are 50 years old or older exist in the APE. Based on a review of the anticipated PAL, it is assumed that a Historical Resources Evaluation Report (HRER) will not be needed and no built environment resources will need to be evaluated. If any resources are identified as part of the record search, then a scope and fee will be provided for approval prior to conducting this effort.

Following completion and approval of the PAL, research, survey, outreach and reporting discussed above, a summary document (the Historical Resources Compliance Report [HRCR]) with attached ASR shall be generated in accordance with Caltrans standards. It is anticipated that no properties eligible for listing on the NRHP or CRHR are present within the project's PAL and no evaluation of resources (i.e., no DPR form preparation) will be required.

MSHCP Consistency Compliance: ICF will prepare a cover letter and complete the Joint Project Review (JPR) checklist/application for submittal to the Regional Conservation Authority (RCA) for processing. ICF will coordinate with the City and RCA as necessary during the processing period. It is assumed that no meetings with RCA and the wildlife agencies (USFWS and CDFW) will be required as part of this task. No application fee is assumed or included.

It is assumed that no jurisdictional or riparian/riverine resources will be impacted and that a Determination of Biologically Equivalent or Superior Preservation

(DBESP) will not be required and a DBESP is not included in this scope of work. If a DBESP were to be required, then a scope and cost will be provided to Mark Thomas and the City for review and approval prior to conducting this work.

Task 6.2. Environmental Document

Based upon review of the environmental technical studies, the City and Caltrans will determine the appropriate environmental document. Environmental documentation for the project will be prepared in accordance with the Caltrans Standard Environmental Reference (SER), and the Caltrans Project Development Procedures Manual (PDPM), along CEQA, and local requirements.

Based upon a preliminary comprehensive review of the project site and proposed improvements, a CEQA Categorical Exemption is anticipated. If a higher level CEQA document is identified as the appropriate document for the proposed project based on the technical analyses performed, then additional project development services will be scoped and subject to amendment to this agreement.

The Caltrans CE/CE Determination Form will be prepared (CEQA portion only) and provided to Caltrans for review and approval. It is assumed that a brief project description and one to two sentence summary of the findings of each technical study will be included. In addition, an Environmental Commitments Record (ECR) will be prepared and appended to the CE/CE Determination Form. No other environmental documentation related to the CE/CE is assumed.

Notice of Exemption: A CEQA Notice of Exemption (NOE) will be prepared and filed with the State Clearinghouse. It is assumed that no fees will be required associated with the NOE.

DELIVERABLES

- Draft CE/CE Determination Form (electronically to City and Caltrans)
- Final CE/CE Determination Form for signature (electronically to City and Caltrans)
- Final signed CE/CE Determination Form (electronically to City and Caltrans)
- Environmental Commitments Record (ECR)
- Draft and Final Notice of Exemption (all transmittals assumed to be done electronically)

BASE ASSUMPTIONS/EXCLUSIONS

- Preparation of a cooperative agreement between the City and Caltrans is not included.
- Regulatory or resource agency permitting is excluded.
- Dry Utility (joint trench) design is excluded.
- Transportation Management Plan is excluded.
- Aerially Deposited Lead Report is excluded.
- 65% PS&E submittal is excluded.
- A Noise Abatement Decision Report is excluded.
- The City is to Advertise, Award and Administer the project construction.
- Construction Management/Administration is specifically excluded from this scope.
- No retrofit of the existing bridge is required.
- Preparation of a SWPPP is excluded.
- No Right of Way Acquisition or Transfer is required. Preliminary.
- Title Reports are excluded.
- A Record of Survey is excluded.
- Bidding or construction support services are excluded.
- As-built plan preparation is excluded.
- A Life-Cycle Cost Analysis for Pavement is excluded.
- Geotechnical Investigation:
 - Geotechnical Investigation is allowed between 9 AM and 3 PM on weekdays.
 - No investigation of hazardous materials. If hazardous materials are encountered during the geotechnical field investigation, EMI will terminate our work and notify the City.
 - Environmental clearance for accomplishing the field work is excluded.
 - No permit fee was assumed for the City of Temecula, and a permit fee of \$1,000 was assumed for Caltrans. Any other permits, if required, will be provided by others.
 - No Yellow Thermoplastic Traffic Stripes within the proposed project alignment, which eliminates the requirement for lead-based paint testing.
 - No infiltration basins, no soundwalls, and no overhead signs in the project.
 - Existing pavement rehabilitation recommendations are excluded.

EXHIBIT B

PAYMENT RATES AND SCHEDULE

MARK THOMAS	Mark Thomas										Subconsultants					TOTAL COST			
	Engineering Manager	Sr. Technical Lead	Project Manager	Sr. Project Engineer	Project Engineer	Design Engineer II	Design Engineer I	Technician	Sr. Survey Manager	Survey Manager	Survey Technician	Total Hour	Total Int Cost	EARTH MECHANICS	RIP LAND SOLUTIONS		FIRM & PERKS	ICP	TOWAL
1.0 PROJECT MANAGEMENT																			
1.1	120											120	\$23,400						\$23,400
1.2	10			30								30	\$6,000						\$6,000
1.3	20			20								40	\$8,000				\$1,200		\$9,200
1.4	8											8	\$1,600						\$1,600
1.5	8											8	\$1,600						\$1,600
1.6	40			60								120	\$24,000						\$24,000
Subtotal Task 1	0	0	170	60	100	0	0	0	0	0	0	330	\$68,000	0	0	0	\$23,200	Non OAC	\$92,140
2.0 SURVEY, RIGHT OF WAY & UTILITIES																			
2.1												48	\$9,600						\$9,600
2.2												0	0						0
2.2.1												0	0						0
2.2.2												0	0						0
2.2.3												0	0						0
2.3	20			20								60	\$6,000						\$6,000
Subtotal Task 2	0	0	0	0	30	30	0	0	30	0	0	100	\$12,000	0	\$10,600	0	\$0	Non OAC	\$101,795
3.0 CALTRANS PIER DOCUMENTATION																			
3.1	4											24	\$8,200						\$8,200
3.2	1											0	0						0
3.3	2			40								80	\$11,500						\$11,500
Subtotal Task 3	0	0	0	0	60	60	0	0	20	0	0	100	\$20,140	0	0	\$0	\$0	\$0	\$47,660
4.0 ENGINEERING REPORTS																			
4.1												0	0						0
4.1.1												0	0						0
4.1.2												0	0						0
4.1.3												0	0						0
4.2												200	\$22,000						\$22,000
4.3												100	\$10,000						\$10,000
4.4												100	\$10,000						\$10,000
4.5												100	\$10,000						\$10,000
4.6												100	\$10,000						\$10,000
4.7												100	\$10,000						\$10,000
4.8												100	\$10,000						\$10,000
4.9												100	\$10,000						\$10,000
Subtotal Task 4	4	20	0	40	150	170	20	60	50	0	0	530	\$47,116	\$46,827	0	0	0	0	\$112,743
5.0 PLANS, SPECIFICATIONS & ESTIMATE																			
5.1												110	\$22,000						\$22,000
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EXHIBIT B (continued)[illegible]