

PROFESSIONAL SERVICES AGREEMENT
[Traffic Engineering Services – Citywide Speed Limit Assessment]

THIS PROFESSIONAL SERVICES AGREEMENT (the “Agreement”) is made at Orange, California, on this ____ day of _____, 2026 (the “Effective Date”) by and between the CITY OF ORANGE, a municipal corporation (“City”), and AGA ENGINEERS, INC., a California corporation (“Contractor”), who agree as follows:

1. Services. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide to the reasonable satisfaction of City the services set forth in Exhibit “A,” which is attached hereto and incorporated herein by reference. As a material inducement to City to enter into this Agreement, Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. The services which are the subject of this Agreement are not in the usual course of City’s business and City relies on Contractor’s representation that it is independently engaged in the business of providing such services and is experienced in performing the work. Contractor shall perform all services in a manner reasonably satisfactory to City and in a manner in conformance with the standards of quality normally observed by an entity providing such services to a municipal agency. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices. The terms and conditions set forth in this Agreement shall control over any terms and conditions in Exhibit "A" to the contrary.

Larry Tay, City Traffic Engineer (“City’s Project Manager”), shall be the person to whom Contractor will report for the performance of services hereunder. It is understood that Contractor’s performance hereunder shall be under the supervision of City’s Project Manager (or his/her designee), that Contractor shall coordinate its services hereunder with City’s Project Manager to the extent required by City’s Project Manager, and that all performances required hereunder by Contractor shall be performed to the satisfaction of City’s Project Manager and the City Manager.

2. Compensation and Fees.

a. Contractor's total compensation for all services performed under this Agreement, shall not exceed EIGHTY-TWO THOUSAND TWO HUNDRED FIFTY-TWO DOLLARS and 00/100 (\$82,252.00) without the prior written authorization of City.

b. The above compensation shall include all costs, including, but not limited to, all clerical, administrative, overhead, insurance, reproduction, telephone, travel, auto rental, subsistence and all related expenses.

c. In addition to the scheduled services to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by City’s Project Manager. In anticipation of such contingencies, the sum of SEVENTEEN THOUSAND SEVEN HUNDRED FORTY-EIGHT DOLLARS and 00/100 (\$17,748.00) has been added to the total compensation of this Agreement. City’s Project Manager may approve the additional work and

the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as City's Project Manager and the Contractor may agree upon in advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of an Amendment to Agreement approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the City's Project Manager. Any and all additional work and services performed under this Agreement shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by City's Project Manager prior to the commencement of such services.

d. In addition to the scheduled services to be performed by the Contractor, the parties acknowledge that the City may elect to exercise Optional Task 5 as set forth in Exhibit A. In anticipation of the City's potential exercise of such optional services, the sum of FIFTY THOUSAND DOLLARS and 00/100 (\$50,000.00) has been added to the total compensation of this Agreement. The City's Project Manager may authorize the performance of Optional Task 5 and approve the actual costs incurred by the Contractor in accordance with the scope and compensation associated with Optional Task 5 as set forth in Exhibit A, as the City's Project Manager and the Contractor may agree upon in advance. Any authorization to proceed with Optional Task 5, and the corresponding compensation therefor, shall be memorialized in the form of an Amendment to Agreement approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform Optional Task 5 only upon written authorization from the City's Project Manager. All services performed pursuant to Optional Task 5 shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by City's Project Manager prior to the commencement of such services.

e. The total amount of compensation under this Agreement, including contingencies, shall not exceed ONE HUNDRED FIFTY THOUSAND DOLLARS and 00/100 (\$150,000.00).

3. Payment.

a. As scheduled services are completed, Contractor shall submit to City an invoice for the services completed, authorized expenses and authorized extra work actually performed or incurred.

b. All such invoices shall state the basis for the amount invoiced, including services completed, the number of hours spent and any extra work performed.

c. City will pay Contractor the amount invoiced within thirty (30) days of receipt of all deliverables.

d. Payment shall constitute payment in full for all services, authorized costs and authorized extra work covered by that invoice.

4. **Change Orders.** No payment for extra services caused by a change in the scope or complexity of work, or for any other reason, shall be made unless and until such extra services and a price therefor have been previously authorized in writing and approved by City as an amendment to this Agreement. City's Project Manager is authorized to approve a reduction in the services to be performed and compensation therefor. All amendments shall set forth the changes of work, extension of time, and/or adjustment of the compensation to be paid by City to Contractor and shall be signed by the City's Project Manager, City Manager or City Council, as applicable.

5. **Licenses.** Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the work contemplated by this Agreement and that Contractor and its subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Agreement.

6. **Independent Contractor.** At all times during the term of this Agreement, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Agreement. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Agreement. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that it and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

7. **Contractor Not Agent.** Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

8. **Designated Persons.** Only those qualified persons authorized by City's Project Manager, or as designated in Exhibit "A," shall perform work provided for under this Agreement. It is understood by the parties that clerical and other nonprofessional work may be performed by persons other than those designated.

9. **Assignment or Subcontracting.** No assignment or subcontracting by Contractor of any part of this Agreement or of funds to be received under this Agreement shall be of any force or effect unless the assignment has the prior written approval of City. City may terminate this Agreement rather than accept any proposed assignment or subcontracting. Such assignment or subcontracting may be approved by the City Manager or his/her designee.

10. Time of Completion. Except as otherwise specified in Exhibit “A,” Contractor shall commence the work provided for in this Agreement within five (5) days of the Effective Date of this Agreement and diligently prosecute completion of the work in accordance with the time period set forth in Exhibit “A” hereto or as otherwise agreed to by and between the representatives of the parties.

11. Time Is of the Essence. Time is of the essence in this Agreement. Contractor shall do all things necessary and incidental to the prosecution of Contractor's work.

12. Reserved.

13. Delays and Extensions of Time. Contractor's sole remedy for delays outside its control, other than those delays caused by City, shall be an extension of time. No matter what the cause of the delay, Contractor must document any delay and request an extension of time in writing at the time of the delay to the satisfaction of City. Any extensions granted shall be limited to the length of the delay outside Contractor’s control. If Contractor believes that delays caused by City will cause it to incur additional costs, it must specify, in writing, why the delay has caused additional costs to be incurred and the exact amount of such cost at the time the delay occurs. No additional costs can be paid that exceed the not to exceed amount stated in Section 2.a, above, absent a written amendment to this Agreement.

14. Products of Contractor. The documents, studies, evaluations, assessments, reports, plans, citations, materials, manuals, technical data, logs, files, designs and other products produced or provided by Contractor for this Agreement shall become the property of City upon receipt. Contractor shall deliver all such products to City prior to payment for same. City may use, reuse or otherwise utilize such products without restriction.

15. Equal Employment Opportunity. During the performance of this Agreement, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any work covered by this Agreement, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

16. Conflicts of Interest. Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a consultant to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code. Contractor further agrees that it shall not be eligible to work as the design/build firm for the project that is the subject of this Agreement.

17. Indemnity.

a. To the fullest extent permitted by law, Contractor agrees to indemnify, defend and hold City, its City Council and each member thereof, and the officers, officials, agents and employees of City (collectively the “Indemnitees”) entirely harmless from all liability arising out of:

(1) Any and all claims under workers’ compensation acts and other employee benefit acts with respect to Contractor’s employees or Contractor’s subcontractor’s employees arising out of Contractor’s work under this Agreement, including any and all claims under any law pertaining to Contractor or its employees’ status as an independent contractor and any and all claims under Labor Code section 1720 related to the payment of prevailing wages for public works projects; and

(2) Any claim, loss, injury to or death of persons or damage to property caused by any act, neglect, default, or omission of Contractor, or person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages due to loss or theft sustained by any person, firm or corporation including the Indemnitees, or any of them, arising out of, or in any way connected with the work or services which are the subject of this Agreement, including injury or damage either on or off City’s property; but not for any loss, injury, death or damage caused by the active negligence or willful misconduct of City. Contractor, at its own expense, cost and risk, shall indemnify any and all claims, actions, suits or other proceedings that may be brought or instituted against the Indemnitees on any such claim or liability covered by this subparagraph, and shall pay or satisfy any judgment that may be rendered against the Indemnitees, or any of them, in any action, suit or other proceedings as a result of coverage under this subparagraph.

b. To the fullest extent permitted by law, and as limited by California Civil Code 2782.8, Contractor agrees to indemnify and hold Indemnitees harmless from all liability arising out of any claim, loss, injury to or death of persons or damage to property to the extent caused by its negligent professional act or omission in the performance of professional services pursuant to this Agreement.

c. Except for the Indemnitees, the indemnifications provided in this Agreement shall not be construed to extend any third party indemnification rights of any kind to any person or entity which is not a signatory to this Agreement.

d. The indemnities set forth in this section shall survive any closing, rescission, or termination of this Agreement, and shall continue to be binding and in full force and effect in perpetuity with respect to Contractor and its successors.

18. Insurance.

a. Contractor shall carry workers' compensation insurance as required by law for the protection of its employees during the progress of the work. Contractor understands that it is an independent contractor and not entitled to any workers' compensation benefits under any City program.

b. Contractor shall maintain during the life of this Agreement the following minimum amount of comprehensive general liability insurance or commercial general liability insurance: the greater of (1) One Million Dollars (\$1,000,000) per occurrence; or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage and be written on an occurrence basis.

c. Contractor shall maintain during the life of this Agreement, the following minimum amount of automotive liability insurance: the greater of (1) a combined single limit of One Million Dollars (\$1,000,000); or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage for all owned, non-owned and hired vehicles and be written on an occurrence basis.

d. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Contractor under this Agreement.

e. Each policy of general liability and automotive liability shall provide that City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, but only with respect to the work performed by Contractor under this Agreement. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences that City is an additional insured as a contracting party. The minimum coverage required by Subsection 18.b and c, above, shall apply to City as an additional insured. Any umbrella liability insurance that is provided as part of the general or automobile liability minimums set forth herein shall be maintained for the duration of the Agreement.

f. Contractor shall maintain during the life of this Agreement professional liability insurance covering errors and omissions arising out of the performance of this Agreement with a minimum limit of One Million Dollars (\$1,000,000) per claim. Contractor agrees to keep

such policy in force and effect for at least five (5) years from the date of completion of this Agreement.

g. The insurance policies maintained by Contractor shall be primary insurance and no insurance held or owned by City shall be called upon to cover any loss under the policy. Contractor will determine its own needs in procurement of insurance to cover liabilities other than as stated above.

h. Before Contractor performs any work or prepares or delivers any materials, Contractor shall furnish certificates of insurance and endorsements, as required by City, evidencing the aforementioned minimum insurance coverages on forms acceptable to City, which shall provide that the insurance in force will not be canceled or allowed to lapse without at least ten (10) days' prior written notice to City.

i. Except for professional liability insurance coverage that may be required by this Agreement, all insurance maintained by Contractor shall be issued by companies admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide. In the case of professional liability insurance coverage, such coverage shall be issued by companies either licensed or admitted to conduct business in California so long as such insurer possesses the aforementioned Best rating.

j. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

k. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance.

l. Contractor shall include all subcontractors, if any, as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor to City for review and approval. All coverages for subcontractors shall be subject to all of the requirements stated herein.

19. Termination. City may for any reason terminate this Agreement by giving Contractor not less than five (5) days' written notice of intent to terminate. Upon receipt of such notice, Contractor shall immediately cease work, unless the notice from City provides otherwise. Upon the termination of this Agreement, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with

this Agreement, unless termination by City shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

20. Maintenance and Inspection of Records. In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records, and other information (collectively, the “records”) pertaining to the costs of and completion of services performed under this Agreement. City and its authorized representatives shall have access to and the right to audit and reproduce any of Contractor's records regarding the services provided under this Agreement. Contractor shall maintain all such records for a period of at least three (3) years after termination or completion of this Agreement. Contractor agrees to make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days’ notice from City, and copies thereof shall be furnished if requested.

21. Compliance with all Laws/Immigration Laws.

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws which may apply to the performance of this Agreement.

b. If the work provided for in this Agreement constitutes a “public works,” as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid, to the extent Contractor’s employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that it, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

c. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Agreement comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Agreement who is ineligible to work in the United States or under the terms of this Agreement; and

(3) Has properly maintained, and shall at all times during the term of this Agreement properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor’s employees; and

(4) Has responded, and shall at all times during the term of this Agreement respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

d. Contractor shall require all subcontractors or subconsultants to make the same representations and warranties as set forth in Subsection 21.c.

e. Contractor shall, upon request of City, provide a list of all employees working under this Agreement and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Agreement without written notice to City, accompanied by the verification required herein for such employees.

f. Contractor shall require all subcontractors or sub-consultants to make the same verification as set forth in Subsection 21.e.

g. If Contractor or subcontractor knowingly employs an employee providing work under this Agreement who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, that shall constitute a material breach of this Agreement and may be cause for immediate termination of this Agreement by City.

h. Contractor agrees to indemnify and hold City, its officers, officials, agents and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Agreement.

22. Governing Law and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California and Contractor agrees to submit to the jurisdiction of California courts. Venue for any dispute arising under this Agreement shall be in Orange County, California.

23. Integration. This Agreement constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the work to be performed under this Agreement shall be of any force or effect unless it is in writing and signed by both parties. Any work performed which is inconsistent with or in violation of the provisions of this Agreement shall not be compensated.

24. Notice. Except as otherwise provided herein, all notices required under this Agreement shall be in writing and delivered personally, by e-mail, or by first class U.S. mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

AGA Engineers, Inc
211 Imperial Highway, Suite 208
Fullerton, CA 92835
Attn.: Chalap K. Sadam, President

Telephone: (714) 992-4592
E-Mail: chalap@agaengineersinc.com

“CITY”

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn.: Larry Tay, City Traffic Engineer

Telephone: 714-744-5525
E-Mail: ltay@cityoforange.org

25. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted electronically shall have the same effect as original signatures.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS of this Agreement, the parties have entered into this Agreement as of the year and day first above written.

“CONTRACTOR”

“CITY”

AGA ENGINEERS, INC.,
a California corporation

CITY OF ORANGE, a municipal corporation

*By: 
Printed Name: Chalap K. Sadam
Title: President/Secretary

By: _____
Daniel R. Slater, Mayor

*By: 
Printed Name: Ruben Perales
Title: Vice President

ATTEST:

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Nathalie Adourian, City Attorney

***NOTE:** City requires the following signature(s) on behalf of the Contractor:
-- (1) the Chairman of the Board, the President or a Vice-President, AND (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please so indicate. OR
-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to City.

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EXHIBIT "A"

SCOPE OF SERVICES

[Beneath this sheet.]

SCOPE OF WORK

GENERAL:

The Scope of Work is not definitive and is intended only as a guide to illustrate the minimum project requirements.

The selected Consultant shall do the Engineering and Traffic Survey work in accordance with the State of California Department of Transportation Manual for Setting Speed Limits, CA MUTCD, CVC, and any other applicable guidance, including all recent changes in law and best speed management practices. The Consultant shall prepare speed limit recommendations for all roadway segments. This recommendation shall consider all recent legal (including AB 43) and best practice guidance for establishing speed limits and shall consider opportunities to reduce speed limits where appropriate. Any recommendations for speed limit reductions under AB 43 shall be identified and subject to approval by the City.

Each radar gun used for speed surveys shall be certified that it meets and/or exceeds all of the manufacturer's specifications by an authorized entity, distributor, or repair facility acceptable to the City. Proof of certification must be included in the proposal.

PROJECT TASKS:

The Consultant shall provide all necessary services to perform the following tasks:

1) Kick-off Meeting

2) Data Collection

- a. The Consultant shall conduct bi-directional vehicle speed (radar) surveys for 186 speed zones within the City of Orange. The number of speed zones shall be confirmed according to the City's Master Plan of Streets and Highways and the latest California Road System (CRS) Map. While taking the speed measurements, the traffic speeds should not be altered by law enforcement, the surveyor and equipment, or any other means. Radar that is capable of accurately distinguishing and measuring unimpeded speed of free-flowing vehicles may be used. Surveys shall not be conducted on Fridays, weekends, Mondays, or during peak traffic hours. Speed measurements should be taken in periods in which the pavement is dry and the weather is fair. The minimum sample size should be at least 100 vehicles per location. For the two-way streets, at least 50 counts for each direction at each location shall be collected. No specific vehicle combination is required. Provide the radar speed survey field sheets (with raw data) and preliminary radar speed survey analysis sheets for each surveyed speed zone. Please Note: If speed survey data seems either unusually high or low, the City may require such locations to be resurveyed at no additional cost to the City.
- b. The City will be collecting average daily traffic (ADT) volume counts for all speed zones and will provide this data to the Consultant.
- c. The Consultant shall collect and analyze collision data as required in the California Manual for Setting Speed Limits and CA MUTCD for the most recent five (5) years available. Property Damage Only (PDO) crashes shall be included in the collision data collection and analysis. The Consultant shall coordinate with Crossroads Software Traffic Collision Database, as needed, to obtain collision data. Collision data shall be reported as total collisions, annual collision rate, as well as actual collisions per million vehicle miles and

average. The actual collision rates shall be calculated and compared with the State of California average collision rates for similar roadways and street segments.

- d. Conduct field reviews of each of the 186 speed zones. The field reviews for traffic factors shall be conducted while school is in session. Provide a field review summary sheet for traffic factors, roadway factors, roadway geometry, and adjacent land uses, etc.

3) Speed Limit Recommendation

- a. Determine the appropriate speed limit for each speed zone following the latest requirements from the CA MUTCD and the CVC. When determining the speed limits, the Consultant must also review the latest methodologies. If any reduction from the 85th percentile speed is recommended, these shall be fully documented and follow the procedures required by the State of California in setting speed limits. The Consultant shall provide radar speed survey analysis sheets signed by a qualified Registered Civil Engineer/Traffic Engineer licensed in the State of California for each surveyed speed zone. Consultant shall prepare a summary of recommendations in Microsoft Excel form to include the street name, street segment, existing speed limit, recommended speed limit, 85th percentile speed, mean speed, 10 mph pace range, percent of vehicles in pace, date of survey, and reason for speed limit change from the 85th percentile. The summary of recommendations shall include all speed zones studied, unless otherwise specified by City staff.
- b. Consultant shall provide a frequency histogram and a cumulative frequency curve diagram for each speed zone.

4) Project Report

- a. Prepare a report which includes the following:
 - i. Radar speed survey operational procedures,
 - ii. A description of the purpose and methodology of speed zone establishment,
 - iii. A description of the statistical analysis factors,
 - iv. A traffic collision data summary table by street segment,
 - v. Results and recommendations, and
 - vi. The summary of recommendations in Microsoft Excel form.
 - vii. The final report shall be stamped and signed by a qualified Registered Civil Engineer/Traffic Engineer licensed in the State of California.
 - viii. As part of the report preparation the selected Consultant may present at two (2) public meetings to report out the study findings and recommendations. All procedures and speed limit recommendations shall be per the latest requirements in CA MUTCD plus the latest law in the most current version of the CVC.

5) Sign Change Sketch Preparation (Optional Task)

- a. Consultant shall prepares sketches for sign changes. This task is based on the number of sign-posting locations where changes are recommended by the Consultant. Once all recommendations are confirmed by the City, this task may or may not be required by the City. In the fee proposal, please list the unit price to identify each sign location at a specific distance from the nearest curb extension. These changes will indicate if the sign is new, a replacement, and/or removal and if a new sign (only) or a new sign and post will be

required. City staff would then use such sketches to write-up each work order for sign change. Sketches shall be done in a manner acceptable to the City and using the City's formats. Sketches shall be done by attaching digital aerials photos into AutoCAD files and showing the sign post changes from the nearest curb return extension. This task (No. 6) needs to be listed in Fee Proposal as a separate item with a price per unit cost listed for the recommended locations. The City reserves the right to issue or not issue this task or a portion of it.

DELIVERABLES:

Deliverable shall include the following:

1) Task 1: Kick-off Meeting

- a. Meeting agenda, to be provided to the City at least three (3) business days prior to the kick-off meeting.
- b. Meeting notes

2) Task 2: Data Collection

- a. Radar speed survey field sheets containing raw data for each of the 186 speed zones.
- b. Collision data (past five (5) years) for each speed zone. Collision data shall include PDO crashes. The Consultant shall coordinate with Crossroads to obtain collision data.
- c. Documentation of any locations that required resurveying and associated results.
- d. Field review summary sheets for each of the 186 speed zones documenting survey locations and field conditions, including observed traffic factors, roadway characteristics, adjacent land uses, and other relevant data collected.

3) Task 3: Speed Limit Recommendation

- a. Radar speed survey analysis sheets with frequency histogram and cumulative frequency curve diagram for each speed zone. Each sheet shall be stamped and signed by a qualified Registered Civil Engineer/Traffic Engineer licensed in the State of California.
 - i. A meeting shall be held with City staff for review prior to the finalization of all 186 analysis sheets.
- b. A Microsoft Excel summary of recommendations (sample attached) that includes:
 - i. Street name and segment
 - ii. Existing and recommended speed limits
 - iii. 85th percentile speed, mean speed, 10 mph pace range, and percent of vehicles in pace
 - iv. Date of survey
 - v. Reason for any change from the 85th percentile speed
- c. Documentation of applied methodology, including any changes from prior studies and compliance with the CA MUTCD and the CVC.

4) Task 4: Project Report

- a. 90% Draft Report

Proposal

Traffic Engineering Services: Citywide Speed Limit Assessment

January 6, 2026





January 6, 2026

Mr. Jose A La Torre
Transportation Analyst
City of Orange
300 East Chapman Avenue
Orange, California 92866

RE: Proposal to Conduct Engineering & Traffic Surveys for 186 Segments in the City of Orange

Dear Mr. A La Torre:

In response to the City's Request for Proposal (RFP) dated December 9, 2025, AGA Engineers, Inc. (AGA) is pleased to present to you this proposal to provide an Engineering and Traffic Survey (E&TS) for 186 locations in the City of Orange. Our Proposal is being submitted via email as directed in the RFP.

It is understood that the City will provide Average Daily Traffic (ADT) counts. Radar speed survey data will be collected by our data collection subconsultant, National Data & Surveying (NDS).

AGA acknowledges that our proposal is in accordance with the Terms and Conditions of the previously executed On-Call Professional Services Agreement No. AGR-7488.C between the City and AGA.

The AGA Project Team looks forward to working with the City of Orange on this important project. If you have any questions on any aspect of this proposal, please feel free to contact me at ruben@agaengineersinc.com or (714) 992-4592.

Respectfully submitted,

AGA Engineers, Inc.

A handwritten signature in black ink, appearing to read "RP", with a long horizontal flourish extending to the right.

Ruben Perales, P.E., T.E.
Vice President



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Appendix – Resumes of the AGA Team



1. Project Understanding and Approach

Project Understanding

The objective of Engineering and Traffic Surveys (E&TS) is to review the City's existing speed limits to validate and/or recommend changes (increase, decrease, or no change) in accordance with the requirements of the State of California, Department of Transportation, California Manual on Uniform Traffic Control Devices (CA MUTCD), Part 2B.13 (Speed Limit Sign), and CVC 627 and 40802, and sections 22348 through 22413. The study will provide sufficient information to document that the conditions of the latest edition of CVC Section 627 have been satisfied and that other conditions not readily apparent to a motorist are properly identified.

Assembly Bill No. 43 (AB 43) amended and added sections to both the CVC and the latest version of the CA MUTCD related to traffic safety and speed limits. The following are key highlights:

- Allows prima facie speed limit of 25 mph on State highways located in any business or residential district.
- Authorizes Caltrans and a local authority to declare a speed of 20 or 15 mph on State highways.
- Authorizes a lower speed limit on a section of highway contiguous to a business activity district. Definition of "business activity district" is identified in AB 43 text.
- Authorizes a local authority to further reduce the speed limit beyond the 5-mph reduction after June 30, 2024, if certain conditions are met.
- Extends the validity of speed surveys from 10 years to 14 years if evaluated by registered engineer.
- Local authority may, by ordinance, retain the current speed limit or restore the immediately prior speed limit if that speed limit was: (1) established with an engineering and traffic survey, and (2) if a registered engineer has evaluated the section of highway and determined that no additional general purpose lanes have been added to the roadway since completion of the traffic survey that established the prior speed limit.
- Review City's Local Roadway Safety Plan (LRSP), SCAG's High Injury Network (HIN), and Transportation Injury Mapping System (TIMS) to determine designated "Safety Corridors".

The product of the study will be a *legal document* which will be acted on by the City Council to formally adopt and/or change specific speed limits at the surveyed locations. The report will be the document used by both the Police Department and the local courts in the day-to-day legal defense activities of the established speed limit.

Project Approach

Based on our extensive experience in conducting E&TS for various agencies throughout the years, the following is the AGA Team's scope of work for the project. All work under this contract will be performed under the direction and supervision of a qualified Registered Civil Engineer/Traffic Engineer licensed in the State of California.

Task 1. Kick-Off Meeting

AGA will coordinate and conduct a kick-off meeting at City Hall with both City and Police Department staff. At this meeting, the project objectives will be clarified, the project schedule will be finalized, and specific requirements will be discussed. The City will provide any pertinent data needed for analysis. AGA will



prepare and distribute an agenda three days prior to the meeting and submit meeting minutes and a participant list within a week after the meeting.

- Deliverables:
 - Meeting agenda
 - Meeting minutes

Task 2. Data Collection and Field Review

The vehicle speed surveys will be conducted in accordance with the *2020 California Manual for Setting Speed Limits* published by the Division of Traffic Operations of the California Department of Transportation, the CVC, and the CA MUTCD. AGA’s subconsultant, National Data & Surveying (NDS), will be conducting the radar speed surveys. We understand that the ADT counts for all segments will be provided by the City. As an added value to the City of Orange, AGA will prepare a citywide ADT map to summarize the ADT counts provided by the City.

A minimum of 100 bidirectional speed observations, with a minimum of 50 observations for each direction of travel will be obtained for the designated city street segments. Obtaining a minimum of 100 speed samples for each street segment will ensure that there will be a 95% probability that the sample data represents the population data for this type of study and the actual behavior of the majority of motorists.

The studies will only be conducted during “good weather” conditions on weekdays (Tuesday – Thursday) during the off-peak hours of 9:00 AM to 4:00 PM when school is in session, unless other specific time limits are specified by the City. Each speed zone will be surveyed for representative free flow speeds; that is, speeds not influenced by inclement weather, temporary conditions, or construction work. The survey will utilize a traffic radar gun which is calibrated and certified periodically to achieve and maintain accuracy.

The field survey data will be marked on a radar speed survey field sheet and will contain the following roadway segment information:

- Adjacent land use types
- Roadway geometrics
- On-Street Parking
- School Zone
- Bike Route
- Pedestrian and bicycle activity
- Lane configuration
- Median type
- No Parking/Stopping restrictions
- Truck Route
- Bike lane facilities
- General Comments

Collect Traffic Collision Data and Calculate Collision Rates

The AGA Team will evaluate the most current mid-block collision history (five years) for each of the segments. AGA will coordinate with City staff and the Crossroads Software Traffic Collision Database to obtain the collision data. For collision history analysis purposes, mid-block collisions are defined as those occurring outside of the 150-foot radius of signalized intersections of the roadway segment being analyzed. This criterion excludes collisions that may be traffic signal related in nature. The mid-block collision rate in terms of “collisions per 1,000,000 vehicle miles of travel” for each segment surveyed will be calculated and shown on the Engineering and Traffic Survey summary sheets.

The following shows the collision rate calculation:



$$\text{Collision Rate} = \frac{\text{Number of midblock collisions} \times 10^6}{24\text{-hour volume} \times 365 \times \text{segment length} \times \text{number of years}}$$

Where:

- Number of mid-block collisions based on a minimum of five years
- 24-hour volume (both directions) for the survey segment
- Segment length in miles

A minimum of five years of collision data will be utilized to develop Actual Collision Rates for comparison to the Average Expected Collision Rates which is detailed in the *2023 Crash Data on California State Highways* published by the California Department of Transportation. The Average Expected Collision Rates per roadway type are summarized below. Average Daily Traffic (ADT) counts will be used to determine collisions rates per vehicle miles traveled.

Roadway Type	Average Expected Collision Rate
Conventional 2 lanes or less (< 45 mph)	1.07
Conventional 2 lanes or less (≥ 45 mph)	0.61
Undivided 4 lanes (<45 mph)	0.66
Undivided 4 lanes (≥ 45 mph)	0.77
Divided 4 lanes (< 45 mph)	0.64
Divided 4 lanes (≥ 45 mph)	0.93
Divided 5 lanes or more (< 45 mph)	0.75
Divided 5 lanes or more(≥ 45 mph)	0.87

Field Review of Roadway Segments

A licensed Traffic Engineer will review all project segments to determine any roadway conditions not readily apparent to motorists which would justify changing the proposed speed limit to the maximum permitted under State established guidelines. These characteristics include the following:

- Street width and alignment
- Channelization and striping patterns
- Reversed super elevation
- Roadside land use
- Heavy pedestrians and/or trucks
- Traffic flow
- Frequency of driveways
- Visibility obstructions
- Roadway grade
- On-street parking

The product of this review will be a summary of each of the segments and identification of the segments which justify consideration for maximum increase/decrease of the recommended speed limits. In addition to reviewing the roadway conditions not readily apparent to motorists, the AGA team will review the locations of existing speed limit signs and will provide recommendations on any relocations or additions of speed limit signs.

➤ Deliverables:

- Radar Speed Survey Sheets with raw data for all segments
- Collision data from the Crossroads database
- Documentation of locations needing resurveying



- Engineering & Traffic Survey Summary Sheets for all segments

Task 3. Speed Limit Recommendations

The speed survey data will be summarized in a Segment Spot Speed Summary Table. This table includes the recommended speed limit for the street segment based on the 85th percentile speed and any justifications for setting the speed limit lower than the recommended 85th percentile speed. A City approved Engineering and Traffic Survey template will be utilized to summarize our findings and document all data collected and calculated. At a minimum, this table will include the following:

- 85th percentile speed (critical speed)
 - 15th percentile speed
 - 10 mph pace speed range
 - Number of vehicles in the 10-mph pace speed range
 - Percentage of vehicles in the pace speed range
 - Mean speed
 - Median speed
 - Mode speed
 - Average vehicle speed
 - Standard deviation
- Deliverables:
- Radar speed survey sheets
 - Summary sheets in Microsoft Excel
 - Documentation of applied methodology and compliance with CA MUTCD and CVC

Task 4. Project Report and Presentations

After compiling all pertinent data on the Segment Spot Speed Summary Table, and the Engineering & Traffic Survey Sheets for all project segments, AGA will submit all survey sheets to the City of Orange for review. AGA will discuss the findings with City staff and will review any comments/questions City staff may have on recommendations shown on the survey sheets. As part of this discussion, AGA will identify corridors that may be designated as “Safety Corridors” and/or “Business Activity District” corridors. The latest edition of the CA MUTCD (Revision 9) includes guidelines to assist with the designation of such corridors.

A draft report documenting the Engineering and Traffic Study will be submitted to the City for review. It will summarize the existing speed limits and the recommended changes (increase, decrease, or no change) in accordance with the requirements of CVC Sections 627, 40802(b), 22357, 22358, and AB 43 (included in the CVC and CA MUTCD). AGA will also document any changes in the guidelines based on the current California Manual for Setting Speed Limits and the current California Manual on Uniform Traffic Control Devices, if any.

The report will be a legal document to formally adopt or change speed limits at the surveyed locations. It will include an executive summary, a summary of recommendations in a tabular format for ease of reference, specific recommendations with a description of the basis for that recommendation for each roadway segment surveyed, and all other supporting data.



At a minimum, the report will include the following:

- Radar speed survey operational procedures
- Description of the purpose and methodology of Speed Zone establishment, including a discussion of realistic speed zoning, speed traps, CVC requirements, etc.
- Description of the statistical analysis factors
- Description of the field data used in analyzing related roadway characteristics
- Collision history for the street segments
- Results and recommendations
- Summary of recommendations in both narrative and table form

A meeting with City staff will be held to discuss the analysis results presented in the Draft E&TS Report. AGA will address and incorporate the City’s consolidated comments on the draft report into the final report which will be provided to the City in both hardcopy and electronic formats. Another meeting with City staff will be conducted for the presentation of the Final E&TS Report.

Traffic Commission and City Council Meetings

AGA will be available to attend one Traffic Commission meeting and one City Council Meeting to assist the City of Orange staff with presenting the speed survey results. We will also respond to any questions that Commission/Council members may have.

- Deliverables:
 - 90% draft report
 - Final report
 - Public meetings (up to two meetings)

Task 5. Sign Change Sketch Preparation (Optional Task)

As part of the field review in Task 2, the AGA team will assess the existing speed limit signs and provide recommendations on any relocations, additions, and/or changes. If authorized by the City, we will design the sign-posting at the locations which are confirmed by the City. The plans will indicate the distance from the curb extension, whether the sign is new, a replacement, or a removal, and if a post will be needed. Aerial photos of each location will be included on the sketches. The sketches will be completed in AutoCAD using the City’s preferred format.

- Deliverables:
 - Sign change sketches with aerial photos

2. Relevant Project Experience, Qualifications, and References

Previous E&TS Experience

We fully understand the importance of dealing with traffic-related situations, including determining the appropriate posted speeds along the City’s corridors. Staff at AGA have completed many tasks similar or identical to those anticipated under this contract, and have completed such tasks on time, within budget, and in a manner that meets all the requirements of the agency for which the work was completed, while at the same time placing minimal time and effort requirements on agency staff.



The AGA Team possesses all of the necessary capabilities and experience to complete the proposed project in a professional, timely, and cost-effective manner. The AGA Team has a long history of conducting E&TS projects for cities throughout Southern California. Within the last five years, the AGA Team has conducted speed surveys for the following cities:

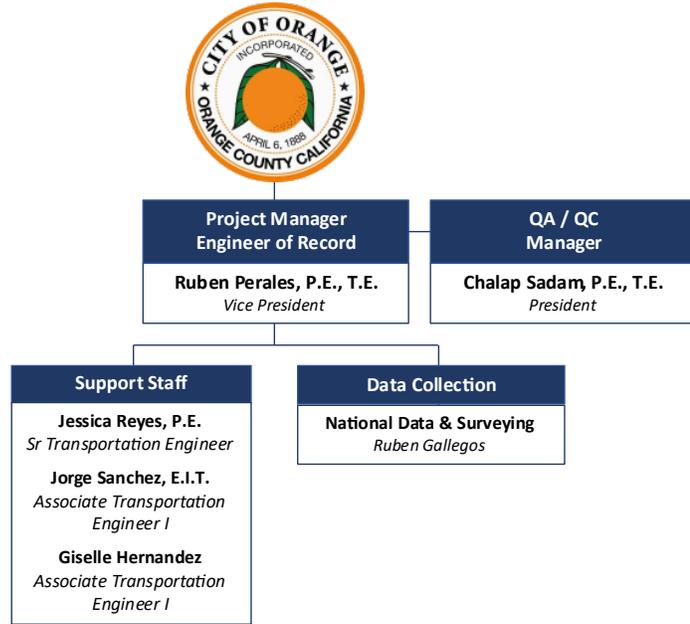
Buena Park	Burbank	Costa Mesa	Fountain Valley	Garden Grove
Gardena	Huntington Beach	Laguna Niguel	Redondo Beach	Santa Ana
Seal Beach	Tustin	Westminster	Whittier	

Additionally, we are currently finalizing speed surveys for the cities of:

- Santa Clarita
- Yorba Linda

Project Team

Strong results-oriented leadership is a key element of AGA’s management approach to fully leverage the expertise and experience of our team members. Mr. Ruben Perales, P.E., T.E., as the Project Manager will be responsible for the day-to-day direction and management of each element of work being completed as a part of the project. Project team meetings will be held regularly to ensure that work is proceeding appropriately in a timely fashion. Mr. Perales will be responsible for adherence to the project schedule and for maintaining quality control of all project work products. In short, Mr. Perales will do everything necessary to ensure that the project is completed on time, within budget, and in a manner that fulfills all the goals and objectives of the City of Orange. AGA proposes to utilize experienced senior staff members to conduct this project. Our Organizational Chart is to the right. Resumes are included in the Appendix.



Our subconsultant responsible for data collection will be **National Data and Surveying Services (NDS)**. Founded in 1989, NDS leads the industry as the largest traffic data collection firm, transit data collection firm, and GIS data collection firm in the nation. NDS has an incredibly large capacity to conduct well over two thousand traffic counts every single day and unparalleled technical expertise in their industry. NDS clientele includes private engineering firms, public agencies, regional planning organizations, retail outlets, private companies, and private citizens. NDS has been part of our team for many of the E&TS projects we have conducted.

Our experienced QA/QC Manager will conduct an objective review of the work product. When several disciplines are involved in a project, the QC Manager may also seek review assistance when needed from



other individuals specializing in those disciplines to verify that all project concepts are being met and all constructability issues are addressed prior to delivery of the project.

Quality assurance defines the process utilized for each project to guarantee that the design deliverables are accomplished in accordance with the project objectives. To achieve the desired quality of deliverables and services, quality assurance consists of several systems including initial implementation of a Quality Control Program, conducting quality audits to verify conformance with policies and procedures, and quality assurance reports.

The independent senior staff assigned to the project will identify problems, recommend solutions, and verify implementation of corrective action. The Project Manager will ensure that quality is achieved and fully supports the verification efforts by independent personnel. The Project Manager will interface with the project staff members for resolution of matters related to quality.

Client satisfaction is a key project goal. We emphasize client satisfaction throughout all phases of work. We monitor client feedback and satisfaction as a corporate objective. Document control, records control, and corrective/preventative actions are the minimum procedures we provide for every project.

References

The following is project information and references for E&TS studies our team has conducted within the last five years. All the projects listed below included the following tasks: radar surveys conducted under free flow conditions, evaluation of the accident history, field review by a licensed engineer, and recommendations for changes in speed limits developed. The survey data was then compiled into summary tables and a report prepared to be used as a legal document by cities and courts.

City of Santa Ana

Mr. Zdenek “Zed” Kekula, Principal Civil Engineer
20 Civic Center Plaza, Santa Ana, CA 92702
(714) 647-5606 || zkekula@santa-ana.org
November 2022 – March 2023
177 segments surveyed

City of Garden Grove

Mr. Juan Navarro, City Traffic Engineer
11222 Acacia Parkway, Garden Grove, CA 92842
(714) 741-5186 || juann@ggcity.org
August – December 2021
143 segments surveyed

City of Fountain Valley

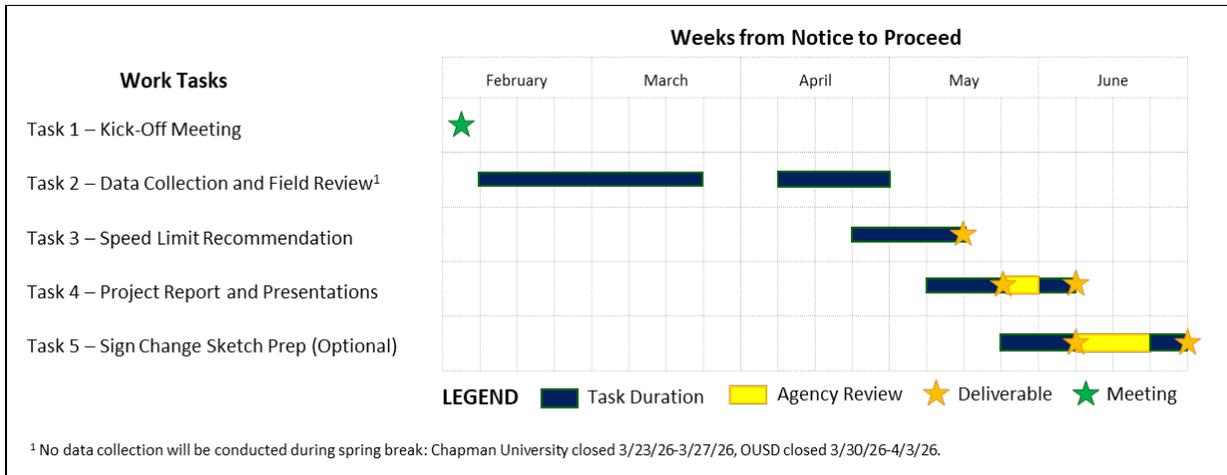
Mr. Temo Galvez
Deputy Director of Public Works/City Engineer
10200 Slater Avenue, Fountain Valley, CA 92708
(714) 593-4517 || temo.galvez@fountainvalley.org
March – June 2024
92 segments surveyed

City of Buena Park

Mr. Nader M. Alqam, Principal Engineer
6650 Beach Boulevard, Buena Park, CA 90622
(714) 562-3698 || nalqam@buenapark.com
January – August 2025
81 segments surveyed

3. Work Progress Activity Schedule

Our proposed schedule is shown on the following page. A detailed schedule will be provided at the Project Kick-Off Meeting.



4. Cost Proposal

Our Cost Proposal is included below. The table shows a detailed breakdown of staff hours by task and classification, hourly rates, and any subconsultant costs. Our rates are all inclusive. All direct and indirect costs (i.e., mileage, equipment, materials, reproduction and printing, etc.) are included in our fees.

City of Orange
Citywide Speed Limit Assessment
Hourly Breakdown Per Task

Job Classification/Title (AGA Engineers, Inc.)	Hourly Rates	Task 1 Kick-Off Meeting	Task 2 Data Collection and Field Review	Task 3 Speed Limit Recommendations	Task 4 Project Report and Presentations	TOTAL Hrs/Cost
Chalap Sadam, QA/QC Manager <i>President</i>	\$300.00	1	3	4	8	
		\$0.00	\$300.00	\$900.00	\$1,200.00	\$2,400.00
Ruben Perales <i>Vice President, Project Manager</i>	\$280.00	2	48	24	14	88
		\$560.00	\$13,440.00	\$6,720.00	\$3,920.00	\$24,640.00
Jessica Reyes <i>Senior Transportation Engineer I</i>	\$225.00	2	24	16	24	66
		\$450.00	\$5,400.00	\$3,600.00	\$5,400.00	\$14,850.00
Jorge Sanchez <i>Associate Transportation Engineer I</i>	\$155.00	1	32	8	16	57
		\$155.00	\$4,960.00	\$1,240.00	\$2,480.00	\$8,835.00
Giselle Hernandez <i>Associate Transportation Engineer I</i>	\$155.00	1	32	8	16	57
		\$155.00	\$4,960.00	\$1,240.00	\$2,480.00	\$8,835.00
Total Hours:		6	137	59	74	276
TOTAL COST:		\$1,320.00	\$29,060.00	\$13,700.00	\$15,480.00	\$59,560.00
Subconsultants						
National Data & Surveying Services (NDS) <i>Radar Speed Surveys</i>			\$22,692.00			\$22,692.00
TOTAL SUBCONSULTANT COST:		\$0.00	\$22,692.00	\$0.00	\$0.00	\$22,692.00
TOTAL PROJECT COST:		\$1,320.00	\$51,752.00	\$13,700.00	\$15,480.00	\$82,252.00
OPTIONAL TASK 5 - SIGN CHANGE SKETCH PREPARATION UNIT COST:						\$400 / sketch