# PROFESSIONAL SERVICES AGREEMENT [On-Call Traffic Engineering Services]

]	THIS	<b>PROFI</b>	ESSIC	NAL S	ERVI	CES	<b>AGRE</b>	EEMENT	(the	"Agreen	ment")	is m	ade at
Orange,	Califo	ornia, o	n this		day of	•		, 2025	(the	"Effect	ive Da	te") ł	y and
between	the	CITY	OF	ORANG	GE, a	mur	iicipal	corporation	on ('	'City"),	and	BOW	/MAN
<b>CONSU</b>	LTIN	G GRO	UP LT	ГD., а D	elawar	e corp	oration	ı ("Contrac	ctor")	, who as	gree as	follo	ws:

1. Services. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide general on-call traffic engineering services 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 ONE HUNDRED THOUSAND DOLLARS and 00/100 (\$100,000.00) 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.

### 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. <u>Licenses</u>. 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.
- Independent Contractor. At all times during the term of this Agreement, 6. 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. <u>Contractor Not Agent</u>. 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.** <u>Designated Persons</u>. 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. <u>Assignment or Subcontracting</u>. 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. <u>Time of Completion</u>. 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. <u>Time Is of the Essence</u>. 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. <u>Products of Contractor</u>. 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. <u>Equal Employment Opportunity</u>. 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. <u>Conflicts of Interest</u>. 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. <u>Termination</u>. 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. <u>Compliance with all Laws/Immigration Laws</u>.

- 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 (<a href="www.dir.ca.gov/DLSR">www.dir.ca.gov/DLSR</a>). 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. <u>Integration</u>. 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"

"CITY"

Bowman Consulting Group Ltd. 3060 Saturn Street, Suite 250

Brea, CA 92821

Attn.: Farzad Dorrani

Telephone: 714-940-0100 E-Mail: fdorrani@bowman.com 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.** <u>Counterparts</u>. 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	"
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### "CITY"

BOWMAN CONSULTING GROUP LTD., a Delaware corporation	CITY OF ORANGE, a municipal corporation
*By:Printed Name: Robert Hickey  Title: Executive Vice President	By:
*By:Printed Name: Kathryn Williams  Title: Assistant Secretary	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, <u>AND</u> (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. <u>OR</u>
  - -- 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.

## EXHIBIT "A"

### SCOPE OF SERVICES

[Beneath this sheet.]

# **SECTION III**

**SCOPE OF WORK** 

RFP NO. 24-25.24

### **SECTION III: SCOPE OF WORK**

All work shall be conducted on an as needed basis when requested in writing by the City Traffic Engineer or designated representative and according to the timeframe specified by the City. Work performed by the Consultant that has not be specifically identified and authorized by the City, will not be compensated.

The scope of work includes, but is not limited to:

- Traffic studies for capital projects
- Traffic and/or parking study review for private developments
- Traffic signal design
- Traffic control plan preparations
- Plan check for capital/development projects and traffic control plans
- Street light design and plan check
- Signing and striping plan preparation and plan check
- Traffic signal and street lighting construction inspection
- Construction management and construction engineering
- Technical support for funding and grant application
- Grant funding oversight
- Intelligent transportation systems (ITS) design
- Traffic signal timing and coordination studies
- Traffic counts and data collection
- Neighborhood traffic calming studies, warrant studies, and traffic investigations
- Special studies, civil design, and on-site support services may be requested
- General municipal traffic engineering services

The City of Orange manages 160 traffic signals, over 8,000 streetlights, over 20 miles of fiber optic network, the Traffic Management Center (TMC), radar feedback signs, pedestrian crossing and overhead flashers, and other devices to facilitate the safety of the public and efficiency of traffic. The City of Orange expects consulting firms to have thorough knowledge in traffic signal, ITS systems, street light design to perform required services. Firms are also expected to understand federal/state/local funding and policies, as well as Orange County Transportation Authority (OCTA) Comprehensive Transportation Funding Program (CTFP) requirements. The ideal firm(s) will have expertise in the areas above or may specialize in one or more subareas and will be capable to provide technical services associated with the general traffic engineering needs of the City of Orange.

All design work and improvement plan check services shall be performed by or under the responsible charge of a California License Professional Engineer (Civil, Traffic, and/or California License Land Surveyor as applicable) eligible to prepare and sign such plans. Successful firms will be required to enter into the City's standard professional services agreement (attached) and obtain an Orange business license. Any changes requested to the City's standard agreement must be noted in the response to the RFP for the City's consideration.

Each specific assignment under an on-call engineering services contract will be compensated on either lump sum or time-and-materials basis. The method of compensation will be specified in writing by the City at the time the assignment is given.

Generally, response times related to plan checks for the initial review shall be completed within **ten (10) working days**, unless otherwise directed by the City. Each subsequent plan check shall be completed within 5 working days unless otherwise directed by the City.

The scope of work will vary by project, and will be further defined in a project specific request by the City of Orange, but may generally include the following:

- Design Plans Develop or assist with development of final design plans associated with traffic signals and street light systems. These plans include, but are not limited to: traffic signal plans, Intelligent Transportation Systems plans, traffic signal interconnect plans, and street light plans.
- Program Management / Construction Management / Construction Inspection Services related to the City's Capital Improvement Program, which will typically include traffic signal and street light improvements, but may also include ancillary roadway rehabilitation, roadway widening, ADA access and handicap ramps, parkways, drainage and drainage structures, storm drain utilities, signage and striping, parks, and other miscellaneous facilities. A thorough understanding of the NPDES regulations and grant regulations, including Federally funded program compliance is required. Project manager and inspector must be able to coordinate with outside agencies such as adjacent cities, Caltrans, and various utility companies.
- Transportation Analysis Specialized traffic studies to assess proposed projects within
  a short time frame. Typical studies would include travel demand or traffic forecasting of
  proposed roadways, street widening or intersection improvement projects. Studies will
  analyze diversion of traffic due to substantial long term construction projects. Analysis will
  incorporate pedestrian and bicycles. Additional studies could be needed to provide
  technical support for grant and funding applications.
- Traffic Signal Corridor Coordination Studies Conduct studies that analyze the
  performance of traffic signal timing on street corridors. These studies shall include before
  and after analysis to quantify the level of improvement to the expected as a result of the
  project.
- **Simulation Modeling** Provide computer simulation of corridors or road networks as needed utilizing microsimulation software. Training may also be included with these projects.
- **Traffic Counts** Perform data collection as needed within short time frames including ADT's, 12-hour counts, intersection turning movement counts, occupancy rates, speed/delay runs, pedestrian and bike counts, parking turnover, etc.
- Statewide Planning Efforts Specialized studies and analysis in support of various regional and statewide initiatives involving traffic signal improvements, timing, and coordination.
- Research and Outreach Assist staff in producing reports and making presentations on transportation related topics.
- **Neighborhood Traffic Calming** Assist staff in processing requests for traffic calming measures. This includes but is not limited to street and neighborhood evaluation, data collection, recommendations, design, and coordination/communication with residents.
- Review for Private Developments Assist staff in reviewing plans and reports for private development projects. This includes but is not limited to: traffic signal plans, striping plans, street light plans, and various traffic studies. Coordination with project owners or design teams on behalf of the City may be requested.

### **Deliverables**

The specific scope of work for each task/project will be provided in a written transmittal from a City of Orange representative along with, in most cases, a follow-up phone call and, if necessary, a meeting to discuss the specific needs of the assignment. Within five business days of receipt of transmittal, the Consultant will be expected to provide the City with a proposed level of support along with a NOT TO EXCEED cost. A fully-executed amendment to the on-call contract may be required along with an authorization to proceed prior to commencement of work.

Consultant is expected to have a close working relationship with City staff and remain very accessible throughout the contract duration. The Consultant shall act as an extension of City staff.

A member of the consulting firm will be required to attend meetings with other jurisdictions, City departments, or public outreach events if an individual project requires extra coordination.

### G

## **Qualifications of Proposer's Personnel**

Provide an organizational chart of the Consultant Team showing the names, positions, and responsibilities. This section shall define the experience of key personnel and sub-consultants. All sub-consultants and their personnel must be identified. Resumes for the Consultant Team, including the Project Manager and key personnel, shall be provided in the Appendices. Resumes shall contain information relating to each person's education, experience or training in the area covered within this proposal. The City reserves the right to review and approve any additions or revisions to the Consultant Team, including sub-consultants.

Resumes appear in the Appendix, and do not count toward the 15-page limit, per the RFP.





Aidan Mousavi, MBA, PE, TE, QSD

Principal-in-Charge

**Bowman** 



**Douglas Benash, PE, QSD** *Quality Assurance (QA) Manager* 

**Bowman** 



Amir Farahani, PE, TE Senior Project Manager

**Bowman** 





Yunus Rahi, PhD, PE, TE

Senior Traffic Engineer

**Bowman** 



Masoud Sepahi, PE, LEED GA

Construction Manager

**Bowman** 



**Dennis Barnes, PE, TE** 

Senior Traffic Engineer

**Bowman** 



**Malcom Weatherbie** 

Construction Inspector

**Bowman** 



Hamed Habibi, MS, EIT

Engineer III, Transportation

**Bowman** 



**Cat Survance** 

Outreach Specialist

Bowman

**SUBCONSULTANT TEAM** 



**Dennis Janda** 

Survey

DJI



Nicole Nguyen

Traffic Counts

CITYTRAFFIC



### **Work Plan**

The Proposer shall indicate an understanding of the scope of services requested in this RFP. The work plan should address and satisfy the objectives and specifications as listed in the Scope of Work in this RFP.

#### **APPROACH**

Effective execution of task order contracts requires clear delineation of work, streamlined communication and accountability of all stakeholders, as well as a collaborative approach with both internal resources and subconsultants. We are accustomed to serving our clients both on standalone projects as a dedicated consultant, as well as through staff augmentation roles, supporting our clients' needs for outside staffing.

Accordingly, Bowman's approach to delivering a successful task order within budget and on schedule begins with a clear understanding of the goals, scope, deliverables, budget, timeline, and involved stakeholders. On stand-alone projects, and based on this initial information provided to our team, we develop a project-specific management plan that delineates organizational structure, staffing, deliverables, and associated schedule, including progress and review meetings. As part of our approach to the execution of individual assignments within a multitask contract, it is imperative to understand several factors

that may influence the project objectives, such as local site conditions, project-specific details and performance requirements, client-driven operational needs, community interface, seasonal restrictions, safety requirements, timelines, or legislatively mandated criteria. It is with this understanding that for each task, we evaluate the critical objectives and obstacles; implement best practices approach, cost effective and practical solutions; and implement such through engagement in all phases of the project.

Our project execution efforts are aimed at matching the right skill set to the project task, thereby ensuring effective and efficient use of resources. At Bowman, we instill a culture of consistency and high-quality performance through the preservation of personnel continuity on tasks through the life of the contract and the persistent pursuit of excellence through professional growth and innovation. Continuity of proven performers and preservation of project institutional knowledge yields quality performance and successful delivery metrics.

While we are prepared to work only on portions of a project (ex. a warrant study or calming analysis), our approach to developing our work product follows a total-project-life cycle mentality, as reflected in the workflow graphic below.

**Scope Definition** 

Bowman will provide detailed scope, schedule, and budget **Task Initiation** 

An in-person meeting

issues, introduce staff,

and establish commu-

to review project

nication protocols

**Data Collection** 

Field investigations are performed, data is acquired and documented, and progress is reported monthly

Reporting

Progress reports will be communicated with City staff and stakeholders

Collaboration

Input from project stakeholders is incorporated into the project

Documentation

All final work products, including reports, are submitted

Feedback

We ensure that we have a mutually agreed upon closure of the project and encourage feedback

**Expectations are** aligned and project execution is defined

A collaborative process is established for conducting the project activities

Maintain awareness of project activities, project status and any items for resolution

Early coordination and input ensures that all work is well coordinated as it progresses through design

Outcome / Benefit Outcome / Be

A collaborative design process will help maintain the project budget and schedule throughout design process

A comprehensive record of all project data

is maintained for final submission in support of design decisions

Your feedback regarding project performance will be utilized to further optimize project performance in future tasks

Traffic engineering is one of the core disciplines we provide to Southern California cities. Bowman's extensive traffic engineering knowledge, sharply-honed technical skills, and decades of combined experience makes us invaluable to our client cities as we help them to keep Southern California moving. Bowman is known by our clients for innovation and effective approaches, providing exceptional value and cost effective services. Traffic and transportation engineering services that we provide include the following:

### **Work Plan**

Traffic Signal Design and Modification	Traffic / Transportation Feasibility	Transportation Planning		
Traffic Signal Synchronization	Traffic Impact Analysis (TIA)	Local Transportation		
Traffic Signal Construction Management	ITS Development, Design and	Regional Transportation		
6	Implementation			
Community and Neighborhood Traffic Issues	Safety Studies	Multi - Modal Transportation Plans		
CIP Project Development, Design and Implementation	School Route Analysis	Staff Augmentation		
Traffic Studies	Traffic Engineering	City Traffic Engineer		
Engineering & Traffic Survey (E&TS)	Transportation Planning	Assistant Traffic Engineer		
EIR Studies / CEQA / NEPA	MTA Call - For - Projects Process (Funding)	Overflow Workload		
Traffic Circulation Studies	Traffic Engineering Design	Rail Grade Crossing		
Neighborhood Permit Parking Program	Traffic Signal and System Design	ITS Design and Implementation		
Project Study Reports (PSR)	Interconnect Design	Traffic Control and Detour Plans		
Traffic Calming Studies	Signing and Striping	Bicycle Facilities Assessment & Improvements		
Quiet Zone Feasibility Study	HAWK & RRFB Design	Local Roadway Safety Plan		

#### **Transportation Impact Study Guidelines**

Our team offers comprehensive traffic study and analysis services tailored to the City's needs. These services include the preparation and review of traffic impact studies, safety assessments, speed surveys, traffic control warrant analyses, detour plans, and neighborhood traffic calming evaluations.

We employ a variety of data collection methods – including manual counts, radar devices, automatic traffic recorders (ATRs), and video-based systems – to gather accurate traffic volume, speed, gap, and vehicle classification data. As part of our standard practice, our analysts conduct field visits to each project site to ensure that all analyses are informed by real-world conditions and observations.

To support our data collection efforts, we maintain a contract with City Traffic Counters (CTC), ensuring timely and reliable traffic count data for all studies.

Our team specializes in the development of traffic impact studies that include capacity and safety analyses, mitigation recommendations in response to specific concerns, and comparative evaluations of improvement alternatives. We also provide ongoing monitoring of traffic conditions to assess the effectiveness of implemented transportation improvements.

As part of our commitment to consistency and transparency, we will develop a customized Transportation Impact Study Guidelines document for the City. This document will be informed by the Caltrans Transportation Impact Study Guide and will outline:

- · Criteria for when a Traffic Impact Study is required
- Scope and methodology of the study
- · Data collection standards and sources
- · Analytical methods for evaluating traffic impacts
- · Mitigation strategies and improvement recommendations

This structured approach ensures that all traffic studies are aligned with state best practices while being tailored to the City of Orange's specific infrastructure, policies, and community goals.

## Traffic Engineering, Traffic Analysis and Transportation Planning Studies

Our team provides full-service traffic engineering and transportation planning support for both public agencies and private development projects. We are well-versed in reviewing land development applications, including internal circulation, site access, and off-site improvements. Our reviews ensure compliance with City, County, and Caltrans

### **Work Plan**

standards, as well as CA-MUTCD and AASHTO guidelines. We routinely evaluate traffic signal warrants, intersection and driveway sight distance, and roadway design elements. Our staff are also available to represent the City in meetings with applicants and before planning or land use boards, providing expert technical input as needed. To support planning and policy decisions, we conduct detailed analyses of existing conditions and historical trends, including traffic volumes and crash data, to identify high-priority corridors and intersections. We coordinate closely with City staff to build on existing studies and data sources.

Our team is fully qualified to prepare and oversee a wide range of traffic studies, including signal and stop control warrants, left-turn phasing evaluations, speed surveys, and mitigation assessments. We also develop citywide and corridor-level transportation plans, conduct feasibility studies, and support capital improvement programming.

Whether the City requires focused intersection analysis or comprehensive transportation master planning, our team brings the technical expertise and municipal experience to deliver actionable, policy-aligned solutions.

#### Traffic Control Device Studies and Signal Design

Bowman offers a comprehensive suite of services for the evaluation, justification, and design of traffic control devices, including traffic signals, stop signs, and other regulatory measures. Our approach is rooted in data-driven analysis, regulatory compliance, and a commitment to enhancing safety, mobility, and operational efficiency throughout the City of Orange.

Our licensed traffic engineers conduct thorough warrant studies in full conformance with the CA-MUTCD, as well as all applicable federal, state, and local regulations. Each study begins with a detailed field investigation and the collection of critical data, including:

- Collision history from SWITRS and TIMS
- 24-hour Average Daily Traffic (ADT) volumes
- Peak-period turning movement counts for vehicles, pedestrians, and bicyclists
- Speed surveys, gap studies, and sight distance evaluations

This data is analyzed against MUTCD warrant criteria to determine the need for traffic signals, multi-way stops,

or other control devices. Our team then prepares a comprehensive warrant study report with clear findings and actionable recommendations. When requested, our engineers present these findings to the City's Traffic Engineer, Traffic Commission, Planning Commission, or City Council, ensuring that decision-makers are equipped with the technical insight needed to proceed confidently.

Once a traffic control device is warranted and approved, Bowman seamlessly transitions into the design phase, delivering:

- · Construction-ready plans
- Engineer's cost estimates
- Technical specifications
- Bid support documents, including addenda and contractor clarifications

Our traffic signal design services are led by registered traffic engineers with extensive experience preparing Plans, Specifications, and Estimates (PS&E) for a wide range of intersection and corridor improvements. We adhere strictly to CA-MUTCD, Caltrans Standard Plans and Specifications, and City of Orange standards. All final plans are signed and sealed by our licensed engineers to certify their accuracy and adequacy.

Our design team is proficient in the use of AutoCAD, Synchro, and other industry-standard software, and is highly experienced in preparing plans that meet the requirements of Caltrans, Orange County, and other regional agencies. We are also well-versed in the latest traffic signal technologies, including:

- LED signal heads and internally illuminated street name signs
- NEMA TS-2 controllers and closed-loop systems
- Fiber-optic communications and emergency vehicle preemption
- · Red light enforcement cameras
- · Video, microwave, and radar detection systems

In addition to design, Bowman provides signal system review, inspection, and operational support. We assist with equipment selection, system integration, and signal timing optimization to ensure smooth traffic flow and coordination.

### **Work Plan**

Our team can also perform signal inventory assessments, intersection conformance reviews, and prepare technical specifications for new or upgraded installations.

Whether the City is seeking to improve intersection safety, modernize signal infrastructure, or implement new traffic control strategies, Bowman is ready to deliver innovative, cost-effective, and community-sensitive solutions that align with the City of Orange's transportation goals.

### Intelligent Transportation Systems (ITS) Design

Bowman offers a forward-thinking, technology-driven approach to Intelligent Transportation Systems (ITS) design, with a strong emphasis on enhancing traffic operations, safety, and multimodal connectivity. Our team has successfully delivered ITS projects for municipalities across Southern California, integrating advanced technologies that support real-time traffic management, data collection, and system-wide coordination.

We understand that the City of Orange operates a sophisticated transportation network that includes over 160 traffic signals, 20+ miles of fiber optic infrastructure, and a centralized Traffic Management Center (TMC). Bowman is well-equipped to support the City in expanding and optimizing this network through innovative ITS solutions tailored to local needs.

Our ITS design services include:

- **Traffic signal interconnect** design using fiber optic and wireless communication technologies
- Adaptive signal control systems that respond dynamically to real-time traffic conditions
- Integration of field devices such as CCTV cameras, vehicle detection systems, dynamic message signs (DMS), and radar feedback signs
- Design of communication infrastructure, including conduit routing, pull boxes, and cabinet upgrades
- Coordination with Caltrans, OCTA, and utility providers to ensure seamless system integration and compliance with regional standards
- Development of system architecture and specifications for new or upgraded ITS corridors
- Support for grant applications and funding strategies related to ITS deployment (e.g., SB1, CMAQ, and ATP)

Our team will begin each assignment with a thorough review of existing infrastructure and system capabilities. We will conduct field investigations, assess communication gaps, and identify opportunities for system upgrades or expansion. Our ITS engineers will then develop detailed design plans, specifications, and cost estimates that are fully compliant with Caltrans Standard Plans, CA-MUTCD, and City of Orange standards.

Bowman also provides construction support and system testing services, ensuring that ITS components are installed correctly, calibrated, and fully functional before system acceptance. We work closely with City staff and vendors to ensure that all systems are integrated into the City's TMC and that operations staff are trained on new technologies.

Our goal is to help the City of Orange leverage ITS to improve traffic flow, reduce congestion, enhance safety, and support future smart city initiatives. With Bowman as your partner, you gain a team that understands both the technical and operational dimensions of ITS – and how to deliver systems that work seamlessly from day one.

#### **Traffic Control Plans**

Bowman has a proven record of successfully managing capital improvement projects and other roadway and traffic engineering construction projects for several Southern California municipalities. Our registered Traffic Engineers have prepared numerous traffic control and detour plans for construction projects while prioritizing traffic and pedestrian convenience and safety. The Traffic Engineers assigned to these tasks for the City will promptly collect all relevant traffic control needs and roadway safety information upon receiving a request from the City and prepare the appropriate plans for application to the specific projects. The CA-MUTCD and Caltrans Standard Plans and Standard Specifications will be used in preparing these plans. The plans will have the registered engineer's stamp and wet signature certifying accuracy and adequacy.

## Review Projects involving Traffic Impact Analysis, Roadway Improvements and Traffic Signal Modifications

Our professionally registered Traffic Engineers can review and comment on traffic studies and are well-versed with all local and regional guidelines and policies and procedures, including the latest state-mandated CEQA-required Vehicle Miles Traveled (VMT) analysis procedures (per SB 743) for

### H Work Plan

transportation impacts determination. Our traffic engineers have experience serving as City Engineers and City Traffic Engineers for various cities and can review and determine needs for specific traffic controls at intersections or street segments, including traffic signals, traffic and parking control signs and markings, posting of speed control signs, etc. We can prepare recommendations for any traffic ordinance or City Council or planning commission resolutions, as requested. Our team of professionals can also review any traffic impact mitigation plans, strategies or programs proposed by private developers and work in coordination with them to prepare a list of precise recommended improvements with subsequent involving traffic impacts predicting how the proposed plans, strategies, and programs will improve traffic congestion and safety.

### **Construction Management and Inspection Support**

Our team has a strong track record of successfully managing capital improvement and traffic engineering construction projects for municipalities across Southern California. We provide full-service construction support, including traffic control planning, field coordination, and engineering assistance throughout the construction and bidding phases.

Our registered Traffic Engineers are experienced in preparing traffic control and detour plans that prioritize safety and minimize disruption to vehicular and pedestrian traffic. Upon request, our team will promptly assess site-specific traffic control needs and develop tailored plans that meet City, Caltrans, and CA-MUTCD standards.

**Amir Farahani, PE, TE**, will serve as the primary point of contact for construction coordination. He will attend pre-construction meetings, job walks, and site visits, and will provide field recommendations as needed. Our team is prepared to respond to RFIs promptly, maintain a detailed log of inquiries and responses, and revise plans or specifications as required by the City.

We also offer engineering support during the bidding phase, including clarification of design documents, preparation of addenda, and coordination with contractors to ensure a smooth transition into construction. Our team will review construction area traffic control plans to ensure public safety and maintain traffic circulation throughout the work zone.

With a proactive and responsive approach, we are committed to supporting the City in delivering safe, efficient, and well-coordinated construction projects.

## Research for Federal and State Infrastructure Grants and Preparation of Grant Applications

At Bowman, we pride ourselves on being more than just engineers—we are strategic partners who help cities unlock funding opportunities and bring transformative projects to life. Our team has extensive, project-specific experience in preparing successful grant applications and securing competitive funding for municipalities and local agencies across Southern California.

We specialize in developing compelling engineering conceptual plans, technical reports, and supporting documentation under the City's direction, tailored for submittal to a wide range of funding agencies. These include, but are not limited to:

- Orange County Transportation Authority (OCTA)
- Caltrans
- Southern California Association of Governments (SCAG)
- Metrolink / SCRRA
- California Transportation Commission (CTC)
- Federal Highway Administration (FHWA)
- Orange County Council of Governments (OCCOG)

Our staff possess deep knowledge of federal and state funding programs, including Measure M, SB 1, ATP, HSIP, CMAQ, and STBG. We don't just respond to funding opportunities—we anticipate them. In fact, we have a proven track record of identifying projects that align with upcoming grant cycles and guiding our clients through the entire process, from concept to award.

One notable example: a city client missed the deadline for an MTA Call for Projects for a critical intersection improvement. Rather than accept the setback, our team proactively appealed to MTA and successfully secured \$2.1M in funding. We then advanced the project to the I-710 Early Action Technical Advisory Committee, where we obtained an additional \$1.2M—resulting in a fully funded project at zero cost to the City.

### **Work Plan**

This level of initiative is embedded in our culture. We coach our staff to be vigilant and forward-thinking, always seeking ways to streamline project delivery, reduce costs, and maximize funding potential. Our team members are actively engaged in local and regional organizations, staying informed on policy shifts, funding trends, and emerging opportunities.

For the City of Orange, Bowman will bring this same level of dedication and foresight. **Yunus Rahi, PhD, PE, TE**, a seasoned grant strategist on our team, will lead all grant-related efforts, ensuring that every application is technically sound, strategically positioned, and aligned with the City's long-term transportation goals.

### **Analyses of Existing and Projected Traffic Conditions**

Bowman's approach to traffic condition analysis is rooted in data integrity, inter-agency coordination, and a deep understanding of the regulatory and physical context of each project. Our team is experienced in conducting comprehensive evaluations of both existing and future traffic conditions to support informed decision-making and effective project delivery.

We begin by coordinating with the City of Orange, Orange County, Caltrans, and other relevant agencies to obtain all available records related to accident history, roadway geometry, traffic operations, and driver behavior. This includes sourcing crash data from:

- SWITRS (Statewide Integrated Traffic Records System) by the California Highway Patrol
- TIMS (Transportation Injury Mapping System) by UC Berkeley's Safe Transportation Research and Education Center

This data provides critical insight into historical safety trends and informs our field investigations and design recommendations.

Our team also conducts a thorough review of existing records and right-of-way documentation, including topographic surveys, utility maps, easements, and property boundaries. We proactively engage with utility companies, public agencies, and private stakeholders to identify any constraints or permitting requirements early in the process. This ensures that all necessary approvals are accounted for prior to the implementation of traffic improvements.

A preliminary field investigation is then conducted to assess:

- Site access and circulation
- · Potential utility conflicts
- Safety concerns and operational deficiencies
- · Impacts to adjacent parcels and land uses

To support this effort, our subconsultant CTC – a recognized leader in traffic data collection – will perform a full suite of services, including:

- · Manual turning movement counts
- · 24-hour machine counts
- Radar speed surveys
- Parking occupancy and demand studies
- · Pedestrian crosswalk counts
- Transit and ridership surveys

All field data and site imagery will be integrated into our GIS platform, enabling real-time access to geo-located photos and field notes. This system allows both Bowman and City staff to visualize and manage project data through the City's GIS portal, streamlining coordination and enhancing transparency.

Our GIS Analyst will support the development of base maps that reflect true physical constraints and inform the design process. These maps, combined with our traffic modeling and forecasting tools, allow us to evaluate projected traffic conditions under various growth and development scenarios.

Bowman's holistic approach ensures that every traffic analysis is grounded in accurate data, informed by local context, and aligned with the City's long-term transportation goals.

#### **Pedestrian and Bicycle Studies**

Bowman brings a deep bench of expertise in multimodal transportation planning, with a strong track record of delivering pedestrian and bicycle studies that lead to actionable, community-supported improvements. Our team understands that enhancing non-motorized mobility is not only a matter of infrastructure, but also about creating safer, more connected, and more livable neighborhoods.

We have successfully led Traffic Safety Studies Near Schools, focusing on critical safety concerns such as excessive vehicular speeds, collision history, near-miss incidents, and

### **Work Plan**

pedestrian vulnerability at intersections and corridors along school routes. Our methodology includes targeted traffic and pedestrian counts during peak school hours (typically 7:00–9:00 AM and 2:00–4:00 PM), ensuring that we capture accurate data reflective of real-world conditions. We also evaluate the potential benefits of deploying adult crossing guards and other operational strategies to enhance safety during school pick-up and drop-off periods.

Bowman is experienced in developing comprehensive Safe Routes to School (SRTS) Action Plans, which include:

- Project management and stakeholder coordination
- · Assessment of existing conditions and infrastructure gaps
- Development of interactive, web-based tools for community input
- Facilitation of safety workshops and public engagement
- Preparation of final SRTS Action Plans with individual school profiles
- 30% conceptual design plans for targeted improvements

These plans are designed to be implementation-ready and grant-competitive, aligning with funding programs such as ATP, HSIP, and SB 1.

Beyond school zones, our team conducts citywide pedestrian and bicycle studies to identify high-demand corridors, safety concerns, and opportunities for network expansion. We assess traffic conditions, user behavior, and multimodal demand to inform the design of Complete Streets that serve all users.

Should the City of Orange choose to pursue a Complete Streets Bicycle and Safety Improvements Project, Bowman is fully equipped to support every phase—from feasibility analysis to final design. Our approach would encompass:

- · Pavement rehabilitation and resurfacing
- Upgrades to Transportation Management System (TMS) elements
- ADA compliance for all pedestrian and bicycle facilities
- Design and construction of new infrastructure, including protected bike lanes, enhanced crosswalks, and pedestrian refuge islands

Our team is committed to delivering solutions that are not only technically sound but also context-sensitive and community-driven. We understand the importance of balancing safety, mobility, and aesthetics in a way that reflects the City's vision for a more walkable and bike-friendly future.

## Review Projects involving Traffic Impact Analysis, Roadway Improvements and Traffic Signal Modifications

Bowman offers a highly qualified team of traffic engineers, including professionally registered Traffic Engineers with extensive experience serving as City Engineers and City Traffic Engineers throughout Southern California. Our team is well-versed in reviewing and evaluating traffic impact studies, roadway improvement plans, and traffic signal modifications in accordance with local, regional, and state quidelines.

We bring a deep understanding of the latest CEQA-mandated Vehicle Miles Traveled (VMT) analysis procedures under SB 743, and we are adept at applying these methodologies to determine transportation impacts for both public and private development projects. Our engineers are proficient in interpreting and applying policies from OCTA, Caltrans, SCAG, and the City's own General Plan and Circulation Element.

#### Our services include:

- Thorough review of Traffic Impact Analyses (TIAs) for compliance with City standards and regional modeling assumptions
- Evaluation of intersection and corridor operations, including the need for traffic signals, stop control, speed zoning, and other traffic control devices
- Review and comment on roadway improvement plans, including geometric design, lane configurations, and multimodal accommodations
- Assessment of traffic and parking control signage, pavement markings, and striping plans
- Preparation of staff reports, technical memoranda, and recommendations for Planning Commission, City Council, or Traffic Committee consideration

### **Work Plan**

We also work closely with private developers and their consultants to review proposed traffic mitigation strategies, ensuring that they are technically sound, feasible, and aligned with the City's long-term mobility goals. Our team can prepare a precise list of recommended improvements, supported by data-driven analysis and predictive modeling to demonstrate how proposed measures will alleviate congestion, enhance safety, and support sustainable growth.

Bowman's approach is collaborative and proactive – we aim to streamline the review process while upholding the highest standards of technical rigor and public accountability. Our goal is to support the City of Orange in making informed, defensible decisions that improve mobility and quality of life for all users.



## **MEET THE SENIOR PROJECT MANAGER**

Amir Farahani, PE, TE

Amir Farahani is a seasoned traffic and transportation engineering professional with over 32 years of experience in civil, traffic, and transportation engineering, including more than 28 years of dedicated service to the City of Orange. Throughout his tenure, Amir held progressively responsible positions – rising from Engineering Technician to Assistant Engineer, Associate Engineer, Senior Engineer, and ultimately serving as City Traffic Engineer and Traffic and Transportation Manager.

In these roles, Amir led the City's traffic and transportation division, where he oversaw daily traffic operations, managed the City's Traffic Management Center (TMC), and directed signal timing, maintenance, and capital improvement initiatives. He was responsible for delivering projects from concept through construction, preparing PS&E packages, administering contracts, and coordinating with local, regional, and federal agencies.

Amir's expertise includes development review, grant funding strategy and application (including HSIP, SR2S, CDBG, and TEA), and public representation at City Council and inter-agency meetings. He played a key role in shaping the City's traffic engineering standards, signal design practices, and transportation policies to enhance safety and mobility.

Since joining Bowman in 2021, Amir has continued to apply his deep municipal knowledge across Southern California. His recent work includes traffic signal design, pedestrian safety improvements (e.g., HAWK and RRFB systems), including various studies and reports. Amir's long-standing relationship with the City of Orange provides him with a unique and valuable perspective on its infrastructure, operational priorities, and community values.

## City of Orange RFP 24-25.24 On-Call Traffic Engineering Services Bowman Consulting Group - Cost Proposal

-
\$300
\$220
\$200
\$185
\$170
\$200
\$190
\$155
\$145
\$140
\$155
\$200
\$180
\$160
\$155
\$125