Qualifications/Proposal For:

Professional Engineering Design Services for
TDA Article 3 (SB 821) Projects:

Perez Road Class IV Separated Bikeways - C08673
Whispering Palms Trail Class III Bike Routes - C08672

City of Cathedral City | October 29, 2024

Submitted By:

STC Traffic, Inc

Mailing and Business Address:

5973 Avenida Encinas, Suite 218
Carlsbad, CA 92008
Principal Contact: Jason Stack, President
P: (760) 602-4290

STC TRAFFIC

Cathedral City

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Conflict of Interest Statement: STC does not have any financial, business or other relationship with the City that may have an impact upon the outcome of the contract or the construction project. STC does not have any current clients or relationship with any construction companies that have a financial interest in the project.

I. Cover Letter

October 29, 2024

Attn: Armando J. Garcia Baldizzone, P.E.
City Engineer
68-700 Avenida Lalo Guerrero
Cathedral City, CA 92234

RE: Request for Qualifications/Proposals – Professional Engineering Design Services for TDA Article 3 (SB 821) Projects: Perez Road Class IV Separated Bikeways (C08673) and Whispering Palms Trail Class III Bike Routes (C08672)

STC Traffic, Inc. (STC) is pleased to submit our qualifications to the City of Cathedral City for Professional Engineering Design Services for Professional Engineering Design Services for TDA Article 3 (SB 821) Projects: Perez Road Class IV Separated Bikeways (C08673) and Whispering Palms Trail Class III Bike Routes (C08672).

We love working for the City and collaborating with City staff. Not only does the City have a strong familiarity with our team, but City staff and in-house staff employed by the agency regularly rely on us for important jobs. We are currently working on three (3) HSIP Cycle 11 Projects for the City. These projects demonstrate our intimate familiarity with Caltrans Local Assistance Procedures Manual (LAPM), Local Assistance Program Guidelines (LAPG), and other Caltrans requirements.

For over a decade, we have worked on similar bikeway projects throughout Southern California. The City of Encinitas is a great example where we designed the first application of sharrows/lane reductions on Coast Highway 101; challenging bike lanes on the City's arterial network; traffic calming/road diet measures; and Class IV buffered green bike lanes. **We performed much of this work in conjunction with pavement/street maintenance programs on nearly every major corridor in the City.** After proving our success, we introduced the program to the City of Menifee where we developed the City's Active Transportation Plan to improve bicycle/ped facilities citywide.

Our Project Manager, Rob Blough, P.E., T.E., is a licensed professional Civil Engineer in the State of California. We do not proposed the use of sub-consultants. As the authorized representative to execute an agreement with the City, we have read and complied with all terms and conditions of the RFP and acknowledge all addenda. We look forward to working with the City.

Sincerely,

Jason Stack, President
5973 Avenida Encinas, Suite 218
Carlsbad, CA 92008
(760) 602-4290, jason.stack@stctraffic.com

II. Statement of Qualifications

STC Traffic, Inc. *has been providing professional traffic engineering services to municipal agencies in Southern California for over 17 years.*

Our team is recognized for its ability to creatively solve problems arising from the most challenging traffic engineering projects.

We are comprised of professional engineers in traffic and civil engineering, traffic operations engineers, certified planners, certified IMSA signal technicians, ITS and systems and network engineers, and Public Works electricians/ inspectors. These are exactly the professionals that the City will need to deliver these TDA Article 3 Bikeway Projects.

STC is structured as a full-service extension of City staff precisely so that our planners, designers, and ITS experts can address the City's immediate needs.

STC currently provides as-needed traffic engineering services to the City of Cathedral City. Our strong local and regional presence gives us the ability to deliver the range of services that the City requires on these projects.

STC is a certified **Small Business Enterprise (SBE).** The staff represented in our proposal are the staff that are going to be there for the City 100% of the time. Our staff is flexible working the hours necessary to make the deadline. We understand the critical nature of the consulting work we do. Our work is all about trust.

Local Presence

Our team currently supports the City of Cathedral City with on-call traffic engineering services and are regularly on site and/or in the vicinity. We will provide the same level of service and availability on this project. We are 100% committed to providing boots-on-the-ground and local resources whenever they are needed for this contract. STC has the ability to establish an office within the County or surrounding area.

Seasoned Project Management

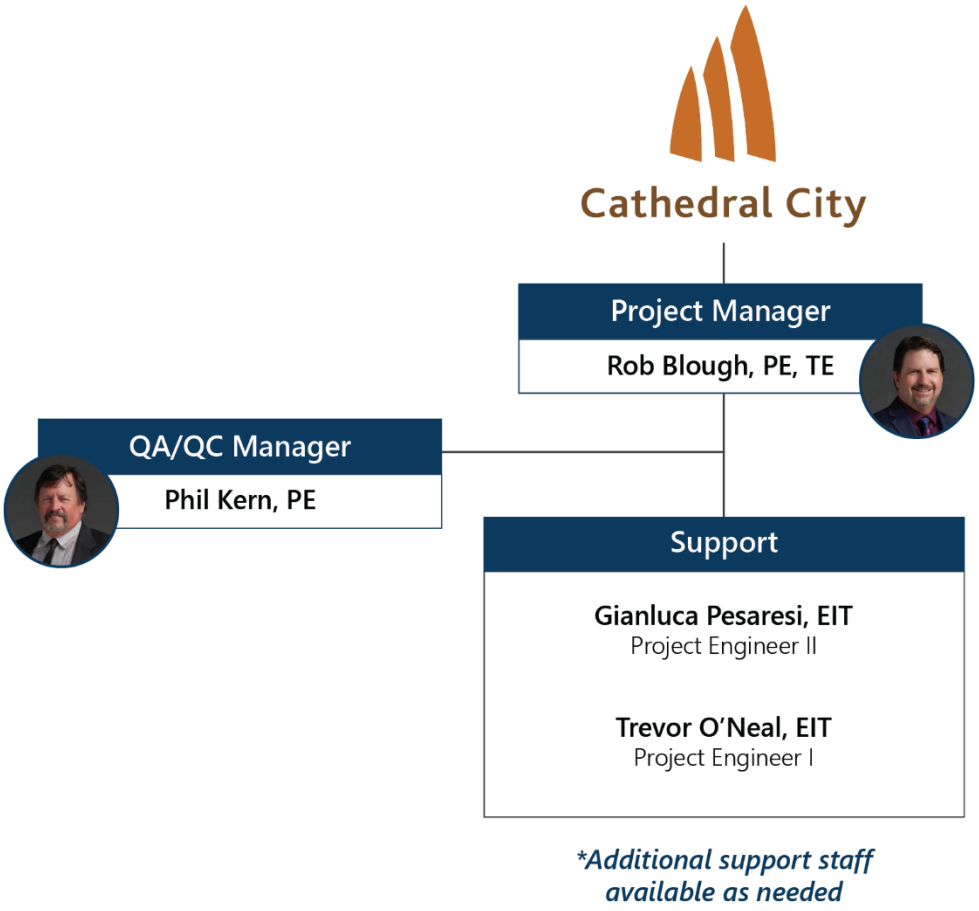
The STC Team will be led by Rob Blough, P.E., T.E., and supported by in-house technical staff in STC's planning, engineering, and systems and operations divisions. Rob understands municipal agency needs from the inside-out. As a former City Traffic Engineer for the Cities of Menifee (2018-2023) and Encinitas (1997-2018), he will be able to serve as a true extension of City staff.

Project Personnel

STC's Organizational Chart for the project is shown below—resumes for project management (Rob Blough) and support staff are included as Appendix A. All assigned key professional staff are properly licensed to practice in California.

Our foremost approach to meeting the City's needs for this project is to provide the highest-quality staff. STC is modeled in the image of the municipal public works traffic division. We are comprised of professional engineers (traffic/civil), professional traffic operations engineers, certified signal technicians (up to IMSA Level III), ITS systems and network engineers, and public works electricians and inspectors—the team proposed for this Project is the same team that has delivered many similar projects throughout Southern California, including current HSIP work for the City of Cathedral City. This experience will give the City confidence in our ability to continue to deliver.

All work for this contract will be handled in-house. We do not propose the use of sub-consultants.



Meet the Project Manager

Rob Blough, P.E., T.E., is the Project Manager and primary point of contact for this project. Rob has 25 years of experience as the City Traffic Engineer for the City of Encinitas and five years for the City of Menifee.

He often functions as the City Traffic Engineer in many of STC's on-call contracts throughout Southern California. During his 30+ year government career as City Traffic Engineer for two unique cities, Rob gained the knowledge of how local governments operate, both in a high-growth developing City like Menifee (No. 1 fastest growth City in California 2017-2022), and in a City with heavy public participation like Encinitas that prioritized maintaining its community character through addressing neighborhood traffic issues.

He has extensive experience in **bikeway design, cyclist and pedestrian safety,** traffic signal design, signal timing, traffic operations, and trouble-shooting problems in the field, **design of traffic calming**, roundabouts, parking issues, streetscape projects, interchange projects, school traffic safety issues, **striping plan design and field implementation,** traffic control plan review, creating work orders, and working with contractors, public works inspectors, and **street maintenance.**

Rob is a hands-on traffic engineer that understands how to work with the public, elected officials, citizen groups, and other public agencies. He has both the technical knowledge and insight to address complex traffic issues, identify problems, develop solutions and alternatives, and present results both in writing and orally to citizens, traffic commissions, planning commissions, and City Councils.

While City Traffic Engineer with the City of Encinitas, he prepared over 1,000 technical reports and presented these reports in public meetings at over 300 Traffic Commission, Planning Commission, and City Council meetings and workshops.

While working for the fast-paced City of Menifee, he was a key staff member assisting other City departments in land development, site plan review, traffic circulation planning, construction of over 50 traffic signals, signal timing and coordination development, ITS and Traffic Management Communication, CIP projects, traffic impact and VMT studies, active transportation and bike projects, and working with the Police Department to address speeding and traffic safety issues.

All of this experience will be relied upon in order to deliver the TDA Article 3 Bikeway Projects.

Meet the Support Team

Phil Kern, P.E., Principal Engineer, has over 37 years of experience in the planning, design, permitting, and construction support of a wide range of public works, transportation, infrastructure, and capital improvement projects for public agencies. The last 20 years of his career have focused on the design and delivery of capital projects through on-call contracts and serving as staff extension for public agencies. Phil leads civil engineering design for STC's contracts in Riverside County.

Gianluca Pesaresi, EIT, Project Engineer II, has over seven years of experience in the fields of traffic engineering and traffic signal operations. He has been responsible for supporting the delivery of numerous grant-funded projects throughout Southern California. Gianluca was the lead designer for similar bikeway and striping projects in the Cities of Encinitas, Carlsbad, and many others.

Trevor O'Neal, EIT, Project Engineer I, is a project engineer with experience as a civil engineering construction intern, where he got hands-on experience reviewing plans, conducting field work, developing quantity takeoffs, and working in Bluebeam and HeavyBid. He supports STC's engineering team developing and reviewing PS&E for various traffic and civil engineering improvements, having recently supported projects for the Cities of Cathedral City, Jurupa Valley, Beaumont, Fontana, and Palm Desert.

LAPM and LAPG Experience

Over the past 10 years, STC has completed dozens of contracts for grant-funded projects, which required coordination with DLA for project delivery. Our staff is versed in the LAPM, and we recognize the City needs STC to self-deliver our expertise in order to drive forward the projects. For example, STC has delivered HSIP funded projects since HSIP Cycle 1 and has direct experience on HSIP funded projects, including three current projects for the City of Cathedral City. STC is regularly involved in the coordination and administrative efforts with Caltrans, Caltrans Local Assistance, and the representative local agencies.

Similar Project Work

Local Projects in Cathedral City

- **HSIP Cycle 11 Grant Applications and Design:** Cathedral City has been pursuing HSIP grant funding for infrastructure improvements that enhance safety for all roadway users in the City since 2011 and has been successful in achieving millions of dollars in HSIP grant awards authored by STC. STC wrote all of the grant applications for the projects in HSIP Cycle 11, helping the City achieve more than $3.5M in funding. STC is currently working on the design for HSIPL-5430-040, HSIPL-5430-041, and HSIPL-5430-042.

- **Local Roadway Safety Plan:** STC developed priority projects for upgrading safety lighting and internally illuminated street name signs to LED and retro-reflective backplates at signalized intersections citywide; installing pedestrian hybrid beacons; and upgrading existing pedestrian crosswalks to include LED lighting, curb extensions, curb ramps, flashing stop sign beacons, high visibility striping, and upgrades to existing roadway signing and striping. Ramon Rd & Avenida La Paloma (right) was identified as a priority unsignalized location by the LRSP. Additionally, recommendations were presented for HSIP funding set-asides.

STC Traffic
Cathedral City HSIP Cycle 11 Projects

HSIP Cycle 11 Grants	STC-Grant Authored	STC-Awarded Design
Pedestrian Crosswalk Upgrades (18 Intersections) *HSIPL-5430-039*	$1,306,890	
Pedestrian Signals (2 intersections) *HSIPL-5430-040*	$959,670	✓
Signal Hardware (49 intersections) *HSIPL-5430-041*	$1,008,000	✓
30th Ave & San Eljay Ave (Set-Aside) *HSIPL-5430-042*	$249,840	✓

- **HAWK Crossing at Ramon Rd. & Avenida La Paloma:** The City of was awarded a HSIP grant to construct a High-Intensity Activated Crosswalk (HAWK) signal near the intersection of Ramon Road & Avenida La Paloma to address pedestrian and bicyclist collisions between Candlewood Drive and Shifting Sands Trail. STC evaluated the existing operations of Ramon Road in greater detail at the onset of the project and produced a Basis of Design document to further analyze and determine the preferred crossing location, configuration, and traffic signal control type. Following finalization of the preferred crossing alternative, STC prepared the PS&E, RFA, and assisted with the bidding process.

Client Reference: John A. Corella, P.E., Director of Engineering/Public Works (760) 770-0327 jcorella@cathedralcity.gov

Citywide Bikeway Improvements | Encinitas, CA (2011-Present)

Since 2011, STC has been the go-to firm for the City of Encinitas for innovative traffic engineering services and designs. STC has provided the City services including citywide bikeway design, signing and striping design, traffic signal design, street lighting design, ITS planning and design, plan check review, traffic operations, construction management, constructability review, traffic signal timing plans, and grant applications.

As part of these services, STC has stayed involved with **bikeway improvements for nearly every major corridor in the City, including citywide green bike lane striping.**

STC designed a road diet and Complete Streets project on Coast Highway 101 from the north City limit in Leucadia and south to Swami's Beach. This was a high-profile project that represented the first implementation of a ten-year plan to create a reduced-traffic, bicycle and pedestrian-friendly, art-infused, curbside dining "village" through Leucadia. STC developed several concepts with City staff to provide bike lanes, sharrows, parking regulation areas, and associated new roadway cross sections. One of the project highlights reduced the northbound cross section of Coast Highway 101 from two lanes to one lane between Leucadia Boulevard and La Costa Avenue to accommodate an 8-foot bike lane. The project was designed and constructed on schedule and met with great fanfare.

Highway 101 Class IV Buffered Green Bike Lanes | Encinitas Spotlight

In this high-profile bike mobility and safety project, STC designed and installed AC berm protected Class IV buffered green bike lanes from Chesterfield Drive to the City's southern limits.

This fast-evolving project morphed from a buffered signing and striping bike lane to a Class IV, physically separated bike lane. The project design, which also included civil design plans, moved quickly to account for changes as the City laid out its plans in front of the Traffic Commission Council and the general public, and STC's project team remained immediately available to adjust plans on an as-needed basis.

This project represents STC's ability to innovate. We utilized AC berm to reduce cost, just one of the many alterations showcasing our ability to work within the City's budget to deliver a value-driven product. The project complements our decades-long work with the City to create a reduced-traffic, bicycle and pedestrian-friendly Coast Highway 101.

Bikeway Analysis at Balour Drive and Oakcrest Park Drive | Encinitas Spotlight

STC executed design of a pedestrian crossing at the intersection of Oakcrest Drive and Balour Drive and bicycle striping along Balour Drive from Encinitas Boulevard to Santa Fe Drive. The purpose of the initial study was to evaluate roadway and intersection operating conditions in the vicinity of the intersection and determine the conditions prompting public concern, including whether a traffic signal was warranted and whether other safety improvements were needed to address vehicle, pedestrian, and bicycle traffic activity (*Cont. on Next Page*).

Designs plans included signage and striping plans, pedestrian signal crossing plans, and rectangular rapid flashing beacon (RRFB) plans. The design from San Andrade Drive to Encinitas Blvd incorporated additional geometric striping changes to provide for safer transitions. STC incorporated green bike lanes as part of Encinitas's push to create a safer biking community. For location where bike lanes could not fit the exist roadway geometry, sharrow striping was implemented. This project supports Safe Routes to School by addressing a known safety hazard near Oakcrest Middle School.

Client Reference: Abraham Bandegan, PE, TE, PTP, City Traffic Engineer, (760) 633-2705 abandegan@encinitasca.gov

Citywide Bikeway Improvements | National City, CA (2011-Present)

The National City On-Call CIP Support Services contract is arguably the best example of STC's ability to provide highest-quality comprehensive municipal as-needed engineering consulting services. Through our strength in traffic engineering, we have become a lead program manager, providing multidisciplinary services for one of the largest municipal CIP programs in San Diego County. As part of these services, STC has stayed involved with bikeway improvements for a variety of local and grant-funded projects.

Westside Mobility Enhancements with Ped and Bicycle Improvements | National City Spotlight

STC assisted the City with preparing an ATP grant application to improve walking and bicycling in the City's historic Old Town neighborhood. The grant was centered on implementing pedestrian and bicycle improvements identified in the City's Westside Specific Area Plan, with emphasis on traffic calming and mobility. Elements of design included: Class II bike lanes, green bike boxes at a signalized intersection, traffic signal modification, roundabout, new street lighting, reconfiguration of a two-way street to a one-way street with angle parking, raised sidewalk and crosswalk along a walking route to school, and enhanced crosswalks with curb extensions and high intensity signing and striping.

Client Reference: Stephen Manganiello, TE, Director of Public Works, (608) 469-1169 smanganiello@nationalcityca.gov

Avenida Encinas Coastal Rail Trail | Carlsbad, CA (2022-2023)

The project involved lane reduction restriping on Avenida Encinas to encourage use of bikes without the construction of a separated cycle track or bike path. The Class II bike lane was designed to maximize bicycle visibility and safety, incorporating elements such as wide buffer lanes, green bike paint at conflict areas, bike signage, and parking lane buffers. STC performed all of the traffic engineering for the project including multimodal transportation analysis, traffic signal modifications, pedestrian active warning devices, signing and striping, and specifications and cost estimates.

Client Reference: Brandon Miles, P.E., T.E., QSD, Associate Engineer, (442) 339-2745 Brandon.Miles@carlsbadca.gov

III. Project Understanding and Approach

Project Understanding

This project represents a continuation of the City of Cathedral City's dedication to invest in non-motorized traffic system improvements that directly benefit the community's quality of life by encouraging alternative modes of transportation through improvements to the bikeway network.

The City received funding through SB 821 to complete improvements prioritizing bicycle and pedestrian facilities. The City is seeking engineering design services for City Project No. C08673 on Perez Road from Cathedral Canyon Drive to Date Palm Drive and City Project No. C08672 on Whispering Palms Trail from Dinah Shore Drive to 30th Avenue.

The proposed improvements on Perez Road include the installation of a 7-foot bike lane adjacent to existing curb and a 4-foot horizontal buffer zone with vertical flexible post delineators spaced 10-feet apart on both sides of the road. If funding allows, a six-inch curb may also be installed.

The Project will include dashed green colored pavement markings at conflict points with intersection crossings and driveways, a bicycle box for the westbound approach at Cathedral Canyon Drive, bicycle detection and vehicle loop detection at the signalized intersections, pavement improvements to ensure a smooth and level surface for bicycles, and new roadway signage and striping. The total design and construction cost for this project is $680,000.00.

The proposed improvements on Whispering Palms Trail include the installation of shared lane/sharrow pavement markings, bicycle route and wayfinding signage, and bicycle boxes and bicycle detection for the northbound and southbound approaches of Whispering Palms Trail at Ramon Road. The total design and construction cost for this project is $1,062,000.00.

These two projects align with the vision, goals, and objectives outlined in the City's Active Transportation Plan to improve health and safety, provide multimodal connections, equity, and access and connectivity, within Cathedral City.

STC is known in the traffic engineering community for a strong reputation in working with local government agencies and have former City Traffic Engineers that have extensive experience in implementing active transportation projects. **We have designed numerous separated Class IV and Class III bikeway signing and striping projects** and understand the latest standards and guidelines as well as research of the performance and safety issues involving poorly designed Class IV facilities.

Our staff of over 27 engineers, planners, and signal technicians are wholly dedicated to municipal traffic engineering and the broad spectrum of specialties required to deliver these services. Through our combined decades of experience, we have developed a tried and proven process to deliver these exact services.

It all starts with a solid concept.

We carry out our work with the ultimate purpose in mind, which is the life cycle of management, operation, and maintenance that the City will be responsible for. Our process starts with a concept, which the City has provided, that ties directly to this ultimate use and is why we prepare a project basis of design that serves as a critical reference documenting our rationale, criteria, principles, assumptions, and constraints.

The basis document reduces risks of unknowns and ensures that our concept has been vetted, is understood, and has the answers to progress to the detailed design phase with the confidence of the City and design team.

Discussion & Project Approach

Perez Road. The City provided a separated Class IV bikeway striping plan concept in the RFP for Perez Road between Cathedral Canyon Drive and Date Palm Drive.

On Perez Road there are 17 driveway openings on the south side and 13 driveway openings and two public intersections on the north side. The concept plan presented in the RFP proposes to install a bike lane buffer, green paint, delineators to provide the separation between narrower vehicle lanes and a wider Class IV bikeway, and rubberized emulsion asphalt slurry. Also proposed are bike lane loop detectors at the two traffic signals at Cathedral Canyon Drive and Date Palm Drive as well as bike boxes at the intersection of Cathedral Canyon Drive to help facilitate bike left turns. Curb barriers will be considered if funding is available per the RFP.

STC has designed many similar bikeway projects along some of the most heavily traveled bike corridors in southern California. We have extensive experience along the highly-traveled Coast Highway 101 corridor through the Cities of Carlsbad, Encinitas, Solana Beach, and San Diego.

Our Project Manager, Rob Blough, P.E., T.E., is a former City Traffic Engineer of 30 years who has extensive knowledge of cyclist and vehicle driver behaviors and the latest bikeway/bike lane standards that have been introduced in recent years. He will use his knowledge to provide the City with the safest design possible.

Potential issues STC will consider in the design include the following:

- ✓ Raised curbs that are not well marked can result in an increase in bicycles hitting physical obstructions if they are not easily seen.
- ✓ Raised curbs and delineators near heavily used driveways and intersections can result in **higher incidence of right hook vehicle vs. bicycle accidents** since drivers will be prevented from merging into the bike lane prior to the driveways. (*See Figure 1 below*).

Figure 1. Example of hazards raised curbs can present to cyclists. STC has monitored separated bikeway projects and is well aware of what is needed to create a safe design for all road users.

- ✓ Delineators that are standard height are often too tall have resulted in bicyclist's handlebars hitting the delineators and crashing.
- ✓ Separated bike lanes often accumulate and trap debris between the raised curbs and can impair street sweeping operations and result in hazards in the separated bikeway. Cities have had to purchase narrower street sweepers to keep the bike lanes safe and free of debris (*See Figure 2 below*).

Figure 2. Example of special narrow street sweeper that had to be purchased to clean separated bikeways that were too narrow for standard street sweepers.

- ✓ Eastbound Perez Road approaching the intersection of Date Palm Drive will be evaluated as we feel the concept plan does not provide a safe design where two eastbound vehicle lanes have a lane drop and merge approaching the intersection of Date Palm Dr. (*See Figure 3*).

Figure 3. Example substandard lane merge and drop on eastbound Perez Road approaching Date Palm Dr. STC has reviewed the concept drawings and will provide a design to meet CA MUTCD standards and guidelines.

Whispering Palms Trail. The City provided a Class III bike route striping plan concept in the RFP for Whispering Palms Trail between Dinah Shore Drive to 30th Avenue.

Whispering Palm Trail is 40 feet wide curb-to-curb with on-street parking. The concept striping plan provides replacement of existing striping after pavement improvements and installation of sharrows, bike loops, bike boxes, speed feedback signs, and removing and replacing 3" AC and applying rubberized emulsion asphalt slurry. **To save costs,** the bike loop installation, speed feedback signs, and paving improvements will be included on the same improvement plan with the signing/striping plan.

The sharrows will be designed to be located per CA MUTCD standards and we propose to include the sign "Bikes May Use Full Lane" signs at key intervals along the corridor. Our Project Manager, Rob Blough, was one of the first City Traffic Engineers to install sharrows in southern California along one of the heaviest biking corridors in the State. He will use his knowledge and experience gained through his years working with the biking community and special interest biking groups to develop a plan that meets the needs of the cycling community in Cathedral City.

IV. Scope of Work

This section summarizes STC's scope of work, technical approach, and key deliverables to provide the engineering services required by the City. The tasks shown in the RFP have been modified to reflect the workflow and hours anticipated for the project.

Task 1. Project Management & Administration

STC's Project Manager, Mr. Blough, P.E., T.E., will coordinate the day-to-day activities for the duration of the project and serve as the primary point of contact. Following the Notice to Proceed (NTP), Mr. Blough will schedule a project kick-off meeting with City staff and the Project Team to discuss the objectives, schedule, scope, and City policies and procedures.

Mr. Blough will coordinate progress meetings to discuss design development, staff comments on submittals, and action items. There will be meetings following each submittal to the City at the Preliminary Plan stage and at 90% and 100% PS&E submittals.

STC will prepare and email meeting agendas to City staff in advance of the meetings and email meeting minutes after each meeting. STC will also support the City by attending one City Council meeting to present the project for approval.

STC will submit a progress report with invoices to the City in an organized format and with sufficient detail and backup documentation to clearly identify personnel, hours worked, and tasks completed. STC will control all project documents and provide deliverables and final files to the City in both hard-copy and electronic format.

STC will maintain project files in an organized, logical fashion, and will be able to promptly retrieve and distribute project information to the City in the event of an audit or PRA request for information.

Task 1. Deliverables:

- *Schedule and Schedule Updates*
- *Monthly Progress Reports*
- *Meeting Agendas and Minutes*
- *Attend One City Council Meeting*

Task 2. Field Work, Preliminary Plans, Inventory & Standards

The STC Team and City Project Manager, if available, will walk the project area and collect relevant information to aid in completing location optimization and preliminary plan development.

During the field review, STC will evaluate the project area for compliance with minimum safety standards as provided in the CA MUTCD, Americans with Disabilities Act (ADA), and City Standards. The project area will be observed, paying special attention to traffic signal operations, bike and pedestrian activity, vehicle speed, safety concerns, site constraints, and opportunities.

Following field review, a base map will be prepared showing all the proposed improvements, including the overlay and slurry seal, and laying out the preliminary improvement plans. A Basis of Design (BOD) technical memo will accompany the preliminary plans and document all assumptions and standards to support the design.

Task 2. Deliverables:

- *Field Notes with Photos*
- *Basis of Design Technical Memo*
- *Preliminary Plans*

Task 3. Environmental Documentation

STC will prepare the required environmental documentation that will include the Notice of Determination (NOD) or Notice of Exemption (NOE) and file with the County of Riverside and the State Clearinghouse at the Governor's Office of Planning and Research (OPR).

Task 3. Deliverables:

- *Prepare and File CEQA NOD or NOE Form with County of Riverside and State Clearinghouse*

Plans, Specifications, and Cost Estimate (PS&E)

The STC Team will prepare all drawings, specifications and engineers estimates adequate and sufficient for the City of Cathedral City to solicit bids for the award of the contract and construction. This work is summarized in the subsequent task.

Task 4. Plans, Specifications, and Estimate (PS&E)

STC will use the Basis of Design (BOD) technical memo and preliminary plans developed during Task 2 as the outline for developing 90% and 100% PS&E. The design will be developed in conformance with the latest City of Cathedral City requirements, Green Book, Caltrans Specifications and Standard Plans, AASHTO, California Manual on Uniform Traffic Control Devices (CA-MUTCD), and Riverside County Regional Standard Drawings.

Plans will be prepared utilizing AutoCAD software. All work identified on the plans will be approved and signed by a professional Civil Engineer registered in the Station of California.

Signing and Striping Plans will be prepared at a horizontal scale of 1"=40'. The plans will include full geometry of the roadway and appropriate signing and striping removals and improvements. Bike loop detection will be incorporated into the signing and striping plans to reduce costs. The street overlay and slurry seal limits will also be included on the signing/striping plans showing the limits and with a general note. This will not include detailed pavement design or full depth pavement construction. The plans will incorporate all aspects of existing and proposed signing and striping design.

STC will provide submittals at the 90% and 100% levels and will schedule a meeting with the City within two (2) weeks of submittal to discuss the plans, answer questions, and obtain direction from the City.

Task 4. Deliverables:

- *Project Plans, Specifications, Cost Estimate, and Bid Documents at the 90% and 100% Design Levels*

Task 5. Bidding Assistance

The STC Team will provide support for bidding during the pre-bidding phases of the project. This work will include, but is not limited to, responding to pre-bid questions from the City and contractor, interpretations of the plans and specifications by email or phone, responses to RFIs, and preparation of addendums if necessary.

STC will attend the pre-bid meeting and be available to answer questions and provide assistance to the City and contractor. All communication will be directed to the City for issuance to the Contractor. STC will have no direct contact with the Contractor.

Task 5. Deliverables:

- *Pre-Bid Meeting Attendance, Written RFI Responses, and Addenda*

Task 6. Construction Support

The STC Team will provide support during the construction phases of this project. This work will include, but is not limited to, responding to the Contractor's RFIs related to the plans and specifications, review of submittals, and prepare final record drawings based on the red-line copies of the plans from the contractor and inspector.

STC will attend the pre-construction meeting and be available to answer questions and provide assistance to the City and Contractor.

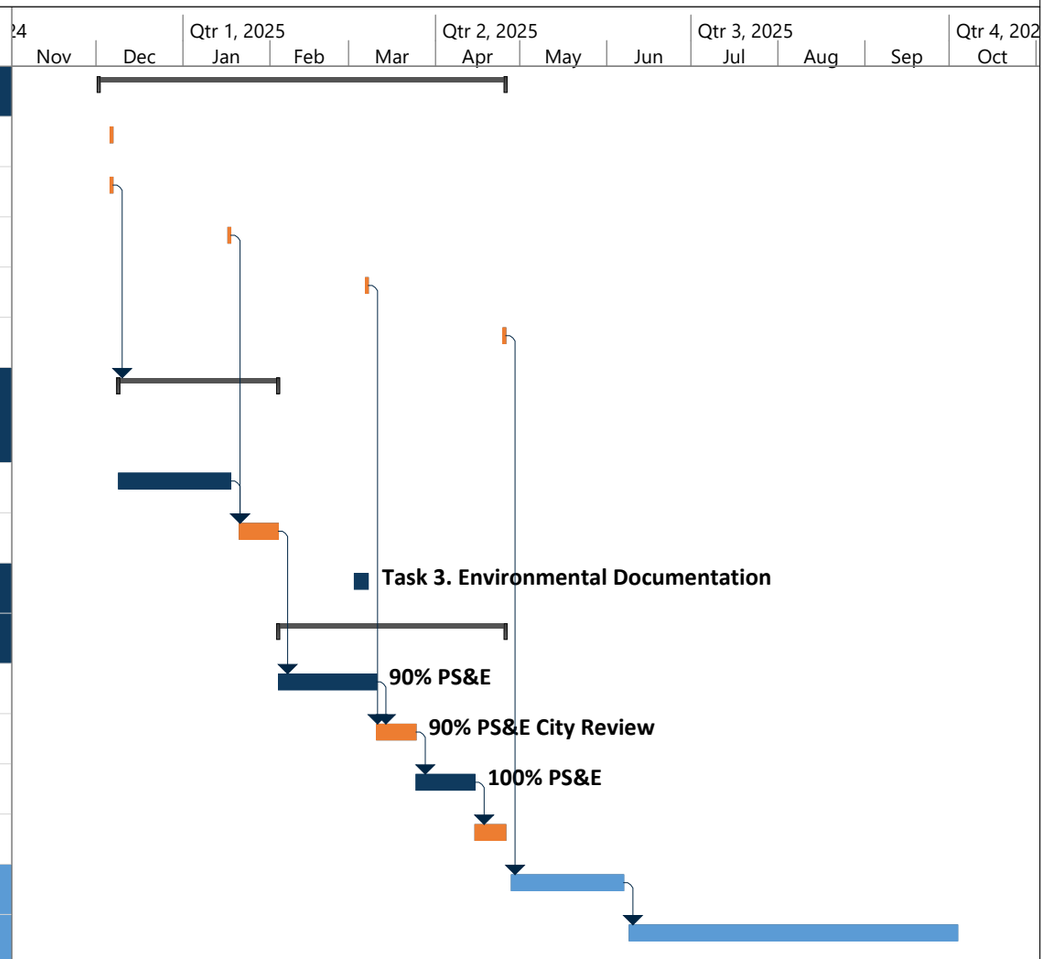
All communication will be directed to the City for issuance to the Contractor. STC will have no direct contact with the Contractor. This task excludes regularly scheduled construction observation.

Task 6. Deliverables:

- *Pre-Construction Meeting Attendance*
- *Written RFI Responses, Addenda, Shop Drawing Review and Acceptance*
- *Final Record Drawings*

Project Schedule
STC Traffic - TDA Article 3 Bikeway Projects: C08673 & C08672

ID	Task Name	Duration	Start	Finish
1	**Task 1. Project Management & Administration**	**105 days**	**Mon 12/2/24**	**Fri 4/25/25**
2	Notice to Proceed	1 day	Fri 12/6/24	Fri 12/6/24
3	Kick-off Meeting	1 day	Fri 12/6/24	Fri 12/6/24
4	Progress Meeting #1	1 day	Fri 1/17/25	Fri 1/17/25
5	Progress Meeting #2	1 day	Fri 3/7/25	Fri 3/7/25
6	Progress Meeting #3	1 day	Fri 4/25/25	Fri 4/25/25
7	**Task 2. Field Work, Preliminary Plans, Inventory & Standards**	**41 days**	**Mon 12/9/24**	**Mon 2/3/25**
8	Preliminary Plans & Basis of Design (BOD)	30 days	Mon 12/9/24	Fri 1/17/25
9	City Review of Preliminary Plans & BOD	10 days	Tue 1/21/25	Mon 2/3/25
10	**Task 3. Environmental Documentation**	**5 days**	**Mon 3/3/25**	**Fri 3/7/25**
11	**Task 4. Plans, Specifications & Estimate (PS&E)**	**59 days**	**Tue 2/4/25**	**Fri 4/25/25**
12	90% PS&E	25 days	Tue 2/4/25	Mon 3/10/25
13	90% PS&E City Review	10 days	Tue 3/11/25	Mon 3/24/25
14	100% PS&E	15 days	Tue 3/25/25	Mon 4/14/25
15	100% PS&E City Review	9 days	Tue 4/15/25	Fri 4/25/25
16	**Task 5. Bidding Assistance**	**30 days**	**Mon 4/28/25**	**Fri 6/6/25**
17	**Task 6. Construction Support**	**85 days**	**Mon 6/9/25**	**Fri 10/3/25**

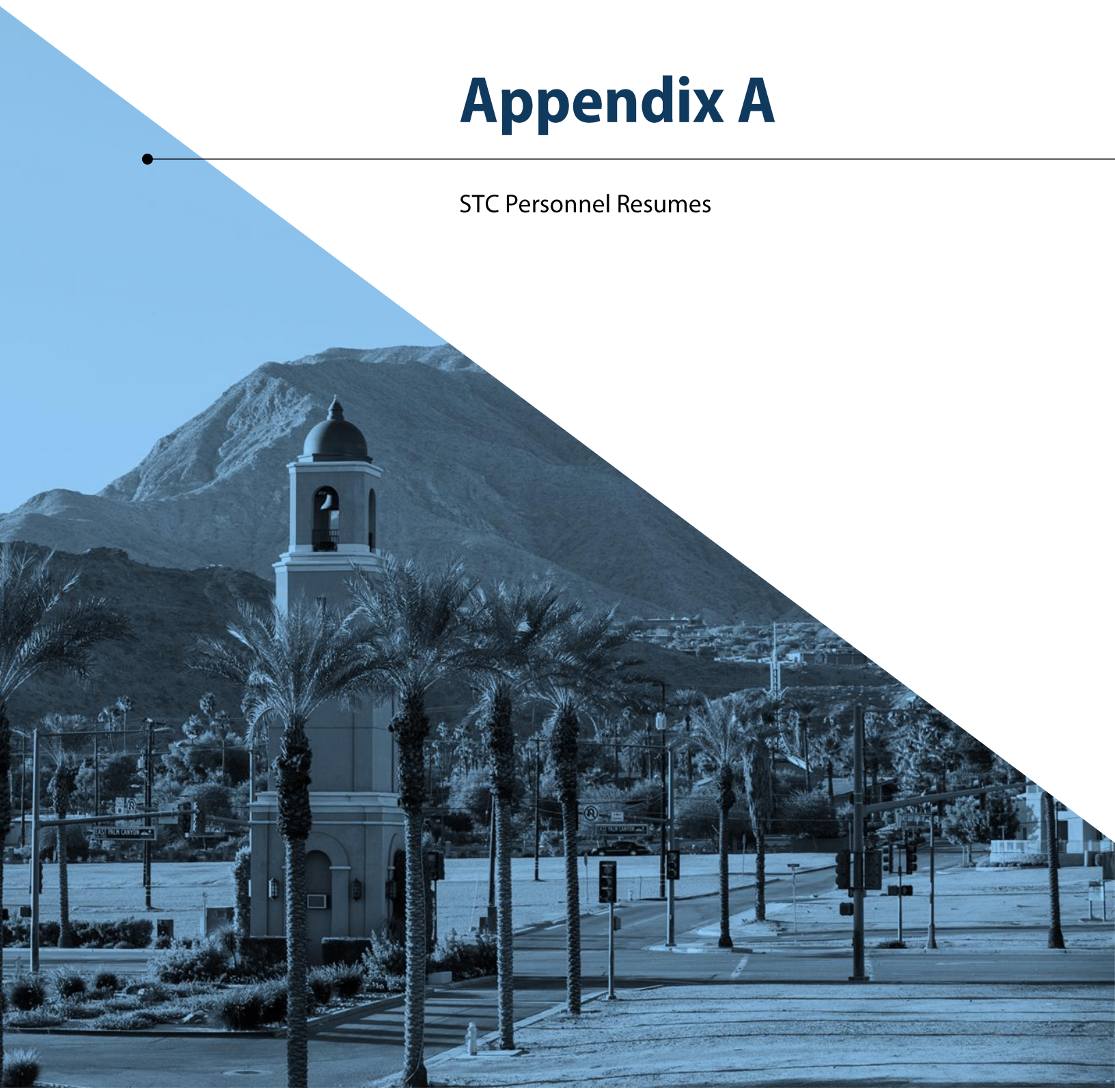


October 27, 2024

STC Task | City Task | Summary

Appendix A

STC Personnel Resumes



PROJECT MANAGER

Rob Blough PE, TE

Rob's professional experience includes serving 20 years as the City Traffic Engineer for the City of Encinitas and 5 years for the City of Menifee, where he managed all aspects of City transportation tasks, including working directly with maintenance staff in the field to troubleshoot signal issues and working with elected and appointed officials, citizens, community groups, Caltrans, and school districts. He currently supports traffic departments under on-call contracts for the cities of Cathedral City, Beaumont, Menifee, Murrieta, and Jurupa Valley.

Years of Experience: 34

Education

B.S. Civil Engineering, University of California, Irvine, 1990

Professional Registrations

Professional Engineer (Civil) CA, #60204

Professional Engineer (Traffic) CA, #1829

Relevant Experience

City of Cathedral City, On-Call Traffic Engineering Services, 2023-Present

Principal Manager. Rob manages task orders issued by the City. He is currently overseeing development of PS&E for the HSIP Citywide Traffic Signal Hardware Upgrades project. He provided additional oversight for the development of four HSIP 11 grant applications and the two grant applications for RCTC TDA Article 3 (SB 821) Bicycle and Pedestrian Facilities Grant Program.

City of Palm Desert, North Sphere Fire Station Offsite Improvements, 2023-Present

Project Manager. STC is supporting roadway and traffic signal improvements associated with the new fire station. Rob oversaw the feasibility and alternatives analysis for Class 2 buffered bike lanes, Basis of Design for two closely spaced traffic signals, signing and striping along Gerald Ford Drive, and curb return radius design at the fire station to accommodate fire truck access.

City of Fontana, Date Elementary School Street Improvements, 2023-Present

Principal Manager. STC is providing traffic engineering design to support safety improvements near the elementary schoool, including ADA-compliant access ramps, street signing and striping, which will include a Class II bike lane, traffic signal modifications at Fontana Avenue and Merrill Avenue, and fiber optic communications. Rob is responsible for coordination and development of PS&E.

City of Fontana, Intersection Improvements at Baseline/Palmetto, 2023-Present

Principal Manager. STC is responsible for traffic signal design and street improvements at the intersection of a major arterial highway and a collector roadway, to improve control and flow of traffic during peak periods. Rob coordinated with the Cities of Fontana and Rialto, reviewed geometric constraints at the intersection, and provided QA/QC for development of PS&E. The project expanded to include widening of the north side of Baseline Avenue, which included curb, gutter, and sidewalk improvements, and signing and striping for bike lanes, intersections, and pedestrian crossings.

City of Menifee, Traffic Engineering Services, 2018-2023

City Traffic Engineer. Responsible for all Traffic Engineering functions of one of the fastest developing cities in Southern California with over 100,000 citizens and consisting of 50 square miles. Functions included traffic signal design, signal timing, traffic operations, traffic calming design, striping plan design and field implementation, and plan reviews. He was responsible for planning and development of the City's bike network, tying into local projects and regional biking initiatives. Rob continues to support the City under the current contract.

QA/QC Manager

Phil Kern PE

Phil has over 37 years of experience in the planning, design, permitting, and construction support of a wide range of public works, transportation, infrastructure, and capital improvement projects for public agencies. The last 20 years of his career have focused on the design and delivery of capital projects through on-call contracts and serving as staff extension for public agencies. Phil leads civil engineering design for STC's on-call services contracts.

Years of Experience: 37

Education

B.S. Civil Engineering, San Diego State University, 1983

Professional Registrations

Professional Engineer (Civil) CA, #40831

Relevant Experience

City of Cathedral City, Ramon Road Signalized Pedestrian Crossing, 2022-Present

Principal Engineer. Cathedral City was awarded an HSIP Grant to construct a HAWK signal near the intersection of Ramon Road/ Avenida La Paloma. Under STC's recommendation, the City selected a standard pedestrian signal operations with 3-section signal heads and a staggered crosswalk. Phil provided review of civil elements of the project.

City of Colton, Washington Street Bicycle Route Project, 2022-Present

Project Manager. STC designed 1.8 miles of Class 2 and Class 3 bike facilities, including bike lanes, intersections and pedestrian crossings along a primary corridor. There were original plans to widen the recently overlayed and striped roadway. Phil coordinated with the City to develop design alternatives that would avoid new overlay and restriping and minimize loss of parking. This included reduction of median widths and incorporation of sharrows in areas that could not accomodate the 6-foot bike lanes. Design is complete and Phil is providing bid support during construction.

City of Colton, San Bernardino Avenue Street Improvement Project, 2022-Present

Project Manager. Phil is overseeing development of the bicycle facility concept plan which includes restriping of a half mile of San Bernardino Avenue, modification/replacement of non-compliant curb ramps at five intersections, and construction of 500 feet of curb and gutter. The final roadway configuration will consist of two travel lanes, a center Two Way Left Turn Lane (TWLTL) and bike lanes in both directions.

City of National City, Westside Mobility Improvements, 2016-2019

Project Manager. The project was part of the ATP for implementing pedestrian and bicycle improvements identified in the City's Westside Specific Area Plan. Phil oversaw all elements of design, which included Class II bike lanes, green bike boxes at signalized intersection, and enhanced crosswalks with curb extensions and high intensity signing and striping. The project was awarded the 2018 ASCE Award of Excellence in the Bikeways and Trails category.

City of La Mesa, Massachusetts Ave and Blackton Dr Pedestrian and Bike Improvements, 2019-2021

Project Manager. This regional ATP-funded project was meant to fill a gap in the City of La Mesa Bike Network by installing a northbound Class II bicycle lane on the east side of Massachusetts Avenue. It constructed new pedestrian ramps, a crosswalk, and medians. Project design and construction had to account for additional school traffic alongside normal pedestrian and bicycle traffic.

Gianluca has over 7 years of experience in the fields of traffic engineering and traffic signal operations. Prior to joining STC, he served as a traffic engineering intern for the City of Encinitas, where he was primarily responsible for assisting with traffic calming measures in residential areas, reviewing traffic control plans, and working closely with citizens to resolve traffic-related issues. In his current role, Gianluca applies his experience and technical skills in traffic engineering design, data collection/analysis, graphics production, and before/after traffic analyses in support of municipal projects.

Years of Experience: 7

Education

B.S. Civil Engineering, San Diego State University, 2017

Professional Registrations

Engineer-In-Training (EIT), CA # 162712

PROJECT ENGINEER II

Gianluca Pesaresi EIT

Relevant Experience

City of Cathedral City, On-Call Traffic Engineering Services, 2023-Present

Project Engineer II. Gianluca provides engineering and construction support for task orders. He supported PS&E development and utility coordination for the HSIP-funded pedestrian crossing on Ramon Road. He is currently supporting the HSIP Citywide Traffic Signal Hardware Upgrades project, deveoping PS&E and reviewing specifications for bidding documents.

City of Carlsbad, Avenida Encinas Coastal Rail Trail, 2021-Present

Project Engineer II. The project involves lane reduction restriping and Class II bike lanes designed to maximize bicycle visibility and safety, incorporating wide buffer lanes, green bike paint at conflict areas, bike signage, and parking lane buffers. Gianluca was responsible for drafting three design alternatives, field review of existing signage and traffic signal infrastructure, drafting striping and traffic signal modification plans specifying all necessary Caltrans standards, and developing cost estimates.

City of Encinitas, Oakcrest and Balour Drive Pedestrian and Bike Improvements, 2019

Project Engineer II. STC executed design of a pedestrian crossing at the intersection of Oakcrest Drive and Balour Drive and bicycle striping along Balour Drive. The design incorporated additional geometric striping changes to provide for safer transitions and green bike lanes as part of Encinitas's push to create a safer biking community. Gianluca conducted field reviews and supported development of PS&E.

City of Carlsbad, Safe Streets Initiative - Green Bike Lane Enhancements, 2022

Project Engineer II. This project supports the City's Safe Streets Initiative and will improve bicyclist safety at various intersections and driveways. Gianluca conducted field reviews and supports PS&E development for higher visibility green paint and update signage at 37 priority locations throughout the City.

City of Oceanside, Coast Highway Corridor Design Phase I, 2024-Present

Project Engineer II. STC is providing traffic engineering support for mobility enhancements along Coast Highway, which includes signing and striping design for a road diet, modifications to intersections and approaches, and 1.75 miles of Class II, buffered and shared bike lanes. Plans will accommodate narrowing of traffic lanes, reconstruction of curb returns, curb extensions, pedestrian crossings, parking buffers, and conflict zones at specific locations. Gianluca supported PS&E development for signing/striping, street lighting, and traffic signal modifications and is currently developing cost estimates for 90% submittal.

PROJECT ENGINEER I

Trevor O'Neal EIT

Trevor is a project engineer with experience as a civil engineering construction intern, where he got hands-on experience reviewing plans, conducting field work, developing quantity takeoffs, and working in Bluebeam and HeavyBid. He supports STC's engineering team developing and reviewing PS&E for various traffic and civil engineering improvements.

Years of Experience: 2

Education

B.S. Civil Engineering, University of Nevada Reno, 2023

Professional Registrations

Engineer-In-Training (EIT), #0T9051

Relevant Experience

City of Cathedral City, On-Call Traffic Engineering Services, 2023-Present

Project Engineer I. Trevor provides engineering and construction support for task orders. He is currently supporting the HSIP Citywide Traffic Signal Hardware Upgrades project, conducting field investigations and supporting development of PS&E through preliminary and final phases.

City of Palm Desert, North Sphere Fire Station Improvements, 2023-Present

Project Engineer I. STC is supporting roadway and traffic signal improvements associated with the new fire station, including Class 2 buffered bike lanes in both directions on Gerald Ford Drive and design for two closely spaced traffic signals, signing and striping along Gerald Ford Drive, and curb return radius design at the fire station to accommodate fire truck access. Trevor provides engineering support and updates plans according to City comments.

City of Jurupa Valley, Street Resurfacing Program, 2024-Present

Project Engineer I. STC is providing signing and striping plans for various streets to support contract bidding and construction for the City's FY23 Street Resurfacing Program. Types of striping include additional travel lanes, road diets, bike lane enhancements, and striping for parallel parking. Trevor provides engineering support and updates plans according to City comments.

City of Fontana, Date Elementary School Street Improvements, 2023-Present

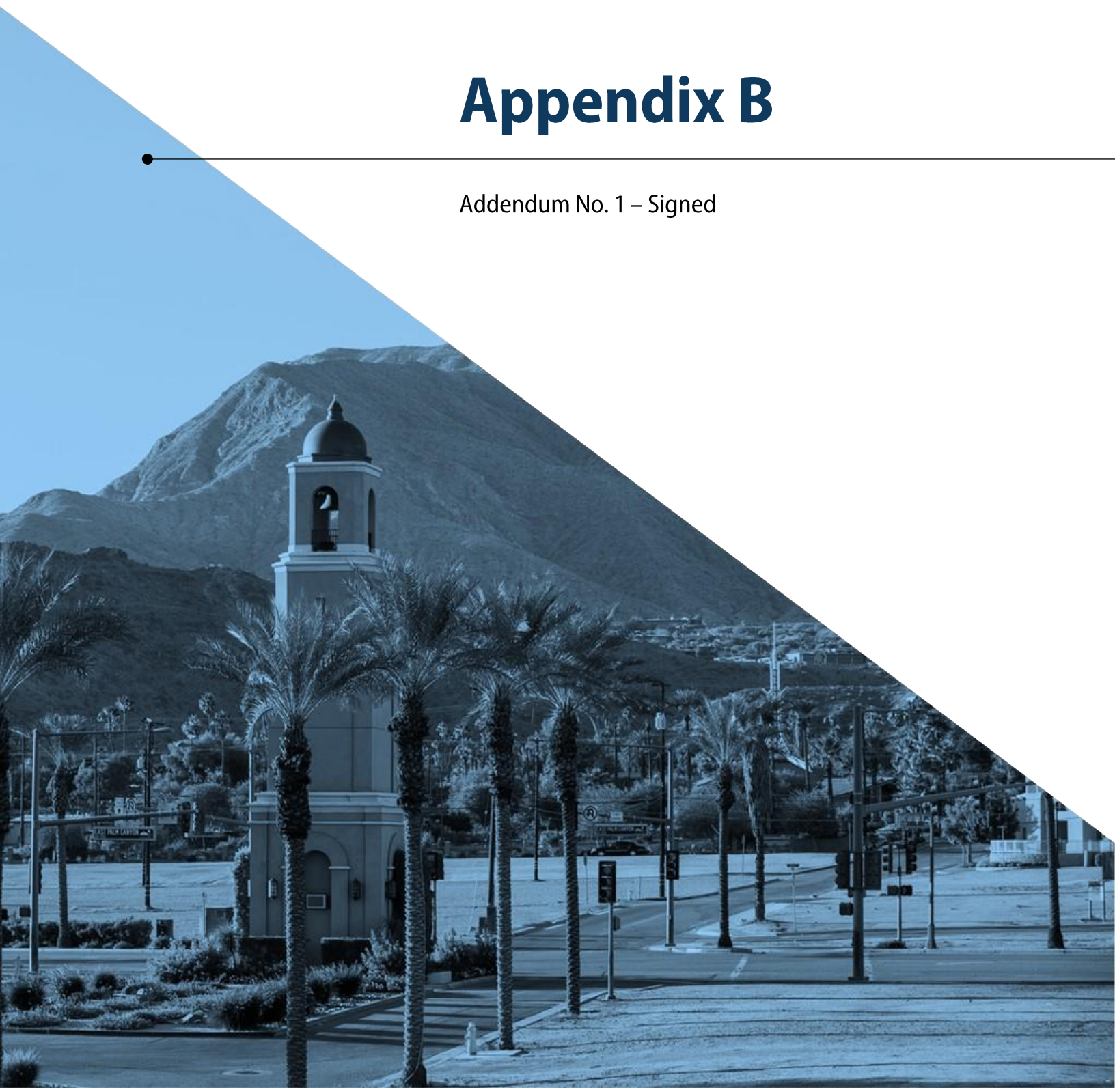
Project Engineer I. STC is providing traffic engineering design to support safety improvements near the elementary schoool, including ADA-compliant access ramps, street signing and striping, traffic signal modifications, and fiber optic communications. Trevor provides engineering support and updates plans according to City comments.

City of Oceanside, Coast Highway Corridor Design Phase I, 2024-Present

Project Engineer I. STC is providing traffic engineering support for mobility enhancements along Coast Highway. Signing and striping design includes restriping of the roadway following paving rehabilitation operations to provide road diets from four travel lanes to two for most segments, modifications to intersections and approaches, and the addition of 1.75 miles of Class II, buffered and shared bike lanes. Plans will accommodate narrowing of traffic lanes, reconstruction of curb returns, curb extensions, pedestrian crossings, parking buffers, and conflict zones at specific locations. Trevor provided engineering support for PS&E at 60% submittal.

Appendix B

Addendum No. 1 – Signed



Cathedral City

DATE: October 25, 2024

TO: All Prospective Bidders and Plan Holders

RE: **TDA ARTICLE 3 (SB 821) PROJECTS:**
Perez Road Class IV Separated Bikeways - (C08673)
Whispering Palms Trail Class III Bike Routes - (C08672)

ADDENDUM NUMBER 1

The following shall be considered as incorporated into the project specifications for the above referenced projects. Portions of Contract Documents not specifically mentioned in this Addendum remain in force.

Prospective Bidders and Plan Holders are directed to make the following changes:

- **RESPONSE TO QUESTIONS**

  Refer to Response to Questions (Addendum #1, Attachment 1).

The Consultant is hereby notified; As stipulated under "Section IX. Submittal Format" of the RFP, Addendum No.1 must be acknowledged in the Work Proposal of the submitted Proposal Package. Failure to do so may result in the City designating said proposal as "Non-Responsive."

APPROVED:

Armando J. Garcia Baldizzone, P. E.
City Engineer

Attachments:

1. Response to Questions

END OF ADDENDUM NUMBER 1

Cathedral City

CITY OF CATHEDRAL CITY

TDA ARTICLE 3 (SB 821) PROJECTS:
Perez Road Class IV Separated Bikeways (C08673)
Whispering Palms Trail Class III Bike Routes (C08672)

RESPONSE TO QUESTIONS

October 25, 2024

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1) **Because the project doesn't involve State or Federal funding, is it still necessary to submit Exhibit 10-K or a similar rate sheet (like the Sample Cost Proposal) for this project?**

   Exhibit 10-K will not be required. A detailed cost proposal for each project including all services and materials anticipated will be required.

2) **Should the plans for this project include the pavement improvements in addition to the signing and striping?**

   The plans for this project WILL INCLUDE BOTH the application of Rubberized Emulsion Aggregate Slurry (REAS) from 30th Avenue to Vega Road and Baristo Road to Dinah Shore Drive and the pavement improvements from Vega Road to Baristo Road.

3) **Is 11x17 an allowable size for exhibits and the schedule? If so, will this count as 1 or 2 pages?**

   Yes, 11 x 17 will be allowed for exhibits and schedule. Each page will count as 1 page.

Acknowledged by: Jason Stack

Jason Stack, President Date: 10/27/2024
STC Traffic, Inc.