

STATEMENT OF QUALIFICATIONS FOR: City of Hermosa Beach On-Call Transportation Planning and Traffic Engineering Services (RFQ 24-002)

GTS<u>.240801</u>











City of Hermosa Beach

SUBJECT: On-Call Transportation Planning and Traffic Engineering Services in the City of Hermosa Beach, California.

Dear City of Hermosa Beach Selection Committee:

On behalf of General Technologies and Solutions (GTS), I am pleased to submit our proposal for the City of Hermosa Beach On-Call Transportation Planning and Traffic Engineering Services.

GTS provides traffic engineering, transportation planning, parking, and technology solutions for public agencies and institutions across Southern California. Our team members have worked with several cities either directly as staff members or on an on-call basis, and as such we understand the importance of responsiveness while ensuring top-quality deliverables. For this on-call, we have carefully selected a team of seasoned professionals who bring comprehensive engineering and multi-modal transportation planning services to support the City of Hermosa Beach throughout the duration of the project and the potential tasks outlined in the RFP.

As your project manager and main point of contact, I will oversee and coordinate the activities of our proposed team. I have managed various projects across Southern California. I have served in similar capacities most recently for the City of Rancho Palos Verdes (helping with traffic signal designs, signal timing, and intersection analysis), City of Hermosa Beach (assisting with traffic engineering designs and studies), City of Hawthorne (performing warrant analysis and signal designs), City of Commerce (delivering on traffic analysis and preparing HSIP and ATP grant applications), City of Glendora (carrying out signal warrant analysis and designs), City of Buena Park (peer reviewing signal synchronization plans), and City of Irvine (assisting with adaptive signal control and probe data analysis), among several others. I will be supported by the GTS team which includes Ariel Godwin, a senior planner specializing in complete streets and active transportation.

Our other team members were meticulously selected to ensure responsiveness on every task order. We have added Rock Miller, who brings over 40 years of transportation planning, design, and operations experience. He is a national expert in traffic design and safety, and will bring his signal timing expertise to this effort. We have also included Patrick Armijo on our team to provide signal systems engineering expertise building on his many years of experience working with state and local governments. Our team also includes AIM TD for data collection.

GTS experience is illustrated in the following pages, ranging from leading the Southern California Regional Integration of Intelligent Transportation Systems (RIITS) strategic plan update to smart city design services in West Hollywood, corridor signal timing plans in Glendora and Los Angeles County, and various projects utilizing emerging technologies to enhance operations and safety.

Our team's combined experience allows us to seamlessly integrate with your staff and cover all elements of the identified transportation service areas. For a summary of our recent experience pertaining to the various services highlighted in the RFP, please refer to the following page.

If you have any questions regarding our submittal, please feel free to contact me at any time. We appreciate your consideration of the GTS team and look forward to working with the City of Hermosa Beach

Sincerely.

Rowel U.

Rawad Hani, PE, TE 11900 W Olympic Boulevard #450, Los Angeles, CA 90064 rawad.hani@gentecsol.com | (213) 532-8221

P.S. We acknowledge receipt of the project addenda

GTS Experience in a Nut Shell

City of Hermosa Beach RFP Requirements	GTS Expereince
Development of conceptual plans and alternatives for corridor revitalization projects, neighborhood traffic management, bikeway improvements, and other long-term capital improvements.	GTS has developed various conceptual plans and alternatives for revitalization projects (such as Old Torrance Revitalization and San Luis Obispo Los Osos Valley Road among others); neighborhood traffic management (such as Miraleste in Rancho Palso Verdes, LRSP in Glendora and SS [‡] A in Irwindale), bike way improvements (in Downtown Hermosa Beach as well as the Dominguez Hills bike trail) and various long-term capital improvements such as Melrose Design Distict in West Hollywood among various others.
Develop final design plans, specifications, and cost estimates for transportation-related projects and assist the City during construction as required.	GTS has prepared various PS&E for transportation projects ranging from the City of Carson 190 th St/Victoria/Figueroa traffic signal upgrades to Arlington and Lincoln traffic signal in Torrance, Hacienda Roadway Safety Improvements in La Habra Heights, Grand and Bennett intersection in Glendora among tens of other projects. We often provide Construction Support Service ensuring plans are constructed as designed. Our typical approach for P&E projects is presented in the following pages.
Preparation of studies, recommendations, and regulatory changes to assist in the expansion of transportation choices.	GTS prepared numerous studies, recommendations, and regulatory changes to assist in the expansion of transportation choices. For example, in Rancho Palos Verdes we supported the City with installing bike lanes and RRFBs at various locations to promote walking and biking for various age groups. We also utilized technology (video analytics) to support with proactive safety applications such as enhancing signal operations.
	In West Hollywood, GT supported with pedestrian scale designs from lighting to IRWLS and signal enhancements. GTS also assisted with various LRSP and HSIP grant applications aiming mainly at the expansion of transportation choices.
Preparation of studies, recommendation, and regulatory changes to provide for the effective management of the City's parking resources and implementation of parking programs.	GTS has carried out various parking studies from Metro's park and ride studies to support housing development, to downtown Torrance parking management plan, California State University Domiguez Hills campus-wide parking study, and Glendale Community College facilities strategic plan parking analysis among others. We are aware of Coastal Commission parking consideration for beach communities like Hermosa Beach. Our team has developed various shared parking studies and we understand parking extends beyond supply and demand from economic development, to multi-modal transportation, demand management, enforcement and others.
Development and implementation of transportation education, engagement, and other awareness initiatives (i.e. Safe Routes to School, Bike Safety, Distracted Driving, etc.).	GTS has led the development and implementation of the Glendora Local Road Safety Plan, Old Torrance Systematic Safety Improvement Plan and are currently developing the Irwindale Safe Streets for All Plan. All plans focus on transportation education, engagement, and various awareness initiatives prime among which are planning for Vulnerable Road Users (VRU).
Plan/project review of private development projects and prepare or peer review traffic and/or parking studies for California Environmental Quality Act documents.	GTS has carried out plan and project reviews for various private development projects across Southern California; from Moorpark (review of traffic impact study for a multi-family residential development) to Imperial County (reviewing industrial development traffic impacts), Ontario (peer reviewing the Sports Complex VMT and traffic analysis), Redlands (Carmax peer review), among many others. GTS has the inhouse resources for VMT analysis using SCAG model as well as operational analysis review such as Synchro, Vistro and other tools.

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Firm Profile

General Technologies and Solutions (GTS)

Point of Contact

Rawad Hani (Principal/Owner) - 213 532 8221 11900 W Olympic Boulevard #450, Los Angeles, CA 90064 Type of Entity California LLC FEIN 82 160 2943

GTS provides mobility solutions for all road uses: pedestrian, bicycle, transit, auto, and freight modes.

We employ state-of-the-art technologies to provide innovation in:



GTS was established in 2017 with the goal of helping public agencies leverage advanced technology in transportation. We believe in the power of technology to effect meaningful change in our local neighborhoods and communities. Smart cities are the future, offering unlimited opportunities for smart government technology. GTS brings together our understanding of smart technology solutions (what's on the horizon) with community needs and goals (what's in demand).

At GTS results matter as much as the way getting there. We support our clients throughout the whole project lifecycle, including communicating mobility initiatives, technology goals, and strategies to stakeholders at all levels.

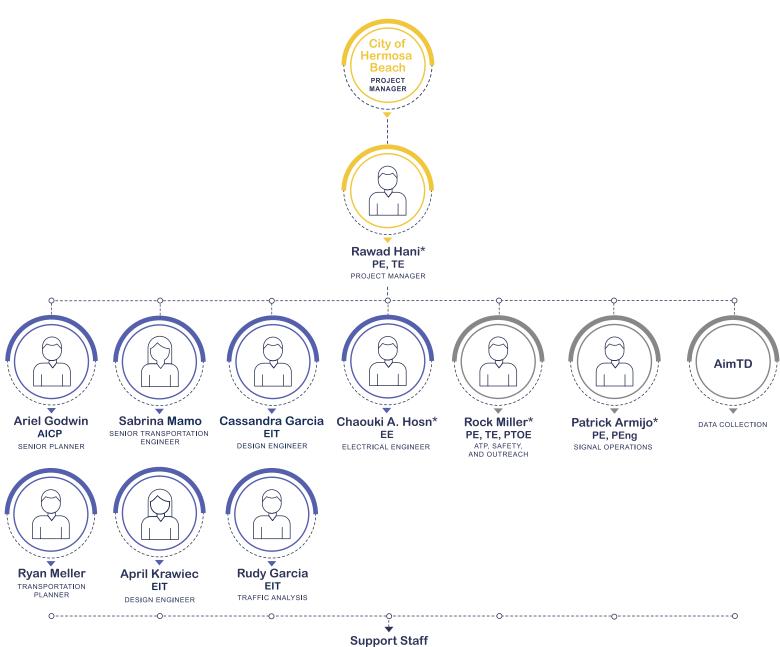
GTS currently works across Southern California from Orange County to Los Angeles County, San Bernardino County, Riverside County and Imperial County, and the cities of Hermosa Beach, Redondo Beach, Rancho Palos Verdes, Torrance, Carson, Hawthorne,Irvine, Alendora, West Hollywood, Santa Monica among others on transportation engineering design and planning tasks ranging from grant applications to smart city solutions, revitalization plans, systems engineering, safety studies, traffic calming, signing and striping, traffic signal design and modification, and data analytics among others.

GTS has served in similar capacities for various cities most recently for the City of Rancho Palos Verdes (supporting on traffic calming, school access, intersection analysis, and plan review among others), City of Hermosa Beach (providing traffic engineering designs and studies), City of Hawthorne (carrying out signal warrant analysis), and City of Glendora (supporting on signal timing and designs). Our project manager for this on-call has also served many cities on an on-call basis; Rawad worked with the City of Commerce (delivering on traffic analysis and preparing HSIP and ATP grant applications), City of Buena Park (peer reviewing signal synchronization plans), City of Irvine (assisting with adaptive signal control and probe data analysis), and City of West Hollywood (carrying out parking studies) among several others.

Our key team members have been providing services similar to thse requird in the RFP for over 20 years. GTS has never failedd or refused to complete a contract.



Organizational Chart



CAD, GRAPHICS, GIS, ETC.

*Licenses: Rawad Hani: 83730 (Civil Engineer - CA); 2817 (Traffic Engineer - CA) **GTS Team Memebrs** Rock Miller: 29493 (Civil Engineer - CA); 1139 (Traffic Engineer - CA); PTOE Patrick Armijo: 44201 (Civil Engineer - WA) GTS Sub-Consultants Chaouki A. Hosn: 14083 (Electrical Engineer - CA)

GTS

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City of Hermosa Beach - On-Call Transportation Planning and Traffic Engineering Services

Bios of Key Staff

The following is a brief introduction to the key personnel:

Rawad Hani, PE, TE, RSP1, PTOE | Role: Project Manager

Rawad is a licensed civil and traffic engineer with over 22 years of experience in traffic engineering and transportation planning. Rawad carried out various projects similar in scope to the project under consideration and understands the importance of communications and timely follow through the success of on-call projects. He will be principally responsible for working with the City as the main point of contact for this project, and will manage day-to-day activities of the project team. Rawad is authorized to negotiate the contract on behalf of GTS.

Ariel Godwin, AICP | Role: Senior Planner / Outreach

Ariel is a certified Urban and Regional Planner with over 16 years of experience in community planning, transportation/mobility planning, design, GIS, and project management. Ariel has worked on a wide variety of projects from Complete Streets policy development to regional ITS and congestion management strategies, and will lead on traffic analysis tasks.

Chaouki A. Hosn, EE | Role: Electrical Systems Engineer

Chaouki is a registered electrical engineer with over 34 years of experience working with the private and public sectors, specializing in high and low voltage design for infrastructure projects. Chaouki will lead on any EV charging and street lighting tasks as needed, as well as utility coordinations.

Cassandra Garcia, EIT | Role: Design Engineer

Cassandra will provide traffic engineering and design services ranging from signal designs to signing and striping, traffic control plans, and street lighting.

Sabrina Mamo | Role: Senior Transportation Engineer

Sabrina is a highly accomplished transportation engineer with a background in project management and traffic engineering design. Her management responsibilities include overseeing cost estimates, grant assistance, and CAD management, while ensuring quality control for models, plans, and sketches. Her experience spans corridor analysis, adaptive signal plans, pedestrian facilities, and roadway design.

Rudy Garcia, EIT | Role: Traffic Analysis

Rudy is an experienced Transportation Engineer with more than 10 years of experience in the design and studies of transportation systems, specializing in traffic impact studies, parking, and feasibility studies. Rudy will support on traffic analysis tasks.

April Krawiec, EIT | Role: Design Engineer

April is a transportation engineer who has worked on projects across Southern California, carrying out traffic signal design, pavement delineation plans, signing & striping plans, and ITS plans, among others.

Ryan Meller | Role: Transportation Planner

Ryan will provide transportation planning support services on traffic impact studies and VMT analysis. An organization chart and one-page resume of each of our key team members are included in the following pages.

Rock Miller, PE, TE, PTOE | Role: Active Transportation, Safety and Outreach

Rock is a registered civil and traffic engineer with more than 40 years of transportation planning, design, and operations experience. Rock will build on his expertise in active transportation planning with similar projects to advise on the pedestrian, bicycle, and safety planning and design aspects and will support in reviewing final plans and public engagement/outreach.

Patrick Armijo, PE, PEng | Role: Signal Operations

Patrick is a professional engineer with 30 years of experience exclusively in traffic signal systems, operations, and signal timings. Patrick will provide signal systems engineering expertise building on his many years of experience working with state and local governments.





- BE Civil Engineering, American University
- MS Civil Engineering, American University

REGISTRATIONS

- Civil Engineer in CA, WA, and FL
- Traffic Engineer in CA
- PTOE Professional Traffic Operations Engineer
- PTP Professional Transportation Planner
- RSP1 Road Safety
 Professional 1

AREAS OF EXPERTISE

- Traffic Engineering
- Parking Analysis
- Transportation Planning
- Transportation Technology Applications

RAWAD HANI PE, TE

PROJECT MANAGER

<u>PROFILE</u>

Rawad is a traffic engineer and transportation planner with over 22 years of experience. He specializes in traffic engineering, parking analysis, demand modeling, and technology applications. Rawad has managed engineering design projects in the US and internationally where he advised public, private, and institutional clients. His recent experience includes assisting local governments across Southern California with ITS plans, traffic studies, and signal and street lighting designs. His on-call project experience includes the cities of Hermosa Beach, Irvine, Buena Park, Commerce, Santa Monica, and Glendora among others. Rawad understands the importance of striking the right balance between engineering (mobility and safety) and planning (livability and sustainability) considerations. He has worked on context-sensitive design projects and has helped planning and transportation agencies achieve effective solutions.

- City of Rancho Palos Verdes Transportation and Traffic Engineering On-Call, City of Rancho Palos Verdes On-Call
- Hermosa Beach On-Call Traffic Control Plans and Striping, City of Hermosa Beach On-Call
- City of Irvine Adaptive Signal Control Pilot and Probe Data Analysis, City of Irvine On-Call
- City of Commerce MixMaster Analysis and Alternatives Design, City of Commerce On-Call
- Orange County Fire Authority Signal Designs, City of Mission Viejo and City of Anaheim
- City of Glendora On-Call (Signal Timing and Design), Glendora, CA
- City of Burbank On-Call (Signing and Striping Design), Burbank, CA
- City of Villa Park Rectangular Rapid Flashing Beacon and Signing and Striping Designs
- Melrose Design District Fiber Communications and Smart City Design Services, City of West Hollywood
- San Juan Creek Road at La Noiva Ave Traffic Signal Modification, City of San Juan Capistrano
- Foothill Blvd and Oak Tree Dr Warrant Analysis, City of Glendora On-Call
- Artesia Blvd and Knott Ave Signal Synchronization Review, City of Buena Park On-Call
- City of Hawthorne On-Call, Warrant Analysis and Feasibility Studies, Hawthorne, CA
- City of Norwalk Rosecrans Ave and San Antonio Dr Traffic Control Plans
- 20th Street Pedestrian and Bicycle Connection (ATP), City of Santa Monica/ Caltrans
- San Bernardino Traffic Signal Upgrade PS&E Services (HSIP), San Bernardino, CA
- Carson Dominguez Channel and Figueroa St/Victoria St Intersection (HSIP), Carson, CA
- La Habra Heights HSIP Grant Applications, La Habra, CA
- Buena Park HSIP Grant Application, Buena Park, CA



- Master of City and Regional Planning, Ohio State University
- BA, Grinnell College

CERTIFICATIONS

 AICP (American Institute of Certified Planners)

AREAS OF EXPERTISE

- Traffic Safety Analysis
 Pedestrian & Bicycle Planning & Design
- Complete Streets Policies
- GIS & Mapping

<u>AWARDS</u>

- Georgia Planning Service Award, 2021
- NADO Impact Award City of Douglas Sidewalk Master Plan, 2020.
- NADO Impact Award City of Nicholls Zoning Code, 2019.
- NADO Innovation Award –Tifton Pedestrian Connectivity Plan, 2018.

Ariel Godwin AICP

SENIOR PLANNER / OUTREACH

<u>PROFILE</u>

Ariel is a transportation planner with over 16 years of experience in planning, design, and project management. Throughout a career focused on multimodal planning and transportation safety, he has worked on a wide variety of projects, from Complete Streets policy development to pedestrian and bicycle plans to congestion management strategies. His recent experience includes assisting local governments with creative solutions to address unique traffic safety issues, as well as advising on regional transit systems, pedestrian connectivity, and shared parking.

EXPERIENCE

- Glendora Local Road Safety Plan Oversaw data analytics, project prioritization, and HSIP grant application
- City of RPV Intersection Near-Miss Analysis Lead Data Analyst
- Los Osos Valley Road (San Luis Obispo) Corridor Safety Improvements Project Manager
- Palos Verdes Peninsula School Traffic Safety Improvement Plans Planning Lead and Traffic Calming Specialist
- California State University Dominguez Hills, Pedestrian Safety & Connectivity Plan - Planning Lead and GIS Analyst
- Rancho Palos Verdes Crash Database Data Manager & QA/QC
- RPV Neighborhood Traffic Calming Plans Planning Lead
- Sunset4All Street Redesign Cross-sections and site visits
- Miraleste Corridor Safety Improvements Planning Lead and Traffic Safet
 Specialist
- Hermosa Beach Road Diet and Dining Decks Safety Analyst
- Downtown Torrance Revitalization Plan Multi-modal Planner
- · Valdosta MPO Complete Streets Policy Project Manager
- Valdosta MPO High-Injury Network Analysis Lead Analyst
- Columbus (Ohio) Bicycle & Pedestrian Safety Lead Analyst
- MORPC (Columbus, OH) Complete Streets Initiative Policy Analyst

PUBLICATIONS

- Godwin, Ariel and Anne M. Price. 2016. "Bicycling and Walking in the Southeast USA: Why is it Rare and Risky?" Journal of Transport & Health (3): 26-37.
- Godwin, Ariel and Anne M. Price. 2016. "Bicyclists on Sidewalks: Why They're Not Going Away and What We Can Do About It." Planetizen feature article. http://www.planetizen.com/node/84910.
- Godwin, Ariel and Anne M. Price. 2012. "Mapping Transportation and Health in the United States" Planetizen feature article. http://www.planetizen.com/ node/53728.
- Godwin, Ariel. 2012. "Are Amoeba-Shaped Cities More Likely to Go Bankrupt?" Planetizen feature article. http://www.planetizen.com/node/58658.



• BS Electrical Engineering, University of Washington, (Seattle, WA)

REGISTRATIONS

• Electrical Engineer in CA

AREAS OF EXPERTISE

- Street Lighting
- Power and Lighting
- Layout Design
- EV Charging Stations
- Lighting Photometric
- Dry Utility Services
- Design Management

CHAOUKI A. HOSN EE

ELECTRICAL SYSTEMS ENGINEER

<u>PROFILE</u>

Chaouki is a California registered Electrical Engineer, specializing in high and low voltage design for infrastructure projects. His experience includes street lighting design, lighting photometric, communication infrastructure, dry utility services as well as the electrical design for parking lots lighting design. He has designed several electric vehicle charging stations as well as electrical infrastructure designs for commercial, industrial facilities, and residential facilities. Chaouki has over 34 years of experience working with the private and public sectors mostly with the City of Los Angeles Harbor Department and as such he understands first hand the demands placed on the local agency staff. He works collaboratively with utility owners and local agencies to ensure on-going communications and timely delivery of projects.

- Emergency Shelter Parking Lot, Pomona, CA Design Manager: Light poles layout, conduit and wires, communication, lighting photometric, load calculations, specifications, and cost estimate.
- Santa Monica 20th Street Connection, Santa Monica, CA Electrical Design Manager: Laying out pedestrian and bicycle lighting along with complete infrastructure design, new SCE services, specifications and cost estimate. Project is in Caltrans right of way and involved working closely with Caltrans.
- Palm Ave Street Lighting Design, Upland, CA Design Manager: street lighting improvement along Palm Ave between West 9th Street and Alpine Street in compliance with ANSI/IES RFP-8-14 roadway lighting, which includes street light poles layout, conduit and wires, communication, lighting photometric, load calculations, specifications, and cost estimate.
- Melrose Complete Street Design, West Hollywood, CA Design Manager: (12) EV charging level II stations along streets, which includes power and communication infrastructures, new SCE services and charge point platform for billing. Advising on smart pole designs.
- Lincoln and Arlington Street Lighting and Undergrounding, Torrance, CA Design Manager: utility pole relocations, undergrounding, new SCE services, load calculations.
- Navy Way Street Lighting, Port of Los Angeles Design Engineer: lighting and undergrounding design for the 3-mile roadway that included photometric, utility coordination, light poles layout, load calculations, specifications, and cost estimate. LED was later installed.
- Various Dry utility services, SCE rule 20B, parking lot lighting, and complete electrical infrastructure for various development projects across Southern California (Pasadena, Colton, Carlsbad, San Clemente, Dana Point, Newport Beach, San Diego, Long Beach among others.)



 Bachelor of Civil Engineering, California State Polytechnic University, Pomona

<u>SKILLS</u>

• EIT (Engineer-In-Training)

MEMBERSHIPS

• Computer-Aided Design

CASSANDRA GARCIA EIT

TRAFFIC ENGINEER

PROFILE

Cassandra provides traffic engineering and design services ranging from signal designs to signing and striping, traffic control plans, and street lighting. Her recent experience includes the collection of data and creation of design plans for resurfacing projects, bike path projects, and traffic signal upgrade projects. Cassandra strives to improve communities through implementation of safe and effective methods of transportation.

- WEHO Melrose, West Hollywood, CA. Performed field visit and created base plans for multiple signalized intersections within the city of West Hollywood.
- Burbank Road Resurfacing Project (Phase I & II), Burbank, CA. Worked on creating signing and striping plans as well as loop replacement plans for multiple corridors pending resurfacing within the city of Burbank.
- Colton Speed Study, Colton, CA. Assisted in the collection of data and preparation of documents for a speed study within city of Colton.
- RPV On-Call, Rancho Palos Verdes, CA. Worked on multiple signing and striping improvement plans, collision diagrams, and traffic signal plans for four Rectangular Rapid Flashing Beacon (RRFB) crossing locations.
- Glendora LRSP, Glendora, CA. Set up a site for the collection of stakeholder comments and analyzed collision data to form a report and develop a list of viable countermeasures to be used in a HSIP application.
- San Bernardino Traffic Signal Hardware Upgrade, San Bernardino, CA. Created plans for the relocation, replacement and/or upgrade of traffic signal equipment including vehicle heads, pedestrian heads, and pedestrian push buttons for multiple intersections in the San Bernardino region.
- Carson Signal Design, Carson, CA. Performed a field visit and prepared plans for the installation of poles, curbs, video detection cameras and other traffic signal equipment at an intersection within the city of Carson.
- Carson On-Call, Carson, CA. Performed a field visit along multiple corridors for the purpose of implementing bike routes and bike lanes to join disconnected portions of the Dominguez Channel Bike Path. Created signing and striping plans for all connecting sections along the channel and paved street roads.
- LHH Signal Design, La Habra Heights, CA. Created signing and striping plans for all Hacienda Road within La Habra Heights city limits and assisted with traffic signal design plans.
- CSULB SS, Long Beach, CA. Created signing and striping for stop-controlled intersection within California State University, Long Beach.
- Norwalk TCP, Norwalk, CA. Developed traffic control plans within Caltrans rightof-way for the purpose of utility installation.



 BS Civil Engineering, University of South Florida

<u>SKILLS</u>

- Traffic Signals
- Traffic Control/MPT
- Roadway
- Specialized Signage Conceptual Design
- Alternative Analysis
- Intelligent Transportation Systems Project Management
- Data Collection
- Report Writing
- Traffic Analysis
- Team Management

MEMBERSHIPS

- ASCE YMF Board Member (2021-2023)
- ASCE, MOASIC Corresponding Member (2022-2023)
- WTS Member (2018-2023)
- MASITE Member (2021-2023)

SABRINA MAMO

SENIOR TRANSPORTATION ENGINEER

<u>PROFILE</u>

Sabrina is a highly accomplished transportation engineer with a background in project management and traffic engineering design. Her management responsibilities include overseeing cost estimates, grant assistance, and CAD management, while ensuring quality control for models, plans, and sketches. She has successfully guided conceptual designs and demonstrated forwardthinking in addressing future design needs. Sabrina's diverse experience spans corridor analysis, adaptive signal plans, pedestrian facilities, and roadway design. Additionally, Sabrina's commitment to the profession extends beyond technical skills; she actively engages in leadership roles within professional organizations, contributing to mentorship programs and community initiatives.

- Oceanside Boulevard Signals for Private Development, Oceanside, CA Adjusted signal traffic designs to meet clients needs to two signals on Sports Park Way/W. Bobier Drive and Melrose Drive/Oceanside Boulevard.
- Oceanside On-call, Oceanside, CA The on-call supported several traffic engineering tasks for Oceanside, CA, such as parking, signage, sight distance and traffic calming measures.
- Poway On-call, Poway, CA The on-call supported Poway on several traffic engineering tasks for Poway, CA. This on-call supported as a traffic division for Poway and would support the city on traffic calming, speed review, parking, signal design and timing adjustments, leading pedestrian initiative, land development traffic review, and meeting material preparation for traffic safety committee.
- Warminster Township Signals, Warminster, PA Responsibilities: As-built plans, specialized sign design, ITERIS coordination, cabinet signal timings review, client meetings, track hours, and conduct field inspections.
- Freemansburg Streetscape, Freemansburg, PA Responsibilities: Cost estimate and accompanying visual report, grant assistance, OpenRoads CAD Management, QA/QC on all models, plans and sketches and management of staff hours, OpenRoads Team Lead and conceptual design, lighting, signage, parking evaluation, and pedestrian study.
- Boot Road Corridor, West Goshen, PA Responsibilities: Developed Synchro corridor, client communication, assisted with minor PM tasks for preliminary design, performed analternative analysis, pavement markings plans, SignCAD specialized signs, roadway QA/QC, and erosion and sediment control.
- Bus Rapid Transit, Pittsburgh, PA Responsibilities: Mast arm design, pedestrian facilities, signal design, signage design, span wire calculations, and bike lane design.
- PA 309 Connector, Kulpsville, PA Responsibilities: Permit and construction signal plans from design to fullbuild. This entailed signal calculations, adaptive signal plans, pedestrian facilities, and sign design.
- Riverpoint Industrial Park, Upper Mount Bethel, PA Responsibilities: Traffic impact studies, traffic signal calculations, guiderail calculations, and all development plans (signals, lighting, roadway, parking, and truck circulation).
- SR 611 and SR 512 Intersection Design, Upper Mount Bethel, PA Responsibilities: Permit signal design, client coordination, QA/QC of plans and minor roadway design assistance.



- MS Civil Engineering, UC Davis
- BS Civil Engineering, UC Davis

REGISTRATIONS

- Civil Engineer in CA and HI
- Traffic Engineer in CA
- PTOE Professional
- Traffic Operations Engineer

MEMBERSHIPS

- Voting Member, National Committee on Uniform Traffic Control Devices
- International President, 2012, Institute of Transportation Engineers
- Member, Association of Pedestrian and Bicycle Professionals
- Member, American Society of Civil Engineers
- Past Section and District President, Institute of Transportation Engineers
- Fellow, Institute of Transportation Engineers

ROCK E. MILLER PE, TE

ACTIVE TRANSPORTATION, SAFETY AND OUTREACH

PROFILE

Rock is a registered Civil Engineer and Traffic Engineer in the State of California with more than 40 years of transportation planning, design, and operations experience. He is an expert in the latest capabilities and requirements available and expected from cities and municipal governments. For more than 25 years, Rock has been a consultant at the senior or principal level in the field of traffic engineering, traffic safety, and circulation design. He also has 10 years of public agency experience serving as City Traffic Engineer for Costa Mesa and staff traffic engineer with the County of Orange.

Rock has completed a wide variety of unique transportation projects, including traffic signals, signing and striping, street lighting, work site traffic control, traffic impact analysis, and the design of street and highway improvements. He has also prepared many transportation policy plans and completed controversial and complex transportation studies, including neighborhood traffic calming projects, complete streets, pedestrian and bicycle studies, projects anticipating litigation by another public agency, and projects with intense public opposition. Rock is a national expert in the traffic design and safety for walking and ur ban bicycling infrastructure. He has frequently been an invited speaker to regional and national conferences and committees on many topics, including pedestrian circulation, innovative bikeway design, traffic calming, and transportation policy. Rock served as International President of the 15,000 member Institute of Transportation Engineer (Traffic) in the State of California and a Certified Professional Traffic Operations Engineer by the Institute of Transportation Engineers.

EXPERIENCE

Rock has extensive experience in leading neighborhood traffic management plans. He has led such studies for over ten communities. His role is key as the leader of public outreach efforts for this type of studies, taking advantage of his effective presentation style in public workshops and events. Some of the larger studies of this type are highlighted below and a more extensive resume can be provided upon request:

- City of La Quinta Roundabout Designs
- CV Link Multi-Purpose Trail, Coachella Valley, California
- Rancho Mirage Bikeway Design Assistance, Rancho Mirage California
- Newport Heights Neighborhood Traffic Management Plan, Newport Beach, California
- Los Alamitos Neighborhood Traffic Plan, Los Alamitos CA
- Town of Piru Traffic Management Plan, Ventura County, CA
- Fillmore River Street Traffic Circles, Fillmore, California
- Berkeley Street Traffic Calming Project, Santa Monica, CA
- Vista Avenue Bicycle Boulevard, Long Beach, California



• BS Civil Engineering, California State University, Sacramento

REGISTRATIONS

 Professional Engineer in WA and Alberta, Canada

AREAS OF EXPERTISE

- Institute of Transportation Engineers
- International Municipal Signals Association

PATRICK ARMIJO PE, PEng

SIGNAL OPERATIONS EXPERT

<u>PROFILE</u>

Patrick Armijo is a Professional Engineer with about 30 years of experience in the public and private sectors. His experience includes: municipal infrastructure management; supervising traffic signal and railroad signal operations engineering staff and signal maintenance crews; traffic signal timing; traffic signal design; traffic signal construction; ITS operations; TMC operations and design; highway design; bridge and roadway construction; railway crossing signal operations; community lighting; capital Improvement program budgeting; and writing requests for proposals.

- Light Rail Signals Supervisor at Santa Clara Valley Transportation Authority: Plan, schedule, and supervise inspections, maintenance, and repair of signaling, crossing equipment, and rail safety systems. Conduct safety training and monitor crew performance to ensure safe work practices, procedures and compliance with FRA and CPUC regulations.Evaluate traffic signal RR preemption and crossing safety. Advise VTA on intelligent transportation systems and transit system priority.
- Technical Director, Intelligent Transportation Systems at Western Pacific Signal, San Leandro, California: Advanced Traffic Management System client liaison, advanced technical support, training, and proposal director. Projects included adaptive traffic signal operations, transit signal priority, connected vehicle research, railroad crossing signal preemption, and traffic management center design.
- Project Manager at ADVANTEC Consulting Engineers, Irvine, California: Traffic signal timing, traffic signal synchronization and railroad preemption signal timing: Orange County (OCTA), San Bernardino Association of Governments (SANBAG), Metropolitan Transportation Commission (MTC), Caltrans and City of Glendale.
- Traffic Signals/Railroad Signals Manager at City of Lethbridge, Alberta, Canada: Managed and supervised the traffic signal department for the City of Lethbridge. The staff included a traffic signal operations engineer, five traffic signal/railroad signal electricians. Served as Project Manager on new traffic signal designs and construction projects. Managed traffic signal synchronization projects. Supervised and approved upgrades to traffic signal infrastructure such as signal interconnect, cabinets, controllers, vehicle detection systems, emergency vehicle preemption systems, speed enforcement/red light running camera systems, and Battery Back Up units.
- Traffic Signals Operations Engineer at Washington State Department of Transportation: Managed traffic signal operations for over 250 state, county, and municipal traffic signals for 18 years. Developed traffic signal timing and signal coordination plans. Conducted traffic accident analysis and recommended safety mitigation measures. Experience with transit system priority programming and traffic signal railroad preemption timing development.

Relevant Experiences and References

City of Hermosa Beach Transportation Planning and Traffic Engineering On-Call (2019-Ongoing)

GTS is providing transportation planning and traffic engineering on-call services to the City of Hermosa Beach. We assisted the City in its COVID-19 relief efforts to support small businesses by providing traffic engineering design services.

GTS produced plans, specifications and estimates (PS&E) for road re-purposing and installing Class II bicycle facilities in the downtown area (Hermosa Ave and Pier Ave) to provide space for walking, biking, and outdoor dining while ensuring social distancing. At the time of this proposal we have provided the design of over seventeen parklets and carried out the traffic engineering feasibility study of closing a right turn slip lane.

Contracting Agency: City of Hermosa Beach Reference Information: Douglas Krauss | Project Manager | dkrauss@hermosabeach.gov | 310.750.3603 Staff: Rawad Hani, Cassandra Garcia, Ariel Godwin Estimated Fee: \$60,000

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GTS have been an absolute pleasure to work with. They have been extremely responsive, especially during the difficult period of the pandemic. They are a very knowledgeable and capable consulting firm and have proven to be very effective. They came through during a difficult time to assist our city with a very challenging project and has continued to be a tremendous resource and partner in this and other projects.

- Douglas Krauss, Project Manager (City of Hermosa Beach)

City of Hawthorne On-Call, Warrant Analysis and Feasibility Studies (2022-Ongoing)

GTS supported the City of Hawthorne (as part of the on-call) in carrying out traffic signal warrants studies at three intersections of Freeman Ave & 118th St, 126th St & Birch Ave, and Kornblum Ave & 120th St. The purpose of the analysis was to determine whether a traffic signal should be installed at the currently stop-controlled intersections based on the analysis of the traffic signal warrants contained in the California Manual of Uniform Traffic Control Devices (CA MUTCD). GTS carried out site visits, data collection, warrant analysis, feasibility studies, and technical documentation.

Contracting Agency: City of Hawthorne Reference Information: DJ Dweejal (DJ) Torado, T.E. | Assistant Engineer |dtorado@cityofhawthorne.org | (310) 349-2987 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$40,000

City of Rancho Palos Verdes Transportation and Traffic Engineering On-Call (2021-Ongoing)

GTS is providing transportation and traffic engineering on-call services to the City of Rancho Palos Verdes. Our services range from studies to designs to responding to citizen requests. We often assist the City with stop-warrant analysis, speed surveys, signage and pavement marking designs among several other tasks. GTS worked with the City on the traffic signal design review at the intersection of Palos Verdes Drive E & Palos



GTS

City of Hermosa Beach - On-Call Transportation Planning and Traffic Engineering Services

Verdes Drive S. The scope includes presenting recommendations to enhance the aesthetics at said location by presenting features that better blend with the surroundings.

GTS also assisted with the traffic engineering and circulation analysis for several schools in Rancho Palos Verdes (Silver Spur Elementary, Soleado Elementary, Ridgecrest Intermediate, and Vista Grande Elementary). Our scope of work included working jointly with the City and the schools to confirm the current challenges through site observations of the drop-off and pick-up areas and surrounding streets, analysis of the prevailing conditions and providing recommendations for improvement, and documentation of findings. The results of the analysis will be consolidated in single circulation plan/flyer that can be distributed to families and staff.

Contracting Agency: City of Rancho Palos Verdes Reference Information: Ramzi Awwad | Public Works Director | rawwad@rpvca.gov | 310.544.5275 Staff: Rawad Hani, Ariel Godwin, Cassandra Garcia, Sabrina Mamo, Patrick Armijo Estimated Fee: \$400,000

GTS has done an excellent job for the City of Rancho Palos Verdes. They have always responded to our needs in a timely manner. Their analyses are rooted in traffic engineering best practices while also being practical. I recommend GTS to any public works department.

- Ramzi Awwad, Public Works Director (City of Rancho Palos Verdes)

Glendora Route 66 Signal Timing and Coordination (2023-Ongoing)

GTS developed the signal timing and coordination plans for Route 66 within the City of Glendora. The project of 13 signalized intersections also included signal equipment upgrades at various intersections. GTS scope comprised of field observations and data review, traffic data collection, Synchro and Simtraffic modeling, developing signal timing sheets, and implementation support. The proposed signal timing parameters included yellow times, all-red times, walk times, flashing don't walk times, minimum greens, lead/lad phasing, and sync phases for each study intersection. Additional timing parameters, such as minimum bicycle timings, yellow timing for left turn, and through movements, were also calculated per the CA-MUTCD. Plans were developed for the AM Peak, PM Peak, and off-peak periods.

Contracting Agency: City of Glendora Contact Information: Maliha Ansari | Principal Engineer | mansari@cityofglendora.org | 626.914.8294 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$ 60,000

Burbank Resurfacing Program - Signing & Striping Restoration and Loop Replacement Plans (2020-2021)

GTS supported the City of Burbank with the Phase X resurfacing program (for Zones 9, 10, 11, & 12) which includes over 22 roadway miles. GTS utilized aerial imagery and performed field review prior to the base and design preparation. The striping restoration utilized (when available) as-built and roadway rehabilitation plans and included field reviews for lane widths, locations of speed bumps, fire hydrants, etc. The City is leveraging the roadway resurfacing program to add bike lanes as well as crosswalks at various locations. GTS also prepared the loop restoration for 18 signalized intersections that were impacted by the road rehabilitation.

Contracting Agency: City of Burbank Reference Information: Artin Megerdichian | Principal Civil Engineer | amegerdichian@burbankca.gov | 818.238.3943 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$200,000



City of San Bernardino Traffic Signal Upgrade PS&E Services (2020-2021)

GTS provided traffic engineering signal upgrade services for 40 of the 224 signalized intersections in the City of San Bernardino where various safety, operational, and accessibility upgrades are required. This HSIP-funded project will replace or install new equipment to the existing traffic signal system which include traffic signal head improvements, pedestrian signal head improvements, and pedestrian pushbutton improvements among others.

Contracting Agency: City of San Bernardino (GTS is a sub to Kimley-Horn)

Reference Information: Azzam Jabsheh | City Traffic Engineer | jabsheh_az@sbcity.org | 909.384.7272 Staff: Rawad Hani, Cassandra Garcia

Estimated Fee: \$60,000

Eastern Avenue TSSP and Myrtle Avenue TSSP, County of Los Angeles (2021-Ongoing)

GTS is carrying out the signal design for intersections along Eastern Avenue and Myrtle Avenue. The projects include the completion of a field review/inventory package, recommendation improvement reports, traffic signal base plans, utility plans, improvement plans, and engineer's cost estimate for the specified intersections.

Client: Los Angeles County

Reference Information: Marc Violett | Michael Baker | 949.855.3607 | marc.violett@mbakerintl.com; Jean Fares | Senior Vice President, Kimley-Horn | 213.354.9402 | jean.fares@kimley-horn.com Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$20,000

City of La Habra Heights Hacienda Rd Traffic Signal and Safety Improvements (2022-Ongoing)

GTS is providing road safety improvement design services and recommendations for Hacienda Rd in the City of La Habra Heights, including a new traffic signal at the intersection of Hacienda Rd and Avocado Crest Rd. This HSIP-funded project will provide traffic signal improvements including complete traffic signal system, new cabinet and controller, providing interconnect capabilities, mastarms, backup batteries, installing vehicle detection video cameras, providing advanced dilemma zone detection, stripping, and providing signal timing for efficient vehicular movement.

Contracting Agency: City of La Habra Heights Reference Information: Rafferty Wooldridge | Interim City Manager | 562-694-6302 | rwooldridge@lhhcity.org Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$80,000

Traffic Signal Design of Figueroa St and Victoria St / 190th Street (2020-2021)

GTS provided traffic engineering signal upgrade services for the signalized intersection of Figueroa St and Victoria St / 190th St in the City of Carson. GTS carried out various safety, operational, and accessibility upgrades as part of this design. This HSIP-funded project will provide protected left-turn signal phases at all legs of the subject intersection, safety improvements for road users and pedestrians, and ADA-compliant curb ramp design. The design services included coordination with the City of Los Angeles (which has shared jurisdiction at the intersection) as well as with Caltrans for funding administration purposes.

Contracting Agency: City of Carson Reference Information: Gilbert M. Marquez, P.E. | City Engineer | Tel: (310) 952-1700 | gmarquez@carson.ca.us Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$35,000

Melrose Design District Smart City Design Services (2020-2021)

As part of this Melrose Design District complete streets project in the City of West Hollywood, GTS is providing traffic engineering, optic communications, and electric engineering design services. GTS supported Phase 1 of the project by providing EV charging stations design as well as fiber optic design, and was retained for Phase 2 (NW Quad) to also provide signal designs, IRWL's, and street lighting. The GTS scope includes the following services:

• Traffic Signal and Highway Safety Light Improvement Plans including detailed design of traffic signal systems and highway safety light systems at the controlled intersections. This includes all signal elements from pedestrian buttons and counters to footings, electroliers, luminaires, signal light equipment, arms, pullboxes, conduit,



conductors, cabinets, meters, circuitry, signage, loop detection/video detection, etc.

• In-Roadway Warning Light (IRWL) System Improvement Plans detailing in-roadway warning lights at the intersections. This includes LED edge-lit signs, push button activation technology, and either hard-wired or solar power sources.

• Fiber Optic & Smart Street Improvement Plans to design construction plans detailing fiber optic system for the entire lengths of all streets that will connect all traffic signal systems, wifi systems, smart street system, bus shelters/totems, and the digital wayfinding signs.

• Street Lighting Improvement Plans to design construction plans detailing street lights/pedestrian lights occurring in the sidewalk/parkway zone. This includes the existing street light banners being rehung on the new street lights with new assemblies.

• EV Charging Improvement Plans detailing EV chargers occurring in the sidewalk/parkway zone for curbside parking. This includes 8' tall ChargePoint Level 2 chargers (mostly dual chargers).

Client: Kabbara Engineering Reference Information: Leah Kabbara | Project Manager | leah@kabbara.net | 714.744.9400 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$230,000

Anaheim Gene Autry Way Fire Station Traffic Signal Modification, Anaheim, CA (2023-Ongoing)

GTS is preparing the traffic signal modification for the St. College/Gene Autry Way intersection (immediately abutting the fire station to the southwest) to accommodate the proposed street improvements and project conditions of approval. The signal will be modified in accordance with City of Anaheim Emergency Vehicle Preemption (EVP) Standards with a preemptive signal switch installed within the station apparatus bay. The traffic signal plan will be designed at a scale of 1"=20' per the City standards, Caltrans Standard Plans and other agreed-upon engineering standards and requirements.

Client: BKF Engineers Reference Information: Vincent Lin | Senior Project Engineer | vlin@bkf.com | 949.526.8487 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$12,000

Rectangular Rapid Flashing Beacon Design at Nichols Ave and Serrano Ave, Villa Park, CA (2023)

GTS carried out the Rectangular Rapid Flashing Beacon (RRFB) design for Nichols Avenue and Serrano Avenue in the City of Villa Park. The scope included researching existing as-built plans, conducting a field review to verify the existing improvements, and preparing an intersection base plan at a scale of 1"=20'. The base plan showed centerlines, right of way lines, existing and proposed street improvements, utilities of record, and existing traffic controls and improvements. Recommendations were provided for the proposed installation or relocation of equipment and signs. The plan and Electrical Special Provisions were prepared per City of Villa Park standards and requirements.

Client: Kabbara Engineering Reference Information: Leah Kabbara | Project Manager | leah@kabbara.net | 714.744.9400 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$10,000

RIITS Strategic Plan Update and Roadmap (2021-Ongoing)

GTS is leading the Southern California Regional Integration of Intelligent Transportation Systems (RIITS) Strategic Plan Update and Roadmap. The RIITS program is managed by Metro and facilities data collection and dissemination between multimodal agencies and partners through a system infrastructure consisting of a data management system and telecommunication network. The purpose of RIITS is to deliver multimodal transportation information services through a flexible platform to achieve regional mobility, safety and sustainability goals.

The GTS team started by evaluating the existing conditions and emerging trends. This is followed by identifying regional concerns and system gaps as well as the program's strategic direction through a comprehensive stakeholder engagement process. These tasks will lead to developing the program's vision and mission as well



as goals and strategies. The strategies will then be organized in an implementation plan that defines the action programs for the next 5 to 10 years.

Contracting Agency: Los Angeles Metro Reference Information: Melissa Park | Project Manager | parkm@metro.net | 213.418.3318 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$420,000

CVAG ITS Master Plan Peer Review Services (2020)

GTS assisted with a third party review of the CVAG ITS Plan with a focus on the centralized Traffic Management Center, roadway management strategies, and emerging mobility technologies and trends. Our review, which included the concept of operations as well as the systems engineering plan provided valuable feedback on integrating 5G as an enabler of Smart City applications and elaborating on the role of public-private-partnerships as it relates to emerging technologies and trends.

Client: Fehr & Peers Reference Information: Josh Peterman | Project Manager | j.peterman@fehrandpeers.com | 925.357.3368 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$10,000

Arlington Ave and Lincoln Ave Signal and Street Lighting Design, Torrance (2020-2021)

As part of the conditions of approval of a proposed residential development at the northwest corner of Arlington Ave and Lincoln Ave, GTS carried out the signal design, signing and striping, and street light design services. The scope of work consists of:

- Designing a new traffic signal at the intersection of Arlington Ave and Lincoln Ave
- · Replacing the overhead-fed streetlights and undergrounding power feeds
- Installing one new underground-fed streetlight along the Lincoln Ave frontage

Client: DSC Engineering Reference Information: Joe Dietz | Project Manager | 949.305.9070 | joe.dietz@dscengineering.net Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$22,000

Red Hill Ave and Reynolds Ave Signing and Striping Design, Irvine (2021)

As part of the conditions of approval of a 17401 Eastman St development project, GTS assisted LPA Architects with the signing and striping design along Red Hill Ave in the City of Irvine. GTS prepared the striping plans showing the pavement marking modifications per the City of Irvine agreed upon standards and requirements on a 1" = 40' scale. GTS carried out the site visits, City coordination, plan preparation, and addressed the City's revisions. It should be noted that our project manager for this on-call has previously managed the City of Irvine's on-call (for his previous firm) and assisted the City of Irvine as part of the on-call contract with an Adaptive Signal Control Pilot Study as well as with a Probe Data Analysis Assessment.

Client: LPA Architects Reference Information: Denise Mendelssohn | 949.701.4083 | dmendelssohn@lpadesignstudios.com Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$7000

Los Angeles Sun Valley Traffic Signal Designs and Modifications (2019)

As part of the B-permit, GTS prepared a new traffic signal design at Randall St and Glenoaks Blvd and modification plans for the intersections of Penrose St and Bradley Ave and Tuxford St and Glenoaks Blvd. The plans depict all proposed and existing traffic signal equipment (traffic signal controller cabinets, signal standards, mast arms, vehicle heads, and pedestrian heads) and loop detectors. The traffic signal plans also show proposed and existing traffic signal conduits, pull boxes, interconnect/video fiber, splice boxes, loop detectors, service feed, and proposed traffic signal phasing, as necessary. Additionally, traffic signal plans also reference existing, proposed, and (to be) removed pavement delineation, traffic signage, safety lighting, and utilities to accommodate the



proposed traffic signal design modification and installation. The proposed traffic signal plans are designed at a scale of 1"=20' per the LADOT standards and engineering requirements. GTS also prepared signing and striping and street lighting designs as part of this project.

Client: Facility Builders & Erectors Reference Information: Dwight Becker | Project Manager | 714.577.8060 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$40,000

City of Carson Dominguez Channel Bicycle Design (2020-2021)

GTS provided traffic engineering design services for both Phase I and Phase II of the City of Carson bicycle design project. GTS services included supporting the conceptual design elements of the project as well as the design development to produce the final plans, specifications, and estimates. GTS carried out the design of signing and striping as well as traffic signal designs and or modifications. The design is per the requirements of the California Manual of Uniform Traffic Design as well as the Highway Design Manual. The design is geared to address safety, operational, and accessibility considerations with a special focus on vulnerable modes of transportation.

Contracting Agency: City of Carson Reference Information: Ryan Kim | Traffic Engineer | rkim@carson.ca.us | 310.952.1700 x1815 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$40,000

El Rivino Road and Agua Mansa Road Traffic Signal Design, County of San Bernardino (2022-Ongoing)

GTS is preparing the traffic signal for the intersection of El Rivino Road and Agua Mansa Road in the County of San Bernardino. The scope includes traffic signal plans, specifications and cost estimates, design coordination, and construction support services. The traffic signal plans will depict all proposed traffic signal equipment (traffic signal controller cabinets, signal standards, mast arms, vehicle heads, and pedestrian heads) and loop/video detectors. The traffic signal plans will also show traffic signal conduits, pull boxes, interconnect/video fiber, splice boxes, detectors, service feed, and traffic signal phasing. Additionally, the traffic signal plans will also reference existing, proposed, and (to be) removed pavement delineation, traffic signal plans will be designed at a scale of 1"=20' per the County of San Bernardino standards, Caltrans Standard Plans, and other agreed-upon engineering standards and requirements.

Client: BKF Engineers Reference Information: Sheila Amparo | Project Manager | samparo@bkf.com | 949.526.8478 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$20,000

Ramona Expressway and Brennan Avenue Traffic Signal and Signing and Striping, Riverside County (2022-2023)

GTS provided conceptual design services for an industrial development at the northeast corner of Ramona Expressway and Brennan Ave in the City of Perris in Riverside County. The project includes a traffic signal design at the intersection of Ramona Expressway and Brennan Road to accommodate the proposed street improvement serving the project site, a signing and striping plan illustrating signal requirements and the frontage of the project site, and coordination with City and County staff. Prior to plan preparation, GTS conducted research of as-built and other available data, and performed a field review to prepare the base plan.

Client: EPD Solutions Reference Information: Abby Pal | Project Manager | abby@epdsolutions.com | 412.636.2713 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$26,000

City of Lake Elsinore, Traffic Signal Modification Design of Central Ave (SR 74) and Ardenwood Way (2021-2022)

GTS is providing traffic engineering signal upgrade services for the signalized intersection of Central Ave (SR



74) and Ardenwood Way in the City of Lake Elsinore. GTS is carrying out various safety, operational, and accessibility upgrades as part of this design. This project will accommodate the SR74 road widening from 4 to 6 lanes, provide safety improvements for road users and pedestrians, and design ADA-compliant curb ramps. The design services include coordination with the City and the County (which has shared jurisdiction at the intersection).

Client: Karaki WS

Reference Information: Florentino Mendoza | Project Manager | fmendoza@karakiws.com | 714.695.9300 Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$16.000

Santa Monica 20th Street Connection (2019-2020)

GTS carried out the traffic engineering tasks for this City of Santa Monica project that is closing a key bike and pedestrian network gap and serving as critical linkage between the Michigan Avenue Neighborhood Greenway (MANGo) and Bergamot Expo Station.

The project posed the challenge of designing as closely as possible to Caltrans Highway Design Manual standards with limited space available for improvements. GTS worked closely and tirelessly with Caltrans and the City on developing and testing various alternatives that are acceptable to both agencies. GTS performed the traffic analysis, truck turning analysis, traffic signal design, signing and striping design, and traffic control plans. GTS also designed the street lighting and emergency blue light phone services over a 4G network. Prior to this project our team members also assisted the City with video detection standardization and the design of the electronic parking guidance for the downtown area.

Contracting Agency: City of Santa Monica Reference Information: Joseph SanClemente (currently PW Director at City of Hermosa Beach) | 310-318-0238 |jsanclemente@hermosabeach.gov Staff: Rawad Hani, Cassandra Garcia Estimated Fee: \$60,000



Thank you for all your timely and hard work. You have continually gone above and beyond what is expected.

- John Cruikshank, Project Manager



Project Management Plan

Project Management Approach (Communications & Quality Control)

GTS provides the capabilities needed to complete high-priority transportation projects or provide solid recommendations to City staff and elected officials on how to address particular transportation issues. We understand that communication, responsiveness, efficiency, and collaboration are critical to our successful partnerships with local municipalities.

Rawad Hani will be the City's main point of contact and will manage the task orders and staff to execute the required tasks adequately and efficiently. His responsibilities include leading the project management, scoping, and coordinating with experts from the GTS team, among others. Upon receiving a task order request, our response proposal will include the following:

- A description of the services to be provided (scope and methodology)
- The name and position of each person to be assigned to perform the services
- A schedule with the milestones
- · The estimated number of hours and cost to complete the services

Upon notice to proceed and depending on the specific task order, a kick-off meeting may be required to coordinate the specifics of our project approach and work tasks to ensure we meet the overall goals and objectives. This meeting will be used to establish the goals and objectives for the task order, refine the approach and/or schedule, establish project team communication and stakeholder coordination aspects, discuss data or design requirements, and confirm deliverables and milestones. All project deliverables will be provided to the City in draft format, with time for comments and feedback. Our approach to project delivery emphasizes quality control to ensure that all work products are delivered free of errors. For this engagement, all work products will be reviewed by our quality assurance manager or a key team member prior to submittal to the city. As can be attested to by our references, our project team consistently collaborates to deliver a quality work product in a timely manner. At the end of every task, GTS will conduct a task review process that may include a quick survey to gauge our success from your perspective. We share the feedback among the project team in an effort to constantly improve.

General Approach

Our general project approach to on-call traffic signal and ITS design services encompasses three main components:

i. Research of Relevant Background Information: this includes items such as previous studies, records of prior approvals or resolutions, conditions of approval that may be relevant to the project under consideration, etc.

ii. Application of our Engineering and Planning Knowledge: to discern prospective issues including controversial issues and providing notice to the City staff. Our knowledge is based on the collective experience of our team members coupled with the relevant background information. In delivering our services we build on:

a) Policies and Procedures at the Local, Regional, State, and Federal levels: which include regulations and guidelines impacting the municipal traffic engineering process from the City code to elements like SB 1, SB743, the regional Green House Gas/SCS policies and plans, Caltrans Standards and/or Caltrans Construction Manual Specifications, the Standard Plans for Public Works Construction, and The Standard Specifications for Public Works Construction among others.

b) Emerging Trends in Engineering Practice and Technology: which includes elements such as Vision Zero, concepts of Complete Streets, Active Transportation considerations, electric vehicle charging, ADA compliance, and sustainability considerations. Similarly, changes in the MUTCD and the new Highway Safety Manual affect the practice of municipal transportation traffic engineering.

iii. Effective and Timely Communication: whereby we expect on-going interaction with City staff during each task order where progress can be monitored. This could include weekly touchpoints to discuss the project and ensure all parties are up to date on project progress. We anticipate that informal check in meetings will occur regularly.



Typical Work Plan

The following sections describe typical task orders carried out as part of on-call contracts illustrating our work plan.

1. Plans, Specifications, and Estimates

GTS will prepare plans, specifications, and estimates (PS&E) to accommodate the construction requirements for traffic signals, signing and striping, traffic control plans, and other ITS design tasks.

We typically anticipate producing plans for the following:

- Street Improvement Plans To accommodate ADA compliant curb ramps and raised median noses.
- Signing and Striping Design
- Traffic Signal Plan To propose agreed upon traffic signal improvements and operations based on the developed recommendations.

The GTS team believes a detailed field review and as-built plan verification will provide a good base plan for a high-quality design plan and will result in higher efficiencies (less time and costs). Prior to preparing a base plan for the street improvement and traffic engineering design, GTS will obtain copies of available as-built drawings and other available database/information pertaining to the project from the City and other agencies if needed. The field review will include identifying design constraints, verifying as-built information, and observing general site conditions. We will document our findings with photos taken as part of our field review. We will review the preliminary utility information and prepare and send notifications to all utility companies known to operate within the project area. Underground and overhead utilities will be identified, and potential conflicts will be noted and resolved during final design.

Typical tasks could include:

1.1 Topographic Land Survey: The design survey will be developed at 1"=20' scale and will include the following items:

- Sufficient spot elevations and breaklines to accurately develop contours at a 1.0' interval.
- Curbs, right-of-way (and jurisdiction boundary line), flowlines, and gutters.
- Paving types.
- Roadway crown elevations and striping.
- Above ground evidence of utilities.

1.2 Street Improvement Plan: GTS will modify the existing curb ramps to comply with ADA guidelines at the intersection. GTS will utilize the topographic land survey to produce the street improvement plan. The street improvements will be limited to ADA curb ramp reconstruction. GTS will perform a detailed ADA evaluation. We will design all proposed curb ramps per the standards agreed upon with the City. The plans will clearly show limits of construction and curb ramp grades and details. The curb ramp details will be prepared at 1"=10' scale.

1.3 Signing and Striping Design: GTS will incorporate any striping and signage modifications at the project intersection on the corresponding traffic signal plan if it is part of a signal design project, or will produce separate signing and striping plans.

Striping and signage services will include items like improving existing bike lane signages, reinstalling faded striping, or other striping or signage that may be required.

1.4 Traffic Signal Plan: Utilizing the traffic signal as-built plans, survey, and field investigation data, GTS will prepare a traffic signal base plan at the intersection. The base plan is the backbone to accurately design proposed improvements. At this stage of the process, a thorough review is performed on the base plan to ensure accuracy prior to design. The base plan will include centerline, right-of-way, relevant existing street improvements, and existing traffic controls. We will prepare the base plan in accordance with City's format and standards. If the intersection has shared jurisdiction with other cities we will also work with their standards.

GTS has extensive experience in traffic signal design and will utilize that knowledge to identify potential



conflicts before the project goes into construction. For example, proposed signal poles will be strategically placed in the optimum location for driver/pedestrian visibility and will adhere to ADA guidelines. We will also evaluate any current deficiencies or sub-standard equipment that should be upgraded to meet current City agreed-upon standards.

We will provide a detailed traffic signal plan per City agreed-upon format, standards, and specifications. The plan will propose approved signal phases, clearly identifying all existing, proposed, and removed traffic signal equipment to correspond with the overall design intent and shown existing and proposed improvements. The traffic signal plan will be 1"=20' scale unless directed otherwise.

1.5 Utility Verification and Coordination: GTS will request a contact list from the City of utility companies with facilities at the project intersection. We will request utility maps and compile underground and above ground utilities in a separate digital file. This file will be referenced into all relevant design plans and clearly labeled to identify utility type, size, and owner. This will allow us to identify any potential impacts and modify the design as necessary.

We will also send a notification to all utility companies within the project limits at the 70% and/or final design stage for their review to determine if there are any possible conflicts with the proposed improvements. GTS will work closely with the utility companies and other City departments to resolve conflicts prior to final design. A communication log will be preserved throughout the project and provided to the City upon request. GTS will provide coordination with electric utility companies if the design includes modification to the service pedestal and/ or point of connection (POC).

1.6 Specifications and Cost Estimates: GTS will prepare the technical specifications using the City's boilerplate template or Caltrans required template and required format. We will use the City-required standards and specifications.

1.7 Pre-Construction Support: GTS will provide pre-construction support services for this project after plans have been approved by the City and other agency. We will attend pre-bid meeting and answer the questions during the construction bidding process regarding the design and specifications. If there are omissions or conflicts in the design prior to the award to contractor, GTS will provide a plan revision.

1.8 Construction Support: GTS will provide construction support services for this project during construction. These services include but are not limited to attending a pre-construction meeting, responding to questions during the construction, reviewing contractor submittals within 72 hours, responding to contractor's requests for information (RFIs) or Change Request (CR), revising design plans per CR, maintaining a log of all changes to approved plan set, reviewing and making recommendations to Contract Change Order (CCO), and providing progress reports.

1.9 As-Built Plan Preparation: After the completion of project construction, we will request the redline markings prepared by the project inspectors and/or contractors on the signed design plans for preparation of as-built plans. The as-built plans will be signed and submitted to the City for the completion of the project.

Sample Recent Relevant Projects:

- City of Carson: Provided HSIP-funded PS&E signal design services at Figueroa St and Victoria St; also provided PS&E services for the Dominguez Channel Bike Path Design working with the City and County
- City of Santa Monica: Provided ATP-funded PS&E signal design, signing and striping, and street lighting designs as well as traffic analysis per Caltrans and City guidelines
- Orange County Fire Authority: Traffic signals in Mission Viejo and Anaheim

2. Review/Prepare Traffic Signal Timing/Coordination Plans

GTS will provide signal timing plan support to the City to address the changing traffic conditions. Our tasks typically include the following:

2.1 Field Observations and Data Review: We will review the provided signal timing parameters (yellow/red timing, lead/lag timing, offsets, pedestrian timing, etc.) for potential inconsistencies between timing sheets or other anomalies. We will also coordinate with the City to open the traffic controller cabinets and verify existing controllers. We will also observe traffic flow patterns and signal operations during each peak period along the



corridor. Elements such as uneven lane distributions, queue spillbacks, cut through traffic movements, heavy truck or bus percentages, congestion associated with school activity, and friction factors affecting vehicle speed or intersection throughput will be noted. Crosswalk lengths will be measured using aerial imagery to determine appropriate pedestrian timing.

2.2 Traffic Data Collection: A 24-hour count will be used to understand demand variability by time and determine intersection and corridor peak hours. GTS will collect turning movement counts with vehicle classification at the project intersections. All turning movement counts will be classified to distinguish vehicle classification, pedestrians, and bicycles. Before travel time data may be collected if the City desires.

2.3 Modeling: Using the collected traffic counts and existing signal timing plans available to the City, GTS will develop Synchro and SimTraffic models to understand existing condition operations at each of the project intersections. An accurate understanding of operational deficiencies is crucial to develop improvements at the conceptual level. Based on the results of our field visits and safety and Synchro/SimTraffic analysis, GTS will develop a set of improvements to be tested in the Synchro model for future consideration. The following are few examples of such improvements:

- Lead/lag phasing order based on platoon arrivals, turning movement volumes, and synch phase assignments.
- Phase splits that provide sufficient time to meet pedestrian minimums and minimize the frequency of underserving queues, except where strategically beneficial.
- Offsets that prioritize the primary direction of travel to the extent that flow directionality exists within each period of implementation.
- Re-striping or modification to intersection approach to change the lane configuration. For example, provision of a dedicated turn lane or changing a dedicated turn lane to shared movement.

Each set of proposed improvements will be vetted for feasibility and tested in Synchro to determine effectiveness in improving traffic operation. We will work with the City to select a preferred set of improvements, which will be included in the final optimized Synchro model.

2.4 Signal Timing Sheets: GTS will develop a spreadsheet of proposed signal timing parameters such as yellow times, all-red times, walk times, flashing don't walk times, minimum greens, lead/lad phasing, and sync phases for each study intersection. Additional timing parameters such as minimum bicycle timings, yellow timing for left turn, and through movements will be calculated per the CA-MUTCD. Finally, based on coordination factors, field observations, scenario testing with Synchro, and our signal timing experience, we will propose signal timing groups and cycle lengths for each of the synchronization periods.

2.5 Optimized Synchro Model & Implementation Support: Based on the findings of the above tasks, GTS will develop Synchro models inclusive of the preferred set of improvements with optimized signal timings for each of synchronization period. A table will be prepared to compare measures of effectiveness (MOEs) between the existing conditions and the proposed Synchro models. MOEs are anticipated to include LOS, total travel time, total delay, fuel consumption, and stops.

Sample Recent Relevant Projects:

- City of Rancho Palos Verdes Traffic On-Call: Carried out the Hawthorne and Via Rivera intersection, Crenshaw signals coordination, and Hawthorne and Eddinghill left turn phase analysis
- City of Glendora: Carried out the traffic signal coordination and timing for Route 66 within city limits

3. Review/Prepare Traffic Control Plans

GTS often assists with maintenance of traffic requirements for CIP projects from resurfacing projects to projects involving signal designs, signing and striping, and bicycle facilities design.

We will work with the City to efficiently prepare or review and approve plans and maintain schedules. We provide high quality through the plan check cycle, from planning and design to construction completion. Typical projects include:

- New traffic signals or traffic signal modifications.
- Power source and cabinet placement.



- Required street lighting and integration with traffic control.
- Conformance with ADA requirements.
- Street improvement, rehabilitation, and widening plans.

Sample Recent Relevant Projects:

- City of Hermosa Beach Traffic On-Call: Conducted review (within one to two days) of outdoor dining designs for about 17 parklets
- City of Santa Monica 20th Street: Carried out traffic control plans (following Caltrans standards) and invitations to the meetings

4. Prepare Grant Applications

We will assist the City with identifying and applying for funding to realize the various CIP projects. GTS has assisted various cities with grant applications and grant management. We recently carried out 3 grant applications for the HSIP program for the cities of Buena Park and La Habra Heights to help upgrade signal hardware, construct new signals, and upgrade guardrail. We understand not only the grant writing process, but equally important the scoring rubric that is essential to ensure successful grant applications.

Our team has previously supported the City of Commerce on successfully obtaining HSIP and ATP grants.

As part of our project delivery, we also support cities with grant management and dealing with the funding agency requirements such as E-76 and others.

Sample Recent Relevant Projects:

- City of La Habra Heights: Prepared HSIP applications for guardrail upgrades and new traffic signal
- City of Buena Park: Prepared HSIP application for signal modifications
- Prepared LRSP applications for various cities (South Pasadena, Hidden Hills, Buena Park, etc.)

5. Attend Meetings and Prepare Presentation Materials

GTS often plans and attends council, commission, and community meetings to solicit input and feedback on projects. The scope of our services ranges from one-on-one briefings to community at-large gatherings. These meetings can take place at various milestones during the life of the project. Meeting topics range from presenting initial findings to soliciting feedback from the community or council/comission.

GTS is prepared to assist with leading the meetings, note taking, and support services which will include coordination of meeting times and locations, hand-outs, sign-in sheets, organization of facility details (venue assumed to be provided by the City), and meeting set-ups. We will also work with the City to provide the notices and invitations to the meetings.

Sample Recent Relevant Projects:

- City of La Habra Heights: Presented to the Council and Road Commission on the project progress
- City of Torrance Downtown Revitalization: Participated in community outreach presenting on circulation and parking elements

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Quality Assurance & Control Brief

GTS ensures project deliverables are free of errors, easy to understand, and executed in line with client expectations. Our established quality control process builds on our experience to offer precision in delivery of our work. Our quality assurance/quality control plan begins before the task order is assigned, during scoping discussions. At this time, our project manager will work with the City to define the project tasks, establish roles and responsibilities for project team members, identify communication protocols, and identify success criteria for the project. Subsequently, we develop a draft definition of required project tasks, deliverables, budget, and schedule. Risk assessment, change management strategies, and project communication plans are incorporated into this planning process. Once these tasks have been reviewed, modified, and adopted by the project team, GTS will proceed with the project as planned, providing continuous support and regular communication with the City.

WE PLAN THE WORK AND WORK THE PLAN!

All deliverables and communications with the City will be reviewed by both the project manager and a key team member (who is not otherwise involved in the task). This will be akin to a third-party QA/QC that not only ensures that deliverables are free of errors, but also that we are meeting your needs in terms of our understanding of the project and are aligned with the City's budget and schedule.

For design work in particular, our design plans will be field verified and reviewed by senior staff members during the design preparation. A constructability review in the field will be carried out for the final plan prior to City's approval. Formal quality control checklists and/or plan review comments are employed to control the quality of deliverables.

At the end of every project, GTS conducts a project closure process that includes an online client survey to gauge our success from the client's perspective. We share the feedback among the project team in an effort to constantly improve.





Required Forms

6.1 Certification of Qualifications

RFQ #: <u>24-002</u>

The undersigned hereby submits its statement of qualifications and agrees to be bound by the terms and conditions of this Request for Qualifications ("RFQ").

- Proposer declares and warrants that no elected or appointed official, officer or employee of the City has been or shall be compensated, directly or indirectly, in connection with this statement of qualifications or any work connected with this statement of qualifications. Should any agreement be approved in connection with this RFQ, Proposer declares and warrants that no elected or appointed official, officer or employee of the City, during the term of his/her service with the City shall have any direct interest in that agreement, or obtain any present, anticipated or future material benefit arising therefrom.
- 2. By submitting the response to this request, Proposer agrees, if selected to furnish services to the City in accordance with this RFQ.
- 3. Proposer has carefully reviewed its statement of qualifications and understands and agrees that the City is not responsible for any errors or omissions on the part of the Proposer and that the Proposer is responsible for them.
- 4. It is understood and agreed that the City reserves the right to accept or reject any or all statement of qualifications and to waive any informality or irregularity in any statement of qualifications received by the City.
- 5. The statement of qualifications response includes all of the commentary, figures and data required by the RFQ.
- 6. The statement of qualifications shall be valid for 90 days from the date of submittal.
- 7. Proposer acknowledges that the City may issue addendums related to this RFQ and that the proposer has reviewed the following addendums which have been issued:

Addendum: Addendum 1

Addendum: _____

Addendum: _____

Addendum: _____

8. Proposer further acknowledges the provisions of any addendums issued have been incorporated into their statement of qualifications.

Signature of Authorized Representative:

Rowal U_____ They

Printed Name and Title:

Rawad Hani, Principal





6.2 Non-Collusion Affidavit

RFQ #: <u>24-002</u>

The undersigned declares states and certifies that:

- 1. This statement of qualifications is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation.
- 2. This statement of qualifications is genuine and not collusive or sham.
- 3. I have not directly or indirectly induced or solicited any other Proposer to put in a false or sham statement of qualifications and I have not directly or indirectly colluded, conspired, connived, or agreed with any other Proposer or anyone else to put in a sham statement of qualifications or to refrain from submitting to this RFQ.
- 4. I have not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the rate schedule price or to fix any overhead, profit or cost element of the rate schedule price or to secure any advantage against the City of Hermosa Beach or of anyone interested in the proposed contract.
- 5. All statements contained in the statement of qualifications and related documents are true.
- 6. I have not directly or indirectly submitted the rate schedule price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any person, corporation, partnership, company, association, organization, RFQ depository, or to any member or agent thereof, to effectuate a collusive or sham statement of qualifications.
- 7. I have not entered into any arrangement or agreement with any City of Hermosa Beach public officer in connection with this statement of qualifications .
- 8. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards.

Signature of Authorized Representative:

Printed Name and Title:

Rawad Hani, Principal





6.3 Compliance with Insurance Requirements

RFQ #: <u>24-002</u>

The selected consultant will be expected to comply with the City's insurance requirements contained within this Request for Qualifications ("RFQ").

The undersigned declares states and certifies that:

- 1. Proposer agrees, acknowledges and is fully aware of the insurance requirements as specified in the RFQ.
- 2. If selected, proposer agrees to accept all conditions and requirements as contained therein.

Signature of Authorized Representative:

Rowed U. - Hog

Printed Name and Title: Rawad Hani, Principal





6.4 Acknowledgement of Professional Services Agreement

RFQ #: <u>24-002</u>

The selected consultant will be expected to comply with and sign the City's Professional Services Agreement. Proposers shall identify and/or indicate any exceptions to the Sample Professional Services Agreement included as Attachment 1. The City Attorney or their designee retains the discretion to accept or reject proposed exceptions or modifications to the City's Professional Services Agreement.

- 1. Proposer agrees, acknowledges and is fully aware of the conditions specified in the City's Sample Professional Services Agreement.
- 2. Proposer agrees to accept all conditions and requirements as contained therein with exceptions noted as follows:

Signature of Authorized Representative:

Rowal U_____

Printed Name and Title: Rawad Hani, Principal



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August 27, 2024

Suja Lowenthal, City Manager

City of Hermosa Beach 1315 Valley Drive Hermosa Beach, CA 90254

RE: Mandatory COVID-19 Vaccination for City of Hermosa Beach Consultants

Dear Ms. Lowenthal:

Per this letter, GTS certifies that all of its officers, agents, employees, subcontractors, representatives and volunteers servicing the City of Hermosa Beach on-site within the City pursuant to the On-Call Transportation Planning and Traffic Engineering Services, are or will be fully vaccinated or covered by an approved medical or religious exemption prior to the implementation of the scope of work located within the above referenced agreement.

Respectfully,

Rowed U. . They

Rawad Hani, Principal





Our Commitment to the City of Hermosa Beach

We will provide the City with the team most capable of developing innovative solutions based on local needs and, equally important, effectively communicating these solutions. In providing quality service to the City, the GTS team will focus on:

- ✓ Responsiveness
- ✓ Clear communications
- ✓ Meeting established deadlines
- ✓ Maintaining positive working relationships
- ✓ Providing creative, yet implementable solutions

