

Proposal for On-Call Civil Engineering Plan Checking & On-Call Construction Inspection Services
WORK PROPOSAL



Submitted: November 9, 2020



November 9, 2020

City of Garden Grove 11222 Acacia Parkway Garden Grove, CA 92842

Attn: Dan Candelaria, PE, TE - City Engineer

RE: Proposal for On-Call Civil Engineering Plan Checking & On-Call Construction Inspection Services

Office Responsible for Project: 1861 W. Redlands Blvd. Redlands, CA 92373 (909) 890-1255, info@erscinc.com

Evaluation Period Contact: Robert Righetti Project Manager (760) 485-0041 rrighetti@erscinc.com

Dear Mr. Candelaria,

Engineering Resources of Southern California (ERSC) is pleased to have the opportunity to submit our proposal to the City of Garden Grove as a qualified, experienced consultant to provide On-Call Plan Check and Inspection services. Based on our review of the RFP and consulting of available supporting information, we have developed a thorough understanding of the Project. Our proposal intends to provide solutions that exceed the City's expectations for the Project.

The City is preparing to continue a tradition of being one of the most respected municipalities in Orange County. The Northern Orange County area in particular has challenged the residents, property owners, local agencies, and regional and state governing agencies with regard to pacing growth in infrastructure with the growth in Development. With the City's efforts in advancing the community, future projects will enhance local infrastructure necessary to serve current and future populations.

Principal In Charge

John M. Brudin, PE will serve as principal in charge during the term of the project. Mr. Brudin has provided oversight of plan checking and construction inspection projects throughout numerous municipalities for over 20 years. He is well versed in review of all types of civil improvement plans as they relate to development, capital improvements, and their related supporting documents including geotechnical reports, hydrology studies, and water quality management plans. Mr. Brudin has also participated in construction administration activities during hundreds of residential and capital improvement projects throughout municipalities and special districts throughout the region.

Project Manager

Robert Righetti will serve as project manager and will lead the ERSC team during the term of this project. Bob has served the City during the most recent assignment in the City and will continue into a new agreement. A list of similar ERSC projects in other locales lead by Bob include:

- Plan Check and Development Services City of Tustin, City of Yorba Linda, City of Huntington Beach
- On-Call Engineering Services City of La Mirada
- On-Call Inspection Services City of Indio

ERSC's Stand-Out Capabilities and Knowledge

- Experienced ERSC's familiarity with municipal plan checking processes, practices, and requirements.
- Responsive ERSC can provide immediate pickup and responsiveness through our project-specific plan checking coordinators and couriers. Often, we can provide same day pickup within the hour.
- Available ERSC Inspectors are available for assignment within 24 hours of request.
- Advanced ERSC's experience in electronic review, transmittal, and receipt of plan check projects.

We look forward to the opportunity to work with the City and thank you for the invitation to submit a

proposal. If you have any questions, or require additional information, please contact Bob at **rrighetti@erscinc.com** or **(760) 485-0041.** I am authorized to bind the firm in a potential agreement. This proposal will be valid for a period of 90-days from the submittal date.

Respectfully submitted,

John M. Brudin, PE

President - Principal In Charge





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Phoje chuncles inches & Approach

Based on our review of the City's Request for Proposal (RFP) dated October 7, 2020, and in reflection upon our past working relationship with City Staff providing all of the services requested in the RFP, it is our understanding that the City of Garden Grove wishes to contract for On-Call Civil Engineering Plan Checking and On-Call Construction Inspection Services for the independent review of private land development applications and capital improvement project submittals along with the associated improvement plans and technical studies processed through the City, as well as the asneeded field representation and review for private land development and capital improvement projects that may occur under city issued permits and franchise agreements (such as with various public utilities). Since its inception, Engineering Resources of Southern California, Inc., (ERSC) has built a solid reputation for providing the



kind of services that the City of Garden Grove is seeking, and we have cultivated a unique and thorough understanding of the community of Garden Grove and all of its stakeholders and associated agencies as a result of past service to the city.

The work normally performed by City Engineering staff is not the same as the work performed by design consultants who typically produce the plans. The as-needed Professional Civil Engineering Plan Check and Land Development Review Services consultant must understand the complex regulatory requirements and constraints, as well as the ministerial needs and goals that the City must perform in its role of providing administrative review and approval of the final improvements. This requires not only a solid understanding of the design principles involved, but also experience and knowledge in the regulatory and ministerial arena that governs how projects are initiated in the city, progress through the entitlement process an then move through the final design and construction phases.

A comprehensive understanding of the local community planning, operation/maintenance and monitoring/ reporting requirements that serve to frame how the city implements its General Plan and Master Plan elements throughout its jurisdiction is essential to successfully executing this type of work. This requires an understanding of the infrastructure history and setting of the city, and the role of federal, state, county and city regulations and ordinances that provide the ministerial guidelines for land development, as well as the protection and observance of health, safety and welfare issues that necessitate the oversight and review role of the city.

ERSC has made this kind of expertise our primary practice. Due to our heavy experience in the land use process performing development review for cities, we also understand the importance of paying close attention to the Entitlement Conditions of Approval in the development review and plan check process and confirming how the developer has complied with the requirements placed on his development by the City's Planning Commission and City Council to mitigate the impacts of the project. It is vital that the intent of the Entitlement Conditions are accurately conveyed on the project drawings and contract documents for construction. And during that process, as well as following the issuance of permits for



Project Understanding & Approach

construction, it is vitally important that the City maintain a system of documenting and archiving how each development project was processed, permitted, completed at the project site and made ready for occupancy or use, not only for future maintenance purposes, but also for reference by the City and the public for future planning efforts as more development occurs.

To accomplish the work assigned by the City of Garden Grove (City), ERSC offers well-grounded experienced people with the technical skills, personality, teamwork fit and public contact tools and expertise that are ideally suited to the challenges associated with municipal development public counter service as well as survey, engineering plan review and inspection services. We believe our firm offers a natural blending of civil engineers, land surveyors, planning/design and inspection technicians who understand not only "how", but also "why" this work is performed by City staff, thus enhancing and building upon the City's "service friendly" approach, ensuring continuity, organized coordination of the tasks and timely processing that responds to the City's needs and the needs of the community that it serves.

The City of Garden Grove

Besides the typical features associated with the city's infrastructure and public right of way that are much like other cities around southern California, Garden Grove has some unique elements that make the city much different from other communities primarily due to its land use practice during the early years of cityhood with large residential lots, flat topography and physical location within a very heavily developed region of Orange County. One of the obvious results was an infrastructure that was designed for lower density capacities, and therefore requires periodic revisits to the master planned design elements, and the associated models that support those plans.

In addition, Garden Grove's proximity to very intensely visited and active recreational venues, both natural and developed, along with a changing and very diverse population with a high percentage of young and middle-aged residents (See the chart on this page) has placed heavier burdens upon the infrastructure. This, coupled with a variety of new and future developing land uses, will rely heavily upon the developed and future infrastructure improvements that the city is charged with maintaining and upgrading. All of these issues have a direct bearing upon how development related improvements are planned, approved and constructed without being detrimental to the quality of life in the city. New development must receive the input and assistance of every department, commission, agency and the public in order to provide the Planning Commission and City Council with the information needed to establish the best development guidelines and entitlements to promote new improvements that will be an asset and direct enhancement of the existing quality of life in the City of Garden Grove. And, as these new developments and infrastructure are built, experienced and qualified field inspectors will need to be available to monitor conformance with local, state and federal requirements as well as adherence to the approved design plan and contract documents.

Outside Agency Coordination

With that in mind, we understand that the work will include assisting the private development sector, as well as the various departments (including, but not limited to, Planning, Building and Safety, Fire, Public Works, Water Services, Water Quality, Redevelopment and Community Services) as a representative of the Engineering Department in the processing of development projects for public hearing and entitlement approval, preliminary site plan and technical design study/report review and approval, permitting as well as coordination in with affected public agencies

such as the County of Orange (including Flood Control), Orange County Sanitation District, the Federal Emergency Management Agency (FEMA), the California Regional Water Quality Control







Project Understanding & Approach

Board, Municipal Water District of Orange County, Caltrans, State Lands Commission, the Army Corps of Engineers, and related permitting agencies encountered especially during the CEQA and NEPA review process.

Plan Check/Review

Subsequent to obtaining entitlement approvals, the work includes assisting city engineering staff in the plan review of plans and technical studies related to grading, onsite and offsite improvements, stormwater quality, geotechnical conditions, and drainage for conformance with the project Conditions of Approval, and all local, state and federal code requirements.

In addition, the city is requesting support to meet with developers, engineers, contractors, consultants and the general public to discuss, resolve and make recommendations for the resolution of development criteria issues, processing, field construction and related aspects, including researching archival resources in the city's files. ERSC is providing qualified temporary staff who can serve as the city's representative to provide guidance to the public, monitor and coordinate with the contractors performing work being conducted under permits issued by the city, whether on private property or within the public right-of-way, and other duties as needed.

Construction Management and Inspection

In concert with that need, the city has also requested On-Call Construction Inspection Services to be provided as part of the ongoing work to be performed on behalf of the Engineering Department. As part of that service, the inspector must be properly qualified and equipped observe how the construction demonstrate that it has met the intent of the plan documents and the project conditions of approval, but also how the contractor and his crews are observing and meeting local, state and federal regulatory requirements within the limits of the work, and in the workmanship of the final improvements as constructed. This means providing the daily and/or intermittent observation of the work, checking horizontal and vertical control and matchup, observing site safety for workers and the public, receiving, evaluating, resolving, and when necessary, obtaining input from key city resources to address complaints when they arise. The inspector must also maintain and process critical communications, logs of activities and communications, project inspection forms and records, and provide a critical communication link between the contractor and the City Engineer.

Lastly, both the plan checker and the inspector must perform all of their duties in a manner that reflects the same high standards of all city departments, most especially the Engineering Department, and be ready to employ cost effective strategies and techniques that minimize redundancy, duplication of effort and promote the best value possible for the city.

Performance Schedule

As discussed above, every project has elements or issues that can impact the development processing and plan review schedule of the submittals. In all cases, ERSC will review and return plans, studies and technical reports that are received as a package, or separately and independently of development or plan review sets when appropriate, within the city's agreed committed delivery time lines or sooner when possible. We will always make it our goal to meet the city's expectations of prompt and efficient service to the public. However, larger and more complicated project plan sets, studies and reports may require more than the anticipated working days to provide a complete review. These will have a mutually agreed upon return date determined prior to initiating any reviews by ERSC.

ERSC makes a firm commitment to excellence in providing the City of Garden Grove with comprehensive On-Call Civil Engineering Plan Check and On-Call Construction Inspection Services. We fully understand the goals of the anticipated work and:



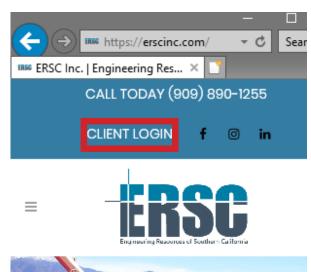
Project Understanding & Approach

- Maintain the kind of in-house technical expertise and experienced personnel specific to Civil Engineering Development Review, plan-check, map check, processing and Construction Inspection services;
- Offer to the City a fully developed, tested and effective work plan that we have improved through
 experience with our many other development review, plan check, map review and construction
 inspection contracts so that it embodies the creativity, cost-consciousness, practicality and hard
 work essential for success; and
- Will deliberately minimize our work with private sector developers to avoid the potential or appearance of conflict of interest to keep our public service work above reproach or challenge.

Electronic Document Review and Submittal

ERSC is currently providing electronic plan checking in a number of Cities in the region. This is accomplished through the use of our FTP site and PDF format documents. Each project for plan check is reviewed using Bluebeam REVU Software and Tools and saved to ERSC networks. However, instead of being routed back to the City, ERSC provides via email a web link to download the project's plan check documents. In the same correspondence, ERSC also provides the engineer a link to upload revised documents for re-submittal. The FTP program is entirely web based so no additional software is needed.

Through this system, ERSC is able to provide individual user access to the City and Design Engineers to access redlined plans, plan check documents and ERSC's tracking information related to plan checking. This system



is in used with many of ERSC's plan check assignments and is successful in reducing time required in completing a review, eliminating costs associated with hand delivery, and establishes transparency in the process for all parties.

ERSC has established a detailed instruction set for use by the City and Design Engineers that outlines electronic system access, login, setup, retrieval, submittal, and other important areas. You can view the login landing page by visiting www.erscinc.com and clicking on "CLIENT LOGIN" at the top right corner of the page.





Given the multiple Scopes outlined in the RFP, ERSC has divided this section into an approach to Plan Checking activities and a separate approach to Construction Inspection activities. Each are identified in under individual headings below.

Approach – Plan Checking

ERSC has become well versed in the many special nuances that must be observed by anyone processing plans and studies for approval with ERSC's plan check clients. Documents such as the State Subdivision Map Act, Standard Specifications for Public Works Construction, Americans with Disabilities Act requirements, and the California Building Code are applicable. Other facets of a particular project, such as water quality or traffic improvements, are governed by the Construction General Permit, MS4 Permit, the WQMP guidance document, California Best Management Practices Handbook for storm water BMPs, Manual on Uniform Traffic Control Devices, the State of California Highway Design Manual, Caltrans standard specifications & standard drawings, Orange County Standard Plans and Specifications, SWQCB General Permits, and the United Stated Army Corps of Engineers Permit requirements are applied respectively and where applicable.

Local guidance documents such as the City Grading Notes for Improvement Plans, City Encroachment Permit Application Package, City Municipal Code, City General Plan, and City Specific Plan Elements are also applied when appropriate.

ERSC staff understands the importance of ensuring that all Conditions of Approval are incorporated into the design of the project to confirm how the Developer or Engineer have complied with the requirements of the City's Planning Commission and the City Council to mitigate the impacts of the project. This requires a complete and thorough review of Conditions of Approval imposed by the Planning, Fire, Public Works, and Engineering Departments.

Process Applicable to all Plans/Subdivision Maps/Studies

- a. Review initial submittal package for completeness. General items include title report, tentative map and conditions of approval; grading plans may require a geotechnical report and hydrology study; storm drain plans require hydraulic calculations; sewer and water plans may require support calculations; final maps require supporting record maps, recorded grant deeds, easements, and closure calculations.
- b. Research and review files for past projects near or adjacent to current project. Verify ownership. View site aerials and photos with Google Earth or GIS and review conditions onsite and adjacent improvements. Prepare notes. Initiate review of plans and supporting documents. Verify drawing content per City guidelines including title block, file number, RCE signature block, benchmark, and proper drafting technique. Verify compliance with conditions of approval. Verify WQMP template.
- c. Verify general notes and content, construction notes, quantities. Include project title, list utility companies with contact information, vicinity and index map, legal description, APN, site ownership,



- and address. Verify references to standard drawings and details in construction notes.
- d. Compliance with applicable provisions of the City's Standards and local Civil Engineering industry design standards and conformance to all local ordinances, policies and procedures.
- e. Compliance with applicable Specific Plans and Community Plan design requirements.
- f. Review of engineering design principals and requirements, which includes plan check of cross section and profiles, right-of-way lines, construction limits, and center line control.
- g. Review of special studies including, but not limited to, drainage, water quality, geotechnical, structural (including but not limited to structural analysis of bridge structures) and traffic studies. The studies will be checked to assure they are conceptually sound and meet City, County and State Standards.
- h. Review of format, which includes plan check of general notes, construction notes, drawing and utility legends, benchmark, basis of bearing, construction quantities, vicinity map, location map, standard sheet and title block, north arrow etc.
- i. Recommendation of accurate construction quantities and engineering's cost estimate for bonding purposes or Landscape Maintenance District formation.
- j. Conformance to City's preferred format and layout.

Process for Individual Improvement Plan Checking and Special Study Review

Plan check for civil engineering design plans which may include, but is not limited to: street, sewer, water, recycled water, storm drain, grading, erosion control, signing and striping, street lighting, traffic signal and all related engineering studies, including hydrology and hydraulics, WQMP, soils, water & sewer studies and structural analyses. Plan, study, and calculation review services will include, but not be limited to, the following:

Grading Plans

Verify conformance with City guidelines and geotechnical report; show boundary information, easements, and adjacent lot numbers; show street dimensions, existing utilities, sewer lateral and water meter; review and verify perimeter conditions; cross reference with street and drainage plans and final map; verify compliance with California Building Code for grading and accessibility; verify minimum slope requirements and drainage control at top of slope; verify slopes, top of grate and invert elevations on drains; verify retention basin and BMP's, show building locations/setbacks; show critical elevations, i.e. high points, thresholds, verify location of perimeter walls and retaining walls; show top of wall and finished surface at critical points. For commercial grading verify parking design per City standards; verify the accessible path of travel, parking, and signage; verify driveway/lane widths, fire access, and structural section. For all grading plans, verify conformance with FEMA requirements.

Street Plans and Alignment Review

Verify design speed, geometrics, and cross section; show typical section with cross fall and dimensions; verify minimum/maximum street grades and cul-de-sac design; verify structural section (AC/CMB); verify bearings, curve data (centerline and curb) and stationing; show stations/elevations at intersections, EC/BC and ECR/BCR; verify "join" elevations extend topography; show saw cut line and feathered paving; provide supplemental cross sections for widening; show driveway approaches and cross gutters; show drainage devices, easements, and lot lines/numbers. In the profile, show existing/proposed profile at centerline, curb left & right; show stations at begin/end construction, intersection, EC/BC and even stations; show slope, elevations at critical points and grade breaks; show the location, length, and PI for vertical curves;



show projection and length of curb returns/verify design; profile "grade to drain" and show elevations.

Storm Drain Plans

Verify size and design flow per City's master plan, if applicable; design per Flood Control standards; verify alignment, geometrics, and stationing; show existing utilities (OH/UG); show catch basins, manholes/junction structures and inlet/outlet structures with details when required; show, obtain, and/or verify drainage easements; show invert elevations at inlet/outlet, structures, and grade breaks; verify design flow and street capacity with hydrology study; show HGL, flow rate, and velocity for main line and lateral; coordinate with hydraulic calculations; verify coordination with regulatory agencies as required. Storm drain plans will be checked against hydrology and hydraulic calculations to verify their design accuracy as required by the City Standards and coordinated with the City's Storm Drain Mater Plan for the design of mater planned lines.

Water Plans

Verify size per City's master plan; verify minimum velocity and slope requirements; verify pipe material and class; verify meter, restraint and AR/AV calculations; verify compliance with CDPH separation requirements; verify alignment and stationing; show existing utilities (OH/UG); verify minimum cover and maximum & valve spacing; verify valve placement; show stations and elevations at cleanouts, valves, fittings, and fire hydrants; verify cross-connection requirements; show easements. Water and Recycled Water Plans shall be coordinated with the City's Water and Recycled Water Master Plan for design of master planned lines.

Sewer Plans

Verify size per City's master plan; verify minimum velocity and slope requirements; verify minimum lateral slopes; verify compliance with CDPH separation requirements; verify alignment and stationing; show existing utilities (OH/UG); verify minimum cover and maximum manhole spacing; show stations and elevations at manholes, cleanouts and laterals; show easements. Sewer plans shall be coordinated with the City's Sewer Master Plan for design of master plan lines.

Sewer Studies

Review City's sewer master plan; verify tributary area; verify existing pipe size and existing flow; determine proposed pipe size; verify sewer loading and peaking factors; determine/verify EDU's, average daily flow; peak hour dry weather flow, peak hour wet weather flow; review pipe size calculations; verify d/D ratio and minimum velocity requirements; verify downstream pipe capacity.

Landscape and Irrigation Plans

Verify compliance with City guidelines and ordinances; review/verify existing water system pressure and flow data; review meter size and calculations and location; verify cross-connection protection; verify location of controller, rain sensor and service pedestal; review pipe sizes and supporting calculations; review systems layout including head and emitter location; review location, size and configuration of antisiphon valves and gate valves; review soils tests and method of soil preparation; review and confirm plant palette and plant spacing; review and confirm ground cover type and spacing; review and confirm street trees, spacing and tree grate location; confirm shrub and tree planting methods; verify sight distance requirements; confirm proper use of edge treatments, root barriers and rock mulch. For Landscape Maintenance District plans verify compliance with the Guidelines and Specifications for Landscape Development, Landscape Architecture Development Plan Requirements and Irrigation, Planting and Maintenance Requirements.



Tentative, Final Maps, and Survey

Check to assure compliance with applicable provisions of the State Subdivision Map Act, Land Surveyor's Act, City Municipal Code, Conditions of Approval and other City requirements, and all other applicable state statutes and local ordinances; Review of map sheets for centerline control, lot closure calculations, mathematical accuracy, surveyor notes and symbols, monumentation per City Standards, & survey procedures; Review of boundary retracement procedures & title reports; Review of format statements and certificates; Monitor of coordination response to Civil Engineers / Land Surveyors; Conformance to City's preferred format and layout; Verify conformance to City's Subdivision Map Review Checklist.

Title Reports

Review title report to confirm that the legal description, ownership, vesting, trustees and beneficiaries are correctly shown; Review title insurance exceptions to confirm that rights of way and easements are correctly listed and plotted; Verify that applicable rights of way, easements and mineral rights are correctly listed as signature omissions; Verify that subdivider has requested non-interference letters from public entities and public utility companies.

Soils Reports and Geotechnical Reports

Review and comment on private project Geotechnical and Geology Reports including but not limited to items such as soil stability, soil composition, liquefaction, compaction, foundations, etc.; Development of Geotechnical and Geology Reports for limited special public projects, as well as peer review of geotechnical and geology reports; Prepare review comments and conditions of approval of soils reports in a written format that is acceptable to the City; Review responses to review comments provided by the developer's soils engineer; Work with developer's soils engineer to resolve issues generated by review comments; Attend meetings with the City, developers, builders, engineers, and consultants in a timely manner to resolve issues generated during the report review process or during construction; Review soils reports submitted by the developer's soils engineer for proposed changes during grading; Provide technical support to the City for geotechnical engineering and geologic related issues on an asneeded basis; Provide grading inspection services on an asneeded basis to ensure compliance with City approved plans and standards.

Legal Descriptions and Easement Documentation

Review title report, Schedule B documents and vesting deed; verify compliance with City application requirements; reviewing legal description for accuracy and proper acknowledgment of record and easement documents; review and verify closure calculations, review plat for proper identification of R/W, lot lines, easements and location of existing structures and utilities. For easement or R/W vacations, coordinate with local utility companies.

Hydrology and Hydraulics Calculations

Verify compliance with Flood Control methods and City requirements; verify design criteria; review and verify critical design values; review and verify model input/output and content of hydrology map; and verify narrative content. For hydraulic calculations, verify mainline, lateral and catch basin design flow, review and verify model input/output; verify methods of analysis; review design methods of catch basins, hydraulic structures and outlet protection; review maximum velocity, junction losses, freeboard and outlet conditions; and verify hydraulic data on storm drain plans.

Water Quality Management Plans

Verify storm water management requirements applicable to the project, source control/site design, pollutant



controls and hydromodification management; review performance requirements for source control and site design BMP's, storm water pollutant control BMP's and hydromodification management BMP's. For a Standard WQMP verify project information and ownership, construction storm water BMP's, post construction source control BMP's and post construction site design BMP's. For Priority Development Projects, verify onsite pollutant control BMP's or combination BMP's, BMP selection process and BMP sizing necessary to meet storm water pollutant control standards.

Storm Water Pollution Prevention Plans

Verify proper format and content; verify QSD certification and Legally responsible person, verify SWPPP requirements and content of Notice of Intent; review and verify project information, risk level determination and non-storm water discharges; review and evaluate best management practices and BMP inspection & maintenance requirements; review training requirements and responsible parties; review & evaluate monitoring and reporting requirements, sampling, analysis, and QA/QC requirements; review references documents.

Erosion and Sediment Control Plans

Verify plan adheres to City requirements; Verify WDID Number; Verify perimeter protection; Verify Inlet protection; Check BMPs with CASQA recommendations; Verify retention basin and BMPs, show building locations/setbacks perimeter walls and retaining walls; Verify stabilized construction entrance; Verify equipment staging areas; Verify materials storage areas; Ensure offsite inlet protection where applicable.

Traffic Scoping Agreement

Verify project location and scope; revive project scenarios; verify/review study intersections and roadway segments; review traffic forecasting for existing conditions, future growth, ambient growth and related projects; review/verify future changes to the transportation network; verify methodology; and, verify trip generation and distribution.

Traffic Impact Analysis

Confirm approval of scoping agreement; verify project characteristics; evaluate traffic forecasts and supporting data; review/verify existing conditions; review future conditions without the project including intersections and roadway segment analyzes; review future conditions with the project including intersections and roadway segments analyzes; and, review the transportation management plan.

Signing and Striping Plans

Gather all available information including 'as-builts' and Conditions of Approval to adjacent existing improvements and future developments to provide a coordinated review. Review plans against current traffic engineering design standards, guidelines and practices; City standards for street construction; City's Guidelines for Bicycle Facilities; adhere to the Caltrans Highway Design Manual, Caltrans Traffic Manual, CA MUCTD and Caltrans Standard Plans and Specifications.

Traffic Signal Plans

Review and recommend approval of new traffic signal installations and traffic signal modifications including: review of proposed and verification of existing intersection geometrics, lane configuration and improvements; review/verification of existing utilities, subsurface and overhead obstructions; verify general notes, construction notes and standard plan references; review pole locations, mast arm lengths and ADA compliance; review/evaluate conduit layout and sizing, pull box locations; verify controller location and type, service connection and pedestal location, review pole and equipment schedule, conductor schedule



and phase diagram; verify location of loop detectors or video detection zones; review/verify directional and warning signage, street name signs (illuminated v. non illuminated); review and verify vehicle storage (que), striping, pavement markings and advanced warnings.

Street Light Plans and Voltage Drop Calculations

Verify conformance with the City's Public Works Standards, Standard Specifications for Street Lights and drafting standards. Verify location at intersections, along roadways and placement within median islands. Verify pole spacing and illumination requirements. Verify pole height, mast arm length and luminaire. Verify foundation requirements and location, pedestal location, service points and availability of service. Verify conduit layout, size and material. Verify circuit design.

Project Review Schedule

The project schedule will be determined and maintained by the project applicant. The project review schedule shall be as dictated by the City. ERSC typically adheres to a schedule similar to the one presented below:

First Review	Subsequent Review
15 Business Days	10 Business Days

Approach – Construction Inspection Services

Our goal is service and responsiveness, therefore ERSC's team will work closely with City staff to maximize the effectiveness and efficiency of our construction management inspection team, especially in relation to project issues that may drive possible field changes, decisions or adjustments that will affect control or the cost of the project, or long-term maintenance once the improvements are completed. ERSC's size allows us to be flexible to the needs of our clients. ERSC is ready and able to adapt to and apply the City's preferred methods of project, budget, and schedule management. Summarized below is ERSC's typical approach to managing the many facets of a successful project.

Essential Considerations

ERSC takes into consideration multiple objectives when delivering successful projects to our clients. The following will be emphasized:

- Fulfill all responsibilities of the City without causing additional burden to City staff.
- ERSC inspectors will act as an extension of City staff.
- Ensure that projects are constructed in accordance with contract documents, proper building standards, SSPWC Greenbook, Caltrans, and current City Standards.
- Maintain a Professional Approach and Attitude (at all times and with all parties): Minimizes potential
 conflict, promotes project success, enhances daily productivity.
- Immediate resolution of construction issues. Clarification of items of concern can reduce or eliminate change order request/demand from the Contractor.
- Project safety will be considered paramount and overriding with any project that ERSC is assigned.
 In almost 24 years of business, ERSC has yet to receive a workplace injury and we intend to hold contractors to the same standards by adhering to:
 - Contractor's own or the City's Injury and Illness Prevention Programs.
 - Trench and Excavation Protection Measures (as necessary)



- Confined Space Requirements
- Applicable Cal/Osha Standards, Rules, Regulations, And Orders
- Site Safety Measures and Fire Protection Procedures
- Daily review of the project with the City to discuss any project concerns, progress, and potential issues to eliminate the possibility of surprises and change orders.
- Attendance of preconstruction and regular progress meetings with the contractor and the City to discuss progress, potential/anticipated issues, project schedule, and safety concerns.
- Detailed record-keeping of all materials, equipment, conditions, labor, and work to ensure accurate payments to the Contractor with minimal change orders.

Communication

To effectively deliver a project on time, ERSC believes a key component is to have clear lines of communication between the City, Contractor, and Construction Manger along with a detailed project schedule with vital milestone dates. The City will benefit from clear lines of communication within the ERSC team structure. ERSC's Construction Manager, Joanna Rembis, and ERSC's assigned Project Inspector will serves as the main points of contact between ERSC and the City to ensure all communication is filtered to the correct people involved in the project. Email shall be the primary form of written communication between the City, ERSC, and Contractor during the term of our contract. Two week look ahead schedules will be sent to the City's project manager on Mondays to keep the City apprised of the work ahead, planned deliverables, schedule impacts and budget.

Schedule Control

Our team understands that schedule is critical on this project. Our team has been providing services in this area and because of this our team can foresee problems, roadblocks and other potential issues before they materialize. In addition, our team understands the importance of communication and works to establish a rapport with the contractor along with City staff so that concerns are communicated early before they become an issue. In addition, our team has a thorough understanding of how to apply project specifications such that confusion and possible delays are mitigated.

Pre-Construction Meetings & Progress Meetings

ERSC Project Manager will coordinate and facilitate pre-construction meeting and progress meetings on a weekly basis to enable all parties to comprehend scope of project, implementation of the specification and City Requirements. ERSC Inspectors will conduct regularly scheduled meetings to discuss issues to be addressed to expedite project completion. ERSC shall prepare meeting agenda and maintain backup documentation of project meetings/workshops and prepare summary records of meetings for the City's review within three working days after each meeting. Upon receipt of the City's comments regarding the record, if any, ERSC shall incorporate comments to conform and enhance the meeting record to maintain an accurate account of all discussions and present to all parties.

Project Records/Documents

ERSC's inspector will maintain all required project records through closeout. All records shall be delivered to the City at the completion of construction. The City or any of its duly authorized representatives shall have access to any documents, books, papers, and records of the consultant (which are directly pertinent to the project).



All information is retained by ERSC on our network for redundant backups. Using field computers, we can upload reports, photos, and documents directly to our project FTP site. These electronic documents are accessible by clients, project managers, and office staff for review and documentation. Reports, photos, dates, timesheets, and correspondence are all compared and reviewed by the project manager to ensure quality, accuracy, and consistency is maintained through the project.

Management Approach

Ms. Rembis will serve as Project Manager for the duration of the project. As project manager Ms. Rembis will be the extension of the City by being the liaison between the Contractor, City and Public to ensure the project is completed in accordance with the PS&E, stays on track, addresses and resolves issues and minimizes impact to stakeholders. As a result of our efficient construction management, progress meetings are kept to a minimum, which saves the City's personnel time to work on other pressing matters. Ms. Rembis will also be the point of contact for ERSC if services outside of normal inspection duties are required.

ERSC inspectors all report to Principal Engineer and Project Manager, Joanna Rembis. Ms. Rembis is responsible for providing support, direction, assignment, and QA/QC to ERSC inspectors. She regularly maintains contact with inspectors to resolve scheduling conflicts, provide necessary equipment, and offer support during projects.

Permit/Environmental Compliance

If required, review Storm Water Pollution Prevention Plan (SWPPP) as required by the contract documents and ensure its proper submittal and processing as outlined in the specifications as "NPDES Compliance." Review the Contractor's "Best Management Practices" plan prior to start of construction. Inspect the Contractor's application to avoid storm water pollution from related activities in compliance with the National Pollutant Discharge Elimination System (NPDES).

Public Relations

Assist the City in upholding a good relationship with the public. The team will promptly attempt to alleviate problems and inform the City's Project Manager as soon as possible.

Having good public relations with the general public is important to any type of project. Construction work is adjacent to private residences and businesses, and ERSC aims to reduce any disturbance caused by construction. On this project, proper communication between the team and stakeholders is critical to reduce disruptions to the area. We will need to understand busy and high-traffic times in order to allow for access during such periods. To assist with the public relations efforts of this contract, we will:

- Maintain a log of all phone calls received.
- Listen to community concerns and try to adhere to them
- Work with the Contractor for timely resolution of issues.
- Ensure changeable message signs are present to alert traffic of the period of potential delays during lane closures.
- Communicate with emergency services regarding any events that may raise emergency calls from the public.

Monthly Status Reports

Assess Contractor's schedule of values compared to payment application. Provide comments to the City



regarding monthly progress payment applications submitted by the contractor. Reports containing project progress, CCOs, as well as cost and schedule matters will be prepared monthly.

Site Safety

Review and check the contractor's safety program for compliance with Cal/OSHA, contract documents, and traffic control/staging plan. ERSC's Inspector will enforce on-site safety standards and will report any observed deviations to the City.

ERSC ensures their inspectors are equipped with all the required personal protective equipment (PPE) and tools to perform their work accurately, efficiently, and safety. ERSC's policy is for their inspectors to always wear a white hard hat, safety vest, long pants, and boots whenever present on a project site. Our inspectors are equipped with a cell phone to provide quick and frequent communication and keep abreast of any issues. ERSC provides safety trainings and courses to our inspectors on a frequent basis so they stay apprised of the current safety requirements for working on or near roadways/highways, structures, confined spaces, and underground areas.

Inspection Reports

ERSC is familiar with the type of information necessary to perform complete inspections of construction projects. Contractors, personnel, work hours, equipment and labor, work items, hours, weather, weight tickets, quantities, visitors, and other work-related items are closely monitored and documented by ERSC. The daily reports will be prepared in accordance with Caltrans requirements on the CEM-4601 and CEM-4501 forms. Reports are always accompanied by photos of work to support the content entered by the inspector. Following the completion of the inspection reports by ERSC's inspector, reports are submitted at the end of each week to the Project Manager for review. Reports are reviewed for complete information and necessary level of detail. If deemed incomplete, the Project Manager will request revisions until satisfactory for submittal. When approved for submittal, ERSC's inspector will upload to the City's system for records. ERSC's turnaround time for submitting reports to the City are typically within a week from the date of inspection. In addition to the daily work reports, ERSC's inspector will maintain a comprehensive photo and video log before, during and post construction and will deliver to the City upon completion of the project. Sound engineering will be used throughout the administration of the project and submittals/calculations will be checked for accuracy.

ERSC can adapt to the City's preferred method of reporting and QA/QC for construction inspection documents

Project Closeout

ERSC's Inspector will have a copy of the plans on the site with all up-to-date changes. Upon completion of construction, ERSC will have an "As-Built" verification and provide a copy of the "As-Built" plans to the City and involved parties. ERSC's Inspectors are also familiar with providing other project closeout procedures such as final punch lists and walk-throughs.

Project Controls

ERSC projects are loaded into our accounting and time tracking program, Deltek Ajera, broken down by each task. Each task is preloaded identically to the work plan and Fee Schedule with the time allotted per billing rate and the total project budget. Any employee working within the project is able to account for their hours billed to a project as well as remaining hours available for a task. Accountability and ease of access to this information aims to eliminate overruns.



Representation

ERSC's Construction Manager and inspector will represent the City and act as their agent with contractors, developers and other outside agencies and City contracted technical consultants.

Tasks

In addition, to all the services highlighted above, Ms. Rembis and the designated inspector will provide all services noted in the RFP throughout the course of the project. ERSC's selected inspector will perform observation and inspection during the entirety of the project to ensure the project is built per plans, specifications, contract documents, and in a timely fashion. ERSC inspector will always wear the appropriate personal protective equipment on the project site and will have all the proper equipment, tools, and supplies needed to carry out the required duties. ERSC shall perform comprehensive daily inspection and monitoring duties that may include, but not be limited to, the following tasks:

Constructability Review

Review contract plans, specifications, and engineer's estimate for constructability and make recommendations for necessary or desirable changes.

Meetings

Attend kick-off meeting with the City, to verify approach to project and parameters and review scope of work, plans, and project schedule. Coordinate and facilitate Pre-Construction Conference and progress meetings with City, Contractor, and Stakeholders to enable all parties to comprehend scope of project, implementation of the specification and City Requirements, review job progress, scheduling and answer any questions. ERSC will prepare the meeting agenda and record minutes of the meeting covering all aspects of contractor's questions and clarifications of project and present to all parties

Supervision of Construction Inspection

Project Manager shall conduct on-site observations of the Work in progress to assist the City in determining that the Project is proceeding in accordance with the Contract Documents and that completed Work will conform to the requirements of the Contract Documents and applicable regulations such as SSPWC Greenbook and Caltrans. Review work and reports prepared by the inspector and submit copies of the reports to the City on a weekly basis.

Construction Phasing

The PM review the overall project and the Contractor's proposed schedule and provide recommendations for phasing that will minimize impact to the community, local businesses, schools, and residents.

Project Records

Maintain all files during construction including pay quantities, daily and weekly reports, change order documentation, photographs, testing results, payrolls, and other documentation.

Coordination

ERSC shall provide general contract administration for the construction of the project. Provide office engineering and consultation as required and coordinate with the City, utility companies, other agencies, and other staff in management of the construction contract. Log, tack and process submittals, RFI's, RFC's, CCO, field directives, notices of potential claims, non-conformance reports, review and approved



traffic control plans, data relative to questions of extras or deductions, decisions, observations in more detail as in the case of observing test procedures. Coordinate the review all construction shop drawings and materials with the design engineer and determine consistency with the construction drawings, specifications, documents and regulations Send updated copies to the City.

Survey

Review, manage, monitor and verify construction survey work provided by the contractor including lines and grades, construction staking, cut sheets, monuments, records etc.

Reports

Project Manager will review inspection reports for accuracy and completeness and submit to the City on a weekly basis.

Construction Schedule

Review the contractor's project schedule and weekly look ahead schedules for conformance to the specifications, logic, tasks definition and duration, critical activities, submittal review, material procurement, and coordination with other contracts. Provide recommendations and direction to the Contractor to make suitable adjustments to minimize impact to the community, schools, businesses, and residents and to stay in compliance with the original schedule.

Labor Compliance & DBE

Review payroll and perform workmen interviews to monitor the Contractor's compliance with prevailing wage and Disadvantage Business Enterprise goals for the project.

Weekly Working Day Statement

Prepare weekly statements of Working Days and other reports that may be required by the City and Caltrans. The working day statement shall conform to Caltrans form CEM-2701.

Project Coordination

Coordinate with City, utility companies, stakeholders, and the contractor throughout the project.

Submittals

Review and track contractor's submittals of materials and shop drawings for conformance with the contract specifications and recommend amendments or acceptance

Review Traffic Control Plans

Review and approve the Contractor's traffic control plans to assure safety to the traveling public and to minimize impacts to the general public.

Public Outreach

Assist the City in upholding a good relationship with the public. The team will promptly attempt to alleviate problems and inform the City's Project Manager as soon as possible. ERSC will coordinate distribution of imminent construction notices by the Contractor to all residents and businesses. ERSC's Project Manager will respond to concerns of the businesses along the construction site and those who travel through it and the community at large. This would also include individuals and groups with concerns related



to ADA access issues. All issues, concerns, and complaints will be logged and maintained throughout the project. ERSC inspector will review the pedestrian and ADA paths of travel through the project periodically to monitor access and safety concerns and recommend alternatives and/or adjustments and ensure improvements comply with the American Disabilities Act.

Progress Payments

Receive and review all Contractor invoices, inspection reports, and estimates of percent completion and make recommendations for payment of Contractor, as appropriate.

Review Contractor Payment and Contract Change Order Request

- Receive and review all Contractor invoices, material quantities, change order payments, inspection
 reports, and estimates of percent completion and make recommendations for payment of Contractor,
 as appropriate. Submit progress payment request to City for processing. Monitor the project funding
 and project budgets. Maintain a current monthly accounting of construction costs to complete the
 project, including approved change orders for City's review and approval.
- Negotiate, prepare, and process change order(s) and/or extra work order(s) within 48 hours of receipt. The modifications communicated by change order will be fully documented with drawings and/or written description of the work required. Forward all CO requests to design engineer for their input regarding validity and cost. Assist with determination and/or negotiations for compensation and prepare the change order(s). The change order(s) will be prepared in the standard City format.

Review on Contract Claims

Work with the Contractor to resolve any issues prior to claims. Submit recommendations on construction issues which include considerations of time and budget impacts, possible compensable delays and clarify construction changes and irregularities. Prepare supplementary sketches and details as necessary to resolve field construction problems encountered. Consider and evaluate the Contractor's suggestions for modifications in the Project Documents and report them to the City's Engineer. Resolutions shall be approved by the City Engineer prior to moving forward with solution.

"As-Built" Plans

Maintain a marked-up set of plans for as-built drawings to be filed with the City. Review up-to-date construction information recorded by Project Inspector during the course of construction to be used in preparation of the construction record drawings. The as-builts will be checked monthly for accuracy. Review and verify Contractor's redline as-builts and provide the City with an original hard and scanned copy.

Final Walk Through and "Punch-list"

Upon completion of work, coordinate a final walkthrough with all affected stakeholders and a punch list of deficiencies will be generated and distributed to the Contractor, City and Stakeholders. As part of the punch list, ERSC's inspector will issue a schedule to complete the items included. ERSC will re-inspect the repair or re-work and provide recommendations for acceptance when full compliance is achieved.

Filing System

Prepare documents and filing system as required by auditors. Maintain all files during construction including pay quantities, daily and weekly reports, change order documentation, photographs, testing results, payrolls, and other documentation.





Engineering Resources of Southern California, Inc. (ERSC) was formed in 1996 with the asset purchase of NBS/Lowry, Inc. Since formation, ERSC has been committed to serving the Southern California region's public sector such as Special Districts, Regional Agencies, and Municipalities. ERSC currently staffs over 37 engineers, designers, construction observation personnel, and administrative support staff in four offices located in Redlands, Palm Desert, and Temecula.

Firm Background and Qualifications

ERSC Capabilities

ERSC has concentrated throughout its history on servicing public agencies. As a result, our strengths have been established to provide solutions and professional services to agencies throughout the public sector.

- Water/Wastewater Engineering
- Construction Management and Inspection
- Civil Site Design
- Transportation Engineering
- Independent Plan Review
- Flood Control and Drainage Engineering
- Water Quality/NPDES
- Traffic Engineering
- Survey and Mapping
- Environmental Services



ERSC's range of capabilities performed in-house allows us to meet the needs of clients throughout the life of any potential project.

Plan Check and Survey Capabilities

ERSC has provided planning, design, and construction phase services since 1996. ERSC's clients include municipalities, government agencies, and special districts throughout the region. Many of these clients have extended service agreements to retain our services outside of the original contract period. These clients benefit from the expertise of our team as we have completed thousands of projects throughout our different clients in the region.

ERSC Professionals

The strength behind ERSC is found in our staff of professionals. ERSC hosts a qualified and experienced staff of engineers, designers, construction observation personnel, and administrative support staff. We strive to match the exceptional skills, technical abilities, character, and attitude of our team members to the needs of our clients. ERSC staff work daily to create partnerships with our clients to transform their



Executive Summary

projects from the broadest level of general scope to their final planning, design, implementation and construction resolution.

Many ERSC professionals have significant previous experience as municipal and public agency employees. As a result, ERSC can approach your project with first-hand knowledge of agency culture and how any agency envisions the planning and processing of a well-executed project.

ERSC Reliability

We believe that our long-standing service to a variety of public agency clients throughout California, many on a continuous basis throughout our 23 years in business, is a testimonial to the quality of services we provide. Many of our clients have continually sought our services since our first year of business.

Throughout years of service, ERSC has developed significant financial resources and organizational efficiencies. Development of proficiencies in these areas has allowed ERSC to continually deliver projects that routinely exceed client expectations.

ERSC in the City of Garden Grove

ERSC has provided engineering plan check for most of the plans, maps and exhibits reviewed by the City Engineering Division. In addition, we have assisted the Economic Development Division on numerous projects (including most of the major hotel projects, including the currently on-going "Site C" project) along Harbor Blvd., Brookhurst Street, Garden Grove Blvd. in the acquisition of funding, preliminary studies and reports inspection for both private development projects, public capital improvement projects, Public Works Water Division projects, and more. ERSC has also assisted both the Engineering Division and the Planning Division in the creation of project documentation for recordation of mapping and lot line adjustments, public street dedications and vacations, and helped in the review of the current adopted City Standards. ERSC also provides on-call structural review, as well as review of water quality documentation, including Erosion Control Plans, Water Quality Management Plans, and other types of storm water quality documentation.

During the 20 years of association with the City of Garden Grove, ERSC has developed a specialized knowledge and understanding of the City departments and their processing needs. And they are currently involved in the development of new projects, such as "Site C" and others, that are ongoing and will required a knowledge history of the projects to make sure that all city requirements and design requirements are met

It is our understanding that the City is now considering incorporating digital submittal of planning and engineering documentation using the latest digital plan check technology. ERSC is currently prepared to assist the city in this transition to improve processing and tracking of all submittals. ERSC currently works with programs such as Bluebeam REVU with other clients such as the Cities of Banning, Palm Springs, Colton, Rialto, Chino, and Beaumont.

We are prepared to operate both within the city at a work station provided by the city, and we will make sure that there is coffee available to make the working environment friendly, productive and complimentary to the culture and working environment that the Engineering Division staff currently enjoys

ERSC Corporate Information

ERSC Corporate Information

Engineering Resources of Southern California, Inc. 1861 W. Redlands Blvd. Redlands, CA 92373



Executive Summary

Contact Information

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Fax: 909.890.0995 Cell: 760.485.0041

Email Address: rrighetti@erscinc.com

Type of Entity

Corporation Organized in California

Number of Employees

37 professionals throughout 3 offices in Southern California.

Federal Employer I.D. Number.

33-0718153

CA Dept. of Industrial Relations Number 1000017460

Years in Business

24 years

ERSC Insurance Coverage Levels				
Professional	\$ 1.0 Million Per Occurrence;			
Liability	\$ 2.0 Million Aggregate			
General Liability	\$ 1.0 Million Per Occurrence;			
	\$ 2.0 Million Aggregate			
Automobile	\$ 1.0 Million Combined Single Limit			
Workman's Comp	Maintained at levels required by law.			





Staff Selection

ERSC's project team is comprised of the professionals who offer the familiarity, experience, and merit in completed projects similar to those described in the RFP. ERSC understands that we are an extension of your team, therefore we make our engineers, engineering technicians, and administration team easily accessible. We selected staff with experience navigating the strategies in researching and identifying utility conflicts, coordination with regulatory/permitting agencies, minimizing traffic impacts, review of hydraulic requirements, constructability analysis, and building code interpretation. ERSC aims to provide a team that can provide a not only a complete project, but also the flexibility to meet the requirements and expectations of the City.

Project Manager - Robert Righetti, Principal Engineer

For the past 20 years, Mr. Righetti has provided the majority of the services to the city as described under the anticipated scope of work for Engineering Plan Review and Inspection, along with support staff from ERSC. His services to the city have also included development review and preparation of staff reports and engineering reports for the Engineering Division. He has also been responsible for preparation of checklists and other support documentation adopted and used currently by the city.



John M. Brudin, PE Principal-in-Charge

Robert Righetti Principal Engineer, Project Manager

Moe Ahmadi, PE

Sr. Principal Engineer, Hydrology Review

Reza Toorzani, PE

Engineer V, Structural Review

Robert Ollerton, PLS

Principal Surveyor, Survey/Mapping Review

Phil I ans

Sr. Construction Inspector, Construction Management and Inspection

Mark Korando

Sr. Construction Inspector, Construction Management and Inspection



Education BS, Civil Engineering, Loyola Marymount University, Los Angeles, CA

Registrations / Certifications CA, Civil Engineer No. C41836 QSD/QSP No. 00707

Affiliations American Public Works Association Floodplain Management Association

Areas of Expertise
Water/Wastewater Engineering
Flood Control Engineering
Project Management
Quality Control

Over the past 34 years, Mr. Brudin has been involved in a large number of complex planning, design and construction projects for public agencies. His ability to effectively communicate with agency personnel and team members provides the vital link between client and consultant that will ensure that the goals of each development review and plan check project assignment are met. Mr. Brudin has a broad base of experience in various disciplines including site development, streets and roads, grading and drainage, water & sewer, and flood control facilities.

Mr. Brudin has served as a District Engineer for the Lake Hemet Municipal Water District and as a Project Manager for "as-needed" professional engineering plan check services for several cities in the Orange, Riverside and San Bernardino County areas. Under these contracts, he has managed development review and plan check services for land development and capital projects, including grading, water, sewer, drainage, traffic signal and street improvement plans.

Map checking was also provided under these contracts.

Similar Project Experience:

General Plan Check Services, City of Chino – Project Manager responsible for oversight of the plan check team during general plan check services to the City of Chino since 2016. In the City of Chino, ERSC is commissioned to provide the review of Rough and Precise Grading Plans, Wet Utility, Plans (e.g. Sewer, Water, Storm Drain), Street Improvement Plans, Street Light Plans and Voltage Drop Calculations, Hydrology Studies and Hydraulic Calculations, Water Quality Management Plans (WQMPs), Survey documents and maps, and oils Reports, for private development and capital improvement projects throughout the City.

On-Call Plan Check, Inspection and Design Services, City of Beaumont – Project Manager responsible for oversight of the plan check team during civil engineering plan check, design, and inspection services to the City of Beaumont since in 2017. ERSC reviews development projects, CIP projects, and WQMPs. Development plans range from 1-million sqft commercial complexes to multiple lot subdivisions. As an on-call design consultant, ERSC is responsible for paving projects, survey projects, and drainage projects. Most recently, ERSC completed the Highland Springs/1st Drainage project to mitigate erosion and sedimentation issue near a local golf course.

On-Call Plan Check and Inspection Services, City of Banning – Project Manager responsible for oversight of the plan check team during plan check and inspection services of residential and development projects. Plan check services include review of maps, street, sewer, water, grading and storm drain projects, as well as review of construction drawings to assure compliance with City, State and Federal regulations. ERSC also provides conditions of approvals for City projects, as needed.

On-Call Plan Check Services, City of Lake Elsinore – Project Manager responsible for oversight of the plan check team during civil engineering plan check services to the City of Lake Elsinore since in 2016. As part of an on-call contract with the City, ERSC provides review of the following plans and documents: Traffic Signal Plans; Improvement Plans; Grading Plans; Final Maps and Parcel Maps; Dedications, Easements; Vacations, Quitclaims; Parcel Mergers; Lot Line Adjustments; WQMP Submittals; Hydrology and Hydraulic Studies/Reports; HEC-5 Studies; Traffic Analyses, Studies, Reports; Soil/Geotechnical Studies/Reports; Alquist Priolo Studies/State Submittals; Erosion Control Designs; Review of Technical Specifications for Proposed Improvements within City Road Rights of Way.



Plan Checking and Project Management, City of Palm Springs – Project Manager responsible for oversight of the plan check team during an on-call professional services agreement with the City of Palm Springs, ERSC provides plan and map checking for the City's development projects. Specific tasks include the review of improvement plans, final subdivision maps, and other survey related documents as prepared by design consultants for accuracy and completeness, conformance to local codes, ordinances, and design standards. Matt Brudin has served as the Project Manager and primary Plan Check team member since 2002 and all members of ERSC's current team have provided plan checking to the City under ERSC's contract, which is currently ongoing.

Riverside Drive Street Widening, Signal Modifications, Signing and Striping, Lake Elsinore, CA - Principal-In-Charge in the development of program documents and planning and design activities related to the reconstruction of an existing campground located along Riverside Drive on the westerly end of Lake Elsinore. Steven coordinated completion of all CalTrans requirements to facilitate completion of the project.

San Moritz Way Widening, County of San Bernaridno Special Districts Office, Crestline, CA - Principal in Charge during the efforts to reinforce the Lake Gregory Dam and widening of San Moritz way deemed necessary by SBCSDD. The project also accommodated construction and hauling trucks to a local County stockpile during the reinforcement of the Dam. ERSC's design included the widening of San Moritz Way from a one-way, 16' section to a two-way 26' section with drainage improvements and a trail within the ROW. The intersection of San Moritz Drive and San Moritz way was also slated for reconfiguration to allow for additional traffic lane and anticipated large construction traffic.

Second Street Storm Drain and Street Improvements, City of Yucaipa, CA — Project Manager for the City of Yucaipa during their improvement to one-half-mile of CDBG-funded street and drainage design for Second Street between Yucaipa Boulevard and Avenue "E." The project involved widening the street to its ultimate width, installation of curb and gutter, acquiring the necessary right-of-way and providing drainage structures in conformance with the City's Master Drainage Plan.

Design of Storm Drain Line "LL" Improvements, Dracaea Avenue and Old 215 Frontage Road — Project Manager during the preparation of an Engineer's Report which analyzed various alignment alternatives and recommended the most appropriate alignment. Services included base mapping, utility research, hydrology studies, alternative development and analysis, hydraulic calculations, profiles, cost estimates and a written report.

Cactus Avenue Widening, Rialto, California — Located between the Metrolink rail crossing to the south and First Street to the north, this portion of Cactus Avenue was fully improved on the west side of the street widening from a 12-foot half width to 36 feet. The project included curb and gutter, drainage improvements, traffic signal improvements at the intersection of Rialto Avenue, right-of-way support, improvements to a San Bernardino County Flood Control facility, and project coordination with Southern California Regional Rail Authority (SCRRA) for their signal gate installation at the Metrolink rail crossing.

Southeast Valle Vista Storm Drain, Hemet, California — Project Manager to Lake Hemet Municipal Water District during the design of 48- and 60-inch storm drains in Southeast Valle Vista.

East Drop Structure Repair Mitigation Within Whitewater River Channel, City Of Indian Wells, Indian Wells, CA – Principal-in-Charge for redesign of the East Drop Structure along the Whitewater River. Site analyses and development of potential replacement structures such as a concrete drop structure that incorporates a baffle chute at the outlet of the low flow channel, a USBR stilling basin or a drop structure similar to the one constructed in 1995 using materials sized to withstand the anticipated flows. Regulatory permitting and clearance for an RWQCB CWA Section 401 Water Quality Certification, CDFW 1602 Streambed Alteration Agreement, USACE Nationwide Section 404 Dredge and Fill Permit, and CEQA IS/MND coordination.

East Cathedral Creek, Cathedral City, CA - Project Manager during the development of construction



drawings for one-quarter-mile of soft-bottom channel along East Cathedral Creek. Major elements of the project included design surveys, hydraulic analyzes, alternative development, and preparation of final plans, specifications and quantity and cost estimates. The final project required Riverside County Flood Control District and Federal Emergency Management Agency (FEMA) approval.

Storm Drain Development Standards, Storm Drain Criteria and Drainage Design Manual, City of Hemet, CA – Project Manager during the preparation of a focused manual to provide for the planning and implementation of planned storm drainage systems in the City of Hemet. Major elements of the manual addressed the goals and objectives of the City, provided written policy statements related to the development of drainage systems, preparation of preliminary drainage design and submittal, and established criteria for the design of surface and subsurface drainage and flood control facilities.

CSDP Storm Drain Line 3-5, City Of Colton, Colton, CA – Principal-in-Charge during the design of a regional drainage facility conveying 1,000cfs from a 2,045-acre area. The project included installation of 10,000 feet of 108 and 120-inch reinforced concrete pipe from Valley boulevard south to the Santa Ana River, as well as protection of sewer and water mains, MCI fiber optics cable, major petroleum products line and gas lines, and an existing aqueduct system. Approximately 1,700 feet of 108-inch RCP by boring and jacking methods were also installed. Final design of the facilities included preparation of construction plans and specifications meeting San Bernardino County Flood Control District requirements, utility coordination and relocation, preparation of right-of-way documentation and coordination of construction permits from the State of California and the Southern Pacific Railroad.

Section 29 Stormwater Basin, City of Palm Desert, Palm Desert, CA – Project Manager during design for the failed rock slope protection downstream of the existing spillway and collapsed slope that undermined a significant portion of the spillway crest. The work also included hydrology analysis of approximately 519 acres of drainage watershed, development of a unit hydrograph tributary to Mid-Valley Channel, flood routing through the existing drainage channels and Section 29 Retention Basin, hydraulic analysis for design and reconstruction of the rock slope protection, spillway, forensic analysis to investigate the cause of the failure, produce contract documents guiding the repair of the Section 29 Basin and an 18-inch basin inlet. Relocation of an existing 12-inch sewer line under the basin spillway.

MDP Lines 6A and 8, Laterals 20C and 20A, City of Palm Springs, Palm Springs, CA – Principal-in-Charge during the design of the three major flood control projects commissioned by the City of Palm Springs. Line 6A and Line 8 along Sunrise Way resulted in the elimination of "down and under drains" and support commercial development between Via Escuela and Vista Chino Drive and Andreas Road and the Baristo Channel, respectively. Similarly, Laterals 20C and 20CA resulted in the elimination of "down and under drains" and support residential development along El Cielo and Baristo Road. Services provided include review and modification of master plan hydrology, design surveys, utility coordination, geotechnical engineering, alignment selection and analysis, hydraulic modeling and the development of plans, specifications and estimates.

San Jacinto Area Master Drainage Plan Line "E-2", City of San Jacinto, CA – Principal-in-Charge for the reparation of construction plans for MDP Lines E-2 and E-2A in the City of San Jacinto and Hemet. The project reach for MDP Line E-2 is over 7100 feet along State Street between Menlo Avenue and MDP Line E and over 250 feet for MDP Line E-2A along Esplanade Avenue. The size of the storm drain facilities are from 36-inch to 72-inch diameter. The scope of work included hydrology analysis to determine the 10-and 100-year storm runoff within the MDP facilities watershed. using CivilDesign software. The Hydraulic calculations for the proposed MDP facilities was performed utilizing Water Surface Profile Gradient (WSPG) program, latest version by CivilDesign.

San Jacinto Area Master Drainage Plan Line "H". City of San Jacinto, CA – Principal-in-Charge for the preparation of a feasibility study to evaluate alternative alignments for MDP Line H, H-2 and H-3 per the current City of San Jacinto MDP. The scope of work also included preparation of construction plans for the most cost-effective alignment of the above facilities. The project included evaluation of the existing



drainage facilities at the intersection of Ramona Expressway and State Street; to mitigate drainage deficiencies as required. It also includes Rational Method Hydrology using CivilDesign software to determine the 10- and 100-year storm runoff. The Hydraulic calculations for the proposed MDP facilities was performed utilizing Water Surface Profile Gradient (WSPG) program, latest version by CivilDesign.

PW17-17 Ynez Road Cross Section Survey, City of Temecula, Temecula, CA – Project Manager for professional engineering and surveying services related to the development of a digital terrain model (DTM) along Ynez Road from Tierra Vista Road to Rancho Vista Road. ERSC collected record data, performed survey data collection in the field with 50-foot street cross sections, and prepared a final DTM. The DTM showed all surface improvements, signal components, water appurtenances, manholes, utility vaults, and signing/striping.

PW20-02 Fifth Street Improvements, City of Temecula, Temecula, CA – Project Manager for survey and engineering services for preparation of street improvement plans for the north of side of Fifth Street from Front Street to the Murrieta Creek. This project is subject to the elements of the Old Town Specific plan and the design criteria therein. The specific plan requires on-street parking, a 12-foot pedestrian mall, and a round-a-bout. ERSC collected record data, performed survey data collection in the field with 25-foot street cross sections, drafted a conceptual design for approval, and prepared plan specifications and estimates for the project.

PW16-06 Overland ROW Analysis, City of Temecula, Temecula, CA – Project Manager for survey and engineering analysis of existing and proposed rights-of-way on Overland Drive between Commerce Center Drive and Jefferson Avenue. ERSC analyzed the impacts associated with the acquisition of additional right-of-way on both sides of Overland Drive. To complete this analysis, mapping was required that depicts the existing roadway improvements, private surface and landscape improvements, visible utility pedestals and vaults and building footprint.

PW 19-11 Bike Lane and Trail Program - Temecula Creek South Side Trail, City of Temecula, Temecula, CA – Project Manager for the preliminary and final engineering services necessary to provide project scoping and final design for the Temecula Creek South Side Trail Project. Services required to complete the project will be provided in two (2) phases, including an investigation and summary of the potential issues affecting the project and the development of contract documents including plans, specifications and estimates.

Xenia Drive ROW Survey, City of Beaumont, Beaumont, CA – Project Manager for professional survey services to the City to locate the ROW along Xenia drive from 6th Street to 8th Street. The ERSC team performed record research, control survey, and ROW survey to establish the ROW. Due to the density of development, and the potential for visual impacts related thereto, a 60D spike with a "shiner" and a three foot lath was placed at 100 foot intervals along the west side of the roadway. This interval was increased to a maximum of 200 feet on the east side due to the lack of development.

WWTP Paving Project, City of Beaumont, Beaumont, CA – Project Manager for professional survey and engineering services to the City for pavement improvements at the City's Wastewater Treatment Plant (WWTP). The interior roads of the WWTP had deteriorated due to the frequent heavy truck traffic and age. Additionally, the WWTP staff parking area was not to current ADA standards and required updating. ERSC's team provided data collection, topographic survey, driveway and access improvements, concrete curbs, walkways, ADA parking/accessibility improvements, and a WQMP for the project.



Robert Righetti | Principal Engineer

Education

California State University Long Beach, Coursework in Civil Engineering

Certifications

Certified Right-of-Way Engineer Construction Management Certified

Affiliations APWA ASCE CASQA

Areas of Expertise
Municipal Engineering Services
Quality Assurance/Quality Control
Traffic and Transportation

Over the past 45 years, Mr. Righetti has provided municipal engineering and survey/mapping/easement and plan check and development review services to a number of cities in Southern California. During that time, he spent a combined 40 years as a Development Services Engineer for the Department of Public Works and Engineering for the City of Huntington Beach, as well as personally working on a contract basis with the cities of Garden Grove, Tustin, Yorba Linda, Moreno Valley, San Bernardino, Rancho Mirage, La Mirada, La Quinta, Palm Desert, Palm Springs, Indio and Eastern Municipal Water District. Mr. Righetti's typical duties 'have included, but were not limited to, the following:

- Directed project teams in providing review and impact mitigation conditioning of all land development cases.
- Handled capital project administration and project management.
- Managed and prepared the documentation and processing of right-of-way and specialized easements for the construction of public infrastructure
- Conducted traffic study review and approval.
- Prepared staff reports to the Planning Commission and City Council.
- Prepared departmental budget projections, capital improvement program plans, development agreements, inter-agency memorandums of understanding, grant applications, and contract bid packages.
- Handled public agency liaison, citizen complaints and community coordination.
- Directed teams for plan check processing and construction field review.
- Performed on-call plan check, constructability review and project management for all cities he has worked in.
- Reviewed maps, legal descriptions and plats for technical accuracy and conformance with the Subdivision Map Act for many of the cities where he has worked.
- Prepared department policy documents, practice manuals, design standards, checklists and handouts for the public counter of the City's Engineering and Public Works Department including checklists and criteria for Water Quality Management Plans and Storm Water Pollution Prevention Plans (SWPPP's).
- Provided City services to assist with plan review, design of public works projects, review of specific
 plans and related environmental documents, management of Capital Improvement Programs (CIP),
 review of traffic plans and studies, and review and inspection of landscape drawings.
- Provided Constructability review, value engineering and construction management services for numerous cities in southern California.
- Worked as a key member of the Project Development Team for a number of alignment and realignment planning and construction packages in Riverside, Orange, Los Angeles and San Bernardino County.
- Provided peer review and project administration for Community Facilities Districts and other types of special districts and funding plans in many of the cities for which he has worked.

Similar Project Experience:

Plan Check and Construction Services, City of Garden Grove – For the past 20 years has provided services as Project Engineer for plan check services, construction management, and inspection services for various street, intersection and storm drain improvement projects. Plan check services include the review of documents for all City projects, including but not limited to: Tract Maps, WQMP, Street Improvements, Right-of-Way Exhibits, CC&Rs, Grading, Precise Grading, Erosion, Hydrology and Water,



Robert Righetti | Principal Engineer

Storm Drain, Utilities, Survey, Lot Line Adjustments, Legals and Plats. Construction management and inspection services include coordination of CIP projects awarded to contractors for compliance with plans and specifications; review of monthly progress pay estimates for compliance with specifications and provide monthly payment recommendations; monitor contractor's progress to ensure project schedules are met; assist and advise staff with post-construction activities; review, assess and manage claims submitted by contractors. Additional services include the management of projects that require special reporting to state or federal agencies to assure compliance with loan or grant conditions. Mr Righetti leads service contracts and performs most of the work for the City with ERSC support staff.

Development Review and Plan Check Services, City of Tustin – Project Engineer for overflow and expedited plan review for developer and City-funded projects. Services included peer review of grading, water & sewer, street & storm drain plans, and supporting documents for development projects in the City. Specific tasks include the review of improvement plans prepared by private developers for accuracy and completeness; conformance to local codes, ordinances, & design standards. ERSC also reviewed Water Quality Management Plans (WQMP) & Storm Water Pollution Prevention Plans (SWPPP) for compliance with the City's Local Implementation Plan (LIP) and the Orange County Drainage Area Management Plan (DAMP) in conformance with NPDES requirements. Mr. Righetti also performed plan check work for the City.

Development Review and Plan Check Services, City of La Mirada – Project Engineer during an on-call agreement providing the City of La Mirada with On-Call Interim Public Works Project Management Services for the management and independent review of various capital improvement projects along with the associated improvement plans and technical studies processed and managed by the City. Representative projects include, but are not limited to: Imperial Highway and Telegraph Road Intersection, Residential Slurry Seal, Measure I Residential Street Rehabilitation, Waterline for Measure I Residential Street Rehabilitation, Olive Branch Street Rehabilitation, Santa Gertrudes Ave., Rosecrans Avenue Dual Left Turn Pockets at Beach Blvd.

Development Review, Plan Check, and Construction Management Services, City of Huntington Beach

– For the past 20 years has provided services as Project Engineer for plan check services, construction management, and inspection services for various street, intersection and storm drain improvement projects. Plan check services include the review of documents for all City projects, including but not limited to: Tract Maps, WQMP, Street Improvements, Right-of-Way Exhibits, CC&Rs, Grading, Precise Grading, Erosion, Hydrology and Water, Storm Drain, Utilities, Survey, Lot Line Adjustments, Legals and Plats. Construction management and inspection services include coordination of CIP projects awarded to contractors for compliance with plans and specifications; review of monthly progress pay estimates for compliance with specifications and provide monthly payment recommendations; monitor contractor's progress to ensure project schedules are met; assist and advise staff with post-construction activities; review, assess and manage claims submitted by contractors. Additional services include the management of projects that require special reporting to state or federal agencies to assure compliance with loan or grant conditions. Mr Righetti leads service contracts and performs most of the work for the City with ERSC support staff.

Development Review and Plan Check Services, City of Yorba Linda – Project Engineer for overflow and expedited plan review for developer and City-funded projects. Services included peer review of grading, water & sewer, street & storm drain plans, and supporting documents for development projects in the City. Specific tasks include the review of improvement plans prepared by private developers for accuracy and completeness; conformance to local codes, ordinances, & design standards. ERSC also reviewed Water Quality Management Plans (WQMP) & Storm Water Pollution Prevention Plans (SWPPP) for compliance with the City's Local Implementation Plan (LIP) and the Orange County Drainage Area Management Plan (DAMP) in conformance with NPDES requirements. Mr. Righetti also performed plan check work for the City.



Moe Ahmadi, PE | Sr. Principal Engineer

Education
BS, Civil Engineering, Texas A&M
University College Station, TX

MS, Civil Engineering Construction Management, Texas A&M University, College Station, TX

Registrations / Certifications CA, Civil Engineer No. C58784 QSD/QSP No. 00706

Affiliations American Society of Civil Engineers National Society of Prof. Engineers

Areas of Expertise
Water Resources Engineering
Flood Control Engineering
Hydraulics and Hydrology
Erosion Control

Over the past 30 years Mr. Ahmadi has actively participated in the preparation of numerous feasibility studies, design reports, construction plans, specifications and cost estimates for drainage and flood control facilities throughout Southern California. Mr. Ahmadi is experienced with numerous computer programs including AutoCAD 2019, CivilCAD Hydrology programs, Water Surface Profile Gradient (WSPG), and HEC-RAS flood plain analysis software.

He is also experienced in preparation of Stork Water Prevention Plan (SWPPP) as required by the NPDES Industrial General Permit and the Construction General Permit (CGP), which identify BMPs used to reduce or eliminate potential pollutant discharges in storm water runoff. Under his direction, plans for various residential, commercial, and industrial projects in the Counties of Riverside, San Bernardino, and Orange have been prepared. As part of the requirements of the CGP, Mr. Ahmadi has provided SWPPP services to address new requirements. This work included Data Submitter services, conducting the risk assessment; an evaluation of a project's sediment risk and receiving water risk, and then determining the overall Risk Level for traditional projects, or LUP Type for linear utility projects, and assisting clients to register and

submit applications in the SMARTS System to obtain the applicable WDID numbers from the SWQCB prior to construction.

Similar Project Experience:

General Plan Check Services, City of Chino – Project Engineer responsible for oversight and review of drainage related plans and studies during general plan check services to the City of Chino since 2016. In the City of Chino, ERSC is commissioned to provide the review of Rough and Precise Grading Plans, Wet Utility, Plans (e.g. Sewer, Water, Storm Drain), Street Improvement Plans, Street Light Plans and Voltage Drop Calculations, Hydrology Studies and Hydraulic Calculations, Water Quality Management Plans (WQMPs), Survey documents and maps, and oils Reports, for private development and capital improvement projects throughout the City.

On-Call Plan Check, Inspection and Design Services, City of Beaumont – Project Engineer responsible for oversight and review of drainage related plans and studies during civil engineering plan check, design, and inspection services to the City of Beaumont since in 2017. ERSC reviews development projects, CIP projects, and WQMPs. Development plans range from 1-million sqft commercial complexes to multiple lot subdivisions. As an on-call design consultant, ERSC is responsible for paving projects, survey projects, and drainage projects. Most recently, ERSC completed the Highland Springs/1st Drainage project to mitigate erosion and sedimentation issue near a local golf course.

On-Call Plan Check and Inspection Services, City of Banning – Project Engineer responsible for oversight and review of drainage related plans and studies during plan check and inspection services of residential and development projects. Plan check services include review of maps, street, sewer, water, grading and storm drain projects, as well as review of construction drawings to assure compliance with City, State and Federal regulations. ERSC also provides conditions of approvals for City projects, as needed.

On-Call Civil Engineering and Plan Check Services, City of Colton – Project Manager responsible for oversight of the plan check team during Engineering and Plan Check services in the City. ERSC works closely with City staff in the review of grading, street improvements, hydrology studies, soils reports, WQMP, SWPPP, lot line adjustments, and parcel maps. ERSC also provides on-call engineering services,



Moe Ahmadi, PE | Sr. Principal Engineer

such as the design for the La Cadena and 8th Street Intersection Reconfiguration.

On-Call Plan Check and Construction Inspection Services, City of Highland – Project Engineer responsible for oversight and review of drainage related plans and studies during an on-call professional services agreement with the City of Highland. ERSC provides contract plan check and inspection services for the construction of public works and privately funded improvements, including site improvements, street improvements, paving, sidewalk, curb, gutter, grading, and earthwork. Work also included site review for compliance with City standards and traffic control requirements. ERSC also provides plan checking services for all parcel and tract maps, as well as hydrology review.

On-Call Plan Check Services, City of Lake Elsinore – Project Engineer responsible for oversight and review of drainage related plans and studies during civil engineering plan check services to the City of Lake Elsinore since in 2016. As part of an on-call contract with the City, ERSC provides review of the following plans and documents: Traffic Signal Plans; Improvement Plans; Grading Plans; Final Maps and Parcel Maps; Dedications, Easements; Vacations, Quitclaims; Parcel Mergers; Lot Line Adjustments; WQMP Submittals; Hydrology and Hydraulic Studies/Reports; HEC-5 Studies; Traffic Analyses, Studies, Reports; Soil/Geotechnical Studies/Reports; Alquist Priolo Studies/State Submittals; Erosion Control Designs; Review of Technical Specifications for Proposed Improvements within City Road Rights of Way.

Plan Checking and Project Management, City of Palm Springs – Project Engineer responsible for oversight and review of drainage related plans and studies during an on-call professional services agreement with the City of Palm Springs, ERSC provides plan and map checking for the City's development projects. Specific tasks include the review of improvement plans, final subdivision maps, and other survey related documents as prepared by design consultants for accuracy and completeness, conformance to local codes, ordinances, and design standards. Matt Brudin has served as the Project Manager and primary Plan Check team member since 2002 and all members of ERSC's current team have provided plan checking to the City under ERSC's contract, which is currently ongoing.



Reza Toorzani, PE | Engineer V

Education BS, Civil Engineering, Southern University and A&M College, Baton Rouge, LA

MS, Civil Engineering, New Jersey Institute of Technology, Newark, NJ

Registrations / Certifications CA, Civil Engineer No. C74906 DE, Civil Engineer No. C13235

Affiliations
American Concrete Institute

Areas of Expertise
Construction Management
Structural Engineering
Structural Analysis
Material Analysis

Mr. Toorzani joined the ERSC team in 2003, with more than 26 years of rich and extensive experience. He has gained particular skill in design, and a distinguished reputation for the overall supervision of large and complicated projects, insuring that the contracted works meets the required specifications. He has managed several site supervision teams and played a major role in completing projects according to program and within budget. In addition, Mr. Toorzani has practiced as an analyst, designer and site superintendent in the implementation of major civil infrastructure projects mainly in the United States and Iran.

Since joining the ERSC team, Mr. Toorzani has focused his extensive experience and expertise on the design and peer review of various structures. His design experience includes large scale solar projects, walls and foundations, reinforced concrete box storm drains and substructures and block enclosures and small wood framed structures at pump station and large metal buildings. Has conducted peer review for conical wind turbine foundations in the City of Palm Springs, Con-Span bridge structures along the Cactus Valley Wash in the City of Hemet and reinforced concrete structures crossing

the East Garden Grove/Wintersburg Channel in the City of Huntington Beach.

Similar Project Experience:

General Plan Check Services, City of Chino – Project Engineer responsible for review of soils reports and geotechnical investigations during general plan check services to the City of Chino since 2016. In the City of Chino, ERSC is commissioned to provide the review of Rough and Precise Grading Plans, Wet Utility, Plans (e.g. Sewer, Water, Storm Drain), Street Improvement Plans, Street Light Plans and Voltage Drop Calculations, Hydrology Studies and Hydraulic Calculations, Water Quality Management Plans (WQMPs), Survey documents and maps, and oils Reports, for private development and capital improvement projects throughout the City.

On-Call Plan Check, Inspection and Design Services, City of Beaumont – Project Engineer responsible for review of soils reports and geotechnical investigations during civil engineering plan check, design, and inspection services to the City of Beaumont since in 2017. ERSC reviews development projects, CIP projects, and WQMPs. Development plans range from 1-million sqft commercial complexes to multiple lot subdivisions. As an on-call design consultant, ERSC is responsible for paving projects, survey projects, and drainage projects. Most recently, ERSC completed the Highland Springs/1st Drainage project to mitigate erosion and sedimentation issue near a local golf course.

On-Call Plan Check and Inspection Services, City of Banning – Project Engineer responsible for review of soils reports and geotechnical investigations during plan check and inspection services of residential and development projects. Plan check services include review of maps, street, sewer, water, grading and storm drain projects, as well as review of construction drawings to assure compliance with City, State and Federal regulations. ERSC also provides conditions of approvals for City projects, as needed.

On-Call Civil Engineering and Plan Check Services, City of Colton – Project Engineer responsible for review of soils reports and geotechnical investigations during Engineering and Plan Check services in the City. ERSC works closely with City staff in the review of grading, street improvements, hydrology studies, soils reports, WQMP, SWPPP, lot line adjustments, and parcel maps. ERSC also provides on-call



Reza Toorzani, PE | Engineer V

engineering services, such as the design for the La Cadena and 8th Street Intersection Reconfiguration.

On-Call Plan Check and Construction Inspection Services, City of Highland – Project Engineer responsible for review of soils reports and geotechnical investigations during an on-call professional services agreement with the City of Highland. ERSC provides contract plan check and inspection services for the construction of public works and privately funded improvements, including site improvements, street improvements, paving, sidewalk, curb, gutter, grading, and earthwork. Work also included site review for compliance with City standards and traffic control requirements. ERSC also provides plan checking services for all parcel and tract maps, as well as hydrology review.

On-Call Plan Check Services, City of Lake Elsinore – Project Engineer responsible for review of soils reports and geotechnical investigations during civil engineering plan check services to the City of Lake Elsinore since in 2016. As part of an on-call contract with the City, ERSC provides review of the following plans and documents: Traffic Signal Plans; Improvement Plans; Grading Plans; Final Maps and Parcel Maps; Dedications, Easements; Vacations, Quitclaims; Parcel Mergers; Lot Line Adjustments; WQMP Submittals; Hydrology and Hydraulic Studies/Reports; HEC-5 Studies; Traffic Analyses, Studies, Reports; Soil/Geotechnical Studies/Reports; Alquist Priolo Studies/State Submittals; Erosion Control Designs; Review of Technical Specifications for Proposed Improvements within City Road Rights of Way.

Plan Checking and Project Management, City of Palm Springs – Project Engineer responsible for review of soils reports and geotechnical investigations during an on-call professional services agreement with the City of Palm Springs, ERSC provides plan and map checking for the City's development projects. Specific tasks include the review of improvement plans, final subdivision maps, and other survey related documents as prepared by design consultants for accuracy and completeness, conformance to local codes, ordinances, and design standards. Matt Brudin has served as the Project Manager and primary Plan Check team member since 2002 and all members of ERSC's current team have provided plan checking to the City under ERSC's contract, which is currently ongoing.



Robert Ollerton, PLS | Principal Surveyor

Education BS, Civil Engineering, University of California at Riverside, Riverside, CA

Registrations / Certifications CA, Land Surveyor No. 7731

Training
AutoCAD
MicroStation
ArcGIS

Areas of Expertise Survey Right-Of-Way Legal Descriptions Mapping CAD Operation Robert has over 30 years of professional experience in land surveying for municipal agencies. He has managed a wide variety of land survey projects including surveys for topographic mapping, geodetic control, right-of-way, boundary, and construction projects.

Most recently, Robert's responsibilities include the management and coordination of construction staking contracts for civil engineering projects, boundary surveys, title analysis, topographic mapping, detailed design surveys, ALTA Surveys and mapping. As a plan check engineer, Robert is responsible for all coordination and checking for improvement plans and maps/ survey documents. Robert signs all survey documents for approval following review. Since joining ERSC, Robert's wide range of skills and background have enabled ERSC to provide clients with localized and personalized service, keeping true to ERSC's philosophy of dedication to customer service and satisfaction.

Similar Project Experience:

General Plan Check Services, City of Chino – Principal Surveyor responsible for oversight of review of survey documents during general plan check services to the City of Chino since 2016. In the City of Chino, ERSC is commissioned to provide the review of Rough and Precise Grading Plans, Wet Utility, Plans (e.g. Sewer, Water, Storm Drain), Street Improvement Plans, Street Light Plans and Voltage Drop Calculations, Hydrology Studies and Hydraulic Calculations, Water Quality Management Plans (WQMPs), Survey documents and maps, and oils Reports, for private development and capital improvement projects throughout the City.

On-Call Plan Check, Inspection and Design Services, City of Beaumont – Principal Surveyor responsible for oversight of review of survey documents during civil engineering plan check, design, and inspection services to the City of Beaumont since in 2017. ERSC reviews development projects, CIP projects, and WQMPs. Development plans range from 1-million sqft commercial complexes to multiple lot subdivisions. As an on-call design consultant, ERSC is responsible for paving projects, survey projects, and drainage projects. Most recently, ERSC completed the Highland Springs/1st Drainage project to mitigate erosion and sedimentation issue near a local golf course.

On-Call Plan Check and Inspection Services, City of Banning – Principal Surveyor responsible for oversight of review of survey documents during plan check and inspection services of residential and development projects. Plan check services include review of maps, street, sewer, water, grading and storm drain projects, as well as review of construction drawings to assure compliance with City, State and Federal regulations. ERSC also provides conditions of approvals for City projects, as needed.

On-Call Civil Engineering and Plan Check Services, City of Colton – Principal Surveyor responsible for oversight of review of survey documents during Engineering and Plan Check services in the City. ERSC works closely with City staff in the review of grading, street improvements, hydrology studies, soils reports, WQMP, SWPPP, lot line adjustments, and parcel maps. ERSC also provides on-call engineering services, such as the design for the La Cadena and 8th Street Intersection Reconfiguration.

On-Call Plan Check and Construction Inspection Services, City of Highland – Principal Surveyor responsible for oversight of review of survey documents during an on-call professional services agreement with the City of Highland. ERSC provides contract plan check and inspection services for the construction of public works and privately funded improvements, including site improvements, street improvements, paving, sidewalk, curb, gutter, grading, and earthwork. Work also included site review for compliance with



Robert Ollerton, PLS | Principal Surveyor

City standards and traffic control requirements. ERSC also provides plan checking services for all parcel and tract maps, as well as hydrology review.

On-Call Plan Check Services, City of Lake Elsinore – Principal Surveyor responsible for oversight of review of survey documents during civil engineering plan check services to the City of Lake Elsinore since in 2016. As part of an on-call contract with the City, ERSC provides review of the following plans and documents: Traffic Signal Plans; Improvement Plans; Grading Plans; Final Maps and Parcel Maps; Dedications, Easements; Vacations, Quitclaims; Parcel Mergers; Lot Line Adjustments; WQMP Submittals; Hydrology and Hydraulic Studies/Reports; HEC-5 Studies; Traffic Analyses, Studies, Reports; Soil/Geotechnical Studies/Reports; Alquist Priolo Studies/State Submittals; Erosion Control Designs; Review of Technical Specifications for Proposed Improvements within City Road Rights of Way.

Plan Checking and Project Management, City of Palm Springs – Principal Surveyor responsible for oversight of review of survey documents during an on-call professional services agreement with the City of Palm Springs, ERSC provides plan and map checking for the City's development projects. Specific tasks include the review of improvement plans, final subdivision maps, and other survey related documents as prepared by design consultants for accuracy and completeness, conformance to local codes, ordinances, and design standards. Matt Brudin has served as the Project Manager and primary Plan Check team member since 2002 and all members of ERSC's current team have provided plan checking to the City under ERSC's contract, which is currently ongoing.



Phil Laos | Sr. Construction Inspector

Registrations / Certifications
Confined Space and Fall Protection
Hazardous Waste Operations and
Emergency Response
Scaffold Awareness and Scaffold
Certified Fork Lift Operator
Carpenter's Training Program
Erection Training
American Concrete Institute

Mr. Laos has nearly 20 years of active construction inspection experience on large and small public works and private development projects. He has inspected both large and small subdivisions for all public works infrastructure improvements, and he has also inspected public works capital projects and maintained all project elements required. His work has included conformance with various state, federal and local specifications, standards and guidelines, including Caltrans, MUTCD California Supplement, Greenbook, California Building Codes, FHA/VA, ACI, AWWA, and other relevant agency specifications.

In addition, due to his previous work with major cities and special districts, he is fully familiar and informed about requirements in the field, especially in relation to traffic control, coordination with key departments, and understands the importance of establishing rapport with key individuals who are responsible for important project elements such as water/wastewater operations, landscaping and irrigation, water services, etc. He understands the critical important of construction and contract communications with field reports and daily inspection reports, field orders, stop work orders, non-compliance reports, recognizing and identifying critical or potential field conflicts and maintain a photographic log to complement his reporting. He has an established working system for joint team efforts including the client, contractor, property owners, other consultants, and jurisdictional agencies with an interest in the work. He has experienced practice in construction methods, with a specialty associated with underground systems for water and wastewater facilities.

Select Project Experience:

Construction Management Services, City of Garden Grove – Senior Construction Inspector providing construction management services for both public infrastructure and onsite improvements. Project scopes included grading, street, intersection, water resources, and storm drain improvement. Representative projects include:

- Westminster and Brookhurst Intersection Improvements
- Garden Grove and Galway Intersection Improvements
- Westminster and Harbor Intersection Improvements
- Lampson Avenue Storm Drain
- · Ninth Street Storm Drain

Construction Management and Inspection Services, City of South Gate – Senior Construction Inspector for the project providing construction management and inspection services for the improvements to Chakemco Street that are adding sidewalks, curbs, gutters, ADA ramps, drive approaches, landscaping, irrigation, new street pavement, striping, lighting, and miscellaneous additions to improve the overall pedestrian mobility and safety.

Disinfection System Conversion: Spec # 1312s, Eastern Municipal Water District, Various, CA - Senior Construction Inspector during the conversion of multiple disinfection systems at EMWD reclamation facilities. Work Consisted of Construction of Sodium Hypochlorite Disinfection Systems to replace the existing Gas Disinfection Systems at the Moreno Valley, San Jacinto Valley, and the Perris Valley Regional Water Reclamation Facilities. Work included modification, re-lining and replacement of existing storage tanks. New Canopy Covers for Tanks. Provide new and modify existing piping. Demolish existing chlorine systems and gas scrubbers. Installation of new SHC pumps, control panels and PLC's for the new systems.

Post Road Hydropneumatic Booster Pump Station: Spec # 1310w, Eastern Municipal Water District, Perris, CA - Senior Construction Inspector during installation of a hydropneumatics booster station in EMWD's potable system. Work included the installation of 2,400 Ft. of 18" CML&C Transmission Pipeline



Phil Laos | Sr. Construction Inspector

and 3,200 Ft. of 8" C-900 PVC Transmission Pipeline, connecting new pipelines to existing underground offsite pipelines and grading of the new site. Installation of the new Hydropneumatic Pump Station also included replacement of approximately 40 existing service lines with new service lines and installation of over 140 Pressure Relief Valves to new and existing services. Installation of four above ground Check Valve Stations and restoration of asphalt roadways was part of the work.

Solar Renewable Energy Initiative – Phase 3: Spec # 1345 Eastern Municipal Water District, Various, CA - Senior Construction Inspector during site preparation construction for solar infrastructure installation at Moreno Valley RWRF, San Jacinto Valley RWRF, Perris Valley RWRF and Sun City RWRF. Work includes Earthwork for Solar Panel Area Graded Pads, Import and export of soil, installation of drainage features such as Culverts, Storm Drains, Catch Basins, Concrete Swales and Grouted Rip Rap. Fine Grade, access roads construction, pipeline removal, and relocation was also constructed under supervision. Fox Street 1MG Tank and Pipeline Project: Spec # 1318W, Eastern Municipal Water District, Perris, CA - Senior Construction Inspector during construction of a 1MG Tank. Work includes grading and site preparation for the site. Installation of yard piping and construction of an on site Valve Assembly & Enclosure. Installation of 1960 Ft. of 12" Fusible PVC Water Mainline with new services in related work area. Demolish existing Water Tank and site appurtenances was also supervised.

Eastern Municipal Water District's Perris Valley RWRF Expansion Plant 3 – Inspector during expansion of RWRF, including influent pump station and splitter, grit chambers, primary and secondary clarifiers, aeration basins, sludge storage tank, transfer pump station, digesters, biofilter and related site work, piping, and electrical. Provided specialty inspection services at three manufacturing facilities (Rinker, Electromatic, and Levco) to inspect the fabrication of various piping materials (RCP, carbon steel, and stainless steel).

Eastern Municipal Water District's Perris Valley Regional Wastewater Reclamation Facility Fuel Cell – 1,200 kW fuel cell facility, including fuel cell units, gas treatment system, utility water system, mechanical piping, and electrical and controls.

Western Municipal Water District's Western Water Recycling Facility Phase 2 Expansion – Expansion to 3.0 MGD capacity secondary and tertiary treatment facilities, including: (1) headworks with two mechanical bar screens, two vortex-type grit removal chambers, monitoring, and metering; (2) sewage lift station; (3) three primary sedimentation tanks; (4) three oxidation ditch-type aeration basins with two 75 hp slow speed surface aerators and control system for simultaneous nitrification and denitrification; (5) four circular secondary clarifiers; (6) two secondary effluent balancing ponds; (7) tertiary influent pump station; (8) three cloth media-type filter units; (9) four chlorine contact chambers; (10) tertiary storage pond; and (11) recycled water booster station with four 200 hp pumping units and algae removal screens. Recycled water pump station with four 200 hp vertical turbine pumping units, each with variable frequency drives and three automatically cleaning algae filter/strainers. Modification of recycled storage pond to add two concrete lined, 1.2 MG balancing ponds.

Elsinore Valley Municipal Water District's Lighthouse Lift Station Replacement – 1,000 gpm capacity submersible sewage lift station with two 50 hp submersible pumping units and one 25 hp emergency wet weather flow pumping unit in 40' deep wet well and emergency storage chamber with 2 hours detention time. Control building housing emergency standby generator, electrical switchgear, motor control center, and controls. Chemical feed and storage systems for odor control. Removal and demolition of existing lift station.

Elsinore Valley Municipal Water District's Continental Lift Station Replacement – 2,000 gpm capacity submersible sewage lift station with three 40 hp submersible pumping units in 50' deep self-cleaning wet well and emergency storage chamber with 2 hours detention time. Control building housing emergency standby generator, electrical switchgear, motor control center, and controls. Odor control system, consisting of chemical feed and storage equipment and biological odor scrubber. Removal and demolition of existing lift station.



Mark Korando | Sr. Construction Inspector

Education

FEMA IACET, National Incident Management System, 2013

Fitel Lucent Technologies Fusion Splicing

OTDR Testing, 1999

Orange Coast CollegeGeneral Geology Studies100+ Semester Units, 1988-1993

Registrations / Certifications CCalifornia Storm Water Quality QSP/QSD Certification 2010-2012

CAT Powerlift Operator Safety, 2000

Coastline Community College Computer Science Certification CADD, 1987-1988

Areas of Expertise Municipal Inspection Water Infrastructure Caltrans Mark has 27 years of experience in engineering, construction, and project management of lump sum and cost reimbursable projects for the telecommunications, government, and transportation industries. His experience includes office and field assignments: Highway toll lane construction, engineering and construction of Public utility and government infrastructure, commercial and residential construction projects located throughout the western United States.

Mark's Experience covers a range of project construction management responsibilities including: project planning, management of technical interfaces, project budget and cost estimating and control, proposal development, interface with field, vendors, contractors, and clients. He also has been responsible for establishing the project execution to ensure compliance with the contract, as well as safety, quality, and profitability.

Mark has been responsible for multiple simultaneous projects based in multiple Cities in the Ventura, Los Angeles, Orange, San Bernardino, Riverside, San Diego, San Francisco, Dallas/Fort Worth and Denver metropolitan area Counties.

Similar Project Experience:

Bloomington Area Waterline Replacement Phase 3A, West Valley Water District, Rialto, CA – Construction Inspector for the Bloomington Phase 3A of the Bloomington Area Waterline Replacement initiative. During this phase, the District's selected contractor installed approximately 5,600 lineal feet of fully welded CML&C water line, relocated 141 water services from backyard alleyways to front of properties, and installed 14 new fire hydrants.

Plan Check and Construction Services, City of Garden Grove, Garden Grove, CA – Construction Inspector during construction management services for various street, intersection and storm drain improvement projects. These services include coordination of CIP projects awarded to contractors for compliance with plans and specifications; review of monthly progress pay estimates for compliance with specifications and provide monthly payment recommendations; monitor contractor's progress to ensure project schedules are met; assist and advise District staff with post-construction activities; review, assess and manage claims submitted by contractors

City of Santa Monica - Major projects

- Santa Monica Urban Runoff Recycling Facility
- Water Main Replacement Project on Franklin Street, Montana Avenue and 26th Street
- Joint Coastal Sewer Interceptor Project
- Santa Monica Public Safety Facility
- Post Northridge Earthquake Sewer restoration Project
- All Development Driven Sewer, Storm Water, Domestic Water, Fire Water, and Utility Service Installations
- City of Irvine Major projects
- SAWPA'S Integrated Irvine Desalter Project
- Over 2000 Acres of City Public Right of Way New development including Sewer, Domestic Water, Storm Water, Sanitary Sewer, Recycled Water, Utility Mains and Service Laterals. Construction of all related street structures.

City of Downey - Major projects

- Annual Street Maintenance Water/Sewer Restoration Projects
- Downey Gateway Water Main Extension Project
- Fifth Street Water Main Replacement Project
- Firestone Rehabilitation Project
- Downey Promenade Development Lakewood/Bellflower Blvd.
- All Development Driven Sewer, Storm Water, Domestic Water, Fire Water, Recycled Water, and Utility Service Installations





References

ERSC provides specialized services to the public sector related to planning, design, and construction management of public works infrastructure. ERSC typically offers a myriad of services encompassing independent plan review, planning, design, survey, right-of-way engineering, construction management, inspection, constructibility review, and related City staff assistance for the construction of diverse public sector efforts.

The following presents an overview of services and professional capabilities of ERSC in these specialized disciplines that are specifically responsive to the requirements of the City along with the reasons why ERSC is the best fit for the City of Garden Grove. With each of the following experience abstracts, we have provided contact information for a project representative. We encourage the City of Garden Grove to contact any of those included for testimonial to the quality of service ERSC provides. The below table offers specific references for your use.

City of Garden Grove	City of Tustin	City of Chino	City of Temecula	City of Palm Springs
William Murray, P.E., Public Works Director (714) 741-5000 (Main: 714-741-5192) wem@garden-grove.org	Doug Stack, P.E. Public Works Director (714) 573-3150 dstack@tustinca.org	Chris Magdosku, PE, City Engineer (909) 334-3417 cmagdosku@ cityofchino.org	Laura Bragg, Associate Eng. II (951) 308-6367 laura.bragg@ temeculaca.gov	Rick Minjares, Engineering Associate (760) 323-8299 Rick.Minjares@ palmsprings-ca.gov

PLAN CHECK AND CONSTRUCTION SERVICES, CITY OF GARDEN GROVE: PROJECT TERM: 2010 - PRESENT

Under a municipal services contract with the City of Garden Grove, ERSC provides plan check services, construction management, and inspection services for various street, intersection and storm drain improvement projects. Plan check services include the review of



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documents for all City projects, including but not limited to: Tract Maps, WQMP, Street Improvements, Right-of-Way Exhibits, CC&Rs, Grading, Precise Grading, Erosion, Hydrology and Water, Storm Drain, Utilities, Survey, Lot Line Adjustments, Legals and Plats. Construction management and inspection services include coordination of CIP projects awarded to contractors for compliance with plans and specifications; review of monthly progress pay estimates for compliance with specifications and provide monthly payment recommendations; monitor contractor's progress to ensure project schedules are met; assist and advise staff with post-construction activities; review, assess and manage claims submitted by contractors. Additional services include the management of projects that require special reporting to state or federal agencies to assure compliance with loan or grant conditions.



DEVELOPMENT REVIEW AND PLAN CHECK SERVICES, CITY OF TUSTIN - PROJECT TERM: 2007 - PRESENT

Under contract to the City of Tustin, Engineering Resources of Southern California, Inc., is currently providing overflow and expedited plan review for developer and City-funded projects throughout the City. Services include the peer review of grading, water



Doug Stack, P.E. Public Works Director (714) 573-3150 dstack@tustinca.org

& sewer, street & storm drain plans, and supporting documents for development projects in the City. Specific tasks include the review of improvement plans prepared by private developers for accuracy and completeness; conformance to local codes, ordinances, & design standards. ERSC also has reviewed Water Quality Management Plans (WQMP) & Storm Water Pollution Prevention Plans (SWPPP) for compliance with the City's Local Implementation Plan (LIP) and the Orange County Drainage Area Management Plan (DAMP) in conformance with NPDES requirements.

PROJECT MANAGEMENT AND INSPECTION CONSTRUCTION SERVICES, CITY OF LAMIRADA - PROJECT TERM: 2016 - PRESENT

Under an on-call agreement, ERSC provides the City of La Mirada with On-Call Interim Public Works Project Management Services for the management and independent review of various capital improvement projects along with the associated improvement plans



Mark Stowell, P.E. Public Works Director/City Engineer (562) 902-2385 mstowell@cityoflamirada.org

and technical studies processed and managed by the City. Representative projects include, but are not limited to:

- Imperial Highway and Telegraph Road Intersection
- Residential Slurry Seal
- Measure I Residential Street Rehabilitation
- Waterline for Measure I Residential Street Rehabilitation
- Olive Branch Street Rehabilitation. Santa Gertrudes Ave.
- Rosecrans Avenue Dual Left Turn Pockets at Beach Blvd.

ON-CALL PLAN CHECK AND CONSTRUCTION INSPECTION SERVICES, CITY OF HIGHLAND; PROJECT TERM 2003 - PRESENT

Under an on-call professional services agreement with the City of Highland, ERSC provides plan checking services to the City during both development and CIP projects. Grading, street, storm drain, hydrology studies, and WQMPs are regularly reviewed by ERSC on the



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Director
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City's behalf. Survey documents such as lot line adjustments, parcel maps, tract maps, and parcels mergers are also reviewed by ERSC.

ERSC also provides contract inspection services for the construction of public works and privately funded improvements. Representative projects include:

- Lankershim Avenue Street Improvements
- Sterling Avenue Improvements
- Highland Basin Drainage
- Victoria Avenue Improvements at 5th Street
- 2012 Community Development Block Grant Project - Vine Street
- Bledsoe Creek Outlet Reconstruction

- Olive Street Improvements
- Traffic Signal Various locations
- City-Wide Sidewalk Project
- 5th Street Bike Lane, Signing and Striping Improvements
- Greenspot Road "S" Curve Realignment



ON-CALL PLAN CHECK SERVICES, CITY OF LAKE ELSINORE; PROJECT TERM 2016 - PRESENT

Engineering Resources of Southern California, Inc., has provided civil engineering plan check services to the City of Lake Elsinore since in 2016. As part of an on-call contract with the City, ERSC provides review of the following plans and documents:

- Traffic Signal Plans
- Improvement Plans
- Grading Plans
- Final Maps and Parcel Maps
- · Dedications, Easements
- · Vacations, Quitclaims
- Parcel Mergers
- Lot Line Adjustments
- WQMP Submittals



- Hydrology and Hydraulic Studies/Reports
- HEC-5 Studies
- Traffic Analyses, Studies, Reports
- Soil/Geotechnical Studies/Reports
- Alquist Priolo Studies/State Submittals
- Erosion Control Designs
- Review of Technical Specifications for Proposed Improvements within City Road Rights of Way.

ON-CALL CIVIL ENGINEERING AND PLAN CHECK SERVICES – CITY OF COLTON PROJECT TERM: 2003 - PRESENT

Engineering Resources of Southern California, Inc. is proud to serve the City of Colton since 2003 with On-Call Civil Engineering and Plan Check services. Our engineers, engineering technicians and administrative team have worked closely with City staff in the review



City of Colton Victor Ortiz, PE, City Engineer (909) 514-4210 vortiz@coltonca.gov

of grading, street improvements, hydrology studies, soils reports, WQMP, SWPPP, lot line adjustments, and parcel maps.

Collectively, with the new additions to City staff, ERSC was excited to implement an electronic processing procedure for plan check review. The ERSC team handles the scanning of all plan check and supporting documents, helping to eliminate the burden for City staff, which helps project costs and budgets. This new procedure has helped to reduce plan check time and all plan check information is forwarded to the City in downloadable links for the City of Colton's ease and use.

ERSC also provides on-call engineering services, such as the design for the La Cadena and 8th Street Intersection Reconfiguration.

CIVIL ENGINEERING PLAN CHECK SERVICES, CITY OF HEMET, PROJECT TERM: 2000-2007 & 2015-2018

Engineering Resources of Southern California, Inc., provided civil engineering plan check services to the City of Hemet between 2000 to 2007 and 2015 to 2017, wherein ERSC was commissioned to provide the review of private development projects throughout the City.



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Team members were responsible for verifying the conformance of various construction drawings with the City's municipal code, conditions of the approval, grading & erosion control manual, standards & specifications for all final subdivision maps and legal documents, commercial & residential grading, street improvements, traffic Signal installations & modifications, signing & striping, storm drain & site drainage plans, supporting hydrology & hydraulic calculations, and engineer's estimates & bond amounts for both public and private improvements. ERSC also provided the review and approval of construction and post construction water quality documents under the Construction General Permit and the MS4 in compliance with the requirements of the Santa Ana Regional Water Quality Control Board.



GENERAL PLAN CHECK SERVICES, CITY OF CHINO; PROJECT TERM 2016 - PRESENT

ERSC has provided general plan check services to the City of Chino since 2016. Since 2016 ERSC has been able to meet the surge in development activity that the City has experienced. ERSC has adapted to multiple staff changes, internal engineering preferences, and many



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different requirements that the City has adopted to serve its changing populace.

In the City of Chino, ERSC is commissioned to provide the review of Rough and Precise Grading Plans, Wet Utility, Plans (e.g. Sewer, Water, Storm Drain), Street Improvement Plans, Street Light Plans and Voltage Drop Calculations, Hydrology Studies and Hydraulic Calculations, Water Quality Management Plans (WQMPs), Easements and Right-Of-Way Dedications, Soils Reports, Subdivision Maps, Title Reports, and Closure Calculations, for private development and capital improvement projects throughout the City.

ERSC also acts as the City Surveyor, signing maps on the City's behalf while also answering survey related questions that arise in the day-to-day operation of the engineering department.

PLAN CHECKING AND PROJECT MANAGEMENT, CITY OF PALM SPRINGS: PROJECT TERM: 2002 - PRESENT

Under an on-call professional services agreement with the City of Palm Springs, Engineering Resources of Southern California, Inc., provides plan and map checking for most of the City's development projects and construction management and inspection for some



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of the Capital Improvement Projects throughout the incorporated area.

Specific tasks include the review of improvement plans, final subdivision maps, and other survey related documents as prepared by design consultants for accuracy and completeness; conformance to local codes, ordinances, and design standards. Further, ERSC has provided inspection and construction management services for City-sponsored improvements to streets and drainage facilities. Matt Brudin has served as the Project Manager and Plan Check team member since 2002 and all members of ERSC's current team have provided plan checking to the City under ERSC's contract, which is currently ongoing.

PLAN CHECKAND INSPECTION SERVICES, CITY OF BANNING; PROJECT TERM: 2018 - PRESENT

Engineering Resources of Southern California, Inc., was recently awarded a contract with the City of Banning to provide plan check and inspection services of residential and development projects. The scope of plan check services includes review of street, sewer, water, grading



Kevin D. Sin, PE (951) 922-3140 (Main (951) 922-3130) ksin@banningca.gov

and storm drain projects, as well as review of construction drawings to assure compliance with City, State and Federal regulations. ERSC will also provide conditions of approvals for City projects, as needed.

ERSC's goal is to provide comprehensive early plan check comments to avoid unexpected project requirements late in the process, employ streamlined review processes and have a problem solving approach with all interactions. ERSC will review plans, calculations, reports and specifications for compliance with the most recent adopted Federal, State and City regulations and standards. Once verified that the plans comply with applicable regulations, ERSC will approve the plans and forward them to the City for permit issuance.

ERSC's inspectors inspect public works improvement projects before, during and/or after construction to insure conformance with Federal, State and City statues, regulations, guidelines, applicable standards, specifications, plans, laws and accepted standard construction practices. Inspectors will be responsible for site photos and reports submitted to the City daily, among other duties in the field.



Firm References

ON-CALL PLAN CHECK, INSPECTION, AND ENGINEERING DESIGN SERVICES, CITY OF BEAUMONT; PROJECT TERM 2016 - PRESENT

Engineering Resources of Southern California, Inc., has provided civil engineering plan check, design, and inspection services to the City of Beaumont since in 2017.



Laurie Miller (951) 769-8520 ext. 326 Imiller@ci.beaumont.ca.us

As a plan checking consultant, ERSC reviews development projects, CIP projects, and WQMPs. Development plans have ranged from 1-Million sqft commercial complexes to multiple lot subdivisions.

As an on-call design consultant, ERSC has been responsible for paving projects, survey projects, and drainage projects. Most recently, ERSC completed the Highland Springs/1St Drainage project to mitigate erosion and sedimentation issue near a local golf course.

ERSC also provides inspectors to the City to be onsite during construction of land development activities in the City. ERSC inspectors regularly ensure work is performed per City standards, ADA accessibility requirements, coordinate material testing, and ensure storm water compliance measures are implemented on behalf of the City.





