



PROPOSAL FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR THE

WELL 7 EQUIPPING AND PIPELINE PROJECTS (W-296B AND W-296C)

December 5, 2024

Proposal by:



WATER INFRASTRUCTURE ENGINEERS

1199 S. Fullerton Rd.,

City of Industry, CA 91748

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APPENDICES

Appendix A - LEE + RO Resumes

December 5, 2024

Western Municipal Water District
Attn: Douglas B. McCartney, PE, L.S.
14205 Meridian Parkway
Riverside, CA 92518

**Subject: Construction Management & Inspection Services for the Well 7 Equipping and Pipeline Project
(W-296B, W-296C)**

Dear Mr. McCartney:

We are excited to submit this proposal to provide Construction Management & Inspection Services (CMIS) for the Well 7 Equipping and Pipeline Project (W-296B, and W-296C). Our resourceful team is geared to provide construction management and inspection staff to handle complex facilities' construction needs. We understand that the needs may vary, and our team will pace our resources to match the needs in the field while acting as an extension for the Western Municipal Water District. We have a focused construction management team with strong leadership, depth of resources, and commitment to excellent teamwork; we have also included sub-consultant Verdantas, who is just as equally deeply resourceful and keenly experienced in handling all on-site testing and special inspection needs.

L + R is proposing **Robert Mercado, PE**, as the **Project Manager**. Robert has more than 30 years of experience in construction. Robert started his career as an equipment operator at construction sites and worked his way through engineering school to get his bachelor's degree and then his professional engineering license. Because of his background in construction, Robert offers unmatched experience in handling construction challenges and offering creative solutions.

Gregory Bucknell, PE, will be the **Construction Manager** and the **Resident Engineer/Inspector**. Greg has over 40 years of experience in design, construction, and project management. Throughout his career, he has worked on projects where he not only managed construction, budgets, and schedules but also coordinated with multiple stakeholders. He has worked both in the public and private sectors and brings his in-depth knowledge and experience in engineering design and construction management to this project to facilitate the smooth implementation of the project.

David Tiscareno, EIT, PACP/MACP, will support this team as the coordinator and office engineer. He will ensure that the submittals and RFIs are reviewed and responded to on time, that the design engineer is notified of the required tasks, and that they meet their requirements and deadlines.

Leo Cabnada, PACP/MACP, will act as a resident inspector when Greg will need to take personal time off.

Amritendu Maji, PE, with over 25 years of experience will be the **Project Director**. He will provide QA-QC and overall project oversight.

When un-monitored and unprepared, construction project challenges and delays can easily develop and spiral beyond control. LEE + RO has had proven success in mitigating and minimizing such challenges through open communication, pre-planning, experienced anticipation, and collaboration.

Our team is led by seasoned Construction Managers and Inspectors. These experienced professionals will be attuned to the project's dynamic needs. Please do not hesitate to contact me if you have any questions or comments. We believe LEE + RO represents a top choice to service your future needs as an extension of your staff.

Respectfully Submitted,



LEE + RO, Inc.
Amritendu Maji, PE
Principal-in-Charge & Project Director
amritendu.maji@lee-ro.com
(626) 667-5352

1. PROJECT UNDERSTANDING

Western Municipal Water District (WMWD) desires Construction Management and Inspection Services (CMIS) for the Well 7 Equipping (W-296B), and Well #7 Well Head and Discharge Pipeline (W-296C) projects.

The construction bidding package to perform the work was produced by MKN & Associates and Michael Baker International. The construction project is expected to be awarded during the First quarter of 2025 Board meeting. Construction is expected to begin in Mid-2025 due to the long lead items for the electrical control of the pump like the MCC's. The construction is scheduled for 170 calendar days after the NTP. Substantial Completion is expected by the second week of October 2025. The awarded CMS firm will provide full-time inspection from 7 am to 4 pm on weekdays and on rare occasions, a few hours beyond 4 pm, since it is this CM experience that the contractor will hit and damage a few house service laterals that will cause delays.

L + R will assume that both projects will be awarded to one single contractor and contractor will be required to have two crews each working in its own project at the same time either Well 7 Equipping (W-296B) and Discharge Pipeline (W-296C), to take the benefit of having a single CM team with two inspectors at the same time while construction activities take place, thus generating a cost saving for the submittal reviews and field coordination with the Agency.

It is expected that the contractor will work at the pump project location well first, and then when he is about 75% complete, he will break ground with the pipeline installation to coincide with the finished date at the same time he is ready to test the pump.

Project W-296B is located at 7200 Magnolia Avenue in the City of Riverside and includes the construction of a vertical turbine pump, motor room and associated electrical equipment. The project will include the construction of a new structure to enclose the new mechanical equipment at the existing well site.



Western Municipal Water District Project Site

Project W-296C includes the construction of the corresponding discharge piping consisting of approximately 3,000 LF of 12-inch diameter PVC pipe along Magnolia Avenue and Hoover Street. The alignment begins at the corresponding new well head facility and turns west along Magnolia Avenue and then south along Hoover Street, ending at the Riverside Canal just before Nixon Drive as shown below.



Western Municipal Water District Pipe Alignment

Construction of the Well 7 equipping project will take place in an existing parking lot and will require careful inspection to ensure the proper installation and start-up testing of the new vertical turbine pump are performed in accordance with the Contract Documents. It is understood that the pump will be provided by the Owner and installed by the Contractor. Our experienced team will carefully review the pump manufacturer documents provided to ensure all installation and handling requirements are met.

However, a critical path for the successful scheduled completion of the project will be the procurement of the motor control centers (MCC) and electrical components. Per recent discussions with multiple vendors, typical lead times for MCCs currently range from 35 to 60 weeks after approval of drawings. Due to this, our CM team will have this on top of mind to coordinate with the Contractor to expedite the submittal and approval of this and other critical lead time items before even breaking ground. These efforts will assist in mitigating procurement delays during

construction and facilitate the successful completion on schedule.

The work required for this project will involve traffic control, excavation and shoring, coordination with water service customers in case any service lateral gets damage during excavation, repair of the existing service lateral, pressure testing, asphalt and striping and site clean-up.

Contractor will be required to perform all potholing, utility field verification, and surveying of all existing piping, structures, and equipment affected by the work. Contractor will not be granted allowable delays or time extensions for insufficient potholing and field verification.

The Contractor's installation sequence and means and methods will be critical to mitigate potential un-intended mishaps or construction delays. L + R will meet with

the Contractor to explore and determine their intended construction process with their available means and methods.

There are additionally three major locations of interest for this project where the discharge piping construction activity will take place: 1) single lane street along Magnolia Avenue at the well head tie-in location, 2) intersection of Magnolia Avenue and Hoover Street impacting the Hoover Courthouse, and 3) Riverside Canal at the discharge location. It is understood that the contractor will require strategic traffic control measures at each location and maintain access to the existing driveways throughout the construction activity.

The L + R team has scouted the pipe alignment to better understand its challenges and special requirements during construction. There may be multiple challenges encountered during this project. Identifying, pre-planning and preparation are ways to minimize and mitigate the undesired ramifications from these challenges.

Construction Challenges



Well 7 Equipping Project Noise & Dust. Construction at this location will require contractor to ensure that noise and especially dust generated by the construction activities do not become a nuisance to the local residents. I would recommend a chain link fence with vertical privacy slats would help a lot in keeping the noise and dust in check.



Exist Parkin Conditions. It is apparent that this parking lot is currently been used by the local neighbors. To ensure that they continue using it, an area should be designated for construction only to avoid any future damage and claims that might delay final payment.



Cross Gutter Crossings. It is my experience that contractors will most likely tunnel under the existing concrete cross gutters to avoid a new concrete pour and request via RFI the exemp-tion to slurry backfill at this location to achieve proper compaction under the slab without providing an additional credit to the District (Typical for all concrete gutters).



Traffic Control: The work requires the pipe installation on the number 2 lane, very close to the stripping that separates lane 1 and 2 due to the exiting concrete apron at Station 15+00 seen in this site photo, thus creating a nuisance for the local traffic during the installation along Magnolia Avenue since traffic will have to be slow down and flag as traffic drives thru the open trench cut. Traffic control set up will have to be closely monitor to ensure the safety of all in the area of construction. Contractor will have to coordinate his traffic control within the residential driveway access along Hoover Street, and ensure that the postal and city waste management services are not affected during the excavation and open trench cut.



Existing Utilities. Although the contractor will pothole the existing utilities and do his best to ensure that their location is known, the possibility exists that they will damage a few utilities during their excavation. The CM team will make sure that the emergency contact number for the owners of the utilities is posted for all to know to avoid delays during the incidents.

2. SCOPE OF WORK (APPROACH)

LEE + RO (L + R) will provide construction management and inspection services (CM/IS) for the construction project under the guidance of a single Construction Manager (CM). The CM will be supported by a pool of specialty inspectors to handle peak inspection and specialty inspection needs for the electrical installation. Most of the CM and general inspection will be handled by one person experienced in handling the CM/IS needs. The team will have additional qualified inspectors on an as needed basis to handle peak and specialty inspection needs. The construction work will be based on a normal single shift operation but occasionally there may be additional working hours and/or weekend work due to specific constraints imposed by unforeseen situations.

LEE + RO provides well organized project coordination and management services, competent inspection services, informed professional advice, and effective communication among the entire project team. We will work with WMWD staff to implement relevant policies and procedures, observing and monitoring the work in progress and the quality of constructed work in place. The work will be monitored and evaluated against the approved project plans, schedule and budget.

We have carefully reviewed the project scope and goals and organized an efficient team. We will proactively communicate with WMWD, Project Manager, Construction Management Administrator, and Design Engineers staff and quickly expose potential issues and assist with developing resolutions in a timely manner. We will elevate the issues before they grossly impact the project costs and create schedule delays. We will document all correspondences and decisions made.

As previously mentioned, one of the best strategies to minimizing and mitigating potential construction issues is before they develop. This can be best applied in early identification, pre-planning, and advanced preparation, and anticipating for unplanned delays. One of these critical periods will be during the Pre-Construction Kick-off Meeting, where open discussions about the Contractor's intended installation sequence and process can be reviewed and determine if their proposed or alternate approach, if given, is feasible or provides cost savings as an added benefit to the District.

L + R will provide Construction Management and Inspection Services outlined in WMWD's RFP as the following Tasks. The services will consist of the following phases/tasks:

- **Task 1 – Construction Management**
- **Task 2 – Construction Contract Administration**
- **Task 3 – Inspections**
- **Task 4 – Project Startup**
- **Task 5 – Project Closeout**
- **Task 6 – Additional Services For the Benefit of the Project (Optional)**

TASK 1 – CONSTRUCTION MANAGEMENT

LEE + RO will manage the construction process, prepare a Construction Management Plan, facilitate, prepare, document, and distribute the weekly progress meetings and monthly progress report meeting agenda and minutes for record, ensure that the work is complete on time and within budget, and coordinate with all stakeholders involved in the project.

Task 1.1 – Construction Management Plan

The Construction Management Plan will consist of following:

- Project Pre-Construction
- Construction
- Project Closeout/Post-Construction

As WMWD's selected Construction Management Consultant, we will thoroughly review the Plans, Specifications, and Estimate package, field walk the sites to have a complete understanding of the project. Upon receiving the WMWD's Notice to Proceed with the CM&I Services, we will request a virtual kick-off meeting with WMWD's Representative(s) to introduce L+R staff, discuss project details, and schedule. We will then send out a Pre-Construction Conference notice to schedule a meeting with WMWD's representatives from various departments, project design team, contractor, sub- contractors, utility companies, and other stakeholders.

L + R will prepare the Pre-Construction meeting agenda in accordance with WMWD's guidelines for WMWD's review. The following items will be reviewed at the Pre- Construction meeting:

- Plans and Specifications.
 - Project Schedule and Long Lead Items Procurement Time.
 - Submittals and the approval process.
 - Geotechnical Materials Testing Services.
 - Impacted Utilities.
 - Hydrostatic pressure testing and leak checks.
 - Labor Compliance Administration (Interviews, Payroll Reviews, etc.).
 - Weekly Statement of Working Day Reports.
 - Contract Change Order (CCO) process.
 - Coordination with the District Divisions and City Departments, and other impacted agencies.
- Coordination with transit companies and similar entities.
 - Construction Schedule.
 - Traffic Control/Phasing Plan.
 - Encroachment Permit(s).
 - Agreed communication with the Construction Manager and Project Inspector.
 - Contract time.
 - Progress meetings.
 - Construction Observation process.
 - Final project walkthrough.
 - Punch list items.
 - Preparation of as built drawings.
 - Project acceptance.
 - Miscellaneous

CONSTRUCTION PHASE

L + R Team will provide the Scope of Services outlined in WMWD's RFP to ensure the project's Construction Management/Observation, Materials Testing, and Labor Compliance Services needs are met.

Management, Meetings, Schedule/Budget and Miscellaneous Sub-tasks: Scheduling, attending, and participating in meetings, preparing agendas, and minutes. Our CM team will review the construction schedule, coordinate with WMWD's staff, design team, utility companies and other agencies, submittal reviews, traffic control plans' review, striping plan review, process program payment requests, and Contract Change Orders.



WBMWD Torrance Pump Concrete Pedestal

PROJECT CLOSEOUT/POST-CONSTRUCTION

LEE + RO will ensure that all project documentation is completed and submitted in a timely manner, coordinate for the Project Startup and Final inspection, through the respective timeline entirety of the project, and verify that all work has been completed in accordance with the contract documents.

Task 1.2 – Meetings

As WMWD's selected CM&I consultant, L + R will coordinate and chair all meetings for the duration of the project.

We will send out a Pre-Construction Conference notice to schedule a meeting with WMWD's representatives, City Project Inspection Team, contractor, sub-contractors, utility companies, and other stakeholders.



WBMWD Torrance CMU Pump Room

L + R will prepare the Pre-Construction meeting agenda in accordance with WMWD's guidelines for WMWD's review. The following items will be reviewed at the Pre- Construction meeting:

- Plans and Specifications;
- Submittals and the approval process;
- Impacted Utilities;
- Contract Change Order (CCO) process;
- Coordination with the District and City Departments,
- Baseline Schedule;
- Traffic Control/Phasing Plan;
- Encroachment Permit(s);
- Progress meetings;
- Final project walkthrough;
- Punch list items;
- Preparation of as-built drawings; Project acceptance and Other details.

We will schedule team meetings with the Contractor, WMWD's Project Manager, and other key members to review the project schedule, projected tasks, approval of submittals, unforeseen issues, among other items. These meetings will be held both weekly and monthly.

Task 1.3 – Progress Reporting

L + R approach to Schedule Control consists of having the contractor prepare a baseline schedule, laying out the project scope, milestones, key dates, critical path, and

phases of work using scheduling software such as Microsoft Office, Primavera, etc. We will compare the contractor's schedule with the contract document term(s) and determine the accuracy. Our own schedule will be used as a guide to determine the feasibility and practicality of the contractor's schedule.

At progress meetings, construction schedule and "Look Ahead" activities are reviewed among other items. Agendas and meeting notes are distributed to all participating parties to ensure common understanding of discussions. When activities slip from their proposed date of completion, we work with the contractor to ensure a proper recovery plan.

L + R's team will ensure that the Project Schedule is updated by the Contractor to represent up-to-date construction conditions and reflect the decisions made. Parties will be notified of any deviation from the schedule, and noncompliance will be corrected accordingly.

L + R will prepare a monthly construction progress report including:

- A summary of the prior month's main accomplishments and current construction activities.
- Overall contractor's conformance to contract schedule and quality requirements.
- Identification of key problems, action items, and issues along with recommendation for solutions.
- Summary of progress payments, change orders, disputes, submittals, RFIs, and notices of noncompliance.
- Photographs of representative project activities.
- Month look-ahead to help with planning the project identifying any community coordination or messaging moving forward.



WBMWD Torrance Underground Piping

COST CONTROL SYSTEM

The progress payments, material quantities, and change order payments will be reviewed to ensure the project will be completed within the allocated budget.

Contract Change Orders (CCOs) may be requested by WMWD, Contractor, CM, or design engineer. When a proposed change is requested, the CM will determine the need for the change, check for conformance to standards, consider other remedies, method of compensation, impact on contract time, estimate of cost, and the likelihood of final approval. Once approved CO will be log and track by the CM to share with WMWD team. All documentation regarding change orders will be kept, including dates of Contractor notification, interim steps, recommendations by the CM, and the final decision.

Task 1.4 – Correspondence

L + R will develop Construction Management systems specific to each project's needs, to ensure proper task management of projects. To have everyone on the same page, clear and prompt communication will be held by CM, WMWD, EOR and stakeholders of the project. The Construction Management team will continuously be accessible via phone and email during construction of projects, actively communicating and updating members involved in projects.

L + R will generate and keep a log system for organizing, tracking, filing, and managing all hard copy/electronic correspondences such as Request for Information/Request for Clarification (RFI/RFC) submittals, reports, O&M manuals, progress payments, change orders, among other filings. WMWD's Construction Management Software (Smartsheets) will be used to have clear visibility of project documents.

Task 1.5 – Web Based Document Control System

L + R is familiar with WMWD's supplied construction management software (SmartSheets) for managing the electronic and hard copy files, maintaining a logging system including dates received and returned of all documents (submittals, RFIs, correspondence, etc.). We will upload and link files, notifications of overdue items, provide comments and feedback, review turnaround time, follow up on submittals needing to be resubmitted, manage personnel access to data, among other tasks.

We will keep track of RFIs, submittals, O&M manuals, progress payments, change orders, and other as required on Task 1.4 of this proposal.

Task 1.6 – Equipment

L + R provides its field staff with office supplies, computers, tools, inspection gear, cameras, paper, and their own vehicles to perform the required tasks of the project.

TASK 2 – CONSTRUCTION CONTRACT ADMINISTRATION

L + R team will be available two weeks prior to construction activities and a maximum of 6 weeks after acceptance of the project construction as requested on this RFP.

The task and duties of this project shall include but not limited to the following:

Task 2.1 – Submittals and Requests for Information

Submittals and RFIs will be reviewed by L+R CM and the Engineer of Record to ensure any deviations of submittals submitted by the Contractor are equal to or of better quality than specified in the contract documents. A submittal log will be kept to process required submittals before and during the project.

Task 2.2 – Extra Work, Change Orders and Disputes

Contract Change Orders: The CM will determine the need for the change order, check for conformance to standards, consider other remedies, method of compensation, impact on contract time, estimate of cost, and the likelihood of final approval. CCOs will be reviewed with the Contractor, Inspector, and field verified prior to discussing them with WMWD.

Dispute Resolution: The CM team brings years of experience to this project that will prevent disputes from arising. Through clear communication, understanding of the project, and management, L+R will avoid potential disagreement. Team members must all be treated fairly and reasonably. This fosters and promotes a good working relationship among the members of the team.



WBMWD Torrance Finished Pump Room

Task 2.3 – Design Clarifications

L + R will identify the need for design clarifications, and request preparation of design clarification to be performed by the Design Engineer. The Contractor will be requested to go over design inquiries with field staff and the Construction Manager. RFIs detailing the design clarification will be requested from the Contractor and will be reviewed with the Design Engineer. In collaboration with the Design Engineer, a response will be provided to the Contractor to solve the design issue, which will allow construction to take place at the design clarification location.

Task 2.4 – Progress Payments

L + R will receive and review the Contractor's monthly payment requests, with the Inspection Staff to ensure quantities are accurately stated and provide WMWD with appropriate written recommendation for payment to WMWD.

Task 2.5 – Record Drawings

The Inspector will keep a set of record drawings to ensure that the contractor has the same information and will be reviewed each month prior to approving their monthly invoice. The As-Builts will be delineated by the designer for preparation of the Record- Drawing at the end of the project.

Task 2.6 – Operations and Maintenance Manuals

L + R will ensure that all the operation and maintenance manuals (OMMs) are complete and accurately reflect the work completed by the General Contractor and reviewed by Design Engineer prior to distribution to WMWD staff.

Task 2.7 – Environmental and Regulatory Agency Compliance

L + R will verify the contractor's compliance with providing inspection to confirm the Contractor is complying with its SWPPP and with storm water regulations and assist the District as require with any issues regarding environmental compliance.

TASK 3 – INSPECTIONS

Task 3.1 – Construction Inspection

L + R team will conduct field inspection during construction and will coordinate geotechnical work and testing as required in accordance with the requirements of the RFP.

- Inspector will be on-site during construction activities.
- Inspector will attend all meetings.
- Coordinate, schedule sampling and testing of construction materials.
- Receive, verify, initial, and retain delivery tickets.
- Record changes to use for the preparation of the record drawings.

- Report violations to any applicable regulations
- Have a copy of the contract documents and construction-related documents at the construction site.
- Take and maintain project sites/construction activity photos.
- Communicate with utility companies and other agencies.

Task 3.2 – Inspection Reports

Prepare Daily Inspection Reports, which will consist of:

- Contractors working hours on the jobsite.
- Contractor and sub-contractor personnel and equipment on site.
- Weather conditions and impact on the progress of the work.
- Tasks or instructions given to the contractor.
- Daily use of the contractor and sub-contractor equipment.
- Observations relevant to the work progress, including deficiencies or violations of contract by the contractor.
- Delivery of materials to the project site.
- Observed or foreseen delays and reasons as to why, and what contractor will do as a response.
- Review Contractor's two-week look ahead schedule.
- Claims, additions, removals pertaining to contract item.
- Construction progress.
- Quantities measurements.
- Photographs.

Task 3.3 – Specialty Inspection

If needed, L + R will provide special inspection by its certified and qualified sub-consultant pursuant to code and regulatory requirements.

TASK 4 – PROJECT STARTUP

L + R will ensure that all equipment has been successfully installed and that equipment and pipeline is ready for testing prior commencing startup procedures and commissioning.

TASK 5 – PROJECT CLOSEOUT

L + R will schedule a final walkthrough with all involved parties. A punch list will be generated and the CM team will ensure that all discrepancies are remedied and the As-Built drawings are finalized and provided to the Engineer of record for final drawing preparation. CM will provide the electronic project files to the WMWD on a flash drive and through WMWD's construction management software (SmartSheets).

TASK 6 – ADDITIONAL SERVICES FOR THE BENEFIT OF THE PROJECT (OPTIONAL)

Material Testing and Geotechnical Services: L + R has selected Verdantas Consultants to provide the required Geotechnical and Materials Testing services. This includes identifying the locations and specified depths for all tests within the project limits, material and soil sampling, field analysis, laboratory testing and related project needs. Verdantas will provide for sampling and acceptance testing requirements on materials (e.g., Concrete strength and asphalt pavement, etc.) proposed for the project and continue sampling as required throughout the duration of the project.

Verdantas will provide an experienced field technician on a part-time, on-call, as-needed basis to provide geotechnical observations and testing during construction of the project. The field technician will monitor the over-excavation of all unsuitable materials both vertically and laterally across the

site and determine that competent excavation bottoms are reached prior to placing compacted fill. Verdantas's field technician will also observe moisture conditioning of the soil that will be used as compacted fill. Field density testing will be performed as the fill progresses to assure that adequate moisture content and relative compaction as required by the project specifications and construction documents are being achieved. The field daily reports will be provided at the end of each working day.

Warranty Period Services: L+R will provide the required engineering, technical support, and administrative services during this period. It is understood that the warranty phase will extend one year past the filing of the Notice of Completion of the project construction.

Cost Estimating: L + R will provide an opinion of construction cost for the potential change orders to be negotiated with the contractor. In accordance with the RFP, we will provide an opinion of cost for up to CCO requests.



WBMWD Dominguez Pump Station

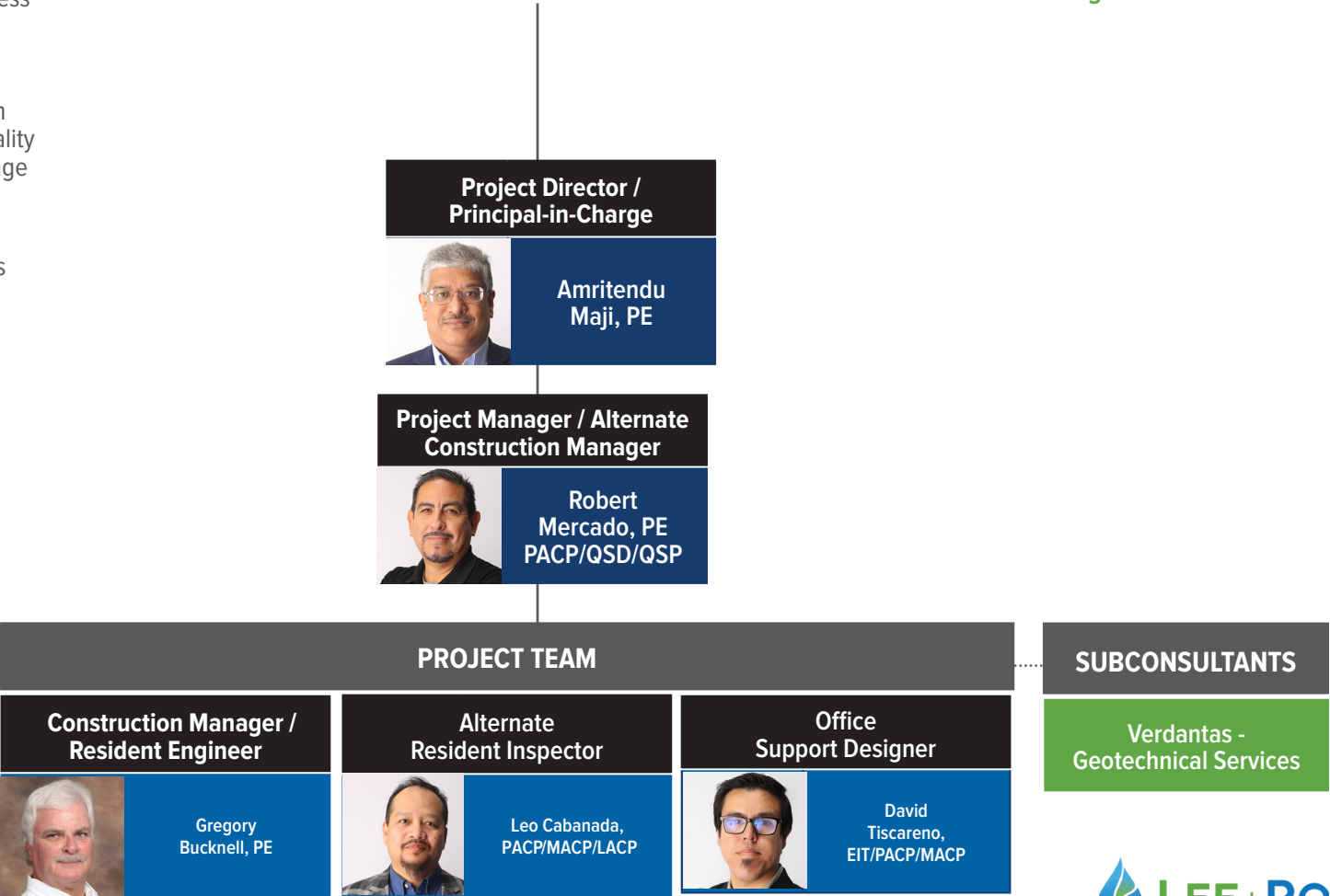
3. PROJECT PERSONNEL ORGANIZATIONAL CHART & TEAM QUALIFICATIONS

LEE + RO has assembled a team for this project as shown in the project organization chart (**Exhibit 3-1**). Our team has executed several construction inspection projects in recent years and this team has demonstrated its expertise, resourcefulness and responsiveness in addressing project challenges. Engaging this team will prove to be a significant asset to the District. Our team has completed many projects of similar scope and value, on schedule and within budget, resulting in quality construction carried out with a low percentage of construction change orders.

Short bios and brief project experience are shown on the following pages. Full Resumes can be found in **Appendix A**.



Exhibit 3-1:
Organizational Chart



Key Personnel Biographies



LICENSE/CERTIFICATION
Civil Engineer,
CA #87036

EDUCATION
MS, Engineering
Mechanics,
University of Arizona

MS, Civil Engineering,
University of Southern
Illinois

BS, Civil Engineering,
Jadavpur University

Amritendu Maji, PE | Project Director / Principal-in-Charge

Amritendu Maji is a California-registered civil engineer and project manager with over 25 years of progressive experience in the planning, design, construction, and administration of public works projects. He has been responsible for preparing plans and specifications, construction cost estimates, bid documents, and permit applications for site development, roadways, water & wastewater conveyance, and distribution facilities, including pipelines, pump stations and reservoirs, and stormwater and flood control facilities. He has considerable experience in hydraulics and hydraulic modeling, as well as the preparation of feasibility studies and technical reports. He has provided constructability review and QA/QC of technical reports, plans & specifications, construction cost estimates, and other bid documents. He has provided construction administration and support services, including construction site visits, conducting progress meetings, review of shop drawings, responding to RFIs, analysis & preparation of change orders, start-up & commissioning, and review & approval of contractors' pay requests and project closeout. He also has considerable experience in the preparation of permits, including the Federal Section 404 (Clean Water Act) for work in wetlands, Section 408 (Rivers and Harbors Act) for federally constructed structures like levees and floodwalls, and permits from the State Transportation and Development offices for work in and around State and Federal Highways, etc.

Amritendu's Relevant Experience Includes:

- Saugus Wells 3 & 4 (Replacement Wells) Well Equipment and Site Improvements Project, Santa Clarita Valley Water Agency
- Prado Booster Station Upgrade Project, City of Colton, CA
- Overland Drive and Margarita Road Potable Water Pipeline Replacement, Rancho California Water



LICENSE/CERTIFICATION
Civil Engineer,
CA #C79646

NASSCO Pipeline
Assessment Certification
Program (PACP)
#U614-06021492

CASQA Certified SWPPP
Developer (QSD)
And Practitioner (QSP)
#23971

EDUCATION
BS, Civil Engineering,
Cal State University,
Los Angeles

Robert Mercado, PE/PACP/QSD/QSP | Project Manager / Alternate Construction Manager

Robert has over 20 years of engineering, construction management, resident engineer, and cost estimating experience. He has successfully completed CM & resident engineering assignments for pipelines and pump stations projects for public agencies throughout Southern California, including the West Basin Municipal Water District, City of Burbank, City of Long Beach, and Santa Clarita Valley Water Agency (formerly Castaic Lake Water Agency). Robert also serves as the construction cost estimator for many of LEE + RO's projects. Before Robert joined LEE + RO in 2006, he worked as a construction manager for Northwest Pipe (a large diameter water transmission main supplier) and Clark Pacific, a precast concrete products supplier. His CM services experience and responsibilities include construction and schedule coordination, quality control, owner representation, field documentation, progress payment reviews, facility startups, and permit coordination. Cost estimating experience includes large and small diameter water mains, trunk sewers, and force mains, including pipe rehabilitation and lining projects. Robert has considerable experience with street and traffic signal repairs and paving restoration.

Robert's Relevant Experience Includes:

- Construction Management/Inspection Services for the Gateway Village Construction Inspection, Moulton Niguel Water District, Laguna Niguel, CA
- Construction Management Services for Torrance and Dominguez Booster Pump Stations and Carson Mall Lateral, West Basin Municipal Water District
- Hyperion Secondary Effluent Pump Station Improvements, West Basin Municipal Water District, California



LICENSE/CERTIFICATION
Civil Engineer,
CA #C41550

EDUCATION
BS, Civil Engineering
with structural
and environmental
emphasis - South Dakota
School of Mines
& Technology

Gregory J. Bucknell, PE I Construction Manager & Resident Engineer

Gregory Bucknell has over 30 years of experience in engineering, construction management, and resident engineer experience. His experience includes coordinating the development of a Bridge and Roadway Capital Improvement Program amounting to \$150 million; directing the design, construction, and expenditure on capital improvement projects amounting to over \$300 million funded by Public Financed Districts and Development Fee Programs; coordinating the development of updated master sewer and storm drainage plans and fee programs amounting to over \$400 million; coordinating the development of an assessment fee program for a redevelopment project area amounting to \$160 million of infrastructure costs; coordinating and implementing the Public Improvement Policy and Procedure Manual for the administration of public financed project areas; updating the master development, reimbursement, fee credit, settlement, construction, purchase and finance agreements; developing a flood control fee program amounting to \$85 million of facilities costs; directing the design and construction of architecture and engineering projects amounting to \$12 million within a nine month period; and providing engineering and construction services involving the expansion of two surface coal mines amounting to \$10 million of development and construction costs.

Gregory's Relevant Experience Includes:

- Jess Ranch Lift Station Upgrades, Town of Apple Valley, California
- Pacifica Services, Inc., Pasadena, CA
- Civil Source, an NV5 Company, Irvine, CA



LICENSE/CERTIFICATION
NASSCO PACP, MACP,
LACP, #P0039718-102022

EDUCATION
BS, Civil Engineering,
Walla Walla University,
(Abet Accredited)

Leo Cabanada, PACP/MACP/LACP I Construction Manager & Resident Engineer

Leo has 17 years of engineering, construction management, and resident engineer/inspector experience. Previously, Leo worked as a construction project manager for Northwest Pipe (a large diameter water piping system supplier). Leo also spent five years as a project engineer for Clark Pacific, a precast concrete products supplier. His construction management services experience and responsibilities included construction inspection resident engineering services and schedule coordination, quality control, owner representation, field documentation, progress payment reviews, facility startups, and permit coordination.

Leo's Relevant Experience Includes:

- CM / Inspection, Well Facility Backup Power Facilities Upgrades (Wells 37, 38 and 39), Ontario Municipal Utilities Company
- Magic Mountain Parkway Pipeline Extension, Santa Clarita Valley Water Agency
- Beachwood / Sparks Force Main and Pump Station Upgrade Project, City of Burbank



LICENSE/CERTIFICATION
Engineer-In-Training
#169413

**NASSCO PACP AND
MACP, #U-614-06021725**

EDUCATION
BS, Civil Engineering,
California State
Polytechnic University,
Pomona

David Tiscareno, EIT/PACP/MACP | Office Support Designer

David is a Civil Engineer in Training specializing in water and wastewater projects, including pump station, pipeline, treatment plant, and reservoir projects. David has gained valuable experience over the last 8 years working on numerous small to large water and wastewater projects covering planning, design, and construction administration for design. His project experience includes the development of specifications and providing design support, preparation of hydraulic calculations, permit preparation, and coordination. Aside from design support experience, David has provided construction administration support, including assistance with RFPs, RFIs, submittals, and change orders. David is also a GIS expert. He holds NASSCO Pipeline Assessment Certification Program (PACP) and Manhole Assessment Certification Program (MACP) certifications. His construction management and inspection services project experience and responsibilities have included construction inspection, quality control, owner representation, field documentation, progress payment reviews, and permit coordination.

David's Relevant Experience Includes:

- Saugus Formation Replacement Wells / Dry Wells and Conveyance Pipeline Project, Santa Clarita Valley Water Agency
- Water Well No.1 Facility Replacement Project, City of Huntington Beach
- Hyperion Secondary Effluent Pumping Station (HSEPS) Expansion Project, Hyperion Treatment Plant (HTP), West Basin Municipal Water District (WBMWD), Carson

Subconsultant Biography

Verdantas | Geotechnical Services

Verdantas Inc. (formerly Leighton Consulting, Inc.) is an engineering firm dedicated to providing our clients with expertise in engineering consulting, the environment, and its supporting infrastructure. Verdantas has grown exponentially in the last four years, strategically acquiring firms including Southern California's premier geotechnical consultant, Leighton Consulting, Inc. With the addition of Leighton's legacy team, Verdantas has the advantage of more than 63 years of experience delivering industry-leading geotechnical engineering, environmental consulting, and materials testing and inspection services to local communities.

Verdantas has performed geotechnical investigations, geotechnical observation, materials testing, and special inspection services on numerous water and wastewater pipelines, lift stations, water treatment and pump station facilities, and regional water reclamation facilities for more than 60 public agencies.

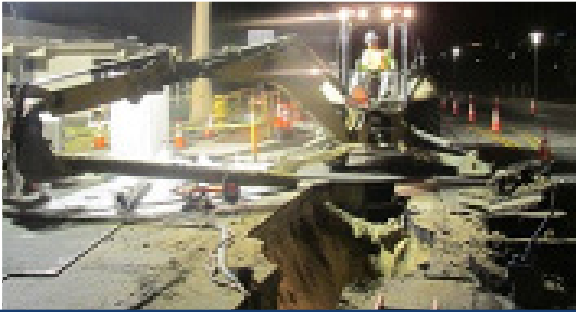
4. FIRM EXPERIENCE



Construction Management Services for Torrance and Dominguez Booster Pump Stations and Carson Mall Recycled Water Pipelines West Basin Municipal Water District

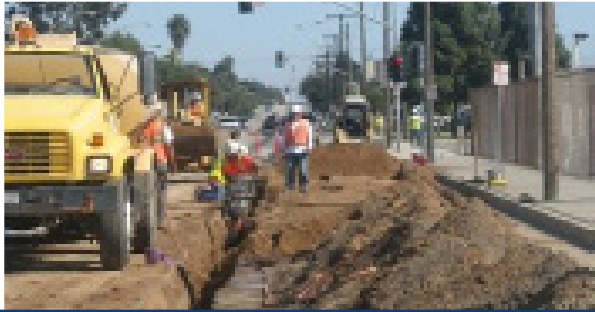
LEE + RO provided construction management and inspection services during construction for the Torrance Booster Pump Station, Dominguez Booster Pump Station, and Carson Mall Recycled Water Lateral projects. These projects are part of the Harbor South Bay Project, a partnership program between West Basin and the U. S. Army Corps of Engineers, for providing Title 22 recycled water to the South Bay area irrigation and industrial customers.

The Torrance Booster Pump Station, located within the property of West Torrance High School in the City of Torrance, boosts pressure in the recycled water system off the Anza Avenue Recycled Water Lateral. There are three main pumps and two jockey pumps that deliver from 50 gpm to 750 gpm flow range in the recycled water distribution system. The pump station equipment is housed in a reinforced masonry structure. Dominguez Booster Pump Station, located in a private lot, includes two main pumps and one jockey pump, a sodium hypochlorite disinfection system and related equipment, all housed in a CMU building. The pump station boosts recycled water pressures for the customers located in the City of Carson. The Carson Mall Lateral project includes about 4,000 lineal feet of 12-inch diameter recycled water lateral from the existing 42-inch diameter recycled water main at Broadway and Main Street in Carson to the proposed Carson Mall development. A portion of the pipeline is hung from a bridge. The CM and inspection services follow the Army Corps of Engineers requirements. The CM services include specialty inspections and materials testing, community interaction, coordination with the Cities of Torrance and Carson, Southern California Edison, and Torrance Unified School District. Traffic control and community impacts were of concern for ensuring smooth construction. Other challenges include noise mitigation, dust suppression, existing utilities and installing new electric service.



Gateway Village Construction Inspection Services for Water and Sewer Upsizing Moulton Niguel Water District

LEE + RO provided construction management services to the Long Beach LEE + RO is providing construction support and special inspection services for all construction elements of the LEE + RO provided full-time construction management and inspection services for upsizing an existing 8-inch water main to 12-inch, the installation of a water high-line bypass during the upsizing and installation of the new 12-inch water main, the upsizing the existing 10-inch sewer main to 15-inch, bypassing of sewage flows during upsizing and installation of the new sewer main. The work was performed at night Sunday through Friday.



Construction Management, Inspection and Testing Services for Anza Ave. Lateral (Phase I and Phase II) and Imperial Ave. Lateral Project West Basin Municipal Water district

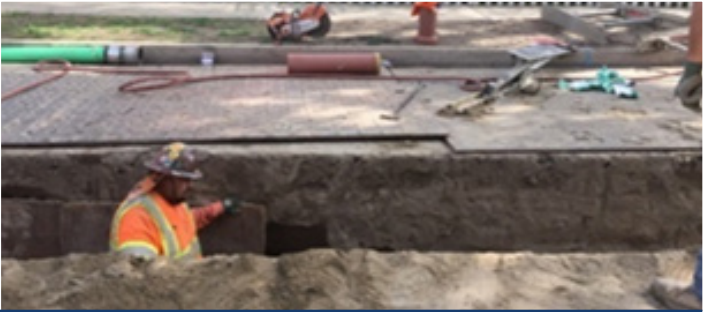
LEE + RO provided construction inspection and testing coordination services in addition to community outreach support to the West Basin Municipal Water District and the U.S. Army Corps of Engineers - Los Angeles District (USACOE) for the construction of the Anza Avenue Lateral (Phase I and Phase II) and Imperial Avenue Lateral.

The Anza Avenue Lateral Project included the installation of 25,000 lineal feet of 8-inch, 6-inch, and 4-inch diameter recycled water pipeline, providing recycled water to parks and schools for landscape irrigation applications within the City of Torrance. The Imperial Avenue Lateral Project included the installation of 4,700 lineal feet of 6-inch diameter recycled water pipeline, providing recycled water to parks and greenbelts for landscape irrigation applications along Imperial Avenue in the City El Segundo.



Carson Water Recycling Facility Pipeline Repair Project West Basin Municipal Water District

LEE + RO provided Construction Management (CM)/Inspection Services to West Basin for the emergency pipeline repair project near the District's Carson facilities. Doty Brothers was the Contractor for the emergency repair work. The affected area was cluttered with numerous utilities, including oil and gas lines. There was potential for contamination of soil and groundwater beneath the work area. All potable water pipelines in the area had to conform to the California Department of Public Health requirements. LEE & RO provided CM/Inspection services on an emergency basis including working around-the-clock for several weeks to perform repairs and minimize downtime. The work included inspection of the excavation, pipeline repairs, rerouting of utilities, compliance with the local, State and Federal Regulations and encroachment permit conditions.



Beachwood Sewer and Pump Station City of Burbank

This project included the design and construction management of over 12,000 linear feet of new 24-inch diameter HDPE sewer forcemain and the rehabilitation of the existing pump station including the replacement of 3 – 150 horsepower pumps and rehabilitation to the existing pump station structural, mechanical and electrical elements. The work included removal and replacement of existing sewer pumps and mechanical piping and valves, installation of new concrete valve vault, demolition of sections of existing force main and manholes as noted, removal of existing electrical panels and conduit, sidewalk, pavement, and surface improvements, traffic control and traffic control plans, SWPPP measures and BMP's, installation of new 24 inch HDPE force main, installation of new 18 inch steel force main sections, pipeline jacking and receiving pits, trenchless installations of steel casings and forcemain, forcemain access man-ways for maintenance, combination air and vacuum release valves, blow-off assemblies, re-lining and re-coating of existing wet well and installation of wet well submersible pumps, installation of cathodic protection and CPT test stations, modifications to existing flow meter vault and piping and equipment at BWRP, asphalt removal and paving and stripping, pump start-up and performance testing with temporary pump recirculation piping, de-watering, emptying, cleaning, disinfection, disposal of cleaning water and videotaping of the existing 18 inch steel sewer forcemain pipeline, restoration of existing public and private improvements, and related appurtenant work not mentioned above but required in accordance with the Contract Documents.

Construction Management Services for the project included engineering construction management and inspection and office support services during construction such as submittal reviews, resolution of field construction issues, and public outreach. Field inspection required full time resident engineers/inspectors and office support. LEE + RO provided community relations using a public relations subcontractor, hosted several community meetings and maintained a hotline to accept requests from community and follow-ups.



**Construction Management / Inspection Services for the Backwash Filter Tee Replacement Project, Edward C. Little Water Reclamation Facility
West Basin Municipal Water District**

LEE + RO provided Construction Manager/Inspection Services for construction of the Title 22 Filter Backwash Tee Replacement Project at West Basin’s ECLWRF. The ECLWRF treatment train includes mono-media anthracite filters to remove suspended solids. To maintain the designed flux rates, periodic backwashing removes the accumulated solids. Carbon steel backwash piping from each tank had developed leaks at exactly the same location within the filter system. The project included replacement of ten 24-in x 24-in x 16-in diameter carbon steel tees (with 24-in x 16-in reducers) with the new 316L stainless steel tees. The project was completed within the West Basin budget and schedule constraints.



**Hyperion Secondary Effluent Pump Station (HSEPS)
West Basin Municipal Water District**

The Hyperion Secondary Effluent Pump Station (HSEPS) conveys secondary effluent from The City of Los Angeles Hyperion Treatment Plant to West Basin’s Edward C. Little Water Recycling Facility. This project increased firm capacity from 51 MGD to 83 MGD with 3 new 800 HP vertical turbine pumps with VFDs, a new 3,000 kW emergency generator with 4.16 kV switchgear, motor control centers, and distribution system. Extensive electrical and control system rework was necessary to tie-in to the existing pump station and LADWP power feeds. Construction of this \$14.7M Project was completed in 2020. This project won ENR’s Project of The Year Award in 2020.



**Overland Drive and Margarita Road Potable Water Pipeline Replacement
Rancho California Water District**

LEE + RO was retained for the replacement of a potable water line and associated pavement restoration work. This project is located within the City of Temecula and consists of the design of a replacement pipeline for approximately 1,700 linear feet of 16-inch diameter C905 PVC potable water pipeline. The existing pipeline, installed in 1999, experienced two catastrophic failures between 2018 and June 2019. During repair work, District staff observed that the pipeline had ruptured from what appeared to be “over-belled” joints, which resulted in failure at the joints and subsequent splitting longitudinally down the pipe section. LEE + RO performed a pipe material evaluation, alignment selection, pipeline replacement/repair alternatives and provided these to the District in a technical memorandum. LEE + RO also provided final design, bid phase and engineering services during construction.



**Prado Booster Station Upgrade Project
City of Colton**

The water infrastructure project was a capital improvement funded project to provide redundancy by the installation of a third pump, removal of existing pumps and installing three new variable frequency drives, new piping, valves, instrumentation and appurtenances, removing and replacing the existing MCC, all new electrical conduits and conductors, including installation of complete instrumentation and control design, SCADA upgrade for the booster station monitoring system, new emergency generator transfer switch, new portable emergency generator, LED lighting for the pump station (PS), new HVAC system, new PS security system upgrades, removing and replacing new skylights with roof hatches.

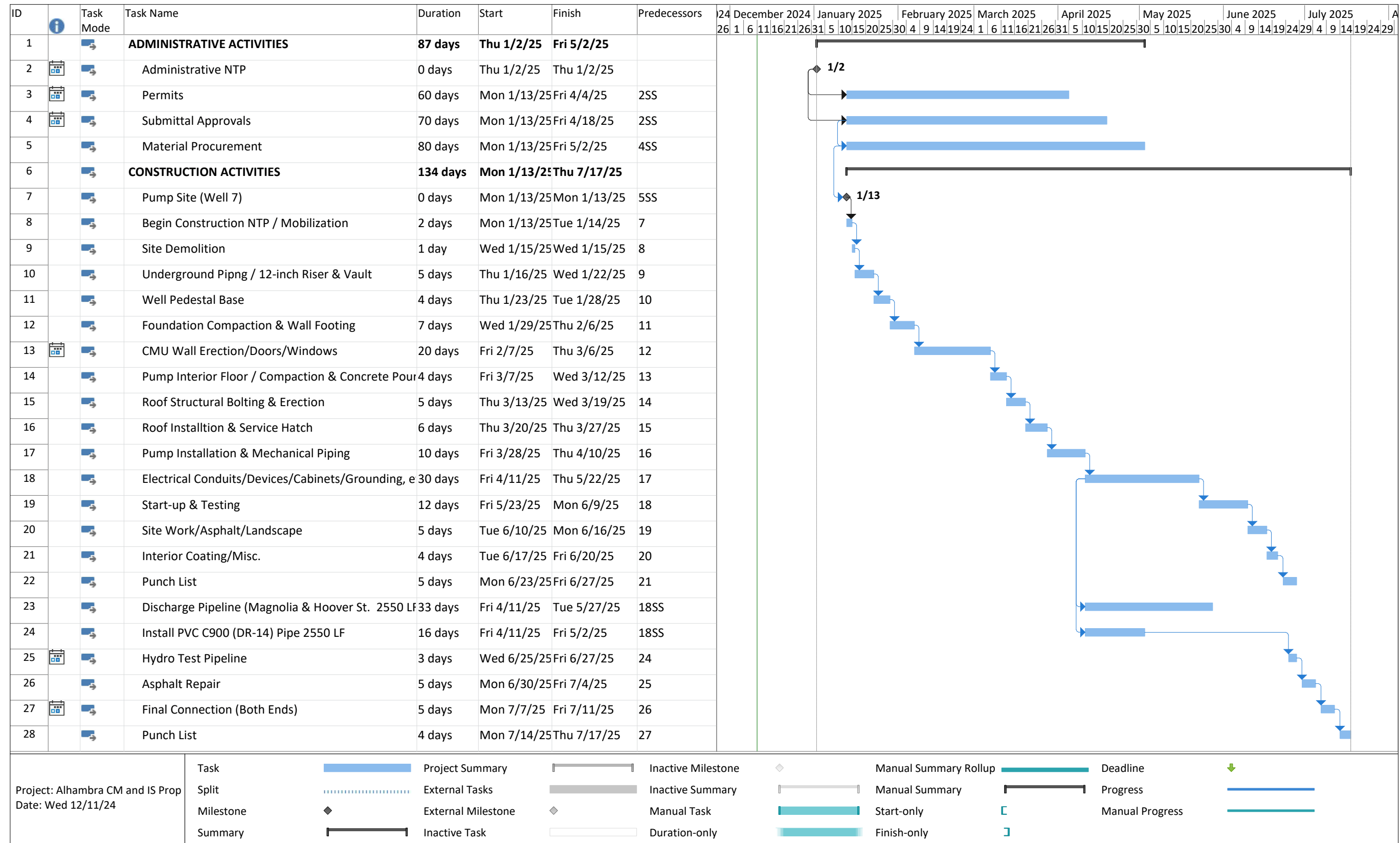
LEE + RO provided Construction Management and Inspection services during the booster station upgrades including submittal and RFI review, progress payment review, negotiating Change Order requests, provided Daily Inspection Reports, and facilitated the kick-off pre-construction and weekly construction progress meetings.



**RV-2 Modifications
Santa Clarita Valley Water Agency**

Construction Management for the repair of the 72-inch Rio Vista Valve #2 (RV-2), which was damaged and could not fully seal properly. Modifications include replacing the damaged valve as well as adding a separate pressure control valve and related equipment. The project includes installation of Rio Vista Valve No. 2 (RV-2) in a subsurface valve vault. Critical components include installation of a 72-inch motor operated valve (MOV), two 30-inch MOVs, one 30-inch solenoid operated Primary Bypass Valve, an 8-inch secondary bypass MOV, rehabilitation of existing valve vault, electrical and instrumentation upgrades and site/ security upgrades.

5. PROJECT SCHEDULE



6. ESTIMATED LEVEL OF EFFORT

Task ID	Labor Category Used for Fee Estimate: E8: Managing Engineer/Project Manager; E5 Construction Manager/Resident Engineer; E3 Office Engineer; F2 Inspector/Resident Engineer and A1 Admin Assistant	Labor Category					Total Hours
		E8	E5	E3	F2	A1	
Task Description							
TASK A Non-Optional Services							
Task 1 Construction Management							
1.1	Construction Management Plan	2	4	16	0	2	24
1.2	Meetings (KO, PCC, 34 Weekly, 12 Monthly)	8	40	24	4	0	76
1.3	Progress Reporting (Assume 12 monthly reports), Schedule and Cost Control	4	8	24	0	24	60
1.4	Correspondence	16	12	0	0	8	36
1.5	Web Based (SmartSheets) Document Control System	4	16	40	0	16	76
1.6	Equipment	0	2	2	0	2	6
Subtotal Task 1 - Construction Management		34	82	106	4	52	278
Task 2 Construction Contract Administration							
2.1	Submittal & RFI (Assume 40 Submittals and 20 RFIs)	8	40	72	0	0	120
2.2	Extra Work, Change Orders and Disputes	8	20	30	0	0	58
2.3	Design Clarifications	0	6	12	0	0	18
2.4	Progress Payments (Assume 8 Contractor’s Monthly Invoices)	0	4	16	0	0	20
2.5	Record Drawings	2	8	8	0	0	18
2.6	O&M Manual	0	2	4	0	0	6
2.7	Environmental and Regulatory Assistance	0	2	8	0	0	10
Subtotal Task 2 - Construction Contract Administration		18	82	150	0	0	250
Task 3 Inspections							
3.1A	Construction Inspection W-296B (Assume 120 Work Days)	0	0	0	1080	30	1110
3.1B	Construction Inspection W-296C (Assume 35 Work Days)	0	0	0	315	9	324
3.2	Inspection Reports	4	8	16	0	0	28
3.3A	Specialty Inspection W-296B (Well 7)	8	8	8	0	0	24
3.3B	Specialty Inspection W-296C (Pipeline Project)	0	4	0	0	0	4
Subtotal Task 3 - Inspections		12	20	24	1395	39	1490
Task 4 Project Startup							
4.1	Project Startup	2	16	0	0	0	18
Subtotal Task 4 - Project Startup		2	16	0	0	0	18
Task 5 Project Closeout							
5.1	Project Closeout	0	8	4	20	4	36
Subtotal Task 5 - Project Closeout		0	8	4	20	4	36
Task 6 Optional Additional Services For The Benefit Of The Project							
6.1	Material Testing (Verdantas, included in Task 6.2)	1	0	0	0	1	2
6.2	Geotechnical Services & Report Preparation (Verdantas)	8	8	8	8	16	48
6.3	Warranty Period Services	1	4	2	10	0	17
6.4	Cost Estimating (Given: Assume 10 Cost Estimates Required)	1	4	20	0	0	25
Subtotal Task 6 - Optional Additional Services For The Benefit Of The Project		11	16	30	18	17	92
Subtotal		77	224	314	1437	112	2164
Total Not-To-Exceed (Without Optional Services)		66	208	284	1419	95	2072
Total Not-To-Exceed (Including Optional Services)		77	224	314	1437	112	2164

REQUEST FOR PROPOSAL
Construction Management & Inspection Services
Well 7 Equipping and Pipeline Project (W-296B, W-296C)



RFP Signature Sheet

My signature certifies that the proposal, as submitted, complies with all terms and conditions as set forth in this RFP.

My signature certifies that this firm has no business or personal relationships with any other companies or persons that could be considered a conflict of interest or potential conflict of interest to Western, pertaining to any and/or all work or services to be performed as a result of this request and any resulting contract with Western.

The Proposer hereby certifies that it has:

- ☒ Read each and every clause of this RFP.
- ☒ Included all costs necessary to complete the specified services/work in its proposed prices.
- ☒ Agreed that, if it is awarded the Contract, it will make no claim against Western based upon ignorance of local conditions or misunderstanding of any provision of the contract. Should conditions turn out otherwise than anticipated by it, the Proposer agrees to assume all risks incident thereto.

I hereby certify that I am authorized to sign as a representative for the firm:

Name of Firm: LEE + RO, Inc.

Address: 1199 South Fullerton Road, City of Industry, CA 91748

Fed Tax ID No.: 95-3443396

Signature: *Amritendu Maji*

Name (type/print): Amritendu Maji

Title: Vice President of Operations + Principal

Telephone (626) 667-5352

Email: amritendu.maji@lee-ro.com

Fax No. (____) _____

Date: 12/5/2024

To receive consideration of award, this signature sheet must be completed and returned ***as part of the proposal.***

APPENDIX A

LEE + RO RESUMES



AMRITENDU MAJI, PE

PROJECT DIRECTOR / PRINCIPAL-IN-CHARGE

Amritendu Maji is a Civil Engineer and Project Manager with over 25 years of progressive experience in the planning, design, construction, and administration of public works projects. He has been responsible for preparing plans and specifications, construction cost estimates, bid documents, and permit applications for pump stations and reservoirs, site development, roadways, water & wastewater conveyance and distribution facilities including pipelines and stormwater and flood control facilities. He has designed pump stations with capacities ranging from 100 gpm to 1,000,000 gpm and larger. He has considerable experience in hydraulics and hydraulic modeling, as well as preparation of feasibility studies and technical reports. He has provided constructability review and QA/QC of technical reports, plans & specifications, construction cost estimates, and other bid documents. He has provided construction administration and support services including construction site visits, conducting progress meetings, review of shop drawings, responding to RFIs, analysis & preparation of change orders, start-up & commissioning and review & approval of contractors' pay requests and project closeout. He also has considerable experience in the preparation of permits including the Federal Section 404 (Clean Water Act) for work in wetlands, Section 408 (Rivers and Harbors Act) for federally constructed structures like levees and floodwalls, and permits from the State Transportation and Development offices for work in and around State and Federal Highways etc..

EXPERIENCE

Saugus Wells 3 & 4 (Replacement Wells) Well Equipment and Site Improvements Project, Santa Clarita Valley Water Agency. Project Manager for the Saugus Wells 3 & 4 (Replacement Wells) Well Equipment and Site Improvements Project. The work involves 2 well sites with a design flow rate per well of 2,000 gpm, an anticipated well depth of 2,700 ft bgs, 18-inch diameter HSLA casing, complete with sodium hypochlorite and 19% aqueous ammonia disinfection. Each well site will include mechanical equipment, including well pump and valves, discharge and pump-to-waste piping, disinfection equipment, enclosed electrical equipment, flow metering, concrete equipment pads and, site security consisting of an anti-climb chain-link perimeter fence and intrusion alarms.

Jess Ranch Lift Station Upgrades, Town of Apple Valley. Project Manager responsible for providing preliminary and final engineering design services for the construction of a new \$ 2.6 million lift station. The old Jess Ranch Lift Station was constructed in the 1980s to primarily service the Jess Ranch residential community, which is directly adjacent to the Mojave River. Since that time, the community has grown significantly, and an upgraded lift station was necessary. LEE + RO evaluated the existing system and anticipated future demands and provided recommendations for upsizing pump capacities and wet well volume, in addition to force main size. A feasibility study was prepared presenting various design alternatives to the Town, including a hydraulic analysis of the existing and anticipated build-out sewer flows to determine the necessary pumping and storage capacities required and included an electrical analysis to determine the new electrical loads, utility service requirements and sizing of the new electrical gear and emergency standby generator. The feasibility study presented various types of pumping system alternatives, including self-priming pumps, non-clog pumps with submersible motors, a combination dry-pit / wet-pit arrangement, and a direct in-line pumping system, in addition to relocation options. LEE + RO recommended a triplex station consisting of three 25 HP pumps, each rated at 300 gpm be constructed at a new location. Relocation of the new lift station allowed the existing lift station to remain in operation during construction and provided additional distance from the Mojave River, providing the Town additional response time in the event of a major catastrophic event.



LICENSE/CERTIFICATION

Civil Engineer, CA #C87036

EDUCATION

MS, Engineering Mechanics,
University of Arizona

MS, Civil Engineering,
University of Southern Illinois

BS, Civil Engineering,
Jadavpur University

AMRITENDU MAJI, PE
PROJECT DIRECTOR /
PRINCIPAL-IN-CHARGE

Prado Booster Station Upgrade Project, City of Colton. Project Manager for the \$1.1 million Prado Booster Station Upgrade Project for the City of Colton. Upgrades to the 900 gpm capacity domestic water pump station consisted of three new pumps and motors complete with new Variable Frequency Drives (VFDs), new piping and valving, instrumentation and appurtenances, new replacement MCC, all new electrical conduits and conductors, complete instrumentation and controls design, SCADA design for booster station remote monitoring system, new emergency generator transfer switch sized for the pump station's new electrical loads, new portable emergency generator connection, new LED lighting system for the pump station building, new HVAC system, pump station security system upgrades, removing and replacing the skylights with roof hatches for future pump and motor removal, bid phase services, and engineering services during construction.

Overland Drive and Margarita Road Potable Water Pipeline Replacement, Rancho California Water District Technical Advisor for this project is located within the city of Temecula and consists of the design of a replacement pipeline for approximately 2,432 linear feet of existing 16-inch diameter C905 PVC potable water pipeline. The existing pipeline, installed in 1999, experienced two catastrophic failures from 2018 to June 2019. During repair work, District staff observed that the pipeline ruptured from what appears to be "over-belled" joints, which has resulted in failure at the joints and subsequent splitting longitudinally down the pipe section. LEE + RO performed a pipe material evaluation, alignment selection, pipeline replacement/repair alternatives and provided a technical memorandum and performed bid phase services. The project included development of engineered traffic control plans through primarily commercial developments consisting of Costco, restaurants and a strip mall, and coordination with the City for plan checking and approval thereof.

Booster Pump Station 3501 Replacement, Coachella Valley Water District, Desert Hot Springs. Project Manager responsible for the engineering, design, and construction phase support services for this \$3.3 million domestic water booster pump station replacement project. BPS 3501 pumps water from the ID 8 Pressure Zone 1040 through 2.7 miles of 18-inch transmission pipeline to the Sky Valley Pressure Zone 1425. The new booster pump station includes four (4) new 1,100 gpm 200 HP vertical turbine pumps (with cans for two future pumps) with reduced voltage soft starts, instrumentation and controls, a new 1,200A electrical service and utility transformer, a new electrical building with HVAC to house the new main switchboard, ATS, MCC and electrical panels, SCADA panel, a new chemical storage building, a new air compressor for the surge tank, a new 750kW stationary diesel-fueled emergency generator and load bank. The existing pump station had to remain online throughout the construction process and could not be demolished until the new booster pump station was commissioned and fully operational. The existing site includes two above-ground steel reservoirs with new fill and drain piping (yard piping) provided for the reservoirs to optimize the site layout and operations. New seismic valves were installed at the reservoir connections.

Sewer System Rehabilitation Plan Phase 1, Sewer Main Lining and Spot Repair Projects 1 & 2, Garden Grove Sanitary District Technical Reviewer for the \$1.6M project consists of rehabilitation of approximately 17,430 LF of 8-inch diameter sanitary sewer gravity piping, and 60 LF of 6-inch diameter sanitary sewer gravity piping by UV-cured glass reinforced plastic cured-in-place pipe (GRP-CIPP) liner, approximately 270 LF of 8-inch diameter sanitary sewer gravity piping by steam-cured felt impregnated resin CIPP liner, 9 spot repairs; 420 sewer lateral reinstatements and 69 top hat sewer lateral seals in various streets in Garden Grove. These projects are subject to the requirements of Housing and Urban Development (HUD) Act of 1968, Section 3 Clause and prepared / followed the guidelines.



REGISTRATION

Civil Engineer, CA #C79646

NASSCO PACP, #U-614-06021492

CASQA Certified Qualified SWPPP Developer (QSD) and Practitioner (QSP), #23971

NASSCO Pipeline Assessment Certification Program (PACP), #U-614-06021492

EDUCATION

BS, Civil Engineering,
Cal State University, Los Angeles

ROBERT MERCADO, PE/PACP/QSD/QSP PROJECT MANAGER / ALTERNATE CONSTRUCTION MANAGER

Robert Mercado has over 20 years of engineering, construction management, and resident engineer/inspector experience, including the past 14 years with LEE + RO as a project engineer/construction manager/resident engineer. He has successfully completed CM & resident engineering assignments for pipelines and pump station projects for public agencies throughout Southern California including the West Basin Municipal Water District, City of Burbank, City of Long Beach and Santa Clarita Valley Water Agency (formerly Castaic Lake Water Agency). Previously, he worked as a project manager for Northwest Pipe (a large diameter water piping system supplier). His construction management services experience and responsibilities include construction and schedule coordination, quality control, owner representation, community relations, field documentation, progress payment reviews, facility startups, and permit coordination. He has extensive experience with resolution of construction issues and conflicts, traffic controls, and associated street repaving, and relocation/restoration of utilities and traffic signals.

EXPERIENCE

Construction Management/Inspection Services for the Gateway Village Construction Inspection, Moulton Niguel Water District, Laguna Niguel, CA. Robert provided full-time construction management and inspection services for upsizing an existing 8-inch water main to 12-inch, the installation of a water high-line bypass during the upsizing and installation of the new 12-inch water main, the upsizing the existing 10-inch sewer main to 15-inch, bypassing of sewage flows during upsizing and installation of the new sewer main.

Construction Management Services for Torrance and Dominguez Booster Pump Stations and Carson Mall Lateral, West Basin Municipal Water District. Construction Management services and Lead Inspector for the USACOE in the Winter of 2011. He interfaced with West Basin Project Managers, USACOE staff and the City inspectors during construction. The Torrance Booster Pump Station will boost pressures in the recycled water system off the Anza Avenue Recycled Water Lateral. The Dominguez Booster Pump Station will help boost the pressure of recycled water to customers located in the City of Carson. The Carson Mall Lateral project includes about 4,000 linear feet of 12-inch diameter recycled water lateral from the existing 42-inch diameter recycled water main at Broadway and Main Street in Carson to the proposed Carson Mall development. The CM and inspection services follow the Army Corps requirements. The CM services included specialty inspections and materials testing, community interaction, coordination with the Cities of Torrance and Carson, Southern California Edison, Caltrans and Torrance Unified School District.

Hyperion Secondary Effluent Pump Station Improvements, West Basin Municipal Water District, California. Robert provided engineering inspection and office support services during construction for this \$18 million project. Responsibilities included submittal review, resolution of field construction issues, and onsite inspection during the installation of the diesel-fueled standby 4.16kV engine generator as part of the overall project which involve the construction of a new pump station (SHSEPS).

Anza Avenue Lateral and Imperial Avenue Lateral Project, West Basin Municipal Water District WBMWD. Lead Inspector and CM services for the USACOE led project in the fall of 2009. He provided construction inspection and testing coordination and interfaced with West Basin and USACOE staff and the City inspectors. The Anza Avenue Lateral Project included the installation of 14,500 lineal feet of 8-inch, 6-inch, and 4-inch diameter recycled water pipeline within the City of Torrance. The Imperial Avenue Lateral Project included the installation of 4,700 lineal feet of 6-inch

ROBERT MERCADO,
PE/PACP/QSD/QSP
PROJECT MANAGER /
ALTERNATE CONSTRUCTION
MANAGER

Western Municipal Water District
Construction Management & Inspection Services Well 7 Equipping and Pipeline Project (W-296B, W-296C)

diameter recycled water pipeline, providing recycled water to parks and greenbelt for landscape irrigation application. He interacted successfully with agencies such as Caltrans and LA County Flood Control and the Cities of Torrance and El Segundo.

Beachwood / Sparks Sewer Force Main and Pump Station Upgrade Project, City of Burbank.

Robert provided engineering CM, inspection and office support services during construction for this \$10.5 million project. Responsibilities included submittal review, resolution of field construction issues, and public outreach. The project includes approximately 12,000 linear feet of 24-inch HDPE pipe along the Sparks-Chandler alignment, replacement of three dry- pit submersible 150 Hp pumps, construction of a new valve vault, removal and replacement of valves and appurtenances, and recoating the pump station wet well. The project also included construction of new sewer maintenance manholes, air relief valves, blow-off assemblies, and tie-in to the new 24-inch force main. Robert guided the project through construction, startup, testing and O&M phases. He provided post-construction warranty support. The project was completed within budget and on schedule.

Overland Drive and Margarita Road Potable Water Pipeline Replacement, Rancho California Water District.

Construction Manager / Inspector for this project located within the city of Temecula for a replacement pipeline for approximately 2,432 linear feet of existing 16-inch diameter C905 PVC potable water pipeline. The existing pipeline, installed in 1999, experienced two catastrophic failures from 2018 to June 2019. During repair work, District staff observed that the pipeline ruptured from what appeared to be “over-belled “ joints, which resulted in failure at the joints and subsequent splitting longitudinally down the pipe section. LEE + RO performed a pipe material evaluation, alignment selection, pipeline replacement/repair alternatives and provided a technical memorandum and performed bid phase services.

Prado Booster Station Upgrade Project, City of Colton.

Construction Manager / Inspector for the \$1.1 million Prado Booster Station Upgrade Project for the City of Colton. Upgrades to the 900 gpm capacity domestic water pump station consisted of three new pumps and motors complete with new Variable Frequency Drives (VFDs), new piping and valving, instrumentation and appurtenances, new replacement MCC, all new electrical conduits and conductors, complete instrumentation and controls design, SCADA design for booster station remote monitoring system, new emergency generator transfer switch sized for the pump station’s new electrical loads, new portable emergency generator connection, new LED lighting system for the pump station building, new HVAC system, pump station security system upgrades, removing and replacing the skylights with roof hatches for future pump and motor removal, bid phase services, and engineering services during construction.

Sanitary Sewer Pipeline Replacement Project – Phase 1, Long Beach Water Department.

Construction Inspector for the replacement of 8-inch diameter, 10-inch diameter, and 12- inch diameter gravity sewer pipelines with structural deficiencies in the Belmont Shore and Naples Island areas of Long Beach. Work included 3620 LF of Cured-In-Place Pipe Liner (CIPP) rehabilitation, point repairs, sewer cleaning and disposal, removal of root balls from sewer laterals, as well as pre- and post-construction CCTV inspections.

Sanitary Sewer Pipe Rehabilitation/Replacement Group 3 Project, Long Beach Water Department.

Robert provided construction inspection services for the rehabilitation and replacement of 21,000 LF of 8-inch, 10-inch, and 12-inch diameter cement sewer mains. Work included CIPP rehabilitation, point repairs, sewer cleaning and disposal, removal of rootballs from sewer laterals, as well as pre- and post-construction CCTV inspections.



LICENSE/CERTIFICATION
Civil Engineer, CA #C41550

EDUCATION
BS, in Civil Engineering with structural and environmental emphasis -
South Dakota School
of Mines and Technology

GREGORY J. BUCKNELL, PE

CONSTRUCTION MANAGER / RESIDENT ENGINEER

Gregory Bucknell has over 40 years of experience in engineering, construction management, and resident engineer experience. His experience includes coordinating the development of a Bridge and Roadway Capital Improvement Program amounting to \$150 million; directing the design, construction, and expenditure on capital improvement projects amounting to over \$300 million funded by Public Financed Districts and Development Fee Programs; coordinating the development of updated master sewer and storm drainage plans and fee programs amounting to over \$400 million; coordinating the development of an assessment fee program for a redevelopment project area amounting to \$160 million of infrastructure costs; coordinating and implementing the Public Improvement Policy and Procedure Manual for the administration of public financed project areas; updating the master development, reimbursement, fee credit, settlement, construction, purchase and finance agreements; developing a flood control fee program amounting to \$85 million of facilities costs; directing the design and construction of architecture and engineering projects amounting to \$12 million within a nine month period; and providing engineering and construction services involving the expansion of two surface coal mines amounting to \$10 million of development and construction costs.

EXPERIENCE

Jess Ranch Lift Station Upgrades, Town of Apple Valley. Resident Engineer for the construction of a new lift station due to significant community growth with additional residential communities to the south and an expansive retail district to the north. The existing Jess Ranch lift station was constructed to primarily service the Jess Ranch residential community, which is directly adjacent to the Mojave River. The design portion of the project identified and focused on an evaluation of the existing system and anticipated future demands and includes recommendations for potentially upsizing pump capacities and wet well volume, in addition to force main size. The project is currently in construction.

Pacifica Services, Inc., Pasadena, CA. Senior Project Manager II. Project Resident Engineer on Victorville Wellness Center.

Civil Source, an NV5 Company, Irvine, CA. Project Manager. As a Contract Civil Engineer through Civil Source/NV5 for the County of San Benito, Resources Management Agency, Public Works Division, worked on HBP Bridges, FHWA Roadway, FEMA, SB 1, County CIP, County Service Areas, and Land Development projects including participation in Building, Planning, and Code Enforcement issues. Also, I provided engineering technical support and advisement for the County in regards to the SBCOG-Council of San Benito County Governments and Caltrans related projects.

Harris & Associates, Irvine, CA. Project Manager. Provided plan reviews and staff augmentation services to a governmental agency.

Civil Source, Inc., Irvine, CA - Sub-consultant Project/Construction Manager. Participated in the preparation of RFQ/RFP's for program/project/construction management, engineering and staff augmentation services and provided such services.

W.G. Zimmerman Engineering, Inc., Huntington Beach, CA. Senior Project Manager. Preparation of RFQ/RFP's for Program/Project/Construction management, engineering and staff augmentation services.

City of Fontana, CA - Principal Civil Engineer

- **Special Projects** - In this capacity since July, 2008 until taking my option to receive a pension in July, 2009, involved in developing updated program unit costs and processing for development impact fee credit agreements, updating the comprehensive fee schedule, the subdivision municipal code, standard requirements and conditions of approval for the design advisory board processing. Member on the Website Steering, the Software LAMPS, and GIS Browser Update Committees. Assigned a Work Program for the Engineering Department.
- **Land Development** - The previous seven years for the City as the Principal Civil Engineer/Land Development managed the FEMA CLOMR/LOMR and land documents processing, improvements plan checking, building and safety routing, design advisory board conditions of approval, annexations, engineering public front counter, public permit issuance, and other duties as described above.

Special Projects - Capital Improvement and Public Financed Projects/Fee Assessment Programs

- The prior ten years experience was on projects including interchanges, overpass, streets, pavement rehabilitation programs, multi-purpose/bike trails, street landscaping, traffic signals, sewer, storm drains, parks, fire stations, community centers, flood control including channels, basins, and levee improvements funded by capital improvement fee programs, public financed districts, and land developers. Coordinated and implemented the Public Improvement Policy and Procedure Manual for the administration of public financed project and maintenance areas as approved by the City Council. Processed the RFQ/RFP's, negotiated the fee and amendments on construction management, engineering, surveying, materials testing, and public works inspection services agreements. Monitored and supervised the process for the bidding, award of construction contracts, and negotiations for the construction contract change orders for capital improvement projects funded by development fee programs, public financed districts, and fee credit agreements. Processed progress and reimbursement payments to construction contractors and developers. Supervised and participated with attorneys, right of way agents, and appraisers on right of way acquisitions. Provided document statements for processing and expert testimony in court on right of way acquisition and construction claim cases.

LEO CABANDA, PACP/MACP/LACP ALTERNATE RESIDENT INSPECTOR

Leo has 17 years of engineering, construction management, and resident engineer/inspector experience. Previously, Leo worked as a construction project manager for Northwest Pipe (a large diameter water piping system supplier). Leo also spent five years as a project engineer for Clark Pacific, a precast concrete products supplier. His construction management services experience and responsibilities included construction inspection resident engineering services and schedule coordination, quality control, owner representation, field documentation, progress payment reviews, facility startups, and permit coordination.

EXPERIENCE

CM / Inspection, Well Facility Backup Power Facilities Upgrades (Wells 37, 38 and 39), Ontario Municipal Utilities Company. Provided Construction Management Inspection services for this \$7 million project that included 24 groundwater production wells, five booster pump stations / storage facilities, and 3 sewer lift stations. The project also includes a 1,280 KW mobile generator and modifications to the well sites to enable generator hook ups.

Magic Mountain Parkway Pipeline Extension, Santa Clarita Valley Water Agency. Staff engineer assisting with design of a 42-inch dia. water transmission main extension project. The existing pipeline currently terminates approximately 500 feet west of the street intersection between Magic Mountain Parkway and Old Road. The tie-in connection for the new pipeline extension will occur at this termination. The project includes an extension of approximately 2,000 linear feet west along Magic Mountain Parkway. Project tasks include developing Contract Bid Documents (plans, specifications, and cost estimates) for the new 42-inch pipeline including plan and profiles with concrete vaults, and associated appurtenances.

Beachwood / Sparks Force Main and Pump Station Upgrade Project, City of Burbank. Provided engineering CM, inspection, and office support services during construction for this \$10.5 million project. Responsibilities included submittal review, resolution of field construction issues, and public outreach. The project includes approximately 12,000 linear feet of 24-inch HDPE pipe along the Sparks-Chandler alignment, replacement of three dry-pit submersible 150 Hp pumps, construction of a new valve vault, removal and replacement of valves and appurtenances, and recoating the pump station wet well. The project also included construction of new sewer maintenance manholes, air relief valves, blow-off assemblies, and tie-in to the new 24-inch force main. Robert guided the project through construction, startup, testing and O&M phases. He provided post-construction warranty support. The project was completed within budget and on schedule.

CM and Inspection Services for Church Street and Little Third Bypass Sewer Project, EVWD. Provided engineering, CM, and inspection services for sewer capacity improvements located in the City and County of San Bernardino and the City of Highland. The projects consist of two separate reaches: Reach 1 includes the construction of 900 lineal feet of 12-inch PVC sewer pipe, three (3) new manholes and re-construction of two existing manholes. Reach 2 includes the construction of 4,400 lineal feet of 15-inch PVC sewer pipe, fifteen (15) new manholes and reconstruction of two existing manholes.

North Long Beach Collection Main Control Valve Upgrade Project, Long Beach Water District. Leo provided inspection and CM services during construction for this \$ 1.2 million project. Work included daily field inspection and CM services, construction engineering support providing review and recommendations on contractor submittals, RFIs, contractor's change orders, CCTV review and preparation of record drawings, also direct contact, and coordination with LBWD staff, agencies and the contractor. The project entails upgrading an old pressure transmitter and an



LICENSE/CERTIFICATION

NASSCO PACP, #U-816-07005064

EDUCATION

BS, Civil Engineering,
Walla Walla University

accompanying 160-in BFV and vault replacement on a 24-in water main, installing all new electrical and instrumentation appurtenances. Performing two condition assessments at multiple sites, utilizing 4 different tools (2 internal acoustic, 1 external acoustic, 1 internal electromagnetic).

Mattel Inc., Recycled Water Irrigation Conversion Project, WBMWD. Provided engineering, CM, and inspection services for the conversion of supply water to the existing irrigation system to a tertiary disinfected (recycled water) supply including coordination and compliance with the Los Angeles County Department of Public Health Services Recycled Water and Cal Water requirements in the City of El Segundo. CM services included facilitating coordination for Pre-Construction, Construction, and Start-up Phase elements.

Broadway Sewer Siphon Replacement Project Sunset Beach Sanitary District. Leo provided inspection and office support services during construction for this \$ 0.7 million project. The Project entails replacing approximately 220 LF of existing 6-inch diameter cast iron sewer siphon crossing beneath the Sunset Channel just east of Pacific Coast Highway (PCH) northwest of the existing bridge on Broadway including replacing the two end manholes and relocating existing water utilities. The goal of the District was to proactively replace the existing 85-year-old pipe, using Horizontal Directional Drilling (HDD) with a greater pipe resistance to earthquake shaking.

Sewer System Rehabilitation Plan Phase 1, Sewer Main Lining and Spot Repair Projects 1 & 2, Garden Grove Sanitary District. CM Inspection and office support services during construction for this \$1.1 million project. Work included daily field inspection and CM services, construction engineering support providing review and recommendations on contractor submittals, RFIs, contractor's change orders, CCTV review and preparation of record drawings, also direct contact, and coordination with GGSD staff, agencies and the contractor. This project includes 3.3 miles of UV-cured reinforced plastic cured-in-place pipe (GRP-CIPP) liner and CCTV, and UV-cured GRP-CIPP top hat lateral seals.

Sanitary Sewer Renewal Program, Wastewater Conveyance and Conveyance Division (WCCD), Bureau of Engineering, City of Los Angeles. Civil Engineer / Construction Management Support for construction of various sewer rehabilitation projects. The City has been rehabilitating its sewers under the 60-mile SSRP program under a Federal mandate. Projects are currently between .5 million dollars to 3 million dollars involving 4,000 to 20,000 LF of rehabilitation work range from removing and replacing sewer pipe to cured-in-place pipe (CIPP) or fold and form liner installation in pipes ranging in size from 6-inches to 15-inches in diameter. Duties include preparing change orders, project monthly reports and board reports, reviewing project documents including plans and specifications, contractor proposals, contractor submittals, RFIs, evaluating claims made by the public or the contractor, coordinating work between LADOT, Caltrans, L.A. Department of Water and Power (DWP), utilities and the contractor.

The following are a list of projects Leo has managed and inspected:

C946 SSRP DAR05 Hollywood/Wilshire Planning Area, \$8.4 Million Project, including 5.2 miles of CCTV and 1.4 miles of rehabilitate by CIPP of sewer pipe.

C931 Arlington Ave. Sewer Rehabilitation Jefferson Blvd. to Rodeo Rd., \$6.8 Million Project, \$6.8 Million Project, including 0.5 miles of 33-inch and 42-inch rehabilitate by slip lining, 0.5 miles of 30-inch rehabilitate by CIPP, and 3.65 miles of CCTV.

C928 SSRP H22 Melrose Ave. & Wilton Pl., \$2.3 million project, including approx. 7,000-LF of CIPP lining.

C930 SSRP P22 Verdugo Rd. & Palmer Dr., \$1.6 million project, including approx. 5,000-LF of CIPP lining.

C918 SSRP P06 El Sereno Ave. & Edison., \$6.2 million project, including approx. 20,000-LF of CCTV and 9,000-LF of R&R.

C919 SSRP S13 Vernon Ave. & Budlong Ave., \$4.8 million project, including approx. 25,00-LF of CCTV

C913 SSRP P19 Figueroa St. & Yosemite Dr., \$4.8 million project, including approx. 30,000-LF of CCTV.

DAVID TISCARENO, EIT/PACP/MACP

OFFICE SUPPORT DESIGNER

David is a Civil Engineer in Training specializing in water and wastewater projects including pump station, pipeline, treatment plant, and reservoir projects. David has gained valuable experience over the last 8 years working on numerous small to large water and wastewater projects covering planning, design, and construction administration. His project experience includes the development of specifications and providing design support, preparation of hydraulic calculations, permit preparation and coordination. Aside from design support experience, David has provided construction administration support including assistance with RFPs, RFIs, submittals and change orders. David Tiscareno is also a GIS expert and has experience with engineering, construction management, and inspection services. He holds NASSCO Pipeline Assessment Certification Program (PACP) and Manhole Assessment Certification Program (MACP) certifications. His construction management and inspection services project experience and responsibilities have included construction inspection, quality control, owner representation, field documentation, progress payment reviews, and permit coordination.

EXPERIENCE

Saugus Formation Replacement Wells / Dry Wells and Conveyance Pipeline Project, Santa Clarita Valley Water Agency. Junior Civil Designer for the feasibility study of adding four new wells to their well system consisting of two “replacement” wells and two “Dry Year” wells. The replacement wells will replace wells that were taken out of service due to perchlorate contamination and the dry year wells will add to the Agency’s supply capacity in dry or drought affected periods. The design flow rate for each well is 2,100 gpm and total capacity of the four wells will be 8,400 gpm. The project also included pipeline alignment study to convey the water to the Agency distribution network.

Water Well No.1 Facility Replacement Project, City of Huntington Beach. Junior Civil Designer for Well #1 Replacement Project. Abandoned 600 gpm capacity Well #1, located within a residential area. This \$2.5 million project is to replace the existing well with a new 1,500 gpm capacity well. Services include agency approvals, hydrogeology and geotechnical, surveying, and design of the new well and wellhead, architectural, structural electrical, controls/SCADA and a security system.

Hyperion Secondary Effluent Pumping Station (HSEPS) Expansion Project, Hyperion Treatment Plant (HTP), West Basin Municipal Water District (WBMWD), Carson. Civil Designer for a \$14.7 million pumping capacity expansion project (from 70 to 90 mgd) including a connection of 60-inch secondary effluent supply pipe to the pressurized HTP’s secondary effluent channel (wet tapping) and addition of two new 20 MGD pumps (190 feet of TDH), each driven by 800 HP, 4,160V motor and VFD. Work included CFD modelling of pump intake system to satisfy the Hydraulic Institute’s requirements; construction of a 40 feet deep vertical structure in a tight site for installation of the additional vertical turbine pumps; mitigation of construction impact at the El Segundo Water Recycling Plant and HTP (minimum shutdown period); connection of 48” pump effluent header to the Existing 60-inch Pressure Main in Vista Del Mar, a busy highway; and addition of a 3,000-kW emergency generator.

Beachwood / Sparks Force Main and Pump Station Upgrade Project, Burbank. As an inspector, David oversaw trenching, pipe fusing, slurry back-filling, asphaltting, and tunneling and pushing casing under busy intersections for this project. David provided engineering inspection and office support services during construction for this \$9.5 million project including resolution of field construction issues, submittal reviews and public outreach. The project included approximately 12,000 linear feet of 24-inch HDPE pipe along the Sparks-Chandler alignment, replacement of three dry-pit submersible 150 Hp pumps, construction of a new valve vault, removal, and replacement of valves and appurtenances, and recoating the pump station wet well. The project also included construction of new sewer maintenance manholes, air relief valves, blow-off assemblies, and tie-in to the new 24-inch force main.



LICENSE/CERTIFICATION

Engineer-in-Training #169413

NASSCO PACP and MACP,
#U-614-06021725

EDUCATION

BS, Civil Engineering,
California State Polytechnic
University, Pomona

Manhattan Village Home Owner Association (HOA) Recycled Water Pipeline Project, West Basin Municipal Water District. Project Designer for this \$1.5 million recycled water distribution project that included design and installation of approximately 6,000 feet of 4- to 8-inch diameter recycled water main. The project included 15 2-inch water meters in various locations throughout the Manhattan Village HOA private streets. The proposed pipeline included the connection to these meters and to the existing 42-inch diameter recycled water main on marine avenue within the City of Manhattan Beach.

Prado Booster Station Upgrade Project, City of Colton. Inspector for the \$1.1 million Prado Booster Station Upgrade Project for the City of Colton. Upgrades to the 900 gpm capacity domestic water pump station consisted of three new pumps and motors complete with new Variable Frequency Drives (VFDs), new piping and valving, instrumentation and appurtenances, new replacement MCC, all new electrical conduits and conductors, complete instrumentation and controls design, SCADA design for booster station remote monitoring system, new emergency generator transfer switch sized for the pump station's new electrical loads, new portable emergency generator connection, new LED lighting system for the pump station building, new HVAC system, pump station security system upgrades, removing and replacing the skylights with roof hatches for future pump and motor removal, bid phase services, and engineering services during construction.

CM for Rio Vista Valve No. 2, Santa Clarita Valley Water Agency, Santa Clarita, CA. David is the Inspector for the repair of the 72-inch Rio Vista Valve #2 (RV-2), which was damaged and could not fully seal properly. Modifications included replacing the damaged valve as well as adding a separate pressure control valve and related equipment. The project included installation of Rio Vista Valve No. 2 (RV-2) in a subsurface valve vault. Critical components included installation of a 72-inch motor operated valve (MOV), two 30-inch MOVs, one 30-inch solenoid operated Primary Bypass Valve, an 8-inch secondary bypass MOV, rehabilitation of existing valve vault, electrical and instrumentation upgrades, and site/security upgrades.

Refurbishment of Fountain Springs and Indian Creek Pump Stations, Los Angeles County, Dept. of Public Works. Project Designer for a PDR for the Fountain Springs and Indian Creek Pump Stations. The Fountain Springs Pump Station project consists of the demolition of the existing pump station and construction of a new pump station, including all civil, structural, mechanical, electrical, I&C and an additional wet well to handle 2 hrs of peak wet weather flow; five (5) new 125 HP pumps, each rated at 3,150 gpm @ 100 ft. TDH; and rehabilitation of the existing dual force main. The Indian Creek Pump Station consists of the demolition of the existing pump station and construction of a new pump station, including all civil, structural, mechanical, electrical, I&C, and an additional wet well to handle 2 hrs of peak wet weather flow; two (2) new dual train 350 gpm @ 163 feet of TDH (total of 325 feet) pumps; installation of new dual 6" diameter force main (design includes surge analysis); and design of a new access road with better geometrics to allow for easier access by vector trucks and other maintenance vehicles.

CM for Rio Vista Valve No. 2, Santa Clarita Valley Water Agency. David is the Inspector for the repair of the 72-inch Rio Vista Valve #2 (RV-2), which was damaged and could not fully seal properly. Modifications included replacing the damaged valve as well as adding a separate pressure control valve and related equipment. The project included installation of Rio Vista Valve No. 2 (RV-2) in a subsurface valve vault. Critical components included installation of a 72-inch motor operated valve (MOV), two 30-inch MOVs, one 30-inch solenoid operated Primary Bypass Valve, an 8-inch secondary bypass MOV, rehabilitation of existing valve vault, electrical and instrumentation upgrades, and site/security upgrades.

Fee Proposal for
Western Municipal Water District



FEE PROPOSAL FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR THE

WELL 7 EQUIPPING AND PIPELINE PROJECTS (W-296B AND W-296C)

December 5, 2024

Proposal by:



WATER INFRASTRUCTURE ENGINEERS

1199 S. Fullerton Rd.,

City of Industry, CA 91748

626-912-3391 lee-ro.com

December 5, 2024

Western Municipal Water District
Attn: Douglas B. McCartney, PE, L.S.
14205 Meridian Parkway
Riverside, CA 92518

**Subject: Construction Management & Inspection Services for the Well 7 Equipping and Pipeline Project
(W-296B, W-296C)**

Dear Mr. McCartney:

LEE + RO, Inc. is pleased to submit this fee proposal for Construction Management and Inspection Services for the Well 7 Equipping and Pipeline Project (W-296B, and W-296C). The total fees for this project including optional services is **\$459,901**. The total fees without optional services is **\$359,688**. We have also enclosed the breakdown of our fee in detail and our current billing rate schedule, and Other Direct Costs are enclosed with this letter.

LEE + RO sincerely appreciates the opportunity to be of service to the District. If you have any questions or concerns, please do not hesitate to contact me at (626) 667-5352.



LEE + RO, Inc.
Amritendu Maji, PE
Principal-in-Charge & Project Director
amritendu.maji@lee-ro.com
(626) 667-5352

Enclosures: LEE + RO's Fee Estimate; LEE + RO's Billing Rate Schedules; LEE + RO's Other Direct Costs Billing Rate Schedules

Exhibit 1: Fee Estimate

Task ID	Labor Category Used for Fee Estimate: E8: Managing Engineer/Project Manager; E5 Construction Manager/Resident Engineer; E3 Office Engineer; F2 Inspector/Resident Engineer and A1 Admin Assistant	Labor Category					Total Hours	Labor Cost	Other Direct Costs (ODCs)	Sub - Consultant Costs	TOTAL FEES
		E8	E5	E3	F2	A1					
		Labor Rates per Hour									
Task Description		\$317	\$213	\$177	\$151	\$95					
TASK A Non-Optional Services											
Task 1 Construction Management											
1.1	Construction Management Plan	2	4	16	0	2	24	\$4,508	\$0	\$0	\$4,508
1.2	Meetings (KO, PCC, 34 Weekly, 12 Monthly)	8	40	24	4	0	76	\$15,908	\$3,000	\$0	\$18,908
1.3	Progress Reporting (Assume 12 monthly reports), Schedule and Cost Control	4	8	24	0	24	60	\$9,500	\$0	\$0	\$9,500
1.4	Correspondence	16	12	0	0	8	36	\$8,388	\$0	\$0	\$8,388
1.5	Web Based (SmartSheets) Document Control System	4	16	40	0	16	76	\$13,276	\$0	\$0	\$13,276
1.6	Equipment	0	2	2	0	2	6	\$970	\$2,000	\$0	\$2,970
Subtotal Task 1 - Construction Management		34	82	106	4	52	278	\$52,550	\$5,000	\$0	\$57,550
Task 2 Construction Contract Administration											
2.1	Submittal & RFI (Assume 40 Submittals and 20 RFIs)	8	40	72	0	0	120	\$23,800	\$0	\$0	\$23,800
2.2	Extra Work, Change Orders and Disputes	8	20	30	0	0	58	\$12,106	\$0	\$0	\$12,106
2.3	Design Clarifications	0	6	12	0	0	18	\$3,402	\$0	\$0	\$3,402
2.4	Progress Payments (Assume 8 Contractor’s Monthly Invoices)	0	4	16	0	0	20	\$3,684	\$0	\$0	\$3,684
2.5	Record Drawings	2	8	8	0	0	18	\$3,754	\$0	\$0	\$3,754
2.6	O&M Manual	0	2	4	0	0	6	\$1,134	\$0	\$0	\$1,134
2.7	Environmental and Regulatory Assistance	0	2	8	0	0	10	\$1,842	\$0	\$0	\$1,842
Subtotal Task 2 - Construction Contract Administration		18	82	150	0	0	250	\$49,722	\$0	\$0	\$49,722
Task 3 Inspections											
3.1A	Construction Inspection W-296B (Assume 120 Work Days)	0	0	0	1080	30	1110	\$165,930	\$12,000	\$0	\$177,930
3.1B	Construction Inspection W-296C (Assume 35 Work Days)	0	0	0	315	9	324	\$48,420	\$3,500	\$0	\$51,920
3.2	Inspection Reports	4	8	16	0	0	28	\$5,804	\$0	\$0	\$5,804
3.3A	Specialty Inspection W-296B (Well 7)	8	8	8	0	0	24	\$5,656	\$200	\$0	\$5,856
3.3B	Specialty Inspection W-296C (Pipeline Project)	0	4	0	0	0	4	\$852	\$100	\$0	\$952
Subtotal Task 3 - Inspections		12	20	24	1395	39	1490	\$226,662	\$15,800	\$0	\$242,462
Task 4 Project Startup											
4.1	Project Startup	2	16	0	0	0	18	\$4,042	\$0	\$0	\$4,042
Subtotal Task 4 - Project Startup		2	16	0	0	0	18	\$4,042	\$0	\$0	\$4,042

Exhibit 1: Fee Estimate (Continued)

Task ID	Labor Category Used for Fee Estimate: E8: Managing Engineer/Project Manager; E5 Construction Manager/Resident Engineer; E3 Office Engineer; F2 Inspector/Resident Engineer and A1 Admin Assistant	Labor Category					Total Hours	Labor Cost	Other Direct Costs (ODCs)	Sub - Consultant Costs	TOTAL FEES	
		E8	E5	E3	F2	A1						
		Labor Rates per Hour										
Task Description		\$317	\$213	\$177	\$151	\$95						
Task 5 Project Closeout												
5.1	Project Closeout	0	8	4	20	4	36	\$5,812	\$100	\$0	\$5,912	
Subtotal Task 5 - Project Closeout		0	8	4	20	4	36	\$5,812	\$100	\$0	\$5,912	
Task 6 Optional Additional Services For The Benefit Of The Project												
6.1	Material Testing (Verdantas, included in Task 6.2)	1	0	0	0	1	2	\$412	\$0	\$0	\$412	
6.2	Geotechnical Services & Report Preparation (Verdantas)	8	8	8	8	16	48	\$8,384	\$0	\$83,475	\$91,859	
6.3	Warranty Period Services	1	4	2	10	0	17	\$3,033	\$200	\$0	\$3,233	
6.4	Cost Estimating (Given: Assume 10 Cost Estimates Required)	1	4	20	0	0	25	\$4,709	\$0	\$0	\$4,709	
Subtotal Task 6 - Optional Additional Services For The Benefit Of The Project		11	16	30	18	17	92	\$16,538	\$200	\$83,475	\$100,213	
Subtotal		77	224	314	1437	112	2164	\$355,326	\$21,100	\$83,475	\$459,901	
Total Not-To-Exceed (Without Optional Services)		66	208	284	1419	95	2072	\$338,788	\$20,900	\$0	\$359,688	
Total Not-To-Exceed (Including Optional Services)		77	224	314	1437	112	2164	\$355,326	\$21,100	\$83,475	\$459,901	

Exhibit 2: Billing Rate Schedule

(Billing rates are effective From November 1, 2024 to October 31, 2025.

Billing rates are subject to an annual increase on November 1st of every year)

PERSONNEL CLASSIFICATION			BILLING RATES (\$/HOUR)
ENGINEERS			
Engineer 9	E9	Chief Engineer	\$353
Engineer 8	E8	Managing Engineer	\$317
Engineer 7	E7	Supervising Engineer	\$284
Engineer 6	E6	Principal Engineer	\$252
Engineer 5	E5	Senior Engineer	\$213
Engineer 4	E4	Engineer	\$197
Engineer 3	E3	Associate Engineer	\$177
Engineer 2	E2	Assistant Engineer	\$131
Engineer 1	E1	Junior Engineer	\$109
CAD / DESIGNERS			
Designer 6	T6	Principal Designer	\$235
Designer 5	T5	Senior Designer	\$180
Designer 4	T4	Designer	\$163
Designer 3	T3	Associate Designer	\$152
Designer 2	T2	Assistant Designer	\$121
Designer 1	T1	Junior Designer	\$104
FIELD PROFESSIONALS			
Field Professional 5	F5	Senior Resident Engineer	\$213
Field Professional 4	F4	Resident Engineer	\$197
Field Professional 3	F3	Senior Inspector	\$177
Field Professional 2	F2	Inspector	\$151
Field Professional 1	F1	Assistant Inspector	\$109
ADMINISTRATIVE			
Administrative 4	A4	Senior Contract Manager	\$153
Administrative 3	A3	Contract Manager	\$144
Administrative 2	A2	Senior Word Processor	\$114
Administrative 1	A1	Word Processor / Admin. Assistant	\$95

Exhibit 3: Other Direct Costs

(Effective From November 1, 2024 to October 31, 2025)

Automobile Mileage	IRS Published Rate
In-house Reproduction	\$0.08 / sheet (8.5 x 11 Bond B & W)
	\$0.20 / sheet (8.5 x 11 Bond Color)
	\$0.15 / sheet (11 x 17 Bond B & W)
	\$0.50 / sheet (11 x 17 Color)
	\$1.25 / sheet (24 x 36 Bond)
Mylar Original Drawing	\$8.00 / sheet (24 x 36 or 22 x 34)
Computers & Work Stations	No Charge
Subconsultant Mark-up	Subconsultant Invoice Amount Plus 5%
Bulk Reproduction by Outside Printing Firm	Invoice amount plus 10% Handling Charge
Overnight Mailing, Air Fare, Project-Specific Software, Equipment Rental, etc.	At Cost