

**DATE:** January 28, 2019

**TO:** RMC Governing Board

**FROM:** Mark Stanley, Executive Officer

**SUBJECT:** Item 14: Consideration of Resolution Approving a Grant to the GLAAC Boy Scouts of America for the Trask Scout Reservation Water System Improvement and Enhancement Project

**PROGRAM AREA:** Mountains, Hills, Foothills

**PROJECT TYPE:** Planning

**JURISDICTION:** City of Monrovia

**PROJECT MANAGER:** Joseph Gonzalez

**RECOMMENDATION:** That the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) approve a Proposition 1 Grant to the Greater Los Angeles Area Council, Boy Scouts of America in the amount of \$112,800 for the Trask Scout Reservation Water System Improvement and Enhancement Project.

**PROJECT DESCRIPTION:**

<b>Project:</b>	GLAAC Boy Scouts of America for the Trask Scout Reservation Water System Improvement and Enhancement Project (RMC 18006)
<b>Applicant:</b>	GLAAC Boy Scouts of America
<b>Program area:</b>	Mountains and Foothills
<b>Amount requested:</b>	\$112,800
<b>Amount recommended funding:</b>	\$112,800

**MOUNTAINS AND HILLS PLANNING PROJECT EVALUATION CRITERIA SUMMARY**

<b>Factor</b>	<b>Project Score</b>	<b>Total Possible Points</b>
1. Restore River Parkways	8	12
2. Urban Land Value	6	8
3. Water Sustainability	11	16
4. Habitat Value	13	17
5. Matching Funds	5	9
6. Environmental Justice and Disadvantaged Communities	19	24
7. Stakeholders/Partners Resource	9	9
8. Capacity	5	5
<b>TOTAL POINTS</b>	<b>76</b>	<b>100</b>

- Exhibit A: Site map,
- Exhibit B: Budget,
- Exhibit C: Tasklist & Timeline, and
- Exhibit D: Proposal submitted by GLAAC BSA.

The Greater Los Angeles Area Council, Boy Scouts of America (GLAAC BSA) operate the Camp Trask Scout Reservation located in the Monrovia foothills only minutes from the city of Monrovia (See Exhibit A: Site Map). GLAAC BSA is requesting funds to support updating their water system at Camp Trask. The current water system is out of compliance with the State of California Water Resources Control Board, Division of Drinking Water (DDW), who determined that the tap water is not safe for drinking, cooking, hand washing or bathing (April 2017). As a result, public use of the facility is severely impacted as visitors must bring in all their own potable water for the duration of their stay.

The requested support from RMC will be used to hire an engineering consultant to determine the camp's various water system needs and provide an engineering estimate of expected costs. The resulting report will enable GLAAC BSA to pursue additional funding opportunities to move forward with the necessary procurement, installation, and construction of the proposed improvements and upgrades, and ultimately restore the camp's potable water access.

The current expectation is to replace a portion of the existing water treatment with a consolidated design that meets water quality standards and install a 100,000-gallon capacity tank that will replace their current 25,000-gallon tank. These upgrades are expected to provide a safe and reliable water supply to meet water demands of Camp Trask, restoring access for BSA youth, families, and greater community. The enlarged water tank will also provide fire suppression storage that will greatly benefit Angeles National Forest's firefighting operations in this high-risk fire area.

The new tank will support upwards of 6 new fire hydrants that will be conceptualized to tie into the existing 4-inch distribution main and extend to remote reaches of the upper camp sites to further enhance fire suppression capabilities throughout the site. The end system improvements will meet the DDW requirements for treatment and provide fire suppression storage that will greatly benefit firefighting operations in this high-risk fire area.

Sawpit Creek (Creek) is the sole water source for Camp Trask. Most of the ground water diverted from the Creek contains moderate levels of turbidity and must meet Title 22 of the California Code of Regulations for log removal of viruses, Giardia lamblia cysts and Cryptosporidium through filtration. The ultimate water system improvements are envisioned to replace the current system with a package water treatment plant that meets the requirements above. The new water treatment plant will be connected to their existing pipelines and will be positioned in a more accessible location for maintenance. The existing system will be used in addition to the new system to establish redundancy and reliability. An assessment on the power supply to support operation of the new treatment plant and existing system will also need to be completed.

GLAAC BSA went through a competitive bid process and selected SA Associates as the most qualified bidder to provide engineering services to determine the various needs of the project. Specifically, the funding request will allow for the following to happen:

- Concept Design that can be reviewed by GLAAC BSA and Division of Drinking Water to ensure concepts meet requirements before design is initiated.
- 30-Percent Design and Technical Specifications to be completed, signed and sealed for GLAAC BSA's implementation funding request.
- Consultant will obtain pricing for the equipment (package water treatment plant, storage tanks, steel piping, fire hydrants, pumps, fencing, etc.).
- Consultant will provide Construction Cost Estimate for implementation funding request
- DDW to approve the 30-Percent Design while the implementation funding request is being submitted
- Permitting to be completed while implementation funding request is being submitted
- If GLAAC BSA is interested in initiating the bidding process with contractors
- GLAAC BSA could conduct field walks with potential contractors
- Bidding and Construction Management Services with the selected consultant would be included with the implementation funding.

Exhibit B: Budget

<b>Budget</b>	<b>Amount</b>
Concept Report	\$20,000
30% Design	\$65,000
Technical Specifications	\$9,000
<b>Subtotal</b>	<b>\$94,000</b>
Contingency @ 10%	\$9,400
Project Administration @ 5%	\$4,700
Indirect Costs @ 5%	\$4,700
<b>Total</b>	<b>\$112,800</b>

This grant will award the Greater Los Angeles Area Council, Boy Scouts of America a total of \$112,800 in Proposition 1 funds from funds remaining in the round one solicitation of Proposition 1 project request and will extend through July 2019 (see Exhibit C: Timeline). GLAAC BSA's formal proposal is included as Exhibit D.

**BACKGROUND:** For over a century, Scouting has instilled strong character attributes and life skills in over 120 million youth, so they may thrive and develop into moral adults and courageous

leaders. GLAAC BSA serves youth in the Greater Los Angeles Area, by providing outdoor recreation and education opportunities at the Camp Trask Scout Reservation located in the foothills of Monrovia only minutes from the bustling city. Trask offers a rustic environment for year-round camping, Merit Badge weekends, Cub and Webelos Day and Resident Camp, and several Trail to Eagle sessions. Campers enjoy the Nature Center, swimming pool, Fort Rotary, outdoor amphitheater, and flushing toilets and hot showers.

Camping is an integral part of the Scouting experience and getting kids to camp is one of the GLAAC's highest priorities. Over its years of operation, GLAAC has developed strategic initiatives to serve at-risk, inner city youth in communities such as Compton, Watts, South Central, Inglewood, Lynwood, Hawthorne, East Los Angeles, Baldwin Park, El Monte, South El Monte, Pomona, Azusa and Rosemead. They serve 26,000 youth, leverage the support of 10,700 adult volunteer leaders, and send over 12,000 kids to camp each year. It is their mission and vision to bring quality Scouting programs and outdoor experiences to youth to foster a deep appreciation of the great outdoors, leadership, and team work. For many of their inner-city participants, a visit to Camp Trask is their very first exposure and immersive experience with nature. Their camps serve as outdoor learning laboratories where youth build character and confidence, practice skills, advance toward new ranks, explore career opportunities, identify lifelong hobbies, and develop service-oriented leadership skills that support their community.

In addition to Scouts and other youth groups, the camp is available to and widely utilized by local community groups, including Soledad Enrichment Action, an anti-gang intervention organization and charter school for at-risk, inner-city youth. Hikers trekking the Mountain Canyon Park Trail, a back trail that passes Camp Trask, stop at the Camp for water or to use the restroom when the facility is not in use by Scouts. In total, Camp Trask annually serves over 3,600 youth annually, the majority of whom come from low-income families from disadvantaged communities. Over 5,000 individuals visit Camp Trask each year, not including hundreds of local hikers who pass through the camp.

All of these services are currently hindered by Camp Trask's outdated water system. The current water system is out of compliance with the State of California Water Resources Control Board, Division of Drinking Water (DDW), who determined that the tap water is not safe for drinking, cooking, hand washing or bathing (April 2017). As a result, public use of the facility is severely impacted as visitors must bring in all their own potable water for the duration of their stay.

### **FISCAL INFORMATION:**

This grant award to Greater Los Angeles Area Council, Boy Scouts of America (GLAAC BSA) for a total amount of \$112,800 in Proposition 1 funds from funds remaining in the round one solicitation of Proposition 1 project request. Funding for this process will be allocated from the following statute of Proposition 1:

79731 (f): San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, the sum of thirty million dollars (\$30,000,000)

**LEGISLATIVE AUTHORITY AND RMC ADOPTED POLICIES/AUTHORITIES:** The Rivers and Mountains Conservancy (RMC) statute provides in part that:

Section 32614: The conservancy may do all the following:

- (b) Enter into contracts with any public agency, private entity, or person necessary for the proper discharge of the conservancy's duties and enter into a joint powers agreement with a public agency, in furtherance of the purposes set forth in Section 32602.
- (e) Enter into any other agreement with any public agency, private entity, or person necessary for the proper discharge of the conservancy's duties for the purposes set forth in Section 32602.
- (f) Recruit and coordinate volunteers and experts to conduct interpretive and recreational programs and assist with construction projects and the maintenance of parkway facilities.

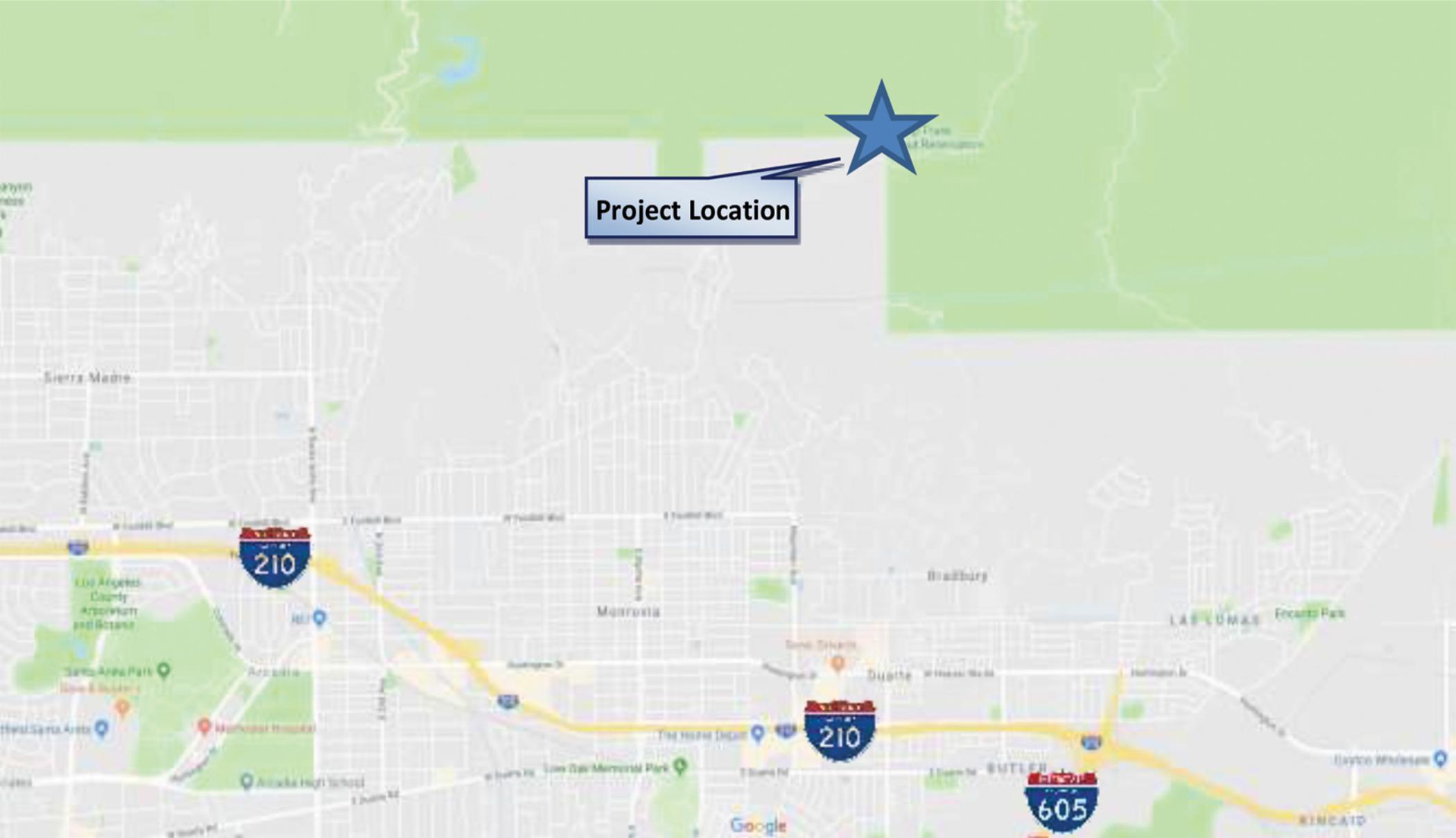
Further, Section 32614 provides that: The conservancy may do all the following:

- (g) Undertake, within the territory, site improvement projects, regulate public access, and revegetate and otherwise rehabilitate degraded areas, in consultation with any other public agency with appropriate jurisdiction and expertise, in accordance with the purposes set forth in Section 32602. The conservancy may also, within the territory, upgrade deteriorating facilities and construct new facilities as needed for outdoor recreation, nature appreciation and interpretation, and natural resources protection. The conservancy may undertake those projects by itself or in conjunction with another local agency; however, the conservancy shall provide overall coordination of those projects by setting priorities for the projects and by ensuring a uniform approach to projects. The conservancy may undertake those projects with prior notification to the legislative body of the local agency that has jurisdiction in the area in which the conservancy proposes to undertake that activity.

Section 32614.5:

- (a) The conservancy may award grants to local public agencies, state agencies, federal agencies, and nonprofit organizations for the purposes of this division.
- (b) Grants to nonprofit organizations for the acquisition of real property or interests in real property shall be subject to all the following conditions:
  - (1) The purchase price of any interest in land acquired by the nonprofit organization may not exceed fair market value as established by an appraisal approved by the conservancy.
  - (2) The conservancy approves the terms under which the interest in land is acquired.
  - (3) The interest in land acquired pursuant to a grant from the conservancy may not be used as security for any debt incurred by the nonprofit organization unless the conservancy approves the transaction.
  - (4) The transfer of land acquired pursuant to a grant shall be subject to the approval of the conservancy and the execution of an agreement between the conservancy and the transferee sufficient to protect the interests of the state.
  - (5) The state shall have a right of entry and power of termination in and over all interests in real property acquired with state funds, which may be exercised if any essential term or condition of the grant is violated.
  - (6) If the existence of the nonprofit organization is terminated for any reason, title to all interest in real property acquired with state funds shall immediately vest in the state, except that, prior to that termination, another public agency or nonprofit organization may receive title to all or a portion of that interest in real property, by recording its acceptance of title, together with the conservancy's approval, in writing.
- (c) Any deed or other instrument of conveyance whereby real property is acquired by a nonprofit organization pursuant to this section shall be recorded and shall set forth the executor interest or right of entry on the part of the state.

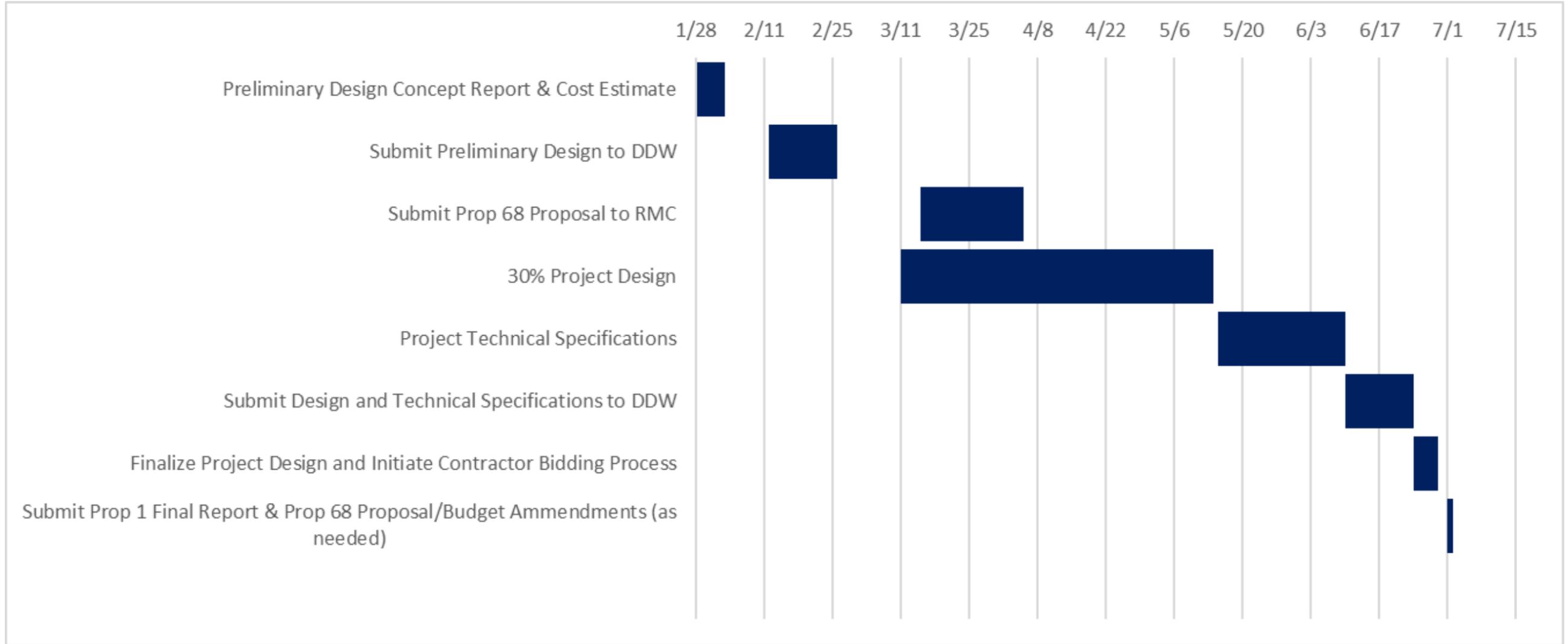
RMC Resolution 2015-19 approved guidelines consistent with the Proposition 1 bond language; RMC Resolution 2016-05 approved review of forty-four grant applications submitted for the Rivers and Mountains Conservancy Proposition 1 Grant Program; RMC Resolution 2016-13 approved the RMC Proposition 1 (2015) Tier 1 and Tier 2 Grant Recommendations; RMC Resolution 2016-23 approved the RMC Proposition 1 Grant Program (2015) Tier 1 and Tier 2 Grant Recommendations and authorized grant distributions of \$20,261,564.



<b>BUDGET</b>	<b><u>Amount</u></b>
Concept Report	\$20,000
30% Design	\$65,000
Technical Specifications	\$9,000
<b>Subtotal</b>	<b>\$94,000</b>
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Contingency @ 10%	\$9,400
Project Administration @ 5%	\$4,700
Indirect Costs @ 5%	\$4,700
<b>TOTAL</b>	<b>\$112,800</b>

# Greater Los Angeles Area Council, Boy Scouts of America

## Camp Trask Scout Reservation Water Supply Rehabilitation & Enhancement Project Proposition 1 Grant Funding Timeline





January 4, 2019

Mr. Mark Stanley  
Executive Officer  
Rivers and Mountains Conservancy  
El Encanto  
100 N. Old San Gabriel Canyon Road  
Azusa, CA 91702

Re: Proposal for Trask Scout Reservation  
Water System Improvement and Enhancement Project

Dear Mr. Stanley,

On behalf of the Greater Los Angeles Area Council, Boy Scouts of America we respectfully request a grant of \$112,800 from Proposition 1 funding to support a new water system at Camp Trask Scout Reservation in Monrovia. The current water system is out of compliance with the State of California Water Resources Control Board, Division of Drinking Water (DDW), who determined that the tap water is not safe for drinking, cooking, hand washing or bathing (April 2017). As a result, public use of the facility is severely impacted as visitors must bring in all their own potable water for the duration of their stay. The requested support from the Rivers and Mountains Conservancy will be used to hire an engineering consultant to determine the camp's various water system needs and provide an engineering estimate of expected costs. This report will enable the Greater Los Angeles Area Council to pursue additional funding opportunities to move forward with the necessary procurement, installation and construction of the proposed improvements and upgrades, and ultimately restore the camp's potable water access. By investing in much needed improvements of the existing water collection, treatment and storage facilities, we will be able to restore access for our youth, families and community and continue our outdoor education programs.

**Greater Los Angeles Area Council, Boy Scouts of America**

For over a century, Scouting has instilled strong character attributes and life skills in over 120 million youth, so they may thrive and develop into moral adults and courageous leaders. Nowhere is this need more critical than the Greater Los Angeles Area where our council has developed strategic initiatives to serve at-risk, inner-city youth. As the only Council serving communities such as Compton, Watts, South Central, Inglewood, Lynwood, Hawthorne, East Los Angeles, Baldwin Park, El Monte, South El Monte, Pomona, Azusa and Rosemead, it is our mission and vision to bring quality Scouting programs and outdoor experiences to these challenged neighborhoods. We have witnessed first-hand, the transformative impact of Scouting in our youth, families and communities. We proudly serve 26,000 youth, leverage the support of 10,700 adult volunteer leaders, and send over 12,000 kids to camp each year. Scouting provides the fundamental building blocks of success, and fosters a deep appreciation of the great outdoors, leadership, and team work.

Camping is an integral part of the Scouting experience and getting kids to camp is one of the Council's highest priorities. Our camps serve as outdoor learning laboratories where youth build character and confidence, practice skills, advance toward new ranks, explore career opportunities, identify lifelong hobbies, and develop service-oriented leadership skills that support their community.

The majority of families in the Greater Los Angeles Area Council (60%) live at- or below-the federal poverty level and struggle to meet their most basic needs. For many of our inner-city youth, a visit to Camp Trask is their very first exposure and immersive experience with nature. This transformative experience broadens their horizons and empowers youth to explore new territories and take on new challenges.

Located only minutes from the hustle and bustle of the city in the Monrovia foothills, Camp Trask offers a rustic experience and opportunities for youth to earn merit badges, complete rank advancement requirements, and build new skills. A brief drive up a meandering road and visitors are suddenly in a calming wilderness setting. The silence in camp is broken only by the sound of the year-round stream which flows through camp. Trask offers year-round camping, Merit Badge weekends, Cub and Webelos Day and Resident Camp, and several Trail to Eagle sessions. Campers enjoy the Nature Center, swimming pool, Fort Rotary, outdoor amphitheater, and flushing toilets and hot showers.

Camp Trask's Nature Center is 1,000+ square foot outdoor classroom with 360-degrees of visibility, which takes advantage of the surrounding natural beauty, and provides a unique perspective to view local fauna and flora. Built-in terrariums and the classroom's open floor plan will accommodate a broad range of hands-on programs, including: archaeology, bird study, basketry, energy, environmental science, fish and wildlife, forestry, gardening, geology, insect study, mammal study, nature, plant science, reptile and amphibian study, sustainability, and weather.

In addition to Scouts and other youth groups, the camp is available to and widely utilized by local community groups, including Soledad Enrichment Action, an anti-gang intervention organization and charter school for at-risk, inner-city youth. In total, Camp Trask annually serves over 3,600 youth annually, the majority of whom come from low-income families from disadvantaged communities. Over 5,000 individuals visit Camp Trask each year, not including hundreds of local hikers who would benefit from clean water access.

### **Water System Improvement and Enhancement Project Overview**

The Greater Los Angeles Area Council, Boy Scouts of America provides water services to the Camp Trask area including the common areas, camp sites, camp offices, commissary, kitchen, swimming pool and fire suppression. GLAAC is committed to ensuring a reliable water supply to meet water demands for camp participants and staff. There is one water source for the camp, which includes the Sawpit Creek (Creek). Most of the ground water diverted from the Creek contains moderate levels of turbidity and must meet Title 22 of the California Code of Regulations for log removal of viruses, Giardia lamblia cysts and Cryptosporidium through filtration. The intake system draws water from the creek through a suction pipeline and delivers

the water to a pre-treatment system, which consists of a strainer, a 2-cell cartridge filter, a sand filter and a diatomaceous earth filter. After pre-treatment the water flows to the slow sand filter. Subsequent to treatment the water flows to a clear well and is disinfected with a solution of sodium hypochlorite. Water is conveyed from the clear well utilizing one duty pump up to an existing 25,000-gallon steel reservoir. Water distribution from the pump station to the reservoir is routed through the Camp pipeline network which consists of a primary transmission main that is 4- inches in diameter. Camp demands are met through service connections at key points along this main alignment. In addition, the distribution system must also provide fire flow storage and conveyance.

The ultimate water system improvements are envisioned to remove the existing water treatment plant inclusive of the pre-treatment components and the sand filtration system. These treatment systems will be replaced with a package water treatment plant that meets the log removal requirements for viruses, Giardia lamblia cysts and Cryptosporidium per the Compliance Order no. 04-22-17R- 001. The intake for the treatment plant will be relocated to downstream of the Creek crossing at the main access road bridge. Water collected here will tie into an existing water collection pipeline that will extend to a location adjacent to the existing sand filtration unit. The new water treatment plant will be positioned in this location and its configuration will minimize construction costs and place the entire water treatment system in a location more easily accessible by Camp operators and DDW personnel. All treatment components will be supported on a structural pad and enclosed in a new structure to protect it from the elements.

The existing pumping system and clear well will be equipped with an additional pumping unit to establish redundancy and reliability. The existing sand filtration structure will also be reconfigured with a cover and structural modifications to ensure a plug flow regime. The chlorine dosing system will be adjusted to direct chlorine to the sand filtration structure to provide additional contact time to inactivate viruses, Giardia lamblia cysts and Cryptosporidium. Power to the support operations of the new treatment plant and the additional pumping unit that is located in the clear well will be conceptualized. This effort will determine if the existing power supply is of adequate capacity to support the improvements associated with pumping and treatment along with existing power demands of the treatment and production facilities.

Lastly, a new reservoir with an approximately 100,000-gallon capacity will be positioned in the same location as the existing 25,000-gallon tank. The new reservoir will be supported with a new concrete foundation. Additionally, upwards of 6 new fire hydrants will be conceptualized to tie into the existing 4-inch distribution main and extend to remote reaches of the upper camp sites to further enhance fire suppression capabilities throughout the site.

The end system improvements will meet the DDW requirements for treatment and provide fire suppression storage that will greatly benefit firefighting operations in this high-risk fire area.

### **Budget**

After a competitive bid process involving four reputable firms (DRP Engineering, CivilTec Engineering, Stetson Engineers, and SA Associates), the Greater Los Angeles Area Council, BSA selected SA Associates, as the most response, to provide engineering services to determine

the various needs of the project. Specifically, the funding request will allow the following to happen:

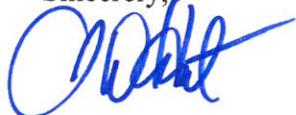
- Concept Design that can be reviewed by GLAAC, BSA and Division of Drinking Water to ensure concepts are accurate before design is initiated.
- 30-Percent Design and Technical Specifications to be completed, signed and sealed for GLAAC, BSA's Proposition 68 application
- Consultant will obtain accurate pricing for the equipment (package water treatment plant, storage tanks, steel piping, fire hydrants, pumps, fencing, etc.).
- Consultant will provide accurate Construction Cost Estimate for Proposition 68 application funding request
- DDW to approve the 30-Percent Design while Proposition 68 application is being submitted
- Permitting to be completed while Proposition 68 application is being submitted
- If GLAAC, BSA is interested, initiate the bidding process with Contractors
- GLAAC, BSA could conduct field walks with potential Contractors
- Bidding and Construction Management Services with the selected Consultant would be included in the Prop 68 application.

<b>BUDGET</b>	<b>Amount</b>
Concept Report	\$20,000
30% Design	\$65,000
Technical Specifications	\$9,000
<b>Subtotal</b>	<b>\$94,000</b>
Contingency @ 10%	\$9,400
Project Administration @ 5%	\$4,700
Indirect Costs @ 5%	\$4,700
<b>TOTAL</b>	<b>\$112,800</b>

Please see the enclosed engineering proposal from SA Associates for further details regarding scope of project, timeline and budget details.

Thank you for considering this request. If you have any questions, please do not hesitate to contact me at (213) 413-4400 ext. 301 or [jeff.hunt@scouting.org](mailto:jeff.hunt@scouting.org) , or Kelli Nakayama, Director of Strategic Initiatives at (213) 361-9466 or [kelli.nakayama@scouting.org](mailto:kelli.nakayama@scouting.org).

Sincerely,



Jeff Hunt  
Scout Executive/CEO

Enclosures



BOY SCOUTS OF AMERICA® GREATER LOS ANGELES AREA COUNCIL

**PROPOSAL FOR  
TRASK SCOUT RESERVATION WATER SYSTEM REHABILITATION  
& ENHANCEMENT PROJECT**



**DECEMBER 21, 2018**



DELIVERING VALUE ... COMMITTED TO EXCELLENCE



December 21, 2018

Matt Bear  
Director of Support Services  
Boy Scouts of America  
Greater Los Angeles Area Council  
2333 Scout Way  
Los Angeles, CA 90026

Subject: Proposal for Trask Scout Reservation Water System Rehabilitation & Enhancement Project

Dear Mr. Bear:

In accordance with your Request for Proposal, we are pleased to submit our proposal for the Trask Scout Reservation Water System Rehabilitation and Enhancement Project.

SA Associates was established in May, 1989, and is a principal-owned engineering firm offering complete services in the civil engineering field. Our services cover a broad spectrum of engineering from investigation and feasibility reports to design, construction administration, and construction observation. We provide complete water engineering services for municipalities, public and private water agencies, sanitary districts, and flood control districts. The size of our firm allows us to provide personalized service to our clients.

SA Associates has extensive experience in design and construction of water and wastewater facilities. For the city of Monterey Park, we provided Construction Oversight Services for the design and construction of the Centralized Groundwater Treatment System (CGTS) at the Delta Plant in Rosemead. The work included site development, site utilities, equipment procurement and installation, permitting, and commissioning and startup of a new treatment system to replace the existing individual wellhead treatment systems. The City was awarded 2015 Prop 84 Integrated Regional Water Management grant funds to implement the Project. SA Associates is also assisting the City for permitting of the CGTS through DDW.

Another recent project was for Crescenta Valley Water District. We prepared plans for Well No. 2 at Ordunio Reservoir which consisted of a new submersible pump and motor, onsite piping, a chorine feed system, a nitrate removal treatment, upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system, pavement and other on-site improvements. SA Associates is also provided Construction Support Services and assisted the District for permitting of the well through the State Department of Drinking Water (DDW). **This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019.**

A third project was to provide design services for the On-Site Sodium Hypochlorite Generating Systems at the Walker Well and City Yard Sites in the city of La Palma. The work involved civil, mechanical, structural, architectural, electrical, and supervisory control and data acquisition. The hypochlorite system, including the chemical tank, was located inside the existing well building. The work included design of a new sand separator at the City Yard site and relocation of an existing sand separator at the Walker Well Site. We also provided construction management and inspection services for this project. The project was categorically exempt based on Initial Environmental Study (EIS). SA Associates also provided construction management and inspection services for this project. **This project was awarded the 2008 "Project of the Year" by the American Public Works Association.**

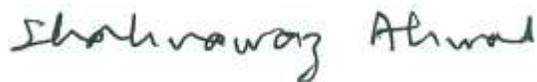
Boy Scouts of America  
Great Los Angeles Area Council  
Proposal for Trask Scout Reservation Water System Rehabilitation & Enhancement Project  
December 21, 2018  
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For your project, we have committed a team of experienced professionals to provide the leadership, management skills, and similar project experience to make your project a successful one. Our team will be led by John Robinson who will serve as Project Manager. The Principal-in-Charge will be Shahnawaz Ahmad, P.E., and point of contact for the Council / Trask Scout Reservation. In addition, we have a depth of project engineers, support staff and sub-consultants who have assisted the proposed project manager with previous water facilities projects. Mr. Robinson has over 25 years of experience in the management, design and construction on water, wastewater, and recycled water projects.

SA Associates has prepared this proposal identifying its understanding of the Council, the project, and potential solutions to key issues. If selected, we are committed to complete the project successfully, within budget, and on schedule.

Thank you for the opportunity and hope our proposal meets your interest and approval. Should you have any questions or require any further information, please do not hesitate to contact the undersigned, the authorized person to negotiate, contractually obligate, and provide any clarification on behalf of the firm.

Very truly yours,



Shahnawaz Ahmad, P.E.  
President  
Tel: 626.821.3456  
E-Mail: [sahmad@saassociates.net](mailto:sahmad@saassociates.net)



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OUR COST PROPOSAL IS ENCLOSED IN A SEPARATE SEALED ENVELOPE



## SECTION I: PROJECT UNDERSTANDING, APPROACH, AND SCOPE OF WORK

### INTRODUCTION

It is our understanding that the Greater Los Angeles Area Council Boy Scouts of America (“Council”) is seeking to engage a professional engineering consultant to provide engineering & design services to prepare PS&E (Preliminary Design - 30% Phase) for the design-build Project of the Trask Scout Reservation-Water System Rehabilitation and Enhancement Project. The Council is also seeking the engineering consultant to provide part time Construction Management and Inspection during construction.

The San Gabriel Valley Council, Boy Scouts of America has operated Camp Trask, located at 1100 North Canyon Boulevard, Sawpit Canyon, Monrovia, CA. since the mid-1960s and is proposing water system improvements within the camp grounds because the existing one is not in compliance with the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) - Surface Water Treatment Rule. The existing water system is not properly designed to provide adequate inactivation of pathogens, therefore SWRCB requested the Boy Scouts of America on April 25, 2017 to stop potable water production and post a “Do Not Use” public notice advising visitors not to use the tap water for drinking, cooking, hand washing or bathing. We understand the Council is seeking the engineering consultant to provide corrective measurements to the system to bring it up to SWRCB’s compliance.

The campground site is located on approximately ten acres of National Forest land. The Camp has four buildings serving approximately 80 employees, a swimming pool, a fort (Fort Rotary), flush toilets and showers, a lake, rifle and archery ranges, parking, and other recreational areas with a maximum capacity for 200 campers. 99% of the use of the camp is weekend only; not full-time camping. The campground is located near a stream in Sawpit Canyon that flows year-round. The Project location is shown in **Figure 1 below**.

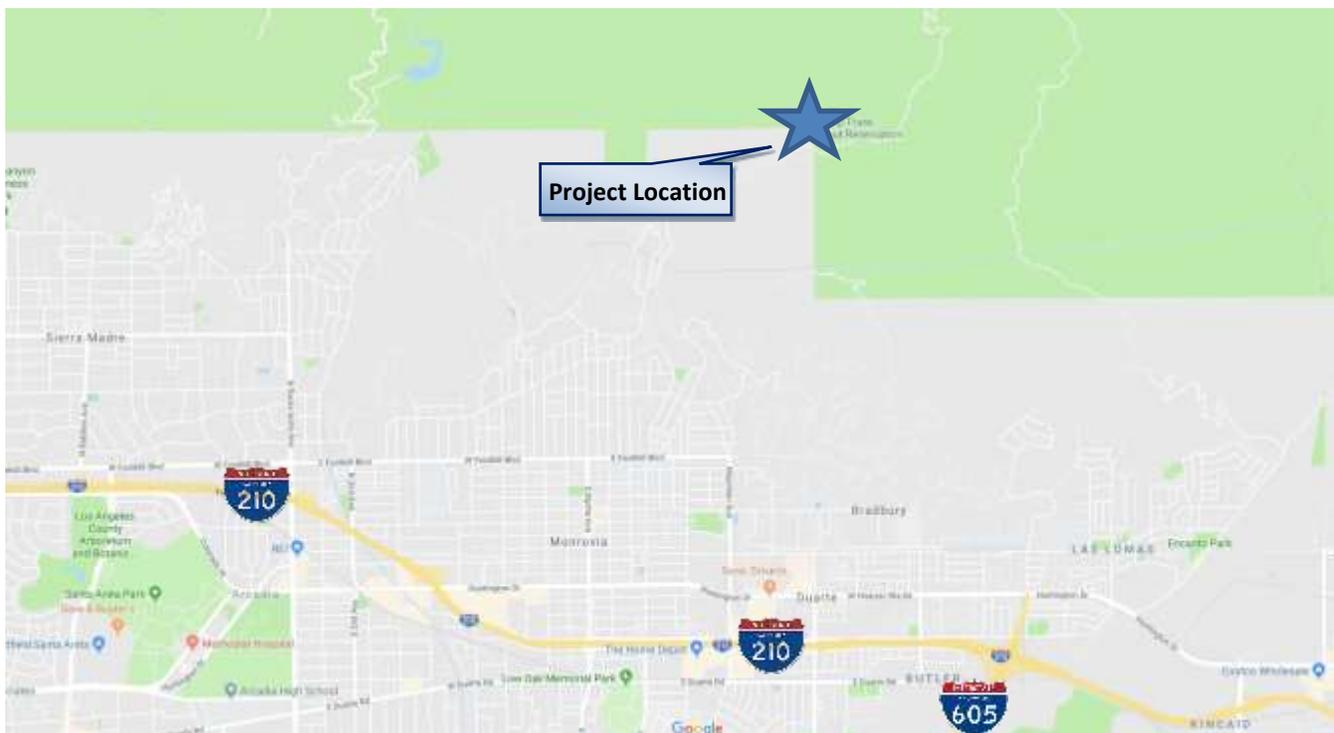


FIGURE 1: PROJECT LOCATION



## SYSTEM BACKGROUND

The only supply of water to the Trask Scout Reservation is the Sawpit Creek. Surface water pickup collection system is located 6 feet below the stream bed and gravity fed through a 4-inch waterline to a pre-treatment system consisting of a strainer, cartridge/sand/diatomaceous filters. After pre-treatment, water continues flowing through the 4-inch main by gravity for about 500 ft from the source to a treatment facility comprising a slow sand filtration with a maximum capacity of 9 gallons per minute (gpm). Treated water is then conveyed through a 6-inch pipeline into a 3,500-gallon clear well where water is disinfected with sodium hypochlorite solution. Treated and disinfected water thereafter flows through a 4-inch pipeline serving the distribution system. Excess water is stored at the end of the 4-inch pipeline on an existing 25,000-gallon steel storage tank. As previously mentioned, the existing system is not in compliance with Title 22, CCR, under Section 64652(a) and does not produce 99.9 percent (3-log) reduction of *Giardia Lamblia* (provides only 2-log reduction) and 99.99 percent (4-log) viruses reduction (system provides only 1-log removal). Moreover, disinfection in the clear well does not provide enough contact time to achieve the 1-log inactivation of *Giardia* and 3-log inactivation of viruses. The slow sand filtration however is deemed to be capable of achieving 99 percent (2-log) removal of *Cryptosporidium* which is in compliance. **Exhibit A** depicts on Page 6 the existing water system at the Trask Scout Reservation.

## DESIGN

We understand the Council preference is to have a skid mounted self-contained package surface water treatment system housed in a heavy duty shed to avoid vandalism, increase security, and protect the system from weather. The new treatment system shall also treat surface water to be in compliance with Title 22, CCR, under section 64652(a) and to levels accepted for DDW's approval.

A detailed description of the major task categories for the scope of work are stated further in this proposal. Below is a summary of our understanding of the scope of services:

- New intake pump, if existing pump is near its life span or does not have the capacity
- Package treatment system
- Housing (shed) and concrete slab for new package treatment system
- Pipe works as needed to tie into existing system – clear well / distribution / storage
- Additional booster pump in the wet-well room to provide redundancy
- Interior / exterior lighting for the new treatment's housing
- PLC (Controls) and cables to communicate between the treatment facility, pumps, clear-well, storage tank, meters, etc.
- Electrical works to wire treatment components
- Emergency generator
- Removal and hauling of fallen tree over existing water transmission line
- New 100,000-gallon steel bolted tank along with foundation pad and piping works as needed to tie into existing system
- Chain link fence around new tank
- Grading around treatment housing and steel tank
- Installation of six (6) new fire hydrants with shut-off valves
- Removal and hauling of existing pre-treatment / treatment / conflicting piping / storage tank / others.
- Lab work coordination with contractor and necessary consulting time for start-up and submittal / approval with DDW.



**Exhibit B** on Page 7 shows the potential location of the proposed package water treatment system at the Trask Scout Reservation. **Exhibit C** on Page 8 depicts a flow diagram for the existing and proposed systems showing the improvements needed.

Additionally, it is our understanding that the Council wants the consulting engineer to provide along with this proposal, a complete budget to procure and construct the proposed water system improvements and appurtenances that meets DDW standards and requirements for the purpose of securing funding for the Project from the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC).

It is also our understanding that the existing 4-inch water main from the clear well to the storage tank, used as a distribution line, is in compliance with standard DDW separations for sewer and other parallel facilities, and is in good operating condition; therefore, no further pipe improvements are needed and this water main will not be part of the scope of work. Furthermore, existing fire hydrants, valves, meters, service laterals, and appurtenances along the existing 4-inch water main are considered in good operating condition as well and replacement is not envisioned as part of the scope of work.

If any existing water main needs to be put out of service or abandoned, it will be done only after the new water mains are installed, inspected, and tested such as to keep fire and services available during construction. All proposed water mains shall conform to City of Monrovia Standards and permits as appropriate.

The design portion will generally consist of plans, profiles, and detail sheets of the proposed facilities. Water and features such as tie-in connections to existing facilities, valves, and other information will be included in the contract documents. A constructability review will be provided to ensure all of the foreseeable construction tasks are included in the technical specifications, measurement and payment, and ultimately in the bid schedule. The expected method of construction will be carefully analyzed for these situations and shall be included in the plans and specifications.

Based on our past experience with water improvement projects, it is understood that paying attention to detail during the design phase, and ensuring to illustrate and specify what construction is required, reduces unnecessary burden and cost for all of the parties involved during the construction phase.

## CONSTRUCTION

In terms of construction, the work will ultimately consist of, but not be limited to:

- Removal of pre-treatment system
- Protect in place existing 4-inch transmission pipe from source to the treatment system
- Abandonment and/or removal of existing treatment facilities, piping, valves, and accessories/appurtenances
- Excavation/backfill, concrete work, installation of new treatment system
- Installation of new booster pump and associated piping work in the pump house
- Installation of electrical works serving new improvements and emergency generator
- Installation of 6 new fire hydrants (location to be determined)
- Connection of new systems to the existing one
- Removal of existing storage tank and installation on new steel bolted tank along with accessories and other appurtenances.

All work is to be in compliance with DDW, City of Monrovia' Standards and the Project Specifications.



We have worked with DDW on numerous Projects. Our experience shows that it works best to start early and include DDW in all stages of planning and development of the design and implementation to obtain the permit amendment. We have experience with the process and have worked closely with Shu-Fang Peng, Kun Cheng, Cliff Cheng, others from the DDW-District 22, Los Angeles Region, therefore we are confident our solution will meet their requirements.

SA Associates will provide accurate construction ready bidding documents such as plans, specifications, cost estimates, as well as engineering support, project and construction management for this project, ensuring value engineering, efficiency, and project reliability during the whole design development.

Our team comes into this project with a positive advantage of having worked extensively with both contractors and clients on a broad spectrum of projects, a major component of which has been in the water treatment sector.

### SITE VISIT/PRELIMINARY OBSERVATIONS

Photos were taken of the site on November 16, 2018, during the Pre-Proposal Meeting for record purposes and for preliminary evaluation of the design constraints. During the visit, we walked along the site to evaluate existing conditions such as the pretreatment filters, slow sand filters, pumps, clear-well, tank, and flag conflicting and/or not in compliance items with DDW standards. **Photos 1** through **6** provide a representative sample of photos taken during our site visit:



PHOTO 1: EXISTING PRE-TREATMENT SYSTEM



PHOTO 2: FALLEN TREE ON WATER MAIN AT INTAKE CONNECTION POINT



PHOTO 3: EXISTING SLOW SAND FILTRATION



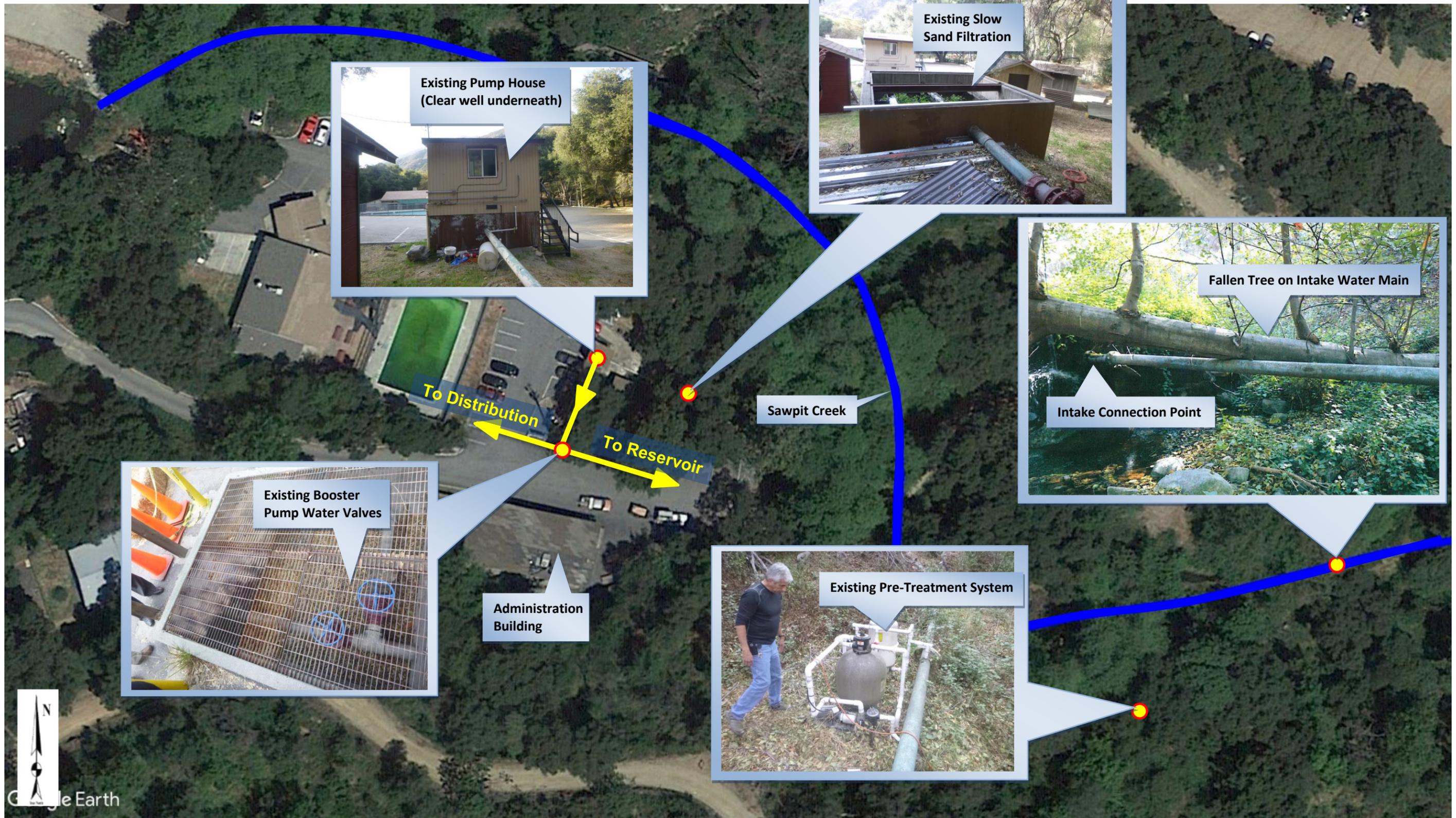
PHOTO 4: EXISTING BOOSTER PUMP



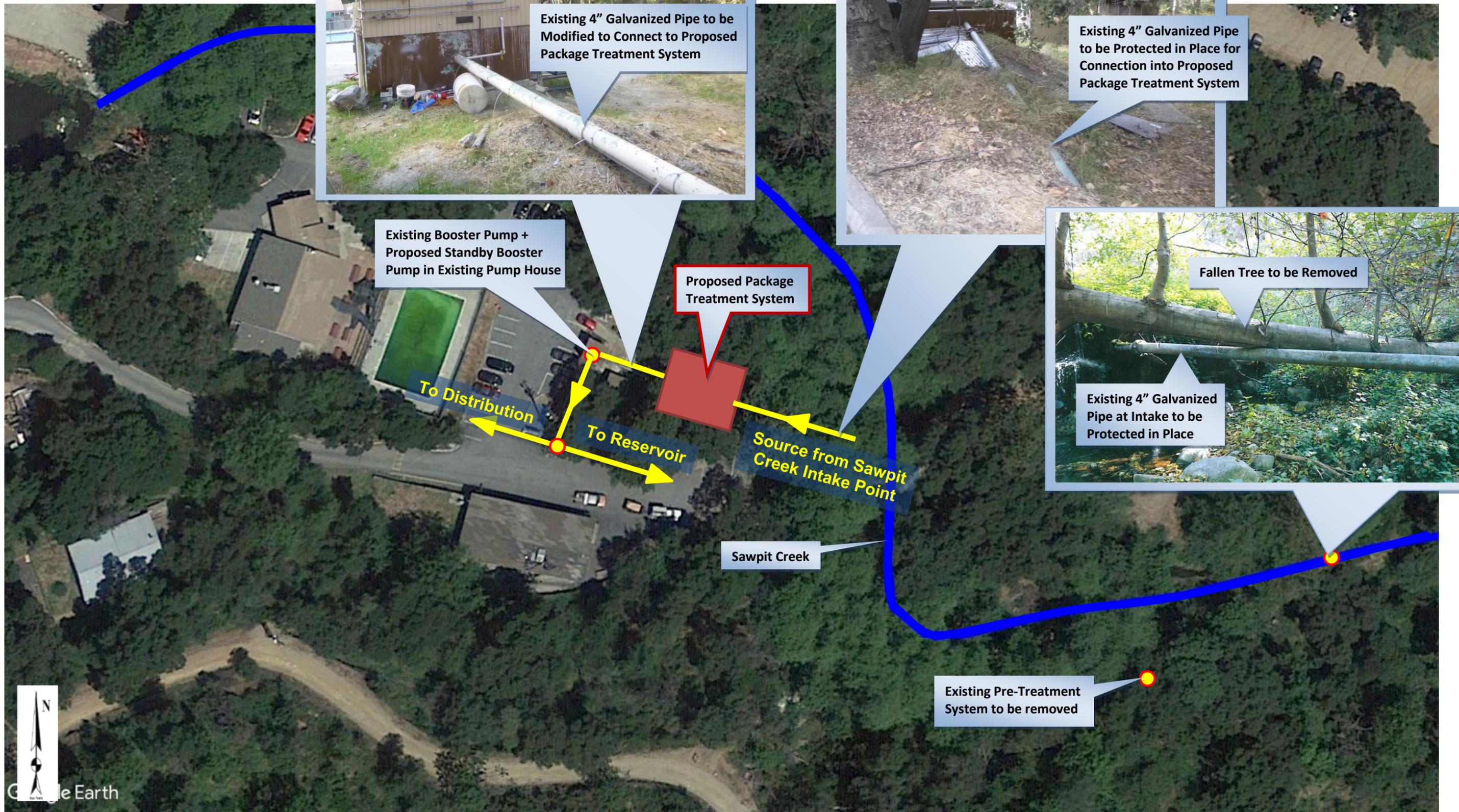
**PHOTO 5: EXISTING RESERVIORS**



**PHOTO 6: EXISTING PUMP HOUSE**

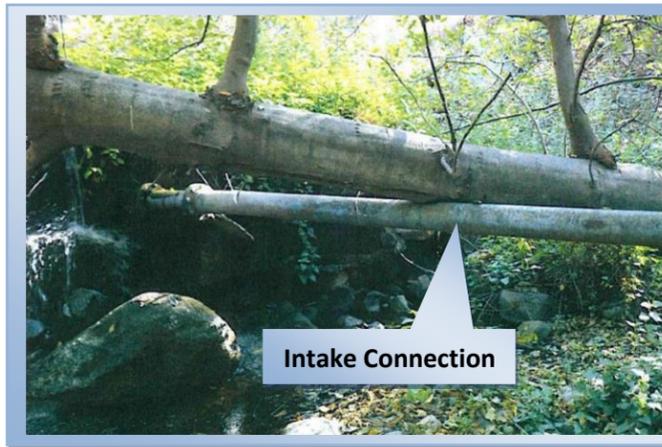
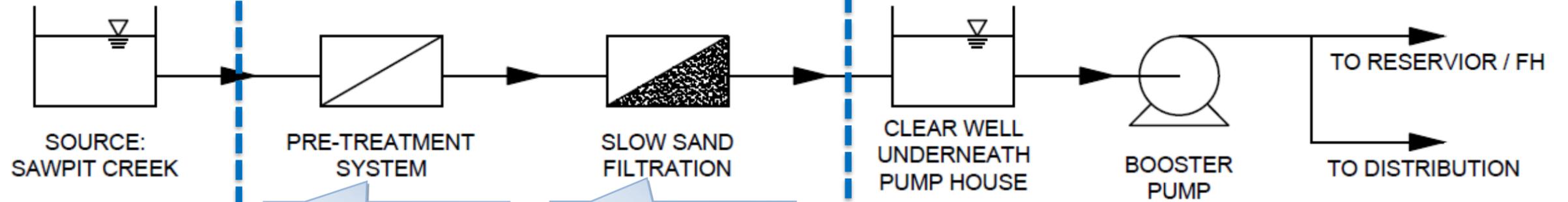


**Exhibit A – Existing Conditions**  
**Trask Scout Reservation Water System Improvement & Enhancement Project**

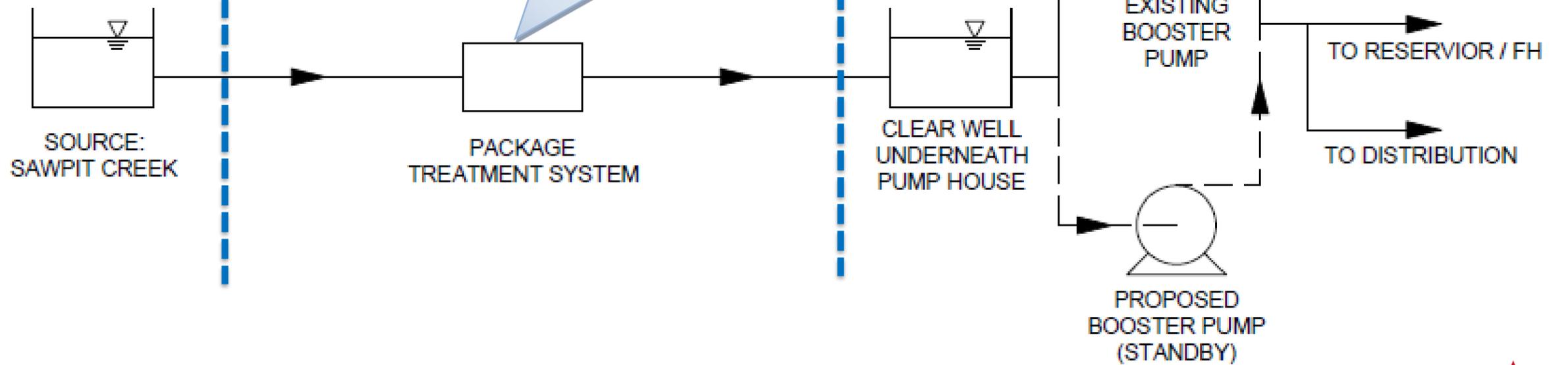


**Exhibit B – Proposed Improvements**  
**Trask Scout Reservation Water System Improvement & Enhancement Project**

**EXISTING**



**PROPOSED**





## EXISTING UTILITIES

During our visit of the site, we noted some of the utilities present, including sewer septic systems, water, storm drain, some electrical, and telephone lines. With regard to utilities in the Project site, we understand that the Council may have and can provide some current water, electric, sewer and storm drain information (as available), as well as any as-builts that may reflect other utilities present in the sites. However, we will conduct further utility research and obtain outside agency information to complete the utility investigation process.

## KEY ISSUES/CONSTRAINTS/PROBLEMS TO BE ANTICIPATED DURING THE CONSTRUCTION

Based on our review of the RFP, site visit, and our general understanding of the Project requirements, we believe the following to be key Project issues that will require creativity on the design team part in order to accomplish the Project within the schedule and budget:

- Coordination with DDW

During the course of the design, we are prepared to coordinate the planning and managing of the Project with the Department of Drinking Water (DDW) as necessary to facilitate submittals and obtaining an Amended Water Supply Permit for the proposed enhancement and improvement Projects.

- Safety of Employee and Visitors

It is of importance to accommodate for construction during days of low campground activities to avoid labor or recreational disruptions and/or potential safety issues to camp and construction personnel. This can be covered in part on the plans, under the General Notes and in the Specifications such as to emphasize public safety and avoid the risk of change orders.

- Coordination with Lab Works and Treatment System Provider

SA Associates will coordinate the planning and construction managing of the Water Treatment System Rehabilitation and Enhancement with the treatment provider to ensure maximum efficient of all components. We will also coordinate with the treatment system provider and review lab work under Contractor's responsibility to ensure that the required degree of contaminant/pathogen removal, and overall effluent is in compliance with DDW, local, state, and federal regulations.

- Construction Phasing

The construction of the new treatment facilities and improvements will be studied carefully to determine the optimal construction sequences and phasing to ensure maximum efficiency to stay within the allocated time and budget. The proposed phasing can be included in the Summary of Work and Sequence of Construction portion of the Specifications.

Based on the key issues stated above, it is important that the design team reflect well on the values of the Council. With this in mind, SA Associates is committed to providing quality staff members who are not only capable of satisfying the Project tasks but who also have a track record of similar Projects and working well with all impacted agencies and local residents.



## TECHINCAL APPROACH

As your Consultant, SA Associates will provide quality resources to manage and complete the Project. We will work within the framework of the Project cocuments, Council and Trask Scout Reservation staff, and the Contractor to execute our tasks in a timely manner. We consider ourselves to be available not as contract representatives, but as an extension of your staff. For our Projects, we believe in developing and maintaining clear lines of communication between all Project parties, being proactive in identifying construction issues, and working diligently toward resolution of issues. Based on this approach, you will be assured of a complete Project that complies with your Project designs and is in accordance with the standards of the industry.

### Technical Approach

SA Associates' overall approach for your Project is to provide hands on engineering in order to create robust contract documents and reduce the risk for change orders. This Project has multiple features that will require proper construction sequencing to avoid delays in the construction.

With regard to streamlining the design and construction phase of the Project, the key technical approach to be used by the design/ construction team is as follows:

- Expedite coordination among all affected parties including utility information requests
- Evaluate design alternatives immediately
- Sequence Project tasks to occur simultaneously where possible
- Coordinate thoroughly throughout the entire Project & appurtenances
- Sequence meetings to occur at favorable days/times (i.e., meetings with Council / Trask Reservation staff and other meetings with impacted agencies/personnel may occur simultaneously or subsequently)
- Expedite submittal review / approval
- Enforce Safety / Security of Jobsite
- Coordinate demolition / removal of existing facilities and installation / construction of new improvements.
- Enforce Contract documents and other applicable regulations during construction.

## SCOPE OF WORK

We will provide design services as required under your scope of services, which will serve as the basis for this Project and will not be reiterated here. We will execute each of these tasks through our proposed Scope of Work that includes the following major categories:

- Task I – Engineering Support for the Application under Proposition 68
  - Concept Report
  - Construction Cost Estimate
- Task II – Engineering Design Services
  - 30% Design Plans
  - Technical Specifications
  - Bid Assistance
- Task III – Part Time Construction Management - Inspection



A detailed description of the major task categories is as follows:

### **Task I – Engineering Support for the Application under Proposition 68**

#### **Concept Report**

1. Conduct a Kickoff Meeting with Council / Trask Scout Reservation staff in order to introduce key staff members, learn the organization structure of the Council's Project team and discuss the Project objectives. A meeting agenda will be prepared for the Kickoff Meeting and Meeting Minutes will be submitted to the City within five (5) working days, and before distribution.
2. Conduct additional field visits to better familiarize ourselves with the Project's existing conditions and visualize location of proposed improvements to avoid any potential conflicts.
3. Analyze the existing as-built, atlas, and topographic data pertinent to the Project. We will coordinate with Council staff to obtain all available record drawings within the Project limits.
4. Prepare a concept report which will record the design concepts for major aspects of the Project and clearly state its complete scope of work. The report will identify data reviewed, design standards, concept development, constraints, buildability, planning, regulatory compliance, site context, definition of water treatment elements, procurement options, etc.

#### **Construction Cost Estimate**

1. Develop and submit the Engineer's Quantity and Cost Estimates for the Project. The cost estimate will serve as support Project funding request and become the first of the Project phase "control estimates" against which all actual costs and resources will be monitored for variation to budget. Submittals will be in PDF format. Hard copies will also be provided.

### **Task II – Engineering Design Services**

#### **30% Design Plans**

1. Conduct a Kickoff Meeting with Council / Trask Scout Reservation staff in order to follow definition of the base elements for the Project and other Project planning activities. A meeting agenda will be prepared for the Kickoff Meeting and Meeting Minutes will be submitted to the City within five (5) working days, and before distribution.
2. Conduct utility research and coordinate with utility companies to obtain as-built records and/or atlas maps in order to identify all utilities within the Project limits. This information will be clearly delineated on the Project base map.
3. Conduct a "limited" topographic survey to obtain necessary design topography for proposed improvements. The basis of the horizontal and vertical control shall be North American Datum of 1983 (NAD 83) and North American Vertical Datum of 1988 (NAVD 88), respectively. All field topography shall be collected electronically using modern survey equipment for data processing and preparation of a digital AutoCAD file.
4. Pothole existing utilities to determine horizontal and vertical location. Assume eight (8) potholes.
5. Plans will be submitted on full-size (24x36) regular bond, edge-bound paper. SA Associates will prepare construction plans in one phase only, 30% design-preliminary plans, for review and



comment. Development of each design stage will address and incorporate all Council, DDW, and utility agency comments and concerns. Submittals will be in PDF and DWG format. Hard copies, including wet signed and sealed mylar plans, will also be provided. At this point, we anticipate the Plans to consist of the following sheets:

**Design of Main Street Sewer Replacement Project**

Sheet Title	No. of Sheets
Title Sheet	1
Notes, Legend, Vicinity Map	1
Site Preparation Plan (Ex. Conditions, demolishing, removals, etc.)	1
Site Plan and Piping Layout	1
Treatment System & Housing Plan / Sections/ Grading	2
Mechanical Plans (Booster Pumps / Emergency Generator)	1
Steel Tank / Details /Grading	1
Details (Piping / Fire Hydrants / Foundations)	2
Electrical symbols list and abbreviations	1
Electrical Diagram, PLC, Instrumentation	2
Electrical site plan / power / lighting	1
Treatment Process Diagram from Provider	1
<b>Total Sheets</b>	<b>15</b>

6. Meet with Council / Trask Scout Reservation staff to review the design submittal and to obtain additional input.
7. Submit Plans to DDW and allocate consulting time to coordinate approval.

Technical Specifications

1. Prepare and submit specifications in accordance to the “Standard Specifications for Public Works Construction, ‘Green Book’” (Latest Edition) and to the City of Monrovia’s Standard Plans and Specifications. We will ensure that specifications clearly convey technical information for quality acceptance, performance characteristics, and permissible construction methods in line with the Council’s expectations, latest engineering practices, and local, state, federal regulations. Specifications will be submitted at 30% and Final stages. The final phase will incorporate all comments from agencies / Council / Trask Scout. Submittals will be in PDF format. Wet signed and sealed hard copies will also be provided. SA Associates will prepare bid and contract documents that easily convey to prospective contractors all bidding requirements and contractual obligations expected of the successful bidder.
2. Meet with Council / Trask Scout Reservation staff to review the design submittals and to obtain additional input.

*Note: Geotechnical investigation and traffic control plans are not included in our Scope of Work, unless otherwise directed/requested by the City.*



### Bid Assistance

1. Attend the pre-bid meeting.
2. Assist the Council in providing clarification to contract documents and responses to Requests for Information/Requests for Clarification (RFIs/RFCs). We will prepare supplementary sketches to resolve field construction issues and to interpret the Plans and Specifications. We will record all questions and responses in writing and deliver the resulting written document to the Council. Assume five (5) RFIs/RFCs.
3. Assist the City in the preparation of bid addenda as necessary to address RFIs/RFCs.
4. Review bid proposals and provide recommendations to the Council for award of contract.

### **Task III - Part Time Construction Management – Inspection**

Construction Management and Inspection will be provided on a part time basis. The Construction Manager and/or Inspector are/is expected to visit the site at least twice a week. Labor time will vary depending on construction needs, however time could range between 2 to 5 hours per visit.

1. We will schedule and lead the Pre-Construction Meeting. We will prepare an agenda and meeting minutes and distribute to all attendees. It is important at this point in time, to address many of the procedural issues for the Project. These include lines of communication, procedures for submitting questions, correspondence, shop drawings, requests for information, payment requests, Project schedule updates, and other issues. Issues specific to the Project will be defined and resolved.
2. Review Contractor's submittals and respond in timely manner to keep the Project on schedule. Receive shop drawings, products data, material samples, test results, warranties, maintenance agreement, Project photograph and other construction documents from the Contractor/Council, distribute them to the technical specialist familiar with the progress and quality of the work, reject or approve work to ensure conformance with contract documents. Submittals will be distributed to the Council for review and final comments prior to being returned to the Contractor for action. Assume 10 shop drawing submittals and resubmittals.
3. Conduct biweekly construction progress meetings with the Contractor, the Council / Trask Scout Reservation staff, and other involved parties to discuss the progress of the Project, review the Project schedule, two-weeks look ahead, approval of submittals, potential delays, problems that may affect Project budget and/or schedule. Prepare and distribute meeting agendas and list of attendees in consultation with the Council / Trask Scout's Project Manager and prepare meeting minutes. We will also resolve all Project issues and concerns at these meetings and follow up with field meetings, if needed, to expedite closure to issues. Assume 7 meetings.
4. Provide partial inspection / field observation during construction twice a week. We will conduct site observations of the general progress of the work to determine if the work is proceeding in accordance with the contract documents.
5. Coordinate any certified technical inspections, field testing, or laboratory testing (provided by others) required for the Project. Contractor to conduct lab work to ensure compliance with DDW requirements.



6. Review the Contractor's "Best Management Practices" plan prior to beginning of construction. Monitor the Contractor's implementation to prevent storm water pollution from related activities in compliance with the National Pollutant Discharge Elimination System (NPDES).
7. Review Operation and Maintenance Manual to be prepared by others.
8. Establish and update punch-list
9. Provide the Council with a Project final report, make recommendations regarding final Project approval and acceptance, as well as Contractor's final progress payment request. The Project final report will include: financial summary of the construction contracts, change orders, engineering services, Project management services, construction summary, schedule review, and summary of final acceptance.
10. Provide As-Built Drawing Set reflecting the redline sets of the Contractor and Inspector following completion of construction. Ensure these drawings demonstrate accurately how the Contractor built the Project and what changes were made during the construction process.



## SECTION II: CONSTRUCTION COST ESTIMATE - BUDGET

Unit costs for this preliminary construction estimate are based on a combination of sources that include vendor quotes, review of actual final costs and project labor records for similar facilities constructed in recent years. Supplemental costs were obtained from the RS Means latest edition. Estimate assumes that all improvements will be constructed as a single project during one construction season.

The objective of this construction budget is for the Consultant-Proposer to come up with cost to do the work for the purpose of securing funding from the San Gabriel and Lower Los Angeles Rivers and Mountains conservancy ("RMC").

**Table 3-1** on next page depicts construction budget. Cost proposal for Design and Project / Construction Management is enclosed in a separate sealed envelope.



**TABLE 3-1: CONSTRUCTION COST ESTIMATE**

Item	Description	Qty	Unit	Unit Price	Total Price
1	Mobilization and Demobilization (5%)	1	LS	\$30,000	\$30,000
2	Site Preparation - Clear and Grubbing	1	LS	\$6,000	\$6,000
3	Removal of Ex. Slow Sand Filter System including pipes/ valves, etc.	1	LS	\$10,300	\$10,300
4	Removal of Ex. Pre-treatment Facility	1	LS	\$2,500	\$2,500
5	Removal of Ex. 25,000 gal Steel Tank, associated piping, tie-ins, concrete slab, etc.	1	LS	\$11,200	\$11,200
6	Potholing Ex. Utilities (assume 8)	1	LS	\$10,800	\$10,800
7	Package pre-treatment and treatment system (skid mounted) metering pumps, air compressor, equipment delivery, unloading, underground piping, and complete installation	1	LS	\$220,000	\$220,000
8	Piping works from Pump to new package treatment system, including valves and fittings	1	LS	\$12,600	\$12,600
9	Housing for package treatment system - Outdoor Storage Shed (11 ft x 13. 5 ft) including delivery and installation	1	LS	\$6,000	\$6,000
10	Install new Analytical Total Chlorine Analyzer and Sampling line	1	LS	\$13,500	\$13,500
11	Reinforced Concrete slab - assumes 12 x15 slab, 8-inch thick	1	LS	\$1,500	\$1,500
12	Earthworks (Grading) around package treatment system	1	LS	\$1,200	\$1,200
13	Emergency Generator system with aluminum enclosure including concrete slab. Assume next to the treatment building.	1	LS	\$12,000	\$12,000
14	Additional booster pump ( 2 HP) in the wet well - assumes existing booster pump and wet well in good conditions	1	LS	\$4,000	\$4,000
15	Piping works from package treatment system to wet well & new booter pump, and connection to existing water system	1	LS	\$15,000	\$15,000
16	Install 6 new Fire Hydrants with shut off valves assembly and tie-in to existing 4-inch steel main - Includes excavation, cut in tee, valves, lateral, fire hydrant, backfill, surface restoration. Assumes Ex. Fire Hydrants are in good condition and are to be protectec in place.	6	EA	\$10,600	\$63,600
17	Install new 100,000 gallon steel bolted tank - assume 20 ft radius (40 ft diamt) x 11 ft Height	1	LS	\$105,000	\$105,000
18	Earthworks (Grading) around steel bolted tank	1	LS	\$8,400	\$8,400
19	Reinforced concrete slab for new steel bolted tank, including excavation,	1	LS	\$18,900	\$18,900
20	Altitude Valve, overflow, Meter, fittings, other piping works for steel bolted tank, tie-in to existing 4-inch pipe (ex. System)	1	LS	\$16,000	\$16,000
21	Laboratory Works	1	LS	\$20,000	\$20,000
22	Erosion and Sediment Control Measures (BMPs)	1	LS	\$3,500	\$3,500
23	Demolition - Electrical (pump house / wet well, others)	1	LS	\$5,000	\$5,000
24	PLC	1	LS	\$9,000	\$9,000
25	Temporary Power and Controls	1	LS	\$2,000	\$2,000
26	Power Distribution & Lighting	1	LS	\$4,000	\$4,000
27	Conduits and Wires (Communications between tank, pumps, wet well, treatment system)	1	LS	\$15,000	\$15,000
28	Other Electrical labor and Miscellaneous Materials	1	LS	\$5,000	\$5,000
29	Start-Up & Testing, Manuals, and Traning	1	LS	\$8,000	\$8,000
<b>OPTIONAL</b>					
1	Removal of fallen tree over existing water transmission	1	LS	\$3,500	\$3,500
2	Install 6 ft chain link fence around stee bolted tank	140	LF	\$40	\$5,600
Subtotal					\$649,100
25% Contingency*					\$150,000
<b>Total Construction Cost (ROUNDUP)</b>					<b>\$799,999</b>

Items not included in the budget, are assumed in good working conditions, are to be protected in place, and not additional improvements are expected:

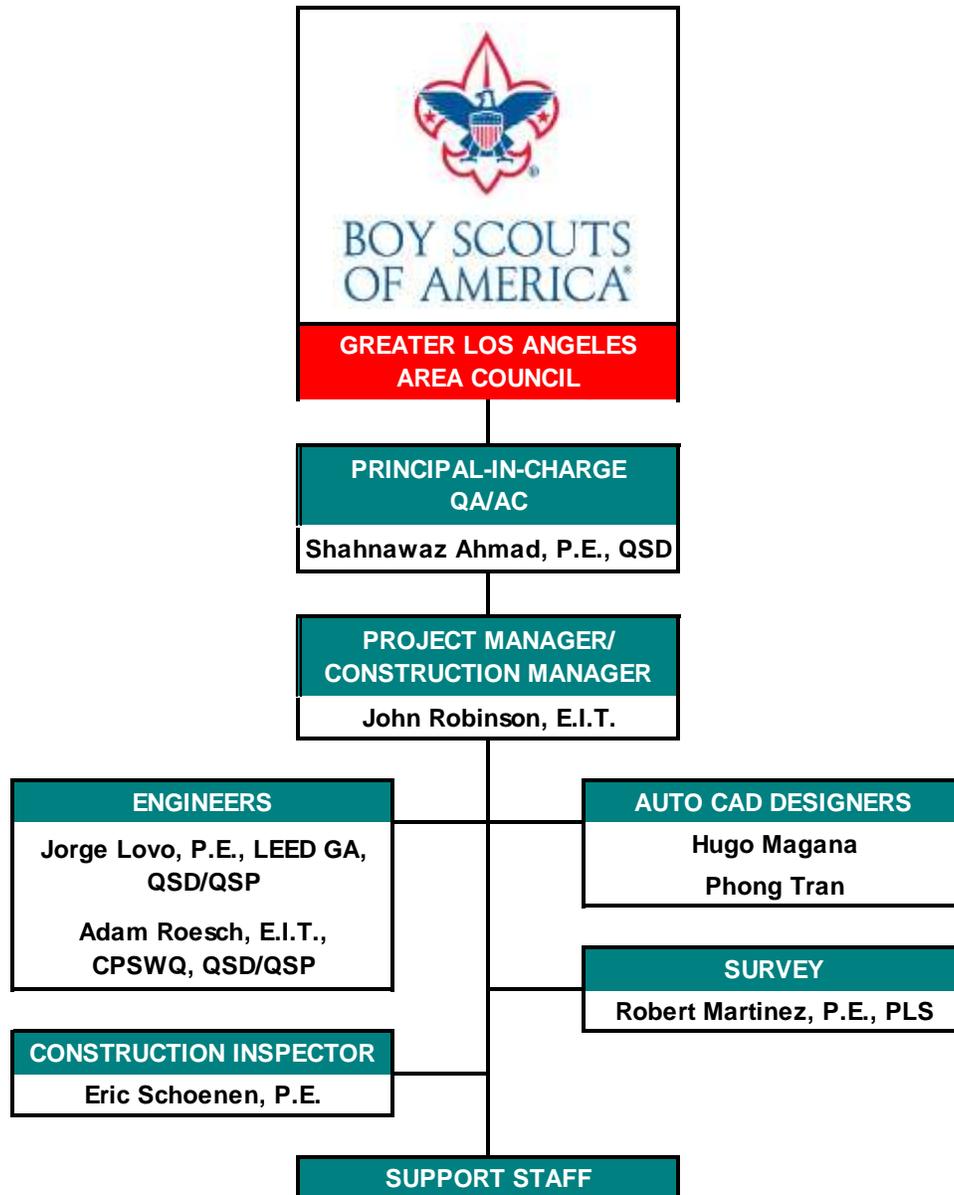
- a) Ex. Booster Pump, meters, pump valves, pressure gage, pump House & other ex. pump appurtenances
- b) Ex. chlorine tanks, metering pump, piping / fittings, spill containers
- c) Ex. 4-inch steel pipe (around 2,500 LF) from wet well to tank
- d) Ex. Fire Hydrants are assumed
- e) Ex. 4-inch Distribution line
- f) Ex. 4-inch Transmission main from ex. damn (source) to treatment however connections to the existing system are considered within the budget.

\* ROUNDUP does not include lab work or mobilization



**SECTION III: STAFFING CHART**

**ORGANIZATIONAL CHART**



Resumes for our Project Team Members follow in this section.

**SHAHNAWAZ AHMAD, P.E., QSD**  
**Principal-in-Charge, QA/QC**

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**OVERVIEW:**

Mr. Ahmad serves as principal-in-charge and/or project manager for projects related to water and sewer system master planning; water resources; water supply and treatment; water reuse; wastewater collection, treatment, and disposal; storm drainage; design of water and wastewater treatment plants, water pipelines, sewers, pumping stations, wells, storage reservoirs, and water reclamation systems; studies of water and wastewater treatment processes; and industrial waste problems.

**EDUCATION:**

University of Karachi, Pakistan, B.E.,  
 Civil Engineering, 1969  
 University of California, Berkeley, M.S.,  
 Sanitary Engineering, 1971

**REGISTRATION:**

Registered Civil Engineer, California  
 No. 23712

**MEMBER:**

American Academy of Environmental  
 Engineers, Diplomate  
 American Public Works Association  
 American Society of Civil Engineers  
 California Water Environment  
 Association  
 Southern California Water Utilities  
 Association  
 Water Environment Federation

**PROJECT EXPERIENCE**

**CITY OF ALHAMBRA**

- Provided engineering design and construction support services for the replacement of approximately 3,500 ft. of 4" and 14" mains in Westmont Drive from Sherwood Ave to Norwich Ave (Project). The new main will replace two failing mains which have had several failures over the past 4-5 years. The new main will supply adequate fire flow while providing both transmission and distribution functions. Approximately 100 services will be replaced.

**CITY OF BEVERLY HILLS**

- Prepared the 2005 and 2010 Urban Water Management Plans. The preparation of this report is mandated by the State of California's Urban Water Management Planning Act for every urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually.

**CENTRAL BASIN MUNICIPAL WATER DISTRICT**

- Provided engineering and design services the construction of approximately 24,600 ft. of new 8" to 20" recycled water main located in segments of Southern Avenue, Alameda St., Hildreth Ave and California Ave. to South Gate City Hall, and State St.

**CITY OF CHINO**

- Prepared plans & specifications for the Quadrant I Water Main Replacement Project which consists of 10,940 ft. of 8" PVC pipe to improve the existing water system. In addition, the project consists of the replacement of the replacement or reconnection of existing service laterals and reconnections to the existing water mains.

**CRESCENTA VALLEY WATER DISTRICT**

- Prepared plans for Well No. 2 at Ordunio Reservoir which consisted of a new submersible pump and motor, onsite piping, a chorine feed system, a nitrate removal treatment, upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system, pavement and other on-site improvements. SA Associates is also provided Construction Support Services and assisted the District for permitting of the well through the State Department of Drinking Water (DDW). **This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019.**

**KINNELOA IRRIGATION DISTRICT**

- Prepared plans & specifications for design of the East-West Tank East-West Tank Connector Pipeline consisting of 2,800 ft of 12" DIP, including connections to existing main, Design of 960 ft of 4" DIP, including connections to existing 4" steel tunnel line, Design of two (2) Los Angeles County Flood Control District (LACFCD) channel crossings. A portion of the project is located between private properties. A permit was obtained from County of Los Angeles for the channel crossing.

**CITY OF LA PALMA**

- Provided design services for the On-Site Sodium Hypochlorite Generating Systems at the Walker Well and City Yard Sites. The work involves civil, mechanical, structural, architectural, electrical, and supervisory control and data acquisition. The hypochlorite system, including the chemical tank, was located inside the existing well building. The work included the design of a new sand separator at the



City Yard site and relocation of an existing sand separator at the Walker Well Site. We have also provided construction management and inspection services for this project. The project was categorically exempt based on Initial Environmental Study (EIS). We also provided construction management and inspection services. **This project was awarded the 2008 Project of the Year by the American Public Works Association**

#### **LONG BEACH WATER DEPARTMENT**

- Prepared plans and specification for the East 27<sup>th</sup> Street and Via Passilo Cast Iron Water Main Replacement Project which consisted of the replacement of approximately 4,000 feet of 6 & 8 inch cast iron & ductile pipe. A portion of the project was located in narrow streets.

#### **CITY OF MONTEREY PARK**

- Currently preparing plans and specifications for the water mains along Atlantic Boulevard. The proposed water main is 3,768 ft. of 12" PVC C900, Class 305 pipe with tracer wire, from Hellman to Newmark Avenue.
- Provided Construction Oversight Services for the design and construction of the Centralized Groundwater Treatment System (CGTS) at the Delta Plant in Rosemead. The work included site development, site utilities, equipment procurement and installation, permitting, and commissioning and startup of a new treatment system to replace the existing individual wellhead treatment systems. The City was awarded 2015 Prop 84 Integrated Regional Water Management grant funds to implement the Project. SA Associates is also assisting the City for permitting of the CGTS through DDW.

#### **CITY OF POMONA**

- Prepared plans and specifications for District 6 Phase IV Water Main Replacement Project for approximately 7,300 feet of 10" and 12" ductile iron water mains in Bonita and Towne Avenues. This project crossed railroad tracks and required a permit from Caltrans. A buried vault was also reconfigured for water main connections.
- Water Mains – Pipeline Districts 4, 5, & 6: Provided design, construction management, and inspection services for approximately 22,400 feet of 6", 8", 10", and 12" diameter ductile iron pipelines in various locations in the City. The work also included utilities research. Construction Cost: \$2,700,000
- Prepared plans and specifications for the design of approximately 13,400 feet of 30-inch diameter steel transmission water mains. This project included crossing two railroad tracks, location of pipeline in the Caltrans right-of-way, and coordination with other parties that were in the construction process of a grade separation project along the alignment. Construction Cost: \$2,400,000.

#### **ROSE HILLS MEMORIAL PARK AND CEMETERY**

- Design of Recycled Water Retrofit Project for 600 acres of Rose Hills Memorial Park and Cemetery that included approximately 4,500 LF of 8" potable water/fire protection pipeline, 8,000 LF of 4" and 8" potable water pipeline, and modifications to the four (4) on-site wells and four (4) reservoirs. The project team coordinated with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Department of Public Health, and the Los Angeles County Fire Department. The project was funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

#### **CITY OF TORRANCE**

- Prepared plans and specifications for the I-25 Water Main Replacement Project. The project consisted of 22,540 feet of 6-inch and 8-inch diameter ductile iron pipe. Construction Cost: \$2,000,000.
- Prepared plans for approximately 16,700 feet of 6" through 12" diameter water mains on Artesia Boulevard from Hawthorne Boulevard to Western Avenue. The project included work in Caltrans right-of-way and crossing the Dominguez Channel. Permits were obtained from Caltrans and the Los Angeles County Department of Public Works. Construction Cost: \$1,500,000.

#### **WEST BASIN MUNICIPAL WATER DISTRICT**

- El Segundo Lateral Project. Prepared plans and specifications for the design of approximately 5,900 feet of PVC/reclaimed water pipelines water mains for the El Segundo Lateral in the city of El Segundo.
- Design of Brine Line for the Carson Regional Recycling Water Plant. SA Associates prepared plans and specifications for the design of approximately 27,000 feet of 14-inch brine line for the Carson Regional Recycling Water Plant. The work consists of the design of a brine disposal line extending from a new water reclamation plant to the Joint Water Pollution Control Plant operated by the Los Angeles County Sanitation Districts in the city of Carson.

#### **CITY OF WHITTIER**

- Prepared plans and specifications for the replacement of a water main in the uptown business district, along Comstock Avenue between Hadley Avenue and Wardman Avenue, for an approximate length of 2,000 ft. and for the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft.

**JORGE LOVO, P.E., LEED G.A., QSD/QSP  
Engineer**

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**OVERVIEW:**

Mr. Lovo has over 16 years of experience designing and managing a variety of water-related projects and programs ranging from water, wastewater, recycled water, and storm water facilities including conveyance, water quality & treatment, pump stations, and storage. Providing technical leadership on small to large sized projects; supporting teams winning new business; interacting with clients, agencies and other consulting firms; preparing detailed engineering calculations, CAD drawings, estimates, master planning, facilities condition assessment, construction support, preparation of plans, specifications and others documents for permitting and construction.

**EDUCATION:**

B.S. Civil Engineering  
University of Hawaii

**REGISTRATION:**

Registered Civil Engineer, California  
No. C75632  
Registered Civil Engineer, Canada  
Board of Professional Engineers

**CERTIFICATION:**

LEED Green Associates – Green Building  
Certification Institute,  
ID No. 10779963  
Construction Management, University of  
Quebec, Canada  
Professional Studies in Technique of  
Architecture, College of Old  
Montreal

Qualified SWPPP Developer (QSD)  
Qualified SWPPP Practitioner (QSP)  
Certificate No. 25596

**PROJECT EXPERIENCE:**

**CITY OF ANAHEIM**

- Prepared plans and specifications for Water Main Replacement Projects on (1) Pepper Creek Way, (2) Fern Haven Lane, and Hadrians Crescent (Project) to replace approximately 1,500 ft. of existing cast iron pipe (CIP) to polyvinyl chloride (PVC) pipe along various streets within Anaheim Hills. The pipes were installed between 1960s and 1970s and are in need of replacement due to external corrosion of the pipeline. As a result, the corrosion causes numerous main breaks rendering water loss.
- Prepared plans and specifications for an 8" PVC Water Main Replacement in Baja Dr. between Palo Alto Dr. & Pueblo Pl., and Solomon Dr. between Arno Crescent St. & Camino Pinzon, with an approximate length of 1,557 ft.

**CENTRAL BASIN MUNICIPAL WATER DISTRICT**

- Prepared plans, specifications, and cost estimates for The Recycled Water System Extension in the City of South Gate, CA. This Project consists of the construction of approximately 24,600 LF of recycled pipeline varying in diameter between 8" and 20". In addition approximately 3,400 LF of pipeline will be constructed in California Avenue north from Southern Avenue to South Gate City Hall and then to South Gate High School. Shorter segments on Tweedy Blvd. (1,900 FL) and Sequoia Dr (495 LF) are also included. The proposed Recycled Water main will be crossing the Alameda Corridor (ACTA) at Southern Ave/Alameda St. and at Alameda St./Tweedy Blvd. This new system extension will serve South Gate Park, State Street Park, South Gate Middle School, Stanford Avenue Park, American Apparel, Koos Manufacturing Co., South Gate City Hall, South Gate High School, and South East High School.

**CRESCENTA VALLEY WATER DISTRICT**

- Prepared plans for the District's Well No. 2 at Ordunio Reservoir. The project consisted of a new 150 gpm submersible pump and motor for well no.2, onsite piping, a chlorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. Funding, in part, was provided by grants, including Proposition 84 (Integrated Regional Water Management Grant Program under the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006) and Proposition 50 (The Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002) Groundwater assessment, well design, pumps layout, wellhead treatment options, & water rights allocations. **This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019.**

**CITY OF HUNTINGTON BEACH**

- Currently providing design services for the replacement of water valves in approximately 50 separate locations throughout the City's water system. Over 50% of those locations are expected to be closer to the coast, in area of low elevations where groundwater may be encountered and the other 50% will be located inland. In addition to restoring valve



operation, the City will require the construction contractor to carefully remove and bag asbestos cement pipe from each of these valve locations, to collect field data, to collect soil samples, and to store at a location identified by the City for future analysis to determine remaining useful life of ACP as part of the City's Asset Management Program. The valve sizes will be 6" to 12" and will be in-line valves with no vaults.

**CITY OF MONTEREY PARK**

- Currently preparing plans and specifications for the water and sewer mains along Atlantic Boulevard. The proposed sewer main is from W. Hellman Avenue to Garvey Avenue with a length of approximately 2,700 LF and shall be 12" Vitrified Clay pipe (VCP).

**ROSE HILLS MEMORIAL PARK**

- Designed the recycled water retrofit for 600 acres of Rose Hills Memorial Park and Cemetery. The design included approximately 4,500 LF of 8" potable water/fire to the four (4) on-site wells and four (4) reservoirs. The project team is coordinating with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Fire Department. This project is funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

**CITY OF WHITTIER**

- Designed the replacement of a water main in the uptown business district, along Comstock Avenue between Hadley Avenue and Wardman Avenue, for an approximate length of 2,000 ft., upgrading a 6" cast iron line to the 12" ductile iron pipe to provide sufficient flow within the area as well as for future improvements.
- Designed the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft. The existing 6" cast iron water main will be replaced with an 8" ductile iron pipe. The suggested design will minimize construction and maintenance costs by protecting the existing parkway and pine trees, and providing better access for maintenance of the proposed main.

**ROWLAND WATER DISTRICT SUPPLY LA PUENTE VALLEY COUNTY WATER DISTRICT:**

- Water Resources Engineer for planning, design, bid and construction for the conveyance, treatment, and storage of 3000 gpm local groundwater including production wells, pump stations, eight miles of pipe, best available treatment technologies for removal of contaminants and disinfection (LGAC, IX, UV, Chlorination, Chloramines), and storage.
- OCSD groundwater replenishment, Edward C. Little recycling facility, Tillman water reclamation plant, San Jose Creek water reclamation plant.



## HUGO MAGAÑA AutoCAD Designer

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### OVERVIEW:

Mr. Magana is a Designer/Draftsman. He graduated with a Mechanical Engineering degree. He is well versed in the use of AutoCAD and GIS software. Mr. Magana is currently providing technical and CAD assistance on various street, sewer, and water projects.

### EDUCATION:

California State University  
B.S. Mechanical Engineering  
Rio Honda College  
College of Engineering and  
Technology  
California State University,  
Fullerton, College of Engineering  
and Technology

### AFFILIATIONS:

- Engineers for a Sustainable World, Cal State Long Beach
- Center for Academic Support in Engineering and Computer Science, Cal State Fullerton
- Society of Mexican American Engineers and Scientists, Cal State Fullerton and Cal State Long Beach

### PROJECT EXPERIENCE:

#### CITY OF MONTEREY PARK

- . Prepared plans for sidewalk improvements in front of East Los Angeles College on the north and south sides of Cesar Chavez Avenue between Vancouver Avenue and Collegian Avenue.
- . Prepared plans for sidewalk improvements in front of Improvements in front of Langley Center on the south side of Emerson Avenue between Ynez Avenue and McPherrin Avenue.

#### CITY OF INGLEWOOD

- . Prepared plans for Sewer Main Replacement Project, Phase I, to upgrade/repair or replace segments of the existing 8" to 15" vitrified clay pipe (VCP) throughout the City to improve the existing sewer system. In addition, the project consists of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP. The Project will also involve reconnections to existing sewer mains, two of which are owned by Sanitation Districts of Los Angeles County (LACSD). The total approximate length of pipe to be replaced is 5,352 feet

#### CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Data Analysis
- GIS mapping
- Field data gathering
- Update Plans in AutoCAD
- RFP & Memo creation
- Budget analysis
- PO creation
- Filing system and Laserfiche
- Water Quality reports
- Meter Readings
- Set up meetings



## ROBERT G. MARTINEZ, P.E., P.L.S. Surveyor

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### OVERVIEW:

Mr. Martinez has over 30 years of experience in providing professional land surveying services to both public and private infrastructure projects in all areas relating to land development including:

- Infrastructure and improvement design for grading, streets, storm drains, utilities and associated matters.
- Preliminary land planning, tentative and final map processing, land use and feasibility studies.
- A.L.T.A., architectural, boundary and topographic survey, entitlement analysis, right-of-way engineering and preparation of legal descriptions.
- GPS Surveying.

### EDUCATION:

California State Polytechnic University,  
Pomona – June 1989  
Civil Engineering (Survey Minor)

### REGISTRATION:

Registered Civil Engineer, California  
No. 54360

Registered Land Surveyor, California  
No. 6966

### PROJECT EXPERIENCE

- A.L.T.A. Surveys
- Records of Surveys
- Corner Records
- Boundary & Topographic Surveys
- Reservoir surveys for MWD, and various Municipalities, including: Beverly Hills, Pasadena, Los Angeles
- GPS surveys
- Boundary Analysis
- Legal Descriptions
- Mapping/Exhibits
- Calculations
- Survey Coordination
- Field Crew Party Chief
- Manual & CAD Drafting
- Project Management
- Grading/Drainage Plans
- Street Plans
- Storm Drain Plans
- Utility Plans
- Demo Plans
- Hydrology/Hydraulic Analysis & Reports
- General/Specific Plan Studies
- Specifications
- Proposals
- Subdivisions
- Client Relations & Consultations
- Presentations, Proposals, Research, Processing, Training & Supervision of co-workers.



## JOHN ROBINSON, E.I.T. Project Manager

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### OVERVIEW:

Mr. Robinson's 25 years of environmental engineering experience has focused exclusively on water reclamation planning and infrastructure design projects for municipalities in southern California. He has been involved in over 35 recycled water feasibility/master studies and plans, 12 booster pump stations and over 300 miles of recycled water pipeline design. He has converted over 400 customers to utilize recycled water including cemeteries, medians, parkways, schools, parks and industries. He has deep roots with the State Water Resource Control Board Division of Drinking Water as well as the County of Los Angeles Department of Public Health in order to coordinate the recycled water design and recycled water conversion of customers to utilize recycled water for irrigation and industrial purposes.

### EDUCATION:

B.S., Civil Engineering, California State University, Long Beach, 1993

### REGISTRATION

Engineer-in-Training, California, Registration No. 109865, 1997

### MEMBER:

American Society of Civil Engineers  
California Water Environment Association  
Central Basin Water Association  
San Gabriel Valley Water Association  
Southern California Water Utilities Association  
Water Environmental Federation  
WaterReuse Association

### PRESENTATIONS:

30 Presentations on water, wastewater, recycled water infrastructure and treatment projects

### FINANCING EXPERIENCE SUMMARY:

Mr. Robinson assisted in obtaining and managing the U.S. Bureau of Reclamation Title XVI funding, State Revolving Fund (SFR) Proposition 50, State Water Resources Control Board (SWRCB) Proposition 13, Department of Water Resources Proposition 84 Rounds 1 and 2 and Metropolitan Water District of Southern California Local Resources Program monies in order to complete the approximately \$175M of recycled water projects for clients in southern California including Central Basin Municipal Water District and Rose Hills Memorial Park and Cemetery. Mr. Robinson assisted in completing the coordination with the funding agency on the behalf of clients including monthly reports, progress deliverables, proposed financial breakdowns and coordinating field meetings.

### PROJECT EXPERIENCE:

**Project Coordinator, Crescenta Valley Water District, La Crescenta, CA** – Mr. Robinson served as the Project Coordinator for the District for Well No. 2 at Ordunio Reservoir which consisted of a new submersible pump and motor, onsite piping, a chlorine feed system, a nitrate removal treatment, upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system, pavement and other on-site improvements. SA Associates is also provided Construction Support Services and is assisting the District for permitting of the well through the State Department of Drinking Water (DDW). **This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019.**

**Project Manager, City of Monterey Park, CA** - Provided Construction Oversight Services for the design and construction of the Centralized Groundwater Treatment System (CGTS) at the Delta Plant in Rosemead. The work included site development, site utilities, equipment procurement and installation, permitting, and commissioning and startup of a new treatment system to replace the existing individual wellhead treatment systems. The City was awarded 2015 Prop 84 Integrated Regional Water Management grant funds to implement the Project. SA Associates is also assisting the City for permitting of the CGTS through DDW.

### **Project Engineer, West Basin's Recycled Water Program, WBMWD, Carson, CA**

Mr. Robinson was part of the Program Management team who oversaw the design of approximately 50 miles of 4- to 60-inch recycled water pipelines from 1993 through 1997. In addition, John was the lead project engineer for the conversion of **over 190 recycled water customers** for West Basin during that same period.

### **Program Management Team Member Central Basin Municipal Water District Water Reclamation Program, CA**

Provided various engineering services during the design of pump stations, distribution systems, and customer connections specifically to the City of Cerritos. In addition, assisted with the identifications of potential reclaimed water customers, developed on-site retrofit drawings, and prepared engineering reports for industrial user for approvals by the state and county health departments. Project included computer hydraulic model of the District's recycled water distribution system



**Project Engineer, Century Reclamation Program and Recycled Water Retrofits, Central Basin Municipal Water District** – Mr. Robinson identified and converted 133 recycled water use customers include those located in the City of Cerritos, which included the design of on-site retrofits for reclaimed water irrigation systems and disconnection from potable water system. Worked closely with users and Los Angeles County DPH to maximize reclaimed water use for commercial/industrial applications.

**Project Manager, Rose Hills Recycled Water Project Phase I –Pipeline and Conversion** – Mr. Robinson was responsible for the expansion of the Upper San Gabriel Valley Municipal Water District's recycled water system to Rose Hills. The facilities for the project include 12,000 linear feet of pipeline and the recycled water conversion of approximately 600 acres of Rose Hills property to utilize recycled water while maintaining potable water in hose bibbs. Worked closely with Rose Hills, San Gabriel Valley Water Company and Los Angeles County DPH to maximize reclaimed water use for commercial/industrial applications.

**Principal-In-Charge, Phase I - Northwest Area Recycled Water Facilities, Inland Empire Utilities Agency, Chino, CA** Mr. Robinson served as principal-in-charge for the design of approximately 22,000 linear feet of the 6-inch, 8-inch and 12-inch pipeline in the cities of Ontario, Rancho Cucamonga, and Upland. **The project involved crossing two railroad right-of-ways**, crossing a 152-in diameter Metropolitan Water District feeder line, coordination with multiple municipalities, and integration of multiple design criteria into a single project. The Phase 1 facilities were preliminary designed, design, and constructed over a 6 year period with the final pipelines currently being installed in May 2012.

**Principal-In-Charge, RP-4 1158 and 1270 Pump Stations and Pipeline, IEUA, Chino, CA** Mr. Robinson's responsibilities included the writing, and preparation of the preliminary and final design efforts for two pump stations and approximately 1,000-foot 36-inch diameter pipeline. In his role as project manager, Mr. Robinson was responsible for the revision and finalization of the design criteria for the two pump stations and pipeline through the preliminary and final design of the project. Additional duties included management for preliminary and final design development and client coordination.

**Principal-in-Charge, Rosemead Extension, Upper San Gabriel Valley MWD, City of Rosemead, CA** Mr. Robinson managed the preliminary and final design and construction services for 6000-LF of 18-inch CML&C Steel and Ductile Iron Pipe alternate recycled water pipeline. The project will serve approximately 510 AFY to three adjacent irrigation customers.

**Senior Manager, Hollydale Pump Station and Pipeline, Central Basin Municipal Water District and City of Vernon, CA** Management of the Hollydale Pump Station located in the City of South Gate and approximately 8,000 linear feet of 12-and 18-inch recycled water pipeline to supply Malburg Generation Station. The facilities were in partnership between Central Basin Municipal Water District and City of Vernon.

**Phase I – Reclamation Expansion - Long Beach Water Department, Long Beach, CA.** Mr. Robinson served as project engineer and project manager to provide various engineering services, including developed on-site retrofit drawings; preliminary and final design of 4 miles of 8-inch recycled water pipeline and 4 miles of 6-inch recycled water pipeline; prepared industrial engineering reports; and, performed retrofit construction management. Project included computer hydraulic model of Long Beach's recycled water distribution system.

**Project Manager, Recycled Water System Expansion, Contract 1D, City of Long Beach, Long Beach, CA** Mr. Robinson was responsible for the design and construction management for the submittal review and resident inspection of approximately four miles of 24-inch and 30-inch diameter welded steel recycled water main. In addition, an aged and deteriorated 12-inch cast iron water main was replaced by a one mile long section of new 12-inch ductile iron pipe.

**Project Manager, Irvine Ranch Water District Planning Area 9A, Irvine Boulevard and Jeffrey Road Pipeline Improvements, Irvine, CA** This project included design of domestic water, recycled water, and sewer pipelines to serve a new development. The recycled water pipelines included 7,500 feet of 12-inch and 2,600 feet of 30-inch diameter pipe. New water mains up to 54-inch diameter were required. All pipelines were constructed in existing streets and required careful consideration for existing facilities and traffic control. The design schedule was expedited to accommodate street improvements by the developer and was completed in four months.

**Project Manager, Irvine Ranch Water District Planning Area 9A, Irvine Boulevard and Jeffrey Road Pipeline Improvements, Irvine, CA** – This project included the design of domestic water, recycled water, and sewer pipelines to serve a new development. The recycled water pipelines included 7,500 feet of 12-inch and 2,600 feet of 30-inch diameter pipe. New water mains up to 54-inch diameter were required. All pipelines were construction in existing streets and required careful consideration for existing facilities and traffic control. The design schedule was expedited to accommodate street improvements by the developer and was completed in four months.



## ADAM ROESCH, E.I.T, CPSWQ, QSD/QSP Engineer

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### OVERVIEW:

Mr. Roesch serves as an assistant engineer for various projects, including water main, wells, sewer, storm, & street projects. Due to his knowledge of engineering principles, Mr. Roesch provides valuable engineering assistance to SA Associates. Also, due to his past and part-time experience in environmental engineering/water quality, Mr. Roesch provides valuable technical assistance, especially in areas related to NPDES permitting.

### EDUCATION:

California State University, Long Beach  
B.S. Civil Engineering

### REGISTRATION:

Engineer in Training, California

Certified Professional in Storm Water  
Quality (CPSWQ)  
Certificate No. 1022

Qualified SWPPP Developer (QSD)  
Qualified SWPPP Practitioner (QSP)  
Certificate No. 25508

### SOFTWARE:

Microsoft Office  
Adobe  
Autodesk (AutoCAD)

### PROJECT EXPERIENCE

#### CITY OF ANAHEIM

- Prepared plans and specifications for Water Main Replacement Projects on (1) Pepper Creek Way, (2) Fern Haven Lane, and Hadrians Crescent (Project) to replace approximately 1,500 ft. of existing cast iron pipe (CIP) to polyvinyl chloride (PVC) pipe along various streets within Anaheim Hills. The pipes were installed between 1960s and 1970s and are in need of replacement due to external corrosion of the pipeline. As a result, the corrosion causes numerous main breaks rendering water loss.
- Prepared plans and specifications for the 8" Water Main Replacement in Country Glen Way for the replacement of 5,300 ft. of 6 & 8-inch ductile iron pipe and 6 & 8-inch polyvinyl chloride (PVC) pipe. Currently preparing the as-built plans.

#### CITY OF ARCADIA

- Assisted with preparing plans for the Orange Grove Disinfection System Upgrade Project. The project involved the installation of new DIP to connect the existing piping with three existing reservoirs. The project also involved the installation of a chlorine injector assembly, nitrate analyzers, drainage pipes, and concrete removal and replacement.

#### CITY OF CHINO

- Prepared plans & specifications for the Quadrant I Water Main Replacement Project which consists of 10,940 ft. of 8" PVC pipe to improve the existing water system. In addition, the project consists of the replacement of the replacement or reconnection of existing service laterals and reconnections to the existing water mains.

#### CRESCENTA VALLEY WATER DISTRICT

- Assisted with preparing plans for Crescenta Valley Water District's Well No. 2 at Ordunio Reservoir. The project consists of a new 150 gpm submersible pump and motor for well no.2, onsite piping, a chlorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. **This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019.**

#### CITY OF INGLEWOOD

- Prepared plans for the Water Main Pipeline Improvement Plans Phase V Project. The project involved the installation of new 8-inch ductile iron pipe main in 2nd Avenue, 3rd Avenue, 4th Avenue, and 5th Avenue from Arbor Vitae Street to Manchester Boulevard. The total length of pipe installed is 9,994 linear feet.

#### KINNELOA IRRIGATION DISTRICT

- Prepared plans for the East-West Tank Connector Pipeline Project. The project involves improving the reliability and service of the District's water distribution system by connecting the distribution system of its East Tank and West Tank Reservoirs with a 12-inch water line. The project also involved the installation of a 4" DIP main alongside the 12" DIP main in order to abandon an existing 4-inch



waterline that runs through private properties. Mr. Roesch Also performed the utility research, coordinated with utility companies within the project vicinity.

**LONG BEACH WATER DEPARTMENT**

- Prepared plans and specification for the East 27<sup>th</sup> Street and Via Passilo Cast Iron Water Main Replacement Project which consists of the replacement of approximately 4,000 feet of 6 & 8 inch cast iron & ductile pipe.
- Provided inspection for the Groundwater Treatment Plant Chemical Tank Replacement Project – Phase I. The project involved the replacement of three existing polyethylene chemical storage tanks located within LBWD's Groundwater Treatment Plant, along with chemical piping, vent piping, liquid level indicators, and SCADA equipment.

**CITY OF MONTEREY PARK**

- Currently preparing plans and specifications for the water and sewer mains along Atlantic Boulevard. The proposed sewer main is from W. Hellman Avenue to Garvey Avenue with a length of approximately 2,700 LF and shall be 12" Vitrified Clay pipe (VCP).

**ROSE HILLS MEMORIAL PARK**

- Assisted with the design of the recycled water retrofit for 600 acres of Rose Hills Memorial Park and Cemetery. The design included approximately 4,500 LF of 8" potable water/fire protection pipeline, 8,000 LF of 4" and 8" potable water pipeline, and modifications to the four (4) on-site wells and four (4) reservoirs. The project team is coordinating with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Department of Public Health, and the Los Angeles County Fire Department. This project is funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

**CITY OF WHITTIER**

- Prepared technical specifications for the Comstock Avenue Water Main Improvements Project. The project involves the removal and replacement of approximately 2,000 linear feet of 6-inch CIP with 12-inch ductile iron pipe along Comstock Avenue from Hadley Avenue to Wardman Avenue. The project also involves the repair of the existing concrete pavement.
- Designed the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft. The existing 6" cast iron water main will be replaced with an 8" ductile iron pipe. The suggested design will minimize construction and maintenance costs by protecting the existing parkway and pine trees, and providing better access for maintenance of the proposed main.



## ERIC SCHOENEN, P.E. Construction Inspector

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### OVERVIEW:

Mr. Schoenen has over 28 years of experience with a mix of land surveying, design, plan check, conditions of approval, strategic planning, and capital improvement projects. He has over 16 years of experience working for a Water Utility Franchise. Experience includes budget estimating, scheduling, technical report writing, and City Council Agenda Reports. Responsible for coordination with professional consultants and staff to implement CIP projects as a project manager.

### EDUCATION:

California Polytechnic University,  
Pomona

B.S. Civil Engineering, 1988  
University of California, Riverside  
Supervisory Excellence I and II, 1998

### REGISTRATION:

Registered Civil Engineer, California  
No. 52775

### PROJECT EXPERIENCE

#### CITY OF ALHAMBRA

- . Provided construction management and inspection services for the Valley Blvd./Almanson St. Sewer Replacement Project (Project). The work includes installation of approximately 1,380 ft. of 36" extra-strength VCP sewer along Almanson St. from San Marino Ave. to Valley Blvd. and approximately 1,830 ft of 30" extra-strength VCP sewer along Valley Blvd. from Almanson St. to Garfield Ave.
- . Provided construction management services to install approximately 3,355 ft. of 20-inch ductile iron water pipeline along Westmont Drive, from Sherwood to Norwich Avenue. The new DIP construction aims to replace/abandon existing 4-inch and 14-inch cast iron pipe along Westmont. In addition, the project also consists of pavement rehabilitation of 1.5-inch cold mill and overlay from gutter to gutter, curb and gutter replacements, stripping and utility cover adjustments.

#### CRESCENTA VALLEY WATER DISTRICT

- . Assisted with civil engineering and grading for the design of Well No. 2 at Ordunio Reservoir which consisted of a new submersible pump and motor, onsite piping, a chlorine feed system, a nitrate removal treatment, upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system, pavement and other on-site improvements. SA Associates is also provided Construction Support Services and assisted the District for permitting of the well through the State Department of Drinking Water (DDW). **This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019.**

#### LONG BEACH WATER DEPARTMENT

- . Provided construction management and inspection services for a sewer replacement project for the rehabilitation of 10,600 linear feet (LF) of sewer, including lining 4,971 LF of sewer with 8-inch CIPP and multiple location-specific rehabilitation efforts for the District's Cement Sewer Rehabilitation/ Replacement Group 2 Project.

#### CITY OF MANHATTAN BEACH

- . Provided design services for spot and/or section repairs to the existing pipe as identified in the City's 2013 Storm Drain Condition Assessment Report. The segments to be repaired or replaced have been identified as having high risk structural defects.
- . Also designed the removal of an existing catch basin and construction of a new catch basin at 2912 Laurel Avenue to prevent flooding. The existing catch basin was found to be under capacity due to its narrow opening and shallow depth.

#### CITY OF MONTEREY PARK

- . Currently preparing plans and specifications for the water and sewer mains along Atlantic Boulevard. The proposed sewer main is from W. Hellman Avenue to Garvey Avenue with a length of approximately 2,700 LF and shall be 12" Vitrified Clay pipe (VCP).
- . Provided construction inspection for the Centralized Groundwater Treatment System at the Delta Plant in Rosemead. The work included site development, site



utilities, equipment procurement and installation, permitting, and commissioning and startup of a new treatment system to replace the existing individual wellhead treatment systems. The City was awarded 2015 Prop 84 Integrated Regional Water Management grant funds to implement the project.

#### **CITY OF POMONA**

Provided construction management services for the Water Main Replacement - Park Avenue to replace about 2,000 linear feet of a 12 inch steel water distribution main in Park Avenue between Orange Grove and McKinley Avenue with a new 16-inch DIP main, including new hydrants and service connections. This project also aimed to remove/replace about 520 linear feet of VCP sewer in Holt Avenue, about 200 linear feet of VCP sewer in White Avenue, and about 92 linear feet of VCP sewer in/adjacent to via Estrella.

Provided construction management and inspection services for Westmont Service Lateral Replacement Project. Work included replacing 183 existing ¾" polyethylene water service laterals with 1" copper tubing from the meter connection to the water main, meter box replacement and relocation. Many of the main line service laterals were direct tap to an existing 12" ACP main line which required coordination with home owners, water maintenances staff, and water quality personnel to coordinate water main shut downs. Bacteriological testing was required to be performed and submitted to DHS when the main line experienced negative pressure during the shut downs.

Provided construction management services for the Phillips Ranch Water Service Laterals and Flush Tanks/Lamp Hole Replacements and New Manhole Installation projects under the City's FY 2008-09 Water & Sewer CIP. Project included replacing approximately 464 service laterals ranging in size from ¾" to 2½".

Provided construction management and inspection services for Sewer Replacement D Project. This Project was comprised of three (3) sewer main replacements in different locations totaling 574 linear feet. It also included nine (9) sewer main spot repairs at various locations throughout the City. This project included coordinating with operations/maintenance staff, reviewing CCTV videos, and providing recommendations on substitute MH to MH and point repair locations for contract locations that were not constructible. The inspection included ensuring SWPP best management practices were implemented.

For the city of Pomona, served as Senior Water Resources Engineer. Coordinated with Water Operations and Public Works to manage various projects. His primary task was associated with implementation of CIP design phase. He also worked on other projects such as administration of 30" waterline construction. Prepared a response and met with DPH regarding a DPH investigation of an SSO. Developed excel programs for operations staff to calculate flow of sewer spills, and another to calculate fire flows. Reviewed and coordinate the completion of an SSMP. Design and stake foundation/grading for a salt silo. Attended meetings related to outside water agencies. Also for the city of Pomona, served as Senior Water Resources Engineer. Coordinated with Water Operations and Public Works to manage various projects. His primary task was associated with implementation of CIP design phase. He also worked on other projects such as administration of 30" waterline construction. Prepared a response and met with DPH regarding a DPH investigation of an SSO. Developed excel programs for operations staff to calculate flow of sewer spills, and another to calculate fire flows. Reviewed and coordinate the completion of an SSMP. Design and stake foundation/grading for a salt silo. Attended meetings related to outside water agencies.

#### **CITY OF SANTA MONICA**

Provided construction inspection services for the 3<sup>rd</sup> Court Water Main Replacement Project. The work consists of replacement of approximately 2,000 ft. of existing 8" CIP with 12" DIP in 3rd Court from Broadway Avenue to Wilshire Boulevard. The project's narrow working area behind the business district of the Santa Monica 3rd Street Promenade and required consistent coordination with these businesses regarding parking issues, deliveries, and their building maintenance.

Provided construction management and inspection services for the Water Main Replacement/Upgrade Project (SP 2297) which includes replacing and/or upgrading existing facilities and the abandonment of old facilities. The project consists of approximately 10,000 ft. of 6" to 21" PVC pipe on Olympic Blvd., Lincoln Ct., Pennsylvania Ave., 16th Ct., 17th Ct., 18th Ct., 20th Ct. Euclid Ave., and Ocean Ave. Some nighttime work was involved because of heavy vehicular and pedestrian traffic on portions of the project.

Provided construction management and inspection services for the 2015 Annual Wastewater Improvements Citywide Project to replace approximately 3,450 linear feet of sewer pipeline and rehabilitate approximately 1,980 linear feet of sewer pipeline to extend their useful life, reduce maintenance, and upgrade capacity. Specific work included replacement, upgrade, lining and rehabilitation of existing wastewater mains; construction of new and rehabilitation of existing maintenance access structures.

## PHONG TRAN AutoCAD Designer

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### OVERVIEW:

Mr. Tran is an engineering assistant who recently graduated with the Civil Engineering degree with an emphasis in hydraulic and traffic engineering. He is well versed in the use of AutoCAD and GIS software. He has gained valuable experience by assisting the senior engineers with design calculations and researching information. He is participating in the assembly of proposals and statements of qualifications. He has worked on various projects, including water mains, storm, & street projects

### EDUCATION:

B.S. Civil Engineering  
California State University Long Beach

### RELEVANT COURSES:

Mapping and Surveying  
Transportation Engineering  
Highway Materials  
Traffic Engineering  
Fluid Mechanics & Lab  
Hydraulic Engineering & Design  
Structural Analysis  
Highway Design  
GIS Lab  
Groundwater & Hydrology  
Cost Benefit & Analysis

### PROJECT EXPERIENCE:

#### CITY OF ANAHEIM

- Conducted utilities research and preparing plans for the Solomon and Baja Drives Water Main Replacement project. The work included replacement of approximately 1,557 ft. of corroded 6" & 8" cast iron pipe with 8" PVC pipe. The project also consisted of replacing fire hydrants, valves, service lines, and appurtenances.

#### CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Provided design services for the construction of approximately 24,600 ft. of new 8" to 20" recycled water main located in segments of Southern Avenue, Alameda St., Hildreth Ave and California Ave. to South Gate City Hall, and State St. The new pipeline will connect to an existing 12-inch recycled water pipeline in Southern Ave., in the vicinity of Park Ave., west of Atlantic Ave. The system extension will allow for the supply of recycled water to four schools, three parks, two manufacturing companies, a recreation center, & South Gate City Hall.

#### CITY OF CHINO

- Prepared plans & specifications for the Quadrant I Water Main Replacement Project which consists of 10,940 ft. of 8" PVC pipe to improve the existing water system. In addition, the project consists of the replacement or reconnection of existing service laterals and reconnections to the existing water mains.

#### CITY OF INGLEWOOD

- Prepared plans for Sewer Main Replacement Project, Phase I, to upgrade/repair or replace segments of the existing 8" to 15" vitrified clay pipe (VCP) throughout the City to improve the existing sewer system. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP. The Project also involved reconnections to existing sewer mains, two of which are owned by Sanitation Districts of Los Angeles County (LACSD). The total approximate length of pipe replaced was 5,352 feet

#### CITY OF MANHATTAN BEACH

- Conducted utilities research and preparing a hydrology study for four storm drain sites including 2912 Laurel Avenue, 1825 N. Poinsettia Avenue, 2512 N. Poinsettia Avenue, and 1201 14<sup>th</sup> Street.
- Provided design services for spot and/or section repairs to the existing pipe as identified in the City's 2013 Storm Drain Condition Assessment Report. The segments to be repaired or replaced were identified as having high risk structural defects.

#### CITY OF MONTEREY PARK

- Reviewed CCTV footage to determine locations of sewer system repair. Locations were identified based on the amount and severity of the pipe defects between sewer reaches. Provided design plans on 35 locations of sewer main repairs consisted of spot repairs and CIPP lining. The repairs consisted of 8,700 Ft. of CIPP lining as well as 36 locations of point repairs.

**PHONG TRAN, AutoCAD Designer**

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- . Currently preparing plans and specifications for approximately 3,300 ft. of sidewalk improvements in front of East Los Angeles College on the north and south sides of Cesar Chavez Avenue between Vancouver Avenue and Collegian Avenue
- . Currently preparing plans and specifications for approximately 450 ft. of sidewalk improvements in front of Improvements in front of Langley Center on the south side of Emerson Avenue between Ynez Avenue and McPherrin Avenue.

**CITY OF WHITTIER**

- . Conducted utilities research and preparing plans for Comstock Avenue Water Replacement Project. The work includes replacement of approximately 2,000 ft. of 6" cast iron pipe with 12" ductile iron pipe on Comstock Avenue between Hadley Avenue and Wardman Avenue. The upgrading of the water to a large size is to provide adequate fire flow and supply within the area to accommodate future developmental projects. The project also consists of replacing service laterals and tie-ins to repair the existing concrete pavement along the trench width.
- . Aided in the design for the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft. The existing 6" cast iron water main will be replaced with an 8" ductile iron pipe. The suggested design will minimize construction and maintenance costs by protecting the existing parkway and pine trees, and providing better access for maintenance of the proposed main.

**CITY OF GARDENA**

- . Performed field study of existing parking situations, aided the engineering staff on providing various parking improvement solutions and developed construction plans for the Downtown Gardena Parking Study and Improvements project.
- . Provided pavement inspection and report update for the City of Gardena Pavement Management Program. Inspected nearly 100 centerline miles of streets, graded each section based on a Pavement Condition Index (PCI) and update Streetsaver, pavement management software. The updated information is used to show citywide pavement conditions and sections that required immediate remediation



## SECTION IV: RELATED EXPERIENCE

### RELATED PROJECT EXPERIENCE: WATER FACILITIES

#### CITY OF ALHAMBRA

<b>START / COMPLETION DATES:</b>	2016 / 2016
<b>CONSTRUCTION COST:</b>	\$1,300,000
<b>PROJECT MANAGER:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Phillip West, Adam Roesch
<b>AUTOCAD DESIGNER:</b>	Adam Roesch
<b>SURVEYOR:</b>	Robert Martinez
<b>POTHOLING:</b>	Safe-r-Dig Utility Surveys, Inc.
<b>Westmont Drive Water Main Replacement Project</b>	
<p>Provided engineering design and construction support services for the replacement of approximately 3,500 ft. of 4" and 14" water mains in Westmont Drive from Sherwood Ave to Norwich Ave). The new main replaced two failing mains which have had several failures over the past 4-5 years. The new main supplies adequate fire flow while providing both transmission and distribution functions. Approximately 100 services were replaced for this project. SA Associates also provided construction management and inspection services for this project.</p>	

#### CITY OF ARCADIA

<b>PROJECT MGR.:</b>	Shahnawaz Ahmad
<b>Design and Construction of a Treatment Facility to Remove Trichloroethylene (TCE) and Tetrachloroethlyene (PCE) From Two Wells in The City.</b>	
<p>Design and construction of a treatment facility to remove trichloroethylene (TCE) and tetrachloroethlyene (PCE) from two wells in the city of Arcadia at the Longden Plant. Several alternatives were considered for the removal and/or reduction of TCE/PCE from Arcadia's drinking water supply. Packed tower aeration was selected as the recommended alternative. The facilities included two air stripping towers, two blowers, two steel platforms, 16-inch mortar lined and coated steel piping, butterfly valves, connection of the effluent discharge from the towers to the existing reservoir, and the electrical work. An air quality permit to construct and operate the facilities was also obtained from the Southern California Air Quality Management District. The facility was the first air stripping treatment facility in the Southern California area.</p>	

#### CENTRAL BASIN MUNICIPAL WATER DISTRICT

<b>START / COMPLETION DATES:</b>	2017 / 2017
<b>CONSTRUCTION COST:</b>	Approximately \$8,000,000
<b>PROJECT MGR.:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Jorge Lovo, Eric Schoenen, Adam Roesch
<b>QA/QC:</b>	John Robinson
<b>AUTOCAD DESIGNERS:</b>	Phong Tran, Hugo Magana
<b>SURVEYOR:</b>	On-Point Land Surveying, Inc.
<b>GEOTECHNICAL:</b>	Geo-Advantec, Inc.
<b>POTHOLING:</b>	BESS Testlab, Inc.
<b>TRAFFIC CONTROL PLANS:</b>	JMDiaz, Inc.
<b>Recycled Water Pipeline System Extension in the City of South Gate</b>	
<p>The work consists of the preparation of Plans, Specifications, and Estimate of Probable Construction Costs for The Recycled Water System Extension in the City of South Gate, CA. This Project consists of the construction of approximately 24,600 linear feet (LF) of recycled pipeline varying in diameter between 8" and 20".</p>	

#### CITY OF CHINO

<b>START / COMPLETION DATES:</b>	2017 / 2018
<b>CONSTRUCTION COST:</b>	\$3,400,000
<b>PROJECT MANAGER:</b>	Shahnawaz Ahmad



<b>ENGINEERS:</b>	Adam Roesch
<b>AUTOCAD DESIGNERS:</b>	Phong Tran, Hugo Magana
<b>SURVEYOR:</b>	On-Point Land Surveying, Inc.
<b>Quadrant I Water Main Replacement Project</b>	
Prepared preparing plans and specifications for approximately 10,940 ft. to replace segments of existing pipe throughout the City with new 8-inch C900 Polyvinyl Chloride (PVC) in order to improve the existing water system. In addition, the project consisted of the replacement or reconnection of existing service laterals within the project area as a result of the replacement of the existing water main. The work also involved reconnections to existing water mains.	

**CRESCENTA VALLEY WATER DISTRICT**

<b>YEAR COMPLETED:</b>	2018
<b>CONSTRUCTION COST:</b>	\$1,245,000
<b>PROJECT MGR.:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Jorge Lovo, Adam Roesch
<b>ELECTRICAL ENGINEER:</b>	Linkture Consulting Engineers
<b>AUTOCAD DESIGNER:</b>	Phong Tran
<b>Design of Well No. 2</b>	
Prepared plans for CVWD's Well No. 2 at Ordunio Reservoir. The project consists of a new 150 gpm submersible pump and motor for well no.2, onsite piping, a chorine feed system using sodium hypochlorite (NAOCL), a nitrate removal treatment facility (by APT Water), upgrade of two existing booster pumps, installation of a masonry or pre-fabricated operations building, installation of a "carport" type building over concrete pad for the nitrate removal facility, water, sewer, and gas services, electrical and telemetry system (SCADA), pavement and other on-site improvements. SA Associates provided Construction Support Services and assisted the District for permitting of the well through the State Department of Drinking Water (DDW).	
<div style="border: 1px dashed black; padding: 5px; background-color: #e0f2f1;"> <p><i>This project will be awarded the American Council of Engineering Companies Project of the Year Award in February, 2019</i></p> </div>	

**CITY OF HUNTINGTON BEACH**

<b>START / COMPLETION DATES:</b>	2018 / Early 2019
<b>CONSTRUCTION COST:</b>	TBD
<b>PROJECT MANAGER:</b>	Jorge lovo
<b>ENGINEERS:</b>	Adam Roesch
<b>AUTOCAD DESIGNERS:</b>	Phong Tran, Hugo Magana
<b>Water Valves Replacement</b>	
Currently providing design services for the replacement of water valves in approximately 50 separate locations throughout the City's water system. Over 50% of those locations are expected to be closer to the coast, in area of low elevations where groundwater may be encountered and the other 50% will be located inland. In addition to restoring valve operation, the City will require the construction contractor to carefully remove and bag asbestos cement pipe (ACP) from each of these valve locations, to collect field data, to collect soil samples, and to store at a location identified by the City for future analysis to determine remaining useful life of ACP as part of the City's Asset Management Program. The valve sizes will be 6" to 12" and will be in-line valves with no vaults.	

**KINNELOA IRRIGATION DISTRICT**

<b>START / COMPLETION DATES:</b>	2014 / 2014
<b>CONSTRUCTION COST:</b>	\$644,000
<b>PROJECT MANAGER:</b>	Shahnawaz Ahmad
<b>ENGINEER:</b>	Phillip West
<b>AUTOCAD DESIGNER:</b>	Adam Roesch
<b>SURVEYOR:</b>	Online Engineering
<b>East-West Tank Connector Pipeline Project</b>	
Prepared plans, specifications, and cost estimates for design of 2,800 ft of 12" DIP, including connections to existing main, Design of 960 ft of 4" DIP, including connections to existing 4" steel tunnel line, Design of two (2) Los Angeles County Flood Control District (LACFCD) channel crossings. This project is in a hilly area. Also provided construction support services.	



**CITY OF LA PALMA**

<b>YEAR COMPLETED:</b>	2008
<b>CONSTRUCTION COST:</b>	\$630,000
<b>PROJECT MGR.:</b>	Shahnawaz Ahmad
<b>Design of the On-Site Sodium Hypochlorite Generating Systems at the Walker Well and City Yard Sites</b>	
<p>Provided design services for the On-Site Sodium Hypochlorite Generating Systems at the Walker Well and City Yard Sites. The work involved civil, mechanical, structural, architectural, electrical, and supervisory control and data acquisition. The hypochlorite system, including the chemical tank, was located inside the existing well building. The work included design of a new sand separator at the City Yard site and relocation of an existing sand separator at the Walker Well Site. We also provided construction management and inspection services for this project. The project was categorically exempt based on Initial Environmental Study (EIS). SA Associates also provided construction management and inspection services for this project.</p>	

*Project was awarded  
 the 2008  
 "Project of the Year"  
 by APWA*

**CITY OF LYNWOOD**

<b>YEAR COMPLETED:</b>	2017
<b>CONSTRUCTION COST:</b>	\$1,500,000
<b>PROJECT MGR.:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Adam Roesch, Eric Schoenen, Phillip West
<b>ELECTRICAL ENGINEER:</b>	Linkture Consulting Engineers
<b>AUTOCAD DESIGNER:</b>	Phong Tran
<b>Well No. 22 Pump House Facilities and Site Improvement</b>	
<p>Design of pump house facilities for a new municipal supply well No. 22. The new well is located at Lynwood City Park near the intersection of Birch Street and Spruce Street west of Fred W. Holser Middle School. The site is located adjacent to a residential area and is approximately 5,000 square feet. The well capacity is 2,500 gallons per minute and at a pumping level of about 130 feet below ground surface. The well casing is 18 inches in diameter and the well discharge piping is 12 inches in diameter. The well discharge is controlled by a well-control diaphragm valve (Cla-Val model 51-02) along with a check valve (Cla-Val model 81-02). On-site chlorination is the only well-head treatment provided for the well discharge. The well discharge continues to a nearby water main about 150 feet away. The site includes a perimeter wall, well house building, engine generator building, and a chlorination facilities building. The site also features perimeter landscaping and two 14 foot access gates. The generator serves the site in the event power from Edison is unavailable. The project also includes abandonment of an existing sewer main and design of a new sewer main as a replacement.</p>	

**CITY OF MONTEREY PARK**

<b>START / COMPLETION DATES:</b>	2018 / Early 2019 Anticipated
<b>CONSTRUCTION COST:</b>	TBD
<b>PROJECT MANAGER:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Jorge Lovo, Adam Roesch, Phong Tran
<b>SURVYOR:</b>	Robert Martinez
<b>POTHOLING</b>	BESS TestLab
<b>Atlantic Boulevard Water Main Project</b>	
<p>Currently preparing plans and specifications for the water mains along Atlantic Boulevard in the city of Monterey Park. The proposed water main is 3,768 ft. of 12" PVC C900, Class 305 pipe with tracer wire, from Hellman to Newmark Avenue.</p>	

<b>YEAR TO BE COMPLETED:</b>	2018
<b>CONSTRUCTION COST:</b>	\$8,300,000
<b>PRINCIPAL-IN-CHARGE</b>	Shahnawaz Ahmad
<b>PROJECT MANAGER</b>	John Robinson
<b>CONSTR. INSPECTORS:</b>	Shannon Leonard, Eric Schoenen



**Centralized Groundwater Treatment System**

Provided Construction Oversight Services for the Centralized Groundwater Treatment System. The project comprises design and construction of the Centralized Groundwater Treatment System (CGTS) at the Delta Plant in Rosemead, California. The Project includes the City's selected Contractor (Filanc) to perform all engineering design, site development, site utilities, equipment procurement and installation, permitting, and commissioning and startup of a new treatment system to replace the existing individual wellhead treatment systems. The treatment system being constructed is UV-AOP. The City was awarded 2015 Prop 84 Integrated Regional Water Management grant funds to implement the Project. SA Associates is also assisting the City for permitting of the CGTS through DDW.

**CITY OF POMONA**

<b>START / COMPLETION DATES:</b>	2012 / 2013
<b>CONSTRUCTION COST:</b>	\$1.9M
<b>PROJECT MANAGERS:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Phillip West, Pete Heye, Sam Nabbout
<b>AUTO CAD DESIGNERS:</b>	Randy Seto, Scott Walz
<b>CONSTRUCTION INSPECTOR:</b>	Boytrese Osias (Project 8)
<b>SURVEYOR(S):</b>	Online Engineering
<b>GEOTECHNICAL</b>	Geo-Environmental, Inc,
<b>District 6 Phase IV Water Main Replacement Project</b>	
Prepared plans, specifications, and construction cost estimates for 7,300 ft. of 10-inch and 12-inch ductile iron water mains.	

<b>START / COMPLETION DATES:</b>	2012 / 2013
<b>CONSTRUCTION COST:</b>	\$1.3M
<b>PROJECT MANAGERS:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Phillip West, Pete Heye, Sam Nabbout
<b>AUTO CAD DESIGNERS:</b>	Randy Seto, Scott Walz
<b>CONSTRUCTION INSPECTOR:</b>	Boytrese Osias (Project 8)
<b>SURVEYOR(S):</b>	Online Engineering
<b>GEOTECHNICAL</b>	Geo-Environmental, Inc,
<b>District 1, 2, and 5 Water Main Replacement Project</b>	
Prepared plans, specifications, and construction cost estimates for 4,220 feet of 8", 10", and 12" ductile iron water mains in various streets).	

**CITY OF RIALTO**

<b>YEAR COMPLETED:</b>	2015
<b>CONSTRUCTION COST:</b>	\$2,000,000
<b>PROJECT MGR.:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Phillip West
<b>ELECTRICAL ENGINEER:</b>	Linkture Consulting Engineers
<b>Construction and Equipping of a New Replacement Well to Replace Older Well No. 3</b>	
Equipping of a new replacement 900 ft deep well at a nearby City-owned property that lies within the Lytle Creek Groundwater Basin. This well will replace older Well No. 3. Pump capacity 1,500 gpm. Electrical design work for the new well was provided and a SCADA System was installed.	

**ROSE HILLS MEMORIAL PARK AND CEMETERY**

<b>START / COMPLETION DATES:</b>	2014 / 2015
<b>CONSTRUCTION COST:</b>	\$800,000
<b>PROJECT MANAGER:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	John Robinson, Jorge Lovo
<b>AUTOCAD DESIGNER:</b>	Ramon Cortez
<b>CONSTRUCTION INSPECTOR:</b>	Shannon Leonard
<b>SURVEYOR:</b>	Online Engineering



**Recycled Water Retrofit Project for 600 acres of Rose Hills Memorial Park and Cemetery**

The design included approximately 4,500 LF of 8" potable water/fire protection pipeline, 8,000 LF of 4" and 8" potable water pipeline, and modifications to the four (4) on-site wells and four (4) reservoirs. The project team coordinated with Rose Hills staff, Upper San Gabriel Valley Municipal Water District, Los Angeles County Sanitation Districts, San Gabriel Valley Water Company, Los Angeles County Department of Public Health, and the Los Angeles County Fire Department. The project was funded by DWR Proposition 84, Round 3 – Drought Grant and MWD On-Site Recycled Water Retrofit.

**VEOLIA WATER WEST OPERATING SERVICES, INC.**

<b>YEAR COMPLETED:</b>	2015
<b>CONSTRUCTION COST:</b>	\$1,500,000
<b>PROJECT MGR.:</b>	Shahnawaz Ahmad
<b>ENGINEER</b>	Phillip West

**Wells 1 & 2, City of Rialto**

Prepared plans and specifications for the equipping of a new municipal supply well (Well No. 1A). This site is located on a City of Rialto owned parcel on the banks of the Lytle Creek in the County of San Bernardino and also contains the City's Well 2. The well is approximately 800 ft deep and will produce up to 2,000 gpm when operational. Total construction cost is estimated at \$1,500,000.

**CITY OF WHITTIER:**

<b>START / COMPLETION DATES:</b>	2016 / 2017
<b>CONSTRUCTION COST:</b>	\$600,000
<b>PROJECT MANAGER:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Jorge Lovo, Adam Roesch
<b>AUTOCAD DESIGNER:</b>	Phong Tran
<b>SURVEYOR:</b>	Online Engineering
<b>GEOTECHNICAL:</b>	Geocon West
<b>POTHOLING:</b>	Safe-r-Dig Utility Surveys, Inc.

**Comstock Avenue Water Main Replacement Project**

Designed the replacement of a water main in the uptown business district, along Comstock Avenue between Hadley Avenue and Wardman Avenue, for an approximate length of 2,000 ft., upgrading a 6" cast iron line to the 12" ductile iron pipe to provide sufficient flow within the area as well as for future improvements. The project will consist of replacing service laterals and tie-ins and to repair the existing concrete pavement along the trench width.

<b>START / COMPLETION DATES:</b>	2017 / 2017
<b>CONSTRUCTION COST:</b>	\$1.2M
<b>PROJECT MANAGER:</b>	Shahnawaz Ahmad
<b>ENGINEERS:</b>	Jorge Lovo, Adam Roesch
<b>AUTOCAD DESIGNER:</b>	Phong Tran
<b>SURVEYOR:</b>	Online Engineering
<b>GEOTECHNICAL:</b>	Geo-Advantec, Inc.
<b>POTHOLING:</b>	BESS Testlab

**Beverly Boulevard Water Main Replacement Project**

Designed the replacement of a water main along Beverly Boulevard between Palm Avenue and Citrus Avenue to replace an aging water main with an approximate length of 4,450 ft. The existing 6" cast iron water main will be replaced with an 8" ductile iron pipe. The design minimized construction and maintenance costs by protecting the existing parkway and pine trees, and providing better access for maintenance of the proposed main.



## **SECTION V: PROJECT SCHEDULE**

The project kick-off meeting date of January 9, 2019 shown on our project schedule is based on the expected award date. The objective is to hit the ground running with this important project as soon as awarded, however if the Execution of Contract and Notice to Proceed date is scheduled on a different date, we will update our schedule accordingly.

We have included our project schedule in MS Project format on the following page. A summary of it follows here below. The schedule can be adjusted if desired.

### **Task I – Eng. Support for the Application Under Prop. 68**

- Kick-off Meeting Jan. 9, 2019
- Concept Report and Construction Estimate Submittal Jan. 28, 2019
- Revised Concept Report and Estimate – SAA Submittal – Rev. by Council Feb. 12, 2019

### **Task II – Engineering Design Services (Design / Built Project)**

#### **30% Design**

- Kick-off Meeting March 11, 2019
- 30% Plans Submittal April 29, 2019
- Revised 30% Submittal – SAA Submittal – Rev. by Council / Agencies May 14, 2019

#### **Technical Specifications**

- Technical Specifications May 24, 2019
- Revised Technical Specs Submittal – SAA Submittal - Rev. by Council June 10, 2019

#### **Bid Assistance**

- Pre-Bid Meeting June 24, 2019
- Bid Award July 16, 2019

### **Task III - Part Time Construction Management & Inspection**

- Pre-Construction Meeting July 25, 2019
- Punchlist Oct. 10, 2019
- End of Construction Nov. 14, 2019
- As-built Drawings and Final Report Dec. 12, 2019



**BOY SCOUTS OF AMERICA - GREATER LOS ANGELES AREA COUNCIL  
TRASK SCOUT RESERVATION WATER SYSTEM REHABILITATION AND ENHANCEMENT PROJECT  
Design & Construction Schedule**



ID	Task Name	Duration	Start	Finish	'18	Jul '18	Aug '18	Sep '18	Oct '18	Nov '18	Dec '18	Jan '19	Feb '19	Mar '19	Apr '19	May '19	Jun '19	Jul '19	Aug '19	Sep '19	Oct '19	Nov '19	Dec '19																
					10/17/24	1/8/15	2/22/29	5/12/19	26/2/9	1/6/23	30/7/14	2/18/25	4/11/18	25/2/9	1/6/23	30/6/13	20/27/3	10/17/24	3/10/17	24/31/7	14/21/28	5/12/19	26/2/9	1/6/23	30/7/14	2/18/25	4/11/18	25/2/9	1/6/23	29/6/13	20/27/3	10/17/24	1/8/15	22/29	6/13/20	27/3/10	17/24	1/8/15	22/29
1	<b>TASK I - ENG. SUPPORT FOR THE APPLICATION UNDER PROP. 68</b>	33.5 days	Wed 1/9/19	Mon 2/25/19	TASK I - ENG. SUPPORT FOR THE APPLICATION UNDER PROP. 68																																		
2	<b>CONCEPT REPORT &amp; COST ESTIMATE</b>	25 days	Wed 1/9/19	Tue 2/12/19	CONCEPT REPORT & COST ESTIMATE																																		
3	Kickoff Meeting	1 day	Wed 1/9/19	Wed 1/9/19	Kickoff Meeting																																		
4	Additional Field Visits	3 days	Thu 1/10/19	Mon 1/14/19	Additional Field Visits																																		
5	Obtain/Analyze Existing Data/As-Builts	4 days	Thu 1/10/19	Tue 1/15/19	Obtain/Analyze Existing Data/As-Builts																																		
6	Prepare Concept Report and Construction Cost Estimate	2 wks	Tue 1/15/19	Mon 1/28/19	Prepare Concept Report and Construction Cost Estimate																																		
7	Council / Trask Review	1 wk	Tue 1/29/19	Mon 2/4/19	Council / Trask Review																																		
8	Design Review Meeting	1 day	Tue 2/5/19	Tue 2/5/19	Design Review Meeting																																		
9	Submit revised Report and Estimate	1 wk	Wed 2/6/19	Tue 2/12/19	Submit revised Report and Estimate																																		
10	<b>TASK II - ENGINEERING DESIGN SERVICES (DESIGN / BUILT PROJECT)</b>	199 days	Mon 3/11/19	Thu 12/12/19	TASK II - ENGINEERING DESIGN SERVICES (DESIGN / BUILT PROJECT)																																		
11	<b>30% DESIGN</b>	47 days	Mon 3/11/19	Tue 5/14/19	30% DESIGN																																		
12	Kickoff Meeting	1 day	Mon 3/11/19	Mon 3/11/19	Kickoff Meeting																																		
13	Utility Research	2 wks	Tue 3/12/19	Mon 3/25/19	Utility Research																																		
14	Field Survey / Digital Topo File	3 wks	Tue 3/12/19	Mon 4/1/19	Field Survey / Digital Topo File																																		
15	Prepare & Submit 30% Design Plan for Review	4 wks	Tue 4/2/19	Mon 4/29/19	Prepare & Submit 30% Design Plan for Review																																		
16	Council / Trask Review	1 wk	Tue 4/30/19	Mon 5/6/19	Council / Trask Review																																		
17	Design Review Meeting	1 day	Tue 5/7/19	Tue 5/7/19	Design Review Meeting																																		
18	Revised 30% Submittal	1 wk	Wed 5/8/19	Tue 5/14/19	Revised 30% Submittal																																		
19	<b>TECHNICAL SPECIFICATIONS</b>	18.5 days	Wed 5/15/19	Mon 6/10/19	TECHNICAL SPECIFICATIONS																																		
20	Prepare and Submit Specifications	1.5 wks	Wed 5/15/19	Fri 5/24/19	Prepare and Submit Specifications																																		
21	Council Review	1 wk	Fri 5/24/19	Fri 5/31/19	Council Review																																		
22	Review Meeting	1 day	Fri 5/31/19	Mon 6/3/19	Review Meeting																																		
23	Final Technical Specifications	1 wk	Mon 6/3/19	Mon 6/10/19	Final Technical Specifications																																		
24	<b>BID ASSISTANCE</b>	17 days	Mon 6/24/19	Tue 7/16/19	BID ASSISTANCE																																		
25	Attend pre-bid meeting	1 day	Mon 6/24/19	Mon 6/24/19	Attend pre-bid meeting																																		
26	Assist the Council with Bid Documents / RFIs / RFCs	3 wks	Tue 6/25/19	Mon 7/15/19	Assist the Council with Bid Documents / RFIs / RFCs																																		
27	Review bid Proposal and provide Recommendations for Award	1 day	Tue 7/16/19	Tue 7/16/19	Review bid Proposal and provide Recommendations for Award																																		
28	<b>TASK III- PART TIME CONSTRUCTION MANAGEMENT &amp; INSPECTION</b>	101 days	Thu 7/25/19	Thu 12/12/19	TASK III- PART TIME CONSTRUCTION MANAGEMENT & INSPECTION																																		
29	Attend pre-construction meeting	1 day	Thu 7/25/19	Thu 7/25/19	Attend pre-construction meeting																																		
30	Monitor Schedules & Budgets	70 days	Fri 7/26/19	Thu 10/31/19	Monitor Schedules & Budgets																																		
31	Monitor and Enforce Safety/Security	70 days	Fri 7/26/19	Thu 10/31/19	Monitor and Enforce Safety/Security																																		
32	RFI / Shop Drawings / Managing and Processing	10 days	Fri 7/26/19	Thu 8/8/19	RFI / Shop Drawings / Managing and Processing																																		
33	Evaluate / Process Change Orders / Extra Work Orders	70 days	Fri 7/26/19	Thu 10/31/19	Evaluate / Process Change Orders / Extra Work Orders																																		
34	Prepare & Attend Biweekly Construction Meetings (7 meetings)	70 days	Fri 7/26/19	Thu 10/31/19	Prepare & Attend Biweekly Construction Meetings (7 meetings)																																		
35	Inspection / Site Visits - Twice a week (28 visits)	70 days	Fri 7/26/19	Thu 10/31/19	Inspection / Site Visits - Twice a week (28 visits)																																		
36	Review & Monitor Lab Works by Contractor	70 days	Fri 7/26/19	Thu 10/31/19	Review & Monitor Lab Works by Contractor																																		
37	Maintain field visit logs, photos & reports	70 days	Fri 7/26/19	Thu 10/31/19	Maintain field visit logs, photos & reports																																		
38	Review Contractor's Best management Practices	70 days	Fri 7/26/19	Thu 10/31/19	Review Contractor's Best management Practices																																		
39	Mointor Construction Progress for As-built records	70 days	Fri 7/26/19	Thu 10/31/19	Mointor Construction Progress for As-built records																																		
40	Establish & Update Punchlist	60 days	Fri 8/9/19	Thu 10/31/19	Establish & Update Punchlist																																		
41	Review Operation and Maintenance Manual prepared by others	2 wks	Fri 11/1/19	Thu 11/14/19	Review Operation and Maintenance Manual prepared by others																																		
42	Prepare and Submit Final Notebook with Photographs	2 wks	Fri 11/15/19	Thu 11/28/19	Prepare and Submit Final Notebook with Photographs																																		
43	Prepare & Submit As-built Drawings	2 wks	Fri 11/29/19	Thu 12/12/19	Prepare & Submit As-built Drawings																																		

SCHEDULE-Trask Scout -REV 2 Wed 12/19/18



ASSOCIATES

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**BOY SCOUTS OF AMERICA - GREATER LOS ANGELES AREA COUNCIL  
TRASK SCOUT RESERVATION WATER SYSTEM REHABILITATION AND  
ENHANCHEMENT PROJECT**

**Fee Estimate**

Task No.	Item	PIC	PM	CM	Engr.	Insp.	CAD	QA/QC	Survey	Elec.	Sec.	Direct Costs	Total		
													Hours	\$	
<b>Task I</b>	<b>Engineering Support for the Application under Prop. 68</b>														
	*Concept Report	9	33	0	50	0	12	13	0	0	8	\$360	125	\$20,000	
	*Cost Estimate														
<b>Task II</b>	<b>Engineering Design Services (Design / Built Project)</b>														
	30% Plans	15	25	0	70	0	79	25	34	79	14	\$650	341	\$65,000	
	Technical Specifications	6	11	0	21	0	0	8	0	0	8	\$400	54	\$9,000	
	<del>Bid Assistance</del>	<del>4</del>	<del>6</del>	<del>0</del>	<del>11</del>	<del>0</del>	<del>2</del>	<del>0</del>	<del>0</del>	<del>0</del>	<del>3</del>	<del>\$250</del>	<del>26</del>	<del>\$4,000</del>	
	<del>TOTAL FOR TASKS II</del>	<del>25</del>	<del>42</del>	<del>0</del>	<del>102</del>	<del>0</del>	<del>81</del>	<del>33</del>	<del>34</del>	<del>79</del>	<del>25</del>	<del>1,300</del>	<del>421</del>	<del>\$78,000.00</del>	
<del>Task III</del>	<del>Part Time Construction Management &amp; Inspection</del>	<del>2</del>	<del>2</del>	<del>85</del>	<del>60</del>	<del>75</del>	<del>16</del>	<del>38</del>	<del>0</del>	<del>87</del>	<del>30</del>	<del>\$810</del>	<del>395</del>	<del>\$62,000</del>	
	<b>TOTAL FOR TASKS I, II &amp; III</b>	<b>36</b>	<b>77</b>	<b>85</b>	<b>212</b>	<b>75</b>	<b>109</b>	<b>84</b>	<b>34</b>	<b>166</b>	<b>63</b>	<b>2,270</b>	<b>941</b>	<b>\$180,000</b>	

Sub Total	\$94,000
Contingency @10%	9,400
Indirect Costs @5%	4,700
Administration @5%	<u>4,700</u>
<b>Grand Total</b>	<b><u>\$112,800</u></b>

January 28, 2019 – Item 14

RESOLUTION 2019-05

RESOLUTION OF THE SAN GABRIEL AND LOWER LOS ANGELES RIVERS AND MOUNTAINS CONSERVANCY (RMC) APPROVING A GRANT TO GLAAC BOY SCOUTS OF AMERICA FOR THE TRASK SCOUT RESERVATION WATER SYSTEM IMPROVEMENT PROJECT (RMC 18006)

WHEREAS, The legislature has found and declared that the San Gabriel River and its tributaries, the Lower Los Angeles River and its tributaries, and the San Gabriel Mountains, Puente Hills, and San Jose Hills constitute a unique and important open space, environmental, anthropological, cultural, scientific, educational, recreational, scenic, and wildlife resource that should be held in trust to be preserved and enhanced for the enjoyment of, and appreciation by, present and future generations; and

WHEREAS, The people of the State of California have enacted the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (“Proposition 1”) and

WHEREAS, the State of California has authorized an expenditure of funds from Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014 to the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy for capital outlay and local assistance multi-benefit grants for ecosystem and watershed protection and restoration projects; and

WHEREAS, The RMC may award grants to local public agencies, state agencies, federal agencies, and nonprofit organizations for the purposes of Division 22.8 the Public Resources Code; and

WHEREAS, The proposed project meets an objective of the California Water Action Plan for more reliable water supplies, restoration of important species and habitat, more resilient and sustainably managed water infrastructure; and

WHEREAS, The proposed project meets the goals of reducing greenhouse gas emissions consistent with AB 32; and

WHEREAS, The proposed project is consistent with the San Gabriel and Los Angeles River Watershed and Open Space Plan; and

WHEREAS, The proposed project protects land and water resources; and

WHEREAS, The grantee has requested a grant from Proposition 1, Section 79731 (f) or Section 79735 (a) of the Water Code; and

This action is exempt from the environmental impact report requirements of the California Environmental Quality Act (CEQA); and NOW

*Therefore be it resolved that* the RMC hereby:

- 1 FINDS that this action is consistent with the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy Act and is necessary to carry out the purposes and objectives of Division 22.8 of the Public Resources Code.
- 2 FINDS that the Proposition 1 RMC Grant Program is consistent with the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (“Proposition 1”), which provides funds for the RMC grant program.

Resolution No. 2019-05

- 3 FINDS the proposed project meets at least one of the purposes of Proposition 1.
- 4 FINDS the proposed project meets at least one of the three objectives of the California Water Action Plan.
- 5 FINDS that the proposed action is consistent with the San Gabriel and Lower San Gabriel and Los Angeles River Watershed and Open Space Plan as adopted by the Rivers and Mountains Conservancy;
- 6 FINDS that the actions contemplated by this resolution are exempt from the environmental impact report requirements of the California Environmental Quality Act.
- 7 ADOPTS the staff report dated January 28, 2019.
- 8 AUTHORIZES a grant of Proposition 1 funds in the amount of \$112,800 to the GLAAC Boy Scouts of America for the Trask Scout Reservation Water System Improvement and Enhancement Project.

*~ End of Resolution ~*

Passed and Adopted by the Board of the  
SAN GABRIEL AND LOWER LOS ANGELES RIVERS AND MOUNTAINS  
CONSERVANCY on January 28, 2019.

Motion \_\_\_\_\_ Second: \_\_\_\_\_

Ayes: \_\_\_\_\_ Nays: \_\_\_\_\_ Abstentions: \_\_\_\_\_

\_\_\_\_\_  
Frank Colonna, Chair

ATTEST:

\_\_\_\_\_  
David Edsall, Jr.  
Deputy Attorney General