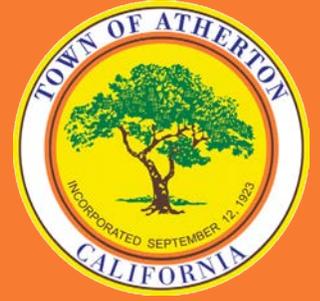


Statement of Qualifications for
THE ATHERTON WATER CAPTURE PROJECT



Prepared for
TOWN OF ATHERTON

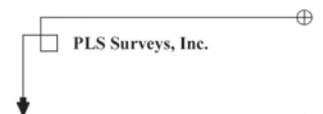


Prepared by:



October 5, 2017

In association with:





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www.wreco.com

October 5, 2017

Marty Hanneman, P.E., T.E., City Engineer/Project Manager
Town of Atherton
91 Ashfield Road
Atherton, CA 94027

Subject: Request for Qualifications for the Atherton Water Capture Project

Dear Mr. Hanneman,

It is our pleasure to respond to the Request for Qualifications (RFQ) for the Atherton Water Capture Project (Project). Having visited the Project site and performed preliminary research, we have a solid understanding of the Project and its requirements, and we are confident that we can successfully deliver this Project to the Town. Additionally, WRECO staff are very familiar with the Town's standards and expectations due to our recent experience working with the Town of Atherton (Town) on the Drainage Facilities Repairs for Stockbridge Avenue, Polhemus Avenue, Euclid Avenue, Camino al Lago, and Atherton Channel Restoration Project, as well as the Belbrook Culvert Repair Project.

WRECO Team

Ms. Analette Ochoa, P.E., QSD/P, ToR, is our proposed Project Manager for this Project. She has more than 23 years of drainage and stormwater design experience and is known for developing innovative solutions for her clients. Additionally, she manages WRECO's Water Quality Studies On-call Contract with Caltrans District 4 and has been involved on several task orders from Caltrans Headquarters' stormwater contracts. Ms. Ochoa fully understands Caltrans' requirements and the funding total maximum daily loads (TMDLs)/compliance units background of this Project. She will be supported by our Senior Biologist, Ms. Sandra Etchell, M.S., who has worked on projects for the Town staff for more than 7 years.

The following firms make up the WRECO Team. Each firm will contribute their specialized expertise and knowledge to the Project. With our combined resources, expertise, and responsiveness, the WRECO Team will be the most suitable team for this Project.

- ➡ **WRECO (Prime Consultant)** - providing project management, quality assurance/quality control (QA/QC), hydrology and hydraulic modeling, grading design, geotechnical engineering, permitting, and as-needed design-build services
- ➡ **Kimley-Horn and Associates, Inc. (KHA)** - providing CEQA/NEPA/environmental compliance, public outreach, structural and traffic engineering, and as-needed design-build services
- ➡ **PGAdesign, Inc. (PGA)** - providing landscape/irrigation design services
- ➡ **PLS Surveys, Inc. (PLS)** - providing surveying services

As the proposed Principal-in-Charge and QA/QC Lead, I will work with Ms. Ochoa to ensure adequate resources are assigned. I will make certain the WRECO Team mobilizes and performs all assigned work promptly and efficiently, while providing the highest quality services and products to the Town and funding requirements of Caltrans.

Sincerely,

WRECO | Han-Bin Liang, Ph.D., P.E., President | T: (925) 941-0017 x201 | E: hanbin_liang@wreco.com





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Firm Profiles



Founded in 1995, **WRECO** provides communities throughout California with innovative solutions in the fields of civil engineering, environmental compliance, geotechnical engineering, and water resources. We pride ourselves in finding cost-effective solutions that prioritize both our clients' goals and environmental considerations.

As a testament to our ability to produce quality deliverables on time and within budget, we have established long-term relationships with our clients in the private and public sectors, including transportation authorities; local municipalities; public works departments; flood control and water conservation districts; flood protection boards; utility companies; permitting agencies; and water, sewer, and irrigation districts.

By offering a diverse line of services, including an in-house materials testing lab, WRECO is able to streamline project delivery to give the best value to our clients. A small but diverse business, WRECO is composed of exceptional professional civil engineers, hydraulic engineers, geotechnical engineers, hydrologists, biologists, geologists, environmental scientists, water quality specialists, Qualified Storm Water Pollution Prevention Plan (SWPPP) Developers and Practitioners, Qualified Industrial Stormwater Practitioners, CASQA-qualified National Pollutant Discharge Elimination System (NPDES) Construction General Permit Trainers of Record, and CADD technicians. WRECO's proposed staff members are available and committed to the successful completion and timely delivery of the Project.



Financial Capacity

WRECO's financial condition is in good standing. The firm does not anticipate any financial drawbacks, nor are there any impending issues. With steady growth and reliable staff, WRECO has a proven track record of excellence and efficiency, while maintaining minimal overhead and competitive rates.

Insurance

WRECO can comply with the Town's insurance requirements.

References

1. David Huynh, Town of Atherton, (650) 752-0555, dhuynh@ci.atherton.ca.us
2. Hardeep Takhar, Caltrans District 4, (510) 286-7182, hardeep_s_takhar@dot.ca.gov
3. Matthew Fabry, P.E., San Mateo Countywide Water Pollution Prevention Program, (650) 599-1419, mfabry@smcgov.org



KHA provides a staff of experienced engineers and environmental specialists working within a collaborative environment that includes over 350 professionals in 12 offices throughout California, including San Jose. Founded in 1967, KHA is a full-service consulting firm with over 3,100 professionals in 84 offices. The firm provides expertise in all aspects of civil engineering, traffic analysis, transportation planning, structural engineering, and CEQA documentation.

KHA's staff prepares and processes of all types of environmental documents under CEQA, and has extensive knowledge of environmental document requirements. Their environmental professionals not only have years of experience in developing CEQA documents for public works and site development projects, but also receive regular training on changes in CEQA and applicable case law affecting the interpretation of current statutes. Additionally, KHA is experienced in providing services under alternative construction delivery methods, including design/build. In the past five years, they have worked on more than 50 design/build projects throughout the country.

KHA has prior experience working with the Town by having provided engineering support for local agencies in San Mateo and Santa Clara counties and coordinating projects with Caltrans District 4. Previous projects with the Town include the Menlo School Traffic Impact Study, Safe Routes to School improvements, and speed surveys. KHA has also provided traffic engineering, transportation planning, and environmental support for projects with the City of Menlo Park, City of Palo Alto, Redwood City, County of San Mateo, and County of Santa Clara.

Insurance

KHA can comply with the Town's insurance requirements.

References

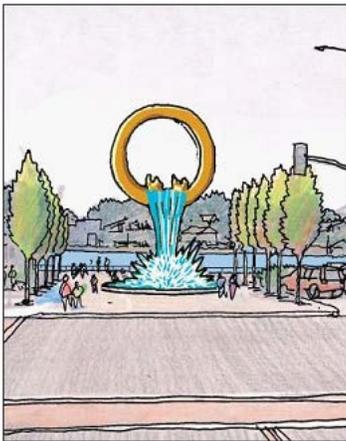
1. Leigha Schmidt, City of Hayward, (510) 583-4113, leigha.schmidt@hayward-ca.gov
2. Hunter Young, City of San Rafael, (415) 485-3408, hunter.young@cityofsanrafael.org



PGA is an award-winning landscape architectural studio that creates enduring and vibrant environments within the public realm. Founded in 1979, the firm focuses on a variety of project sectors throughout California ranging in size and complexity. Woven deeply within their projects — urban civic spaces, high-density housing, educational facilities, places of historic significance, parks and trails, and transit-focused developments — are inspiring and purposeful designs that enrich the communities in which they live and work.

Their site design reveals and expresses the distinct characteristics informed by a place’s unique history and significant features. They skillfully navigate the challenges of a community’s concerns and city agency conditions to generate consensus and successfully translate a project’s vision into reality. PGA’s commitment to sustainability bridges our professional and personal lives, and they are devoted to improving communities through their design practice.

PGA’s projects demonstrate distinctive design solutions that not only conserve and protect natural resources, but also fulfill project visions and their clients’ budget challenges. Through continual research and exploration, PGA’s team of LEED Accredited Professionals and Bay-Friendly Qualified Professionals remain up-to-date on current technologies, initiatives, materials, and ideas that prolong a site’s life-cycle and legacy.

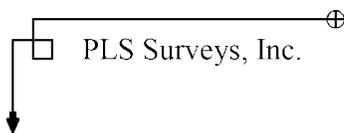


Insurance

PGA can comply with the Town’s insurance requirements.

References

1. David Winslow, City of San Francisco – Planning Department, (415) 575-9159, david.winslow@sfgov.org
2. Ali Schwarz, City of Oakland, (510) 238-7310, aschwarz@oaklandnet.com



PLS was established in 1991 by offering general land surveying services. Their land surveying experience includes: right-of-way mapping, ALTA Surveys, boundary and topographic surveying, settlement monitoring, aerial control, parcel and final map preparation, environmental monitoring with GeoTracker specifications, RTK GPS, and construction staking.

Insurance

PLS can comply with the Town’s insurance requirements.

References

1. Donald Snaman, Port of Redwood City, (650) 306-4150, dsnaman@redwoodcity.com
2. Jimmy Dang, Oro Loma Sanitary District, (510) 481-6981, jdang@oroloma.org



Project Examples

The WRECO Team’s portfolio demonstrates our ability to deliver innovative and economical solutions on time and within budget. Our experience has given us an understanding of cost-effective strategies for designing detention basin, while still protecting ecologically sensitive areas and client’s assets.

OWNER

Town of Atherton

DURATION

2017 - Present

FEE

\$334K

CLIENT REFERENCE

Marty Hanneman, P.E., T.E.
Project Manager
Town of Atherton
(916) 804-0336
mhanneman@ci.atherton.ca.us

PROJECT RELEVANCE

- ✓ *Project for the Town*
- ✓ *Drainage design*
- ✓ *Environmental compliance*
- ✓ *Atherton Channel*

DRAINAGE FACILITIES REPAIR PROJECT

Atherton, CA



WRECO is responsible for designing the repairs for drainage pipes and swales at Stockbridge Avenue, Polhemus Avenue, Euclid Avenue, and Camino al Lago to restore the capacity, stop channel deepening, and mitigate further erosion of Atherton Channel.

WRECO recently completed the culvert replacement and drainage improvement plans, specifications, and estimate (PS&E) for Stockbridge Avenue, Polhemus Avenue, and Camino al Lago. We are finalizing the concrete valley gutter replacement plans along Stockbridge Avenue and working towards generating PS&E packages addressing erosion and stream-bank failure issues for both the Euclid-Parker ditch and Upper Atherton channel. There are many challenges associated with this section of the channel due to the failure of past erosion control structures. In addition, special-status species such as California red-legged frog and San Francisco dusky-footed woodrat inhabit this portion of the channel.

OWNER

Novartis Pharmaceuticals Corporation (Novartis)

DURATION

2010 - 2014

FEE

\$313K

PROJECT RELEVANCE

- ✓ *Flood protection with water quality improvements*
- ✓ *Hydrology and hydraulics analyses & modeling*
- ✓ *Public outreach and stakeholder meetings*
- ✓ *Environmental compliance*

BELMONT CREEK FLOOD PROTECTION AND WATERSHED STUDY,

San Carlos, CA



The Novartis property is bounded by Industrial Road, Belmont Creek, Quarry Road, and another commercial property in the City of San Carlos. The property is within a low-lying area that has experienced flooding in the past. WRECO prepared a Technical Study Memorandum regarding dredging sections of Belmont Creek adjacent to the Novartis facility

in San Carlos. The study evaluated the hydraulic effects of dredging Belmont Creek from the upstream property line to the downstream property line.

Dredging was completed successfully, and WRECO performed an expanded study of the entire Belmont Creek watershed, which provided a watershed management tool for key stakeholders and for improvements to drainage storage, riparian and aquatic habitat, and water quality/low-impact development (LID). The study was used to determine additional measures that could be taken to reduce the flooding at the facility.

OWNER
City of Bakersfield

DURATION
2008 - Present

FEE
\$189K

CLIENT REFERENCE
Kris Budak, P.E.
Civil Engineer III
City of Bakersfield
(661) 326-3483
kbudak@bakersfield
freeways.us

PROJECT RELEVANCE

- √ *Geotechnical engineering*
- √ *Detention basin*
- √ *Hydrologic and hydraulic modeling*
- √ *Environmental technical studies*

STATE ROUTE 178 WIDENING - DETENTION BASIN PROJECT
Bakersfield, CA



The project site is located on SR 178 from approximately Canteria Drive/Bedford Green Drive to approximately 0.20 miles east of Miramonte Drive, east of the City of Bakersfield. The purpose of the project is to convert the existing two-lane expressway and two-lane conventional highway.

WRECO prepared a supplemental geotechnical investigation for characterizing the subsurface conditions at two locations within proposed detention Basin No. 3 (Basin 3). As planned, Basin 3 will be constructed mostly in cut with cuts up to 14-feet deep to achieve the plan basin bottom. At the time of our investigation, the proposed area of Basin 3 consisted of open undeveloped land with sparse vegetation.

During the environmental phase, WRECO also prepared the Stormwater Data Report, Water Quality Study Report, Location Hydraulic Study, and Drainage Impact Study Report. The studies included the development of the preliminary detention basin sizing design that encompassed the need to achieve both stormwater treatment of impervious surface and metering of flows from the 25-year, 24-hour design storm event; WRECO determined the dimensions for six detention basins along the project corridor.

OWNER
Bay Area Stormwater Management Agencies Association (BASMAA)

DURATION
2012 - 2013

FEE
\$176K

CLIENT REFERENCE
Matthew Fabry, P.E.
Coordinator
San Mateo Countywide Water Pollution Prevention Program
(650) 599-1419
mfabry@smcgov.org

PROJECT RELEVANCE

- √ *San Mateo County*
- √ *Stormwater treatment*
- √ *Public outreach/stakeholder coordination*

ENGINEERING DESIGN SERVICES: URBAN RUNOFF TREATMENT RETROFITS: BRANSTEN ROAD, San Carlos, CA



WRECO worked with BASMAA on a pilot program to select and implement urban stormwater treatment retrofit projects that can be used to evaluate potential polychlorinated biphenyl load reductions in urban stormwater runoff to the Bay.

WRECO completed the design and construction of stormwater treatment BMPs that were constructed along Bransten Road in the City of San Carlos. The design consisted of nine bioretention areas along Bransten Road situated within parking areas, which promoted infiltration and treated runoff to minimize impacts to downstream receiving waters. The design was in conformance with the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) C.3 guidelines where feasible. We also worked closely with Matthew Fabry of the SMCWPPP regarding post-construction design challenges and provided public outreach to educate the community. Additionally, WRECO addressed existing utility challenges by assisting the city with coordinating with the utility companies to meet their concerns. Construction was completed in 2013.

OWNER

City of Antioch

DURATION

2016 - Present

FEE

\$27K

CLIENT REFERENCE

Scott Buenting
Project Manager
City of Antioch
(925) 779-7050
sbuenting@ci.antioch.ca.us

PROJECT RELEVANCE

- ✓ Flood protection
- ✓ Hydrologic and hydraulic modeling
- ✓ NPDES trash requirements

LAKE ALHAMBRA WEIR EVALUATION

Antioch, CA



Lake Alhambra is located in the City of Antioch and drains into the San Joaquin River. Two weirs regulate freshwater inflows to the lake, both of which are defined as regulatory floodways by the Federal Emergency Management Agency (FEMA). South Lake Weir is located on the West Branch of East Antioch Creek, just upstream of a box culvert

that passes under South Lake Drive, and drains into a southern branch of the lake. Hillcrest Weir is located on the main branch of the East Antioch Creek and drains into a concrete channel that passes under Hillcrest Avenue before draining into the eastern end of the lake.

WRECO is assisting the city in investigating the possibility of installing a trash capture system at these two weirs that meets the NPDES requirements for a full trash capture system. We found that there is almost no potential of raising the height of these two weirs without causing an increase in flood levels in the regulatory floodway. Due to these findings, we are investigating other ways to achieve full capture at the weirs without negatively impacting flood levels.

OWNER

San Mateo County

DURATION

2017 - Present

FEE

\$195K

CLIENT REFERENCE

Mark Chow, P.E.
Principal Civil Engineer
San Mateo County
(650) 363-4100
mchow@smcgov.org

PROJECT RELEVANCE

- ✓ San Mateo County
- ✓ Stormwater management
- ✓ Hydrologic and hydraulic modeling
- ✓ Environmental compliance
- ✓ Geotechnical engineering
- ✓ CEQA documentation

COLMA CREEK FLOOD CONTROL CHANNEL IMPROVEMENT

PROJECT-UTAH TO NAVIGABLE SLOUGH, South San Francisco, CA



The project's objective is to provide channel improvements with flood walls, culvert repair/replacement/extension, and other routine maintenance activities along the Colma Creek Flood Control Channel.

This work will provide flood protection and adequate flood conveyance capacity for the City of South San Francisco communities near the channel.

As part of WRECO's On-call Engineering and Professional Services Agreement with San Mateo County, WRECO is responsible for conducting a subsurface soil investigation at the project site; preparing the PS&E package for wall plans, culvert replacement plans, and planting plans; the Geotechnical Investigation Report, Phase I/II Environmental Site Assessment Report, Hydraulic Analysis Report, and Stormwater Management Plan; and providing construction support. WRECO is also preparing the CEQA document and planting palette and developing the Initial Study/Mitigated Negative Declaration (IS/MND).

OWNER

City of Dinuba

DURATION

2009 - 2014

FEE

\$131K

CLIENT REFERENCE

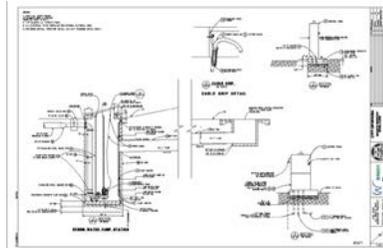
Juann Ramos, P.E.
Project Manager
Dokken Engineering
(916) 858-0642
jramos@
dokkenengineering.com

PROJECT RELEVANCE

- ✓ *Underground storage*
- ✓ *Hydrologic and hydraulic modeling*
- ✓ *Pump station/detention basin design*

AVENUE 416/EL MONTE WAY WIDENING

Dinuba, CA



Avenue 416/El Monte Way is a 4.5-mile segment of a Tulare County Route of Regional Significance connecting the cities of Dinuba and the communities of Sultana and Cutler/Orosi with SR 99.

Roadway drainage consists of roadside ditches and culverts in the rural and suburban areas to underground collection systems in the urban areas. Several roadways that intersect with Avenue 416/El Monte Way pose critical capacity and safety issues.

The pump station portion of the project is located along the Avenue 416/El Monte Way Corridor and consists of widening 12 miles of Mountain View Avenue/ Avenue 416/El Monte Way from Bethel Avenue in Fresno County through the City of Dinuba in Tulare County. WRECO was responsible for performing pump station evaluation, analyses, and preparing the pump station PS&E for a series of flood hazard abatement detention basins. This included six separate lift stations that will significantly reduce flooding impacts along the Avenue 416 corridor.

OWNER

Caltrans Headquarters

DURATION

2016 - Present

FEE

\$43K

CLIENT REFERENCE

James M. Philipp, P.E.
Senior Transportation Engineer
Caltrans, Office of Hydraulics & Stormwater
(916) 654-5080
jim.philipp@dot.ca.gov

PROJECT RELEVANCE

- ✓ *Caltrans requirements*
- ✓ *Underground structures/ detention basin design*
- ✓ *Water quality*

CALTRANS HEADQUARTERS STORMWATER CONTRACT - DETENTION BASIN AND DEVICES DESIGN GUIDANCE, Statewide, CA



For this task order, WRECO is reviewing and editing the design guidance documents for permanent stormwater treatment devices used by Caltrans, including biofiltration, infiltration, and detention devices, and media filters.

WRECO is also assisting with the development of new design guidance documents for infiltration gallery devices, which provide stormwater treatment through infiltration within subsurface structures, and bioretention devices, which use an engineered soil media to promote infiltration and retention of stormwater runoff. The design guidance development includes providing minimum design parameters, siting determination and limitations, and example calculations and quantity sheets.

OWNER

City of San Rafael

DURATION

2014 - 2016

FEE

\$116K

CLIENT REFERENCE

Hunter Young, P.E.
Assistant Civil Engineer
City of San Rafael
(415) 485-3408
hunter.young@cityofsanrafael.org

PROJECT RELEVANCE

- ✓ CEQA document
- ✓ Caltrans District 4 coordination
- ✓ Environmental technical studies

SAN RAFAEL REGIONAL TRANSPORTATION SYSTEM ENHANCEMENT PROJECT, San Rafael, CA



KHA prepared a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA for the San Rafael Regional Transportation System Enhancements (RTSE) project, which consists of improvements and modifications to provide accessible curbs and sidewalks to meet Americans with Disabilities Act (ADA) guidelines and provide accessible pedestrian

access with the downtown area, associated drainage improvements, and traffic signal system improvements. The traffic signal system upgrades will synchronize signals in the downtown area to optimize vehicular flow, and will include accommodations for rail pre-emption in anticipation of the extension of the Sonoma Marin Area Rail Transit (SMART) system extension.

Technical studies managed by KHA included an Historic Property Survey Report, Archaeological Survey Report, Extended Phase I Archaeological Survey Report, Environmentally Sensitive Areas Action Plan, Location Hydraulic Study and Summary Floodplain Encroachment Technical Memorandum, Natural Environment Study, and Phase I Initial Site Assessment.

OWNER

Town of Atherton

DURATION

2010 - 2011

FEE

\$29K

CLIENT REFERENCE

Neal Martin
Town Planner
Town of Atherton,
Planning Department
(650) 752-0544
nmartin@ci.atherton.ca.us

PROJECT RELEVANCE

- ✓ Project for the Town
- ✓ Traffic impact study

MENLO SCHOOL TRAFFIC IMPACT STUDY, Atherton, CA



KHA performed a traffic impact study for the proposed amendment of a Conditional Use Permit at Menlo School approved by the Atherton Planning Commission. The amendment allowed Menlo School to increase its enrollment from its current maximum to a maximum of 815 students. The analysis involved three scenarios: existing conditions, existing plus approved

permit conditions, and existing plus approved permit plus increased enrollment conditions. The AM peak period and PM peak period were both analyzed for level of service and delay. A specific trip generation study was completed for Menlo School because there was limited trip generation data in the ITE Trip Generation Manual that pertained to a private school with 600 or more students. In addition, KHA completed a quality control review of a new Traffic Demand Model plan prepared for Menlo School and reported its findings to the Town.

OWNER

City of Vallejo

DURATION

2015 - Present

CLIENT REFERENCE

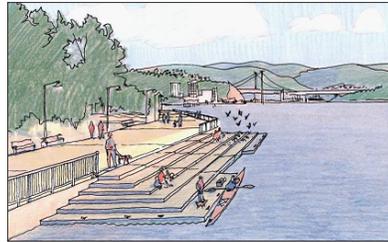
Will Morat
 Administrative Analysis II
 City of Vallejo
 Office of the City Manager
 (707) 648-4109
 will.morat@cityofvallejo.net

PROJECT RELEVANCE

- ✓ *Landscape design*
- ✓ *Conceptual master plan*
- ✓ *Park/sports field project*

VALLEJO WATERFRONT CONCEPTUAL MASTER PLAN

Vallejo, CA



PGA, thru a pro-bono effort, provided a conceptual master plan that re-imagined the City of Vallejo’s waterfront from Independence Park to the Vallejo Yacht Club.

The conceptual master plan came in response to a proposal by artist Mario Chiodo and the Vallejo Mayor to place large artwork

and gateway sculptures along the waterfront. Any artwork of this size needed to be carefully integrated with future site uses. Future uses had yet to be fully envisioned by the City, so PGA thought the best way to vet out and explore these uses was to prepare a conceptual master plan that would engage the community and stimulate thought and discussion on how to utilize the full potential of this unique City asset.

In addition to specifying locations for the large-scale art pieces, PGA’s conceptual master plan re-imagines the uses for the space which will include: a multi-use field, better water access, sports fields, a food truck court, arts and crafts fair space, bike trail connections, an outdoor theater, exercise equipment, benches and picnic opportunities, children’s play area, and a nature walk.

OWNER

Rotary Club of San Jose with Hensel Phelps and City of San Jose

DURATION

2012 - 2016

FEE

\$230K

CLIENT REFERENCE

Dave J. Mitchell, ASLA
 Park Planner/Project Manager
 City of San Jose
 (408) 793-5528
 dave.mitchell@sanjoseca.gov

PROJECT RELEVANCE

- ✓ *Park project*
- ✓ *Landscape design*
- ✓ *Master planning*

ROTARY PLAYGARDEN, San Jose, CA



The fully accessible PlayGarden, located at the City of San Jose’s Guadalupe River Park, is a first of its kind for San Jose. PGA’s role included master planning, construction documents, and construction administration. PGA led a full team of subconsultants including a civil engineer, a structural engineer, an electrical engineer, an artist/fabricator, and a geotechnical engineer. The cost of the project was set at \$6 million and included the donation of time and materials.

The PlayGarden focuses on providing multiple activities that accommodate a variety of needs. There is rotating, swinging, sliding, climbing, spinning, and bouncing equipment; kinetic elements sand, tactile play, and water play; and a wheelchair accessible carousel — all in a layout that encourages playing together.

The park’s legacy includes hiring and training staff with special needs to help maintain the park. In addition, the Santa Clara County Office of Education and San Andreas Regional Center will support programming at the facility for their clients.

Project Understanding

The WRECO Team understands the Town has entered into a Cooperative Implementation Agreement (CIA) with Caltrans where Caltrans has agreed to contribute \$13.6 million to the design and construction of a Water Capture Facility at Holbrook-Palmer Park adjacent to the Atherton Channel.



Photo 1. Open lawn at Holbrook-Palmer Park, site of the proposed water capture facility

The purpose of the water capture facility will be to provide water quality treatment and to provide capacity for the 10-year storm event in Atherton Channel at the Marsh Road crossing. To meet these goals the water capture facility will need to provide approximately 8 to 10 acre-feet of storage. This Project was originally proposed in the Town's Drainage Study Update in April 2015 as an open detention facility and was then reimagined in the San Mateo County Stormwater Resource Plan in February 2017 as an underground facility that would provide water quality treatment in addition to the flood control.

The drainage area for Atherton Channel at the Holbrook-Palmer Park location is approximately 2,875 acres with 14 acres from I-280 and 10 acres from El Camino Real. The method for capturing the runoff described in the RFQ includes adding a diversion structure within Atherton Channel that will direct flow into the water capture facility. An outfall pipe on the downstream end of the water capture facility will discharge back into Atherton Channel.

WRECO Team

The WRECO Team has provided design support for various types of water quality and flood control projects in the San Francisco Bay Area and has worked on park improvement projects. We are versed in the local water quality and other regulatory requirements and have great working relationships with agencies such as the San Francisco Bay RWQCB. Our team will use the experience, knowledge, and relationships we have to help navigate the Project through the potential challenges it may face.

Potential Project Challenges and Solutions

Jurisdictional Waters of the U.S.

Atherton Channel, while not in a Federal Emergency Management Agency (FEMA) floodplain, is considered a jurisdictional Waters of the U.S. and State. It has a distinct bed, bank, and channel; therefore, it falls within the jurisdiction of the California Department of Fish and Wildlife (CDFW). This presents several challenges. Any work that is done within the jurisdictional boundaries would require permits from the U.S. Army Corps of Engineer (USACE), CDFW, and RWQCB. Typically, the resource agencies deny projects that alter flows to and from the channel, so the WRECO Team will assist the Town to develop a strong case to show the benefits of flows being altered and processed through the water capture facility and re-released into the stream after treatment in better condition. Altering the channel may require mitigation depending on the final design alternative chosen and actual impacts to the creek. The WRECO Team's review of the downstream channel indicates that water rights will not likely be a consideration.

Environmental Permitting

Based on the WRECO Team's preliminary research, we anticipate the following permits are required for the Project:

- *RWQCB 401 Water Quality Certificate*
- *USACE 404 Nationwide Permit*
- *CDFW 1602 Lake and Streambed Alteration Agreement*

The WRECO Team will prepare these permit applications and will also coordinate with the resource agencies to facilitate approval of these permit applications.

California Environmental Quality Act

Based on our preliminary assessment, we assume the Project will require an Initial Study/Mitigated Negative Declaration (IS/MND) document to satisfy the California Environmental Quality Act (CEQA) documents. However, four elements covered by CEQA could result in findings of unavoidable significant impact which would trigger the preparation of an Initial Study/Environmental Impact Report (IS/EIR). Those four elements include:

1. *Public Services and Recreation*
2. *Biological Resources*
3. *Hydrology*
4. *Water Quality*

Public services and recreation are elements that must be considered because the Project would take place in the only public park in the Town. Although only a portion of the park would be closed for approximately one year, impacts likely could be kept to an insignificant or mitigatable level through public outreach and planning. Biological resources, hydrology, and water quality are other CEQA elements that must be taken into consideration because of the potential for altering the existing drainage pattern of the site.

The WRECO Team assumes that no document will be required to satisfy the National Environmental Policy Act (NEPA) because the Project is not receiving federal funds.



Photo 2. Looking downstream of Atherton Channel — Holbrook-Palmer Park located to the right beyond the tree line

Soil Conditions

The Natural Resources Conservation Service (NRCS) soil report for the Project area shows a clay loam composition with a hydrologic soil group C and a depth to water table of “more than 80 inches.” The WRECO Team will perform a more detailed geotechnical investigation of the soil conditions to determine the feasibility of infiltration and installation of dry wells at the site. Typically, a water table depth of 10 feet or greater is required for infiltration.

Justifying Treatment of the I-280 Watershed

The Caltrans CIA funding is a result of the Project’s ability to provide water quality treatment for the I-280 and El Camino Real runoff within the Atherton Channel watershed. The 10 acres of the El Camino Real drainage area are relatively close to Holbrook-Palmer Park, and it can be assumed that the water quality volume will reach the water capture facility. The 14 acres of the I-280 drainage area is located approximately 4.7 miles upstream of Atherton Channel at the very top of the 2,875-acre drainage area. In order to credit the water capture facility with treatment of the I-280 drainage area it would need to fully capture all flows from Atherton Channel, which would be difficult to permit and might require mitigation. The WRECO Team will assist the Town in coordinating with the funding partners at Caltrans to communicate the Project’s capabilities and available alternatives.

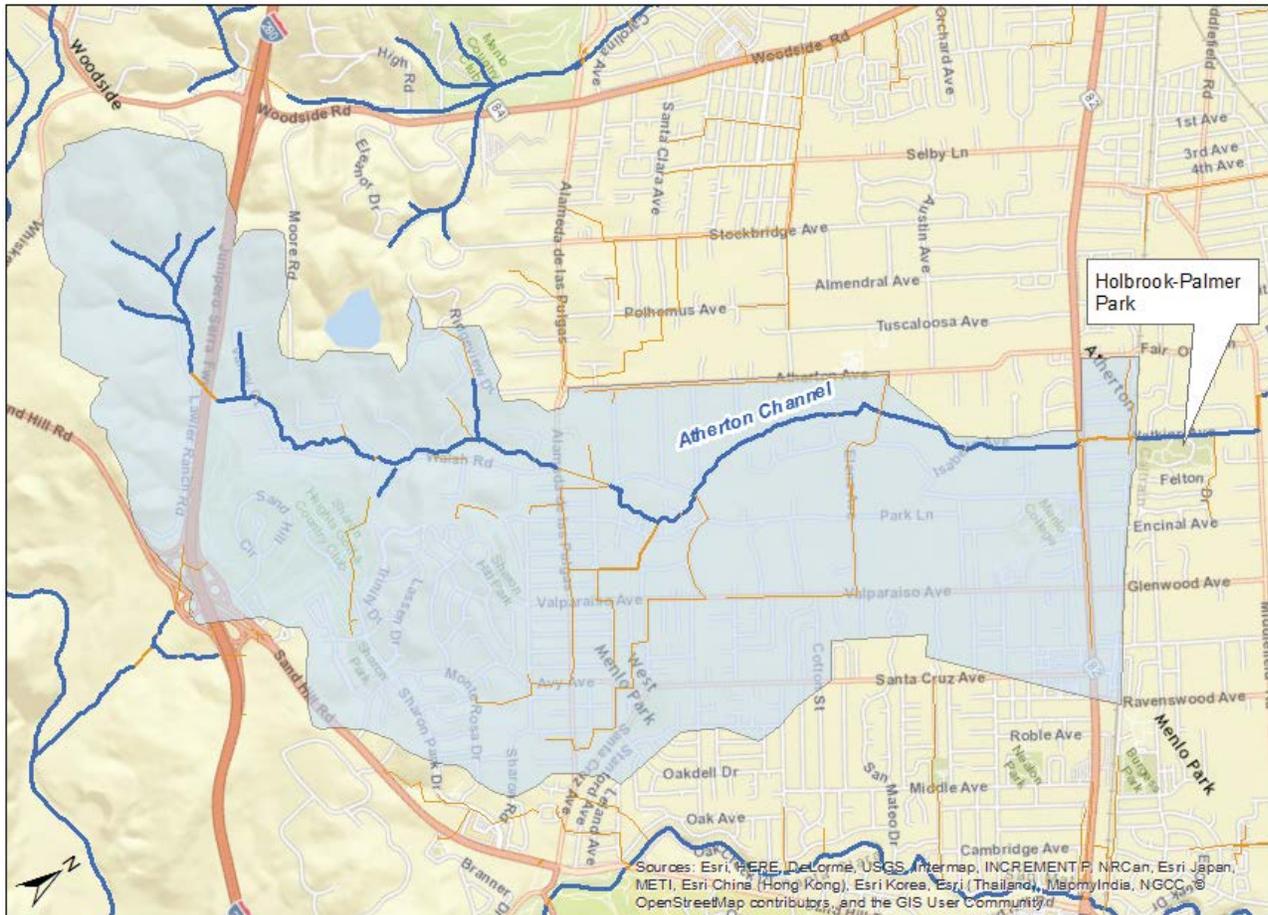


Figure 1. Atherton Channel watershed at Holbrook-Palmer Park

Disturbance to Park Facilities

Holbrook-Palmer Park is the only public park within the Town. The Park Master Plan identifies the open lawn as one of the most popular facilities within the park and it is also the proposed location of the water capture facility. Several sports leagues, including lacrosse and little league, use the field on a seasonal basis. The little league season lasts from February to June, and lacrosse events are scheduled for June, July, September, and October. The baseball field in the south corner of the lawn has been recently renovated and received a new infield in 2015. The Park Master Plan provides proposed improvements throughout the park, but the majority of the open lawn space is preserved, which will make locating the water capture facility easier. Project construction is estimated to take 16 months, which will impact the use of the field. The WRECO Team will review phasing options for construction with the Town to limit the time and area of open lawn that would be unavailable to the public during construction.



Photo 3. PGA's Union Park Project

Project Approach

Alternatives Development for Permitting Comparisons

The WRECO Team will coordinate with the regulatory agencies to determine if diverting the runoff in Atherton Channel would require any mitigation in order to be permitted. Our strong working relationships with the necessary agencies and our knowledge of the requirements will help expedite the process. We will make a strong appeal to the Project's benefits in treating the water quality and minimal downstream impacts given the concrete-lined channels and culverts throughout the system.

In the event that mitigation seems likely, alternative options for routing runoff to the water capture facility will be analyzed. This will allow for a comparison of the permitting and mitigation requirements that could impact the Project schedule and budget.

A possible alternative for the Town to consider would be to use the existing storm drain systems on El Camino Real and re-direct them north along Spruce Avenue under the existing Caltrains' line and into the water capture facility in Holbrook-Palmer Park (see Figure 3). The runoff along Spruce Avenue that is conveyed to Atherton Channel in a 24" pipe would also be directed to the water capture facility. The total captured watershed would be approximately 305 acres. The water capture facility would discharge into Atherton Channel. This avoids the full diversion of Atherton Channel and would minimize mitigation and permitting. Challenges for this alternative would include working in the City of Menlo Park's jurisdiction along Spruce Avenue and crossing an existing Caltrain line with the proposed pipe diversion. Permits will still be required for the new outfall into Atherton Channel.



Figure 2. Potential alternative for directing runoff to the proposed water capture facility

Improving Surrounding Facilities

Additionally, the WRECO Team noticed the sidewalk along the east side of Watkins Avenue is narrow, has a poor-quality fence (northbound of the bridge), links up awkwardly with the pedestrian bridge, has a degraded curb, and is not Americans with Disabilities Act (ADA) compliant. There may be an opportunity to correct some or part of these issues within the Project scope.

All concepts and proposed improvements would be discussed with the Town and vetted through the public review process. We understand the park facilities should be kept available to the public as much as possible during construction. To accommodate this, special attention will be paid to phasing the construction and designing temporary access paths when and where needed. Impacts on ADA access from the west must be fully understood even if the bridge is closed temporarily.

Comprehensive Hydrology and Hydraulic Modeling

WRECO has extensive experience in modeling complex hydrologic and hydraulic projects using a variety of methods and software. Our staff is trained in HEC-HMS, HEC-RAS, EPA SWMM, PC SWMM, and HydroFlow. For the analysis of the detention/infiltration, it is recommended that EPA SWMM or PC SWMM be used for the hydrologic and hydraulic analysis of the Project alternatives. Our capabilities will allow us to quickly and accurately provide alternative methods

for routing runoff into the proposed water capture facility, size the water capture facility, and determine the downstream impacts. We can also quickly adjust our models to account for any changes that may arise during permitting, design, or construction. We have a great working relationship with the San Mateo County Flood Control District, which will help streamline coordination and review of our models through the agency.

Sorting Through the Vendor Devices

The WRECO Team has experience and contacts with major vendors of the underground storage and infiltration devices that would be considered for this Project. Each vendor offers several options for underground storage and infiltration. The underground storage will need to detain approximately 350,000 to 450,000 cubic feet. The amount of storage in an individual chamber depends on the shape and profile of the selected product. Our initial review of the products available and the allowable space in the open lawn shows that several products will be able to meet these requirements. We will review all vendor options after receiving the results of the geotechnical analysis to determine the best fit for the Project site with an emphasis on maintenance requirements. The vendors we plan to compare include Contech, ADS, Stormtrap, Prinsco, and Aquashield.



Figure 3. Storage/infiltration devices (Source: Contech)

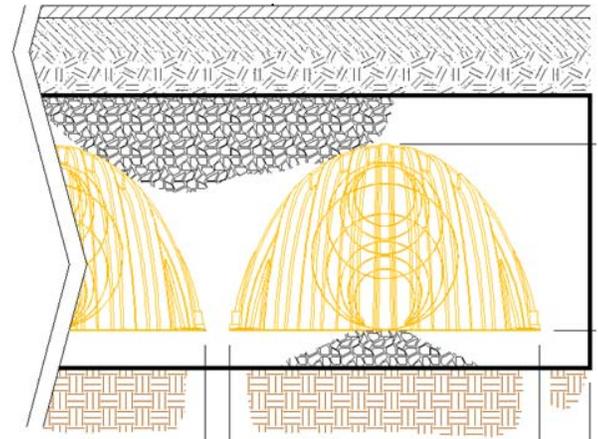
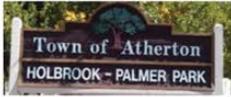


Figure 4. Example of storage device in profile (Source: ADS)

Communication is Key

The biggest component to making this a successful Project will be effective communication. As an innovative and impactful Project, it has many stakeholders. The WRECO Team has a long history of working with these stakeholders and we have many close contacts. We will use our experience and knowledge of the processes that must be followed to effectively navigate the required permits, reviews, and documentation of the Project.

We understand that potential Project stakeholders may include:

 <p>Town Staff and Community</p>		 <p>RWQCB</p>	 <p>US Army Corps of Engineers®</p>	
 <p>San Mateo County FCD and Clean Water Program</p>	 <p>Holbrook-Palmer Park Foundation</p>	    <p>Vendors of Water Capture Devices</p>	 <p>North Fair Oaks Surrounding Jurisdictions</p>	

The WRECO Team Benefits

For this Project, the WRECO Team will provide the Town with our extensive experience in complex flood control and water quality projects, permitting those projects, award-winning park design experience, and communicating our projects through local public outreach.

We have a long history of great working relationships with Caltrans Headquarters — Division of Environmental Analysis and Stormwater Units, Caltrans District 4, regulatory agencies, the San Mateo Countywide Water Pollution Prevention Program, and the San Mateo County Flood Control District. With these qualifications, the WRECO Team can streamline the Project through environmental clearance and design the best solution(s) to meet the Town’s schedule and budget.

Approach/Scope of Work

TASK 1 SITE ANALYSIS/ALTERNATIVES ANALYSIS AND PRELIMINARY ENGINEERING CONCEPT

Task 1.1 Alternatives Analysis and Preliminary Engineering Concept Design Report (20%)

The WRECO Team will review available data, including previous studies, provided by the Town and other relevant background materials related to the Project. We will also conduct a field reconnaissance to assess the existing conditions in the vicinity of the Project site. We will conduct meetings with the Project Team and representatives from the Town, park foundation, Caltrans, SMCWPPP, Caltrain, USACE, RWQCB, and CDFW to receive input on the Project and discuss potential regulatory challenges.

The WRECO Team will perform a hydrology and hydraulics analysis using SWMM software on up to three alternatives for directing runoff into the proposed water capture facility and options to meet the regulatory challenges. An Alternatives Analysis Report will be developed summarizing the findings of the analysis including coordination with the Project Team. The WRECO Team will meet with the Town to discuss the alternatives, and the Town will select their desired alternative.

Once the alternative is chosen, we will prepare the Preliminary Engineering Concept Design Report and the preliminary drawings (20%) for the Town to review and approve prior to Council approval. The final report will be used as the basis of design.

■ **Deliverables:**

- *Alternatives Analysis Report (PDF)*
- *Draft Preliminary Engineering Concept Design Report (PDF)*
- *Final Preliminary Engineering Concept Design Report (PDF and 3 hard copies)*

TASK 2 TECHNICAL STUDIES

Task 2.1 Jurisdictional Determination

The WRECO Team will conduct a site reconnaissance to determine if potential wetlands or other waters regulated by the USACE and/or Waters of the U.S. or State may be present. If potential jurisdictional wetlands and or waters are identified, we will conduct a wetlands delineation utilizing the USACE Wetlands Delineation Manual and the applicable regional supplements. We will provide mapping and supporting figures as required by the USACE's guidance. If necessary, the WRECO Team can attend a field verification with the regulatory agency representative to confirm the presence or absence of jurisdictional waters.

■ **Deliverables:**

- *Draft Wetland Delineation Report (Word Document and PDF along with supporting materials and files)*
- *Final Wetland Delineation Report (Word Document and PDF along with supporting materials and files, and 3 hard copies)*

Task 2.2 Biological Resources Analysis

Based on WRECO's past projects in the Upper Atherton Channel, a Biological Resources Study will be necessary. The WRECO Team will prepare the Biological Resources Study and include it in the appendix of the Initial Study, including any resource agency permits that may be necessary.

■ **Deliverables:**

- *Draft Biological Resources Study Report (PDF)*
- *Final Biological Resources Study Report (PDF and 3 hard copies)*

Task 2.3 Floodplain Evaluation Report Technical Memorandum

Based on the WRECO Team's preliminary qualitative assessments, no floodplain encroachments or impacts are anticipated as a result of the Project. Therefore, WRECO will prepare a Floodplain Evaluation Report Technical Memorandum, including the Technical Information for the Location Hydraulic Study and the Floodplain Evaluation Report Summary form to document the investigation and summarize the results.

■ **Deliverables:**

- *Draft Floodplain Evaluation Report Technical Memorandum (PDF)*
- *Final Floodplain Evaluation Report Technical Memorandum (PDF and 3 hard copies)*

Task 2.4 Water Quality Assessment Memorandum

In order to provide the existing physical and regulatory environment information for water quality, the WRECO Team will: 1) identify and describe the current and upcoming laws that relate to water quality, 2) describe the beneficial uses for all potentially affected waters, 3) discuss water quality objectives for all potentially affected waters, 4) collect and present any monitoring data from other agencies, 5) list potential sources of pollutants, and 6) describe the watershed, existing drainage, and hydrologic conditions. We will evaluate the water quality impacts for each proposed alignment and recommend possible minimization measures to reduce the adverse impacts to water quality. We will document our findings in a technical memorandum.

■ **Deliverables:**

- *Draft Water Quality Assessment Memorandum (PDF)*
- *Final Water Quality Assessment Memorandum (PDF and 3 hard copies)*

Task 2.5 Initial Site Assessment

The WRECO Team will review available data, including previous studies, Resource Conservation and Recovery Act (RCRA) facility inspections and plans, site investigation reports, groundwater monitoring reports, and federal and State record reviews within 1 mile of the Project site provided by the Town and other sources.

WRECO will conduct a field reconnaissance to assess the existing conditions in the vicinity of the Project site.

WRECO will perform an Initial Site Assessment and summarize the results in a technical memorandum. WRECO will incorporate the comments received on the draft technical memorandum and prepare the final technical memorandum. The memorandum will comply with Caltrans and CEQA/NEPA requirements.

■ **Deliverables:**

- *Draft Initial Site Assessment Memorandum (PDF)*
- *Final Initial Site Assessment Memorandum (PDF and 3 hard copies)*

Task 2.6 CulturalArchival and Records Search and Native American Consultation

The WRECO Team will request an archival and records search of the Project area from the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University. The archival and records search will be conducted for a 0.25-mile radius

surrounding the Archaeological APE and will reveal all known cultural resources and prior cultural resource studies associated within the Project area.

Literature Review Report

After the literature review is completed, the WRECO Team will prepare a report as appropriate for documenting the type(s) of resources encountered, previous studies conducted, results of Native American consultation, and summary. The report will be prepared in accordance with the State CEQA Guidelines and will include mapping as needed and archaeological site location data if appropriate. The report will also contain recommendations for further studies if needed.

■ Deliverables:

- *Draft Cultural Assessment Report (PDF)*
- *Final Cultural Assessment Report (PDF and 3 hard copies)*

Task 2.7 Traffic

Construction Traffic

The CEQA document is required to address construction activity and trip generation for demolition and new construction. The WRECO Team, in collaboration with the Town staff, will develop a preliminary construction schedule and relevant construction traffic activity, including impacts to pedestrians, bicyclists, and general transit during construction.

Background Information

The WRECO Team will review the Project-related materials consisting of the proposed site plan, Project schematic plans, land use quantities/unit totals, site access locations, the Project description, recent local traffic studies and available traffic data within the study area (to be provided by the Town), and agency and regional transportation planning documents (consisting of general plan circulation elements and recent community plan circulation elements).

■ Deliverables:

- *Draft Traffic Impact Study Report (PDF)*
- *Final Traffic Impact Study Report (PDF and 3 hard copies)*

Task 2.8 Noise & Vibration

Existing Conditions/Regulatory Framework

The WRECO Team will review applicable noise and land use compatibility criteria for the Project area. Noise standards regulating noise impacts will be discussed for land uses on and adjacent to the Project site. We will conduct a reconnaissance throughout the Project site. During the reconnaissance, the WRECO Team will conduct short-term noise level measurements along the Project area. The noise monitoring survey will be conducted at up to four separate locations to establish baseline noise levels in the Project area. The noise analysis will be structured to address the applicable questions from Appendix G of the CEQA Guidelines.

Construction-Related Noise and Vibration

Construction would occur during implementation of the proposed Project. Noise impacts from construction sources will be analyzed based on the anticipated equipment to be used; length of a specific construction task; equipment power type (gasoline or diesel engine), horsepower, and load factor; and percentage of time in use. The construction noise impacts will be evaluated in terms of

maximum levels (Lmax), hourly equivalent continuous noise levels (Leq), and the frequency of occurrence at adjacent sensitive locations. If pile driving is required for the Project, an analysis of vibration impacts from potential pile driving or drilling for the placement of piles will be based on the Federal Transit Administration's vibration analysis guidance. Analysis requirements will be based on the sensitivity of the area, specific construction activities, and Noise Ordinance specifications.

Operational Noise Sources

On- and off-site noise impacts from vehicular traffic will be assessed using the U.S. Federal Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The 24-hour weighted Community Noise Equivalent Levels (CNEL) will be presented in a tabular format. On-site noise-generating activities will also be addressed and analyzed for potential impacts to the adjacent uses. Mitigation measures will be identified, if necessary.

■ **Deliverables:**

- *Draft Noise Study Report (PDF)*
- *Final Noise Study Report (PDF and 3 hard copies)*

Task 2.9 CEQA Documentation Support

After the WRECO Team prepares the technical studies deemed necessary to satisfy the CEQA requirements, we will preparation of Initial Study/Mitigated Negative Declaration.

The WRECO Team will prepare an Initial Study (IS) in conformance with CEQA and the regulation requirements and procedures of any other responsible Public Agency with jurisdiction by law. Based on our current Project understanding, the following scope of work assumes preparation of an IS leading to a Mitigated Negative Declaration (MND). Should one or more impacts be identified as Significant and Unavoidable, thus necessitating the preparation of an Environmental Impact Report (EIR), a separate scope of work and budget can be prepared for the alternative environmental documentation.

Screencheck Draft IS

The WRECO Team will prepare an IS in accordance with the Town's CEQA criteria. We will evaluate the necessary information with respect to the existing conditions, the potential adverse effects of Project implementation (both individual and cumulative), and measures to mitigate such effects. Ten copies of the Screencheck Draft IS and one (1) copy on disk in PDF format will be provided to the Town. In consultation with all affected parties, we will revise the Screencheck Draft IS for final Town approval prior to public review. The WRECO Team will respond up to two (2) rounds of Town comments received on the Screencheck Draft IS.

Public Distribution and Review

Up to 15 copies of the Public Review Draft IS will be provided for public distribution. The WRECO Team will also prepare all required noticing and document distribution (based on distribution lists provided by the Town), including the required 15 copies to the State Clearinghouse under this task. Required noticing will be sent via regular mail based on a 500-foot radius from the edge of the Project limits.

The WRECO Team will provide the Town with a Notice of Availability (NOA) following approval of the Public Review Draft IS for publication in the newspaper of local circulation and will prepare and submit a Record of Public Meeting to the Town. Our representatives will attend and represent the Project team at all public hearings and make presentations as necessary.

Response to Comments

The WRECO Team will respond to all comments received on the Draft IS during the 30-day public review period. The Draft Responses to Comments will be prepared for review by the Town staff. Following review of the Draft Responses to Comments, we will finalize this section for inclusion in the Final IS.

Final Environmental Document

To comply with the Public Resources Code Section 21081.6 (AB 3180), the WRECO Team will prepare a Draft Mitigation Monitoring and Reporting Program (MMRP) which will be submitted to the Town for review and approval. We will respond to one complete set of Town comments on the Draft MMRP. The Draft MMRP will be defined through working with staff to identify appropriate monitoring steps and procedures in order to provide a basis for monitoring such measures during and upon Project implementation. The Final IS will be assembled including the Draft IS, Responses to Comments, Technical Appendices, and Final MMRP.

The WRECO Team will complete the CEQA process for environmental clearance including the filing of the Notice of Determination (NOD). A draft NOD will be prepared and submitted to the Town for review and comment. Following the review, we will prepare a Final NOD and submit to the Town.

■ **Deliverables:**

- *Draft Initial Study/Mitigated Negative Declaration (PDF)*
- *Final Initial Study/Mitigated Negative Declaration (PDF and 3 hard copies)*
- *Screencheck Draft IS for Town review (PDF and 10 hard copies)*
- *Public Review Draft IS for public distribution (PDF and 15 hard copies)*
- *Public Review Draft IS to the State Clearinghouse (PDF and 15 hard copies)*
- *Final IS and MMRP (PDF and 10 hard copies)*
- *Draft Notice of Determination (PDF)*
- *Final Notice of Determination (PDF and 3 hard copies)*

TASK 3 COMMUNITY OUTREACH AND PUBLIC INPUT

The WRECO Team will assist the Town in community outreach and public input by attending up to two (2) public meetings. A Draft Community Outreach Presentation (PowerPoint) and supporting materials will be provided to the Town for comment, and will be revised following comments for the Final Community Outreach Presentation. The Town will be responsible for securing a venue and preparing notices. Additionally, we will summarize the comments received from each meeting.

■ **Deliverables:**

- *Draft Community Outreach Presentation (PowerPoint)*
- *Final Community Outreach Presentation (PowerPoint)*
- *Comments summary from each event (PDF)*

TASK 4 GEOTECHNICAL INVESTIGATION

The WRECO Team will:

- *Drill up to four (4) borings within the proposed limit of Holbrook-Palmer Park to completion depths between 10 and 15 feet below existing grades.*
- *Perform soil sampling using split-barrel drive samplers at 2.5-foot sampling intervals to recover disturbed soil samples.*
- *Install temporary wells in the borings for use in determining the groundwater level (if encountered) and also for performing infiltration testing to determine the site soil infiltration rates.*
- *Have the WRECO Team's geologist observe the boring and sampling work along with the well construction.*
- *Take the recovered representative samples to a certified soil laboratory, and soil testing will generally consist of particle-size determination, liquid and plastic limit, and moisture/density. Actual soil testing will be determined based upon recovered soil samples.*
- *Perform and document the soil classifications and assumed soil strata breaks, groundwater level (if encountered), well construction, and summary of soil laboratory testing results.*
- *Perform infiltration testing in the wells to determine the steady-state infiltration rates of the soils.*

The WRECO Team will prepare the Draft Geotechnical Report which will include (but not be limited to) the following:

- *Summary of scope of work*
- *Project description, location map, and vicinity map*
- *Field exploration program summary*
- *Laboratory testing program*
- *Site geology and subsurface conditions*
- *Geologic profiles and engineering parameters*
- *Infiltration testing results and design infiltration rates*
- *Recommendations for general grading and the underground water storage construction.*

We will submit the Draft Geotechnical Report to the Town for comment, and we will address the Town's comments and issue the Final Geotechnical Report.

■ **Deliverables:**

- *Draft Geotechnical Report (PDF)*
- *Final Geotechnical Report (PDF and 3 hard copies)*

TASK 5 TOPOGRAPHIC SURVEY AND BASE MAPPING

The WRECO Team will perform a topographic survey of the Project site. We will define the limits of the survey and will include all the items necessary to complete design and construction of the Project. Items will include, but are not limited to: slopes, grade breaks, drainage features, irrigation features, park entrances, existing utilities, structures, and trees. Sufficient temporary benchmarks (TBMs) will be established to provide adequate control during the construction phase of the Project. We will perform cross sections of Atherton Channel at the Caltrain crossing to the Middlefield Road culvert at approximate 100-foot intervals plus outfall lines into the channel (~3,000 feet). We will prepare a digital base map (AutoCAD based) for the Project at a scale of 1"=20', using standard drafting

conventions. The base map will depict the existing site conditions. Additionally, the WRECO Team will prepare easement descriptions and exhibits as necessary. We will survey the existing sewer lines and dipped areas, and information will be included in the base maps.

 **Deliverables:**

- *Base Map of Existing Conditions (Topo, utilities, easements, etc.)*

TASK 6 PRELIMINARY DESIGN PLANS

The WRECO Team will prepare the preliminary improvement plans which will include the plan and profile; details for grading, drainage, and irrigation; and pertinent facilities necessary for the Project at 30%, 60%, and 95% design. All improvements will be per the Town, County, or Caltrans' standards as appropriate. The WRECO Team will also prepare an itemized engineer's quantity estimate and construction costs for all items of work. Utility relocation will be avoided to the extent practicable to keep costs down and schedule streamlined. If utility relocation is unavoidable, coordination will be required. Additionally, we will perform structural review of any pre-manufactured systems.

 **Deliverables:**

- *30% Plans (PDF)*
- *60% PS&E (PDF)*
- *95% PS&E (PDF)*

TASK 7 PERMITTING

The WRECO Team will prepare the resource agency permit applications for the Project utilizing information provided by the Town. The Town will submit the final permit applications and pay all associated fees. After the permit applications have been submitted, the WRECO Team will act as the Project contact for the regulatory agencies with regard to questions about the Project. We will track the progress of the permits' status to expedite receipt. The Town will be copied on all correspondence. Based on the WRECO Team's preliminary research, we anticipate the following permits are required for the Project:

- *RWQCB 401 Water Quality Certificate*
- *USACE Standard Permit 404 Nationwide Permit*
- *CDFW 1602 Lake and Streambed Alteration Agreement*

 **Deliverables:**

- *Draft Permit Applications (Word file and PDF)*
- *Final Permit Applications (Word file, PDF, and 3 hard copies for each application)*

TASK 8 FINAL DESIGN PLANS

The WRECO Team will implement comments received from the previous submittals prior to updating the PS&E for the Final 100% PS&E submittal, including performing a structural review of the pre-manufactured system.

 **Deliverables:**

- *Final 100% PS&E (AutoCAD, PDF, and one full-size original)*

TASK 9 DRAINAGE REPORT

The WRECO Team will review the available data and prepare the design calculations to assess the capacity of the existing drainage systems. We will prepare the Drainage Report, which will include design calculations to assess the need for any drainage improvements. The results and design recommendations will be summarized in the Drainage Report. The report is expected to include the following:

- *Evaluation of the existing conditions*
- *Unusual and special conditions*
- *Drainage mapping*
- *Hydraulic analysis and modeling*
- *Proposed systems*

■ **Deliverables:**

- *Draft Drainage Report (PDF – submitted with 30% Plans)*
- *Final Drainage Report (PDF and 3 hard copies – submitted with 95% PS&E)*

TASK 10 STORMWATER MANAGEMENT PLAN

The WRECO Team will prepare a Stormwater Management Plan summarizing the Project impacts to water quality and recommended BMPs. Our study will address only the impacts from the Project and associated roadway improvements, and we will utilize guidance from the Town, San Mateo Countywide Water Pollution Prevention Program, and San Francisco Bay RWQCB.

We will also address the need for the Construction General Permit (CGP) and assist the Town to comply with this permit. We will:

- *Perform a risk assessment for the Project*
- *Update the Stormwater Management Plan to document the risk of the Project and the new BMPs to be implemented*
- *Provide cost estimates for additional Inspections/Monitoring/Sampling/Rain Event Action Plan, as applicable, based on the risk assessment of the Project for the PS&E package*

■ **Deliverables:**

- *Draft Stormwater Management Plan (PDF – submitted with 30% Plans)*
- *Final Stormwater Management Plan (PDF and 3 hard copies – submitted with 95% Plans)*

TASK 11 PROJECT MANAGEMENT AND MEETINGS

The WRECO Team will attend the Project kickoff meeting and attend five coordination meetings. We will also participate in up to 10 conference calls with the Town staff. On a monthly basis, WRECO will provide the Town staff with invoices and progress reports for the Project.

■ **Deliverables:**

- *Monthly Invoices and Progress Reports*

TASK 12 BIDDING SUPPORT

The WRECO Team will provide bidding assistance to the Town. We will draft responses to Requests for Information (RFIs). Additionally, we will assist the Town staff in preparing bid addenda documents.

■ **Deliverables:**

- *Responses to RFIs and bid addenda documents*

TASK 13 DESIGN SUPPORT DURING CONSTRUCTION

Design Support during Construction

The WRECO Team will provide construction assistance to the Town. We will perform the following tasks:

- Attend pre-construction meeting
- Review and comment on contractor's submittals, RFIs, and change-order requests
- Perform field review during construction as requested by the Town
- Prepare "As-built" drawings

Bio Construction Monitoring

The WRECO Team's ornithologist will:

- Perform all nesting bird surveys necessary to keep the Project in compliance with environmental regulations.
- Keep records of nesting bird survey methods, results, and maps for each day that a survey is conducted.
- Provide reports for each day surveyed and provide monthly monitoring reports.
- Notify the designated site supervisor immediately if active nests are discovered and what the implications would be. The WRECO Team will be available to discuss avoidance measures (including buffer zones) and monitoring options.

■ Deliverables:

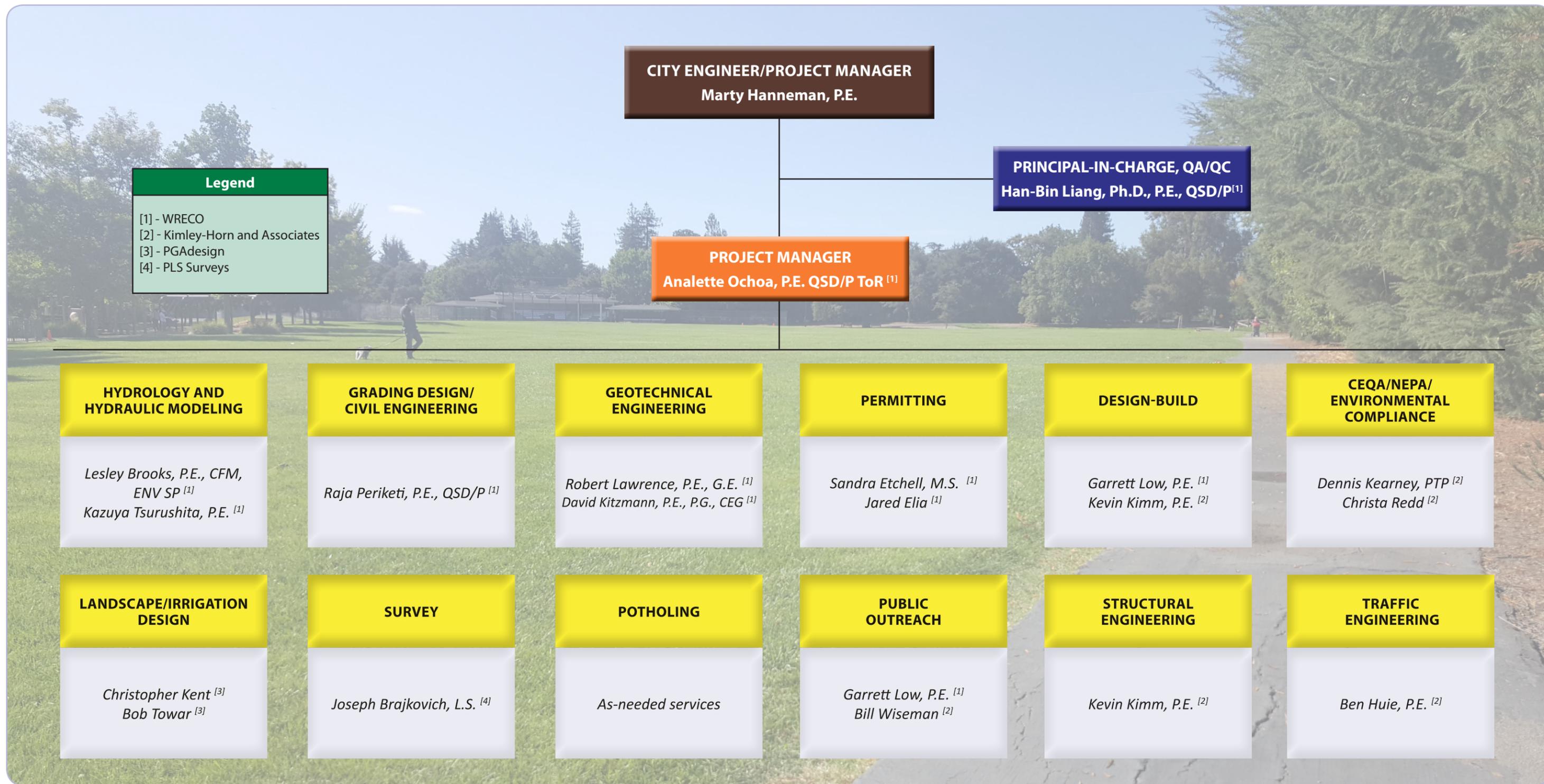
- Pre-construction Survey Results and Observations (to be submitted to the designated site supervisor within 24 hours of completion - PDF)
- Bi-weekly Survey Results and Observations (to be submitted to the designated site supervisor within 24 hours of completion - PDF)
- Monthly Survey Results Reports (to be submitted to the designated site supervisor - PDF)
- Final Construction Monitoring Report, providing nesting bird survey reports and maps (to be submitted to the designated Project personnel – PDF and 3 hard copies).
- Monitoring Plan, if active nests are located within the Project area and have potential to be impacted by the construction activity (this is an optional task).

Scope and Fee Assumptions:

- Encroachment permits will be provided at no cost to WRECO.
- Rights-of-entry (if required) will be provided by others to WRECO prior to the field investigation.
- The field work will be performed during daylight hours (8am to 5pm).
- The site is accessible with truck-mounted drilling equipment and a support truck for the infiltration testing.
- This scope and fee are only for the park infiltration and construction. No geotechnical work is included outside the limits of the park site.
- The Project schedule is dependent on timely approval of permits and the availability of drilling equipment.
- No hazardous materials are known to exist at the site or will be encountered during fieldwork.
- Notification to residents of work in the channel and the park will be performed by the Town.
- Access will be available for a portable drilling rig to the site.
- Boreholes can be advanced using auger methods.

Project Disciplines

The WRECO Team’s proposed key staff and their roles are detailed below in the organizational chart. The WRECO Team is fully committed and available to assist the Town for this upcoming Project.



Availability

The WRECO Team is committed and available to work on this Project. We can start work immediately upon receiving the Notice to Proceed from the Town.

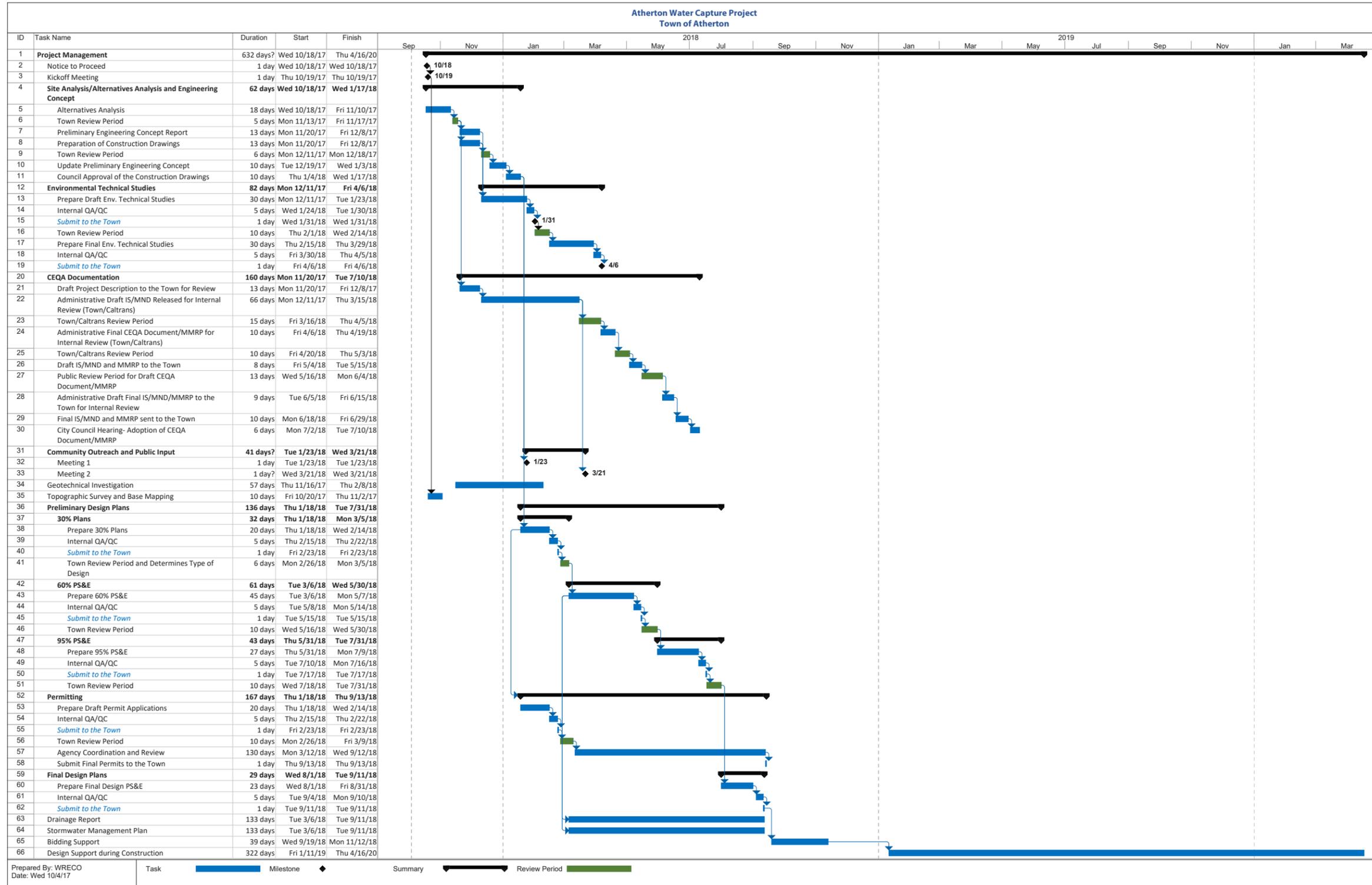
Offices Performing Work

Shown in the table below are the WRECO Team offices that will be working on this Project.

Firm	Primary Office(s) Performing Work
WRECO	San Jose: 100 Century Center Court, Suite 502, San Jose, CA 95112 Walnut Creek: 1243 Alpine Road, Suite 108, Walnut Creek, CA 94596
KHA	San Jose: 100 W. San Fernando Street, Suite 250, San Jose, CA 95113
PGA	Oakland: 444 17th Street, Oakland, CA 94612
PLS	Oakland: 2220 Livingston Street, Suite 202, Oakland, CA, 94606

Schedule

As shown in our proposed Project schedule below, the WRECO Team can meet the Town's milestone schedule.



Consultant Services Agreement

WRECO has reviewed the sample agreement and would like to recommend a change to the agreement as shown below.

In **Section 11, Responsibility of Consultant**, we propose changing the language in the paragraph to the following: "In providing services under this Agreement, the Consultant shall exercise that degree of skill and care ordinarily used by other reputable members of Consultant's profession, practicing in the same or similar locality and under similar circumstances. Consultant agrees that if its products and services do not meet this standard of care, Consultant will correct any such deficiency. In the event of the failure of Consultant to promptly correct such deficiency, Consultant shall pay to the Town the reasonable costs of remedying such deficiency together with any damages caused by such deficiency."

We understand that this is only a recommendation and that any changes would be discussed after selection as the Consultant for this Project.

Resumes

The WRECO Project Team has been carefully selected based on each staff’s ability to contribute unique skills, knowledge, and expertise in addition extensive experience with local regulatory requirements and the Town of Atherton. The Project Team is available and committed to providing high-quality services to the Town on schedule and within budget.

Analette Ochoa, P.E., QSD/P, ToR | Project Manager



YEARS OF EXPERIENCE

23 years

KEY QUALIFICATIONS

- ✓ Expert in Bay Area water quality and stormwater management
- ✓ Prepared more than 100 water quality studies for various projects
- ✓ Extensive Caltrans Districts 4 and 43 experience
- ✓ San Mateo County Flood Control and Atherton project experience

PROFESSIONAL LICENSES

Civil Engineer: CA, #55279
 Qualified SWPPP Developer and Practitioner (QSD/P): CA, #178
 Qualified Construction General Permit QSD/P Trainer of Record: CA
 HAZWOPER

EDUCATION

B.S., Civil Engineering, University of California, Davis, 1992

Caltrans District 4 Water Quality Studies and Technical Services, San Francisco Bay Area, CA

For Caltrans District 4, Project Manager. Ms. Ochoa manages various studies prepared for projects for CEQA and NEPA compliance with the Clean Water Act (CWA), California Porter-Cologne Water Quality Control Act, Caltrans’ Statewide NPDES permit and project-specific CWA 401 Certification and Waste Discharge



Requirements, California Wetlands Policy, Total Maximum Daily Loads (TMDLs), and Water Quality Control Plans adopted by the Regional Water Quality Control Boards (RWQCBs) and State Water Resources Control Board (SWRCB). Ms. Ochoa also provides oversight for construction support, risk assessments, CGP compliance, Stormwater

Data Reports, Notices of Termination (NOTs), SWPPP amendments, and conceptual SWPPPs. She was also responsible for verifying that treatment best management practices (BMPs) were constructed per permit requirements during NOT inspections.

Drainage Facilities Repair Project, Town of Atherton, CA

For Town of Atherton, Project Manager. WRECO is responsible for designing drainage pipe and swale repairs, stopping channel deepening, and erosion mitigation of Atherton Channel. Ms. Ochoa is responsible for preparing the PS&E for various streets including Stockbridge Avenue, Polhemus Avenue, and Camino al Lago.

BASMAA Engineering Design Services: Urban Runoff Treatment Retrofits, Cities of Richmond, Vallejo, San Carlos, and Oakland, CA

For Bay Area Stormwater Management Agencies Association (BASMAA), Project Manager.

Ms. Ochoa was responsible for the design of various treatment BMPs throughout the San Francisco Bay Area to be constructed per the Clean Watersheds for a Clean Bay Implementation Plan. The objective was to select/implement representative urban low-impact development (LID)/stormwater treatment retrofit projects that can be used



to evaluate potential load reductions of polychlorinated biphenyls in urban

stormwater runoff to the San Francisco Bay. Current designs include media filters, bioretention facilities, biofiltration swales, and tree well filters. Ms. Ochoa worked closely with all the local agencies and clean water programs to meet aggressive schedules.

Caltrans District 43 Stormwater Policy Development and NPDES Permit Support Services, Statewide, CA

For Caltrans District 43, Stormwater Specialist. Trash generation within the San Francisco Bay Area is a pervasive issue impacting the water quality and beneficial uses of creeks, streams, waterways and the San Francisco Bay. Ms. Ochoa is responsible for identifying high trash generation areas along Mission Boulevard, San Pablo Avenue, and El Camino Real. She is responsible for coordinating with local agencies, MS4, and Caltrans maintenance supervisors to prioritize high trash generation areas for clean up. Ms. Ochoa is also assisting Caltrans Headquarters' Office of Storm Water Management Design with revisions to the Storm Water Project Planning and Design Guidelines (PPDG) in compliance with the Caltrans MS4 Permit.



San Mateo County On-call Flood Control, San Mateo County, CA

For San Mateo County, Task Order Manager. WRECO holds an on-call services contract with the San Mateo County Department of Public Works for flood control and drainage system study and design. Ms. Ochoa is responsible for managing various task orders executed under this contract, including green streets/low-impact development feasibility studies for the Vallemar drainage area in Moss Beach.

Colma Creek Flood Control Zone Flood Wall Project, San Mateo County, CA

For San Mateo County, Supervising Engineer. WRECO is currently providing San Mateo County with flood control engineering services for the Colma Creek Flood Wall Project. Ms. Ochoa is responsible for managing the feasibility study for the construction of flood walls along Colma Creek, a hydraulic analysis for the geotechnical investigation, biological impacts for the drainage, and impact analysis. The feasibility study for this project included numerous flood wall types including: vinyl sheet piles, steel sheet piles, type I walls, masonry block, and earthen embankment.



U.S. 101/Broadway Interchange Reconstruction, San Mateo County, CA

For San Mateo County Transportation Authority, Supervising Engineer. The project would replace the existing interchange with a combination of buttonhook- and diamond-type configurations. The existing bridge structure over U.S. 101 would be replaced by a new and wider linear bridge structure. Bayshore Highway will be widened between Broadway and the buttonhook northbound on-ramp. The intersection of Broadway/Bayshore Highway/Airport Boulevard will also be upgraded. Ms. Ochoa reviewed the project's Water Quality Study and Storm Water Data Report.

State Route 178 Widening Project, City of Bakersfield, CA

For City of Bakersfield, Supervising Engineer. The project proposes to widen the existing SR 178 in the northeast portion of the city from Morning Drive to Rancheria Road. Ms. Ochoa oversaw the preparation of the Drainage Impact Study Report, Storm Water Data Report, Water Quality Assessment Report, and Floodplain Evaluation/Location Hydraulic Study for the project.

Han-Bin Liang, Ph.D., P.E., QSD/P | Principal-in-Charge, QA/QC



YEARS OF EXPERIENCE

31 years

KEY QUALIFICATIONS

- ✓ Expert in hydrology and hydraulics
- ✓ Performed more than 1,000 infrastructure/water resources projects and hydraulic studies for more than 500 bridges/culverts
- ✓ QA/QC experience for water quality projects
- ✓ San Mateo County Flood Control project experience

PROFESSIONAL LICENSES

Civil Engineer: CA, #48404
 QSD/P: CA, #1130

EDUCATION

Ph.D., Civil Engineering, University of California, Berkeley, 1988
 M.S., Civil Engineering, University of California, Berkeley, 1984
 B.S., Agricultural Engineering (Hydraulics), National Taiwan University, 1981

Caltrans District 4 Water Quality Studies and Technical Services, San Francisco Bay Area, CA

For Caltrans District 4, Principal-in-Charge. Dr. Liang oversees a team of consultants to perform studies for NEPA and CEQA; to ensure compliance with the CWA, Caltrans’ Statewide NPDES permit and CWA 401 Certification and waste discharge requirements, TMDLs, and Water Quality Control Plans adopted by the RWQCB and SWRCB and to complete Storm Water Data Reports. Some task orders include Sabercat Creek Wetland Mitigation, Sweet Ranch, Mountain Lake, Stage Gulch Creek, and the San Francisco-Oakland Bay Bridge.

BASMAA Engineering Design Services: Urban Runoff Treatment Retrofits, Cities of Richmond, Vallejo, San Carlos, and Oakland, CA

For Bay Area Stormwater Management Agencies Association (BASMAA), Principal-in-Charge. Dr. Liang provided oversight for the design of various treatment best management practices throughout the San Francisco Bay Area to be constructed per the Clean Watersheds for a Clean Bay (CW4CB)



Implementation Plan. The objective of the CW4CB Plan was to select and implement representative urban stormwater treatment retrofit projects that could be used to evaluate potential polychlorinated biphenyl (PCBs) load reductions in urban stormwater runoff to the San Francisco Bay. The proposed designs included media filters, bioretention

facilities, biofiltration swales, and tree well filters. He worked closely with San Mateo Countywide Water Pollution Prevention Program.

San Mateo County Flood-Control Engineering and Hydrology/Hydraulics On-call Services Contracts, San Mateo County, CA

For San Mateo County, Project Manager. Dr. Liang oversees and manages the task orders executed under these on-call contracts. Task orders have included modeling and analysis of proposed flood walls for Colma Creek, a dredging modeling study for Colma Creek, and various green streets feasibility studies.

Bayfront Canal Levee Improvements, City of Redwood City, CA

For City of Redwood City, Project Manager. Redwood City experiences chronic flooding in the surrounding neighborhoods of Bayfront Canal and Atherton Channel as a result of the insufficient detention capacity during periods of high tide. Dr. Liang oversaw the hydraulic analyses, HEC-RAS model development for various scenarios, and preparation of the Hydrology and Hydraulics Report summarizing the results and design plans for the proposed improvements.



YEARS OF EXPERIENCE

10 years

KEY QUALIFICATIONS

- ✓ Stormwater management and drainage design experience
- ✓ Proficient in various hydrologic and hydraulic modeling software such as HEC-RAS, HEC-HMS, FLO-2D, Infoworks ICM, and FESWMS modeling programs
- ✓ Experience working with the Town of Atherton

PROFESSIONAL LICENSES

Civil Engineer: TX, #104914
 Envision Sustainability Professional
 Certified Floodplain Manager

EDUCATION

B.S., Civil Engineering, Texas A&M University, 2006

Atherton Drainage Facilities Repairs, Town of Atherton, CA



For Town of Atherton, Associate Engineer. Ms. Brooks is responsible for the hydrologic and hydraulic study and design of several local drainage improvements throughout the Town. Improvements include pipe systems, culvert crossings, channel improvements, and localized grading. Each project deliverable includes construction plans, specifications, and construction estimates (PS&E).

San Carlos Capital Improvement Project 1A, City of San Carlos, CA

For City of San Carlos, Associate Engineer. Ms. Brooks is using PC SWMM to develop 2D hydraulic models of the proposed pipe system improvements. The improvements include underground pipe detention that will be utilized to maintain existing conditions at the downstream creek outfall and reduce the permitting and regulatory requirements.



Pleasant Hill Storm Drainage Master Plan, City of Pleasant Hill, CA

For City of Pleasant Hill, Associate Engineer. WRECO is inspecting and analyzing the conditions of the City of Pleasant Hill’s City Master Plan (CMP), analyzing the identified “Hotspot” drainage locations, developing projects to mitigate and alleviate deficiencies in the City of Pleasant Hill’s CMPs and “Hotspot” drainage locations, preparing a funding plan for completing each project, and preparing the Master Study, which will outline each project and include a 20-year implementation plan to complete the entire program. For the project, Ms. Brooks is responsible for the analysis of the “Hotspot” locations. She will be performing the modeling on the existing conditions and developing alternatives to alleviate potential flooding impacts.

Martis Valley Trail Project, Placer County, CA

For Placer County Department of Public Works and Facilities, Associate Engineer. Ms. Brooks is responsible for the hydrologic and hydraulic study and design of 2 miles of trail Segment 3B. The drainage design considerations include culverts, drainage ditches, and water quality requirements as regulated by the Lahontan Regional Water Quality Control Board.

Kazuya Tsurushita, P.E. | Hydrology and Hydraulic Modeling



YEARS OF EXPERIENCE

10 years

KEY QUALIFICATIONS

- ✓ Experience with hydrology, hydraulics, and floodplain studies
- ✓ Proficient with HEC-RAS, HEC-HMS, FLO-2D, Infoworks ICM, and FESWMS modeling programs
- ✓ Performed more than 50 bridge hydraulic studies

PROFESSIONAL LICENSES

Civil Engineer: CA, #81167

EDUCATION

B.S., Civil and Environmental Engineering, University of California, Davis, 2007

Novartis Pharmaceutical/Belmont Creek Flood Protection Study, City of San Carlos, CA

For Novartis Pharmaceutical Corporation, Hydraulic Engineer.



The Novartis Pharmaceuticals Corporation (Novartis) property is bounded by Industrial Road, Belmont Creek, Quarry Road, and another commercial property in the City of San Carlos, San Mateo County. The property is within a low-lying area that has experienced flooding in the past. WRECO is working with Novartis to study the effects of dredging Belmont

Creek adjacent to the Novartis facilities to improve hydraulic performance and to calculate the maximum capacity of the dredged channel. Mr. Tsurushita performed hydraulic calculations and modeling using HEC-RAS and replicated the XPSWMM model.

Dam Breach Analysis and Inundation Mapping Project, Alameda County, CA

For Alameda County Flood Control and Water Conservation District, Hydraulic Engineer.

Mr. Tsurushita developed HEC-RAS and FLO-2D hydraulic models to perform hydraulic analysis and floodplain mapping. The project analyzed two dams in their original design capacity and their existing capacity, which is limited because of sediment buildup. The analysis involved four scenarios for dam breach failures for each dam.

Rheem Creek Restoration Project in Wanlass Park, City of San Pablo, CA

For City of San Pablo, Hydraulic Engineer.

Mr. Tsurushita performed flood damage analyses using the U.S. Army Corps of Engineers' HEC-RAS and HEC-FDA computer models.



French Camp Outlet Canal Undergrounding Strategy, County of San Joaquin, CA

For City of Manteca, Hydraulic Engineer.

Mr. Tsurushita performed peer review of the XPSWMM hydraulic model referenced in the French Camp Outlet Canal Undergrounding Strategy. Peer review was performed by developing the Infoworks ICM hydraulic model that replicated the XPSWMM model.

Raja Periketi, P.E., QSD/P | Grading Design



YEARS OF EXPERIENCE

12 years

KEY QUALIFICATIONS

- ✓ Project experience in the Town of Atherton
- ✓ Experience with grading design
- ✓ Design-build experience
- ✓ Extensive Caltrans District 4 experience

PROFESSIONAL LICENSES

Civil Engineer: CA, #78270
 QSD/P: CA, #21419

EDUCATION

M.S., Environmental Engineering, University of Mississippi, 2005
 B.S., Civil Engineering, Osmannia University, India, 2002

Atherton Drainage Facilities Repairs, Town of Atherton, CA

For Town of Atherton, Senior Engineer. Atherton is facilitating various improvements including pipe systems, culvert crossings, channel improvements, and localized grading. Mr. Periketi is responsible for managing the design of several local drainage improvements and the hydrologic and hydraulic study throughout the Town.

Sweet Ranch Wetland Mitigation Project, Alameda County, CA

For Caltrans District 4, Hydraulic Engineer. For the Sweet Ranch Wetland Mitigation Project, WRECO was responsible for reviewing the results of the revised water balance model runs, which were developed with the Soil-Plant-Air-Water modeling program from the Natural Resources Conservation Service. Mr. Periketi performed grading and earthwork balance using Civil 3D for two wetland mitigation sites in the City of Pleasanton. These proposed wetlands were designed to have a low flow channel, rock spillways, and a geosynthetic clay liner. He was also responsible for the hydraulic analysis, cost estimate, and construction support for the proposed wetlands.

Los Gatos Creek Railroad Bridge Replacement Project, City of Los Gatos, CA

For Caltrain, Hydraulic Engineer. The proposed project consists of the replacement of the existing double-track bridge, as well as the construction of a new third bridge and tail track to serve the San Jose Diridon Station. For this project, WRECO is responsible for the geomorphology, hydraulics, sediment transport study, bioengineered creek bank stabilization plans, and replanting plan. Mr. Periketi was responsible for performing hydraulic modeling to determine the effects of several new bridge designs. This allowed a design to be chosen that was the least disruptive to the natural creek flow. Mr. Periketi recommended and designed mitigation measures to protect the new channel slopes in areas that would have increased flow velocities. Mr. Periketi was also responsible for developing final grading plans by coordinating with the structures, creek mitigation, and hydraulics of the project.



Mr. Periketi recommended and designed mitigation measures to protect the new channel slopes in areas that would have increased flow velocities. Mr. Periketi was also responsible for developing final grading plans by coordinating with the structures, creek mitigation, and hydraulics of the project.

River Oaks Subdivision Project, City of Fairfield, CA

For City of Fairfield, Project Engineer. Mr. Periketi prepared utility plans, drainage improvement, pavement delineation, grading, and traffic control plans for the River Oaks Subdivision in the City of Fairfield. In addition, he was involved in designing the storm water system, firewater system, water distribution system, and sanitary sewer system for the aforementioned residential subdivision.



Robert Lawrence, P.E., G.E. | Geotechnical Engineering



YEARS OF EXPERIENCE

22 years

KEY QUALIFICATIONS

- ✓ Performed design evaluations that resulted in significant savings in construction costs
- ✓ Infiltration soil investigations
- ✓ Basin design experience
- ✓ Experience with federally funded projects

PROFESSIONAL LICENSES

Civil Engineer: CA, #63076
 Geotechnical Engineer: CA, #2785

EDUCATION

M.S. coursework completed, Geotechnical Engineering, New Jersey Institute of Technology
 B.S., Civil Engineering, New Jersey Institute of Technology, 1994

Engineering Design Services: Urban Runoff Treatment Retrofits: Broadway and Redwood Bioretention/Biotreatment Project and PG&E Substation Drop Inlet Retrofit Project, City of Vallejo, CA

For Bay Area Stormwater Management Agencies Association (BASMAA), Senior Geotechnical Engineer. The design for the PG&E Substation and Redwood Street Project consists of the construction of media filters with replaceable cartridges, a new drainage inlet to treat the entire watershed of the substation, and a 100-foot-long biofiltration swale. Mr. Lawrence was responsible for the field investigation, which included drilling soil borings and performing shoring design for LID next to the railroad tracks.

Lower Laguna Creek Open Space Trail Project, City of Elk Grove, CA

For City of Elk Grove, Senior Geotechnical Engineer. The project is for the construction of approximately one mile of a new 10-foot-wide paved bike trail in the City of Elk Grove. Because there are expansive soils within the limits of the proposed bike trail, multiple structural trail sections consisting of lime/cement treated soils vs. deepened Class 2 AB base sections under both roller compacted concrete and hot mix asphalt surfaces are being evaluated for cost and durability. Mr. Lawrence is managing the geotechnical aspect of the project, which is currently in final design.



State Route 178 Widening Project, City of Bakersfield, CA

For City of Bakersfield, Geotechnical Project Manager. Mr. Lawrence was responsible for the SR 178 Widening Project located in the City of Bakersfield. The project consisted of widening approximately 3.5 miles of the existing two-lane state highway into a four-lane facility with dedicated turn lanes and minor drainage and retaining wall structures. A field investigation program consisting of approximately 45 soil borings and 50 pavement cores was performed to better characterize the existing pavement sections and subsurface soil conditions along the project alignment. Mr. Lawrence performed non-destructive deflection testing to determine the modulus of sub-grade of the existing pavement for overlay design and a Full Depth Reclamation using Cement (FDR-C) field study to develop an FDR option of the existing asphalt concrete and base material. Mr. Lawrence prepared the Geotechnical Design Report and the Materials Report for the City of Bakersfield and Caltrans. All design reports were approved.



David Kitzmann, P.E., P.G., CEG | Geotechnical Engineering



YEARS OF EXPERIENCE

17 years

KEY QUALIFICATIONS

- ✓ Geologic/geotechnical investigations
- ✓ Shallow and deep foundations design
- ✓ Landslide remediation
- ✓ Retaining structures
- ✓ Roadway design
- ✓ Geotechnical instrumentation

PROFESSIONAL LICENSES

Civil Engineer: CA, #81410
 Professional Geologist: CA, #7920
 Certified Engineering Geologist: CA, #2412

EDUCATION

Graduate Studies, Geology, Old Dominion University, 2002
 B.S., Geology, Old Dominion University, 2000

Colma Creek Flood Control Channel Improvement Project – Utah to Navigable Slough, San Mateo County, CA

For San Mateo County, Senior Geologist. This project proposes to provide channel improvements with flood walls, culvert repair/replacement/extension, and other routine maintenance activities along the Colma Creek Flood Control Channel in the City of South San Francisco. Mr. Kitzmann is providing oversight of the subsurface soil investigation at the Project site, preparation of the PS&E package, Geotechnical Investigation Report, and Phase I/II Environmental Site Assessment Report. WRECO is also responsible for the Hydraulic Analysis Report and Stormwater Management Plan, as well as for providing construction support.



El Dorado County Geotechnical On-call Contract, El Dorado County, CA

For El Dorado County, Senior Geologist. Mr. Kitzmann is assisting El Dorado County on various storm damage and bridge design task orders. Storm damage projects include Newtown Road Slipout, Starkes Grade landslide, Fort Jim Culvert Washout, and Airport Road Storm Damage. Bridge replacement projects include two bridges on Green Valley Road and two bridges on Clear Creek Road.

Sperry Road at Interstate 5 Interchange Project, PA/ED, Stanislaus County, CA

For Stanislaus County, Senior Geologist. The project includes preparation of a preliminary foundation report for the proposed off-ramp structure and an initial site assessment report. As these activities progress, Mr. Kitzmann is coordinating with both Stanislaus County and Caltrans District 10 Materials for a smoother approval process.



Cassery Road Bridge, Santa Cruz County, CA

For Santa Cruz County, Project Manager. Mr. Kitzmann performed a geotechnical investigation for the design of the replacement bridge. The bridge site is challenging due to the site having a deep weak soil profile with significant liquefaction, settlement, lateral spreading, and scour potential. Mr. Kitzmann has actively worked with Santa Cruz County to select cost-effective bridge type and construction methods on this county-funded project.

Sandra Etchell, M.S. | Permitting



YEARS OF EXPERIENCE

21 years

KEY QUALIFICATIONS

- ✓ Specialist in biology and environmental permitting
- ✓ Extensive knowledge of the Bay Area's special-status species
- ✓ Experience ensuring project compliance with CEQA/NEPA
- ✓ Performs environmental monitoring for a variety of project types
- ✓ Experience working with the Town of Atherton

EDUCATION

M.S., Environmental Management, University of San Francisco, 2009
 B.A., Biology (Zoology), Sonoma State University, 1999

Upper Atherton Channel Bank Stabilization Project, Phase II, Town of Atherton, CA

For Town of Atherton, Wildlife Biologist and Monitor. Ms. Etchell was the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) approved biologist for capturing and relocating California red-legged frog and native fish species during dewatering of the project. Ms. Etchell also prepared the post-construction biological as-built report and 401 CWA wetland tracker, and she provided monitoring and reporting of restoration for a 10-year period as required by resource agencies. She worked closely with the RWQCB for permitting criteria.



Frenchman's Creek Water Intake Project, City of Half Moon Bay, CA

For Private Client, Senior Biologist. Ms. Etchell obtained biological resources permits for the replacement of a water intake structure and associated water treatment and distribution infrastructure in Frenchman's Creek, located in the City of Half Moon Bay, San Mateo County, California. Ms. Etchell surveyed the project site for several special-status species, including Steelhead, San Francisco dusky-footed woodrat, California red-legged frog, San Francisco garter snake, and bats. Ms. Etchell also prepared a restoration and enhancement plan and is providing long term monitoring and reporting.



Jones Gulch Bank Stabilization Project, Town of Portola Valley, CA

For Monte Leon LLC, Lead Biologist and Permit Specialist. Ms. Etchell is leading WRECO's scope, including biological consultation, emergency permitting, and biological monitoring as a Caltrans-approved biologist. Sensitive species in the area include the California red-legged frog, San Francisco dusky-footed woodrat, and San Francisco garter snake.

Moss Beach Stairway at the Fitzgerald Marine Preserve, San Mateo County, CA

For County of San Mateo Parks Department, Biologist and Permit Specialist. Ms. Etchell assisted the County of San Mateo Parks Department in obtaining permits from federal and state resource agencies, including the California Coastal Commission (CCC), for the construction of a 160-foot concrete stairway with observation platforms and interpretive signs. Ms. Etchell prepared permit applications including the biological resources analysis and was the primary contact with the CCC and Parks Department during the permitting process.

Jared Elia | Permitting



YEARS OF EXPERIENCE

11 years

KEY QUALIFICATIONS

- ✓ Experience providing permitting, biology, and environmental compliance services
- ✓ Extensive knowledge of permit regulations
- ✓ Experience working with special-status species
- ✓ Experienced with preparation of technical documents associated with CEQA
- ✓ Experience working with the Town of Atherton

TRAINING

Wetland Delineations
 California Rapid Assessment Method (CRAM)
 Rare Pond Species Survey Techniques
 QSP/QSD Training
 CEQA 8-Hour Workshop

EDUCATION

B.S., Earth Systems Science and Policy, California State University, Monterey Bay, 2006

Atherton Channel Bank Stabilization Project, Town of Atherton, CA

For Town of Atherton, Biologist and Monitor. Mr. Elia was a USFWS- and CDFW-approved biologist for capturing and relocating California red-legged frog, San Francisco garter snake, and native fish species during dewatering of the project. Mr. Elia also assisted with the preparation of the project post-construction biological as-built report and 401 CWA wetland tracker, and is proposed to provide monitoring and reporting of restoration success for a 10-year monitoring period as required by resource agencies.

Surfer’s Beach Shoreline Protection Project, San Mateo County, CA

For County of San Mateo, Permit Specialist. Mr. Elia assisted the County of San Mateo with obtaining all required biological resource agency permits for the Surfer’s Beach Shoreline Protection Project. San Mateo County and Caltrans are proposing to place an approximately 500-foot-long structure along the shoreline in the City of Half Moon Bay where State Route 1 is being destabilized by erosive wave action. He is also assisting with technical reports in support of CEQA and NEPA documentation.

Caltrans District 4 Water Quality Services Contracts, San Francisco Bay Area, CA

For Caltrans District 4, Associate Biologist. Mr. Elia is providing 401 Water Quality Certifications assistance for numerous projects. His tasks include biological assessments, mitigation monitoring plans, coordination/contact with permitting agencies for permit negotiations, permit applications, and obtaining permits and waste discharge requirements.



Alameda County Public Works Agency Biological and Broad Range Environmental Services Contract, Alameda County, CA

For Alameda County Public Works Agency (ACPWA), Biologist. As part of the ACPWA Biological and Broad Range Environmental Services contract, Mr. Elia assisted in wetland delineation and initial habitat assessment, and contributed to the avoidance, minimization, and mitigation measures for numerous flood control channel rehabilitation projects. He has prepared biological resource studies, biological assessments, and wetland delineation reports, and provided permitting assistance, including Lake and Streambed Alteration Agreements, Section 401 and 404, and San Francisco Bay Conservation and Development Commission permits.



Garrett Low, P.E. | Design-Build, Public Outreach



YEARS OF EXPERIENCE

10 years

KEY QUALIFICATIONS

- ✓ Experience with design-build projects
- ✓ Experience in designing drainage systems for local flood control agencies as well as Caltrans
- ✓ Extensive roadway/transportation drainage design experience

PROFESSIONAL LICENSES

Civil Engineer: CA, #51662

EDUCATION

B.S., Civil Engineering and Material Science, University of California, Davis, 1989

California High Speed Rail Construction Package 1 North Segment, Madera and Fresno Counties, CA

For California High Speed Rail Authority, WRECO's Project Manager/Lead Drainage Engineer, North Segment.



Mr. Low is responsible for the drainage design and construction document preparation of the High Speed Rail Construction Package 1 North Segment between Madera and Fresno. The drainage design meets the standards of the High Speed Rail Authority, Caltrans, Madera County, Fresno Metropolitan Flood

Control District, and the Central Valley Flood Protection Board.

West Dublin/Pleasanton BART Parking Structures and Street Improvements Design Build Project, Cities of Dublin and Pleasanton, CA

For BART, Project Manager. Mr. Low was responsible for the design of civil elements for the parking structures of the West Dublin/Pleasanton BART. This project included drainage design, sanitary sewer modification, utility relocations and new utility connections, and site development plans. This design-build contract included the construction of two multilevel parking structures to service the new BART station in the median of the I-680 freeway. A separate contractor was simultaneously constructing the station while the parking structures were being designed and constructed. Close coordination was required for the pedestrian overcrossing connecting the parking structures to the stations as well as several utilities that were servicing the station and the parking structures.

Reconstruction of Entrada Way in the La Honda Area, San Mateo County, CA

For San Mateo County, Project Manager. The purpose of the project is to improve drainage conditions and rehabilitate the pavement on Entrada Way between La Honda Road and Scenic Drive. Mr. Low was responsible for utilities and pothole mapping, drainage system layouts and design, and topographic mapping of the project site. WRECO is providing bid and construction support for this project.

Golf Club Road/Old Quarry Road Intersection Improvements, City of Pleasant Hill, CA

For City of Pleasant Hill, Project Manager. Mr. Low oversaw the preparation of the construction plans, specifications, and cost estimates; right-of-way acquisitions; and the public outreach program for the project. Construction of the project improvements will require several stages to accommodate bus, pedestrian, and bicycle movements, as well as traffic volumes. Some of the work will need to be performed at night to complete intersection improvements.





YEARS OF EXPERIENCE

32 years

KEY QUALIFICATIONS

- ✓ Experienced community outreach facilitator with expertise in working with diverse stakeholder groups
- ✓ International experience in land use and environmental planning
- ✓ More than 20 years of experience in Bay Area and Central Coast communities

EDUCATION

M.S., Urban Planning, University of Washington, 1991
 B.A., Economics, University of California Santa Barbara, 1984

Carmel-by-the-Sea General Plan Update, City of Carmel, CA

For City of Carmel, Project Manager. Mr. Wiseman led a comprehensive community involvement program to define the public’s vision for Carmel. The program included community workshops, an informational brochure, preparation and distribution of background studies and reports, and focused policy workshops.

Scotts Valley General Plan, City of Scotts Valley, CA

For City of Scotts Valley, Project Manager. Mr. Wiseman led a community involvement program to support the development of a new General Plan. Outreach included a live GIS mapping system and community surveys to gain broader participation and keep the community informed.

Watsonville General Plan EIR, City of Watsonville CA

For City of Watsonville, Project Manager. Mr. Wiseman directed the public involvement program, and coordinated with the Steering Committee and consultant team. Critical issues included the jobs/housing balance, a Sphere of Influence Amendment, conversion of agricultural lands, and development near sensitive lands.

Downtown Dublin Specific Plan and EIR, City of Dublin, CA

For City of Dublin, Project Manager. Mr. Wiseman managed the preparation of the Specific Plan and EIR for the downtown plan. Public outreach included an online visual preference survey, three-day stakeholder immersion program, walking tour, and workshop to assess values, concerns, and visions for downtown.

AMBAG Metropolitan Transportation Plan/Sustainable Communities Strategies and EIR, Monterey Bay Region, CA

For Association of Monterey Bay Area Governments (AMBAG), Environmental Planner. Mr. Wiseman assisted in providing community engagement as part of a multi-agency collaboration for Moving Forward Monterey Bay 2035. The community engagement effort included more than 18 community workshops, 12 stakeholder meetings, four AMBAG Board meetings, and development of a seven-minute video. Public involvement activities also included an interactive web-based mapping site, and a web-based MetroQuest® preference survey.

100 Enterprise Way Hotel and Residential Development EIR, City of Scotts Valley, CA

For City of Scotts Valley, Project Manager. Mr. Wiseman prepared the EIR and provided project entitlement support for a mixed-use hotel and residential project. He also led public scoping meetings and workshops on the project, as well as public presentations to the planning commission and the Scott’s Valley City Council.

Kevin Kimm, P.E. | Structural Engineering, Design-Build

Kimley»Horn

**YEARS OF EXPERIENCE**

10 years

KEY QUALIFICATIONS

- ✓ Structural engineer with experience on drainage facilities and public infrastructure
- ✓ Experience on design-build projects
- ✓ Responsible for project design and construction support

PROFESSIONAL LICENSES

Civil Engineer: CA, #75462

EDUCATION

B.S., Civil Engineering, Montana State University, 2000

Replacement of Pump Houses at Oakland International Airport, City of Oakland, CA

For Port of Oakland, Structural Engineer. Mr. Kimm provided structural design in support of the replacement of two stormwater pump stations at Oakland International Airport. The two pump stations were constructed in 1954 and were used to pump stormwater from the airport site over the levee, which protects the airport, and into the San Francisco Bay. Structural design included 80-foot multi-span reinforced concrete slab bridges into the San Francisco Bay, pump station structures designed to resist seismic events, a structural steel maintenance platform, and a pile-supported retaining wall.

Lower Vintage Oaks Lift Station, City of Auburn, CA

For City of Auburn, Structural Engineer. Mr. Kimm provided structural design for a new pump station, including design of a new 23-foot-deep, 8-foot-diameter concrete wet well and valve vault. He also provided structural design for building enclosure and lift-station appurtenances.

Broadway Plaza Expansion, City of Walnut Creek, CA

For The Macerich Company, Structural Engineer. Mr. Kimm provided structural engineering for a new Neiman Marcus store. The project included structural design for a shoring wall and an underground transformer vault, as well as design of on-site stormwater treatment facilities.

The Railyards, City of Sacramento, CA

For Downtown Railyard Venture, LLC, Structural Engineer. Mr. Kimm provided structural engineering for improvements to a 238-acre infill redevelopment project. This included structural design to support roadway, drainage, and stormwater quality improvements, as well as mechanically stabilized earth (MSE) retaining walls for three bridges spanning the Union Pacific Railroad tracks.

Graton Casino Off-Site Roadway Improvements, City of Rohnert Park, CA

For Caltrans District 4, Structural Engineer. Mr. Kimm provided structural engineering for off-site improvements associated with the Graton Casino project. This included structural design support for widening 1.4 miles of roadway, undergrounding utilities, drainage and water quality features, a new 150-foot bike bridge, six new traffic signals, four traffic signal modifications, pavement reconstruction along two other roadways, and widening a freeway off-ramp.

Citywide Lift Station Security Upgrades, City of Phoenix, AZ

For City of Phoenix, Structural Engineer. Mr. Kimm provided the structural component of the design of CCTV poles and foundations, anti-climb attachments to concrete masonry unit walls, and fence pole foundation calculations for the security, electrical, and communications improvements at 22 lift station sites.

**YEARS OF EXPERIENCE**

18 years

KEY QUALIFICATIONS

- ✓ Preparation of EIRs for public improvement projects statewide
- ✓ Responsible for working with public agencies for analysis of transportation and infrastructure improvements
- ✓ Experienced in CEQA document development and management of technical studies

EDUCATION

M.S., Environmental and Natural Resource Sciences, University of Nevada, Reno, 2005

M.S., Certificate, Land Use and Environmental Planning, University of California, Davis, Extension, 2003

B.S., Environmental Science, Minor in Geosciences, Oregon State University, 1998

California Avenue Transit Hub Corridor Enhancements, City of Palo Alto, CA

For City of Palo Alto, Environmental Project Manager. Ms. Redd prepared the Preliminary Environmental Study (PES) for the proposed project and worked closely with the City of Palo Alto and Caltrans District 4, to determine the appropriate technical studies and environmental documents needed. An extensive community outreach and CEQA Initial Study/Negative Declaration were conducted, followed by a NEPA clearance with supporting documents as a Categorical Exclusion. Key issues for the project include traffic, visual resources, air quality, and construction noise.

Half Moon Bay SR 92 Widening Project, City of San Mateo, CA

For Caltrans District 4, Environmental Planner. Ms. Redd prepared an Initial Site Assessment and Visual Resource Assessment, and assisted with the Environmental Document. The project consisted of widening SR 92 in Half Moon Bay from approximately the city limit line to Cabrillo Highway and improving a portion of Main Street.

Capitol Expressway ITS Infrastructure Project, Santa Clara County, CA

For County of Santa Clara, Environmental Planner. Ms. Redd provided environmental support on a federally funded project to design various ITS infrastructure and civil improvements along the entire length of the Capitol Expressway. The ITS infrastructure improvements include new fiber interconnect, pedestrian and bicycle detectors, new traffic video monitoring cameras, and new controllers and controller cabinets. The project also included traffic signal modifications at 17 intersections.

Vallco Shopping District Specific Plan, City of Cupertino, CA

For Sand Hill Property, Environmental Planner. Ms. Redd is responsible for assisting in the preparation of the Environmental Assessment for the redevelopment of the Vallco Mall to a 53-acre mixed-use Town Center. Included is a 30-acre community park constructed on top of the building complex, making it the largest green roof in the world.

Solar Highways Pilot Project MND/CE, Santa Clara County, CA

For Caltrans District 4, Task Order Manager. Ms. Redd assisted in coordinating all aspects of the CEQA and NEPA environmental clearance by working with Caltrans District 4, the lead agency. The proposed project would permit the installation and maintenance of solar panels within operating State right-of-way at up to seven interchanges throughout Santa Clara County. Key environmental issues include cultural resources, aesthetics, including light and glare, and safety and maintenance issues.



YEARS OF EXPERIENCE

16 years

KEY QUALIFICATIONS

- ✓ Responsible for preparing environmental analysis for water infrastructure, transportation, and land development projects
- ✓ Experience throughout the San Francisco Bay Area
- ✓ Provided State and federal permitting support

PROFESSIONAL LICENSES

Professional Transportation Planner (PTP)

EDUCATION

B.S., Conservation and Resource Studies, University of California, Berkeley

Lower San Luis Rey Groundwater Storage/Recovery EIR, San Diego County, CA

For San Diego County Water Authority, Program Manager. Mr. Kearney managed all phases of the draft CEQA document and coordinated groundwater modeling and groundwater extraction technical reports. He collaborated with county staff on issues related to recharge wells, infiltration basins, desalination facilities, pump stations, and treated and untreated water conveyance pipelines.

North Coast Pipeline System Program EIR/EIS, Santa Cruz County, CA

For County of Santa Cruz, Deputy Project Manager. Mr. Kearney co-managed preparation of the CEQA document for a complex water supply and redundancy project. Technical issues included coastal zone impacts, sensitive and endangered species habitat, traffic, noise, air quality, and sedimentation associated with expansion of the mountain-based water supply.

Pipeline Reliability Upgrade Project EIR/EIS, City of San Francisco, CA

For San Francisco Public Utilities Commission (SFPUC) Bay Division, Deputy Project Manager. Mr. Kearney co-managed preparation of an EIR/EIS for the SFPUC's Water System Improvement Project (WSIP) for pipeline replacement/improvements to the Bay Division Pipeline system. He coordinated with agency resource specialists, reviewed/edited technical reports, and managed responses to comments on the environmental document.

Mayfield Precise Plan, City of Mountain View, CA

For City of Mountain View, Deputy Project Manager. Mr. Kearney assisted in the preparation of a plan for reuse of a Hewlett Packard facility for mixed residential housing (lower density to higher densities). Resource issues included dual municipalities, Caltrain, streets, open space, housing, and master plan needs.

San Francisco Transbay Terminal Supplemental EIR/EIS, City of San Francisco, CA

For Transbay Joint Powers Authority, Senior Planner. Mr. Kearney was a Senior Planner responsible for preparing an updated biological resources section for the supplemental environmental document required for the expanded Transbay Terminal facility. He focused on migrating and nesting birds, tree removal, and construction compliance requirements.

Cherryland Community Center, Alameda County, CA

For County of Alameda, Project Manager. Mr. Kearney managed preparation of environmental documents for this LEED-certified, in-fill development project located in dense residential area. He coordinated with agencies and landscape architects to design a Net Zero facility in a dense residential area of Alameda County adjacent to existing historic property.

Ben Huie, P.E. | Traffic Engineering

Kimley»Horn

**YEARS OF EXPERIENCE**

10 years

KEY QUALIFICATIONS

- ✓ Responsible for traffic impact studies throughout the Bay Area
- ✓ Prepared intersection control evaluations, traffic signal design plans, and roadway design
- ✓ Skilled in the use of latest traffic analysis software
- ✓ Experience working with the Town of Atherton

PROFESSIONAL LICENSES

Civil Engineer: CA, #76682

EDUCATION

B.S., Civil and Environmental Engineering, University of California, Berkeley, 2007

Menlo School Traffic Impact Study, Town of Atherton, CA

For Town of Atherton, Analyst. Mr. Huie provided support for preparation of a traffic impact study for the proposed amendment of a Conditional Use Permit at Menlo School to increase its enrollment to a maximum of 815 students. A specific trip generation study was completed for Menlo School because there was limited trip-generation data in the ITE Trip Generation Manual for a private school with 600 or more students. Kimley-Horn also completed the quality control review of a new Traffic Demand Model plan prepared for Menlo School.

Menlo Gateway Transportation Planning, City of Menlo Park, CA

For City of Menlo Park, Project Engineer. Mr. Huie provided transportation planning and traffic impact analysis for a proposed office development totaling nearly 700,000 sq. ft., in addition to hotel and retail facilities. He also assisted in development of mitigation measures for traffic impacts.

Valparaiso Safe Routes to School Plan, City of Menlo Park, CA

For City of Menlo Park, Analyst. Mr. Huie provided support for the preparation of a Safe Routes to School plan and concept design for improvements along Valparaiso Avenue within the vicinity of several local schools. The project included significant outreach to neighborhood residents, the school district, and other local stakeholders.

Eastridge Transit Center Traffic Evaluation, City of San Jose, CA

For Santa Clara Valley Transportation Authority (VTA), Project Analyst. Mr. Huie was responsible for a traffic operations evaluation of roadway facilities in the immediate vicinity of the Eastridge Transit Center in San Jose. To assist VTA in the feasibility evaluation of the reconfigured Eastridge Mall parking layout associated with the Capitol Expressway Pedestrian Improvement Project, Kimley-Horn conducted an assessment of current operations as well as an analysis of the proposed reconfigured roadway network.

El Camino Real Precise Plan and EIR, City of Mountain View, CA

For City of Mountain View, Project Engineer. Mr. Huie assisted in preparing studies of the transportation and infrastructure systems needed to support growth in the plan area. The final plan included development standards and guidelines for land use, parking, multi-modal transportation, and infrastructure.

Old Town Village Traffic Impact Analysis, City of Livermore, CA

For City of Livermore, Project Engineer. Mr. Huie prepared a traffic impact study to evaluate the current and anticipated traffic conditions at or near the Old Town village residential development site, and identify key intersections where traffic operations would be impacted as a result of the project. The project proposed to develop 94 free-standing detached town homes.

**YEARS OF EXPERIENCE**

24 years

KEY QUALIFICATIONS

- ✓ Expert in urban transit architecture
- ✓ Experienced with multi-agency jobs

PROFESSIONAL LICENSES

California Landscape Architect, #4289

LEED Accredited Professional

CLARB Member #36090

National Charrette Institute

Certified Charrette Leader

Bay Friendly Qualified Landscape Professional

EDUCATION

MLA, Landscape Architecture, University of California, Berkeley, 1993

B.A., Architecture, South Massachusetts University, Dartmouth, 1980

Vallejo Waterfront Art Walk Park, City of Vallejo, CA

For City of Vallejo, Project Manager. Mr. Kent prepared concept drawings for the proposed 20-acre Waterfront Park. The plan re-imagines current uses and incorporates new ideas such as better water access, a food-truck court, arts and crafts fair space, wine trail gateway, outdoor theater, par course equipment, picnic opportunities, sports fields, and children's play spaces that use custom-designed structures that showcase Vallejo's ship-building history.

NVTA Bus Maintenance Facility Master Plan, City of Napa, CA

For City of Napa, Principal-in-Charge. Mr. Kent prepared alternative conceptual site plans to explore the environmental impacts of the proposed bus maintenance facility on an 8-acre site on Sheehy Court in Napa. The site plans incorporated the external influences such as easements, setbacks, and code requirements; the Napa Valley Transportation Authority special needs for the bus maintenance facility uses; methods to capture and address extensive stormwater runoff; and the goals of regional bike trails that ran adjacent to the site.

MacArthur Boulevard Streetscape Improvements, City of Oakland, CA

For City of Oakland, Principal-in-Charge. Mr. Kent coordinated with the City of Oakland, BART, Caltrans, and AC Transit on streetscape improvements surrounding the six-block transit-oriented development at the MacArthur BART station. Develop design and PS&E for all improvements.

7th Street Improvements, City of Oakland, CA

For City of Oakland, Principal-in-Charge. Mr. Kent planned and documented six blocks of streetscape/transit improvements at the West Oakland BART station. This \$4 million project improves the pedestrian experience and makes public transit more convenient, safe, and enjoyable.

Henry J. Kaiser Memorial Park, City of Oakland, CA

For City of Oakland, Principal-in-Charge. Mr. Kent designed, prepared construction documents, and oversaw construction of this 1-acre urban park. The design sensitively accommodated two general areas: the local resident's area (children's play area, small gathering spaces, cafe tables, intimate wisteria covering the walking paths) and the civic space which housed the Remember Them Memorial, a tribute to civil rights activists through time.



YEARS OF EXPERIENCE

27 years

KEY QUALIFICATIONS

- ✓ Expert in irrigation design and consulting services
- ✓ Experienced with sustainable design and BMPs for efficient water usage
- ✓ Extensive experience in the San Francisco Bay Area

PROFESSIONAL LICENSES

Certified Irrigation Designer
#4880 Certified Landscape Water Manager
Certified Landscape Irrigation Auditor
LEED Accredited Professional
Bay Friendly Qualified Professional

EDUCATION

B.S., Landscape Irrigation, California State Polytechnic University, Pomona, 1994

55 Ninth Street, City of San Francisco, CA

Senior Landscape Designer. This high profile project is a residential high rise with modern apartments of cutting-edge design. The LEED gold project is located around the corner from Twitter headquarters and houses many Twitter employees. Mr. Towar designed all irrigation needs to be supplied from a rainwater cistern, which in turn harvests rainwater from a large green roof area. The cistern is located on an upper level, eliminating the need for an irrigation booster pump. The cistern is sized to provide an entire year’s landscape water requirement; no potable connection for make-up water is provided.

2558 Mission Street, City of San Francisco, CA

Senior Landscape Designer. This project involved conversion of a former movie theater to mixed use, including ground level retail and condominiums. Mr. Towar designed harvested rainwater to be collected in a cistern on the parking-garage level which will then be used to irrigate planted areas on three levels including the 7th-floor roof garden.

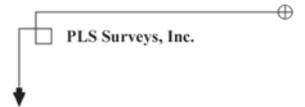
1634 Pine Street, City of San Francisco, CA

Senior Landscape Designer. This is luxury multi-family residential project in the heart of San Francisco’s western addition. Mr. Towar was responsible for the design of the rainwater harvesting system that includes the ability to make up cistern water from the potable source. The cistern itself is designed to provide sufficient capacity to irrigate the landscape areas for a full growing season without the need for potable water in a normal year. Harvested rainwater is used to irrigate planted areas on four levels, including a 13th-floor roof garden.

2302 Valdez Street, City of San Oakland, CA

Senior Landscape Designer. This market-rate mixed-use project features ground-level retail and condominiums. Mr. Towar designed for rainwater harvested from roofs on multiple levels to be stored in a cistern on a lower parking level. The cistern provides irrigation water for landscaping on four levels, including an 8th-floor roof garden.

Joseph Brajkovich, L.S. | Survey



YEARS OF EXPERIENCE

30 years

KEY QUALIFICATIONS

- ✓ Project experience in the Town of Atherton
- ✓ Completed more than 300 similar projects. All projects were on time and within their budgets

PROFESSIONAL LICENSES

Land Surveyor State of California, #5254

EDUCATION

B.S., Civil Engineering, University of Texas, 1988
 B.S., Geology, Texas Tech University, 1982

Verizon Cell Phone Sites, Town of Atherton, CA

For Nexius Solutions, Inc., Land Surveyor. PLS Surveys Inc. worked as a subcontractor for Nexius Solutions, Inc. and provided surveying and right-of-way mapping of utility poles that are to be considered for cell phone equipment installation. The work also included research for subdivisions and right-of-way maps, locating survey monuments, gathering topography around each pole and surveying the elements on the pole, such as wires, cross arms, transformers, guy wires, and electroliers. Mr. Brajkovich was the field party chief, project manager, and oversaw the CAD and plan development.

Topographic Surveying,

Cities of San Francisco, Oakland, Concord, Danville and Berkeley, CA

For Verde Design, Land Surveyor. PLS Surveys Inc. worked as a subcontractor for Verde Design of Santa Clara for this project. PLS Surveys provided topographic surveying of existing parks and school fields for installation of sports fields. Design level surveys were required in order design improvements to match the surrounding conditions. The surveys included site improvements, trees, structures, surface utilities and sufficient enough spot elevation to generate 6 in. contours. Mr. Brajkovich was the field party chief, project manager, and oversaw the CAD and plan development.

Fisher Middle School, Santa Clara County, CA

For Urban Design Consulting Engineers, Land Surveyor. PLS Surveys Inc. was hired by Urban Design Consulting Engineers of San Francisco to survey the play field at the school for regrading and field development. The field area was approximately 5 acres with various underground utility lines that were mapped. The neighboring roadways were also mapped. Mr. Brajkovich was the field party chief, project manager, and oversaw the CAD and plan development.

Snow Park and Harrison St Realignment, Oakland and Alameda Counties, CA

For PLACEWORKS, Land Surveyor. PLS Survey Inc. Worked for Design Community & Environment now known as PLACEWORKS located in Berkeley. PLS Survey provided right-of-way mapping and topographic surveying of approximately 4,500 liner feet of roadway and a park near Lake Merritt in Oakland. The design used our information to realign several streets, pedestrian paths and included bike lanes. Snow Park will be improved as well and the improvements are underway. Mr. Brajkovich was the field party chief, project manager, and oversaw the CAD and plan development.