



Posting Date: 08-27-2021

## NOTICE OF SPECIAL MEETING OPERATIONS COMMITTEE/BOARD OF DIRECTORS (OPERATIONS)

(Per Section 3, page 10, of the Board Handbook: The Board, as a practice, generally does not take final action on items during committee meetings, unless District staff determines the urgency of the item requires immediate action that cannot be delayed until a subsequent regular bi-monthly Board meeting.)

**MEETING DATE:** 08-30-2021  
**TIME:** 9:30 a.m.  
**LOCATION:** This meeting will be held virtually, pursuant to the Governor’s Executive Order N-29-20.

To participate online, go to <https://us06web.zoom.us/j/88593961759>. You can also participate by phone by calling 1-669-900-6833 and entering the webinar ID#: 885 9396 1759.

**PARTICIPATION DURING MEETINGS:** During the public comment periods, the public may comment by clicking the “raise hand” button on the bottom of the Zoom screen; if you are joining by phone and would like to comment, press \*9 and we will call on you as appropriate.

**EMAILED PUBLIC COMMENTS:** You may submit your comments in advance of the meeting by emailing them to [BoardComment@MarinWater.org](mailto:BoardComment@MarinWater.org). All emailed comments received by 7:30 a.m. on the day of the meeting will be provided to the Board of Directors prior to the meeting. Those emailed comments on approval items received by 7:30 a.m. will also be summarized by the board secretary at the board meeting. All emails will be posted on our website. (Please do not include personal information in your comment that you do not want published on our website such as phone numbers and home addresses.)

AGENDA ITEMS	RECOMMENDATIONS
Call to Order and Roll Call	
Adopt Agenda	<i>Approve</i>

MARIN WATER BOARD OF DIRECTORS: LARRY BRAGMAN, JACK GIBSON, CYNTHIA KOEHLER, LARRY RUSSELL, AND MONTY SCHMITT

AGENDA ITEMS	RECOMMENDATIONS
<p><b>Public Comment</b>  <i>Members of the public may comment on any items not listed on the agenda during this time. Comments will be limited to three minutes per speaker, and time limits may be reduced by the Committee Chair to accommodate the number of speakers and ensure that the meeting is conducted in an efficient manner.</i></p>	
<p><b>Calendar</b></p>	
<p>1. Minutes of the Operations Committee/Board of Directors (Operations) Meeting of July 16, 2021  <i>(Approximate time 1 minute)</i></p>	<p><i>Approve</i></p>
<p>2. Emergency Intertie Project Update  <i>(Approximate time 45 minutes)</i></p>	<p><i>Information</i></p>
<p>3. Three (3) Amendments to Engineering Consultant Agreements for the Emergency Intertie Project and Authorize the General Manager to Negotiate and Execute Amendments  <i>(Approximate time 20 minutes)</i></p>	<p><i>Approve</i></p>
<p>4. Submittal of a Temporary Urgency Change Petition for Lagunitas Creek Streamflow Releases and Authorize the General Manager to File the Final Petition with the State Water Board  <i>(Approximate time 45 minutes)</i></p>	<p><i>Approve</i></p>
<p>5. Berrylane Pipe Replacement Project  <i>(Approximate time 5 minutes)</i></p>	<p><i>Review and Refer for Board Approval</i></p>
<p>6. Construction Inspection Support Services  <i>(Approximate time 10 minutes)</i></p>	<p><i>Review and Refer for Board Approval</i></p>
<p><b>Adjournment</b></p>	

**ADA NOTICE AND HEARING IMPAIRED PROVISIONS:**

In accordance with the Americans with Disabilities Act (ADA) and California Law, it is Marin Water’s policy to offer its public programs, services, and meetings in a manner that is readily accessible to everyone, including those with disabilities. If you are disabled and require a copy of a public hearing notice, an agenda, and/or agenda packet in an appropriate alternative format, or if you require other accommodations, please contact Board Secretary Terrie Gillen at 415.945.1448, at least two days in advance of the meeting. Advance notification will enable the Marin Water to make reasonable arrangements to ensure accessibility.

INFORMATION PACKETS ARE AVAILABLE FOR REVIEW AT THE CIVIC CENTER LIBRARY, CORTE MADERA LIBRARY, FAIRFAX LIBRARY, MILL VALLEY LIBRARY, MARIN WATER OFFICE, AND ON THE MARIN WATER WEBSITE (MARINWATER.ORG)

**FUTURE BOARD MEETINGS:**

- ❖ Tuesday, September 7, 2021  
Board of Directors' Regular Bi-Monthly Meeting  
7:30 p.m.<sup>1</sup>
  
- ❖ Thursday, September 16, 2021  
Watershed Committee/Board of Directors (Watershed) Meeting  
1:30 p.m.
  
- ❖ Friday, September 17, 2021  
Operations Committee/Board of Directors (Operations) Meeting  
9:30 a.m.



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Board Secretary

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<sup>1</sup> A closed session will take place at 6 p.m.



**Item Number:** 01  
**Meeting Date:** 08-30-2021  
**Meeting:** Operations  
Committee/Board of Directors  
(Operations)

## Approval Item

### TITLE

Minutes of the Operations Committee/Board of Directors (Operations) Regular Meeting of July 16, 2021

### RECOMMENDATION

Approve the adoption of the minutes.

### SUMMARY

On July 16, 2021, the Operations Committee/Board of Directors (Operations) held its regularly scheduled monthly meeting. The minutes of the meeting are attached.

### DISCUSSION

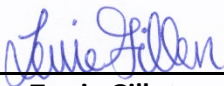
None

### FISCAL IMPACT

None

### ATTACHMENT(S)

1. Minutes of July 16, 2021, Meeting of the Operations Committee/Board of Directors (Operations)

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Communications & Public Affairs Department	 Terrie Gillen Board Secretary	 Ben Horenstein General Manager

**MARIN MUNICIPAL WATER DISTRICT  
OPERATIONS COMMITTEE /BOARD OF DIRECTORS (OPERATIONS) SPECIAL MEETING**

**MINUTES**

**Friday, July 16, 2021**

**Via teleconference**

(In accordance with Governor Gavin Newsom’s Executive Order N-29-20)

**DIRECTORS PRESENT:** Larry Bragman, John C. Gibson, Larry L. Russell, and Cynthia Koehler

**DIRECTORS ABSENT:** Monty Schmitt

**CALL TO ORDER:** Chair Russell called the meeting to order at 9:30 a.m.

**ADOPT AGENDA:**

On motion made by Director Bragman and seconded by Director Gibson, the board approved the adoption of the agenda. The board took the following roll call vote:

Ayes: Directors Bragman, Gibson, Koehler, and Russell  
Noes: None  
Absent: Director Schmitt

**PUBLIC COMMENT:**

There were no public comments.

**CALENDAR ITEMS:**

**ITEM 1. MINUTES OF THE OPERATIONS COMMITTEE /BOARD OF DIRECTORS (OPERATIONS) MEETING OF JUNE 18, 2021**

On motion made by Director Gibson and seconded by Director Bragman, the board approved the minutes by the following roll call vote:

Ayes: Directors Bragman, Gibson, Koehler, and Russell  
Noes: None  
Absent: Director Schmitt

There were no public comments.

**ITEM 2. WATER CONSERVATION INVESTMENT PLAN**

Water Efficiency Manager Carrie Pollard presented this item. The Directors and staff conversed throughout the presentation.

There were three public comments.

This was an informational item; therefore, the board took no formal action.

President Koehler left at 11:00 a.m.

**ITEM 3. EMERGENCY DROUGHT PROJECTS UPDATE**

Operations Manager Paul Sellier brought forth this item. Discussion followed.

There were two public comments.

This was an informational item; therefore, the board took no formal action.

Director Gibson left at 11:34 a.m.

**ITEM 4. 2021 AGREEMENT FOR TRANSFER OF THE KASTANIA PUMP STATION FROM THE SONOMA COUNTY WATER AGENCY TO THE MARIN MUNICIPAL WATER DISTRICT**

Engineering Manager Mike Ban presented this item. Discussion ensued.

There were no public comments.

On motion made by Director Gibson and seconded by Director Russell, both referred the item to a future board meeting for board approval.

**ITEM 5. SMITH SADDLE TANKS REHABILITATION PROJECT**

The Operations Committee tabled this item to a future meeting.

**ADJOURNMENT**

There being no further business, the Operations Committee/Board of Directors (Operations) meeting adjourned at 11:44 a.m.

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Board Secretary





**Item Number:** 02  
**Meeting Date:** 08-30-2021  
**Meeting:** Operations  
Committee/Board of Directors  
(Operations)

## Informational Item

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**TO:** Operations Committee/Board of Directors (Operations)

**FROM:** Paul Sellier, Operations Director 

**THROUGH:** Ben Horenstein, General Manager 

**DIVISION NAME:** Operations

**ITEM:** Emergency Intertie Project Update

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### **SUMMARY**

Staff will provide an update on the Emergency Intertie Project.

### **DISCUSSION**

Due to continued dry conditions and historically low reservoir storage levels, the Board declared a water shortage emergency and adopted mandatory water use restrictions at the April 20<sup>th</sup>, 2021 Board meeting, with further measures adopted at subsequent Board meetings. Given the severity of the drought, the District has evaluated a number of opportunities to augment our water supply. Staff will provide an update to the Board on the range of water supply alternatives, with a focus on the Emergency Intertie Project, which has been found to be the most feasible approach given the volume of the supplemental water that may be needed in the timeframe required.

### **FISCAL IMPACT**

None

### **ATTACHMENT(S)**

None

## Approval Item

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### **TITLE**

Approval of engineering consulting agreements for the development of the Emergency Intertie project

### **RECOMMENDATION**

Approve three amendments to engineering consultant agreements and authorize the General Manager to negotiate and execute amendments to existing agreements with consulting firms to complete the feasibility report and 30% design to support environmental review pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) required for the proposed Emergency Intertie Project as follows:

Amendment No 1. with Woodard and Curran not to exceed \$727,554

Amendment No 1. with Carollo Engineers not to exceed \$1,274,466

Amendment No 1. with WSP not to exceed \$154,465

### **SUMMARY**

On April 20, 2021, the District's Board of Directors (Board) adopted Resolution 8630 declaring a water shortage emergency and adopted Ordinance No. 449 setting forth a comprehensive list of mandatory water conservation measures and water use restrictions. Subsequently, an emergency was declared at the County level, and on July 8<sup>th</sup>, Governor Newsom declared a drought emergency for Marin County. Reservoir levels are historically low and projections indicate that if the drought continues the District will need a supplemental water supply in the second half of 2022. The agreements with the engineering firms will allow the District to complete the feasibility analysis and obtain design details sufficient to support the required environmental review pursuant to CEQA and NEPA. Staff will present additional details on the scopes of work and fee for each agreement at the August 30 Operations Committee meeting.

### **DISCUSSION**

After two successive dry winters with below average rainfall, District reservoir storage volumes are at historically low levels. Reservoir storage as of August 25, 2021 was 30,374 acre-feet (AF), which was less than 38.2% of capacity. Projections indicate that, should the drought continue, storage levels may drop below 10,000 AF by summer 2022. The District has never operated the reservoir system below 10,000 AF and there is uncertainty regarding the reliability of the water supply pool were levels to go below 10,000 AF. The District is evaluating the feasibility of an intertie with East Bay Municipal Utility District, to accommodate water transfers, via a new pipeline across the Richmond-San Rafael Bridge. The feasibility assessment is complex and requires the services of engineering firms with experience in water transfers, complex project



management, pipeline hydraulics and seismic and structural analysis. Assisting the District in these efforts are three firms with roles and responsibilities described below.

Woodard and Curran (W&C) is an established engineering consulting firm with experience in both water transfers and engineering projects. W&C's role is to provide overall project management for the proposed Emergency Intertie Project and to assist the District in securing water transfer agreements.

Carollo Engineers is an established engineering firm with experience in a wide variety of engineering applications. Carollo Engineers will be responsible for the design of project elements proposed to be constructed on either side of the bridge, which include hydraulics, pipe sizing, pump stations, controls and electrical work associated with the proposed project.

WSP is a global professional services company and their role will include the structural analysis needed to demonstrate that the bridge can support the additional weight of the pipeline under the guidelines set by Caltrans. In addition WSP will be responsible for designing the supports that will secure the pipeline to the bridge. WSP is very familiar with the Richmond San Rafael Bridge having previously worked on the structure and is also very familiar with Caltrans, the owner and operator of the bridge.

The combined efforts of these firms will result in an overall feasibility analysis that is intended to provide the District with a level of certainty that the proposed project is feasible, and in addition will assist in providing a sufficient level of detail to allow the CEQA/NEPA review required for the proposed project.

#### **FISCAL IMPACT**

These amendments are unbudgeted and it is anticipated that funding will come from reserves as follows:

Woodard and Curran – Amendment No 1 \$727,554

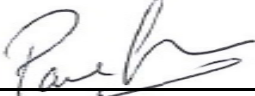

Carollo Engineers – Amendment No 1 \$1,274,466

WSP – Amendment No 1 \$154,465

Total fiscal impact is \$2,156,485

#### **ATTACHMENT(S)**

1. Amendment No 1 - Woodard and Curran Scope and Fee
2. Amendment No 1 - Carollo Scope and Fee
3. Amendment No 1 - WSP Scope and Fee

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Operations	 Paul Sellier Operations Director	 Ben Horenstein General Manager

**FIRST AMENDMENT TO  
PROFESSIONAL SERVICES AGREEMENT  
WITH WOODARD & CURRAN**

This First Amendment ("Amendment") is entered into by and between Marin Municipal Water District, ("District") and Woodard & Curran and amends that certain Professional Services Agreement between the District and Woodard & Curran ("Consultant"), Agreement No. MA 5969, dated as of July 14, 2021 ("Agreement").

For good and valuable consideration the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

Section 1. Recitals:

- A. The District entered into the Agreement with Consultant for program management, project management, engineering and water transfer services.
- B. The District now desires to amend the Agreement to expand the scope of work to be provided under the terms of the Agreement and increase the amounts payable as appropriate to compensate for the additional services.
- C. Consultant agrees to provide those services in accordance with the terms of the Agreement as amended herein.

Section 2. Terms:

- A. **First Amendment to Agreement:** This First Amendment modifies the Agreement. Except for the modifications contained herein, all of the terms of the Agreement remain unchanged and in full force and effect.
- B. **Additional Scope of Work and Budget – Attachment A1.** Consultant will provide the additional services as set forth in the Additional Scope of Work and Budget attached to this Amendment as Attachment A1 and made part of this Amendment and the Agreement. The services set forth in the Additional Scope of Work shall be in addition to those already contained in the Agreement.
- C. **Additional Compensation.** In consideration for the additional services included in the Additional Scope of Work at Attachment A1, the District shall pay additional compensation to Consultant in an amount not to exceed \$727,554 in accordance with the Budget included in Attachment A1. The total amount of compensation due under the Agreement is hereby increased from the total original contract amount of \$99,000 to \$826,554.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the last date written below.

WOODARD & CURRAN

MARIN MUNICIPAL WATER DISTRICT

\_\_\_\_\_

\_\_\_\_\_  
Bennet Horenstein  
General Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## Marin East Bay Emergency Intertie Program Management Services

### Background

Marin Municipal Water District (MMWD), in response to the current water shortage emergency, is exploring supplemental drought supplies. The needed infrastructure consists of an intertie between MMWD and the East Bay Municipal Utility District (EBMUD), as well as pipeline improvements within the MMWD system, a pump station within the EBMUD system near the east end of the Richmond-San Rafael Bridge, two pump stations within the MMWD system, and a 1 MG storage tank within the MMWD system.

Carollo Engineers (Carollo) is being retained by MMWD to develop a conceptual design for improvements on either end of the bridge. Carollo will retain TJCAA (structural), Cinquini & Passarino, Inc. (survey), JDH (corrosion), and Miller Pacific (Geotech) to assist. WSP Global (WSP) is being retained to establish feasibility and develop a conceptual design for a pipeline to be supported by the bridge. ESA is being retained by MMWD to perform needed environmental analyses and obtain necessary environmental permits. For purposes of this Scope, the work done by each consultant team is termed a "project", and the portfolio of those projects is termed the "program".

### Scope of Work

Woodard & Curran (W&C) will primarily provide program management services aimed at coordinating the preliminary design work of the larger team that includes the consultants mentioned above, MMWD staff, and cooperating agencies. However, W&C will retain Joe Hill Consulting Engineers (JHCE) (generator power) and Associated Right-of-Way Services (ARWS) (real estate) Additionally, W&C will provide specific services as detailed herein.

The work described below covers completing the feasibility phase started in July and the 30% preliminary design phase. It is anticipated this phase will last through November 2021.

## 1. Program and Project Management

This task includes managing the project team, the scope of work, the project schedule and budget, subconsultants, and the coordination and documentation of project meetings. Additionally, the project management task includes Consultant's quality management program and providing monthly progress reports to the District to accompany the invoices for the services provided by Consultant. W&C will perform a detailed review of each consultant's scope package to align each project's scope and schedule to overall program goals and check for scope gaps.

### Task 1.01 - Project Administration:

W&C will administer the project to maintain project schedule and budget. The project progress and budget status will be included in monthly progress reports that will be attached to billing invoices submitted to the District. Additionally, the monthly progress report will include a list of work completed for the invoice period and anticipated work efforts for the next invoice period.

W&C will identify and document interdependencies among projects such as interface points, schedule dependencies, and common agency approvals; align each project's deliverables and their timing to program needs, then adjust as needed; as-needed hold focused meetings among team members, including MMWD staff as appropriate, to align scope and schedule among projects;

review work products of each project, including participation in technical review workshops; and share information among the project team including changes to scope or schedule or changes to key assumptions.

**Task 1.02 - Conduct Project Coordination Meetings:**

W&C will conduct multiple weekly project coordination meetings as needed with District staff to keep the project team up to speed on all ongoing activities. Meetings will be conducted using a platform agreeable to the District such as MSTeams, Zoom, Skype, or Go to Meeting. Consultant will prepare a standing agenda and meeting notes for each meeting. Multiple weekly project coordination meetings will be one (1) hour in length on a mutually agreed upon day of the week.

Additionally, W&C will conduct and attend project coordination meetings on an as needed basis and provide agendas and minutes as needed.

**Task 1.03 - Conduct Project Quality Assurance and Control:**

Consultant will implement and maintain a Quality Management Program for the project. All deliverables will be reviewed in accordance with our quality management program prior to being submitted to the District for review.

**Task 1.04 – Consultant Management:**

W&C will set and track schedules; identify schedule problems and work with consultant to resolve them; review invoices, change order requests; recommend disposition to MMWD; and participate in technical workshops and reviews. Level of effort assumes Carollo team and WSP team each have one meeting per week requiring attendance by W&C.

## 2 Field Investigations

**Task 2.01 – Conduct Field Survey:**

Supervise and coordinate efforts to complete survey. Review deliverables from subconsultant.

**Task 2.02 – Conduct Geotechnical Investigation:**

Supervise and coordinate efforts to complete geotechnical investigation. Review report recommendations.

**Task 2.03 – Conduct Utility Investigation:**

Supervise and coordinate efforts to complete utility investigation

**Task 2.04 – Corrosion Investigation:**

Supervise and coordinate efforts to complete corrosion investigation.

### 3 Basis of Design Summary Memorandum

W&C will coordinate and participate in the following activities:

Task 3.01 - Confirm Design Criteria:

The Consultant will confirm the overall project design criteria under this task. This will include review of existing District design criteria and Consultant recommendations.

Task 3.02 - Confirm Hydraulics:

This task includes review and confirmation of the hydraulics associated with the alignment identified during the Feasibility Analysis stage and completion of the final hydraulic profile. Discussions on the hydraulic model assumptions will be included.

Task 3.03 - Confirm Pipeline Alignment:

This task will include confirmation of the identified pipeline alignments as identified during the Feasibility Analysis stage. The alignment will be reviewed for constructability, maintenance, and operation. Any recommended revisions will be discussed and documented.

Task 3.04 - Confirm Pipe Materials:

This task will confirm the pipe material that will be used for the project. This information will then be incorporated into the design process.

Task 3.05 - Confirm Pump Station Components:

Under this task the Consultant will confirm the pump station components and identify the items that will require pre-purchase.

Task 3.06 - Conduct Transient Analysis:

Under this task, a transient analysis will be conducted to evaluate the surge protection facilities required for the project. This analysis may include the development of a surge tank facility for the pump station sites and/or the development of air release and air vacuum valve facilities along the pipeline.

Task 3.07 - Develop Preliminary (10%) Plans:

Consultant will include ten percent (10%) level of design plans under this task. Plans will be to a level of detail that defines pipeline alignments, pipeline diameters and proposed pump station locations.

Task 3.08 - Develop DRAFT Basis of Design Summary Memorandum:

This task will include the development of the DRAFT Basis of Design Summary Memorandum that will identify the components and facilities to be implemented during the development of the pre-purchase packages and the final design process. The DRAFT Basis of Design Summary Memorandum will be submitted to the District for review.

Task 3.09 - Develop FINAL Basis of Design Summary Memorandum:

This task will include the development of the FINAL Basis of Design Summary Memorandum document and include responses to all the District review comments. The FINAL Basis of Design Summary Memorandum document will be submitted to the District.

### 4 Permitting and Stakeholder Coordination Assistance

As part of this task, W&C will coordinate with stakeholders identified by the District that will need to be part of the project coordination. This includes all associated included in coordinating with the following listed agencies Assumptions for meeting frequency for each agency are provided below. Additionally, this task includes answering questions and providing information to the stakeholders when requested. Currently, identified stakeholders include:

- CalTrans Encroachment Assistance - Six (6) meetings total
- City of San Rafael Encroachment Assistance - Four (4) meetings total

- Marin County Encroachment Assistance - Four (4) meetings total
- City of Richmond Encroachment Assistance - Four (4) meetings total
- CEQA Compliance Assistance - Three (3) meetings total
- EBMUD Coordination Assistance - Six (6) meetings total
- BCDC Coordination Assistance - Three (3) meetings total
- PG&E Power Coordination Assistance - Three (3) meetings total

## 5 Coordination with Other District Consultants

As part of this task, W&C will coordinate with other consultants identified by the District that will need to be part of the project coordination. It is assumed one meeting per week per District Consultant will be attended. Additionally, this task includes answering questions and providing information to the District Consultants when requested. Currently, identified consultants include Carollo, WSP, and ESA for a total of three meetings a week.

## 6 Develop Pre-Purchase Documents

W&C will coordinate and participate in the following activities:

Consultant will assist the District with pre-purchase of long lead equipment selection and procurement by identifying qualified equipment suppliers, developing the vendor scope of supply, providing guidance for competitive procurement, developing bid advertisement packages, reviewing quotations, and recommending the selected supplier. The Pre-Purchase Equipment documents in each package shall generally consist of the following:

- Front-end documents based on District's standard procurement documents, which are based on EJCDC standards.
- Technical specifications listing the equipment requirements including warranty requirements, materials of construction, production capacity, sizing, equipment, redundancy, control strategies, and manufacturer's services.
- Site specific design criteria, operations and maintenance requirements, and related specifications.

Task 6.01 - Develop and Maintain a Pre-Purchase Equipment List and Schedule:

Under this task the Consultant will identify the pre-purchase equipment items and develop an initial schedule for acquisition. The schedule will be maintained during the pre-purchase document development as well as during the bidding phase.

Task 6.02 - Develop Steel Pipe Pre-Purchase Documents:

Under this task the Consultant will identify suitable steel pipe vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the steel pipe material for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue the final bid advertisement package for the steel pipe material to solicit proposals from suppliers. It is assumed that there will be two types of steel pipe procured under this package. Cement mortar lined and coated (CMLC) AWWA C200 and polyurethane (or epoxy) lined and coated AWWA C200 steel pipe.

Task 6.03 - Develop Pump Station Pre-Purchase Documents:



Under this task the Consultant will identify suitable package pump station vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the package pump station facilities for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue final bid advertisement package for the package pump stations to solicit proposals from suppliers. It is assumed that a total of three (3) pump stations will be included under this package.

Task 6.04 - Develop Bolted Steel Tank Pre-Purchase Documents:

Under this task the Consultant will identify suitable bolted steel tank vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the bolted steel tank for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue final bid advertisement package for the bolted steel tank to solicit proposals from suppliers.

Task 6.05 - Develop Emergency Genset Pre-Purchase Documents:

Under this task the Consultant will identify suitable emergency generator vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the emergency generator facilities for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue final bid advertisement package for the emergency generator to solicit proposals from suppliers. It is assumed that a total of three (3) emergency generators will be included under this package.

## 7 Bid Phase Services (Pre-Purchase Packages Only)

Task 7.01 - Answer Bidder Questions/Provide Addendums (Four (4) pre-purchase packages)

This task includes assisting the District during the bidding period. The task includes responding to bidders' questions, preparing addenda to the contract documents during the advertisement period, and providing ongoing consultation and interpretation of the pre-purchase documents. Consultant will evaluate supplier proposals and prepare a bid tab for each package. Consultant will prepare the ranking of suppliers for each package to District staff and the reasons for their recommendation. Consultant will assist the District in negotiating final terms of the contract for supply of each piece of equipment with the supplier.

## 8 Engineering Services During Fabrication (Pre-Purchase Packages Only)

W&C will coordinate and participate in the following activities:

Task 8.01 - Review Pre-Purchase Vendor Submittals

Consultant will provide submittal review for the long lead time equipment. Consultant will complete the initial review of submittals provided by each supplier to determine compliance with the contract documents prior to District final review/approval and issuance of the purchase order. If issues with the quality of the shop drawings are identified, Consultant will bring it to District's attention to initiate corrective action with the supplier.

Task 8.02 - Respond to Pre-Purchase Vendor Requests for Information (RFI)

Consultant will maintain open communication with the selected Pre-Purchase vendors and respond to any RFI's.

Task 8.03 - Purchase Order Support and Equipment Supplier Coordination

Consultant will assist with the following activities after the District issues the Purchase Order to each equipment supplier.

- Maintain the Pre-Purchase Equipment schedule, Pre-Purchase Equipment List, and Supplier Communication Log.
- Maintain positive contact with each equipment and material supplier to maintain schedule of review submittals and delivery

## 9 Other services

In this task W&C will provide the indicated services to complement the work of the other team members.

### 9.01 - System Functional Description (SFD):

W&C will prepare a description of the system from an operations perspective. The task is intended to align all stakeholders on the project scope, with sufficient detail to guide the subsequent technical work. The SFD will describe the envisioned steps to start up the new facilities, run them day to day with flow variations, and shut them down. The level of instrumentation and automation will be described. Exceptions will be described and the basic approach to handling each; for example, the desired behavior if power is lost to some, or all, of the system components will be described. Interlocks and permissives will be described including boundary conditions triggering alarms or shutdown.

### Task 9.02 - Asset Management Overview:

In this task W&C will document the assets being created under the program and the conceptual asset management approach for each. The document will describe the range of foreseen maintenance activities (e.g., preventative maintenance, reactive maintenance, major repair and replacement) and identify the responsible party to perform the work, and key considerations for the work such as integration with work by others (e.g., Caltrans, EBMUD).

### Task 9.03 – Right-of-way Needs:

Right of way needs. As conceptual right of way needs become known for the various program elements such as pipelines and pumping plants, W&C will procure and manage specialty services to determine necessary and desirable property rights, research land ownership, prepare property and easement descriptions, and assist MMWD in property negotiations.

### Task 9.04 – Water Transfer Negotiations:

Woodard & Curran will develop and support negotiations on agreements necessary to implement water transfers. Agreements are anticipated to include wheeling and storage agreement and operating plan with EBMUD, water purchase and storage agreement with Contra Costa WD, and options agreements/water purchase agreements with sellers, including Glenn-Colusa Irrigation District, Yuba Water Agency, and others

### Task 9.05 – Public Outreach

Prepare materials and support MMWD staff or assist with presentations to the MMWD Board. Assume four Board meetings, with two dry runs per meeting. Prepare briefing materials as requested for use by MMWD staff to speak with external stakeholder groups or to the media. This may involve detailed, three-dimensional exhibits to illustrate changes to the bike path, for example.

### Task 9.06 – Site Visits as Needed

W&C will conduct up to ten site visits to any part of the overall project site as needed. It is assumed two people will attend each site visit.

General Assumptions applicable to all tasks:

- Deliverables in Word or PDF format unless noted otherwise.
- Meetings virtual unless noted otherwise.
- Duration of preliminary design is up to 3 months.
- Although the Scope of Services is broken down into tasks and subtasks, the fee for each task is not an exact estimate. W&C reserves the ability to adjust the budgets within and amongst tasks to balance the overall level of effort. W&C will not exceed the total contracted budget without authorization from the District.



Level of Effort and Fee Estimate

Marin Municipal Water District  
Marin East Bay Emergency Intertie Project - Preliminary Design Phase

Tasks	Woodard & Curran Labor										ODCs				Total					
	Xavier Frias		Ryker Brown		Andree Johnson/ Kim Clyma		Chris van Lansden		Zeey Wang		Lindsay Martien		Dylan Meris			Total JHCE Engineering Costs	Total Richard Sykes Costs	Right-of-Way Assistance	Sub-consultant Total Cost ODCs (2)	Total Fee
	Program Manager	Design Program Manager	Project Support	Lead Modeler	Modeler	Planner	Senior Designer	Staff Engineer	Total W&C Labor Hours (1)	Total JHCE Costs	Total Diemer Engineering Costs	Total Richard Sykes Costs	Sub-consultant Total Cost ODCs (2)	Total Fee						
<b>Task 1: Project Management</b>																				
1.01 - Field Administration	324	281	281	281	281	281	281	281	281	281	281	281	281	281	281	281	281	281	281	281
1.02 - Project Coordination Meetings	16	16																		
1.03 - Conduct Project Quality Management	8	8																		
1.04 - Consultant Management	40	40																		
Subtotal Task 1: 324 281																				
<b>Task 2: Field Investigations</b>																				
2.01 - Conduct Field Survey	2	2																		
2.02 - Conduct Geotechnical Investigation	2	2																		
2.03 - Conduct Utility Investigation	2	2																		
2.04 - Conduct Corrosion Investigation	2	2																		
Subtotal Task 2: 8																				
<b>Task 3: Basis of Design Summary Memorandum</b>																				
3.01 - Confirm Design Criteria	2	2																		
3.02 - Confirm Parameters	2	2																		
3.03 - Confirm Phasing Alignment	2	2																		
3.04 - Confirm Pipe Materials	2	2																		
3.05 - Confirm Tank Materials	2	2																		
3.06 - Confirm Tank Station Components	2	2																		
3.07 - Develop Preliminary (100%) Plans	2	2																		
3.08 - Develop PRELIM Basis of Design Summary Memorandum	2	2																		
3.09 - Develop FINAL Basis of Design Summary Memorandum	4	4																		
Subtotal Task 3: 28																				
<b>Task 4: Permitting &amp; Coordination Assistance</b>																				
4.01 - Permitting & Coordination Assistance	80	80	160																	
Subtotal Task 4: 80 80 160 80 400 107,040																				
<b>Task 5: Coordination with Other District Consultants</b>																				
5.01 - Coordination with Other District Consultants	48	48																		
Subtotal Task 5: 48 48 29,040																				
<b>Task 6: Pre-Purchase Documents</b>																				
6.01 - Develop and Distribute Pre-Purchase Equipment List and Schedule	8	8																		
6.02 - Develop Steel Pipe Pre-Purchase Documents	8	8																		
6.03 - Develop Pump Station Pre-Purchase Documents	8	8																		
6.04 - Develop Ball Valve Tank Pre-Purchase Documents	8	8																		
6.05 - Develop Emergency Generator Pre-Purchase Documents	8	8																		
Subtotal Task 6: 40 40 160 240 40 10,312 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000 11,000																				
<b>Task 7: Bid Packages (Pre-Purchase Packages Only)</b>																				
7.01 - Answer Bidder Questions/Requests	8	8																		
Subtotal Task 7: 8 8 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208 6,208																				
<b>Task 8: Engineering Services During Fabrication (Pre-Purchase Packages Only)</b>																				
8.01 - Review Pre-Purchase Vendor Submittals	8	8																		
8.02 - Respond to Pre-Purchase Vendor Requests for Information (RFI)	8	8																		
8.03 - Purchase Order Support and Equipment Supplier Coordination	8	8																		
Subtotal Task 8: 24 24 16 32 16 32 16 32 16 32 16 32 16 32 16 32 16 32 16 32 16 32																				
<b>Task 9: Other Services</b>																				
9.01 - System Functional Description (SFD)	10	10																		
9.02 - Asset Management Overview	6	6																		
9.03 - Right-of-Way Needs	12	12																		
9.04 - Water Transfer Negotiations	16	16																		
9.05 - Public Outreach	10	10																		
9.06 - Site Visits as Needed	50	50																		
Subtotal Task 9: 106 106 400 400 400 400 400 400 400 400 400 400 400 400 400 400 400 400 400 400																				
<b>TOTAL: 494 432 400 48 72 400 80 520 2,446 681,504 222,000 16,500 16,500 16,500 16,500 16,500 16,500 16,500 16,500 16,500 16,500</b>																				

1. The individual hourly rates include salary, overhead and profit based. Woodard & Curran reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts. Rates shown are for 2021.  
 2. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be billed at actual cost plus 10%).  
 3. Assumes 3-month project duration (September, October, November).  
 4. Additional Woodard & Curran staff may perform work on the project, based on our standard billing rate schedule currently in effect.

**FIRST AMENDMENT TO  
PROFESSIONAL SERVICES AGREEMENT  
WITH CAROLLO ENGINEERS**

This First Amendment ("Amendment") is entered into by and between Marin Municipal Water District, ("District") and Carollo Engineers and amends that certain Professional Services Agreement between the District and Carollo Engineers ("Consultant"), Agreement No. MA 5972, dated as of July 20, 2021 ("Agreement").

For good and valuable consideration the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

Section 1. Recitals:

- A. The District entered into the Agreement with Consultant for project management and engineering design services.
- B. The District now desires to amend the Agreement to expand the scope of work to be provided under the terms of the Agreement and increase the amounts payable as appropriate to compensate for the additional services.
- C. Consultant agrees to provide those services in accordance with the terms of the Agreement as amended herein.

Section 2. Terms:

- A. **First Amendment to Agreement:** This First Amendment modifies the Agreement. Except for the modifications contained herein, all of the terms of the Agreement remain unchanged and in full force and effect.
- B. **Additional Scope of Work and Budget – Attachment A1.** Consultant will provide the additional services as set forth in the Additional Scope of Work and Budget attached to this Amendment as Attachment A1 and made part of this Amendment and the Agreement. The services set forth in the Additional Scope of Work shall be in addition to those already contained in the Agreement.
- C. **Additional Compensation.** In consideration for the additional services included in the Additional Scope of Work at Attachment A1, the District shall pay additional compensation to Consultant in an amount not to exceed \$1,274,466 in accordance with the Budget included in Attachment A1. The total amount of compensation due under the Agreement is hereby increased from the total original contract amount of \$99,980 to \$1,374,446.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the last date written below.

CAROLLO ENGINEERS

MARIN MUNICIPAL WATER DISTRICT

\_\_\_\_\_

\_\_\_\_\_

Bennet Horenstein  
General Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

# MARIN EAST BAY EMERGENCY INTERTIE PROJECT PHASE 2 - 30% PRELIMINARY DESIGN ASSISTANCE

Marin Municipal Water District

## Background

The Marin Municipal Water District (District) has requested assistance for the conceptual design and stakeholder coordination assistance for the Richmond Bridge Pipeline Facilities Project (Project). The Project has been identified as a potential emergency project to provide additional water supply from outside District boundaries to address the current on-going drought conditions and existing water supply shortage.

## Scope of Work

The Scope of Work, and the associated fee estimate, is based on discussions with District staff and includes professional engineering services associated with the preliminary design and stakeholder coordination assistance for the following Project facilities:

- Proposed pump station on the east side of the Richmond San Rafael (RSR) Bridge located near the intersection of Tewksbury Way and Castro Street (Richmond Pump Station) and EBMUD tie-in in Richmond, CA
- Pipeline alignment from the proposed Richmond Pump Station (RPS) to the Richmond San Rafael Bridge
- Pipeline alignment on the west side of the Richmond San Rafael Bridge to the existing District owned property on Pelican Way
- Proposed 1.0 million gallon (MG) storage tank and pump station located on existing District owned property on Pelican Way
- Pipeline alignment from the existing District owned property on Pelican Way down Francisco Blvd. to Bellam Blvd., south on Bellam Blvd. to Anderson Drive, southeast down Anderson Drive to Sir Francis Drake Blvd. and then to a connection point to the District's distribution system approximately 600 feet down Sir Francis Drake Blvd.
- *See attached layout exhibits.*

## Task 1 - Project Management

This task includes managing the project team, the scope of work, the project schedule and budget, subconsultants, and the coordination and documentation of project meetings. Additionally, the project management task includes Consultant's quality management program and providing monthly progress reports to the District to accompany the invoices for the services provided by Consultant.

### Task 1.01 - Project Administration

Consultant will administer the project to maintain project schedule and budget. The project progress and budget status will be included in monthly progress reports that will be attached to billing invoices

submitted to the District. Additionally, the monthly progress report will include a list of work completed for the invoice period and anticipated work efforts for the next invoice period.

#### Task 1.02 - Conduct Project Coordination Meetings (Weekly)

Consultant will conduct weekly project coordination meetings with District staff to keep the project team up to speed on all ongoing activities. Meetings will be conducted using a platform agreeable to the District such as MSTEams, Zoom, Skype, or Go to Meeting. Consultant will prepare a standing agenda and meeting notes for each meeting. Weekly project coordination meetings will be one (1) hour in length on a mutually agreed upon day of the week.

#### Task 1.03 - Conduct Project Quality Management

Consultant will implement and maintain its standard Quality Management Program for the project. All deliverables will be reviewed in accordance with the quality management program prior to being submitted to the District for review.

### Task 2 - Field Investigations

#### Task 2.01 - Conduct Topographic Survey.

Consultant's subconsultant, Cinquini & Pastorini (C&P), will conduct a topographic survey, right-of-way survey, and develop plats and legal descriptions for non-public right-of-way areas. The topographic survey will be at a drawing scale of 1 inch = 30 feet, unless otherwise requested, with a one-foot contour interval. The topographic survey will include the following:

Topographic survey coverage area will include the following:

*West Side Connection Area.* Perform an aerial survey topographic survey along the pipeline alignments. Aerial survey will include the proposed pump station site. The width of the survey will be apparent right-of-way to apparent right-of-way

Perform supplemental topographic surveys to locate surface evidence of underground utilities within the public right-of-way and at the pump station site.

*East Side Connection Area.* Perform a ground topographic survey of the pipeline alignment. The width of the survey will be the limits of the bike path plus 10 feet on each side where access is available (does not including surveying within Caltrans highway lanes). Where roadways are surveyed, survey will include full width of roadway.

Topographic survey will include all necessary work to produce a topographic map, including features such as, but not limited to; building corners, curb lines, water meters, sewer cleanouts, valves, manholes (including rim, invert and pipe information), utility markings on the pavement, utility poles, driveway locations, sidewalks, trees 6 inches and larger and larger, retaining walls and any other pertinent information that could apply to the project during design within the public right-of-way.

Topographic survey will be provided on North American Vertical Datum of 1988 as established by GNSS observations.

Topographic map to horizontally relate to California Coordinate System of 1983, Epoch 2017.50.

C&P will locate existing survey monumentation to establish the right-of-way along the proposed pipeline alignments and the boundaries along the two known proposed pump station sites. We will begin by



reviewing existing record maps, county maps, Caltrans mapping, deeds and other pertinent documents. Once the records research and field monument ties have been completed, we will determine the right-of-way and provide the information to the design team for their use. This work will also be used in conjunction for the preparation and filing of a Record of Survey maps with the County of Marin and County of Contra Costa.

C&P will prepare one (1) legal description and plat for easement acquisition at the proposed Richmond Pump Station location. This item includes one (1) submittal and one (1) revision to that submittal to address any comments.

#### Task 2.02 - Conduct Geotechnical Investigation Desktop Study.

Under this task, the Consultant's subconsultant, Miller Pacific Engineering Group (MPEG), will conduct a geotechnical investigation for the project. MPEG will mark areas in identified areas to explore subsurface conditions and notify underground service alert to identify active utilities in those locations. MPEG will obtain environmental/drilling permits from Marin and Contra Costa Counties and encroachment permits from San Rafael and Caltrans prior to drilling. MPEG will explore the subsurface conditions at the Pelican Way site with two (2) test borings (approximately 40 to 60-feet deep) and two (2) or three (3) Cone Penetration Tests (CPTs) to depths of approximately 100+ feet (below the Bay Mud), one (1) test boring at the Quarry Pump Station site (approximately 15-feet deep), one (1) test boring at the Richmond Pump Station (approximately 25 to 35 feet deep), and four (4) test borings along the pipeline alignment (approximately 10-feet deep). During exploration, MPEG will collect soil samples at select intervals for laboratory testing to determine their pertinent engineering properties. Laboratory testing is anticipated to include moisture content, density, strength, plasticity, and consolidation testing of Bay Mud.

A Geotechnical Data Report will then be developed to identify existing subsurface conditions and provide recommendations for proposed facility foundations and trench sections.

#### Task 2.03 - Conduct Utility Investigation.

Under this task, Consultant will perform existing utility research within the project area in accordance with the American Society of Civil Engineers (ASCE) 38-02 - Level "C" standard guidelines. A potholing plan will be developed if determined to be required.

#### Task 2.04 - Corrosion Investigation.

Under this task Consultant's subconsultant, JDH Corrosion Consultants, Inc. (JDH), will collect soil samples from the project geotechnical subconsultant, who will be collecting soil samples as a part of the soil investigation along the proposed pipeline alignments for chemical analysis. The soil samples will be collected from pipe depth and will be analyzed for pH, chlorides, sulfates, resistivity, and Redox potential using ASTM test methods. JDH will evaluate the results of the chemical analysis and determine the corrosivity of the soils along the pipeline alignments to the proposed materials of construction (i.e. mortar-coated steel and dielectric-coated steel). Additionally, in-situ soil resistivities will be conducted at an approximate 1,500 foot (ft). interval along the pipeline alignment using the Wenner 4-pin technique. In-situ resistivities will be measured at 2.5 ft, 5 ft, 7.5 ft, 10 ft, and 15 ft depths using a Soil Resistivity Meter. Barnes layer calculations will be performed to determine the corrosivity of the different soil layers to the proposed pipeline materials. A stray current evaluation will be conducted for the pipeline alignments. A technical memorandum will be prepared which will provide a summary of the field data collected along with the chemical analysis of the soil samples and an analysis of this data. The

potential for corrosion on the new water pipeline will be determined based on the analysis and recommendations for the long-term prevention of corrosion will be included for all pipe material options. Also, the design criteria for corrosion control for the pumping plants, will be included in this technical memorandum.

### Task 3 - Basis of Design Summary Memorandum

This task will be accomplished in parallel with the field investigations identified under Task 2. Once the field investigation work is completed it will be incorporated into the Basis of Design Memorandum.

#### Task 3.01 - Summarize Design Criteria

The Consultant will summarize the overall project design criteria (i.e. flow, pipe pressure class, velocities, type of pumps, electrical, instrumentation, etc...) under this task. This will include review of existing District design criteria and Consultant recommendations.

#### Task 3.02 - Summarize Hydraulics

This task includes review and completion of the hydraulics associated with the alignment identified during the Feasibility Analysis stage and completion of the final hydraulic profile. Discussions on the hydraulic model assumptions will be included.

#### Task 3.03 - Summarize Pipeline Alignment

This task will include completion of the pipeline alignments as identified during the Feasibility Analysis stage. The alignment will be reviewed for constructability, maintenance, and operation. Any recommended revisions will be discussed and documented.

#### Task 3.04 - Summarize Pipe Materials

This task will summarize the applicable pipe material that will be used for the project. This information will then be incorporated into the design process.

#### Task 3.05 - Summarize Pump Station Components

Under this task the Consultant will summarize the pump station components and identify the items that will require pre-purchase.

#### Task 3.06 - Conduct Transient Analysis

Under this task, a transient analysis will be conducted to evaluate the surge protection facilities required for the project. This analysis may include the development of a surge tank facility for the pump station sites and/or the development of air release and air vacuum valve facilities along the pipeline.

#### Task 3.07 - Develop Preliminary (30%) Plans

Consultant will include thirty percent (30%) level of design plans under this task. Plans will be to a level of detail that defines pipeline alignments, pipeline diameters and proposed pump station locations. Topographic survey information will be used from Task 2.1 for both the west and east side connection areas off the RSR Bridge.

#### Task 3.08 - Develop Preliminary Opinion of Probable Construction Costs (OPCC)

Consultant will develop a preliminary opinion of probable costs under this task. The construction cost estimate will be in accordance with the Association for the Advancement of Cost Estimating (AACE) International Class 4 cost estimates with a level of accuracy of -30% plus +50%.

Task 3.09 - Develop DRAFT Basis of Design Summary Memorandum

This task will include the development of the DRAFT Basis of Design Summary Memorandum that will identify the components and facilities to be implemented during the development of the pre-purchase packages and the final design process. The DRAFT Basis of Design Summary Memorandum will be submitted to the District for review.

Task 3.10 - Develop FINAL Basis of Design Summary Memorandum

This task will include the development of the FINAL Basis of Design Summary Memorandum document and include responses to all the District review comments. The FINAL Basis of Design Summary Memorandum document will be submitted to the District.

Task 4 - Permitting and Stakeholder Coordination Assistance

As part of this task, Consultant will coordinate with stakeholders identified by the District that will need to be part of the project coordination. Assumptions for meeting frequency for each agency are provided below. Additionally, this task includes answering questions and providing information to the stakeholders when requested. Currently, identified stakeholders include:

- CalTrans Encroachment Assistance - Six (6) meetings total
- City of San Rafael Encroachment Assistance - Four (4) meetings total
- Marin County Encroachment Assistance - Four (4) meetings total
- City of Richmond Encroachment Assistance - Four (4) meetings total
- CEQA Compliance Assistance - Three (3) meetings total
- EBMUD Coordination Assistance - Six (6) meetings total
- BCDC Coordination Assistance - Three (3) meetings total
- PG&E Power Coordination Assistance - Three (3) meetings total

Task 5 - Coordination with Other District Consultants

As part of this task, Consultant will coordinate with other consultants identified by the District that will need to be part of the project coordination. It is assumed that a total of one (1) meeting per week per District Consultant will be attended. Additionally, this task includes answering questions and providing information to the District Consultants when requested. Currently, identified consultants include:

- Water Supply Project - Woodard & Curran
- Richmond Bridge Structural Assessment Project - WSP Global
- CEQA Documentation - ESA

Task 6 - Develop Pre-Purchase Documents

Consultant will assist the District with pre-purchase of long lead equipment selection and procurement by identifying qualified equipment suppliers, developing the vendor scope of supply, providing guidance for competitive procurement, developing bid advertisement packages, reviewing quotations, and recommending the selected supplier. The Pre-Purchase Equipment documents in each package shall generally consist of the following:

- Front-end documents based on District's standard documents.

- Technical specifications listing the equipment requirements including warranty requirements, materials of construction, production capacity, sizing, equipment, redundancy, control strategies, and manufacturer's services.
- Site specific design criteria, operations and maintenance requirements, and related specifications.

Task 6.01 - Develop and Maintain Pre-Purchase Equipment List and Schedule

Under this task the Consultant will identify the pre-purchase equipment items and develop an initial schedule for acquisition. The schedule will be maintained during the pre-purchase document development as well as during the bidding phase.

Task 6.02 - Develop Steel Pipe Pre-Purchase Documents

Under this task the Consultant will identify suitable steel pipe vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the steel pipe material for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue the final bid advertisement package for the steel pipe material to solicit proposals from suppliers. It is assumed that there will be two types of steel pipe procured under this package. Cement mortar lined and coated (CMLC) AWWA C200 and polyurethane (or epoxy) lined and coated AWWA C200 steel pipe.

Task 6.03 - Develop Pump Station Pre-Purchase Documents

Under this task the Consultant will identify suitable package pump station vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the package pump station facilities for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue final bid advertisement package for the package pump stations to solicit proposals from suppliers. *It is assumed that a total of three (3) pump stations will be included under this package.*

Task 6.04 - Develop Bolted Steel Tank Pre-Purchase Documents

Under this task the Consultant will identify suitable bolted steel tank vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the bolted steel tank for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue final bid advertisement package for the bolted steel tank to solicit proposals from suppliers.

Task 6.05 - Develop Emergency Genset Pre-Purchase Documents

Under this task the Consultant will identify suitable emergency generator vendors and obtain budgetary costs and lead times. Consultant will prepare a draft bid advertisement package for the emergency generator facilities for review by the District. One (1) review meeting will be held to discuss District review comments on the draft pre-purchase documents. Consultant will prepare and issue final bid advertisement package for the emergency generator to solicit proposals from suppliers. *It is assumed that a total of three (3) emergency generators will be included under this package.*

Task 7 - Bid Phase Services (Pre-Purchase Packages only)

Task 7.01 - Answer Bidder Questions/Provide Addendums (Four (4) pre-purchase packages)

This task includes assisting the District during the bidding period. The task includes responding to bidders' questions, preparing addenda to the contract documents during the advertisement period, and

providing ongoing consultation and interpretation of the pre-purchase documents. Consultant will evaluate supplier proposals and prepare a bid tab for each package. Consultant will prepare the ranking of suppliers for each package to District staff and the reasons for their recommendation. Consultant will assist the District in negotiating final terms of the contract for supply of each piece of equipment with the supplier.

#### Task 8 - Engineering Services During Fabrication (Pre-Purchase Packages only)

##### Task 8.01 - Review Pre-Purchase Vendor Submittals

Consultant will provide submittal review for the long lead time equipment. Consultant will complete the initial review of submittals provided by each supplier to determine compliance with the contract documents prior to District final review/approval and issuance of the purchase order. If issues with the quality of the shop drawings are identified, Consultant will bring it to District's attention to initiate corrective action with the supplier.

##### Task 8.02 - Respond to Pre-Purchase Vendor Requests for Information (RFI)

Consultant will maintain open communication with the selected Pre-Purchase vendors and respond to any RFI's.

##### Task 8.03 - Purchase Order Support and Equipment Supplier Coordination

Consultant will assist with the following activities after the District issues the Purchase Order to each equipment supplier.

- Maintain the Pre-Purchase Equipment schedule, Pre-Purchase Equipment List, and Supplier Communication Log.
- Maintain positive contact with each equipment and material supplier to maintain schedule of review submittals and delivery.

### DELIVERABLES:

- Draft Basis of Design Summary Memorandum
- Final Basis of Design Summary Memorandum
- Draft bid advertisement packages for review by District (Per Pre-Purchase package)
- Final bid advertisement packages for soliciting proposals (Per Pre-Purchase package)
- Bid Tab, per equipment package
- Procurement schedule
- Pre-Purchase Equipment List
- Pre-Purchase Equipment Schedule
- Meeting agendas and minutes
- Supplier Communication Logs

### ASSUMPTIONS:

- Phase 2 - 30% Preliminary Design schedule to be approximately three (3) months.
- Project status meeting to be held weekly during the design phase of the project.
- Project status meetings to be one (1) hour in length and conducted utilizing MSTeams video conference platform.
- Hydraulic modeling to be completed by others.
- Costs are estimates based on current project knowledge. See attached figures for general system layout.
- Boundary surveys are not included.
- Potholing of existing utilities is not included.
- Costs for permitting and stakeholder coordination assistance are estimates.
- Program Manager (Other Consultant) to take the lead on all permitting and stakeholder coordination meetings.
- Permitting and stakeholder coordination meeting will be virtual and one (1) hour in length.
- 30% level of design to include:
  - Cover
  - Plan & Profile (Pipeline alignment, existing utilities, and major crossings)
  - Mechanical Layout (Pump stations)
  - P&ID (Pump stations and emergency generators)
- A total of four (4) Pre-Purchase packages to be developed. These packages are:
  - Steel Pipe Material
  - Package Pump Station Facilities
  - Bolted Steel Tank (Approximately 1.0 MG)
  - Emergency Generator Facilities
- Bolt steel tank will be standard size and volume.
- All pump stations will be standard pre-package systems with no customization.
- All emergency generators will be standard pre-package systems with no customization.
- All RSR Bridge work is to be completed by others.
- Scofield Crossing structural design currently not included.
- District does not require that suppliers meet any specific prequalification requirements and may submit their quote and qualifications in one step.
- The pre-purchase package will be the basis for selecting the equipment for the Project.
- Consultant estimates 40 hours of submittal review per pre-purchase package and there will be a maximum of two (2) submittal rounds.

- Factory Acceptance Test witnessing is not included.
- The District will advertise the bid packages on their website.
- The District will pre-purchase the equipment and Consultant will assist and provide guidance to support the District during the pre-purchase process.
- This scope of work does not include assistance to support construction, commissioning, startup, and O&M of the facilities.
- The pre-purchase equipment purchase orders will be transferred to the selected construction contractor at the appropriate time.
- Consultant will work to time the equipment delivery, so the construction contractor receives the materials and equipment, if possible.
- If required, the District will store, maintain, and exercise all equipment that is pre-purchased and delivered to the District prior to the contractor being awarded the construction contract.





**FIRST AMENDMENT TO  
PROFESSIONAL SERVICES AGREEMENT  
WITH WSP**

This First Amendment (“Amendment”) is entered into by and between Marin Municipal Water District, (“District”) and WSP and amends that certain Professional Services Agreement between the District and WSP (“Consultant”), Agreement No. MA 5973, dated as of July 28, 2021 (“Agreement”).

For good and valuable consideration the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

Section 1. Recitals:

- A. The District entered into the Agreement with Consultant for structural engineering design and analysis services.
- B. The District now desires to amend the Agreement to expand the scope of work to be provided under the terms of the Agreement and increase the amounts payable as appropriate to compensate for the additional services.
- C. Consultant agrees to provide those services in accordance with the terms of the Agreement as amended herein.

Section 2. Terms:

- A. **First Amendment to Agreement:** This First Amendment modifies the Agreement. Except for the modifications contained herein, all of the terms of the Agreement remain unchanged and in full force and effect.
- B. **Additional Scope of Work and Budget – Attachment A1.** Consultant will provide the additional services as set forth in the Additional Scope of Work and Budget attached to this Amendment as Attachment A1 and made part of this Amendment and the Agreement. The services set forth in the Additional Scope of Work shall be in addition to those already contained in the Agreement.
- C. **Additional Compensation.** In consideration for the additional services included in the Additional Scope of Work at Attachment A1, the District shall pay additional compensation to Consultant in an amount not to exceed \$154,465 in accordance with the Budget included in Attachment A1. The total amount of compensation due under the Agreement is hereby increased from the total original contract amount of \$99,996 to \$254,461.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the last date written below.

WSP

MARIN MUNICIPAL WATER DISTRICT

\_\_\_\_\_

\_\_\_\_\_  
Bennet Horenstein  
General Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

# **DRAFT - Scope of Work – Advanced Planning Study of Adding a 24” Diameter Waterline to the Richmond-San Rafael Bridge**

08-23-2021

## **Background**

The Marin Municipal Water District (District) is currently facing drought conditions with water levels in its reservoirs at historic low levels. In response to these conditions, the District has recently declared a water shortage emergency and adopted several water use restrictions. To mitigate drought conditions, the District is exploring various options including a proposal to install a permanent 24 in. diameter waterline across the Richmond-San Rafael Bridge to pump water into Marin county. A waterline had been installed in 1977 on this bridge to alleviate similar drought conditions which was removed in 1982 when the threat of drought was believed to have passed.

The Richmond-San Rafael Bridge (RSR) is a steel truss bridge located in San Pablo Bay, connecting the cities of Richmond and San Rafael, CA, and was opened in 1956. It consists of an upper and lower deck with 36 ft. of travelled roadway each way. Currently, the bridge carries two lanes of vehicular traffic on the top deck together with a 10 ft. pedestrian lane. There are three lanes of vehicular traffic present on the lower deck. A recent load rating study has indicated that the RSR Bridge requires strengthening at specific locations to carry the three AASHTO legal load vehicles. The addition of a waterline imposes additional loads on the bridge that need to be evaluated to ensure the bridge remains safe for the traveling public.

This scope of work describes the tasks and deliverables associated with an Advanced Planning Study (APS) involving the addition of a permanent 24 in. diameter waterline on the RSR Bridge. The scope involves examining various alternatives for attaching this waterline on the RSR Bridge, listing the pros and cons of each option, developing conceptual sketches for attaching the waterline, identifying the preferred alternative by the CONSULTANT, and developing an opinion of probable cost and construction schedule for its installation on the bridge. The scope of this effort will include an assessment of impacts to the safe load carrying capacity of the RSR Bridge to carry the three AASHTO legal load vehicles with the additional weight of the waterline. Other design consideration including environmental and architectural impacts will not be assessed. A limited, qualitative seismic evaluation will be performed for the RSR Bridge.

The APS will be based on assumptions including but not limited to the following:

1. Impacts of adding the waterline will have minimal impact on the seismic performance of the bridge.

## **Task 1.0 Project Management**

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### **1.1 Project Monitoring and Reporting**

This task includes all services related to the management, administration, and coordination of the CONSULTANT's activities performed in accordance with the Project Management Institute's standards. This task will be continuous throughout the project duration.

The CONSULTANT will develop a task baseline that includes scope, schedule, and budget information for review and approval by the District. Schedule information for the task baseline will include task milestones.

The CONSULTANT's project manager will monitor the task during its entire duration. The CONSULTANT shall submit a Monthly Progress Report segregated by milestones including the previous month's actual hours worked, total costs for each milestone, and summary to date for the District's approval. Copies of these along with direct costs, other than salary costs, shall be submitted with the CONSULTANT's monthly invoices. Monthly invoices will reconcile any differences with the previous month's invoices. The progress report will document all meetings and communication and will address actual or anticipated problems with task delivery.

***Deliverables:***

- Invoices and Progress Reports will be submitted to the District electronically by email in PDF format.

## **1.2 Meetings and Coordination**

The CONSULTANT's project manager will provide direction to the project team and conduct project coordination meetings.

The CONSULTANT will hold virtual or in-person meetings with District/BATA/Caltrans, and TAM as needed, to update project status and conduct comment resolution for the draft deliverables. The CONSULTANT will attend up to twelve (12) additional meetings, with up to three (3) staff members.

***Assumptions:***

- Meetings with District/BATA/Caltrans/TAM will have a maximum duration of one (1) hour each.
- Meeting agendas and notes, including a list of action items, will be prepared by others.

***Deliverables for meetings:***

- Action items prepared by others.

## **1.3 Quality Control/Quality Assurance Review**

Quality Control/Quality Assurance (QC/QA) will be performed by a designated QC/QA staff member in accordance with the CONSULTANT's in-house QC/QA Management Plan, modified as needed to meet the PROJECT specific requirements. The QC/QA review will include but is not limited to computer modeling assumptions, input & output files, analysis approach, load rating criteria, rating calculations and reports / memorandum(s). The QC/QA manager will also conduct periodic reviews of the design criteria, design assumptions and deliverable requirements to verify that the overall PROJECT objectives are being fulfilled.

***Assumptions:***

- All QC/QA documentation will be available for review upon request by District/Caltrans/BATA.

***Deliverables:***

- Electronic (PDF) copies of CONSULTANT's in-house QC/QA Management Plan, upon request.

- Electronic (PDF) copies of completed Quality Control Review documentation, upon request.

## **Task 2.0 Waterline Addition to the Bridge**

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### **2.1 Screening of Waterline Locations**

There are limited locations where the 24 in. waterline may be attached to the RSR Bridge. These locations will be evaluated for effects on the load carrying capacity of the bridge, impacts to traveled lanes, permit requirements and construction duration. The pros and cons of each alternative will be listed, and justification will be provided for the alternative recommended for the waterline location. An opinion of probable cost will be provided for the recommended location. The options discussed will include:

- Waterline supported from the top deck floorbeams of the trusses.
- Waterline located in the bike path.
- Waterline located on the inside edge of bottom deck shoulder.
- Waterline supported from bottom deck floorbeams of the trusses.
- Waterline attached outside the bridge to truss components with a specially designed pipe support.

Addition of the waterline imposes additional loads on the bridge. The CONSULTANT will determine the maximum number of traffic lanes that can be operated safely on the top and lower deck of the bridge with the additional weight of the waterline. Feasibility of waterline placement at two (2) locations will be studied in greater detail as part of the APS that will include one location within the bike path and one location supported by floorbeams of the upper deck.

The CONSULTANT will use the GT STRUDL model for all load rating evaluations. The evaluations shall be performed for the AASHTO legal vehicle loads only, and shall be performed on the components listed under each representative bridge type 1 through 4 listed below:

- 1. Concrete trestle**
  - A. Double -Tee concrete girders
- 2. Plate girder spans**
  - A. Plate girders
  - B. X-girders
  - C. Floorbeams
- 3. 289 ft. Truss**
  - A. Stringers
  - B. Floorbeams
  - C. Truss members
  - D. Five (5) gusset plates (were identified as critical in the load rating report for BATA); one or more gusset plates deemed the most critical of these five (5) may be selected for evaluation.
- 4. Cantilever Truss**
  - A. Stringers
  - B. Floorbeams
  - C. Truss members

- D. Eighteen (18) gusset plates (identified as critical in the load rating report/memorandums prepared for BATA); one or more gusset plates deemed the most critical of the eighteen (18) may be selected for evaluation

**Assumptions:**

- The CONSULTANT shall determine the load ratings of members and connections of the RSR Bridge impacted by the addition of the waterline while all traffic lanes and pedestrian/bicycle lanes are in operation.
- The CONSULTANT shall provide a table showing the load ratings after the installation of the waterline.
- The CONSULTANT shall identify bridge components that will require strengthening to meet  $RF > 1.0$  under legal loads (Type 3, Type 3-3, Type 3S2, and  $0.75(\text{Type 3-3}) + 0.2klf$ ).
- CONSULTANT will be provided design/as-builts drawings, other available pertinent information of the previous waterline.
- CONSULTANT will use the evaluation criteria specified in the Caltrans memo to BATA dated May 20, 2021.
- The evaluation shall be performed with waterline assumed completely full of water whose density = 62.4 pcf.
- Waterline is a 24 in. diameter welded steel pipe with appropriate wall thickness determined by the CONSULTANT.
- Waterline weights will be developed by the CONSULTANT.

**Deliverables:**

- Narrative of the pros and cons of the various waterline location alternatives analyzed.
- Results of the load rating analysis of the RSR Bridge for the alternative recommended for the waterline location.

## **2.2 Mechanical and Seismic Evaluation**

The CONSULTANT will develop design concepts for structural and mechanical components used to support the 24 in. diameter waterline for the alternative recommended for its location. The design concepts will account for anticipated forces and movements due to thrust, temperature, general ambient movement from vehicle traffic, and design seismic events. The CONSULTANT shall perform a static analysis on the waterline to determine the seismic forces on the support system for the waterline.

**Assumptions:**

- Only qualitative analysis to assess impact of the additional weight of the waterline on the overall seismic performance of the RSR Bridge will be performed in this subtask
- Loads from a 24 in. diameter, welded steel waterline assumed completely full of water whose density = 62.4 pcf shall be used for this subtask.
- Evaluations will consider the required space for waterline expansion joints, combination of waterline dead load with seismic forces and thrust in the waterline

**Deliverables:**

- Results from qualitative seismic analysis of the RSR Bridge.
- Determination of seismic forces at support locations for the waterline.

- Conceptual sketches of expansion/contraction/seismic movement fittings and support system for attaching the 24 in. diameter waterline to the bridge components.
- An opinion of probable cost and construction schedule.

### **Task 3.0 Prepare Advanced Planning Report**

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The CONSULTANT will prepare an Advanced Planning Report that identifies waterline location alternatives analyzed on the RSR Bridge, lists pros and cons of each alternative, includes load rating tables for the bridge after the waterline addition, and recommends a preferred alternative location for the waterline. The APS report will include conceptual design sketches for pipeline attachment to the bridge, and other miscellaneous details required to accommodate expansion, contraction and seismic movements and forces associated with the waterline. The APS will also develop an opinion of probable cost and construction schedule for the recommended waterline location alternative.

**Assumptions:**

- APS will be prepared per Caltrans MTD 1-8, dated January 2015.

**Deliverables:**

- Draft Advanced Planning Study Report to District/Caltrans/BATA for comments.
- Final Advanced Planning Study Report.

**Schedule: (X= NTP date)**

<b>Milestone</b>	<b>Deliverable</b>	<b>Duration</b>	<b>Comment</b>
2.1	Screening of Waterline Locations	X + 10 working days	
2.2	Mechanical & Seismic Evaluation	X + 25 working days	
3.0	Prepare Advanced Planning Study Report	X + 45 working days	

Although the Scope of Services is broken down into tasks and subtasks, the fee for each task is not an exact estimate. WSP reserves the ability to adjust the budgets within and amongst tasks to balance the overall level of effort. WSP will not exceed the total contracted budget without authorization from the District.

COMPANY: WSP  
 Project RSR Bridge Main Water District Waterline Feasibility  
 Project #

#	Task/Subtask Number	Description	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Total Hours	Total Cost
1	PROJECT MANAGEMENT																					
1.1	Project Monitoring & Reporting		16	4																	20	\$5,569
1.2	Meetings and Coordination		0.5	16	4																57	\$14,005
1.3	Quality Control / Quality Assurance Review		0.5	16	16																49	\$12,644
2	WATERLINE ADDITION TO THE BRIDGE																					
2.1	Screening of Waterline Locations		1.0	8	40	60	40														229	\$42,482
2.3	Mechanical and Seismic Evaluation			32	16	60	60														172	\$33,183
3	PREPARE ADVANCED PLANNING REPORT		2.0	4.0	80	8	64														266	\$45,802
	TOTAL HOURS BY EMPLOYEE		4.0	60	188	88	196														792	\$154,465
	Landed Hourly Rate		\$410.45	\$292.23	\$293.27	\$201.80	\$231.81	\$96.42	\$109.57	\$145.89	\$198.50	\$554.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
	Total Labor Cost		\$1,641.80	\$18,933.80	\$49,454.76	\$17,256.40	\$45,452.35	\$2,796.44	\$10,518.72	\$9,343.36	\$654.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

Note: Landed Hourly rates, Travel Rates and Unit Costs shown are for Cost Estimating Purposes only. Charges will conform with those shown in the contract.  
 Rates correspond to PB FY 20-21 approved rates.

Function Codes:

Specification  
 Cost Estimator  
 CAD Operator  
 Project Administrator

Geotechnical Lead  
 Geotechnical Support

Type	Travel	Unit Cost
Alcove		
Breakfast		
Lunch		
Dinner		
Leasing		
Printing/Tools		
Air Travel		
Gas/Don		
Total Travel		

Other Direct Costs	Unit Cost
Reproduction	\$150.00
Telephone	\$50.00
Field Photo(s)	
Total Other Direct Costs	\$0.00

Subcontractors	Cost
XXX	0.00
Total Subcontractor Costs	\$0.00

Total Cost	Cost
Labor	\$154,465
Travel	\$0
Other Direct Costs	\$240
Subcontractors	\$0
Total Costs	\$154,705





**Item Number:** 04  
**Meeting Date:** 08-30-2021  
**Meeting:** Operations  
Committee/Board of Directors  
(Operations)

## Approval Item

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### **TITLE**

Approval to submit a Temporary Urgency Change Petition to State Water Board for Lagunitas Creek Streamflow Releases

### **RECOMMENDATION**

Approve a Temporary Urgency Change Petition (TUCP) for Lagunitas Creek Streamflow Releases and authorize the General Manager to file the final petition with the State Water Board.

### **SUMMARY**

On April 20, 2021, the District's Board of Directors (Board) adopted Resolution 8630 declaring a water shortage emergency and adopted Ordinance No. 449 setting forth a comprehensive list of mandatory water conservation measures and water use restrictions. On April 6<sup>th</sup>, Marin Water (District) authorized Environmental Science Associates (ESA) to initiate the Lagunitas Creek Stream Release Study to better understand how to optimize flows to protect salmonid migration and instream habitat while reducing the volume of water released in order to conserve storage during these historical drought conditions. Staff have actively engaged the resource agencies with jurisdiction on this matter, as well as the Lagunitas Creek Technical Advisory Committee (TAC), in several meetings to date. The dialogue was extensive and their feedback has been incorporated into the study and adjustments to the proposed flow release schedule and monitoring and reporting plan were made based on input received. The Study is complete and staff will highlight model results, proposed flow release modifications, and monitoring and adaptive management actions.

### **DISCUSSION**

After two successive dry winters with below average rainfall, District reservoir storage volumes are at historically low levels. Reservoir storage as of August 9, 2021 was 31,768 acre-feet (AF), which was less than 40% of capacity, 30,155 AF below the historic average of 61,923 AF on this date. This was the lowest storage level in the 38 years since Kent Dam was raised and the total capacity of the District's reservoir system was increased to 79,566 AF. Total rainfall from January 1, 2020 through August 1, 2021 was approximately 32 inches, putting water year (WY) 2021 (12-month period) on track to be the second driest in our 142 year history. As a result of this drought, District reservoirs are at 51% of average storage volume for this date and are projected to have as little as 22,000 to 25,000 AF in storage on December 1, 2021 in the absence of above average rainfall and runoff over the remainder of the year.

To preserve the District's limited water supply, the District's Board of Directors (Board) adopted Resolution 8630 on April 20, 2021 declaring a water shortage emergency and adopted Ordinance No. 449 setting forth a comprehensive list of mandatory water conservation

measures and water use restrictions. At the May 4, 2021 and July 6, 2021 meetings, the Board adopted Ordinance No. 450 and Ordinance No. 452 adding additional mandatory water conservation measures. The State subsequently declared a drought emergency for Marin County on July 8, 2021. As of August 15<sup>th</sup>, water conservation has resulted in an approximate savings of 1,700 acre feet of water and it is projected that additional water use restriction will result in additional water supply savings over the coming year.

Additionally, in an effort to establish more water supply resiliency the District is evaluating longer-term water conservation measures and water supply projects. Water supply enhancement efforts are focusing on recycled water opportunities, water transfer projects, and long-term water conservation. These types of water supply enhancements can help to improve water supply conditions to ensure sufficient water is available to support environmental water releases into Lagunitas Creek. This type of long-term planning will not only enhance water supply resiliency, but will also help the District continue to meet its environmental stewardship goals within the Lagunitas Creek watershed.

On April 6<sup>th</sup>, the Board authorized Environmental Science Associates (ESA) to initiate the Lagunitas Creek Stream Release Study to better understand how to optimize flows to protect salmonid migration and instream habitat while reducing the volume of water released in order to conserve storage during these historical drought conditions. The Study was undertaken to inform the feasibility of a petition to the State Water Board for a Temporary Urgency Change (TUC) to WR95-17 in order to evaluate options for reducing flow without impacting sensitive biological species.

#### **Study Process & Stakeholder Engagement**

As part of the Study, District staff engaged stakeholders and resource agencies throughout the process to seek input into the study parameters, review progress and solicit feedback. To date, the Lagunitas TAC has received presentations on this item at two regular meetings, the Lagunitas TAC subcommittee has met four times since the Study was initiated (May, June, July, August), and the resource agencies (California Department of Fish and Wildlife, National Marine Fisheries Service, San Francisco Bay Regional Water Quality Control Board) have met with the District five times (April, May, June, July, August). The District has worked collaboratively with all stakeholders to refine the study approach and has integrated feedback and comments into the study design.

To inform potential modifications to the current flow release schedule, the project team developed a habitat suitability model to evaluate how changes in winter base flow influence aquatic habitat in Lagunitas Creek. As part of developing the habitat suitability model, detailed topographic surveys were conducted in areas known to support high salmonid spawning densities. The resource agencies and Lagunitas TAC subcommittee participated in the selection and review of the sites that were included in the Study, which incorporates approximately 25% of the most highly used spawning areas of Lagunitas Creek. Additionally, to enhance the model

integrity, the habitat suitability model incorporates over 25 years of fisheries monitoring data that the District has been collecting as part of its Lagunitas Creek Stewardship Plan.

The Study evaluated habitat changes that will result from reducing the flow from the dry year winter base flow of 20 cubic feet per second (cfs) and found that suitable habitat for spawning and rearing will still be available at the proposed 14-16 cfs minimum winter base flow level. From the results of the Study, Staff found that flow reduction would reduce usable area and a decline in spawning habitat, but further found sufficient spawning habitat with reduced flow for the amount of spawning that has been observed in previous years. Furthermore, moving forward with a TUCP this winter will help to preserve water supply to support flow release during other critical life stages for aquatic species downstream of Kent Lake later in 2022. As part of the modified flow release schedule, staff is proposing to increase monitoring and adaptively manage operations.

### **Monitoring and Adaptive Management**

The habitat suitability model provides insight into how conditions will change downstream under different flow scenarios. However, there are limitations to the model, which necessitate an increased level of active monitoring and adaptive management. Staff has developed a TUCP Monitoring Plan that would be in place during the 180 day TUC period when flows are modified. The monitoring will be carried out to ensure that the TUC flow release schedule is not resulting in changes to stream habitat conditions that may have impacts to sensitive species. As part of the Monitoring Plan, updates would be provided to resource agencies weekly. If the monitoring identifies un-favorable conditions, then operational changes would be made in consultation with resource agencies.

### **Proposed TUCP Flow Releases**

In the accompanying presentation, staff will highlight model outcomes, justification for temporary flow release modifications, and adaptive management measures. As part of the presentation staff will discuss the flow release modifications in detail and monitoring activities, which will inform adaptive management actions. Additionally, during the TUC period the District will be providing weekly updates to the resource agencies regarding operations and monitoring activities.

### **Next Steps**

If the Board elects to move forward with a TUCP, staff will work to complete the petition for filing with the State Water Board. Staff will submit the TUCP application in early September to allow for review and approval prior to the onset of the proposed flow schedule modifications in November. The District will work to get the TUCP conditions, including a robust monitoring program, in place before the November 1<sup>st</sup>, which would commence the TUC period. Staff is currently evaluating how to add capacity for this additional monitoring effort.

As part of the District's Lagunitas Stewardship Plan, ongoing restoration within the Lagunitas Creek Watershed is a priority. As such, the District is advancing restoration design in Lagunitas Creek with a focus on habitat enhancement actions that would improve conditions for sensitive species. Recently, the District submitted a grant application in an effort to further advance these designs from the 30% stage to the 100% stage to support future implementation. The restoration designs are being advanced with long-term drought in mind and are focused on restoration actions that would increase habitat and spawning conditions within Lagunitas Creek.

### **Environmental Review**

The proposed action was reviewed relative to the California Environmental Quality Act (CEQA) and CEQA Guidelines. This review finds that the proposed project qualifies for a Statutory Exemption under Section 15269 Emergency Projects as described in further detail below.

Under Section 15269, the following actions are statutorily exempt from the requirements of CEQA:

*(c) Specific actions necessary to prevent or mitigate an emergency. This does not include long-term projects undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the short-term, but this exclusion does not apply (i) if the anticipated period of time to conduct an environmental review of a such a long-term project would create a risk to public health, safety or welfare, or (ii) if activities (such as fire or catastrophic risk mitigation or modifications to improve facility integrity) are proposed for existing facilities in response to an emergency at a similar existing facility.*

As described earlier, the District has experienced two successive dry winters with below average rainfall, resulting in reservoir storage volumes at historically low levels. At its April 20<sup>th</sup>, 2021 meeting, the Board, under Resolution 8630, declared a water shortage emergency. Subsequently, an emergency was declared at the County level, and on July 8<sup>th</sup>, Governor Newsom declared a drought emergency for Marin County. To help manage the water shortage emergency, the District proposes to file for a Temporary Urgency Change Petition to the State Water Board for a temporary reduction in instream flow requirements for Lagunitas Creek. This will assist in maintaining the essential public service of water delivery to its customers and to mitigate the emergency. This action is consistent with the intent of the Emergency Project exemption.



This action qualifies for an exemption under 15269 Emergency Projects of the CEQA Guidelines. A copy of the draft Notice of Exemption is provided in Attachment 1.

### **FISCAL IMPACT**

The Flow Release Study is anticipated to cost \$331,000. Additional fees include approximately \$50,000 in expert legal assistance and approximately \$60,000 in filing fees. These costs are budgeted in Watershed Administration Fund Center 6710 and Fisheries Fund Center 2043.

**ATTACHMENT(S)**

- 1. Lag Creek TUCP CEQA Notice of Exemption

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Watershed	 Shaun Horne Watershed Manager	 Ben Horenstein General Manager

# Notice of Exemption

# Appendix E

To: Office of Planning and Research  
P.O. Box 3044, Room 113  
Sacramento, CA 95812-3044

County Clerk  
County of: Marin  
\_\_\_\_\_  
\_\_\_\_\_

From: (Public Agency): Marin Municipal Water District  
220 Nellen Avenue, Corte Madera, CA 94925  
Attn: Crystal Yezman, Director of Engineering

(Address)

Project Title: Petition Requesting Approval of Temporary Urgency Change in Water Rights Permits 5633, 9390, and 18546 in Marin County

Project Applicant: Marin Municipal Water District

Project Location - Specific:

**Lagunitas Creek from Peters Dam/Kent Lake to confluence with Tomales Bay**

Project Location - City: N/A Project Location - County: Marin County

Description of Nature, Purpose and Beneficiaries of Project:

See attached memo.

Name of Public Agency Approving Project: State Water Resources Control Board – Division of Water Rights

Name of Person or Agency Carrying Out Project: Marin Municipal Water District

Exempt Status: **(check one):**

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: 15301, 15308, 15309
- Statutory Exemptions. State code number: \_\_\_\_\_

Reasons why project is exempt:

See attached memo.

Lead Agency  
Contact Person: Crystal Yezman Area Code/Telephone/Extension: 415-945-1100

**If filed by applicant:**

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?    Yes    No

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Title: \_\_\_\_\_

Signed by Lead Agency      Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.  
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: \_\_\_\_\_

# Attachment 1 - Notice of Exemption



Filing Requested By and When Filed Return To:

Marin Municipal Water District  
220 Nellen Ave  
Corte Madera, CA 94925  
Attn: Crystal Yezman, Director of Engineering

**Project Title:** Petition Requesting Approval of Temporary Urgency Change in Water Rights Permits 5633, 9390, and 18546 in Marin County

**Project Location:** The proposed action would occur in Lagunitas Creek in Marin County from Peters Dam/Kent Lake to the confluence with Tomales Bay. Figure 1 shows the streamflow requirements for Lagunitas Creek. The only community along this portion of Lagunitas Creek is Tocaloma.

**Project Location – County:** Marin

## **Description of Nature, Purpose and Beneficiaries of Project:**

Marin Municipal Water District (Marin Water) controls and coordinates water supply releases from Peters Dam in accordance with the provisions of State Water Board Order 95-17, which the State Water Resources Control Board (SWRCB) adopted on October 26, 1995. Order 95-17 specifies the minimum instream flow requirements for Lagunitas Creek, which vary based on hydrologic conditions of Lagunitas Creek watershed. Based on these conditions, there are two main water year classifications, *Normal* year and *Dry* year, which are based on the amount of rainfall received at the Kent Lake rain gage. The January 1 water year classification is based on the total rainfall measured during the preceding 15-month period. If the total rainfall during this period is less than 48 inches, *Dry* year flow requirements are maintained from January 1 through March 31. The April 1 water year classification is based on the total rainfall during the preceding 6-month period. If the total rainfall during this 6-month period is less than 28 inches, *Dry* year flow requirements are maintained from April 1 to the first upstream migration flow in November. *Normal* water year requirements exist whenever *Dry* year conditions are not present.

Water Rights Permits 5633, 9390, and 19546 require a minimum flow of 6 cubic feet per second (cfs) in Lagunitas Creek at the USGS gage located at Samuel P. Taylor state park under all water supply conditions. Throughout the year, Order 95-17 required minimum flows at this location are: November 1st or 15th through December 31, 20 cfs; from January 1st to March 15<sup>th</sup>, 25 cfs for Normal water supply conditions, 20 cfs for Dry conditions; March 15th to March 31st 20 cfs; April 1st through April 30th 16 cfs for Normal conditions, 14 cfs for Dry conditions; May 1st through June 15th 12 cfs for Normal conditions, 10 cfs for Dry conditions; June 16th through November 1st or 15th 8 cfs for Normal conditions, 6 cfs for Dry conditions. Order 95-17 has variation between November 1st or 15th for the minimum flow of 20 cfs in that it shall begin following the first storm that produces a “trigger” flow of 25 cfs as measured at the USGS gage. In the absence of a storm causing a “trigger” flow, the 20 cfs flow requirement shall begin on November 15th of each year. Additionally, there are four upstream migration flows required at a minimum flow of 35 cfs that are to occur between November 1st and February 3rd at roughly the beginning of each month.

Marin Water is requesting that the SWRCB make the following temporary urgency change to Water Rights Permits 5633, 9390, and 18546 to preserve Marin Water’s water supply in case below-normal rainfall and hydrologic conditions continue. Starting November 1, 2021, Marin Water is proposing the following minimum instream flows schedule for the 180 day period: November 1<sup>st</sup> to November 15<sup>th</sup>, 6 cfs; November 15<sup>th</sup> to November 30<sup>th</sup>, 6 cfs unless a storm above 25 cfs occurs; December 1<sup>st</sup> or December 15<sup>th</sup> to March 31<sup>st</sup>, 16 cfs; April 1<sup>st</sup> to April 30<sup>th</sup>, 14 cfs. Between November 15<sup>th</sup> and November 30<sup>th</sup>, flows would remain at 6 cfs unless a flow event greater than 25 cfs occurs as measured at the USGS gage. If this happens, flows would increase to 10 cfs and monitoring for coho spawning would take place for one week following the event. If no coho spawning is observed within the one-week period, flows would return to 6 cfs until December 1<sup>st</sup> unless a subsequent storm event occurs. If coho spawning is observed within the one-week period, flows would increase to 16 cfs and remain there until March 31<sup>st</sup>. The proposal has variation between December 1st or 15th for the minimum flow of 16 cfs in that it shall begin following the first storm that produces a trigger flow of 25 cfs as measured at the USGS gage. In the absence of a storm causing a trigger flow, the 16 cfs flow requirement shall begin on December 15th. Additionally, the other three upstream

migration flows required at a minimum flow of 35 cfs would occur between December 1st and February 3rd at roughly the beginning of each month.

**Summary of Marin Water Supply Sources.** Marin Water supplies water to 191,000 customers in Marin County. Approximately 75 percent of Marin Water's water supply comes from water stored in a total of seven reservoirs on Mount Tamalpais and in west Marin, and approximately 25 percent of the water supply is imported from Sonoma Water via the North Marin Aqueduct. Both Marin Water and the North Marin Water District receive their imported water supply via the North Marin Aqueduct, which is owned by the North Marin Water District. Marin Water's imported water supply is received at its Ignacio Pump Station in Novato, which is located downstream of the North Marin Water District's Aqueduct turnouts. Marin Water's contracts with Sonoma Water identify the maximum volumes to be imported: 12.8 million gallons per day (mgd) during the months of May to September and 17 to 23 mgd from October to April. However, to date, Marin Water has never needed the maximum volumes, averaging 8.81 mgd during peak months over the last 5 years, with a high of 10.07 mgd in 2016.

**Continuing Drought Conditions.** The County of Marin and much of California is facing an extreme drought. After two successive dry winters with significantly below average rainfall, Marin Water reservoir storage volumes are at historically low levels. As of August 17, 2021, Marin Water's reservoirs are at 39.12 percent of average storage volume, or 31,128 AF, and are projected to have as little as 20,000 AF in storage on December 1, 2021 in the absence of above average rainfall and runoff over the remainder of the water year. Regarding supplies from Sonoma Water, as of July 26<sup>th</sup>, 2021, Lake Sonoma had 123,725 acre-feet of water, which is 50.5% of capacity and approximately 56% of historical average for this time of year. Sonoma Water has also filed a Temporary Urgency Change Petition to reduce their instream flow requirements due to these severely dry conditions, and has reduced allocations to its retail customers, including Marin Water. From July through September 2021, Marin Water will be restricted to 4 mgd with a slight increase in October to 4.6 mgd (compared to a typical import of 8.8 mgd). The reduced allocations are expected to continue if rainfall is below average in the fall.

**Drought Response.** To preserve Marin Water's limited water supply, the Marin Water's Board of Directors (Board) adopted Resolution 8624 on February 16, 2021 providing initial drought water conservation actions for Marin Water customers to voluntarily reduce their water usage. At the April 20, 2021 meeting, the Board adopted Resolution 8630 declaring a water shortage emergency and adopted an ordinance setting forth a comprehensive list of mandatory water conservation measures and water use restrictions. At the May 18, 2021 meeting, the Marin County Board of Supervisors voted unanimously to declare a local emergency and acknowledge the imminent threat of disaster related to local dry conditions and water supplies. Subsequently, on July 8, 2021, Governor Gavin Newsom added Marin County to a list of 50 out of 58 counties in California that are in a drought state of emergency and calling for state agencies to provide assistance where appropriate, including considering modifications to reservoir releases as necessary to address the drought conditions. The goal of the mandatory water use restrictions adopted by Marin Water is to achieve a 40 percent reduction in water use districtwide. Restrictions include but are not limited to the following: spray irrigation is limited to one day a week, with each community having a designated watering day; drip irrigation is limited to any two days per week; recommendation to turn off irrigation systems and spot water by hand, only when necessary; prohibition on outdoor water between 9:00 a.m. and 7:00 p.m. to prevent evaporation; all pools and spas must be covered; no washing of vehicles at home; and no power-washing of any structures or hardscape; no installation of potable water irrigated landscaping for new water services connections during the drought. In addition to implementing restrictions, Marin Water also provides ways to help save water with conservation tips, water-efficient fixtures, rebates, and other programs. As of mid-July 2021, a 23 percent reduction was observed from baseline water use. Even with these aggressive mandatory conservation measures, Marin Water's 191,000 customers are projected to run out of water as early as next July if the drought continues.

**Urgent Need for the Project.** An urgent need for the requested temporary change exists because of the extremely low storage levels in Marin Water's reservoirs and the fact that Sonoma Water will be restricting allocations due to their low storage levels. Without proposed changes, the applicable minimum instream flow requirements may require releases of water from Kent Lake that would risk significant depletions of storage and potential elimination of water supplies for water users in the Marin Water's service area during the winter and spring of 2022. Such depletions in storage and reductions or eliminations of water supplies would cause serious impacts to human health and welfare, and reduce water supplies needed for fishery protection and stable flows in Lagunitas Creek in summer 2022. As indicated above, Marin Water's 191,000 customers are projected to run out of water as early as July 2022 if the drought continues. Approval of the TUCP is therefore necessary at this time to prevent and mitigate loss of, or damage to, public health and essential public services, the environment, and fishery resources.

**Public Agency Approving Project:** State Water Resources Control Board – Division of Water Rights

**Name of Person or Agency Carrying Out Project:** Marin Municipal Water District



**CEQA Exemption Status:** Emergency Project (Sec. 21080 (b)(4); 15269 (c)): Specific actions necessary to prevent or mitigate an emergency.

**Reasons for Exemption:** The proposed action is statutorily exempt under California Environmental Quality Act (CEQA) Statute 21080(b)(4) and categorically exempt under the State CEQA Guidelines Sections 15301, 15307 and 15308.

*A. Actions to Prevent or Mitigate an Emergency*

California Public Resources Code, Division 13, Section 21080(b)(4) provides that specific actions necessary to prevent or mitigate an emergency are exempt from CEQA. The County of Marin and much of California is facing an extreme drought. At the April 20, 2021 meeting, the Marin Water Board of Directors adopted Resolution 8630 declaring a water shortage emergency and adopted an ordinance setting forth a comprehensive list of mandatory water conservation measures and water use restrictions. At the May 18, 2021 meeting, the Marin County Board of Supervisors voted unanimously to declare a local emergency and acknowledge the imminent threat of disaster related to local dry conditions and water supplies. Subsequently, on July 8, 2021, Governor Gavin Newsom added Marin County to a list of 50 out of 58 counties in California that are in a drought state of emergency, which Proclamation included the suspension of environmental review by state and local agencies to the extent necessary to carry out actions pertaining to the drought response and mitigation<sup>1</sup>. As of August 23, 2021, the water supply storage level in Marin Water’s reservoirs was 30,658 acre-feet, which is less 39% of capacity. The current low storage level is the result of severely low rainfall in the region. As measured at Lake Lagunitas, recorded rainfall for from January 1, 2020 through August 1, 2021 was approximately 32 inches, the lowest total rainfall for the 20-month period in 142 years. Furthermore, Marin Water typically receives about 25% of its supply from Sonoma Water, which is in similar drought conditions. As a result of this drought, Sonoma Water has begun curtailing the amount of water available to its contractors throughout this drought period and Marin Water’s supply from Sonoma has been cut in half. Without significant storm events in the near future, results of modeling show storage levels in Marin Water’s reservoirs to be below 25,000 acre-feet by December 2021 due in part to minimum instream flow requirements on Lagunitas Creek. If storage in Marin Water’s reservoirs is depleted, then water to maintain Lagunitas Creek flows in 2022 will not be available to support the other critical life stages for aquatic species downstream of Kent Lake. Even with aggressive mandatory conservation measures, Marin Water’s 191,000 customers are projected to run out of water as early as next July if the drought continues. Accordingly, the project is statutorily exempt from CEQA because it is necessary to prevent or mitigate an emergency—in this case, a proclaimed drought emergency—that poses a clear and imminent danger. (Pub. Resources Code, §§ 21060.3 & 21080, subd. (b)(4); Cal. Code Regs., tit. 14, § 15269, subd. (c).)

*B. Actions by Regulatory Agencies for Protection of Natural Resources and the Environment*

CEQA Guidelines Sections 15307 and 15308 provide that actions taken by regulatory agencies to assure the maintenance, restoration or enhancement of a natural resource and the environment are categorically exempt. The proposed temporary urgency changes to Marin Water’s water right permits 5633, 9390, and 18546 would conserve water in Marin Water’s reservoirs to support beneficial uses downstream of Kent Lake, including critical life stages and habitat for listed threatened and endangered species in Lagunitas Creek. Accordingly, these changes are categorically exempt from CEQA pursuant to Class 7 and Class 8 exemptions.

*C. Minor Alteration of Existing Public Facility.* CEQA Guidelines Section 15301 provide that actions consisting of “the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use” are categorically exempt. The proposed action consists of the operation of existing facilities involving negligible or no expansion of use beyond that existing, and accordingly is categorically exempt from CEQA under a Class 1 exemption.

**Lead Agency Contact Person:** Crystal Yezman, Director of Engineering

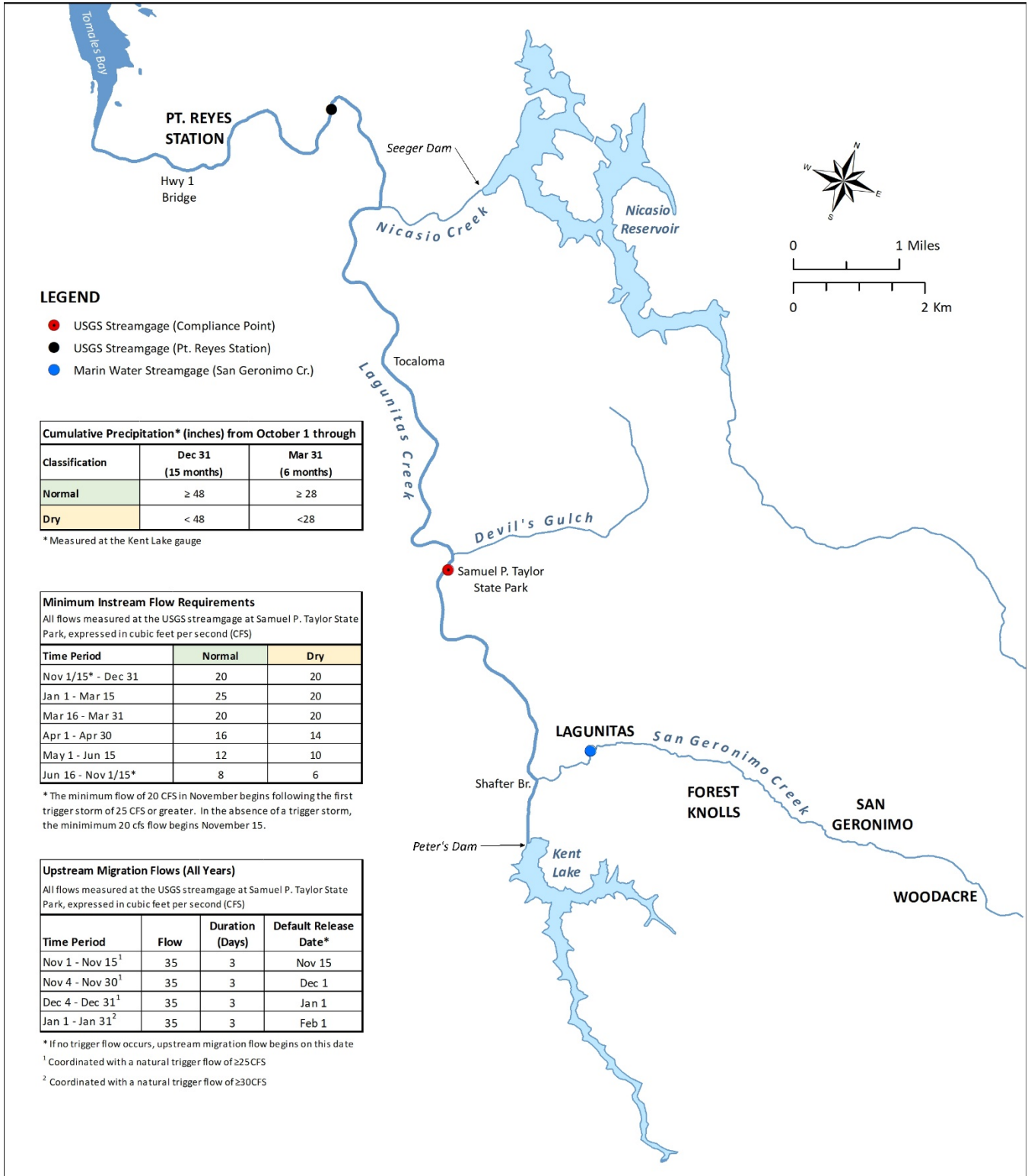
**Telephone:** (415) 945-1100

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**Crystal Yezman, Director of Engineering**

**Date**

1. Emergency Declaration Executive Order N-10-21. <https://www.gov.ca.gov/wp-content/uploads/2021/07/7.8.21-Conservation-Executive-Order-N-10-21-.pdf>



## Lagunitas Creek Streamflow Requirements

Per State Water Resources Control Board Order WR95-17

Figure 1







**Item Number:** 05  
**Meeting Date:** 08-30-2021  
**Meeting:** Operations  
Committee/Board of Directors  
(Operations)

## Review and Refer for Board Approval

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**TO:** Operations Committee/Board of Directors (Operations)

**FROM:** Crystal Yezman, Director of Engineering 

**THROUGH:** Ben Horenstein, General Manager 

**DIVISION NAME:** Engineering

**ITEM:** Berry Lane Pipeline Replacement Project

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### SUMMARY

The Berry Lane Pipeline Replacement Project will replace approximately 350 feet of old leak prone cast iron pipe on Berry Lane and relocate one water service to Skyland Way, all in the Town of Ross. On August 10, 2021, District staff received and opened four bids for the Berry Lane Pipeline Replacement Project. Maggiora & Ghilotti, Inc. submitted the lowest bid at their contract price of \$151,333, but failed to include a signed copy of Addendum Number 2 with their contract bid. After staff and legal review, it was determined that the Board has the right to waive this irregularity and award the contract to the lowest bidder.

District staff requests that the Operations Committee refer and recommend waiver of the minor bid irregularity and award of this contract to Maggiora & Ghilotti, Inc. at a future board meeting.

### DISCUSSION

The Project is a component of the District's Capital Improvement Program. This Project will replace 350 feet of leak prone, 4-inch cast iron pipe installed in 1938. On January 8, 2020, a main break on this cast iron pipe occurred on Berry Lane requiring the temporary installation of a bypass to continue providing service to the District's customers.

These street segments were evaluated for the installation of recycled water piping. There are no recycled water pipelines near the Project site and there is no plan for recycled water services in the area at this time, therefore installation of recycle water pipelines was not included in this Project.

The District received four bids for the Project on August 10, 2021. Maggiora & Ghilotti, Inc. submitted the lowest bid at their contract price of \$151,333, but failed to include a signed copy of Addendum Number 2 with their contract bid. The second and third lowest bidders also failed

to return a signed copy of Addendum Number 2. Addendum Number 2 was issued by the District to provide detail on the installation method of a 1-inch service lateral and did not constitute a change in quantities of the contract. As such, following staff and legal review, it was determined that waiver of this requirements would not relieve the lowest bidder from its bid and did not therefore provide any unfair advantage to the low bidder. Consequently, the Board has the right to waive this irregularity and award the contract to the lowest bidder.

Bid results are provided in Table 1.

**Table 1**  
**Bid Results**  
**Berry Lane Pipeline Replacement Project (D21007)**

<b>Bid Rank</b>	<b>Contractor Name</b>	<b>Bid Amount</b>
1	Maggiore & Ghilotti, Inc.	\$151,333.00
2	D&D Pipelines, Inc.	\$154,510.00
3	Michael Paul Company, Inc.	\$173,520.00
4	W.R. Forde Associates, Inc.	\$178,550.00

The engineer's estimate was \$145,000.

Summaries of the estimated Project cost and schedule are provided below.

**Budget**

Contract Cost: \$ 151,333  
Contingency: \$ 15,000  
Materials and Professional Fees: \$ 90,000  
District Labor / Inspection: \$ 75,000  
Total Budget: \$ 331,333  
Budget Category: A1A02A

**Project Implementation:**

Project Advertisement: July 27, 2021  
Bid Opening: August 10, 2021  
Project Award: September 7, 2021  
Estimated Completion Date: December 10, 2021  
Duration: 94 Days

**ENVIRONMENTAL REVIEW**

The Director of Engineering has determined that the Project is Categorically Exempt pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15302 (c), Replacement or

Reconstruction. The Project qualifies for exemption pursuant to Section 15302(c) inasmuch as it is the replacement of existing water pipeline involving negligible or no expansion of capacity.

**PUBLIC OUTREACH EFFORTS:**

MMWD’s multi-step process for notifying customers about this Project began in August 2020 when District staff initiated discussions with the Town of Ross. District staff has continually coordinated with the Town of Ross and has discussed the project with other stakeholders. Public outreach steps to be taken are described in the table below.

<b>Department</b>	<b>Action</b>
Engineering	Issued preliminary notice in 2020 to all customers along the Project route letting them know District staff would be in their neighborhood collecting design information for the Project.
Engineering	Upon approval of the contract by the Board, staff will send a Project information letter with a map to all customers along the Project route.
Public Information	Issue news release to local media (print and online outlets)
Public Information	Post on MMWD website
Public Information	Post on MMWD Nextdoor page for affected neighborhoods
Public Information	Send notice to the Town of Ross for posting on their website.
Engineering	Provide signage at Project site throughout construction period.

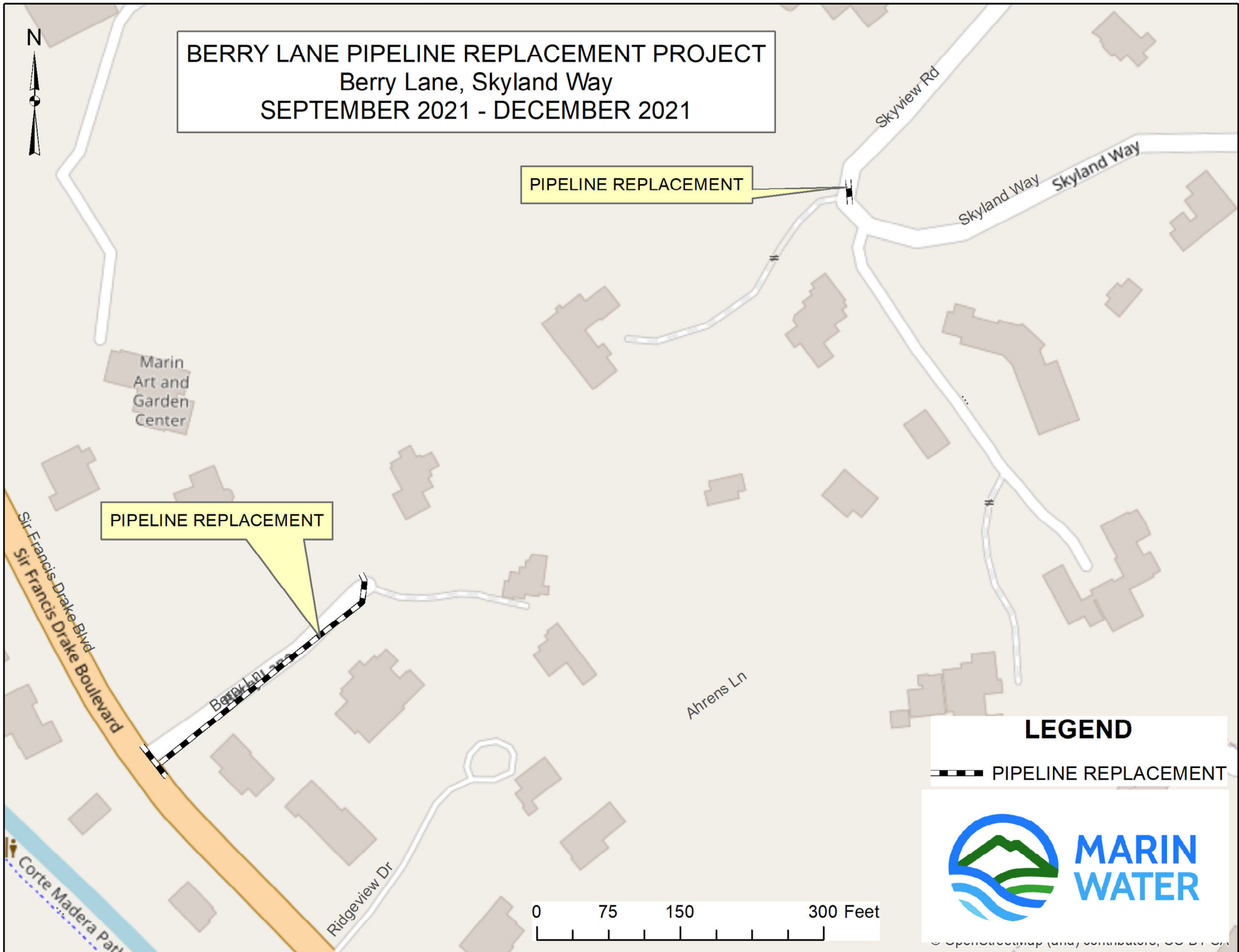
**FISCAL IMPACT**

The total cost to complete the Berry Lane Pipeline Replacement is estimated at \$325,000.

**ATTACHMENT(S)**

1. Site Map

**BERRY LANE PIPELINE REPLACEMENT PROJECT**  
Berry Lane, Skyland Way  
SEPTEMBER 2021 - DECEMBER 2021



**LEGEND**

--- PIPELINE REPLACEMENT



**MARIN WATER**

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**Item Number:** 06  
**Meeting Date:** 08-30-2021  
**Meeting:** Operations  
Committee/Board of Directors  
(Operations)

## Review and Refer for Board Approval

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**TO:** Operations Committee/Board of Directors (Operations)

**FROM:** Crystal Yezman, Director of Engineering

**THROUGH:** Ben Horenstein, General Manager

**DIVISION NAME:** Engineering

**ITEM:** Construction Inspection Support Services

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### SUMMARY

The Construction Inspection group recently temporarily reassigned one construction inspector to lead the Drought Water Waste Monitoring Program. As a result, the construction inspection team is now down one construction inspector to provide inspections for the Districts capital, fire flow, reimbursable and subdivision pipeline projects. District staff issued a Request for Proposal on July 29, 2021 to four different construction consulting firms (Coastland, Ghirardelli Associates, PSOMAS and The Thier Group) to provide construction inspection services for one full time inspector for a time frame of up to 4 months. District staff received two proposals on August 13, 2021 from Ghirardelli and PSOMAS.

District staff will make a recommendation for award of a professional services agreement at a future regularly scheduled Board meeting.

### DISCUSSION

In response to the Districts ongoing Drought effort, it was determined that a Drought Water Waste Monitoring Program needed to be implemented to patrol and address water waste in response to our recent landscape ordinance. One of the Construction Management Group (CMG) inspectors was temporarily re-assigned to manage and coordinate water waste patrols, staff scheduling and violation follow-up. This temporary assignment has left CMG shorthanded one inspector to provide construction inspections on the District's capital, fire flow, reimbursable and subdivision projects.

To temporarily address this need of construction inspection services, the District issued a Request for Proposal (RFP) on July 29, 2021 to four different construction consulting firms. The RFP was for the consultant firm to provide up to 2 construction inspectors full time (40 hours a week) for up to 4 months depending on the duration on Drought Water Waste Monitoring Program reassignment. The contracted construction inspector will perform construction inspection services on the District's pipeline projects to ensure compliance with contract plans

and specifications. In addition, if the District determined that the Water Efficiency Department needs assistance with inspections of the Districts turf removal program, then the second inspector would provide inspection services for the Water Efficiency Department. The second inspector option is still being evaluated by the District at this time.

The District received two proposals on August 13, 2021, from Ghirardelli Associates and PSOMAS. District staff have reviewed the proposals and have identified that PSOMAS provides a construction inspection team that has had experience on large water pipeline projects at a more cost effective price. The professional services agreement is for a contract term of up to 4 month for a full time inspector (40 hours per week).

District staff will be making a recommendation for award of a professional services agreement at a future regularly scheduled Board meeting.

The District received four proposals for construction inspection services on August 13, 2021. Bid results are provided in Table 1.

**Table 1**  
**Request for Proposal Results**  
**Temporary Construction Inspection Support Services**

Consultant Firms Name	Hourly Rate
Coastland	DNSP
Ghirardelli Associates	\$195
PSOMAS	\$170
The Thier Group	DNSP

DNSP = Did Not Submit Proposal

Summaries of the estimated Contract cost and schedule are provided below.

**Budget**

Contract Cost:	\$ 119,680
<u>Contingency:</u>	<u>\$ 12,000</u>
Total Budget:	\$ 131,680
Budget Category:	Will be billed to project

**Project Implementation:**

Request for Proposal :	July 29, 2021
Proposals Received:	August 13, 2021
Project Award:	September 7, 2021
Estimated Completion Date:	December 31, 2021
Duration:	88 Days



**FISCAL IMPACT**

The total cost for this contract is \$119,680 with a staff requested contingency of \$12,000 that will be paid for by the specific projects associated with construction inspection services.

**ATTACHMENT(S)**

1. PSOMAS Proposal
2. Ghirardelli Associates Proposal

August 11, 2021

Alex Anaya, Engineer Manager Design  
Marin Municipal Water District  
220 Nellen Avenue  
Corte Madera, CA 94925

Subject: **Proposal for Construction Inspection Support Services**

Dear Mr. Anaya:

Psomas is eager to expand our positive working relationship and support the District in meeting its service commitment to its customers. The current drought conditions are putting a strain on that commitment. The last easy conservation measure is to reduce outside irrigation by removing lawns. The other step that will bolster supplies is to repair old pipes and ensure that new systems are installed correctly. Our proposed inspectors understand the importance of these programs and are ready to start work now. Our inspectors are technically qualified, with experience in welded-steel-pipe construction, and customer-oriented who will be great District ambassadors.

We have a proven track record of working closely with the District, providing construction management and inspection for a host of past projects. We are here for the District during this time of need.

We appreciate your trust and confidence in Psomas and are excited about the opportunity to continue providing valuable support and building on our “clients for life” professional relationship.

Sincerely,

**P S O M A S**



Chris Davenport, PE  
Vice President



Justin Seufert, PE



## Firm Qualifications

Psomas is the ideal firm to support the District's construction inspection needs. We have the local, experienced resources to provide long-term, flexible, qualified personnel for any construction-related assignment.

Our local Walnut Creek office specializes in construction management on water-resource projects in Northern California. Arguably, we have the industry's largest concentration of wastewater construction management specialists in the greater Bay Area. In addition, our team is supported by surveying, environmental, and engineering professional resources throughout California.

## Understanding

The District is seeking inspectors familiar with welded-steel-pipe construction to verify the contract work is compliant with the contract plans and specifications. In addition, the District also needs an inspector who can engage with the public and represent the District in support of the Water Efficiency Department for compliance inspections of the Districts turf removal program.



## Team Qualifications

Our proposed inspectors have the technical expertise and experience for these roles. Beyond that, they have the proper attitude, passion, and personality to work with the District's constituency and contractors. Brief introductions of our team members follow, and resumes are included on the following pages.

Antonio Uscanga is a construction inspector with 18 years of experience. Prior to joining Psomas, Antonio spent much of his career as a special inspector working on numerous water distribution pipelines. Antonio carries numerous IIC and ACI certificates, including for Structural Steel Welding.

Ibrahim Mcharo has more than 23 years of experience as a construction inspector on infrastructure projects including pipelines, roads, bridges, and levees. Ibrahim also has extensive experience with public outreach, including coordinating work with residential and commercial property owners.

Psomas has a proven track record of working closely with the District, providing construction management, inspection, and advisory services for a host of past projects. We are familiar with District's requirements and propose to employ staff currently working with the District on other projects to help coordinate support for this effort.

## CERTIFICATIONS

ICC California Commercial  
Plumbing

ICC California Commercial  
Mechanical

ICC Reinforced Concrete

ICC Structural Masonry

ICC Prestressed Post  
Tension

ICC Structural Steel  
Welding

ICC Structural Steel and  
Bolting

ACI American Concrete  
Institute

# Antonio Uscanga

## Construction Inspector

Antonio Uscanga is a construction inspector with 18 years of experience. Antonio is familiar with building codes, ASTM, ICC, ACI, AWS, and AISC. He takes pride in his ability to safeguard the public health and safety through ensuring construction follows minimum requirements of the code. He is familiar with construction materials, equipment, and safety as well as RFIs, change orders, and submittals. He is also bilingual as a fluent Spanish speaker.

## Experience

**San Francisco Public Utilities Commission San Joaquin Pipeline, Western Segment – San Francisco, CA:** Construction Inspector for the 82-inch diameter water pipeline #4 in the Vernalis, CA 11-mile stretch of pipeline installed. Inspected joints on the pipeline, pressure air test around the joints, checked for air leaks around welds, sand blasting, primer adhesive, wrapping of the joints, wire mesh, diaphragm installation, reinforcement steel around the manholes of the pipes, concrete sampling, and soil cement sampling.  
**Construction Dates:** (08/2011 to 03/2012)

**San Francisco Public Utilities Commission San Joaquin Pipeline, Western Segment – San Francisco, CA:** Construction Inspector on a 82-inch diameter water pipeline #4 in the Oakdale, CA 6-mile stretch of pipeline installed in rocky hills and mountains. Inspected reinforcement steel around the manholes of the pipes, concrete sampling, soil cement sampling, and soil compaction.  
**Construction Dates:** (04/2012 to 01/2013)

**Oakland International Airport – Oakland, CA:** Construction Inspector for the new expansion of the airport terminals and runways. Inspected CMU walls, reinforcement of steel, pile driving, footings, grade beams, elevator pits walls, concrete pours and sampling, bolt pattern layout.  
**Construction Dates:** (02/2005 to 10/2006)

**Port of Oakland – Oakland, CA:** Construction Inspector for pile driving, visual epoxy, reinforcement steel, bolt inspection and concrete pours of the shipping docks and bollards.  
**Construction Dates:** (11/2006 to 06/2007)

**Morgan Hill Courthouse – Morgan Hill, CA:** Construction Inspector on CMU walls of the holding cells for the courthouse reinforced steel inspection, concrete slabs, walls, and footings.  
**Construction Dates:** (01/2006 to 11/2006)

**Water DAM – San Mateo, Crystals Springs, CA:** Construction Inspector for reinforcement steel on the lower part of the mat foundation of the dam. Performed grouting sampling of the soil nails for the shotcrete walls. Performed shotcrete sampling, concrete sampling, and grouting sampling.  
**Construction Dates:** (04/2011 to 07/2011)



## Ibrahim Mcharo

### Construction Inspector

Ibrahim Mcharo has more than 23 years of experience in construction inspection on various types of infrastructure projects including roads, bridges, subways, airports, harbor dredging, and levees. Ibrahim is a specialist in the inspection of grading, base placement, asphalt paving, landscape irrigation systems, and sewer systems. Ibrahim is also experienced with monitoring storm water pollution prevention plan (SWPPP) compliance on infrastructure improvement projects. As a construction inspector, Ibrahim monitors the contractor for compliance with plans and specifications and to avoid potential delays. He writes detailed daily reports that identify progress in daily activities. He makes recommendations to avoid impacts to safety, budget, and schedule. Ibrahim verifies the approved materials submittals are being used on site by the contractor. He also confirms the contractor's equipment is in real working order, certifying accuracy and saving the client money. Ibrahim also has experience with public outreach, which he does by keeping the public informed of the nature of the work, scheduled road closures, and progress of the overall project to minimize the impact on their daily lives.

## Experience

### **Large Diameter Gravity Sewer Rehabilitation – Marin County, CA:**

Construction Inspector for this \$11 million rehabilitation project for the Ross Valley Sanitary District comprised of four separate projects (II-1, II-2, II-3A, and II-3B) to rehabilitate Techite and non-reinforced concrete pipe ranging in size from 18-inch to 36-inch in diameter. Rehabilitation methods included UV, steam, and water Cured-In-Place Pipe (CIPP). The projects required extensive stakeholder coordination and community outreach as the construction of the trunk sewer occurred on property located in residential neighborhoods, busy downtown business districts, and at a public school. Construction also involved multiple creek crossings, work on private easements, extensive bypass pumping operations, and wet weather constraints.

**Construction Dates:** (6/2019 to 6/2020)

### **Sonoma County 2020 PPP- FDR Project – Sonoma County, CA:**

Construction Inspector for this \$11 million project to rehabilitate 15 miles of County roads using various methods, including eight miles of Full Depth Reclamation (FDR), removing and replacing asphalt concrete pavement, and asphalt overlays. The project is part of the County's Pavement Preservation Program (PPP) to prolong the life of its roadways, lower the long-term maintenance costs, and allow the public to travel safely and efficiently. Ibrahim was involved in significant public outreach and coordination of construction with residents and businesses.

**Construction Dates:** (6/2020 to 11/2020)

**Old Town Pipeline Improvements – Oakley, CA:** Construction Inspector for this project to remove 1.8 miles of existing gravity sewer pipeline and replace it with open-cut 6-inch and 8-inch diameter pipeline. This project involved extensive public outreach in the surrounding residential and commercial areas.

**Construction Dates:** (11/2020 to 7/2021)

# FEE SCHEDULE

## Construction Management Services

Effective January 1, 2021 thru December 31, 2022

### Hourly Rates

\$240 - \$255	Senior Project Manager
\$190 - \$235	Senior Construction Manager
\$150 - \$185	Construction Manager
\$125 - \$160	Project Engineer
\$110 - \$150	Office/Field Engineer
\$175 - \$180	Senior Inspector (prevailing wage)
\$165 - \$175	Inspector (prevailing wage)

For the inspectors proposed, the hourly rates will be \$170 for 2021, hourly rates will increase to \$175 beginning January 1, 2022.

The above rate schedule is for straight time and includes overhead. Overtime will be charged at 135 percent of the standard hourly rates. Sundays and Holidays will be charged at 170 percent of the standard hourly rates.

### Other Costs

Extraordinary expenses, such as subsistence, air travel, and large reproduction expenses will be charged at cost. The services of outside consultants will be charged at cost plus five percent. Standard computer and technology costs are incorporated into the above hourly rates.

File No. 21089.P01

August 13, 2021

Alex Anaya  
Engineer Manager Design  
Marin Municipal Water District  
220 Nellen Avenue  
Corte Madera, CA 94925  
Via Email: [aanaya@marinwater.org](mailto:aanaya@marinwater.org)

**RE: PROPOSAL, CONSTRUCTION INSPECTION SUPPORT SERVICES**

Dear Mr. Anaya,

Ghirardelli Associates, Inc. (Ghirardelli) is pleased to submit this proposal to serve the Marin Municipal Water District (District) in providing construction inspection support services. The Ghirardelli team has proven construction management and inspection experience; knowledge of the Marin community, work environment, and site conditions; and qualified personnel to deliver these services. Ghirardelli is a proven Bay Area leader in effectively and successfully delivering local agency projects.

Our proposed team will be led by Project Manager William Davis, PMP, LEED AP. Mr. Davis is personally committed to support the District in the successful delivery of our inspection support services. Mike Peters, QSP, CPESC, and Chris Morris are our Lead Construction Inspectors. Kolby Butcher, Carolyn Adkins, and Jake Melvin will be our alternate inspectors available on an as-needed basis. These individuals will ensure that the District is informed of ongoing operations and will respond to concerns in a timely manner. All members of our team have a proven partnership that will bring added value to the effective and successful inspection support services to the District.

The Ghirardelli team has the leadership, available resources, proven record, and strong commitment to undertake inspection services for the various District projects. The following proposal outlines how the Ghirardelli team will assist the District during the next four months and deliver on our commitment to meet the District's goals and objectives.

As a principal of the firm, I have the authority to bind the firm. Our Project Manager, William Davis, PMP, LEED GA, can be contacted directly during the evaluation via email at [bdavis@ghirardelliassoc.com](mailto:bdavis@ghirardelliassoc.com) or via cell at 510.772.9092.

Sincerely,

**Ghirardelli Associates, Inc.**



Raewyn Lelo-Butcher  
Executive Vice President  
M | 510.708.7442  
E | [raewyn@ghirardelliassoc.com](mailto:raewyn@ghirardelliassoc.com)

## **PROPOSED TEAM**

Ghirardelli has assembled a highly qualified team of construction inspectors to provide services for the District's capital infrastructure projects as well as the Water Efficiency Department's turf removal program. Below are brief bios for our proposed team. Full resumes of these individuals are provided at the end of this proposal.

### **Mike Peters, QSP, CPESC – Construction Inspector**

Mr. Peters has over 30 years of experience in engineering and construction management of various Public Works, State, Federal and Private projects. He has worked as an inspector on numerous projects and has experience with HMA and PCC paving, grading, underground utilities, drainage, soldier pile walls, CIDH and CISS piles and piling. Mr. Peters has been a Certified Quality Control Manager for USACE and served as Quality Assurance Officer, acting as a liaison between the Corps and the contractor on the Sonoma-Marín Area Rail Transit (SMART) in Petaluma. He is a Certified Professional in Erosion and Sediment Control (CPESC) and Qualified Storm Water Pollution Prevention Plan Developer (QSD) and a published author of "Storm Water Pollution Prevention Plan Risk Management for the Construction Industry." Mr. Peters has excellent communication skills, which he uses in coordinating projects with designers, contractors, and public agencies such as Caltrans, Army Corps of Engineers, U.S. Fish & Wildlife, Homeland Security, San Francisco Airport, Homeland Security, Caltrans, and State and Federal EPA and Departments of Environmental Quality.

Mr. Peters is an accomplished professional with proven success as a construction superintendent and project manager, and as an OSHA Competent Person. For over 30 years, Mr. Peters has effectively managed all levels of construction including pile driving, bridge building, CIDH and CISS pile installation, grading, paving, underground, utility, drainage, utility boring and jacking, and multiple whaler soldier pile timber lagging retaining walls with grouted and gunite tiebacks.

### **Chris Morris – Construction Inspector**

Mr. Morris has more than 30 years of extensive construction industry experience including management, administration, and inspection of projects funded by state and federal regulatory agencies and includes experience working as a project manager for a general contractor. He is personable, has a professional manner, and is excellent in negotiating issues with the contractor, coordinating public relations, plan specification interpretation and implementation, problem solving, and detailed contract documentation. Mr. Morris' recent waterline experience includes installation of 6" and 8" waterlines as part of the Boyes Boulevard Bridge Replacement project for the County of Sonoma. Prior to that, he inspected waterline installation on the BART El Cerrito del Norte Station Modernization project.

### **Jake Melvin – Construction Inspector (Alternate)**

Mr. Melvin has over eight years of experience in the construction industry working for several owners and contractors in California and Nevada. He is currently completing the Henderson Street Utility Improvements project for the City of Eureka. This project included the installation of 8" water line, valve cluster replacement and new water services to residences and businesses.

### **Kolby Butcher – Construction Inspector (Alternate)**

Mr. Butcher has four years of experience in general construction, marine construction and waterways. He has a strong history of working on multiple projects to successful completion utilizing effective communication and team collaboration. Mr. Butcher has an advanced ability to communicate well with clients, co-workers and contractors. This collaboration helps ensure time efficiency and clear understanding on all fronts and helps ensure a safe environment.

### **Carolyn Adkins – Construction Inspector (Alternate)**

Ms. Adkins is a seasoned construction inspector with a diverse project background. Her expertise includes a thorough knowledge of construction standards and all aspects of highway construction management in accordance with the



Caltrans Construction Manual and Local Assistant Procedures Manual (LAPM). She also assists Ghirardelli with safety oversight firmwide.

## **EXPERIENCE**

### **Gateway at Millbrae Transit Oriented Development Civil Improvements**

City of Millbrae; Millbrae, CA (2019 – Present)

The Millbrae Station TOD project includes mixed-use development to promote BART's goal of Transit-Oriented Development at various stations throughout BART's service area. Located at the BART Millbrae Station, the project entails development of the 17.8 acre site into mixed-use commercial, retail, hotel and affordable housing. Construction began in 2019 and is scheduled to be completed in 2022. The BART garage will remain open throughout construction while safe access for bikes and pedestrians is maintained. BART is also ensuring that ADA accessible paths and parking will remain available.

As a representative of BART, Ghirardelli is responsible for overall coordination of the infrastructure improvements with the City of Millbrae, BART, the developer and the general contractor. We oversee demolition of existing underground utilities, surface parking and asphalt concrete (AC) pavement, landscape and vegetation, concrete, bus shelter, monumentsignage. Ghirardelli also inspects installation of new *storm drain, sanitary sewer, domestic water, fire water* and joint trench. Other site improvements planned under this project contract scheduled for inspection include curb, gutter, sidewalk, dog walk, paseos, bioretention areas, site lighting, and landscaping. Ghirardelli's team is also inspecting new improvements for passenger/carpool/bus drop-off areas, and wayfinding and signage for BART and the City.

### **Richmond Ferry Terminal and Parking Lot**

SF Water Emergency Transportation Authority; Richmond, CA (2017-2018)

Ghirardelli was selected to provide construction management and inspection services for this \$20 million project which launched a new ferry service between Richmond and San Francisco. The facility is located at the southern point of the Ford Peninsula in Richmond, adjacent to the Ford Assembly Plant building. Construction of the new ferry terminal, in addition to the terminal building float and gangway, included a new 360 stall at-grade parking lot, new street and parking lot lighting, *over 600 feet of new water main and over 200 feet of new and replacement storm drains along with drain inlets at curbs* and in the parking area. The project also included new street and parking lot lighting, underground communications, and electrical utilities. Landscaping, Sidewalks, pedestrian bulb outs and street repairs. The Ford building, including the Craneway Pavilion event center remained open and active throughout the project requiring attention to traffic controls, public safety in close proximity to construction work and coordination between construction staff and the building tenants.

### **On-Call Construction Management Services**

City of Richmond; Richmond, CA (2013 – Present)

Ghirardelli was selected by the City of Richmond to provide on-call construction management and inspection services for a wide variety of public improvement projects including: Mathiew Court Alley Greening Project; Safe routes to School – Cycle 1 Improvements; Ohlone Greenway; Carlson Crosstown Connector; Rifle Range Road Retaining Wall; 37<sup>th</sup> Street Bicycle and Pedestrian Improvements; 2019 Slurry Seal Project; and the Castro Ranch Road Rehabilitation. These projects included rehabilitations, *drainage improvements, sanitary sewer improvements*, slope stabilization, building renovation, traffic signal modifications, and street light improvements.

### **Emergency Sink Hole Repair**

Town of Moraga; Moraga, CA (2017 – 2017)

This project involved the *removal and replacement of a 96-inch storm drain culvert* that crossed Rheem Boulevard just east of Moraga Road. Ghirardelli's responsibilities included the review, implementation, and monitoring of a significant

traffic/pedestrian detour plan to divert traffic around Rheem Boulevard, a main thoroughfare. Ghirardelli staff performed communication with the adjacent cities of Orinda and Lafayette to coordinate traffic control plans and trucking routes for the project; review of a soldier pile lagging shoring with mid-bracing; coordination with PG&E to restore their damaged 12 KV line; coordination with Comcast and AT&T; coordination with East Bay Municipal Utilities District (EBMUD) who had an adjacent 12-inch steel water line; and coordination with Contra Costa County Sanitation District who had an active 15- inch clay sewer line adjacent to the sinkhole.

### **PROJECT UNDERSTANDING**

The District has had to reallocate staff to respond to the current drought emergency within Marin County. Due to this reallocation of staff, the District is in need of backfilling some of these positions through an outside consultant to continue with construction inspection work during this busy construction season. The District is requesting two full time inspectors working five days a week, eight hours a day for a forty hour work week. These inspectors will inspect various pipeline projects being constructed as well as assisting the Water Efficiency Department with inspections of the District's turf removal program.

The District at its discretion, may need a third inspector to start at twenty four hours per week with the option of increasing hours depending upon the need.

### **SCOPE OF WORK**

Ghirardelli is proud to bring its experience with similar projects as the District's. Our approach for this type of project is built around the qualifications and experience of our staff and lessons learned from previous projects. Ghirardelli realizes that the success of any construction project depends on the ability of the construction management team to proactively identify and anticipate problems before they become major issues and to resolve issues promptly before they impact the project budget and schedule.

Ghirardelli will provide construction inspection services, including, but not limited to the following:

- Inspect construction methods and materials to ensure compliance with plans and specifications
- Inspection during the installation and testing of pipe, services, hydrants, and other water facilities
- Recommend alteration of plans and specifications to meet field conditions, when necessary
- Issue materials to the contractor
- Make field measurements and prepare progress estimates
- Prepare and maintain complete records and field sketches of projects
- Maintain liaison with public agencies and contractors
- Review construction plans for transmission and/or distribution pipelines, tanks, pumps, and other associated facilities
- Interpret and apply safety rules and regulations to work assignments
- Check cuts/fills for compliance with grading and pipeline installation plans
- Inspect unplanned potable water discharges resulting from water main breaks and other related infrastructure failures
- Inspect the surrounding area and complete appropriate checklist form to record observations
- Provide inspection assistance to the Water Efficiency Department with the District's turf removal program

### **Daily Inspection Reports**

Ghirardelli's Inspectors will prepare a daily report for each construction day. The inspector's daily reports will be provided to the District's Project Manager. This information will be used for the preparation and evaluation of the

monthly progress estimates, non-compliance issues, construction delays, compliance tests, CPM schedule review, liquidated damages, and claims. The daily reports will be reviewed for the following factual information:

- Date, project identification, contractor's name, subcontractor's name(s), and time of inspections.
- Conditions (weather, moisture, soil, etc.); any inclement weather conditions that hampered or delayed the contractor's operations.
- Activities detail. Scheduled activities including starting and completion dates. Bid item numbers of all activities should be listed in the daily report.
- Difficulties encountered by the contractor.
- Construction issues (disputes, questions in the field, etc.).
- Deficiencies and violations (including construction work, safety, labor, etc.).
- Major material and equipment deliveries to the site (type, quantity, means of delivery, and condition of materials).
- Record of manpower, construction equipment, and materials testing locations and results.

### **CONTRACT REQUIREMENTS**

Ghirardelli has reviewed the District's standard "Agreement for Consulting Services" provided as Attachment B to the RFP and does not take any exceptions to the Agreement. Ghirardelli is prepared to sign the agreement as provided in Attachment B when selected.

Ghirardelli has also reviewed the insurance requirements in Attachment B and is able to provide the coverage requested for this contract.

## FEE SCHEDULE

Below are the hourly rates for the Construction Inspectors and Alternate Construction Inspectors listed in our proposal. Ghirardelli's inspectors are fully equipped with a company vehicle, laptop computer, printer, cell phone, mobile hot spot, PPE, and equipment to successfully fulfill their duties. Their company vehicles are essentially, mobile offices for them to conduct their daily activities and submit their daily diaries.

### Hourly Rates

	PW BILL RATE					
	First Shift			Second Shift		
NAME	ST	OT	DT	ST	OT	DT
Mike Peters, QSP, CPESC (Inspector)	\$195.00	\$244.60	\$266.41	\$195.00	\$244.60	\$296.74
Chris Morris (Inspector)	\$187.74	\$281.62	\$375.50	\$187.74	\$281.62	\$375.50
Kolby Butcher (Alternate Inspector)	\$169.40	\$229.98	\$290.52	\$184.55	\$252.70	\$320.81
Carolyn Adkins (Alternate Inspector)	\$197.75	\$258.41	\$332.70	\$212.92	\$281.16	\$349.38
Jake Melvin (Alternate Inspector)	\$169.62	\$254.43	\$339.25	\$180.76	\$254.43	\$339.25

The following table represents Ghirardelli's standard fee schedule by classification.

### Hourly Rates – Standard Fee Schedule by Classification

Role	Range	2021 Construction Management Hourly Rates		
		Straight	OT	Double OT
Contract Manager/Project Manager	Min.	\$188.74	\$188.74	\$188.74
Contract Manager/Project Manager	Max.	\$324.00	\$324.00	\$324.00
Resident Engineer	Min.	\$188.74	\$188.74	\$188.74
Resident Engineer	Max.	\$285.12	\$285.12	\$285.12
Construction Inspector	Min.	\$150.99	\$226.49	\$301.98
Construction Inspector	Max.	\$259.20	\$388.80	\$518.40
Electrical Inspector	Min.	\$150.99	\$226.49	\$301.98
Electrical Inspector	Max.	\$259.20	\$388.80	\$518.40
Mechanical Inspector	Min.	\$150.99	\$226.49	\$301.98
Mechanical Inspector	Max.	\$259.20	\$388.80	\$518.40
Construction Safety	Min.	\$150.99	\$226.49	\$301.98
Construction Safety	Max.	\$259.20	\$388.80	\$518.40
Storm Water Pollution Prevention (SWPPP)	Min.	\$150.99	\$226.49	\$301.98
Storm Water Pollution Prevention (SWPPP)	Max.	\$259.20	\$388.80	\$518.40
Office Engineer	Min.	\$113.24	\$169.86	\$226.48
Office Engineer	Max.	\$207.37	\$311.06	\$414.74

- Hourly rates include vehicle, mobile phone, laptop, and camera.
- Any extensive reproduction or delivery service charges shall be billed at actual.
- Rates valid until 12/31/2021. Annual rate escalation is 3%.
- Construction inspection activities are subject to prevailing wage requirements.
- Per prevailing wage requirements, a shift differential is for for any covered work shift beginning after 2PM.



# Mike Peters, QSD, CPESC

## Construction Inspector

**EXPERIENCE** 30+ Years  
**TENURE W/GA** 3 Years

### EDUCATION

Technical Management, DeVry University

California State University, Chico

### REGISTRATION/CERTIFICATION

Qualified SWPPP Developer (QSD), No. 22337

Certified Professional Erosion and Sediment Control (CPESC), No. 6762

JPB Safety Training, CPUC SSWP Training

### BART CERTIFICATIONS

BART Badge: #62547

RWP

TWIC

SSI

OSHA 30-Hour, First Aid

Mr. Peters has over 30 years of experience in engineering and construction management of various Public Works, State, Federal and Private projects. He was worked as an inspector on numerous projects and has experience with HMA and PCC paving, grading, underground utilities, drainage, soldier pile walls, CIDH and CISS piles and piling. Mr. Peters has been a Certified Quality Control Manager for USACE and served as Quality Assurance Officer, acting as a liaison between the Corps and the contractor on the Sonoma-Marine Area Rail Transit (SMART) in Petaluma. He is a Certified Professional in Erosion and Sediment Control (CPESC) and Qualified Storm Water Pollution Prevention Plan Developer (QSD) and a published author of "Storm Water Pollution Prevention Plan Risk Management for the Construction Industry." Mr. Peters has excellent communication skills, which he uses in coordinating projects with designers, contractors, and public agencies such as Caltrans, Army Corps of Engineers, U.S. Fish & Wildlife, Homeland Security, San Francisco Airport, Homeland Security, Caltrans, and State and Federal EPA and Departments of Environmental Quality.

Mr. Peters is an accomplished professional with proven success as a construction superintendent and project manager, and as an OSHA Competent Person. For over 30 years, Mr. Peters has effectively managed all levels of construction including pile driving, bridge building, CIDH and CISS pile installation, grading, paving, underground, utility, drainage, utility boring and jacking, and multiple whaler soldier pile timber lagging retaining walls with grouted and gunite tiebacks.

## Project Experience

### 3-Mile Spring Water Transmission Line, Spring Water Bottling Plant

Crystal Geyser Spring Water; Black Springs, Arkansas

**Construction Manager/Inspector** | Mr. Peters was the Project Manager/Construction Manager in charge of oversight of permitting, interface with the Arkansas Department of Environmental Quality, and US Army Corps of Engineers for construction of the 150,000 square foot bottling plant and three miles of food grade spring water transmission line from the developed spring to the bottling plant. He oversaw all grading and earth work design and testing, pouring of PCC floor and erection of metal building, installation of all electrical, HVAC, food grade piping, and high-speed bottling equipment from Europe. Bore and jack steel casing were used under the Caddo River for the spring water transmission lines from the spring to the new plant.

### Oakland Hills Streets Rehabilitation

City of Oakland; Oakland, CA

**Construction Inspector** | The project includes street rehabilitations, paving, new sidewalks, ADA ramps, curb ramps and gutters along Coliseum, Thornhill, Foothill, Mitchell, and Telegraph Avenue. Mr. Peters duties include field inspection to ensure conformance with approved contract plans and specifications; daily inspection report preparation including digital documentation; submittal and RFI coordination; coordination of materials testing, special inspection, and construction survey services; coordination with utilities; verifying quantities to confirm the contractor's invoiced quantities are accurate for payment; daily communications with City staff; and resolution with concerns from the residents.

### Thornhill Drive Sidewalk Improvement, Paving, and Striping

City of Oakland; Oakland, CA

**Construction Inspector** | The project includes the construction of high visibility crosswalks, ADA ramps, and concrete curb, gutter, sidewalk on the northwest side of Thornhill Drive from Moraga Avenue to Grisborne Avenue. Also included

in the project is an upgrade to the traffic signal at the intersection of Mountain Boulevard and Thornhill Drive and installation of striping and paving on Thornhill Drive from Moraga Avenue to Pinehaven Road. Mr. Peters duties include field inspection to ensure conformance with approved contract plans and specifications; daily inspection report preparation including digital documentation; submittal and RFI coordination; coordination of materials testing, special inspection, and construction survey services; coordination with utilities; verifying quantities to confirm the contractor's invoiced quantities are accurate for payment; daily communications with City staff; and resolution with concerns from the residents.

### **Yerba Buena Island (YBI) West Bound I-80 Off Ramps**

Treasure Island Development Authority/San Francisco County Transportation Authority/Caltrans District 4; San Francisco, CA

**Inspector/QSD/CPESC** | Mr. Peters was responsible for the oversight of Storm Water Pollution Prevention Plan (SWPPP) implementation and compliance, monitored and reported all unlawful and allowable stormwater and non-stormwater discharges, and coordinated with the Regional Water Quality Control Board. The project relocated the westbound exit ramp on the north side of I-80 and reconstructed the westbound entrance ramp on the north side of I-80 onto Bay Bridge. The project improved traffic safety, geometric design, and traffic operations of the ramps. Mr. Peters provided civil and structural inspection on the detour roadway construction of the Coast Guard ingress and egress. He inspected the pile driving for the five, 30-foot columns that attached to the east side of YBI and inspected the base rock, paving and striping for the roadway. Additional project elements included utility removal and installation as well as column/bent bridge construction and pile driving. Mr. Peters' duties included writing daily reports; documenting progress with photos and ensuring compliance in accordance with the plans and specifications as well as safety regulations.

### **Interstate 80 Median Removal and Installation of Westbound and Eastbound High Occupancy Vehicle Lanes (Red Hill Road to Vacaville)**

Caltrans District 4; Fairfield and Vacaville, CA

**Construction Inspector** | Mr. Peters was the structural roadway inspector for the I-80 widening in Fairfield and Vacaville. The project removed the center median MBGR and foliage and replaced with HMA pavement and PCC Median Barrier. Mr. Peters oversaw roadway excavation between Westbound and Eastbound #1 Lanes for median reconstruction and addition of EB and WB HOV lanes. Repaved entire lanes of I-80 including the Truck Scales in Fairfield. Installed median barrier signs and electronic sensors for Trucking lanes. Mr. Peters took Caltrans HMA sampling course and took samples of all night HMA paving of approximately 2,000 – 3,000 tons per night of ¾" HMA. He oversaw setup of traffic control, COZEEP, called in/off lane closures to Caltrans Radio Room for I-80 paving operations. Mr. Peters documented ADL soil mitigation/manifest quantities and had soils tested for proper disposal per the PPM of Lead. He performed all inspection of temporary striping and permanent restriping of all lanes of I-80 (4-6 lanes each direction from Truck Scales).



**EXPERIENCE** 36 Years  
**TENURE W/GA** 15 Years

**EDUCATION**

B.S., Engineering Technology,  
Cogswell College, San Francisco,  
CA

**CERTIFICATIONS**

- California Test Methods: 526,  
533, 539, 540, 541

# Chris Morris

## Construction Inspector

Mr. Morris has 30+ years of extensive construction industry experience including management, administration, and inspection of Caltrans projects funded by state and federal regulatory agencies and includes experience working as a project manager for a general contractor. Mr. Morris is personable, has a professional manner, and is excellent in negotiating issues with the contractor, coordinating public relations, plan specification interpretation and implementation, problem solving, and detailed contract documentation.

### Project Experience

#### Boyes Boulevard Bridge Replacement

Sonoma County Public Works; Sonoma, CA

**Construction Inspector** | The new bridge will be a single span precast girder bridge, built to current standards including accommodating a 100-year storm event. The project includes the installation of 6" and 8" waterlines. The bridge is located in a busy suburban corridor so construction will progress over two seasons. In 2018, a temporary pedestrian bridge was constructed, and various utilities were temporarily relocated to this structure. In 2019, removal and replacement of the old bridge was completed including the permanent relocation of utilities to the new structure. The Ghirardelli Team is maintaining construction diaries that include documentation of the work progress, materials tested, and any other pertinent information in a daily diary for permanent record of events. Photographs of project progress are regularly taken and kept for permanent records to support disputes and verify quality for acceptance. Mr. Morris is maintaining construction diaries that include documentation of the work progress, materials tested, and any other pertinent information in a daily diary for permanent record of events. Photographs of project progress are regularly taken and kept for permanent records to support disputes and verify quality for acceptance.

#### Civic Center Drive Improvement Project

County of Marin; San Rafael, CA

**Assistant Resident Engineer/Construction Inspector** | This project connected the SMART Train Civic Center passenger station stop to the Marin County Civic Center campus. The project created a new multi-use pathway along Civic Center Drive and a traffic roundabout. Project elements included a new traffic signal equipment, pathway and street lighting equipment, PG&E utility realignments, fiber-optic utility installation, underground drainage improvements, ADA accessibility upgrades, bio-swale construction, architecturally designed flatwork finishes, traffic delineation, signage, and new landscaping improvements. This project also involved the coordination of the construction activities within the SMART Train rail agency right-of-way and Marin County Cultural Services agency activities. The implementation of regulatory agency permit conditions associated with working along the tidal Las Gallinas Creek and the clapper rail endangered species. Mr. Morris assisted the resident engineer to administer the construction contract and to document all field work generated by the contractor, coordinated outside testing and inspection services, provided field QA inspection, tracked extra work, documented the progress of work for contract compliance, and provided contract administrative support.

#### Central Marin Ferry Connection Project

County of Marin; Larkspur, CA

**Assistant Resident Engineer/Construction Inspector** | This project extended the Cal Park Hill Multi-Use Pathway southward with a new steel bridge structure crossing over Sir Francis Drake Boulevard (SFDB); an access ramp leading down to the existing ground-level east-west pathway adjacent to SFDB; a southern connection from the future SMART station; and pedestrian/bicycle improvements to the existing multi-use pathway on the south side of SFDB, from the Highway 101 off-ramp up to the Ferry Terminal property. The project also created a new sidewalk on the north side of SFDB, connecting the path with the sidewalk along Larkspur Landing Circle. Project elements included a steel,

prefabricated pedestrian/bicycle bridge with drilled piers and poured in place concrete deck, grading, retaining walls, paving, lighting, landscaping, sidewalk, signage, and implementation of regulatory agency conditions and other items all including working in a salt marsh environment adjacent to the Corte Madera Creek with the following endangered species: the clapper rail and the salt marsh harvest mouse.

### **County-wide Arterial Micro-Surfacing Project**

Contra Costa County, Department of Public Works; Contra Costa County, CA

**Assistant Resident Engineer** | Site work included 21 miles of roadway and entailed performing pavement base failure repairs, the removal of the existing pavement delineation, and the application of micro-surfacing throughout Contra Costa County, on major arterial roadways. Extensive traffic control and the placement of new thermoplastic pavement delineation was also involved. Mr. Morris assisted the resident engineer administer the construction contract and document all field work generated by the contractor, provided field inspection, coordinated County representatives to approve the layout of pavement delineation, scheduled of County inspection forces to provided QA inspection, and maintained daily records of work progress and materials incorporated into the work. Additionally, he tracked daily quantities of work produced, assembled monthly progress payment reports to the resident engineer, and maintained public convenience to the residences and businesses adjacent to the work as work progressed for the civil and structures work, resolved technical issues and interpreted specifications. He also assisted with public relations with the adjacent businesses and homeowners' association.

### **US-101 Rehabilitation (Todd Road to Route 12)**

Caltrans District 4; Santa Rosa, CA

**Assistant Resident Engineer** | This Caltrans, District 4 was a cross-slope rehabilitation and maintenance overlay for both the main-line highway and interchanges, within project limits. Site work removed outdated gutter details, pre-cast concrete (PCC) slab removal and replacement, installed edge drains on the mainline highway, and horizontal directional boring for new traffic counting equipment. Mr. Morris assisted with contract administration, wrote contract change orders, scheduled state inspectors to cover the workload, sampled and inspected materials incorporated into the work, and prepared monthly progress payments and daily diaries.

### **US-101 Rehabilitation (South Petaluma to Wilfred Avenue)**

Caltrans District 4; Petaluma, CA

**Assistant Resident Engineer** | This Caltrans, District 4 highway rehabilitation, pavement recycling, and maintenance overlay project included cold planning 270,000 SY of existing asphalt surfacing, recycled 232,000 SY of asphalt concrete (AC), placed 53,000 tons of AC, updated metal beam-guard railing and drainage dikes, widened shoulders, bridge decks, and restriped the highway. Mr. Morris assisted with contract administration, wrote contract change orders, scheduled two (2) state inspectors to cover the workload, sampled and inspected materials incorporated into the work, and prepared monthly progress payments and daily diaries.

### **Highway 121 Realignment at Napa Road**

Caltrans District 4; Napa, CA

**Assistant Resident Engineer** | This project realigned 1.5 miles of SR-121 and included 74,000 CY of roadway excavation, imported 18,000 CY of dirt, placed and fine graded 24,000 CY of aggregate sub-base material, placed 21,000 tons of asphalt concrete (AC), and installed 580 LF of 60"-diameter pre-cast concrete pipe and 450 lineal feet of 48-inch diameter pre-cast concrete pipe into an existing creek bed to facilitate the roadway widening. Chris assisted with contract administration, wrote contract change orders, wrote claims reports, scheduled two (2) state inspectors to cover the workload, coordinated utility relocation, sampled and inspected the materials incorporated in the work, and prepared monthly progress payments and daily diaries.





# Jake Melvin

## Construction Inspector (Alternate)

**EXPERIENCE** 8 Years  
**TENURE W/GA** <1 Years

### EDUCATION

B.S. Construction Management,  
California State University, Chico

### SKILLS

- Construction Inspection
- Project Management
- CPM Scheduling
- Job Site Safety Inspection

**Mr. Melvin** has over eight years of experience in the construction industry working for several owners and contractors in California and Nevada. He performs and manages quality control of jobsite materials and installation; interprets plans and specifications; submits RFI's; schedule subcontractors; coordinates and manages owner and team meetings; manage change orders, budgeting, invoicing; and ensure jobsite safety.

### Project Experience

#### Henderson Street Utility Improvements

City of Eureka, California

**Assistant Resident Engineer / Construction Inspector** | Mr. Melvin is currently

providing Assistant Resident Engineering/Inspection services for City of Eureka's \$4 Million, Henderson Street Utility Improvements project in Eureka, Ca from F Street to Fairfield Street. This utility improvement project consists of major operations for valve cluster replacement, bursting/open trench installation of new 8" water line, bursting/open trench installation of 6" sewer line, new water services from main line to meter boxes at all residences and business, temporary water line during bursting/open trench installation, lowering and raising all utility lids, replacement of sewer manholes, milling/cold plane existing roadway at .2' depth, hot mix asphalt with 1/2" Type A to match existing elevations, minor concrete work at meter boxes, sidewalks, and curb ramps, thermo striping lanes, cross walks, and reflectors, and new traffic signal loops. Mr. Melvin is responsible for inspection of the contractor's daily activities, preparing daily reports, keeping photograph documentation of activities, preparing quantity sheets, tracking force account work, reviewing project safety, coordinating materials testing, and tracking the contractor's labor compliance. Work is completed during daytime hours under strict traffic control restrictions due to the high volume of vehicles on Henderson Street.

#### Herback General Engineering

Minden, NV

**Quality Control Manager** | Mr. Melvin fulfilled the role of Project Manager and Superintendent in which he was responsible for all quality control inspections of the work for compliance with the contract plans and specifications, updating and reviewing monthly CPM schedules, monitoring safety on all projects' sites. He scheduled all subcontractors and kept them informed and updated on project schedule. He was responsible for coordinating and leading pre-construction meetings, weekly meetings, and close out meetings. Mr. Melvin served as the project technical resource to interpret plans, specifications, and submit RFI's. He also performed quality control of all materials brought on sight and ensured proper installation of materials throughout the jobsite.

#### A&K Earth Movers

Fallon, NV

**Project Manager/Estimator** | As a Project Manager, Mr. Melvin was the project manager for various construction projects in which he was responsible for all quality control inspections for compliance with the contract plans and specifications. Mr. Melvin processed invoices for material, supplies, and rental equipment. He also served as the project technical resource to interpret plans, specifications, and submit RFI's.

#### Whitaker Construction Group

Paso Robles, CA

**Project Manager** | As a Project Manager, Mr. Melvin was responsible for management of quality control, RFI's, submittals, addendums, change orders, job costs, budgeting, invoices, and billing and jobsite safety. He coordinated and managed owner and team meetings.

### **Lawrence Livermore National Laboratory**

Livermore, CA

**Construction Manager** | As a Construction Manager, Mr. Melvin was responsible for construction inspection, implementing decisions related to construction matters, processing subcontractor generated documents (RFI's, technical submittals, as-built drawings), coordinating and leading pre-construction meetings, weekly coordination meetings, and close out meetings. Mr. Melvin performed quality control of all materials brought onsite and ensured proper installation of materials throughout the jobsite. He set up and maintained permits, on-site underground line markings, and kept facilities informed of work in or near structures/buildings.

### **Goodfellow Top Grade Construction**

Various Locations, CA

**Project/Field Engineer** | As a Project/Field Engineer, Mr. Melvin inspected field work, and assisted with contract change orders. He was also responsible for daily reports, RFI's contracts, permits, progress photos, traffic control plans, review of job cost reports, and performed cost report audits.



**EXPERIENCE** 4 Years  
**TENURE W/GA** 2 Years

**CERTIFICATIONS/TRAINING**

- TWIC Card (exp. 6/2025)
- OSHA 30 Hour
- OSCA Refinery Training
- Crosby Rigging Training
- Shipyard Competency Training (Including Chemical and Confined Space)
- Health and Safety Management Training
- Electrical Hazards Training
- Fire Response and Suppression
- Emergency Planning Training
- Fall Protection Competent Person
- Confined Space Trained (General Industry and Construction)
- Job Safety Hazard Identification Trained

**PROJECT SKILLS**

- Ability to Apply Common Sense Understanding to Carry Out Detailed Written or Oral Instructions
- Ability to Follow Verbal and Written Instructions
- Detail Oriented
- Demonstrates Excellent Customer Service Skills
- Demonstrates Good Performance and Attendance
- Safety Minded
- Willing and Determined to Produce Quality Results

# Kolby Butcher

## Construction Inspector (Alternate)

**Mr. Butcher** has four years of experience in general construction, marine construction and waterways. He has a strong history of working on multiple projects to successful completion utilizing effective communication and team collaboration. Mr. Butcher has an advanced ability to communicate well with clients, co-workers and contractors. This collaboration helps ensure time efficiency and clear understanding on all fronts. His experience includes managing marine, spillway and water treatment crews, coordinating with contractors and safety officers to help ensure a safe environment.

### Project Experience

#### Storm Damaged Repair Projects

County of Yuba; Yuba County, CA

**Construction Inspector |** The construction work in general consisted of storm damage repair projects in Yuba County during the 2019 construction season. Twelve separate sites experienced storm damages during heavy rain events in 2017. The scope of work included excavation of unstable materials, installation of slope stabilization such as retaining walls (i.e. soldier piles, gabions, and mechanical stabilized embankment), bringing in fill material (import burrow and tire-derived aggregate), rebuilding the roadway sections, drainage systems, and installing guardrails and cable railings. Mr. Butcher provided inspection services for the sites associated with the West portion. Once those were finished, he transitioned to the East portion sites.

#### FY21 Citywide Pavement Maintenance Project

City of Gilroy; Gilroy, CA

**Construction Inspector |** The project consisted of localized asphalt and concrete repair, micro-surfacing, cape seal, crack sealing, concrete curb ramp upgrades and/or replacement, striping and marking improvements, sidewalk repairs and utility adjustments. Mr. Butcher provided construction inspection services during the grinding and stripping of Camino Arroyo and adjacent side streets, shoulder backing at San Ysidro Avenue, and iron raising on 8<sup>th</sup> Street. He confirmed that the materials used and work performed conform to the plans and specifications and provided careful and detailed documentation and reporting on his observations. He confirmed and documented that the ADA requirements for each ramp were

met prior to and after placement of the concrete. Mr. Butcher kept careful records of contractor and equipment staff on site for latter comparison with the contractor’s submitted Certified Payroll reports. He enforced safety including traffic control set ups and procedures and provided public engagement for pedestrians, affected shop owners, and other members of the public who were curious about the project. His detailed daily reports included ample photographic support and were filed through the City’s Procure project management software.

#### Alderpoint Road Storm Damage Repairs

County of Humboldt; Humboldt County, CA

**Construction Inspector |** The Alderpoint Road at PM 44.79 project consists of the construction of a soldier pile retaining wall with ground anchors and PCC waler, underdrain systems, guard railing, and roadway structural section (AB/HMA). The Alderpoint Road at PM 21.8, 22.8, 23.0-23.5, and 23.75 projects consists of the construction of soldier pile retaining walls with ground anchors, underdrain systems, stabilization trenches, drainage structures, geosynthetic reinforced

embankments, and roadway structural sections (AB/HMA). Mr. Butcher is the lead construction inspector for these projects. His duties include inspection and verification of all field constructions to verify compliance to contract plans and specifications, special provisions, submittals, and local jurisdiction. He prepares inspector daily reports, record of work activities and unusual occurrence, attend weekly meetings, and manages project documentations. Mr. Butcher inspects job site for safety to the travelling public at detours and nearby construction zone.

### **Transbay Tube Cathodic Protection Anode Sled and Cable Replacement**

BART; Oakland, CA

**Construction Inspector** | The BART anode sled cathodic protection project scope uses divers on a Derrick barge to locate anodes sleds attached to the BART Trans Bay Tube (TBT) and replace them. The anode on this project is in the form of a concrete sled that sits between 150-200 feet from the TBT, attached by a cable. Duties include documentation of the work performed and ensure that BART is receiving accurate information regarding production and work quality. The project goal was to splice a new sled onto the existing cable if possible necessitating Mr. Butcher to witness as an Inspector that the splice is performed by a qualified electrician. Mr. Butcher documented the work through pictures and observed that the technical staff followed the correct splicing method. In the case of having to replace an entire cable, a new cable is spliced to a new anode sled and the existing cable is replaced leading into the TBT.

### **Various Construction Projects**

Power Engineering Construction; Alameda, CA

**Journeyman Deck Engineer** | Mr. Butcher maintained, trouble shot, and repaired crane, deck gear, winches, live wire lines, electrical, pile driving hammer, pneumatic systems. He assisted in pile driving operations such as bridge foundation pipe pile, coffer dams, tide break soldier pile, dock guide pile, batter pile, sheet pile, concrete pile and cast in place. He maintained all crew safety and safety logs. He kept detailed daily logs on all equipment maintenance, repairs and tasks. He also performed as the lead qualified rigger on heavy lift projects.

### **Various Construction Projects**

Kiewit Corporation; Oroville, CA

**Journeyman Crane Coordinator/Excavator/Wheel Loader Operator** | Mr. Butcher's duties were to organize, rig and signal all heavy and dangerous crane pics. He maintained clear radio communications channels throughout the job site. He kept detailed logs of crane swing radius and picks while working with and around concrete crews and inspectors to help ensure crew safety. He organized concrete pump set up in coordination with cranes to be able to operate simultaneously, and safely. He also assembled and disassembled cranes as needed. Operated various machinery when needed, including excavation and backfill operations and blasting operations.

### **Various Construction Projects**

Dragados; Elk Grove, CA

**Journeyman Oiler/Night Shift Foreman** | Mr. Butcher coordinated all nighttime crane operations. He kept detailed daily logs of tasks and crane maintenance. He also kept timecards and applied time to cost code allocations.

### **DB Njord Derrick Barge**

Manson Construction; Richmond, CA

**Journeyman Deckhand** | Mr. Butcher maintained, problem shoot and repaired equipment. He kept accurate daily logs of tasks. He assisted in collecting surveys for depth, dredge surveying. He was responsible for maintaining accurate logs of dredging survey, depths of survey line. Mr. Butcher also operated all deck gear while moving dredge.

### **Oroville Spillways**

Neils Controlled Blasting; Newcastle, CA

**Journeyman Driller/Blaster** | Mr. Butcher was responsible for drill holes in the Oroville Spillways. He loaded and blasted drilled holes in preparation for exaction. He was required to hold an ATF Explosives Certification.



**EXPERIENCE** 29 Years  
**TENURE W/GA** 20 Years

**EDUCATION**

Construction Management Coursework, Laney College

Construction Management Coursework, Contra Costa College

**CERTIFICATIONS**

- Ghirardelli Safety Officer
- OSHA Safety
- 4-Hour Lead Awareness Training
- Radiation Safety Officer No. 11764
- CPN nuclear gauge
- 40-Hour HAZWOPER

# Carolyn Adkins

## Construction Inspector (Alternate)

**Ms. Adkins** is a seasoned construction inspector with a diverse project background. Carolyn’s expertise includes a thorough knowledge of construction standards and all aspects of highway construction management in accordance with the Caltrans Construction Manual and Local Assistant Procedures Manual (LAPM). She also assists Ghirardelli with safety oversight firmwide.

### Project Experience

#### Isabel Avenue Extension

City of Livermore; Livermore, CA

**Construction Inspector** | The new alignment expressway, which was constructed under permits from the U.S. Army Corps of Engineers, Union Pacific Railroad (UPRR), and California Department of Transportation (Caltrans), involved the construction of three (3) bridges, and featured a canal realignment, pumping plant, new storm drain system, sewers, 24-inch natural gas line, over-head high voltage utility relocation, extensive staging, traffic control, and new highway electrical systems. Carolyn provided electrical inspection of the removal of old lighting, and the installation of temporary staging lighting and temporary services, temporary signaling, new signalization and controllers, and loops detection. She performed field inspections of the extensive traffic control, earthwork, AC paving,

and estimated progress payments. She was also responsible for the electrical constructability review for this project.

#### On-Call Construction Management (Lighted Crosswalk and Pavement Rehabilitation)

City of Richmond; Richmond, CA

**Construction Inspector** | Carolyn assisted the City with pavement repairs associated with sanitary sewer work, bike lane marking and crosswalks, as well as planned for various pavement repair options. She monitored contractors for compliance with applicable encroachment permits, when working around traffic areas. The signal interconnection was mainly for the timing of traffic lights, but also included crossing lights for pedestrians and cyclists. Carolyn provided field inspection of the contractor’s work activities, verified that work performed met contract documents, assisted the resident engineer with documentation and reporting, coordinated stakeholders and sub-consultants, and provided daily reports.

#### 7th Street Realignment, Vision 2000 Project

Port of Oakland; Oakland, CA

**Construction Inspector** | Carolyn inspected earthwork operations, which involved cuts of twenty feet and deeper (shoring shields), drainage systems and a new force main sewer system. Carolyn also assisted the resident engineer with contract administration duties and also produced the monthly progress payments.

#### Interstate 580/Airway Boulevard Interchange Reconstruction and Improvement

City of Livermore; Livermore, CA

**Assistant Resident Engineer** | This project involved the construction of a new over-crossing adjacent to the existing one at I-580, the reconfiguration of the interchange ramps, the construction of several retaining walls, the installation of a new waterline through the bridge, earthwork, AC paving, changing a reclaimed waterline to a potable, as well as extensive traffic control. Carolyn inspected and provided oversight for the construction of abutments, ramps (all earthwork), the installation of the water-lines, sewer, minor structures, and AC paving.

#### Atlas Road Project

City of Richmond; Richmond, CA

**Construction Inspector** | Carolyn inspected earthwork operations, which involved cuts of twenty feet and deeper (shoring shields), drainage systems, and a new force main sewer system. She also assisted the resident engineer with contract administration duties and produced the monthly progress payments.

### **Nevin Avenue Pedestrian and Bicycle Improvements (19<sup>th</sup> to 27<sup>th</sup> Street)**

City of Richmond; Richmond, CA

**Construction Inspector** | The project reconstructed Nevin Avenue between 19th and 27th Streets for pedestrian and bicycle improvements. The work consisted of roadway, sidewalk, landscaping, relocation for wet and dry utility relocation, including water main, service and meters, drainage, and signal and lighting systems. As a part of the work, utilities were relocated, and the profile grade of the roadway was reduced to lessen the grade of the roadway cross slope which impacts access point to the roadway such as driveways and sidewalk curb returns. The construction site was located in a predominately residential area, so parking, pedestrian access and public safety required special attention during construction operations. EBMUD coordination.

The project was constructed in three (3) stages with the follow scope for each: Stage 0, Potholing and Field Exploration: Contractor confirmed exact locations of utilities in the field and established SWPPP BMPs / controls. Stage 1 Utility Relocation: Utility agencies and Contractor relocated poles and utility boxes as necessary to accommodate the planned construction. Stage 2A - 2B, 19th to 23rd Street: Demolished / removed existing pavement and wet / dry utilities. Constructed new wet and dry utilities, sidewalks, curbs and gutters, structural section, irrigation systems, lighting systems and traffic signals. Stage 2C, 19th to 23rd Street: Placed final layer of surfacing and pavement delineation. Adjusted utility covers position in roadway to grade. Stage 3A - 3B, 23rd to 27th Street: Demolished / removed existing pavement and wet / dry utilities. Constructed new wet and dry utilities, sidewalks, curbs and gutters, structural section, irrigation systems, lighting systems and traffic signals. Stage 3C, 23rd to 27th Street: Placed final layer of surfacing and pavement delineation.

### **State Route 37 Widening Phase 2**

Caltrans District 4; Fairfield, CA

**Assistant Resident Engineer / Lead Inspector** | This project widened SR-37 and stabilized White Slough, using drainage wicks and geotechnical fabrics, as well as the construction of a new interchange at the Sacramento Street Overcrossing, with new on- and off-ramps. Carolyn inspected earthwork operations, drainage systems and wick drain installations, AC paving, and traffic control. As this project was constructed adjacent to a waterway, Carolyn covered the control of water pollution by enforcing compliance of the approved Storm Water Pollution Prevention Program (SWPPP) and made amendments as needed. She assisted with the construction of detours and AC paving night work. As the lead inspector, Carolyn scheduled lane closures, traffic control, and materials testers, and ensured the lanes reopened on time, every morning, without delay to commuters.

### **Interstate 880/98<sup>th</sup> Avenue Interchange**

Alameda County Transportation Authority; Oakland, CA

**Assistant Resident Engineer** | This transportation improvement project included the reconstruction of the 98th Avenue interchange and the construction of a new pedestrian over-crossing. Site work included the installation of a 36-inch reinforced concrete pipe (RCP) watertight drainage system, bored under I-880 using the jacking method, two large boring and receiving pits were excavated (one on each side of the freeway), and safety inspections were continuously conducted during the boring operation. Carolyn inspected earthwork, drainage systems, minor structures, and AC paving. She also assisted with the inspection of piles driven for the bent foundations to the pedestrian overcrossing and performed a balance of field and office engineering work, labor compliance, and SWPPP inspections to ensure compliance. A public relations hotline was specified for this project, and Carolyn assisted in taking calls and working towards resolving reported issues. She worked with the Caltrans staff for accurate and timely project completion documentation.