



1001 Galaxy Way
Suite 310
Concord CA 94520

925.949.5800 phone
530.756.5991 fax
westyost.com

July 7, 2023

SENT VIA: EMAIL

Mr. Chad Davisson
Interim General Manager
Graton Community Services District
250 Ross Lane
Sebastopol, CA 95472

**SUBJECT: Proposal for Engineering Services for Phase 1 of the
Sewer System Repair and Rehabilitation Project**

Dear Chad:

The purpose of this letter proposal is to provide the Graton Community Services District (District) with a proposed Scope of Services, Budget, and Schedule for Phase 1 of the Sewer System Repair and Rehabilitation Project (Project). The Project is defined in a grant agreement that District received from the State Water Resources Control Water Board (Water Board) under agreement number C-06-8335-110 and project number SWRCB0000000000D1901021 (Agreement).

PROJECT UNDERSTANDING

In March 2023, the District requested support from West Yost to develop a request for an amendment to the Agreement to provide for additional time to complete the scope of services. In addition to developing recommendations for a new schedule, we also suggested the changes to the scope of services based on our team's review of the Agreement. The following specific recommendations were made:

1. The District televised and cleaned 6,788 ft. and 18,249 ft. of its sanitary sewer network in 2008 and 2009. In 2011 it re-inspected 3,946 ft. of sewer mains. The scope of services in the original agreement assumed the District would clean and inspect 10,000 additional linear feet of pipeline. However, because the inspection efforts are over ten years old, West Yost had recommended that the District re-inspect 25,000 feet of collection system. This recommendation was made because it would allow for about 80 percent of the total collection system to be inspected while still preserving available funds for other scope items.
2. An intertie pipeline that extends from the District treatment plant to Forestville Water District is shared by both districts to transfer recycled water to users along its alignment. The condition of the pipeline is not known and must be evaluated before expanding the recycled water program. Therefore, the Project defined in the original agreement included inspection of this pipeline. Another critical infrastructure piece needed to accommodate potential expansion of the recycled water system is replacement of the recently failed disinfection system that is used to meet the Title 22 requirements for recycled water. Therefore, West Yost has recommended that the City expand the scope of services under the Agreement to include an assessment of the disinfection system so that identified improvements can be included in the construction grant application.

3. The original Agreement did not include a budget related to preparing the quarterly reports required under the agreement. Therefore, West Yost has recommended that this effort be added to the scope of services and budget.
4. The original agreement included a task that involved completing 50 percent design and bid documents for the recommended collection system improvements. However, with the recommended scope of services expansion described above, the original agreement budget of \$500,000 would not allow for completion of this design task. Therefore, West Yost recommended that the design task be removed from the Agreement and instead be included in the Construction Grant Application.

On June 9, 2023, the Water Board issued Amendment No. 1 to the Agreement. The revised scope of services and schedule for the Project as defined in Amendment No. 1 is summarized in Table 1. As shown, Amendment No. 1 did incorporate some of the new scope of service additions detailed in items 1 through 4 listed above. However, the amendment did not incorporate the removal of the development of the 50 percent design and bid documents. Amendment No. 1 also did not incorporate the recommended budget adjustments.

Water Board staff indicated at the time the amendment was requested that the amendment needed to be processed before the initial planning work completion date, and it was not prudent to change any budget line items and/or remove scope items at the time as this would delay the initial amendment process. Water Board staff also stated that a future amendment request could be made to adjust the budget and remove scope items.

Based on discussion with the District after issuance of Amendment No. 1, and our current understanding of the District's needs, we are further proposing that the collection system inspection efforts (Item 1 of the agreement) be expanded to include cleaning and inspection of all 32,000 feet of sewer line, inspection of 132 manholes and inspection of the two collection system lift stations. With this expansion of the condition assessment efforts, it may not be possible to complete all the scope items previously recommended unless the budget for the Project is increased beyond the currently allocated \$500,000. Specifically, it is unclear whether it will be possible to complete the intertie pipeline assessment or the evaluation of the treatment plant disinfection system.

To make the most efficient use of the available funding, West Yost is proposing to move forward with the collection system condition assessment efforts in parallel with continuing discussions with Water Board staff regarding options for further modifications to the agreement. This will include discussing whether the total budget for the agreement can be increased so that all the planning efforts necessary to support the District's long-term goals can be completed. Following the completion of the Phase 1 efforts, West Yost will work with the District to define the Phase 2 scope. Under Phase 2, West Yost will work with the District to complete the remaining efforts and to obtain Water Board approval for the change in scope and budget to conform to the final recommendations for the project. At a minimum, the Phase 2 scope is expected to include all of the collection system related tasks identified under Items 3, 4, and 5 in Table 1.

Table 1. Agreement Scope of Services, Budget and Schedule Amendment 1 (June 9, 2023)		
Task	Submittal	Estimated Completion Date ^(a)
Item 1. Collection System Closed Circuit Television (CCTV)		
Perform approximately 25,000 feet of CCTV Inspections. Results will be recorded in an asset management system (GIS).	CCTV Condition Assessment	8/21/2023
Item 2. Intertie Pipeline Inspection and Evaluation		
2.1 Develop an opinion of the pipeline’s physical condition with respect to corrosion-related degradation to date. An opinion will be developed in three phases with a desktop opinion of corrosion risk, collection of data through pipe to soil potential surveys and through direct assessment based on the data collected.	Intertie Pipeline Evaluation	10/23/2023
2.2 Develop an opinion of the preferred strategy for improving the WWTP disinfection system to meet disinfected tertiary recycled water standards. UV disinfection and chlorine disinfection using the Intertie Pipeline will be considered as alternatives.	None Defined	None Specified
Item 3. Sewer Repair and Rehabilitation Project Feasibility Study/Preliminary Engineer’s Report		
Prepare a Preliminary Engineer’s Report (PER) that will evaluate alternatives for correcting identified deficiencies and improve the wastewater treatment plant (WWTP) disinfection system. The report will also include a lift station evaluation.	Preliminary Engineer’s Report	5/20/2024
Item 4. Environmental Documentation		
Complete environmental documents to satisfy necessary CEQA and possible NEPA requirements.	Environmental Documentation	1/27/2025
Item 5. CWSRF Construction Funding Applications		
5.1 Complete and submit the CWSRF Construction Application(s).	CWSRF Application	3/31/2025
5.2 Prepare submit quarterly status reports.	Status Reports	Quarterly
Item 6. Design & Bid Documents (50 percent)		
6.1 Perform project management- Project coordination, Project staffing requirements, Project progress, Project Management Plan.	Project Management Plan	3/31/2025
6.2 Conduct field investigations, potholing and surveying	Not Defined	
6.3 Perform Geotechnical Evaluation	Geotechnical Investigation Report	3/31/2025
6.4 Prepare 50% Complete Design Documents	50 percent complete plans, specifications, and estimated project costs	3/31/2025
(a) Discussions with Water Board staff indicate that these are estimated submittal dates and it would be acceptable for the submittals to be provided outside this timeframe. The District will just need to provide the justification in the quarterly reports. The only hard deadline is the Work Completion Date, which is set at March 31, 2025.		

SCOPE OF SERVICES

The following is a list of the key tasks necessary to perform this proposed Scope of Services, each further described below:

- Task 1. Collection System Condition Assessment
- Task 2. CWSRF Funding Support
- Task 3. Project Management

Task 1. Collection System Condition Assessment

The collection system condition assessment includes inspection of all system pipelines, manholes, and the two pump stations. Inspection results will be used to understand the District's rehabilitation needs and develop recommendations in the Phase 2 scope of services.

Given that the available Closed Circuit TV (CCTV) inspections were performed over 10 years ago, West Yost recommends performing CCTV inspections for the entire collection system. This includes CCTV inspection of approximately 32,000 feet of gravity main. CCTV inspections will include pre-cleaning (hydrojetting) and CCTV inspection using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) assessment and scoring system. Due to the condition of the gravity mains being unknown, the extent of the pre-cleaning is also unknown. Therefore, a cleaning contingency has also been included in this task for heavy cleaning. Additional cleaning effort may affect the time required to successfully inspect gravity mains. The proposed budget for CCTV inspections will be used to clean and inspect as much of the gravity main system as possible.

During the CCTV field work, the inspection company will also perform MACP Level 1 condition assessment of manholes and collect GNSS (Global Navigation Satellite System) coordinates of all manhole horizontal locations. This information will be used by West Yost to create GIS base mapping of the manholes and pipelines.

A West Yost Pump Station Engineer will perform visual inspection of the two lift station facilities. Inspections will include major assets such as pumps, wetwell/drywell, inlet/outlet piping, and electrical/instrumentation. Both a condition and performance score will be assigned to major assets and/or major discipline groups (e.g., structural, civil/site). Operator feedback will be collected to understand current operating and maintenance issues. Photos will be taken to document condition.

The condition assessment information will be reviewed by West Yost and summarized in a concise condition assessment summary technical memorandum (TM). This document will be used to understand the District's rehabilitation needs and define the recommendations for the Preliminary Design Report to be completed in the Phase 2 scope of services and that is used to support the construction grant application. Following District review of the Draft TM, a Final TM will be prepared for incorporation into the Preliminary Design Report.

Task 1 Assumptions

- The District will provide access to the collection system and grant all permits required.
- It is assumed that the collection system contains approximately 135 manholes or cleanouts.
- Hydrocleaning consists of a maximum of two passes with the hydro jet.
- Confined space entry will not be performed at the pump stations.

Task 1 Deliverables

- West Yost will provide CCTV inspection videos, reports, and a PACP-compliant database of the inspection results.
- West Yost will provide MACP manhole condition assessment results.
- West Yost will provide GIS geodatabase of pipeline and manhole and associated attributes.
- West Yost will provide pump station condition assessment summary sheets.
- West Yost will provide Draft and Final Condition Assessment Summary TMs.

Task 2. CWSRF Funding Support

Task 2.1 Quarterly Reporting during Planning Phase

West Yost will prepare and submit quarterly DFA progress reports during the initial Phase 1 evaluation period within forty-five (45) days following the end of the calendar quarter. A total of two (2) reports will be prepared (Quarter 2 and Quarter 3 of 2023). The reports will provide a brief description of activities that have occurred, milestones achieved, description of anticipated activities in the following quarter, monitoring results (if applicable), and any problems encountered in the performance of the services during the applicable reporting period. Reporting will be prepared even if no project-related activities occurred during the reporting period. All project activities and expenditures will be documented, including work performed by contractors. A draft of each quarterly report will be submitted to the District for review and comment before finalizing and submitting to DFA by the required deadline.

Task 2.2 CWSRF Coordination

West Yost will coordinate with CWSRF staff regarding the modifications to the scope and budget for the grant application. This will include discussions regarding opportunities for expanding the budget to allow for completion of the Intertie Inspection and Disinfection System analysis.

Task 2 Deliverables

- West Yost will prepare two (2) Quarterly Progress Reports during the planning phase per State Water Board Funding Requirements (Draft and Final).

Task 3. Project Management

West Yost will perform project management and QA/QC for all tasks described above. This task includes monitoring the progress, budget, and schedule of individual tasks and coordinating completion of work products.

West Yost will facilitate a kickoff meeting and progress meetings with District staff to review inspection work plans, progress, and results. Meetings will be held via Microsoft Teams or similar software during the execution of this project.

Task 3 Assumptions

- Progress meetings between West Yost and District staff will be conducted via Microsoft Teams.
- Project duration will be approximately five (5) months.

Task 3 Deliverables

- West Yost will provide status meeting agendas and notes via email.
- West Yost will provide monthly project summary invoices.

PROJECT BUDGET

West Yost's proposed level of effort and budget for each of the tasks described above is shown in Table 2. West Yost will perform the scope of services described above on a time-and-expenses basis, at the billing rates set forth in West Yost's attached 2023 Billing Rate Schedule, with a not-to-exceed budget of \$326,000. Any additional services not included in this scope of services will be performed only after receiving written authorization and a corresponding budget augmentation.

Table 2. Estimated Project Hours and Budget		
Task	Level of Effort, hours	Estimated Budget, dollars
Task 1. Collection System Condition Assessment	276	300,700
Task 2. CWSRF Funding Support	40	10,100
Task 3. Project Management	52	15,200
Total Project Hours and Budget	368	\$326,000

SCHEDULE

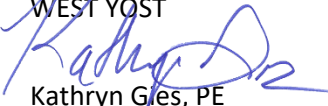
West Yost anticipates the completion of Phase 1 within the following timeline in Table 3.

Table 3. Estimated Project Completion of Phase 1	
Task	Completion Date
Task 1. Collection System Condition Assessment	<ul style="list-style-type: none">Field work completed by end of September 2023TM completed by end of October 2023
Task 2. CWSRF Funding Support	<ul style="list-style-type: none">Through December 2023

Following completion of the TM, we will have additional information from the State that we can use to discuss the Phase 2 scope of services and schedule. We currently anticipate being able to meet the May 2024 deadline for completion of the Sewer Repair and Rehabilitation Project Feasibility Study/Preliminary Engineer's Report.

Thank you for providing West Yost the opportunity to be of service to the District. We look forward to working with you on this important project. Please call if you have any questions or require additional information.

Sincerely,
WEST YOST



Kathryn Gies, PE
Engineering Manager
RCE #65022

Attachment A: West Yost 2023 Billing Rate Schedule

Attachment A

West Yost 2023 Billing Rate Schedule

2023 Billing Rate Schedule

(Effective January 1, 2023 through December 31, 2023)*



POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	\$338
Engineer/Scientist/Geologist Manager I / II	\$319 / \$334
Principal Engineer/Scientist/Geologist I / II	\$288 / \$307
Senior Engineer/Scientist/Geologist I / II	\$259 / \$272
Associate Engineer/Scientist/Geologist I / II	\$215 / \$231
Engineer/Scientist/Geologist I / II	\$173 / \$201
Engineering Aide	\$101
Field Monitoring Services	\$125
Administrative I / II / III / IV	\$92 / \$115 / \$138 / \$152
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	\$332 / \$334
Principal Tech Specialist I / II	\$305 / \$315
Senior Tech Specialist I / II	\$279 / \$291
Senior GIS Analyst	\$252
GIS Analyst	\$239
Technical Specialist I / II / III / IV	\$178 / \$203 / \$228 / \$254
Technical Analyst I / II	\$128 / \$152
Technical Analyst Intern	\$103
Cross-Connection Control Specialist I / II / III / IV	\$133 / \$144 / \$162 / \$180
CAD Manager	\$201
CAD Designer I / II	\$156 / \$176
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	\$322
Construction Manager I / II / III / IV	\$197 / \$211 / \$224 / \$283
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$172 / \$191 / \$213 / \$221
Apprentice Inspector	\$156
CM Administrative I / II	\$83 / \$112
Field Services	\$221

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- The Federal Mileage Rate will be used for mileage charges and will be based on the Federal Mileage Rate applicable to when the mileage costs were incurred. Travel other than mileage will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

2023 Billing Rate Schedule

(Effective January 1, 2023 through December 31, 2023)*



Equipment Charges

EQUIPMENT	BILLING RATES
2" Purge Pump & Control Box	\$300 / day
Aquacalc / Pygmy or AA Flow Meter	\$28 / day
Emergency SCADA System	\$35 / day
Field Vehicles (Groundwater)	\$1 / mile
Gas Detector	\$80 / day
Generator	\$60 / day
Hydrant Pressure Gauge	\$10 / day
Hydrant Pressure Recorder, Impulse (Transient)	\$55 / day
Hydrant Pressure Recorder, Standard	\$40 / day
Low Flow Pump Back Pack	\$135 / day
Low Flow Pump Controller	\$200 / day
Powers Water Level Meter	\$32 / day
Precision Water Level Meter 300ft	\$30 / day
Precision Water Level Meter 500ft	\$40 / day
Precision Water Level Meter 700ft	\$45 / day
QED Sample Pro Bladder Pump	\$65 / day
Stainless Steel Wire per foot	\$0.03 / day
Storage Tank	\$20 / day
Sump Pump	\$24 / day
Transducer Components (per installation)	\$23 / day
Trimble GPS – Geo 7x	\$220 / day
Tube Length Counter	\$22 / day
Turbidity Meter	\$30 / day
Vehicle (Construction Management)	\$10 / hour
Water Flow Probe Meter	\$20 / day
Water Quality Meter	\$50 / day
Water Quality Multimeter	\$185 / day
Well Sounder	\$30 / day