

## **STAFF REPORT**

**To:** Coastside County Water District Board of Directors

**From:** Mary Rogren, General Manager

**Agenda:** August 12, 2025

**Date:** August 8, 2025

**Agenda Title:** Approval of Professional Services Agreement with EKI Environment and Water, Inc. for Geotechnical Investigation and Predesign Study for the Highway 92 Pipeline Project – Phase 2

---

### **Recommendation/Motion:**

**Authorize the General Manager to enter into a professional service agreement with EKI Environment and Water, Inc. for a geotechnical investigation and predesign study for the Highway 92 Pipeline Project – Phase 2 for a not-to-exceed amount of \$85,500.**

### **Background:**

In July 2025, the District completed the Highway 92 Emergency Pipeline Replacement Project which included the installation of 4,170 linear feet of 10-inch and 6-inch ductile iron pipe and 1,480 linear feet of 12-inch high-density polyethylene pipe (HDPE) by horizontal directional drilling under three creek crossings, reconnection or replacement of water services connections, installation of new hydrants, valves and appurtenances.

This new pipeline replaced a section of an existing 12-inch welded steel potable pipeline that was damaged during the severe storm events of December 2022 and January 2023 located east of Pastorino's Pumpkin Farm and La Nebbie winery. Sections of the existing 12-inch pipeline remain to the west and east of the completed Emergency Pipeline Project. Given the age of the existing pipeline (installed in 1947), the District would like to evaluate the rehabilitation or replacement of the remaining pipeline (3,500 linear feet to the west and 3,050 linear feet to the east.)

This project consists of two tasks:

- 1) Geotechnical consulting work by EKI Environment and Water, Inc.'s ("EKI") subconsultant, Geo-Logics Associates to perform a geotechnical investigation to explore subsurface conditions for each of the two creek crossings along the proposed

alignment and to provide geotechnical recommendations for the design and construction of the pipeline.

- 2) Predesign study conducted by EKI to evaluate alternatives for replacing or rehabilitating the existing 12-inch welded steel pipeline along the Phase 2 project alignment.

EKI will prepare a technical memorandum summarizing the results of the evaluation.

EKI provided engineering design services and engineering during construction on the recently completed Highway 92 Emergency Pipeline Replacement Project. Given their exemplary work in assisting the District on the recently completed Highway 92 project as well as their knowledge of the Highway 92 location and its challenges, staff recommends utilizing EKI to assist the District on the predesign work for the next phase of the project.

**Fiscal Impact: \$85,500.**

Attachment: See Exhibit A for EKI's Proposal.

6 August 2025

Ms. Mary Rogren  
General Manager  
Coastside County Water District  
766 Main Street  
Half Moon Bay, California 94019

Subject: Proposal for Geotechnical Investigation and Predesign Study for the Highway 92 Pipeline Project – Phase 2  
Coastside County Water District, Half Moon Bay, California  
(EKI B80108.50)

Dear Ms. Rogren:

EKI Environment & Water, Inc. (EKI) is pleased to submit this proposal to Coastside County Water District (District) for Geotechnical Investigation and Predesign Study for the Highway 92 Pipeline Project – Phase 2 (Phase 2 Project).

## **BACKGROUND AND PROJECT UNDERSTANDING**

An existing 12-inch welded steel (WS) potable water pipeline runs along the south side of Highway 92 (San Mateo Road) adjacent to Pilarcitos Creek in a 10-foot-wide easement. The existing pipeline crosses Pilarcitos Creek or its tributaries in several locations. Severe storm events of December 2022 and January 2023 overflowed the banks of Pilarcitos Creek and its tributaries, causing major bank slides and erosions. In response to the imminent threat to portions of the existing 12-inch WS pipeline, the District recently completed the Highway 92 Emergency Pipeline Replacement Project (Emergency Project). The Emergency Project included the installation of approximately 4,170 linear feet (LF) of 10-inch and 6-inch ductile iron pipe (DIP), 1480 LF of 12-inch high-density polyethylene (HDPE) by horizontal direction drilling (HDD) under three creek crossings, reconnection or replacement of water service connections, installation of new hydrant assemblies, and the installation of valves and other appurtenances.

Sections of the existing 12-inch WS pipeline remain to the west and east of the completed Emergency Project along Highway 92 (see Figure 1 attached). EKI understands that the District would like to evaluate the rehabilitation or replacement of these remaining sections. On the west side of the completed Emergency Project, the Phase 2 Project will replace approximately 3,500 LF of 12-inch WS pipe between the newly constructed 10-inch DIP at the Pastorino Pumpkin Farm to the existing 12-inch DIP at the western corner of Repetto's Flow Field. On the east side, the Phase 2 Project will replace approximately 3,050 LF of 12-inch WS pipe from the end of the Emergency Project to the furthest east water service connection across from Wherry Road. The Phase 2 Project will include the crossing of Apanolio Creek on the west section and Nuff Creek on the east section.

## **SCOPE OF WORK**

EKI proposes the following tasks as part of this scope of work.

### **Task 1: Geotechnical Investigation**

EKI's subconsultant Geo-Logic Associates will perform a geotechnical investigation to explore subsurface conditions for each of the two creek crossings along the proposed alignment for the Project and to provide geotechnical recommendations for the design and construction of the pipeline.

The geotechnical investigation is anticipated to include the following tasks:

- Review pertinent geological information for the area.
- Site visit to observe existing site conditions and mark proposed boring locations.
- Notify USA for underground utility clearance.
- Obtain a subsurface drilling permit from the County of San Mateo Environmental Health Services Division (SMCEHS).
- Subcontract with a private underground services locator to check the proposed boring locations for the presence of underground utilities.
- Coordinate subsurface exploration with the District, City, County, and EKI.
- Conduct subsurface exploration by means of two (2) exploratory borings to depths of about 50 feet below ground surface, or practical refuse, using a truck-mounted drill rig (see Exhibit 1 – proposed Borings DH-1, DH-2).
- Perform laboratory testing on selected soil samples obtained from the borings to evaluate pertinent engineering properties.
- Perform engineering analysis on the data collected from boring DH-1 and DH-2 and data collected under a separate scope of work from borings DH-9 to DH-11.
- Prepare a geotechnical investigation report corresponding to the Project.

EKI will also provide project management services, including budget tracking, invoicing, staff and consultant management, and review. The EKI team will use the results of the geotechnical investigation to assist in the detailed design of the proposed Project as part of a future scope of work.

### **Deliverables:**

- Draft and final Geotechnical Reports in PDF format.
- Subsurface drilling permit.

### **Assumptions:**

- Right-of-entry to private properties for field exploration work will be provided by the District. Information will be provided to assist the District in obtaining these agreements.

- Cost is based on conventional geotechnical subsurface exploration with truck or track-mounted equipment, and no special requirements or procedures.
- Field work will be performed during business hours Monday-Friday, between 7 am-6 pm
- Soil cuttings will be spread in vacant areas near the drilling sites. Additional fees will be required if soil cuttings are to be handled differently.
- No work plan is required for field work. Additional fees will be required if a work plan is required.
- EKI will provide oversight and review the findings of the investigation as they pertain to the design of the Project.

## **Task 2: Predesign Study**

EKI will evaluate alternatives for replacing or rehabilitating the existing 12-inch WS pipeline along the Phase 2 Project alignment other than at the creek crossings. At the two crossings the existing pipe is assumed to be replaced by HDD under the creek. Alternatives for the remaining sections are anticipated to include:

1. Replacing the 12-inch WS pipe by open trench construction methods.
2. Replacing the 12-inch WS pipe by HDD construction methods.
3. Pipebursting the 12-inch WS with new 10-inch HDPE pipe.
4. Lining the 12-inch WS pipe with Flexible Fabric Reinforced Pipe Liner (e.g., Primus Line).
5. Lining the 12-inch WS pipe with fully structural, pressure-rated cured-in-place pipe (CIPP) (e.g., Altra10x [formerly known as Aqua-Pipe]).

As an initial effort, EKI will confirm the feasibility of each alternative and identify any fatal flaws. For alternatives retained for detailed evaluation, EKI will:

- Review and refine the existing basemap to include identified utilities;
- Prepare conceptual alignments and delineate staging areas for the HDD creek crossings;
- Prepare conceptual alignments and delineate staging areas for each retained alternative;
- Prepare conceptual temporary bypass plans that for alternatives that will remove the existing pipe from service over an extended period;
- Compare relative advantages and disadvantages with respect to criteria including potential risks, anticipated construction duration, construction impacts, permitting requirements, temporary and permanent easement requirements, and future operation and maintenance requirements;
- Prepare conceptual opinions of probable costs for the retained alternatives; and,
- Provide recommendations for next steps.

A combination of the retained alternatives may be recommended based on detailed analysis and variable existing conditions. EKI will conduct a workshop at the beginning of the project to review and confirm alternatives to be evaluated and a meeting to present preliminary findings to the District. Based on feedback from the District, EKI will prepare a technical memorandum that summarizes the results of the evaluation and District preferences.

Deliverables:

- Draft and final technical memorandum in electronic format (Word and PDF).

Assumptions:

- EKI will participate in a site walk and workshop with the District to review potential alternatives to evaluate at the beginning of the project.
- EKI will evaluate up to five (5) alternatives for replacing or rehabilitating the pipeline.
- EKI will present preliminary findings to District staff over a teleconference prior to submitting the draft technical memorandum.
- EKI will rely upon existing topographic survey data and aerials. No additional topographic surveying will be completed as part of this scope of work.
- Detailed design, permitting and property acquisition support, bid support, and construction services for the Phase 2 Project would be completed under a separate scope of work.

**PROJECT SCHEDULE**

The EKI team is prepared to commence work immediately upon execution of this task order. We anticipate that drilling and laboratory testing should be completed in three (3) weeks of obtaining the necessary permitting. The geotechnical report will be completed in three (3) weeks after laboratory testing. Evaluation and preparation of the predesign study draft technical memorandum will be completed within two (2) months of the notice to proceed and the final technical memorandum will be completed within three (3) weeks of receipt of comments on the draft from the District.

**COMPENSATION FOR CONSULTING SERVICES**

We propose that compensation for consulting services by EKI be on a time and expense reimbursement basis in accordance with our attached current Schedule of Charges, dated 2 January 2025. Based on the proposed Scope of Work described above, we propose a not-to-exceed budget of \$85,500 for the completion of Tasks 1 and 2 as shown by task in Table 1, below, and detailed in Table 2, attached.

**Table 1. Proposed Cost by Tasks**

Task	Description	Task Total
1	Geotechnical Investigation	\$38,000
2	Predesign Study	\$47,500
Total Estimated Budget		\$85,500

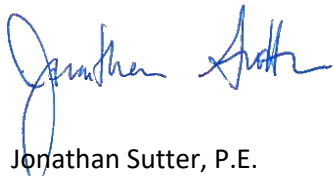
**TERMS AND CONDITIONS**

Other than the scope of work, budget, and schedule herein, the work will be performed in accordance with our current Professional Services Agreement.

Thank you for the opportunity to work with the District on this project. Please contact Jonathan Sutter at 650-292-9100 with any questions.

Very truly yours,

EKI ENVIRONMENT & WATER, INC.



Jonathan Sutter, P.E.  
Principal Engineer

Attachments

Figure 1 – Conceptual Map

Exhibit 1 – Proposed Boring Locations

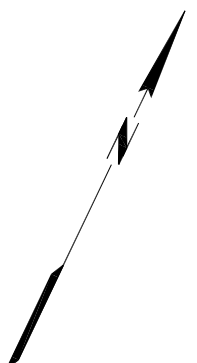
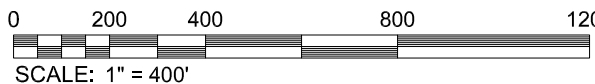
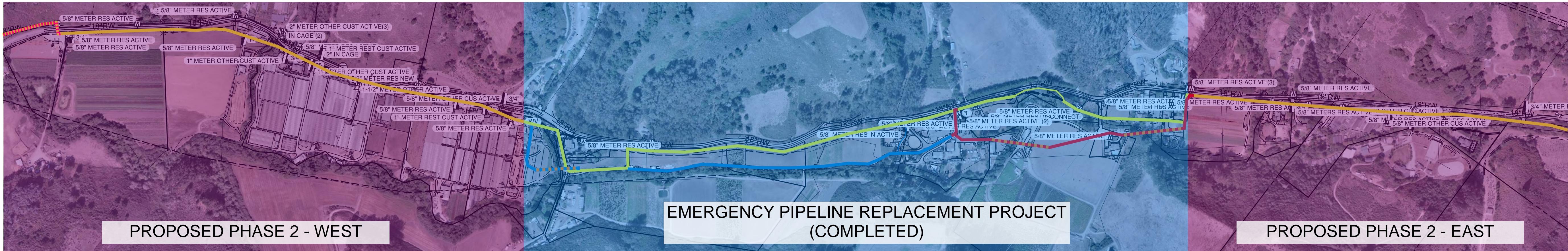
Table 2 – Budget Estimate for Proposed Scope of Work

EKI Schedule of Charges, dated 2 January 2025




# CONCEPTUAL MAP

NOT FOR CONSTRUCTION



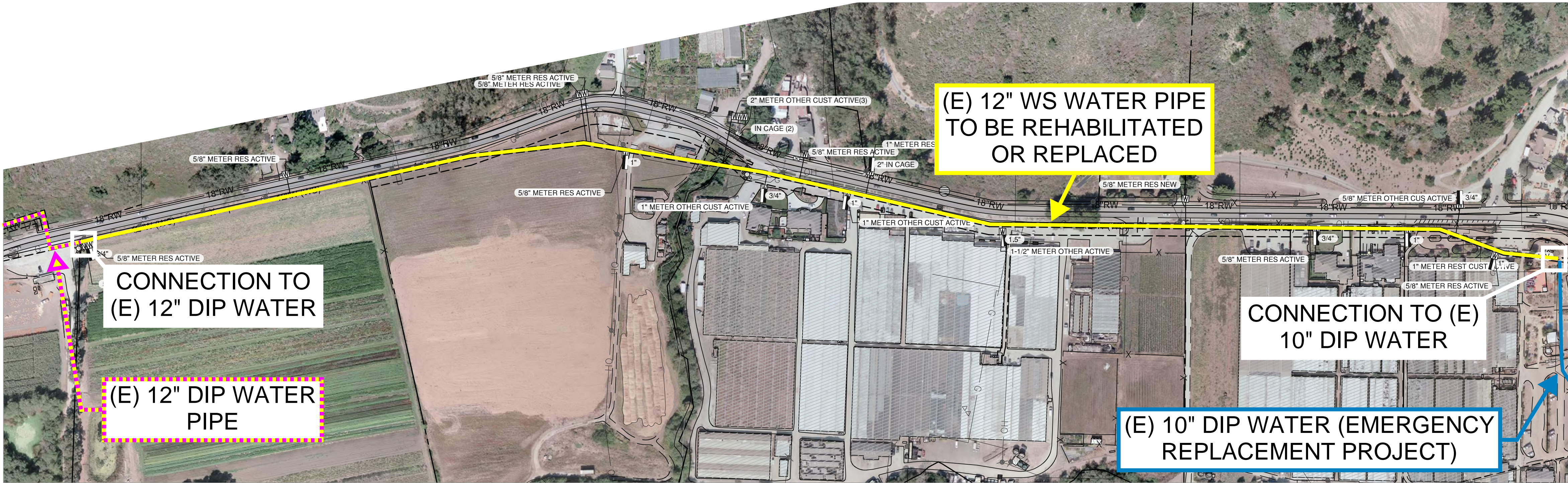
**HIGHWAY 92 POTABLE WATER PIPELINE  
PROJECT  
COASTSIDE COUNTY WATER DISTRICT  
CONCEPTUAL OVERVIEW MAP**

SHEET NUMBER		DATE:				
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. 0  1"		SCALE:				
		DRAWN:				
		DESIGNED:				
		APPROVED:				
		REV	DESCRIPTION	APPROVED	DATE	

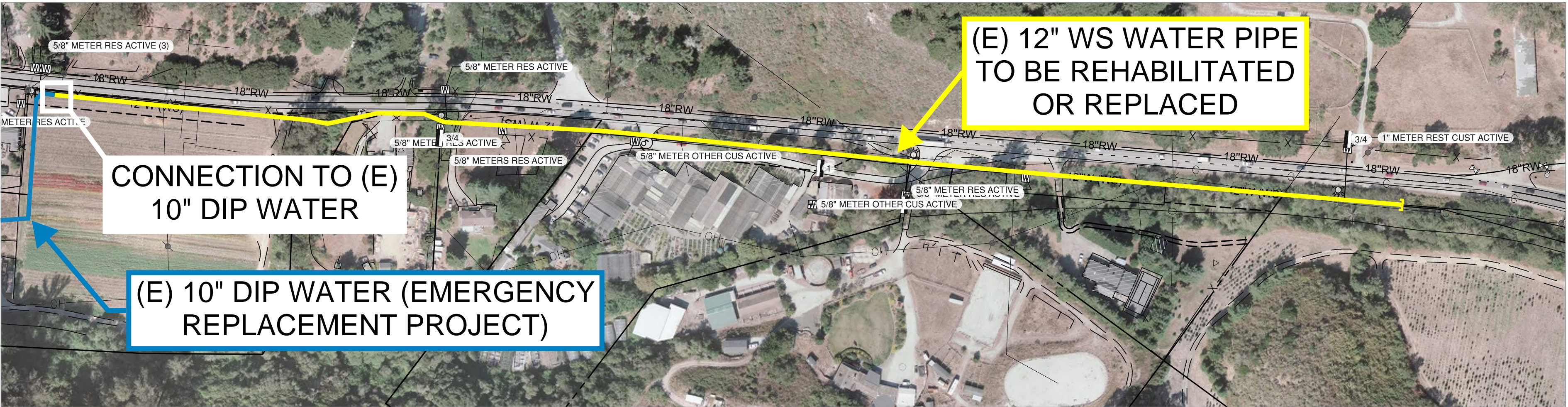
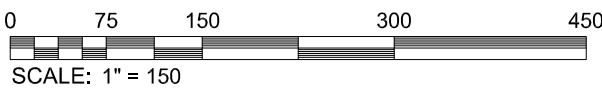


Path: G:\EKL\_CONSTRUCTION\DWGS\B0108.01 (CIP PROJECTS)\Hwy 92 File: Hwy92V1.dwg Plot Date: March 22, 2023 - 3:43 PM CADD User: Jordan Gans

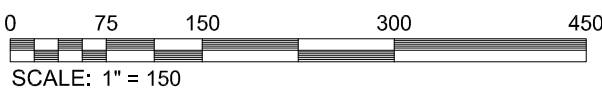
CONCEPTUAL MAP  
NOT FOR CONSTRUCTION



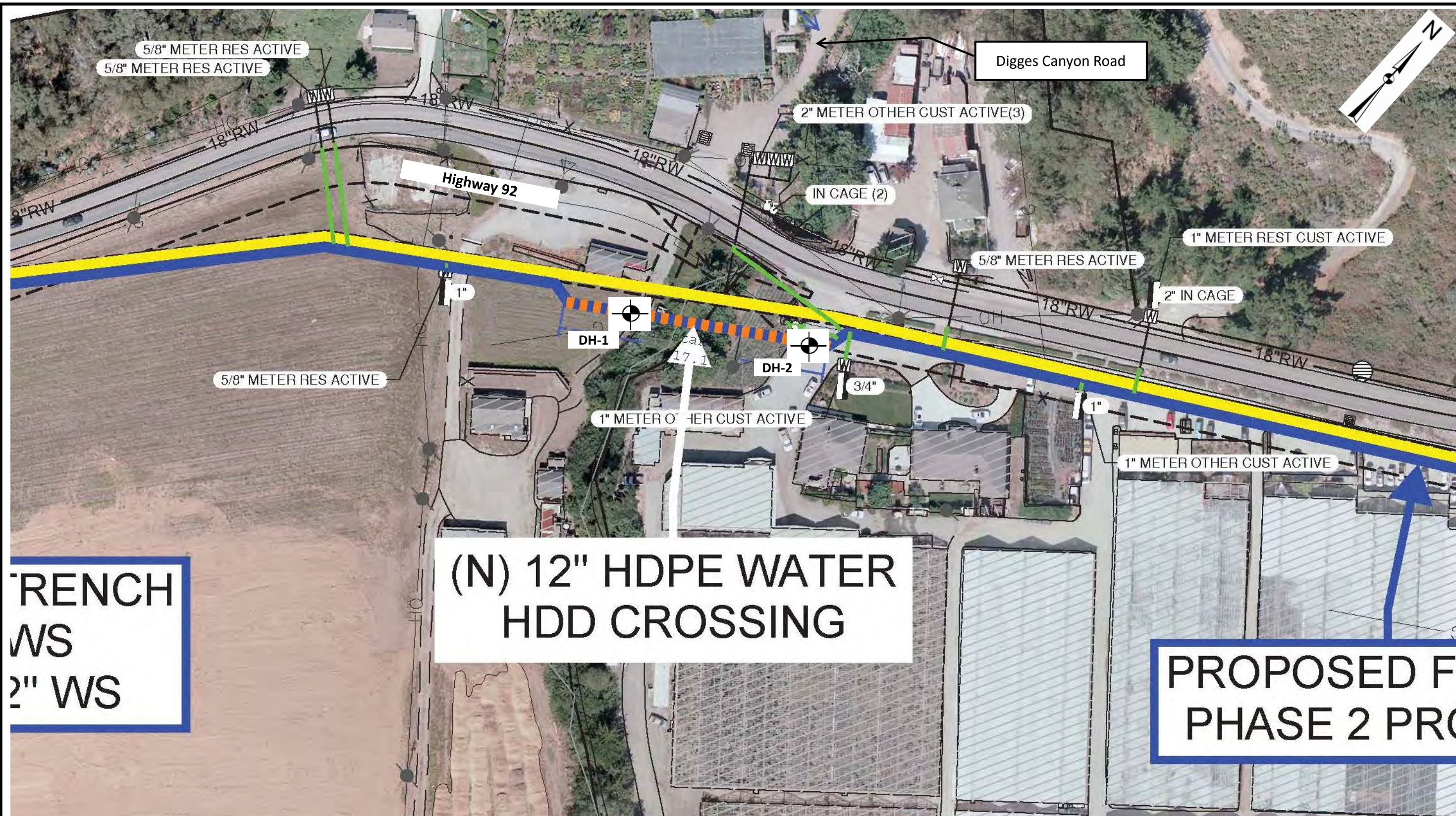
PHASE 2 - WEST




PHASE 2 - EAST







**Legend**


 Proposed exploratory boring

**Geo-Logic**  
 ASSOCIATES

6300 San Ignacio Avenue,  
 Suite A  
 San Jose, California 95119  
 Phone (408) 778-2818

Drafted By:

Date: February 2023

Checked By:

Revision:

**PROPOSED BORINGS @ CROSSING SITE 1**  
 Coastside County Water District Highway 92  
 Water Line Replacement Project  
 San Mateo County, California

**FIGURE**  
 1  
**PROJECT**  
 PA23.1005.PR



Table 2. Estimated Fee - Geotechnical Investigation and Predesign Study for Highway 92 Pipeline Project - Phase 2

Coastside County Water District, Half Moon Bay, California  
(EKI B80108.50)

TASKS				LABOR COST (\$)	SUBS	OTHER DIRECT COSTS				MARKUP ON DIRECT COSTS	TOTAL DIRECT COSTS	TOTAL	
					Geo-Logic Associates	UNIT	QUANTITY	UNIT COST	TOTAL COST			TASK BUDGET TOTALS (\$)	ROUNDED BUDGET TOTALS (\$)
	G5 Engineer	Jordan Gans, P.E.	Jonathan Sutter, P.E.										
	\$170	\$234	\$343						10%				
<b>Task 1 - Geotechnical Investigation</b>													
Project Management and Communication		4	2	\$1,622								\$1,622	
Geotechnical Investigation		4	2	\$1,622	\$ 31,505					\$3,151	\$34,656	\$36,278	
Communications Fee (EKI Labor Only)							4%	\$3,244			\$130	\$130	
<b>Task 1 Subtotal</b>		8	4	\$3,244	\$31,505					\$3,151	\$34,785	\$38,029	\$38,000
<b>Task 2 - Predesign Study</b>													
Project Management		4	2	\$1,622								\$1,622	
Utility Research and Basemap Refinement	8	4	1	\$2,639								\$2,639	
Site visit and Alternatives Workshop	4	4	4	\$2,988								\$2,988	
Develop Conceptual Pipeline Rehabilitation or Replacement Alternatives (Incl. Temp Bypass Plan)	24	12	8	\$9,632								\$9,632	
Develop Conceptual-Level Cost Estimates	12	10	4	\$5,752								\$5,752	
Prepare Multi-Criteria Alternative Evaluation	16	12	6	\$7,586								\$7,586	
Conference Call to Present Preliminary Findings		4	2	\$1,622								\$1,622	
Prepare Draft and Final Technical Memorandum	24	24	12	\$13,812								\$13,812	
Communications Fee (EKI Labor Only)							4%	\$45,653			\$1,826	\$1,826	
<b>Task 2 Subtotal</b>	88	74	39	\$45,653							\$1,826	\$47,479	\$47,500
<b>TOTALS:</b>	88	82	43	\$48,897	\$31,505					\$3,151	\$36,611	\$85,508	\$85,500



**Proposal/Agreement Date: 6 August 2025**

**EKI Proposal/Project # B80108.50**

**SCHEDULE OF CHARGES FOR EKI ENVIRONMENT & WATER, INC.**

**2 January 2025**

<b><u>Personnel Classification</u></b>	<b><u>Hourly Rate</u></b>
Officer and Chief Engineer-Scientist	355
Principal Engineer-Scientist	343
Supervising I, Engineer-Scientist	333
Supervising II, Engineer-Scientist	319
Senior I, Engineer-Scientist	306
Senior II, Engineer-Scientist	295
Associate I, Engineer-Scientist	283
Associate II, Engineer-Scientist	267
Engineer-Scientist, Grade 1	248
Engineer-Scientist, Grade 2	234
Engineer-Scientist, Grade 3	215
Engineer-Scientist, Grade 4	193
Engineer-Scientist, Grade 5	170
Engineer-Scientist, Grade 6	148
Project Assistant	139
Technician	133
Senior GIS / Database Analyst	175
CADD Operator / GIS Analyst	152
Senior Administrative Assistant	167
Administrative Assistant	132
Secretary	111

**Direct Expenses**

Reimbursement for direct expenses, as listed below, incurred in connection with the work will be at cost plus ten percent (10%) for items such as:

- a. Maps, photographs, reproductions, printing, equipment rental, and special supplies related to the work.
- b. Consultants, soils engineers, surveyors, drillers, laboratories, and contractors.
- c. Rented vehicles, local public transportation and taxis, travel, and subsistence.
- d. Special fees, insurance, permits, and licenses applicable to the work.
- e. Outside computer processing, computation, and proprietary programs purchased for the work.

A Communication charge for e-mail access, web conferencing, cellphone calls, messaging and data access, file sharing, local and long distance telephone calls and conferences, facsimile transmittals, standard delivery U.S. postage, and incidental in-house copying will be charged at a rate of 4% of labor charges. Large volume copying of project documents, e.g., bound reports for distribution or project-specific reference files, will be charged as a project expense as described above.

Reimbursement for company-owned automobiles, except trucks and four-wheel drive vehicles, used in connection with the work will be at the rate of sixty cents (\$0.60) per mile. The rate for company-owned trucks and four-wheel drive vehicles will be seventy-five cents (\$0.75) per mile. There will be an additional charge of thirty dollars (\$30.00) per day for vehicles used for field work. Reimbursement for use of personal vehicles will be at the federally allowed rate plus ten percent (10%).

CADD and other specialized software computer time will be charged at twenty dollars (\$20.00) per hour. In-house material and equipment charges will be in accordance with the current rate schedule or special quotation. Excise taxes, if any, will be added as a direct expense.

Rate for professional staff for legal proceedings or as expert witnesses will be at a rate of one and one-half times the Hourly Rates specified above.

The foregoing Schedule of Charges is incorporated into the Agreement for the Services of EKI Environment & Water, Inc. and may be updated annually.