

November 1, 2019

Mr. Christopher Carey, P.E.  
Eastern Municipal Water District  
2270 Trumble Road  
Perris, CA 92570

**Subject: Proposal for 30-Inch Brackish Water Pipeline Design in Sherman Road**

Dear Mr. Carey,

Thank you for the opportunity to present our proposal to assist the District by providing engineering services for the 30-Inch Brackish Water Transmission Pipeline Design in Sherman Road. We have a comprehensive understanding of the District's needs for this project based on the information you provided. The attached proposal includes our understanding and approach to the project, proposed scope of work, schedule, and our estimated level of effort.

Please feel free to call or email me at 949-373-8313/bohlund@dudek.com or Neil Harper at 949-373-8316/nharper@dudek.com if you have questions regarding our proposal. We look forward to getting started.

Sincerely,



Bob Ohlund, PE  
Vice President

# 1. Project Background and Objective

Recently an alignment alternatives evaluation (CDM-Smith) was conducted on the District's brackish water conveyance system which evaluated alternative alignments for several reaches of this system to relieve a bottleneck due to the recently completed District Well No.'s 93, 94, 95, and 96. The alignment evaluation concluded with several recommended upgrades on the brackish water conveyance system. One of the recommendations was to construct a 30-inch parallel pipeline approximately 5,300 feet in length within Sherman Road from Ellis Avenue to Mapes Road. Connections are anticipated to be made to the existing 24-inch PVC brackish water transmission mains in both Ellis Avenue to Mapes Road.

The District would like to advance this project by retaining a consultant to prepare the preliminary and final designs and provide services during bidding for the 5,300 lineal foot 30-inch pipeline within Sherman Road.

## 2. Scope of Work

The following summarizes the scope of work tasks required for the preparation of the preliminary and final designs and services during bidding for the 5,300 lineal foot 30-inch pipeline within Sherman Road.

### Task 1 Project Administration/Management

As per the District's request, Dudek will conduct the following meetings and field walks:

- Kick-off meeting
- 30% preliminary design review meeting and field walk
- 75% design review workshop and field walk

In addition, Dudek will prepare meeting agendas, presentations, and minutes for each meeting. Agendas and presentations will be provided to the District (3) days in advance of the meeting/workshop. Meeting/workshop minutes will be provided to the District within (5) days of the meeting/workshop. In addition to weekly communications by phone and e-mail, project administration will also include preparation and maintenance of the project schedule and monthly reports that accompany our invoices.

Bob Ohlund will provide quality control reviews and feedback to the design team on the various project submittals (30% plans and basis of design memo, 75% submittal and 100% submittal) prior to submission of these deliverables to the District.

### Task 2 Preliminary and Final Designs

Dudek will prepare preliminary and final designs for the 5,300 lineal foot 30-inch pipeline that will include a basis of design memo, construction drawings, contract documents using the District's Front End Documents, Custom Detailed Provisions (including any custom specifications, brackish water pipeline dewatering strategy/constraints, etc.), and Appendices. The proposed submittals are as follows:

- 2.1 Basis of Design Memo & 30 Percent Plans.** Dudek will acquire and review available as-built utility drawings and prepare basefiles utilizing a topographic survey furnished by the District. We will prepare a brief basis of design (BOD) memo that establishes the design criteria for the project including: pipeline material, separation standards, valves, pipeline appurtenances, geotechnical requirements, trench section, pavement repair/rehabilitation, etcetera. Additional discussion to be contained in the BOD

memo will also include the reasoning and rationale for selecting the recommended alignment, and other alignments considered on a plan/figure.

The design memo will also include permitting requirements (encroachment permit forms, traffic control requirements, pavement repair and rehabilitation requirements, etc.), an anticipated construction schedule, an engineer's opinion of probable construction cost, the 30-percent design drawings (horizontal alignment only with vertical profile that includes only the existing surface elevation along the alignment, location of existing utilities, and recommended connection point/elevation), and a potholing exhibit.

***Submittal: Five (5) hardcopies of the Basis of Design Memo including all drawings and exhibits, and the AutoCAD, word.docx, excel, and PDF versions of these Basis of Design Memo contents/documents.***

- 2.2 75 Percent Submittal.** This submittal will utilize the 30 percent drawings and District comments on the 30 percent plans and field walk. The 75 percent drawings shall include completed plan and profile drawings and will include the majority of the details.

The Contract Documents package will include the Cover Sheet, Table of Contents, Notice Inviting Bids, Walk-Thru Map, Bidding Sheets, List of Permits, Shutdown Schedule, Special Conditions, Supplemental Special Conditions, Contract Drawings List, Schedule of Values, Custom Specifications, etc. The District will provide the other Front End Documents.

An engineer's estimate of probable construction cost will also be prepared and included in this submittal.

***Submittal: One (1) full size and (8) 11" x 17" sets of plans, specifications, and cost estimate, and the AutoCAD, word.docx, excel, and PDF versions of these documents.***

- 2.3 100 Percent Submittal.** After the District completes a review of the 75 percent submittal, Dudek will be instructed to prepare the 100 percent Contract Documents. The 100 percent Contract Documents will incorporate and/or address all District comments from the 75 percent review, field walk, and design workshop. The 100 percent Contract Documents shall be considered complete and be a Draft Final submittal including all completed plan and profile drawings and details.

***Submittal: One (1) full size sets of plans, (1) stamped/signed digital version of the specifications, and cost estimate, and the AutoCAD, word.docx, excel, and PDF versions of these documents.***

- 2.4 Final Contract Documents.** After the District completes a review of the 100 percent submittal, Dudek will be instructed to prepare Final Contract Documents. The Final Contract Documents will incorporate and/or address all District comments from the 100 percent review. The Final Contract Documents shall be stamped and signed construction plans and digital specifications for final publication by the District.

***Submittal: One (1) full size set of stamped and signed reproducible plans (Mylar cover sheet and all other drawings in in bond paper), (1) set of 11"x17" plans, (1) stamped/signed digital version of the specifications, (1) Class I cost estimate, and the AutoCAD, word.docx, excel, and PDF versions of these documents.***

## Task 3 Bidding Phase Services

During the bidding period, Dudek will assist with providing information and clarification of the Contract Documents to prospective bidders as requested. Dudek assumes up to (2) addenda will be required during the bid process

and will incorporate this scope and fee into the proposal. Dudek will attend and participate in an on-site pre-bid meeting.

### 3. Schedule

The following durations are anticipated to prepare the various submittals:

- A. Design Memo and 30% Drawings – 3 weeks (after receipt of existing utilities and survey)
- B. 75% Submittal – 4 weeks
- C. 100% Submittal – 3 weeks
- D. Final Submittal – 2 weeks

Assuming it will take 3 weeks to receive the existing utilities and 2 week District reviews (3 total reviews) for each of the non-Final submittals, the project is anticipated to be ready for advertisement 21 weeks after receipt of the notice-to-proceed.

### 4. Clarifications

- A. The District will provide the required topographic survey for preparation of the pipeline plans and provide the geotechnical report for our information and use during design.
- B. Potholing will be provided by the District. Dudek will prepare a potholing exhibit showing the proposed pothole locations and coordinate with the District on the locations.
- C. It is assumed the District will handle any permitting and coordination with jurisdictional agencies. Dudek will coordinate with the District as needed to incorporate the survey, geotechnical, potholing, CEQA, and/or other permitting requirements into the design documents.
- D. We have assumed preparing 1" = 40-ft horizontal scale for the plan and profile drawings.
- E. A total of (12) drawings are budgeted (3 Title/General Notes, (7) plan and profile, and (2) detail)

### 5. Fee Estimate

Dudek proposes to complete the base scope of services for a not-to-exceed fee of \$93,630.00. A breakdown of the fee by task is presented in the subsequent table.