
File #: 2022-2570

Agenda Date: 10/26/2022

Agenda Item No: 10.

FROM: James D. Herberg, General Manager
Originator: Kathy Millea, Director of Engineering

SUBJECT:

GREENVILLE TRUNK IMPROVEMENTS, PROJECT NO. 1-24

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Professional Design Services Agreement with Brown and Caldwell to provide engineering services for Greenville Trunk Improvements, Project No. 1-24, for an amount not to exceed \$4,730,000; and
- B. Approve a contingency of \$473,000 (10%).

BACKGROUND

The Greenville Trunk sewer was originally constructed in the city of Santa Ana in 1952. In 1959, a portion of the sewer was reconstructed as a siphon to allow for the Santa Ana Gardens Channel storm drains crossing.

The majority of the Greenville Trunk sewer consists of 24-inch and 27-inch vitrified clay pipe. Nearly all manhole structures on the Greenville Trunk sewer are uncoated concrete manholes.

RELEVANT STANDARDS

- Meet or exceed sanitary sewer overflow regulations
- Comply with California Government Code §4526: Select the “best qualified firm” and “negotiate fair and equitable fees”
- Protect OC San assets
- Commitment to safety & reducing risk in all operations

PROBLEM

There are multiple issues associated with the Greenville Trunk sewer, including capacity, condition, oversized siphons, and accessibility issues. The Orange County Sanitation District (OC San) Collections Capacity Evaluation Study identified surcharging in the Greenville Trunk sewer under modeled 2040 peak wet weather flow conditions. Closed-circuit television inspection of the sewer indicates that there are cracks, widespread leaking joints, calcification in the sewer, and corroded

manholes along the trunk line. Furthermore, the siphons are oversized for the current flow conditions which contributes to accumulation of solids in the siphons. Finally, several manholes along the trunk sewer are difficult for Collections staff to access for maintenance, including one that is located under a playground, and another that is adjacent to a fire station, inhibiting fire truck mobility during scheduled siphon maintenance.

PROPOSED SOLUTION

Approve a Professional Design Services Agreement for Greenville Trunk Improvements, Project No. 1-24. This project will upsize the Greenville Trunk sewer, including the replacement of 16,100 linear feet of pipelines, two siphons, air jumpers, and 41 manholes. Construction will require careful coordination with neighbors and businesses to minimize public impact.

TIMING CONCERNS

Delaying the approval of the agreement would delay completion of the project, which would increase the risk that a spill might occur before the work is completed.

RAMIFICATIONS OF NOT TAKING ACTION

Without this project, the capacity deficiencies in the pipeline could result in a sewage spill during wet weather conditions.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

Consultant Selection:

OC San requested and advertised for proposals for the Greenville Trunk Improvements, Project No. 1-24 on March 16, 2022. The following evaluation criteria were described in the Request for Proposals (RFP) and used to determine the most qualified Consultant.

CRITERION	WEIGHT
Project Understanding and Approach	40%
Related Project Experience	30%
Project Team and Staff Qualifications	30%

Five proposals were received on May 24, 2022 and evaluated in accordance with the evaluation process set forth in OC San's Purchasing Ordinance by a pre-selected Evaluation Team consisting of the following OC San staff: CIP Project Manager, Associate Engineer, Engineering Manager, Engineering Supervisor, and a Maintenance Manager. The Evaluation Team also included one non-voting representative from the Contracts Administration Division. The Evaluation Team scored the proposals on the established criteria as summarized in the table below:

	Firm	Approach (Max 40)	Related Experience (Max 30)	Team (Max 30)	Total Score (Max 100)
1	Brown and Caldwell	33	24	25	82
2	Woodard & Curran	25	24	24	73
3	Black & Veatch Corporation	24	19	22	65
4	Atkins North America, Inc.	23	16	20	59
5	GHD, Inc.	24	16	17	57

Based on this scoring, the two highest-scoring firms were shortlisted for interviews on June 20, 2022. Following the interview, each member of the Evaluation Team scored the Consultants based on both the proposals and interviews using the evaluation criteria and weighting described above. Based on the scoring shown below, Brown and Caldwell was selected as the most qualified Consultant.

	Firm	Approach (Max 40)	Related Experience (Max 30)	Team (Max 30)	Total Score (Max 100)
1	Brown and Caldwell	37	25	27	89
2	Woodard & Curran	23	23	19	65

Brown and Caldwell excelled in both the proposal and the interview. Their technical proposal went beyond a general understanding of the Scope of Work and provided specific examples of how the proposed team would efficiently approach unique design challenges of the project. Additionally, the proposal showed that the firm has the appropriate relevant project experience and a well-defined project execution plan regarding the alignment and key decisions needed during the Preliminary Design phase to start the Final Design with a well-defined scope. Brown and Caldwell's interview presentation was notable for the thoughtful structure which was effective in directly and comprehensively addressing the assigned topics, including the CEQA schedule outline and well-defined risk management approach. Brown and Caldwell's performance in the interview confirmed a clear understanding of OC San's expectations and key challenges for each element. Therefore, the Evaluation Team determined that Brown and Caldwell is the most qualified firm to complete the Scope of Work.

Review of Fee Proposal and Negotiations:

Proposals were accompanied by sealed fee proposals. In accordance with OC San's Purchasing Ordinance, the fee proposal of only the highest-ranked firm was opened after approval by the Director of Engineering of the Evaluation Committee's recommendation.

To meet the goals and objectives of the Project, on June 27, 2022, the Evaluation Team began negotiations with Brown and Caldwell to clarify the requirements of the Scope of Work, the assumptions used for the estimated level of effort, and the proposed approach to meet the goals and objectives for the project. Negotiations included multiple meetings, phone calls, and emails to verify assumptions and level of effort, resulting in a \$596,015 decrease in the overall level of effort.

The following table summarizes how the estimated level of effort was revised through the negotiations process.

	Original Fee Proposal	Final Fee Proposal
Number of Drawings	197	157
Total Hours	24,890	20,826
Total Fee	\$5,326,015	\$4,730,000

The Consultant's fringe and overhead costs, which factor into the billing rate, have been substantiated. The contract profit is 5%, which is based on an established formula for OC San's standard design agreements.

Staff has determined that the final negotiated fee is fair and reasonable for the level of effort required for this project and recommends award of the Professional Design Services Agreement to Brown and Caldwell.

Construction Cost Estimate Increase:

OC San staff recently updated the construction cost estimate for this project, which was previously completed in January 2020. The updated cost estimate is substantially higher (at \$33,642,000) than the previous cost estimate (at \$28,461,000). Although the recent construction cost estimate is much higher than the previous cost estimate, staff recommends not requesting additional budget increase to cover the increase in the construction cost until after the Preliminary Design Report for the project is completed. This will allow the Consultant to evaluate potential cost saving ideas and to update the construction cost estimate based on the decisions made during the Preliminary Design phase.

CEQA

The Project is included in the Facilities Master Plan 2020 Program Environmental Impact Report, State Clearinghouse Number 2019070998. If the Consultant proposes to change the sewer alignment as the result of their evaluation during the Preliminary Design phase, the Project may require an Initial Study Mitigated Negative Declaration to be performed.

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Adopted Budget, Fiscal Years 2022-2023 and 2023-2024, Section 8, Page 13) and the budget is sufficient for the recommended action. Although additional budget may be required for an increase in the construction cost estimate, staff recommends waiting until after the Preliminary Design phase of the project to request additional budget.

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

- Professional Design Services Agreement
- Presentation

VP: tk