
File #: 2023-2786

Agenda Date: 2/22/2023

Agenda Item No: 10.

FROM: Robert Thompson, General Manager
Originator: Kathy Millea, Director of Engineering

SUBJECT:

CAD DESIGN MANUAL UPDATE FOR 3D DESIGN, PROJECT NO. PS21-05

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Professional Services Agreement with The Austin Company to provide support services for CAD Design Manual Update for 3D Design, Project No. PS21-05, for a total amount not to exceed \$416,000; and
- B. Approve a contingency of \$41,600 (10%).

BACKGROUND

Orange County Sanitation District (OC San) projects utilize computer-aided design (CAD) software to develop design drawings. These drawings are developed in accordance with OC San's published CAD standards. The current standards are based on two dimensional designs, which were previously the industry standard.

RELEVANT STANDARDS

- Maintain a culture of improving efficiency to reduce the cost to provide the current service level or standard
- Sustain 1, 5, 20-year planning horizons

PROBLEM

OC San's current CAD standards are not applicable for 3D designs, which are becoming increasingly common. OC San's consultants are currently preparing 3D design documents based on their own design standards, which causes inconsistencies between design drawings developed by different consultants and creates additional work by OC San staff to gain CAD compliance.

PROPOSED SOLUTION

Approve a professional services agreement for CAD Design Manual Update for 3D Design, Project No. PS21-05. This project will develop 3D CAD design standards that follow general industry

guidelines, integrate these standards into OC San's current CAD Standards Manual, create automated quality control tools for 3D CAD compliance verification, identify 3D applications that may benefit OC San in the future within the environment of OC San's GIS database, and provide training to OC San CAD staff to perform quality control for CAD compliance.

TIMING CONCERNS

OC San projects using 3D design will continue to rely on consultant's internal standards, which are inconsistent with one another, until OC San 3D CAD standards are published.

RAMIFICATIONS OF NOT TAKING ACTION

OC San projects will continue to be inconsistent with 3D design standards.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

Consultant Selection:

OC San requested and advertised for proposals for CAD Design Manual Update for 3D Design, Project No. PS21-05 on July 21, 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%

Two proposals were received on October 4, 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: Senior Engineer (Project Engineer), Information Technology Manager, and Senior Engineer (Project Manager). The Evaluation Team also included two non-voting representatives: one Supplemental Engineering Services contract employee and one representative from the Contracts Administration Division.

The Evaluation Team scored the two proposals on the established criteria as summarized below:

Proposer	Project Understanding and Approach (Max. 40 Points)	Related Project Experience (Max. 30 Points)	Project Team and Staff Qualifications (Max. 30 Points)	Total Score (Max. 100 Points)
The Austin Company	27	20	18	65
Next Stage Group	23	20	15	58

Both Consultants were shortlisted for interviews on November 8, 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, The Austin Company was selected as the most qualified Consultant.

Proposer	Project Understanding and Approach (Max. 40 Points)	Related Project Experience (Max. 30 Points)	Project Team and Staff Qualifications (Max. 30 Points)	Total Score (Max. 100 Points)
The Austin Company	33	23	24	80
Next Stage Group	12	10	10	32

The selected proposer provided a detailed work execution schedule that showcased their understanding of OC San's project goals of clear 3D CAD standards and an updated 3D CAD manual. The selected proposer also identified areas where the schedule can be improved to create more time for stakeholder workshops. The project manager of the proposed team is the firm's Building Information Management (BIM) Manager to bring their expertise in executing 3D CAD projects. The team also includes engineers from multiple disciplines who bring experience in executing 3D CAD compliance. The selected proposer included two subconsultants to ensure a successful project. The first provides additional experience in creating similar 3D CAD standards for other agencies and the second specializes in training, which will be critical for a successful rollout of the updated CAD Manual.

Review of Fee Proposal and Negotiations:

Proposals were accompanied by sealed fee proposals. In accordance with the 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.

Staff conducted negotiations with The Austin Company 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. Starting on November 19, 2022, the Evaluation Team conducted negotiations. The negotiated fee remained generally the same as the Scope of Work. Changes listed below were already represented in the originally proposed labor hours and fees and were deemed fair and reasonable by OC San staff. The table below summarizes the revised level of effort:

	Original Fee Proposal	Negotiated Fee
Total Hours	2,316	2,316
Total Fee	\$415,873	\$416,000

The Austin Company proposed changes to the Scope of Work in their original proposal as listed below. OC San staff accepted these changes as they were determined to benefit the delivery of the project.

- Added additional reviews of completed OC San project CAD files to obtain a better understanding of the types of projects typical of OC San.
- Mandated earlier project meetings to gain earlier consensus from stakeholders.

- Required production of sample 3D model that will be used in both external and internal training sessions.

The Consultant's fringe and overhead costs, which factor into the billing rate, have been substantiated. The contract profit is 9.96%, which is based on an established formula based on OC San's standard design agreements. Staff is requesting a 10 percent contingency to address revisions as the project progresses through design.

Based on the above, 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 Services Agreement to The Austin Company.

CEQA

This is not a project as defined by the California Environmental Quality Act (CEQA), therefore CEQA does not apply.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Adopted Budget, Fiscal Years 2022-2023 and 2023-24, Section 8, Page 51, Planning Studies Program, Project No. M-STUDIES) and the budget is sufficient for the recommended action.

ATTACHMENT

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

- Professional Services Agreement
- Professional Services Agreement Attachment A - Scope of Work

VR:jw:sa