

ITEM #: 25
DATE: 11-12-24
DEPT: P&R

COUNCIL ACTION FORM

SUBJECT: CHANGER ORDER #2 FOR TERRACON CONSULTANTS, INC. FOR BUILDING ENVELOPE EVALUATION AND INSPECTION SERVICES FOR THE FITCH FAMILY INDOOR AQUATIC CENTER

BACKGROUND:

Construction of the Fitch Family Indoor Aquatic Center (FFIAC) began in spring 2024, with the estimated project completion occurring in late fall 2025. In terms of building performance, natatoriums are one of the most challenging building types to design, construct, and maintain due to the corrosive nature of the chlorinated environment, as well as the high temperature and relative humidity requirements. Due the nature this environment, it is imperative that the interaction of the mechanical system and the building enclosure functions efficiently and effectively to prevent potential failures in the future.

At its October 8, 2024, meeting, City Council approved awarding a contract to SystemWorks of West Des Moines, Iowa to perform systems commissioning during construction. The systems to be commissioned include natatorium space systems, locker and lobby areas to control pressure/airflow balancing between space types, heat pump chiller, air handling unit condensing unit, heating, ventilating and air conditioning systems including fan coil units, energy recovery unit and pool air handling unit, heat recovery chillers, and heating water system. **The final piece to ensure the building enclosure is functioning as intended is to contract with a company to conduct building enclosure evaluation and inspection services.**

Building enclosure evaluation and inspection work to be performed under this contract includes, but is not limited to:

- Become thoroughly acquainted with the plans and specifications for all above and below grade exterior Building Envelope (BE) elements, including, but not limited to, foundations and slabs, walls, doors, window/exterior wall glazing systems, sealants, vapor barriers, vapor retarders, roof and wall penetrations, pool basins, and roofing systems.
- Review all BE shop drawings and provide a written report of issues, concerns or situations that the BE Consultant (BEC) has. If issues or concerns are discovered, provide recommendations for remedy in the written report and actively work with the project team to develop solutions.
- After each day's inspection or inspections, the following shall occur:
 - BEC shall provide written report with photos to Story Construction.
 - BEC shall identify in writing and review in-person with Story Construction and the Bid Package Contractors regarding any non-compliant installation.
 - Story Construction will notify BEC when non-compliant work has been corrected, in their opinion.
 - BEC shall re-inspect the previous non-compliant work, in a timeframe as designated by Story Construction, to ascertain if it is compliant with the plans, specifications, approved shop drawings, and other supporting documentation (such as, but not limited to,

manufacturers written installation instructions).

- BEC shall attend Preinstallation Meetings on site for each envelope system, assembly, and component (identified below.) Participation includes being prepared, offering feedback, providing input and recommendations as necessary.
- Inspections to be Provided:
 - Slab-on-Grade
 - Full inspection of vapor barrier installations
 - Above Grade Wall Assemblies
 - Full inspection of each assembly, including air barrier and joint sealants prior to covering with architectural finishes.
 - Roofing Systems
 - Inspect and verify that all roof assembly and components (such as vapor barrier, adhesives, insulation, EPDM) are fully and continuously installed.
 - Verify all penetrations in roof assembly are being fully sealed on both the interior and exterior.
 - Watertight flashing installation.
 - BEC on site for first full day of installation and partial daily inspections through entire installation.
 - Wall Openings and Penetrations
 - Inspect and verify of all piping, ductwork, and electrical conduit penetrations are properly sealed.
 - Inspect and verify curtain wall framing and glazing installations, including proper sealant installation as required by window wall system manufacturers written and shop drawing instructions and best trade practices.
 - BEC to be on site for first three (3) full days of curtain wall installation. Additionally, include five (5) periodic visits thereafter for curtain wall installation. The anticipated delivery to start November 25, 2024.
 - Precast Panel Joint Sealant
 - Inspect all interior and exterior sealant installations.
 - BEC to be on site for first full day of joint sealant installation. Additionally, include four (4) periodic visits thereafter
 - Swimming Pools
 - Full inspection of vapor barrier installations at slabs and walls of each pool basin. During the swimming pool preinstall meeting, discuss all penetrations with all affected contractors that could compromise the vapor barrier installation.
 - BEC to be on site for periodic inspections of waterstop installations and piping penetrations for a total of twelve (12) visits.
 - Showers
 - Full inspection of showers for waterproofing integrity and compatibility assurance.
 - BEC to be on site as the work begins and include two (2) periodic visits thereafter.
 - Final Inspection
 - Provide written report and sign off on all areas of required inspection outlined above certifying that all inspected systems have been installed according to the plans, specifications, approved shop drawings, and other supporting documentation (manufacturers written installation instruction included with shop drawings or product shipped to the site, trade standards).

Currently, Terracon Consultants, Inc. and SystemWorks are under contract with the City to perform

material testing and commissioning, respectively, for the FFIAC. Both firms were determined to be capable of doing the Building Enclosure Evaluation and Inspection Services work. Therefore, a Request for Proposal (RFP) for that work was sent to Terracon and SystemWorks on October 29, 2024 with a due date of November 5, 2024. Proposals from both firms were received and evaluated by City staff.

The RFP costs are shown in the table below:

Company	Cost Proposal
SystemWorks, West Des Moines, Iowa	\$55,020
Terracon Consultants, Inc. Ames, Iowa	\$89,090

Staff has reviewed the proposals and believes the proposal from SystemWorks, LLC West Des Moines, IA, is incomplete as several items were not included in the scope of work. Staff contacted SystemWorks regarding the omissions and was told that SystemWorks does not perform the services omitted from the response. Additionally, SystemWorks indicated it does not have the capacity or capability to perform these services at this time. Staff finds the proposal from Terracon to be complete and acceptable. Story Construction (Project Construction Manager) concurs with staffs evaluation.

The FFIAC budget for Soils, Surveys, and Testing, which includes this proposed work, is \$390,000. **The unencumbered balance remaining is \$193,384. Story Construction will be responsible for scheduling the Building Enclosure work as needed.**

ALTERNATIVES:

1. Approve Change Order #2 to Terracon Consultants, Inc., Ames, Iowa for Building Enclosure Evaluation and Inspection Services for the Fitch Family Indoor Aquatic Center Project in the amount not-to-exceed \$89,090.
2. Do not award a contract to either company and refer back to staff with direction to solicit other proposals for this work.

CITY MANAGER'S RECOMMENDED ACTION:

Building enclosure services are an important component of the construction process. Of the two firms submitting proposals, Terracon Consultants, Inc. was deemed acceptable, while SystemWorks, LLC was not. Terracon is already under contract for materials testing services and has been contracted for many other City of Ames projects. Staff contacted Story Construction for feedback regarding the proposals and Story Construction confirmed that Terracon's proposal includes the scope of work desired by the City. Although Terracon's proposal comes with a higher cost, it is imperative that the selected firm is capable of performing all services described in the RFP. Therefore, it is the recommendation of the City Manager that the City Council approve Alternative #1 as shown above.