KC WATER
FACILITES AND PLANTS ENGINEERING
4800 E. 63rd Street • Kansas City, MO 64130
P: 816-513-0188 • F: 816-513-0366 • www.kcwaterservices.org

DATE: August 22, 2024

TO: Kenneth C. Morgan, P.E., Director
Jeff Martin P.E., Chief Engineering Officer

FROM: Debra L. Smith, AIA, Project Manager DLS DS 9/4/2024

SUBJECT: Bid Recommendation for KC Water Laboratory Renovation and Modifications
Project Number: 80002229 Contract Number: 9737

Project Budget and Bid Pricing
KC Water received a Guaranteed Maximum Price (GMP) of $29,962,962.00 from the Whiting-Turner Contracting Group. The current CIP budget is $24 million for the Lab Renovation and Modifications project. It is recommended to delay the vertical well replacement project ($8.5 Million CIP Budget) to fiscal year 26 (funds available May 2025) to allow the Lab project to proceed. The Architect of Record, Finkle + Williams Architects, has reviewed the GMP and found it to be reasonable.

Project Description and Purpose
The existing Lab building, which was constructed over 30 years ago, has multiple deficiencies and no longer effectively meets the requirements of the Lab operations. These deficiencies include the roof which has exceeded its life cycle and is need of replacement; the HVAC system which has multiple problems and often does not maintain the required temperature and/or humidity controls required for some tests; a layout/floor plan which is not conducive to efficient workflow and operations patterns; some areas are significantly undersized and "landlocked" so they cannot feasibly be expanded; and there are multiple issues throughout the existing building which are not ADA compliant.

In 2023 KC Water's Lab performed over 90,000 analyses in six (6) different areas including General Chemistry, Organic Prep and Analysis; Metals; Taste and Odor.

The design for the addition and renovation of the existing building will: a.) improve workflow and efficiency for sample receiving, testing and analyses for Lab staff to more effectively perform the tens of thousands of analyses done annually; b.) accommodate the Lab's needs for expanded testing that were not in place 30+ years ago; c.) offer flexibility in the building moving forward to better accommodate future changes and demands; and d.) create a healthier, more inviting work environment which will help with employee retention.

Project Delivery Method
This project is using the Construction Manager at Risk (CMaR) project delivery method. Whiting-Turner Contracting Company (W-T) is the CMaR partner on this project and worked closely with KC Water and the Professional Design Team to develop the Construction Documents.

W-T developed 22 bid packages to promote a competitive bidding process to ensure the best pricing for KC Water, they reached out to 398 potential bidders, issued 333 sets of plans and received 71 bids total. Most of the bid packages had 3 or more bidders.

Funding:
Project Included in the 2025 CIP; funding string pending.

Project Description
This project adds approximately 9,500 s.f. to the existing 20,500 s.f. building and will provide KC Water with an updated lab facility designed to meet the current mandated sampling and testing requirements and allow flexibility to accommodate future changes.

The project is proposed to be built in two (2) phases to reduce disruption to the Lab's operations and minimize cost to outsource testing and analyses of samples due to construction.

Phase I will construct the addition which will house all of the Lab prep and testing areas. When the construction of the addition is complete, the fume hoods and all of the Lab equipment will be moved to the new space, hooked up, calibrated and tested. Then the Lab operations will move into this space and Phase II will begin.

Transition to the addition is estimated to take no more than three (3) weeks. The entire construction period for both phases is estimated to take approximately 23 months. This is in part due to long lead times for some large electrical and mechanical equipment.

Phase II includes a gut rehab of the existing building to expand the Samples Receiving area, bulk storage, offices, conference room, breakroom, restrooms and other support spaces. There will be approximately 6,000 s.f. of unprogrammed space that can be used for training or other functions that support the Water Treatment Plant.

The entire project has been designed to meet LEED Gold standards as required by City Ordinance for City buildings.

MBE/WBE Participation
Using the City's CREO Manual for MBE and WBE participation, the goals were set at **14% MBE** and **14% WBE**.
Whiting-Turner Contracting Company submitted their Contractor Utilization Plan with **23.09% MBE** and **16.67% WBE** business participation. W-T has no written violations for any MBE/WBE programs and has incurred no penalties.

Experience Reference Form

The Project Design Professional Team Lead (Finkle+Williams Architects (F+W)) reviewed the Bid Forms. In a letter to KC Water, F+W expressed favorable work experience with many of the subcontractors recommended in the guaranteed maximum price (GMP). For the subcontractors F+W was not familiar with, W-T provided background information or their own work experience with the subcontractors. The information provided led F+W to believe that the subcontractors are capable of performing the work specified.

F+W also stated that various factors beyond the CMaR's control attributed to the cost increases from the earlier cost estimates. These factors include but are not limited to:

- Unprecedented high inflation period in the US following the COVID pandemic
- Continued supply issues for large electrical and HVAC equipment
- Current amount of construction work in the region and contractor backlogs
- Complexity of maintaining temporary operations on site and the phased approach
- Sustainability features the project design.

KC Water Lab staff prepared a cost estimate to outsource the Lab services for the anticipated 13-month duration of Phase I construction to allow construction to be done in a single phase with offices and support spaces housed in trailers on site. The cost to outsource those services would add approximately $11.5 million to the project cost.

KC Water also explored moving the Lab operations to a different site during construction, but the requirements needed to meet testing criteria made this option unfeasible.

List of Subcontractors and Suppliers

W-T submitted a List of Subcontractors to be used on this project all of which are currently certified as MBE or WBE with the City of KCMO.

The MBE participants are as follows:

a. Pro-Metals, LLC (HVAC)	$7,450,000	21.56%
b. KCon, LLC (earthwork, site utilities)	$ 457,800	1.53%

The WBE participants are as follows:

a. Eiberger Construction (demo)	$ 261,325	0.87%
b. Structure Incorporated (casework, doors, frames, hardware, framing and drywall)	$2,174,001	6.36%
c. Regents Flooring (flooring)	$ 91,026	0.20%
d. Pro-Mechanical (plumbing)	$2,500,000	8.34%

Summary

It is therefore recommended that the City move forward to amend the contract with Whiting-Turner Contracting Company to add construction of the KC Water Lab Renovation and Modifications project with a Guaranteed Maximum Price of $29,962,962.00.

KC Water recommends adding a 5% construction contingency.

Construction Phase Services (CPS) will be provided by Finkle+Williams Architects, the lead design professional on this project. Their fee for CPS will be negotiated and added to the Professional Design Services contract.

Attached Document(s):

- 9522, F+W's comments to W-T's Lab GMP, 7-31-24
- 9737, W-T's GMP MasterFormat Summary, 7-24-24

Approved: DS BA 9/5/2024 (initial/date)
Blake Anderson, P.E., Engineering-Facilities Division Manager

Approved: DocuSigned by: Jeff Martin 756D1017BA554BC... 9/5/2024
Jeff Martin, P.E., Chief Engineering Officer Date

Approved: Signed by: Kenneth Morgan 47CA3801D3B6446... 9/23/2024
Kenneth C. Morgan, P.E., Director Date

cc: Lisa Pleasure, Finance Manager, KC Water Finance Administration Division
Robbi Jackson, Budget Analyst, KC Water Finance Administration Division
Delois Moore, Contract Administrator, KC Water Contracts Administration Division
Debra L. Smith, AIA, Project Manager, KC Water Facilities Engineering Division
Contract File 9737

THE WHITING-TURNER CONTRACTING COMPANY

KCMO Water Service Lab Addition and Renovation

GMP - 07/24/2024

MASTERFORMAT SUMMARY

	BUILDING			SITE DEVELOPMENT			PROJECT TOTAL			60% BUDGET COMPARSION FOR REFERENCE			
	31,000	GSF	BLDG	4.0	ACRE	SITE	31,000	GSF		31,000	GSF		
DIVISION	COST	$/SF	% COW	COST	$/ACRE	% COW	COST	$/SF	% COW	COST	$/SF	% COW	OVER/UNDER
01 General Requirements	$ 1,361,098	$ 43.91	5.66%	$ -	$ -	0.00%	$ 1,361,098	$ 43.91	5.39%	$ 1,393,184.00	$ 46.44	7.22%	$ (32,086.00)
02 Existing Conditions	$ 261,325	$ 8.43	1.09%	$ -	$ -	0.00%	$ 261,325	$ 8.43	1.04%	$ 283,722.95	$ 9.46	1.47%	$ (22,397.95)
03 Concrete	$ 500,663	$ 16.15	2.08%	$ -	$ -	0.00%	$ 500,663	$ 16.15	1.98%	$ 790,375.00	$ 26.35	4.09%	$ (289,712.35)
04 Masonry	$ 295,566	$ 9.53	1.23%	$ -	$ -	0.00%	$ 295,566	$ 9.53	1.17%	$ 306,138.00	$ 10.20	1.59%	$ (10,572.00)
05 Metals	$ 877,110	$ 28.29	3.65%	$ -	$ -	0.00%	$ 877,110	$ 28.29	3.47%	$ 605,529.00	$ 20.18	3.14%	$ 271,581.00
06 Wood, Plastics, and Composites	$ 46,046	$ 1.49	0.19%	$ -	$ -	0.00%	$ 46,046	$ 1.49	0.18%	$ 165,770.00	$ 5.53	0.86%	$ (119,724.00)
07 Thermal & Moisture Protection	$ 876,515	$ 28.27	3.64%	$ -	$ -	0.00%	$ 876,515	$ 28.27	3.47%	$ 1,079,869.00	$ 36.00	5.59%	$ (203,354.00)
08 Openings	$ 886,670	$ 28.60	3.69%	$ -	$ -	0.00%	$ 886,670	$ 28.60	3.51%	$ 837,375.00	$ 27.91	4.34%	$ 49,295.00
09 Finishes	$ 1,949,659	$ 62.89	8.11%	$ -	$ -	0.00%	$ 1,949,659	$ 62.89	7.72%	$ 1,043,235.00	$ 34.77	5.40%	$ 906,424.00
10 Specialties	$ 29,596	$ 0.95	0.12%	$ -	$ -	0.00%	$ 29,596	$ 0.95	0.12%	$ 60,723.00	$ 2.02	0.31%	$ (31,127.00)
12 Lab Equipment/Lab Casework/Millwork	$ 1,438,807	$ 46.41	5.98%	$ -	$ -	0.00%	$ 1,438,807	$ 46.41	5.70%	$ 1,717,847.00	$ 57.26	8.90%	$ (279,040.00)
21 Fire Suppression	$ 302,250	$ 9.75	1.26%	$ -	$ -	0.00%	$ 302,250	$ 9.75	1.20%	$ 154,788.00	$ 5.16	0.80%	$ 147,462.00
22 Plumbing	$ 2,530,000	$ 81.61	10.52%	$ -	$ -	0.00%	$ 2,530,000	$ 81.61	10.02%	$ 1,537,059.00	$ 51.24	7.96%	$ 992,941.00
23 HVAC	$ 7,762,000	$ 250.39	32.27%	$ -	$ -	0.00%	$ 7,762,000	$ 250.39	30.74%	$ 4,772,433.00	$ 159.08	24.72%	$ 2,989,567.00
26 Electrical/Fire Alarm	$ 4,633,697	$ 149.47	19.27%	$ -	$ -	0.00%	$ 4,633,697	$ 149.47	18.35%	$ 3,101,125.00	$ 103.37	16.07%	$ 1,532,572.00
31 ACP/Earthwork/Site Utilities	$ 300,560	$ 9.70	1.25%	$ 505,510	$ 126,377.50	42.28%	$ 806,070	$ 26.00	3.19%	$ 829,215.00	$ 23.08	4.30%	$ (23,145.00)
32 Exterior Improvements	$ -	$ -	0.00%	$ 690,177	$ 172,544.25	57.72%	$ 690,177	$ 22.26	2.73%	$ 625,026.00	$ 20.83	3.24%	$ 65,151.00
SUBTOTAL - COST OF WORK	**$ 24,051,562**	**$ 775.86**	**100.00%**	**$ 1,195,687**	**$ 298,921.75**	**100.00%**	**$ 25,247,249**	**$ 814.43**	**100.00%**	**$ 19,303,414**	**$ 622.69**	**100.00%**	**$ 5,943,834.70**
Construction/CM Contingency	$ 962,062	$ 31.03	4.00%	$ 47,827	$ 11,956.87	4.00%	$ 1,009,890	$ 32.58	4.00%	$ 1,584,561.37	$ 52.82	6.70%	$ (574,671.43)
General Conditions	$ 2,358,178	$ 76.07	FIXED	$ 117,233	$ 29,308.32	FIXED	$ 2,475,412	$ 79.85	FIXED	$ 1,824,071.00	$ 60.80	7.71%	$ 651,340.52
Liability Insurance	$ 260,032	$ 8.39	0.95%	$ 12,927	$ 3,231.78	0.95%	$ 272,959	$ 8.81	0.95%	$ 211,290.83	$ 7.04	0.89%	$ 61,668.40
Whiting-Turner Bond	$ 138,159	$ 4.46	0.50%	$ 6,868	$ 1,717.09	0.50%	$ 145,028	$ 4.68	0.50%	$ 134,997.49	$ 4.50	0.57%	$ 10,030.06
Whiting-Turner Fee	$ 694,250	$ 22.40	2.50%	$ 34,514	$ 8,628.40	2.50%	$ 728,763	$ 23.51	2.50%	$ 542,466.83	$ 18.08	2.29%	$ 186,296.59
Builder's Risk Insurance	$ 79,700	$ 2.57	0.28%	$ 3,962	$ 990.54	0.28%	$ 83,662	$ 2.70	0.28%	$ 47,150.11	$ 1.57	0.20%	$ 36,511.93
PROJECT TOTALS	**$ 28,543,943**	**$ 920.77**	**/ GSF**	**$ 1,419,019**	**$ 354,754.74**	**/ ACRE**	**$ 29,962,962**	**$ 966.55**	**/ GSF**	**$ 23,647,952**	**$ 762.84**	**GSF**	**$ 6,315,010.77**

FINKLE + WILLIAMS
ARCHITECTURE

8787 RENNER BOULEVARD SUITE
100 LENEXA, KANSAS 66219

P 913 + 498 - 1550
F 913 + 498 - 1042

July 31, 2024

Dear Deborah,

The Design Team has reviewed the GMP documents provided by WT. In general, the costs of the project have increased significantly from the start of the design process in 2020. We attribute the increase in costs to the following:

- Unprecedented high inflation period in US history following the Covid Pandemic.
- Continued supply issues for large electrical and HVAC equipment.
- Amount of construction work and contractor backlogs.
- Complexity of maintaining temporary operations on site and phased approach.
- Sustainability features within the building.
- Tedious nature of a small renovation project.
- Relatively small scale of the project reducing the economy of scale.

We have several projects in design now, one of which is a Clinical Building for a local government that is experiencing the same high estimated costs for Electrical and HVAC systems. This along with receiving multiple bids for these scopes gives us confidence that they represent current market value.

Subcontractors

We have experience with many of the subcontractors who are being recommended by this GMP proposal. Those that we don't, WT has provided background information and or their own experience with them to make us believe they are capable of performing the work specified.

Scope of Work

Review of the bid leveling documents has allowed us to see communication between WT and the subcontractor on scopes of work. There are a couple bids such as electrical, lighting package and casework, that have large spreads that could suggest missed scope. After specific inquiry with WT we are comfortable that scopes from those areas

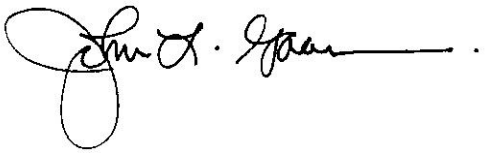
have been covered by the proposed subcontractor. In review of the WSL-Qualifications, we find nothing unexpected. This does further stipulate work by owner which includes but is not limited to:

- EV charging equipment
- Security, IT equipment, AV, TV monitors & Access Control (further defined by responsibility matrix in the plans)
- Equipment move and installation
- Furniture removal and new furniture installation
- Third party inspections & testing

Addendum 3 as noted in not specifically included but is covered by allowance. We will continue to work with the supplier to review options for confirming the scope as documented on the plans.

Based upon our review information provided we have no reason not to recommend moving forward with this GMP for the construction of the Water Laboratory. Further delay of the project could pose additional inflationary increases in the project and subcontractor fatigue. While we are hearing that the economy is slowing down, we are seeing many opportunities for projects which would suggest normal continued escalation of construction cost in the foreseeable future. We look forward to moving this project to the construction phase. Let us know if you have any questions that we can address.

Sincerely,



John L. Gaar, AIA, NCARB