

**AMENDMENT NUMBER 2 TO THE  
PROFESSIONAL SERVICES AGREEMENT FOR THE  
WWTP HEADWORKS IMPROVEMENT PROJECT**

This Amendment Number 2 (“Amendment”) is to the agreement between the City of Ann Arbor, (“City”) and Hubbell, Roth & Clark, Inc, (“Contractor”) for Professional Engineering Services, which is dated January 14, 2020 (“Agreement”) for engineering design services for improvements to the wastewater treatment plant (WWTP) headworks treatment equipment. City and Contractor agree to amend the Agreement as follows:

- 1) **Article III, SERVICES**, is amended as follows
  - A. The Contractor agrees to provide Professional Engineering Services (“Services”) in connection with the Project as described in Exhibit A of the original Agreement dated January 14, 2020, Exhibit A-1 of Amendment No. 1 dated May 18, 2021, and Exhibit A-2 of this Amendment 2. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.
  - B. Quality of Services under this Agreement shall be of the level of quality performed by persons regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
  - C. The Contractor shall perform its Services for the Project in compliance with all statutory, regulatory, and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.
  - D. The Contractor may rely upon the accuracy of reports and surveys provided to it by the City (if any) except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.
  
- 2) **Article V, COMPENSATION OF CONTRACTOR** is amended to read as follows
  - A. The Contractor shall be paid in the manner set forth in Exhibit B of the original Agreement dated January 14, 2020, Exhibit B-1 of Amendment 1, and Exhibit B-2 of this Amendment 2. Payment shall be made monthly, unless another payment term is specified in Exhibit B and B-1, following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator. Total compensation payable for all Services performed during the term of this Agreement and Amendment 1 shall not exceed **One Million Six-Hundred Thousand Two-Hundred-Seventy-Five Dollars and Fifty-Three Cents (\$1,600,275.53)**.

- B. The Contractor will be compensated for Services performed in addition to the Services described in Article III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator. Compensation will be payable according to the fee schedule in Exhibit B of the original Agreement dated January 14, 2020, Exhibit B-1 of Amendment 1, and in Exhibit B-2 of this Amendment 2. The Contract Administrator shall be the sole arbitrator of what shall be considered “reasonable” under this provision.
  
- C. The Contractor shall keep complete records of work performed (e.g., tasks performed, hours allocated, etc.) so that the City may verify invoices submitted by the Contractor. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

All terms, conditions, and provisions of the Agreement, unless specifically amended above, shall apply to this Amendment and are made a part of this Amendment as though expressly rewritten, incorporated, and included herein.

City and Contractor agree that for this Amendment and any documents related to the Agreement: 1) signatures may be delivered electronically in lieu of an original signature; 2) to treat electronic signatures as original signatures that bind them; and 3) signatures may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

This Amendment to the Agreement shall be binding on the Parties’ heirs, successors, and assigns.

**[SIGNATURE PAGE FOLLOWS]**

**For Contractor**

By \_\_\_\_\_

Jesse VanDeCreek

Its:

Date: \_\_\_\_\_

**For City of Ann Arbor**

By \_\_\_\_\_  
Christopher Taylor, Mayor

By \_\_\_\_\_  
Jacqueline Beaudry, City Clerk

Date: \_\_\_\_\_

**Approved as to substance**

\_\_\_\_\_  
Milton Dohoney Jr. Interim City Administrator

\_\_\_\_\_  
Brian Steglitz, Interim Public Service Area  
Administrator

**Approved as to form and content**

\_\_\_\_\_  
Stephen K. Postema, City Attorney

## EXHIBIT A-2

**WASTEWATER TREATMENT SERVICES UNIT  
HEADWORKS IMPROVEMENT PROJECT  
HRC CONSTRUCTION ADMINISTRATION SCOPE OF SERVICES  
1/26/2022**

HRC will provide the following Construction Administration services:

### **BID ASSISTANCE**

#### **Pre-Bid Meeting**

- ≡ HRC will prepare for and attend the Pre-Bid Conference, discuss the technical design and potential construction issues, answer questions, and provide site tours.

#### **Design Changes**

- ≡ HRC will finalize design changes due to manufacturer comments and requirements including Grit Wolf control and electrical change and concrete top slab design due to spatial requirements for equipment removal, maintenance and inspections.
- ≡ HRC will finalize design changes due to Owner requests including the anchor point for the removal of the screen washer compactor equipment via forklift, performance testing, and additional grit pump (control changes and electrical changes included).

#### **Addenda**

- ≡ HRC will prepare answers to formal questions from bidders, prepare bid addenda as necessary, and make necessary changes to the contract documents, specifications, and/or plan documents to clarify discrepancies.

#### **Bid Evaluation**

- ≡ HRC will assist with the evaluation of the apparent low bidders and their subcontractors, and will make a recommendation to award the construction contract.

### **CONSTRUCTION ADMINISTRATION**

#### **Construction Administration and Pre-Construction Tasks**

- ≡ HRC will prepare the conformed set, conduct a pre-construction meeting, attend construction progress meetings (bi-weekly via Teams and once a month onsite), and conduct routine project communications including review progress payment applications for processing by the Owner.
- ≡ 90 meetings are included with 25% being onsite and 75% conducted virtually.
- ≡ HRC will review payment applications and wage determinations and will recommend payment to the Owner.

#### **Submittal Review**

- ≡ HRC will review the contractor's schedule, shop drawings, sequencing work plan, shut-down requests, equipment O&M manuals, and test reports.

- ≡ HRC will maintain and updated the log of all submittals
- ≡ 180 submittal reviews are planned, including 50% requiring re-submittal reviews, and 20% requiring a second re-review.
- ≡ Submittal reviews include civil, architectural, landscaping, structural, process, mechanical, electrical, and I&C.

#### **Changes in the Work**

- ≡ Log and address Requests for Information (RFIs), prepare Requests for Quotation (RFQs), issue field orders directing any changes, and prepare change orders for increased contract costs and/or time extension as required.
- ≡ Prepare the final reconciliation Change Order.

#### **Periodic Observation**

- ≡ HRC will provide structural, process, mechanical, civil, landscaping, and electrical periodic inspections to monitor the quality of the work.
- ≡ Attend field meeting when on-site observations and discussions are required to resolve issues
- ≡ 21 days are planned, 4 days for Structural, 1/2 day for Civil, 1/2 day for Landscaping, 1 day for Architectural, 2 days for Electrical, 3 days for I&C, 7 days for process equipment installation and inspection, 2 days for performance testing, and 2 days for mechanical inspections. Time also includes planning and follow up correspondence associated with the inspections.

#### **Equipment Start-up**

- ≡ HRC will review start-up documents, witness equipment start-up, document Substantial Completion and issue Substantial Completion Certificates.
- ≡ HRC will perform commissioning for each piece of installed equipment within the Headworks facility.

#### **Project Closeout**

- ≡ HRC will prepare record drawings, punch lists, perform a final inspection, recommend final payment, prepare final reconciliation change order, issue the Final Completion Certificate, and transfer key HRC project documents in AutoCAD, Word and .PDF format.

#### **RESIDENT PROJECT REPRESENTATIVE (RPR) SERVICES:**

- ≡ Provide periodic RPR services to for observation services during construction. The RPR will verify conformance to the contract documents, help coordinate solutions to construction issues, review pay applications, quantify any unit pricing or time and materials work, help coordinate shutdown and start-up activities, participate in Punch List preparation, and assist with Project Closeout.
- ≡ RPR services assumes 8 hours/day, 3 days a week, accounting for 283 working days

## EXHIBIT A-2, (continued)

### **WASTEWATER TREATMENT SERVICES UNIT HEADWORKS IMPROVEMENT PROJECT HAZEN CONSTRUCTION ADMINISTRATION SCOPE OF SERVICES 1/26/2022**

#### **SCOPE OF SERVICES**

Hazen and Sawyer, P.C., (ENGINEER), the ENGINEER will provide Hubbell Roth and Clark (HRC) bidding assistance and the following construction phase services for the Headworks Improvement Project at Ann Arbor Wastewater Treatment Plant (WWTP) Improvements involving Instrumentation and Controls (I&C), HVAC, Odor Control and Process Mechanical related to grit removal and processing equipment:

#### **1. Construction Administration**

Provide Construction Administrator to provide the following services:

- Develop and submit monthly invoices to the HRC for services performed under this scope of services. Each invoice will be accompanied by a monthly progress report that will include a summary of work completed since the previous monthly progress report; work anticipated in the upcoming month; scheduled and actual percent completes for major tasks; budget status, including contracted amount, total billed to date, amount remaining, variances in the project budget and/or schedule; list of coordination and information required; list of problems encountered and proposed resolution.

#### **2. Conformed Documents**

Support HRC with assembling contract documents and provide "conformed" documents through incorporation of changes made through addenda issued during the bidding phase into the Bidding Documents.

#### **3. Construction Coordination and Meetings**

*Pre-Construction Meeting* - Upon Contract Award, HRC will coordinate with OWNER and arrange for pre-construction meeting with the contractor. The contractor will be advised of the procedural requirements for execution of the work, organization, line of authority and communication with OWNER, work plan and progress, quality control, shop drawings and other submittals, field operations (pile driving, concrete placement, etc.), cost control, construction contract compliance, and other special administrative issues. HRC will provide Notice to Proceed (NTP) documentation to the Contractor at the Pre-Construction Meeting. ENGINEER will participate in Pre-construction Meeting.

*Monthly Progress Meetings* – Participate in monthly progress meetings will be held with the contractor and OWNER to discuss progress, review shop drawings and request for information (RFI) status, and coordinate construction activities. A four-week look ahead work plan will be requested from the contractor and discussed prior to the conclusion of each monthly progress meeting. Provide meeting agenda and meeting minutes for all monthly progress meetings.

#### **4. Submittals Review**

ENGINEER will distribute submittals to the appropriate team members for review, received back from

ENGINEER's reviewer(s), recorded for disposition of review (e.g., approved as submitted, approved as noted, not approved), and returned to the HRC for return to Contractor.

## **5. Response to RFIs**

ENGINEER will prepare responses to RFI's submitted by the Contractor for information requests involving Instrumentation and Controls (I&C), HVAC, Odor Control and Process Mechanical related to grit removal and processing equipment and will issue necessary clarifications and interpretations of the Contract Documents as appropriate to the completion of Contractor's work. Such clarifications and interpretations are intended to be consistent with the intent of and reasonably inferable from the Construction Documents. ENGINEER may issue Field Orders authorizing minor variations in the Work from the requirements of the Contract Documents but will promptly send all such Field Orders to the OWNER'S representative for their review prior to finalization.

## **6. Issuing RFPs and CO Review**

ENGINEER will prepare up to 5 Requests for Proposals (RFPs) as directed by the OWNER. ENGINEER will review contract documents to verify a Request for Proposal (RFP) is required and is consistent with the design intent. ENGINEER will create RFP documentation to submit to the Contractor when a change in scope outside of the contract is deemed necessary or requested. ENGINEER will create and update an ongoing RFP log.

A total of 5 Change Orders (CO) will be reviewed by the ENGINEER. ENGINEER will review contractor's CO request for technical content, cost and schedule prior to recommending acceptance or rejection as a Change Order to OWNER.

## **7. Claims Management**

ENGINEER will monitor the project to identify issues early when they can be more easily resolved. Potential issues will be tracked through a computerized database. Contractor claims will be reviewed for validity based on contract provisions, supporting documentation, schedule impacts and field observations and records. When entitlement is verified, an independent change estimate will be prepared and reconciled with the contractor's claim, which may require negotiation. Recommend to the OWNER whether the claim is valid. Provide OWNER with written documentation that supports ENGINEER's recommendation. ENGINEER will review 5 claims.

## **8. Equipment Operation and Maintenance Manuals**

ENGINEER will review the vendor equipment operation and maintenance manuals provided by the Contractor to verify compliance with the requirements stated in the Contract Documents such as complete information in connection with assembly, operation, lubrication, adjustment, wiring diagrams and schematics, maintenance, and repair, including detailed parts lists with drawings or photographs identifying the parts. ENGINEER will verify that final copies of all operation and maintenance manuals are provided to the OWNER, including digital and hard copies. Engineer will review 12 O&M manuals.

## **9. Startup Assistance and Training**

ENGINEER will review the Contractor's Startup Plan and verify that Contractor complies with the construction sequencing, constraints and coordination requirements that must be followed to maintain the facility in operation. The major construction activities, their predecessor activities and restrictions (such as when shutdowns can take place) that are critical to maintaining continuous facility operation

will be reviewed by the ENGINEER for conformance with the Contract Documents. ENGINEER will provide startup assistance and training services for the new system which is supplemental to manufacturer's training on new equipment. All training material will be submitted in electronic format. Training materials will be submitted prior to actual training. Services will include:

*Manufacturer's Training* – ENGINEER will review and approve the training agenda on new equipment and systems prepared by the manufacturer/supplier in order for OWNER O&M staff to correctly maintain and operate the equipment. ENGINEER will verify that manufacturer's training is delivered.

*Systems Startup and Testing Assistance* - Upon completion of the work, ENGINEER will provide engineering and treatment process expertise to assist the OWNER in start-up and initial operation of the upgraded facilities. Prior to start-up of new facilities, provide detailed operation training for the OWNER's operations staff in a classroom setting. The ENGINEER will develop handouts and graphics to enhance the learning process and conduct hands-on training in the field for each class. Each major process area and major support systems such as electrical and instrumentation and control will be covered. The ENGINEER will assist the OWNER with coordination of Contractor activities as required during the one-year warranty period.

- Start-Up Assistance – The ENGINEER will provide up to 2 weeks (40 hours per week) of start-up assistance related to construction completion. This assistance will consist of on-site and telephone assistance by up to 16 hours of senior level engineering staff. The ENGINEER will adapt assistance to specific areas of concern by the OWNER and as necessary to assist the operations staff in process optimization of the pumping station operations.
- Operations Training – The ENGINEER will provide project specific operator training as the project construction is being completed and facilities are being placed into service, up to 8 hours of training. The ENGINEER will train OWNER personnel on the operation philosophy and details of operation of the new facilities. It is anticipated that the training will involve up to 8 hours of senior level engineers. It is anticipated that, as much as possible, the OWNER will coordinate the training sessions so that they are provided during the same week. OWNER will be responsible for providing training facilities and coordinating training attendance.

## **10. Substantial and Final Completion Review**

Upon substantial completion of the Work (or each component of the Work with a separate completion date or substantial completion date), ENGINEER will perform the following: (1) conduct inspection(s) to develop the "punch list" and determine if the Work is substantially complete; (2) if necessary, act as mediator between the OWNER and Contractor to develop an agreed punch list; and (3) conduct a final inspection to determine if the completed Work (or component of the Work) is in compliance with the punch list, Contractor's "as-built" drawing markups, shop drawings and specifications. Once ENGINEER determines that Work is substantially complete, ENGINEER will recommend payment and issue certificate of substantial completion (subject to any conditions identified by ENGINEER).





CONSTRUCTION ADMINISTRATION COST PROPOSAL: **COMBINED ENGINEERING FEES**

CITY OF ANN ARBOR

HEADWORKS IMPROVEMENT PROJECT

ITB # = 4706

**Tuesday, March 8, 2022**

Firm	Bidding	Construction Administration	Construction Observation	Total Proposed Costs
HRC	\$ 28,885	\$ 277,481	\$ 353,634	\$ 660,000
Hazen	\$ 7,532	\$ 163,655	\$ -	\$ 171,187
<b>Totals</b>	<b>\$ 36,417</b>	<b>\$ 441,136</b>	<b>\$ 353,634</b>	<b>\$ 831,188</b>

## EXHIBIT B-2

**CONSTRUCTION ADMINISTRATION COST PROPOSAL: HRC WORK PROJECTIONS**  
**CITY OF ANN ARBOR**  
**HEADWORKS IMPROVEMENT PROJECT**  
**ITB # = 4706**  
**March 8, 2022**

Account	TASK DESCRIPTION	Process										Total
		Sr. Assoc.	Engineer	Civil Engineer	Landsc Arch.	Architect	Structural	Elect. Eng.	RPR	Cadd Tech.	Rate (\$/hr.):	
	<b>Bid Phase</b>											
	Pre-Bid Meeting (and notes)	3	8									11
	Q&A, Addendum	4	40	2	2	20	20	20			50	158
	Bid Tab	1	4									5
	Bid Review and Recommendation Letter	1	20									21
	Post-Bid Meeting (if needed)	3	3									6
	<b>Subtotals</b>	<b>12</b>	<b>75</b>	<b>2</b>	<b>2</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>0</b>	<b>50</b>		<b>201</b>
0.41		\$ 2,160	\$ 10,875	\$ 360	\$ 290	\$ 2,900	\$ 2,900	\$ 2,900	\$ -	\$ 6,500		\$ 28,885
	<b>Task 3 - Construction Administration</b>											
0.43	Progress Meetings / Project communications (1)	40	405									445
0.42	Submittals (See assumptions below)	8	139	71	16	63	158	111		10		576.86
	Pay Applications	4	112									116
0.44	Changes in the Work (RFI, RFQ, COs, etc.)	6	81	22	7	29	72	47		60		322.9
0.47	Periodic Inspections	4	80	16	8	24	40	30				202
	Performance Testing		16									
	Start-up / Commissioning	4	88					32				124
0.49	Project Closeout	4	40	4	2	8	8	8				74
	<b>Subtotals</b>	<b>70</b>	<b>961</b>	<b>113</b>	<b>33</b>	<b>124</b>	<b>278</b>	<b>228</b>	<b>0</b>	<b>70</b>		<b>1877</b>
		\$ 12,600	\$ 139,287	\$ 20,318	\$ 4,791	\$ 18,003	\$ 40,368	\$ 33,014	\$ -	\$ 9,100		\$ 277,481
	<b>Resident Project Representative</b>											
0.47	Observation (2)								2,439			2,439
	<b>Subtotals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,439</b>	<b>0</b>		<b>2,439</b>
0.47		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 353,634	\$ -		\$ 353,634
	<b>Project Totals</b>	<b>82</b>	<b>1,036</b>	<b>115</b>	<b>35</b>	<b>144</b>	<b>298</b>	<b>248</b>	<b>2439</b>	<b>120</b>		<b>4517</b>
		\$ 14,760	\$ 150,162	\$ 20,678	\$ 5,081	\$ 20,903	\$ 43,268	\$ 35,914	\$ 353,634	\$ 15,600		\$ 660,000

**Assumptions**

- 1 Assumes weekly construction meetings (2 hours each for video conferencing meeting and 4 hours each for on-site meetings) including note and 180 hours routine communications
- 2 Assumes 3 days/week for a 660 calendar day duration for general observations, plus 80 hours for specific observations for bypass pumping set-up and testing, punch lists etc.

## EXHIBIT B-2, (continued)

### CONSTRUCTION ADMINISTRATION COST PROPOSAL: HAZEN WORK PROJECTIONS

CITY OF ANN ARBOR

### HEADWORKS IMPROVEMENT PROJECT

ITB # = 4706

March 8, 2022

Account	TASK DESCRIPTION Rate (\$/hr.):	Principal	Sr. Assoc.	Process Engineer	Mechanical Engineer	I&C	Cadd Tech.	Total
		\$ 282.00	\$ 186.00	\$ 145.00	\$ 188.00	\$ 150.00	\$ 146.00	
<b>Bid Phase</b>								
	Pre-Bid Meeting (and notes)		2	2				4
	Q&A, Addendum		2	16	8	8	5	39
	Bid Tab		1	0				1
	Bid Review and Recommendation Letter		1	0				1
	Post-Bid Meeting (if needed)		2	0				2
0.41	<b>Subtotals</b>	<b>0</b>	<b>8</b>	<b>18</b>	<b>8</b>	<b>8</b>	<b>5</b>	<b>47</b>
		\$ -	\$ 1,488	\$ 2,610	\$ 1,504	\$ 1,200	\$ 730	\$ 7,532

<b>Task 3 - Construction Administration</b>								
0.43	Progress Meetings / Project communications (1)		84	120				204
0.42	Submittals (See assumptions below)		20	109	95	79		303
	Pay Applications		4	21				25
0.44	Changes in the Work (RFI, RFQ, COs, etc.)		5	50	58	36		148
0.47	Periodic Inspections		8	80	16	40		144
	Performance Testing		8	36				
	Start-up / Commissioning		6	36	24	26		92
0.49	Project Closeout		4	40	4	16		64
	<b>Subtotals</b>	<b>0</b>	<b>139</b>	<b>491</b>	<b>197</b>	<b>197</b>	<b>0</b>	<b>1,024.2</b>
		\$ -	\$ 25,854	\$ 71,253	\$ 36,968	\$ 29,580	\$ -	\$ 163,655

<b>Resident Project Representative</b>								
0.47	Observation (2)							
0.47	<b>Subtotals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

<b>Project Totals</b>		<b>0</b>	<b>147</b>	<b>509</b>	<b>205</b>	<b>205</b>	<b>5</b>	<b>1,071.2</b>
		\$ -	\$ 27,342	\$ 73,863	\$ 38,472	\$ 30,780	\$ 730	\$ 171,187

**Assumptions**

- 1 Assumes weekly construction meetings (2 hours each for video conferencing meeting and 4 hours each for on-site meetings) including note and 180 hours routine communications
- 2 Assumes 3 days/week for a 660 calendar day duration for general observations, plus 80 hours for specific observations for bypass pumping set-up and testing, punch lists etc.