CITY OF HIGH POINT AGENDA ITEM



Title: Amendment 1- Engineering Services for Ward Electrical and HVAC Upgrade

From: Terry Houk – Public Services Director

Derrick Boone – Public Services Asst. Director

Meeting Date: July 20, 2020

Nawfal Shujaa – Project Engineer

Wendell Pickett, Ward Plant Superintendent

Public Hearing: N/A **Advertising Date:** N/A **Advertised By:** N/A

Attachments: Attachment A – Amendment No. 1

PURPOSE:

Amendment No. 1 modifies the original agreement entered on October 16, 2018 for engineering services related to the Ward Plant Upgrade. The scope of services is amended to include the additional services required for additional work based on time extension of project and change orders related to the upgrade.

BACKGROUND:

Black and Veatch had planned to provide on average 72 hours per week or 312 hours per month providing Contract Administration and Change Order services. Since construction began in earnest (January 2019) through May 2020, B/V has provided an average of 104 hours per week or 511 hours per month, which has consumed the original budget. The reasons for additional time put forth on the project are attributable to several factors including:

- Several project changes that have required extensive coordination with Owner and multiple reviews and negotiations with Contractor by Consultant due to unforeseen conditions including but not limited to: Lead Abatement, SCADA changes and upgrades, Delays due to COVID-19, Addition of a second back-up generator, Rerouting Fiber Optic provisions between Generator and Admin Buildings, Scope changes associated with Existing Transformers, Bathroom Ceiling Tiles and Sedimentation Basins Wall Infills, etc. These changes have also extended the construction schedule.
- Submittals have been complex, and reviews have taken additional effort to confirm coordination with contractor, equipment manufacturers, CHP operations and maintenance, and design intent.

Additional field inspections have been required to substantiate conformance with design requirements.

BUDGET IMPACT: Funds for this are available in the adopted budget.

RECOMMENDATION / ACTION REQUESTED:

The Public Services Department recommends approval of Amendment No. 1 to Black and Veatch for \$ 1,168,700.00.

BLACK & VEATCH Building a world of difference.

BLACK & VEATCH INTERNATIONAL COMPANY

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July 8, 2020

City of High Point Ward Water Treatment Plant Upgrade Project No. 190221 B&V File No. 11.1210

City of High Point 211 South Hamilton Street High Point, NC 27261

Attention: Mr. Terry Houk, Public Services Director Subject: Ward Water Plant Electrical and HVAC

Contract Amendment No. 1

This letter amendment covers additional fees for services provided for the Ward Water Treatment Plant Upgrade project for Contract Administration and Construction Observation. The Professional Services Contract dated October 16, 2018 for the On-Call Engineering – WTP Upgrades: Contract Administration and Construction Inspection allows changes by written amendment. This amendment covers Consultant's fees to continue provision of services identified in the Professional Services Contract. The need for additional fees is summarized below:

- 1. Construction Period Extension: The original final contract completion date has been extended due to project changes. This Amendment covers the time period through June 2021, or until the budget is exhausted, whichever comes first.
- 2. Project Change Orders: There have been several project changes that have required extensive coordination with Owner and multiple reviews and negotiations with Contractor by Consultant due to unforeseen conditions including but not limited to: Lead Abatement, SCADA changes and upgrades, Delays due to COVID-19, Rerouting Fiber Optic provisions between Generator and Admin Buildings, Scope reductions associated to Existing Transformers, Bathroom Ceiling Tiles and Sedimentation Basins Wall Infills. etc.

The total additional fee is \$1,168,700.00.

Please indicate acceptance of this proposal by signing below.

Very truly yours, BLACK & VEATCH INTERNATIONAL COMPANY

Mike Osborne, PE Project Manager

Accepted:

Public Services Director City of High Point Jeffrey Coggins, PE Associate Vice President

Approved:

Deputy City Manager City of High Point Owner: City of High Point

Project: Ward WTP Additional CPS

PHASE/Task		Sr. Project Manager	Admin	Construction Manager	Engineering Manager	Civil Engineer	Resident Project Representativ e	Structural Sr. Engineer	Structural Engineer	Architect Director/QC	Bldg Mech Sr. Engineer	Bldg Mech Engineer	Electrical Sr. Engineer	Electrical Engineer	Electrical Technician	I&C Sr. Engineer	I&C Engineer	BIM Sr Technician
		\$245.00	\$100.00	\$230.00	\$205.00	\$145.00	\$190.00	\$215.00	\$196.00	\$240.00	\$215.00	\$185.00	\$245.00	\$135.00	\$160.00	\$215.00	\$160.00	\$155.00
(Billing Rate, \$\$,Hr.)																		
WORK BREAKDOWN STRUCTURE	PHASE																	
Project Status Meetings		62	30	72	48	127	-	-	-	_	_	30	36	-	-	8	-	-
Construction Site Visits		60	-	80	80	120	-	-	-	-	-	96	96	24	-	96	-	-
Submittals, RFIs and Clarifications		36	72	124	-	322	-	35	86	60	80	143	66	124	-	36	100	6
Change Orders and Work Change Directives		28	8	44	-	76	_	9	15	16	-	23	50	60	_	8	-	_
Substantial Completion Walk Through		24	-	36	-	40	-	-	-	-	-	32	16	8	-	4	-	-
Final Construction Review		16	-	26	-	38	-	-	-	_	-	_	24	8	_	-	-	-
Prepare Record Drawings		8	8	36	-	120	-	-	-	4	-	8	-	_	40	-	8	100
Resident Field Observation		-	-	-	-	-	2,080	-	-	-	-	-	-	-	_	-	-	-
Operational Phase		16	-	32	-	64	-	-	-	-	-	-	-	-	_	-	-	-
PM&A		150	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total, Hours		400	228	450	128	907	2,080	44	101	80	80	332	288	224	40	152	108	106
Total, Billings		\$ 98,000	\$ 22,800	\$ 103,500	\$ 26,240	\$ 131,515	\$ 395,200	\$ 9,460	\$ 19,796	\$ 19,200	\$ 17,200	\$ 61,420	\$ 70,560	\$ 30,240	\$ 6,400	\$ 32,680	\$ 17,280	\$ 16,430

Owner: City of High Point

Project: Ward WTP Additional CPS

PHASE/Task		BIM Technician		Finance \$135.00	Со	roject ntrols	SUBTOTAL, hours	SUBTOTAL, Billings \$		Other Expenses		SUBTOTAL, EXPENSES w/o MULTIPLIER		SUBTOTAL, EXPENSES		TOTAL Billings	
(Billing Rate, \$\$,Hr.)																	
WORK BREAKDOWN STRUCTURE	PHASE																
Project Status Meetings			-	-		-	413	\$	79,095	\$	5,000	\$	5,000	\$	5,000	\$	84,095
Construction Site Visits			-	-		-	652	\$	132,060	\$	5,000	\$	5,000	\$	5,000	\$	137,060
Submittals, RFIs and Clarifications			-	-		-	1,290	\$	231,246	\$	-	\$	-	\$	-	\$	231,246
Change Orders and Work Change Directives			-	-		-	337	\$	63,840	\$	-	\$	-	\$	-	\$	63,840
Substantial Completion Walk Through			-	-		-	160	\$	31,740	\$	-	\$	-	\$	-	\$	31,740
Final Construction Review			-	-		-	112	\$	22,370	\$	-	\$	-	\$	-	\$	22,370
Prepare Record Drawings			155	-		-	487	\$	73,435	\$	2,500	\$	2,500	\$	2,500	\$	75,935
Resident Field Observation			-	-		_	2,080	\$	395,200	\$	48,500	\$	48,500	\$	48,500	\$	443,700
Operational Phase			-	-		-	112	\$	20,560	\$	1,500	\$	1,500	\$	1,500	\$	22,060
PM&A			-	26	i	40	326	\$	56,660	\$	-	\$	-	\$	-	\$	56,660
			-	-		_	-	\$	-	\$	-	\$	-	\$	-	\$	-
	-																
Total, Hours			155	26	;	40	5,969										
Total, Billings			9,375	\$ 3,510	\$	5,400		\$	1,106,206	\$	62,500			\$	62,500	\$	1,168,706

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