CITY	OF							
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Date of Action: 9/	25/17
Approved 4	Denied
By: Jane	im

# **CITY COUNCIL ACTION MEMORANDUM**

AM No. 17-41: Contract Extension to HDL Engineering Consultants, LLC in the amount of \$44,967 for E. Susitna Well Connection Construction Administration Services.

Public Works Director Originator: September 14, 2017 Date:

Agenda of: September 25, 2017

Route to:	Department Head	Signature	Date
Х	Public Works Director		1 9/14/17
Х	Finance Director	Hornotin	9.14.17
Х	Deputy Administrator	ald	9/14/17
Х	City Clerk	AUTIN	9/15/1

Reviewed by Mayor Bert L. Cottle: \_

**Fiscal Impact**: Xyes \$44,967

**Funds Available:** 🛛 yes

Account name/number: East Susitna Well Connection/320-4369-436.45-xx Attachments: HDL Proposal (8 pages)

Summary Statement: This contract extension is proposed to oversee construction of the E. Susitna Well Connection project. This is a continuation of the engineering services provided by HDL to design the E. Susitna Well and Well Connection project. The well connection project includes construction of approximately 1,100 LF of 6-inch Class 52 ductile iron pipe, electrical conduits and junction boxes, installation of a pitless adapter on a previously drilled well, installation of a well pump, drop pipe, controls for the well, interior well house piping, site grading, and excavation and embankment for a future roadway.

This contract extension will provide the necessary inspections, quality assurance testing, documentation and permitting to bring the new water supply into service for the E. Susitna Reservoir.

Staff Recommendation: Adopt AM No. 17-41.

September 12, 2017

Archie Giddings, Public Works Director City of Wasilla 290 E. Herning Avenue Wasilla, Alaska 99654

Re: Amendment for Construction Phase Services East Susitna Well Connection

Dear Mr. Giddings:

CIVIL ENGINEERING

GEOTECHNICAL ENGINEERING

TRANSPORTATION ENGINEERING

ENVIRONMENTAL SERVICES

PLANNING

SURVEYING & MAPPING

CONSTRUCTION ADMINISTRATION

> MATERIAL TESTING

RIGHT-OF-WAY SERVICES As requested, HDL Engineering Consultants, LLC (HDL) hereby requests an amendment to add construction-phase services for the East Susitna Well Connection project to our current contract with the City of Wasilla (City).

# BACKGROUND

The City contracted with HDL in February 2017 to provide survey, permitting, preparation of bidding documents, and bid-phase services for the East Susitna Well Connection project. Surveying work began in late-February concurrently with preliminary design of a road to connect East Susitna Avenue with Roberts Street. After completion of survey and preliminary design, HDL received approval to move forward with development of a water main connection, and electrical/mechanical work required to provide a complete project that would result in a fully-functional water supply well. Design and permitting work progressed throughout the spring/summer and a final, bid-ready package of plans, specifications, and an estimate were delivered on August 1, 2017. Due to possible funding shortfall, the project was broken into a Base Bid plus two Additive Alternates.

Bids for the project were opened on August 29<sup>th</sup> and the City awarded a construction contract to Tutka, LLC for the Base Bid plus Additive Alternate #1 at the September 11, 2017 council meeting.

# PROJECT DESCRIPTION

The East Susitna Well Connection project includes a base bid for construction of approximately 1,100 linear feet of 6-inch Class 52 ductile iron pipe, electrical conduits, installation of a pitless adapter on a previously drilled well, and excavation/embankment for a future road. Additive alternate 1 includes the installation of a well pump, drop pipe, electrical switchgear and controls, and interior well house piping.

**DL**ENGINEERING Consultants RE: Amendment for Construction Phase Services East Susitna Well Connection September 12, 2017 Page 2 of 4

## SCOPE OF SERVICES

#### Task 4 – Construction Phase Services

HDL proposes to provide construction administration (CA) and full-time inspection services during pipe installation and excavation/embankment for the roadway, and part-time inspection during mechanical/electrical work. We anticipate construction of the project to occur during the fall/winter of 2017-2018. Currently, contract notice to proceed is expected to be issued in late-September with project substantial completion required by February 28, 2018. Final completion is required by June 30, 2018. Despite the allowable contract times covering five months, we anticipate that the actual work on-site will occur over an approximate 7-week period with office work occurring over a 14-week period. HDL will work closely with the Public Works staff and will be the Contractor's primary point of contact for verbal and written communication. Our scope of work will include construction monitoring, coordination, administration, inspection, material testing, and record drawings.

HDL will coordinate and monitor the day-to-day activities of the project on behalf of the City. Chris Bowman, PE will be the Project Manager/Engineer and David Lundin, PE will be the Principal-in-Charge. Chris will be the primary point of contact and will keep the City informed of progress, field directives, and any changes as they arise and will prepare weekly written status reports. He will also coordinate with ADEC and keep the City informed of the progress. David will provide quality control and oversight of HDL activities.

<u>Construction Administration</u>. At project start-up, HDL will review material and equipment submittals, shop drawings, samples, and quality control submittals. HDL will conduct a preconstruction conference to review the contractor's schedule, establish procedures for submittals and shop drawings, and establish a working understanding between the Contractor, HDL, and the City.

During construction, HDL will review administrative submittals and schedules and will review and respond to Design Clarification/Verification Requests (DCVRs). We will conduct formal weekly construction meetings. We will review the Contractor's pay requests, verify pay item quantities, and provide recommendations for payment.

Our electrical/mechanical subconsultant, EDC, Inc., will assist HDL will applicable submittal reviews, DCVR responses, and change orders.

<u>Construction Inspection & Quality Assurance Testing</u>. HDL will provide full-time construction inspection during excavation/embankment activities and installation of water pipeline (approximately 3 weeks) and part-time inspection during other contractor activities to observe, test, and document the construction on behalf of the City. Documentation will include photographs and daily reports detailing the equipment, labor, inspections, testing, and activities occurring while our Inspector is on-site. Copies of daily reports will be provided to the City on a weekly basis. We anticipate our Inspector will work approximately 40 hours per week during full-time inspection periods. However, the actual hours on-site per day will be dependent on the Contractor's schedule, the type of work being performed, and the level of inspection required. HDL will conduct formal substantial and final completion inspection report, and list



RE: Amendment for Construction Phase Services East Susitna Well Connection September 12, 2017 Page 3 of 4

of deficient items. EDC will perform inspections for electrical rough-in, substantial completion, and final completion, as detailed on the attached fee proposal.

HDL will also provide quality assurance material testing to check the adequacy of the Contractor's quality control program by performing the following independent tests:

- ✓ Approximately 30 field density tests on fill materials
- Approximately 5 laboratory moisture-density tests (Proctors) including soil gradations
- ✓ Approximately 5 laboratory grain size analyses

<u>Closeout Documents</u>. HDL will review the Contractor's construction markups and will prepare electronic record drawings. We will submit half-size record drawings on bond paper and will provide half-size record drawings in Adobe PDF format on CD for your records. HDL will submit record drawings to ADEC and apply for Approval to Operate the new water pipeline on behalf of the City, including signing the ADEC-required statement that construction was completed under the direction of an engineer. For the construction contract closeout, we will request a release of liens and claims statement from the Contractor and will distribute a project completion and acceptance certificate for execution.

Basic Assumptions. The following basic assumptions were used to prepare this estimate:

- 1. HDL will be the primary point of contact for verbal and written communications.
- HDL will provide one full-time (40 hours/week) inspector for approximately three weeks during excavation/embankment work and underground piping installation and one part-time (16 hours/week) inspector during other site work activities (estimated at 4 weeks). Inspection will not be required on weekends, holidays, or double shifts.
- 3. We do not anticipate the inspector will be required to work overtime.
- Our work excludes claims negotiations or protracted disputes with the Contractor, repeated retesting due to inadequate contractor performance, or if the Contractor's work extends beyond the performance period.



RE: Amendment for Construction Phase Services East Susitna Well Connection September 12, 2017 Page 4 of 4

### **FEE PROPOSAL**

HDL estimates that the aforementioned construction phase services can be accomplished for a cost not to exceed \$60,795, as shown on the attached fee estimate worksheet. However, as of the end of August 2017, there was \$15,828 remaining in our original contract budget. Therefore, we request a budget amendment in the amount of **\$44,967** to provide sufficient budget to complete the project.

We appreciate the opportunity to provide this proposal and to continue working with you. If you have any questions, please contact me at 746-5230.

Sincerely,

HDL Engineering Consultants, LLC

Chris Bowman, P.E. Civil Engineer

Attach: EDC Fee Proposal Dated 8/22/17 (2 pages) Fee Estimate Worksheet (2 pages)

H:\proposals\86-172 Wasilla East Su Well Connection (COW)\CA\86-172 Wasilla East Su Well Connection CA proposal.docx



#### CITY OF WASILLA - FEE WORKSHEET Construction Phase Services for East Susitna Well Connection

				HDL LABOR				
TASK		QTY		& DIRECT EXPENSES	REIMBURSABLE EXPENSES	SUB- CONTRACTS	SUBTOTAL	TOTAL
	ACTIVITY		RATE					
4.0	Construction Phase Services							\$59,710
4.1	Submittal/Shop Drawing Review						\$5,720	
	Project Manager	6 hrs	@ \$130	\$780				
	Project Engineer		@ \$115	\$2,300				
	EDC	1 fee	@ \$2,640			\$2,640		
4.2	Construction Administration - Office (14 weeks)						\$20,915	
	Principal Civil Engineer (0.5 hrs/wk)	7 hrs	@ \$175	\$1,225				
	Project Manager (8 hrs/wk)	112 hrs	@ \$130	\$14,560				
	Clerical	7 hrs	@ \$70	\$490				
	Vehicle (1/2 day rate)	35 days	@ \$40	\$1,400				
	EDC	1 fee	@ \$3,240			\$3,240		
4.3	Full-Time Inspection Services (3 weeks)						\$15,500	
	Inspector (40 hrs/wk)	120 hrs	@ \$115	\$13,800				
	Vehicle (1 day rate)	15 days	@ \$80	\$1,200				
	Miscellaneous Reimbursables	1 Lump Sum	@ \$500		\$500			
4.4	Part-Time Inspection Services (4 weeks)						\$11,480	
	Inspector (16 hrs/wk)	64 hrs	@ \$115	\$7,360				
	Vehicle (1/2 day rate)	20 days		\$800				
	EDC		@ \$3,320			\$3,320		

Page 1 of 2

#### CITY OF WASILLA - FEE WORKSHEET Construction Phase Services for East Susitna Well Connection

				HDL LABOR				
				& DIRECT	REIMBURSABLE	SUB-		
TASK	ACTIVITY	QTY	RATE	EXPENSES	EXPENSES	CONTRACTS	SUBTOTAL	TOTAL
4.5	Quality Assurance Material Testing						\$2,585	
	Field Materials Tech.		Included w/ in	spection				
	Lab Supervisor	2 hrs	@ \$110	\$220				
	Nuclear Densometer	15 days	@ \$35	\$525				
	Lab. Moisture-Density Test	5 ea	@ \$270	\$1,350				
	Lab. Grain Size Analysis	5 ea	@ \$70	\$350				
	Clerical	2 hrs	@ \$70	\$140				
4.6	Record Drawings, FATO, and Closeout						\$3,510	
	Project Manager/Engineer	8 hrs	@ \$130	\$1,040				
	Drafter		@ \$110	\$1,320				
	EDC	1 fee	@ \$1,150			\$1,150		
Subtotal	Task 4			\$48,860	\$500	\$10,350		\$59,710
Markup*					\$50	\$1,035		\$1,085
Total Task 4				\$48,860	\$550	\$11,385		\$60,795
Credit for Budget Remaining as of 8/31/17								(\$15,828)
Total Amendment Request (Task 4)								\$44,967
*10% for	subcontracts, 10% for reimbursable expenses							

Page 2 of 2



ENGINEERING DESIGN &

EDC, INC.

An Alaskan Owned Professional Corporation

213 W. Fireweed Lane Anchorage, AK 99503

August 22, 2017

Chris Bowman, P.E. Hattenburg, Dilley, & Linnell 202 W Elmwood Ave, Suite 1 Palmer, AK 99645

<u>Subject:</u> Electrical and Mechanical Construction Management (CM) Services for City of Wasilla East Susitna Well Connection

Dear Chris,

This proposal is to provide electrical and mechanical construction management services for the City's East Susitna Well Connection project in Wasilla, Alaska.

# Scope of Work

The scope of work includes submittal reviews, answering RFIs, site inspections (3 for electrical and 2 for mechanical, 5 total), O&M manual review and record drawings.

# Assumptions

- Three site visit will be performed (rough-in, pre-final, final).
- All SCADA commissioning/programming will be performed by the Contractor per the specifications.

# **Proposed Fee**

The proposed fee estimate for the above scope of work is:

	Electrical	Mechanical
-Submittal review	\$1,400	\$1,240
-RFI responses	\$750	\$620
-Site inspections (3 electrical, 2 mechanical)	\$2,700	\$620
-O&M manual review	\$1,250	\$620
-Record drawings	\$850	\$300
Subtotal	\$6,950	\$3,400

Total CM Fee \$10,350

Construction Management (CM) Services for City of Wasilla East Susitna Well Connection Page 2 August 21, 2017

If you have any questions concerning our understanding of the scope of work or the proposed fee estimate please feel free to call.

Sincerely,

gach

John A. Pepe, PE EDC, Inc.