WASILLA

• ALASKA •

Date of Action: $3/21/16$						
Approved D	Denied					
By: Januluu						

# CITY COUNCIL ACTION MEMORANDUM

AM No. 16-09: Contract Amendment to Hattenburg, Dilley and Linnell in the amount of \$30,540 for engineering a new well at the East Susitna Reservoir.

Originator:

Public Works Director

Date:

March 2, 2016

Agenda of: March 21, 2016

Route to:	Department Head	Signature	Date
X	Public Works Director		3/8/16
X	Finance Director	Minkow	L 3-8-14
X	Deputy Administrator	St lake	3/10/16
X	City Clerk	Adulu	3/10/16

Reviewed by Mayor Bert L. Cottle:

Fiscal Impact: ⊠yes \$30,540

Funds Available: ⊠yes

Account name/number: Wells & Completion of Pumphouse/320-4369-436.45-61

Attachments: HDL Proposal (4 pages)

**Summary Statement:** Hattenburg, Dilley and Linnell was awarded a well drilling engineering contract on October 12, 2014 in the amount of \$89,720 through Action Memorandum No. 14-41. Action Memorandum No. 16-09 is proposed to extend the engineering contract to drill a second city well next to the East Susitna Reservoir site with the same specifications and contractor.

The East Susitna well has been offline for over a year due to elevated arsenic levels. Water treatment options have been considered for this well which will add operating costs to the water utility. Another option exists with the newly acquired train depot property adjacent to the East Susitna Reservoir site. This property can be explored for a new city well that has the potential to produce arsenic free water.

Adoption of Action Memorandum No. 16-09 will allow the engineering to move forward for a new city well. The engineering contract will be funded by a state grant if approved.

**Staff Recommendation:** Adopt AM No. 16-09.



February 23, 2016

Archie Giddings, P.E. Wasilla Public Works Director 290 E. Herning Avenue Wasilla, AK 99654

RE:

Amendment Proposal for Additional Services

City of Wasilla - Airport Water Well

CIVIL

GEOTECHNICAL ENGINEERING

TRANSPORTATION ENGINEERING

ENVIRONMENTAL SERVICES

PLANNING

SURVEYING & MAPPING

CONSTRUCTION ADMINISTRATION

MATERIAL

RIGHT-OF-WAY SERVICES Dear Mr. Giddings:

As requested, Hattenburg Dilley & Linnell (HDL) has prepared this amendment proposal for additional services related to drilling and testing a new water well adjacent to the City's existing East Susitna Well. HDL is currently negotiating with the well driller from the Airport Water Well project, E&D Water Wells, to drill a new 8-inch diameter well for this project.

#### AMENDMENT REQUEST

## Task 7 - Airport Water Well (East Susitna Amendment)

We will coordinate and observe the driller's activities on-site. We will collect representative samples during drilling and select samples will be tested in our laboratory for grain size distribution to assist in selection of a well screen. The results of our observations and testing will be incorporated into the detailed well log as appropriate. HDL will instrument the new well and existing East Susitna Well to gather water level data before, during and after test pumping operations for well analysis. We will also collect a representative water sample at the mid-point of test pumping for analysis as a Class A drinking water source.

HDL will perform hydraulic analysis of the aquifer using standard well hydraulics and methodologies and radial groundwater modeling to estimate future aquifer yields and interference between the two wells. In addition, we will continue to consult with Jim Munter for peer review of calculations and flow projections.

We will summarize our findings in a memorandum including a complete log of the new well, laboratory testing results, water quality analysis results, aquifer test pumping results, long term aquifer viability analysis, and proposed long term pumping yield rates.

### **ASSUMPTIONS**

- 1. The existing production well can be used for monitoring during pump testing.
- 2. We have included an estimate of time required for E&D to drill to approximately 220 feet of 8-inch casing and install 20 feet of screen as well as time for a step drawdown and 24-hour pump tests. If actual well drilling time exceeds our allowance, a fee amendment or reduced effort may be required.

RE: Amendment Proposal for Additional Services City of Wasilla – Airport Water Well February 23, 2016 Page 2 of 2

- 3. Public involvement effort is not included.
- 4. Surveying, permitting, environmental assessments, wetland delineations, cultural resources consultation are not included.

### **ASSUMPTIONS**

We propose to provide the aforementioned services on a time and expenses basis at our published hourly labor rates and 10% mark-up of subcontracts and reimbursable expenses for a fee not to exceed \$30,540 as detailed on the attached worksheet. If you have any questions, please contact Chris Bowman, P.E. at 746-5230 or cbowman@hdlalaska.com.

Sincerely,

HATTENBURG DILLEY & LINNELL

David Lundin, P.E.

Principal/Civil & Environmental Engineer

attach: Fee Proposal Worksheet 2-23-16 (1 page)

cc: Chris Bowman, P.E., HDL



# FEE PROPOSAL WORKSHEET

# for Engineering Services City of Wasilla - Airport Water Well (East Susitna Amendment)

			HDL LABOR			-	***************************************	
				& DIRECT	REIMBURSABLE	SUB-		
TASK	<u>ACTIVITY</u> G	QTY	RATE	EXPENSES	EXPENSES	CONTRACTS	SUBTOTAL	TOTAL
7.0	Additional Work for East Susitna W	/ater Well						\$30,140
7.1	8" Exploration/Test Well						\$16,200	***************************************
	Project Manager/Principal Civil Eng.	4 hrs	@ \$170	\$680		***************************************		
	Civil Engineer	12 hrs	@ \$130	\$1,560				
	Geotechnical Engineer	8 hrs	@ \$145	\$1,160				
	Engineering Assistant	80 hrs	@ \$100	\$8,000				
	Jim Munter	1 allow	@ \$1,000			\$1,000		
	Laboratory Testing	1 allow	@ \$2,500	\$2,500				
	Vehicle (1 day rate)	10 days	@ \$80	\$800				
	Misc. Reimbursables	1 allow	@ \$500		\$500			
7.2	Aquifer/Water System Evaluation				***************************************		\$13,940	
	Project Manager/Principal Civil Eng.	4 hrs	@ \$170	\$680				
	Civil Engineer	20 hrs	@ \$130	\$2,600				
	Geotechnical Engineer	20 hrs	@ \$145	\$2,900				
	Engineering Assistant	40 hrs	@ \$100	\$4,000				
	Drafter	12 hrs	@ \$105	\$1,260				
	Jim Munter	1 allow	@ \$2,000			\$2,000		
	Misc. Reimbursables	1 sum	@ \$500		\$500			
Subtotal				\$26,140	\$1,000	\$3,000		\$30,140
Markup*					\$100	\$300		\$400
Total_(N	lot-to-exceed) Fee			\$26,140	\$1,100	\$3,300		\$30,540

