## AMENDMENT NO. 1 TO L30894

Contract Start Date:	11/20/2023	Original Total Amount:	\$49,600.00
Original Completion Date:	3/31/2024	As Previously Amended:	\$49,600.00
Amendment Completion Date:	7/31/2024	Current Amendment:	\$17,750.00
Resolution:	24-0572R	New Total Contract Amount:	\$67,350.00

This amendment, effective as of the date of attestation by the City Clerk (the "Effective Date"), by and between the City of Duluth, hereinafter referred to as "City", and Cornwell Engineering Group located at 712 Gum Rock Court, Newport News, VA 23606, hereinafter referred to as "Consultant", for the purpose of rendering services to the City.

WHEREAS, on November 20, 2023, City and Consultant entered into an agreement bearing City of Duluth Contract No. L30894 for the evaluation of corrosion control treatment processes, which Contract has not been previously amended, and which Contract and amendments are hereinafter referred to as the "Contract"; and

WHEREAS, both parties desire to amend the Contract.

NOW THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth, the parties hereto hereby agree as follows:

In this Amendment changes in the language of the Contract which delete language will be shown as stricken and language added to the contract language will be underlined.

**Revision 1.** The proposal described in the fourth paragraph of the Contract is hereby amended as follows:

WHEREAS, Consultant submitted a proposal to provide services for the Project (the "Proposal"), a copy of which is attached hereto as Exhibit A; and the letter dated July 1, 2024 for two additional segments of work which is attached hereto as Exhibit B; and

**Revision 2.** The Fees described in Section II. of the Contract is hereby amended as follows:

It is agreed between the parties that Consultant's maximum fee for the Project and Services shall not exceed the sum of Forty Nine Thousand, Six Hundred and 00/100 Dollars (\$49,600.00) Sixty-Seven Thousand, Three Hundred Fifty and 00/100 Dollars (\$67,350.00) inclusive of all travel and other expenses associated with the Project, payable from Fund 510-500-1955-5310.

**Revision 3.** The Agreement Period described in Section III.5. of the Contract is hereby amended as follows:

The term of this Agreement shall commence on the Effective Date and performance shall be completed by March 31, 2024 July 31, 2024, unless terminated earlier as provided for herein.

In all other respects the contract, together with all of its terms, covenants and conditions, is hereby confirmed in its entirety.

[Remainder of page intentionally left blank. Signature page to follow.]

IN WITNESS WHEREOF, the parties have hereunto set their hands as of the date of attestation shown below:

CITY OF DULUTH	CORNWELL ENGINEERING GROUP
Ву:	Ву:
Mayor	Company Representative
Attest:	Its:
City Clerk	Title of Representative
Date Attested:	Date:
Countersigned:	
City Auditor	
Approved as to form:	
City Attorney	



## CITY OF DULUTH, MINNESOTA DEPARTMENT OF PUBLIC WORKS AND UTILITIES COMPLETED WORK CORNWELL ENGINEERING GROUP (CORNWELL)

**JULY 1, 2024** 

Attention: Brad Scott, MN Licensed PE, Senior Engineer - Utilities

411 West First St, Room 240

Duluth MN 55802

Dear Mr. Scott:

This letter provides proposals for two segments of work previously competed as requested.

There are two tasks detailed on the attached sheets. The tasks are:

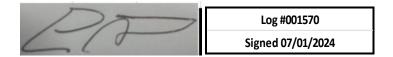
Task 1 – Preliminary Reservoir Review

Cornwell met with City and external consultant representatives to discuss preliminary approaches to identifying and mitigating risk such as testing, cleaning and operational review. The City conducted an initial test on Reservoir A, which was hampered by access issues. During a field visit to several reservoirs, an alternate test plan was developed for Reservoir "A" and executed on Friday, February 22. City completed a chemical analysis indicating positive (within standards) heterotrophic plate counts; low pH from 7.3 to 7.7 versus the desired 9.2, increased manganese near the reservoir bottom, iron, calcium, and manganese. The increasing turbidity and metals suggest cleaning is needed. Cornwell included an assessment in the desktop study and the task is complete.

Task 2 – Assessment of Conversion from gaseous ammonia to aqueous ammonia.

The City is preparing to convert from ammonia gas for chloramination to an ammonium sulfate liquid product, and requested that Cornwell review the conditions for a new ammonium sulfate storage and feed facility in the chemical storage area of the Lakewood WTP. Cornwell verified the feed and dose calculations, identified features of the gaseous system, and recommended modifications to improve the mixing of the liquid ammonia solution. The review has been completed and submitted.

The amended fee proposal for the completion of the work is attached. As discussed, it represents a total \$17,750 amendment.



Everett Skipper, MN PE, BCEE, Senior Vice President Cornwell Engineering Group, Inc.



					Dı	uluth Propo	sed Amend	dment- Con	pleted Tas	ks					
						•	FEE ES	TIMATE							
7/1//2024															
LABOR COSTS			STAFFING HOURS									į J	1		
				Employee Name	DC	ES	RB	GW	JF	CT/AK		Subtotal	Subtotal		
TASK DESCRIPTION			Employee Classification	Technical Director	Project Manager	Sr Engineer	Sr Engr	Engineer	Tech		Hours	Labor	Expense	Subtotal Costs	
			Billing Rate	\$230.00	\$215.00	\$180.00	\$155.00	\$110.00	\$80.00		1				
Desk	Desktop Study - Original Contract														
Com	pleted	Tasks													
1		A	mmonia E	valuation	2	12	0	24	5	0		43	\$7,310	\$0	\$7,310
1.1	Evaluation	of gas vs l	iquid ammo	onia feed isues/recs.	2	12		24	5			43	\$7,310		\$7,310
2 Reservoir Operations and Water Quality				6	36	0	0	12	0		54	\$10,440	\$0	\$10,440	
2.1	2.1 Discuss issues and potential concerns			2	12						14	\$3,040		\$3,040	
Review test locations, approaches for confirming suitability of water quality for corrosion control				2	16			4			22	\$4,340		\$4,340	
2.3	2.3 Review Feb 2024 field data and provide recommendations				2	8			8			18	\$3,060		\$3,060
				Subtotal Hours	8	48	0	24	17	0	0	97	\$17,750	<i>\$0</i>	\$17,750
				Billable Labor Costs	1,840	10,320	0	3,720	1,870	0			\$17,750		