

This is **EXHIBIT K**, consisting of 7 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

**AMENDMENT TO OWNER-ENGINEER AGREEMENT**  
**Amendment No. 01**

The Effective Date of this Amendment is: September 28, 2022.

Background Data

Effective Date of Owner-Engineer Agreement: August 17, 2021

Owner: Town of Johnstown, Colorado

Engineer: Burns & McDonnell Engineering Company, Inc.

Project: Johnstown Water Treatment Plant Design

Nature of Amendment: [Check those that are applicable and delete those that are inapplicable.]

- Additional Services to be performed by Engineer
- Modifications to services of Engineer
- Modifications to responsibilities of Owner
- Modifications of payment to Engineer
- Modifications to time(s) for rendering services
- Modifications to other terms and conditions of the Agreement

Description of Modifications:

**Scope of Services**

Engineer shall provide the following services as summarized below and described in detail following:

1. Design of WTP expansion on the adjacent southern property
  - a. Expand scope of topographic survey
  - b. Expand scope of geotechnical investigation
  - c. Expand scope of utility test holes
  - d. Improve eastern access road from County Road 13 to the existing WTP property
  - e. Site improvements to the southern property, including grading, drainage, stormwater management and access to Ballantine Boulevard.
2. Design of Residuals Building to provide storage of pretreatment solids and dewatering in lieu of solids discharge to the sanitary sewer
  - a. Float pumps in the existing DAF Building

- b. Sludge storage tanks with mixing
- c. Dewatering feed pumps
- d. Polymer system
- e. Dewatering equipment
- f. Solids conveyor

## **TASK SERIES 1100 – SOUTHERN PROPERTY**

### **Task 1101 – Topographic Survey**

Conduct topographic survey requirements, as required by Engineer, to facilitate the detailed design of the expanded WTP on the existing WTP property and southern property (approximately 17.7 acres). Includes land survey plat, private utility located and title binder for one parcel.

### **Task 1102 - Geotechnical Investigations**

Conduct geotechnical investigation of the existing WTP and southern properties, based on seventeen (17) boreholes, to develop foundation and pavement design recommendations.

### **Task 1103 - Utility Locates & Test Holes**

Engineer shall sub-contract for utility locates and test holes after site layout confirmed in preliminary design. Prepare utility report compatible with ASCE Class B. Allowance for up to thirty (30) test holes.

### **Task 1104 – Access Road to County Road 13**

Engineer shall prepare detailed design for a new access road from the existing WTP to County Road 13 to facilitate temporary construction access and permanent access to the existing WTP, minimize impact to the existing cemetery and improve durability. The scope includes eight additional civil drawings (initial, interim, and final erosion and sediment control, enlarged site plan, control point plan and table, sections and profiles, stormwater plan and landscaping), expansion of the stormwater management plan, and permitting coordination with Weld County.

### **Task 1105 – Grading and Drainage**

Engineer shall prepare detailed design for the expanded WTP on the existing and southern properties. Includes site grading, drainage, stormwater improvements, yard piping and site access roads on southern property. The scope includes twelve additional civil drawings (initial, interim, and final erosion and sediment control, enlarged site plan, control point plan and table, sections and profiles, grading plans, yard piping plans, roadway sections and profiles, stormwater plan and landscaping), expansion of the stormwater management plan, and permitting coordination for the new access road to Ballantine Boulevard.

## **TASK SERIES 1200 – RESIDUALS BUILDING**

### **Task 1201 – Project, Risk and Resource Management, Schedule, and Budget Controls**

Engineer shall provide project management services for the Residuals Building design phase includes all project coordination between the Owner and the team members. The Engineer will monitor project status, monitor project schedule, monitor project deliverables, and coordinate resources including sub-Engineers. The Engineer will prepare a risk register and a decision log at project initiation and maintain throughout the course of the design phase. The Engineer will utilize our internal accounting systems to track budget and manage project scope.

### **Task 1202 - Prepare Conceptual Design**

Engineer shall determine flow and loading for waste flows from the improved pretreatment process. Engineer shall prepare preliminary sizing of float pumping, sludge storage tanks, dewatering feed pumps, polymer system and dewatering presses. Engineer shall evaluate annual operating costs for up to three options (wet hauling, contract hauling and on-site dewatering) to assist the Town with the selection of the preferred alternative. On-site dewatering was selected during the concept design. Engineer shall prepare conceptual design (15% complete) of the Residual Building and appurtenances.

Engineer shall advance the Residuals Building conceptual design, based on Owner feedback during Design Workshop(s). Conceptual design includes design drawings, specifications, and updates to the Basis of Design Report (BODR) to show the selected treatment train layout, structure sizing, utilities, proposed structures, and initial process & instrumentation diagrams. Conceptual design package to represent 15% complete design. Engineer to develop opinion of probable construction and annual operating costs, construction schedule and phases.

Based on the 15% design documents, Engineer shall prepare an AACE Class 4 engineer's opinion of probable cost for the Residuals Building. This cost opinion will be submitted along with the design documents for review and comment by the Owner. The cost opinion will be based on recent bid tabulation information, historical cost data, and discussions with local suppliers and contractors. Assumptions will be included for reference.

Conceptual design documents to be submitted in PDF format.

### **Task 1203 – Sampling and Analysis**

Engineer shall collect and ship samples of pretreatment float to up to four dewatering vendors. Samples will be collected during the DAF performance test using the proposed expanded WTP chemistry (ferric sulfate as the primary coagulant). Vendors to assess the performance of their proposed dewatering system(s). Engineer shall collect and transfer float samples to an analytical laboratory. Engineer shall assess laboratory results, summarize vendor-supplied results, and propose design criteria for the Residuals Building at Design Workshop(s).

### **Task 1204 - Develop Preliminary Design**

Engineer shall develop a set of schematic (30%) plans for the scope listed above. The 30% plans will consist of civil, architectural, structural, process, mechanical, electrical, and pipeline drawings necessary to convey the intended scope of improvements. Engineer will provide a PDF of the 30% plans (11"x17"). The plans will be prepared in accordance with Engineer's and/or sub-consultant's drafting standards.

This task includes the development of draft specifications for the Residuals Building. The Engineer shall finalize the process flow diagram for the overall WTP, including the Residuals Building. The process flow diagram shall indicate the overall process flow but shall not include most valves or the number of equipment items. The Engineer will finalize the unit process sizing and include the information in a process design sheet in the 30% drawings.

The Engineer will finalize the hydraulics for the Residuals Building, including float water, potable water, raw water (spray down), decant, drain, overflow, pressate return and waste. The Engineer will coordinate with the Owner to finalize the hydraulics and coordinate tie-ins to the existing DAF Building.

**Task 1205 - Prepare Procurement Request for Proposals Packages**

Engineer shall prepare issued for bid documents for the above Residuals equipment packages. Engineer shall provide front-end procurement documents in their preferred format and facilitate the solicitation and receipt of proposals, based on an assumed Design-Build approach.

Engineer shall develop procurement packages for dewatering vendors to evaluate and select the preferred dewatering technology. Engineer shall use the available data, collected during the pretreatment pilot, to develop minimum performance criteria for dewatering selection (design flows and loads, percent dry solids, polymer usage, pressate flows). Engineer shall develop minimum qualifications for vendor acceptance. The dewatering equipment will be packaged as float pumps, mixers, and dewatering equipment (dewatering feed pumps, polymer system, dewatering presses, and solids conveyor).

**Task 1206 - Procurement Period Support**

Engineer shall support the Owner by responding in writing to questions received from equipment vendors.

**Task 1207 - Evaluation & Negotiation of Procurement Packages**

Engineer shall assist the Owner with evaluation of the received equipment package bids. Engineer shall facilitate a selection of the preferred equipment supplier, based on monetary and non-monetary criteria. This scope of work assumes a Design-Build approach, with the Design-Builder assuming responsibility for procurement of the equipment packages after selection by the Owner and Engineer.

**Task 1208 - Submittal Review**

Engineer shall review compliance submittals from equipment suppliers. Includes initial submittal review, coordination meetings and resubmittal review.

**Task 1209 - Prepare 60% Design**

Engineer shall provide drawings at the 60% design level for the Residuals Building and its associated facilities. The 60% drawings shall include drawings included in the 30% design package, brought to 60%, and additional detail drawings that are needed for final design. The plans will be prepared in accordance with Engineer's and/or subconsultant's drafting standards. The Engineer will develop a set of 60% specifications, consisting of draft specifications from all required engineering disciplines. Engineer will provide a PDF of the 60% plans (11"x17") and specifications.

**Task 1210 - Prepare 90% Design**

Engineer shall provide plans at the 90% design level for the Residuals Building and its associated facilities. The 90% drawings shall include 60% drawings, brought to 90%, and additional detail drawings that are needed for final design. Input from the Owner, reviewing agencies or Design-Builder at Design Workshops or other meetings will be incorporated into the 90% design where appropriate. Engineer will provide a PDF of the 90% plans (11"x17"). The plans will be prepared in accordance with Engineer's and/or subconsultant's drafting standards. Engineer shall develop a set of 90% specifications, consisting of specifications from required engineering disciplines. Engineer will provide a PDF of the 90% specifications.

**Task 1211 – Permitting Support**

Engineer shall coordinate with authorities having jurisdiction, including response to comments on the initial submittals, submit updated documentation for final issue of permits.

**Task 1212 - Prepare Construction Documents**

Engineer will incorporate any comments from the 90% design documents from the Owner and reviewing authorities into the Issued for Construction documents. The issued for construction documents shall be signed and sealed by a professional engineer in the state of Colorado.

Agreement Summary (Basic Services):

Original agreement amount:	\$2,059,442
Net change for prior amendments	\$0
This amendment amount:	\$407,937
Adjusted Agreement amount:	\$2,467,379
Change in time for services (days or date, as applicable)	60 days

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this, or previous Amendments remain in effect.

OWNER:

\_\_\_\_\_

By: \_\_\_\_\_

Print \_\_\_\_\_

name: \_\_\_\_\_

Title: \_\_\_\_\_

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

ENGINEER:

\_\_\_\_\_

By: \_\_\_\_\_

Print \_\_\_\_\_

name: \_\_\_\_\_

Title: \_\_\_\_\_

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

*Daniel D. Korinek*

Daniel D. Korinek

Vice President

9/28/2022

Town of Johnstown  
 Water Treatment Plant Expansion from 5 to 12.5 mgd  
 Amendment 01 - Work Breakdown Structure and Fee Schedule

Activity	Project Manager	Quality Control	Lead Process	Process	Structural	Architectural	Civil	Mechanical	Electrical, Instrumentation & Controls	Construction	CAD / Designer	Fire Protection	BMCD Total Labor		Expenses	Sub-Consultants	Total Cost
	Pugh	Schaefer	Lundgren	Kurtz Wetz	Kienholz	DalGLISH Lang	Brothers Tessitore	Olsen	Patwari Baker	Kuntz Waddell	Aryan	Ginsburg DeGroff	Hours	Cost	Direct	Cost	
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours					
<b>TASK SERIES 1100 - Southern Property</b>																	
1101 - Additional Topographic Survey													0	\$0	\$0		\$ -
1102 - Additional Geotechnical Investigation	4				8								12	\$3,156	\$130	\$20,944	\$ 24,230
1103 - Additional Utility Test Holes	4			8									12	\$2,298	\$90	\$10,579	\$ 12,967
1104 - Access Road to County Road 13	8						80						88	\$16,168	\$650		\$ 16,818
1105 - Grading and Drainage	4						300						304	\$53,740	\$2,150		\$ 55,890
<b>Sub-Total Series 1100</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>0</b>	<b>380</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>416</b>	<b>\$75,362</b>	<b>\$3,020</b>	<b>\$31,523</b>	<b>\$109,905</b>
<b>TASK SERIES 1200 - Residuals Building</b>																	
1201 - Project, Risk and Resource Management, Schedule and Budget Controls	40		20										60	\$13,920	\$560		\$ 14,480
1202 - Prepare Conceptual Design (15%)	20	2	8	80	32	20			8		40		210	\$40,561	\$1,620		\$ 42,181
1203 - Sampling and Analysis			4	20									24	\$3,760	\$150	\$3,000	\$ 6,910
1204 - Develop Preliminary Design (30%)	20	2	10	80	24	24		21	16		40		237	\$46,613	\$1,860		\$ 48,473
1205 - Prepare Procurement Request for Proposal Package	2			10						5			17	\$3,365	\$130		\$ 3,495
1206 - Procurement Period Support	2		4	10									16	\$2,742	\$110		\$ 2,852
1207 - Evaluation & Negotiation of Procurement Package	4		2	6					8	5			25	\$5,211	\$210		\$ 5,421
1208 - Submittal Review	4			30	4			5	8				51	\$9,625	\$390		\$ 10,015
1209 - Prepare 60% Design	20	2	16	120	32	20	4	21	24	5	40	20	324	\$63,371	\$2,530		\$ 65,901
1210 - Prepare 90% Design	16	2	12	120	40	40	4	25	30	5	60	20	374	\$73,673	\$2,950		\$ 76,623
1211 - Permitting Support	8												8	\$2,120	\$80		\$ 2,200
1212 - Prepare Construction Documents	4	2	4	24	8	8	2	8	16		20		96	\$18,732	\$750		\$ 19,482
<b>Sub-Total Series 1200</b>	<b>140</b>	<b>10</b>	<b>80</b>	<b>500</b>	<b>140</b>	<b>112</b>	<b>10</b>	<b>80</b>	<b>110</b>	<b>20</b>	<b>200</b>	<b>40</b>	<b>1,442</b>	<b>\$283,691</b>	<b>\$11,340</b>	<b>\$3,000</b>	<b>\$298,031</b>
<b>Project Subtotals</b>	<b>160</b>	<b>10</b>	<b>80</b>	<b>508</b>	<b>148</b>	<b>112</b>	<b>390</b>	<b>80</b>	<b>110</b>	<b>20</b>	<b>200</b>	<b>40</b>	<b>1,858</b>	<b>\$359,054</b>	<b>\$14,360</b>	<b>\$34,523</b>	<b>\$407,937</b>
<b>Project Total</b>																	<b>\$407,937</b>

Notes: