

# **ATTACHMENT B**

AMENDMENT NO. 1  
To  
DESIGN CONSULTANT AGREEMENT  
Between  
BURNS & McDONNELL ENGINEERING COMPANY, INC.  
Centennial, Colorado  
and  
PLUM CREEK WATER RECLAMATION AUTHORITY

This Contract amendment (“Amendment”) is made by and between Burns & McDonnell Engineering Company, Inc. a Corporation and the Plum Creek Water Reclamation Authority, a quasi-municipal corporation and political subdivision of the state of Colorado, this \_\_\_\_ day of November, 2018, for the Wastewater Treatment Facility Expansion.

Whereas, it is the mutual desire of the parties hereto to amend the DESIGN CONSULTANT AGREEMENT entered into on the 06<sup>th</sup> day of September 2017, hereinafter called the “Existing Agreement.”

Therefore, it is hereby agreed that the Existing Agreement be amended as follows:

## **SCOPE OF SERVICE**

Add the following after Task 4 of Attachment A – Detailed Scope of Work:

### **Construction Phase Engineering Services**

The Scope of Services described herein represents the ENGINEER’s professional engineering activities necessary for engineering services during construction and post-construction activities. ENGINEER will provide a full-time resident project representative (“RPR”) on-site during the construction phase, for a total of 20 months of the anticipated 24-month construction period, or 3,467 inspection hours. If more or less inspection time is required, an equitable adjustment will be made to the ENGINEER’s contract by means of a supplemental agreement. ENGINEER’s RPR service will in no way relieve construction contractors of their obligations for complete compliance with the drawings and specifications. ENGINEER shall not make exhaustive or continuous on-site inspections to check the quality or quantity of such work. ENGINEER shall not be responsible for the means, methods, techniques, sequences, or procedures of construction contractors, or for their safety precautions and programs incident to their work. ENGINEER shall not be responsible for the failure of construction contractors to perform the work in accordance with the Contract Documents. Notwithstanding the foregoing, if ENGINEER becomes aware of any deficiencies or defects in the work, or any lack of conformity of the work to the Contract Documents, ENGINEER shall promptly bring such deficiencies, defects, or lack of conformity to OWNER’s attention.

Insofar as job site safety is concerned, ENGINEER is only responsible for its employees’ activities on the job site, and this shall not be construed to relieve OWNER or any construction contractors from their responsibilities for maintaining a safe job site. Neither the professional

activities of ENGINEER, nor presence of ENGINEER or its employees and subcontractors shall be construed to imply ENGINEER has any responsibility for methods of work performance, superintendence, sequencing of construction, or safety in, on or about the job site. OWNER agrees that the construction contractors are solely responsible for job site safety, and this intent shall be made evident in OWNER's agreement with all construction contractors. OWNER and ENGINEER shall be made additional insureds under the construction contractors' general liability insurance policy.

ENGINEER will not be a party to any construction contract and all authority and responsibility to stop work belongs to the OWNER. ENGINEER shall not be liable for the results of any interpretations or decisions rendered by it in good faith when acting as an arbitrator or interpreter of the Contract Documents; provided, however, that all interpretations and decisions of ENGINEER shall be consistent with the intent of, and reasonably inferable from, the Contract Documents and shall be in writing or in the form of drawings.

By recommending any payment to others, ENGINEER will not thereby be deemed to have represented that continuous or exhaustive examinations have been made by ENGINEER to check the quality or quantity of the work or to review the means, methods, sequences, techniques or procedures of construction or safety precautions or programs incident thereto or that ENGINEER has made an examination to ascertain how or for what purposes any person(s) has used the moneys paid on account, or that title to any of work, materials or equipment has passed to the OWNER free and clear of any lien, claims, security interests or encumbrances, or that others have completed their work exactly in accordance with the Contract Documents. Notwithstanding the foregoing, it is agreed that, by recommending any payment to others, ENGINEER does thereby represent that, based on ENGINEER's evaluation of the work and the data comprising the Contractor's Application for Payment, that, to the best of ENGINEER's knowledge, information and belief, the work has progressed to the point indicated, the quality of the work is in accordance with the Contract Documents, that the Contractor is entitled to payment in the amount certified, and that ENGINEER knows of no legitimate reason that such payment or any part thereof may or should be withheld.

## **Task Series 5. Engineering During Construction**

General Administration of Construction Contract:

ENGINEER shall provide for general administration of the construction contract. Specific tasks included within the administration of the construction contract include the following services:

### **5.1 Preconstruction Conference**

Schedule and conduct preconstruction conference. Prepare minutes of the proceedings of the conference and distribute copies to OWNER and those in attendance.

### **5.2 Progress Meetings**

Prepare for and attend meetings as required to consult with the OWNER during the construction period relative to general administration of the construction

### 5.3 Compliance Submittals

Review and approve (or take other appropriate action in respect of) Shop Drawings, Samples, and other submittals and data required to ascertain and ensure their conformance with the Contract Documents.

### 5.4 Office Engineering Services

Review and respond to requests for information (“RFIs”) in writing and Prepare and issue supplemental Drawings and Specifications as necessary in response to RFIs. Maintain an orderly record of all RFIs, responses provided to the General Contractor, and documentation of each RFI’s resolution. Review and inform OWNER of construction schedule. Review cost change proposals and provide office staff support for the project. Receive, review and transmit to OWNER, with written comments, operating and maintenance instructions, schedules, guarantees, or certificates required by the Contract Documents, certificates of inspection, tests and approvals, and marked up record documents (including Shop Drawings, samples and other data approved as provided) which are to be assembled by ENGINEER in accordance with the Contract Documents to obtain final payment.

### 5.5 Work Compliance Site Visits

Specific discipline engineers will visit the site at times required to observe critical events or progress. This may include work observation/inspection of steel, concrete, masonry, etc. as required.

### 5.6 Construction Oversight and Residential Project Representative

Observe the progress and quality of the work as is reasonably necessary at various stages of construction to determine if the work is proceeding in accordance with the Contract Documents. Keep the OWNER informed about the progress and quality of the portion of the Work completed.

Review and monitor the progress schedule, schedule of Shop Drawing and other submittals prepared by General Contractor and take necessary and appropriate action concerning acceptability.

Attend meetings with General Contractor and OWNER, such as preconstruction conferences, progress meetings, job conferences, and other project-related meetings, and prepare and circulate copies of minutes thereof, and keep OWNER advised as necessary.

Conduct on-site observations of the work in progress to determine if the work is proceeding in accordance with the Contract Documents.

Verify that tests, equipment and systems start-ups and operating and maintenance training are conducted in the presence of appropriate personnel.

Conduct Specials Inspections for the following items:

- Material verification of high-strength bolts
- Visual inspection of pre-tensioning
- Material verification of structural steel
- Visual inspection of steel frame joint details
- Material verification of cold-formed steel deck material
- Visual inspection of concrete formwork
- Visual inspection of concrete reinforcement
- Visual inspection of cast in place concrete placement
- Visual inspection of cast in place concrete curing conditions/methods
- Visual inspection of size and placement of cast in place and post installed anchors
- Confirm compliance of masonry construction with approved documents
- Visual inspection of masonry size, placement, and conditions to conform with approved documents
- Visual inspection of grout space prior to placement and grout placement

The Contractor will be responsible for materials testing and weld inspections. This will include density testing of subgrade, welding materials and finished welding visual inspection of welds, concrete materials testing and verification of properties, grout materials testing and verification of properties.

Maintain, at ENGINEER's office, orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including all Requests for Information, Construction Change Directives, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing submittals and other project related documents. Maintain an updated set of Contract Documents showing "Conforming to Construction Records" conditions based on the General Contractor's records and the RPR's observations and inspections.

Review checklists of work to be completed or corrected with a request for issuance of a certificate of substantial completion. Conduct an inspection with the OWNER to check conformance of the Work with the requirements of the Contract Documents and, if the checklists are accurate and complete take the necessary action for disposition.

Conduct a final inspection, accompanied by OWNER, prepare a final checklist of items to be completed or corrected, and prepare documentation for transmittal to the OWNER as required to close out the Project, including: (1) consent of surety or sureties, if any, to reduction in or partial release of retainage or the making of final payment; (2) affidavits, receipts, releases and waivers of liens or bonds indemnifying the OWNER against liens; and (3) any other documentation required of the ENGINEER under the Contract Documents.

## **Task Series 6. Post-Construction Engineering**

### 6.1. Start-Up, and Operation and Maintenance Training

Start-Up: Facility start-up shall be performed by the OWNER with ENGINEER as needed for operating recommendations. The OWNER Operation Staff shall oversee operations once wastewater is introduced into the new facility. The CONTRACTOR shall complete instrumentation and control construction (installation and adjustment) including all items that require wastewater to be present. ENGINEER shall provide guidance and recommendations to help resolve start-up issues in a timely manner.

Pre-Start-Up Workshop: To aide in the start-up planning, the ENGINEER shall conduct a pre-start-up planning workshop with the OWNER and CONTRACTOR prior to introducing wastewater into each new process of the facility.

Equipment Operations Training: Equipment training requirements shall be included within the construction document specifications. The CONTRACTOR shall be responsible for ensuring that equipment vendors complete the training requirements as outlined in the specifications.

### 6.2. Operation and Maintenance (O&M) Manual Preparation

The O&M Manual prepared by the ENGINEER shall be a paper version document. It shall coordinate descriptions of the facility processes with the physical operation and periodic maintenance of the mechanical equipment performing those processes. A final O&M Manual shall be prepared and presented in its final form by the completion of construction. The final O&M Manual shall also list the operation and control parameters based on the design intent for control of the new facility.

The content of the O&M Manual prepared by ENGINEER shall satisfy all requirements of the applicable regulatory agencies required to review and/or approve the document and include, at minimum:

- Information regarding actual equipment supplied and reflect changes, which may have been made throughout construction.
- An overall description of each system and its intended performance represented as a schematic diagram.
- A description of the primary equipment and equipment identification methods.
- P & ID Drawings
- System or building plans showing the record as-built locations of major equipment and piping in order to convey the operational intent.
- Step sequencing for start-up, normal operation, and shut-down

### Deliverables:

Final O&M Manual: Four (4) paper copies for OWNER, paper copies as required by the regulatory agencies, and one (1) electronic version (pdf)

### 6.3. Conduct Final Inspection

The ENGINEER shall conduct a final inspection and issue a final Certificate for Payment indicating that all Work complies with the requirements of the Contract Documents.

#### 6.4. CDPHE Certifications

The ENGINEER shall issue CDPHE Certification of completion per approved design and/or work through changes to secure final approval from CDPHE of plant construction.

#### 6.5. Record Drawings

ENGINEER shall prepare conforming to construction record drawings of the constructed facilities. The final set of record drawings furnished shall be "Revised According to Construction Records" in accordance with records provided by ENGINEER'S RPR and General Contractor.

Deliverables:

Draft Record Drawings: One (1) complete paper copy for review and comment by the OWNER.

Final Record Drawings: Four (4) complete paper copies and one (1) electronic version (i.e., PDF).

### TIME OF SERVICE

Add the following paragraph to Section 3.06 of the agreement:

"Tasks 5-6 scope of work shall be completed within twenty eight (28) months of construction notice to proceed. If construction is not completed within the timeline predicted, ENGINEER will request additional time for completion."

### COMPENSATION

For the Additional Services outlined in Tasks 5-6 Scope of Services described herein, OWNER shall pay ENGINEER on a rate schedule plus expenses basis according to the ENGINEER's Reimbursable Expenses Schedule (Exhibit G) and Hourly Rates (Exhibit B), with a "not to exceed" Maximum Fee of One Million, Seventy Eight Thousand, Three Hundred Twenty Three United States Dollars (US \$1,078,323) (Exhibit F). Exhibits F & G are attached to this amendment and incorporated into the overall agreement."

This amendment will be deemed a part of, and be subject to, all terms and conditions of the Existing Agreement. Except as modified above, the Existing Agreement will remain in full force and effect.

BURNS & MCDONNELL ENGINEERING CO.

ACCEPTED:

By\_\_\_\_\_

Title Mark A. Lichtwardt, Sr. Vice President

Date\_\_\_\_\_

PLUM CREEK WATER RECLAMATION AUTHORITY

ACCEPTED:

By\_\_\_\_\_

Title Wes Martin, Authority Manager

Date\_\_\_\_\_

END OF AMENDMENT NO.1