

**EXHIBIT A – AMENDMENT 2
TO AGREEMENT BETWEEN
OWNER AND ENGINEER
Scope of Work**

This is an amendment exhibit attached to and made a part of the Agreement dated April 20, 2020, between the City of Kingsport (OWNER) and CDM Smith Inc. (ENGINEER) for professional services.

1.0 BACKGROUND

The OWNER owns and operates the Kingsport Water Treatment Plant (WTP). The clearwell and high service pumping system consisting of pumps, power supply, filtered water piping and appurtenant facilities has been determined to be a vulnerable part of the Kingsport water system.

The Kingsport Water Treatment Plant Master Plan (May 2011 by Hazen and Sawyer) provides the following recommendations for these facilities.

1. Provide additional 1.5 million-gallon clearwell.
2. Replace three existing high service pumps and add a fourth high service pump to provide N+1+1 reliability.
3. Replace high service pump station electrical system.

Two of the existing pumps and motor have been replaced by the OWNER, and one new replacement pump has been ordered and existing motors will be used on these pumps.

The project will be implemented in a phased approach with tasks as follows:

- Task 1 – Preliminary Design (Complete)
- Task 2 – Final Design (Complete)
- Task 3 – Permitting and Approvals (Complete)
- Task 4 – Bidding Services (In-Progress)
- Task 5 – General Services During Construction
- Task 6 – Resident Project Representative (RPR) Services

Task 1 was completed in August 2020. Task 2 through 6 will include only the High Service Pump Station upgrades. Tasks 4 through 6 are included in this scope of work. The clearwell and related piping upgrades will be implemented in a future phase of the project and are not included in the scope of work of this agreement.

2.0 ENGINEER'S SERVICES

Task 1 – Preliminary Design (Complete)

Task 2 – Final Design (Complete)

Task 3 – Permitting and Approvals (Complete)

Task 4 – Bidding Services (In-progress)

Standard bidding services were included in the original scope of work and did not include services related to funding sources. The ENGINEER shall provide engineering services related to the implementation of EDA and SRF funding. Standard EDA and SRF documents will be incorporated into the completed drawings and specifications. ENGINEER will coordinate with funding staff and work with the OWNER to address comments in order to achieve approval to bid project.

Task 5 – Construction Phase Services

The ENGINEER shall provide engineering services during the construction phase. This task includes provisions of construction services starting with the construction contract Notice-to-Proceed (NTP) date and ending with certificate of final completion. It is assumed that the construction duration will be 18 months. Should the final construction contract duration vary from the currently estimated duration, the ENGINEER and OWNER shall adjust the Agreement scope of work and compensation for any additional (or reduced) construction services required via amendment of the Agreement. Construction Phase Services to be provided by the ENGINEER are as follows:

Task 5.1-General Administration of the Construction Contract

ENGINEER shall consult with and advise OWNER and acts as OWNER's representative as provided in the Standard General Conditions. The extent and limitations of the duties, responsibilities, and authority of the ENGINEER as assigned in said Standard General Conditions shall not be modified, except to the extent provided herein. All of OWNER's instruction to Contactor will be issued through ENGINEER who shall have authority to act of behalf of OWNER in dealings with Contractor to the extent provided in this Agreement and said Standard General Conditions, except as otherwise provided in writing.

Task 5.2-Visits to the Site and Observation of Construction

In connection with observations of the work of Contractor while in progress:

ENGINEER shall make visits to the site at intervals appropriate to the various stakes of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress and quality of the various aspects of the Contractor's work. Such visits and observations by ENGINEER are not intended to be exhaustive or to extend every aspect of the work in progress, or to involve detailed inspections of the work beyond the responsibilities specifically assigned to ENGINEER in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observations of the work based on ENGINEER's exercise of professional judgment. Based on information obtained during such visits and such observations, ENGINEER shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and ENGINEER shall keep OWNER informed of the progress of work. The responsibilities of ENGINEER contained in this paragraph are expressly subject to the limitations set

forth in the following paragraph and other express or general limitations in this Agreement and elsewhere.

The purpose of ENGINEER's visits to the site will be to enable ENGINEER to better carry out the duties and responsibilities assigned to and undertaken by ENGINEER during the Construction Phase and, in addition, by the exercise of ENGINEER's efforts as an experienced and qualified design professional, to provide for OWNER a greater degree of confidence that the completed work of Contractor will conform in general to the contract Documents and that the integrity of the design concept of the compiled Project as function whole as indicated in the Contract Document has been implemented and preserved by Contractor. On the other hand, ENGINEER shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct or have control over Contractor's work; nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, for safety precautions and programs incident to the work of Contractor, or for any failure of Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor's furnishing and performing the work. Accordingly, ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

It is assumed that site visits will coincide with monthly progress meetings. Two additional site visits are assumed for process, electrical, structural, building mechanical, I/C engineers and architects.

Task 5.3-Defective Work

During such visits and on the basis of such observations, ENGINEER shall have authority to disapprove of or reject Contractor's work while it is in progress, if ENGINEER believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the complete Project as a functioning whole as indicated in the Contract Documents.

Task 5.4-Clarifications and Interpretation, Field Orders

ENGINEER shall issue necessary clarification and interpretation of the contract Documents, as appropriate to the orderly completion of the work. Such clarifications and interpretation will be consistent with the intent of and reasonable inferable from the Contract Documents. ENGINEER may issue Field Orders authorizing minor variations from the requirements of the Contract Documents.

Task 5.5-Change Orders and Work Change Directives

ENGINEER shall recommend Change Orders and Work Change Directives to OWNER as appropriate and shall prepare Change Orders and Work Change Directives as required.

Task 5.6-Shop Drawings and other Submittals

ENGINEER shall review and approved (or take other appropriate action in respect of) Shop Drawings and Samples and other data with Contractor is required to submit but only for conformance with the information given in the contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures or

construction or to safety precautions and programs incident thereto. Single discipline reviews shall be completed in 30 calendar days and multi-discipline reviews will be completed in 45 days.

Task 5.7-Substitutes

ENGINEER shall evaluate and determine the acceptability of substitute or-equal materials and equipment proposed by Contractor. However, services in making revisions to Drawings and Specification occasioned by the acceptance of substitute materials or equipment other than or-equal items and services after the award of the Construction Contract in evaluating and determining the acceptability of a substitute which is appropriate for the Project or an excessive number of substitutes will only be performed pursuant to an amendment to this Agreement for additional compensation.

Task 5.8-Disagreement between OWNER and Contractor

ENGINEER shall render the initial decisions on all claims of OWNER and Contractor relating to the acceptability of the work or the interpretation of the requirements of the technical and design related portion of the contract Documents pertained to the execution and progress of the work. In rendering such decision, ENGINEER shall be fair and not show partiality to OWNER or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity. OWNER shall be responsible for interpretation of the requirements of Decisions 00 and 01 of the Contract Documents.

Task 5.9-Applications for Payment

Based on ENGINEER's on-site observations as an experienced and qualified design professional and on review of Applications for Payment and the accompanying data and schedules:

ENGINEER shall determine the amounts that ENGINEER recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute ENGINEER's representation to OWNER, based on such observations and review, that, to the best of ENGINEER's knowledge, information and belief, the work has progress to the point indicated, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the work. In the case of unit price work, ENGINEER's recommendations of payment will include final determinations of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents). The responsibilities of ENGINEER contained in this paragraph and other express or general limitations in this Agreement and elsewhere.

By recommending any payment, ENGINEER shall not thereby be deemed to have represented that onsite observation made by ENGINEER to check the quality or quantity of Contractor's work as it is performed and furnished have been exhaustive, extended to every aspect of the work in progress, or have involved detailed inspection of the work beyond the responsibilities specifically assigned to ENGINEER in this Agreement and Contract Documents. Neither ENGINEER's review of Contractor's work for the purpose of recommending payments nor ENGINEER's recommendations of any payment (including final payment) will impose on ENGINEER responsibility to supervise, direct, or control such work or for the means, methods, techniques, sequences, or procedures of construction or safety

precautions or programs incident thereto, or Contactor's compliance with laws, rules, regulations, ordinances, codes, or orders applicable to Contractor's furnishing and performing the work. It will also not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the contract Price or to determine that title to any of the work, materials, or equipment has passed to the OWNER free and clear of any liens, claims, security interest, or encumbrances or that there may not be other matters at issue between OWNER and Contractor that might affect the amount that should be paid.

Engineer to provide Pay Application support and coordination related for EDA and SRF funding sources.

Task 5.10-Contractor's Completion Documents

ENGINEER shall receive, review, and transmit to OWNER with written comment maintenance and operation instruction, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, test and approvals, and marked-up Record Documents (including Shop Drawings, Samples and other data approved as provided under paragraph 5.6 and marked up record drawings) which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. ENGINEER's review of such documents will only be determined generally that their content complies with the requirements of an, in the case of certificates of inspections, tests, ad approvals, the results certified indicated compliance with the Contract Documents.

Task 5.11-Substantial Completion

Following notice from Contractor that Contractor considers the entire work ready for its intended use, Engineer and Owner, accompanied by Contactor, shall conduct an inspection to determine if the work is substantially complete. If, after considering any objections of OWNER, ENGINEER considers work substantially complete ENGINEER shall deliver a certificate of Substantial Completion to OWNER and Contractor.

Task 5.12-Final Notice of Acceptability of Work

ENGINEER shall conduct a final inspection to determine if the completed work of Contractor is acceptable so that ENGINEER may recommend, in writing, final payment to the Contractor. Accompanying the recommendation for final payment, ENGINEER shall indicated the work is acceptable (subject to the provision of paragraph 5.9.2) to the best of ENGINEER's knowledge, information, and belief and based on the extent of the services performed and furnished by ENGINEER under this Agreement.

Task 5.13-Record Drawings

ENGINEER shall prepare one reproducible record drawing set based on information provided by the Contractor and reviewed as part of Task 5.10. Record Drawings shall also be delivered in PDF electronic format on CD.

Task 5.14-Operation Manuals

Preparation of specific equipment and process operations manuals is not included. Review of vendor prepared equipment operations and maintenance manuals is included in Task 5.6.

Task 5.15-Start-up and Operational Assistances

ENGINEER will review and comment on Contactor commissioning plan, and review start-up reports required by the contract documents. ENGINEER will coordinate communications with the Contractor regarding operational issues until Final Completion. ENGINEER's project manager and one other engineer will be present during start-up and testing.

Task 5.16-Meetings

ENGINEER will prepare agendas, attend meetings and prepare meeting minutes summaries for the following meetings:

- Preconstruction Meeting
- Monthly Progress Meetings (18 assumed)

Limitations of Responsibilities – ENGINEER shall not be responsible for the acts or omissions of any Contractor, or of any subcontractor, any supplier, or any other person or organization performing or furnishing any of the work. ENGINEER shall not be responsible for Contractor's failure to perform or furnish the work in accordance with the Contract Documents.

Task 6 - Resident Project Representative (RPR) Services

ENGINEER shall furnish a Resident Project Representative (RPR) to assist OWNER in observing, documenting progress and quality of the work of Contractor and to assist in the coordination of the construction activities. Part-time RPR services shall be provided for a 12-month period (2,080 hours assumed), anticipated to begin in the fall of 2023. Due to longer equipment lead times, the RPR services will only be provided while construction activities are occurring in the field. Therefore, the RPR's Duties and Responsibilities are limited and shall only provide the following tasks while the RPR is on-site. In the event the Contractor does not meet the assumed schedule, requiring additional RPR inspection services, the Contract shall be amended as needed.

Through on-site observations of the work in progress and field checks of materials and equipment by the RPR, RPR shall endeavor to provide further protection for OWNER against defects and deficiencies in the work of Contractor. However, RPR shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work nor shall RPR have authority over or responsibility for the means, methods, techniques, sequences or procedures selected by Contractor, for safety precautions and programs incident to the work of Contractor, for any failure of Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor's performing and furnishing the work, or responsibility of construction for Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

The duties and responsibilities of the RPR are limited to those of the ENGINEER in ENGINEER's Agreement with OWNER and in the construction Contract Documents, and are further limited and described as

follows:

A. General

1. RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work will in general be with ENGINEER and Contractor, keeping OWNER advised as necessary. RPR's dealing with Contractor's subcontractors will only be through or with the full knowledge and approval of Contractor. RPR will generally communicate with Owner with the knowledge of and under the direction of ENGINEER.

B. Duties and Responsibilities of RPR

1. Schedules: RPR will review the progress schedule, schedule of Shop Drawing submittals, and schedule of values prepared by Contractor and consult with ENGINEER concerning acceptability.
2. Conferences and Meetings: RPR will attend meetings with Contractor such as preconstruction conferences, monthly progress meetings, job conferences, and other Project-related meetings.
3. Liaison: RPR will serve as ENGINEER's liaison with Contractor, working principally through Contractor's superintendent, and assist in understanding the intent of Contract Documents; and assist ENGINEER in serving as OWNER's liaison with Contractor when Contractor's operations affect OWNER's on-site operations.
4. RPR will assist in obtaining from OWNER additional details or information when required for proper execution of the Work.
5. Shop Drawings and Samples:
 - a. RPR shall maintain a file of shop drawings, submittals and samples. RPR will advise ENGINEER and Contractor of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by ENGINEER.
6. Review of Work, Rejection of Defective Work, Inspections and Tests:
 - a. RPR will conduct on-site observation of the Work in progress to assist ENGINEER in determining if the Work is proceeding in accordance with the Contract Documents.
 - b. RPR will report to ENGINEER whenever RPR believes that any Work will not produce a completed Project that conforms to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of Work that the RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
 - c. RPR will verify that tests and start-ups are conducted in the presence of appropriate personnel; and that Contractor maintains adequate records thereof; and observe, record, and report to ENGINEER appropriate details relative to the test procedures and start-ups.
 - d. RPR will accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to

ENGINEER.

- e. RPR will coordinate and review the results of tests made by the independent soils and materials testing laboratory. It is assumed that the services of the independent soils and materials testing laboratory will be provided by others and is not included in the ENGINEER's scope of work.
- f. Interpretation of Contract Documents: RPR will report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by ENGINEER.
- g. Modifications: RPR will consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to Contractor in writing decisions as issued by ENGINEER.

C. Records:

- a. RPR will maintain at the job site orderly files for documents received from OWNER and ENGINEER related to the project. ENGINEER shall maintain the official project files as they relate to correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including all Work Change, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing submittals received from and delivered to Contractor and other Project related documents.
2. RPR will prepare a daily report, keep a diary or log book, recording Contractor's hours on the job site, weather conditions, number and types of labor personnel onsite, equipment onsite, equipment in use, work completed each day, data relative to questions regarding Work Change Directives, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations (in general), and specific observations in more detail as in the case of observing test procedures; and send copies to Consultant.
3. RPR will record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.

A. Reports:

1. RPR will furnish to ENGINEER periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
2. RPR will consult with ENGINEER in advance of scheduled major tests, inspection, or start of important phases of the Work.
3. RPR will recommend to ENGINEER Change Orders, Work Change Directives, and Field Orders.
4. RPR will report immediately to ENGINEER and OWNER the occurrence of any accident.

E. Payment Requests:

1. Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Owner, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the site but not incorporated in the Work.

F. Completion:

1. Before Owner issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.
2. Observe whether Contractor has had performed inspections required by laws, rules, regulations, ordinances, codes, or orders applicable to the work, including but not limited to those to be performed by public agencies having jurisdiction over the work.
2. Conduct a final inspection in the company of ENGINEER, OWNER and Contractor and prepare a final list of items to be completed or corrected.
3. Observe whether all items on final list have been completed or corrected and make recommendations to OWNER concerning acceptance and issuance of the Notice of Acceptability of the Work.

G. Limitations of Authority by RPR

1. RPR will not authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items), unless authorized by OWNER or ENGINEER.
2. RPR will not exceed limitations of RPR's authority as set forth in the Agreement or the Contract Documents.
3. RPR will not undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.
4. RPR will not advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, procedures of construction, or health and safety procedures unless such advice or directions are specifically required by the Contract Documents.
5. RPR will not accept Shop Drawing or Sample submittals; these shall be accepted and processed by ENGINEER.
6. RPR will not authorize OWNER to occupy the Project in whole or in part.
7. RPR will not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by OWNER or ENGINEER.

3.0 ASSUMPTIONS

The following assumptions have been made:

- Scope and fee assumes up to 240 submittals (including resubmittals) and up to 40 RFIs will be received.
- Scope and fee assumes up to 4 field orders and 2 change orders
- A total of 2,080 hours are assumed for the RPR. RPR hours included in the scope are non-overtime hours.
- The Engineer will not attend any factory witness testing

4.0 SCHEDULE AND BUDGET

Construction Administration Services will coincide with the issuance of the Notice to Proceed. The construction duration of the project is assumed to be 18 months.

CDM Smith proposes to complete this work for a lump sum fee of \$764,900. The lump sum price

includes anticipated labor and expenses that may be required for completion of the work. OWNER will not hold CDM Smith to task-by-task budgets for the lump sum fee.

Task Description	Estimated Fee
Task 4 – Bidding Services	\$17,300
Task 5 – Construction Phase Services	\$438,600
Task 6 – Resident Project Representative (RPR) Services	\$309,000
Total Project Cost	\$764,900