This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR PROFESSIONAL SERVICES

Prepared by

EJCDC®
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

Issued and Published Jointly by

ACEC
AMERICAN COUNCIL OF ENGINEERING COMPANIES

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

National Society of Professional Engineers®

This Agreement has been prepared for use with EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance on the completion and use of this Agreement, see EJCDC® E-001, Commentary on the EJCDC Engineering Services Agreements, 2013 Edition.

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AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of **August 17, 2021** ("Effective Date") between

Town of Johnstown, a Colorado home rule municipal corporation ("Owner") and

Burns & McDonnell Engineering Company, Inc., a Missouri Corporation ("Engineer").

Owner's Project, of which Engineer's services under this Agreement are a part, is generally identified as follows:

Johnstown Water Treatment Plant Design

Other terms used in this Agreement are defined in Article 7.

Engineer's services under this Agreement are generally identified as follows:

Customary and basic planning, permitting assistance, design engineering to the Town of Johnstown Water Treatment Plant to increase the design capacity to 12.5 MGD ("Project"). This Agreement relates to the permitting assistance, engineering design related services related to the Project. Construction Phase Engineering Services will be negotiated during the final design phase of the project and be subject to an amendment to this Agreement or to a subsequent written agreement. The scope of this Agreement is more fully defined in Exhibit A.

Owner and Engineer further agree as follows:

ARTICLE 1 – SERVICES OF ENGINEER

1.01 *Scope*

A. Engineer shall provide, or cause to be provided, the services set forth herein and in Exhibit A.

B. Engineer shall perform its services in accordance with the Standard of Care for professional engineering. Engineer's scope of services shall be performed in accordance with the applicable regulations issued by the Colorado Department of Public Health and Environment ("CDPHE") regarding the design and permitting of drinking water facilities; specifically including Design Criteria for Potable Water Systems.

ARTICLE 2 – OWNER'S RESPONSIBILITIES

2.01 *General*

A. Owner shall have the responsibilities set forth herein and in Exhibit B.

B. Owner shall pay Engineer as set forth in Article 4 and Exhibit C.

C. Owner shall be responsible for all requirements and instructions that it furnishes to Engineer pursuant to this Agreement, and for the accuracy and completeness of all programs,

reports, data, and other information furnished by Owner to Engineer pursuant to this Agreement. Engineer may use and rely upon such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement, subject to any express limitations or reservations applicable to the furnished items.

D. Owner shall endeavor to provide prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of:

1. any development that affects the scope or time of performance of Engineer's services.

2. the presence at the Site of any Constituent of Concern that is not already known or discovered as described in Paragraph 6.10; or

3. any relevant, material defect or nonconformance in: (a) Engineer's services, (b) the Work, (c) the performance of any Constructor to the extent such performance impacts the Engineer's obligations hereunder, or (d) Owner's performance of its responsibilities under this Agreement.

ARTICLE 3 – SCHEDULE FOR RENDERING SERVICES

3.01 *Commencement*

A. Engineer is authorized to begin rendering services as of the Effective Date.

3.02 *Time for Completion*

A. Engineer recognizes that time is material and shall complete its obligations set forth in this Agreement pursuant to the schedule set forth in Exhibit A, absent agreed-upon extensions of time.

B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably if such delay results in additional cost to Engineer.

C. If Owner authorizes changes in the project budget, scope, extent, or character of the Project or Engineer's services, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably, but shall only be increased if such change expands the scope, extent or character of the Project or Engineer' services.

D. Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services.

ARTICLE 4 – INVOICES AND PAYMENTS

4.01 *Invoices*

A. *Preparation and Submittal of Invoices:* Engineer shall prepare invoices in accordance with its standard invoicing practices and the terms of Exhibit C. Engineer shall submit its invoices to Owner on a monthly basis. Invoices are due and payable within 30 days of receipt.

4.02 *Payments*

A. *Application to Interest and Principal:* Payment will be credited first to any interest owed to Engineer and then to principal.

B. *Failure to Pay*: If Owner fails to make any payment due Engineer for services and expenses within 30 days after receipt of Engineer's invoice, then:

1. amounts due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day; and

2. Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement until Owner has paid in full all amounts due for services, expenses, and other related charges, except that Engineer shall not suspend services for the Owner's failure to pay the portion of an invoice that is disputed. Owner waives any and all claims against Engineer for any such suspension.

C. *Disputed Invoices:* If Owner disputes an invoice, either as to amount or entitlement, then Owner shall promptly advise Engineer in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion subject to the terms of Paragraph 4.01.

D. *Sales or Use Taxes:* If after the Effective Date any governmental entity takes a legislative action that imposes additional sales or use taxes on Engineer's services or compensation under this Agreement, then Engineer may invoice such additional sales or use taxes for reimbursement by Owner. Owner shall reimburse Engineer for the cost of such invoiced additional sales or use taxes; such reimbursement shall be in addition to the compensation to which Engineer is entitled under the terms of Exhibit C.

ARTICLE 5 – OPINIONS OF COST

5.01 *Opinions of Probable Construction Cost*

A. Engineer's opinions (if any) of probable Construction Cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner requires greater assurance as to probable Construction Cost, then Owner agrees to obtain an independent cost estimate.

5.02 *Opinions of Total Project Costs*

A. The services, if any, of Engineer with respect to Total Project Costs shall be limited to assisting the Owner in tabulating the various categories that comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

ARTICLE 6 – GENERAL CONSIDERATIONS

6.01 *Standards of Performance*

A. *Standard of Care:* The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality.

B. The foregoing representation of the standard of care shall not apply in connection with, and the Engineer shall have no responsibility for, any consequences from: (1) the Owner's failure to perform a responsibility under this Agreement, or (2) any of the following circumstances:

1. The discovery, identification, presence, handling, disposal, or removal of, or exposure of a person to hazardous materials pre-existing that were not reasonably foreseeable or known at the Project, including but not limited to asbestos or asbestos products, lead-based paint, PCB, or other hazardous materials; or

2. A modification to, or use of, any drawings, specifications or other documents furnished by the Owner, which modification or use is not contemplated by this Agreement.

C. *Technical Accuracy:* Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct deficiencies in technical accuracy without additional compensation unless such corrective action is directly attributable to deficiencies in Owner-furnished information.

D. *Consultants:* Engineer may retain such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner. In its Proposal, Engineer designated Consultants to work on the Project, whose services are included in Basic Services described in Part 1 of Exhibit A and whose fees are included in Section C2.01 of Exhibit C, and Owner hereby agrees to retention of those designated Consultants. Prior to the retention of additional Consultants, Engineer shall provide written notice to Owner and allow Owner a reasonable period of time to object to the retention of, and expense related to, the additional Consultants.

E. *Reliance on Others:* Subject to the standard of care set forth in Paragraph 6.01.A, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.

F. *Compliance with Laws and Regulations, and Policies and Procedures:*

1. Engineer and Owner shall comply with applicable Laws and Regulations in effect at the time the services are rendered.

2. Engineer shall comply with any and all policies, procedures, and instructions of Owner that are applicable to Engineer's performance of services under this Agreement and that Owner provides to Engineer in writing, subject to the standard of care set forth in Paragraph 6.01.A, and to the extent compliance is not inconsistent with professional practice requirements.

3. This Agreement is based on Laws and Regulations and Owner-provided written policies and procedures as of the Effective Date. The following may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation:

   a. changes after the Effective Date to Laws and Regulations.

   b. the receipt by Engineer after the Effective Date of Owner-provided written policies and procedures.

   c. changes after the Effective Date to Owner-provided written policies or procedures.

G. Engineer shall not be required to sign any document, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. Owner agrees not to make resolution of any dispute with the Engineer or payment of any amount due to the Engineer in any way contingent upon the Engineer signing any such document.

H. If the EJCDC forms are used for the Construction Contract, the general conditions for any construction contract documents prepared hereunder are to be EJCDC® C-700 "Standard General Conditions of the Construction Contract" (2013 Edition), prepared by the Engineers Joint Contract Documents Committee, as modified, upon agreement of the Contractor and as modified by Owner or Contractor, if at all. Any change to the Standard General Conditions of the Construction Contract which impact the Engineer must be reviewed and approved by the Engineer in writing.

I. Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a Constructor to comply with Laws and Regulations applicable to that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

J. Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's, failure to furnish and perform the Work in accordance with the Construction Contract Documents or any schedule for completion of the Work, except that Engineer shall be obligated, if retained in an amendment to this Agreement, to act as Owner's representative related to the Project and provide services mutually agreed to by the Parties, which may include but are not limited to, providing certain notifications regarding Constructor's work to Owner.

K. Engineer shall not be responsible for any decision made regarding the Construction Contract Documents, or any application, interpretation, clarification, or modification of the Construction Contract Documents, other than those made by Engineer or its Consultants.

L. Engineer is not required to provide and does not have any responsibility for surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements.

M. Engineer's services do not include providing legal advice or representation.

N. Engineer's services do not include (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission, or (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances.

O. In addition to exercising the standard of care set forth in 6.01A, while at the Site, Engineer, its Consultants, and their employees and representatives shall comply with the applicable requirements of Contractor's and Owner's safety programs of which Engineer has been informed in writing.

6.02 *Use of Documents*

A. All Documents are instruments of service, and Engineer shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the Engineer) whether or not the Project is completed.

B. If Engineer is required to prepare or furnish Drawings or Specifications under this Agreement, Engineer shall deliver to Owner at least one original printed record version of such Drawings and Specifications, signed and sealed according to applicable Laws and Regulations.

C. Owner may make and retain copies of Documents for information and reference in connection with the use of the Documents on the Project. Engineer grants Owner a limited license to use the Documents on the Project, extensions of the Project, and for related uses of the Owner on related to or associated with this Project, subject to receipt by Engineer of full payment due and owing for all services relating to preparation of the Documents, and subject to the following limitations: (1) Owner acknowledges that such Documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer; (2) any such use or reuse, or any modification of the Documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to its officers, directors, members, partners, agents, employees, and Consultants; (3) only to the extent permitted by law, as set forth in paragraph 8.09.A below, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from all claims, damages, losses, and expenses,

including attorneys' fees, arising out of or resulting from any use, reuse, or modification of the Documents without Engineer's written authorization and its verification, completion, or adaptation by Engineer; and (4) such limited license to Owner shall not create any rights in third parties.

D. If Engineer at Owner's request verifies the suitability of the Documents, completes them, or adapts them for extensions of the Project or for any other purpose, then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.

E. Notwithstanding anything contained herein, the Parties recognize and agree that Owner is retaining Engineer pursuant to this Agreement to complete the Engineering Design Plans. Once completed, as long as Owner has made payments according to this Agreement, the Engineering Design Plans, along with any documents, drawings, specifications, and the like included therewith, shall be the Owner's property and Owner shall have the right to use the Engineering Design Plans as Owner desires and shall not be obligated to notify or obtain approval from Engineer for such use.

6.03 *Electronic Transmittals*

A. Owner and Engineer may transmit, and shall accept, Project-related correspondence, Documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol.

B. If this Agreement does not establish protocols for electronic or digital transmittals, then Owner and Engineer may jointly develop such protocols.

C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

6.04 *Insurance*

A. Engineer shall procure and maintain insurance as set forth in Exhibit G. Engineer shall cause Owner to be listed as an additional insured on the required applicable general liability insurance policy carried by Engineer. Engineer shall use commercially reasonable efforts to contractually require that Consultants procure and maintain insurance in appropriate limits and that Consultants list Owner as an additional insured on the required general liability insurance policy. Engineer shall not be required to carry insurance under this Agreement for the construction phase of the Project.

B. Owner shall procure and maintain insurance. For purposes of this Agreement only, which does not cover the construction phase, and not for purposes of any subsequent agreement or work that may relate to the construction phase, Owner waives all claims against the Engineer that may be connected to construction phase administrative, engineering, or professional services except for those services that are expressly required of Engineer in Exhibit A.

C. Owner shall require Contractor to purchase and maintain policies of insurance covering workers' compensation, general liability, motor vehicle damage and injuries, and other insurance necessary to protect Owner's and Engineer's interests in the Project and require Contractor to include Engineer as an additional insured on Contractor's policies of insurance for general liability and motor vehicle damage and injuries, as well as any excess/umbrella policies and waive rights of subrogation against Engineer for such policies as well.

D. Owner and Engineer shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement.

E. All policies of property insurance relating to the Project, including but not limited to any builder's risk policy, shall provide for waiver of subrogation rights, and contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insured thereunder or against Engineer or its Consultants. Owner and Engineer waive all rights against each other, Contractor, the Consultants, and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, to recover for losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by any builder's risk policy and any other property insurance relating to the Project. Owner and Engineer shall take appropriate measures in other Project-related contracts to secure waivers of rights consistent with those set forth in this paragraph.

F. All policies of insurance shall contain a provision or endorsement that the coverage afforded will not be canceled , and that renewal will not be refused, until at least 10 days prior written notice has been given to the primary insured. Upon receipt of such notice, the receiving party shall promptly forward a copy of the notice to the other party to this Agreement.

G. At any time, subsequent to the execution of this Agreement, Owner may request that Engineer or its Consultants, at Owner's sole expense, provide additional insurance coverage, If so requested by Owner, and if commercially available, Engineer shall obtain and shall require its Consultants to obtain such additional insurance coverage, for such periods of time as requested by Owner, and Exhibit G will be supplemented to incorporate these requirements.

6.05 *Suspension and Termination*

A. *Suspension:*

1. *By Owner*: In its sole discretion, Owner may suspend the Project for up to 90 days upon seven days written notice to Engineer.

2. *By Engineer*: Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement if Owner has failed to pay Engineer for invoiced services and expenses, as set forth in Paragraph 4.02.B, or in response to the presence of Constituents of Concern at the Site, as set forth in Paragraph 6.10.D.

B. *Termination*: The obligation to provide further services under this Agreement may be terminated:

1. For cause,

    a. by either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

    b. by Engineer:

        1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or

        2) upon seven days written notice if the Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control, or as the result of the presence at the Site of undisclosed or previously unknown Constituents of Concern, as set forth in Paragraph 6.10.

        3) Engineer shall have no liability to Owner on account of such termination.

    c. Notwithstanding the foregoing, this Agreement will not terminate under Paragraph 6.06.B.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. For convenience, by Owner effective upon Engineer's receipt of written notice from Owner.

C. *Effective Date of Termination:* The terminating party under Paragraph 6.06.B may, in its discretion, set the effective date of termination at a time up to 30 days later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

D. *Payments Upon Termination:*

1. In the event of any termination under Paragraph 6.06, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all Reimbursable Expenses incurred through the effective date of termination. Upon making such payment, Owner shall have the limited right to the use of Documents, at Owner's sole risk, subject to the provisions of Paragraph 6.03.

2. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in Paragraph 6.06.D.1, to invoice Owner and receive payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of

termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C. Prior to invoicing, Engineer shall forward to Owner the proposed "reasonable amount" and Owner shall have ten days to review and, in its discretion, object to such amount, in which case the parties shall endeavor to agree upon the "reasonable amount" for such delineated services and expenses.

6.06 *Controlling Law*

This Agreement is to be governed by the Laws and Regulations of the State of Colorado. Venue for any action shall be in the County of Weld, State of Colorado.

6.07 *Successors, Assigns, and Beneficiaries*

A. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing in this Paragraph prevents Engineer from subcontracting any portion of its services to consultants as provided in the Contract Documents.

B. Contractor may engage temporary staffing agencies or obtain assistance from its affiliates and subsidiaries including, without limitation, Burns & McDonnell Canada Ltd., Burns & McDonnell International Inc., and Burns & McDonnell India Pvt. Ltd. ("Labor Sources") to fulfill Contractor's performance obligations under this Agreement. The parties agree that contracts, purchase orders, or similar agreements between Contractor and any Labor Sources are not subcontracts as that term is used in this Agreement, and personnel from such Labor Sources shall be billed according to the applicable rate sheet for the Scope of Work as if such personnel is a direct hire employee. Personnel from Labor Sources shall be considered agents of Contractor and able to act on behalf of Contractor within the scope of the authority granted such personnel according to job function and billing classification.

C. Unless expressly provided otherwise in this Agreement:

1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Contractor, Constructor, Subcontractor, lender or other third-party individual or entity, or to any surety or indemnity for or employee of any of them.

2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.

3. At the time of negotiation of the Construction Contract Documents, upon written request of Engineer, Owner agrees to request that the substance of the provisions of this Paragraph 6.08.B appear in the Construction Contract Documents.

6.08 *Dispute Resolution*

A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice prior to invoking the procedures of Exhibit H or other provisions of this Agreement or exercising their rights at law. Such negotiations shall include the designated representatives of each party identified in this Agreement and required by Paragraph 8.03.A.

B. If the parties fail to resolve a dispute through negotiation under Paragraph 6.09.A, then either or both may invoke the procedures of Exhibit H. If Exhibit H is not included, or if no dispute resolution method is specified in Exhibit H, then the parties must first submit the dispute to mediation before a mediator jointly chosen in a location mutually agreed upon. If mediation is not successful, the parties may exercise their rights at law.

6.09 *Environmental Condition of Site*

A. Owner represents to Engineer that as of the Effective Date to the best of Owner's knowledge no Constituents of Concern exist at or adjacent to the Site, other than those (i) disclosed in writing to Engineer, (ii) regularly occurring or existing at a water treatment site or (iii) discovered, or should have been discovered, by Engineer during the Engineer's requisite due diligence conducted prior to the execution of this Agreement.

B. If Engineer encounters or learns of an undisclosed or unknown Constituent of Concern at the Site, then Engineer shall notify (1) Owner and (2) appropriate governmental officials if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.

C. If Engineer or any other party encounters, uncovers, or reveals an undisclosed or unknown Constituent of Concern, then Owner shall promptly determine whether to retain a qualified expert to evaluate such condition or take any necessary corrective action.

D. If investigative or remedial action, or other professional services, are necessary with respect to undisclosed Constituents of Concern, or if investigative or remedial action beyond that reasonably contemplated is needed to address a disclosed or known Constituent of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until such portion of the Project is no longer affected.

E. If the presence at the Site of undisclosed or unknown Constituents of Concern adversely affects the performance of Engineer's services under this Agreement, then the Engineer shall have the option of (1) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause on seven days' notice.

F. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and shall not be required to become an "owner," "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with Engineer's activities under this Agreement.

6.10 *Indemnification and Mutual Waiver*

A. *Indemnification by Engineer:* To the fullest extent permitted by Laws and Regulations, as allowed by parties to a contract, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, members, partners, agents, consultants, and employees, from losses, damages, and judgments (including reasonable consultants' and attorneys' fees and expenses) arising from or relating to the Project, but only to the extent caused by any negligent and/or willful act or omission of Engineer or Engineer's officers, directors, members, partners, agents, employees, or Consultants.

B. *Indemnification by Owner:* Only to the extent permitted by law, as set forth in paragraph 8.09.A below, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from losses, damages, and judgments (including reasonable consultants' and attorneys' fees and expenses) arising from third-party claims or actions relating to the Project, provided that any such losses, damages, or judgment are attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Owner or Owner's officers, directors, members, partners, agents, employees, or Contractors.

C. *Environmental Indemnification:* Only to the extent permitted by law, as set forth in paragraph 8.09.A below, Owner shall defend, indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from all claims, costs, losses, damages, actions, and judgments (including reasonable consultants' and attorney's fees and expenses) caused by, arising out of, relating to, or resulting from a Constituent of Concern at, on, or under the Site, provided that (1) any such claim, cost, loss, damages, action, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (2) nothing in this paragraph shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own willful misconduct.

D. *No Defense Obligation:* The indemnification commitment in this Agreement does not include a defense obligation by the indemnitor unless such obligation is expressly stated.

E. *Percentage Share of Negligence:* To the fullest extent permitted by Laws and Regulations, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, and all other negligent entities and individuals.

F. *Mutual Waiver:* To the fullest extent permitted by Laws and Regulations, Owner and Engineer waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages, which include but are not limited to, losses of use, income, anticipated profit, financing, business and reputation, damages to customers of Owner, lost sales and opportunities, arising out of, resulting from, or in any

way related to this Agreement or the Project, from any cause or causes, except to the extent the damages arise from Engineer's negligent or willful and wanton conduct.

6.11 *Records Retention*

A. Engineer shall maintain on file in legible form, for a period of five years following completion or termination of its services, all Documents, records (including cost records), and design calculations related to Engineer's services or pertinent to Engineer's performance under this Agreement. Upon Owner's request, Engineer shall provide a copy of any such item to Owner at cost.

B. Engineer recognizes and agrees that Owner is a public entity subject to the provisions of the Colorado Open Records Act, C.R.S. §§ 24-72-200.1, *et seq*. ("CORA"), and that Owner may be required to disclose Documents, records, and design calculations pursuant to CORA.

6.12 *Miscellaneous Provisions*

A. *Notices:* Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt. Notwithstanding the foregoing, notice may be provided by electronic mail ("E-mail") on the condition that the receiving party acknowledges receipt of the E-mail and does not, upon such acknowledgment, object to the form of notice.

B. *Survival:* All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.

C. *Severability:* Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Engineer, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

D. *Waiver:* A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

ARTICLE 7 – DEFINITIONS

7.01 *Defined Terms*

A. Wherever used in this Agreement (including the Exhibits hereto) terms (including the singular and plural forms) printed with initial capital letters have the meanings indicated in the text above, in the exhibits, or in the following definitions:

1. *Addenda*—Written or graphic instruments issued prior to the opening of bids which clarify, correct, or change the bidding requirements or the proposed Construction Contract Documents.

2. *Additional Services*—The services to be performed for or furnished to Owner by Engineer in accordance with Part 2 of Exhibit A of this Agreement.

3. *Agreement*—This written contract for professional services between Owner and Engineer, including all exhibits identified in Paragraph 8.01 and any duly executed amendments.

4. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Construction Contract.

5. *Basic Services*—The services to be performed for or furnished to Owner by Engineer in accordance with Part 1 of Exhibit A of this Agreement.

6. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Construction Contract Price or the Construction Contract Times, or other revision to the Construction Contract, issued on or after the effective date of the Construction Contract.

7. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth in the Construction Contract, seeking an adjustment in Construction Contract Price or Construction Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Construction Contract Documents or the acceptability of Work under the Construction Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Construction Contract.

8. *Constituent of Concern*—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, State, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

9. *Construction Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.

10. *Construction Contract Documents*—Those items designated as "Contract Documents" in the Construction Contract, and which together comprise the Construction Contract.

11. *Construction Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Construction Contract Documents.

12. *Construction Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve milestones, if any, in the Construction Contract; (b) achieve Substantial Completion; and (c) complete the Work.

13. *Construction Cost*—The cost to Owner of the construction of those portions of the entire Project designed or specified by or for Engineer under this Agreement, including construction labor, services, materials, equipment, insurance, and bonding costs, and allowances for contingencies. Construction Cost does not include costs of services of Engineer or other design professionals and consultants; cost of land or rights-of-way, or compensation for damages to property; Owner's costs for legal, accounting, insurance counseling, or auditing services; interest or financing charges incurred in connection with the Project; or the cost of other services to be provided by others to Owner. Construction Cost is one of the items comprising Total Project Costs.

14. *Constructor*—Any person or entity (not including the Engineer, its employees, agents, representatives, and Consultants), performing or supporting construction activities relating to the Project, including but not limited to Contractors, Subcontractors, Suppliers, Owner's work forces, utility companies, other contractors, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.

15. *Consultants*—Individuals or entities having a contract with Engineer to furnish services with respect to this Project as Engineer's independent professional associates and consultants; subcontractors; or vendors.

16. *Contractor*—The entity or individual with which Owner enters into a Construction Contract.

17. *Documents*—Data, reports, Drawings, Specifications, Record Drawings, building information models, civil integrated management models, and other deliverables, whether in printed or electronic format, provided or furnished in appropriate phases by Engineer to Owner pursuant to this Agreement.

18. *Drawings*—That part of the Construction Contract Documents that graphically shows the scope, extent, and character of the Work to be performed by Contractor.

19. *Effective Date*—The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, the date on which this Agreement is signed and delivered by the last of the parties to sign and deliver.

20. *Engineer*—The individual or entity named as such in this Agreement.

21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Construction Contract Price or the Construction Contract Times.

22. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

23. *Owner*—The individual or entity named as such in this Agreement and for which Engineer's services are to be performed. Unless indicated otherwise, this is the same individual or entity that will enter into any Construction Contracts concerning the Project.

24. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the services to be performed or furnished by Engineer under this Agreement are a part.

25. *Record Drawings*—Drawings depicting the completed Project, or a specific portion of the completed Project, based on Contractor's record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications, as delivered to Engineer and annotated by Contractor to show changes made during construction.

26. *Reimbursable Expenses*—The expenses incurred directly by Engineer in connection with the performing or furnishing of Basic Services and Additional Services for the Project.

27. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site during the Construction Phase. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative. The duties and responsibilities of the Resident Project Representative, if any, are as set forth in Exhibit D.

28. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

29. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Construction Contract Documents.

30. *Site*—Lands or areas to be indicated in the Construction Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.

31. *Specifications*—The part of the Construction Contract Documents that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

32. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.

33. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Construction Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes

for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

34. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.

35. *Total Project Costs*—The total cost of planning, studying, designing, constructing, testing, commissioning, and start-up of the Project, including Construction Cost and all other Project labor, services, materials, equipment, insurance, and bonding costs, allowances for contingencies, and the total costs of services of Engineer or other design professionals and consultants, together with such other Project-related costs that Owner furnishes for inclusion, including but not limited to cost of land, rights-of-way, compensation for damages to properties, Owner's costs for legal, accounting, insurance counseling, and auditing services, interest and financing charges incurred in connection with the Project, and the cost of other services to be provided by others to Owner.

36. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Construction Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Construction Contract Documents.

37. *Work Change Directive*—A written directive to Contractor issued on or after the effective date of the Construction Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

B. *Day*:

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

ARTICLE 8 – EXHIBITS AND SPECIAL PROVISIONS

8.01 *Exhibits Included:*

A. Exhibit A, Engineer's Services.

B. Exhibit B, Owner's Responsibilities.

C. Exhibit C, Payments to Engineer for Services and Reimbursable Expenses.

D. ~~Exhibit D, Duties, Responsibilities and Limitations of Authority of Resident Project Representative~~. (NOT USED)

~~E. Exhibit E, Notice of Acceptability of Work.~~ (NOT USED)

F. ~~Exhibit F, Construction Cost Limit.~~ (NOT USED)

G. Exhibit G, Insurance.

H. Exhibit H, Dispute Resolution.

I. Exhibit I, Limitations of Liability.

J. ~~Exhibit J, Special Provisions.~~ (NOT USED)

K. Exhibit K, Form of Amendment to Owner-Engineer Agreement.

8.02 *Total Agreement*

A. This Agreement, together with the exhibits included above, constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a written instrument duly executed by both parties. Amendments should be based whenever possible on the format of Exhibit K to this Agreement.

8.03 *Designated Representatives*

A. With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer's and Owner's representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement. Such an individual shall have authority to transmit instructions, receive information, and render decisions relative to this Agreement on behalf of the respective party whom the individual represents. The Owner recognizes that that Engineer's designated representative is subject to change due to vacations, sick leave, occasional firm commitments to other clients or projects and that when the designated representative is not available, the Engineer shall identify in writing another suitable person as a replacement.

8.04 *Engineer's Certifications*

A. Engineer certifies that it has not engaged in corrupt, fraudulent, or coercive practices in competing for or in executing the Agreement. For the purposes of this Paragraph 8.04:

1. "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the selection process or in the Agreement execution.

2. "Fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the selection process or the execution of the Agreement to the detriment of Owner, or (b) to deprive Owner of the benefits of free and open competition.

3. "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or affect the execution of the Agreement.

8.05 *Governmental Immunity*

A. Nothing contained in this Agreement shall be construed as a waiver of the limitations on damages or any of the privileges, immunities or defenses provided to, or enjoyed by, Owner under common law or pursuant to statute, including but not limited to the Colorado

Governmental Immunity Act, §§ 24-10-101 *et seq.*, C.R.S., as may be amended from time to time.

8.06 *Appropriation of Funds*

A. Pursuant to C.R.S. § 24-91-103.6, as may be amended from time to time, Owner has appropriated the money necessary to fund this Project and compensate the Engineer as set forth herein. No change order or other form of directive shall be issued by Owner requiring additional compensable work to be performed by Engineer, which causes the aggregate amount payable under this Agreement to exceed the amount appropriated for the original contract amount, unless the Engineer is given written assurance by Owner that lawful appropriations have been made by Owner to cover the cost of the additional work or unless such work is covered under the remedy-granting provisions of this Agreement.

B. Pursuant to C.R.S. § 29-1-110, as may be amended from time to time, financial obligations of Owner payable as set forth herein, after the current fiscal year, are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available. This Agreement shall be terminated effective January 1 of the first fiscal year for which funds are not appropriated.

8.07 *Costs and Attorney's Fees*

A. In the event of litigation enforcing or interpreting the terms of the Agreement, the prevailing party shall be entitled an award of reasonable attorney fees and all costs of suit, including expert witness fees, court reporter fees and similar litigation expenses, except that Owner shall only be required to pay such fees to the extent permitted by law considering the limitations set forth in the Colorado Constitution, the Johnstown Home Rule Charter and Colorado statues, including, but not limited to, those relating to budgeting and appropriations.

8.08 *Illegal Aliens*

A. Engineer certifies, warrants, and agrees that it shall not knowingly employ or contract with an illegal alien to perform work under this contract and shall confirm the employment eligibility of all employees who are newly hired for employment in the United States to perform work under this contract, through participation in the E-Verify Program or the Department of Labor and Employment program. Engineer shall not knowingly employ or contract with an illegal alien to perform work under this contract or enter into a contract with a sub-consultant that fails to certify to Engineer that the sub-consultant shall not knowingly employ or contract with an illegal alien to perform work under this contract. Engineer (a) shall not use E-Verify Program or Department of Labor and Employment program procedures to undertake pre-employment screening of job applicants while this contract is being performed, (b) shall notify the sub-consultant and Owner within three days if Engineer has actual knowledge that a sub-consultant is employing or contracting with an illegal alien for work under this contract, (c) shall terminate the subcontract if a sub-consultant does not stop employing or contracting with the illegal alien within three days of receiving the notice, and (d) shall comply with reasonable requests made in the course of an investigation, undertaken pursuant to C.R.S. § 8-17.5-102(5), by the Colorado Department of Labor and Employment. If Engineer fails to comply with any requirement of this provision or C.R.S. § 8-17.5-101 et seq., Owner may terminate this contract for breach

and, if so terminated, Engineer shall be liable for actual and, notwithstanding provisions to the contrary in this Agreement, consequential damages.

8.09 *Owner's Indemnification Obligations*

A. Owner represents that it is prohibited by the Colorado Constitution, the Johnstown Home Rule Charter, the Johnstown Municipal Code, and state law from entering into indemnification obligations without appropriations in its budget which it has not made for this Agreement. Accordingly, notwithstanding anything herein to the contrary, Owner's indemnification obligations set forth in this Agreement are provided only to the extent permitted by law.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Owner: [ ]	Engineer: Burns & McDonnell Engineering Company, Inc.
By:	By:
Print name: Gary Lebsack	Print name: Dan Korinek
Title: Mayor	Title: Vice President
Date Signed: [ ]	Date Signed:
ATTEST:	Engineer License or Firm's Certificate No. (if required): Firm registration not required in Colorado.
Diana Seele, Town Clerk	State of:
Address for Owner's receipt of notices: Town of Johnstown 450 S. Parish Avenue Johnstown, CO 80534	Address for Engineer's receipt of notices: Burns & McDonnell Engineering Company, Inc. 9785 Maroon Circle, Suite 400 Centennial, CO 80112
Designated Representative (Paragraph 8.03.A): Matt LeCerf [ ]	Designated Representative (Paragraph 8.03.A): Dan Korinek
Title: Town Manager [ ]	Title: Vice President
Phone Number: 970-587-4664[ ]	Phone Number: 303-474-2224
E-Mail Address: mlecerf@townofjohnstown.com	E-Mail Address: dkorinek@burnsmcd.com

STATE OF COLORADO)
) ss
COUNTY OF _____)

SUBSCRIBED AND SWORN to before me this _____day of _____, 2021, by xxxxxxx as

WITNESS my hand and official seal.

My commission expires: _____

_____
Notary Public

This is **EXHIBIT A**, consisting of 29 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

Engineer's Services

Article 1 of the Agreement is supplemented to include the following agreement of the parties.

Engineer shall provide Basic and Additional Services as set forth in the attached Table.

PART 1 – BASIC SERVICES

A1.01 ***Scope of Services Table***

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

1. Project Initiation & Coordination
2. Review of Existing Data & Basis of Design
3. Preliminary Design 30%
4. Detailed Design 60%
5. Optimize Operations
6. Final Design
7. CMAR Selection
8. Equipment Procurement

Scope of Services – Part 1, Basic Services

The Scope of Services proposed includes design services for an expansion of the existing 6.2 million gallons per day (MGD) capacity water treatment plant (WTP) to 12.5 MGD. The WTP expansion includes:

- Modification of the existing pretreatment system to saturated air flotation (SAF).
- New ozone system for taste and odor control.
- New biologically active filtration (BAF) and associated chemical systems.
- New disinfection contact basin with separate backwash supply tank.
- New distribution pump station.
- New backwash waste tank.
- New recycle pump station.
- Associated yard piping and related structures.
- New chemical storage and dosing systems.
- Related electrical and control system upgrades.
- All Work on the existing WTP property.

Finished water will tie into the existing transmission mains on the WTP property. Backwash waste will be directed to a new storage tank. Recycled water will be sent to the existing raw water tank for blending with the existing incoming raw water. Thickened backwash will be directed to the existing sanitary sewer.

The following items are excluded from the scope:

- Modifications to the Lone Tree Reservoir pump station or powdered activated carbon (PAC) system.
- Addition of a second raw water transmission main from the Lone Tree Reservoir.
- Changes to the existing raw water piping at the WTP site.
- Modification of the two existing ground storage tanks.
- Treatment of thickened backwash waste. Solids will be directed to the existing sanitary sewer.
- Changes to the site access roadway.
- Expansion of the WTP on adjacent property.

Task Series 100 – Project Initiation & Collaboration

Task 101 – Project Kickoff Meeting:
Engineer shall coordinate and lead a Project Kickoff Meeting at the WTP. During the Project Kickoff meeting the collective project team shall regroup the team on the project goals, coordinate activities, discuss project requirements, establish a project schedule, identify key project issues/concerns, identify key personnel who are to provide input on the project, and get initial input on design items. A site walk with the Owner will occur immediately after the Kickoff Meeting.

Task 102 – Weekly Progress Meetings:
The Engineer's project manager will prepare for, attend, and conduct weekly progress meetings. It is currently anticipated that half of the meetings will be in person and half will be virtual. Regular workshop attendees will include the project manager and a process engineer. Other resources will participate as part of a virtual meeting. The Engineer will provide meeting minutes with a decision log and a list of action items. Meeting minutes will be distributed via e-mail. When workshops or review meeting coincide with weekly progress meetings the meetings will be combined. Assumes 12 months of meetings during the design phase. This task also includes internal progress meetings.

Task 103 – Project, Risk and Resource Management, Schedule, and Budget Controls:
Engineer shall provide project management services for the 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 Series 200 – Review Existing Data & Basis of Design

Task 201 – Review Existing Documents:
Engineer shall prepare a document request for the Owner existing data, including record drawings, operational records, and. The Engineer will summarize the data in the basis of design report (BODR) and identify any gaps for the Owner to collect.

Task 202 – Develop Permitting Matrix:
Engineer shall assist with necessary permitting as identified in the BODR and listed in the Table A-1 below. Engineer shall prepare a permitting matrix to identify potential permit requirements for the project. The permitting matrix will identify local, state, and federal authorities, permit requirements, likelihood of needing a permit, responsible party for submitting permit and estimated duration for submittal review and negotiation. We currently do not include fee to perform the services for all of these permits. We have included fees to perform all permits coordinated by the Engineer that are certain (100%) required. The Engineer will determine which other permits are required and any additional permitting work required will be included in additional services. Other permits may be required by the Contractor. Engineer has assumed that the Owner will pay all permit application and review fees.

Table A 1 - Preliminary Permitting Matrix

Permit/Compliance		Permit/Compliance	Administering Agency	Requirement	Trigger	Probability of Need	Estimated Duration to Acquire Authorization	Permit Coordinator and Submitter
Federal	Clean Water Act, Section 404	Clean Water Act, Section 404	U.S. Army Corp of Engineers (USACE), Omaha District	Permanent wetland impacts greater than 0.50 acre require an Individual Permit, including mitigation and public involvement. If permanent wetland impacts range from 0.10 to 0.50 acre, USACE notification and application is required to obtain a nationwide permit (NWP); if less than 0.1 acre, no USACE notification is required.	Temporary and/or permanent impacts on wetlands and/or jurisdictional features.	Low (25%) Depends on whether wetlands and streams onsite can be avoided in siting facilities.	If present, coordination with USACE could take 2-6 months. Submit after BODR. Assumes wetland areas less than 0.5 acres.	Engineer
	Endangered Species Act (ESA) Section 7 and 10 Consultation	Endangered Species Act (ESA) Section 7 and 10 Consultation	USFWS	The ESA § 7 directs all Federal agencies to work to conserve federally listed threatened, endangered, candidate and proposed (TECP) species and to use authorities to further the purposes of the ESA. Section 7 and 10 of the ESA is the mechanism by which Federal agencies and private citizens ensure actions, including those they fund or authorize, do not jeopardize the existence of TECP species.	Presence of protected species within or adjacent to areas affected by the Project	Low (25%). Not likely present	If present, coordination with USFWS would take about 1 year. If not present, 60 days. Submit after BODR.	Engineer
	Migratory Bird Treaty Act (MBTA)	Migratory Bird Treaty Act (MBTA)	USFWS	Avian studies and nest surveys could be required by the USFWS to demonstrate compliance with the ESA, MBTA, and the Bald and Golden Eagle Protection Act (BGEPA).	Breeding habitat clearing during nesting season	Moderate (50%). Depends on nesting species in the area and construction schedule.	If nesting habitat clearing can occur outside of nesting season, efforts would be minor.	Engineer
	Bald and Golden Eagle Protection Act	Bald and Golden Eagle Protection Act	USFWS	The BGEPA (16 U.S.C. 668-668c) prohibits anyone, without a permit, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ..., alive or dead, or any part, nest, or egg thereof."	Surface occupancy within 0.25-mile or construction activities within 0.5 mile of bald or golden eagle nests or bald eagle winter roost sites (see CPW recommended buffer distances in section 3.1.4)	Low (25%). Although a bald eagle was observed, we do not believe an incidental take permit (ITP) will be necessary.	If buffer zones and seasonal restrictions can be implemented, efforts would be minor.	Engineer
	Notice of Proposed Construction or Alteration Determination of No Hazard to Air Navigation	Notice of Proposed Construction or Alteration Determination of No Hazard to Air Navigation	Federal Aviation Administration (FAA)	The requirements for filing with the FAA for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.	Structure is above 200 ft, proximity to an airport, potential glare impacts for solar sites within 2 miles of an airport.	Very low (<10%)	Must be filed 45 days prior to construction.	Engineer

Permit/Compliance		Permit/Compliance	Administering Agency	Requirement	Trigger	Probability of Need	Estimated Duration to Acquire Authorization	Permit Coordinator and Submitter
	Spill Prevention, Control, and Countermeasures (SPCC); 40 CFR Part 112, or 40 CFR Part 300.	Spill Prevention, Control, and Countermeasures (SPCC); 40 CFR Part 112, or 40 CFR Part 300.	Environmental Protection Agency (EPA), Region 8	SPCC plan.	Transformers with a 55-gallon capacity or greater	Moderate (50%). If a transformer will be located on site, a SPCC will be required.	Final Design/ Construction No pre-approval required. Must be kept onsite and reviewed every 5 years or if there is a change in the site.	Contractor
State	CPW Coordination	CPW Coordination	CPW, State-protected species	Colorado law states wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors. CPW routinely reviews development project proposals and makes recommendations for areas where state-protected plant and animal species are known to occur. CPW recommends conducting raptor surveys during the breeding season and implementing nest buffers (nesting season is year-round depending on the raptor species) and season restrictions (150 feet to 0.5 miles, depending on the raptor species; CPW 2008)	Presence of protected species within or adjacent to areas affected by the Project	Moderate (50%). Coordination is likely.	If present, coordination with USFWS and CPW would take 30-90 days.	Engineer
	National Pollutant Discharge Elimination System (NPDES) Permit; Stormwater Management Plan (SWMP)	National Pollutant Discharge Elimination System (NPDES) Permit; Stormwater Management Plan (SWMP)	Colorado Department of Public Health and Environment (CDPHE); Stormwater protection	If more than 1 acre of disturbance will occur, a SWMP would be developed during final design of the Project and would incorporate an Erosion and Sediment Control Plan.	Greater than 1 acre of disturbance	100%	30 days	Contractor
	General Construction Permit Air Pollutant Emission Notice (APEN)	General Construction Permit Air Pollutant Emission Notice (APEN)	CDPHE: Air Pollution Control Division	Land development refers to all land clearing activities, including but not limited to land preparation such as excavating or grading, for residential, commercial, or industrial development.	Land development and the operation of emitting equipment	High (90%); construction equipment	30 days	Contractor
	National Historic Preservation Act (NHPA), Section 106 Consultation	National Historic Preservation Act (NHPA), Section 106 Consultation	Colorado Office of Archeology and Historic Preservation (OAHP)	Section 106 of the NHPA requires Federal agencies to consider the effects that their federally funded activities and programs have on significant historic properties. "Significant historic properties" are those properties that are included in, or eligible for, the National Register of Historic Places. Section 106 compliance would be required for USACE permits, etc.	Involvement of Federal actions (lands, permits, funding, etc.).	Moderate (50%). If USACE permitting is needed, NHPA compliance will be required.	90 days	Engineer

Permit/Compliance		Permit/Compliance	Administering Agency	Requirement	Trigger	Probability of Need	Estimated Duration to Acquire Authorization	Permit Coordinator and Submitter
	State Highway Access Permit	State Highway Access Permit	Colorado Department of Transportation (CDOT)	To obtain permission to construct, modify, relocate, or close a vehicular access, where such work will be within highway right-of-way (ROW), a state highway access permit is required. To obtain permission, a complete application must be submitted to the issuing authority and a permit issued. Construction may not begin until a Notice to Proceed is approved. Application packages may be obtained from the issuing authority. To investigate. If required, responsibility of contractor.	Digging or excavating within the state ROW	Low (25%). Based on remaining on existing WTP property. High if additional property acquired.	Final Design/ Construction The statewide encroachment permit turnaround performance target is 72 hours.	Engineer or Contractor
	Oversize/ Overweight Permits	**Oversize/ Overweight Permits**	CDOT	Permit required to move oversize or overweight loads on State roads (85,000 pounds gross maximum, 20,000 pounds per axle maximum) To investigate. If required, responsibility of vendor.	Oversize/overweight loads	Moderate (50%)	30 days	Contractor
	Water quality division	**Water quality division**	CDPHE	Review and approve facility design	Modification or expansion of existing WTP process	Certain (100%)	90 days	Engineer
Local	Floodplain Development	Floodplain Development	Town of Johnstown	Verify location of works not within floodplain	New construction	Certain (100%)	30 days	Engineer
	Site Development Plan	Site Development Plan	Town of Johnstown	New construction or development within town boundaries	New development	Certain (100%)	120 days	Engineer
	Building Permit	Building Permit	Town of Johnstown	New construction within town boundaries	New construction	Certain (100%)	60 days	Engineer

Task 203 – Desktop Analysis:
Engineer shall review data provided by Owner (record drawings, operating records). Conduct field visual assessment of existing assets to determine if assets suitable to integrate in the expanded WTP. Prepare technical memorandum (TM) to document the condition of existing assets. Develop up to three (3) potential process trains, and initial sizing calculations. Identify site conditions, includes review of existing soils report, potential for presence of environmental or cultural resources, identify site utilities (water, sanitary sewer, storm, electricity, data, communications, natural gas). Identify integration points with the existing WTP and potential impacts to the existing WTP operations.

The Owner shall be given at least one week to review all design deliverables prior to holding a review meeting or workshop.

Task 204 - Workshop 1 – Overall Treatment Train Options
Prepare agenda and facilitate an Overall Treatment Train Options Selection Workshop at the WTP to evaluate potential candidate treatment trains. Candidate trains include membrane filtration with granular activated carbon (GAC) and ozone and BAF. The preferred conceptual design will be selected using costs and non-monetary factors. The selection matrix will be provided to allow all parties to become familiar prior to the meeting. Engineer will lead a paired-comparison evaluation during the workshop. The workshop will identify the preferred option while noting the advantages and disadvantages to each option. Provide summary notes to document the decisions made during the Selection Workshop.

Task 205 - Water Characterization
Owner to provide population projections as basis for future water demand calculations. Engineer shall use the existing water quality data and conduct additional field analysis to characterize water quality. Engineer shall summarize water quality data in a TM. This task includes an allowance up to $20,000 for laboratory analytical costs for parameters not included within Owner's available data.

Task 206 - Pretreatment Capacity Analysis
Engineer shall analyze the conversion of the existing dissolved air flotation (DAF) to saturated air flotation (SAF). Includes sending sample water to SAF vendor for jar testing at their facility. Identify process modifications to implement SAF and sequence of construction to minimize impact to operations.

Task 207 - Prepare 2 Layout Options for Selected Treatment Train
Engineer shall prepare two (2) schematic layout options for the expanded WTP. Includes preliminary sizing of process units and proposed structures.

Owner to indicate if the adjacent property will be acquired for the WTP expansion prior to Engineer starting Task 207 to avoid additional Engineer effort to redesign schematic layouts.

Task 208 - Taste & Odor Control Option Selection
Engineer shall prepare comparison of taste and odor control options including granular activated carbon (GAC), ozone, biologically active filtration (BAF). Task will include available operating data from the 2021 GAC demonstration project. Summarize taste and odor control options in a TM.

Task 209 - Workshop 2 - Taste & Odor Control Option Selection
Prepare agenda and facilitate a Taste & Odor Options Selection Workshop to evaluate potential an overall taste and odor control toolbox. Discuss treatment options from source management, blending ratios, PAC at Lone Tree, ozone, BAF and GAC. The workshop will identify the preferred option while noting the

advantages and disadvantages to each option. Provide summary notes to document the decisions made during the Workshop.

Task 210 - Disinfection & Distribution Pump Station Options Development
Engineer shall complete disinfection, distribution storage and pumping analysis, including design of new disinfection contact basin. Coordinate capacity of pump station with Owner for other planned distribution system improvements. Investigate options for reuse of existing ground storage tanks. Improvements to the ground storage tanks are excluded. Prepare design for a separate backwash supply cell to use un-chlorinated water for BAF backwash. Perform desktop analysis on corrosion impact to distribution system. Summarize findings in a TM.

Task 211 - Workshop 3 - Alternative Design Comparison
Engineer shall host an interactive workshop at the Owner's facilities to discuss design documents prepared to date, including all TM and analytical data. Workshop shall discuss anticipated raw water quality, treatment goals, taste and odor options, disinfection contact basin and distribution pump station design. Solicit Owner feedback to make collaborative decisions on the preferred process train for conceptual design.

Task 212 - Prepare Conceptual Design
Engineer shall advance the conceptual design, based on Owner feedback during Workshop 3. Conceptual design includes design drawings 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 project. 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 drawings to be submitted in PDF format. Summarize cost and schedule in a TM.

Task 213 - Prepare WTP Siting Options, Construction & Prioritization Phases
Engineer shall prepare phasing plans to show the sequence of construction on the existing WTP property. Engineer shall prepare up to three (3) on the adjacent property. Phasing plan to indicate critical tie-ins that may impact the WTP operations, estimated durations and contingency plans. Work sequence shall identify construction tasks that should be performed during seasonal low demand periods. Summary in TM.

Task 214 - Basis of Design Report
Engineer shall prepare a Basis of Design Report (BODR) to document decisions made, design standards, design criteria, layout, estimated costs and schedule, based on feedback at Workshop.

Task 215 - Workshop 4 - Review Conceptual Design
Engineer shall host an interactive workshop at the Owner's facilities to discuss the conceptual design drawings and TM submitted to date. Solicit Owner feedback to make collaborative decisions on the selected conceptual design. Finalize conceptual design to carry forward into preliminary design. Provide summary notes to document the decisions made during the Workshop.

Task Series 300 – Preliminary Design (30%)

Task 301 - Develop Preliminary Design:
The Engineer will 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 to potential Construction Manager At-Risk (CMAR) firms. 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 table of contents for the anticipated specifications for the expanded WTP scope. The Engineer shall finalize the process flow diagram for the WTP. 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 expanded WTP, including raw water, settled water, filtered water, treated water and backwash waste. The Engineer will coordinate with the Owner to finalize the hydraulics and coordinate tie-ins to raw or treated water.

Task 302 - Topographic Survey:
Conduct topographic survey requirements, as required by Engineer, to facilitate the detailed design of the expanded WTP on the existing 4.5 acres WTP property. Includes land survey plat, private utility located and title binder for one parcel. This work will be subcontracted.

Task 303 - Geotechnical Investigations:
Conduct geotechnical investigation of the existing WTP property, based on seven (7) boreholes, to develop foundation and pavement design recommendations. This work will be subcontracted.

Task 304 - Preliminary Design Report:
Engineer shall update the BODR with decisions made during the preliminary design phase in a preliminary design report (PDR). Engineer shall update the estimated schedules and construction costs for the PDR.

Task 305 – Review Meeting 1 – Preliminary Design and Phasing:
Engineer shall host a Review Meeting 1 at the Owner's facilities to discuss the 30% design documents. The purpose of this meeting is to provide the Owner and Engineer an opportunity to clarify Owner comments on the documents. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email. Decision log and risk register will be updated.

Task Series 400 – Detailed Design (60%)

401 - Prepare 60% Design:
Engineer shall provide drawings at the 60% design level. 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.
The CMAR shall prepare estimated construction cost, schedule, and sequencing at the 60% and 90% deliverables. It is assumed that there is one work package (no early work packages, such as excavation or foundation packages).

402 - 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 ten (10) test holes. This work will be subcontracted.

403 - Review Meeting 2 - 60% Design:
After the Owner has had an opportunity to review the 60% design documents, Engineer will conduct a 60% design review meeting. The purpose of this meeting is to provide the Owner and Engineer an opportunity to clarify Owner comments on the documents. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email. Decision log and risk register will be updated.

404 - Initial Permitting Support:
Engineer shall prepare initial applications and supporting documents for approval submittals to CDPHE Water Quality Division, Owner Planning and Building Permit. This task includes initial coordination calls with the above entities, including, pre-application meetings, where applicable.

Task Series 500 – Final Design (90%)

501 - Prepare 90% Design:
Engineer shall provide plans at the 90% design level. The 90% drawings shall include 60% drawings, brought to 90%, and additional detail drawings that are needed for final design. Engineer will provide a PDF of the 90% plans (11"x17"). The plans will be prepared in accordance with BMcD'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.

502 - Review Meeting 3 - 90% Design:
After the Owner has had an opportunity to review the 90% design documents, Engineer will conduct a 90% design review meeting. The purpose of this meeting is to provide the Owner and Engineer an opportunity to clarify Owner comments on the documents. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email. Decision log and risk register will be updated.

503 - Final 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.

504 - Prepare Construction Documents:
Engineer will incorporate any comments from the 90% design documents from the Owner, CMAR 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.

505 - Review Meeting 4 – Construction Documents:
Engineer will conduct a final review meeting with the Owner and CMAR to discuss the construction documents. The purpose of this meeting is to provide the Owner and Engineer an opportunity to clarify Owner and CMAR comments on the documents. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email. Decision log and risk register will be updated.

Task Series 600 – CMAR Selection

601 – Project Delivery Workshop
Engineer will host a collaborate Workshop within 30 days of project initiation with the Owner to discuss project delivery options. Options include Design-Bid-Build, Design-Build and Construction Management At-Risk (CMAR). The preferred delivery method will be selected using costs and non-monetary factors. The selection matrix will be provided to allow all parties to become familiar prior to the meeting. The workshop will identify the appropriate form of agreement between the Owner and contractor.
It is assumed for this scope of services that the selected delivery method will be CMAR.

602 – CMAR Execution Workshop
Engineer will host a collaborate Workshop with the Owner to discuss how to execute the project with CMAR delivery. Engineer shall provide a proposed sequence of tasks to the Owner prior to the meeting for their review. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email. Decision log and risk register will be updated.

603 – Prepare Request for Qualifications (RFQ) Documents:
Engineer shall prepare a RFQ document to issue to local construction contractors. The goal of the RFQ is to develop a short list of qualified contractors to invite to the proposal phase. The RFQ shall request contractor qualifications, including proposed staffing, recent project experience and references. Owner shall provide their preferred CMAR forms of agreement for use. Owner shall manage the advertising of the RFQ.
It is assumed that the RFQ documents are issued with the conceptual design (15%) package to provide the interested contractors with a description of the proposed scope of work.

604 - Review Meeting 5 - CMAR RFQ Documents:
Engineer will conduct a review meeting with the Owner to discuss the CMAR RFQ documents. Owner shall provide comments for the Engineer to review and incorporate, where applicable. Engineer shall update the RFQ documents based on the review meeting comments. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email. Decision log and risk register will be updated.

605 - Evaluation of Received Qualification Packages & Development of Short List:
Engineer shall assist the Owner with evaluation of the received RFQ packages and facilitate a discussion on the shortlisted firms. Only firms on the shortlist will be invited to the proposal stage.

606 - Preparation of Request for Proposals (RFP):
Engineer shall prepare an RFP document to issue to the shortlisted firms. CMAR firms will propose on their project approach, schedules, comments on the proposed form of agreement, Phase 1 (pre-construction services) and CMAR fee (% fee on the cost of work). Owner shall manage the advertising of the RFP and related questions. It is assumed that the RFP documents are issued with the preliminary design (30%) package.

607 - Review Meeting 6 - CMAR RFP Documents:
Engineer will conduct a review meeting with the Owner to discuss the CMAR RFP documents. Owner shall provide comments for the Engineer to review and incorporate, where applicable. Engineer shall update the RFP documents based on the review meeting comments. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email.

608 - RFP Period Support:
Engineer shall support the Owner by responding in writing to questions received from CMAR firms.

609 - Evaluation of CMAR Proposals & Contractor Negotiation:
Engineer shall assist the Owner with evaluation of the received RFP packages and facilitate a selection of the preferred CMAR firm. Task includes participating in interviews with three (3) proponents.

610 - Review of Cost Estimates, Schedules, Value Engineering & Constructability Issues:
Engineer will work with the selected CMAR contractor to identify portions of the work that are candidates for early work packages, identify cost-saving or value engineering opportunities, identify long lead time equipment packages, and prioritize the design of these items accordingly. It is assumed that the Owner's building department does not allow partial building permits and that early construction packages are not possible.

CMAR to develop estimated construction costs and schedules at the 60%, 90% and final design milestones. Engineer shall review all estimates prepared by the CMAR, including the Guaranteed Maximum Price development and breakdown for completeness, contract compliance and conformity with the scope of work and the Owner's goals and expectations.

Task Series 700 – Equipment Procurement

701 - Prepare Documents for Early Procurement Packages:
Engineer shall collaborate with the Owner to identify early procurement packages. This scope of work assumes the following early procurement packages:

- SAF equipment
- Ozone system equipment
- BAF system equipment, including chemical dosing systems
- Pumping units (backwash supply, filtered water, distribution pumps, recycle pumps)
- Diesel generator

Engineer shall prepare technical specifications and layout drawings for the above packages.

702 - Prepare Procurement Request for Proposal Packages:
Engineer shall prepare issued for bid documents for the above equipment packages. Owner shall provide front-end procurement documents in their preferred format and facilitate the solicitation and receipt of proposals.

703 - Review Meeting 7 - Procurement Documents:
Engineer will conduct a review meeting with the Owner to discuss the procurement documents. Owner shall provide comments for the Engineer to review and incorporate, where applicable. Engineer shall update the procurement documents based on the review meeting comments. Engineer will provide meeting minutes with a decision log and list of action items. Meeting minutes will be distributed via email.

704 - Procurement Period Support:
Engineer shall support the Owner by responding in writing to questions received from equipment vendors.

705 - 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 that the CMAR contractor will assume responsibility for procurement of the equipment packages after selection by the Owner and Engineer.

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

707- Coordination with Installing Contractor
Engineer shall coordinate with CMAR contractor on the scope, technical criteria, schedule, and CMAR-contracts of the equipment packages.

Lonetree 36" Raw Water Transmission Pipeline

1. Project Understanding

Design will include waterline material selection, routing, cathodic protection, and other necessary work for a complete pipeline.

The work generally includes:

1. Design of ~11.2 miles of 36-inch diameter (approximate) waterline
2. Conduct pipeline material option analysis, pipeline material recommendations
3. Design connections of the new waterline to existing infrastructure
4. Develop alignment alternative and recommend the highest value route.
5. Permitting support
6. Details of new connections
7. Standard and special water transmission line details
8. Easement legal descriptions/exhibits
9. Waterline appurtenance design including valving, air/vacuum valves, blowoff assemblies, etc.
10. Erosion, and Sediment Control Drawings

2. Scope of Services

TASK SERIES 2100 – Project Initiation & Coordination

Task 2101 – Project Kickoff Meeting:
Engineer will attend a project kick-off meeting to be held with staff. The meeting shall include discussion of pertinent items for the project such as:

- Present project background and overview.
- Introduce key staff involved in the project including personnel who are to provide information/services.
- Determine lines of communication and project contacts (contact list to be developed).
- Identify available existing data and exchange.
- Discuss key issues and goals.

- Review the project schedule and milestones.
- Define sub-consultants and their roles.
- Outline possible community concerns, neighboring residents, businesses, easements, etc.
- Discuss the geotechnical needs for the project.
- Discuss considerations for connections to the existing system.
- Discuss methods of construction that will be considered.
- Discuss agency coordination such as USACOE, USFWS, Weld County, and CDOT in addition to future developments in the area.

A meeting agenda and subsequent meeting minutes will be distributed to all meeting participants

Task 2102 – Data Collection and Review of Background Information:
Engineer will review available information provided by the Owner including:

- WTP Drawings
- Lone Tree Pump Station Drawings
- Lone Tree Pipeline Drawings
- Surge Analysis
- Other as-built record drawings
- GIS mapping
- Utility maps including Key Maps
- Aerial photography
- Existing easement documents
- Existing details

Task 203 – Conduct Weekly Progress Meetings:
Engineer will conduct weekly team coordination meetings via telephone conference and/or utilize Microsoft Teams to discuss the status of the report and any project topics. For the purposes of this proposal, Engineer has assumed that the design phase will take approximately ten (10) months to complete. As such, our scope and fee includes hours to host forty (40) coordination meetings (does not include kick-off) via telephone or LiveMeeting. These meeting are in addition to design review meetings (60%, and 90% design level). A meeting agenda and subsequent meeting minutes will be distributed to all meeting participants.

TASK SERIES 2200 – Land Ownership, Easement Support, & Permitting

Task 2201 – Prepare Exhibit Showing Property Lines and Land Ownership Information and Easements:
Engineer will prepare an exhibit of property line boundaries and ownership information along the selected alignment, and it will include the surrounding project area. This work will be subcontracted.

Task 2202 –Develop and Maintain a List of Property owners for Each Alignment Alternative:
Engineer will develop a list of property owners for each alignment alternative considered. The intent of our design will be to minimize the number of impacted landowners.

Task 2203 – Easement Legal Descriptions and Exhibits:
Engineer's surveying subconsultant, King Surveying, will complete up to ten (10) legal descriptions for easements identified in Task 2201. Legal descriptions will include the written description and be supported by an exhibit (map). Additional legal descriptions/exhibits can be provided at $900 for each. This work will be subcontracted.

Task 2204 – Develop and Maintain a Permit Matrix:
Engineer will conduct a regulatory analysis and prepare a matrix that identifies permits, licenses, agreements, and similar approvals required for design and construction of the Project. Engineer shall assist with necessary permitting as required by this work. Such permitting may consist of working with local, state, and federal agencies. Necessary permits for this work may include permits through the USACOE, USFWS, Colorado Department of Health and Environment, Weld County, and CDOT. Permits required to be obtained by the Contractor will be referenced in the specifications.

Task 2205 – Coordination and Permitting with Weld County:
Engineer will coordinate and communicate with Weld County. We will schedule a virtual review meeting with the County once design has reached 30%. We will discuss the County's requirements with regards to placement, restoration, etc. For the purposes of our fee, we have assumed that the Town will pay all review and processing fees.

Task 2206 – Coordination and Permitting with Ditch Companies:
The waterline is likely to cross existing ditches. Our team will meet with each ditch company and discuss their requirements with regards to review, installation, and restoration requirements. For the purposes of our fee, we have assumed that the Town will pay all review and processing fees.

Task 2207 – Coordination and Permitting with United States Army Corps of Engineers:
To comply with Section 404 of the Clean Water Act, Engineer, will conduct a waters of the United States (WUS) delineation which will include background review and field work to identify potentially jurisdictional WUS (e.g., wetlands, drainages). A findings report will be created and submitted to the U.S. Army Corps of Engineers (USACE) with a jurisdictional determination (JD) request to obtain concurrence on the WUS delineation. Per the Colorado Regional Conditions for the Nationwide Permits, a pre-construction notification (PCN) will be submitted to the USACE for authorization of WUS impacts. Required components of the PCN include project/applicant details, WUS delineation, impacts analysis, avoidance, and minimization discussion, preliminary threatened and endangered (T&E) species analysis and cultural review. If additional T&E or cultural information, surveys, reporting, or coordination is required by the USACE, additional scope will be provided.

Task 212 – Coordination and Permitting with CDOT:
The project will cross I-25 and as such, requires coordination and communication with CDOT. Our team will meet with CDOT at the 30% design phase and submit for preliminary approval. Final approval is only granted once a Contractor is selected, and their insurance has been approved.

TASK SERIES 2300 – Environmental Studies and Reports

Task 2301 – Environmental Studies and Reports – Biological Survey and Threatened & Endangered Species:
Once the final alignment is selected, Engineer will coordinate to complete a protected species desktop habitat assessment to determine if areas that would be disturbed during Project construction could include potential habitat for state- or federally protected species. Based on the results of the desktop habitat assessment, an Engineer's environmental scientist will visit the site and complete a protected species habitat assessment field survey of the route and expected contractor working areas. The findings of this evaluation will be documented in a brief letter report that would be suitable to submitting to the agencies. If threatened/endangered species habitats are identified, the habitat limits and recommendations for future additional study will be recommended. Please note that our proposal does not include any presence/absence surveys, special status trapping, counts, etc. These services could be added through amendment as required. Pinyon will make recommendations with regards to future permitting based on the required construction and discovery of protected species habitats. If this work triggers a federal permit, this will be specifically communicated to the Town.

Task 2302 – Environmental Studies and Reports – Wetland Delineation:
Once the final alignment is selected, Engineer will coordinate to conduct a desktop evaluation of the Project Area for wetlands using publicly available data. Based on the results of the desktop review, a wetland specialist will visit the site and evaluate the route and expected contractor working areas for wetlands and other waterbodies. This field visit will verify any previous findings or discoveries through desktop analysis. The findings of this evaluation will be documented in a letter report. Wetlands and other waterbodies, when present, will be delineated with a sub-meter-accurate GPS. These GPS limits will be included into our construction drawings. Pinyon will make recommendations with regards to future permitting based on the required construction, and location of wetlands and other waterbodies. If the work triggers a federal permit, this will be specifically communicated to the Town.

Task 2303 – Environmental Studies and Reports – Historical and Cultural:
Once the final alignment is selected, Engineer will coordinate to conduct a desktop evaluation of the Project Area for cultural and historic resources using records and database review from common sources. Based on the results of the desktop review, a cultural resources specialist will visit the site and evaluate the route and expected contractor working areas for potential impact to historical and cultural sites. This field visit will verify any previous findings or discoveries through desktop analysis. The findings of this evaluation will be documented in a brief memorandum. Historical and/or cultural sites, when present, will be delineated with a hand-held GPS. These GPS limits will be included into our construction drawings. ERO will make recommendations with regards to future permitting based on the required construction, number, size, location, and importance of historical and/or cultural finds. If the work triggers a federal permit, this will be specifically communicated to the Town. ERO will also coordinate with the local tribe(s) to conduct a site walk down.

Task 2304 – Environmental Studies and Reports – Jurisdictional Determinations:
Engineer, in conjunction with Task 2211 and 2302, will develop jurisdiction determination requests and submit to the USACOE.

Task 2305 – Environmental Studies and Reports – Raptors and Birds:
Once the final alignment is selected, Engineer will coordinate to complete a desktop habitat assessment of protected raptors/nesting birds to determine if areas that would be disturbed during Project construction could include potential habitat for state- or federally protected species. Based on the results of the desktop habitat assessment, Pinyon will visit the site and complete a raptor/nesting bird habitat assessment field

survey of the route and expected contractor working areas. The findings of this evaluation will be documented in a brief letter report that would be suitable to submitting to the agencies. If threatened/endangered species habitats are identified, the habitat limits and recommendations for future additional study will be recommended. Please note that our proposal does not include any presence/absence surveys, special status trapping, counts, etc. These services could be added through amendment as required. Pinyon will make recommendations with regards to future permitting based on the required construction and discovery of protected bird habitats. If this work triggers a federal permit, this will be specifically communicated to the Town.

TASK SERIES 2400 – Field Data Collection

Task 2401 – Private Utility Locates and One-Calls:
King Surveying (King) will gather available existing utility mapping from individual utility companies, the Town, for the construction area. Flatirons will designate existing utilities along the work area utilizing a private utility designation firm. Utility marks provided by Colorado One-Call (811) and the surveyor's private utility company will be included in the topographical survey base mapping. Every attempt will be made to achieve SUE level B designation in accordance with ASCE 38-02 and SB 18-167. Utilities that are not field designated will be shown as mapped lines. This work will be subcontracted.

Task 2402 – Field Topographic Survey:
Topographical survey work will be provided by our subconsultant, King. Survey will be tied to the Town's coordinate system (Colorado State Plane Central Zone, NAD 1983 and USGS NVD 1929, feet).

A detailed topographical survey will be provided along the construction area. Survey will locate existing surface features (i.e., curb, gutter, edge of pavement, sidewalk, significant trees, fire hydrants, valve boxes, meter pits, manhole covers, fences, cross pans and walks and culverts, irrigation ditches and/or pipelines, signs, power poles, etc.).

Survey will locate and confirm horizontally existing located utilities (see Task 401). Utility locator markings and visible property corners along the route will be surveyed along the proposed alignment. This work will be subcontracted.

Task 2403 – Develop Utility Potholing Plan:
Utilizing data from the topographical survey and utility company research, Engineer will develop a utility potholing plan to provide to our test hole subconsultant (Kantex Industries).

Task 2404 – Utility Potholing:
Our test hole subconsultant (Kantex Industries) will perform SUE Level A locates of existing utilities that will be crossed or connected to by the proposed construction to determine their location, elevation, size, material, and alignment. For the purposes of this scope, we have included one hundred (100) test holes. Generally, test holes can be performed for $900/each. If the alignment requires more utility test holes than the amount set in this scope, additional scope and fee should be included through amendment. This work will be subcontracted.

Task 2405 – Utility Potholing Report:
Utilizing information from Tasks 2403 and 2404, Engineer will develop a Utility Potholing Report summarizing the findings. Utility mapping and coordination with existing utilities will be provided in this report in addition to the pot holing results. This report will be provided to the Town in PDF format.

Task 4206 – Geotechnical Field Investigations and Geotechnical Report:
Geotechnical investigation test holes will be drilled to a depth of fifteen feet (15') or to auger refusal (whichever comes first) along the pipeline alignment at intervals of 600-feet. Soil samples will be collected and brought to a laboratory for analysis. Groundwater levels (if present) will be recorded and included in the report.

A geotechnical report will be prepared to provide identification, sample and test soils encountered, discuss geotechnical design and construction concerns, take ground water depth measurements, and provide recommendations for pipeline and structure design criteria.

Our scope of work assumes the following required geotechnical holes:

Bore Hole Type	Depth	Number of Holes
Regular Interval Investigation (600' spacing +/-)	15' deep	100
Total		**100**

This work will be subcontracted.

Task 2407 – Cathodic Protection Field Investigations and Resistivity Testing:
Field Analysis:

Engineer's cathodic protection subconsultant, QualCorr, will perform soil resistivity testing and analysis at key locations along the new pipeline alignment (estimate 4 locations and include both in-situ (field) testing and saturated testing). QualCorr will also complete foreign stray current assessment and AC induction study to identify any areas or locations along the piping alignment where these situations may occur.

Engineering and Design:

Engineer's cathodic protection subconsultant, QualCorr, will develop 60%, 90%, and 100% corrosion control and cathodic protection (CP) design submittal packages for this project. A National Association of Corrosion Engineers (NACE) Certified Cathodic Protection Specialist (CP4) and Colorado licensed Professional Engineer will oversee the work and evaluate design for accuracy. The process will involve redlining proposed drawings and specifications, material research, and technical studies review to confirm a design basis of the corrosion control standards and procedures as they relate to this project. Engineer's drawings and specifications will include the required installations (drawings, tables, details, and specifications) to cathodically protect the new waterline. This work will be subcontracted.

TASK SERIES 2500 –Preliminary Design Report and Technical Memorandums

Task 2501 – Develop Preliminary Design Report:
Engineer will compile gathered information and prepare Preliminary Design Plans, supplemental reports, and a basis-of-design report. Preliminary Design will include recommended alignment of the pipe, and location and design/configuration of the tie-in locations on the ends of the pipeline.

Task 2502 – Review and Consider Alternative Waterline Alignments:
Engineer will evaluate the potential waterline alignment alternatives and communicate findings and recommendations to the Project Team. The approach will focus on evaluating the technical, cost, land

acquisition, environmental, and social impacts for the alternative locations of the waterline. The recommended waterline alignment option will be clearly communicated and once agreed upon reflected in the Preliminary Design Report indicated in Task 601.

Task 2503 – Waterline Material Options Analysis and Technical Memorandum:
Engineer will evaluate the waterline so that pipeline material and pipe class (wall thickness) is appropriate for all portions along the pipeline. This is an important step because reducing wall thickness will greatly impact the raw pipe cost which is the single most expensive cost associated with this project. Our specification will provide tables indicating various sections of the pipeline, allowable pipeline materials, and minimum required pipe class (thickness). We will coordinate allowable pipeline materials with the Town. It is expected that this pipeline would be constructed of ductile iron pipe, steel pipe, PVC pipe (C-905), or a combination of materials. We will work with the Town and make recommendations based on design condition, lifecycle, and meeting the preferences of the Town. This analysis will be presented in a Technical Memorandum.

TASK SERIES 2600 –Detailed Design

Task 2601 –60% Waterline Design Drawings:
Plans and specifications shall be provided by Engineer to the 60% design level. The 60% Documents shall include the following:

- Technical Specifications
- All drawings indicated in Preliminary Design brought to 60% completion
    - Pipe profiles will be shown
    - Existing utilities will be shown
- Additional Detail drawings that are needed for final design.

Task 2602 – Erosion and Sediment Control (ESC) Drawings:
Our team will provide 60% design level ESC drawings for the project which shall include Douglas County's requirements relating to sediment and pollution controls. This will include the installation, quantity, and alignment of site-specific BMP's including inlet protection, rock socks, erosion control fence, construction fence, seeding, etc.

Task 2603 - Prepare 60% Technical Specifications:
Engineer will prepare the 60% technical specifications to describe the elements of work proposed. The technical specifications will be as detailed as possible for work to be performed, and to meet the Project Team's expectations. Technical specifications will be coordinated with the Town of Castle Rock's General and Special Conditions, which will be provided by the Town.

Task 2604 – 60% Engineer's Opinion of Probable Construction Cost:
Based on the 60% design drawings, our project team will prepare the engineer's opinion of probable construction cost and update the overall project schedule. Our cost estimate and schedule update will be submitted along with the design documents for review and comment by the Town. Our estimate will be based on recent bid tabulation information, historical cost data, and discussions with local suppliers and contractors. Significant assumptions will be included for reference.

Task 2605 – 60% Quality Control Reviews:
Our team will perform quality control for the plans and specifications in accordance with the Engineer's procedures. Engineer has an established, formalized quality control program that is mandatory on all projects. A copy of our formal quality control procedures manual is available upon request.

Task 2606 – Submit 60% Design Documents:
Engineer will finalize and formally submit 60% design documents from Tasks 2601 through 2604.

Up to five (5) half size copies of the design documents will be provided to the Project Team for review.

The Project Team will be given two weeks to review the plans and outline specifications prior to holding the 60% Design Review Meeting. Five half size copies of the plans will be provided to the Town for review

Task 2607 – 60% Design Review Meeting:
Engineer will prepare for, attend, and conduct a design review meeting to be held with the Project Team. The 60% design shall be presented by the Consultant and reviewed in detail with the Project Team. Engineer will provide meeting minutes with a decision log and a list of action items. Meeting minutes will be distributed via e-mail.

Task 2608 – 90% Waterline Design Drawings:
Plans and specifications shall be provided by Engineer at the 90% design level. The 90% Plans shall include, at a minimum, refinement of the plans and specifications. Utility pothole information shall be incorporated into the design at this level (if not available prior to the 60% deliverable) to identify conflicting utilities. Temporary and permanent easements information, land ownership information and all design related appurtenances shall be included.

Technical specifications shall be completed to a 90% level. Plans and specifications shall include sufficient detail for Bid.

Task 2609 –90% Erosion and Sediment Control (ESC) Drawings:
Our team will provide 90% design level ESC drawings for the project which shall include Douglas County's requirements relating to sediment and pollution controls. This will include the installation, quantity, and alignment of site-specific BMP's including inlet protection, rock socks, erosion control fence, construction fence, seeding, etc.

Task 2610 - 90% Technical Specifications:
Engineer will prepare the 90% technical specifications to describe the elements of work proposed. The technical specifications will be as detailed as possible for work to be performed, and to meet the Project Team's expectations. Technical specifications will be coordinated with the Town of Castle Rock's General and Special Conditions, which will be provided by the Town.

Task 2611 – 90% Engineer's Opinion of Probable Construction Cost and Schedule:
Based on the 90% design drawings, our project team will prepare the engineer's opinion of probable construction cost and update the overall project schedule. Our cost estimate and schedule update will be submitted along with the design documents for review and comment by the Town. Our estimate will be based on recent bid tabulation information, historical cost data, and discussions with local suppliers and contractors. Significant assumptions will be included for reference.

Task 2612 – 90% Quality Control Reviews:
Our team will perform quality control for the plans and specifications in accordance with the Engineer's procedures. Engineer has an established, formalized quality control program that is mandatory on all projects. A copy of our formal quality control procedures manual is available upon request.

Task 2613 – Submit 90% Design Documents:
Engineer will finalize and formally submit 90% design documents from Tasks 709 through 713.

Up to five (5) half size copies of the design documents will be provided to the Project Team for review.

The Project Team will be given at least two weeks to review the plans and outline specifications prior to holding the 90% Design Review Meeting. Five half size copies of the plans will be provided to the Town for review

Task 2614 – 90% Design Review Meeting:
Engineer will prepare for, attend, and conduct a design review meeting to be held with the Project Team. The 60% design shall be presented by the Consultant and reviewed in detail with the Project Team. Engineer will provide meeting minutes with a decision log and a list of action items. Meeting minutes will be distributed via e-mail

Task 2615 – 100 % (Final) Design / Bid Ready Documents:
Plans and specifications shall be completed by Engineer at the 100% design level. Engineer will provide the Project Team with two (2) full sized drawings, three (3) half sized drawings, and five (5) copies of the final specifications. Final documents shall also be provided in AutoCAD (version 2018 or later), Microsoft Word, and Adobe Acrobat (.pdf) formats.

Task 2616 – 100% Engineer's Opinion of Probable Construction Cost:
Based on the 100% design drawings, our project team will prepare the engineer's opinion of probable cost for the project. This estimate will be submitted along with the design documents for review and comment by the Project Team. Our estimate will be based on recent bid tabulation information, historical cost data, and discussions with local suppliers and contractors. Relevant and significant assumptions will be included for reference. This estimate will include a 10% contingency.

TASK SERIES 2700 – Bid Phase Support

Task 2701 - Prepare Issue for Bid Documents:
Engineer will develop the Issue Bid Document (IFB) sets, transmit to the Town, and have them available for contractor distribution.

Task 2702 - Draft and Distribute Addenda:
Engineer will assemble and transmit addenda information as necessary during the bidding process. The addenda will be incorporated into the Contract Documents. Based upon comments, questions, and feedback from Contractors during the bidding process, the issuance of multiple addenda may be required.

Task 2703 - Prepare Agenda and Host Pre-Bid Conference:
Engineer will host and attend pre-bid conference to assist the Project Team in answering questions concerning the design of the project. The meeting agendas will cover important and noteworthy conditions or requirements associated with the bid and the work. We will also provide an exhibit of the overall project

to present to the contractors and a meeting sign-in sheet and meeting minutes. Meeting minutes will be distributed to meeting attendees and prospective bidders.

Task 2704 - Bid Tabulation Summary:

Engineer will compile an overall bid tabulation showing the provided bid costs in a single spreadsheet. This bid tab will help identify computational errors and uncertainties in the bid process. Irregularities will be documented.

Task 2705 - Deliver Conforming Drawings & Specification (IFC Documents):

Engineer will make final revisions to the Contract Documents based on addenda issued during the Bid Phase. Engineer will submit the "Issued for Construction" (IFC) documents to the successful contractor for use during the Construction Phase.

A1.01 Comments and clarifications to the Basic Services Scope Table

All customary water treatment facilities ("WTF") permitting, predesign, design engineering and construction related services including Civil, Process, Mechanical, Architectural, Electrical/ Instrumentation and Controls are provided. Geotechnical/ Survey Services are also included. The following service are not included:

1. No permitting fees or fees that may be imposed are included.
2. Funding assistance services, rate studies, environmental impact or NEPA related services, or floodplain mapping services.

Town of Johnstown, CO
Water Treatment Plant Expansion

BURNS McDONNELL

ID	Task Name
1	**Pre-Award**
4	Notice to proceed
5	**Design Phase - Basic Services**
6	**Design Phase - Water Treatment Plant**
7	**Task Series 100 - Project Initiation & Coordination**
9	**Task Series 200 - Review Existing Data & Basis of Design**
29	**Task Series 300 - Preliminary Design**
36	**Task Series 400 - Detailed Design**
42	**Task Series 500 - Final Design**
51	**Task Series 600 - CMAR Selection**
65	**Task Series 700 - Equipment Procurement**
74	**Design Phase - Additional Services**
75	**Task Series 800 - Optimization**
80	**Task Series 900 - Jar & Pilot Testing**
88	**Design Phase - LoneTreee Raw Waterline**
89	**TASK SERIES 2100 - Project Initiation & Coordination**
133	**TASK SERIES 2200 - Land Ownership, Easement Support, and Permitting**
142	**TASK SERIES 2300 - Environmental Studies and Reports**
148	**TASK SERIES 2400 - Field Data Collection**
156	**TASK SERIES 2500 - Preliminary Design Report and Technical Memorandums**
160	**TASK SERIES 2600 - Detailed Design**
177	**TASK SERIES 2700 - Bid Phase Support**

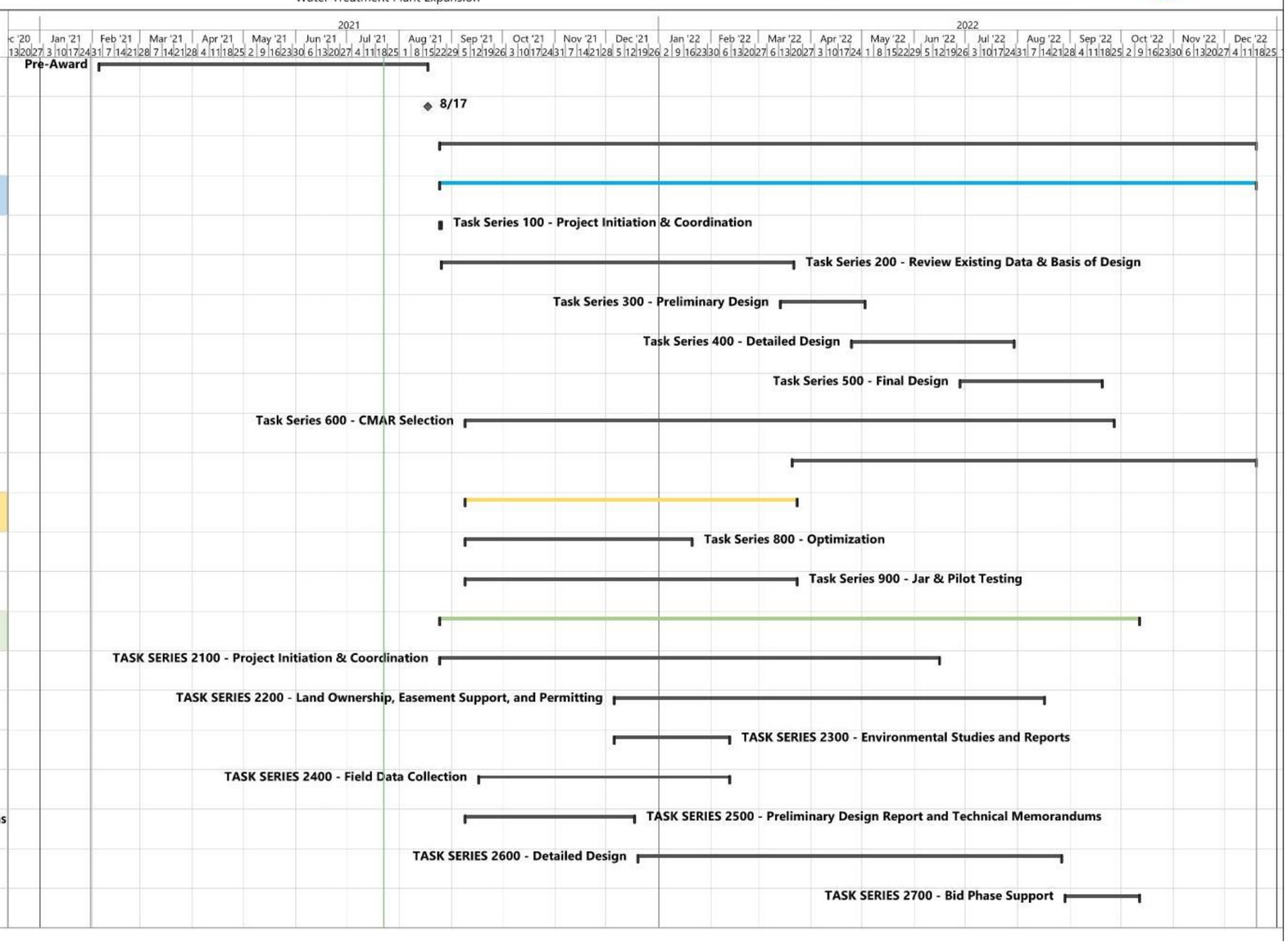

Figure A- 1 - Design Schedule

PART 2 – ADDITIONAL SERVICES

A2.01 *Additional Services Requiring Owner's Written Authorization*

A. If authorized in writing by Owner, Engineer shall provide Additional Services of the types listed below. These services are not included as part of Basic Services and will be paid for by Owner as indicated in Exhibit C. The Parties recognize and agree that many of the listed Additional Services do not apply to this initial phase of the Project, developing the Engineering Design Plans, but may be applicable to subsequent phases of the Project. Pursuant to an amendment to this Agreement, certain of the Additional Services listed herein may become a Basic Service during such subsequent phases of the Project.

Task Series 800 – Optimize Operations

801 - Identify Optimization Tasks
Engineer shall prepare a questionnaire for WTP operators. Operators will be asked to complete the questionnaire and return it prior to our first operators' workshop. This will help gather a broad opinion of current concerns, challenges, and opportunities. Engineer will ask for each operator's level of comfort with particular technologies to seek their input on improving existing operations and safety. Engineer to conduct a site visit with Owner staff to investigate the current operations. Engineer to develop a list of potential optimization tasks based on operator input and the Engineer's site visit. The goal of the 500 Task Series is to provide Owner staff will relief during periods of high water demand until the expanded WTP is online.

802 - Workshop 5 - Operations Investigation
Engineer shall prepare agenda and facilitate a Workshop with Owner operations staff. The Workshop will identify the current bottlenecks and operating procedures that impact the Owner's ability to meet maximum day demands and water quality goals. Provide summary notes to develop action list of optimization tasks, including, but not limited to operational, maintenance, mechanical, electrical or control improvements that can be fast tracked.

803 - WTP Operations Support
Engineer shall provide support to WTP operations. Attend site on weekly basis, review Owner-supplied data and make recommendations to current O&M practices.

804 - Procurement & Installation Support
Engineer shall provide analysis and technical support to identified optimization tasks that are not immediately addressed by O&M practices. Includes on-site bench top testing, laboratory analysis (this work will be subcontracted), consulting with CDPHE. Engineer shall provide technical support for procurement, installation and start-up of equipment identified as an optimization tasks.

Task Series 900 – Jar & Pilot Testing

Task 901 - Jar Testing:
Engineer shall conduct bench scale jar testing and data collection at the WTP to assess optimal chemical dosing options for select constituent removals. The Owner will assist the collection of water supply samples and basic laboratory testing on the raw water that can be conducted onsite during testing (turbidity,

temperature, color, UVT, pH, hardness, and alkalinity). The Engineer assumes that the cost for all lab equipment, consumables and outside water quality laboratory work would be paid by the Owner. This work will be subcontracted.

Engineer shall provide a TM to include the testing results. Owner comments from the draft TM will be incorporated into the final TM.

Task 902 - Bench Scale Ozone Testing:
Engineer shall conduct bench scale testing to determine if raw or intermediate ozone preferred. Engineer shall determine bromate interaction and disinfection byproduct formation potential, using Engineer-supplied ozone generator and laboratory analysis. Feed water will be spiked with organic compounds to simulate peak taste and odor conditions. This work may be subcontracted.

Task 903 - Develop Testing Protocol:
The treatment process that will be analyzed during the pilot test is ozone and granular media filtration. Detailed protocols will be provided by Engineer for each unit process included in the pilot test prior to the initiation of pilot testing. CDPHE will be contacted prior to performing a pilot test and approved by CDPHE if we plan on utilizing the pilot to provide justification for straying from the CDPHE design guidelines.

Task 904 - Field Implementation of Pilot Testing:
Pilot testing will take place onsite at the Johnstown WTP. Effluent from the existing DAF units will be the raw water supply to the pilot units. A small submersible pump may be required for the unit. It is assumed that the Owner would supply the submersible pump with design information from the Engineer.

Task 905 - Pilot Testing Supervision:
Owner staff will oversee the daily (Monday through Friday) operation of the pilot system for its 8 week duration. If the system goes down over the weekend, Owner staff will maintain it on Monday. Daily operation tasks will involve collecting and analyzing water quality samples, maintaining target flowrates and chemical dosing rates, measuring flowrates at specified locations and frequencies, recording visual observations, and noting any issues that occur with the pilot testing components.

Task 906 - Evaluation of Results:
Pilot-Scale testing progress meetings will be held bi-weekly (every two weeks). These meetings will either be held at Johnstown's offices or by phone conference / Microsoft LiveMeeting. The goal of these meetings is to present data collected and summarize results from the previous two weeks of pilot testing. This will be a time to discuss testing progress, any issues with the system, and preview any modifications that will be made to the system (adjust process loading rates, dosing rates, etc.). Engineer (with the cooperation of Johnstown personnel working on the pilot) will prepare an Agenda and compile a summary of results prior to each meeting. Engineer will provide meeting minutes with a decision log and list of action items.

Task 907 - TM7 - Pilot Testing Results:
Engineer will prepare a technical memorandum documenting findings identified during pilot-testing. The technical memorandum will summarize the effectiveness of treatments tested during the pilot test and will culminate in recommended loading rates and dosing rates for each unit process and chemical for the startup and operation of the Water Treatment Plant under various water quality and temperature conditions. The technical memorandum will also describe any perceived weakness in the treatment system and methods that can be utilized (design and operation) to overcome.

Task Series 1000 – Owner Costs for Piloting by Engineer

The following items will be procured and paid for by the Owner: chemicals, chemical feed pumps, electricity, electricity installation, unloading of the pilot units with a crane, chemical consumption, maintenance consumables, daily operation, collection of grab samples, water quality testing and performing pilot system repairs.

Task 1001 – Ozone Pilot Rental

The Engineer or the Owner can lease an ozone pilot system. The most applicable party to lease this equipment will be determined early in the project. It is assumed the pilot will come with a storage container due to the limited building space onsite. This work will be subcontracted.

Task 1002 – BAF Pilot Rental

The Engineer or the Owner can lease a granular media filtration pilot system. The most applicable party to lease this equipment will be determined early in the project. It is assumed the pilot will come with a shipping container due to the limited building space onsite. This work will be subcontracted.

Task 103 – Pilot Site Implementation

The Engineer will assist with the installation and implementation of the pilot. It is assumed that the Owner will hire a contractor to install the unit.

1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

2. Services to make measured drawings of existing conditions or facilities, to conduct tests or investigations of existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.

3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer, or the Project's design requirements, including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Construction Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date or are due to any other causes beyond Engineer's control.

4. Services resulting from Owner's request to evaluate additional alternative solutions beyond those agreed to in Paragraph A1.01.

5. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.

6. Services related to the acquisition of property related to the Work, beyond the exhibits, drawings and definitions included as part of Basic Services.

7. Providing renderings or models for Owner's use, including services in support of building information modeling or civil integrated management.

8. Undertaking investigations and studies including, but not limited to:

    a. detailed consideration of operations, maintenance, and overhead expenses.

    b. the preparation of feasibility studies (such as those that include projections of output capacity, utility project rates, project market demand, or project revenues) and cash flow analyses, provided that such services are based on the engineering and technical aspects of the Project, and do not include rendering advice regarding municipal financial products or the issuance of municipal securities.

    c. preparation of appraisals.

    d. evaluating processes available for licensing and assisting Owner in obtaining process licensing.

    e. detailed quantity surveys of materials, equipment, and labor; and

    f. audits or inventories required in connection with construction performed or furnished by Owner.

9. Furnishing services of Consultants for other than Basic Services.

10. Providing data or services of the types described in Exhibit B, when Owner retains Engineer to provide such data or services instead of Owner furnishing the same.

11. Providing the following services:

    a. Services attributable to more prime construction contracts than specified in Paragraph A1.03.D.

    b. Services to arrange for performance of construction services for Owner by contractors other than the principal prime Contractor and administering Owner's contract for such services.

12. Services during out-of-town travel required of Engineer, other than for visits to the Site, Owner's office or CDPHE's offices as required in Basic Services (Part 1 of Exhibit A).

13. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review requested by Owner; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other documents as a result of such review processes.

14. Preparing additional bidding-related documents (or requests for proposals or other construction procurement documents) or Construction Contract Documents for alternate bids or cost estimates requested by Owner for the Work or a portion thereof.

15. Assistance in connection with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services.

16. Preparing conformed Construction Contract Documents that incorporate and integrate the content of all Addenda and any amendments negotiated by Owner and Contractor.

17. Providing Construction Phase services beyond the original date for completion and readiness for final payment of Contractor, but only if such services increase the total quantity of services to be performed in the Construction Phase, rather than merely shifting performance of such services to a later date.

18. Preparing Record Drawings, and furnishing such Record Drawings to Owner.

19. Supplementing Record Drawings with information regarding the completed Project, Site, and immediately adjacent areas obtained from field observations, Owner, utility companies, and other reliable sources.

20. Conducting surveys, investigations, and field measurements to verify the accuracy of Record Drawing content obtained from Contractor, Owner, utility companies, and other sources; revise and supplement Record Drawings as needed.

21. Preparation of operation, maintenance, and staffing manuals.

22. Protracted or extensive assistance in refining and adjusting of Project equipment and systems (such as initial startup, testing, and balancing).

23. Assistance to Owner in training Owner's staff to operate and maintain Project equipment and systems.

24. Assistance to Owner in developing systems and procedures for (a) control of the operation and maintenance of Project equipment and systems, and (b) related recordkeeping.

25. Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration, lien or bond claim, or other legal or administrative proceeding involving the Project.

26. Overtime work requiring higher than regular rates, but only upon Owner's prior written approval.

27. Providing construction surveys and staking to enable Contractor to perform its work other than as required under Paragraph A1.05.A.8; any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.

28. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.

29. Extensive services required during any correction period, or with respect to monitoring Contractor's compliance with warranties and guarantees called for in the Construction Contract (except as agreed to under Basic Services).

30. Other additional services performed or furnished by Engineer not otherwise provided for in this Agreement.

A2.02 *Additional Services Not Requiring Owner's Written Authorization*

A. Engineer shall advise Owner that Engineer is commencing to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer shall request and obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice to cease from Owner.

1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner.

2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or equal" items; services after the award of the Construction Contract in evaluating and determining the acceptability of a proposed "or equal" or substitution which is found to be inappropriate for the Project; evaluation and determination of an excessive number of proposed "or equals" or substitutions, whether proposed before or after award of the Construction Contract.

3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.

4. Additional or extended services arising from (a) the presence at the Site of any Constituent of Concern or items of historical or cultural significance, (b) emergencies or acts of God endangering the Work, (c) damage to the Work by fire or other causes during construction, (d) a significant amount of defective, neglected, or delayed Work, (e) acceleration of the progress schedule involving services beyond normal working hours, or (f) default by Contractor.

5. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of the Work by Owner prior to Substantial Completion.

6. Evaluating unreasonable or frivolous requests for interpretation or information (RFIs), Change Proposals, or other demands from Contractor or others in connection with the Work, or an excessive number of RFIs, Change Proposals, or demands.

7. Reviewing a Shop Drawing or other Contractor submittal more than three times, as a result of repeated inadequate submissions by Contractor.

8. While at the Site, compliance by Engineer and its staff with those terms of Owner's or Contractor's safety program provided to Engineer subsequent to the Effective Date that exceed those normally required of engineering personnel by federal, State, or local safety authorities for similar construction sites.

This is **EXHIBIT B**, consisting of 3 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

Owner's Responsibilities

Article 2 of the Agreement is supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall at its expense:

A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations.

B. If Engineer is retained to provide bidding assistance, provide Engineer with Owner's bidding requirements.

C. Furnish to Engineer any other available information pertinent to the Project including reports and data relative to previous designs, construction, or investigation at or adjacent to the Site.

D. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, obtain, furnish, or otherwise make available (if necessary, through title searches, or retention of specialists or consultants) such additional Project-related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Engineer and its Consultants shall be entitled to rely on the completeness and accuracy of such Owner-furnished information. Such additional information or data would generally include the following:

1. Property descriptions.

2. Zoning, deed, and other land use restrictions.

3. Utility and topographic mapping and surveys.

4. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.

5. Explorations and tests of subsurface conditions at or adjacent to the Site; geotechnical reports and investigations; drawings of physical conditions relating to existing surface or subsurface structures at the Site; hydrographic surveys, laboratory tests and inspections of samples, materials, and equipment; with appropriate professional interpretation of such information or data.

6. Environmental assessments, audits, investigations, and impact statements, and other relevant environmental, historical, or cultural studies relevant to the Project, the Site, and adjacent areas.

7. Data or consultations as required for the Project but not otherwise identified in this Agreement.

E. Arrange for safe access to and make all provisions for Engineer to enter upon public property as required for Engineer to perform services under the Agreement.

F. Recognizing and acknowledging that Engineer's services and expertise do not include the following services, provide, as required for the Project:

1. Accounting, bond and financial advisory (including, if applicable, "municipal advisor" services as described in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) and the municipal advisor registration rules issued by the Securities and Exchange Commission), independent cost estimating, and insurance counseling services.

2. Legal services with regard to issues pertaining to the Project as Owner requires, Contractor raises, or Engineer reasonably requests.

3. Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the money paid.

G. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of samples, materials, and equipment required by the Construction Contract Documents (other than those required to be furnished or arranged by Contractor), or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof. If requested, provide Engineer with the findings and reports generated by testing laboratories, including findings and reports obtained from or through Contractor.

H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

I. Upon request, advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.

J. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, the parties may define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.

K. If more than one prime contract is to be awarded for the Work designed or specified by Engineer, then designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of Engineer as an attachment to this Exhibit

B that is to be mutually agreed upon and made a part of this Agreement before such services begin.

L. Inform Engineer in writing of any specific requirements of safety or security programs that are applicable to Engineer, as a visitor to the Site.

M. Examine all alternative solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, risk manager, insurance counselor, financial/municipal advisor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.

N. Inform Engineer regarding any need for assistance in evaluating the possible use of Project Strategies, Technologies, and Techniques, as defined in Exhibit A.

O. Advise Engineer as to whether Engineer's assistance is requested in identifying opportunities for enhancing the sustainability of the Project.

P. Place and pay for advertisement for Bids in appropriate publications.

Q. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others (including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling, and legal advice) for Owner so that Engineer may assist Owner in collating the various cost categories which comprise Total Project Costs.

R. Attend and participate in the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job-related meetings, and Site visits to determine Substantial Completion and readiness of the completed Work for final payment.

S. Authorize Engineer to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement, as required.

T. The Owner shall, at the written request of the Engineer, prior to the commencement of Engineer's services and thereafter, furnish to the Engineer reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under this Agreement. When requested, furnishing of such evidence shall be a condition precedent to the commencement or continuation of the Engineer's services. After such evidence has been furnished, the Owner shall not materially vary such financial arrangements without appropriation.

U. If the Owner requires that any assembly, system, product item of material, or design be included in the Project without (or against) the Engineer's recommendation, or if the Owner selects a contractor, subcontractor, or material fabricator, or any assembly, system, product or item of material, without (or against) the Engineer's recommendation, the Engineer shall have no responsibility for such decision by the Owner or for the performance of such owner-specified items or persons, nor shall the Engineer be required to issue any opinion or certificate with respect to such items or the work of such persons.

This is **EXHIBIT C**, consisting of 5 pages, referred to in and part of the Agreement between Owner and Engineer for Professional Services dated August 17, 2021.

Payments to Engineer for Services and Reimbursable Expenses
COMPENSATION PACKET BC-1: Basic Services – Lump Sum

Article 2 of the Agreement is supplemented to include the following agreement of the parties:

ARTICLE 2 – OWNER'S RESPONSIBILITIES

C2.01 *Compensation for Basic Services (other than Resident Project Representative) – Lump Sum Method of Payment*

A. Owner shall pay Engineer for Basic Services set forth in Exhibit A as follows:

1. Design Phase Services for WTP: A Lump Sum, not to exceed, amount of $ 2,059,442 based on the following estimated distribution of compensation:

2. Design Phase Services for Lone Tree Raw Water Pipeline: A Lump Sum, not to exceed, amount of $1,320,336 based on the following estimated distribution of compensation:

3. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Lump Sum amount unless approved in writing by the Owner.

4. The Lump Sum includes compensation for Engineer's services and services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor costs, overhead, profit, expenses (other than any expressly allowed Reimbursable Expenses), and Consultant charges.

5. The portion of the Lump Sum amount billed for Engineer's services will be based upon Engineer's estimate of the percentage of the total services actually completed during the billing period. If any Reimbursable Expenses are expressly allowed, Engineer may also bill for any such Reimbursable Expenses incurred during the billing period as an additional amount to the stipulated lump sum.

B. *Period of Service:* The compensation amount stipulated in Compensation Packet BC-1 is conditioned on a period of service not exceeding 16 months. If such period of service is extended, the compensation amount for Engineer's services may, by written agreement, be adjusted.

C2.02 *Compensation for Additional Services as a Reimbursable Expenses*

A. In addition to the Lump Sum, Engineer is also entitled to reimbursement from Owner for the Reimbursable Expenses.

B. For budgeting purposes only, the additional services are estimated to be $831,280. This is for the Design Phase only.

C. Owner shall pay Engineer for all Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C. To the extent the Reimbursable Expenses are not expressly set forth in Appendix 1, Engineer shall only invoice Owner for such expenses to the extent reasonable.

D. Reimbursable Expenses include the following, to the extent reasonable: transportation (including mileage), lodging, and subsistence incidental thereto; upon the prior written consent of Owner, providing and maintaining field office facilities including furnishings and utilities; toll telephone calls, mobile phone charges, and courier charges; reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items; and Consultants' charges. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.

E. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a factor of 1.1.

C2.03 *Other Provisions Concerning Payment*

A. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of 1.1, except that Engineer's Consultant's charges are already included in C2.01. If additional Consultants are retained, Engineer shall obtain the prior written consent of Owner.

B. *Factors:* The external Reimbursable Expenses and Engineer's Consultants' factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.

C. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

This is **EXHIBIT C.01**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

[Omitted]

Additional Services – Standard Hourly Rates

Article 2 of the Agreement is supplemented to include the following agreement of the parties:

C2.04 Compensation for Additional Services – Standard Hourly Rates Method of Payment

A. Owner shall pay Engineer for Additional Services, if any, as follows:

1. *General*: For services of Engineer's personnel engaged directly on the Project pursuant to Paragraph A2.01 or A2.02 of Exhibit A, except for services as a consultant or witness under Paragraph A2.01.A.20, (which if needed shall be separately negotiated based on the nature of the required consultation or testimony) an amount equal to the cumulative hours charged to the Project by each class of Engineer's personnel times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any.

2. *Standard Hourly Rates are as set forth in* Appendix 1 to this Exhibit C.

B. *Compensation For Reimbursable Expenses:*

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under Paragraph C2.01 and are directly related to the provision of Additional Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.

2. Reimbursable Expenses may include the expenses identified in Appendix 1 and the following categories, to the extent reasonable: transportation (including mileage), lodging, and subsistence incidental thereto; providing and maintaining field office facilities including furnishings and utilities; toll telephone calls, mobile phone charges, and courier charges; reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items; and Consultants' charges. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.

3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such Additional Services, the latter multiplied by a factor of 1.1.

4. The Reimbursable Expenses Schedule may be adjusted annually (as of January 1) to reflect equitable changes in the compensation payable to Engineer on the condition that such Schedule is provided to Owner at least thirty (30) days in advance of the proposed increase.

C. *Other Provisions Concerning Payment for Additional Services:*

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a factor of 1.1

2. *Factors:* The external Reimbursable Expenses and Engineer's Consultant's Factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.

3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

This is **Appendix 1 to EXHIBIT C**, consisting of 5 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

Reimbursable Expenses Schedule

A. *Standard Hourly Rates:*

1. The Standard Hourly Rates apply only as specified in Article C2.

Schedule of Hourly Professional Service Billing Rates

Position Classification	Classification Level	Hourly Billing Rate
General Office *	5	$65.00
Technician *	6	$82.00
Assistant *	7	$98.00
	8	$131.00
	9	$157.00
Staff *	10	$179.00
	11	$198.00
Senior	12	$219.00
	13	$240.00
Associate	14	$252.00
	15	$254.00
	16	$257.00
	17	$259.00

NOTES:

1. Position classifications listed above refer to the firm's internal classification system for employee compensation. For example, "Associate", "Senior", etc., refer to such positions as "Associate Engineer", "Senior Architect", etc.

2. For any nonexempt personnel in positions marked with an asterisk (*), overtime will be billed at 1.5 times the hourly labor billing rates shown.

3. For outside expenses incurred by Burns & McDonnell, such as authorized travel and subsistence, and for services rendered by others such as subcontractors, the client shall pay the cost to Burns & McDonnell plus 10%.

4. Monthly invoices will be submitted for payment covering services and expenses during the preceding month. Invoices are due upon receipt. A late payment charge of 1.5% per month will be added to all amounts not paid within 30 days of the invoice date.

5. The services of contract/agency and/or any personnel of a Burns & McDonnell subsidiary or affiliate shall be billed to Owner according to the rate sheet as if such personnel is a direct employee of Burns & McDonnell.

6. The rates shown above are effective for services through December 31, 2021, and are subject to revision thereafter.

Company Print Services
Billing Schedule

Effective Date
January 1, 2021

PHOTOCOPY

The photocopy process is used for either black and white or color copies/prints up to 12x18. Stock used can be from 20 lb. bond to 100 lb. cover weight, including index tabs. This process is best utilized by:

- Book printing
- Letters and memos
- Line drawings
- Manuals
- Specification covers
- Report covers
- Specifications
- Addendums
- All preliminary documents
- Newsletters
- Booklets
- Forms
- Meeting handouts

PHOTOCOPY – Imaging/Printing on 20 lb. bond

B/W Copies/Prints

8½x11 to 8½x14	$0.06
11x17	$0.14
12x18	$0.24

Color Copies/Prints

8½x11 to 8½x14	$0.38
11x17	$0.80
12x18	$1.30

Central Print Services Only
(B/W Volume Discounts - per page)

	8½x11/ 8½x14	11x17	12x18
1 – 2,500	$0.06	$0.14	$0.24
2,501 – 7,500	$0.05	$0.12	$0.22
7,501 – 15,000	$0.04	$0.10	$0.20
15,001 – up	$0.03	$0.08	$0.18

Central Print Services Only
(Color Volume Discounts - per page)

	8½x11/8½x14	11x17	12x18
1 – 1,500	$0.38	$0.80	$1.30
1,501 – 4,500	$0.33	$0.70	$1.20
4,501 – 7,500	$0.28	$0.60	$1.10
7,501 – up	$0.23	$0.50	$1.00

* Larger than 12 x 18 - See Large Photocopy

Handwork: Labor-charge $36.00 per hour.

Overtime work will be billed at $54.00 per hour.

Minimum overtime charge is one hour.

Binding/Finishing

Up to 12x18

3 Hole Drill	Per 3 Hole	$0.75
Folding (machine)	Per Page	$0.04
Folding (by hand)	Per Page	$0.10
Staple (machine)	Per Staple	$0.03
Staple (by hand)	Per Staple	$0.08
Edge Bind	Per Book	$1.75
Standard Bind	Per Book	$3.00
GBC Plastic Bind	Per Book	$3.00
Plastic Coil Bind	Per Book	$3.00
Wire Bind	Per Book	$3.30
Screw Post Bind	Per Post	$2.00
Hand Inserting	Per Page	$0.15

Laminating

Double Sided

Up to 11x17	$2.50 Per Page
Larger Than 11x17	$2.00 Per. Sq. Ft.

The rates shown above are effective for services through December 31, 2021, and are subject to revision thereafter.

LARGE FORMAT PHOTOCOPY/PRINTING/PLOTTING

Black & White & Color copy/prints up to 36" wide are available on the HP PageWide 8000. All plots will be on bond, Mylar/Film at client's request. This process is best utilized by:

- Approval sets
- Draft sets
- Preliminary sets

WHQ Copy Center Unit Price
B/W = $0.24 sf Color = $3.00 sf
(L/C - Line Color = $1.99 SF)

	B/W	L/C	Color
12x18	$0.48	$3.98	$6.00
15x21	$0.72	$5.97	$9.00
18x24	$0.72	$5.97	$9.00
22x34	$1.44	$11.94	$18.00
24x36	$1.44	$11.94	$18.00
28x40	$1.92	$15.92	$24.00
30x42	$2.16	$17.71	$27.00
34x44	$2.64	$21.87	$30.00
36x48	$2.88	$23.88	$36.00

Larger than 12 sq. ft.:
Actual square footage x $0.26 per sq. ft. B/W
Actual square footage x $3.00 per sq. ft. Color

For mylar, add $0.85 per sq. ft.

DISCOUNT TABLE/CENTRAL PRINT SERVICES

Square footage rounds up

Over 3,000 Sq. Ft. Per Order	Unit Price		
	B/W	L/C	Color
12x18	$0.41	$3.83	$5.02
15x21	$0.54	$5.25	$6.75
18x24	$0.54	$5.25	$6.75
22x34	$1.08	$10.50	$13.50
24x36	$1.08	$10.50	$13.50
28x40	$1.44	$14.00	$18.00
30x42	$1.62	$15.75	$20.25
34x44	$1.98	$19.75	$24.75
36x48	$2.16	$21.00	$27.00

Finishing

Folding (by machine)…..…….per page……..$0.75

Staple……..……....per Staple...…..…$0.10

Staple with edge binder…….....per Set……$2.50

Post bind……per Post…….$2.00

Hole Drilling……....per Hole…….$.25

Handwork will be charged if total time needed to complete is more than 15 minutes.
Labor charge is $36.00 per hour.

Overtime will be billed at $54.00 per hour.
Minimum overtime charge is one hour.

Company Vehicle

Billing Schedule

Effective Date
January 1, 2021

Burns & McDonnell fleet vehicle use is charged using an assigned time component and miles traveled component. The assigned time component provides for daily, weekly and monthly durations. The miles traveled component relates to variable costs such as fuel, lubrication, tires, maintenance, routine cleaning, etc.

The daily charge applies when a vehicle is assigned for 7 days or less. The daily charge is for each 24-hour period or fraction thereof. The weekly charge applies when a vehicle is assigned for more than 7 consecutive days and less than 6 continuous weeks. For fractions of a week over 7 consecutive days, the weekly rate will be prorated by the number of days and fractional days the vehicle is assigned (one-seventh per calendar day).

The monthly charge applies when a vehicle is assigned for more than 6 continuous weeks. For fractions of a month over 6 continuous weeks, the monthly rate will be prorated by the number of months and fractional months the vehicle is assigned (one thirtieth per calendar day).

Employee-owned vehicles are charged at the per mile amount allowed by the Internal Revenue Service for business miles. Vehicles rented at destinations as part of short duration travel, such as airports, are charged per the receipt amount from the Rental Company, plus fuel, insurance, and other directly applicable amounts such as extra cleaning.

The base rate table displays Burns & McDonnell fleet vehicle charges that, in addition to providing the vehicle, provides all fuel, maintenance, repairs, fleet care, scheduling and liability insurance required by statute. For project needs involving any vehicle types that do not appear in the following table, charges will be established from prevailing market prices for the vehicle, miles traveled, and insurance premiums. For situations requiring higher insurance limits than required by statue, a vehicle high insurance limits charge can be prepared.

Type of Vehicle	Base Rate Daily	Weekly	Monthly	Mileage Charge
Sedan, 4 door	$60	$300	$1,195	$0.27
Van	$67	$335	$1,335	$0.32
Van, 12-15 Passenger	$125	$625	$2,175	$0.34
Truck - 2WD Pickup, ½ Ton Regular Cab	$ 52	$260	$1,035	$0.30
Truck - 2WD Pickup, ½ Ton Extended Cab	$57	$285	$1,135	$0.30
Truck - 2WD Pickup, ½ Ton Crew Cab	$62	$310	$1,235	$0.30
Truck - 4WD Pickup, ½ Ton Regular Cab	$62	$310	$1,235	$0.33
Truck - 4WD Pickup, ½ Ton Extended Cab	$66	$330	$1,305	$0.33
Truck - 4WD Pickup, ½ Ton Crew Cab	$70	$350	$1,385	$0.33
Truck - 4WD Pickup, ¾ Ton Extended Cab	$78	$395	$1,575	$0.34
Truck - 4WD Pickup -¾ Ton Crew Cab	$90	$450	$1,750	$0.34
Truck - 2WD Pickup, 1Ton Regular Cab	$70	$350	$1,395	$0.33
Truck - 4WD Pickup, 1Ton	$90	$450	$1,795	$0.34
Compact SUV (Terrain, Equinox or similar)	$67	$335	$1,335	$0.33
Mid-Size SUV (Acadia, Traverse or similar)	$77	$385	$1,535	$0.33
Full Size SUV (Yukon, Tahoe or Similar 6+ Passenger)	$89	$520	$1,995	$0.34

The rates shown above are effective for services through December 31, 2021 and are subject to revision thereafter.

FLEET21

This is **EXHIBIT D**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

[Omitted.]

This is **EXHIBIT E**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

[Omitted.]

This is **EXHIBIT G**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

Insurance

Paragraph 6.05 of the Agreement is supplemented to include the following agreement of the parties:

G6.05 *Insurance*

A. The limits of liability for the insurance required by Paragraph 6.05.A and 6.05.B of the Agreement are as follows:

1. By Engineer:

a. Workers' Compensation: Statutory

b. Employer's Liability --

1) Bodily injury, each accident: $[1,000,000]
2) Bodily injury by disease, each employee: $[1,000,000]
3) Bodily injury/disease, aggregate: $[1,000,000]

c. General Liability --

1) Each Occurrence (Bodily Injury and Property Damage): $[1,000,000]
2) General Aggregate: $[2,000,000]

d. Excess or Umbrella Liability --

1) Per Occurrence: $[2,000,000]
2) General Aggregate: $[2,000,000]

e. Automobile Liability --Combined Single Limit (Bodily Injury and Property Damage):

$[1,000,000]

f. Professional Liability –

1) Each Claim Made $[2,000,000]
2) Annual Aggregate $[2,000,000]

g. Other (specify): $[ ]

2. The Owner shall be listed on Engineer's general liability policy as provided in Paragraph 6.05.A.

This is **EXHIBIT H**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

Dispute Resolution

Paragraph 6.09 of the Agreement is supplemented to include the following agreement of the parties:

H6.09 *Dispute Resolution*

A. *Mediation*: Owner and Engineer agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof ("Disputes") to mediation by, unless the parties otherwise agree, the Judicial Arbiter Group in Denver, Colorado. Owner and Engineer agree to participate in the mediation process in good faith. The process shall be conducted on a confidential basis and shall be completed within 120 days. Owner and Engineer shall share equally in the cost of the mediation. If such mediation is unsuccessful in resolving a Dispute, then (1) the parties may mutually agree to a dispute resolution of their choice, or (2) either party may seek to have the Dispute resolved by a court of competent jurisdiction.

This is **EXHIBIT I**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

Limitations of Liability

Paragraph 6.11 of the Agreement is supplemented to include the following agreement of the parties:

Limitation of Engineer's Liability

A. *Engineer's Liability Limited to Compensation under Agreement:* Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by Laws and Regulations, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, members, partners, agents, employees, and Consultants to Owner and anyone claiming by, through, or under Owner for any and all claims, losses, costs, or damages whatsoever arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract, indemnity obligations, or warranty express or implied, of Engineer or Engineer's officers, directors, members, partners, agents, employees, or Consultants (hereafter "Owner's Claims"), shall not exceed the total compensation to be paid under this Agreement.

This is **EXHIBIT J**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated August 17, 2021.

[Omitted.]

This is **EXHIBIT K**, consisting of 2 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. _____

The Effective Date of this Amendment is: _____.

Background Data

Effective Date of Owner-Engineer Agreement:

Owner:

Engineer:

Project:

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:

Here describe the modifications, in as much specificity and detail as needed. Use an attachment if necessary.

Agreement Summary:

Original agreement amount:	$_____
Net change for prior amendments:	$_____
This amendment amount:	$_____
Adjusted Agreement amount:	$_____

Change in time for services (days or date, as applicable): _____

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:	ENGINEER:
By: _____	By: _____
Print name: _____	Print name: _____
Title: _____	Title: _____
Date Signed: _____	Date Signed: _____