<u>Second Amendment to Agreement for Professional Services</u> (North Water Treatment Plant – Final Design Services)

This Second Amendment to Agreement for Professional Services (the "Second Amendment") is made and entered into this _____ day of _______, 2025 (the "Effective Date"), by and between the Town of Erie, a Colorado home rule municipality with an address of 645 Holbrook Street, P.O. Box 750, Erie, CO 80516 (the "Town"), and Burns & McDonnell Engineering Company, Inc., an independent contractor with a principal place of business at 9191 South Jamaica Street, Englewood, CO 80112 ("Contractor") (each a "Party" and collectively the "Parties").

Whereas, on June 13, 2023, the Parties entered into an Agreement for Professional Services (the "Agreement");

Whereas, on January 24, 2025, the Parties amended the Agreement to add services and change the amount of compensation (the "First Amendment"); and

Whereas, the Parties wish to amend the Agreement again as set forth herein.

Now Therefore, for the consideration hereinafter set forth, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

- 1. <u>Amendments</u>. The Agreement is hereby amended as follows:
- a. *Scope of Work*. Exhibit A to the Agreement is hereby amended by the inclusion of the additional items and budget reallocations set forth in Exhibit A-1, attached hereto and incorporated herein by this reference.
- b. *Compensation*. Exhibit B to the Agreement is hereby amended to increase the maximum amount of compensation to \$7,655,178 allocated as follows:

	Compensation
Original Agreement	\$ 599,203
1 st Amendment	\$ 59,847
2 nd Amendment	\$ 6,996,128
Revised Agreement	\$ 7,655,178
Contingency Available	\$ 524,782

- c. *Schedule Extension*. The schedule to complete the professional services is extended to December 31, 2028.
- 2. <u>Remainder of Agreement</u>. Except as expressly modified herein, the Agreement, as modified by the First Amendment, shall remain in full force and effect.

In Witness Whereof, the Parties have executed this Second Amendment as of the Effective Date.

	Town of Erie, Colorado
Attest:	Andrew J. Moore, Mayor
Debbie Stamp, Town Clerk	Contractor
State of Colorado)) ss. County of)	
	subscribed, sworn to and acknowledged before me, 2025, by as onnell Engineering Company, Inc.
My commission expires:	
(Seal)	Notary Public

Exhibit A-1 Scope of Services

Contractor shall design the North Water Treatment Facility (NWTF) "), as identified in Contractor's 15% conceptual design package of May 15, 2024 that includes the following:

- ► Raw Water Reservoir Conceptual Design
- ► Raw Water Pump Station
- Raw Water System Piping
- Treatment Building
- Disinfection Contact Basin Facility
- ► Solids Handling Facility
- ► Finished Water Transmission Piping from the NWTF to Highway 52

Contractor shall design the NWTF as a potable water treatment facility per Colorado's Primary Drinking Water Regulations (Regulation 11). The design shall include provisions for future modifications such that the NWRF effluent from the existing Reuse Pond may be used as source water for the NWTF per the Colorado Direct Potable Reuse (DPR) Rule.

Task Series 800 – Project Management

Task 801 - Final Design Kickoff Meeting Progress Meetings & Conference Calls

Contractor shall lead a Final Design Phase Kickoff meeting at the Town's offices. During the meeting the project team will discuss the following:

- Define project goals, including design criteria,
- ► Identify and discuss any additional Town feedback on the Conceptual Design package,
- Discuss sustainability goals, including solar and geothermal opportunities,
- Discuss scope of work,
- Establish a project schedule,
- ▶ Identify key project issues,
- Identify key personnel who are to provide input on the project, and
- ► Initial input on critical design tasks.

Task 802 - Progress Meetings & Conference Calls

Contractor shall conduct bi-weekly design progress meetings. These meetings will be held remotely using Microsoft Teams. This task assumes a total of 36 meetings over a design phase duration of 72 weeks.

<u>Task 803 - Project Management & Subcontractor Communications</u>

This task includes project communication between the Town and Contractor, and Contractor and its subcontractors. Contractor's project manager shall monitor project status, schedule, and project deliverables. The task also includes internal team weekly progress meetings. Contractor's project manager shall maintain an Action-Decision log

throughout the project to document design decisions, including a cost and schedule model to project the potential cost and schedule impacts of the decisions. This task also includes 3 meetings to develop and update a project risk register and cost and schedule model, with input from the Town and Construction Manager At-Risk (CMAR).

Task 804 - Project Schedule & Quality Control

Contractor shall develop a master project schedule in critical path format that includes major design activities, and shall updated the schedule monthly. The project team shall follow Contractor's Quality Control/Quality Assurance program. This task includes internal review of the project by qualified staff, as well as independent reviews of major deliverables.

<u>Task 805 - Quarterly Management Meetings</u>

Contractor shall conduct a virtual meeting every 90 days with the Town's and Contractor's management teams. Attendees include the Town's project manager, water system manager, and utilities director, and Contractor's project manager and project engineer. These meetings will be held to review the overall project progress and to discuss how the project is meeting the Town's overall goals.

Task Series 900 – Piloting Systems Final Design

Task 901 - Pilot Study Final Design

Contractor shall develop final design documents for the Pilot Study, which advance the Work completed under Task 703 of Amendment 1. The Pilot Study Final Design shall include testing protocols, pilot layout drawings, equipment lists, and discuss the project with the selected equipment vendors for the piloting study, and shall address:

- ► Temporary raw water system to deliver Boulder Creek flow to the piloting site
- ► Pretreatment Pilot: One flocculation/plate settler tank rental
- ▶ Ultrafiltration (UF) Pilot: One complete UF pilot system rental
- ► Reverse Osmosis (RO) Pilot: One complete RO pilot system rental
- ▶ Utility supply, plumbing, and electrical connections

Water produced and wasted by the pilot system will be discharged to the NWRF Reuse Pond.

Contractor shall provide testing goals and approaches for each unit process included in the pilot study prior to the installation of the pilot testing equipment. This task includes the development of the piloting equipment list, the proposed piloting schedule, and a proposed piloting layout. Contractor shall incorporate feedback and comments from CDPHE within 8 weeks of receipt of the Pilot Application form from the Contractor.

The final deliverables include a layout drawing, utility drawing, equipment list, overall schedule, piloting approach technical memo that describes the overall objectives, rental and installation requirements for each system, recommended laboratory testing requirements, and an operation and supervision plant that delineates the responsibilities between the Town, Contractor, suppliers and subcontractors.

Task 902 - GAC Column Testing Plan

Contractor shall develop a rapid small-scale column testing plan for a granular activated carbon (GAC) evaluation. This task includes the determination of sampling frequency and discussion with the appropriate testing facility to determine the media selection, vessel sizing and empty bed contact time (EBCT) for the removal of taste and odor causing compounds and PFAS. Contractor shall collect samples and ship to 2 supplier facilities. Contractor shall compile test results to determine vessel sizing and empty bed contact time (EBCT) for the removal of taste and odor affecting compounds and PFAS. Contractor shall summarize testing results in a technical memorandum.

<u>Task 903 - Dewatering System Testing Plan</u>

Contractor shall develop a bench testing and trial dewatering plan for solids collected from the pretreatment pilot system. This task includes determination of sampling frequency and discussion with an appropriate testing facility during pilot operations to simulate gravity thickening and centrifuge dewatering. The bench testing shall determine the chemical dosage rates required for dewatering and the approximate final solids concentration.

Task 904 - Pilot Final Design Review Meeting

After the Town has had an opportunity to review the final piloting design documents, Contractor shall conduct a review meeting at the Town's offices, to provide the Town and Contractor an opportunity to clarify Town comments on the documents. Comments will be incorporated into the pilot design as applicable. Contractor shall use the final pilot design documents to schedule pilot construction and timing for test equipment rentals. The meeting will also discuss roles and responsibilities for Contractor and Town staff, supervision of equipment, reporting, utilities, and analytical laboratory costs.

Task Series 1000 – 30% Preliminary Design

Task 1001 - Bench-Scale Testing

Contractor shall perform bench scale testing and data collection on the Boulder Creek raw water supply during the winter. Town staff will assist in the collection of water supply samples and basic laboratory testing for testing collected on site (turbidity, temperature, pH). Using information gathered throughout bench-scale testing completed during conceptual design, Contractor shall test 2 coagulants, 2 oxidants, and PAC to optimize the pre-treatment process. The additional bench-scale testing shall include tests for total and dissolved Fe and Mn to determine the efficacy of a pre-oxidant. Town will pay for all lab equipment, consumables and outside water quality laboratory work.

Task 1002 - Water Quality Sampling Communication

Contractor shall discuss water quality testing for the Boulder Creek and Filly Lake raw water sources with the Town's consultant, Pinyon Environmental. Contractor shall utilize the existing data provided by the Town and determine if additional data is required for a complete analysis of the raw water sources in the above task. Contractor shall evaluate if additional testing is recommended beyond the recommended primary and secondary

maximum contaminant level per the EPA. Pinyon Environmental shall collect the samples and coordinate laboratory analysis. Contractor shall review the established sampling schedule and analyzed parameters and make recommendations.

Task 1003 - Water Transmission Modeling Communication

Contractor shall discuss the project with the Town's hydraulic modeling consultant, Merrick, to assess the Town's current and planned water distribution system. This task includes discussions between Contractor and Merrick to analyze the hydraulic model in scenarios where the NWTP supplies up to 20.4 MGD in a phased approach into the distribution system. The model results shall be used to determine the sizing of distribution pumps, transmission main sizing, and pipeline routing to the future Zone 2 storage tank. This task includes discussions between Contractor, Contractor's surge analysis subcontractor and Merrick to review the Surge Modeling Analysis report and incorporate recommendations into the design after the surge modeling is complete.

Task 1004 - 30% Design Development

Contractor shall prepare 30% Design Documents, which shall include:

- Specification Table of Contents
- Civil Drawings, include improvements to the access road to Highway 52,
- Architectural Drawings
- Structural Drawings
- Plumbing Drawings
- Mechanical Drawings, including Fire Protection
- **Process Drawings**
- **Electrical Drawings**
- **Instrumentation and Controls Drawings**

Contractor shall give the Town at least one week to review the drawings and outline specifications prior to holding the 30% Design Review Meeting. Contractor shall provide PDF documents to the Town for review.

Task 1005 - 30% Engineer's Opinion of Probable Construction Cost & Life Cycle Analysis

Based on the 30% design documents, Contractor shall prepare the engineer's opinion of probable cost (OPC) for the project. Contractor shall submit the OPC with the design documents and design schedule for review and comment by the Town. The OPC shall be based on recent bid tabulation information, historical cost data, and discussions with local suppliers and contractors. Estimates, schedules, forecasts, and projections prepared by Contractor relating to loads, interest rates and other financial analysis parameters, construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results shall be based on the Contractor's experience, qualifications, and judgement as a professional. Contractor does not guarantee that actual rates, costs, quantities, performances, schedules, etc., will not vary significantly from estimats and projects prepared by Contractor.

Contractor shall develop operation, maintenance, and energy costs associated with the conceptual treatment trains to be utilized for the overall process selection analysis. Contractor shall develop a 20-year net present value (NPV) for multiple plant operation conditions, including operation as a seasonal peaking plant and year-round operation. OPC and NPV developed at this stage are assumed to be AACE Class III (Budgetary, Project Definition 10% to 40%, -20% to +30% accuracy).

Task 1006 - 30% Basis of Design Report Revision

Contractor shall provide a revised Basis of Design report (BODR) to document decisions made, design standards, design criteria, layout, estimated costs and schedule, based on Town feedback. The revised 30% BODR shall include a chapter to describe the sequence of expansions at the NWTP and a phasing plan to indicate critical tie-ins that may impact the NWTP operations. This task includes the development of building layouts, piping connections, and utility corridors to aid in future construction. Comments provided by the Town will be incorporated into a finalized expansion phasing plan.

Task 1007 - 30% Design Review Meeting

After the Town has reviewed the 30% design documents, Contractor shall conduct a 30% design review meeting at the Town's offices. The purpose of this meeting is to provide the Town and Contractor an opportunity to clarify Town comments on the documents. Contractor shall incorporate comments into the 60% design documents as appropriate.

Task 1008 - Topographical Survey

Contractor shall subcontract with a licensed surveyor to conduct field surveys of 43-acres of Town-owned properties in sufficient detail to provide a topographic map suitable for detailed design. The survey shall show property boundaries and easements necessary for the project, as well as the location of utilities and surface features that are likely to affect the project.

Task 1009 - Geotechnical Investigation

Contractor shall subcontract with a licensed geotechnical firm to conduct soil borings and laboratory tests at key locations on 43-acres of Town-owned properties as needed to determine subsurface conditions. The geotechnical firm shall provide a geotechnical report with recommendations for the foundation and design of new buildings, basins, and site paving. The scope of the investigation shall include 30 borings with depths ranging from 15 feet to 70 feet with an overall length of borings of approximately 1,000 feet. The borings shall be located within the footprint of the new structures and in areas with new access roads. The subcontractor shall conduct a total of 8 electrical resistivity tests around the proposed structures for grounding design.

Task 1010 - Raw Water Reservoir 30% Design

Contractor shall provide drawings and a basis of design report at the 30% design level for the Raw Water Reservoir. The basis for the reservoir is 700-acre-feet (AF) of storage on the adjacent Weld County Parcel 131331400046. This task includes communication with the design consultant of the Boulder Creek riverbank well structure and associated

pipeline. Contractor shall prepare a preliminary design for the reservoir site. Preliminary design shall include a targeted 700-AF reservoir volume, inlet and outlet sizing, sizing calculations, site plans, site improvements, process flow diagrams, general arrangement drawings, piping routing, slurry wall extents, and utility drawings.

Contractor shall prepare a technical memorandum describing preliminary basis of design for gravel pit conversion, slurry wall construction, inlet and outlet structures, yard piping, utilities, surface improvements and preliminary EOPCC, per AACE Class III definition (30% below to 50% above).

Task Series 1100 – 60% Detailed Design

Task 1101 - 60% Design Development

Contractor shall prepare drawings and specifications at the 60% design level, which shall include:

- ► Technical Specifications
- ▶ Drawings included in the 30% design package brought to 60% completion
- Additional detail drawings needed for final design

Contractor shall give the Town and CMAR at least 7 days to review the drawings and specifications prior to the 60% Design Review Meeting. Contractor shall provide PDF documents to the Town for review.

Task 1102 - 60% Basis of Design Report Revision

Contractor shall provide a revised BODR to document decisions made, design standards, design criteria, layout, estimated costs and schedule, based on Town feedback.

Task 1103 - Value Analysis Preparation

Contractor shall lead a Value Analysis exercise to identify ways to reduce scope and costs while attempting to not minimizing the reduction in function or value of the project. The exercise shall include input from the Town and the CMAR contractor and shall include a constructability review. The 6-step framework is as follows:

- Information gathering
- Creative thinking
- Evaluation
- Development
- Presentation
- Implementation

This task series includes an initial full-day workshop between Contractor, Town, and the CMAR contractor at the Town's offices. Value Analysis Workshop 1 will include the information gathering, creative thinking, and evaluation steps to determine the highest value items in a weighted matrix. Following the initial workshop, Contractor, the Town, and the CMAR contractor will take approximately 4 weeks to develop sketches, return on investment (ROI) calculations, and project plan preparation in sketch format. Contractor shall present the outcomes during the Value Analysis Engineering Workshop 2.

This task includes Contractor preparing for the Value Analysis Workshop 1 in the form of gathering initial ideas, preparing plots for use in the Workshop and collection supporting cost information. The Town may invite outside parties (engineers, scientists, attorneys) to participate in the Value Analysis Task Series.

Task 1104 - Value Analysis Workshop 1

Contractor shall lead the Value Analysis Workshop 1 at the Town's offices, to facilitate a creative thinking session with a broad representation of the project team and stakeholders. Contractor shall lead the participants through a structured brainstorming session to develop ideas on materials, layouts, locations, modifications or alternatives that meet the intended function of the element. Contractor shall collect the ideas and lead a group evaluation to identify options to carry into further development. The outcome of the workshop shall be a set of well-defined decisions for Contractor to evaluate with cost and constructability support from the CMAR contractor.

Task 1105 - Value Analysis Development

Following the initial meeting, Contractor, the Town, and the CMAR contractor will take approximately 4 weeks to develop sketches, ROI calculations, and project plan preparation.

Task 1106 - Value Analysis Workshop 2

Contractor shall lead Value Analysis Workshop 2 at the Town's offices, to present the outcomes of the previous development period. During the workshop the Town and the CMAR contractor will also present their outcomes. The workshop will determine schedule impacts and the finalization of the scope of work before determining the appropriate steps forward and assignment of action items. Contractor shall incorporate the outcomes of the workshop into the 60% design documents.

Task 1107 - SUE Investigation & Reporting

Contractor shall contract with a subcontractor for utility locates and test holes after the site layout is confirmed in 30% design. Contractor's subcontractor shall prepare a utility report compatible with ASCE Class B. This task includes up to 15 test holes.

Task 1108 - Surge Modeling Analysis

Contractor shall contract with a subcontractor to perform surge analysis to identify recommended surge control/mitigation devices with a specific focus on operations at the high service pump station. The analysis will focus on pump station operations for pump start-up and pump power failure scenarios and include recommendations for surge protection measures. This task includes one virtual meeting with the Town, Contractor and the subcontractor to present and discuss the surge analysis and its recommendations.

Task 1109 - 60% Design Review Meeting

After the Town and the CMAR contractor have reviewed the 60% design documents, Contractor shall conduct a 60% design review meeting. The purpose of this meeting is to provide the Town, the CMAR contractor, and Contractor an opportunity to clarify

comments on the documents. Contractor shall incorporate comments into the 90% design documents as appropriate.

Task Series 1200 – 90% Final Design

Task 1201 - 90% Design Development

Contractor shall provided 90% Design Drawings, which shall include the following:

- ► Refined Technical Specifications
- ▶ Drawings included in the 60% design package, brought to 90% completion
- ► Additional detail drawings needed for final design

Contractor shall give the Town and the CMAR contractor at least 7 days to review the drawings and specifications prior to the 90% Design Review Meeting. Contractor shall provide PDF documents to the Town for review. Contractor shall provide a revised BODR to document decisions made, design standards, design criteria, layout, estimated costs and schedule, based on Town feedback.

Task 1202 - 90% Design Review Meeting

After the Town and the CMAR contractor have reviewed the 90% design documents, Contractor shall conduct a 90% design review meeting. The purpose of this meeting is to provide the Town, the CMAR contractor, and Contractor an opportunity to clarify comments on the documents. Contractor shall incorporate comments into the 100% design documents as appropriate.

Task Series 1300 - 100% Design

Task 1301 - 100% Design Development

Contractor shall provide 100% Design Package, which shall include:

- ► Refined Technical Specifications
- ▶ Drawings included in the 90% design package, brought to 100% completion
- Additional detail drawings needed for final design

Contractor shall give the Town and the CMAR contractor at least one week to review the drawings and specifications prior to holding the 100% Design Review Meeting. Contractor shall provide PDF documents of the drawings to the Town for review.

Task 1302 - 100% Design Review Meeting

After the Town and the CMAR contractor have reviewed the 100% Design Documents , Contractor shall conduct a 100% design review meeting. The purpose of this meeting is to provide the Town, the CMAR contractor, and Contractor an opportunity to clarify comments on the documents. Contractor shall incorporate comments into the Issued for Construction (IFC) documents as appropriate.

Task Series 1400 – Issued for Construction Documents

Task 1401 - Prepare Issued for Construction Documents

Contractor shall prepare and submit issued for construction drawings and specifications. The drawings and specifications will incorporate bidding addenda prior to submitting. Contractor shall furnish one electronic copy of the issued for construction drawings and specifications to Town.

Task Series 1500 – CMAR Selection & Coordination

Task 1501 - CMAR Approach Workshop

Contractor shall host a Workshop with the Town to discuss the CMAR delivery model. Contractor shall provide a proposed sequence of tasks to the Town prior to the meeting. Contractor shall provide meeting minutes with a decision log and list of action items.

Task 1502 - Prepare CMAR Request for Qualifications (RFQ) Documents

Contractor 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 Town will provide its preferred CMAR form of agreement. The Town will manage the advertising of the RFQ. Contractor shall prepare up to 2 addenda in response to received questions.

Task 1503 - CMAR RFQ Review Meeting

Contractor shall conduct a review meeting with the Town to discuss the CMAR RFQ documents. Contractor shall update the RFQ documents based on the review meeting comments. Contractor shall provide meeting minutes, via email, with a decision log and list of action items.

Task 1504 - CMAR RFQ Period Support & Selection

Contractor shall prepare written responses during the RFQ period for the Town to distribute to all respondents. Contractor shall support the Town in the development of evaluation criteria to aid in the selection of short-listed qualified contractors. Contractor shall review the received qualification packages for responsiveness and general conformance with the RFQ documents. Contractor shall conduct a review meeting with the Town to discuss the CMAR RFQ documents. Contractor shall update the RFQ documents based on the review meeting comments. Contractor shall provide meeting minutes, via email, with a decision log and list of action items.

Task 1505 - Prepare CMAR Request for Proposal (RFP) Documents

Contractor shall prepare and issue a RFP document to shortlisted firms. Tasks to be included in the CMAR's Phase 1 Pre-Construction services scope shall include without limitation the following:

- Professional Services
- Constructability Reviews
- Participate in Design Meetings

- ▶ Value Analysis
- Cost Estimates
- Guaranteed Maximum Price (GMP) Proposals

The Town will manage the advertising of the RFP and related questions.

Task 1506 - CMAR RFP Review Meeting

Contractor shall conduct a review meeting with the Town to discuss the CMAR RFP documents, including finalized Phase I tasks and the basis of selection criteria. Contractor shall update the RFP documents based on the review meeting comments. Contractor shall provide, via email, meeting minutes with a decision log and list of action items.

Task 1507 - CMAR RFP Period Support & Selection

Contractor shall prepare written response during the RFP period for the Town to distribute to respondents. Contractor shall review the received proposal packages for responsiveness and general conformance with the RFP documents. Contractor shall support the Town in the review of proposal packages based on the established selection criteria. Contractor shall conduct a review meeting with the Town to discuss the received proposals.

Contractor shall update the RFP documents based on the review meeting comments. Contractor shall provide, via email, meeting minutes with a decision log and list of action items. Contractor shall assist the Town with evaluation of the received RFP packages and participate in interviews with 3 respondents. Contractor shall prepare up to 2 addenda in response to received questions.

Task 1508 - Review of CMAR Deliverables

Contractor shall work with the CMAR contractor to identify cost-saving or value engineering opportunities, identify long lead time equipment packages, and prioritize the design accordingly. Contractor shall review the The Contractor shall review the CMAR-prepared initial Guaranteed Maximum Price (GMP) proposal based on the 60% design documents and the final GMP proposal based on the 90% design documents and provide comments on level of completeness, scope gaps, and typical project costs.

Task Series 1600 - Early Procurement

Task 1601 - Early Procurement Package Development

Contractor shall communicate with the Town and the CMAR contractor to identify early procurement packages, including:

- Pretreatment system
- ▶ UF system
- ▶ RO system
- Treatment system pumping units (raw water, backwash supply and recycle, UF feed, distribution pumps)
- GAC Vessels
- Emergency generators

► Electrical switchgear

Contractor shall prepare issued for proposal documents for the selected equipment packages. The Town will provide front-end procurement documents in their preferred format and facilitate the solicitation and receipt of proposals.

This task includes the finalization of the developed early procurement list. Contractor shall prepare technical specifications and layout drawings for the early procurement packages. Contractor shall review procurement agreements between the CMAR contractor and equipment suppliers.

<u>Task 1602 - Prepare Procurement Packages</u>

Contractor shall assist the Town with evaluation of the received equipment package proposals. Contractor shall facilitate a selection of the preferred equipment supplier, based on monetary and non-monetary criteria.

Task 1603 - Submittal Review

Contractor shall review compliance submittals from equipment suppliers. This task includes initial submittal review, vendor discussions and resubmittal review. Contractor shall review submittals for the early procurement packages and provide a response and status for each submittal. This task assumes 80 different submittals from the various suppliers, .

Task Series 1700 – Permitting & Stakeholder Communication

Contractor shall assist the Town with the preparation of permit applications. The Contractor shall submit a revised design schedule for approval by the Town if regulatory authorities do not meet their published review durations.

Task 1701 - EPA Underground Injection Discussions

Contractor shall prepare, attend, and conduct a meeting with EPA Underground Injection Control (UIC) Regional 8, the Town and the Town's DWI consultant to review technical criteria and approval timeline related to Deep Well Injection (DWI) of RO brine. This task includes 2 additional follow-up meetings between the Town, subcontractors and the EPA. Contractor shall support the preparation of the permit application by the Town's DWI consultant for a Class I Municipal Non-Hazardous Waste Disposal Well. The application shall be based on existing geologic information.

Task 1702 – Utility Discussions

Contractor shall discuss the project with the local utility provider, United Energy, to facilitate the project approval and assess energy demands. This task includes initial calls with United Energy, including up to 2 pre-application meetings.

Task 1703 – Design Consultant Discussions

Contractor shall meet with the Town's consultants throughout the detailed design phase, as follows:

▶ Boulder Creek riverbank well structure – 2 virtual meetings

- ► Filly Lake well structure 2 virtual meetings
- ► FEMA Conditional Letter of Map Revisions (CLOMR) activities 2 virtual meetings
- ► NWTP site stockpile grading plan One virtual meeting
- ► Future connection to the Northern Integrated Supply Project (NISP) 2 virtual meetings

This task includes development of site plans and drawings, sharing of design information, and determination of design criteria for future phases.

Task 1704 - Deep Well Injection Consultant Discussions

The Town will contract separately with a consultant to provide scoping, permitting, field investigations, facilities engineering services for the DWI system. Contractor shall provide results from the DWI Feasibility Study (Task 402 from the Conceptual Design Phase) to the DWI consultant. Contractor shall attend 8 meetings with the DWI consultant to discuss progress and share relevant informational items related to the NWTP design.

The components of the DWI system includes the DWI Pump House, anti-scalant system, and 2 deep wells. The 2 deep wells will be drilled vertically from on the WTF property, spaced 0.25-miles apart.

Task 1705 - Stakeholder Discussions

Contractor shall support the Town in project discussions between stakeholders including without limitation Left Hand Water District and Northern Colorado Water Conservancy District. This task will include meetings with stakeholders who are directly affected by, or involved in, the preliminary design and future phasing of the NWTP. This task includes 2 virtual meetings each for the 2 stakeholders (4 total meetings).

Task 1706 - Local Permit Discussions

Contractor shall facilitate permitting discussions among the Town, Weld County, and Mountain View Fire Rescue. Contractor shall discuss project requirements with respective permitting authorities to review compliance requirements. This includes the preparation of a permit application and 2 virtual meetings with the Mountain View Fire Rescue.

Task 1707 - Colorado Department of Transportation (CDOT) Discussions

Contractor shall discuss the project with CDOT regarding access from Highway 52 to the planned site location. This task includes initial calls with CDOT, preparation of design documents, and assistance with filing required permits.

Task 1708 - Planning Application

Contractor shall discuss the project with the Town's Planning Division for required permitting and project approval requirements. Contractor shall prepare and submit permit applications. This task includes an in-person pre-application meeting with the Town's Planning Division, and preparation of 15-20 drawings and development reports in accordance with the Town's Site Plan User Format Guide.

Task 1709 - CDPHE Water Quality Division Discussions & Application

Contractor shall prepare initial applications and supporting documents for approval submittals to CDPHE's Water Quality Division (WQD). Contractor shall discuss the project with CDPHE, provide responses to comments on the initial submittals, and submit updated documents for final issue of permits.

This task includes a scoping meeting with WQD to evaluate the proposed treatment train for future modification to a Direct Potable Reuse (DPR) facility per the Colorado Safe Drinking Water Program. The meeting will discuss DPR requirements such as sampling, monitoring, source water control, communication, design, and permitting steps. The NWTP design shall include provisions, where possible, to modify the proposed treatment train to DPR in the future.

Contractor shall prepare a conceptual process flow diagram and site layout drawing to identify where additional process units are required to meet the log removal credits for DPR as part of this Task.

Task 1710 - Building Permit Application

Contractor shall discuss the project requirements with the Town's building department for required permitting and project approval requirements. Contractor shall prepare permit applications. This task includes participation in a virtual pre-application meeting with the Town's Building Department.

Task 1711 – Wildlife and Habitat Assessment

Contractor shall complete an updated desktop review of the Survey Area (project footprint with a 0.5-mile buffer) to identify sensitive species or associated critical habitat that have potential to occur in the Survey Area including:

- State or federally listed species
- ► Federally listed species critical habitat
- Colorado Parks and Wildlife (CPW) high priority habitat
- ▶ BPW big game species activity ranges
- Migratory bird species
- Prairie dog colonies
- Preble's meadow jumping mouse (PMJM)

Contractor shall complete a one-day field wildlife and habitat assessment analyzing sensitive species and resources identified in the desktop review. Contractor shall take representative habitat photos and record wildlife observations, including prairie dog colonies, raptor nests, and suitable habitat for PMJM. Contractor shall identify habitat types, dominant plant species and incidental noxious weed observations.

Following the field assessment, Contractor shall submit an updated habitat suitability memorandum to the Town summarizing the potential for state or federally listed species to occur within the Survey Area.

Task 1712- CPW and USFWS Coordination

Contractor shall coordinate with Colorado Parks and Wildlife (CPW) and United Stated Fish and Wildlife Services (USFWS) to identify any wildlife concerns including big game species, raptors, migratory birds, and state-listed species. Contractor shall give special attention to the mapped bald eagle nest located approximately 0.58-miles from the project footprint. Contractor shall also address Federally Threatened and Endangered species in the Platt River System to determine if USFWS and United States Army Corps of Engineers (USACE) consultation is required.

- Coordination shall occur before the start of construction activities
- ► Includes 6 meetings with CPW and USFWS.

Task 1713- Burrowing Owl Surveys

Contractor shall conduct a 3-day burrowing owl survey where there is prairie dog habitat within the project footprint. Surveys for burrowing owl shall follow the passive surveys outlined in the CPW Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls (Conway and Simpson, 2003) and shall consist of 3 survey dates as follows:

- First survey during times when burrowing owls may be nesting (May 1 to 31)
- ► Second survey when most owls have young nestlings (June 1 to 15)
- ► Third survey when nestlings are above ground (June 16 to July 15).

Surveys shall be conducted for 4 survey points. If burrowing owls are detected, Contractor shall document the nest burrows as well as other actively used burrows. Contractor shall provide a survey report of findings and recommendations, along with supporting figures and photographs of active burrows, if applicable. If burrowing owls are documented and construction activities cannot occur after October 31, a monitor may be necessary. Burrowing owl nest monitoring is not included.

Task 1714- Pre-Construction Nest Surveys

Contractor shall conduct a 2-day pre-construction nest surveys if vegetation clearing or construction activities occur between February 1 and August 31. Surveys shall occur no more than 7 days prior to clearing or construction activities. Contractor shall mobilize up to 2 times before vegetation clearing. Contractor shall notify the Town and CPW if an active nest is observed, and a nest buffer shall be implemented according to the CPW Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (CPW 2020) guidelines. If an active nest is observed and construction activities cannot be paused, a monitor may be necessary. Nest monitoring is not included.

Task 1715- Wetland Desktop Review and Delineation

The U.S. Army Corps of Engineers (USACE) has jurisdiction over wetlands and other waters of the U.S. in accordance with Section 404 of the Clean Water Act. Contractor shall complete an updated desktop review of applicable available background information for the Survey Area (Project Footprint). Contractor shall conduct a one-day on-site wetland delineation survey after reviewing the desktop information to field-verify the findings of the desktop

survey and to evaluate the site for the presence of wetlands or other aquatic features. The field survey shall consist of a site visit by a wetland scientist and GPS specialist to identify and record the boundaries of wetlands and other water bodies within the Survey Area, which shall be delineated in accordance with the 1987 Corps of Engineers Wetland Delineation Manual (USACE Manual) and the applicable Regional Supplement (Great Plains). Contractor shall survey the boundaries of the delineated wetlands, streams, and other aquatic features using a sub-meter-accurate GPS unit. One AJD coordination meeting is included in this Task.

Contractor shall prepare a wetland delineation letter report that includes background data, survey methodology and results. Contractor shall prepare figures to incorporate the background data and to illustrate the location and extent of any identified areas, and shall include routine wetland determination data forms (from the Regional Supplement) and natural color photographs of the delineation.

If wetlands or waterbodies are identified, a permit from the USACE may be required. Contractor's wetland scientist shall assess whether identified wetlands or other waters have a hydrologic connection to Waters of the U.S. in accordance with the latest regional USACE requirements, and other federal and state guidance regarding the jurisdictionally of wetlands and watercourses. If delineated waters are deemed potentially jurisdictional, an approved jurisdictional determination (AJD) form shall be developed and submitted to the USACE.

Task 1716 - Construction Compliance Plan

Contractor shall prepare a Construction Compliance Plan for the project based on the results of the wildlife and wetlands assessments, to document any required environmental compliance measures that must be implemented during the construction phase, and provide the Construction Compliance Plan to the Town for implementation.

Contractor Deliverables:

Contractor shall provide the deliverables as described above.

Contractor's Schedule:

Contractor shall provide services within 89-weeks, based on the Town, the Town's sub-contractors and outside agencies meeting their review timelines.