

**PROFESSIONAL SERVICES
REQUEST FOR PROPOSALS - REVISED**

**Moffat Collection System, Ranch Creek Canal Improvements,
Phase 2 - Cub Creek Chute to 54-inch Pressure Pipe**

Project Description

The Ranch Creek Canal is a raw water canal which is part of Denver Water's Moffat Collection System in Grand County, Colorado. The trapezoidal-shaped, earthen canal conveys raw water collected further upstream, and intercepts flow from both Cub and Buck Creeks. It operates year-round. The Ranch Creek Canal Improvements, Phase 2 - Cub Creek Chute to 54-inch Pressure Pipe is the second phase of the canal piping project and consists of placing approximately 4,400 linear feet of the open canal into reinforced concrete pipe (RCP). The work will include replacement of the existing measuring flume and construction of runoff collection and blow-off structures. At both ends of the project, transition structures will be constructed to connect the canal piping to existing features: the baffled outlet energy dissipator at the base of Cub Creek Chute and the existing 54-inch pressure pipe. The scope also includes replacing the electrical service to the Ranch Creek Gage House, a precast structure that will be preserved and reused. Steel pipe lining repairs to the inside of the Cub Creek Chute, designed by the Owner, will also be done as part of the construction project.

Background and Project Details

The Ranch Creek System of the Moffat Collection System is located east of US Highway 40 in Grand County, see Figures 1 and 2. The upper system diverts flow from the North, Main and Middle Forks of Ranch Creek. The flow is then combined with that from Englewood's Ranch Creek System, including Meadow Creek Reservoir, and is transmitted through a series of conduits into the Arrow Tunnel. The Ranch Creek Canal begins on the downstream side of the Arrow Tunnel. The upper canal winds along Forest Service Road 128 and 128.1C to the Cub Creek Chute, where a steel pipe shoots the flow down the slope to a baffled outlet energy dissipator. The lower canal (start of Phase 2) begins on the downstream side of the energy dissipator, picks up flow from Cub Creek and winds along Forest Service Road 128. It intercepts Buck Creek and flows through a Parshall Flume at the Ranch Creek Gaging Station. Downstream of the flume, the open canal enters a concrete transition structure that converges to a 54-inch diameter pressure conduit (end of Phase 2). Approximately 200 feet downstream, that pressure conduit empties into the 126-inch diameter Fraser Canal Pipe just before the entrance to the Moffat Tunnel intake shaft. The Moffat Tunnel transmits the flow under the Continental Divide, where it eventually ends up in Gross Reservoir. Figures 3 to 5 show photos along the Phase 2 portion of the canal.

Improvements to the Ranch Creek Canal first began in 1994 (Phase 1) when approximately 1,700 feet of canal downstream of the Arrow Tunnel was placed in 84-inch RCP. Phase 1 ended at the National Forest boundary. The Phase 2 project begins at the base of the Cub Creek Chute on the lower canal and continues to the end of the open canal where it transitions to the 54-inch pressure pipe. Phase 3 will pipe the remaining upper canal between Phase 1 and the entrance to the Cub Creek Chute.

Piping the most downstream section of the Ranch Creek Canal has become a priority due to nearby development. In late 2007, land between the Ranch Creek Canal and US Highway 40 started into development as the Lakota Park Subdivision. The development has continued to expand since that time, with new construction occurring immediately below Forest Service Road 128. Some of the older areas of Lakota Park below the road have experienced problems with seepage. The residential development also included construction of several retaining structures below Forest Service Road 128, which are assumed to be soil nail walls. See the photos on Figure 6. The impact of the Phase 2 loads (temporary and permanent) on stability of the downstream slope and the retaining structures needs to be evaluated. Denver Water was not able to obtain any information on the retaining structures from the Town of Winter Park through an Open Records Request.

Phase 2 work includes the replacement of the existing Parshall flume with a flume designed for use in a pipeline. The adjacent Ranch Creek Gage House, a precast concrete building, will be reused with the new flume. The Mountain Parks Electric service to the Ranch Creek Gage House, including a handhole, transformer and electric meter, are in the way of construction. During the canal outage, no power will be needed to the Ranch Creek Gage House, however that same electrical service also powers the Fraser Canal Gage House, located approximately a half mile further south along Forest Service Road 128 (See Figure 1). The Fraser Gage House will need to remain in service during the Phase 2 Work, requiring temporary power.

The scope of the Phase 2 construction will also include repairs to the lining of the Cub Creek Chute, to be performed during the same canal outage. The repair information will be provided to the Consultant, to be incorporated into the contract documents.

Construction Schedule

The Ranch Creek Canal, Phase 2 project is scheduled for construction during the summer of 2020. The actual canal has a limited outage and can only be taken out after peak runoff has passed (assumed to be July 15), and must be back in service by October 1, 2020. Work cannot be continued into the following summer due to other scheduled work. The Phase 3 project will occur sometime after 2026.

Project Objectives

The following specific project objectives have been identified:

- Model and design a concrete pipe to replace the open Ranch Creek Canal, maintaining its current ability to accept runoff inflow and the ability to discharge flows at three current wasteway locations.
- Model and design a transition structure to go from the base of Cub Creek Chute to the new pipe
- Design the transition to the existing 54-inch pressure pipe.
- Design a replacement measuring flume for the Ranch Creek Canal.
- Design a new electrical service to the Ranch Creek Gage House and design a temporary electrical service to power the Fraser Gage House during construction.
- Include the steel pipe lining repair information for the Cub Creek Chute, which will be supplied by the Owner.
- Prepare design drawings and specifications in accordance with Denver Water's: Engineering Standards, Capital Projects Construction Standards (CPCS), CAD Standards, Design Drafting Standards, and Specification and Formatting Guidelines.
- Adhere to Denver Water's Capital Projects Procedures Manual (CPPM) criteria, procedures and protocols.

Consultant Scope of Services

The Consultant shall coordinate and work closely with the Owner's Design Project Manager (DPM). Design shall proceed in accordance with the Denver Water Capital Projects Procedure Manual (CPPM). Drawings and specifications shall be developed in accordance with Denver Water CPCS and all drawings shall follow the Denver Water CAD Standards and Denver Water Design Drafting Standards. Specifications shall follow the Denver Water Specification and Formatting Guidelines.

The Consultant Scope of Services shall be developed for a complete design up to Final for Bid Documents and including the Final for Construction Drawings. A detailed description of the required Tasks follows. Additional design information, including the drawings of Cub Creek Chute, will be provided to the Consultant after receipt of a completed Nondisclosure Agreement (NDA), attached with this document.

Denver Water anticipates handling the bidding and construction phase services using in-house resources. However, the Owner may add Consultant support services during the bidding and construction phases via a contract amendment.

Detailed Scope of Services

Phase 1 – Project Management and Administration

Project Management and Administration includes the following activities:

- General Project Management
- Project Management Plan
- Project Controls and Reporting
- Project Meetings

Task 1.1: General Project Management

Time for this task is allocated to the Consultant Project Manager to oversee and administer the project.

Deliverables:

- *Cost loaded schedule/work breakdown structure time allocation*

Task 1.2: Project Management Plan

The Project Management Plan will document the key project information required by the Consultant Project Team members to assist them in executing the project to meet the required objectives: on-time, on-budget, quality, and meeting the Owner's critical success factors. The key elements of the project plan are described as follows:

- The Project Charter will establish the project's goals, objectives, and critical success factors.
- Consultant Project Team members, roles, and responsibilities. This will also include the staffing plan (e.g., management, engineering, QA/QC).
- Scope of Services with work breakdown structure.
- Baseline Planned Value (PV) schedule to be used for Earned Value (EV) reporting.
- Project schedule in GANTT chart format. Schedule updates will be provided in monthly progress reports, if changes have been made and agreed upon by the Owner. The project schedule shall be developed in the most current version of Microsoft Project; it shall include meetings, workshops, and key deliverables. Dates for Owner-supplied information will also be provided.
- Project budgets.
- Communications Plan.
- Risk Management Plan.
- QA/QC Plan.
- Project documentation plan and file structure.
- Change Management process
- Conflict Resolution Plan

Deliverables:

- *Project Management Plan (which includes the QA/QC plan)*

Task 1.3: Project Controls and Reporting

Monthly invoices shall be prepared and submitted to the Owner in an approved format. Invoices shall be broken down by task, Prime Consultant, and Subconsultants and include the following:

- Owner's contract number
- Total contract amount
- Detailed charges for the current invoice period
- Total charges to date

- Earned value analysis and graph
- Previous billings
- Outstanding balance
- Current amount remaining
- Total amount due

The Consultant shall be responsible for the management of both the Consultant and the Subconsultant Project Teams' overall project controls, actively coordinating with the Owner's Project Manager to manage the following:

- Project costs
- Project schedule
- Document control

Monthly project status reports shall be prepared and submitted to the Owner, along with the monthly invoices. The reports shall include the following:

- A summary of services completed since the previous report
- The current project schedule and budget status
- Project issues and potential change logs
- Milestones and/or deliverables scheduled in the coming month

This task also includes periodic project review by the Consultant's management to ensure the project meets the Owner's critical success factors, is on schedule, and is within budget.

Deliverables:

- *Monthly invoices*
- *Monthly project status reports*
- *Earned Value charts*

Task 1.4: Project Meetings

Project meetings include the key Project Team stakeholders and, as needed for the current topic, Consultant or Subconsultant team members.

Project Meetings shall include:

- Initial Kickoff Meeting
- CAD Standards meeting. Meeting shall be held prior to starting any drafting work.
- Administrative staff meeting on specifications and formatting guidelines. Meeting shall be held prior to starting the specifications.
- Approximate monthly Owner and Consultant Team Meetings.
- Project Gate (30%-60%-90% Review) meetings

Deliverables:

- *Prepared agendas for each meeting*
- *Meeting minutes*
- *An ongoing log of decisions and conflict resolutions*

Phase 2 – Initial Design

Initial Design is composed of preliminary design work done in advance of starting the drawings and specifications. It includes the following activities:

- Preliminary Pipe and Hydraulic Analysis
- Preliminary Slope Stability Analysis
- Preliminary Flume Design

Task 2.1: Preliminary Pipe and Hydraulic Analysis

This task consists of modeling the Ranch Creek Canal System and identifying the size(s) and slope of the reinforced concrete pipe to be used for Phase 2 piping.

- Determine the required flow rate to be conveyed by the Phase 2 pipe using assumptions on the existing upstream Phase 1 pipe and incorporating snowmelt runoff information provided by the Owner through the Phase 3 and Phase 2 sections
- Evaluate the capacity of the Cub Creek Chute
- Evaluate the capacity of the 54-inch pressure conduit at the end of the canal.
- Size the pipe using a smooth, continuous slope
- Determine the best location of the downstream connection point to the 54-inch pressure conduit

Deliverables:

- *Preliminary Pipe Design and Hydraulic Analysis Memorandum - Provide recommendations for the size and slope of the Phase 2 pipe. Indicate whether there are capacity issues or other problems with existing infrastructure that may need to be upgraded in the future. Include the supporting analyses and note all assumptions. (Memorandum will be finalized at 60% Design.)*

Task 2.2: Preliminary Slope Stability Analysis

This task consists of identifying critical stability locations along the canal road and determining the information needed from the field investigation.

- Using Owner-provided survey, available geotechnical information, and wall construction assumptions, identify critical locations of the canal road (at least 3) for stability. Create slope stability models for the: pre-construction, during construction and post construction conditions using assumed fill geometry over the pipe.
- Run the models for short term and long-term loading conditions. Consult with the Construction Specialist to determine appropriate vehicle or stockpile loads. Post construction loading shall include snow loading and/or maintenance vehicle loading on the road. Run parametric analyses with critical parameters such as water table, bedrock level, soil strength, soil nail properties to identify the most influential factors and any critical combinations.
- Based on the results of the parametric analysis, provide recommendations on the most critical information needed from the field investigation.

Deliverables:

- *Preliminary Slope Stability Technical Memorandum - Detail preliminary slope stability findings based on the parametric analysis, list assumptions and provide recommendations for the geotechnical field investigation. Indicate conditions that could present a high-risk potential to the project. Include an appendix with preliminary stability results. (Memorandum will be finalized at 60% Design.)*

Task 2.3: Preliminary Flume Design

This task consists of identifying the general configuration of the new Ranch Creek flume.

- Based on the results of the Preliminary Pipe Design Memorandum and historical flow rates of the canal, Owner and Consultant shall determine the design criteria for the flume in terms of flow measurements and accuracy levels.
- Use of software, such as WinFlume from the U.S. Bureau of Reclamation, is preferred to customize the flume to site conditions.
- The flume will be enclosed for wintertime operation. Recommend ways to make visual observations and/or verification measurements without compromising the operation of the flume.

Deliverables:

- *Preliminary Flume Design Memorandum - Describe the assumptions and analyses used to design the Ranch Creek flume. Include the supporting analyses. Include recommendations for the access to the flume. (Memorandum will be finalized at 60% Design).*

Phase 3 – 30% Design Submittal

The 30% Design task shall adhere to the requirements of Denver Water's CPPM. The Standards Meeting for preparation of both the drawings and specifications shall be completed prior to starting work on either of these tasks. This task culminates in the 30% Design Submittal and the 30% Project Gate. The 30% Design task shall include the following:

- 30% Design Tasks
- 30% Drawings
- 30% Technical Specifications
- 30% Constructability Review, Cost Estimate and Construction Schedule

Task 3.1: 30% Design Tasks

The 30% Design Gate finalizes the scope for the project. Task 3.1 is the design effort necessary to determine that scope and involves all the design disciplines on the project.

Deliverables:

- *Basis of Design Memorandum - This document is meant to be a broad reaching memorandum to cover all the major design criteria used for the project. The purpose is to document the design criteria such as loading criteria, regulatory standards and codes, materials, and design processes used.*

Task 3.2: 30% Drawings

At 30% Design, the Consultant shall prepare a list of all anticipated drawings with numbering. The following list shows the types of design drawings anticipated for the project. The 30% drawings should reflect finalized locations, and facility elevations, demolition scopes, and rough layout of new facilities. General drawings shall be at least 60% complete. Electrical site plans with major equipment and utility routing, preliminary equipment schedule, and one-line drawings should be included. Placeholders should be included for any drawings not started.

- Cover Sheet, Location Map, and Index
- General Site plan/Staging areas
- Survey Control Diagram (info supplied by Owner)
- Erosion/ Stormwater Control Drawings
- Civil Site Plans
- Demolition drawings
- Pipe Plan and Profile Drawings
- Cub Creek Transition Structure plan, profiles and sections and details
- Flume plan, profiles and sections and details
- Site Reclamation drawings
- Structural Drawings – Transition Structure
- Structural Drawings - Flume
- Cub Creek Chute Lining Repairs
- Electrical site plan and facilities
- Temporary Electric Plan for construction
- Power and Lighting Plan for Gage House
- One-line Diagram, Panel Schedules and Conduit/Conductor Schedules for Gage House
- Civil/Electrical/Structural Details
- Reference Drawings (Assume up to 20)

Deliverables:

- *30% Design Drawings in electrical format (CAD and PDF)*
- *Batch Standards Check file*

Task 3.3: 30% Technical Specifications:

For the 30% design submittal, the consultant shall identify the technical specifications applicable to the project.

- Identify the existing CPCS specifications that are relevant to the project.
- Identify any specifications not included in the CPCS that will be created specifically for the project (Project Specific Technical Specifications). Note that all projects include a Section 01 11 00. For all other proposed new specifications, provide an explanation as to why it is needed.

Deliverables:

- *List of applicable CPCS sections*
- *List of Project Specific Technical Specifications, with justification*

Task 3.4: 30% Constructability Review, Cost Estimate and Construction Schedule

The Consultant's Construction Specialist shall evaluate the 30% design with respect to construction issues. This task shall include the following:

- Review the 30% design scope and construction constraints on the project (supplied by the Owner) to estimate the productivity and produce a construction schedule.
- Analyze the risk factors related not getting project completed within the allowable time. Recommend methods that could be incorporated in the design or contract specifications, that could reduce this risk, such as milestones or work phasing. While completion of the entire scope is desired, if there is significant risk that this would not happen, then the contract should be set up in a manner to allow stopping points.
- Recommend the best way to present the Schedule of Values. This may include whether certain portions of the work should be bid out as work Alternates that could serve as stopping points in the scope.
- Provide a construction cost estimate, with appropriate contingency for 30% design.

Deliverables:

- *30% Constructability Review Memorandum - This shall include the proposed construction schedule and 30% Opinion of Probable Cost as an appendix. Document the assumptions used to develop both the schedule and estimate, and discuss risks to the project. Include recommendations for the contract documents.*

Phase 4 –Geotechnical Investigation

Perform a geotechnical investigation, including both field and laboratory work. Provide both a draft report for Owner review and a final report. The final report should be part of the 60% design submittal. The investigation should use the recommendations from Task 2.2 and include field and laboratory analyses/measurements to provide design and construction information, including the following:

- Slope stability parameters
- Soil and rock types to be encountered during excavation
- Potential for rock excavation
- Material properties, including water soluble sulfate potential
- Spoils reuse potential
- Compaction requirements for pipe and road

Deliverables:

- *Preliminary Geotechnical Investigation Report - Report should contain an executive summary with the recommendations*
- *Final Geotechnical Investigation Report*

Phase 5 –60% Design Submittal

The 60% Design task shall adhere to the requirements of Denver Water's CPPM. This task culminates in the 60% Design Submittal. The 60% Design task shall include the following:

- 30% Comment Resolution Response Log
- 60% Design Tasks
- Final Slope Stability Analysis
- 60% Drawings
- 60% Technical Specifications
- 60% Constructability Review, Cost Estimate and Construction Schedule

Task 5.1: 30% Comment Resolution

Provide a response matrix to address comments provided by Owner on the 30% design submittal. The response document should be submitted at least 2 weeks in advance of submitting the 60% design.

Deliverables:

- *30% Comment Resolution*

Task 5.2: 60% Design Tasks

By the 60% design gate, both Preliminary Design Memoranda shall be finalized. Major work during this design phase will be focused on structural and electrical design. All electrical coordination work with other disciplines will be performed during this period.

Deliverables:

- *Final Pipe Design and Hydraulic Analysis Memorandum - Include final information for the design parameters and modeling. Discuss the sizing and spacing of pipe inlet structures and the design of the blow-offs. Include all relevant calculations.*
- *Final Flume Design Memorandum - Include final information showing the flume performance over the entire range of identified flows. Include flume sketch showing location of staff gage and other important dimensions. Show maximum and minimum water surface. Note any critical construction parameters.*

Task 5.3: Final Slope Stability Analysis

Task 5.3 will update the preliminary slope stability analyses completed in Task 2.2 with information obtained from the Geotechnical Investigation. The purpose of Task 5.3 is to understand the existing condition of Forest Service Road 128 slope and the risk potential caused by the proposed Work, both during and after construction. If unacceptable risk is identified, the Consultant's memorandum shall suggest possible mitigation factors.

Deliverables:

- *Final Slope Stability Technical Memorandum*

Task 5.4: 60% Drawings

The 60% Design Drawings should meet the requirements of Denver Water's CPPM with respect to drawing completion, including the following criteria:

- General Drawings -90% complete
- Civil – 90% complete
- Structural Plans – 50% complete, most reinforcing shown
- Electrical – 60% complete

Deliverables:

- *60% Design Drawings in electrical format (CAD and PDF)*
- *Batch Standards Check file*

Task 5.5: 60% Technical Specifications:

The 60% technical specification submittal shall include the following:

- Project modifications to the Denver Water CPCS using the Supplementary Technical Specifications (STS) format, for all divisions
- All standard STS that are required on Denver Water projects (available online)
- Project Specific Technical Specifications, including Section 01 11 00
- Final Geotechnical Report as Exhibit A

Deliverables:

- *60% Specification Package (PDF and Denver Water format)*

Task 5.6: 60% Constructability Review, Cost Estimate and Construction Schedule

The Consultant's Construction Specialist will evaluate the 60% design submittal and update the cost estimate, proposed construction schedule and include any new project recommendations.

Deliverables:

- *60% Constructability Review Memorandum - This shall include the 60% construction schedule and 60% Opinion of Probable Cost as an appendix. Document the assumptions used for the schedule and cost estimate, identify continuing project risks and include any further recommendations to the contract documents.*

Phase 6 –90% Design Submittal

The 90% Design task shall adhere to the requirements of Denver Water's CPPM. This task culminates in the 90% Design Submittal /Project Gate. The 90% Design task shall include the following:

- 60% Comment Resolution
- 90% Design Tasks
- Contractor Site Visit
- 90% Drawings
- 90% Technical Specifications
- 90% Constructability Review, Cost Estimate and Construction Schedule
- QA/QC Colored Drawings

Task 6.1: 60% Comment Resolution

Provide a response matrix to address Owner's comments on the 60% design submittal. The response document should be submitted at least 2 weeks in advance of the 90% design submittal.

Deliverables:

- *60% Comment Resolution*

Task 6.2: 90% Design Tasks

Task 6.2 is the design effort necessary to complete the design and to document all the technical information not otherwise detailed in design memoranda.

Deliverables:

- *Structural Design Calculation Package*
- *Electrical Design Calculation Package*

Task 6.3: Contractor Site Visit

Due to the timing of the project schedule, the site will not be fully accessible during bidding. The Owner will invite interested contractors to a site visit in the early fall of 2019. Consultant's Project Manager, or another appropriate individual, shall attend. Assume 4 hours of travel and 2 hours for the meeting.

Deliverables:

There are no deliverables for Task 6.3

Task 6.4: 90% Drawings

The 90% Design Drawings should constitute the complete design.

Deliverables:

- *90% Design Drawings in electrical format (CAD and PDF)*
- *Batch Standards Check file*

Task 6.5: 90% Technical Specifications:

The 90% technical specification submittal shall constitute the completed technical specifications.

Deliverables:

- *90% Technical Specifications (in PDF and Denver Water format)*

Task 6.6: 90% Constructability Review, Cost Estimate and Construction Schedule

The Consultant's Construction Specialist will evaluate the 90% design submittal and update the cost estimate and proposed construction schedule.

Deliverables:

- *90% Constructability Review Memorandum - This shall include the proposed construction schedule and 90% Opinion on Probable Cost as an appendix. The memorandum shall document the assumptions used for the schedule and cost estimate.*

Task 6.7: QA/QC Colored Drawings

The Consultant will submit a set of Colored Drawings, in accordance with the color criteria listed in the Denver Water CPPM. This set shall be part of the 90% submittal. The Colored Drawings shall be signed and dated by the QA/QC reviewer.

Deliverables:

- *Colored Drawing set (PDF)*

Phase 7 – Final for Bid Documents

Task 7 is the final work product prior to the Owner posting the project for bidding. The work under this task includes the following:

- 90% Comment Resolution
- Final for Bid Drawings
- Final Technical Specifications

Task 7.1: 90% Comment Resolution

Provide a response matrix to address all comments (including those from the Colored Drawing Set) on the 90% design submittal. The response document should be submitted with the final for construction set.

Deliverables:

- *90% Comment Resolution*

Task 7.2: Final for Bid Drawings

This task consists of producing the final for bid drawings. Plans shall be signed by the Consultant and initialed by the Owner.

Deliverables:

- *Final for Bid Drawings – signed and sealed -full size paper copy*
- *Final for Bid Drawings (CAD and PDF)*
- *Batch Standards Check file*

Task 7.3: Final Technical Specifications

This task consists of providing the final technical specification

Deliverables:

- *Final Technical Specifications, including all Exhibits (MS Word and Denver Water format)*

Phase 8 – Final for Construction Drawings

Task 8 is the production of the Final for Construction Drawings. The drawings must be signed and stamped by the Consultant's Professional Engineers of Record, and initialed by the Owner.

Deliverables:

- *Final for Construction Drawings – signed, with PE stamp – full size paper copy*
- *Final for Construction Drawings (CAD and PDF)*

Consultant Qualifications

Project team members shall have demonstrated experience that is similar in nature to that required for the project. The Consultant team shall include a Construction Specialist who is/was a contractor experienced in civil/pipeline projects of this size. Contractors involved in the design phase of the project are permitted to bid on the project. All Consultant team members providing design shall be Colorado-registered Professional Engineers. Project Management Professional (PMP) certification for the team lead is preferred, but not required.

Consultant proposal shall include a project team organizational chart and provide the resumes of key team members.

Owner Responsibility

The Owner will provide the Consultant with available relevant information to aid in the design process. This includes, but is not limited to:

- Provide project objectives
- Provide the endorsed Project Work Plan
- Provide site survey information and basemap
- Provide reference drawings of existing canal facilities
- Provide historic flow data
- Provide snowmelt runoff data for the Ranch Creek System
- Provide the survey point control tables, locations, and survey notes for the Survey Control Diagram Drawing (assume one sheet)
- Provide repair information and specifications for Cub Creek Chute steel pipe repairs
- Provide any instrumentation modifications to the Ranch Creek Gage House
- Provide the 30-60-90% review comments in accordance with the project schedule
- Provide the front end (legal) portion of the Specifications, which shall be combined with the Consultant's technical specifications to produce the complete document
- Coordinate a contractor site visit during the fall of 2019 (during 90% design)
- Update the Work Plan for 90%, with input from Consultant, and coordinate Work Plan endorsements
- Assemble the final design documents and issue the Final for Bid contract documents
- Provide Public Relations efforts for the construction project

The Owner will also handle the following:

- Provide wetlands surveys and apply for a 404 permit
- Coordinate with the US Forest Service for the necessary authorizations to do the project
- Obtain Forest Service criteria and constraints for construction of the project, including allowable staging locations, road closures and detours
- Provide notifications to State Engineer's Office on the flume replacement

Project Assumptions

The following assumptions were made in the development of this Scope of Work:

- The project shall be in accordance with the Denver Water: CPPM, Capital Projects Construction Standards (CPCS) and CAD Drafting Standards, which are located online at: <https://www.denverwater.org/contractors/construction-information/design-standards>
- The project shall be executed using the methodology and processes described in the CPPM. The milestones for 30-60-90% complete shall meet the minimum criteria described in the CPPM.
- The project will be developed in the Project Wise environment, on the Owner's platform. Information transfers, review sets and other deliverables will be shared and distributed through Project Wise.

- All relevant computer input and output files, and calculations and reference material used to develop the design will be stored on the Project Wise site and appropriately labeled.
- Drawings shall be done in the AutoCAD Civil 3D 2018 platform, in accordance with the Owner's CAD Standards. Drawings shall utilize the Owner's CPCS drawing details where feasible.
- All drawing submittals shall include a Batch Standards Check file.
- Project specifications shall be submitted in the latest CSI format and adhere to Denver Water's Owner's Engineering Specification and Formatting Guidelines (to be provided after award of the contract).
- Consultant shall attend a meeting with the Owner's Drafting Supervisor to discuss Owner's Drafting Standards. The meeting shall be attended by the Consultant's drafting team.
- Consultant shall attend a meeting with the Owner's Administration personnel to discuss the Owner's guidelines for specification preparation. The meeting shall be attended by the Consultant's personnel producing the specifications.
- Consultant shall submit PDF of 60% and 90% technical specification for formatting review a minimum of 3 days prior to Project Gate submittal dates.
- Construction Contract General Conditions, Contract Agreement, Bid Forms, etc., will be provided by the Owner via the CPCS.
- Additional justifiable survey requests by the Consultant, including potholing, will be provided by the Owner. (The ability to obtain this work in a timely manner will be dependent upon site conditions)
- The Consultant is to assume that one drawing will be required for the Cub Creek Chute lining repairs to show the existing structure, repair extent and access locations. Repair information will be addressed chiefly through revisions to the Technical Specifications. Any repair details that need to be shown on the Drawings will be provided by the Owner in CAD format. This information will be provided by the Owner by May 1, 2019.
- The Consultant is to assume the site is free of any sensitive cultural resources.
- The Owner will provide payment for any required review fees to outside agencies necessary for project approval prior to bidding.
- Hydrologic snowmelt data shall be supplied by the Owner to the Consultant at the kickoff meeting.

MWBE Goal

Denver Water has a goal to support a diverse business community and is committed to providing opportunities for minority and women-owned business enterprises. In keeping with that commitment, an MWBE goal of 5% has been set for this Work. More information on Denver Water's MWBE Program can be found online: <https://www.denverwater.org/contractors/bid-and-contract-opportunities/supplier-diversity-program>.

Project Schedule

The Owner may elect to follow the proposals with a formal questionnaire and/or interview to assist with the proposal evaluation.

The anticipated Project Schedule is summarized as follows:

- | | |
|---------------------|---|
| • October 15, 2018 | Initial RFP advertised through Denver Water website |
| • October 23, 2018 | First Pre-Proposal Meeting at Denver Water |
| • November 5, 2018 | Revised RFP issued through Denver Water website |
| • November 15, 2018 | Second Pre-Proposal Meeting at Denver Water |
| • January 7, 2019 | Proposals Due |
| • January 9, 2019 | Consultant Interviews (if needed) |
| • January 11, 2019 | Consultant Selection Finalized |
| • January 23, 2019 | Consultant Agreement taken to Board (if required) |
| • February 14, 2019 | Kickoff Meeting |

- May 17, 2019 30% Design Due
- May 20-May 31, 2019 30% Review Period by DW
- September 6, 2019 60% Design Due
- September 9-20, 2019 60% Review Period by DW
- December 2, 2019 90% Design Due
- December 3-17, 2019 90% Review Period by DW
- January 10, 2020 Bid Ready

Any requests for clarification or additional information regarding the submission of this RFP shall be submitted via e-mail to: jessica.barbier@denverwater.org, or in person during a Pre-Proposal Meeting. Consultants must attend one of two Pre-Proposal meetings on this project: either Tuesday October 23, 2018 at 10 am in Room 308 or Thursday November 15, 2018 in Room 308. No official site visit will be scheduled due to weather concerns. Consultants should visit the site at their convenience.

Proposal Requirements

The proposal shall outline the Consultant's Scope of Services, which shall include, at a minimum, the criteria set forth within this RFP and the Consultant's approach to administer and complete the project. A detailed project approach assists the Owner in understanding the Consultant's comprehension of the project and the opportunities and constraints that a project of this complexity may contain. At a minimum, the Proposal shall include the following:

- Cover letter.
- Project approach, including any unique solutions and modifications or changes to the listed tasks or schedules. Clearly identify assumptions.
- Tailored 2-page resumes for all key personnel. Include projects similar in nature and complexity to the Ranch Creek Canal, Phase 2. Note that key personnel proposed for the project shall remain available for the entirety of the project. A change of project personnel will only be permitted in extreme circumstances and may be subject to a monetary penalty.
- Manpower labor estimate (work breakdown structure) by labor type/hours for the following major project phases and tasks provided under *Scope of Services*. Include the corresponding hourly rates (an 11-inch by 17-inch format for the work breakdown structure is acceptable).
 - Phase 1: Project Management and Administration
 - Task 1.1: General Project Management
 - Task 1.2: Project Management Plan
 - Task 1.3: Project Controls and Reporting
 - Task 1.4: Project Meetings
 - Phase 2: Initial Design
 - Task 2.1: Preliminary Pipe and Hydraulic Analysis
 - Task 2.2: Preliminary Slope Stability Analysis
 - Task 2.3: Preliminary Flume Design
 - Phase 3: 30% Design Submittal
 - Task 3.1: 30% Design Tasks
 - Task 3.2: 30% Drawings
 - Task 3.3: 30% Technical Specifications
 - Task 3.4: 30% Constructability Review, Cost Estimate and Construction Schedule
 - Phase 4: Geotechnical Investigation
 - Phase 5: 60% Design Submittal
 - Task 5.1: 30% Comment Resolution
 - Task 5.2: 60% Design Tasks
 - Task 5.3: Final Slope Stability Analysis
 - Task 5.4: 60% Drawings
 - Task 5.5: 60% Technical Specifications
 - Task 5.6: 60% Constructability Review, Cost Estimate and Construction Schedule
 - Phase 6: 90% Design Submittal
 - Task 6.1: 60% Comment Resolution
 - Task 6.2: 90% Design Tasks

- Task 6.3: Contractor Site Visit
 - Task 6.4. 90% Drawings
 - Task 6.5. 90% Technical Specifications
 - Task 6.5. 90% Constructability Review, Cost Estimate and Construction Schedule
 - Task 6.6. QA/QC Colored Drawings
 - Phase 7: Final for Bid Documents
 - Task 7.1: 90% Comment Resolution
 - Task 7.2: Final for Bid Drawings
 - Task 7.3: Final Technical Specifications
 - Phase 8: Final for Construction Drawings
- A detailed schedule with any deviations from the schedule included herein clearly identified and tied to the project approach.
 - A written statement regarding the Consultant's eligibility to perform the work without a conflict of interest.
 - A written statement regarding the Consultant's willingness to enter into a contract based on the draft proposal Agreement in Appendix A, including the insurance requirements. Any requested changes to the contract language shall be included in this written statement.
 - No page limit will be imposed on the Proposal; however, the Consultant is encouraged to only provide information that is directly relevant to the project.

Selection Criteria

The Owner's review team will review the Proposals and select based on best value, while considering the following criteria:

Criteria	Standard	Weighting Factor
Project Team Qualifications	Do the assigned personnel have the skills and experience to provide a detailed and complete study? Do the personnel have firsthand experience in this type of work? Does the team have the appropriate support capabilities to meet the demands of the project? Does the team have prior experience with Denver Water design projects? (Maximum Score=10)	2.5
Proposed Approach, Project Plan, and Schedule	Does the Proposal show a clear understanding of the project objectives and the results desired from the project? Is the Proposal easy to understand? Does the Consultant offer a different approach that is beneficial to the project? Is the schedule realistic? (Maximum Score =10)	3
Cost and Work Hours	Do the work hours presented accurately reflect the level of effort required to complete the project? How are the hours allocated between less experienced and more experienced design personnel? Is there sufficient QA/QC time? How do unit labor and overhead costs compare to other firms? (Maximum Score =10)	4
MWBE Participation	Proposal will receive the score if the stated MWBE goal of 5% is achieved. While Proposers are encouraged to exceed this percentage, no higher score will be given. No score will be awarded to percentages that are below 5%.	0.5

The scale of the criteria is from 1 to 10; a score of 1 is a poor rating, 5 is an average rating, and 10 is an outstanding rating. Criteria will be multiplied by the associated weight to give a weighted criteria score. The weighted criteria scores will be summed for a cumulative score. The maximum possible cumulative score is 100.

Proposal Submittal

Selection of a Consultant will be based on the selection criteria previously described. The Proposal shall address each component of the selection criteria. Interviews will be conducted if needed on January 9, 2019.

Costs associated with Proposal preparation, pre-proposal meeting attendance, interview attendance, etc. shall be borne entirely by the proposing Consultant. Proposal information will become the property of the Owner.

- **Proprietary or Confidential Information:**
 - Proposers acknowledge that Denver Water may be required to disclose any or all the documents submitted with a Proposal, pursuant to the Colorado Open Records Act, C.R.S. § 24-72-201.1, et seq. Under C.R.S. § 24-72-204(3)(a)(IV), Denver Water may deny inspection of any confidential commercial or financial information furnished to Denver Water by an outside party. Therefore, a Proposer must clearly designate any documents submitted with its Proposal that the Proposer deems proprietary or confidential, to aid Denver Water in determining what must be disclosed in response to a request for documents under the Colorado Open Records Act.
 - The Proposer's designation of material to be redacted must be reasonable or it will not be honored. For example, a Proposer may not designate the entire Proposal to be confidential and proprietary.

Four hardcopies and one electronic copy (a PDF on a flash drive) of the Consultant's Proposal shall be submitted by noon on Monday January 7, 2018, Attention: Jessica Barbier, Project Manager, Denver Water, 1600 West 12th Avenue, Denver, Colorado 80204. In addition, Consultant should submit one hardcopy of the Proposal with intellectual or proprietary property redacted.

Please contact Jessica Barbier at 303-628-6605 or jessica.barbier@denverwater.org with questions regarding this request.

Attachments

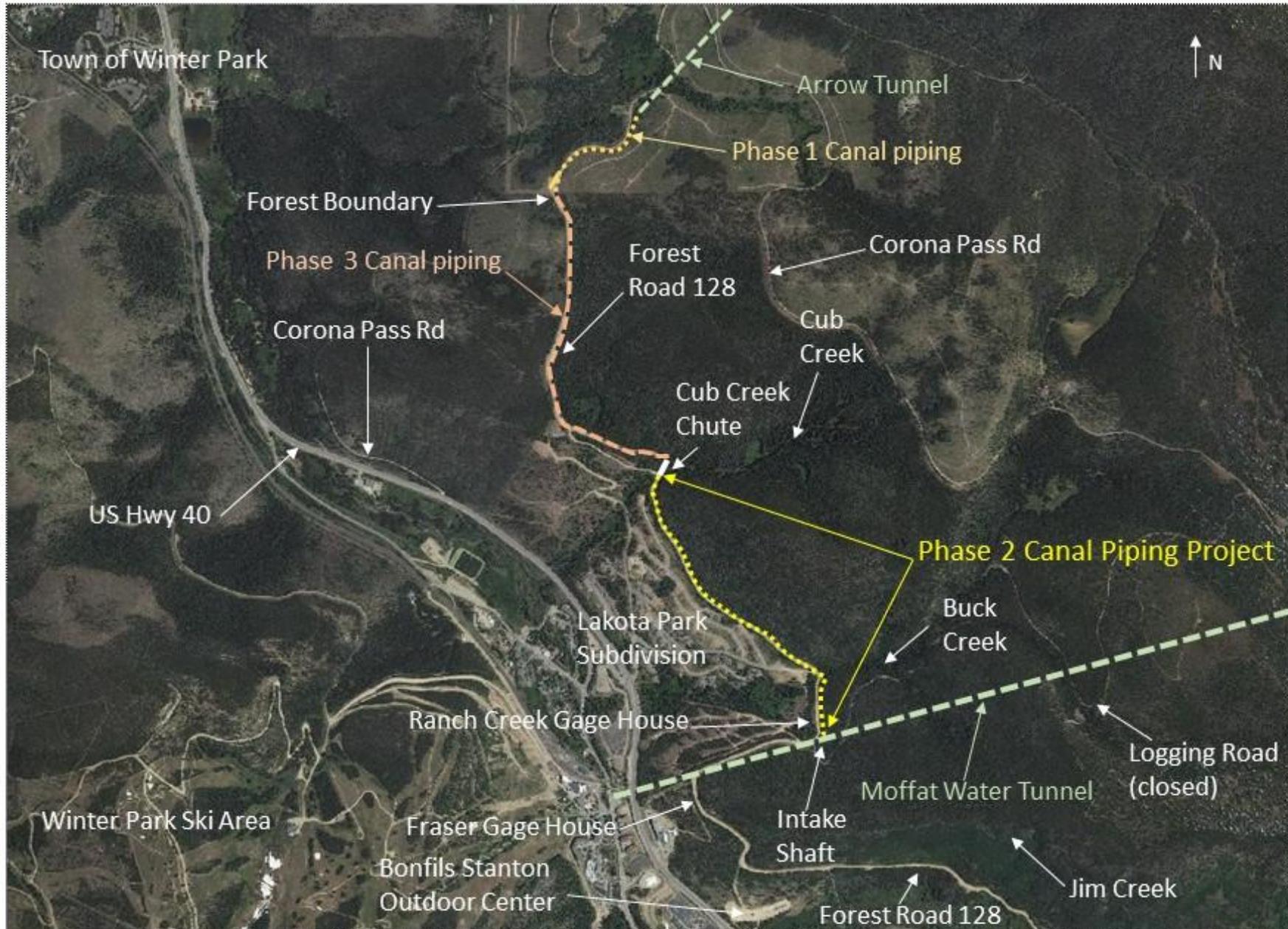
Figures

- Figure 1 - Location Map – Ranch Creek Canal System
- Figure 2 – Phase 2 Piping Project
- Figure 3 – Features of Ranch Creek Canal – Start of Phase 2
- Figure 4 – Features of Ranch Creek Canal – Phase 2
- Figure 5 – Features of Ranch Creek Canal – End of Phase 2
- Figure 6 – Structures Located along Toe of Canal Road Slope

Appendix

Appendix A – Draft Consultant Agreement

Location Map- Ranch Creek Canal System



(Note- Other elements of Moffat Collection System not shown for shown for clarity)

Figure 1

Phase 2 Piping Project



Figure 2

Features of Ranch Creek Canal, Start of Phase 2

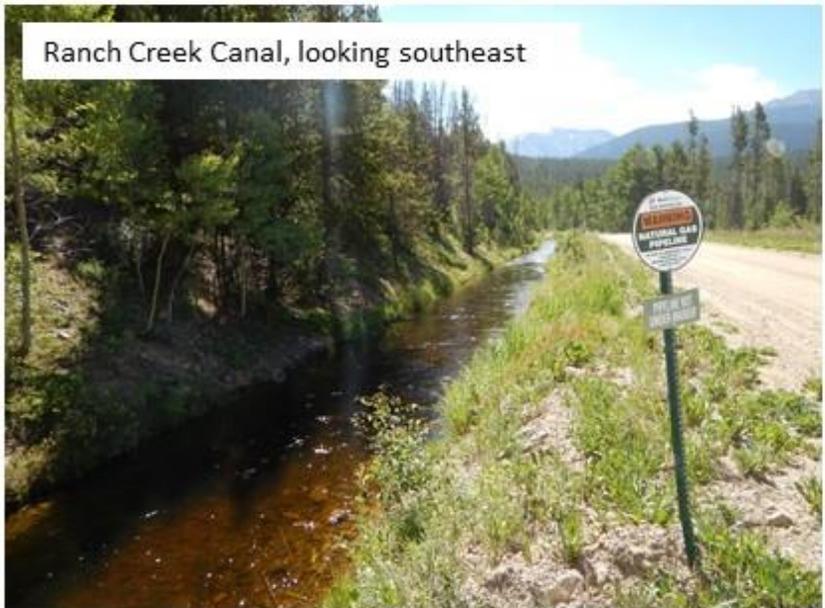
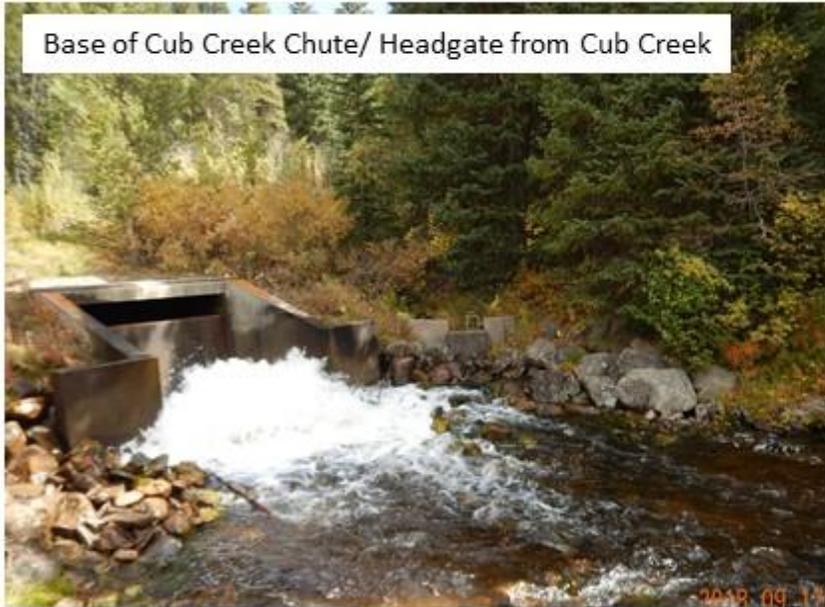


Fig 3

Features of Ranch Creek Canal, Phase 2

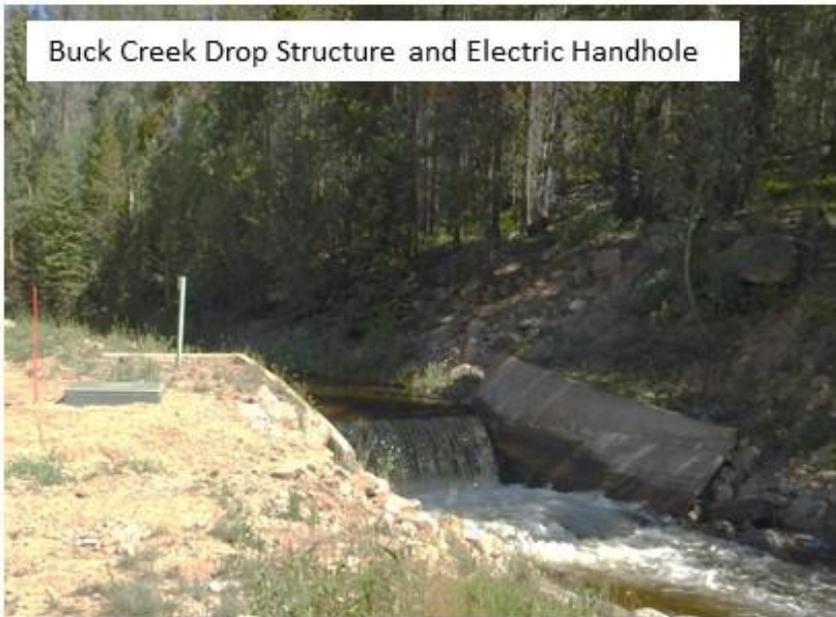


Fig 4

Features of the Ranch Creek Canal, End of Phase 2



Fig 5

Structures Located along Toe of Canal Road Slope

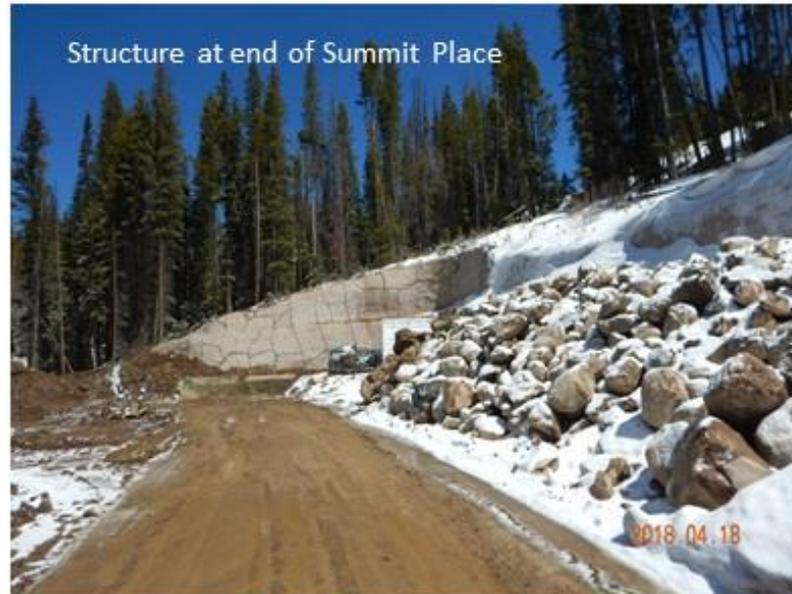


Fig 6

APPENDIX A
Sample Proposal Agreement

AGREEMENT

THIS AGREEMENT (“Agreement”) is made and entered into between the CITY AND COUNTY OF DENVER, acting by and through its BOARD OF WATER COMMISSIONERS (“Board”), a municipal corporation of the State of Colorado whose address is 1600 W. 12th Avenue, Denver, Colorado 80204, and **Verify the correct legal name of the Consultant and insert here** (“Consultant”), whose address is **Insert Consultant's address**. The Board and the Consultant agree as follows:

1. Scope of Work. The Consultant agrees to provide work to the Board in accordance with Exhibit A, attached and incorporated (the “Work”). The Work specifically includes any and all deliverables provided to the Board under this Agreement. Generally, the Consultant will **Insert description of the work the Consultant will perform**.
2. Notice to Proceed. The Board will issue a Notice to Proceed with the required Work after the effective date of this Agreement and after the Board has received satisfactory certificates of insurance as required in this Agreement, whichever is later.
3. Time of Commencement and Completion of Work. The Board shall not dictate times of performance of the Work, except that the Consultant shall commence the Work as soon as necessary after receipt of a Notice to Proceed, if required by this Agreement, or else after the effective date of this Agreement. The Consultant shall complete the Work no later than **Insert date by which Work must be completed**. The Consultant and the Board must agree upon any extensions of the completion date in a written amendment.
4. Consultant Responsibility. The Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all studies, reports and other Work performed under this Agreement. The Consultant is responsible for providing the materials, equipment, training and tools necessary for performance of the Work. The Consultant represents that all Work performed under this Agreement shall be performed with the usual thoroughness and competence and in accordance with the standards of care of the Consultant’s profession prevailing in Colorado. Without additional compensation, and without limiting the Board’s remedies, the Consultant shall promptly remedy and correct any errors, omissions or other deficiencies in the Work not meeting that standard of care, including any breaches of the representations in this Agreement.
5. Ownership of Work Product.
 - a. All printed material, original works of authorship, electronic documents and intellectual property produced, invented, reduced to practice, or created as a result of Work performed under this Agreement (the “Creations”) (with the exception of any intellectual property rights contained therein, owned or created by the Consultant prior to the effective date of this Agreement (“Prior Works”)) shall be the sole property of the Board and may not be used, sold, licensed or disposed of in any manner without prior written approval of the Board. To the maximum extent permitted by applicable law, all Creations shall be deemed works made for hire under the United States copyright laws, and all right, title, and interest in and to such work product shall vest automatically in the Board. Consultant hereby assigns and irrevocably agrees to assign in the future (when

Insert Name of Consultant and/or Contract No.

any such Creations are first reduced to practice or first fixed in a tangible medium, as applicable) to the Board all right, title and interest in and to any and all such Creations, including, without limitation, all related intellectual property rights (as to copyright, to the extent such Creations are held not to be works made for hire under applicable law). All such Creations shall be turned over to the Board upon completion of the Work. For custom-developed software, the Board shall be provided a copy of the source code.

- b. Consultant agrees not to use, and hereby represents that Consultant has not used, in the course of the performance of the Work any Prior Works, unless such Prior Works are first disclosed in writing to the Board, and the Board consents in writing to the use of the Prior Works, and Consultant grants a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license (with rights to sublicense through multiple tiers of sublicensees) to make, have made, modify, create derivative works of, copy, publicly display, use, sell and distribute such Prior Works as incorporated in the Work. Consultant further agrees that it shall not use or incorporate any third party works, third party inventions or open source software in the Work without prior disclosure to the Board, without provision of a valid license providing the Board with all rights necessary to use such as used or incorporated in the Work, and without approval from the Board.
- c. Consultant represents that all studies, reports and other Work performed under this Agreement are original or a license to the same has been obtained for the Board as required in this section, will perform for the purpose intended, contain no infringing intellectual property, and contain no material defects, and, if software, contain no malware or undisclosed means of access. The Consultant may retain one copy of all documents prepared under this Agreement. Any reuse of the Consultant's work product for any use other than as contemplated by this Agreement shall be at the Board's sole risk.

6. Compensation and Invoicing. The Board shall compensate the Consultant for Work performed under this Agreement as described in this paragraph. The compensation for the Consultant provided by this Agreement is entire and complete. The Consultant has not received and will not receive any other compensation in connection with this Agreement. The Consultant warrants that it has not paid or promised to pay any compensation to anyone (except Board-approved subcontractors and the Consultant's officers and employees) in order to obtain this Agreement.

- a. The Consultant will be paid an hourly rate that includes labor, payroll, all overhead expenses, and profit. Overhead expenses include charges for clerical, administrative, accounting, legal, and computer personnel and may not be billed separately. The hours billed by the Consultant shall not exceed hours actually worked on the Work, as shown in the Consultant's timekeeping records, and shall be limited to the hours actually paid to the employee for the Work. The following chart identifies the particular persons or classes of persons who will perform Work under this Agreement and the hourly rate for each. The Consultant shall not bill the Board for persons or classes of persons not listed below or at hourly rates different from those specified below.
- b. The Consultant shall provide invoices each month for Work accomplished through the last day of the preceding month. The Consultant's invoices shall include a description of the Work performed by and the hours worked by each

Insert Name of Consultant and/or Contract No.

person for the billing period. The Consultant must submit documentation supporting the charges in the invoice, which must be consistent with this Agreement, and must include the contract number of this Agreement on each invoice.

- c. The Consultant will be paid the respective amount listed below upon completion of each work product described.

Approved costs should not include more than the following: travel expenses; long distance telephone calls; postage; faxes; express delivery services; printing and reproduction; photocopying; materials specified in the Agreement; and subcontracted work.

The Consultant shall bill for the out-of-pocket costs listed above at actual costs without markup. For any out-of-pocket costs that exceed \$200.00, the Consultant shall provide a copy of the underlying invoice, travel voucher or other document supporting the out-of-pocket cost.

- d. The total compensation under this Agreement, including out-of-pocket costs, shall not exceed \$**Insert not-to-exceed amount**.

7. Payment. Payments shall be based upon the Consultant's verified progress in completing the Work. Unless the Consultant has not properly performed the Work, invoices will be paid within thirty (30) days of receipt. The Board has the right to refuse to pay all or a portion of an invoice that is inconsistent with this Agreement; all undisputed portions of the invoice shall be paid. The Board may delay payment until it can verify the accuracy of the invoice, obtain releases or waivers with respect to Work covered in the invoice (and with respect to Colo. Rev. Stat. Article 26 of Title 38 if applicable), or resolve a dispute with the Consultant regarding an invoice. **The Board will not issue payments unless the Consultant has current insurance coverage in accordance with this Agreement.** Checks shall be made payable to the trade or business of the Consultant.

8. Records and Audits. The Consultant shall at all times maintain a system of accounting records in accordance with its normal procedures, together with supporting documentation for all Work, purchases, and billings under this Agreement. The Consultant shall retain all such accounting records and documentation for at least two (2) years after final payment. The Board has the right to audit the accounting records and documentation of Consultant related to the Work at any time during the period of this Agreement and for two (2) years after final payment. The Consultant shall refund to the Board any charges determined by the Board's audit to be inconsistent with this Agreement.

9. Changes in Work. The Board has the right to order additions, deletions, or changes in the Work at any time, so long as such changes are within the general scope of Work covered by this Agreement. Requests for material changes in the Work may be made by the Board orally or in writing; however, oral requests shall be confirmed by a written request within ten (10) business days after the oral request. If the Board directs the Consultant to proceed with a material change, the Consultant shall be paid for the change as agreed to by the parties.

- 10. Independent Contractor.

- a. The Consultant is customarily engaged in an independent trade, occupation, profession or business related to the Work, and nothing in this Agreement

Insert Name of Consultant and/or Contract No.

requires the Consultant to work exclusively for the Board during the term of the Agreement.

- b. Nothing in this Agreement shall be construed to establish the Consultant as an agent or employee of the Board for any purpose. The Consultant and its employees, agents, and subcontractors shall in no way represent themselves to third parties as agents or employees of the Board in performance of the Work.
- c. The Board shall not oversee the Work of the Consultant or instruct the Consultant on how or when to perform the Work, except that the Board and the Consultant have agreed to a completion date for the Work. The Consultant shall in all respects be an independent contractor of the Board in its performance of the Work.
- d. THE CONSULTANT ACKNOWLEDGES THAT IT IS NOT ENTITLED TO UNEMPLOYMENT INSURANCE OR WORKERS' COMPENSATION BENEFITS AS A RESULT OF PERFORMANCE OF THE WORK FOR THE BOARD.
- e. THE CONSULTANT ACKNOWLEDGES THAT IT IS OBLIGATED AND SOLELY LIABLE TO PAY FEDERAL AND STATE INCOME TAX ON ANY MONEYS EARNED PURSUANT TO THIS AGREEMENT, WHICH MAY INCLUDE FEDERAL AND STATE INCOME AND WITHHOLDING TAXES, UNEMPLOYMENT TAXES, FICA TAXES AND WORKERS' COMPENSATION PAYMENTS AND PREMIUMS APPLICABLE TO THIS AGREEMENT OR ANY WORK PROVIDED. THE CONSULTANT SHALL INDEMNIFY THE BOARD FOR ANY LIABILITY RESULTING FROM NONPAYMENT OF THE CONSULTANT'S OBLIGATIONS UNDER THIS PARAGRAPH.

11. Insurance.

PLEASE READ THIS CAREFULLY. THE CONSULTANT WILL NOT BE PAID UNLESS THE FOLLOWING INSURANCE REQUIREMENTS ARE MET.

The Consultant shall maintain the following insurance in full force and effect during the full term of this Agreement. The Consultant shall provide to the Board certificates of insurance (and renewals thereof) demonstrating that the following insurance requirements have been met.

- a. Commercial General Liability Insurance:
Commercial general liability insurance with limits not less than \$1,000,000 per occurrence and \$2,000,000 general aggregate for bodily injury and property damage. Such insurance shall include the City and County of Denver, acting by and through its Board of Water Commissioners, as additional insured and shall be primary and non-contributing with respect to any insurance or self-insurance program of the Board.
- b. Automobile Liability Insurance:
Consultant shall maintain automobile liability insurance as required by Colorado law. The Board does not require a certificate of insurance unless this subparagraph (b) requires insurance that exceeds the statutory requirements.

Insert Name of Consultant and/or Contract No.

- c. Professional Liability Insurance:
Professional liability insurance with limits not less than \$1,000,000 per claim covering all licensed professionals performing Work under this Agreement.
- d. Workers' Compensation Insurance:
The Consultant is located in Colorado and maintains workers' compensation insurance, as required under the laws of the State of Colorado.
- e. Other Requirements:
 - 1) The Consultant's insurers shall maintain an A.M. Best rating of A-, VII or better.
 - 2) All self-insured retentions or deductibles must be declared and acceptable to the Board.
 - 3) Thirty (30) days' advance written notice of cancellation shall be provided to the Board, except for ten (10) days' advance written notice in the event of cancellation due to non-payment of premium.
- f. The Consultant shall provide copies of insurance policies upon request of the Board and in redacted form if necessary to protect confidential information.
- g. The Board reserves discretion to accept alternative types of insurance.

12. Compliance with Laws. In performing this Agreement, the Consultant shall comply with all applicable laws, rules, and regulations, including, but not limited to, the Colorado Workers' Compensation Act and federal and state tax laws. The Consultant certifies that it has complied, and during the term of this Agreement will continue to comply, with the Immigration Reform and Control Act of 1986.

The signature of the Consultant on this Agreement: (1) certifies that the Consultant is not a natural person unlawfully present in the United States; and (2) also certifies the statements below *if this is a public contract for services as defined in Colo. Rev. Stat. § 8-17.5-101, et seq., and the Consultant utilizes subcontractors or employees in the Consultant's business.*

- a. The Consultant shall not:
 - 1) Knowingly employ or contract with an illegal alien to perform work under this Agreement; or
 - 2) Enter into a contract with a subcontractor that fails to certify to the Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement.
- b. The Consultant has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement through participation in either the e-verify program or the department program (as defined in Colo. Rev. Stat. § 8-17.5-101, et seq.). The Consultant may not use either the e-verify program or the department program procedures to undertake preemployment screening of job applicants while this Agreement is being performed.

Insert Name of Consultant and/or Contract No.

- c. If the Consultant obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien, the Consultant shall:
 - 1) Notify the subcontractor and the Board within three days that the Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and
 - 2) Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to sub-subparagraph 1) of this subparagraph the subcontractor does not stop employing or contracting with the illegal alien; except that the Consultant shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.
- d. The Consultant shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to state law.
- e. The Consultant acknowledges that in the event the Consultant violates any of the provisions of the foregoing subparagraphs a – d, the Board may terminate this Agreement for breach of contract. If this Agreement is so terminated, the Consultant shall be liable for actual and consequential damages to the Board.

13. Safety and Security. The Consultant must comply with applicable safety and occupational health standards, specifications, reporting, and any other relevant requirements. The Consultant also must check in with the Board's Security personnel at each location, where applicable; display appropriate identification at all times while on the Board's premises; and notify the Board's Security personnel in writing in advance of any anticipated third-party deliveries with the name of the delivery person and the approximate time of arrival.

14. Personnel Screening.

At least five (5) working days before assigning an employee or agent to perform duties under this Agreement that require the employee or agent to work under circumstances presenting security concerns or to have access to the Board's sensitive information, proprietary computer programs, software or servers, the Consultant will submit the employee's or agent's name to the Board and certify on the Board-provided Certification of Personnel Screening form that no more than one (1) year prior to the assignment it performed a background check on the employee or agent, including a review of criminal history, and determined that the employee or agent does not pose a risk to persons or property. Consultant's determination should be based on guidance provided by the U.S. Equal Employment Opportunity Commission regarding the use of arrest and conviction history in employment decisions, which requires a weighing of (1) the nature and gravity of the offense or conduct, (2) the time that has passed since the offense, conduct or the employee's completion of any sentence given as a result of the offense, and (3) the nature of the job held or sought. Background checks must include a Colorado Bureau of Investigation (CBI) Criminal History Check, and, if the employee or agent has lived outside the State of Colorado or the United States during the last five (5) years, a criminal history check from each state or country of residence. For employees or agents who will have access to the Board's financial records and/or accounting processes, including purchasing, payables, receivables, and treasury or cash management, the Consultant also will conduct a credit history check on the employee or agent and certify on the Board-provided Certification of Personnel

Insert Name of Consultant and/or Contract No.

Screening form that the Consultant has determined that the employee or agent does not pose a risk to the Board. The Board reserves the right to direct the Consultant to assign another employee or agent, meeting the requirements of this paragraph, to perform the Work if the Board has reason to believe that during the term of the Agreement the assigned employee or agent engaged in criminal activity or was involved in financial improprieties, to be determined by the Board in its sole discretion.

15. Liability. The Consultant agrees to indemnify, hold harmless and defend the Board against any liability, damages, costs, expenses, claims, injuries and losses of whatever nature arising in any way out of this Agreement, including but not limited to any expenses incurred by the Board as a result of damages to the Board's property and any claims that the Creations, Prior Works or the Work infringe the intellectual property rights of a third party, to the extent caused by any negligent act or omission or willful misconduct of the Consultant or the Consultant's officers, subcontractors, agents, or employees.

16. Standards of Conduct – Nondiscrimination and Respectful Workplace. The Consultant agrees not to discriminate against any Board employee, or potential subcontractor or supplier because of race, color, religion, age, national origin, gender, sexual orientation, pregnancy, military status, marital status, or disability. The Consultant further agrees not to conduct business in a manner that brings discredit to the Board or creates a hostile or disrespectful work environment for Board employees, Board customers, or other contractors performing work for the Board. The Board reserves the right at its sole discretion to terminate this Agreement if the Consultant is an individual, or to direct the Consultant to assign another employee or agent to perform the Work, if the Board has reason to believe that during the term of the Agreement the Consultant, or the assigned employee or agent engaged in activity prohibited by this section.

17. Small Business Enterprises; Minority- and Women-Owned Business Enterprises. The Board recognizes the desirability, need and importance to the City and County of Denver of encouraging the development of Small Business Enterprises ("SBEs") and Minority- and Women-Owned Business Enterprises ("MWBEs"). The Consultant agrees to make a good faith effort to involve SBEs and MWBEs in the Work if and when the opportunity arises.

18. Acceptance Not Waiver. The Board's approval of studies, drawings, designs, plans, specifications, reports, computer programs and other work or materials does not in any way relieve the Consultant of responsibility for the technical accuracy of the Work. The Board's approval or acceptance of, or payment for, any Work is not a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

19. Termination or Suspension. The Board reserves the exclusive right to terminate or suspend all or any portion of the Work by giving fourteen (14) days' written notice to the Consultant. If any portion of the project shall be terminated or suspended, the Board shall pay the Consultant equitably for all Work properly performed pursuant to this Agreement. If the project is suspended and the Consultant is not given an order to resume work within sixty (60) days from the effective date of the suspension, this Agreement will be considered terminated. Upon termination, the Consultant shall immediately deliver to the Board any documents then in existence that have been prepared by the Consultant pursuant to this Agreement and that have been paid for by the Board.

20. Default. Every term and condition of this Agreement is a material element of this Agreement. In the event either party should fail or refuse to perform according to the material terms of this Agreement, such party may be declared in default by the other party by a written notice.

Insert Name of Consultant and/or Contract No.

21. Remedies. In the event a party has been declared in default, such defaulting party shall be allowed a period of fifteen (15) days within which to correct, or commence correcting, the default. In the event that the default has not been corrected or begun to be corrected, or the defaulting party has ceased to pursue the correction with due diligence, the party declaring default may elect to (a) terminate the Agreement and seek damages; (b) treat the Agreement as continuing and require specific performance; or (c) avail itself of any other remedy at law or equity. In the event the Consultant fails or neglects to perform the Work in accordance with this Agreement, the Board may elect to correct such deficiencies and charge the Consultant for the full cost of the corrections.

22. Force Majeure. The parties shall not be responsible for any failure or delay in the performance of any obligations under this Agreement caused by acts of God, flood, fire, war or public enemy. Any declared force majeure that remains in effect for longer than ninety (90) days entitles either party to unilaterally terminate this Agreement.

23. Assignment and Subcontracts. The Consultant may not assign this Agreement or any right or liability of this Agreement or enter into any subcontract or amend any subcontract related to this Agreement without prior written consent of the Board. Any subcontract must include language similar to the Records and Audits paragraph of this Agreement, requiring records to be adequate and available for Board audit. This Agreement shall bind and inure to the benefit of the parties and their respective successors and assigns. This Agreement is intended to benefit only the parties, and neither subcontractors nor suppliers of the Consultant nor any other person or entity is intended by the parties to be a third-party beneficiary of this Agreement.

24. Severability. If any provision of this Agreement is determined by a court having jurisdiction to be unenforceable to any extent, the rest of that provision and the rest of this Agreement will remain enforceable to the fullest extent permitted by law.

25. Venue and Governing Law. This Agreement shall be deemed performable in the City and County of Denver, notwithstanding that the parties may find it necessary to take some action outside the City and County. The sole venue for any dispute resulting in litigation shall be in the District Court in and for the City and County of Denver. This Agreement shall be governed by and construed under the laws of the State of Colorado.

26. Notice and Contact. The parties shall contact the persons listed below for all matters related to administration of this Agreement. All notices required or given under this Agreement shall be in writing and shall be deemed effective: (a) when delivered personally to the other party; or (b) seven (7) days after posting in the United States mail, first-class postage prepaid, properly addressed as follows; or (c) when sent by e-mail. If notice is provided by e-mail, the notifying party must follow up with a hard copy of the notice sent by United States mail; however, the notice will be effective as of the original e-mail date.

If to the Consultant:

Insert name of the Consultant
Insert mailing address of the Consultant
Insert e-mail address of the Consultant

Insert Name of Consultant and/or Contract No.

If to the Board:

Insert title of person responsible for contract

Denver Water Department
1600 West 12th Avenue
Denver, Colorado 80204

Insert e-mail address of person responsible for contract

or such other persons or addresses as the parties may have designated in writing.

27. Charter of the City and County of Denver. This Agreement is made under and conformable to Article X of the Charter of the City and County of Denver, which controls the operation of the Denver Municipal Water System. The Charter provisions are incorporated by this reference and supersede any apparently conflicting provisions otherwise contained in this Agreement.

28. Governmental Immunity Act. The parties understand and agree that the Board is relying upon, and has not waived, the monetary limitations and all other rights, immunities and protections provided by the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, et seq., as it may be amended from time to time.

29. Entire Agreement. This Agreement constitutes the entire agreement between the Board and the Consultant and replaces all prior written or oral agreements and understandings. It may be altered, amended, or repealed only by a duly executed written instrument.

30. Effective Date. This Agreement shall become effective on the date it is fully signed by the Board.

31. Electronic Signatures and Records. The Consultant consents to the use of electronic signatures by the Board. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically in the manner specified by the Board. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

Insert Name of Consultant and/or Contract No.

THEREFORE, the parties have executed this Agreement. This Agreement must have the signature of an authorized representative of the Consultant.

ATTESTED:

**CITY AND COUNTY OF DENVER,
acting by and through its
BOARD OF WATER COMMISSIONERS**

By: _____
Secretary

By: _____
CEO/Manager

DATE: _____

APPROVED:

REGISTERED AND COUNTERSIGNED:
CITY AND COUNTY OF DENVER

By: _____
Chief of Engineering

By: _____
Timothy M. O'Brien, CPA
Auditor

APPROVED AS TO FORM:

By: _____
Office of General Counsel

SAMPLE

Insert Name of Consultant and/or Contract No.

THIS AGREEMENT IS ACCEPTED BY:

CONSULTANT: Insert name of the Consultant

By execution, signer certifies s/he is authorized to bind the Consultant to the terms of this Agreement.

By: _____

DATE: _____

TITLE: _____
[for other than individual]

For Board records only, Consultant shall check the applicable box(es) below:

- Consultant is a Small Business per federal SBA guidelines
- Consultant is not a Small Business per federal SBA guidelines
- Consultant is a Minority-owned Business Enterprise (MBE) and/or Women-owned Business Enterprise (WBE) per _____ (name of certifying entity)
- Consultant is not an MBE or WBE
- Consultant elects not to answer this question

If Consultant is an MBE and/or WBE, Consultant must submit evidence of certification from an agency such as the City and County of Denver or the Mountain Plains Minority Supplier Development Council.

(If Contractor/Consultant/Company is an individual, the "Affidavit of Lawful Presence in the U.S." attached to this template and proof of identity are also required.)

(If Contractor/Consultant/Company is not an individual (e.g. corporation), you may disregard the Affidavit at the end of this template, and no proof of identity is required.)

YOU MUST INCLUDE THE NOTARIZATION BELOW FOR CONTRACTORS WHO ARE PERFORMING THE WORK AS INDIVIDUALS AND NOT AS A SEPARATE LEGAL ENTITY. FOR ALL OTHER CONTRACTORS, THE NOTARIZATION BELOW MAY BE DELETED.

CONSULTANT'S SIGNATURE MUST BE NOTARIZED BELOW:

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 201__, by INSERT NAME OF THE CONSULTANT.

Witness my hand and official seal. My commission expires: _____

(SEAL)

Notary Public

Insert Name of Consultant and/or Contract No.

**EXHIBIT A
SCOPE OF WORK**

The Consultant shall perform the following tasks:

Insert description of the scope of work, reiterate work requirements from RFP, or attach the scope of work from the Consultant's proposal.

SAMPLE

Insert Name of Consultant and/or Contract No.

**EXHIBIT B
PROJECT SCHEDULE**

SAMPLE

Insert Name of Consultant and/or Contract No.

**EXHIBIT C
DETAILED FEE ESTIMATE**

SAMPLE

Insert Name of Consultant and/or Contract No.

**EXHIBIT D
CERTIFICATE OF PERSONNEL SCREENING BY CONSULTANT**

SAMPLE

Insert Name of Consultant and/or Contract No.

CERTIFICATION OF PERSONNEL SCREENING BY CONSULTANT/CONTRACTOR

To be completed by the Board's Contract Administrator:

Contract No: _____ Consultant/Contractor: _____

The work under the Agreement involves:

(Check one or more and describe the duties in the spaces provided, and check the corresponding numbered box in the Consultant/Contractor section below.)

- 1. Operating a Board vehicle *(driving record and license check required)*
- 2. Performing work involving security concerns. Describe duties: _____

(criminal background check required)
- 3. Accessing Board's financial records or accounting processes *(credit check required)*
- 4. Performing safety-sensitive work. Describe duties: _____

(criminal background check and drug and alcohol screening required)

To be completed by the representative of Consultant/Contractor:

Name of Employee/Agent: _____ Start Date of Work for Board: _____

I, _____, as a representative of the Consultant/Contractor, certify that the above-named employee or agent of the Consultant/Contractor is assigned to complete the work described above and (check the applicable options below):

- 1. Has a valid Colorado driver's license and a satisfactory driving record, defined as having no more than six (6) points on his/her driving record in the three (3) years prior to the assignment. *(Applies if work involves operating a Board vehicle.)*
- 2. Has been the subject of a background check no more than one (1) year prior to the assignment, and I have determined that he/she does not pose a risk to persons or property. Background checks must include a Colorado Bureau of Investigation (CBI) Criminal History Check, and, if the employee or agent has lived outside the State of Colorado or the United States during the last five (5) years, a criminal history check from each state or country of residence. *(Applies if work involves security concerns or safety-sensitive duties.)*
- 3. Has been the subject of a credit history check, and I have determined that he/she does not pose a risk to the Board. *(Applies if work involves accessing the Board's financial records or accounting processes.)*
- 4. No more than one (1) month prior to the assignment under this contract, he/she passed a drug and alcohol screening performed at a certified testing facility using a Rapid Screen test (negative results only will be accepted) or by a federally certified laboratory using a Federal (HHS, FMCSA or DOT) 5-Panel Drug Test. *(Applies if work involves safety-sensitive duties.)*

Under penalty of perjury, I swear the above statements are true and correct.

Signature: _____ Date: _____

Phone: _____ E-mail: _____

Approval by the Board's Contract Administrator:

Print Name: _____

Signature: _____

Date: _____

Insert Name of Consultant and/or Contract No.

