

Exhibit A
Statement of work
Water Activity Name- Leon Park outlet gate structure repair

Grant Recipient-Leon Park Reservoir Company

Funding Source-Gunnison Basin Roundtable Account

Introduction and Background

Leon park reservoir is located on the grand mesa next to Leon Lake. It has an 1894 decree date, priority number eleven on the surface creek drainage system. The dam has an approximate height of 24 feet. When completely full the reservoir holds 219.61 acre-feet of water. In 2009 a sinkhole was observed just behind the gate structure. A video camera was used to investigate cause of said sinkhole. The camera revealed that the original conduit had separated from the concrete gate structure do to settling. Further study and tests conducted by Norm Aufderheide (Buckhorn Geotech) and Jason Ward (Division Engineer) revealed conduit to be in satisfactory condition , other than detachment from gate structure. Based upon these findings Norm Aufderheide recommended that a new gate structure should be attached to existing conduit to remedy said situation. This course of action has been approved by Jason Ward .

Objectives

The objectives for this project are as follows:

1. Permanently attach a newly precast gate structure to existing conduit.
2. Install new wheelhouse and gate stem-pipe to said gate structure.
3. Improve downstream outlet to allow for improved monitoring. (Downstream side is so flat there is a pool of water. Said conduit is under water impairing visual observation of conduit.)

To remove dam restriction to allow full storage of Leon Park Reservoir.

Tasks

Task 1 – Obtain approved plans from Buckhorn Geotech.

Description of Task

Norm Aufderheide will prepare plans under supervision of Jason Ward for accomplishment of objectives.

Procedure

Working under strict guidelines of state approval, Norm Aufderheide shall prepare a set of state approved plans for permanent attachment of a precast concrete gate structure to existing dam outlet conduit. Plans shall include all types of materials to be used and amounts.

Deliverable
Norm Aufderheide (Buckhorn Geotech)

Task 2 – Purchase of Head gate and Gate-stem pipe

Description of Task

- Purchase head gate specified in State approved plans
- Purchase gate-stem pipe specified in state approved plans

Deliverable
Contractor

Task 3 – Gate Structure

Description of Task

Construct a concrete gate structure

Procedure

- Purchase rebar steel reinforcement
- Purchase necessary materials to construct concrete forms
- Purchase Concrete
- Construct forms around shaped and tied rebar (spacing determined by plans)
- Pour concrete into form
- Cure concrete

Deliverable

A concrete gate structure will be poured in strict adherence to state approved plans. The gate structure will be poured into a form and strict attention to curing of concrete shall be paid. Also special attention shall be paid to attachment of head gate and gate-stem.

Contractor under supervision of Buckhorn Geotech

Task 4 – Wheelhouse Structure

Description of Task

The new wheelhouse at the top of dam is to be made of metal bracing, prefabricated and hauled to site.

Procedure

- Purchase Steel bar stock
- Purchase any miscellaneous items (Stainless steel bolts, nuts etc.)
- Fabricate all parts and assembly pieces

Deliverable

Contractor under supervision of Buckhorn Geotech

Task 5 – Procurement of Gate-stem supports

Description of task

Steel pipe and angle iron supports are to be placed along the slope of the dam to attach the gate-stem pipe securely.

Procedure

- Purchase specified steel pipe and angle iron
- Purchase any miscellaneous items (U-clamps, etc.)

Deliverable

Contractor / according to State approved plans

Task 6 – Delivery of Parts and Materials to Work Site

Description of task

Precast gate structure, gate-stem pipe, head gate, wheelhouse and other miscellaneous materials transported to worksite.

Procedure

Load all materials onto contractor's truck for transport

Deliverable

Contractor

Task 7 –Install Gate Structure

Description of Task

Excavation of dam to expose conduit and permanently attach gate structure.

Procedure

- Excavate dam directly behind existing gate structure
- Remove damaged section of conduit

- Remove old gate structure
- Compact earth where new gate structure is to be placed
- Set new gate structure into place
- Attach PVC pipe to existing conduit and new gate structure (According to State plans)

Backfill and compact dam.

Deliverable

Contractor under supervision of engineer

Task 8 –Installation of Wheelhouse

Description of task

Removal of wooden bracing to install new steel wheelhouse

Procedure

- Remove existing wooden wheelhouse
- Assemble and install new wheelhouse

Deliverable

Contractor under supervision of engineer

Task 9 – installation of New Gate-stem pipe

Description of task

Remove existing gate stem and install new

Procedure

- Remove existing gate-stem and supports
- Install new supports
- Attach new gate-stem to head gate and wheelhouse
- Attach new gate-stem to new gate stem supports

Deliverable

Contractor under supervision of engineer

Task 10 – Improvement of Downstream Outlet

Description of task

Improvement of stilling pool to allow for improved monitoring of conduit and dam

Procedure

- Excavate stilling pool to lower water level so conduit can be observed

- Attach any improvement /brace (pending State plans)

Deliverable

Contractor under supervision of engineer

Exhibit "A"

**Work, budget, and Schedule
Leon Park Reservoir Dam Outlet Repair**

Work Description	Task	Provider	Cost
Evaluation	Excavation	Fritchman Excavation	\$3,000.00
	Rental		\$745.36
	Robot Camera		\$700.00
	Buckhorn Geotech	Engineering	\$3,462.50
	Misc cost		<u>\$315.50</u>
		Total	\$8,223.36
Engineering	Site review, design, Oversight, Reports	Buckhorn Geotech	\$9,100.00
Intake Structure	Material & precasts	Buckhorn Gertech	\$5,900.00
Gate Stem Structure	Headwheel, Gate Stem	Buchhorn Geotech	\$12,500.00
Improve Outlet	Precast Structure	Buckhorn Gertech	\$3,500.00
Mobilization		Buckhorn Geotech	\$4,000.00
Construction	Excav/transport	Fritchman Excavation	\$10,500.00
Contingency			<u>\$5,372.00</u>
Grand Total			\$59,095.36

Funding

Leon Park Reservoir	\$12,723.36
Colorado River District	\$15,000.00
Gunnison Roundtable	\$31,372.00

Schedule of Repairs for Leon Park Reservoir

May 2013	Finalize Engineering Plans and apply for Permits
May – July 2013	Head gate Structure Fabrication
May- July 2013	Gate Stem And Wheelhouse Fabrication
August-October 2013	Install Head gate Structure and Attach to Existing Conduit
August –October 2013	Install Wheelhouse Structure to top of dam
August – October 2013	Connect Gate valve to Gate Stem and Wheelhouse
August – October 2013	Improve outflow Structure and Stilling Pool
October-January 2014	Complete Post Construction Reports