

# Revised Scope of Work

## Project Name: Molas Lake Ditch Rehabilitation and Diversion Structures

Submitted by the Town of Silverton, CO

June 2, 2011

### Scope of Work

#### **Task 1 (the Town is NOT requesting money for this task)**

- *Description of task:* Complete dam and recreation improvements at Molas Lake Park
- *Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task:*
  - Complete dam improvements per state and federal permits and contract with the Department of Local Affairs
  - Complete recreation improvements at Molas Park per contract with Great Outdoors Colorado
- *Description of the major deliverables/products that will be produced upon successful completion of the task:*
  - Completed, backfilled dam, including “as-builts” of those structures submitted to state.
  - Completed recreation improvements, including campsites, privies, dump station, etc.

#### **Task 2**

- *Description of task:* Complete wetland mitigation required per Army Corps Permit (Revegetation, wetland mitigation, and ditch stabilization)
- *Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task:*
  - Revegetate or stabilize all ground where soil has been exposed.
  - Control any potential spread of noxious weeds.
  - Reseed with weed-free seed mix
  - Work to be completed by Alpine Environmental Services, currently under contract for dam improvements at Molas Lake
- *Description of the major deliverables/products that will be produced upon successful completion*

*of the task:*

- Provide narrative and/or photos of revegetation areas including certification of weed-free revegetation.

### **Task 3**

- *Description of task:* Complete rehabilitation of Molas Ditch
- *Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task:*
  - Remove vegetation to limit potential clogging around ditch
  - Remove clogs and roots in ditch bottom
  - Modify grade to improve capacity and freeboard and reduce or eliminate overflow/clogging
  - Work to be completed by Brian Fullmer Construction of Silverton
- *Description of the major deliverables/products that will be produced upon successful completion of the task:*
  - Satisfaction of Forest Service permit conditions regarding use of public land
  - Narrative and photos of rehabilitation of ditch.

### **Task 4**

- *Description of task:* Install structures and equipment
- *Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task:*
  - Using the approved engineered drawings and specifications provided by Engineer Mountain, Maisel Excavation will install and test the following:
    - Diversion structure
    - Waste gate
    - Measuring flume
  - The structures and equipment will be installed at the locations specified in the Forest Service Permit and BLM Use Permit, attached.
- *Description of the major deliverables/products that will be produced upon successful completion of the task:*
  - Narrative and photos of all structures and equipment
  - Final “as-built” plans prepared by “Engineer Mountain,” project engineers
  - Satisfaction of conditions of all state and federal permits
  - Operational ability of dam and ditch

## Project Budget

<i><b>Description</b></i>	<i><b>Cost</b></i>	<i><b>Quantity</b></i>	<i><b>Unit</b></i>	<i><b>Total</b></i>
<b><u>Wetland Mitigation</u></b>				
Environmental Consulting	\$ 90.00	15	hours	\$ 1,350.00
Man hours	\$ 35.00	100	hours	\$ 3,500.00
Seed / mulch	\$ 600.00	1	lump sum	\$ 600.00
Mini excavator	\$ 80.00	8	hours incl labor	\$ 640.00
Bobcat / skidsteer	\$ 100.00	12	hours incl labor	\$ 1,200.00
			<b>Total</b>	<b>\$ 7,290.00</b>
<b><u>Ditch Rehabilitation</u></b>				
Mini excavator	\$ 100.00	10	hours incl labor	\$ 1,000.00
Bobcat / skidsteer	\$ 80.00	18	hours incl labor	\$ 1,440.00
Man hours	\$ 35.00	100	hours	\$ 3,500.00
Monitroing	\$ 50.00	33	hours	\$ 1,650.00
			<b>Total</b>	<b>\$ 7,590.00</b>
<b><u>Structures and measuring</u></b>				
2" Measuring Flume	\$ 4,450.00	2	each incl labor	\$ 8,900.00
9" Parshall Flume	\$ 12,184.00	1	lump sum incl labor	\$ 12,184.00
SRW Waste Gate	\$ 17,952.00	1	Lump sum (340 ft <sup>2</sup> face incl labor)	\$ 17,952.00
Adjustable and fixed weirs, stop logs and appurtananances at diversion point waste gate	\$ 22,973.60	1	lump sum incl labor	\$ 22,973.60
Adjustable and fixed weirs and appurtananances at second waste gate	\$ 15,348.80	1	lump sum incl labor	\$ 15,348.80
Ongoing monitoring by engineer	\$ 50.00	55	hours	\$ 2,750.00
			<b>Total</b>	<b>\$ 80,108.40</b>
			<b>Grand Total</b>	<b>\$ 94,988.40</b>

## Project Schedule

Task or Sub-task	By	Due Date
Finalize permitting and monitor state/federal permitting requirements	Engineer Mountain, Inc.	Ongoing
Complete installation of dam (slidegate, top of box culvert, fill, safety railing)	Maisel Excavation	June 15, 2009
Verify all permitting requirements for Dam are met	Engineer Mountain, Town of Silverton	June 31, 2009
Finish wetland mitigation as required for dam and ditch approvals per the Army Corps of Engineers	Alpine Environmental Services	June 31, 2009
Begin ditch improvements <b>Milestone 1: Earthwork Begins</b>	Maisel Excavation	August 17, 2009
Improvements to Molas Ditch incl. clear ditch bottom, remove vegetation, grade to improve capacity and reduce spillage. Work completed as required by the Forest Service federal lands permit and BLM use permit (COC 73198) <b>Milestone 2: Ditch Improvements Complete</b>	Maisel Excavation	August 31, 2009
Complete construction and installation of diversion structure and waste gates <b>Milestone 2: Diversion structure and measure flume in place.</b>	Maisel Excavation	September 14, 2009
Install measuring flumes and complete any remaining ditchwork and vegetation removal <b>Milestone 3: Major work to ditch complete, structures in place water is able to be measured and regulated.</b>	Maisel Excavation	July 15, 2011
Monitor permit compliance	Engineer Mountain	Ongoing
Submit final "as-builts" for ditch improvements as/if required per federal permits <b>Milestone 4: Submit as-builts</b>	Engineer Mountain	October 31, 2011
Close out project	Town of Silverton	November 30, 2011