COLORADO
Colorado Water Conservation Board
Department of Natural Resources

1313 Sherman Street, Room 721
Denver, CO 80203

August 7, 2014

Stewart Mesa Water Company
Attn: Dave Herz, President
P.O. Box 1315
Paonia, CO 84428

RE: Notice to Proceed – WSRA Grant – Stewart Mesa Water Company Improvement Project in the Gunnison River Basin

Dear Dave:

This letter is to inform you that the purchase order request for the WSRA grant to assist in the Stewart Mesa Water Company Improvement Project in the Gunnison River Basin was approved on August 6, 2014.

With the executed purchase order, you are now able to proceed with the project and begin invoicing the State of Colorado for costs incurred through December 31, 2014. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 45 days. I wish you much success in your project.

Sincerely,

/s/

Craig Godbout
Program Manager
Colorado Water Conservation Board
Water Supply Planning Section
1313 Sherman St, Rm. 721
Denver CO 80203
(303) 866-3441, ext 3210 (office)
(303) 547-8061 (cell)
craig.godbout@state.co.us

Attachments

PURCHASE ORDER GRANTS GIVEN
STATE OF COLORADO
Department of Natural Resources

ORDER
Number: POGG1 PDAA 20150000000000000125
Date: 08/07/14
Description:
PDAA2500WSRA Stewart Mesa Wtr Co Improve Project in Gunn

BUYER
Buyer: Vigil Dori
Email: dori.vigil@state.co.us

VENDOR
STEWART MESA WATER COMPANY
PO BOX 1315
PAONIA, CO 81428

Contact: .
Phone: .

**** IMPORTANT ****
The order number and line number must appear on all invoices, packing slips, cartons and correspondence

BILL TO
COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718

DENVER, CO 80203

SHIP TO
COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718

DENVER, CO 80203

SHIPPING INSTRUCTIONS
Delivery/Install Date:
F.O.B:
VENDOR INSTRUCTIONS:

Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	$0.00	$12,876.00	☐

Description: PDAA2500WSRA Stewart Mesa Wtr Co Improve Project in Gunn
Start Date: 08/06/14 End Date: 12/31/14

TERMS AND CONDITIONS
https://www.colorado.gov/osc/purchase-order-terms-conditions

REASONS FOR MODIFICATION
Change Order No: 1
Change Buyer

DOCUMENT TOTAL = $12,876.00

Exhibit A

Statement of Work

WATER ACTIVITY NAME – Stewart Mesa Water Company Improvement Project

GRANT RECIPIENT – Stewart Mesa Water Company (SMWC)

FUNDING SOURCE - Water Supply Reserve Account – Basin Account

1. INTRODUCTION

The SMWC began providing shareholders agricultural and domestic water before 1906 and was incorporated in 1909. SMWC is operated as a consecutive water system by direct connection to an 8" water main owned by the Town of Paonia, in Delta County. Originally, SMWC had about 30 taps. Today the system has 79 taps of which 75 are active. Ownership in the Company is represented with the recite of a stock certificate. Each stock certificate represents two shares. One share is for the member's household use and the other share is for the watering of livestock and other limited agricultural use. All system related work, including repairs and /or infrastructure improvements, is completed by company volunteers or a combination of contractors and volunteers. Our project consists of two specific tasks as follows:

- Task 1 – Installation of improvements to the Main Line, the McFarland Service Branch, and the Travie Service Branch.
- Task 2 – Complete an engineering analysis of our delivery system defining issues such as system capacity, improvements required to increase capacity, prioritizing improvements to reduce maintenance and enhance system sustainability, leak analysis including recommendations for leak reductions and recommendations on providing water for firefighting support.

2. OBJECTIVES

The project objectives include:

- Completing improvements on the Main Line, and the McFarland and Travie Service branches
- Completing an engineering analysis of the entire delivery system
- Improve water efficiency and reduce cost for the 79 share holders

3. Stewart Mesa Water Company (SMWC) Improvement Project

Background

The funding being requested by SMWC is to be used in two areas in the water distribution system. The first being the completion of the system monitor meter program by installing the last two monitor meters. The installation of monitor meters completes a system-wide water auditing tool used in the company's leak detection program. The second part of our funding request will complete a system engineering analysis of the entire water system. Our hundred-plus-year-old system has been enlarge and extended multiple times. At no time has a hydraulic analysis been performed. Contemporary system water load demands require the company have an expanded knowledge of the systems strengths and weaknesses. We can no longer make accurate infrastructure improvement or expansion decisions without the information the analysis will provide. Additionally, leak detection and control are high priority issues for SMWC as we are presently leaking approximately 25 % of purchased water. The funding requested will enable the company to implement our plan to get leakage under 10%. The proposed system analysis will define structural improvements to eliminate leak issues and better ways to identify, locate, and repair leaks.

TASK 1 – Installation of Improvements on the Main Line, and McFarland and Travie Branches
Description of Task
Task 1 will complete the installation of monitor meters at the McFarland and Travie Branches and improvements to the main line. These improvements will result in reduced maintenance costs, increased system reliability and increased system leak detection.

Task 1 Phase A will be the McFarland service branch installation. This effort will start at the diversion point from the main company line and will include shutoff valves, a pressure reduction device, a monitor meter and a pressure gage. Additionally, a main line pressure reduction device will be installed at this location to provide a redundancy in main line water control. This main line pressure reduction device installation will include shut off valves, a strainer, a pressure reduction device, and pressure gages.

Task 1 Phase B will be the Travie service branch installation. This effort will start at the diversion point from the main company line and will include shutoff valves, a pressure reduction device, a monitor meter and a pressure gage.

Method/Procedure
As with all infrastructure improvements or modifications the SMWC Board identified the need and developed a working budget and associated work scope. The installation complexity at the McFarland service line requires that the effort be done with both SMWC volunteer labor and a contractor with potable water installation expertise. The installation at the Travie service branch is less complex and will be completed by SMWC volunteer labor and shareholder equipment. The installation process to be used on the Travie branch has been used successfully numerous times before by SMWC.

A design with the necessary components has been determined as well as the installation layouts. These efforts determine the size of the underground vault that will have to be used. SMWC places installations of this type in underground water-proof concrete vaults for protection and easier maintenance. Materials will be ordered and inventoried and an assembly procedure determined. A state inspector will be on hand during the course of installation to ensure compliance with state potable water installation procedures. After installation, operational pressure reduction devices will be balanced before the water system is activated.

Deliverable
The installation processes and results will be delivered in the final report.

TASK 2 – Engineering Analysis
Description of Task
The purpose of this task is to complete an engineering analysis of our delivery system defining issues such as:

- Current system capacity and improvements required to increase capacity,
- Prioritizing improvements to reduce maintenance requirements and enhance system sustainability,
- Leak analysis including recommendations for leak reductions
- System modification requirements for delivery of firefighting water support

Method/Procedure
The starting point for the analysis will include:

- Current delivery system drawings, including identification of all repairs and modifications completed since the completion of the drawings
- Current system requirements defined in our contract with the Town of Paonia

The analysis effort will include evaluation of current system capacity, recommendations on operational pressures throughout the system, long-term maintenance, leak analysis and recommendations to reduce leaks, water tank storage requirements for firefighting support, and other items to be defined. The engineering analysis process will incorporate the latest analysis technologies that have been proven successful in the evaluation of water delivery systems.

SMWC will release a competitive procurement for the water system analysis effort from among engineering firms such as McLaughlin Engineering, Tetra-Tec and Buckhorn Geotech. The selection process will be based on a best-value approach and will not be based strictly on cost. Engineering capabilities and past performance will be weighted equally with the bid cost. The least risk, best-value proposal will be selected for award. The winning firm will be selected based on demonstrated engineering capabilities and proven past performance at a level that minimizes the risks of the project. The draft analysis report review process will include a review by board of SMWC, which includes three engineers.

Deliverable
The engineering analysis will be delivered in the final report. All analysis efforts and approach methods will be documented. All models and data used in the analysis process will be supplied.

TASK 3 – Final Report
Description of Task
The effort of this task is to compile and document all of the activities of this project.

Method/Procedure
The results of the first two tasks of the project will be documented in detail for the final report. The final report will be reviewed and approved by the Board of SMWC.

Deliverable
The final report is the deliverable.

4. REPORTING AND FINAL DELIVERABLE

SMWC shall provide a progress report every 6 months, beginning from the date of the executed contract. Our progress reports shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues. All deliverables defined for the tasks will be delivered in the progress reports.
At completion of the project, SMWC shall provide a final report that summarizes the project and documents how the project was completed. Our report may contain photographs, summaries of meetings, engineering reports/designs, and deliverables defined for each task.

5. PROJECT BENEFITS

The completion of this project will result in the following benefits:

- Reduced maintenance costs
- Reduced cost of water to users
- Increased system reliability
- Increased system leak detection
- Conservation of water
- A complete engineering analysis of the current system with multiple recommendations for system improvements and the requirements for the firefighting water delivery

6. PROJECT SUPPORTERS

The Town of Paonia and the Paonia Fire Department are supporting this project. See Exhibit C for their letters of support.

7. BUDGET

The total project funds are given in the Grant Request Table. A total project budget by task is given in the following Table.

Grant Request Table			
Funder	Dollars funded	Status	Funding work areas
Water Supply Reserve Account – GBRT Basin	$12,876	Proposal submitted	Task 1B - $2,000 Task 2 - $10,876
Colorado River District	$11,124	Proposal submitted	Task 1A - $7,000 Task 2 - $4,124
SMWC	$9,100	Cash in hand	Task 1A - $7,100 Task 1B - $2,000
SMWC	$6,800	In-kind Labor	Task 1, 2 & 3
Paonia Fire Department	$720	In-kind Labor	Task 2
Total Project Costs	$40,620		

GBRT's total cost is $12,876. The total cost share is $27,744. The cost share percentage is 68.3%.

SMWC Improvement and Analysis Project			
Task	ODC	In-Kind	Total
Task 1	$18,100	$3,000	$21,100
Task 2	$15,000	$3,720	$18,720
Task 3		$800	$800
Total	$33,100	$7,520	$40,620

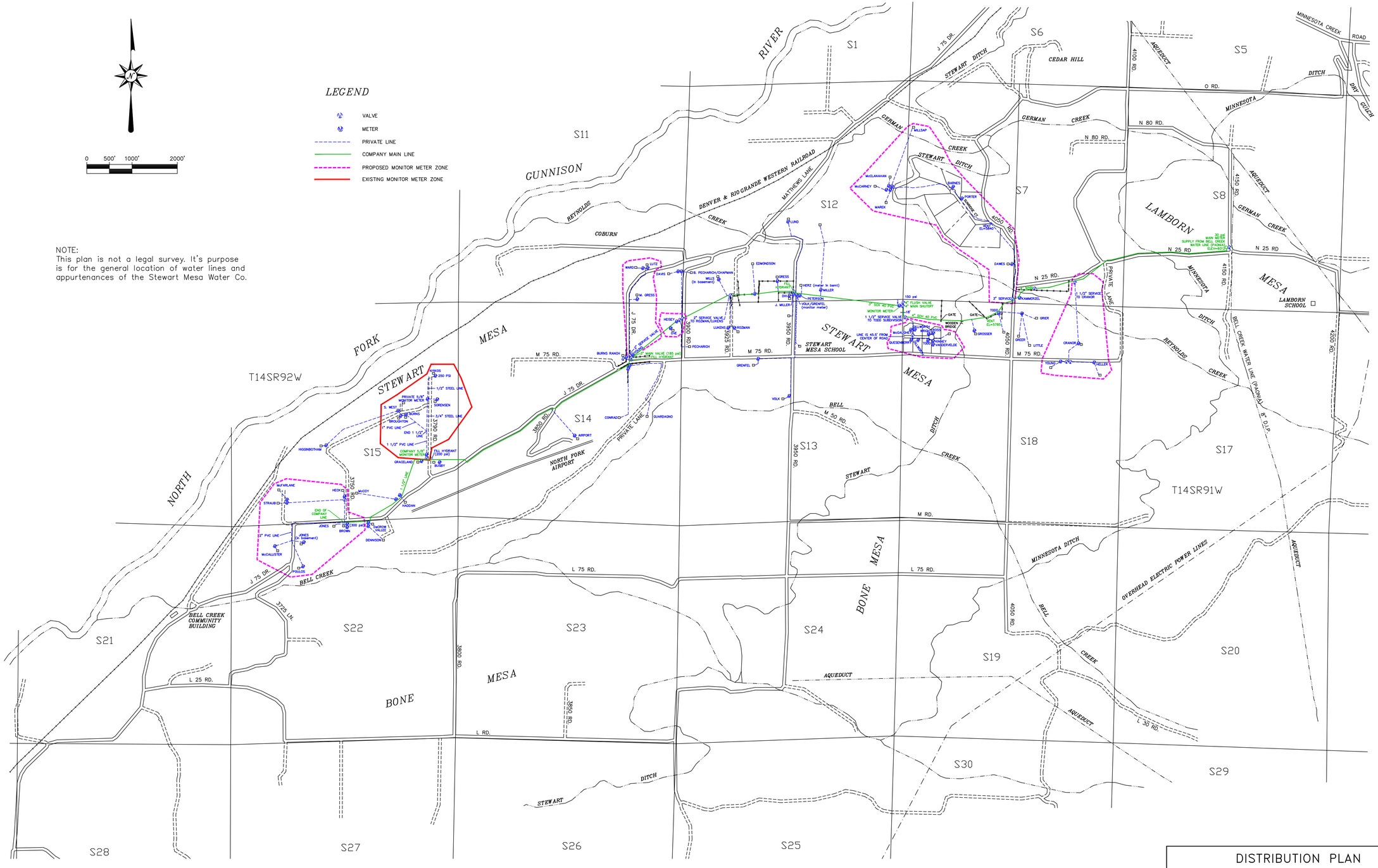
ODC includes
Task 1 – Construction/Installation subcontract and parts – $18,100
Task 2 – Engineering subcontract – $15,000

In-kind Match							
Task	SMWC Hours	$ per hour	SMWC Total	PFD Hours	$ per hour	PFD Total	Total
Task 1 A	14	$50	$700				$700
Task 1 B	46	$50	$2,300				$2,300
Task 2	60	$50	$3,000	16	$45	$720	$3,720
Task 3	16	$50	$800				$800
Total	136		$6,800				$7,520

Task 1A – Construction and Installation Management hours
Task 1B – Construction and Installation Labor and Management hours
Task 2 – Request for Proposal writing, contractor selection, engineering analysis management and support hours
Task 3 – Writing final report hours

Revised schedule

Task	Start Date	Finish Date
SMWC Improvement Project	3/15/2014	12/15/14
Task 1 – Main and Branch Improvements	3/15/2014	7/30/2014
Task 1 Phase A McFarland Branch	4/15/2014	5/25/2014
Task 1 Phase B Travie Branch	8/15/2014	9/30/2014
Task 2 – System analysis	8/15/14	11/30/14
Task 2/Phase 1 Analysis subcontract award	8/15/14	8/25/14
Task 2/Phase 2 Analysis Effort	8/26/14	11/30/14
Task 3 – Final Report	10/1/14	12/20/14



THIS DRAWING REPRESENTS THE OFFICIAL COMPANY MAP OF COMPANY MAIN LINES AND PRIVATE LINES AS OF FEBRUARY 20, 2006

PRESIDENT
STEWART MESA DOMESTIC
WATER COMPANY

DISTRIBUTION PLAN

STEWART MESA DOMESTIC WATER COMPANY

DRAWING BY	DATE	SCALE
G. GILLILAN	2/14/06	AS SHOWN
APPROVED BY	DATE REV. - REV. NO	ACAD DWG NO.
C. NYIKOS		Smdwc.DWG