



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718  
Denver, CO 80203

October 21, 2016

Animas Consolidated Ditch Company  
Attn: Ed Zink, Board Member  
Attn: Carrie Lile, Engineering Consultant  
P.O. Box 3777  
Durango, Co 81302

RE: Notice to Proceed – WSRF Grant – **POGG1 2017-491 – 48 inch Culvert Replacement Project**

Dear Ed and Carrie,

This letter is to inform you that purchase order to assist in the above WSRF grant project has been approved. The email notice and attachments serve as your original contract documents.

With the executed purchase order you are now able to proceed with the project and invoice the State of Colorado for costs incurred through July 31, 2107. Please provide the project name, POGG1 number, and basin when corresponding with or invoicing for your project. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 30 days after review and signed approval of the project manager.

Please refer to the WSRF Criteria & Guidelines for reporting requirements for the six month progress report and final deliverable requirements in order to avoid a delay in payment.

If you have any questions or concerns regarding the project, please contact Craig Godbout, Project Manager at 303-866-3441 x3210 or at [craig.godbout@state.co.us](mailto:craig.godbout@state.co.us). You can contact me at 303-866-3441 ext. 3250 for invoicing and payment disbursement questions.

Thank you.

Sincerely,

//s//

**Doriann Vigil**

**Program Assistant II**

O 303-866-3441 ext. 3250

1313 Sherman Street, Rm. 719, Denver, CO 80203

[Dori.vigil@state.co.us](mailto:Dori.vigil@state.co.us) / [cwcw.state.co.com](http://cwcw.state.co.com)

Attachments





STATE OF COLORADO  
Department of Natural Resources

<b>ORDER</b>				<b>** IMPORTANT **</b>		
Number: POGG1 PDAA 201700000491				The order number and line number must appear on all invoices, packing slips, cartons and correspondence		
Date: 10/21/16						
Description: PDAA 2500 WSRF 48 in Culvert Replacement Project in the SW				<b>BILL TO</b>		
Effective Date: 10/24/16      Expiration Date: 07/31/17				COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203		
<b>BUYER</b>				<b>SHIP TO</b>		
Buyer:				COLORADO WATER BOARD CONSERVATION		
Email:				1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203		
<b>VENDOR</b>				<b>SHIPPING INSTRUCTIONS</b>		
ANIMAS CONSOLIDATED DITCH COMPANY PO BOX 3777 DURANGO, CO 81302-3777				Delivery/Install Date:		
Contact: .				F.O.B: FOB Dest, Freight Allowed		
Phone: .				<b>VENDOR INSTRUCTIONS:</b>		
<b>Line Item</b>	<b>Commodity/Item Code</b>	<b>UOM</b>	<b>QTY</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>MSDS Req.</b>
1	G1000		0	0.00	\$34,354.00	<input type="checkbox"/>
Description: PDAA 2500 WSRF 48 in Culvert Replacement Project in the SW						
Service From: 10/24/16      Service To: 07/31/17						
<b>TERMS AND CONDITIONS</b>						
<a href="https://www.colorado.gov/osc/purchase-order-terms-conditions">https://www.colorado.gov/osc/purchase-order-terms-conditions</a>						
<b>DOCUMENT TOTAL = \$34,354.00</b>						

## **Scope of Work** - EXHIBIT A

**WATER ACTIVITY NAME – ACDC 48 inch Culvert Replacement Project**

**GRANT RECIPIENT – Animas Consolidated Ditch Company**

**FUNDING SOURCE – Basin Account Water Supply Reserve Account**

### **INTRODUCTION AND BACKGROUND**

The Animas Consolidated Ditch Company owns and operates the Animas Consolidated Ditch, which serves the west side of the Animas River Valley between Baker's Bride and Durango. The ditch company has been in operations for over 100 years and has a diversion water right of 91 cfs which provides irrigation and other water uses to roughly 3,000 acres.

An existing squash culvert, within the Animas Consolidated Ditch delivery system, is a corrugated metal pipe with a diameter of 4 feet. The squash culvert delivers 30 cubic feet per second of water to approximately 1,000 acres of irrigated land. This culvert is one of many within the delivery system. The 84 foot long squash culvert is failing; the bottom is being crushed upwards creating exposed, rough metal edges creating turbulent flow and trash traps. The project proposes replacing the existing culvert with a concrete culvert of similar diameter and length. The existing culvert is sandwiched between an old historic home and County Road 203. It is a difficult location and therefore requires significantly more resources for construction than a typical culvert replacement. Due to the close proximity of the home and road, pre-construction surveying and engineering design are necessary.

### **OBJECTIVES**

The project objectives are to design, construct and replace the 84 foot long 48 inch squash culvert. The site will be surveyed and an engineered design will be produced. A construction company familiar with this type of installation work will be contracted. The construction will be overseen by the design engineer to ensure the project is completed as designed.

### **TASKS**

Provide a detailed description of each task using the following format.

#### **TASK 1 – Surveying and Site Assessment**

##### Description of Task

A cursory survey was conducted to determine the gradient of the existing squash culvert. This survey provided adequate data to NRCS to determine the required diameter (4 feet) to deliver 30 cubic feet per second. Due to the location of the culvert, close proximity to a home and county road, cross sectional surveying of the project area is necessary. The design engineer will conduct a site assessment and work with the surveyor to determine the locations of the necessary cross sections to design a replacement culvert.

##### Method/Procedure

Common engineering and surveying principles and practices will be employed to determine the locations of the cross sections. All points will be established on the Colorado State Plane Grid system South Zone 503, NAD 1983, NAVD 1988.

### Deliverable

The deliverable will be a site layout of cross section locations with latitude and longitude values for applicable points.

## **TASK 2 – Culvert Design**

### Description of Task

The second task will be for a professional engineer to design the replacement culvert. The design engineer will utilize the gradient survey data, cross section survey data, preliminary specifications generated by NRCS and any other applicable information.

### Method/Procedure

The design engineer will employ common engineering principles and practices to design the new squash culvert. The design will be reviewed and approved by the Animas Consolidated Ditch Company representatives.

### Deliverable

The major deliverable will be an engineered design to install a new squash culvert along with a construction packet to be used by the contractors.

## **TASK 3 – Construction**

### Description of Task

The third task will be for construction of the new culvert. This work will at a minimum including: excavation of the site, plugging of existing culvert, installation of the new culvert, repair of ditch before and after the culvert to create smooth transitions, and landscaping of the distributed area.

### Method/Procedure

The contractors will employ all required measures of safety, applicable county codes, and all other requirements during their period of work. The work is scheduled to begin after the 2016 irrigation season.

### Deliverable

The major deliverable will be the installation of a new squash culvert.

## **REPORTING AND FINAL DELIVERABLE**

### **Reporting**

The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

### **Final Deliverable**

At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Animas Consolidated Ditch Company  
**48 inch Culvert Replacement Project**

**Attachment to Scope of Work**

Task	Description	Total Cost	WSRA Grant			Total WSRA Grant	Total Matching
			Technical	Construction	Other Direct Costs		
1	Surveying and Site Assessment	\$1,500	\$1,500	\$0	\$0	\$750	\$750
2	Engineered Design	\$4,980	\$4,980	\$0	\$0	\$2,490	\$2,490
3	Construction	\$62,227	\$12,445	\$49,782	\$5,000	\$31,114	\$31,114
	<b>Subtotals</b>	<b>\$68,707</b>	<b>\$18,925</b>	<b>\$49,782</b>	<b>\$5,000</b>	<b>\$34,354</b>	<b>\$34,354</b>
	<b>Total</b>						<b>\$68,707</b>

		Technical					
		Principal Engineer Services	Subtotal	Surveyor Professional Sevices	Subtotal	Construction Services	Subtotal
Labor Distribution		\$120		\$100			
Task 1	Surveying and Site Assessment	5	\$600	15	\$1,500	\$0	\$2,100
Task 2	Engineered Design	27	\$3,240	0	\$0	\$0	\$3,240
Task 3	Construction	9.5	\$1,140	0	\$0	\$62,227	\$63,367
	<b>Total</b>		<b>\$4,980</b>	<b>Total</b>	<b>\$1,500</b>	<b>Total</b>	<b>\$68,707</b>

<b>Total</b>	<b>\$68,707</b>
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- \* The allocation of costs between each component may change depending upon the actual effort for each component.
- \* Billing rates will remain fixed or decreased.
- \* Contractors bid as one job not by individual tasks.

**TASK COMPLETION SCHEDULE**

Tentative Task Completion Schedule	Start Date	Completion Date
Task 1 - Surveying and Site Assesment	P.O. Issued Date	Fall of 2016
Task 2 - Engineering Design	P.O. Issued Date	Fall of 2016
Task 3 - Construction	Fall of 2016	May-2017
Final Report	May 2017	May-2017 -July 2017