

# The Trinchera Irrigation Company



610 Main Street, Blanca, CO 81123 (719)379-3467

April 1, 2019

Jonathan Hernandez, PE  
Project Manager  
Finance Section  
Colorado Water Conservation Board



**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources

1313 Sherman St., Room 718  
Denver, CO 80203  
jonathan.hernandez@state.co.us

Re: Mt. Home Dam Outlet Rehabilitation Phase III – Final Report  
CWCB Loan Contract Number CT2018-3122  
CWCB Grant Contract Number CTGG1 2018-1773

Dear Mr. Hernandez:

The Trinchera Irrigation Company shareholders extend a tremendous thank you to you and the CWCB staff. We appreciate the guidance and support that the Colorado Water Conservation Board has provided us in completing the Mountain Home reservoir dam rehabilitation.

What started out as a repair to the one hundred year old Gate Valves on the Mountain Home reservoir on Trinchera Creek in Costilla County has progressed to a total Dam Outlet Rehabilitation. This project started five years ago with an initial study to evaluate the alternatives to be in compliance with the Colorado State Engineers Office. This is the final Phase of a Three Phase Project. Originally this Phase was for the construction of the Outlet Gate Valves with the work being executed without draining the reservoir. Due to the exceptional dry year and lack of snowmelt to replace the irrigation water in the reservoir it was decided by the Trinchera Irrigation Board to drain the reservoir to provide water to the shareholders. With the reservoir empty we were able to work on the upstream outlet structure and trash rack. This provided the opportunity to upgrade the conduits under the dam with HDPE rubber liners, install new Upstream Knife Gates and a new trash rack.

The actual work commenced in October 2018 shortly after the reservoir was empty. Even with several good snowstorms the project progressed with minimal delays. Moltz Construction was able to make-up lost time and complete the project on schedule.

Weekly conference calls were conducted with Engineering Analytics, Moltz Construction, Colorado State Dam Engineers, Colorado Water Conservation Board and Trinchera Irrigation Company. This regular communication with all parties aided in accomplishing results from any obstacles or setbacks.

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Original upstream Outlet Structure and Trash Rack without Upstream Valve Gates



Reconstructed Outlet Structure with new Trash Rack and Gate Valves

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Jetting the Conduit pipes before Lining



Conduits before 

and after jetting 

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Fusing the sections of Liners and Grout Lines



Installing the Liners and Grout Tubes into the Conduits

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Testing the Grout before pumping through the Grout Tubes to fill the void between the Liner and Conduit



Pumping the Grout into the Grout Tubes

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Old Gate Valves



New Gate Valves and stainless steel side panels

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Old Gate Valve Operators



New Gate Valve Operators

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Shaft from Gate Valves to top of Dam, Valve Operators

Before 

After, with E cudor Coating 

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Moltz Construction Contract	\$1,006,000
Change Order #1	\$88,588
Engineering Analytics	\$150,000
Contingency	\$62,000
Total Project Cost	\$1,307,000
Moore Charitable Foundation Grant	\$18,000
Trinchera Water Conservancy District Grant	\$20,000
WSRF Grant	\$513,000
CWCB Loan Amount	\$756,000
CWCB Loan Amount (Including 1% Service Fee)	\$763,560

## Mountain Home Dam Outlet Works Financial

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The successful completion of the Mountain Home Reservoir Dam Rehabilitation Project will be a benefit to northern Costilla County residents, along with visitors from outside of the county. Not just the farmers and ranchers that will see the extra water savings every winter but for all those that enjoy fishing, recreation and the wildlife viewing that it provides. The dam now meets the safety requirements set by the State and provides a safer environment for all.

Sincerely,



Wayne A Schwab  
Superintendent  
Trinchera Irrigation Company