



Item: Change Order No. 2 – Water Treatment Plant Headhouse Floor Replacement, O. F. 1332.6

From: Engineering Division

Initiated By: Public Works Department

Presented By: Jim Rearden, Public Works Director

Action Requested: Approve Change Order No. 2

Suggested Motion:

1. Commissioner moves:

"I move the City Commission approve Change Order No. 2 in the amount of \$57,832.50 for the Water Treatment Plant Headhouse Floor Replacement, O. F. 1332.6, to Dick Anderson Construction, Inc. and authorize the City Manager to execute the agreements."

2. Mayor calls for a second, discussion, inquiries from the public, and calls for the vote.

Staff Recommendation: Approve Change Order No. 2.

Background:

Significant Impacts

This change order includes two separate items. The first item involves cleaning and resurfacing one of the three alum tanks in the headhouse floor and reinstalling a rubber liner into it. During construction it was found that the rubber liner had developed a leak and that some corrosion has taken place in the tank itself. This corrosion will be ground off and a coal tar epoxy coating will be applied to reseal the tank. The cost of this item is \$4,067.00. The second item involves adding column reinforcing to the twenty four columns located on the basement and first floor of the headhouse building. During construction, columns on the first floor showed signs of cracking and spalling. It was determined that the columns were composed of the same poor quality concrete that made up the original headhouse floor. Our consultant, TDH, has proposed installing steel wraps around each one of the columns to restore their structural integrity. The cost of this work is \$53,765.50.

Citizen Participation

Not applicable

Workload Impacts

Thomas, Dean & Hoskins, Inc. (TDH) completed the project design and is performing construction inspection and contract administration duties. City engineering and water treatment plant staff are assisting with project administration duties.

Purpose

This is one of a series of projects to construct operational improvements at the Water Plant. During a previous construction project, the concrete floor in the Water Plant's headhouse was found to be in very poor condition. An initial attempt to chip away the deteriorated surface and then install a new concrete surface found that the entire depth of the floor was structurally unsound. The headhouse contains one of the plant's three alum tanks used for water treatment and various electrical equipment needed for plant operations. Under an engineering contract, TDH evaluated the floor and determined that total replacement would be the best option. Once replaced, the area would be usable again for storage plus resolve future safety and structural problems. Along with the new floor, a secondary containment system was installed. This containment system will protect against any chemical leaks or spills from the four alum tanks located on the upper floor of the headhouse. This containment is a Montana Department of Environmental Quality (DEQ) requirement.

Project Work Scope

Approximately 1600 square feet of existing 8-inch thick reinforced concrete flooring was demolished along with the supporting beams, and a new 8-inch floor with support beams was poured back. All this work was completed while keeping Water Plant operations up and running. Work was completed in the winter months because of lower water demands during that period of time. The secondary containment system involved installing a water proof curb around all three alum chemical tanks in the headhouse and connecting to a drain that feeds to a new overflow tank located outside of the headhouse. Substantial completion has been reached on the original project scope. The remaining change order work will not affect operations at the water plant.

Evaluation and Selection Process

Two bids were received and opened for this project on October 22, 2008. Dick Anderson Construction submitted the low bid of \$544,450 and the City Commission awarded the contract November 4, 2008. Change Order No. 1 was approved April 21, 2009 for the amount of \$5,000.00 which involved coating the underside of the new floor with an epoxy based paint. This change order will increase the total contract value to \$607,282.50.

Conclusion

City staff recommends approving Change Order No. 2 to Dick Anderson Construction, Inc. for the amount of \$57,832.50.

Concurrences:

Our consultant on the project, Thomas, Dean & Hoskins, concurs with acceptance of Change Order No. 2.

Fiscal Impact:

The additional funding will come from the Water Capital Funds.

Alternatives:

The City Commission could vote to deny Change Order No. 2.

Attachments/Exhibits:

1. Change Order No. 2 is attached. (Not available online; on file in City Clerk's Office.)