



Town of Johnstown

TOWN COUNCIL AGENDA COMMUNICATIONS

AGENDA DATE: November 1, 2021

SUBJECT: Johnstown Reservoir Dam Repair

ACTION PROPOSED: Authorize additional funds for the Johnstown Reservoir Dam Repair project

ATTACHMENTS:

1. Johnstown Reservoir Dam Repair – J-2 Change Order #1
2. Johnstown Reservoir Dam Repair – J-2 Change Order #2
3. J&T Proposal for Phase 2 and Closeout Construction Administration
4. Johnstown Reservoir Dam Repair Project: Summary of Costs
5. Johnstown Reservoir Dam Repair: Yearly Breakdown of Expenses

PRESENTED BY: Ellen Hilbig, Utilities Director

AGENDA ITEM DESCRIPTION:

Enclosed for Council's review and consideration is a request to authorize the allocation of additional funds for the Johnstown Reservoir Dam Repair project to provide the following additional services; 1) Dewater the Johnstown Reservoir, 2) Dredge the Johnstown Reservoir, 3) Change Order Construction Items required by the State Review of the Contract Documents and 4) Phase 2 & Close Out Construction Admin Costs.

J-2 Contracting Company was awarded the construction contract for the Johnstown Reservoir Dam Repair project at the September 8 Council meeting. At the time of award, Town Staff had originally identified the ability to perform the dewatering operations required to draining Johnstown Reservoir internally. Town Staff, J-2 Contracting and J&T Consulting performed a field evaluation of the dewatering requirements and constraints and determined the optimum way to dewater the reservoir is to utilize the intake for the Town Lake Pump Station and surface discharge to the Home Supply Ditch laterals. The volume of water able to be routed through this option allowed for the use of larger pumps than initially anticipated. Staff identified that J-2 Contracting was able to better facilitate dewatering activities for the project with the increased scale of operations for an additional cost of \$88,500 to perform the work.

During the September 8 Council meeting, Council identified an opportunity to dredge the reservoir while the reservoir is drained for the dam repair activities. Upon reviewing the grading plan for the original reservoir construction, J&T Consulting identified that the west end of the reservoir could be dredged safely without risking dredging operations penetrating the reservoir seal. J-2 Contracting and J&T Consulting collaborated to identify two potential options for dredging operations. Option 1 involves dredging and re-grading the reservoir bottom with the existing material to enable flows to reach the outfall. Option 1 fills in the deepest depressions in the current reservoir minimizing hauling costs and provides approximately an additional 3 acre-ft of water storage for an additional project cost of \$268,423.75. Option 2 involves the

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complete removal and haul off of the dredged material creating pockets of deeper water on the west end. Option 2 provides potential improved water quality and ecological habitats, opportunities for storage in the event of dam breach and creates approximately an additional 12 acre-ft of water storage for an additional project cost of \$479,750.00. Staff is recommending Option 2 due to the potential benefits and future potential to lower the Town Lake Pump Station intake to pull water from deeper sections of the reservoir.

As part of the approval process to construct the project, the project construction plans and specifications required official review and approval by the Colorado Dam Safety Branch. This process was underway with the State during the award of the construction contract in order to keep the construction contract on schedule to wrap up the first week in March. Upon review and approval of the final construction documents on October 7, 2021, the State identified a number of items that required correction. These changes resulted in the construction changes identified in Change Order #2 for an additional project cost of \$51,610.00.

The award of the Construction Contract on September 8, 2021 only included construction administration for Phase 1 of the Johnstown Reservoir Dam Repair project. Staff requested and was approved to hire J&T Consulting for construction observation and services for Phase 1 due to the value added in project knowledge and experience with navigating State requirements. The Town wants to be consistent with the construction observation approach and is requesting the additional funding of \$19,800.00 to cover J&T to perform the construction observation for Phase 2 and close out services for the project.

The Town budgeted \$425,000 for the project in Drainage 2021. The project expenses for 2021 are anticipated to be the following which is covered by the appropriated amount.

2021 Project Expenses

J&T Design Services	\$66,150.00
J&T Phase 1 Construction Administration (29%)	\$20,553.00
J-2 Construction Contract Phase 1 (29%)	\$204,335.00
<u>J-2 Construction Contract Change Order #1 Dewatering</u>	<u>\$88,500.00</u>
Total	\$379,538.00

The Town budgeted \$265,000.00 for the project in Parks 2022 and anticipates a project roll over of \$45,462.00 from Drainage 2021 for a total of \$310,462.00. The project expenses for 2022 are anticipated to be the following which will require an amendment to the budgeted amount of \$1,035,155.00 to correct the shortfall of \$395,495.00 and account for the additional services requested of \$639,660.00.

2022 Project Expenses

J&T Phase 1 Construction Administration (71%)	\$50,317.00
J&T Phase 2 & Closeout Construction Administration	\$19,800.00
J-2 Construction Contract Phase 1 (71%)	\$503,345.00
J-2 Construction Contract Phase 2 (100%)	\$240,795.00
J-2 Construction Contract Change Order #1 Dredging	\$479,750.00
<u>J-2 Construction Contract Change Order #2 State Revisions</u>	<u>\$51,610.00</u>
Total	\$1,345,617.00

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The Total Project Costs for the Johnstown Reservoir Dam Repair project prior to this request for additional funds was \$1,085,495.00. The additional services requested with this communication total an additional fund request of \$639,660.00 for the following scope of work; 1) Change Order #1 Dewatering the Johnstown Reservoir (\$88,500), 2) Change Order #1 Dredging the Johnstown Reservoir (\$479,750), 3) Change Order #2 Construction Items required by the State Review of the Contract Documents (\$51,610) and 4) J&T Phase 2 & Close Out Construction Admin Costs (\$19,800).

LEGAL ADVICE:

N/A

FINANCIAL ADVICE:

The Town has budgeted adequate Funds to cover project expenses in 2021 and will be required to address additional project funds of \$1,035,155.00 in the 2022 budget to cover the additional services requested of \$639,660.00 and the budget shortfall of \$395,495.00. These funds are proposed in the FY 2022 budget predominantly included in the Capital Project Fund.

RECOMMENDED ACTION: Staff recommends approval of the award inclusive of the change order.

SUGGESTED MOTIONS:

For Approval:

I move to authorize the additional funds for a total amount of \$639,660.00 and make the necessary 2022 budget allocations for the Johnstown Reservoir Dam Repair project to provide the following additional services; 1) Dewater the Johnstown Reservoir (\$88,500), 2) Dredge the Johnstown Reservoir (\$479,750), 3) Change Order Construction Items required by the State Review of the Contract Documents (\$51,610) and 4) Phase 2 & Close Out Construction Admin Costs (\$19,800).

For Denial:

I move to deny the request for additional services as presented and direct Staff to reevaluate the project needs.

Reviewed and Approved for Presentation,



Town Manager

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