



STAFF REPORT

To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

From: Mark Marlowe, P.E., Director of Castle Rock Water
Matt Benak, P.E., Water Resources Manager
Lauren Moore, Water Resources Project Manager

Title: **Resolution Approving an Amendment to Resolution 2023-123 for the Construction Contract with Applied Ingenuity, LLC for the 2023/2024 Denver Basin Aquifer Rehabilitation and Pumping Equipment Replacement Project**
[Seven wells within Red Hawk, Woodlands, Castle Oaks and Bell Mountain Ranch subdivisions]

Executive Summary

The purpose of the resolution (**see Attachment A**) is to request Town Council approval of an Amendment to Resolution 2023-123 for the Construction Contract (**see Exhibit 1**) with Applied Ingenuity, LLC (Applied) for the 2023/2024 Denver Basin Wells Rehabilitation and Pumping Equipment Replacement Project.

In 2023, Town Council approved 6 to 0 Resolution 2023-123 for the 2023/2024 Denver Basin Rehab Project in the amount of \$870,353 with a town-managed contingency of \$87,035 for a total authorization of \$957,388. Under this contract, Castle Rock Water (CRW) is targeting 4 Denver Basin wells for planned rehabilitation and equipment replacement with Applied.

Attachment B shows the locations of the wells that will or have been rehabilitated. Additionally, the contract includes video investigation of three Bell Mountain Ranch Wells, BMR A-1, BMR D-1, and BMR Da-1, that CRW would like to potentially tie into the newly acquired Bell Mountain Treatment Plant, as these wells are currently piped to East Plum Creek and captured downstream at CR-1 diversion.

Due to unforeseen issues with some of the wells, such as old equipment and additional cleaning, the authorized contingency has been expended and additional authorization is needed to complete the project scope. Castle Rock Water requests approval of an Amendment to Resolution 2023-123 for the Construction Contract with Applied Ingenuity in the amount of \$66,858.00 plus an additional contingency in the amount of \$43,517.65 for a Total revised Project Authorization of \$1,067,763.95. Additionally, CRW recommends extending the substantial completion date through August 31, 2024.

Notification and Outreach Efforts

Notification and outreach efforts included postcard mailers to nearby homes describing the project details such as location, dates, and work hours. Additionally, the project is listed on the Castle Rock Water website.

History of Past Town Council, Boards & Commissions, or Other Discussions

Castle Rock Water Commission was informed of the project at their September 27, 2023 meeting.

On October 17, 2023, Town Council approved Resolution 2023-123 with Applied Ingenuity for a Construction Contract for the 2023/2024 Denver Basin Wells Rehab and Pumping Equipment Project.

Discussion

It is important to keep our existing infrastructure operating efficiently to ensure that peak water demands during the summer months can be met, without resorting to water curtailment measures due to well failures. To do this, the Water Resources Division has established a yearly rehabilitation and equipment replacement program for priority deep Denver Basin wells. A formalized program helps mitigate emergency well services due to pumping equipment failure. This is accomplished by identifying the wells that are showing declines in production due to biofouling and wells with older pumping equipment. Replacing older pumping equipment often provides the opportunity to resize equipment so that better well efficiency is achieved, reducing the long-term costs of operating the wells. CRW typically budgets \$1,000,000 annually for repair and maintenance.

The following wells are identified for the 2023/2024 Denver Basin Rehabilitation and Pumping Equipment Project: Arapahoe Aquifer Well CR-123, Denver Aquifer Wells CR-84, CR-105, and CR-111. The combined daily production from the wells is 1.2 million gallons per day, which collectively represents approximately 7% of our estimated peak summer daily demand. Additionally, the contract includes video investigation of three Bell Mountain Ranch Wells, BMR A-1, BMR D-1, and BMR Da-1, that CRW would like to potentially tie into the newly acquired Bell Mountain Treatment Plant, as these wells are currently piped to discharge directly into East Plum Creek and subsequently capture that water downstream at CR-1 Diversion.

Work under the Applied Contract is approximately 91% complete and includes prior approval of Change Orders 1, 2 and 3 which generally included additional cleaning for 6 wells and equipment replacement upon inspection. The only remaining project items include BMR Da-1 and A-1 cleaning. This amendment is to increase the total project authorization to account for unforeseen issues encountered through the rehabilitation process and inspecting old equipment. A request for additional contingency is to prepare for any additional maintenance that might come about from BMR A-1, which has a shroud piece stuck in the casing as well as a hole that might need a liner. An assessment will be made once the cleaning and post-video are complete. Additionally, CRW recommends extending the substantial completion date from

July 1, 2024 to August 31, 2024 to allow for completion of additional work under Change Order 4. An additional item of note is that since we share the capacity of the BMR wells with the Town of Lochbuie, they will be reimbursing us for their pro-rata share in the amount of \$44,220.25. The Town of Lochbuie was not originally included as a funding source since the original scope (well video inspection) was for CRW’s edification of the three wells’ condition for a future pipeline tie-in. Due to the maintenance required upon inspection, the Town of Lochbuie was notified and agreed verbally to reimburse for their pro-rata share of additional cleaning and equipment replacement as outlined in Exhibit D of the Water Service Agreement with Roxborough Water & Sanitation District (formerly Ravenna Metropolitan District) dated November 17, 2017.

Budget Impact

Funding for the project is available in the approved 2024 Budget. Funding for the project will come from the following account: Repair and Maintenance - Wells 210-4250-442.40-37 (\$1,000,000 budgeted in 2024). This account has a current balance of \$66,823.70. A budget transfer in the amount of \$43,551.95 will come from 210-4275-442.77-68, which has a current balance of \$300,000. The following table shows the breakdown of funding with this amendment request.

| Project Account | Original Authorization (Reso 2023-123) | C.O. 4 | Additional Contingency | Revised Authorization |
|--|---|---------------|-------------------------------|------------------------------|
| 210-4275-442.40-37 Repair & Maintenance – Wells (Applied Ingenuity) | \$957,388.30 | \$66,858.00 | \$43,517.65 | \$1,067,763.95 |

Staff Recommendation

Staff recommends Town Council approval of the Amendment to the Construction Contract with Applied for the 2023/2024 Denver Basin Wells Rehabilitation and Pumping Equipment Replacement Project.

Proposed Motion

“I move to approve the Resolution as introduced by title.”

Alternative Motions

“I move to approve the resolution as introduced by title, with the following conditions: (list conditions).”

“I move to continue this item to the Town Council meeting on _____ date to allow additional time to (list information needed).”

Attachments

Attachment A: Resolution
Exhibit 1: Construction Contract
Attachment B: Location Maps