



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
Roy Gallea, P.E., Engineering Manager
Matthew Hayes, P.E., Project Manager

Title: **A Resolution Approving a Construction Contract between the Town of Castle Rock and Global Underground Corporation for the East Plum Creek Open Space Well Facility** *[Open space north of Plum Creek Water Purification Facility]*

Executive Summary

Castle Rock Water (CRW) is seeking Town Council approval of a resolution (**Attachment A**) approving a construction contract (**Exhibit 1 to Attachment A**) with Global Underground Corporation (Global) for the East Plum Creek Open Space Well Facility Project. This facility is for the new Aquifer Storage and Recovery (ASR) wells, CR-234, CR-235, and CR-236 that are being drilled near the Plum Creek Water Purification Facility (PCWPF) (**Attachment B**). This contract consists of constructing a new metering and control facility for the newly drilled wells as well as new pipelines connecting the wells to both PCWPF and Meadows Water Treatment Plant (MWTP). Global submitted the lowest responsive bid for a total construction cost of \$2,375,650. Staff also requests approval for a 10% Town-managed contingency of \$237,565, for a total project authorization of \$2,613,215. The wells and facility are anticipated to be ready for production in December or 2023.

Notification and Outreach Efforts

Notification letters will be sent to the residents and businesses near the well facility site prior to commencing construction activities. The project information will be posted on the Town's Development Activity map as one of the Water Projects.

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

Castle Rock Water staff presented this item to the Castle Rock Water Commission at their meeting held on March 22, 2023, and the Castle Rock Water Commission voted unanimously 6 to 0 to recommend Town Council approval of the Resolution as presented.

Resolution 2022-115, Approving a Construction Contract with Hydro Resources – Rocky Mountain Inc. for drilling of Wells CR-234, CR-235, and CR-236, was approved by Town Council on October 18, 2022; 6 for and 0 against in the amount of \$4,483,540.

Discussion

Based on the Water Resources Supply and Demand Model, aging infrastructure, and the need for Aquifer Storage and Recovery (ASR) near PCWPF, it is necessary to keep pace with meeting our customers' water demands. With the variability of WISE deliveries, renewable water variability, and lower demands in the winter months, a storage option is needed when these supplies exceed demand. One of the solutions is ASR, which is the ability to store water in the aquifer and recover the water through pumping when needed. The design of an ASR well is slightly modified to take into consideration the water that will be delivered into the aquifer through the well which will cause the water level in the well to increase. The first phase of this project included the drilling, completion, and pump testing of one Arapahoe Aquifer well, one Denver Aquifer well and one Dawson Aquifer well. Staff anticipates that the Arapahoe Aquifer well will produce 250 to 300 gallons per minute (gpm), the Denver Aquifer well will produce 200 to 250 gpm, and the Dawson Aquifer well will produce 50 to 80 gpm or approximately a total of 0.72 to 0.90 million gallons per day (mgd).

This phase of the project consists of constructing a new metering, piping and control facility for the newly drilled wells. This facility has been designed with the flexibility to produce water that can be sent to the PCWPF or the MWTP. This will give the operations team the ability to send water to the MWTP in the summer to maximize water production or to PCWPF for blending in the winter. Additionally, this facility is designed for ASR to bank renewable water during the off peak season.

A request for bids was sent to six prequalified contractors. Bids were received from four contractors, as summarized in the table below. The Engineer's estimate was \$2,700,000. The low bid was received by Global and is considered a responsive bid.

Consultant	Bid Amount
Global	\$2,375,650.01
T. Lowell	\$2,673,000.00
RME	\$2,885,759.00
Moltz	\$3,404,192.00
Velocity	No Bid
RN	No Bid

Assuming approval of this contract, the total project costs for these new wells are provided in the table below.

Consultant/ Contractor	Duties	Proposed Budget[^] or Staff Estimated Budget[*]
Leonard Rice Engineers, Inc.	design of wells and oversight of drilling	\$210,703 [^]

Hydro Resources, Rocky Mountain Inc.	drilling, completion and testing of wells	\$4,483,540^
Hydro Resources, Rocky Mountain Inc.	Pumping equipment installation	\$2,500,000*
Facility Design Consultant	Design well facility	\$172,000^
Facility Contractor	Construction of the facility and yard piping	\$2,375,650^
Estimated Total Cost		\$9,741,893*

* = Staff Estimated Budget

The facility is anticipated to be ready for production in December of 2023. The low bidder did request that CRW approve the pre-purchase of materials as pricing of materials in the market is very unstable. CRW approved \$310,000 in material pre-purchase subject to Council ratification to ensure there would not be an increase in the contract costs due to time required to get approval for the contract from Council.

Budget Impact

The funding for the construction contract will come from Water CIP Account 210-4275-442.75-39 (New Wells), which has a balance of \$0. Staff had decided not to carry forward 2022 funds as an estimate, opting to budget when actual project costs were established. Therefore, a budget amendment will need to be completed for this project. The Town will use capital funds in reserve for the construction, which includes drilling, completion, and testing of this project which has a current balance of \$13,590,570. Global's bid is \$2,375,650.01. Staff requests a Town-managed contingency in the amount of \$237,565 for a total authorization of \$2,613,215.01.

<u>Project</u>	<u>Amount</u>	<u>Contingency</u>	<u>Total Amount</u>
210-4275-442.75-39 New Wells	\$2,375,650.01	\$237,565	\$2,613,215.01

Staff Recommendation

Staff recommends Town Council approval of the resolution approving the construction contract between the Town of Castle Rock and Global for the construction for the East Plum Creek Open Space Well Facility Project in the amount of \$2,375,650.01 plus a 10% Town-managed contingency of \$237,565 for a total authorization of \$2,613,215.01.

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: Contract
Attachment B: Location Map