

July 25, 2025

Shawn Griffith Castle Rock Water 175 Kellogg Ct Castle Rock, CO 80109

RE: Castle Rock Water's System Integrator Procurement

Dear Mr. Griffith.

As per your request, we have evaluated how system integrators could be procured by the Town of Castle Rock.

There are various procurement strategies for system integrators, ranging from sole sourcing to a pre-qualified list of potential integrators to competitive bidding. For the purposes of this document, we evaluated two scenarios:

- → Competitively bid system integrators that are selected based on low bid on a project-to-project basis
- → One system integrator selected by Castle Rock Water and sole sourced on all integration projects

## **Competitively Bid System Integrator**

In this scenario, every individual project that is executed by Castle Rock Water and contains an integration scope will be bid by the general contractor. The general contractor will likely select the low-bid contractor for each project and each project could have a different integrator. If CRW wanted to decrease the number of potential different integrators in their system, they could opt to create a pre-qualified integrator list that projects are then bid to.

The benefit to competitively bidding the integration scope is that integrators will be selected based on a cost component, leading to competitive bids which typically decreases the overall project cost.

The challenges associated with competitively bidding include the following:

- → Non-uniform I&C components/designs
- → Non-uniform I&C workflows
- → Non-uniform programming
- → Additional effort and training required by CRW's I&C staff to bring new integrators up to speed on CRW's preferences and standards that may not be conveyed in drawings and specifications

Many of these concerns could potentially cause long-term operations and maintenance cost that may exceed the initial cost savings provided by competitive bids.

## **One Consistent System Integrator**

On the other end of the spectrum from competitively bidding is sole-sourcing a system integrator. In this arrangement, CRW would select one integrator to complete all I&C scope across their system. Clients who chose this method usually due so due to the concerns listed above in the competitively bid integrator section. Having one consistent integrator typically leads to a higher level of standardization, requiring less training for the Owner. The benefit of this method is the consistency in the system and the ability to build on previous project lessons learned and Owner preferences. The disadvantage is that it may lead to higher initial costs. In addition, sole-sourcing one integration company does not guarantee the same individual programmer on each project. Since each individual programmer has their own technique and style, there may be differences between the



way code is written at each facility.

## **Evaluation**

The decision to sole-source or competitively bid system integrators is highly dependent on individual system needs. The procurement process differs by client, with some sole-sourcing, some providing a yearly or multi-year on-call contract, and some competitively bidding integration on each project. To determine industry practices, Burns & McDonnell categorized a selection of municipal clients in the region by if they standardize on one system integrator if they competitively bid the scope. In that activity, it was determined that approximately 50% of our local clients standardize on I&C contractor for each project due to concerns stated above.

It is imperative that the Town of Castle Rock adheres to all applicable rules and regulations regarding the procurement of contractors. If permitted by procurement rules and regulations, Burns & McDonnell recommends that the Town of Castle Rock standardize its SCADA system and integrator to the greatest extent feasible to decrease overall coordination requirements and increase consistency across the system, allowing for greater understanding of the code.

Please do not hesitate to contact us if you require any further information.

Sincerely,

Jason Schaefer, PE

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