

August 19, 2025

Josh Hansen and Emily Huth Castle Rock Water 175 Kellogg Court Castle Rock, CO 80109

Re: CRR1 and CRR2 Engineering Services During Construction, Extension of Construction Observation and Materials Testing through April 2026

Dear Mr. Hansen and Ms. Huth,

Per your request, W. W. Wheeler & Associates, Inc. (Wheeler) is pleased to provide this scope of work and fee estimate to the Town of Castle Rock (Town) for continuing engineering services during construction of Castle Rock Reservoir No. 2 (CRR2) and the expansion of Castle Rock Reservoir No. 1 (CRR1). The overall scope of work is described in Wheeler's original proposal dated March 22, 2023 and has not changed substantially. The original project was scheduled for completion in May 2025. The construction schedule, however, has been extended by approximately eleven months, and completion is now anticipated in April 2026.

Wheeler's original proposal assumed a two-year construction period based on the schedule provided in the contractor's initial bid. Due to a variety of reasons, the construction schedule was extended. The contractor's most recent schedule, dated July 22, 2025, indicates project completion in March 2026, with most work being completed prior to 2026. We anticipate some minor punch list work will continue into April 2026. At the time Wheeler prepared our initial construction services proposal, construction completion was anticipated in approximately May 2025. As indicated in the original proposal, Wheeler has little control over the construction schedule. Engineering observation, materials testing, and the design engineer's involvement during construction is required by the Colorado Division of Water Resources, Dam Safety Branch. The scope of work, tasks, and deliverables defined in Wheeler's original construction proposal will generally remain unchanged. However, the additional funding will allow Wheeler to continue providing construction observation and materials testing through March 2026.

The Town has also requested that Wheeler provide post-construction support for the dam and reservoir. This task was not included in Wheler's original Construction Engineering Services proposal. Wheeler will provide weekly dam safety and instrumentation monitoring at CRR1 and CRR2, for a period of three months following construction. We anticipate this time will be sufficient to achieve the "First Fill" of both reservoirs, after which monitoring and reporting requirements, outlined by the DWR, will be reduced. During this period, Wheeler will also evaluate anomalies or unanticipated conditions that occur at the dam. Following the three-month period, Wheeler will prepare instrumentation data and plots for submittal to the DWR Dam Safety Office. Wheeler also will provide Castle Rock Water staff with monitoring forms, on-site guidance, and support for long-term instrumentation monitoring and reporting and dam safety inspections.

In anticipation of the extended construction schedule, the remaining project contingency of \$105,560 was applied to the engineering services project budget in April 2025. The remaining

contingency funds generally supplemented the construction engineering services budget through June and July 2025. As of August 1, 2025, the remaining project budget for engineering services was \$203,900. A substantial amount of the remaining budget will be required for as-built documentation, a Letter of Map Revision (LOMR) for submittal to FEMA, and dam safety submittals to the DWR.

Wheeler's fee estimate for additional construction observation time was developed on a monthly basis for August 2025 through April 2026. A summary of key tasks from the July construction schedule and Wheeler's anticipated level of onsite involvement for each additional month is presented in Table 1. Hourly assumptions for a full-time month of observation were scaled to the anticipated level of effort for each month. To simplify the estimate, all months were assumed to be four weeks or 28 working days. A summary of the additional construction observation hours is presented in the work breakdown structure, included as Attachment 1. This approach will preserve the existing budget for project closeout.

Table 1: Key Construction Activities and Anticipated Observation Effort

Month	Key Construction Activities		
Aug-25	Riprap, Bedrock Removal, Fill Structure, Encasement, and steel pipe	100%	
Sep-25	Liner, Anchor Curb, Discharge Structure, Gate Houses	100%	
Oct-25	Liner, Anchor Curb, Gate Houses	100%	
Nov-25	Liner, Fill CRR2 Phase 2, Conduit Banks, Gate Houses	100%	
Dec-25	EI&C, Conduit Banks	50%	
Jan-26	EI&C, Dam Safety Instrumentation, Fill CRR1	75%	
Feb-26	Reclamation and Cleanup	25%	
Mar-26	Reclamation and Punchlist Items	50%	
Apr-26	Punchlist Items and Project Closeout	25%	

CMT, Wheeler's materials testing subconsultant, is also impacted by the extended schedule. We have assumed CMT will be required approximately half time for the months of August, September, and October, with minimal involvement after October. Apart from CMT, the construction observation budget for Wheeler subconsultants will generally be sufficient to complete the project.

Wheeler is requesting an additional \$382,316 to provide construction observation of CRR1 and CRR2 construction through March of 2026. The current remaining budget of \$203,900 is generally sufficient to fund subconsultants and prepare as-built documentation, it was not considered in the Table 2 Additional Engineering Services Funding Summary. This approach preserves the existing project budget for subconsultants whose services are not schedule dependent and for preparation of as built documentation. Table 2 presents a summary of the additional observation funding and the total funding request.

**Table 2: Additional Engineering Services Funding Summary** 

Amount	Notes						
\$73,976	\$73,976 Additional Observation - July 2025 (Invoiced)						
\$380,000	Additional Observation - August 2025 through April 2025						
\$33,900	Post Construction Support						
\$487,876	487,876 Total Additional Funding						
(\$105,560)	105,560) Applied Contingency Funding						
\$382,316	Additional Funding Request						
	nuing our involvement with this project. Please call if you have ut the costs or services described in this proposal.  Ates, Inc.						
S. Street, P.E., CFM	ex wat A						
10BeR	eplaced wil						

We look forward to continuing our involvement with this project. Please call if you have any questions or concerns about the costs or services described in this proposal.

Sincerely,

Tall,

W. W. Wheeler & Associates, Inc.

Todd S. Street, P.E., CFM

Attachment 1: Work Breakdown Structure



			Staff / Position / Rate							
		TSS	STM ZW Project Eng. Civil Associate Engineer Assistant Engineer \$164.00 \$148.00		TH Resident Eng.	SAA Draft	=		Fee Estimate	Rounded plus Contingency
		PM								
Level 1	Level 2	Senior Engineer		er Assistant Enginee	er Cadd/Draftsman	Wheeler Expenses	s Subconsultant Fees			
		\$197.00		\$148.00	\$133.00	\$111.00			Sub Total	5.0%
Task 3 - Construction Observation	3.1 Full Time Oservation (4 Months - Aug,	Sep, Oct, Nov) 256	320	96	640	32	\$3,024	\$37,500	\$246,316	\$258,700
	3.2 75% Observatoin (1 Month - January)	48	48	18	120	6	\$567	\$0	\$37,185	\$39,100
	3.3 50% Observatoin (2 Months - Dec, Mar	64	80	24	160	8	\$756	\$0	\$52,204	\$54,900
	3.4 25% Observation (2 Month - Feb, Apr)	32	40	12	80	4	\$189	\$0	\$25,913	\$27,300
	Task Totals	400	488	150	2000	50	\$4,536	\$37,500	\$361,618	\$380,000
Task 6 - Post Constructoin Support	6.1 SEO Coordination and Reporting	24	40		24		\$0	\$0	\$14,480	\$15,300
	6.2 Instrumentation & Dam Monitoring (3	Months, weekly visits) 8	8		72				\$12,464	\$13,100
	6.2 CR Operations Montioring Support	2	16	1	16				\$5,146	\$5,500
Task Totals		34	64	0	112	0	\$0	\$0	\$32,090	\$33,900
Total Hours			552	150	2,112	50				
	Cost Summary			\$22,200.00	\$280,896.00	\$5,550.00	\$4,536	\$37,500	\$393,708	\$413,900

## Notes:

- 1) Task totals are rounded up to nearest \$100 for proposal purposes
- 2) Actual hours billed per task may vary
- 3) 36 miles roundtrip between Wheeler office and Project site
- 4) Assume 8 months (34 weeks) of additional constructoin obs time
- 5) Change order fees based on 2025 Rates
- 6) Conduit bank will not require testing
- 7) Curb concretre will be tested

## Full Month Staffing Summar

Full Worth Starring Summary							
hrs/ week	hrs/month						
16	64						
20	80						
6	24						
40	160						
2	8						
	hrs/ week  16 20 6						