RESOLUTION NO. 2017-006

RESOLUTION APPROVING AN AGREEMENT WITH LAYNE CHRISTENSEN COMPANY FOR THE CONSTRUCTION OF THE FOUNDERS WELLS CR-226 AND CR-227

WHEREAS, the Town of Castle Rock and Layne Christensen Company have agreed to the terms and conditions by which Layne Christensen Company will undertake construction of the Founders Wells CR-226 and CR-227.

NOW, THEREFORE BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK AS FOLLOWS:

- **Section 1.** Approval. The Agreement between the Town of Castle Rock and Layne Christensen Company in the form attached as *Exhibit 1* is hereby approved. The Mayor and other proper Town officials are hereby authorized to execute the Agreement by and on behalf of the Town of Castle Rock, Colorado
- **Section 2.** Encumbrance and Authorization for Payment. In order to meet the Town's financial obligation under the contract, the Town Council authorizes the expenditure and payment from account 210-4275-442.75-39, in an amount not to exceed \$1,740,384 plus a 10% Townmanaged contingency in the amount of \$174,038 for a total project cost in the amount of \$1,914,422 unless authorized in writing by the Town of Castle Rock.

PASSED, APPROVED AND ADOPTED this 3rd day of January, 2017, by the Town Council of the Town of Castle Rock, Colorado, on first and final reading by a vote of ______ for and _____ against.

ATTEST:

TOWN OF CASTLE ROCK

Sally A. Misare Town Clerk

Approved as to form:

Approved as to content:

Robert J. Slentz, Town Attorney

Mark Marlowe, Utilities Director

SECTION 00520 AGREEMENT

STATE OF COLORADO)		
)ss.		
COUNTY OF <u>Douglas</u>	4		
Aurora , County of Adams , State of Colorado , h the second part, WITNESSETH, that whereas Denver Formation Well CR-226 and Arapahoe	the "OWNER", and Layne Christensen Partnership, or Corporation) of the City of the called the "CONTRACTOR" party of the OWNER intends to construct Castle Rock		
NOW, THEREFORE, the OWNER and CONT forth, agree as follows:	RACTOR for the considerations hereinafter set		
1. The CONTRACTOR agrees to furnish all the necessary labor, materials, equipment, tools and services necessary to perform and complete in a workmanlike manner all work required for the construction of the Work, in strict compliance with the Contract Documents herein mentioned, which are hereby made a part of the Agreement, including the following Addenda:			
Addendum No.	Date		
1	10/21/2016		
	10/25/2016		
3	10/27/2016		
4	10/31/2016		

a) Contract Time: The CONTRACTOR agrees to commence work under this Contract in accordance with the written Notice to Proceed, with milestone completion of the Bid Schedule work within 180 days of the commencement of the Contract Time, and to finally complete the Work within 365 calendar days of the commencement of the Contract Time as defined in the General Conditions of the Contract. Milestone completion shall be defined as the well completed in accordance with the Technical Specifications and in such a condition to produce water from the well and allow the installation of permanent pumping equipment.

- b) Sub-Contractors: The CONTRACTOR agrees to bind every sub-contractor by the terms of the Contract Documents. The Contract Documents shall not be construed as creating any contractual relation between the Sub-Contractor and the OWNER.
- 2. The OWNER agrees to pay, and the CONTRACTOR agrees to accept, in full payment for the performance of this Agreement, and in accordance with Section 00300 of the Contract Documents, the Contract Amount of: one million.seven.hundred.and. forty thousand and three hundred and eighty four Dollars (\$ 1,740,384), plus any and all sums to be added and/or deducted resulting from all extra and/or omitted work in connection therewith, as authorized under the terms as stated in the General and Supplementary Conditions, all in accordance with the terms as stated in the Contract Documents.
 - a) Progress Payments will be made in accordance with the General and Supplementary Conditions of the Contract Documents.
 - b) Progress Payments will be in the amount equal to ninety percent (90%) of the calculated value of the Work completed until fifty percent (50%) of the work required by the Contract Documents has been completed. At such time, OWNER shall have retained funds to five percent (5%) of the total Contract Amount. The amount retained as provided above will be withheld by the OWNER until completion of the Agreement to ensure faithful completion of the Work under the terms of the Contract Documents.
 - c) Upon completion and final acceptance of the Work in accordance with the Contract Documents, OWNER shall pay the remainder of the Contract Amount after publication by the OWNER in accordance with Colorado statutory requirements.

3. Contract Documents

It is hereby mutually agreed that the following list of instruments, plans, specifications, and documents which are attached hereto, bound herewith or incorporated herein by reference shall constitute the Contract Documents, all of which are made a part hereof, and collectively evidenced and constitute the Agreement between the parties hereto, and they are fully a part of the Agreement as if they were set out verbatim and in full herein, and are designated as follows:

- a) Instructions to Bidders
- b) Bid Proposal
- c) Bid Bond
- d) Notice of Award
- e) Agreement
- f) Performance and Payment Bonds
- g) Certificates of Insurance, Policy Endorsement

- h) Notice to Proceed
- i) General Conditions
- j) Supplementary Conditions
- k) Technical Specifications
- 1) Drawings
- m) Addenda

4. <u>Liquidated Damages</u>

OWNER and CONTRACTOR recognize that time is of the essence in this Agreement and that the OWNER will suffer financial loss if the Work is not complete within the time specified in paragraph 1.a) above, plus any extensions thereof allowed in accordance with the General Conditions. They also recognize the delays, expense and difficulties involved in proving, in a legal proceeding, the actual loss suffered by OWNER if the Work is not complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER \$500.00 for each calendar day that expires after the time specified in paragraph 1.a) (except as modified by agreement) for milestone completion until the Work is complete.

5. Contractor Representations

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

- a) CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal, state, and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.
- b) CONTRACTOR has studied carefully the Contract Documents and all other items otherwise affecting cost, progress or performance of the Work which were relied upon by the Engineer in the preparation of the Contract Drawings and Specifications and which have been identified in the Supplementary Conditions as a part of the Contract Documents.
- c) CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in paragraph 5.b) as he deems necessary for the performance of the Work at the Contract Amount, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are or will be required by CONTRACTOR for such purposes.
- d) CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.

e) CONTRACTOR has given Engineer written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to CONTRACTOR.

6. Responsibility For Damage Claims

The CONTRACTOR shall indemnify, save harmless, and defend the Town, its officers and employees, from and in all suits, actions or claims of any character brought because of: any injuries or damage received or sustained by any person, persons or property because of operations for the Town under the Contract; including but not limited to claims or amounts recovered from any infringements of patent, trademark, or copyright; or pollution or environmental liability. The Town may retain so much of the money due the Contractor under the Contract, as the Town considers necessary for such purpose. If no money is due, the Contractor's Surety may be held until such suits, actions, claims for injuries or damages have been settled. Money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that the Contractor and the Town are adequately protected by public liability and property damage insurance.

7. Miscellaneous

- a) Terms used in this Formal Contract which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.
- No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law); and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- c) OWNER and CONTRACTOR each binds himself, his partners, successors, assigns, and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- d) No mechanic, contractor, sub-contractor, materialman or other person can or will contract for or in any manner have or acquire any lien upon the Work covered by this Agreement, or the land upon which the same is situated.
- e) The amount of money appropriated by the contracting public entity, for public works projects, is equal to or in excess of the Contract Amount.
- f) The Agreement prohibits the issuance of any written Modification or other form of order or directive by the Owner requiring additional commensurate Work to be performed, which Work causes the aggregate amount payable under the

Agreement to exceed the Contract Amount appropriated for the original Agreement, unless the Contractor is given written assurance by the Owner that lawful appropriations to cover the costs of the additional work have been made or unless such work is covered under remedy-granting provisions in the Agreement.

Executed this $\frac{3rd}{day}$ of $\frac{2017}{2016}$	
ATTEST:	TOWN OF CASTLE ROCK:
Town Clerk Town	Mayor/Manager (as applicable)
APPROVED AS TO FORM: Town Attorney Address for giving notices:	
175 Kellogg Court	
Castle Rock, CO 80109	
CONTRACTOR:	
Layne Christensen Company	
BY: DECEMBER OF THE BY:	DATE: 17-1-16
TITLE: BUCINESS DEVELOPMEN	EMGR.
Address for giving notices:	
Layne Christensen Company	
17800 East 22 nd Avenue	
Aurora, CO 80111	

TOWN OF CASTLE ROCK RESPONSE TO REQUESTS FOR CLARIFICATION NUMBER 1 FOR RFP NO. 2016-04 October 21, 2016

1. What materials are the pump impellers?

Response: The pump impellors should be Ni resist or bronze.

2. How much extra cable should be included in the bid?

Response: Please include 100 feet of extra cable for bidding proposes.

3. In the bidding documents it states that the VFD should be indoor rated, is that correct?

Response: Please rate the VFD for outdoors.

4. What should the transducer size be?

Response: The transducers should be sized 11/4.

5. It is difficult to obtain a two-year warranty on manufactured equipment is a one-year warranty sufficient?

Response: Please provide a one-year warranty for manufactured equipment.

6. How will water supply be handled?

Response: Included in the updated bid documents attached is a \$10,000 allowance for water supply from the Town. This also includes providing the back flow preventer, the \$1,875 refundable deposit, and \$125 meter calibration test.

7. When is the deadline for questions?

Response: The deadlines for questions is 2:00 p.m. on October 28th, 2016.

8. The place for the date on the bid bond is not included.

Response: Please see the attached bid bond.

9. What is the size of a load?

Response: Rather than trying to determine the size of a load and how many loads, we ask that these items be a lump sums.

10. Request for modification of bidding document.

Response: Please see the modified bidding document.

11. Will sound mitigation be needed for the project?

Response: We are not certain if sound mitigation is required; however, we have decided to add it to the bid alternate items.

12. What are the aquifer depths?

Response: Please see the attached figure. Top of Denver is anticipated at approximately 925 feet. Top of Arapahoe is anticipated at approximately 1,766 feet. Top of Laramie Fox Hills is anticipated at 2,759 feet.

13. How many of each lengths of wire wrap screen?

Response: Denver: 5 sticks of 20 ft., 10 sticks of 10 ft., and 10 sticks of the 5 ft. (250 ft). Arapahoe: 6 sticks of 20 ft., 12 sticks of 10 ft., and 12 sticks of the 5 ft. (300 ft.).

Attachments

- 1. Amended Section 0300 Bid Proposal
- 2. Amended Section 0410 Bid Bond
- 3. Well Diagram Figure

SECTION 00300 BID PROPOSAL

PROJECT: Castle Rock Denver Well CR-226 and Arapahoe Well CR-227

Date: In compliance with your Invitation to Bid dated ______, and subject to 1. all conditions thereof, the undersigned _______, a Corporation incorporated in the State of ________, a_______ consisting of ______, an individual trading as ______ of the City of ______, State of ______, hereby proposes to furnish and do everything required by the Contract Documents to which this refers at the lump sum or unit prices shown for each Bid Schedule. 2. The undersigned bidder does hereby declare and stipulate that this proposal is made in good faith, without collusion or connection with any other person or persons bidding for the same Work, and that it is made in pursuance of and subject to all the terms and conditions of the Invitation to Bid and Instructions to Bidders, the Agreement, the Contract Drawings, and the Specifications pertaining to the Work to be done, all of which have been examined by the undersigned. 3. The undersigned has examined the location of the proposed Work, the Drawings, Specifications, and other Contract Documents and is familiar with the local conditions at the place where the Work is to be performed. 4. Accompanying this bid is a certified or cashier's check or standard bid bond in the sum of ______(\$_____) in accordance with the Invitation to Bid and Instructions to Bidders. 5. The undersigned bidder agrees to execute the Agreement and a Performance Bond and a Payment Bond for the amount of the total of this Bid within ten (10) calendar days from the date when the written Notice of the Award of the Agreement is delivered to him at the address given on this Bid. The name and address of the corporate surety with which the Bidder proposes to furnish the specified Performance and Payment Bonds is as follows: ______. All the various phases of Work enumerated in the Contract Documents with their 6. individual jobs and overhead, whether specifically mentioned, included by implication or appurtenant thereto, are to be performed by the Contractor under one of the items listed in the Bid Schedule, irrespective of whether it is named in said list. 7. Payment for Work performed will be in accordance with the Bid Schedule subject to changes as provided in the Contract Documents.

- 8. The undersigned Bidder hereby acknowledges Addenda No. ___ through _____.
- 9. BASE BID

BID SCHEDULE A Denver Well CR-226 Ten-Inch Completion

<u>ITEM</u>	DESCRIPTION	<u>UNIT</u>	QUANTITY	UNIT PRICE	EXTENSION
1.	Temp Wellhead Completion	L.S.	1	\$	\$
2.	Mobilization and Cleanup	L.S.	1	\$	\$
3.	Drilling 17.5-inch Diameter	L.F.	1,806	\$	\$
4.	Casing			\$	\$
	a. 24-inch Diameter	L.F.	40	\$	\$
	b. 10-inch Diameter	L.F.	1,546	\$	\$
5.	Well Screen Assembly	L.F.	250	\$	\$
6.	Gravel Pack	L.F.	881	\$	\$
7.	Grout Seal	L.F.	925	\$	\$
8.	Well Development	HR.	52	\$	\$
9.	Geophysical Logging	L.S.	1	\$	\$
10.	Well Pumping Tests Supply & Install Equipment	L.S.	1	\$	\$
	a. 8 – hour Step Test	L.S.	1	\$	\$
	b. 72- hour Pumping test	L.S.	1	\$	\$
11.	Disinfection	L.S.	1	\$	\$
12.	Video Survey	L.S.	1	\$	\$
13.	Video Survey – Additional Pass	L.S.	1	\$	\$
14.	Pitless Wellheads	L.S.	1	\$	\$
15	Provide Submersible Pump & Equip (include descript)	L.S.	1	\$	\$
	Install Submersible Pump & Equipment	L.S.	1	\$	\$
16	Adjustable Frequency Drives Include description	L.S.	1	\$	\$
מממ	-			DRILLING TOTAL	\$
DKI	LLING TOTAL (IN WORDS)_				

BID SCHEDULE B Denver Well CR-226 Twelve-Inch Completion

<u>ITEM</u>	DESCRIPTION	<u>UNIT</u>	QUANTITY	UNIT PRICE	EXTENSION
1.	Wellhead Completion	L.S.	1	\$	\$
2.	Mobilization and Cleanup	L.S.	1	\$	\$
3.	Drilling 20.0-inch Diameter	L.F.	1,806	\$	\$
4.	Casing			\$	\$
	a. 24-inch Diameter	L.F.	40	\$	\$
	b. 12-inch Diameter	L.F.	1,546	\$	\$
5.	Well Screen Assembly	L.F.	250	\$	\$
6.	Gravel Pack	L.F.	881	\$	\$
7.	Grout Seal	L.F.	925	\$	\$
8.	Well Development	HR.	52	\$	\$
9.	Geophysical Logging	L.S.	1	\$	\$
10.	Well Pumping Test Tests Supply & Install Equipment	L.S.	1	\$	\$
	a. 8 – hour Step Test	L.S.	1	\$	\$
	b. 72- hour Pumping test	L.S.	1	\$	\$
11.	Disinfection	L.S.	1	\$	\$
12.	Video Survey	L.S.	1	\$	\$
13.	Video Survey – Additional Pass	L.S.	1	\$	\$
14.	Pitless Wellheads	L.S.	1	\$	\$
15	Provide Submersible Pump & Equip (include descip)	L.S.	1	\$	\$
	Install Submersible Pump & Equipment	L.S.	1	\$	\$
16	Adjustable Frequency Drives Include description	L.S.	1	\$	\$
DRI	LLING TOTAL (IN WORDS)_	<u>-</u>			

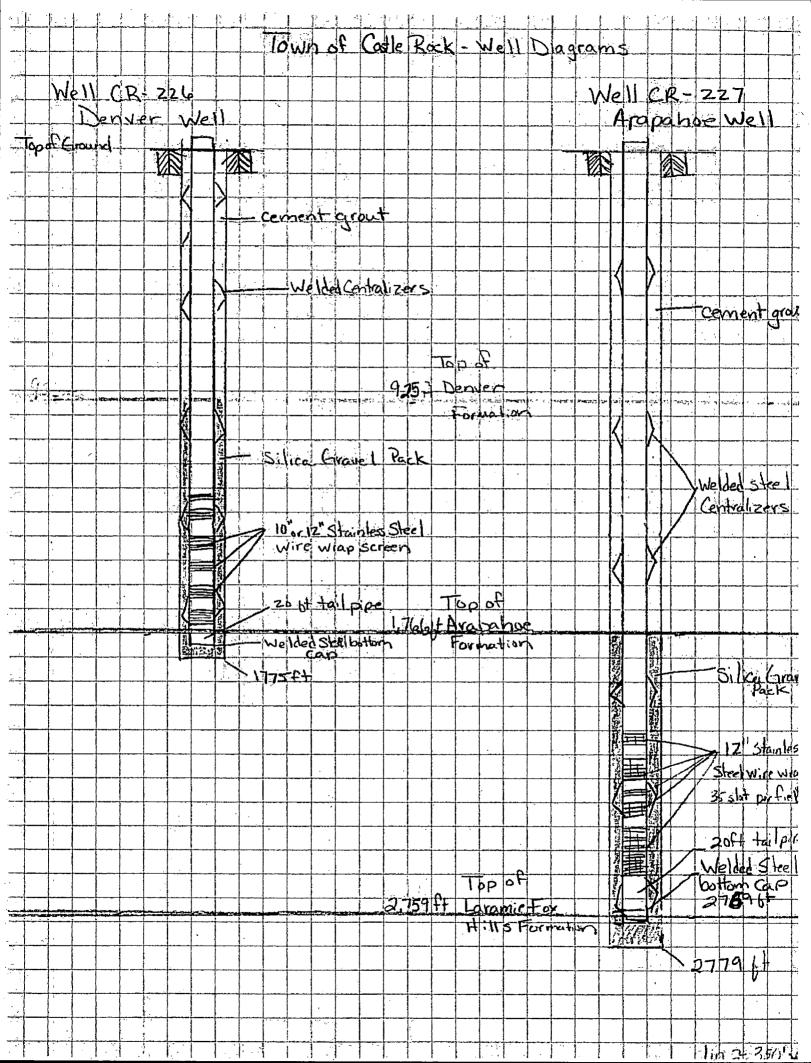
BID SCHEDULE C Arapahoe Well CR-227 Twelve-Inch Completion

<u>ITEM</u>	DESCRIPTION	<u>UNIT</u>	QUANTITY	UNIT PRICE	EXTENSION
1.	Wellhead Completion	L.S.	1	\$	\$
2.	Mobilization and Cleanup	L.S.	1	\$	\$
3.	Drilling 20.0-inch Diameter	L.F.	2,779	\$	\$
4.	Casing			\$	\$
	a. 24-inch Diameter	L.F.	40	\$	\$
	b. 12-inch Diameter	L.F.	2,449	\$	\$
5.	Well Screen Assembly	L.F.	300	\$	\$
6.	Gravel Pack	L.F.	1,013	\$	\$
7.	Grout Seal	L.F.	1,766	\$	\$
8.	Well Development	HR.	52	\$	\$
9.	Geophysical Logging	L.S.	1	\$	\$
10.	Well Pumping Test Tests Supply & Install Equipment	L.S.	1	\$	\$
	a. 8 – hour Step Test	L.S.	1	\$	\$
	b. 72- hour Pumping test	L.S.	1	\$	\$
11.	Disinfection	L.S.	1	\$	\$
12.	Video Survey	L.S.	1	\$	\$
13.	Video Survey – Additional Pass	L.S.	1	\$	\$
14.	Pitless Wellheads	L.S.	1	\$	\$
15	Provide Submersible Pump & Equip (Include descript)	L.S.	1	\$	\$
	Install Submersible Pump & Equipment	L.S.	, 1	\$	\$
16	Adjustable Frequency Drives Include description	L.S.	1	\$	\$
DRI	LLING TOTAL (IN WORDS)_				

MANDATORY ALTERNATE ITEM	S (Must be l	<u>oid)</u>				
GESC Permitting and Implementation	L.S.	1	\$	\$		
Drilling Cuttings Removal	L.S	1	\$	\$		
Drilling Mud/Fluids Removal	L.S	1	\$	\$		
Road Maintenance	L.S	1	\$	\$		
Step up Transformer	L.S.	2	\$	\$		
Nuclear Magnetic Resonance Logging Arapahoe Well	L.S.	1	\$	\$		
Denver Well	L.S.	1	\$	\$		
3 One hour Meetings with Facility Design Engineer	HR.	3	\$	\$		
Water Supply provide backflow meter	Allowance	1	\$_10,000	\$ <u>10,000</u>		
Startup for Denver and Arapahoe at Facility Completion	L.S.	1	\$	\$		
Sound Mitigation	L.S.	1	\$	\$		
MANDATORY ALTERNATE ITEMS TOTAL \$						
MANDATORY ALTERNATE ITEMS	SUBTOTAL	(IN	WORDS)			
TOTAL PROJECT BID (IN WORDS	<u>5)</u>					

Section 00410 Amended BID BOND

(insert the full name and address or legal and,	al title of the Contractor) as Principal,
(insert the legal title of the Surety) as Su	urety, a corporation organized under the laws of the State of d to transact business in the State of Colorado, with a general
office at	a to transact business in the otate of Golorado, with a general
are hereby bound to the Town of Castle	Rock, Colorado, (Town) as Obligee, in the amount of DOLLARS, in United States currency, for the payment of which themselves, their heirs, executors, administrators, successors,
, 2016,	Principal has submitted the accompanying Bid dated
For construction of the Castle Rock Der 227 Project contract.	over Formation Well CR-226 and Arapahoe Formation Well CR-
Guaranty, of at least five percent of the execute the Agreement for Construction	eceiving the Bid, that the Principal deposit with the Town a Bid amount of the Bid, conditioned so that if the Principal fails to a Contract, and furnish the required Bonds if the Principal is paid immediately to the Town, as liquidated damages and not as a form.
Town according to the Bid, as accepted Payment Bond with good and sufficient faithful performance and proper fulfillme	od, executes the Agreement for Construction Contract with the , and furnishes a Performance Bond and a Labor and Material Surety or Sureties, upon the forms prescribed by the Town for the ent of the Contract, or pays to the Town the proper amount of a shall be null and void; otherwise it shall remain in full force and
Executed this day of	, 2016.
WITNESS	PRINCIPAL By its President
WITNESS	SURETY
	TITLE
	BY: Its Attorney-in-fact
then (title) of the Co thereto is genuine; and that the bond wa Corporation by authority of this governing	, certify that I, title) of the Corporation named as Surety; that, Who signed the bond on behalf of the Principal, was prporation; that I know his or her signature, and the signature as duly signed, sealed, and attested to for and on behalf of the ng body.
(CORPORATE SEAL)	Signed: Title:



TOWN OF CASTLE ROCK RESPONSE TO REQUESTS FOR CLARIFICATION NUMBER 2 FOR RFP NO. 2016-04 October 25, 2016

1. Sound Mitigation – there are many different forms of sound control 12' free standing panels, 16',24', 30' sound walls, etc – all of these items are bid by the foot installed Can we assume 300'? of what type?

Response: For bid proposes please use 300 feet of 12 ft. free standing panels.

- 2. Geophysical logging- On the Geophysical logs do we need to include advanced log interpretation? **Response:** Yes, please include advanced log interpretation. This will not be necessary if we do not do the NMR. Write this price onto the bid document. (Integrated Log Montage with Summary Tech Memo)
- 3. NMR logging On the NMR logs do we need to include advanced log interpretation? **Response:** Yes, please include advanced log interpretation for NMR with the inclusion of incorporating the pumping test results into the NMR data interpretation. (Integrated Log Montage with Summary Tech Memo)
- 4. Which well will be drilled first to include the site prep and initial mob costs? **Response:** The Arapahoe well will be drilled first.

TOWN OF CASTLE ROCK RESPONSE TO REQUESTS FOR CLARIFICATION NUMBER 3 FOR RFP NO. 2016-04 October 27, 2016

- Would you consider a few alternate manufactures as qualified as equal to the listed manufactures in the specifications? Summit ESP is a newer manufacture we've been using for the last 5 years and have had excellent reliability with their equipment. Most of their engineers are actually former engineers from Centrilt. Their drive is comparable to the Eaton and actually uses the same VFD manufactured by Vicon.
 - **Response:** The Town would want some references from utilities that have used them and Town Staff would evaluate the products. (The Town has had issues with some ESP products in the past.)
- 2. The other is Baker Manufacture. I'm sure you have heard of them for shallower set pitless adaptors. They have designed deep well pitless and now have it out on the market. I assisted in the design and has all qualities to meet and exceeds the specifications.
 - **Response:** The Town would consider Baker Manufacture and would have to review the submittal that it meets the specifications.

TOWN OF CASTLE ROCK RESPONSE TO REQUESTS FOR CLARIFICATION NUMBER 4 Final FOR RFP NO. 2016-04 October 31, 2016

When is the required start date?
 Response: There is not a required start date. Please include available start date with the bid proposal.

Town of Castle Rock



Agenda Memorandum

Agenda Date: 1/3/2017

Item #: 14. File #: RES 2017-006

To: Honorable Mayor and Members of Town Council

From: Mark Marlowe, PE., Utilities Director

Matt Benak, PE., Water Resources Manager Jeanne Stevens, PE, Engineering Manager

Resolution Approving an Agreement with Layne Christensen Company for the

Construction of the Founders Wells CR-226 and CR-227

Executive Summary

The purpose of this memo is to request the Town Council's approval of a services agreement with Layne Christensen Company (Layne) for the construction of two new Denver Basin wells that will supply water to the Founders Water Treatment Plant. The last Castle Rock Denver Basin wells constructed were the Canyon South Wells CR-101 and CR-117 in 2010. The Founders Treatment Plant is rated to treat 4 million gallons per day (mgd) and currently is considered water short. It is important to understand that this contract is just one piece of the overall project to add two Denver Basin wells to our water supply portfolio. Current total project estimates are as follows:

Project	Contractor	Amount
Well drilling	Layne Christensen Co.	\$1,914,422
Design of well house, pipe, appurtenances	Dewberry	\$141,040
Hydrogeologic professional services	Leonard Rice Engineers	\$78,200
Construction of well house, pipe, appurtenances	Engineer's Cost Estimate	\$1,804,345
	Total Project Estimate	\$3,938,007

There are three qualified well drillers in the region. All three were solicited to provide bids for the construction of two Denver Basin Aquifer wells. Two of the well drilling companies provided bids while the third opted not to submit a proposal. All of the bids were determined to be complete. Staff recommends approving the construction services agreement, based on the qualified proposal from Layne in the amount of \$1,740,384. In addition, Utilities Staff requests a 10% Town-managed contingency of \$174,038, for a total authorization of \$1,914,422. The resolution is attached as *Attachment A*. The Services Agreement Contract is included as *Exhibit 1*.

Item #: 14. File #: RES 2017-006

Town Council approved the Water Service Intergovernmental Agreement (IGA) with Dominion Water and Sanitation District (Dominion) on September 20, 2016 for shared use of infrastructure. As part of the Water Service IGA, Dominion will be paying the Town for all costs associated with the design and construction of the Founders Well Facility infrastructure and conversion of two existing wells at the Ray Waterman Regional Water Treatment Center to ASR (aquifer storage and recovery) as part of the Infrastructure Fee. The initial payment Dominion will make to the Town is \$3 million. If costs for the infrastructure exceed \$3 million Dominion will pay the excess. Costs under \$3 million for the overall project will result in a refund. The costs for this work have been reviewed with Dominion and they are comfortable with them.

The overall schedule for the broader project is for substantial completion Fall of 2017. However, there are some items that have a longer lead time for example the some of the larger electrical equipment. We plan to submit the CDPHE new source water permit with the completion of wells with hopes of having approval at time of project completion or soon after.

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

On December 7, 2016, the Utilities Commission unanimously approved to take the construction services contract for the Founders Wells CR-226 and CR-227 to Town Council for approval.

Discussion

Based on the Water Resources Supply Demand Model, the high population growth trend in Castle Rock, the last two summer water demand seasons, and our recent intergovernmental agreement with Dominion, additional water supply is needed to keep pace with increased water demands. Given the fact that the WISE and the East Plum Creek Diversion Projects will not be on-line until late 2017 and 2018, respectively this has accelerated the need to develop a new water well facility.

The new Founders Well Facility will be located east of Mattney Park along Lantern Circle (see **Attachment B**) on a parcel previously dedicated to the Town for the purpose of developing a well facility. The project will include the construction of two new Denver Basin Aquifer wells, controls and meter facilities at the site, and a transmission pipeline to convey the water to the Founders Water Treatment Facility. Staff anticipates that this facility will produce an additional 0.85 MGD of raw water supply for the Town. Dewberry Engineers, Inc. was selected to design the facility (control panels, vault, and raw water pipeline) with a budget of \$141,040. Leonard Rice Engineers, Inc. was selected for the engineering/hydrogeological professional services for the oversight of the construction of the wells with a budget of \$78,200. The well facility construction documents will be sent out for bid once the design of the facility is complete.

A Request for Proposal (RFP) was sent out to three qualified well drillers to provide proposals for the construction of the two Founders Wells CR-226 and CR-227. The Town Utility Department (Castle Rock Water) received two proposals and one non-bid. All of the bids were determined to be complete. The results are shown in the following table.

Consultant Bid Amount

Item #: 14. File #: RES 2017-006

Layne Christensen Company	\$1,740,384
Hydro Resources, Inc.	\$2,079,567
Cascade Drilling	Opted Not to Bid

Layne's proposal addressed the full scope of work and alternative scope items, and staff believes the proposal amount to be a good value to the Town based on previous similar scopes of work. The work will include the drilling and construction of an Arapahoe Aquifer well and a Denver Aquifer well. Layne has provided well rehabilitation and construction services to the Town on previous projects. Staff is confident of Layne's capabilities to complete this project within budget and on schedule, and we recommend award of the construction service agreement to Layne.

Budget Impact

Funding for this project is available in the approved 2017 Budget. Staff is requesting that Town Council approve the project so that the Notice to Proceed can be issued on January 3, 2017. The approved budget amount is \$2,750,000 (Account No. 210-4275-442.75-39). As part of the agreement between Town of Castle Rock and Dominion Water and Sanitation District, Dominion will provide capital investments to fund the construction of two new Denver Basin wells and the conversion of two existing wells to have the ability for aquifer storage and recovery, an estimated value of \$3,000,000. The Town will use these funds for the design and construction of this project. The Layne proposal fee is \$1,740,384. Staff requests an additional \$174,038 (Town-managed 10% contingency) be authorized for a total project authorization of \$1,914,422.

Project	Amount	Contingency	Total Account
210-42 75-442.75-39	\$1,740,3 84	\$174,038	\$1,914,422
New Water Supply Well			

Staff Recommendation

Staff recommends Town Council approval of the services agreement between the Town of Castle Rock and Layne Christensen Company for the construction of New Founders Wells CR-226 and CR-227 in the amount of \$1,740,384 plus a 10% Town-managed contingency of \$174,038 for a total authorization of \$1,914,422.

Proposed Motion

"I move to approve the resolution as introduced by title".

Attachments

Attachment A: Resolution Exhibit 1: Agreement

Attachment B: Location Map

