TOWN OF CASTLE ROCK
EQUIPMENT AND SERVICES ACQUISITION AGREEMENT
(SCADA Master Plan Phase IV Implementation – Castle Rock Water)

DATE: August 14, 2024.

PARTIES: **TOWN OF CASTLE ROCK**, a Colorado municipal corporation, 100 N. Wilcox Street, Castle Rock, Colorado 80104 ("Town").

LOGICAL SYSTEMS, LLC, a Tennessee limited liability company, 2756 Appling Center Cove, Suite 101, Memphis, Tennessee 38133 ("Contractor").

RECITALS:

I. The Town issued a Request for Proposals from qualified contractors with expertise in water treatment plant control system services.

II. Contractor timely submitted its proposal.

III. The Town engages Contractor to provide the services more fully described in the following Agreement and Exhibits.

TERMS:

1. **Scope of Services.** Contractor shall perform all of the services and provide all materials as set forth on ***Exhibit 1*** ("Services"). Contractor shall complete the Services consistent with standards and practices of the profession.

2. **Payment**. The Town's total obligation to Contractor under this Agreement for the Services shall not exceed $4,475,720.00, unless authorized in writing by the Town. Contractor shall invoice Town for the Services rendered in accordance with the rate and fee schedule set forth in ***Exhibit 1***. Town may withhold payment in whole, or in part for the Services found by the Town to be not conforming to this Agreement, not in conformance with all applicable federal, state, and local laws, ordinances, rules and regulations, or if Contractor is in default of the Inspection and Warranty Section herein, below. Town shall remit payment, whether whole or in part within fifteen (15) days of receipt of such invoice.

3. **Term/Completion.** The term of this Agreement shall commence on October 1, 2024 and expire on May 31, 2026 (the "Term"). The Parties may mutually agree to extend the Term of this Agreement for no more than one (1) year under the same terms and conditions by a written amendment to this Agreement prior to the expiration of this Agreement. Nothing in this paragraph prohibits the parties from amending the payment section and/or incorporating an updated rate and fee schedule should the Parties elect to extend the term of the Agreement. Contractor shall complete any Services in progress as of the expiration date. Contractor shall devote adequate resources, in its professional opinion, to assure timely completion of the Services in accordance with the standards specified in this Agreement. Contractor shall perform the Services under this Agreement using a standard of care, skill and diligence ordinarily used by reputable professionals performing under circumstances similar to those required by this Agreement.

4. **Termination.** Town shall have the right to terminate this Agreement with or without cause at any time with ten (10) days' written notice to Contractor. The Town's only obligation in the event of termination shall be payment of fees and expenses incurred up to and including the effective

date of termination. In the event that the Town terminates this Agreement without cause, such fees may include reasonable demobilization costs, restocking fees and other reasonable costs incurred by Contractor as a result of such termination (the "Termination Fees"). The Town shall not be required to pay any Termination Fees which would result in the cumulative total payment to Contractor under this Agreement exceeding the Town's total payment obligation as listed in Paragraph 2 of this Agreement. Contractor shall provide the Town with an itemization of the Termination Fees if such fees are incurred. Contractor shall not be entitled to charge Termination Fees if the Town terminates this Agreement for cause, or if Contractor is in default under this Agreement. Upon termination, Contractor shall immediately turn over all work product, materials, deliverables created up to the point of termination.

5. **Subcontractors.** Contractor may utilize subcontractors to assist with specialized Services as necessary to complete the Services. Contractor will submit any proposed subcontractor and the description of subcontractor services to the Town for its prior approval.

6. **Inspection and Warranty**. Town reserves the right to inspect the Services provided under this Agreement at all reasonable times and places during the term of this Agreement. Alternatively, the Town may refuse the Services and cancel all or any part of this Agreement if Contractor fails to deliver all or any part of the Services in accordance with the terms and conditions of this Agreement. Failure by the Town to inspect and test the Services shall not relieve Contractor of such responsibility. Any acceptance by the Town shall not be deemed a waiver or settlement of any defect or nonconformity in such Services. If Town elects to accept nonconforming or defective Services, Town, in addition to its other remedies, shall be entitled to deduct a reasonable amount from the price thereof to compensate Town for the nonconformity or defect. Contractor expressly warrants that all materials and/or equipment manufactured by Contractor and furnished under this Agreement shall be free from defects in materials or workmanship, are installed properly and in accordance with the manufacturer recommendations or other industry standards, and will function in conformance with this Agreement for a period of one (1) year from the date of delivery or installation. Contractor, shall, at its option, repair or replace any material and/or equipment that fail to satisfy this warranty during the warranty period. Additionally, Contractor agrees to assign to the Town all written manufacturer warranties relating to the supplies and to deliver such written warranties to the Town.

7. **Risk of Loss**. With respect to any goods or equipment provided under this Agreement, risk of loss shall not pass to the Town until such equipment has been received and accepted by the Town, pursuant to the Inspection and Warrant Section herein, above, at the destination specified by the Town. Contractor assumes full responsibility for packing, crating, marking, transporting, and liability for loss or damage in transit, notwithstanding any agreement by the Town to pay freight, express or other transportation charges.

8. **Annual Appropriation.** The continuance of this Agreement is contingent upon the appropriation of funds to fulfill the requirements of the Agreement by the Town. If the Town fails to appropriate sufficient monies to provide for the continuance of the Agreement, the Agreement shall terminate on the final day preceding the date of the beginning of the first fiscal year for which funds are not appropriated. The Town's only obligation in the event of termination shall be payment of fees and expenses incurred up to and including the effective date of termination.

9. **Assignment.** This Agreement shall not be assigned by Contractor without the written consent of the Town.

10. **Notice.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes if sent by certified mail or registered mail, postage and fees prepaid, addressed to the party to whom such notice is to be given at the address

set forth on the first page of this Agreement, or at such other address as has been previously furnished in writing to the other party or parties. Such notice shall be deemed given when deposited in the United States mail.

11. **Insurance.**

A. **General Conditions:** Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, including any extension thereof, and during any warranty period. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-VII" or better. Each policy shall require notification to the Town in the event any of the required policies be canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the Town. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, Contractor shall provide written notice of cancellation, non-renewal and any reduction in coverage to the Town by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s). Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement. All commercial and automobile liability policies shall have the following additional provisions:

- Severability of interests or separation of insureds provision;
- Provision that coverage is primary and non-contributory with other coverage maintained by the Town;
- The underlying Agreement is an "insured contract" under the policy;
- Defense costs shall be outside the policy limits for liability coverage.

B. **Proof of Insurance:** Contractor may not commence services or work relating to this Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance attached as ***Exhibit* 2**, preferably an ACORD form, complies with all insurance requirements of this Agreement. The Town's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the Town's rights or remedies under this Agreement. Each certificate shall identify the Project and shall provide that coverage afforded under the policies shall not be cancelled, terminated or materially changed until at least 30 days prior written notice has been given to the Town. If the words "endeavor to" appear in the portion of the certificate addressing cancellation, those words shall be stricken from the certificate by the agent(s) completing the certificate. The Town may require additional proof of insurance, including but not limited to policies and endorsements.

C. **Additional Insureds**: For Commercial General Liability and Automobile Liability, Contractor and subcontractor's insurer(s) shall include the Town, its elected and appointed officials, officers, employees, agents and volunteers acting within the course and scope of their duties for the Town as additional insured.

D. **Waiver of Subrogation:** For all coverages required under this Agreement, Contractor's insurer shall waive subrogation rights against the Town, its elected and appointed officials, officers, employees, agents and volunteers acting within the course and scope of their duties for the Town.

E. **Subcontractors:** Contractor shall confirm and document that all subcontractors (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) procure and maintain coverage as approved by the Contractor and appropriate to their respective primary business risks considering the nature and scope of services provided.

F. **Workers' Compensation and Employer's Liability Insurance:** Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of $100,000 per occurrence for each bodily injury claim, $100,000 per occurrence for each bodily injury caused by disease claim, and $500,000 aggregate for all bodily injuries caused by disease claims.

G. **Commercial General Liability:** Contractor shall maintain a Commercial General Liability insurance policy with minimum limits of $1,000,000 for each occurrence and $2,000,000 products and completed operations aggregate, and $2,000,000 general aggregate (per project). The policy shall provide coverage for all claims for bodily injury, property damage (including loss of use), products and completed operations, and contractual liability.

H. **Automobile Liability:** Contractor shall maintain Automobile Liability with minimum limits of $1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement.

12. **Colorado Governmental Immunity Act.** The parties understand and agree that the Town is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, §24-10-101, *et seq.,* C.R.S., as from time to time amended, or otherwise available to Town, its officers, or its employees.

13. **Indemnification.** Contractor expressly agrees to defend, indemnify and hold harmless Town or any of its agents, officers or employees from any and all claims, damages, liability, or court awards including attorney's fees that are or may be awarded as a result of any loss, injury or damage sustained or claimed to have been sustained by anyone, including, but not limited to, any person, firm, partnership, or corporation, to the extent caused by the negligent acts or willful misconduct of Contractor or any of their employees or agents in performing Services pursuant to this Agreement. In the event that any such suit or action is brought against Town, Town will give notice within ten (10) days thereof to Contractor. These defense and indemnification obligations shall survive the expiration or termination of this Agreement.

14. **Delays.** Any delays in or failure of performance by any party of the obligations under this Agreement shall be excused if such delays or failure are a result of acts of God, fires, floods, strikes, labor disputes, accidents, regulations or orders of civil or military authorities, shortages of labor or materials, or other causes, similar or dissimilar, which are beyond the control of such party.

15. **Additional Documents & Entire Agreement.** The parties agree to execute any additional documents or take any additional action that is necessary to carry out this Agreement. Further, this Agreement represents the entire agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in

writing signed by the parties. If any other provision of this Agreement is held invalid or unenforceable, no other provision shall be affected by such holding, and all of the remaining provisions of this Agreement shall continue in full force and effect.

16. **Time of the Essence.** Time is of the essence. If any payment or any other condition, obligation, or duty is not timely made, tendered or performed by either party as defined in Paragraph 17 below and with the exception of any delay excused under Paragraph 14 herein, then this Agreement, at the option of the party who is not in default, may be terminated by the non-defaulting party, in which case, the non-defaulting party may recover such damages as may be reasonable.

17. **Default and Remedies**. In the event either party should default in performance of its obligations under this agreement, and such default shall remain uncured for more than ten (10) days after notice of default is given to the defaulting party, the non-defaulting party shall be entitled to pursue any and all legal remedies and recover its reasonable attorney's fees and costs in such legal action. In addition, no party will be entitled to lost profits, economic damages, or actual, direct, incidental, consequential, punitive or exemplary damages in the event of a default. Contractor's liability hereunder shall be limited to (a) insurance proceeds paid, or (b) in the event that insurance does not respond, to the total cumulative price of this Agreement as stated in Paragraph 2 above.

18. **Waiver.** A waiver by any party to this Agreement of the breach of any term or provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach by either party.

19. **Venue, Choice of Law and Disputes.** Venue for all legal actions shall lie in the District Court in and for the County of Douglas, State of Colorado, and shall be governed by the laws of the State of Colorado as well as the Charter and Municipal Code, rules, regulations, Executive Orders, and fiscal rules of the Town.

20. **Americans with Disabilities Act.** Contractor agrees to ensure that any deliverables, work, services, or equipment developed, designed, constructed or produced pursuant to this Agreement, to include website design services, will comply with all requirements of Title II of the Americans with Disabilities Act and, where applicable, Section 504 of the Rehabilitation Act, the Architectural Barriers Act, and the Colorado Anti-Discrimination Act. To the extent any deliverables, work, services, or equipment developed, designed, constructed or produced pursuant to this Agreement fail to comply with the requirements of this Section, Contractor shall indemnify the Town in accordance with the terms or this Agreement and, at the Town's option, shall re-vise, re-construct, or similar, the non-compliant deliverable, work, service, or equipment, or reimburse the Town for the cost associated with bringing the non-compliance deliverable, work, service or equipment into compliance.

21. **No Discrimination in Employment.** The Town is a governmental agency and, therefore, in connection with the performance of Work or Services under this Agreement, Contractor shall not refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability, or any other protected class under Federal or State law; and Contractor shall insert the foregoing provision in any subcontracts hereunder.

22. **Title VI Compliance.** To the extent applicable, Contractor shall ensure its current and future compliance with Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d et seq., as amended, which prohibits the exclusion from participation, denial of the benefits of, or subjection to

discrimination under programs and activities receiving federal financial assistance, of any person in the United States on the ground of race, color, or national origin.

23. **Advertising and Public Disclosure.** Contractor shall not include any reference to this Agreement or goods or services provided pursuant to this Agreement in any of Contractor's advertising or public relations materials without first obtaining the written approval of the Town. Nothing herein, however, shall preclude the transmittal of any information to officials of the Town, including without limitation, the Town Attorney, Town Manager, and the Town Council.

24. **Ownership of Documents, Open Records, and Copyright.** Any work product, materials, and documents produced by the Contractor pursuant to this Agreement shall become property of the Town upon delivery and shall not be made subject to any copyright or made confidential or protected in any manner unless authorized by the Town. Other materials, methodology and proprietary work used or provided by the Contractor to the Town not specifically created and delivered pursuant to the Services outlined in this Agreement may be protected by a copyright held by the Contractor and the Contractor reserves all rights granted to it by any copyright. However, Contractor acknowledges and understands that the Town is subject to the Colorado Open Records Act, C.R.S. § 24-72-201, et seq. The Town shall not reproduce, sell, or otherwise make copies of any copyrighted, confidential or protected material, subject to the following exceptions: (1) for exclusive use internally by Town staff and/or employees; or (2) pursuant to a request under the Colorado Open Records Act, C.R.S. § 24-72-201, et seq., to the extent that such statute applies; or (3) pursuant to law, regulation, or court order. The Contractor waives any right to prevent its name from being used in connection with the Services.

Contractor warrants that all Services or Work performed under this Agreement shall comply with all applicable patent, trademark and copyright laws, rules, regulations and codes of the United States. Contractor shall not knowingly utilize any protected patent, trademark or copyright in performance of the Work or Services unless Contractor has obtained proper permission and all licenses, releases and other necessary documents. Contractor releases, defends, indemnifies and holds harmless the Town, its officers, agents, and employees from any and all claims, damages, suits, costs, expenses, liabilities actions or proceedings of any kind or nature whatsoever, of or by anyone whomsoever, in any way resulting from, or arising out of, directly or indirectly, the performance of the Work or Services under this Agreement which infringes upon any patent, trademark or copyright protected by law, except where the Services are provided in conformance with the Town's express specifications.

25. **Authority.** The individuals executing this Agreement represent that they are expressly authorized to enter into this Agreement on behalf of the Town and the Contractor and bind their respective entities. This Agreement is executed and made effective as provided above.

26. **Independent Contractor.** Contractor and the Town hereby represent that Contractor is an independent contractor for all purposes hereunder. Contractor is not covered by any worker's compensation insurance or any other insurance maintained by Town except as would apply to members of the general public. Contractor shall not create any indebtedness on behalf of the Town.

27. **No Third-Party Beneficiaries.** It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to Town and Contractor, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than Town or Contractor receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

28. **Counterparts & Electronic Signatures.** This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall be deemed to constitute one and the same instrument. Each of the parties hereto shall be entitled to rely upon a counterpart of the instrument executed by the other party and sent by electronic mail. Each party agrees that this Agreement and any other documents to be delivered in connection herewith may be electronically signed, and that any electronic signatures appearing on this Agreement or such other documents are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.

29. **Licenses/Taxes.** Contractor affirms it is licensed to do business in the State of Colorado and is in good standing. Further, Contractor shall be solely responsible for paying all applicable taxes associated with or rising out of this Agreement.

30. **Confidentiality.** Contractor agrees that it shall treat as confidential all information provided by the Town regarding the Town's business and operations. All confidential information provided by the Town hereto shall be used by Contractor solely for the purposes of rendering services or work pursuant to this Agreement and, except as may be required in carrying out the terms of this Agreement, shall not be disclosed to any third party without the prior consent of the Town. The foregoing shall not be applicable to any information that is publicly available when provided or which thereafter becomes publicly available or which is required to be disclosed by any regulatory authority in the lawful and appropriate exercise of its jurisdiction over a party, any auditor of the parties hereto, by judicial or administrative process or otherwise by applicable law or regulation.

31. **Priority of Provisions.** In the event that any terms of this Agreement and any Exhibit, attachment, or other referenced document are inconsistent, the following order of priority shall control: (1) this Agreement; (2) Exhibit containing Certificate of Insurance; (3) Exhibit containing the Scope of Services and Fee Schedule; and (4) Exhibit containing the Town of Castle Rock Affidavit of Independent Contractor Status.

ATTACHED EXHIBITS:
EXHIBIT 1 – SCOPE OF SERVICES AND FEE SCHEDULE
EXHIBIT 2 – CONTRACTOR'S CERTIFICATE OF INSURANCE

(Remainder of page intentionally left blank; signature page to follow)

ATTEST:

_____
Lisa Anderson, Town Clerk

TOWN OF CASTLE ROCK

_____
Jason Gray, Mayor

_____
David L. Corliss, Town Manager

Approved as to form:

_____
Sarah Jean Rodger, Assistant Town Attorney

Approved as to content:

_____
Mark Marlowe, Director of Castle Rock Water

CONTRACTOR:

LOGICAL SYSTEMS, LLC

By: Carmen Manes

Its: Contract Administrator

EXHIBIT 1

SCOPE OF SERVICES AND FEE SCHEDULE

LOGICAL SYSTEMS, LLC - Golden Branch
400 CORPORATE CIR., SUITE R GOLDEN, CO 80401
PHONE: (303) 215-9950 FAX: (303) 215-9952
www.logicalsysinc.com

Submitted to: Nicolas Van Kooten
Submitted by: Kristin Scott
Reviewed by: Joey Cate

Creation Date: July 24, 2024
Last Revision Date: August 6, 2024

Nicolas Van Kooten
Castle Rock Water
171 Kellogg Court
Castle Rock, CO 80109
303.663.4455 voice
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NVanKooten@crgov.com

Bid Prepared by Logical Systems, LLC
Proposal No. 28091F R1
Castle Rock Water
SCADA Master Plan Implementation Phase IV

LOGICAL SYSTEMS, LLC - Golden Branch
400 CORPORATE CIR., SUITE R GOLDEN, CO 80401
PHONE: (303) 215-9950 FAX: (303) 215-9952
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Submitted to: Nicolas Van Kooten
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rev24v0.0

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Overview

Castle Rock Water (CRW) has requested support to replace the hardware and wiring for the existing control system at the Miller Water Treatment Plant (Miller), and various well and remote sites. The purpose of this project is to bring the system into compliance with modern cybersecurity and equipment standards and improve operator efficiencies, as recommended by the Town's 2019 SCADA Master Plan. LSI proposes to provide professional services for the design, procurement, installation, programming, startup, commissioning and testing of the hardware installation. This also includes fabricating and installing the new programmable logic controller (PLC) panels at Miller WTP and remote sites.

Logical Systems, LLC is pleased to present this Fixed Price proposal for the professional services required for the SCADA Master Plan Implementation Phase IV on the Castle Rock Water.

Proposal revision R1 per Castle Rock Water - Request for Clarification provided on July 31st, 2024. Changed or updated items indicated in yellow highlight.

LOGICAL SYSTEMS, LLC - Golden Branch
400 CORPORATE CIR., SUITE R GOLDEN, CO 80401
PHONE: (303) 215-9950 FAX: (303) 215-9952
www.logicalsysinc.com

Submitted to: Nicolas Van Kooten
Submitted by: Kristin Scott
Reviewed by: Joey Cate

Creation Date: July 24, 2024
Last Revision Date: August 6, 2024

1 Scope of Work

This scope of work is based on the following source documents provided to LSI which described the current state of Castle Rock Water's SCADA Master Plan Implementation efforts and outlined support needs to 23 facilities including:

RFP 2024-006- SCADA Master Plan Phase IV Project (including Appendices A through H), Addendum 1, Addendum 2, Addendum 3, Addendum 4, and Addendum 5.

LSI Proposal – Request for Clarification received on July 31st, 2024.

For this scope of work, LSI will be providing the detail design, procurement, and construction efforts for the Castle Rock Water. As part of this effort LSI will be providing the electrical and control systems design as well as the control system integration. LSI will provide technical and commercial oversight of the electrical and mechanical installation contractors. LSI will also provide a Project Manager for this effort to provide a single point of interface responsible to Castle Rock Water's Project Manager.

This document forms the entire basis for the scope of work and deliverables between the two parties. No other terms other than those contained herein are agreed to. A written purchase order is required for confirmation of the order and must reference this proposal number.

It is recognized by the parties that the aforementioned scope of services is based on the current evaluation and corresponding request by Castle Rock Water and it is possible that variations in the scope of services specified herein may be adjusted from time to time based on newly found needs and requirements at the facility. In such an event, Logical Systems, LLC will use its best efforts to keep Castle Rock Water informed of any such variations and, in any event, shall receive Castle Rock Water's advance approval prior to undertaking any variations that will increase the costs of services Logical Systems, LLC to Castle Rock Water.

2 Equipment and Fabrication

In support of the scope of this proposal LSI will be providing the following equipment/hardware:

LSI will design, fabricate, and internally wire twenty-four (24) control panels based on Issue for Construction drawings developed by LSI and submitted to the Owner for approval. As directed by Castle Rock Water, the panels are required to be Underwriters Laboratories (UL) 508A Listed. LSI will fabricate and list the panels prior to shipment, any design changes or modifications after approval of fabrication drawings will require additional efforts. Panels will be fabricated and listed utilizing one of LSI's four UL508 certified panel shops.

In addition to the control panels above, LSI will also be procuring and providing various instrumentation and actuators for the Miller WTP and remote sites per the provided Instrumentation and Actuator list provided in the Scope of Work.

Please reference "LSI Provided Equipment, Instrumentation, Actuators, Exhibit 6" in the Appendix List for specific instrumentation detail and Control Panel equipment.

3 Project Management

3.1 Project Management

LSI shall provide specific for its scope, a Project Manager for this effort to serve as the point of contact between Castle Rock Water personnel, contractors, vendors, and the LSI resources working on the project. This allows for timely updates of project milestones and will ensure a seamless documented transfer of information between all parties minimizing the potential for scope changes.

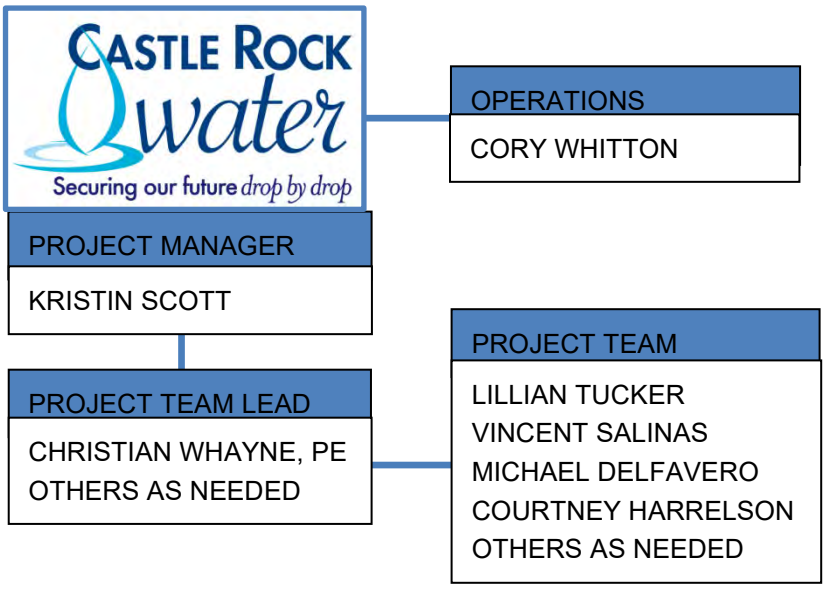
For this scope of work, LSI has included weekly on-site meetings for the duration of the project. These weekly meetings are estimated to be one (1) hour for a total of seventy-eight (78) On-site meetings.

3.2 Project Team

The organizational chart below identifies the key members of a typical project team. LSI's project team will be based in Golden, CO and will be led by Christian Whayne. Christian will be principal point of contact for the Water/Wastewater projects and will delegate tasks to the project team as appropriate. Resumes of the key project team leads and project manager are available upon request.

It is the goal of the project team leadership to coordinate with Castle Rock Water to provide a value engineering analysis of the Miller WTP and all remote sites prior to starting engineering efforts. The purpose of this analysis is to identify areas in which LSI can provide value to Castle Rock Water for each of the sites listed in the provided scope of work. Additionally, it is the intention of LSI to leverage increasing efficiencies throughout the project by using the completed sites as examples for future sites.

The key project staff are all available to begin work on this project October 1st, 2024, and LSI has sufficient resources available from our Colorado office to staff the project in support of the key principals.



4 Hardware Design Effort

For this scope of work, LSI has been provided with design basis PDFs for the twenty-four (24) control panels that will be constructed for the Miller WTP and remote sites. As a part of the hardware design effort for this project, LSI will use the design basis drawings to create drawings for the twenty-four (24) control panels that can meet the requirements for being UL 508 Listed.

LSI will be providing one (1) new motor control panel for the Well W7 site. This panel will include power distribution for the existing soft starter that is to be relocated into this panel in the field. This panel will not be UL 508 Listed due to field installed components.

In addition, LSI will be providing twelve (12) motor starter control panels for the Castlewood 1 Lift Station, Castlewood 2 Lift Station, Maher Lift Station, Sellars Lift Station, and Meadows Grinder remote sites to segregate the existing 480V motor control from the existing PLC Panels. These panels have been sized based on the existing motors and will each be mounted individually. These panels will be designed to meet the requirements of being UL 508 Listed.

LSI will provide a pre-construction submittal including manufacturer's catalog information for the material to be provided as well as layout and schematic drawings for the twenty-four (24) control panels. These submittals will be provided electronically in PDF format. AutoCAD DWG drawings will be provided to the Owner upon request. Hard copies are not included.

In addition, LSI will be conducting individual site detail design. Included in this detail design is the effort for system walk-down and research and creating detailed contractor scope of work documents for both mechanical and electrical installations and demolitions. This detailed design will also include conduit routing, wire way installation details, power distribution drawings, and cable schedules depending on the site.

5 Control System Integration Effort

5.1 Control System Integration Effort

LSI will provide the control system integration effort required for one (1) ControlLogix (and ControlLogix Remote Rack) and twenty-two (22) CompactLogix processors per the scope of work document. This effort will also include modifications to the existing ControlLogix data concentrator processor logic required to integrate the remote sites with Castle Rock's existing FactoryTalk View SE application. LSI will use its existing understanding of data flow between the remote sites and water treatment plants to ensure data integrity is maintained with other existing systems.

For this proposal, LSI has assumed that the control systems integration effort for the remote sites will be able to be leveraged after one (1) Well, Pump Station, PRV, and Lift Station PLC program and Data Concentrator programs are each complete.

It is estimated that this project will require updating up to twenty (20) existing SCADA screens for the Miller WTP, one (1) existing FactoryTalk ViewSE SCADA screen for each remote site, with the exception of BM1A_D and BM2 which will require new one (1) new SCADA Screens, and modification to two (2) system overview and summary screens. In addition, LSI will be providing simple operator terminal screens for each site. These OIT graphics will mirror the SCADA functionality of these sites. additional local functionality not included in the SCADA screens is not included in this proposal.

For this effort, LSI has included six (6) FAT sessions at either Castle Rock Water or LSI's office in Golden, Colorado for program review and of graphics for the Miller WTP, one (1) standard Well Site, one (1) standard Lift Station Site, one (1) standard PRV Site, the Meadows Grinder Site, and one (1) standard Flume Site. It is assumed for this effort that each FAT session will be one (1) 8-Hour day.

In addition, LSI will also be developing functional description/control narrative documents for each individual site detailing control schema, AOI configuration, and functional specifications for the site and associated equipment.

6 Documentation

Upon installation and commissioning of a site, LSI will provide an operations and maintenance (O&M) manual for the equipment reflecting as-built parameters and configuration of the system as left after completion. Documentation will be provided electronically in PDF format. Hard copies are not included.

For this proposal, LSI has included twenty-eight (28) hours for the Miller WTP and fourteen (14) hours per remote site to as-built all control panel drawings, and provide final O&M manuals for the respective sites. O&M manuals will consist of vendor manuals for provided equipment and instrumentation and an as-built functional description/control narrative document.

Per revision R1 of this proposal, LSI has also included additional documentation effort for the As-built drawing, and O&M manuals for the additional motor control starter panels for Castlewood 1, Castlewood 2, Maher, and Sellar Lift Stations, and the Meadows Grinder site.

7 Training

Per the specifications Binder, Contractor is requested to provide the training per SECTION 24.24.19, 26.29.13, 26.29.23.40.90.00, 40.92.05B, and 40.96.00. Based on these sections requirements 35 days total of training would be required.

Although the requested training requirement per the specifications binder listed above is thirty-five (35) days of training, for the purpose of this proposal, LSI proposes to include a total of seventeen (17) days of training to for the affected sites. This reduction in training is to leverage and maximize efficiencies of similar sites.

8 Installation

LSI will subcontract a licensed electrical contractor the electrical scope of work and a licensed mechanical contactor for the mechanical scope of work. LSI has successfully collaborated directly with local firms including Grasmick Electric, Sun Valley Electric, and Rice Lake West in the past.

LSI received bids from all the contractors listed above. LSI conducted interviews with each company to evaluate the provided proposals.

For the purposes of this proposal, LSI has included the subcontracted electrical and mechanical installation effort from Sun Valley Electric. From the interviews, LSI believes that Sun Valley Electric exhibited the best understanding of the approach to complete this scope of work. If requested, LSI will work with Castle Rock Water to select another contractor for this scope of work, however it should be noted that this may cause a change to the overall project cost.

9 On-Site Support

LSI will provide on-site installation support for the startup and commissioning of new equipment and integration of the new control panels with the Castle Rock Water's SCADA system.

Unforeseen on-site delays with existing site conditions, network connections, production rescheduling, plant services, and personnel are not taken into account of which any of these could contribute to extending support over the estimated period. In addition, the estimated period does not account for personnel staying over a weekend or returning on-site for production standby.

9.1 Construction Management

LSI is to provide the overall Construction Management effort for both the Mechanical and Electrical effort required for the upgrades at the Miller WTP and the Remote sites. For this purpose of this proposal, LSI has assumed this effort will be Twenty-Four (24) 40-hour weeks split between the installation season of 2024/2025 and the installation season of 2025/2026.

Per revision R1 of this proposal, LSI has also included additional construction management, commissioning, and start-up effort for the the additional motor control starter panels for Castlewood 1, Castlewood 2, Maher, and Sellar Lift Stations, and the Meadows Grinder site.

9.2 Post Commissioning Support

LSI has included one (1) 40-hour week of on-site post commissioning support for this project.

10 Client Responsibilities

10.1 Source Documentation

Castle Rock Water is to provide relevant project drawings, documentation, and configuration files from the existing process(es) to LSI.

All control panel drawings used as a basis for this scope of work are to be provided in their native CAD format to LSI for modifications to UL List.

10.2 Existing Equipment Condition

Any equipment required for this scope of work that is existing or provided by others is assumed to be fully functional and operational to support the scope of work. Any equipment found to be in unsatisfactory condition will be repaired or replaced as a change order, separate scope, or by others, as agreed upon by LSI and Castle Rock Water. Should the equipment condition impact LSI's ability to perform the scope, a change order or schedule adjustment may be required by LSI to proceed.

10.3 On-Site Infrastructure for LSI Use

Castle Rock Water will, at a minimum, provide the following (as needed) for the LSI execution team and this scope:

1. Badged Site Access and Parking
2. Internet Access to LSI VPN and bandwidth for audio/video conferencing
3. Printing/Plotting
4. Working and Meeting Space

10.4 Network Configuration

Town of Castle Rock is to provide configuration parameters of network switches and XetaWave radio settings.

11 Schedule

Please reference "Castle Rock Water Project Schedule, Exhibit 7" provided in the Appendix List for the proposed schedule. Per RFP Addendum 3, work is expected to begin October 1, 2024, and continue through February 28th, 2026.

Submitted to: Nicolas Van Kooten
Submitted by: Kristin Scott
Reviewed by: Joey Cate

Creation Date: July 24, 2024
Last Revision Date: August 6, 2024

12 Pricing

Pricing is Fixed Price. Please reference "Contractor Fee Schedule Form, Exhibit 3" provided in the Appendix List for pricing details.

NOTES:

1. Proposed Payment Milestones:
   For these proposal milestones, LSI has identified the eight (8) sites that are to be upgraded during the 2024/2025 installation period as "Phase 1". The remaining sites to be upgraded during the 2025/2026 installation period will be identified as "Phase 2".

Proposed Milestone Description	Percentage
Order Acceptance	20%
Phase 1 Drawings Issued for Review	10%
Phase 1 Programming Completion	5%
Phase 1 Receipt of Hardware	5%
Phase 1 Site Mobilization	5%
Phase 1 Installation Completion	10%
Phase 1 Commissioning Complete	5%
Phase 2 Drawings Issued for Review	10%
Phase 2 Programming Completion	5%
Phase 2 Receipt of Hardware	5%
Phase 2 Site Mobilization	5%
Phase 2 Installation Completion	10%
Phase 2 Commissioning Complete	5%
Total	100%

Remit Payments to:
Logical Systems, LLC
P.O. Box 341321
Memphis, TN 38184-1321

Exhibit 5_R1

Appendix - Assumptions, Exclusions, and Clarifications

The following items are LSI's assumptions and/or exclusions for the scope of work defined in LSI's proposal "28091F_CRW SCADA Master Plan P4_R1.pdf" dated August 6, 2024.

General Assumptions, Exclusions, and Clarifications:

1. This scope, proposal, and estimate is based on the source documentation as provided to LSI. If changes are made to or missing items or errors are found in the source documents, it may require LSI to request a change in contract amount and/or schedule.

2. All onsite work will be confirmed by Castle Rock Water a minimum of one (1) week in advance. If Castle Rock Water reschedules an installation window during that confirmed window, additional costs may be applicable.

3. Customer will provide access to all areas where necessary during normal business hours (7:00 AM – 5:00 PM) unless other arrangements are made. If Access is not available when previously agreed upon, additional costs may be applicable.

4. Labor in quote does not include evening, weekend, or holiday work. Any work requested, by the Customer, to be performed after 5:00 PM weekdays or on Saturdays will be charged at 1.5 times the normal rate. Any such work performed on Sundays and holidays will be charged at 2 times the normal rate.

5. All work will be performed in strict accordance with all applicable building codes. The Customer will inform LSI and their Contractors of any unusual code or building circumstances of which they are aware.

6. New field I/O wiring will be pulled as part of this scope. Conduit will be reused where possible. Conduit allowance of $50,000 per the provided contractor fee schedule has been included where conduit may not be re-used.

    - 7/31/24 CRW Request for Clarification:

        a) [CRW] Please clarify that the allowance dollars are only to be used when replacing existing conduit that is deemed to be unusable.

        [LSI] Confirmed. Allowance dollars are only to be used when contractor is onsite and existing conduit is deemed unusable.

b) [CRW] There are other parts of the scope document that dictates needing to provide additional conduit/wireway (example: Scope of Work #3, requires only bottom entry conduit on all control panels, this would require additional conduit for instances where the conduits for existing panels enter from top of the cabinet). Confirm that this is included in the scope of work. If the new conduit is not included in the scope of work, please provide revised pricing to include new conduit.

[LSI] Confirmed. New conduit is included when scope of work document requires rework around new control panels.

7. The control panels provided will be UL508 listed. Motor Control Panels with field-mounted equipment will be provided without UL Listing.

8. All Allen-Bradley equipment listed on the control panel BOMs in RFP Appendix D will be provided by the client. Electronic copies of CAD files requiring modifications will be supplied by the client in their native format. PDF file will not suffice for this work.

- 7/31/24 CRW Request for Clarification:

a) [CRW] Section 4.2 of the RFP defines all the equipment provided by the Owner. The BOMs in Appendix D might have additional Allen Bradley components that are not provided by CRW. Please confirm these are included in the LSI scope.

[LSI] LSI has excluded the following Allen Bradley components:

ALL CompactLogix and ControlLogix PLC components, 2711P HMI, Stratix Ethernet Switches

9. All Allen Bradley hardware for entire project scope is available for shipment to LSI upon award of contract.

10. Any required software licenses will be supplied by the client.

11. Castle Rock Water will be providing any data trending or historian configuration effort.

12. No arc flash studies of new or existing MCCs or Motor Control Panels are included in this proposal

13. Assume all soft starters and motor starters will be reused unless otherwise specifically noted

    - 7/31/24 CRW Request for Clarification:

        a) [CRW] CRW requires new UL listed Motor Control Panel for each motor individually which includes new soft starters/motor starters, and all associated control hardware for following lift stations. This shall also include design, documentation, approval process, testing, startup and commissioning for these panels. Assume all panels are rated for 65KAIC.

            i. Castlewood 1 Lift Station,

            ii. Castlewood 2 Lift Station,

            iii. Maher Lift Station,

            iv. Sellars Lift Station.

            v. Meadows Grinder

        [LSI] Proposal updated to include new UL listed Motor Control Panels for each site listed above.

14. Control panel hardware has been estimated using the drawings provided for each site as a design basis.

15. It is assumed that all pipe taps (saddle or hot taps) for process instrumentation are existing. No new taps have been provided per this proposal.

16. For the first eight sites performed in the 2024/2025 winter, LSI has included shipping for each panel individually. After these first eight sites are completed, LSI has included three (3) shipments for the remaining panels.

17. LSI has assumed only new provided VFDs, Flow Transmitters, and Chlorine analytical transmitters will be wired for RJ45 ethernet communication for non-critical process signals.

18. Per the Scope of Work document provided in the RFQ, LSI assumes that Castle Rock Water shall be responsible for any and all surveying needs.

19. Per the Scope of Work and Addendum documents provided in the RFQ, LSI assumes that Castle Rock Water shall be responsible for any and all bypassing needs.

20. Castle Rock Water will assist with providing confined space permits for work in any confined space as a part of this scope of work.

21. It is assumed that any alarm dialer replacement will utilize the same alarm point configuration as the existing Raco alarm dialers. Communication to the PLC will be upgraded to ethernet per the new communication specification.

22. The overall installation effort included in this scope of work has been estimated by the mechanical and electrical contractor based on the RFP provided to LSI and subsequently the mechanical and electrical contractor. LSI will coordinate closely with the chosen contractor to adhere to scope and inform Castle Rock Water of any deviations in a timely manner.

23. Per the provided design basis documentation, area classification hardware such as isolation barriers or explosion proof instrumentation has not been included in this proposal. Upon award of project, LSI will coordinate with owner to ensure any provided equipment and instrumentation meets NFPA and NEC requirements. If additional hardware is required to meet area classification requirements, a change request will be submitted.

    - 7/31/24 CRW Request for Clarification:

        a) [CRW] For purposes of bidding, please assume all instrumentation with the wastewater service (lift stations, grinder, flume) shall require Class I Div 1 rating and corresponding hardware.

        [LSI] Proposal updated to include Class I Div 1 rating material at the following (9) sites: Castlewood 1 LS, Castlewood 2 LS, Maher LS, Mitchell Creek LS, Sellars LS, Meadows Grinder, Main Flume, Meadows Flume, North Flume

24. All equipment provided by Castle Rock Water will be warrantied by Castle Rock Water. LSI assumes no liability for the warranty of this equipment.

25. Line No. 24of “Appendix - Contractor Fee Schedule Form, Exhibit 3” General condition references Div 00 which was not included in the RFP. However, LSI has included the costs from Div 01 “General Requirements” in each site. As such no cost has been provided for line 24 general conditions in this proposal.

26. Line No. 26 of “Appendix - Contractor Fee Schedule Form, Exhibit 3” shall adhere to LSI’s Standard warranty per Town of Castle Rock Services Agreement. As such this warranty is included.

27. Line No. 27 of “Appendix - Contractor Fee Schedule Form, Exhibit 3” extended 2-year warranty has not been included in this scope of work due to schedule restrictions. An extended 2-year warranty is available for this project and can be negotiated with Castle Rock Water upon award.

    - 7/31/24 CRW Request for Clarification:

        a) [CRW] Please provide a price for an extended 2-year warranty requested in Line No. 27 of “Appendix – Contractor Fee Schedule Form, Exhibit 3”.

        [LSI] Proposal updated to include price for an extended 2-year warranty. This warranty will begin on a per-site basis upon installation.

28. The global supply chain is currently experiencing extended or unreliable lead times for material procurement. LSI will endeavor to hold schedule, but LSI is not responsible for supplier part or equipment delivery issues outside of our control.

29. 7/31/24 CRW Request for Clarification:

    - [CRW] Also provide, per linear foot cost for wiring, conduit, fittings (labor and material) to be used for any additional wiring required at each site based on field conditions.

      [Sun Valley] Per foot pricing for conduit/wire/fitting installation is dependent on several factors, including size, type, number and size of conductors, above-ground or underground, etc. It would be difficult to provide a price-per-foot without specifics. Our average price per foot would be $12.25 for 2#14 w/ ground in ¾" PVC. Materials- $4.15, Labor- $8.10

Site Specific General Assumptions, Exclusions, and Clarifications:

Miller Water Treatment Plant

1. Valve actuators per the instrument & actuator list provided in the RFQ will be replaced. Existing valves will stay in place.
2. LSI has included five (5) days of support for valve actuator tuning from the actuator supplier.
3. LSI assumes duct bank and or conduit from treatment building to well location for intrusion switches cannot be re-used and has included cost in additional scope for excavating and installation of underground raceways for wellhead intrusion switches, and patching asphalt as required.
4. LSI has included one (1) MCC per the load list provided in Addendum 5 of the RFQ. This proposal is budgetary and must be finalized prior to purchase. See "Exhibit 8_Rexel CRW Quote Document" for additional details.
5. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 87 analog signals and 264 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 100 ft in length.

BM1A_D Well

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 10 analog signals and 18 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.
    - 7/31/24 CRW Request for Clarification:
        a) [CRW] BM1D Well – 100 feet

        [LSI] Pricing updated from 25 ft to 100 ft.

BM2 Well

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 5 analog signals and 11 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

RT6ABC

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 4 analog signals and 40 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.
    - 7/31/24 CRW Request for Clarification:
        a) [CRW] RT6ABC – 200 feet

        [LSI] Pricing updated from 25 ft to 200 ft.

RT14

30. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 2 analog signals and 12 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.
    - 7/31/24 CRW Request for Clarification:
        a) [CRW] RT14 – 200 feet

        [LSI] Pricing updated from 25 ft to 200 ft.

W7 Well

1. Well W7 pump soft starter and associated 480V control hardware that are existing may be re-used and relocated into new provided motor starter control panel.
2. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 4 analog signals and 10 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Citadel Pump Station

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 6 analog signals and 27 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Hillside Pump Station

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 9 analog signals and 16 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Plum Creek Pump Station

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 17 analog signals and 38 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.
    - 7/31/24 CRW Request for Clarification:
        a) [CRW] Plum Creek PS – 50 feet

        [LSI] Pricing updated from 25 ft to 50 ft.

Black Feather PRV

1. For the new limit switch requested to be installed on the PRV for this site, LSI has included the installation effort and material required, however LSI has not included the instrument due to it not being included on the Instrument and Actuator list and associated 40.91.00 specifications provided in the RFP. LSI will coordinate with Owner to provide this instrument upon award.
2. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 6 analog signals and 27 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Briscoe PRV

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 3 analog signals and 0 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Scott PRV

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 4 analog signals and 27 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Valley PRV

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 4 analog signals and 20 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.
    - 7/31/24 CRW Request for Clarification:
        a) [CRW] Valley PRV – 50 feet

        [LSI] Pricing updated from 25 ft to 50 ft.

Castlewood 1 Lift Station

1. Castlewood 1 Lift Station pump soft starters and associated 480V control hardware that are existing will not be reused. LSI will provide new separate motor starter control panels for the existing motors. Four (4) 15HP starter panels will be provided for Castlewood 1 Lift Station.
2. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 3 analog signals and 36 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 50 ft in length.

Castlewood 2 Lift Station

1. Castlewood 1 Lift Station pump soft starters and associated 480V control hardware that are existing will not be reused. LSI will provide new separate motor starter control panels for the existing motors. Although the scope of work for Castlewood 2 calls out two (2) 15HP starters, the existing drawings for the site denote two (2) 25HP motors. As such, LSI has assumed Two (2) 25HP starter panels will be provided for Castlewood 2 Lift Station.
2. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 3 analog signals and 40 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 50 ft in length.

Maher Lift Station

1. Maher Lift Station pump soft starters and associated 480V control hardware that are existing will not be reused. LSI will provide new separate motor starter control panels for the existing motors. Two (2) 64HP starter panels will be provided for Maher Lift Station.
2. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 3 analog signals and 26 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 50 ft in length.
    - 7/31/24 CRW Request for Clarification:

        a) [CRW] Maher LS – 40 feet

        [LSI] Pricing updated from 50 ft to 40 ft.

Mitchell Creek Lift Station

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 12 analog signals and 45 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 100 ft in length.
    - 7/31/24 CRW Request for Clarification:

        a) [CRW] Please confirm the following instrumentation from the “Instrument and Valve List” found on Addendum Four is included in the Proposal. If not, please revise the pricing to include:
        Mitchell Creek: Two level transmitters, 1 additional float

        [LSI] Confirmed. Two level transmitters and 1 additional float are included in proposal.

Sellars Lift Station

1. Sellars Lift Station pump soft starters and associated 480V control hardware that are existing will not be reused. LSI will provide new separate motor starter control panels for the existing motors. Three (3) 30HP starter panels will be provided for Sellars Lift Station.
2. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 4 analog signals and 54 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.
    - 7/31/24 CRW Request for Clarification:

        a) [CRW] Sellars LS – 40 feet

        [LSI] Pricing updated from 25 ft to 40 ft.

        b) [CRW] Please confirm the following instrumentation from the “Instrument and Valve List” found on Addendum Four is included in the Proposal. If not, please revise the pricing to include:
        Sellars Lift Station: Additional level float, temperature switches, and the flow meter wiring. Remove intrusion switch.

        [LSI] Confirmed. Additional level float, temperature switches, and the flow meter wiring are included in proposal. Intrusion switch removed.

Meadows Grinder

1. Meadows Grinder reversing starters and associated 480V control hardware that are existing will not be reused. LSI will provide new separate motor starter control panels for the existing motors. one (1) 5HP reversing starter panels will be provided for Meadows Grinder remote site.
2. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 0 analog signals and 10 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Main Flume

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 2 analog signals and 3 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Meadows Flume

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 4 analog signals and 3 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

North Flume

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 2 analog signals and 2 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in

Red Hawk Pond

1. LSI has considered all I/O that is external to the PLC panel to be new field wiring. From the design basis documents allocating for 20% spare, 2 analog signals and 3 discrete signals have been identified for this site. LSI assumes each new signal will require wiring of up to 25 ft in length.

Exhibit 6_R1

Appendix - LSI Provided Equipment, Instrumentation, Actuators

The following items will be provided by LSI for the scope of work defined in LSI's proposal "28091F_CRW SCADA Master Plan P4_R1.pdf" dated August 6, 2024.

Instrumentation:

In support of the scope of this proposal LSI will be providing the following instrumentation:

Miller Water Treatment Plant Instrumentation	
Qty	**Description**
6 ea.	12" Backwaste - Filter 1 - 6, Valve Actuator, Rotork • IQT2000 Open/Close - Discrete • Adaption kit for mounting to existing valve • 18-20 week lead time
25 ea.	4" Air Scour - Filter 1 - 6, Valve Actuator, Rotork 4" Filter Waste Filter 1 - 6, Valve Actuator, Rotork 6" Raw Water Filters 1 - 6, Valve Actuator, Rotork 6" Pipe Gallery Valve, Valve Actuator, Rotork 8" Backwash Supply Filter 1 - 6, Valve Actuator, Rotork • IQT500 Open/Close - Discrete • Adaption kit for mounting to existing valve • 18-20 week lead time
6 ea.	6" Filter Effluent - Filter 1 - 6, Valve Actuator, Rotork • IQT500 Modulating - FOLO • Adaption kit for mounting to existing valve • 18-20 week lead time
2 ea.	Backwash Differential Pressure Transmitter, Endress+Hauser Deltabar PMD75 • 4-20mA, HART • Diaphragm Seal, factory installed
3 ea.	Pressure Indicating Transmitter, Endress+Hauser Cerabar PMP71 • 0-150 PSI range • Diaphragm Seal, factory installed • Tags: PIT311, PIT312, Treatment Building
2 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 3" Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60' cable
1 ea.	pH Analyzer and Transmitter, Hach • SC4500 Controller with Ethernet IP • Digital pH Sensor
1 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch

ADDITIONAL SCOPE	
3 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
MISC EQUIPMENT	
1 ea.	PD Pump #2, UGSI Chem Feed • Encore 700 Pump • 5-7 week lead time
1 ea.	MCC, Rockwell • 46-48 week lead time
1 ea.	MTS, ABB • 14-16 week lead time
1 ea.	Trystar Generator Docking Station, ABB • 14-16 week lead time

Bell Mountain Well 1A & 1D Instrumentation	
Qty	**Description**
1 ea.	Electronic Flow Meter Cable, Endress+Hauser • 60” factory cable
1 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
2 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch

Bell Mountain Well 2 Instrumentation	
Qty	**Description**
2 ea.	Electronic Flow Meter Cable, Endress+Hauser • 60” factory cable
2 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
3 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch

RT6ABC Instrumentation	
Qty	**Description**
2 ea.	Submersible Level Transducer, Endress+Hauser Waterpilot FMX21 • 4-20mA, HART
7 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
3 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch

RT14 Instrumentation	
Qty	**Description**
1 ea.	Submersible Level Transducer, Endress+Hauser Waterpilot FMX21 • 4-20mA, HART
2 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor

W7 Well Instrumentation	
Qty	**Description**
1 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 4” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable
1 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor • Meter Vault Hatch
ADDITIONAL SCOPE	
1 ea.	Level Transducer, Keller • Acculevel High Accuracy Submersible Level Transmitter • Factory Cable
MISC EQUIPMENT	
1 ea.	480V/120V Transformer • Aluminum windings and drip hood

Citadel Pump Station Instrumentation	
Qty	**Description**
2 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 8” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable

Hillside Pump Station Instrumentation	
Qty	**Description**
2 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
1 ea.	Electronic Flow Meter Cable, Endress+Hauser • 60” factory cable
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 4” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable

Plum Creek Pump Station Instrumentation	
Qty	**Description**
2 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
4 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 6” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable
1 ea.	Submersible Level Transducer, Endress+Hauser Waterpilot FMX21 • 4-20mA, HART
1 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor

Black Feather PRV Instrumentation	
Qty	**Description**
1 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
2 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 8” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 4” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable
2 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch
MISC EQUIPMENT	
1 ea.	Power Panel • QTY 1 - 60A Main Circuit Breaker • QTY 4 – 15A Circuit Breaker • QTY 4 – 20A Circuit Breaker

Briscoe PRV Instrumentation	
Qty	**Description**
1 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
3 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch
MISC EQUIPMENT	
1 ea.	Power Panel • QTY 1 - 60A Main Circuit Breaker • QTY 4 – 15A Circuit Breaker • QTY 4 – 20A Circuit Breaker

Scott PRV Instrumentation	
Qty	**Description**
1 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 12” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable
2 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
2 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch
MISC EQUIPMENT	
1 ea.	Power Panel • QTY 1 - 60A Main Circuit Breaker • QTY 4 – 15A Circuit Breaker • QTY 4 – 20A Circuit Breaker

Valley PRV Instrumentation	
Qty	**Description**
1 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 10” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable
2 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
2 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch
MISC EQUIPMENT	
1 ea.	Power Panel • QTY 1 - 60A Main Circuit Breaker • QTY 4 – 15A Circuit Breaker • QTY 4 – 20A Circuit Breaker

Castlewood 1 Lift Station Instrumentation	
Qty	**Description**
1 ea.	Bubbler System • Pressure Transducer, E+H • Compressor/Vacuum Pump, GAST (3) • Pneumatic Pressure Gauge, Wika • Float Flowmeter, Dwyer • Flowmeter Regulator, Dwyer • Enclosure and back panel
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 4” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable • Class 1 Div 1
1 ea.	High Pressure Switch, Ashcroft • Class 1 Div 1
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch
4 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
ADDITIONAL SCOPE	
1 ea.	Explosion-proof RTD Temperature Transmitter, Dwyer • 4-20mA Output
MISC EQUIPMENT	
1 ea.	Alarm Dialer, RACO • Catalyst EtherNet/IP, 256 ch

Castlewood 2 Lift Station Instrumentation	
Qty	**Description**
1 ea.	Bubbler System • Pressure Transducer, E+H • Compressor/Vacuum Pump, GAST (3) • Pneumatic Pressure Gauge, Wika • Float Flowmeter, Dwyer • Flowmeter Regulator, Dwyer • Enclosure and back panel
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 8” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable • Class 1 Div 1
1 ea.	High Pressure Switch, Ashcroft • Class 1 Div 1
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch

4 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
ADDITIONAL SCOPE	
1 ea.	Explosion-proof RTD Temperature Transmitter, Dwyer • 4-20mA Output
MISC EQUIPMENT	
1 ea.	Alarm Dialer, RACO • Catalyst EtherNet/IP, 256 ch

Maher Lift Station Instrumentation	
Qty	**Description**
1 ea.	Bubbler System • Pressure Transducer, E+H • Compressor/Vacuum Pump, GAST (3) • Pneumatic Pressure Gauge, Wika • Float Flowmeter, Dwyer • Flowmeter Regulator, Dwyer • Enclosure and back panel
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 8” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable • Class 1 Div 1
4 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
MISC EQUIPMENT	
1 ea.	Alarm Dialer, RACO • Catalyst EtherNet/IP, 256 ch

Mitchell Creek Lift Station Instrumentation	
Qty	**Description**
1 ea.	Electronic Flow Meter, Endress+Hauser Promag W 500 • 10” Pipe Size • Stainless Ground Discs • Ethernet/IP, 4-20mA • Remote Transmitter, 60’ cable • Class 1 Div 1
4 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
ADDITIONAL SCOPE	
1 ea.	Pressure Transmitter, Endress+Hauser Cerabar PMP71 • Diaphragm Seal, factory installed • Class 1 Div 1 Pressure Switch, Ashcroft Pressure Gauge, Ashcroft Pressure Tree 10-12 week lead time

Mitchell Creek Lift Station Instrumentation	
Qty	**Description**
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
2 ea.	Radar Level Transmitter, Endress+Hauser Micropilot FMR20 • Class 1 Div 1
MISC EQUIPMENT	
1 ea.	Alarm Dialer, RACO • Catalyst EtherNet/IP, 256 ch

Sellars Lift Station Instrumentation	
Qty	**Description**
1 ea.	Bubbler System • Pressure Transducer, E+H • Compressor/Vacuum Pump, GAST (3) • Pneumatic Pressure Gauge, Wika • Float Flowmeter, Dwyer • Flowmeter Regulator, Dwyer • Enclosure and back panel
1 ea.	High Pressure Switch, Ashcroft • Class 1 Div 1
4 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
1 ea.	High and Low Temperature Switch, Mercoid • Explosion-Proof / Heavy-Duty Thermostat
1 ea.	Electronic Flow Meter Cable, Endress+Hauser • 60” factory cable
ADDITIONAL SCOPE	
0 ea.	Intrusion Switch, Allen Bradley • 871P VersaCube 2-wire AC/DC Rectangular Sensor
1 ea.	Water On Floor Level Switch, GEMS • LS-270 Series, Single-Point Level Switch
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT

Meadows Grinder Instrumentation	
Qty	**Description**
1 ea.	Intrusion Switch, Allen Bradley • 82PR Limit Switch Style Inductive Sensor – 2 Wire • Class 1 Div 1
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
ADDITIONAL SCOPE	
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT

Main Flume Instrumentation	
Qty	**Description**
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
ADDITIONAL SCOPE	
1 ea.	Intrusion Switch, Allen Bradley • 82PR Limit Switch Style Inductive Sensor – 2 Wire • Class 1 Div 1

Meadows Flume Instrumentation	
Qty	**Description**
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
ADDITIONAL SCOPE	
1 ea.	Intrusion Switch, Allen Bradley • 82PR Limit Switch Style Inductive Sensor – 2 Wire • Class 1 Div 1
MISC EQUIPMENT	
1 ea.	Power Panel • QTY 1 - 60A Main Circuit Breaker • QTY 4 – 15A Circuit Breaker • QTY 4 – 20A Circuit Breaker

North Flume Instrumentation	
Qty	**Description**
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
ADDITIONAL SCOPE	
1 ea.	Intrusion Switch, Allen Bradley • 82PR Limit Switch Style Inductive Sensor – 2 Wire • Class 1 Div 1

Red Hawk Pond Instrumentation	
Qty	**Description**
1 ea.	Float Switch, SJE Rhombus • 3 Wire - SPDT
1 ea.	Submersible Level Transducer, Endress+Hauser Waterpilot FMX21 • 4-20mA, HART

Control Panels, Remote I/O Panels (RIO), and Motor Control Panels:

In support of the scope of this proposal LSI will be providing the following control panels:

Miller WTP Main Panel	
Qty	**Description**
1 ea.	• 72x72x12 NEMA 4/12 Enclosure • Back Panel • 12” floor stands
1 ea.	• Protocol Converter • Surge Protector
1 ea.	• Panel Intrusion Switch • Enclosure Light • Exhaust Grille, Intake Fan
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Miller RIO Control Panel	
Qty	**Description**
1 ea.	• 72x72x12 NEMA 4/12 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Exhaust Grille, Intake Fan
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Miller PD Pump VFD Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel
1 ea.	• Panel Intrusion Switch • Enclosure Light • Exhaust Grille, Intake Fan
1 lot	• Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Bell Mountain Well 1A & 1D Control Panel	
Qty	**Description**
1 ea.	• 72x48x24 NEMA 4 Enclosure • Back Panel • Side Plate (2) • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Bell Mountain Well 2 Control Panel	
Qty	**Description**
1 ea.	• 72x48x24 NEMA 4 Enclosure • Back Panel • Side Plate (2) • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

RT6ABC Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

RT14 Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Well 7 Control Panel	
Qty	**Description**
1 ea.	• 72x48x24 NEMA 4 Enclosure • Back Panel • Side Plate (2) • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
W7 Well Motor Starter Control Panel	
Qty	**Description**
1 ea.	• 72x48x24 NEMA 4 Enclosure • Back Panel • Side Plate (2) • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, Push to Test Lights, HOA Switch, etc.)

Citadel Pump Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x18 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Hillside Pump Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x18 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Plum Creek Pump Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x24 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Black Feather PRV Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Briscoe PRV Control Panel	
Qty	**Description**
1 ea.	• 20x20x12 NEMA 4X Enclosure • Back Panel • Keylocking “L” Handle with Key
1 ea.	• Panel Intrusion Switch
1 lot	24V DC Power Supply
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Scott PRV Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Valley PRV Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Castlewood 1 Lift Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x18 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Castlewood 1 Lift Station Motor Starter Control Panel	
Qty	**Description**
4 ea.	• 15 HP (21 Amp) Soft Motor Starter Panel
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, Push to Test Lights, HOA Switch, etc.)
Castlewood 1 ISR Junction Box	
Qty	**Description**
1 ea.	• 16x16x6 NEMA 4 Enclosure
5 ea.	• ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Castlewood 2 Lift Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x18 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Castlewood 2 Lift Station Motor Starter Control Panel	
Qty	**Description**
2 ea.	• 25 HP (32 Amp) Soft Motor Starter Panel
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, Push to Test Lights, HOA Switch, etc.)
Castlewood 2 Lift Station ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
5 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Maher Lift Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x18 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Maher Lift Station Motor Starter Control Panel	
Qty	**Description**
2 ea.	• 64 HP (84.7 Amp) Soft Motor Starter Panel
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, Push to Test Lights, HOA Switch, etc.)
Maher Lift Station ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
4 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Mitchell Lift Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x18 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Mitchell Lift Station ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
6 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Sellars Lift Station Control Panel	
Qty	**Description**
1 ea.	• 72x48x18 NEMA 4 Enclosure • Back Panel • 12” floor stands
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Sellars Lift Station Motor Starter Control Panel	
Qty	**Description**
3 ea.	• 30 HP (40 Amp) Soft Motor Starter Panel
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, Push to Test Lights, HOA Switch, etc.)
Sellars Lift Station ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
6 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Meadows Grinder Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Meadows Grinder 480V Control Panel	
Qty	**Description**
1 ea.	• 5 HP (7.1 Amp) Full Voltage Reversing Contactor Panel
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, Push to Test Lights, HOA Switch, etc.)
Meadows Grinder ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
2 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Main Flume Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Main Flume ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
2 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

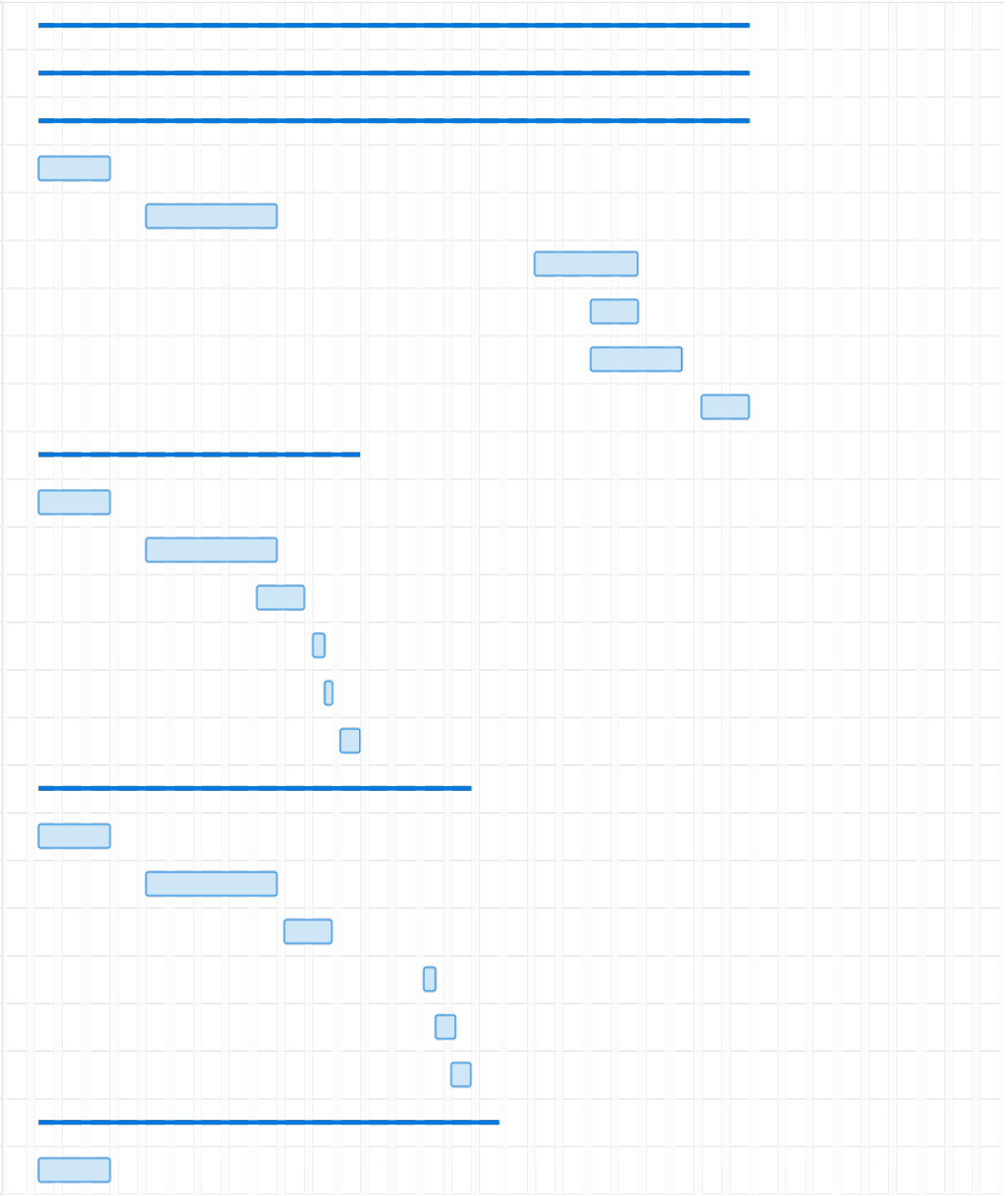
Meadows Flume Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
Meadows Flume ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
2 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

North Flume Control Panel	
Qty	**Description**
1 ea.	• 60x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)
North Flume ISR Junction Box	
Qty	**Description**
1 ea.	16x16x6 NEMA 4 Enclosure
2 ea.	ISR – DI ISO Barrier
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

Red Hawk Pond Control Panel	
Qty	**Description**
1 ea.	• 48x36x12 NEMA 4 Enclosure • Back Panel • Mounting Feet Kit
1 ea.	• Surge Protector • Panel Intrusion Switch • Enclosure Light • Enclosure Heater • Locking HMI Cover • Exhaust Grille, Intake Fan, Grille/Fan Hood (2)
1 lot	UPS, Battery, 24V DC Power Supplies (2), Redundancy Module
1 lot	Panel Supplies (Wire, Wireway, Labels, Terminal Blocks, etc.)

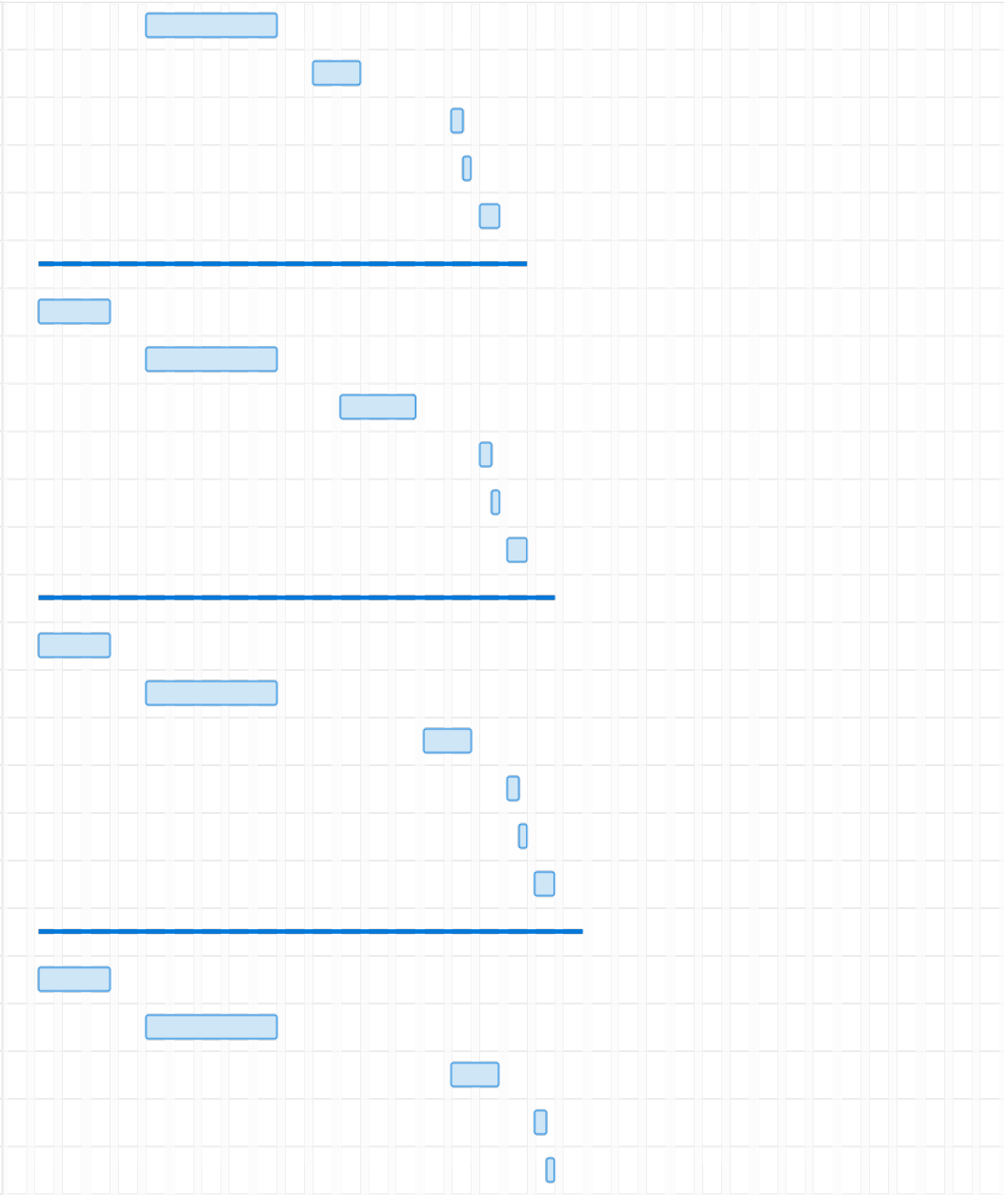
28091F - CRW SCADA Master Plan - P4 - Proposal

	Name	Assigned to	Start	Finish	% Complete
1	**Project Start**		10/1/2024	3/28/2025	0
2	**October 1, 2024 to March 31, 2025 Sites**		10/1/2024	3/28/2025	0
3	**1. Miller Water Treatment Plant (Minus the MCC)**		10/1/2024	3/28/2025	0
4	Engineering/Design		10/1/2024	10/18/2024	0
5	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
6	Miller WTP Main & RIO Control Panel Build		2/3/2025	2/28/2025	0
7	Indoor Site Work - Direct Scope		2/17/2025	2/28/2025	0
8	Indoor/Outdoor Site Work - Additional Scope		2/17/2025	3/11/2025	0
9	Startup/Commissioning		3/17/2025	3/28/2025	0
10	**4. RT6ABC**		10/1/2024	12/20/2024	0
11	Engineering/Design		10/1/2024	10/18/2024	0
12	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
13	Remote Tank 6A, 6B, 6C Panel Build		11/25/2024	12/6/2024	0
14	Outdoor Site Work - Direct Scope		12/9/2024	12/11/2024	0
15	Outdoor Site Work - Indirect Scope		12/12/2024	12/13/2024	0
16	Startup/Commissioning		12/16/2024	12/20/2024	0
17	**5. RT14**		10/1/2024	1/17/2025	0
18	Engineering/Design		10/1/2024	10/18/2024	0
19	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
20	Panel Build		12/2/2024	12/13/2024	0
21	Outdoor Site Work - Direct Scope		1/6/2025	1/8/2025	0
22	Outdoor Site Work - Indirect Scope		1/9/2025	1/13/2025	0
23	Startup/Commissioning		1/13/2025	1/17/2025	0
24	**8. Hillside Pump Station**		10/1/2024	1/24/2025	0
25	Engineering/Design		10/1/2024	10/18/2024	0



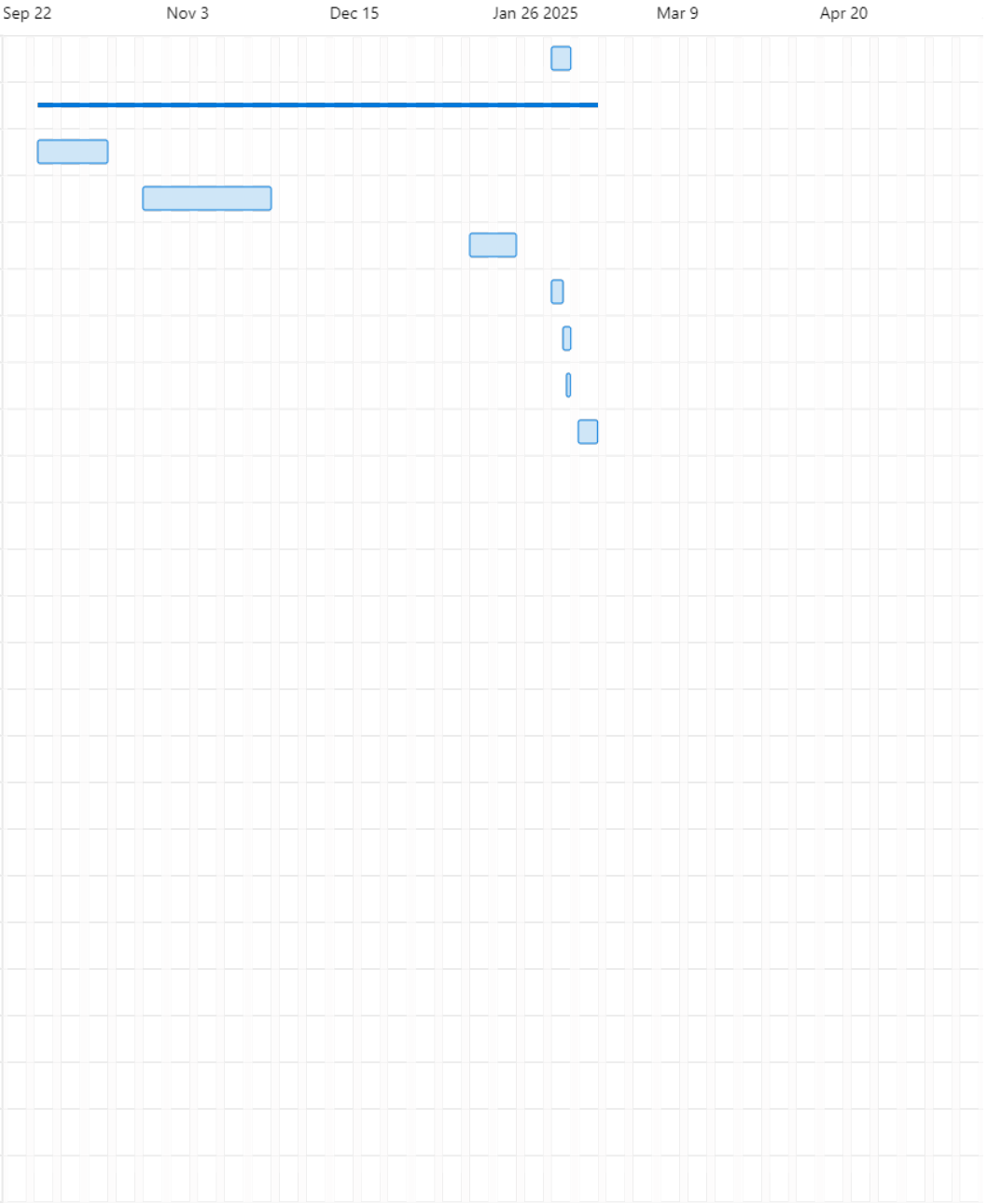
28091F - CRW SCADA Master Plan - P4 - Proposal

	Name	Assigned to	Start	Finish	% Complete
26	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
27	Panel Build		12/9/2024	12/20/2024	0
28	Indoor Site Work - Direct Scope		1/13/2025	1/15/2025	0
29	Indoor Site Work - Indirect Scope		1/16/2025	1/17/2025	0
30	Startup/Commissioning		1/20/2025	1/24/2025	0
31	**9. Plum Creek Pump Station**		10/1/2024	1/31/2025	0
32	Engineering/Design		10/1/2024	10/18/2024	0
33	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
34	Panel Build		12/16/2024	1/3/2025	0
35	Indoor Site Work - Direct Scope		1/20/2025	1/22/2025	0
36	Indoor Site Work - Indirect Scope		1/23/2025	1/24/2025	0
37	Startup/Commissioning		1/27/2025	1/31/2025	0
38	**10. Black Feather PRV**		10/1/2024	2/7/2025	0
39	Engineering/Design		10/1/2024	10/18/2024	0
40	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
41	Panel Build		1/6/2025	1/17/2025	0
42	Outdoor Site Work - Direct Scope		1/27/2025	1/29/2025	0
43	Outdoor Site Work - Indirect Scope		1/30/2025	1/31/2025	0
44	Startup/Commissioning		2/3/2025	2/7/2025	0
45	**12. Scott PRV**		10/1/2024	2/14/2025	0
46	Engineering/Design		10/1/2024	10/18/2024	0
47	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
48	Panel Build		1/13/2025	1/24/2025	0
49	Outdoor Site Work - Direct Scope		2/3/2025	2/5/2025	0
50	Outdoor Site Work - Indirect Scope		2/6/2025	2/7/2025	0



28091F - CRW SCADA Master Plan - P4 - Proposal

	Name	Assigned to	Start	Finish	% Complete
51	Startup/Commissioning		2/10/2025	2/14/2025	0
52	**13. Valley PRV**		10/1/2024	2/21/2025	0
53	Engineering/Design		10/1/2024	10/18/2024	0
54	Equipment & Instrumentation Approval/Procurement		10/28/2024	11/29/2024	0
55	Panel Build		1/20/2025	1/31/2025	0
56	Outdoor Site Work - Direct Scope		2/10/2025	2/12/2025	0
57	Outdoor Site Work - Indirect Scope		2/13/2025	2/14/2025	0
58	Outdoor Site Work - Additional Scope		2/14/2025	2/14/2025	0
59	Startup/Commissioning		2/17/2025	2/21/2025	0
60	**February 28, 2026 Sites**				0
61	**1. Miller Water Treatment Plant MCC**				0
62	MCC & VFD Engineering/Design				0
63	Approval/Procurement				0
64	MCC/VFD Modifications				0
65	Indoor Site Work				0
66	Startup/Commissioning				0
67	**2. BM1A D Well**				0
68	Engineering/Design				0
69	Equipment Approval/Procurement				0
70	Panel Build				0
71	Outdoor Site Work				0
72	Startup/Commissioning				0
73	**3. BM2 Well**				0
74	Engineering/Design				0
75	Equipment Approval/Procurement				0



	Name	Assigned to	Start	Finish	% Complete
76	Panel Build				0
77	Outdoor Site Work				0
78	Startup/Commissioning				0
79	**6. W7 Well**				0
80	Engineering/Design				0
81	Equipment Approval/Procurement				0
82	Panel Build				0
83	Outdoor Site Work				0
84	Startup/Commissioning				0
85	**7. Citadel Pump Station**				0
86	Engineering/Design				0
87	Equipment Approval/Procurement				0
88	Panel Build				0
89	Indoor Site Work				0
90	Startup/Commissioning				0
91	**11. Briscoe PRV**				0
92	Engineering/Design				0
93	Equipment Approval/Procurement				0
94	Panel Build				0
95	Outdoor Site Work				0
96	Startup/Commissioning				0
97	**14. Castlewood 1 Lift Station**				0
98	Engineering/Design				0
99	Equipment Approval/Procurement				0
100	Panel Build				0

	Name	Assigned to	Start	Finish	% Complete
101	Indoor Site Work				0
102	Startup/Commissioning				0
103	**15. Castlewood 2 Lift Station**				0
104	Engineering/Design				0
105	Equipment Approval/Procurement				0
106	Panel Build				0
107	Indoor Site Work				0
108	Startup/Commissioning				0
109	**16. Maher Lift Station**				0
110	Engineering/Design				0
111	Equipment Approval/Procurement				0
112	Panel Build				0
113	Indoor Site Work				0
114	Startup/Commissioning				0
115	**17. Mitchell Creek Lift Station**				0
116	Engineering/Design				0
117	Equipment Approval/Procurement				0
118	Panel Build				0
119	Indoor Site Work				0
120	Startup/Commissioning				0
121	**18. Sellars Lift Station**				0
122	Engineering/Design				0
123	Equipment Approval/Procurement				0
124	Panel Build				0
125	Indoor Site Work				0

	Name	Assigned to	Start	Finish	% Complete
126	Startup/Commissioning				0
127	**19. Meadows Grinder**				0
128	Engineering/Design				0
129	Equipment Approval/Procurement				0
130	Panel Build				0
131	Outdoor Site Work				0
132	Startup/Commissioning				0
133	**20. Main Flume**				0
134	Engineering/Design				0
135	Equipment Approval/Procurement				0
136	Panel Build				0
137	Outdoor Site Work				0
138	Startup/Commissioning				0
139	**21. Meadows Flume**				0
140	Engineering/Design				0
141	Equipment Approval/Procurement				0
142	Outdoor Panel Build				0
143	Site Work				0
144	Startup/Commissioning				0
145	**22. North Flume**				0
146	Engineering/Design				0
147	Equipment Approval/Procurement				0
148	Panel Build				0
149	Outdoor Site Work				0
150	Startup/Commissioning				0

28091F - CRW SCADA Master Plan - P4 - Proposal

	Name	Assigned to	Start	Finish	% Complete
151	**23. Red Hawk Pond**				0
152	Engineering/Design				0
153	Equipment Approval/Procurement				0
154	Panel Build				0
155	Indoor Site Work				0
156	Startup/Commissioning				0
157	Project Final Completion - 2/28/2026 (240 days)				0

REXEL

Expiration Date: 08/22/24

Quotation

TO:
LOGICAL SYSTEMS INC BARTLETT TN
PO BOX 341321
MEMPHIS, TN 38184-1321

Project Info:

Project:	Castlerock Water
Job #:	675253
Bid Date:	07/23/24
Bid Time:	03:00 PM EDT
Quoter:	Dominic Delfiacco

Type	Quantity	Vendor	Description	Unit or Lot#	Unit Price	Ext Price
Budgetary Proposal Only. Not intended for purchase at this time.						
MCC	1	ROCKWELL	MCC - per attached (Lead-time: 6-8 weeks for drawings + 31-36 weeks after release to manufacturing)	Unit		
Data CD	1	ROCKWELL	IntelliCENTER Data CD	Unit		
VFD Startup	1		RXSVC - REXEL SERVICES DRIVE START-UP ESTIMATE 4 HOURS OF LABOR PER DRIVE; ACTUAL HOURS/PRICE MAY VARY.	Unit		

From:
7325 DEN DENVER
SALES PHONE 303-572-7100
425 QUIVAS ST
DENVER, CO 80204-4913
Printed By: Dominic Delfiacco

Notes

LSI / Castle Rock Water Confidential

7/22/2024 4:11:03 PM

Project: Castlerock Water

Expiration **08/22/24**

Quotation

Type	Quantity	Vendor	Description	LOT #	Unit Price	Ext Price
Project Management	1	Stock	PREMIER PROJECT SUPPORT PLAN	Unit	0.000/EA	0.00

From:

7325 DEN DENVER
SALES PHONE 303-572-7100
425 QUIVAS ST
DENVER, CO 80204-4913
Printed By: Dominic Delfiacco

Notes

7/22/2024 4:11:03 PM

Clarifications

Specification:
MCC specification shown as Div 26 on cover page but is shown in Division 40 Specification
26 24 19 2.01 B. no modifications to existing MCCs are included in this proposal
2.02 G. by others
2.03 A 4. one switch configured for entire MCC lineup
2.03 A 9. Class I type B-T wiring provided. Any Class II wiring to be provided by others
2.03 C. 2. b. vertical power bus will not have 'sandwich type insulation'
2.03 C. 4. ground but can be 500A or 900A rated. 500A rated is configured
2.03 D. 1. No one-line or unit diagrams provided at time of quotation
2.03 D. 4. f. 2) isolation contactor provided, not a true bypass
2.03 K SPD – 300kA per phase configured. Section 26 43 13 is referenced but not included in bid documents

Scope: All control panels, components and sites not listed below are not in the scope of this proposal

Miller Water Treatment Plant

Addendum 4 calls for feeder breakers for external VFDs but Addendum 5 shows FVNRs
- FVNRs configured

Rockwell Automation

Centerline 2100 Motor Control Center

Basic Structure Information

Project Name:	Castlerock	Salesperson:	Dominic Del Fiacco
Project Item:	MCC	Created By:	Dominic Del Fiacco
Project ID #:	5334043/2	Date/Time:	07/22/24 - 15:05

Motor Control Center Details

This MCC(s) was developed using an available fault current of 50,001 to 65,000 A.
MCC configuration & pricing subject to change, if actual Available Fault Current differs.

Motor Control Center Details

Power System Type: Wye, 3-phase, 4-wire with solidly grounded neutral
Voltage: 480 Volts / 60 Hertz
Available Fault Current: 50,001 to 65,000 A
Unit Nameplate Type: Acrylic - Black letters on white - Stainless Steel Screws
Wiring Type: B-T Control and Power Terminal Blocks
Wiring Diagram Location: Central location
Arc Resistant MCC: No
IntelliCENTER Network: Ethernet
IMC Device Firmware: Upgraded to latest available version (saves up to 1 hour of customer configuration time per section)

Incoming Line Details

MCC Connection Type: Main Circuit Breaker
Incoming Line Cable Entry: Top Mounted

Bus Details

Main Bus Rating: 1200A
Main Bus Material: Copper / Tin Plated
Main Bus Bracing: 65kA (rms symmetrical)
Insulated Bus: CMOD Added

Horizontal Ground Bus Size: 1/4" X 1"
Horizontal Ground Bus Plating: Tin plated Copper
Horizontal Ground Bus Location: Bottom
Vertical Ground Bus Type: Plug-in Copper
Incoming Ground Lug Size: #6 AWG - 250 kcmil (2 Supplied as Standard)
Incoming Ground Cable Size: None Selected
Outgoing Equipment Ground Lug: Yes

Horizontal Neutral Bus Rating: Same as Main Bus Rating
Horizontal Neutral Bus Location}: Below Main Bus
Neutral Connection Plate: Yes
Neutral Connection Plate Location: Bottom

Enclosure Details

Enclosure Type: 12 - Fully Gasketed with Bottom Plates
NEMA 3R/4 Lifting Angle: No
Section Depth: Front Mounted, 20" Deep
Section Height: 90" High
Stab Opening Protection: Automatic Shutters
Wireway Tie Bar: Yes

Total Shipping Block(s): 2
Total Section(s): 5
Total Unit(s): 21

Ethernet Network Information

Full Ethernet Network Information can be found on the One-Line Diagram associated with this project item. This drawing can be obtained by requesting Pre-order drawings through PowerControl Builder.

Section Modifications (Qty/Mods)

Section 1 Modifications (Quantity/Mods)

(1) Insulated Bus - 1600A and below, 20" wide sections only - PolyPro Flame Retardant Material (No Tape on Bus) - UL Rated

Section 2 Modifications (Quantity/Mods)

(1) Insulated Bus - 1600A and below, 20" wide sections only - PolyPro Flame Retardant Material (No Tape on Bus) - UL Rated

Section 3 Modifications (Quantity/Mods)

(1) Insulated Bus - 1600A and below, 20" wide sections only - PolyPro Flame Retardant Material (No Tape on Bus) - UL Rated

Section 4 Modifications (Quantity/Mods)

(1) Insulated Bus - 1600A and below, 20" wide sections only - PolyPro Flame Retardant Material (No Tape on Bus) - UL Rated

Section 5 Modifications (Quantity/Mods)

(1) Insulated Bus - 1600A and below, 20" wide sections only - PolyPro Flame Retardant Material (No Tape on Bus) - UL Rated

Section Number	Section Width (inches)	Options/Modifications
1	20"	Horizontal Neutral Bus
2	20"	Horizontal Neutral Bus
3	20"	Horizontal Neutral Bus
4	20"	Horizontal Neutral Bus
5	20"	600A Vertical Bus Neutral Connection Plate Horizontal Neutral Bus

Rockwell Automation

Centerline 2100 Motor Control Center

Unit List

Project Name:	Castlerock	Salesperson:	Dominic Del Fiacco
Project Item:	MCC	Created By:	Dominic Del Fiacco
Project ID #:	5334043/2	Date/Time:	07/22/24 - 15:05

ID	QTY	Catalog Number / Unit Description
1	1	2193MT-GJC-56TNMG-88FN-760A / Main Circuit Breaker - 1200A Frame Rating - Top Mounted with 1200A Trip w/ Maintenance Mode
2	1	2100-EPS8JBH-30TGM-79UT-751S / Ethernet Power Supply Unit with Circuit Breaker Thermal Magnetic (15A Trip)
3	1	2100-ESW5220J-T10GNP-751S-768C-768D-768E / Stratix 5200 20-Port
4	1	2100M-CJC-32TGM-79UT / Empty Unit Insert - 1.5 Space Factor with Circuit Breaker Thermal Magnetic (30A Trip)
5	1	2113B-BDB-3-5LG-6P-7FE3EDCN3VR-37TGA-79UT-90-91-600PAX-750-751S / Full Voltage Non-Reversing Starter w/CB - 2 HP with Circuit Breaker Instantaneous MCP (7A Trip)
6	1	2113B-BDB-3-5LG-6P-7FE3EDCN3VR-41TGA-79UT-90-91-600PAX-750-751S / Full Voltage Non-Reversing Starter w/CB - 10 HP with Circuit Breaker Instantaneous MCP (30A Trip)
7	1	2113B-CDB-3-5LG-6P-7FE3EDCN6VR-44TGA-79UT-90-91-600PAX-750-751S / Full Voltage Non-Reversing Starter w/CB - 25 HP with Circuit Breaker Instantaneous MCP (50A Trip)
8	1	2113B-CDB-3-5LG-6P-7FE3EDCN6VR-44TGA-79UT-90-91-600PAX-750-751S / Full Voltage Non-Reversing Starter w/CB - 25 HP with Circuit Breaker Instantaneous MCP (50A Trip)
9	1	2113B-DDB-3-5LG-6P-7FE3EDCN1VR-47TGA-79UT-90-91-600PAX-750-751S / Full Voltage Non-Reversing Starter w/CB - 50 HP with Circuit Breaker Instantaneous MCP (100A Trip)
10	1	2113B-EDB-3-5LG-6P-7FE3EDCN5VR-48TJA-79UT-90-91-600PAX-750-751S / Full Voltage Non-Reversing Starter w/CB - 60 HP with Circuit Breaker Instantaneous MCP (150A Trip)
11	2	2163WB-010JB-3F-5LR-14DFCC-14HC2S-14RLX-39TGM-79UT-600PAX-751S / PowerFlex 525 AC Drive w/CB - 5 HP with Circuit Breaker Thermal Magnetic (20A Trip)
12	1	2190-CJB-56M-79UT-86W54DXB-750-751S / Metering Unit - Bul 1426-M5 PM 5000 w/Ethernet
13	2	2193F-CJC-45TJM-79UT / Feeder Circuit Breaker - 250A Frame Rating with 225A Trip
14	1	2193FZ-BJC-61THML-79UT / Feeder Circuit Breaker - 125A Frame Rating with 25A Trip
15	1	2193FZ-AJB-32TGM-79UT / Feeder Circuit Breaker - 125A Frame Rating with 30A Trip
16	1	2193FZ-AJB-40TGM-79UT / Feeder Circuit Breaker - 125A Frame Rating with 100A Trip
17	3	2100-BJ10 / Blank Unit Door - 1.0 Space Factor

Rockwell Automation

Centerline 2100 Motor Control Center

Unit Description

Project Name:	Castlerock	Salesperson:	Dominic Del Fiacco
Project Item:	MCC	Created By:	Dominic Del Fiacco
Project ID #:	5334043/2	Date/Time:	07/22/24 - 15:05

General Information

Line Voltage / Frequency:	480 Volts / 60 Hertz
Power System Configuration:	Wye, 3-phase, 4-wire with solidly grounded neutral
Class I Wiring Type:	B-T Control and Power Terminal Blocks
NEMA Enclosure Type:	12 - Fully Gasketed with Bottom Plates
Available Fault Current:	50,001 to 65,000 A
Unit Nameplate Type:	Acrylic - Black letters on white - Stainless Steel Screws
Delivery Program:	ENG

Unit Information

Description	Unit Features
Unit Loc: 01A **Del Prog: PEII** **Unit ID: 1** MCB - Main Circuit Breaker **Rating** 1200A **Wiring Diagram** 10007961252 **Name Plate Information** MAIN BREAKER	**Catalog Number: 2193MT-GJC-56TNMG-88FN-760A** Total Space Factor = 4.5 Circuit Breaker: Electronic (LSIG) - Maint. Mode, 65kA at 480V (1200) with Frame Rating of 1200A (N6I Frame) w/ Maintenance Mode, Top Mounted, 1200A Trip, with Internal Ground Fault Protection Lugs Supplied: Std Mech/Lug Pads, 500 kcmil Size Wire, 4 Cables per Phase **Features Included** INC_NEUT_BUS Full-rated (-88FN) 24V Power Supply, Selector Switch, Pilot Light for N- & R-Frame MM (-760A)
Unit Loc: 01K **Del Prog: SCII** **Unit ID: 13** FCB - Feeder Circuit Breaker **Rating** 225A **Wiring Diagram** 10004021873 **Name Plate Information** SERVICE PUMP 4 **Overload Relay(s)** Motor Full Load Current (FLC) = Not Available	**Catalog Number: 2193F-CJC-45TJM-79UT** Total Space Factor = 1.5 Circuit Breaker: Thermal Magnetic, 65kA at 480V (225) with Frame Rating of 250A (J6 Frame), Plug-In Unit, 225A Trip Lugs Supplied: Std Mech/Lug Pads, 250 kcmil Size Wire, 1 Cables per Phase **Features Included** Unit Grd Stab Tin Plated Cu (-79UT)

Unit Loc: 02A **Del Prog: ENG**
Unit ID: 4
FCBX - Empty Unit Insert

Wiring Diagram
10002693814

Name Plate Information
SPD

Catalog Number: 2100M-CJC-32TGM-79UT
Total Space Factor = 1.5
Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (30A Trip)
Disconnect Type Circuit Breaker

Features Included
Unit Grd Stab Tin Plated Cu (-79UT)

Engineered Spec(s)/Modification(s)
(1) ASCO SPD - 300 ka/phase (At 600V Wye only) - UL Rated,450****P30ACCN20
(1) Engineered Modification and/or Custom Diagram

Unit Loc: 02D **Del Prog: SCII**
Unit ID: 12
METR - Metering Unit

Wiring Diagram
10005054150

Name Plate Information
POWER MONITOR

Ethernet Information

Device Type	IP Address	Subnet Mask
2190	192.168.1.2	255.255.255.0
2190	192.168.1.3	255.255.255.0

Cable Length: 2.16 m

Power Monitor Firmware Version: LATEST

Catalog Number: 2190-CJB-56M-79UT-86W54DXB-750-751S
Total Space Factor = 1.5
Metering Type: Bul 1426-M5 PM 5000 w/Ethernet
Ammeter Scale 1200

Features Included
Unit Grd Stab Tin Plated Cu (-79UT)
#14 AWG MTW (TEW) Cu (Tinned) (-750)
Sleeve Type Markers (-751S)

Unit Loc: 02G **Del Prog: PEII**
Unit ID: 9
FVNR - Full Voltage Non-Reversing Starter w/CB

Rating
50 HP

Name Plate Information
WELL 16R

Overload Relay(s)
E300 Comm Based Overload (7FE3)
E300 Communication Option = EtherNet/IP
E300 Voltage Code = 120V AC
E300 Control Module = Control Only
E300 Sensing Module = 10-100A Curr/Grnd Fault/Volt
E300 Operator Station = Electronic Reset
E300 Expansion Module = Not Available
Motor RPM = 1800
Motor Full Load Current (FLC) = 62.3
Motor Service Factor = 1.15

Ethernet Information

Device Type	IP Address	Subnet Mask
2113	192.168.1.4	255.255.255.0

Cable Length: 2.55 m

E300 Overload Firmware Version: LATEST

Catalog Number: 2113B-DDB-3-5LG-6P-7FE3EDCN1VR-47TGA-79UT-90-91-600PAX-750-751S
Size: NEMA Size 3
Total Space Factor = 1.5
Wiring: NEMA Type B wiring
Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (100A Trip)
Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz
Control Wiring: #14 AWG MTW (TEW) Cu (Tinned)

Features Included
Selector Switch: HAND-OFF-AUTO (-3)
Pilot Light(s): ON Type: LED Push To Test, Color(s): Green (-5LG)
Std Capacity Control Power Transformer W/Primary Fuses (-6P)
Unit Grd Stab Tin Plated Cu (-79UT)
1 NO on Starter (-90)
1 NC on Starter (-91)
Wiring configured for PlantPAx usage (-600PAX)
#14 AWG MTW (TEW) Cu (Tinned) (-750)
Sleeve Type Markers (-751S)

Unit Loc: 02K **Del Prog: SCII**
Unit ID: 13
FCB - Feeder Circuit Breaker

Rating
225A

Wiring Diagram
10004021873

Name Plate Information
SERVICE PUMP 5

Overload Relay(s)
Motor Full Load Current (FLC) = Not Available

Catalog Number: 2193F-CJC-45TJM-79UT
Total Space Factor = 1.5
Circuit Breaker: Thermal Magnetic, 65kA at 480V (225) with Frame Rating of 250A (J6 Frame), Plug-In Unit, 225A Trip
Lugs Supplied: Std Mech/Lug Pads, 250 kcmil Size Wire, 1 Cables per Phase

Features Included
Unit Grd Stab Tin Plated Cu (-79UT)

Unit Loc: 03A Del Prog: PEII **Unit ID: 3** ENSW - Stratix 5200 20-Port **Wiring Diagram** 10007842549 **Name Plate Information** ETHERNET SWITCH **Ethernet Information** Device Type IP Address Subnet Mask 2100-ESW 192.168.1.1 255.255.255.0 No Cable Length Ethernet Switch Firmware Version: LATEST	**Catalog Number: 2100-ESW5220J-T10GNP-751S-768C-768D-768E** Total Space Factor = 1 Full Stratix 5200 Firmware NAT (Network Address Translation) Power Adapters (w/Unit Mtg) **Features Included** Sleeve Type Markers (-751S) Redundant ENet Power Supply (-768C) Input/Output Block (-768D) Industrial SD Card Provided (-768E) SmartPort Enabled (-SP) DHCP Port Persistence Enabled (-DHCP_PP) Resilient Ethernet Protocol Enabled (-REP)
Unit Loc: 03C Del Prog: SCII **Unit ID: 2** ENPS - Ethernet Power Supply Unit **Rating** 125A **Wiring Diagram** 10007930735 **Name Plate Information** ETHERNET POWER SUPPLY	**Catalog Number: 2100-EPS8JBH-30TGM-79UT-751S** Total Space Factor = 1 Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (15A Trip) Disconnect Type = Circuit Breaker Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, V/60Hz Control Wiring: #16 AWG MTW(TEW) Cu **Features Included** Unit Grd Stab Tin Plated Cu (-79UT) Sleeve Type Markers (-751S)
Unit Loc: 03E Del Prog: SCII **Unit ID: 16** FCB - Feeder Circuit Breaker **Rating** 100A **Wiring Diagram** 10004092283 **Name Plate Information** 25KVA XFMR **Overload Relay(s)** Motor Full Load Current (FLC) = Not Available	**Catalog Number: 2193FZ-AJB-40TGM-79UT** Total Space Factor = 0.5 Circuit Breaker: Thermal Magnetic, 65kA at 480V (100) with Frame Rating of 125A (G6C Frame), Plug-In Unit, 100A Trip Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase **Features Included** Unit Grd Stab Tin Plated Cu (-79UT)

Unit Loc: 03F Del Prog: SCII **Unit ID: 15** FCB - Feeder Circuit Breaker **Rating** 30A **Wiring Diagram** 10004092180 **Name Plate Information** UNIT HEATERS UH-1, 2, -3 **Overload Relay(s)** Motor Full Load Current (FLC) = Not Available	**Catalog Number: 2193FZ-AJB-32TGM-79UT** Total Space Factor = 0.5 Circuit Breaker: Thermal Magnetic, 65kA at 480V (30) with Frame Rating of 125A (G6C Frame), Plug-In Unit, 30A Trip Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase **Features Included** Unit Grd Stab Tin Plated Cu (-79UT)
Unit Loc: 03G Del Prog: PEII **Unit ID: 14** FCB - Feeder Circuit Breaker **Rating** 25A **Wiring Diagram** 10004708959 **Name Plate Information** UH-5 **Overload Relay(s)** Motor Full Load Current (FLC) = Not Available	**Catalog Number: 2193FZ-BJC-61THML-79UT** Total Space Factor = 0.5 Circuit Breaker: Electronic (LSI), 65kA at 480V (25) with Frame Rating of 125A (H6H Frame), Plug-In Unit, 25A Trip Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase **Features Included** Unit Grd Stab Tin Plated Cu (-79UT)

Unit Loc: 03H **Del Prog: PEII**
Unit ID: 10
FVNR - Full Voltage Non-Reversing Starter w/CB

Rating
60 HP

Name Plate Information
WELL 15R

Overload Relay(s)
E300 Comm Based Overload (7FE3)
E300 Communication Option = EtherNet/IP
E300 Voltage Code = 120V AC
E300 Control Module = Control Only
E300 Sensing Module = 0.5..30A Pass Thru Current/Volt
E300 Operator Station = Electronic Reset
E300 Expansion Module = Not Available
Motor RPM = 1800
Motor Full Load Current (FLC) = 74.3
Motor Service Factor = 1.15

Ethernet Information

Device Type	IP Address	Subnet Mask
2113	192.168.1.5	255.255.255.0

Cable Length: 2.9 m

E300 Overload Firmware Version: LATEST

Catalog Number: 2113B-EDB-3-5LG-6P-7FE3EDCN5VR-48TJA-79UT-90-91-600PAX-750-751S
Size: NEMA Size 4
Total Space Factor = 2.5
Wiring: NEMA Type B wiring
Circuit Breaker: Instantaneous MCP, 100kA at 480V (J8P Frame) (150A Trip)
Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz
Control Wiring: #14 AWG MTW (TEW) Cu (Tinned)

Features Included
Selector Switch: HAND-OFF-AUTO (-3)
Pilot Light(s): ON Type: LED Push To Test, Color(s): Green (-5LG)
Std Capacity Control Power Transformer W/Primary Fuses (-6P)
Unit Grd Stab Tin Plated Cu (-79UT)
1 NO on Starter (-90)
1 NC on Starter (-91)
Wiring configured for PlantPAx usage (-600PAX)
#14 AWG MTW (TEW) Cu (Tinned) (-750)
Sleeve Type Markers (-751S)

Unit Loc: 04A **Del Prog: PEII**
Unit ID: 6
FVNR - Full Voltage Non-Reversing Starter w/CB

Rating
10 HP

Name Plate Information
SF-1

Overload Relay(s)
E300 Comm Based Overload (7FE3)
E300 Communication Option = EtherNet/IP
E300 Voltage Code = 120V AC
E300 Control Module = Control Only
E300 Sensing Module = 0.5-30A Curr/Grnd Fault/Volt
E300 Operator Station = Electronic Reset
E300 Expansion Module = Not Available
Motor RPM = 1800
Motor Full Load Current (FLC) = 13.65
Motor Service Factor = 1.15

Ethernet Information

Device Type	IP Address	Subnet Mask
2113	192.168.1.6	255.255.255.0

Cable Length: 1.8 m

E300 Overload Firmware Version: LATEST

Catalog Number: 2113B-BDB-3-5LG-6P-7FE3EDCN3VR-41TGA-79UT-90-91-600PAX-750-751S
Size: NEMA Size 1
Total Space Factor = 1
Wiring: NEMA Type B wiring
Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (30A Trip)
Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz
Control Wiring: #14 AWG MTW (TEW) Cu (Tinned)

Features Included
Selector Switch: HAND-OFF-AUTO (-3)
Pilot Light(s): ON Type: LED Push To Test, Color(s): Green (-5LG)
Std Capacity Control Power Transformer W/Primary Fuses (-6P)
Unit Grd Stab Tin Plated Cu (-79UT)
1 NO on Starter (-90)
1 NC on Starter (-91)
Wiring configured for PlantPAx usage (-600PAX)
#14 AWG MTW (TEW) Cu (Tinned) (-750)
Sleeve Type Markers (-751S)

Unit Loc: 04C Del Prog: PEII **Unit ID: 7** FVNR - Full Voltage Non-Reversing Starter w/CB **Rating** 25 HP **Name Plate Information** BACKWASH PUMP **Overload Relay(s)** E300 Comm Based Overload (7FE3) E300 Communication Option = EtherNet/IP E300 Voltage Code = 120V AC E300 Control Module = Control Only E300 Sensing Module = 6-60A Curr/Grnd Fault/Volt E300 Operator Station = Electronic Reset E300 Expansion Module = Not Available Motor RPM = 1800 Motor Full Load Current (FLC) = 32.34 Motor Service Factor = 1.15 **Ethernet Information** Device Type: 2113 / IP Address: 192.168.1.7 / Subnet Mask: 255.255.255.0 Cable Length: 2.13 m E300 Overload Firmware Version: LATEST	**Catalog Number: 2113B-CDB-3-5LG-6P-7FE3EDCN6VR-44TGA-79UT-90-91-600PAX-750-751S** Size: NEMA Size 2 Total Space Factor = 1 Wiring: NEMA Type B wiring Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (50A Trip) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #14 AWG MTW (TEW) Cu (Tinned) **Features Included** Selector Switch: HAND-OFF-AUTO (-3) Pilot Light(s): ON Type: LED Push To Test, Color(s): Green (-5LG) Std Capacity Control Power Transformer W/Primary Fuses (-6P) Unit Grd Stab Tin Plated Cu (-79UT) 1 NO on Starter (-90) 1 NC on Starter (-91) Wiring configured for PlantPAx usage (-600PAX) #14 AWG MTW (TEW) Cu (Tinned) (-750) Sleeve Type Markers (-751S)
Unit Loc: 04E Del Prog: SCII **Unit ID: 17** DOOR - Blank Unit Door **Name Plate Information** SPACE	**Catalog Number: 2100-BJ10** Total Space Factor = 1
Unit Loc: 04G Del Prog: SCII **Unit ID: 17** DOOR - Blank Unit Door **Name Plate Information** SPACE	**Catalog Number: 2100-BJ10** Total Space Factor = 1

Unit Loc: 04J **Del Prog: PEII**
Unit ID: 5
FVNR - Full Voltage Non-Reversing Starter w/CB

Rating
2 HP

Name Plate Information
DECANT PUMP

Overload Relay(s)
E300 Comm Based Overload (7FE3)
E300 Communication Option = EtherNet/IP
E300 Voltage Code = 120V AC
E300 Control Module = Control Only
E300 Sensing Module = 0.5-30A Curr/Grnd Fault/Volt
E300 Operator Station = Electronic Reset
E300 Expansion Module = Not Available
Motor RPM = 1800
Motor Full Load Current (FLC) = 3.11
Motor Service Factor = 1.15

Ethernet Information

Device Type	IP Address	Subnet Mask
2113	192.168.1.8	255.255.255.0

Cable Length: 3.13 m

E300 Overload Firmware Version: LATEST

Catalog Number: 2113B-BDB-3-5LG-6P-7FE3EDCN3VR-37TGA-79UT-90-91-600PAX-750-751S
Size: NEMA Size 1
Total Space Factor = 1
Wiring: NEMA Type B wiring
Circuit Breaker: Instantaneous MCP, 65kA at 480V (G8P Frame) (7A Trip)
Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz
Control Wiring: #14 AWG MTW (TEW) Cu (Tinned)

Features Included
Selector Switch: HAND-OFF-AUTO (-3)
Pilot Light(s): ON Type: LED Push To Test, Color(s): Green (-5LG)
Std Capacity Control Power Transformer W/Primary Fuses (-6P)
Unit Grd Stab Tin Plated Cu (-79UT)
1 NO on Starter (-90)
1 NC on Starter (-91)
Wiring configured for PlantPAx usage (-600PAX)
#14 AWG MTW (TEW) Cu (Tinned) (-750)
Sleeve Type Markers (-751S)

Unit Loc: 04L Del Prog: PEII **Unit ID: 8** FVNR - Full Voltage Non-Reversing Starter w/CB **Rating** 25 HP **Name Plate Information** BLOWER **Overload Relay(s)** E300 Comm Based Overload (7FE3) E300 Communication Option = EtherNet/IP E300 Voltage Code = 120V AC E300 Control Module = Control Only E300 Sensing Module = 6-60A Curr/Grnd Fault/Volt E300 Operator Station = Electronic Reset E300 Expansion Module = Not Available Motor RPM = 1800 Motor Full Load Current (FLC) = 32.34 Motor Service Factor = 1.15 **Ethernet Information** Device Type IP Address Subnet Mask 2113 192.168.1.9 255.255.255.0 Cable Length: 3.46 m E300 Overload Firmware Version: LATEST	**Catalog Number: 2113B-CDB-3-5LG-6P-7FE3EDCN6VR-44TGA-79UT-90-91-600PAX-750-751S** Size: NEMA Size 2 Total Space Factor = 1 Wiring: NEMA Type B wiring Circuit Breaker: Instantaneous MCP, 100kA at 480V (G8P Frame) (50A Trip) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #14 AWG MTW (TEW) Cu (Tinned) **Features Included** Selector Switch: HAND-OFF-AUTO (-3) Pilot Light(s): ON Type: LED Push To Test, Color(s): Green (-5LG) Std Capacity Control Power Transformer W/Primary Fuses (-6P) Unit Grd Stab Tin Plated Cu (-79UT) 1 NO on Starter (-90) 1 NC on Starter (-91) Wiring configured for PlantPAx usage (-600PAX) #14 AWG MTW (TEW) Cu (Tinned) (-750) Sleeve Type Markers (-751S)
Unit Loc: 05A Del Prog: SCII **Unit ID: 17** DOOR - Blank Unit Door **Name Plate Information** SPACE	**Catalog Number: 2100-BJ10** Total Space Factor = 1
Unit Loc: 05C Del Prog: SCII **Unit ID: 11** VFD - PowerFlex 525 AC Drive w/CB **Rating** 5 HP **Name Plate Information** PD **Ethernet Information** Device Type IP Address Subnet Mask 2163W 192.168.1.11 255.255.255.0 Cable Length: 3.62 m PowerFlex 525 Firmware Version: LATEST	**Catalog Number: 2163WB-010JB-3F-5LR-14DFCC-14HC2S-14RLX-39TGM-79UT-600PAX-751S** Total Space Factor = 2.5 Wiring: NEMA Type B wiring Output Current Rating: 10A Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (20A Trip) Human Interface Module: Drive HIM LCD Door display-digital keypd Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Control Wiring: #16 AWG MTW(TEW) Cu **Features Included** Selector Switch: HAND-OFF-AUTO (-3F) Pilot Light(s): RUN Type: LED Push To Test, Color(s): Red (-5LR) Drive I/P fuses - Class CC (-14DFCC) Drive Line Reactor (-14RLX) Unit Grd Stab Tin Plated Cu (-79UT) Wiring configured for PlantPAx usage (-600PAX) Sleeve Type Markers (-751S)

Unit Loc: 05H **Del Prog: SCII**
Unit ID: 11
VFD - PowerFlex 525 AC Drive w/CB

Rating
5 HP

Name Plate Information
PD

Ethernet Information

Device Type	IP Address	Subnet Mask
2163W	192.168.1.10	255.255.255.0

Cable Length: 4.45 m

PowerFlex 525 Firmware Version: LATEST

Catalog Number: 2163WB-010JB-3F-5LR-14DFCC-14HC2S-14RLX-39TGM-79UT-600PAX-751S
Total Space Factor = 2.5
Wiring: NEMA Type B wiring
Output Current Rating: 10A
Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (20A Trip)
Human Interface Module: Drive HIM LCD Door display-digital keypd
Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz
Control Wiring: #16 AWG MTW(TEW) Cu

Features Included
Selector Switch: HAND-OFF-AUTO (-3F)
Pilot Light(s): RUN Type: LED Push To Test, Color(s): Red (-5LR)
Drive I/P fuses - Class CC (-14DFCC)
Drive Line Reactor (-14RLX)
Unit Grd Stab Tin Plated Cu (-79UT)
Wiring configured for PlantPAx usage (-600PAX)
Sleeve Type Markers (-751S)

Rockwell Automation

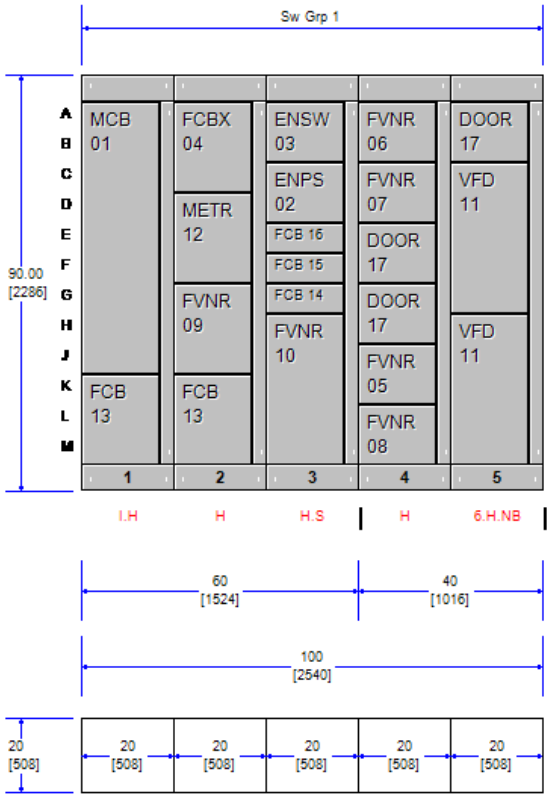
Centerline 2100 Motor Control Center

Front Elevation

Project Name:	Castlerock	Salesperson:	Dominic Del Fiacco
Project Item:	MCC	Created By:	Dominic Del Fiacco
Project ID #:	5334043/2	Date/Time:	07/22/24 - 15:05

Rockwell Automation/Allen-Bradley

PowerControl Builder Lineup



NOTE: Dimensions are subject to change after design review.

ENCLOSURE: NEMA Type 12 (Fully Gasketed with Bottom Closing Plates)

Estimated Heat Loss: 1865 watts.

BTU/hr. Required: 6363

Air Conditioning Tons: 0.53

Estimated Weight: 2500 lbs. (1134 kg)

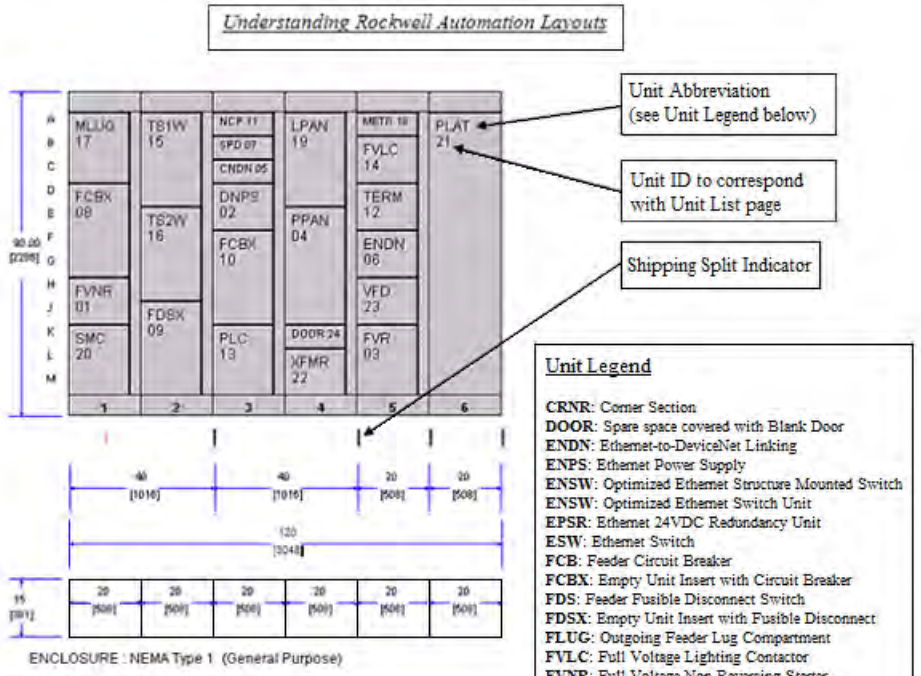
Heat loss values are for estimating purposes only.

Rockwell Automation

Centerline 2100 Motor Control Center

Front Elevation Explanation

Project Name:	Castlerock	Salesperson:	Dominic Del Fiacco
Project Item:		Created By:	Dominic Del Fiacco
Project ID #:	5334043/2	Date/Time:	07/22/24 - 15:05



ENCLOSURE : NEMA Type 1 (General Purpose)

Section Code Legend

6 = 600A vertical bus in section
8 = PowerFlex 755 Floor Mounted Drive Section
9 = 9" wireway section
C = Corner section
H = Horizontal neutral bus
I = Incoming line section
NB = Neutral connection plate in bottom of section
NT = Neutral connection plate in top of section
P = Pull box mounted on top of section
S = Ethernet switch
T = 5" PowerFlex 755 Floor Mounted Drive Transition Section
V = 9" wireway has vertical neutral bus

Space Factor (SF) is 13.0" (330mm) of vertical height

Unit Legend

CRNR: Corner Section
DOOR: Spare space covered with Blank Door
ENDN: Ethernet-to-DeviceNet Linking
ENPS: Ethernet Power Supply
ENSW: Optimized Ethernet Structure Mounted Switch
ENSW: Optimized Ethernet Switch Unit
EPSR: Ethernet 24VDC Redundancy Unit
ESW: Ethernet Switch
FCB: Feeder Circuit Breaker
FCBX: Empty Unit Insert with Circuit Breaker
FDS: Feeder Fusible Disconnect Switch
FDSX: Empty Unit Insert with Fusible Disconnect
FLUG: Outgoing Feeder Lug Compartment
FVLC: Full Voltage Lighting Contactor
FVNR: Full Voltage Non-Reversing Starter
FVR: Full Voltage Reversing Starter
INSR: Empty Unit Insert
LPAN: Frame-Mounted Lighting Panel
MCB: Main Circuit Breaker
METR: Metering Compartment
MFDS: Main Fusible Disconnect Switch
MLUG: Incoming Main Lug Compartment
NCP: Neutral Connection Plate
PLAT: Full Section Blank Mounting Plate
PLC: Programmable I/O Chassis
PPAN: Power Panel
SMC: Soft Starter Motor Controller
SPD: Surge Protective Device
TERM: NEMA Type "C" Terminal Board
TS1W: Two-Speed 1-Winding Starter
TS2W: Two-Speed 2-Winding Starter
VFD: Variable Frequency Drive
XFMR: Control & Lighting Transformer

Exhibit 3_R1

No.	Site Name	Quantity	Unit	Labor Price	Equipment Price	Additional Scope Price	Total Price
1	Miller Water Treatment Plant	1	LS	$337,290	$554,940	$143,460.00	$1,035,690.00
2	BM1A_D Well	1	LS	$91,930	$36,240	n/a	$128,170.00
3	BM2 Well	1	LS	$93,760	$41,750	n/a	$135,510.00
4	RT6ABC	1	LS	$90,050	$32,290	n/a	$122,340.00
5	RT14	1	LS	$87,780	$24,300	n/a	$112,080.00
6	W7 Well	1	LS	$110,010	$60,790	$4,550.00	$175,350.00
7	Citadel Pump Station	1	LS	$118,000	$57,210	n/a	$175,210.00
8	Hillside Pump Station	1	LS	$105,650	$47,190	$510.00	$153,350.00
9	Plum Creek Pump Station	1	LS	$113,190	$77,870	$660.00	$191,720.00
10	Black Feather PRV	1	LS	$95,370	$59,880	n/a	$155,250.00
11	Briscoe PRV	1	LS	$87,280	$27,820	n/a	$115,100.00
12	Scott PRV	1	LS	$87,280	$48,460	n/a	$135,740.00
13	Valley PRV	1	LS	$87,280	$44,500	n/a	$131,780.00
14	Castlewood 1 Lift Station	1	LS	$149,640	$75,840	$4,730.00	$230,210.00
15	Castlewood 2 Lift Station	1	LS	$147,430	$73,440	$1,450.00	$222,320.00
16	Maher Lift Station	1	LS	$140,840	$76,920	n/a	$217,760.00
17	Mitchell Creek Lift Station	1	LS	$127,260	$76,790	$18,320.00	$222,370.00
18	Sellars Lift Station	1	LS	$145,030	$59,130	$15,370.00	$219,530.00
19	Meadows Grinder	1	LS	$83,870	$29,870	$3,280.00	$117,020.00
20	Main Flume	1	LS	$74,810	$20,210	$1,560.00	$96,580.00
21	Meadows Flume	1	LS	$75,870	$21,380	$6,490.00	$103,740.00
22	North Flume	1	LS	$71,740	$19,310	$1,560.00	$92,610.00
23	Red Hawk Pond	1	LS	$68,840	$19,910	n/a	$88,750.00
24	General Conditions (Division 01)	1	LS	n/a	n/a	n/a	$0.00
25	Conduit Allowance	1	LS	n/a	n/a	n/a	$50,000.00
26	Warranties - Alternate 1	1	LS	n/a	n/a	n/a	$0.00
27	Warranties - Alternate 2	1	LS	n/a	n/a	n/a	$47,540.00
						Sum Total	**$4,475,720.00**

EXHIBIT 2

CONTRACTOR’S CERTIFICATE OF INSURANCE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 6/28/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Tammy Quinn	
McDaniel-Whitley, Inc. P.O. Box 382007 Memphis TN 38183-2007	PHONE (A/C, No, Ext): (901)881-6464 FAX (A/C, No): (901)881-6467 E-MAIL ADDRESS: tquinn@mcwins.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Hartford Accident & Indemnity	22357
INSURED	INSURER B : Trumbull Insurance Company	27120
Logical Systems LLC; Logical Systems Inc; LSI Construction LLC (et al) 2756 Appling Center Cove Memphis TN 38133	INSURER C : Hartford Casualty Insurance Company	29424
	INSURER D : Hartford Fire Insurance Company	19682
	INSURER E : Navigators Specialty Insurance Company	36056
	INSURER F : Continental Casualty Company	20443

COVERAGES **CERTIFICATE NUMBER:** 24-25 MASTER **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC OTHER:			20UUNBC5FFN	6/30/2024	6/30/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS			20UUNBC5FFN	6/30/2024	6/30/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000			20XHUBE3L20	6/30/2024	6/30/2025	EACH OCCURRENCE AGGREGATE	$ 15,000,000 $ 15,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N: N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		20WEAB6J11	6/30/2024	6/30/2025	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	Professional Liability			20TE033022418	6/30/2024	6/30/2025	LIMIT OF INSURANCE	5,000,000
F	Excess Professional Liab			652349860	6/30/2024	6/30/2025	LIMIT OF INSURANCE	5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

E. Pollution Liability Pol# NY24ECPX01463NC
6/30/2024 to 6/30/2025 - $5,000,000 Limit of Insurance

CERTIFICATE HOLDER

Castle Rock Water
175 Kellogg Ct
Castle Rock, CO 80109

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

R Whitley/QUINNT