

TOWN OF RIDGWAY

DUCTILE IRON PIPE REPLACEMENT

MAY, 2024



# TOWN OF RIDGWAY

## DUCTILE IRON PIPE REPLACEMENT

MAY, 2024

I hereby certify that these plans and specifications have been prepared under my direct supervision and to the best of my knowledge represent the work required for water pipe replacement. Engineer makes no warranties, expressed or implied in connection with consultant's services. Any additions, deletions, or modifications to any part of these documents will void any warranty expressed or implied.



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Joanne Fagan

5/31/24

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**REQUEST FOR BIDS  
TOWN OF RIDGWAY  
DUCTILE IRON PIPE REPLACEMENT PROJECT**

Notice is given that the Town of Ridgway, Colorado will receive sealed bids from qualified contractors to furnish all labor, equipment, and materials for the Ductile Iron Pipe Replacement Project for approximately 2,500 lineal feet of water line replacement.

Two paper copies and one electronic copy of the proposal in a sealed envelope clearly marked "Ductile Iron Pipe Replacement Project" and the name, address and phone number of the bidder must be received by the Pam Kraft, Town Clerk at Town Hall, 201 N. Railroad Street, or PO Box 10, Ridgway, CO 81432 by **4:00 pm on Thursday, June 27, 2024.**

Plans and specifications may be obtained by contacting [jfagan@town.ridgway.co.us](mailto:jfagan@town.ridgway.co.us)

The project is funded in part by a State Revolving Loan Fund (SRF) loan. Bidder's attention is called to the SRF requirements in the bid package. Davis Bacon wages and compliance with American Iron and Steel (AIS) are required. Disadvantaged Business Enterprise (DBE) requirements and goals are included. Also certified DBE's or a consortium of certified DBE's are encouraged to bid. See bidding documents for a full list of SRF Requirements.

A meeting and site visit will be held at the Ridgway Town Hall on Thursday, June 20, 2024 at 2:00 pm for interested bidders. Questions regarding the contract documents should be submitted by 5:00 pm on Friday, June 21, 2024.

The Town reserves the right to reject any and all bids, to waive any and all informalities in bidding and to negotiate contract terms with the successful bidder, or to make award in such a manner as it may deem right for the best interest of the Town.

By: Pam Kraft Town Clerk

Publication: Ouray County Plaindealer - May 30, June 6, 2024



## SECTION 00100 - INSTRUCTIONS TO BIDDERS

### 1. COPIES OF BIDDING DOCUMENTS

- 1.1. Complete sets of the Bidding Documents in the number and for the sum, if any stated in the Request for Bids may be obtained from Engineer or the Owner.
- 1.2. Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 1.3. Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

### 2. QUALIFICATIONS OF BIDDERS

To be considered as a qualified bidder, bidder must demonstrate that he has satisfactorily completed similar work of similar size and complexity on other projects and that the lead personnel that will be assigned to the project have the necessary experience to satisfy these requirements. Bidder must also demonstrate that he and his staff assigned to this Work meet or exceed the minimum experience requirements for the various types of work specified in the Contract Documents and that he has the financial resources to satisfactorily complete the project. Qualification statements shall be submitted for any entity (bidder, sub-contractor, supplier, etc.) providing 5% or more of the project scope.

### 3. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- 3.1. It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may in any manner affect cost, progress, performance of furnishing of the Work, including without limitation, improvements, soil conditions, drainage, topography and all other features of the terrain and conflicts, (c) consider federal, state and local laws, ordinances, rules and regulations; and (d) study and carefully correlate Bidder's observations with the Contract Documents as each may affect cost, progress, or performance of the work, or apply in any manner whatsoever to the work.
- 3.2 Bidder has given the Owner written notice of all conflicts, errors, or discrepancies that he discovered in the contract documents and such documents are acceptable to the Contractor.
- 3.3 On request, and with adequate notice, Owner will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of his Bid.
- 3.4. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor.
- 3.5. The submission of a Bid will constitute an incontrovertible representation by the Bidder that Bidder has complied with every requirement of this Article 3 without exception, that the Bid is premised upon performing and furnishing the Work required by the Contract Documents and such means, methods, techniques, sequences, or procedures of

construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work, and to provide for a completed, properly functioning installation in conformance with all applicable codes, ordinances, statutes and intent of Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation with respect to its bid or to complete the Work.

#### 4. INTERPRETATIONS

The Owner and Engineer will conduct a meeting prior to bid opening at the date and time specified in the Request for Bids for the purpose of reviewing the project scope and field conditions and interpreting the meaning or intent of the Contract Documents. Interested bidders are strongly encouraged to attend the conference. The meeting will include a visit to the site. The site visit shall in no way relieve the Bidder of his responsibilities under Article 3.

Questions about the meaning or intent of the Contract Documents are to be submitted to the Engineer in writing at least 7 days before the bid opening date in the Request for Bids. All questions will be answered in writing after the pre-bid meeting by Addenda or written response emailed, mailed, or delivered to all parties recorded by Engineer as having received the Bidding Documents. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

#### 5. BID SECURITY

Each Bid must be accompanied by Bid Security made payable to Owner in an amount of 5% of the Bidder's maximum Bid price and in the form of a certified or bank check or a Bid Bond (on form attached). The bid security of the successful Bidder will be retained until such Bidder has executed the Agreement and furnished required Contract Security, whereupon it will be returned. If the Successful Bidder fails to execute and deliver Agreement and furnish the required contract security within 10 days of Notice of Award, Owner may annul the Notice of Award and Bid Security of that Bidder will be forfeited.

#### 6. CONTRACT TIME

The number of days within which, or the date by which, the Work is to be completed and ready for final payment (the Contract Time) are set forth in the Agreement. Strict adherence to timeframe is required.

#### 7. LIQUIDATED DAMAGES

Provisions for liquidated damages are set forth in the Agreement.

#### 8. SUBSTITUTE MATERIAL AND EQUIPMENT

Information regarding substitute material and equipment is provided in Section 01000 and if applicable in the technical specifications.

#### 9. SUBCONTRACTORS, ETC.

9.1. The apparent Successful Bidder, and any other Bidder so requested, shall within three business days after the day of the Bid opening submit to Owner a list of all Subcontractors, Suppliers, and others (including those who are to

furnish the principal items of material and equipment) proposed for those portions of the Work which is equal to more than 5% of the contract price. Such list shall be accompanied by an experience statement and qualification statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, person or organization. If Owner or Engineer after due investigation has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, either may before giving the Notice of Award, request the apparent Successful Bidder to submit an acceptable substitute without an increase in Bid price. If the apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next best qualified Bidder that proposes to use acceptable Subcontractors, Suppliers and other persons and organizations.

9.2. No Contractor shall be required to employ any Subcontractor, other person or organization against who he has reasonable objection.

9.3 More than one contractor and/or the owner may be working on the same area at the same time. The contractors and the Owner shall have equal right to the work area and be equally responsible for coordinating with others working at this site. All costs for coordination and impacts of coordination including but not limited multiple mobilization and demobilization, materials handling and storage and timing shifts shall be included in the relevant bid items.

## 10. BID FORM

10.1. The Bid Form is attached hereto.

10.2. The price(s) quoted in the Bid Form shall include the costs of labor, materials, equipment, and all incidentals required to provide a fully complete and functioning system requested in the plans and specifications. The price(s) stated in the Bid Form shall be complete and total payment for each item in the Bid Form. No additional payment will be made for the work needed to complete the work.

10.3. Bid Forms must be completed in ink or by typewriter.

10.4. Unit price quantities stated in the bid form are estimates only and may vary when constructed. The Contractor will perform the required quantity of work for the unit price stated in the bid form. Owner reserves the right to modify the quantity of work without a change in unit price and to delete entire bid items in order to make the scope of work fit the budget or to align with funding options.

10.5. Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

10.6. Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

10.7. The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form.)

## 11. SUBMISSION OF BIDS

Bids shall be submitted at the time and place indicated in the Request for Bids and shall be enclosed in an opaque sealed envelope, marked with the Project title and name and address of the Bidder and accompanied by Bid Security and the other required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

## 12. MODIFICATION AND WITHDRAWAL OF BIDS

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

## 13. OPENING OF BIDS

When Bids are opened publicly, at the time and place specified in the request for bids, the bid total will be read aloud, and an abstract of the amounts of the base Bids and major alternates (if any) will be made available after the opening of Bids if the Contract is awarded. Bids will be acted upon by the Owner at a later date.

## 14. BIDS TO REMAIN OPEN

All Bids shall remain open for ninety (90) days after the day of the Bid opening, but Owner may, at its sole discretion, release any Bid and return the Bid Security (if any) prior to that date.

## 15. AWARD OF CONTRACT

15.1. Owner reserves the right to reject any of the individual bid items of a bid, to reject any and all Bids, to waive any and all informalities and to negotiate contract terms with apparent Successful Bidder, and the right to disregard all nonconforming, non-responsive or conditional Bids. Also Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsible or responsive or the Bidder is unqualified or of doubtful technical and/or financial ability or fails to meet any other pertinent qualifications, standards, or criteria established by the Owner.

15.2 Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof based on the quantity times the unit price will be resolved in favor of the correct sum. Discrepancies in the multiplication of units of work and unit prices will be resolved in favor of the unit prices.

15.3. In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids are balanced, comply with the prescribed requirements, and such alternates, unit prices and other data as may be requested in the Bid form or prior to the Notice of Award. Owner may accept or delete bid items and/or alternates in any order or combination.

15.4. Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided under sub section 2 above "Qualification of Bidders".

15.5. Owner may conduct such investigations as he deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

15.6. Owner reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to Owner's satisfaction.

15.7. If the contract is to be awarded, it will be awarded to the best qualified, responsible and responsive Bidder(s) whose evaluation by Owner indicates to Owner that the award will be in the best interests of the Project including an assessment of life cycle costs of any equipment and/or alternatives proposed. The Owner shall be solely responsible for determining its best interests and life cycle costs. NOTE: In evaluating and comparing costs, the total cost will be determined based on the amount for the scope of work the Owner intends to award.

15.8. If the contract is to be awarded, Owner will give the Successful Bidder(s) a Notice of Award within ninety (90) days after the day of the Bid opening or if agreed to by both parties such extension of time beyond the 90 days to allow for execution the funding agency contract(s).

#### 16. CONTRACT SECURITY

The Owner's requirements as to Performance and Payment Bonds are set forth in the Agreement. When the Successful Bidder delivers the executed Agreement to Owner it shall be accompanied by the required Performance and Payment Bonds.

#### 17. Funding Agency Requirements

17.1 The project is funded in part by a State Revolving Loan Fund (SRF) loan. Bidder's attention is called to the SRF requirements in the bid package. Disadvantaged Business Enterprise (DBE) requirements and goals are included. Also certified DBE's or a consortium of certified DBE's are encouraged to bid. The Suspension and Debarment Certification Form and DBE 6100-3 and 6100-4 must be completed and submitted by the Bidder **with their bid**.

Bidders are required comply with Williams Steiger Occupational Safety and Health Act of 1970 and with other federal requirements associated with the SRF loan included in the State Revolving Fund Required Specifications. Contractors and subcontractors demonstrating that they are not prohibited from working on federally funded projects, will be required to pay Davis Bacon wages and comply AIS, EEO, DBE and Affirmative Action requirements, and all other SRF requirements listed in the contract document and/or included the terms and conditions required in the Town's loan agreement. In addition, the project is partially funding by an Energy and Mineral Assistance grant from DOLA. Copies of these contracts are available for review at Town Hall. Compliance with the terms of the funding agencies is a requirement of this contract.

#### 18. SIGNING OF AGREEMENT

When Owner gives a Notice of Award to the Successful Bidder(s), it will be accompanied by an unsigned counterpart of the Agreement with all other written Contract Documents attached. Within ten (10) days thereafter Contractor

shall sign and deliver a copy of the Agreement with attached documents to Owner with 3 originals of the required Bonds and copies of insurance certificates.

#### 19. AGREEMENT

The Contract, when executed, shall be deemed to include the entire Agreement between the parties thereto, and the Bidder shall not claim any modifications thereof resulting from any representation or promise made at any time by an officer, agent, or employee of the Owner or by any other person.

#### 20. STATE STATUTES

The Contractor must comply with all State Statutes including but not limited to the requirements HB 13-1292- and CRS 8-17.5-101.



**SECTION 00300 - BID**

PROJECT IDENTIFICATION: Town of Ridgway – Ductile Iron Pipe Replacement Project

THIS BID IS SUBMITTED TO: Town of Ridgway  
P.O. Box 10  
Ridgway, CO 81432

Bid of \_\_\_\_\_ (hereinafter called "Bidder", organized and existing under the laws of the State of \_\_\_\_\_ doing business as \_\_\_\_\_ ( a corporation, partnership, individual).

To the Town of Ridgway (hereinafter called "Owner").

In compliance with your request for Bids, BIDDER hereby proposes to perform all WORK for the construction of Ductile Iron Pipe Replacement Project in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID, each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within the number of days and date specified in the Agreement. BIDDER further agrees to pay as liquidated damages, the sum specified in the Agreement each calendar day thereafter as provided in Agreement

In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that:

(a) Bidder has examined copies of all the Bidding and Contract Documents and of the following Addenda (receipt of all which is hereby acknowledged):

Date	Number
_____	_____
_____	_____
_____	_____
_____	_____

(b) Bidder has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, characteristics of the area and physical conditions, including without limitation, improvements, conflicts, soil conditions, drainage, topography, and all other features of the terrain, and with the local conditions and site constraints, and federal, state, and local laws, ordinances, rules, and regulations that in any manner may affect cost, progress, or performance or furnishing of the Work, or apply in any manner whatsoever to the Work. After a bid has been submitted, the Bidder shall not assert that there was a misunderstanding concerning the nature or quantities of work to be done or the conditions under which the work will need to be performed nor that the Bidder was unaware that the scope of the work could be modified to fit the budget.

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

(d) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation not disclosed; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

(e) Bidder hereby certifies that, as of the date hereof, it does not knowingly employ or contract with an illegal alien who will perform work under this Agreement, and the Contractor will participate in the federal e-verify program or the state program pursuant to CRS 8-17-102(5) in order to confirm eligibility of all employees who are newly hired for employment under this agreement.

Bidder acknowledges that the Contract Price is based on the estimated quantities listed which are approximate and are furnished only for the purpose of estimating probable cost and comparing Bids offered on the Work, except where the unit is Lump Sum (LS), in which case payment will be based on the lump sum price bid for all work necessary to complete the item. Owner reserves the right to add and/or delete work in any order and in any quantity at no change in unit price.

Bidder agrees to perform all Work described in the Contract Documents for the following unit prices or lump sum which each include the full scope of work specified and detailed in Section 00350 Measurement and Payment and as required to complete the work:

**Ductile Iron Pipe Replacement Project Bid Form**

	Description	Units	Qty	Unit Price	Total
1	Mobilization	LS	1		
2a	Pipe replacement 14" HDPE	LF	800		
2b	Pipe replacement 10" C900	LF	1700		
3	Temp Bypass	LF	2500		
4a	Reconnect to upper PRV	LS	1		
4b	Reconnect to lower PRV	LS	1		
5	Reconnect pressure relief	LS	1		
6	Valve Clusters & Tie ins				
	Sabeta	LS	1		
	Le Ranch	LS	1		
	Elizabeth	LS	1		
	Marie South	LS	1		
	Marie North	LS	1		
7	Reconnect taps	LS	11		
8	Cottonwood Creek Crossing	LS	1		
9	Culvert Crossings	Each	4		
10	Master Meter Piping	LS	1		
11	Master Meter Manhole	LS	1		

12	Sanitary Encasements	Ea	2		
13	Air Vac Stations	Ea	4		
14	Cleanup, As Builts	LS	1		
	Total Construction				
	Bid Alternate A				
	Upsize 14" HDPE to 16" HDPE Ductile Iron pipe size	LF	800		
	Bid Alternate B				
	Upsize 10" C900 to 12" C900	LF	1700		

All specific cash allowances are included in the price(s) set forth above.

The Contractor shall, after the award of the Contract, submit to Engineer a complete cost-breakdown of the project showing number of units, unit cost, and total cost for each item to be installed or constructed in the project. This cost breakdown will be used in computing partial payment estimates to the Contractor as the Work progresses.

The following unit prices, Items 1 through 2, shall be applicable in the event that changes to the scope of work are requested and shall be used in adjusting the Contractor's cost on written Change Orders. See note regarding payment for Item #7. The figures below may also be used should the Owner decide to directly procure materials or to perform portions of the work by force account or by separate contract. Prices listed shall include furnishing and installing the materials or work complete including overhead and profit and conformance with all contract requirements in accordance with the Contract Documents unless otherwise specified. The Owner reserves the right to reject any of these unit prices, should they appear unbalanced or excessive. Such rejection shall not invalidate the acceptance of the Proposal or any contract based thereon.

	Unit Prices				
<b>1</b>	Gate Valves				
	16" Gate Valve	Ea			
	14" Gate Valve	Ea			
	10" Gate Valve	Ea			
	8" Gate Valve	Ea			
	6" Gate Valve	Ea			
<b>2</b>	Pipe				
	16" DI Size DR 7	Ea			
	14" DI Size DR 7	Ea			
	12" C900 PVC	Ea			

	10" C900 PVC	Ea			
	8" C900 PVC	Ea			
	6" C900 PVC	Ea			

**Note:** No stabilization work will be paid for unless it is authorized in writing by the Engineer before the work is started and the work is completed in accordance with an approved stabilization plan.

Bidder agrees that the Work will be substantially complete within the timeframe described in the Agreement and completed and ready for final payment within accordance with the time required in the Agreement.

Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

The following documents are attached to and made a condition of this Bid:

- (a) A tabulation of Subcontractors, Suppliers and other persons and organizations required to be identified in this Bid.
- (b) A statement of Bidder's Qualification with supporting data and references regarding similar projects.
- (c) The Suspension and Debarment Certification Form and DBE 6100-3 and 6100-4 .
- (c) Required Bid Security shall be made payable to the Owner, in an amount specified in the Information to Bidders and in the form of a certified or bank Check or a Bid Bond (on form attached) issued by a surety meeting the requirements of the General Conditions.

Submitted on \_\_\_\_\_, 20\_\_\_\_\_.

Respectfully submitted:

\_\_\_\_\_  
Signature Address

\_\_\_\_\_  
Title Date

\_\_\_\_\_  
License number (if applicable) Phone

SEAL - (if BID is by a corporation)

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, \_\_\_\_\_ as Principal, and as Surety, are hereby held and firmly bound unto \_\_\_\_\_ as OWNER in the penal sum of \_\_\_\_\_ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns. Signed, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

The Condition of the above obligation is such that whereas the Principal has submitted to \_\_\_\_\_ a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

NOW, THEREFORE,

- (a) If said BID shall be rejected, or in the alternate,
- (b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (Properly completed in accordance with said BID) and shall furnish a BOND for faithful performance of said contract, and for the payment of all persons performing labor furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

\_\_\_\_\_(L.S.)  
Principal

Surety

By: \_\_\_\_\_



## SECTION 00350 - MEASUREMENT AND PAYMENT

### PART I – GENERAL

This section is intended to further define the scope of the bid items on the bid form. It is the intent of these Contract Documents that the costs for all the work required for a complete project as described in the Contract Documents be included on the bid form. If there is a question of what bid items should include what costs, a written request shall be made to the Engineer at least 10 days prior to bid opening. Nothing in this Section or in the Bid Form, including not finding a specific item or scope described, will negate the Contractor's responsibility to furnish a complete, functional project as described in the Contract Documents.

All pricing in each bid item shall be the complete cost to complete each scope of work whether specifically listed or needed to complete the work including all materials, equipment, labor, quality control and all testing, testing equipment, protection of the work, coordination with others working on the site, and shall include permitting (including but not limited to securing, complying, and closing) stormwater, dewatering, electrical, and other required permits, compliance with applicable Town and Colorado Department of Public Health and Environment (CDPHE) regulations and standards, including but not limited to American Iron and Steel (AIS), OSHA, Disadvantage Business Enterprises (DBE), OSHA, and Davis Bacon, compliance with terms of easements and permits, storm water management, dewatering, stabilization, traffic control, project safety, coordination with others, all submittals specified (including O&M manuals and as-constructed shots and drawings), schedules, surveying and staking, temporary facilities, testing including providing all equipment and materials necessary for handling, testing, clean up, restoration and demobilization, and shall include bonds and insurance, overhead profit, supervision, all applicable taxes, copyright, licensing, trademark and patent fees, warranties, and incidental work, tools, and materials and the associated costs of complying with all the requirements of the Contract Documents including, the Town's Standard Conditions and Typical Drawings for Infrastructure Construction.

Compensation included in each bid item shall also include any contractor loss or damage caused by the nature of the work, the action of the elements, or any unforeseen difficulties which may be encountered during the prosecution of the work, for all expenses incurred in consequence of the suspension or discontinuance of the work as herein specified.

Work in each item shall also include the cost of locating, exposing, and crossings obstacles such as buried utilities that might conflict with the work in each bid item.

Owner reserves the right to add and/or delete work in any order and in any quantity at no change in unit price. The order of any additive alternates, if any, is not indicative of the order in which they might be awarded as that decision will in part be based on if there is available funding and how much is available. If there is insufficient funding to complete the base contract, the Owner may adjust the scope as needed to fit the budget and the Town's needs.

All materials incorporated into the work shall be free from defects and new, unless otherwise specified. Unless explicitly listed as provided by others, contractor shall furnish all materials and incidentals necessary to complete the work.

**Note: The Contractor shall anticipate that there will be utility conflicts, very steep work conditions, that the soils maybe saturated, incompetent and/or unstable, rocky, and/or that the groundwater table may be**

**shallow and shall include the costs of handling those conditions in each relevant bid item. This note is applicable to each bid item. Encountering such conditions shall NOT be an unanticipated site condition.**

**Access to the work areas is limited and much of the work is on very steep slopes. Contractor shall carefully inspect the site prior to submitting a bid and include the costs associated with the limited access, steep slopes, site constraints, and any needed improvements and include the costs of such work in the bid items which are impacted by such constraints.**

The numbering below corresponds to the numbering on the Bid Form:

#### 1. Mobilization

Mobilization includes preparation of pre-construction submittals, and monthly reports and schedules, bonds, set up, any initial dewatering, control staking of grade and alignment by a licensed professional surveyor, and actual mobilization of manpower and equipment to the jobsite. Mobilization will be measured and paid in accordance with CDOT Specifications, Section 626.

#### 2. Water Line Replacement

Furnish all labor, equipment, materials, including testing equipment, and material required to clear, grub, excavate, stabilize, shore, align, dewater, remove existing pipe, install new pipe line of the size and type listed, with tracer wire and warning tape, bed, backfill, and compact, disinfect, test, traffic control, and restore and replace the full road section, including restoration of other surface improvements, revegetation of the site, disposal of removed and unsuitable materials, complete consistent with the Contract Documents. Include in this item costs associated with importing bedding material, increasing the depth of the water line cover up to 1' over the specified depth, for short distances to cross under other utilities. Also include all costs associated with locating and protecting and crossing culverts, water and sewer services and mains and other utilities. Work in this item will be measured and paid for by the lineal foot of pipe installed as measured horizontally and includes disinfecting and testing and including miscellaneous appurtenances associated with the piping, complete. Item 2a is for the HDPE pipe upstream of the upper PRV station and item 2b is for the C900 pipe downstream of the upper PRV Station.

#### 3. Temporary Bypass

Furnish all labor, equipment, materials, including testing equipment required set up for and install bypass piping including miscellaneous appurtenances complete in accordance with the approved method statement including securing and protecting the line, disinfecting and testing the line, making the temporary connections to route the water through the bypass line, and removing the line, sealing any connection points when they are no longer needed, bedding, backfill, compaction, and restoration of all surface disturbances, revegetation of the site, disposal of unsuitable or unneeded materials, complete consistent with the Contract Documents. Work in this item will be measured and paid for by the lineal foot of pipe being replaced as measured horizontally.

#### 4. Reconnect to PRV Station

Furnish all labor, equipment, and materials, appurtenances and traffic control to excavate, stabilize, shore, dewater, locate, determine size and materials and cut existing line(s) as needed, tie in, restrain joints mechanically and physically, bedding, backfill, compact, disinfect and test, disposing of unsuitable materials from just outside the vault on each side of the vault, including tee or cross, valves and boxes, fittings, caps, solid sleeves, pipe stubs and appurtenances to 5' outside the vault, tracer wire, warning tape, and restore and replace the full trench section, revegetation, and restore as required on the plans complete consistent with contract documents and all applicable requirements, complete. Work will be measured and paid for lump sum per each PRV station. Item 4a is for the upper PRV station and Item 4b is the lower PRV station at Moffat.



#### 5. Reconnect to Pressure Relief Station

Reconnection of Pressure Relief station includes the same scope of work as for Bid Item 4 except that the reconnection is to be made at the tee for the relief valve and includes the tee, the valve and box and fittings to reconnect the line that goes to the relief station.

#### 6. Valves Clusters and & Tie Ins

Furnish all labor, equipment, and materials, appurtenances and traffic control to excavate, stabilize, shore, dewater, locate, determine size and materials and cut existing line(s) as needed, tie in, restrain joints mechanically and physically, bedding, backfill, compact, disinfect and test, disposing of unsuitable and unneeded materials, for each valve cluster including tee or cross, valves and boxes, fittings, caps, solid sleeves, pipe stubs and appurtenances to 5' past the fitting farthest from the tee or cross for the specific valve cluster, tracer wire, warning tape, and restore and replace the full trench section, revegetation, and restore improvements as required on the plans complete consistent with contract documents and all applicable requirements. Also includes all costs associated with adjusting the depth of the new main, locating and protecting and crossing water and sewer services and mains and other utilities. Work will be measured and paid for per each cluster / tie-in listed on the bid form, complete.

#### 7. Reconnect Taps

Furnish all labor, equipment and materials, and appurtenances, etc. to reconnect each service including new saddle and corporation stop and shock loop, replacing the service line from the corporation stop and extending up to g' and reconnecting to existing service line. Work includes excavation, dewatering, flow control, stabilizing, shoring, installation, wrapping, bedding, backfill, and compaction (and/or boring), disinfection, testing, traffic control, restoration, and replace the full road section, revegetation, and restore improvements complete consistent with the water service typical drawing and the Contract Documents. Work will be measured and paid lump sum for each service installed on the new main and reconnected to an existing service line within 8' or less of the corp stop measured horizontally of the main.

#### 8. Cottonwood Creek Crossing

Furnish all labor, equipment and materials to gradually raise the water main so that it can cross over the Cottonwood Creek culvert and then lowering back to 5' of cover including protecting the existing culvert, excavation, dewatering, stabilizing, shoring, insulation around or above and below the new main, installation, bedding, backfill, and compaction, disinfection, testing, traffic control, restoration, and replace the full road section, revegetation, and restore improvements complete. Work will be measured and paid lump sum.

#### 9. Culvert Crossing

Furnish all labor, equipment and materials to gradually adjust water main as needed so that it can cross under the culvert and then adjusting back to 5' of cover including protecting the existing culvert, excavation, dewatering, stabilizing, shoring, insulation, installation, bedding, backfill, and compaction (and/or boring), disinfection, testing, traffic control, restoration, and replace the full road section, revegetation, and restore improvements complete. Work will be measured and paid lump sum.

#### 10. Master Meter Piping

Furnish all labor, equipment, and materials, and appurtenances to excavate, stabilize, shore, dewater, locate, determine size and materials and cut existing line(s) as needed, tie in, restrain joints mechanically and physically, bedding, backfill, compact, disinfect and test, tracer wire, warning tape, disposing of unsuitable and unneeded materials associated with the master meter piping including tees, crosses, valves and boxes, fittings, solid sleeves, and appurtenances from 5' feet of the reducer upstream of the manhole to 5' past the reducer

downstream of the manhole, revegetation, and restore improvements as required on the plans complete consistent with contract documents and all applicable requirements. **Note:** Owner will furnish the meter.

#### 11. Master Meter Manhole

Manhole shall be measured and paid for by the each manhole furnished and installed including precast manhole bases and barrels, pipe boots, sealing compounds, dampproofing, frames, covers, grouting, and all appurtenances, including 3' stub outside the manhole as a flexible connection, to the lines, grades, and typical details shown on the plans or required by the contract documents, complete. Include all labor, materials, and equipment for excavation, stabilization, trenching, geotextile, bedding, foundation, backfill and compaction, testing, restoration, cleaning, as built data, and needed miscellaneous construction consistent with the contract documents.

#### 12. Sanitary Encasement of Water Line

Furnish all labor, equipment, and material required to install encasements of adequate size for the carrier pipe with SDR 35 pipe including encasement pipe, carrier pipe supports, sealed ends where applicable, complete consistent with plans, contract documents and all applicable requirements. Work will be measured and paid for by the each 20 foot encasement. Note that the carrier pipe (main or service line) is measured and paid for in the water line and/or service line bid items above.

#### 13. Combination Air Valve Station

Furnish and install combination air valve station including valve, manhole, pipe supports and restraints, tap, saddle, corporation stop, piping, air vent, shut off, insulation, and appurtenances in accordance with the typical drawing at locations designated on the plans and other points in the new water line authorized by the Engineer, complete. Work includes excavation, bedding, backfill, compaction, testing, traffic control, and appurtenances needed to a complete installation consistent with the contract documents. This item will be measured and paid for each station shown on the plans or added to the Work by written direction from Engineer.

#### 14. Cleanup As built, Reveg

For the lump sum price furnish all labor, equipment and materials needed for final clean up and restoration of all impacted surfaces and work areas and other areas impacted by construction to specified grades and uniformity, furnish survey and as built information, as specified in these Contract Documents and needed to leave the site clean and at least as good condition as before construction. Demobilize all equipment and materials that are not part of the work.

##### A.1. Upsize the HDPE line from 14" DR 7 to 16" DR 7.

For the per lineal foot cost **difference** to upsize the HDPE pipe from 14" DR7 DI size pipe to 16" DR 7 DI size pipe. Unit price the pipe shall include the costs for upsizing the valves and fittings. Work for this alternate includes the work listed for the pipe, valve clusters, service reconnections, and other relevant bid items above required to accommodate the larger pipe.

##### B.1. Upsize the C900 from 10" to 12"

For the per lineal foot cost **difference** to upsize the C900 pipe from 10" to 12". Unit price the pipe shall include the costs for upsizing the valves and fittings. Work for this alternate includes the work listed for the pipe, valve clusters, service reconnections, and other relevant bid items above required to accommodate the larger pipe.

## UNIT PRICE ITEMS

Each of the unit price bid items are intended to provide pricing should the Owner request and/or authorize a change in the scope of the work. As with the bid items, the costs for the unit price work should include all the appurtenant and incidentals listed above which are associated with the work. Changes in quantity in excess of 40% shall entitle Contractor to renegotiate unit prices.

### 1. Gate Vales

Changes in number of gate valves will be measured and paid per the each for the applicable size for the work includes in bid items 2 and 6 above.

### 2. Pipe

Furnish and install any changes in pipe included in a change order. Work includes the work included in bid item 2 above for changes in the quantity of pipe of the listed size and type.



QUALIFICATION STATEMENT

Please complete all the questions. If additional space is needed, please attach a separate sheet of paper which references the question number.

Contractor Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone \_\_\_\_\_ Email \_\_\_\_\_

Principal Owner/Officer: \_\_\_\_\_

\_\_\_\_ Corporation    \_\_\_\_ Partnership    \_\_\_\_ Individual    \_\_\_\_ Joint Venture

I. TYPES OF WORK (list years of experience for each type of work desired)

Earthwork and Grading \_\_\_\_\_ Asphalt \_\_\_\_\_  
Concrete \_\_\_\_\_ Welded HDPE Pipe \_\_\_\_\_  
Pipeline \_\_\_\_\_ Trenchless Technologies \_\_\_\_\_  
Others (list) \_\_\_\_\_

II. GENERAL EXPERIENCE INFORMATION

2.1 Are you licensed as a Contractor Yes \_\_ No

Location            Type of License & Number

2.2 How many years has your organization been in business as a Contractor under your present business name? \_\_\_\_\_ Under the current owners? \_\_\_\_\_

Under what previous names has the business and/or the Owners done business?

\_\_\_\_\_

2.3 Date of organization or incorporation: \_\_\_\_\_ State

Names, Titles of Officers/Owners/Partners:

If a partnership is it a general, limited, or association?

2.4 If you have controlling interest in any firm(s) other than the one listed above, list here:

2.5 List percent of work normally performed with own forces

List trades: \_\_\_\_\_

If the answer to any of questions 2.6 - 2.11 is yes, provide explanation and/or details on a separate sheet of paper.

2.6 Have you or your organization or any officer or partner thereof failed to complete a contract awarded to it? Yes \_\_\_ No \_\_\_ If yes, give details:

2.7 Has the firm, any of its officers, principals, superintendents, or managers been involved in any, negotiated settlement, arbitration, litigation or court proceeding in the past eight (8) years? Yes \_\_\_ No \_\_\_ If yes, explain (listing type, kind, plaintiff, defendant, current status, etc.

2.8 Are there any judgments, claims, arbitration matters, unresolved contract disputes, or suits pending or outstanding against the firm, or any of its officers or principals? Yes \_\_\_ No \_\_\_ If yes, explain.

2.9 In the last ten years (10) has your firm, any of its officers, principals, managers, or superintendents filed any lawsuits or requested arbitration or formal mediation for or related to a construction contract? Yes \_\_\_ No \_\_\_ If yes, explain.

2.10 Has the firm, any of its officers, principals, superintendents, or managers been involved in any bankruptcy action as a bankrupt? Yes \_\_\_ No \_\_\_ If yes, explain

2.11 In the last ten (10) years has any of the firms officers, principals, managers, or superintendents ever been an officer or principal in another organization when it failed to complete a construction contract or filed any claims, lawsuits or requested arbitration or formal mediation for a construction contract? Yes \_\_\_ No \_\_\_ If yes, explain.

2.12 List on a separate sheet of paper the major projects your firm, its officers and principals, has completed during at least the last 5 years, providing, at a minimum, the following information for each project.

Name, Address, Phone, Contact Name of: Project, Owner, and Engineer  
If other than this firm, list Name, Address, Phone for Construction Firm  
Type of Project  
Contract Amount, Date Completed  
Percentage of work done with own forces and nature of that work

2.13 Total average annual construction value of work for the last 5 years. \$ \_\_\_\_\_

2.14 List on a separate sheet of paper the major projects your firm has in progress at this time, providing, at a minimum, the following information for each project.

Name, Contact Name, Address, Phone of: Project, Owner, and Engineer, Type of Project  
Contract Amount, Scheduled & Expected Completion Date, Percent Completed Percentage of work done being done with own forces and nature of that work

2.15 Total value of work under contract and in progress \$ \_\_\_\_\_

III. PERSONNEL OF ORGANIZATION

3.1 Provide resumes for the organization's principals, officers, and superintendents and managers the organization intends to assign to this project. Resumes shall include the last 3 projects of similar scope on which each person worked and define the role each played. This information will be used in part to determine whether the personnel meet the minimum qualifications to be awarded the contract for the work.

IV. REFERENCES

4.1 Surety - List the Surety Companies that have bonded your work for the past five years (use a separate paper if necessary):

Name of Surety Name, Address of Agent	Project Location	and	Period of Bond From To	Maximum Limits & General Comments
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4.1.a Total Currently Bonded \_\_\_\_\_ Total Current Bond Limits \_\_\_\_\_

4.2 Bank References

4.3 Trade References

V. FINANCIAL INFORMATION

5.1 If requested, provide a financial statement with balance sheet and income statement and the following minimum information:

Current Assets: Cash, joint venture accounts, accounts receivable, notes receivable, accrued interest on notes, deposits, materials, prepaid expenses, net fixed assets, and other assets.

Current Liabilities: Accounts Payable, notes payable, accrued interest on notes, provision for incomes taxes, advances received from owners, accrued salaries, accrued payroll taxes, other liabilities and capital (capital stock, authorized and outstanding shares of value, earned surplus and retained earnings).

Name of firm preparing the statement and date of the statement

5.2 Is the financial statement for the same exact firm as the qualification statement? If not, what is the relationship and the financial responsibility of the organization whose financial statement is provided?

5.3 Will the organization whose financial statement is provided act as a guarantor for the contract for which this qualification statement is provided? \_\_\_\_\_.

AFFIDAVIT

\_\_\_\_\_ certifies and says: That he is an authorized representative (list title) of (organization) \_\_\_\_\_ submitting this statement of experience; that s/he has read the same, and that the same is true of his/her knowledge; that the statement is for the purpose of providing construction bids/proposals for the **Town of Ridgway – Ductile Iron Pipe Replacement Project** and that any vendor or other agent therein named is hereby authorized to provide information necessary to verify the statement; and that furthermore, should this statement at any time cease to properly or truly represent his condition in any substantial respect, it will refrain from further work for the Town until it shall have submitted a revised and corrected statement.

I certify and declare under penalty of perjury that the foregoing and attached information provided herein is true, correct, and sufficiently complete to not be misleading:

Subscribed on this \_\_\_\_\_, 20\_\_ at \_\_\_\_\_

Note: Use full corporate name & attach corporate seal here, if corporation

Official must sign here \_\_\_\_\_

Title \_\_\_\_\_

Attested: \_\_\_\_\_

NOTE: Statement will be returned and bids and/or proposals rejected unless this affidavit is completed in EVERY respect.



## CONSTRUCTION CONTRACT

### AGREEMENT

**THIS AGREEMENT** is made between the **TOWN of RIDGWAY**, Colorado, (Owner or Town) and the Contractor, for the Construction Project known as: **Town of Ridgway – Ductile Iron Pipe Replacement Project**

The Owner's Representative (OR) is: As designated by the Owner at the Preconstruction Conference.

The Owner and Contractor agree as follows:

#### ARTICLE 1

##### THE WORK:

The Contractor shall perform all the Work required by the Contract Documents for: **Town of Ridgway – Ductile Iron Pipe Replacement Project** described in the Contract Documents. Contractor shall furnish all labor, services, materials, tools, and equipment for the construction and completion of the work proposed to be done under this Agreement. Contractor will construct and complete the work in a thorough and workmanlike manner in every respect to the satisfaction and approval of the Owner, within the time specified herein and in strict accordance with the Contract Documents

#### ARTICLE 2

##### TIME OF COMMENCEMENT AND COMPLETION:

The Work to be performed under this Contract shall commence upon Notice to Proceed. Work shall be completed and ready for final payment within **100 calendar days** of Notice to Proceed and no later than **November 15, 2024** for completion of all excavation and backfill and **December 1, 2024** to be ready for final payment.

#### ARTICLE 3

##### CONTRACT AMOUNT AND BASIS:

The Owner shall pay the Contractor for the satisfactory performance of the Work, subject to additions and deductions by Change Order as provided in this Agreement based on the unit prices in the Contractor's bid.

#### ARTICLE 4

##### PROGRESS PAYMENTS:

Based upon Applications for Payment submitted to the OR by the Contractor accompanied by such supporting documentation, and Certificates for Payment issued by the OR the Owner shall make progress payments to the Contractor as follows:

On a monthly basis for the work satisfactorily completed based on unit prices in the bid form. For lump sum bid items, work will be paid based on an assessment of what is completed and what remains to be completed.

5% of each amount certified for payment shall be retained by the Owner until final payment.

ARTICLE 5

FINAL PAYMENT:

After completion of the Work, provided the Contract be then fully performed, subject to the provisions of Article 16 of the General Conditions, the Owner shall publish a Notice of Final Settlement twice at least 10 days prior to the date of final settlement. The Owner shall withhold from final payments any amounts as required pursuant to C.R.S. 38-26-107.

ARTICLE 6

ENUMERATION OF CONTRACT DOCUMENTS:

The Contract Documents are indicated by a check or X in the boxes below:

- Agreement including General Conditions
- Supplemental General Requirements - Construction Bidding Requirements for State Revolving Loan (SRF) Projects
- Request for Bids and Instructions to Bidders
- Bid Form
- Measurement and Payment
- Specifications
- Drawings
- Addenda – if any
- Change Orders - if any
- Written Interpretation of OR - if any
- Performance Bond and Payment Bond (if required)
- Notice of Award
- Notice to Proceed

ARTICLE 7

CONTRACT DOCUMENTS:

7.1 The Contract Documents consist of this Agreement (which includes provisions commonly referred to as General Conditions), and the documents indicated in Article 6 by an X. These form the Contract and what is required by any one shall be as binding as if required by all. The intention of the Contract Documents is to include all labor, materials, equipment and other items as provided in Paragraph 10.2 necessary for the proper execution and completion of the Work and the terms and conditions of payment therefore, and also to include all Work which may be reasonably inferable from the Contract Documents as being necessary to produce the intended results.

7.2 The Contract Documents shall be signed in not less than triplicate by the Owner and the Contractor. By executing the Contract, the Contractor represents that he has visited the site and familiarized himself with the local conditions under which the Work is to be performed.

7.3 The term Work as used in the Contract Documents includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.

## ARTICLE 8

### OWNER'S REPRESENTATIVE (OR)

8.1 The OR will provide general administration of the Contract and will be the Owner's representative during construction and until issuance of the final Certificate for Payment.

8.2 The OR shall at all times have access to the Work wherever it is in preparation and progress.

8.3 The OR will make periodic visits to the site to familiarize himself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. On the basis of his on-site observations, he will keep the Owner informed of the progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor. The OR will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The OR will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and he will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

8.4 Based on such observations and the Contractor's Applications for Payment, the OR will determine the amounts owing to the Contractor and will review Requests for Payment in accordance with Article 16.

8.5 The OR will be, in the first instance, the interpreter of the requirements of the Contract Documents. He will make decisions on all claims and disputes between the Owner and the Contractor.

8.6 The OR will have authority to reject Work which does not conform to the Contract Documents.

8.7 No act, representation, or instruction of OR or Engineer shall in any way relieve the Contractor from liability for damages or costs that result from activities of the Contractor.

## ARTICLE 9

### OWNER:

9.1 The Owner shall furnish control for the work as specified in paragraph 10.11 below.

9.2 The Owner shall secure any required permanent easements or real property necessary for the completed project and advise Contractor of the boundaries of Owner's easements or property.

9.3 The Owner shall issue all instructions to the Contractor through the OR.

## ARTICLE 10

### CONTRACTOR:

10.1 The Contractor shall supervise and direct the Work competently and efficiently, using his best skill, expertise, and attention in order to perform the work in accordance with the Contract Documents proceeding in an efficient sequence without delays. Contractor shall keep a competent superintendent of work on the premises at all times to receive instructions and to comply with them. Superintendent should be supervising, not operating equipment. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.

10.2 Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials,

equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work.

10.3 The Contractor shall at all times enforce strict discipline and good order among his employees, and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him.

10.4 The Contractor warrants to the Owner and the OR that all materials and equipment incorporated in the Work will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not so conforming to these standards may be considered defective.

10.5 The Contractor shall pay all sales, consumer, use and other similar taxes required by law and shall secure all permits, and licenses necessary for the execution of the Work at Contractor's expense except as provided in Article 24. The Owner is exempt from state and local sales and use taxes on construction and building materials for use in the project. Contractor shall take steps to obtain such exemption from the Colorado Department of Revenue pursuant to C.R.S. 39-26-708.

10.6 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the Work, and shall notify the OR if the Drawings and Specifications are at variance therewith.

10.7 The Contractor shall be responsible for the acts and omissions of all its employees and all Subcontractors, their agents and employees and all other persons performing any of the Work under a contract with the Contractor.

10.8 The Contractor shall review, stamp with his approval and submit all samples and shop drawings as directed for approval of the Engineer for conformance with the design concept and with the information given in the Contract Documents. The Work shall be in accordance with approved samples, submittals, and shop drawings. Work subject to submittal shall not commence until Engineer approval of submittal has been received.

10.9 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as his tools, construction equipment, machinery and surplus materials, and shall clean all surfaces and shall leave the Work "broom clean" or its equivalent, except as otherwise specified.

10.10 The Contractor shall contact Colorado Utility Notification Center (1 800 922 1987) at least three business days prior to any excavation work.

10.11 The Owner will furnish two control points and a bench mark which the contractor shall protect. Contractor shall provide all survey work necessary to construct the work to the line and grade in the contract documents and to confine its operations to the properties the Town owns and/or for which the Town has applicable easements. Where the Contractor's work and/or work area are in close proximity to the site boundaries and/or disturbance limits, the Contractor shall construct a temporary fence to ensure his work and materials stay within the designated boundaries. Prior to construction, Contractor's Surveyor shall verify the locations and provide the Engineer the field notes demonstrating the verification of coordinates and elevations. Should a bench mark or control point be disturbed after verification and before final project acceptance, the Contractor's Surveyor shall immediately notify the Engineer and re-establish the monument prior to any further

work providing the Engineer with the field notes. The Contractor shall bear all costs of the re-establishment of the disturbed monument.

ARTICLE 11  
SUBCONTRACTS:

11.1 A Subcontractor is a person who has a contract with the Contractor to perform any of the Work at the site.

11.2 Unless otherwise specified in the Contract Documents or in the Instructions to Bidders, the Contractor, as soon as practicable after the award of the Contract, shall furnish to the Engineer a written list of the names of Subcontractors proposed for the principal portions of the Work. The Contractor shall not employ any Subcontractor to whom the Engineer, OR, or the Owner may have a reasonable objection. The Contractor shall not be required to employ any Subcontractor to whom he has a reasonable objection. Contracts between the Contractor and the Subcontractor shall be in accordance with the terms of this Agreement and shall include the General Conditions of this Agreement and the SRF Requirements insofar as applicable.

ARTICLE 12  
SEPARATE CONTRACTS AND OWNER WORK:

12.1 The Owner reserves the right to award other contracts in connection with other portions of the Project or other work on the site or to perform such work itself.

12.2 The Contractor shall afford other contractors and/or Owner reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate its Work with theirs.

12.3 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefore.

ARTICLE 13  
ROYALTIES AND PATENTS:

The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and shall save the Owner and Engineer harmless from loss on account thereof.

ARTICLE 14  
PERFORMANCE AND PAYMENT BONDS:

A Performance and a Payment Bond shall be submitted by Contractor for all contracts in excess of \$50,000 or if indicated in Article 6.

Each bond shall be in the amount of the contract sum and shall either be in the form supplied by Owner or shall be in such other form as approved by Owner. Each bond shall comply with the requirements of C.R.S. 38-26-105 and 106 and shall remain in effect no less than one year after final payment.

Warranties and guarantees for longer than one year required by the contract are excluded from the bonding requirements.

## ARTICLE 15

### Time and Liquidated Damages

15.1 All time limits stated in the Contract Documents are of the essence of the Contract. Contractor further agrees to pay as liquidated damage in the sum of \$400.00 for each day that expires after the deadlines in Contract Documents.

15.2 If the Contractor is delayed at any time in the progress of the Work by changes ordered in the Work, by labor disputes, fire, unusual delay in transportation, unavoidable casualties, causes beyond the Contractor's control, or by any cause which the OR may determine justifies the delay, then the Contract Time shall be extended by Change Order for such reasonable time as the OR may determine.

15.3 Contractor waives any claim for damages due to delay unless caused in whole or in part by the acts or omissions within the control of the Owner or persons acting on behalf thereof.

## ARTICLE 16

### PAYMENTS:

16.1 Payments shall be made as provided in Article 4 of this Agreement.

16.2 Payments may be withheld on account of (1) defective Work not remedied, (2) claims asserted or evidence which indicates probable assertion of claims, (3) failure of the Contractor to make payments properly to Subcontractors or for labor, materials, or equipment, (4) damage to another contractor or Owner, or (5) unsatisfactory prosecution of the Work by the Contractor. No funds, payable under this Agreement or any part thereof, shall become due and payable, if the Owner so elects, until the Contractor shall satisfy the Owner that it has fully settled or paid for all materials and equipment used in or upon the work and labor done in connection therewith. The Owner may pay any or all such claims or bills, wholly or in part, and deduct the amount or amounts so paid from any funds due Contractor. In the event the surety on any contract, performance bond, payment bond, or warranty bond given by the Contractor becomes insolvent, or is placed in the hands of a receiver, or has its right to do business in the State revoked, the Owner may withhold payment of funds due Contractor until the Contractor has provided a bond or other security to the satisfaction of the Owner in lieu of the bond so executed by such surety.

16.3 Final payment shall not be due until (1) the Contractor has delivered to the Owner a bond, a clean irrevocable letter of credit, cash or other security satisfactory to the Owner indemnifying Owner against any claim which has been asserted by anyone for labor, materials, equipment or otherwise arising out of the contract or on account of any claim which either Owner or Contractor believes may be asserted, (2) the Owner has inspected and approved the Work as complying with the contract, (3) written consent of surety, (4) release of liens from subcontractors and/or suppliers when requested, and (5) any manufacturers or suppliers warranties and equipment literature, and any as built plans and O&M manuals required are delivered to Owner.

16.4 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from (1) unsettled claims, (2) faulty or defective Work appearing after final Payment, (3) failure of the Work to comply with the requirements of the Contract Documents, or (4) terms of any warranties or special guarantees required by the Contract Documents. The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled as noted or referenced on the final payment form.

16.5 Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by Engineer, nor the issuance of a certificate of Completion, nor any payment by Owner to Contractor under the Contract Documents, nor any use or occupancy of the Work or any part thereof by Owner, nor any act of acceptance by Owner nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by Engineer pursuant to paragraphs regarding "Final Payment" above, nor any correction of defective Work by Owner will constitute an acceptance of Work not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents.

#### ARTICLE 17

##### PROTECTION OF PERSONS AND PROPERTY AND RISK OF LOSS:

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to (1) all employees on the Work and other persons who may be affected thereby, (2) all the Work and all materials and equipment to be incorporated therein, and (3) other property at the site or elsewhere. Contractor shall bear all risk of loss to the work, or materials or equipment for the work due to fire, theft, vandalism, or other casualty or cause, until the work is fully completed and accepted by the Owner. Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. All damage or loss to any property caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor. At no time shall any part of the work be left in an unsafe condition where it could cause injury to any employee or the public.

#### ARTICLE 18

##### INDEMNIFICATION AND INSURANCE:

18.1: Indemnification: The CONTRACTOR agrees to indemnify and hold harmless the STATE of COLORADO, OWNER, its officers, employees, consultants, insurers, and self-insurance pool, from and against all liability, claims, actions, and demands, on account of injury, loss, or damage, including without limitation claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, violation of statute, ordinance, or regulation or any other loss of any kind whatsoever, which arise out of or are in any manner connected with this contract, if such injury, loss, or damage is caused in whole or in part by, or is claimed to be caused in whole or in part by, the act, omission, error, contractor error, mistake, negligence, or other fault of the CONTRACTOR, any subcontractor of the CONTRACTOR, or any officer, employee, representative, or agent of the CONTRACTOR or of any subcontractor of the CONTRACTOR, or which arise out of any workmen's compensation claim of any employee of the CONTRACTOR or of any employee of any subcontractor of the CONTRACTOR. The CONTRACTOR agrees to investigate, handle, respond to, and to provide defense for and defend against, any such liability, claims or demands at the sole expense of the CONTRACTOR, or at the option of OWNER, agrees to pay OWNER or reimburse OWNER for the defense costs incurred by OWNER in connection with, any such liability, claims, or demands. The CONTRACTOR also agrees to bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not any such liability, claims, or demands alleged are groundless, false, or fraudulent. The obligation of this Section 18.1 shall not extend to any injury, loss, or damage which is caused solely by the act, omission, or other fault of the OWNER, its officers, or its employees.

18.2 Insurance: The CONTRACTOR agrees to procure and maintain, at its own cost, a policy or policies of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by the CONTRACTOR pursuant to Section 18.1. Such insurance shall be in addition to any other insurance requirements imposed by this contract or by law. The CONTRACTOR shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to Section 18.1 by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

18.2.1 CONTRACTOR shall procure and maintain, and shall cause any subcontractor of the CONTRACTOR to procure and maintain, the minimum insurance coverages listed below. The Contractor shall not allow any subcontractor to commence work on this project until all similar insurance required of the subcontractor has been obtained and approved. For the duration of this Agreement, the Contractor must maintain the insurance coverage required in this section. Such coverages shall be procured and maintained with forms and insurers acceptable to OWNER. All coverages shall be continuously maintained from the date of commencement of work to cover all liability, claims, demands, and other obligations assumed by the CONTRACTOR pursuant to Section 18.1. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

18.2.1(A) Workers' Compensation insurance to cover obligations imposed by the Workers' Compensation Act of Colorado and any other applicable laws for any employee engaged in the performance of Work under this contract, and Employers' Liability insurance with minimum limits of FIVE HUNDRED THOUSAND DOLLARS (\$500,000) each accident, FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease - policy limit, and FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease - each employee. Evidence of qualified self-insured status may be substituted for the Workmen's Compensation requirements of this paragraph.

18.2.1(B) Commercial General Liability insurance on ISO occurrence form CG 00 01 10/93 or equivalent covering bodily injury, premises operations, broad form property damage (including completed operations) fire damage, independent contractors, products and broad form property insurance including completed operations, blanket Grantual liability, personal injury (including coverage for contractual and employee acts), and advertising liability with minimum combined single limits of (a) ONE MILLION DOLLARS (\$1,000,000) each occurrence, (b) TWO MILLION DOLLARS (\$2,000,000) aggregate, (c) ONE MILLION (\$1,000,000) products and completed operations aggregate, and (d) FIFTY THOUSAND (\$50,000) any fire. The policy shall be applicable to all premises and operations. The policy shall include coverage for explosion, collapse, and underground hazards. The policy shall contain a severability of interests provision. If any aggregate limit is reduced below \$2,000,000 because of claims made or paid, CONTRACTOR shall immediately obtain additional insurance to restore the full aggregate limit and furnish to OWNER a certificate or other document satisfactory to OWNER showing compliance with this provision.

18.2.1(C) Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) aggregate with respect to each of CONTRACTOR's owned, hired and/or non-owned vehicles assigned to or used in performance of the services. The policy shall contain a severability of interests provision. If the CONTRACTOR has no owned automobiles, the requirements of this Paragraph (3) shall be met by each employee of the CONTRACTOR providing services to the OWNER under this contract.

18.2.2 The policy required by paragraphs 18.2.1(B) and (C) above shall be endorsed to include the State of Colorado, the OWNER (Town of Ridgway) and OWNER's officers and employees as additional insureds. Every policy required above shall be primary insurance and any insurance carried by OWNER, its officers, or its



employees, or carried by or provided through any insurance pool of OWNER, shall be excess and not contributory insurance to that provided by CONTRACTOR. No additional insured endorsement to any policy shall contain any exclusion for bodily injury or property damage arising from completed operations. The CONTRACTOR shall be solely responsible for any deductible losses under any policy required above. Additional insured coverage for completed operations shall be on endorsements CG 2010 11/85, CG 2037, or equivalent.

18.2.3 The certificates of insurance which are consistent with State requirements shall be completed by the CONTRACTOR's insurance agent as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be reviewed and approved by OWNER prior to commencement of the contract. Each certificate shall identify this contract and shall provide that the coverages afforded under the policies shall not be cancelled, non renewed, terminated or materially changed until at least 30 days prior written notice has been given to OWNER. 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 completed certificate of insurance shall be sent to OWNER.

18.2.4 Failure on the part of the CONTRACTOR to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which OWNER may immediately terminate this contract, or at its discretion OWNER may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by OWNER shall be repaid by CONTRACTOR to OWNER upon demand, or OWNER may offset the cost of the premiums against any monies due to CONTRACTOR from OWNER.

18.2.5 OWNER reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

18.2.6 The parties hereto understand and agree that OWNER is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations (presently \$350,000 per person and \$990,000 per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, { 24-10-101 et seq., 10 C.R.S., as from time to time amended, or otherwise available to OWNER, its officers, or its employees.

18.2.7 Subrogation Waiver – All insurance policies in any way related to the project and secured and maintained by the CONTRACTOR as required herein shall include clauses stating that each carrier shall waive all rights of recovery, under subrogation or otherwise, against OWNER or the State, its agencies, institutions, organizations, officers, agents, employees, and volunteers.

18.2.8 The Agreement shall not be executed, and no notice or authorization to proceed shall be given until the Certificates required above, are submitted and approved by the Owner.

18.2.9 In carrying out any of the provisions of this Agreement or in exercising any power or authority thereby, there shall be no personal liability of the Owner, its governing body, staff, consultants, officials, attorneys, representatives, agents, or employees.

## ARTICLE 19

### PROPERTY INSURANCE:

19.1 Unless otherwise provided, the Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. This insurance shall include the interest of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work and shall insure against the perils

of Fire, Theft, Extended Coverage, Vandalism and Malicious Mischief. Such policy shall be an "all-risk" Builders Risk policy.

19.2 Any insured loss is to be adjusted with the Owner and made payable to the Owner as trustee for the insureds, as their interests may appear, subject to the requirements of any mortgagee clause.

19.3 The Contractor shall file a copy of all such policies with the Owner prior to the commencement of the Work.

19.4 The Owner and Contractor waive all rights against each other for damages caused by fire or other perils to the extent covered by insurance provided under this paragraph. The Contractor shall require similar waivers by Subcontractors and Sub-subcontractors.

## ARTICLE 20

### CHANGES IN THE WORK:

20.1 The Owner without invalidating the Contract may order Changes in the Work consisting of additions, deletions, or modifications with the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by written Change Order signed by the Owner.

20.2 The Contract Sum and the Contract Time may be changed only by Change Order.

20.3 The cost or credit to the Owner, if any, from a Change in the Work shall be determined by unit prices if specified in the contract documents, or by mutual agreement using materials costs, and estimated labor and equipment times as a basis where practical.

## ARTICLE 21

### CORRECTION OF WORK:

21.1 The Contractor shall correct any Work that fails to conform to the requirements of the Contract Documents where such failure to conform appears during the progress of the Work and shall remedy any defects or deficiencies due to faulty materials, equipment or workmanship which appear within a period of one year from the Date of Final Settlement of the Contract or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee or warranty required by the Contract Documents. The provisions of this Article 21 apply to Work done by Subcontractors as well as to Work done by direct employees of the Contractor, and are in addition to any other remedies or warranties provided by law, or other provisions of the Contract Documents. Neither the payment of any estimate or progress payment nor the payment of any retained percentage shall relieve the Contractor of any obligations to correct any defective work or material.

## ARTICLE 22

### TERMINATION BY THE CONTRACTOR:

If the OR fails to process a request for payment for a period of thirty days through no fault of the Contractor, or if the Owner fails to make payment thereon for a period of thirty days from date of receipt of grant and/or loan funds, the Contractor may, upon seven days' written notice to the Owner and the OR, terminate the Contract and recover from the Owner payment for all Work executed and for any proven loss sustained upon any materials, equipment tools, and construction equipment and machinery, including reasonable profit and damages.

## ARTICLE 23

### TERMINATION BY THE OWNER:

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision of the Contract, the Owner may, after seven days' written notice to the Contractor and without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor or, at his option, may terminate Contractor's work under the Contract and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method he may deem expedient, and if the unpaid balance of the Contract Sum exceeds the expense of finishing the Work, such excess shall be paid to the Contractor, but if such expense exceeds such unpaid balance, the Contractor shall pay the difference to the Owner. These rights and remedies are in addition to any right to damages or other rights and remedies allowed by law.

## ARTICLE 24

### PERMITS:

Contractor shall be responsible for securing any necessary permits for the work that could include but is not limited to electrical, mechanical, building, dewatering and stormwater management. Contractor shall comply with conditions of all permits secured by the Town and those secured by the Contractor.

## ARTICLE 25

### MISCELLANEOUS PROVISIONS:

25.1 This contract is governed by the laws of the State of Colorado. The parties agree to the jurisdiction and venue of the courts of Ouray County in connection with any dispute arising out of or in any matter connected with this Agreement.

25.2 Contractor shall not assign this contract. The provisions of the contract are binding on the heirs, successors or assignees of the parties.

25.3 The rights and remedies available under this contract shall be in addition to any rights and remedies allowed by law.

25.4 No failure to enforce any provision of the contract on account of any breach thereof, shall be considered as a waiver of any right to enforce provisions of this contract concerning any subsequent or continuing breach.

25.5 The terms of this agreement shall remain in full force and effect following final payment.

25.6 No change order requiring additional payments for additional compensable work or otherwise shall be issued unless an appropriation is available therefore and the Contractor is so advised in writing.

## ARTICLE 26

### ADDITIONAL PROVISIONS:

#### 26.1 PROJECT FUNDING AGENCY REQUIREMENTS

26.1a. This contract shall comply with all applicable federal and Colorado state laws and shall be governed by the applicable law of the State of Colorado notwithstanding provisions herein to the contrary.

26.1b. This project is funded in part by funding from the State Revolving Loan Fund (SRF) and from Energy and Mineral Impact (EIAF) funds. Contractor shall strictly adhere and implement requirements of the funding agencies and the requirements of the SRF general conditions included with the contract including but not limited to Davis Bacon and Related Acts, Disadvantage Business Enterprise, American Iron and Steel requirements, Executive Order 11246, OSHA. It is also funded by the Colorado Water Resource and Power Development Authority (CWRPDA) and is subject to technical review by the Colorado Department of Public Health and Environment (CDPHE). Contractor shall comply with all applicable CDPHE, DOLA, and CWRPDA requirements and applicable laws and regulations. Copies of each of the funding contracts is available for review at Town Hall.

26.1c. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the Contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract

26.1d. The State of Colorado, CDPHE, DOLA, CWRPDA, the State Auditor, the Town, and/or any properly delegated or authorized representatives of these entities, including independent certified public accountants of their choosing, shall have the right to inspect, examine and audit the Contractor's records, books, accounts, and other relevant documents concerning this contract for a period of five years after final payment.

26.1.e. The Contractor must comply with all State Statutes including but not limited to the requirements HB 13-1292- and CRS 8-17.5-101.

26.2 Contractor hereby assigns all manufacturers' warranties to Owner and shall assist the Owner in enforcing such warranties. No limitation of any manufacturer's warranties, or additional warranties of Contractor, shall be construed to limit the obligations of the Contractor under any warranties or other provisions of the contract documents.

26.3 WORK HOURS - All work at the site shall be performed during regular working hours, and Contractor will not permit overtime work or performance of Work on Saturday, Sunday, or any State legal holiday (as enumerated in CDOT Standards #101.32 without Owner's written consent given after prior written notice to Engineer). Contractor shall reimburse Owner for all expenses of Owner including construction observation and testing, incurred as a result of working during non-regular hours. Regular hours shall not exceed 11 hours in a 24 hour period nor 40 hours in a seven day period, nor include Saturdays, Sundays, or legal holidays. Other work hours shall be considered non-regular. Working less than 2 consecutive days in a calendar week shall require consent of the Town. Work shall not commence prior to 7:30 am (including warming vehicles) and continue past 6:30 pm. Specific days and hours for work on certain dates are enumerated in the Additional General Requirements. The project plans and Town standards may include additional work hour restrictions. Concrete placement that requires testing shall not be placed on a Friday.

## 26.4 C.R.S. 8-17.5 and E-Verify Requirements

26.4a. Contractor certifies, warrants, and agrees that it or its sub-contractors do not knowingly employ or contract with an illegal alien who will perform work under this Agreement, and shall confirm the employment eligibility of all employees who are newly hired for employment in the United States to perform work under this Agreement through participation in Federal E-Verify Program or the state program established pursuant to CRS 8-17.5-102(5)(c).

26.4b. Contractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement or enter into a contract with a subcontractor that fails to certify to Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement.

26.4c. Contractor hereby certifies that it has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this agreement through participation in either the e-verify program or the state program.

26.4d. Contractor is prohibited from using either the e-verify program or the state program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.

26.4e. If Contractor obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien, Contractor shall be required to:

(i) notify the subcontractor, the Owner, and State within three (3) days that Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and

(ii) terminate the subcontract with the subcontractor if within three (3) days of receiving the notice required pursuant to this subparagraph the subcontractor does not stop employing or contracting with the illegal alien; except that Contractor shall not terminate the contract with the subcontractor if during such three (3) days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

26.4f. Contractor shall comply with any reasonable in the course of investigation undertaken pursuant to CRS 8.17.5-102(5) by the Colorado Department of Labor and Employment.

26.4g. If Contractor fails to comply with any requirement of this subsection of the Agreement or CRS 8.17.5-101 et seq. the Owner may terminate this Agreement for breach. If this Agreement is so terminated, Contractor shall be liable for actual and consequential damages to the Town.

26.4h In addition to complying with the above requirements, Contractor is also responsible to comply with federal employment verification requirements including requirements that all employees complete the I-9 Employment Eligibility Verification Form at time of hire and that employer verify the information using e-verify or other legally acceptable method.

This Agreement is dated \_\_\_\_\_.

TOWN OF RIDGWAY, COLORADO

By \_\_\_\_\_

CONTRACTOR:

By \_\_\_\_\_

**NOTICE OF AWARD**

DATED:

TO: \_\_\_\_\_  
Bidder

ADDRESS: \_\_\_\_\_

PROJECT NAME: Town of Ridgway – Ductile Iron Pipe Replacement Project

CONTRACT FOR: Town of Ridgway – Ductile Iron Pipe Replacement Project  
Name of Contract as it appears in Bidding Documents

You are notified that your Bid dated \_\_\_\_\_ for the above Contract has been considered. You are the apparent successful bidder and have been awarded a contract for Town of Ridgway – Ductile Iron Pipe Replacement Project with the following amended scope and pricing:

The Contract Price of your contract is \_\_\_\_\_ and 00/100 Dollars (\$ \_\_\_\_\_). The Owner reserves the right to add or deleted work as the project progresses for the unit prices above to insure the project stays within budget.

**Actual payments will be based on the quantity and unit price for the work completed in accordance with the Contract Documents.**

You must comply with the following conditions precedent within ten days of the date of this Notice of Award, that is by \_\_\_\_\_.

1. You must deliver to the Owner three fully executed counterparts of the Agreement including required Contract Securities (Bonds) as specified in the Agreement.
2. Certificates of Insurance with the minimum limits and additional insurers listed in the Contract Documents.
3. (List other conditions precedent). (None)

Failure to comply with these conditions within the time specified will entitle Owner to consider you bid abandoned, to annul this Notice of Award and to declare your Bid Security forfeited.

Within ten days after you comply with those conditions, Owner will return to you one fully signed counterpart of the Agreement with the Contract Documents attached.

Town of Ridgway  
Owner

BY: \_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by:

\_\_\_\_\_ on \_\_\_\_\_, 20

BY: \_\_\_\_\_ Title: \_\_\_\_\_

Employer ID Number: \_\_\_\_\_



PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called Principal, and \_\_\_\_\_  
(Corporation, Partnership, or Individual) (Name of Surety)

\_\_\_\_\_  
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

\_\_\_\_\_  
(Name of Owner)

\_\_\_\_\_  
(Address of Owner)

hereinafter called OWNER in the total aggregate penal sum of \_\_\_\_\_  
Dollars (\$ \_\_\_\_\_)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

Project Name: \_\_\_\_\_

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER with or without notice to the SURETY and during the one year guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its

obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND, the Contract or the Loan Documents shall include any alteration, addition, extension, or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied. The OWNER is the only beneficiaries hereunder.

IN WITNESS WHEREOF, this instrument is executed in \_\_\_\_\_ counterparts, each one of which shall be deemed an original, this the \_\_\_\_\_ day of 20 \_\_\_\_\_ .

ATTEST:

Principal

(Principal) Secretary

By \_\_\_\_\_(s)

(SEAL)

(Address)

Witness as to Principal

\_\_\_\_\_

(Address)

\_\_\_\_\_

ATTEST:

Surety

By \_\_\_\_\_

Witness as to Surety

Attorney-in-Fact

\_\_\_\_\_

(Address)

\_\_\_\_\_

(Address)

\_\_\_\_\_

\_\_\_\_\_

**NOTE:** Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

**IMPORTANT:** Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: that

---

(Name of Contractor)

---

(Address of Contractor)

a \_\_\_\_\_, hereinafter called Principal, and \_\_\_\_\_  
(Corporation, Partnership, or Individual) (Name of Surety)

---

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

---

(Name of Owner)

---

(Address of Owner)

hereinafter called OWNER in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the \_\_\_\_\_ day of 20, a copy of which is hereto attached and made a part hereof for the construction of:

Project Name: \_\_\_\_\_

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, sub-contractors, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such Contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said Work whether by Sub-Contractor or otherwise then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its

obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in \_\_ counterparts, each of which shall be deemed an original, this the \_\_\_ day of \_\_\_\_\_ 20\_\_.

ATTEST:

Principal

(Principal) Secretary

(SEAL)

By \_\_\_\_\_(s)

(Address)

Witness as to Principal

(Address)

ATTEST:

Surety

Witness as to Surety

By  
Attorney-in-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.

oOo

**NOTICE TO PROCEED**

DATED:

TO: \_\_\_\_\_  
Bidder

ADDRESS: \_\_\_\_\_

PROJECT NAME: Town of Ridgway – Ductile Iron Pipe Replacement Project

CONTRACT FOR: Town of Ridgway – Ductile Iron Pipe Replacement Project  
Name of Contract as it appears in Bidding Documents

You are notified that the Contract Time under the above contract will commence to run on \_\_\_\_\_. By that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 2 of the Agreement the date of Completion is \_\_\_\_\_.

Before you may start any Work at the site you must provide the Owner certificates of insurance which is required in the Agreement which is required to be purchased in maintained in accordance with the Contract Documents. You must also schedule with the Engineer and attend a pre-construction conference at the office of the Owner.

Also before you may start any Work at the site you must:

Town of Ridgway  
Owner

BY: \_\_\_\_\_  
Authorized Signature

Title \_\_\_\_\_

ACCEPTANCE OF NOTICE to Proceed

Receipt of the above Notice to Proceed is hereby acknowledged by:

\_\_\_\_\_ on \_\_\_\_\_, 20\_\_

BY: \_\_\_\_\_ Title:

Employer ID Number: \_\_\_\_\_





CHANGE ORDER No. \_\_\_\_\_

PROJECT: Town of Ridgway – Ductile Iron Pipe Replacement Project DATE OF ISSUANCE: \_\_\_\_\_

OWNER: Town of Ridgway  
Address: P.O. Box 10, Ridgway CO 81432

CONTRACTOR: \_\_\_\_\_

You are directed to make the following changes in the Contract Documents:

Description:

Attachments:

CHANGE IN CONTRACT PRICE

CHANGE IN CONTRACT TIME

Original Contract Price

Original Contract Time

\_\_\_\_\_

\_\_\_\_\_

Previous Change Orders #\_ to #\_

Net Change From Previous Change Orders

\_\_\_\_\_

\_\_\_\_\_

Contract Price Prior to this Change Order

Contract Time Prior to this Change Order

\_\_\_\_\_

\_\_\_\_\_

Net Increase (Decrease) this Change Order

Net Increase (Decrease) this Change Order

\_\_\_\_\_

\_\_\_\_\_

Contract Price w/all approved Change Orders

Contract Time w/all appr'd Change Orders

\_\_\_\_\_

\_\_\_\_\_

RECOMMENDED:

APPROVED:

APPROVED:

\_\_\_\_\_  
Engineer

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Owner







# **CO SRF Required Specifications INSTRUCTIONS**

(SRF Non-Equivalency, Base Funding)

## **STEPS:**

1. The following specifications must be inserted in their entirety into the project construction specification documents for bidding and for construction. This includes material, supplies and equipment procurement contracts.
2. Bid advertisements must be posted for a minimum of 30 days prior to bid opening. The bid advertisement should include the following statement or similar: *“This project anticipates funding from the Colorado State Revolving Fund (SRF) loan program. Bidder’s attention is called to the SRF requirements in the bid package.”*
3. The following information must be input into the specifications by the project representative prior to bidding and contract execution:
  - a. **Section 1:** Insert the current Davis-Bacon Wage general decision number. **The decision number must be verified 10-days prior to bid opening and updated if a new decision has been published.** See Section 1 for instructions.
  - b. **Section 1:** A copy of the current published Davis-Bacon wage determination document must be attached and the attachment number provided.
  - c. **Section 4:** The applicable Colorado county (or counties) must be inserted.
4. The following certifications must be completed and submitted by the prime contractor with their bid:
  - a. [Suspension and Debarment Certification Form](#)

If you have any questions regarding the specifications contained in this document, please contact your SRF program Project Manager from the list below. You may also contact the Unit Manager, Work Group Lead or the Compliance Specialist as needed.

**IMPORTANT:** Prior to construction, the project must receive environmental clearance and engineering final design approval from the Water Quality Control Division. If you have any questions regarding the status of these clearances and approvals please contact your SRF program Project Manager.

Name	Title	Phone	Email
Mark Henderson	Unit Manager	720-258-6450	<a href="mailto:mark.henderson@state.co.us">mark.henderson@state.co.us</a>
Alex Hawley	Work Group Lead	720-248-8095	<a href="mailto:alex.hawley@state.co.us">alex.hawley@state.co.us</a>
Erick Worker	Project Manager	303-692-3594	<a href="mailto:erick.worker@state.co.us">erick.worker@state.co.us</a>
Jeff Zajdel	Project Manager	720-235-8828	<a href="mailto:jeff.zajdel@state.co.us">jeff.zajdel@state.co.us</a>
Sean Oliver	Project Manager	303-691-4018	<a href="mailto:sean.oliver@state.co.us">sean.oliver@state.co.us</a>
Aly Ulibarri	Project Manager	720-295-9634	<a href="mailto:aly.ulibarri@state.co.us">aly.ulibarri@state.co.us</a>
James Wheatley	Project Manager	720-248-7364	<a href="mailto:james.wheatley@state.co.us">james.wheatley@state.co.us</a>
Matt Alms	Compliance Specialist	720-263-1530	<a href="mailto:matt.alm@state.co.us">matt.alm@state.co.us</a>



# Colorado State Revolving Fund Required Specifications

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(SRF Non-Equivalency, Base Funding)

## Table of Contents

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Section 7 - *Not Applicable*

Section 8 - *Not Applicable*

Section 9 - *Not Applicable*

Section 10 - *Not Applicable*

[Section 11: SRF Required Forms by Section](#)

# Section 1

## Davis Bacon Prevailing Wage Requirements

This contract is governed by the Davis Bacon and Related Acts and is subject to General Decision Number CO \_\_\_\_\_ dated \_\_\_\_\_.

A copy of this General Decision Number is attached as \_\_\_\_\_ to this document.

The SRF Program is subject to Davis Bacon and Related Acts, which extends the requirements of the Davis-Bacon Act. Compliance with the Davis-Bacon Act is required for any project funded by the Drinking Water Revolving Fund (DWRP) or Water Pollution Control Revolving Fund (WPCRF) programs. Non-Compliance with the Davis-Bacon Act may result in debarment and suspension from working on future projects funded with federal dollars for up to three years and/or loss of funding for the current project.

### Preamble

With respect to the Clean Water and Safe Drinking Water State Revolving Funds, EPA provides capitalization grants to each State which in turn provides sub-grants or loans to eligible entities within the State. Typically, the subrecipients are municipal or other local governmental entities that manage the funds. For these types of recipients, the provisions set forth under Roman numeral I, below, shall apply. Although EPA and the State remain responsible for ensuring subrecipients' compliance with the wage rate requirements set forth herein, those subrecipients shall have the primary responsibility to maintain payroll records as described in Section 3(ii)(A), below and for compliance as described in Section I - 5.

### Attachment 1

#### Wage Rate Requirements under:

- The Consolidated Appropriations Act, 2016 (P.L 114-133), or
- The Water Resources Reform and Redevelopment Act of 2014 (WRRDA):

#### I. For Subrecipients that Are Governmental Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its Davis - Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance under The 2014 Act with respect to State recipients and subrecipients that are governmental entities. If a subrecipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. The recipient or subrecipient may also obtain additional guidance from US Department of Labor (DOL) web site at

<https://www.dol.gov/agencies/whd/government-contracts/construction>

#### 1. Applicability of the Davis-Bacon (DB) prevailing wage requirements.

Under The Consolidated Appropriations Act, 2016, or The Water Resources Reform and Redevelopment Act of 2014, DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the recipient State before authorizing work on that site.

#### 2. Obtaining Wage Determinations.

- (a) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.
  - (1) While the solicitation remains open, the subrecipient shall monitor <https://sam.gov/> weekly to ensure that the wage determination contained in the solicitation remains current. The subrecipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the subrecipient.
  - (2) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor <https://sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.
- (b) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from <https://sam.gov/> into the ordering instrument.
- (c) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.
- (d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

### 3. Contract and Subcontract provisions.

- (a) The Recipient shall insure that the subrecipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment works under the Clean Water State Revolving Fund (CWSRF) or a construction project under the Drinking Water State Revolving Fund (DWSRF) financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or The 2014 Act, the following clauses:



(1) Minimum wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's website, <https://sam.gov/content/home>

- (ii) (A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (2) The classification is utilized in the area by the construction industry; and
  - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient(s) to the State award official. The State award official will transmit the request to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days

of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
  - (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding.

- (i) The subrecipient(s) shall, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Federal Agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

- (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual

wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (ii) (A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at [www.dol.gov/whd/forms/wh347instr.htm](http://www.dol.gov/whd/forms/wh347instr.htm) or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
  - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
  - (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (4) Apprentices and trainees--
- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
  - (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to

and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- (6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and Subrecipient(s), State, EPA, the U.S. Department of Labor, or the employees or their representatives.
- (10) Certification of eligibility.
  - (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible

to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U .S. Criminal Code, 18 U.S.C. 1001.

#### 4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above, or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section, the contractor and any subcontractor responsible, therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The subrecipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29

CFR 5.1, the Subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Federal Agency, State, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

## 5. Compliance Verification

- (a) The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.
- (b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.
- (c) The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of non-compliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date of the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.
- (d) The subrecipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.
- (e) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at:

<https://www.dol.gov/agencies/whd/contact/local-offices>

## Section 2

### American Iron and Steel

The State Revolving Fund Program is subject to, and requires compliance with, the American Iron and Steel requirement (AIS). American Iron and Steel requires Water Pollution Control State Revolving Fund (WPCRF) and Drinking Water Revolving Fund (DWRF) assistance recipients use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed on or after January 17, 2014.

In providing bids, proposals, or services, the Contractor represents and warrants to and for the benefit of the borrower and the State that:

- a. The Contractor has reviewed and understands the American Iron and Steel requirement.
- b. All of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved.
- c. The Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the borrower or the State.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the borrower or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the borrower or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the borrower). While the Contractor has no direct contractual privity with the State, as a lender to the borrower for the funding of its project, the borrower and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of the Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

For purposes of the WPCRF and DWRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings;
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel;
- Reinforced precast concrete; and
- Construction materials.

If the subrecipient can justify a claim made under one of the categories below, a waiver may be granted. Until a waiver is granted by the EPA, the AIS requirement must be adhered to as described in the act.

A waiver may be provided if EPA determines that:



1. Applying these requirements would be inconsistent with the public interest.
2. Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
3. Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

All waiver requests must be routed through the Grants and Loans Unit project manager or compliance specialist.

EPA's guidance on AIS requirements, available at [http://water.epa.gov/grants\\_funding/aisrequirement.cfm](http://water.epa.gov/grants_funding/aisrequirement.cfm) includes specific instructions for communities interested in applying for a waiver. After receiving a completed application for a waiver from the Grants and Loans Unit, EPA will publish the waiver request and all material submitted with the application on this website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to the EPA.

Approved National Waivers available for borrowers and contractors include:

- April 15, 2014 De Minimis Waiver:

“The EPA is hereby granting a nationwide waiver pursuant to the American Iron and Steel requirements of P.L. 113-76 CAA 2014 (Act), section 436 under the authority of Section 436(b)(1) (public interest waiver) for de minimis incidental components of eligible water infrastructure projects. This action permits the use of products when they occur in de minimis incidental components of such projects funded by the Act that may otherwise be prohibited under section 436(a). Funds used for such de minimis incidental components cumulatively may comprise no more than a total of five percent of the total cost of the material used in and incorporated into a project; the cost of an individual item may not exceed one percent of the total cost of materials used in and incorporated into a project.”

## Section 3

### National Term on Suspension and Debarment

- I. General Requirements
  - A. Under Executive Order 12549, an individual or organization debarred or excluded from participation in Federal assistance programs or Federal benefit programs may not receive any assistance award under a Federal program, or a subagreement thereunder for \$25,000 or more.
  - B. The status of prospective individuals or organizations can be checked at the System for Award Management(SAM) at <https://sam.gov/content/home>
  - C. Not being debarred or excluded from participation in Federal assistance shall be a condition of the contract in which this specification is included.
  - D. It is the prime contractor's responsibility to verify that subcontractors, vendors, suppliers and manufacturers are not debarred or excluded from participation in Federal assistance programs prior to entering into any agreements or awarding contracts and the prime contractor must verify and document they are not on the excluded parties list.
  - E. Verification can be completed by checking the System for Award Management (<https://sam.gov/content/home>) or by collection of a certification from that person documenting that the person is not excluded; or by adding a clause or condition to the covered transaction with that person indicating that not being excluded is a condition of the agreement. It is strongly recommended to check the System for Award Management.
  
- II. Demonstrating Compliance
  - A. A prospective prime contractor must submit a completed **Suspension and Debarment Certification Form** (reference Section 11-Forms) along with its bid. Failure to submit the certification may result in considering the bid as non-responsive.
  - B. As needed a completed Suspension and Debarment Certification form will be required to be submitted by the prime contractor prior to contract execution.
  - C. Prime contractors must document they have verified that all subcontractors, vendors, suppliers and manufacturers are not debarred or excluded from participation in Federal assistance programs.
    1. Record of documentation of verification must be maintained throughout the duration of the project and available for review upon request by the Owner or Colorado SRF program.
    2. Upon completion of the project, the documentation must be provided to the Owner and maintained for at least three years after project completion.

## Section 4 Equal Employment Opportunity

- I. Equal Opportunity Employment and Affirmative Action and Affirmative Action Requirements on Federally Assisted Construction Contracts: Notice and Equal Opportunity Clause
  - A. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

**This notice shall be included in, and shall be a part of, all solicitations for offers and bids on all federal and federally assisted construction contracts or subcontracts.**

- (1) The Offerer's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- (2) The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

County	Minority Participation in Each Trade <sup>1</sup>	Female Participation in Each Trade <sup>1</sup>
Fort Collins, Larimer	6.9%	6.9%
Archuleta, Delta, Dolores, Eagle, Garfield, Grand Junction, Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel	10.2%	6.9%
Colorado Springs, El Paso, Teller	10.9%	6.9%
Chaffee, Cheyenne, Clear Creek, Grand, Elbert, Kit Cason, Logan, Morgan, Park, Phillips, Sedgwick, Summit, Washington, Yuma	12.8%	6.9%
Greeley, Weld	13.1%	6.9%
Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Gilpin, Jefferson	13.8%	6.9%
Alamosa, Baca, Bent, Conejos, Costilla, Crowley, Custer, Fremont, Huerfano, Kiowa, Lake, Las Animas, Lincoln, Mineral, Otero, Prowers, Rio Grande, Saguache	19.0%	6.9%

Pueblo	27.5%	6.9%
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1) Source: FR Vol.45 No. 194 / Friday, October 3, 1980

These goals are applicable to all the contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- (3) The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number for the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed (See Form C).
- (4) As used in this Notice, and in the contract resulting from this solicitation, the covered area is                      County.

**B. EQUAL OPPORTUNITY CLAUSES**

- (1) The Equal Opportunity Clause published at 41 CFR Part 60-1.4(b) is required to be included in, and is part of, all nonexempt federally assisted construction contracts and subcontracts. By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated.
- (2) In addition to the clauses described above, all federal contracting officers, all applicants, and all non-construction contractors, as applicable, shall include the specifications set forth in this section in all federal and federally assisted construction contracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to 41 CFR 60-4.6 of this part and in construction subcontracts in excess of \$10,000 necessary in whole or in part to the performance of non-construction Federal contracts and subcontracts covered under the Executive Order.

**II. STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)**

**A. DEFINITIONS AS USED IN SPECIFICATIONS**

- (1) "Covered Area" means the geographical area described in solicitation from which this contract resulted;
- (2) "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
- (3) "Employer identification number" means the Federal Social Security number used on the employer's quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- (4) "Minority" includes:
  - (a) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (b) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (c) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asian, the Indian Subcontinent, or the Pacific Islands);
  - (d) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).

**B. DETAILED SPECIFICATIONS**

- (1) Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$25,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- (2) If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan (Plan) approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area, (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the Equal Employment Opportunity (EEO) clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- (3) The contractor shall implement the specific affirmative action standards provided in paragraphs (6)(a) through (p) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

- (4) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- (5) In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- (6) The contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - (a) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - (b) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations where the contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
  - (c) Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the contractor may have taken.
  - (d) Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - (e) Develop on-the-job training opportunities and/or participate in training programs for the areas which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under (7)(b) above.

- (f) Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- (g) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- (h) Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
- (i) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations servicing the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- (j) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- (k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- (l) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- (m) Ensure that seniority practices, job classification, work assignments and other personnel practices, do not have a discriminatory effect by continually

monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations are followed.

- (n) Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - (o) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
  - (p) Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.
- (7) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (6)(a) through (p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under (6)(a) through (p) of the specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.
- (8) A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the order if a specific minority group of women is under-utilized).
- (9) The contractor shall not use the goals and timetables of affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- (10) The contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.
- (11) The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- (12) The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (6)



of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.3.

- (13) The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- (14) Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

## Section 5

### Williams-Steiger Occupational Safety and Health Act of 1970

#### A. Authority

- (1) The contractor is subject to the provisions of the Williams-Steiger Occupational Safety and Health Act of 1970.
- (2) These construction documents and the joint and several phases of construction hereby contemplated are to be governed, at all times, by applicable provisions of the Federal law(s), including but not limited to the latest amendment of the following:
  - (a) Williams-Steiger Occupational Safety and Health Act of 1970, Public Law 94-596;
  - (b) art 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations;
  - (c) Part 1926 - Safety and Health Regulations for Construction, Chapter XVII of Title 29, Code of Federal Regulations.

#### B. Safety and Health Program Requirements

- (1) This project, its prime contractor and its subcontractors, shall at all times be governed by Chapter XVII of Title 29, Code of Federal Regulations, Part 1926 - Safety and Health Regulations for Construction (29 CFR 22801), as amended to date.
- (2) To implement the program and to provide safe and healthful working conditions for all persons, general project safety meetings will be conducted at the site at least once each month during the course of construction, by the construction superintendent or his/her designated safety officer. Notice of such meeting shall be issued not less than three (3) days prior, stating the exact time, location, and agenda to be included. Attendance by the owner, architect, general foreman, shop steward(s), and trades, or their designated representatives, witnessed in writing as such, shall be mandatory.
- (3) To further implement the program, each trade shall conduct a short gang meeting, not less than once a week, to review project safety requirements mandatory for all persons during the coming week. The gang foreman shall report the agenda and specific items covered to the project superintendent, who shall incorporate these items in his/her daily log or report.
- (4) The prime contractor and all subcontractors shall immediately report all accidents, injuries, or health hazards to the owner and architect, or their designated representatives, in writing. This shall not obviate any mandatory reporting under the provisions of the Occupational Safety and Health Act of 1970.
- (5) This program shall become a part of the contract documents and the contract between the owner and prime contractor, prime contractor and all subcontractors, as though fully written therein.

## Section 6

### Discovery of Archaeological and Other Historical Items

#### A. Construction Procedures

In the event of an archaeological or more recent historical find (e.g., artifacts, housing sites) during any phase of construction, the following procedure should be followed:

- (1) Construction shall be halted, with as little disruption to the archaeological site possible.
- (2) The Contractor shall notify the Owner who shall contact the State Historical Preservation Officer.
- (3) The State Historical Preservation Officer may decide to have an archaeologist inspect the site and make recommendations about the steps needed to protect the site, before construction is resumed.
- (4) The entire event should be handled as expediently as possible in order to hold the loss in construction time to a minimum while still protecting archaeological finds.

#### B. National Register Status

In the event archaeological/historical data are evaluated to meet National Register criteria, the Advisory Council on Historic Preservation may be notified and asked to comment by the Water Quality Control Division.

**Section 7 - Not Applicable**

**Section 8 - Not Applicable**

**Section 9 - Not Applicable**

**Section 10 - Not Applicable**

## Section 11

### SRF Required Forms by Section

SRF forms can be found at the following website (click on “Forms” button at bottom of page):

<https://cdphe.colorado.gov/state-revolving-fund-information>

The list of forms are below. Please contact your SRF Project Manager if you have any questions.

#### Section 1 - Davis Bacon Prevailing Wages

- SRF Davis Bacon Certification Form
- WH - 347 - Contractors Payroll Form
- Standard Form 1444 - Request for Authorization of Additional Classification and Rate
- Standard Form 1445 - Labor Standards Interview Form

#### Section 2 - American Iron and Steel

- SRF American Iron and Steel Certification Form
- SRF American Iron and Steel Product Log

#### Section 3 - National Term on Suspension and Debarment

- Suspension and Debarment Certification

#### Section 4 - Equal Employment Opportunity and Affirmative Action Requirements

- No applicable forms.

#### Section 5 - Williams-Steiger Occupational Safety and Health Act of 1970

- No applicable forms.

#### Section 6 - Discovery of Archaeological and Other Historical Items

- No applicable forms.

Section 7 - Not Applicable

Section 8 - Not Applicable

Section 9 - Not Applicable

Section 10 - Not Applicable



## **CO SRF Required Specifications INSTRUCTIONS**

(SRF Non-Equivalency, Base Funding)

### **STEPS:**

1. The following specifications must be inserted in their entirety into the project construction specification documents for bidding and for construction. This includes material, supplies and equipment procurement contracts.
2. Bid advertisements must be posted for a minimum of 30 days prior to bid opening. The bid advertisement should include the following statement or similar: *“This project anticipates funding from the Colorado State Revolving Fund (SRF) loan program. Bidder’s attention is called to the SRF requirements in the bid package.”*
3. The following information must be input into the specifications by the project representative prior to bidding and contract execution:
  - a. **Section 1:** Insert the current Davis-Bacon Wage general decision number. **The decision number must be verified 10-days prior to bid opening and updated if a new decision has been published.** See Section 1 for instructions.
  - b. **Section 1:** A copy of the current published Davis-Bacon wage determination document must be attached and the attachment number provided.
  - c. **Section 4:** The applicable Colorado county (or counties) must be inserted.
4. The following certifications must be completed and submitted by the prime contractor with their bid:
  - a. [Suspension and Debarment Certification Form](#)

If you have any questions regarding the specifications contained in this document, please contact your SRF program Project Manager from the list below. You may also contact the Unit Manager, Work Group Lead or the Compliance Specialist as needed.

**IMPORTANT:** Prior to construction, the project must receive environmental clearance and engineering final design approval from the Water Quality Control Division. If you have any questions regarding the status of these clearances and approvals please contact your SRF program Project Manager.

Name	Title	Phone	Email
Mark Henderson	Unit Manager	720-258-6450	<a href="mailto:mark.henderson@state.co.us">mark.henderson@state.co.us</a>
Alex Hawley	Work Group Lead	720-248-8095	<a href="mailto:alex.hawley@state.co.us">alex.hawley@state.co.us</a>
Erick Worker	Project Manager	303-692-3594	<a href="mailto:erick.worker@state.co.us">erick.worker@state.co.us</a>
Jeff Zajdel	Project Manager	720-235-8828	<a href="mailto:jeff.zajdel@state.co.us">jeff.zajdel@state.co.us</a>
Sean Oliver	Project Manager	303-691-4018	<a href="mailto:sean.oliver@state.co.us">sean.oliver@state.co.us</a>
Aly Ulibarri	Project Manager	720-295-9634	<a href="mailto:aly.ulibarri@state.co.us">aly.ulibarri@state.co.us</a>
James Wheatley	Project Manager	720-248-7364	<a href="mailto:james.wheatley@state.co.us">james.wheatley@state.co.us</a>
Matt Alms	Compliance Specialist	720-263-1530	<a href="mailto:matt.als@state.co.us">matt.als@state.co.us</a>



# Colorado State Revolving Fund Required Specifications

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(SRF Non-Equivalency, Base Funding)

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# Section 1

## Davis Bacon Prevailing Wage Requirements

This contract is governed by the Davis Bacon and Related Acts and is subject to General Decision Number CO \_\_\_\_\_ dated \_\_\_\_\_.

A copy of this General Decision Number is attached as \_\_\_\_\_ to this document.

The SRF Program is subject to Davis Bacon and Related Acts, which extends the requirements of the Davis-Bacon Act. Compliance with the Davis-Bacon Act is required for any project funded by the Drinking Water Revolving Fund (DWRP) or Water Pollution Control Revolving Fund (WPCRF) programs. Non-Compliance with the Davis-Bacon Act may result in debarment and suspension from working on future projects funded with federal dollars for up to three years and/or loss of funding for the current project.

### Preamble

With respect to the Clean Water and Safe Drinking Water State Revolving Funds, EPA provides capitalization grants to each State which in turn provides sub-grants or loans to eligible entities within the State. Typically, the subrecipients are municipal or other local governmental entities that manage the funds. For these types of recipients, the provisions set forth under Roman numeral I, below, shall apply. Although EPA and the State remain responsible for ensuring subrecipients' compliance with the wage rate requirements set forth herein, those subrecipients shall have the primary responsibility to maintain payroll records as described in Section 3(ii)(A), below and for compliance as described in Section I - 5.

### Attachment 1

#### Wage Rate Requirements under:

- The Consolidated Appropriations Act, 2016 (P.L 114-133), or
- The Water Resources Reform and Redevelopment Act of 2014 (WRRDA):

#### I. For Subrecipients that Are Governmental Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its Davis - Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance under The 2014 Act with respect to State recipients and subrecipients that are governmental entities. If a subrecipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. The recipient or subrecipient may also obtain additional guidance from US Department of Labor (DOL) web site at

<https://www.dol.gov/agencies/whd/government-contracts/construction>

#### 1. Applicability of the Davis-Bacon (DB) prevailing wage requirements.

Under The Consolidated Appropriations Act, 2016, or The Water Resources Reform and Redevelopment Act of 2014, DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the recipient State before authorizing work on that site.

#### 2. Obtaining Wage Determinations.

- (a) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.
  - (1) While the solicitation remains open, the subrecipient shall monitor <https://sam.gov/> weekly to ensure that the wage determination contained in the solicitation remains current. The subrecipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the subrecipient.
  - (2) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor <https://sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.
- (b) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from <https://sam.gov/> into the ordering instrument.
- (c) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.
- (d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

### 3. Contract and Subcontract provisions.

- (a) The Recipient shall insure that the subrecipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment works under the Clean Water State Revolving Fund (CWSRF) or a construction project under the Drinking Water State Revolving Fund (DWSRF) financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or The 2014 Act, the following clauses:

(1) Minimum wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's website, <https://sam.gov/content/home>

- (ii) (A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (2) The classification is utilized in the area by the construction industry; and
  - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient(s) to the State award official. The State award official will transmit the request to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days

of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
  - (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding.

- (i) The subrecipient(s) shall, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Federal Agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

- (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual

wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (ii) (A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at [www.dol.gov/whd/forms/wh347instr.htm](http://www.dol.gov/whd/forms/wh347instr.htm) or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
  - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
  - (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (4) Apprentices and trainees--
- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
  - (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to



and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and Subrecipient(s), State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible

to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U .S. Criminal Code, 18 U.S.C. 1001.

#### 4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above, or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section, the contractor and any subcontractor responsible, therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The subrecipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29

CFR 5.1, the Subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Federal Agency, State, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

## 5. Compliance Verification

- (a) The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.
- (b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.
- (c) The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of non-compliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date of the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.
- (d) The subrecipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.
- (e) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at:

<https://www.dol.gov/agencies/whd/contact/local-offices>

## Section 2

### American Iron and Steel

The State Revolving Fund Program is subject to, and requires compliance with, the American Iron and Steel requirement (AIS). American Iron and Steel requires Water Pollution Control State Revolving Fund (WPCRF) and Drinking Water Revolving Fund (DWRF) assistance recipients use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed on or after January 17, 2014.

In providing bids, proposals, or services, the Contractor represents and warrants to and for the benefit of the borrower and the State that:

- a. The Contractor has reviewed and understands the American Iron and Steel requirement.
- b. All of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved.
- c. The Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the borrower or the State.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the borrower or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the borrower or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the borrower). While the Contractor has no direct contractual privity with the State, as a lender to the borrower for the funding of its project, the borrower and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of the Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

For purposes of the WPCRF and DWRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole Covers;
- Municipal Castings;
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel;
- Reinforced precast concrete; and
- Construction materials.

If the subrecipient can justify a claim made under one of the categories below, a waiver may be granted. Until a waiver is granted by the EPA, the AIS requirement must be adhered to as described in the act.

A waiver may be provided if EPA determines that:

1. Applying these requirements would be inconsistent with the public interest.
2. Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
3. Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

All waiver requests must be routed through the Grants and Loans Unit project manager or compliance specialist.

EPA's guidance on AIS requirements, available at [http://water.epa.gov/grants\\_funding/aisrequirement.cfm](http://water.epa.gov/grants_funding/aisrequirement.cfm) includes specific instructions for communities interested in applying for a waiver. After receiving a completed application for a waiver from the Grants and Loans Unit, EPA will publish the waiver request and all material submitted with the application on this website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to the EPA.

Approved National Waivers available for borrowers and contractors include:

- April 15, 2014 De Minimis Waiver:

“The EPA is hereby granting a nationwide waiver pursuant to the American Iron and Steel requirements of P.L. 113-76 CAA 2014 (Act), section 436 under the authority of Section 436(b)(1) (public interest waiver) for de minimis incidental components of eligible water infrastructure projects. This action permits the use of products when they occur in de minimis incidental components of such projects funded by the Act that may otherwise be prohibited under section 436(a). Funds used for such de minimis incidental components cumulatively may comprise no more than a total of five percent of the total cost of the material used in and incorporated into a project; the cost of an individual item may not exceed one percent of the total cost of materials used in and incorporated into a project.”

## Section 3

### National Term on Suspension and Debarment

- I. General Requirements
  - A. Under Executive Order 12549, an individual or organization debarred or excluded from participation in Federal assistance programs or Federal benefit programs may not receive any assistance award under a Federal program, or a subagreement thereunder for \$25,000 or more.
  - B. The status of prospective individuals or organizations can be checked at the System for Award Management(SAM) at <https://sam.gov/content/home>
  - C. Not being debarred or excluded from participation in Federal assistance shall be a condition of the contract in which this specification is included.
  - D. It is the prime contractor's responsibility to verify that subcontractors, vendors, suppliers and manufacturers are not debarred or excluded from participation in Federal assistance programs prior to entering into any agreements or awarding contracts and the prime contractor must verify and document they are not on the excluded parties list.
  - E. Verification can be completed by checking the System for Award Management (<https://sam.gov/content/home>) or by collection of a certification from that person documenting that the person is not excluded; or by adding a clause or condition to the covered transaction with that person indicating that not being excluded is a condition of the agreement. It is strongly recommended to check the System for Award Management.
- II. Demonstrating Compliance
  - A. A prospective prime contractor must submit a completed **Suspension and Debarment Certification Form** (reference Section 11-Forms) along with its bid. Failure to submit the certification may result in considering the bid as non-responsive.
  - B. As needed a completed Suspension and Debarment Certification form will be required to be submitted by the prime contractor prior to contract execution.
  - C. Prime contractors must document they have verified that all subcontractors, vendors, suppliers and manufacturers are not debarred or excluded from participation in Federal assistance programs.
    1. Record of documentation of verification must be maintained throughout the duration of the project and available for review upon request by the Owner or Colorado SRF program.
    2. Upon completion of the project, the documentation must be provided to the Owner and maintained for at least three years after project completion.

## Section 4 Equal Employment Opportunity

- I. Equal Opportunity Employment and Affirmative Action and Affirmative Action Requirements on Federally Assisted Construction Contracts: Notice and Equal Opportunity Clause
  - A. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

**This notice shall be included in, and shall be a part of, all solicitations for offers and bids on all federal and federally assisted construction contracts or subcontracts.**

- (1) The Offerer's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- (2) The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

County	Minority Participation in Each Trade <sup>1</sup>	Female Participation in Each Trade <sup>1</sup>
Fort Collins, Larimer	6.9%	6.9%
Archuleta, Delta, Dolores, Eagle, Garfield, Grand Junction, Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel	10.2%	6.9%
Colorado Springs, El Paso, Teller	10.9%	6.9%
Chaffee, Cheyenne, Clear Creek, Grand, Elbert, Kit Cason, Logan, Morgan, Park, Phillips, Sedgwick, Summit, Washington, Yuma	12.8%	6.9%
Greeley, Weld	13.1%	6.9%
Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Gilpin, Jefferson	13.8%	6.9%
Alamosa, Baca, Bent, Conejos, Costilla, Crowley, Custer, Fremont, Huerfano, Kiowa, Lake, Las Animas, Lincoln, Mineral, Otero, Prowers, Rio Grande, Saguache	19.0%	6.9%

Pueblo	27.5%	6.9%
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1) Source: FR Vol.45 No. 194 / Friday, October 3, 1980

These goals are applicable to all the contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- (3) The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number for the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed (See Form C).
- (4) As used in this Notice, and in the contract resulting from this solicitation, the covered area is                      County.

**B. EQUAL OPPORTUNITY CLAUSES**

- (1) The Equal Opportunity Clause published at 41 CFR Part 60-1.4(b) is required to be included in, and is part of, all nonexempt federally assisted construction contracts and subcontracts. By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated.
- (2) In addition to the clauses described above, all federal contracting officers, all applicants, and all non-construction contractors, as applicable, shall include the specifications set forth in this section in all federal and federally assisted construction contracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to 41 CFR 60-4.6 of this part and in construction subcontracts in excess of \$10,000 necessary in whole or in part to the performance of non-construction Federal contracts and subcontracts covered under the Executive Order.

**II. STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)**

**A. DEFINITIONS AS USED IN SPECIFICATIONS**



- (1) "Covered Area" means the geographical area described in solicitation from which this contract resulted;
- (2) "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
- (3) "Employer identification number" means the Federal Social Security number used on the employer's quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- (4) "Minority" includes:
  - (a) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (b) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (c) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asian, the Indian Subcontinent, or the Pacific Islands);
  - (d) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).

**B. DETAILED SPECIFICATIONS**

- (1) Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$25,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- (2) If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan (Plan) approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area, (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the Equal Employment Opportunity (EEO) clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- (3) The contractor shall implement the specific affirmative action standards provided in paragraphs (6)(a) through (p) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

- (4) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- (5) In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- (6) The contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - (a) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - (b) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations where the contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
  - (c) Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the contractor may have taken.
  - (d) Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - (e) Develop on-the-job training opportunities and/or participate in training programs for the areas which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under (7)(b) above.

- (f) Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- (g) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- (h) Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
- (i) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations servicing the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- (j) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- (k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- (l) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- (m) Ensure that seniority practices, job classification, work assignments and other personnel practices, do not have a discriminatory effect by continually

monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations are followed.

- (n) Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - (o) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
  - (p) Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.
- (7) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (6)(a) through (p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under (6)(a) through (p) of the specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.
- (8) A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the order if a specific minority group of women is under-utilized).
- (9) The contractor shall not use the goals and timetables of affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- (10) The contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.
- (11) The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- (12) The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (6)

of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.3.

- (13) The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- (14) Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

## Section 5

### Williams-Steiger Occupational Safety and Health Act of 1970

#### A. Authority

- (1) The contractor is subject to the provisions of the Williams-Steiger Occupational Safety and Health Act of 1970.
- (2) These construction documents and the joint and several phases of construction hereby contemplated are to be governed, at all times, by applicable provisions of the Federal law(s), including but not limited to the latest amendment of the following:
  - (a) Williams-Steiger Occupational Safety and Health Act of 1970, Public Law 94-596;
  - (b) art 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations;
  - (c) Part 1926 - Safety and Health Regulations for Construction, Chapter XVII of Title 29, Code of Federal Regulations.

#### B. Safety and Health Program Requirements

- (1) This project, its prime contractor and its subcontractors, shall at all times be governed by Chapter XVII of Title 29, Code of Federal Regulations, Part 1926 - Safety and Health Regulations for Construction (29 CFR 22801), as amended to date.
- (2) To implement the program and to provide safe and healthful working conditions for all persons, general project safety meetings will be conducted at the site at least once each month during the course of construction, by the construction superintendent or his/her designated safety officer. Notice of such meeting shall be issued not less than three (3) days prior, stating the exact time, location, and agenda to be included. Attendance by the owner, architect, general foreman, shop steward(s), and trades, or their designated representatives, witnessed in writing as such, shall be mandatory.
- (3) To further implement the program, each trade shall conduct a short gang meeting, not less than once a week, to review project safety requirements mandatory for all persons during the coming week. The gang foreman shall report the agenda and specific items covered to the project superintendent, who shall incorporate these items in his/her daily log or report.
- (4) The prime contractor and all subcontractors shall immediately report all accidents, injuries, or health hazards to the owner and architect, or their designated representatives, in writing. This shall not obviate any mandatory reporting under the provisions of the Occupational Safety and Health Act of 1970.
- (5) This program shall become a part of the contract documents and the contract between the owner and prime contractor, prime contractor and all subcontractors, as though fully written therein.

## Section 6

### Discovery of Archaeological and Other Historical Items

#### A. Construction Procedures

In the event of an archaeological or more recent historical find (e.g., artifacts, housing sites) during any phase of construction, the following procedure should be followed:

- (1) Construction shall be halted, with as little disruption to the archaeological site possible.
- (2) The Contractor shall notify the Owner who shall contact the State Historical Preservation Officer.
- (3) The State Historical Preservation Officer may decide to have an archaeologist inspect the site and make recommendations about the steps needed to protect the site, before construction is resumed.
- (4) The entire event should be handled as expediently as possible in order to hold the loss in construction time to a minimum while still protecting archaeological finds.

#### B. National Register Status

In the event archaeological/historical data are evaluated to meet National Register criteria, the Advisory Council on Historic Preservation may be notified and asked to comment by the Water Quality Control Division.

**Section 7 - Not Applicable**



**Section 8 - Not Applicable**

**Section 9 - Not Applicable**

**Section 10 - Not Applicable**

## Section 11

### SRF Required Forms by Section

SRF forms can be found at the following website (click on “Forms” button at bottom of page):

<https://cdphe.colorado.gov/state-revolving-fund-information>

The list of forms are below. Please contact your SRF Project Manager if you have any questions.

#### Section 1 - Davis Bacon Prevailing Wages

- SRF Davis Bacon Certification Form
- WH - 347 - Contractors Payroll Form
- Standard Form 1444 - Request for Authorization of Additional Classification and Rate
- Standard Form 1445 - Labor Standards Interview Form

#### Section 2 - American Iron and Steel

- SRF American Iron and Steel Certification Form
- SRF American Iron and Steel Product Log

#### Section 3 - National Term on Suspension and Debarment

- Suspension and Debarment Certification

#### Section 4 - Equal Employment Opportunity and Affirmative Action Requirements

- No applicable forms.

#### Section 5 - Williams-Steiger Occupational Safety and Health Act of 1970

- No applicable forms.

#### Section 6 - Discovery of Archaeological and Other Historical Items

- No applicable forms.

Section 7 - Not Applicable

Section 8 - Not Applicable

Section 9 - Not Applicable

Section 10 - Not Applicable



## American Iron and Steel Certification

Project Name: \_\_\_\_\_

Period From: \_\_\_\_\_ To: \_\_\_\_\_

Section 436 of the Consolidated Appropriations Act, 2014 states that:

*None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.*

To meet this requirement, the undersigned hereby certifies that all iron and steel products which are to be incorporated into the (Name of Construction Contract), has been manufactured and/or fabricated using domestic iron and steel as defined by the above referenced section 436 of P.L. 113-76 and EPA's Guidance Memorandum dated March 20, 2014 for Implementation of American Iron & Steel unless an appropriate waiver has been granted by the Administrator of the Environmental Protection Agency.

\_\_\_\_\_  
Name of Loan Recipient

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorized Official

\_\_\_\_\_  
Print Name and Title of Authorized Official

NOTE: A current completed copy of the American Iron and Steel Products tracking spreadsheet MUST accompany this document.







Project Name: \_\_\_\_\_

Period From: \_\_\_\_\_ To: \_\_\_\_\_

**Davis-Bacon Act CERTIFICATION**

I certify to the best of my knowledge and belief that the above referenced project:

Complies with Davis-Bacon and Related Acts and that all laborers and mechanics employed by contractors and subcontractors during the above referenced period were paid wages at rates not less than those listed on the prevailing wage rate contained in the contract documents and that all applicable provisions of the Davis-Bacon and Related Acts have been met.

\_\_\_\_\_  
Name of Loan Recipient

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorized Official

\_\_\_\_\_  
Print Name and Title of Authorized Official







**Request For Wage Determination And  
Response To Request**

(Construction Wage Rate Requirements Statute and Related Statutes)

**U.S. Department of Labor**

Wage and Hour Division

<p><b>FOR DEPARTMENT OF LABOR USE</b></p> <p>Response To Request</p> <p><input type="checkbox"/> Use area determination issued for this area</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> The attached decision noted below is applicable to this project</p> <p>Decision Number</p> <p>Date of Decision</p> <p>Expires</p> <p>Supersedes Decision Number</p> <p>Approved</p>	<p>Mail Your Request To:</p> <p><b>U.S. Department of Labor Wage and Hour Division Branch of Construction Contract Wage Determinations Washington, D.C. 20210</b></p> <p>Requesting Officer (Typed name <i>and signature</i>)</p> <p>Department, Agency, or Bureau _____ Phone Number _____</p> <p>Date of Request _____ Estimated Advertising Date _____ Estimated Bid Opening Date _____</p> <p>Prior Decision Number (if any) _____ Estimated \$ Value of Contract _____ Type of Work _____</p> <p style="margin-left: 40px;"><input type="checkbox"/> Under 1/2 Mil   <input type="checkbox"/> 1 to 5 Mil   <input type="checkbox"/> Bldg.   <input type="checkbox"/> Highway</p> <p style="margin-left: 40px;"><input type="checkbox"/> 1/2 to 1 Mil   <input type="checkbox"/> Over 5 Mil   <input type="checkbox"/> Resid.   <input type="checkbox"/> Heavy</p> <p>Address to which wage determination should be mailed. (Print or type)</p> <div style="border: 1px solid black; height: 150px; margin: 10px 0;"></div> <p>Location of Project (City, County, State, Zip Code)</p> <p>Description of Work (Be specific) (Print or type)</p>	<p>CHECK OR LIST CRAFTS NEEDED (Attach continuation sheet if needed)</p> <p>_____ Asbestos workers</p> <p>_____ Boilermakers</p> <p>_____ Bricklayers</p> <p>_____ Carpenters</p> <p>_____ Cement masons</p> <p>_____ Electricians</p> <p>_____ Glaziers</p> <p>_____ Ironworkers</p> <p>_____ Laborers (Specify classes)</p> <p>_____ _____</p> <p>_____ _____</p> <p>_____ _____</p> <p>_____ Lathers</p> <p>_____ Marble &amp; tile setters, terrazzo workers</p> <p>_____ Painters</p> <p>_____ Piledrivermen</p> <p>_____ Plasterers</p> <p>_____ Plumbers</p> <p>_____ Roofers</p> <p>_____ Sheet metal workers</p> <p>_____ Soft floor layers</p> <p>_____ Steamfitters</p> <p>_____ Welders-rate for craft</p> <p>_____ Truck drivers</p> <p>_____ Power equipment operators (Specify types)</p> <p>_____ _____</p> <p>_____ _____</p> <p>_____ _____</p> <p>_____ _____</p> <p>_____ _____</p> <p>Other Crafts</p> <p>_____ _____</p> <p>_____ _____</p> <p>_____ _____</p> <p>_____ _____</p>
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**REQUEST FOR AUTHORIZATION OF  
ADDITIONAL CLASSIFICATION AND RATE**

CHECK APPROPRIATE BOX  
 SERVICE CONTRACT  
 CONSTRUCTION CONTRACT

**OMB Control Number: 9000-0089**  
**Expiration Date: 10/31/2019**

PAPERWORK REDUCTION ACT STATEMENT: Public reporting burden for this collection of information is estimated to average .5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing this burden, to U.S. General Services Administration, Regulatory Secretariat (MVCB)/IC 9000-0089, Office of Governmentwide Acquisition Policy, 1800 F Street, NW, Washington, DC 20405.

**INSTRUCTIONS:** THE CONTRACTOR SHALL COMPLETE ITEMS 3 THROUGH 16, KEEP A PENDING COPY, AND SUBMIT THE REQUEST, IN QUADRUPPLICATE, TO THE CONTRACTING OFFICER.

<b>1. TO:</b> ADMINISTRATOR, WAGE AND HOUR DIVISION U.S. DEPARTMENT OF LABOR WASHINGTON, DC 20210	<b>2. FROM:</b> (REPORTING OFFICE)
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3. CONTRACTOR	4. DATE OF REQUEST
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5. CONTRACT NUMBER	6. DATE BID OPENED (SEALED BIDDING)	7. DATE OF AWARD	8. DATE CONTRACT WORK STARTED	9. DATE OPTION EXERCISED (IF APPLICABLE) (SERVICE CONTRACT ONLY)
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10. SUBCONTRACTOR (IF ANY)

11. PROJECT AND DESCRIPTION OF WORK (ATTACH ADDITIONAL SHEET IF NEEDED)

12. LOCATION (CITY, COUNTY AND STATE)

13. IN ORDER TO COMPLETE THE WORK PROVIDED FOR UNDER THE ABOVE CONTRACT, IT IS NECESSARY TO ESTABLISH THE FOLLOWING RATE(S) FOR THE INDICATED CLASSIFICATION(S) NOT INCLUDED IN THE DEPARTMENT OF LABOR DETERMINATION

NUMBER: \_\_\_\_\_ DATED: \_\_\_\_\_

a. LIST IN ORDER: PROPOSED CLASSIFICATION TITLE(S); JOB DESCRIPTION(S); DUTIES; AND RATIONALE FOR PROPOSED CLASSIFICATIONS (Service contracts only) <i>(Use reverse or attach additional sheets, if necessary)</i>	b. WAGE RATE(S)	c. FRINGE BENEFITS PAYMENTS

14. SIGNATURE AND TITLE OF SUBCONTRACTOR REPRESENTATIVE (IF ANY)	15. SIGNATURE AND TITLE OF PRIME CONTRACTOR REPRESENTATIVE
--	--

16. SIGNATURE OF EMPLOYEE OR REPRESENTATIVE	TITLE	CHECK APPROPRIATE BOX-REFERENCING BLOCK 13. <input type="checkbox"/> AGREE <input type="checkbox"/> DISAGREE
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**TO BE COMPLETED BY CONTRACTING OFFICER (CHECK AS APPROPRIATE - SEE FAR 22.1019 (SERVICE CONTRACT LABOR STANDARDS) OR FAR 22.406-3 (CONSTRUCTION WAGE RATE REQUIREMENTS))**

- THE INTERESTED PARTIES AGREE AND THE CONTRACTING OFFICER RECOMMENDS APPROVAL BY THE WAGE AND HOUR DIVISION. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED.
- THE INTERESTED PARTIES CANNOT AGREE ON THE PROPOSED CLASSIFICATION AND WAGE RATE. A DETERMINATION OF THE QUESTION BY THE WAGE AND HOUR DIVISION IS THEREFORE REQUESTED. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED.  
*(Send 3 copies to the Department of Labor)*

SIGNATURE OF CONTRACTING OFFICER OR REPRESENTATIVE	TITLE AND COMMERCIAL TELEPHONE NUMBER	DATE SUBMITTED
--	---------------------------------------	----------------

## LABOR STANDARDS INTERVIEW

CONTRACT NUMBER				EMPLOYEE INFORMATION				
NAME OF PRIME CONTRACTOR				LAST NAME		FIRST NAME		MI
				STREET ADDRESS				
NAME OF EMPLOYER				CITY		STATE	ZIP CODE	
				SUPERVISOR'S NAME		WORK CLASSIFICATION		WAGE RATE
LAST NAME		FIRST NAME		MI				

ACTION	CHECK BELOW	
	YES	NO
Do you work over 8 hours per day?		
Do you work over 40 hours per week?		
Are you paid at least time and a half for overtime hours?		
Are you receiving any cash payments for fringe benefits required by the posted wage determination decision?		
WHAT DEDUCTIONS OTHER THAN TAXES AND SOCIAL SECURITY ARE MADE FROM YOUR PAY?		

HOW MANY HOURS DID YOU WORK ON YOUR LAST WORK DAY BEFORE THIS INTERVIEW?	TOOLS YOU USE	
DATE OF LAST WORK DAY BEFORE INTERVIEW (YYMMDD)		
DATE YOU BEGAN WORK ON THIS PROJECT (YYMMDD)		

THE ABOVE IS CORRECT TO THE BEST OF MY KNOWLEDGE

EMPLOYEE'S SIGNATURE			DATE (YYMMDD)
INTERVIEWER	SIGNATURE	TYPED OR PRINTED NAME	DATE (YYMMDD)

### INTERVIEWER'S COMMENTS

WORK EMPLOYEE WAS DOING WHEN INTERVIEWED	ACTION <i>(If explanation is needed, use comments section)</i>	YES	NO
	IS EMPLOYEE PROPERLY CLASSIFIED AND PAID?		
	ARE WAGE RATES AND POSTERS DISPLAYED?		

### FOR USE BY PAYROLL CHECKER

IS ABOVE INFORMATION IN AGREEMENT WITH PAYROLL DATA?

YES       NO

COMMENTS

CHECKER			
LAST NAME	FIRST NAME	MI	JOB TITLE
SIGNATURE			DATE (YYMMDD)



**FORM B - DBE PROCUREMENTS MADE DURING QUARTER**

**Federal Quarter & Year:** \_\_\_\_\_

1<sup>st</sup> (Oct-Dec); 2<sup>nd</sup> (Jan-Mar);  
 3<sup>rd</sup> (Apr-Jun); 4<sup>th</sup> (Jul-Sep)

Procurement Made By		Business Enterprise		Total Dollar Value of Procurement	Date of Procurement Award MM/DD/YY	Type of Product or Service (see key below)	Name/Address of DBE Contractor or Vendor
Loan Recipient	Prime Contractor	MBE	WBE				
				\$			
				\$			
				\$			
				\$			

Type of Product or Service: 1=Construction 2=Supplies 3=Services 4=Equipment

Loan Recipient:		SRF Project Number			Amount Paid this Quarter	Cumulative Amount Paid to Date
DBE Reporting Contact for Loan Recipient:		Phone:	SRF Loan Amount:	MBEs:	\$	\$
State SRF Contact: Matt Alms		Phone: (303) 692-6264	e-mail: matt.alms@state.co.us	WBEs:	\$	\$
Print Name of Signature Authority of Loan Recipient:			Telephone Number:	Signature:		Date:
Print Name of Prime Contractor & Project Manager			Telephone Number:	Signature of Contractor Project Manager:		Date:

**Form is due within 5 days after the end of each quarter throughout construction- 1/5, 4/5, 7/5, 10/5.**

Instructions for completing and submitting Form B.

1. Federal Quarter/Year: Enter the corresponding quarter and federal fiscal year for each quarter submitted. Do not enter multiple quarters on one sheet.
2. Procurement Made By: Check whether the procurement was awarded by the recipient or the prime contractor
3. Business Enterprise: Check whether the business enterprise was Minority owned (MBE) or Women owned (WBE) business
4. Total Value of Procurement: Enter the total amount of the bid award
5. Date of Procurement Award: Enter the date the bid was **awarded**
6. Name/Address of DBE Contractor or Vendor: Enter the full name and address including city, state and zip of the awarded bidder. Use one sheet per prime contractor for all awards; do not use separate sheets for each business awarded.
7. Loan Recipient: Enter the full name of the recipient.
8. SRF Project Number: Enter the project number of the loan recipient as identified in the Intended Use Plan. This is a 6 digit number ending in the letter W (wastewater) or D (drinking water). If you do not know the project number, contact your project manager for assistance.
9. Loan Recipient DBE Contact: Enter the name of the person responsible for completing Form B.
10. Phone: Enter the phone number of the person responsible for completing Form B.
11. SRF Loan Amount: Enter the amount of the loan that was closed with the Colorado Water Resources and Power Development Authority Exhibit B of the loan agreement.
12. Amount Paid This Quarter: Enter the total amount disbursed to the awarded business for each quarter for each of the MBE and/or WBE you have paid out. Do not use a separate sheet for each business paid just use a total amount and do not enter a contract award amount.
13. Cumulative Amount Paid to Date: Add the previous quarter cumulative amount to the amount paid in the current quarter to calculate the cumulative amount paid to date.
14. Print Name of Signature Authority for Loan Recipient: This should be the same person who has authority to sign off on pay requests
15. Telephone Number: Phone number of 14.
16. Signature: Signature of 14. The form is incomplete if there are no signatures and will be returned to the loan recipient.
17. Date: Date the form was signed by 14.
18. Print Name of Prime Contractor & Project Manager: Company name and project manager name.
19. Telephone Number: Phone number of 18. .
20. Signature of Contractor Project Manager: Signature of 18. The form is incomplete if there are no signatures and will be returned to the loan recipient.
21. Date: Date the form was signed by 18.



**Disadvantaged Business Enterprise (DBE) Program  
 DBE Subcontractor Participation Form**

A Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE subcontractor the opportunity to describe work received and/or report any concerns regarding the project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the DBE Coordinator at any time during the project period of performance.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

<b>Contract Item Number</b>	<b>Description of Work Received from the Prime Contractor Involving Construction, Services , Equipment or Supplies</b>	<b>Amount Received by Prime Contractor</b>







This form is intended to capture the DBE subcontractor’s description of work to be performed and the price of the work submitted to the prime contractor. An SRF Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services , Equipment or Supplies	Price of Work Submitted to the Prime Contractor
DBE Certified By: ___DOT      ___SBA ___Other: _____		Meets/ exceeds certification standards? ___YES ___NO ___Unknown



I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

<b>Prime Contractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

<b>Subcontractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>



**Disadvantaged Business Enterprise (DBE) Program  
 DBE Subcontractor Utilization Form**

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE<sup>1</sup> subcontractors<sup>2</sup> and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Issuing/Funding Entity:			

I have identified potential DBE certified subcontractors	__ YES	__ NO
--	--------	-------

If yes, please complete the table below. If no, please explain:

Subcontractor Name/ Company Name	Company Address/ Phone/ Email	Est. Dollar Amt	Currently DBE Certified?

Continue on back if needed

<sup>1</sup> A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

<sup>2</sup> Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**Disadvantaged Business Enterprise (DBE) Program  
DBE Subcontractor Utilization Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

<b>Prime Contractor Signature</b>	<b>Print Name</b>
<b>Title</b>	<b>Date</b>

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

SRF Attachment 1

"General Decision Number: C020240003 02/23/2024

Superseded General Decision Number: C020230003

State: Colorado

Construction Type: Heavy

Counties: Alamosa, Archuleta, Baca, Bent, Chaffee, Cheyenne, Clear Creek, Conejos, Costilla, Crowley, Custer, Delta, Dolores, Eagle, Elbert, Fremont, Garfield, Gilpin, Grand, Gunnison, Hinsdale, Huerfano, Jackson, Kiowa, Kit Carson, La Plata, Lake, Las Animas, Lincoln, Logan, Mineral, Moffat, Montezuma, Montrose, Morgan, Otero, Ouray, Park, Phillips, Pitkin, Prowers, Rio Blanco, Rio Grande, Routt, Saguache, San Juan, San Miguel, Sedgwick, Summit, Teller, Washington and Yuma

Counties in Colorado.

HEAVY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 14026 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.</li></ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 13658 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on</li></ul>

that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/05/2024
1	02/23/2024

ELEC0012-006 09/01/2023

ALAMOSA, ARCHULETA, BACA, BENT, CHAFFEE, CONEJOS, COSTILLA, CROWLEY, CUSTER, FREMONT, HUERFANO, KIOWA, LAS ANIMAS, MINERAL, OTERO, PROWERS, PUEBLO, RIO GRANDE, SAGUACHE COUNTIES

	Rates	Fringes
Electricians:.....	\$ 31.90	14.96

ELEC0068-011 06/01/2023

CLEAR CREEK, EAGLE, GILPIN, GRAND, JACKSON, LAKE, LOGAN, MORGAN, PHILLIPS, SEDGWICK, SUMMIT, WASHINGTON AND YUMA COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 43.20	18.38

ELEC0111-002 09/01/2023

	Rates	Fringes
Line Construction:		
Groundmen.....	\$ 24.61	21.25%+7.40
Line Equipment Operator.....	\$ 39.77	21.25%+7.40
Lineman and Welder.....	\$ 55.22	24.25%+7.40

\* ELEC0111-008 01/01/2023

DOLORES, GARFIELD, GUNNISON, HINSDALE, LA PLATA, MOFFAT, MONTEZUMA, RIO BLANCO, AND ROUTT COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 27.10	12.62

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 \* ELEC0111-010 01/01/2023

OURAY, PITKIN, SAN JUAN AND SAN MIGUEL COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 33.10	13.80

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 \* ELEC0111-014 01/01/2023

DELTA AND MONTROSE COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 27.10	12.62

-----  
 ELEC0113-004 06/01/2023

CHEYENNE, ELBERT, KIT CARSON, LINCOLN, PARK AND TELLER COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 35.70	17.52

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 ENGI0009-004 05/01/2023

	Rates	Fringes
Power equipment operators:		
Mechanic.....	\$ 34.58	14.25
Motor Grader: Blade-finish..	\$ 34.58	14.25
Motor Grader: Blade-rough...	\$ 34.05	14.25
Roller: self-propelled, all types over 5 tons.....	\$ 34.05	14.25
Roller: self-propelled, rubber tires under 5 tons...	\$ 33.62	14.25
Trackhoe.....	\$ 34.21	14.25

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 PLUM0003-003 06/01/2023

CLEAR CREEK, GILPIN, GRAND, JACKSON, LAKE, LOGAN, MORGAN, PHILLIPS, SEDGWICK,  
 SUMMIT, WASHINGTON, AND YUMA. PARTS OF ELBERT, EAGLE, KIT CARSON, LINCOLN, AND PARK  
 COUNTIES

	Rates	Fringes
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PLUMBER.....\$ 48.23 19.77

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PLUM0058-010 07/01/2023

ALAMOSA, BACA, BENT, CHAFFEE, CHEYENNE, CONEJOS, COSTILLA, CROWLEY, CUSTER, ELBERT (Southern portion including towns of Elbert, Matherson and Simla), FREMONT, HUERFANO, KIOWA, KIT CARSON (Including towns of Dfalgler, Siebert, Vona, Stratton and Bethune), LAS ANIMAS, LINCOLN (Including towns of Geona and Arriba in the southern portion of the county), MINERAL, OTERO, PARK (Including towns of Fauplay, Hartsel and Lake George), PROWERS, PUEBLO, RIO GRANDE, AND SAGUACHE COUNTIES

Rates Fringes

PLUMBER.....\$ 43.90 16.83

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PLUM0058-012 07/01/2023

TELLER COUNTY

Rates Fringes

PLUMBER

Includes HVAC Work.....\$ 43.90 16.83

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PLUM0145-004 07/01/2023

ARCHULETA, DELTA, DOLORES, EAGLE (Eagle County is divided from where Pitkin and Lake Counties join on the north, and in a straight line to and including the town of Edwards and northerly to the south east corner of Routt County), GARFIELD, GUNNISON, HINSDALE, LA PLATA, MOFFAT, MONTEZUMA, MONTROSE, OURAY, PITKIN, RIO BLANCO, ROUNT, SAN JUAN AND SAN MIGUEL COUNTIES

Rates Fringes

PLUMBER.....\$ 37.57 14.93

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\* SUC02001-005 12/20/2001

Rates Fringes

Carpenters:

Form Building and Setting...\$ 16.16 \*\* .82  
All Other Work.....\$ 15.72 \*\*

Cement Mason/Concrete Finisher...\$ 14.76 \*\* 2.28

Laborer, common.....\$ 11.11 \*\* 3.80

PIPEFITTER.....\$ 18.13 1.84



Power equipment operators:

Backhoe.....	\$ 15.93 **	3.58
Bobcat/Skid Loader.....	\$ 20.22	4.41
Bulldozer.....	\$ 15.08 **	4.44
Excavator.....	\$ 15.39 **	
Front End Loader.....	\$ 15.86 **	3.59

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====  
\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

## SECTION 01000 - ADDITIONAL GENERAL REQUIREMENTS

### SCOPE OF ADDITIONAL GENERAL REQUIREMENTS

The provisions of these Additional General Requirements supplement the General Requirements in the Agreement and the State Revolving Fund - Required Specifications. The requirements detailed in this section are as applicable to all of these Contract Documents as if the requirements were specifically stated in each section, unless the requirements are specifically superseded within a specific section.

### CONFORMANCE WITH TOWN STANDARDS & SRF BID SPECIFICATIONS

In addition to conforming with these Contract Documents, all work shall be completed in conformance with the Town of Ridgway Standard Specifications and Typical Drawings for Infrastructure (Town Standards), latest revisions which are available at Town Hall and on the Town's website. Should there be a conflict between or within the documents, they should be brought to the Engineer's attention. Typically, the most stringent standard will apply. All work must also comply with the State Revolving Fund Required Bid Specifications and all applicable local, State and Federal requirements.

### MATERIALS

The Contractor shall furnish all materials needed to complete the Work required under the terms of his Contract, except those materials specified to be furnished by Owner. Materials incorporated in the Work and not specifically covered in the Specifications shall be the best of their kind. Unless otherwise specified, all materials and equipment incorporated in the Work under the Contract shall be new.

The Contractor shall submit satisfactory evidence of compliance with the specifications of such materials to be furnished by him and used in the Work as the OR may require to demonstrate that the materials meet the contract requirements. Documentation and certifications that materials are consistent with SRF standard provisions comply with American Iron and Steel (AIS) requirements must also be furnished.

### DESIGN CRITERIA AND COORDINATION

Drawings and specifications are complementary; what is called for in either of these is binding as though called for in both. In cases of conflict between and within the plans and specifications, the Contractor shall notify the Engineer of the conflict and shall obtain a written interpretation or clarification from the OR. Except for some unusual circumstance, the most stringent requirement will apply.

References in these Contract Documents to Project Manager, Inspector, Architect, shall be read to refer to the Owner's Representative (OR).

The Contractor is responsible for reviewing and understanding Contract Documents and documents incorporated by reference, a copy of which he shall have available on site. Contractor shall execute his work in accordance with the Contract Documents. Additional work and materials required to bring the work in conformance with the Contract Documents shall be provided at no additional cost to the Owner.

Contract Drawings are diagrammatic in character and do not necessarily indicate every required offset, etc. The Contract drawings shall not be scaled for roughing-in measurements nor be used as shop drawings. Where shop drawings are required for these purposes, or have to be made from field measurements, Contractor shall take the necessary measurements and prepare the drawings. Before beginning any installation work, Contractor shall

carefully study all contract drawings and check for interference. If conflicts are discovered as work progresses, a set of prints marked with red pencil showing recommended resolution shall be submitted to the OR for approval prior to installation. Contractor should anticipate needing to adjust his work to fit with existing improvements as part of his scope of work included in the cost of the applicable bid item.

#### CONTRACTOR'S USE OF PREMISES

Confine operations to areas permitted by law, ordinances, permits, and the Contract Documents. Do not trespass onto private property. Do not unreasonably encumber the project with materials or equipment. Coordinate use of the authorized work area with the Owner and others who may need access at various times including other contractors and emergency officials. Assume full responsibility for protection and safekeeping of products stored on and off premises. Move any stored products which interfere with operations of Owner or others. Obtain and pay for use of additional storage or work areas needed for operations.

#### ADDITIONAL CONTRACTOR RESPONSIBILITIES

NUISANCES - Contractor shall take all necessary precautions to control noise, dust, water and air pollution, and damage from vibration of equipment used in construction both on and off site. Noise shall be reduced by proper use of mufflers and other appropriate means on motorized equipment. Noise levels during construction shall not be greater than permitted by OSHA regulations and Town ordinances, both on site and along routes where the Contractor's operations are in progress. Take such measures as are required to keep dust and mud and all other nuisances controlled at the Work site and the surrounding areas impacted by the construction.

SITE SECURITY - Security of the site shall be the Contractor's responsibility from Notice to Proceed until Contract completion, final acceptance, and final payment including protecting and securing materials and equipment furnished by supplier(s).

SUPERVISION - Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents and so that it will proceed in a regular sequence without delays including prompt cleanup. Contractor shall keep a competent superintendent of work on the premises at all times to receive instructions and to comply with them. The superintendent shall have full authority to act on behalf of the Contractor and directions given to the superintendent shall be considered given to the Contractor. At most times the superintendent shall not be engaged in operation of equipment.

WORK SEQUENCE - The sequence of construction will largely be left to the Contractor, but Contractor shall sequence his work in a manner that ensures potable water of adequate pressure is provided to all Town water customers. There is a requirement to begin the project by submitting a method statement regarding how the work will be completed including installing a temporary bypass for the ductile iron pipe that is proposed to be replaced. That can be done in phases or all at once. Reconnecting services lines and water mains will require temporarily interrupting service to a number of customers. Impacted customer notice requirements are provided elsewhere in the contract documents as well as the Town Standards as are requirement to execute the work in a manner that will minimize the time service is interrupted. The method statement shall also provide details how the tie ins will be completed.

COMPLETION SCHEDULE - The contract time is very tight and it is likely the Contractor will need to be using at least two crews a portion of the time in order to complete the work in the timeframe specified.

EXISTING CONDITIONS - Prior to commencing construction, the Contractor shall be responsible for documenting the existing condition of the construction work zones and surrounding areas. Photographs and written descriptions of all substandard pre-existing conditions are recommended. Width and conditions of roads, driveways, vegetation, and existence of drainage should be noted for roadways, as should vegetation in sub standard condition, and broken fences and other private structures which may be in need of repair. Unless sub-standard conditions are adequately documented prior to commencing construction, the Contractor will be held responsible for restoring the site and accesses to conditions which the Owner considers to be those which are standard and/or were pre-existing. Since construction equipment tends to be destructive of gravel and paved roads, particular attention should also be paid to recording conditions of roads which will be traversed by construction equipment especially if there will not be any construction along the specific roadway. Roadways and other improvements damaged by Contractor's construction shall be repaired at Contractor's expense

PROJECT LAYOUT - Owner will provide a benchmark and two points for a control line. The Contractor will be responsible for engaging a licensed surveyor for laying out of his work and shall protect all staking and other controls as well all control for others working at the site. Prior to commencing construction, contractor shall have offset stakes for the earthwork, piping, and structures set. Provide a minimum of two offset stakes for all structures and appurtenances. Provide copies of survey notes to OR promptly.

CODE ISSUES - Contractor shall coordinate his work with building, electrical, and plumbing inspectors as applicable. Contractor shall secure and comply with any needed electrical, dewatering, and stormwater permits as well as any other permits and licenses needed to properly complete the work. Contractor shall notify Engineer promptly when Contractor notes that Contract Documents fail to comply with codes and regulations. If needed, changes will be made to Contract Documents to adjust to such requirements. Contractor shall assume responsibility for Work known to be contrary to such requirements if notice is not provided prior to award of the work.

NOTIFICATIONS - The Contractor shall notify the Town at least 3 working days before beginning any Work. If, for any reason, the Contractor should halt Work on a project during any stage of construction for more than one working day, it shall be the responsibility of the Contractor to notify the Town or its designated representative a day in advance of resuming construction. Notify the Owner at least one business day in advance of any testing and coordinate with the Town when scheduling any training for Town staff taking into consideration staff's working schedule. Contractor shall notify customers as required below in "Public Safety and Convenience".

#### PROTECTION OF UTILITIES, FACILITIES, PROPERTY, AND IMPROVEMENTS

The locations of the utility facilities as shown on the plan sheets and/or herein described as Quality Level C.

The Contractor shall contact the Utility Notification Service of Colorado at 1 (800) 922-1987 in minimum of 3 business days in advance of work. The Contractor shall notify all utility companies and interested parties prior to commencement of work in order to ensure that there will be no unnecessary or unplanned interruptions of services during construction. Contractor shall notify the Town at least two days in advance of when Contractor needs the Town to operate its valves and other town facilities to facilitate Contractor's work.

Contractor shall coordinate and cooperate with utility Owner in their removal, adjustment, and relocation operations so that the utility work can be accomplished without impacting the construction schedule.

The Contractor shall be responsible for coordinating the adjustment of utilities on this project. The Contractor shall keep each utility company including but not limited to the Town advised of any work being performed in the vicinity of their facilities so that each utility company can coordinate any needed locates, adjustments or inspections. The Contractor shall provide the appropriate utility company ample notice, but not less than three

(3) working days, prior to commencing activities in the vicinity of their facilities. Any work performed by the Contractor on behalf of the impacted utility company shall be paid by the utility company requiring the work, unless otherwise provided herein, or agreed to in writing by the Project Engineer and the Town.

The Contractor shall be required to verify the type and location of all utilities within close proximity to the work being performed. The Contractor shall take the necessary precautions to protect all utilities in place by considering adjusting the location his work to avoid the conflict. Any adjustments made to avoid a utility conflict shall be pre-approved by the project engineer. In the event a utility cannot be protected in place, the utility will be required to make adjustments to its facility to avoid the conflict. This work will be performed by the utility concurrent with project construction thereby creating restrictions on the contractors work progress. The Contractor is advised to plan for these contingencies when bidding this work as no additional payment will be made for delays associated with this work. Payment for utility relocation work will be handled via a separate agreement between the impacted utility and the Owner. The Contractor shall be responsible for coordinating this work.

A quality investigation of level C was conducted for this project. The project plans do not address all details of construction around or near existing utilities. Contractor shall use due care and work with impacted utilities to ensure adequate protection of all utilities. The following contacts are provided for contractor convenience:

Ridgway - Water, Sewer, storm, drain	Randy Barnes	970 729 1389
San Miguel Power	Jeremy Fox	970 729 1547
Century Link - Phone	Kirby Bryant	970 259 0511
Black Hills Energy	Danny Weisling	970 729 1174

Pothole existing utilities sufficiently in advance of work to allow for gradual adjustment of work if needed and to insure protection of existing utilities. Include potholing in the cost of the work to which it is related. Contractor shall notify Engineer of any conflicts before making adjustments.

Obstructions known to the Engineer are shown on the plans, however, the locations shown may prove inaccurate and other obstructions not shown may be encountered. In all cases, the Contractor at all times shall take proper precautions for the protection of and prevent damage to public and private property including utility lines and services, and appurtenances, manholes, valve boxes, survey monuments, fences, plantings, and other structures and improvements. Hand excavation and support of existing lines shall be used where necessary. Cutting utility lines to facilitate construction is prohibited unless approved for cause in writing by the Engineer at least 24 hours in advance of the work. Such approval may require special measures to ensure proper restoration of any cut lines. The Contractor shall be liable for all damages to existing utilities, structures and improvements, public or private caused by his activities or inactivities, and he shall hold the Town harmless from any liability or expense for injuries, damages, or repairs to such facilities. The Contractor shall at all times take proper precautions for the protection of and replacement or restoration of driveway culverts or pans, street intersection culverts, pans, or aprons, storm drains or inlets, fences, service lines, irrigation ditches and crossings and diversion boxes, mail boxes, shrubbery, flowers and ornamental trees, driveway approaches and all other public and private installations and improvements that may be encountered during construction.

The Contractor is required to provide any impacted property with access to and from the property during the time of construction. Existing roads and driveways shall be resurfaced with the presently existing type of surfacing whenever existing surface is damaged.



### Utility Conflicts

Contractor should expect that he will need to cross under utility mains and services of buried utilities without cutting such lines. Contractor shall pothole and locate utilities that will need to be crossed well in advance of approaching them with his work. The need to pothole and to cross and to make adjustments to accommodate other utilities and improvements shall be anticipated and included in the cost of the work rather than paid separately. When during construction the Contractor finds an underground utility conduit (mains and services), including, but not limited to, water, sewer, gas, air, dry utilities, and drainage structures, and any above ground utility facilities that could potential interfere with Contractor's alignment, the Contractor shall notify the utility owner and the Engineer well in advance of Contractor's approach to such utility. Such owner and the Engineer shall concur with Contractor's approach or may offer an alternate approach. Contractor shall anticipate needing to accommodate such conflicts rather than expecting the other utility to make adjustments. Contractor will need to keep the existing lines at the plant in service until such time as the new lines and renovated facilities are placed in service. A method statement for how that will be accomplished shall be submitted and approved by the Engineer before commencing work in the plant area.

### Responsibility for Repair

Should any utility be damaged in the construction operations, the Contractor shall immediately notify the owner of such utility as well as the OR, and unless authorized by the owner of the utility, the Contractor shall not attempt to make repairs. The Contractor will be responsible for the cost of repair of underground pipes, wires or conduits, etc. damaged by them or their subcontractors.

The Contractor will be responsible for the repair of any damage or destruction of property resulting from his activities, or his neglect, misconduct, or omission or method of execution or non-execution of the work or caused by defective work or the use of unsatisfactory materials on and off site. The Contractor will restore such property to a condition equal to or better than that existing before such damage or injury was done by repairing, rebuilding, or replacing it as may be directed by the Town or the property owner, and they shall make good such damage or destruction in a manner acceptable to the Town and the property owner.

All survey monuments disturbed or removed by the Contractor, his employees, or sub-contractors will be replaced by a land surveyor registered in the State of Colorado, at the Contractor's expense.

### Public Safety and Convenience

The Contractor is responsible to ensure that his work site and personnel are safe and are at all times complying with all OSHA requirements and good safety practices. The Contractor is responsible for ensuring the safety of the public at all times.

Disruption in Service: Should it be necessary for any utility service to existing customers or the Town to be disrupted for any reason, the Contractor shall provide as much notice as possible to those whose who's service will be disrupted, coordinating such activity with the Town to minimize impact on users and assist the Town in providing inspection. At a minimum, the Contractor shall provide written notice to each effected consumer at least two business days in advance. Notice shall be by personal contact and written notice to each structure and shall state the day, time and anticipated duration of the outage. When service to commercial customers including but not limited to the Town will be disrupted, the Contractor and the Town shall meet with each business at least three days in advance and determine when it would be least inconvenient to have service disrupted which may require late night or early morning work. If at all possible, the service interruption shall be at a time which will have the least impact on all the customers effected. Should construction necessitate road closures, advanced notice in

local newspaper will also be required in addition personal contact to those directly impacted and emergency services. When the work involves excavation and/or compaction adjacent to any building or wall along the work, the Contractor will give property owners sufficient notice thereof, in writing with a copy to the Town.

Emergency Disruption: When service is unexpectedly disrupted, the Contractor shall notify each effected consumer and Town Hall as expeditiously as possible and notify when service will be restored and shall use all means at his disposal to minimize the length of disruption.

Minimizing Disruptions: The length of disruption in service shall be kept to an absolute minimum. All work which can be done in advance shall be done and inspected and found acceptable by the Town and other appropriate entities before the service interruption begins. All personnel, materials, and tools shall be on site and ready prior to disrupting service. Contractor shall make use of personnel, materials, and equipment which will reduce the length of service disruption.

Phasing Disruptions: When the work which will cause the disruption can be phased, the Contractor in coordination with the Town, shall work with the effected customers to determine whether one long or multiple shorter disruptions are preferable. Contractor will be expected to utilize the method that the Town determines minimizes the disruptions and inconvenience.

#### PROTECTION OF POTABLE WATER SUPPLY, STREAMS, LAKES, AND RESERVOIRS

The Contractor shall be sure that waters used for cleaning, testing, flushing, etc are disposed of in a manner which will not create a health, safety, water quality, or nuisance problem. He shall furnish all needed backflow devices to ensure sanitary protection of the Town's water supply. The Town reserves the right to curtail the Contractor's use of water during periods of shortage in its transmission and distribution system.

The Contractor will take all necessary precautions to prevent pollution of streams, lakes, and reservoirs by sediment, fuels, oils, bitumens, calcium chloride, fertilizers, insecticides, sewage, or other harmful materials. Contractor shall conduct and schedule their operations to avoid or minimize runoff and/or siltation of streams, lakes, and reservoirs. All work must conform to all applicable local, state, and federal regulations. Additional protections for potable water supply are included in Division 2.

#### TRAFFIC CONTROL

The Contractor is required to provide adequate construction signage, flagmen, barricades, etc. to warn vehicular and pedestrian traffic of work in progress, obstacles, transport of loads, etc., and divert traffic as may be required in the course of construction. All signing and traffic control shall be subject to approval of the Town police and generally in accordance with the Manual of Uniform Traffic Control, and where applicable, a CDOT permit. When specifically authorized by the Town, portions of a street may be allowed to be partially closed to traffic for construction, though typically not more than one lane of the street at a time nor more than one block at a time. Contractor shall make every attempt to minimize time of such closures. In addition to the requirements listed above under "Disruption of Service", it shall be the responsibility of the Contractor to notify the Police, Fire, Ambulance, and other applicable emergency services at least 48 hours prior to such closures. The Contractor shall not have construction equipment or materials in lanes open to traffic at any time unless directed by the Engineer. Unless otherwise approved by the Town during non-working hours, the roadways shall be restored to safe, pre-construction travel conditions for the free flow of traffic for vehicles and pedestrians. Any maintenance required to restore the roadway to this condition, including, cleaning of the roadway, shall be done prior to opening the areas to traffic or completing the work for the day. There is no pay item for traffic control and

notice. Contractor shall include these costs in the costs of the bid items to which traffic control and notice are incidental.

#### SITE INFORMATION

There are a number of buried and overhead utilities and drainages in the project area including water, sewer, irrigation, phone, cable, fiber, gas, and power and maybe others. The Contractor should anticipate such conflicts and be careful to not harm any of the buried or exposed utilities or improvements. See additional information above in "Utility Conflicts". The information on the construction plans is based on what was observed during design survey and the record plans of previous construction at in the area. If unexpected improvements are encountered which require relocation or disconnection, make written request to Engineer for decision on proper resolution of any interferences. Such conflicts shall not be an unanticipated site condition. It is expressly understood and agreed that the Owner assumes no responsibility whatsoever for the unexpected items and that it is necessary to keep existing or bypass lines operational until new lines and appurtenances are ready for use.

#### Property Limits and Access

The proposed Work is principally within Town rights of way, easements of the Town, property owned by the Town and with written land owner consent, private property. The Contractor is reminded that he is to stay within the property lines of the site for all construction including staging, storage of materials, etc., unless additional easement is obtained for use of other property at Contractor's expense. A copy of a written agreement between the Contractor and the property owner shall be provided to the Town should Contractor arrange to use private property. In addition to the Contractor's requirements, space will be needed for storage of materials and equipment of other contractors and the Town as well as other users' work or otherwise present in the area. Contractor should carefully examine the work site and limited spaces available, access challenges, the steep slopes, encroachments, weather conditions, and other factors when evaluating the costs of the work and include those costs in his bid.

#### Surface water, Groundwater, & River Flows

The Contractor is responsible for directing surface waters away from the construction area and for handling the groundwater encountered.

The Contractor is reminded that groundwater levels fluctuate and that actual field conditions can not be accurately predicted. It shall be the responsibility of the Contractor to control the groundwater level as needed for construction. There is no specific pay item for this work; dewatering costs should be included as part as part of the work for the project. One should expect shallow groundwater table in the work area and should expect the need to dewater, stabilize trenches, and provide gravels as bedding and partial backfill and fabric for isolation of such materials and include those costs in the costs of the work with which is it associated.

#### Soils

A large section of the project is in an area with steep slopes with soils that could be incompetent. The Contractor shall also expect that the soils at the work area and the roads and surroundings areas maybe soft, saturated, and incompetent. The cost of handling these conditions shall be included in the cost of Work and will NOT be paid as stabilization.

### Coordination

Construction of the Work in this contract is may be going on at the same time other work is being constructed in the work area. Contractor shall coordinate his operations with others working in the area including the Town, allowing multiple projects to proceed without interferences.

### Additional Site Information

Should the Bidder feel additional information is needed to accurately bid the work, he shall make arrangements with the Owner to conduct such additional studies as he sees fit, with minimum disruption to the site and at the Contractor's expense.

### Limited Use of Site Information

The Contractor is advised that the data discussed above, and any site or utility information made available by the Owner is NOT a part of the Contract and is solely for the convenience of the Contractor. It is expressly understood and agreed that the Owner assumes no responsibility whatsoever with respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of the interpretations set forth therein.

### REQUIRED PERMITS

The Contractor shall determine what permits will be needed to complete the Work and secure and comply with all needed permits. Costs for securing and complying with needed permits shall be included in the bid items to which they are incidental.

### Dewatering Permits

The Contractor will need to determine whether he will need a dewater permit and if so, Contractor shall apply for and comply with such permit(s).

If dewatering is anticipated, the Contractor will be required to submit a Notice of Intent to Construct Dewatering Well(s) (Form GWS-62) available at <https://dwr.state.co.us/eforms> at least 3 days prior to construction of a dewatering well and pay any applicable permit fees. A copy of the CDPHE general permit and fact sheet to be able to discharge the water are available at: <https://cdphe.colorado.gov/dewatering-general-permit-program>. Refer to these websites for information about the requirements of these permits. The CDPHE permit can take 60 days to be issued.

Note that the State Engineer's Office and/or CDPHE may add some additional conditions, which will be binding on the Contractor. For the dewatering activity to be a temporary activity and not need an augmentation plan, it is necessary that there be no consumptive use of the water. This will likely require piping the outflow from any dewatering well(s) directly to the river. The discharge pipe or sump shall be sized, furnished and installed by the Contractor exclusively for his purposes.

### Colorado Department of Public Health and Environment Stormwater Permit

CDPHE regulations require that any construction larger than 1 acre have a storm water permit and a storm water management plan. Information and forms regarding the storm water permit is available at (303) 692-3517 and at:

<https://cdphe.colorado.gov/cor400000-stormwater-discharge>

The Contractor will be required to secure a storm water permit and develop and implement a storm water management plan. Contractor shall provide Engineer and Owner with copies of the storm water permit and the storm water management plan. Contractor shall be solely responsible for correctly implementing the storm water plan including closing out the permit.

#### Colorado Department of Transportation (CDOT) Permit

Overweight or Oversized loads will require a CDOT permit. Contractor shall secure and comply with any needed CDOT permits.

#### TEMPORARY FACILITIES

The Contractor shall make arrangements for any utilities he may need to accomplish the Work. Any temporary facilities and conveyances for use at the desired locations will be the responsibility of the Contractor.

The Contractor shall provide the necessary fire protection facilities to prevent and, if needed, abate any fire damage that may be created because of his operation in the area. Any damage resulting from fire caused by his operation will be the responsibility of the Contractor to replace or repair to original condition at his cost.

The Contractor will be required to provide sanitary facilities for his crews. Contractor shall provide and maintain adequate water service for drinking and sanitation purposes, as well as for construction purposes at the job site throughout the duration of this Contract.

The Owner will furnish water for the Contractor's use, in quantities necessary for reasonable dust and moisture control, flushing, and testing at locations designated by and at times convenient for the Owner. It shall be the Contractor's responsibility to transport the water to where it is needed. Unless otherwise authorized in writing, only Town employees shall operate the Town's water system. The Contractor shall conserve water and shall not waste or let streams flow unused and shall be sure that waters used for cleaning and flushing are disposed of in a manner which will not create a health, environmental, safety, or nuisance problem. The Owner reserves the right to curtail the Contractor's use of water during periods of shortage in its transmission and distribution system.

All costs of temporary facilities shall be paid for by the Contractor. There is no pay item for such facilities and their costs should be included in the work to which they are incidental.

#### SUBSTITUTIONS AND ALTERNATES

Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, utility or standard, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other suppliers may be accepted by Engineer if sufficient information is submitted by Contractor to allow Engineer to determine that the material or equipment proposed is equivalent or better in quality and operation to that named.

Contractor shall make written application to Engineer for acceptance thereof, certifying that the proposed alternate or substitute will properly perform the functions and achieve the results called for by the general design, be similar, and of equal or better performance, substance, and quality to that specified and be suited to the same use as that specified. Availability of parts and services as well as maintenance requirements and operational costs must also be comparable or superior to the materials or equipment specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice Contractor's achievement of on time Completion nor that it will impact performance and maintenance of the project adversely. If problems with

available space or layout arise, provide drawings detailing how such problems will be mitigated. Show all consequential changes that are necessitated by the use of the alternate and where additional engineering and/or design is required for the alternate, the Contractor shall furnish same for review by the Project Engineer. Note that if the layout could expand the area of impact submitted to the State for environmental clearance, the Contractor shall provide a drawing that can be submitted to modify the clearance. Should the area needed create the need for an environmental assessment, the Owner may elect to reject the alternate. Contractor shall be responsible for all costs and time associated with the use of an "equal" or "substitute" including all changes to other components and to project design which result from such use.

Engineer will be allowed a reasonable time within which to evaluate each proposed substitute. Engineer will be the sole judge of acceptability, in consultation with the Owner and review agencies, and no substitute shall be ordered, installed, or utilized without Engineer's prior written acceptance which will be evidenced by either a change order or approved Shop Drawing. Engineer will consider initial and long-term life cycle costs to Owner as well as anticipated performance in evaluating proposals for alternates and substitutes. Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any alternator substitute. Acceptance of an alternate or substitute is discretionary. Engineer will record time required by Engineer and Engineer's consultants in evaluating substitutions proposed by Contractor and in making changes in the Contract Documents occasioned thereby. Whether or not Engineer accepts a proposed substitute, Contractor shall reimburse Owner for charges of Engineer and Engineer's Consultants for evaluating each proposed substitute.

#### REFERENCE STANDARDS

Reference in the specifications to standard specifications or publications of technical societies or governmental agencies such as ASTM, AASHTO, CDOT, NEC and the like, shall refer to the latest edition adopted and published at the time of receiving bids. It shall be understood that all manufacturers, producers, and their agents shall have such reference standards available for reference and be fully familiar with their requirements as pertains to their product, material, or equipment and have copies available for review on the project. In case of conflict between reference standard and codes, the one having the more stringent requirements shall govern.

#### MANUFACTURER'S INSTRUCTIONS

Handle, store, install, connect, clean or condition specified products in strict accord with manufacturer's instructions and in conformity with project requirements to produce best results obtainable unless they conflict with the Contract Documents or where applicable regulations take precedence. Contractor shall obtain, have on site, and distribute necessary copies of such instructions, including three copies to OR.

#### PRODUCT DELIVERY, STORAGE AND HANDLING

Deliver materials, products and equipment to the project site in undamaged condition in manufacturer's original, unopened containers or packaging, with identifying labels intact and legible. Unload and handle materials in accordance with project specifications and manufacturer recommendations. Upon receipt, make overall inspection that equipment and materials have been received in good condition. All materials should be inspected for any damage or imperfections and problem materials should be marked rejected and handled as described below. Store and handle products as prescribed by manufacturer and as specified in the specifications in a manner to protect from damage by moisture, weather, abuse or construction operations, etc. Products may be stored on site where space and security constraints allow, or off-site in a bonded and insured warehouse approved

by the OR. Contractor shall pay all costs incurred for off-site storage facilities. PVC pipe stored for a prolonged period of time shall be protected from sunlight. Pipe discolored by UV light shall be rejected.

#### REJECTED MATERIALS AND WORK

All materials shall be free of any defects or damage. Anything defective or damaged found in the construction or on the construction site shall be marked and removed from the site and replaced with undamaged materials or work at no cost to the Owner. In the event the Contractor fails to remove rejected materials from the construction site within a reasonable length of time, the Owner may arrange for such removal at the expense of the Contractor. No extension of time will be allowed for replacing damage materials or equipment or correcting faulty work.

#### REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK

Unacceptable work is work, which includes but is not limited to faulty materials, equipment or workmanship, which does not conform to the requirements of the Contract, whether work has been performed by the Contractor or his sub-contractors or suppliers.

Unacceptable work, resulting from any cause, found to exist prior to the final acceptance of the work or within one year of final settlement, shall be removed and replaced in an acceptable manner at the Contractor's expense. The fact that the Engineer, OR, or other Town personnel may have overlooked the unacceptable work shall not constitute an acceptance of any part of the work. Nor shall payment of any estimate or progress payment nor the payment of any retained percentage shall relieve the Contractor of any obligations to correct any defective work or material.

Unauthorized work includes work that was done with improper materials or without adequate lines and grades having been established, work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans, or extra work done without the Engineer's authorization. Unauthorized work will not be paid for under the provisions of the Contract, or if paid for in error deducted from a future pay application, and may be ordered removed or replaced at the Contractor's expense.

If the Contractor fails to comply with any order of the Engineer made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced, and unauthorized work to be removed. The Engineer will deduct the costs for accomplishing such work from any monies previously paid, monies due, or to become due to the Contractor.

Prior to correcting any defective or unacceptable materials, equipment, or work, the Contractor shall provide a method statement for Engineer and possible approval of the proposed corrective actions.

#### LANDSCAPE & PROPERTY PRESERVATION

Movement of crews and equipment within the rights of way and over routes providing for access to the Work shall be performed in a manner to prevent damage to vegetation, landscaping, pavement, base, or property. All destruction, scarring, damage, or defacing of landscaping or property resulting from the Contractor's operations shall be repaired, replanted, reseeded, or otherwise corrected at the Contractor's expense before final payment. The adjoining property owner and the Engineer shall be the judges of satisfaction of the restoration work.

It shall be the responsibility of the Contractor to document any sub-standard conditions before his operations commence.

## SUBMITTALS

After Notice to Award, the Contractor shall submit samples, drawings and data for the Engineer's approval which will demonstrate fully that all the materials and equipment to be furnished will comply with the provisions and intent of these Specifications as well as funding agency requirements.

### Construction Schedule

Contractor shall provide a projected construction schedule for the entire Work. The Contractor will meet with the Engineer and OR to coordinate the development of the schedule. The Construction Schedule shall be a graphic summary (Gantt chart or bar chart) of the schedule the Contractor proposes to follow in the execution of the Work, and provide complete sequence of construction by activity and how his schedule is coordinated with others and with the need to keep the Town in water. A narrative of the schedule shall also be provided. The schedule shall show the phasing plan to accomplish the work. It shall also show any critical path and critical deadlines. The schedule for submittals shall show preparation and delivery of the submittals, review of submittal, and re-submittals and re-reviews if necessary. An updated project schedule shall be provided with each application for payment and a two week look ahead schedule provided weekly.

If, at any time during the course of the Work, the necessary progress is not being maintained, the Contractor shall make such changes in the work force employed as may be necessary to meet the Construction Schedule and contract milestones and time lines. An updated overall project schedule shall be provided with each pay application and at least monthly and shall be accompanied by a summary report. The report shall include work completed or if partially completed the percent completed, include major changes in scope, activities modified since the previous update, problem areas, anticipated delay factors and their impacts, the cause for such delays and corrective actions taken or proposed and their impacts. A two week look ahead schedule shall be provided weekly.

### Sub-Contractors and Suppliers

If not provided earlier, a list of sub-contractors and suppliers shall be submitted at the preconstruction conference which includes the scope of work for each and value of that work. Note that all sub-contractors and suppliers providing more than 5% of the work shall provide a qualification statement prior to award in accordance with the Instruction to Bidders.

### Schedule of Values

A schedule of values shall be provided to the Engineer within 10 days after bid award. The schedule shall be a detailed breakdown of the quantities and prices of work and materials required to perform and complete the Contract subdividing the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. The schedule of values shall allocate the entire contract sum among the various portions of the work. For lump sum items, itemize the materials and work in the item that represent 10% or more of the lump sum price. The total of the price breakdown shall not be unbalanced and each item shall contain the appropriate amount of overhead and profit applicable to that item. The schedule shall be reviewed by the Engineer who is entitled to request additional detail to support the schedule and/or to request changes to the schedule based on information gathered by the Engineer from the Contractor and other sources. An acceptable schedule of values must be provided to the Engineer in advance of the Contractor's first request for payment. Acceptance of the Schedule of Values by the Engineer shall not relieve the Contractor of the responsibility of performing all the Work needed to complete the project at the price bid.



### Shop Drawings, Cutsheets, and Samples

The Contractor shall furnish, without additional cost to the Owner, such quantities of construction materials as may be required by the Engineer for test purposes. After award and prior to the preconstruction conference, submit a schedule of when each submittal will be provided and when review is needed. Allow sufficient time for review and possible resubmittal and re-review. Incomplete or non-complying submittals will increase review times. No claim for delay will be granted for submittal review. Submit Shop Drawings, submittal, samples and/or manufacturer's literature on the following items as well as items requiring submittals in the technical specifications:

- Samples and test results for base and structural fill and bedding materials
- Cut sheet and specifications for piping, valves, fittings, manholes, appurtenances
- American Iron and Steel (AIS) documentation
- Concrete materials data and samples
- Concrete design mix with applicable test data, method statement, and pour schedule.
- Testing and start up procedures

Provide all necessary shop drawings accurately to a scale that is large enough to all pertinent features of the item, its layout, setting, and method of connection to the Work. The data shown on the shop drawings and for materials and equipment shall be complete with respect to quantities, dimensions, specified performance and design criteria and include relevant calculations to enable the Engineer to review the information. The Contractor shall furnish same without additional cost to the Owner.

If the submittal is a manufacturer's standard schematic drawings, the drawings must be modified to delete information that is not applicable and supplemented to provide additional information applicable to the project. Show dimensions and clearances required, performance characteristics, capacities, controls and any other pertinent data applicable to the project. Catalog sheets, brochures, diagrams, schedules, performance data and charts and other standard descriptive data shall be clearly marked as to what data is applicable and what is not to project.

All samples and test results submitted must be representative of the materials to be furnished on the project. Materials or equipment for which samples are required shall not be used on the Work until approval has been given by the Engineer in writing. Approval of any sample shall be only for the characteristics or for the uses named in such approval and no other. No approval of a sample shall be taken in itself to change or modify any Contract requirement. Contractor shall provide test results for actual bedding and base materials delivered to the project site.

Failure of any material to pass the specified tests or to verify that the materials or equipment meet the requirements of contract will be sufficient cause for refusal to consider under this Contract any further sample of the same brand or make of that material.

### Contractor Responsibilities

Submittals shall be made by Contractor to the Engineer, and not by suppliers, subcontractors, or manufacturers. All components of a system shall be submitted as a package. Contractor shall review, sign and date with his approval, and submit in orderly sequence all submittals required by the specifications allowing sufficient time for engineer to review and for resubmittal. By approving and submitting items to the Engineer, Contractor warrants that he has verified all field measurements, field construction criteria, materials, catalog numbers and similar data, and has coordinated each shop drawing with requirements of the Project. His submission shall certify in writing that the submittal meets the requirements of the Contract Documents for the construction.

Notify Engineer in writing at time of submission, of deviations in submittals from requirements of the Contract Documents. Contractor's responsibility for errors and omissions in submittals, or for deviations in submittals from requirements of the Contract Documents, is not be relieved by Engineer's review of submittals, unless Engineer gives written acceptance of specific deviations.

Begin no work which requires submittals until return of approved submittals with Engineer's initials or signature indicating review. Distribute copies of submittals after final review and retain an approved copy on the project site.

#### Engineer's Duties

Review submittals with reasonable promptness. Engineer's review and action will be only for conformance with the design concepts of the project and for compliance with the information required by the Contract Documents. Review of separate items does not constitute review of an assembly in which an item functions. Make comments or corrections on the submittal and Shop Drawing and/or by letter/memo, noting whether submittal is approved, approved as noted, or requires resubmittal. If the submittal is not approved, Contractor shall address the deficiencies identified in the Engineer's review and resubmit. Contractor shall highlight any revisions made to a submittal that were not in response to Engineer's comments. Submittals marked "Approved except as noted" need not be resubmitted, but the notes must be followed.

By approving a submittal, Engineer will not be deemed to have completed an exhaustive, continuous, or detailed review or that examinations has been made by Engineer to check the quality or quantity of Contractor's submittal. Engineer's review does not relieve the Contractor of his obligation to furnish the project in strict accordance with the contract documents. Nor will any approval by the Engineer relieve the Contractor from responsibility for errors or omissions in the submittal.

Engineer's approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has in writing called Engineer's attention to each such variation at the time of submission and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the submittal approval.

#### Operation and Maintenance Manuals

Submit operating and maintenance manuals for all operating apparatus and equipment furnished under the Contract to the Engineer following final approval of applicable submittals and before 50% completion. Provide a draft copy for review. After approval of the draft, furnish one searchable electronic copy (from which other electronic copies can be made) and 3 hard copies. Hard copies shall be bound in durable covers with: front cover stating general nature of the manual, clearly indexed or provided with thumb tabs for each item or product, and include a directory of all subcontractors and maintenance contractors with names, addresses and phone numbers, indicating the area of responsibility for each. Prepare all such manuals in approximately 8-1/2" X 11" format except where large format is needed for clarity. Emergency data shall be clearly marked and tabbed. Electronic copies shall include electronic bookmarks and hot links for the items listed above.

Manuals shall contain full information for each item of operating equipment including:

A general description of the operation of the entire system and explanation of the function of each piece of equipment and a detailed description of the operation.

Schematic diagrams and as-built wiring of control, mechanical, and electrical systems, circuit directories for each electrical, control, and communication panel which correspond to the labeling of same,

Valve Directory showing the tagging of all valves, valve number, location, function, and their normal and emergency operating position,

For every pump and motor provide make, model, and serial number, nameplate information, voltage amperage and power factor for motors, suction and discharge pressures for pumps and pump curves.

Instructions for installation, start-up and shut down operations, normal and emergency operations, including positions of all equipment, switches, valves, levers, pressures, temperatures, etc. during start-up, shut down, summer, winter operating conditions,

Inspection and maintenance requirements, procedures, schedules, safety precautions, and manufacturer's literature for all pieces of equipment and systems including (but not limited to) pumps, generators, transfer switch, controls, valves, etc. Include information on regular maintenance with schedules for daily, weekly, monthly, and less frequent tasks, assembly and disassembly of repairable units, troubleshooting guides, lubrication schedules, data sheets and complete nomenclature of all replaceable parts, their part numbers, current cost, and name and address of nearest vendor of parts and at least one alternate supplier, in electronic and paper format, including calendar reminders for monthly and less frequent tasks,

For each item, list the manufacturer and supplier including: addresses, phone numbers, name of local representative and local service agency if different from supplier. Mark neatly in ink the correct model number and data for the model number where the literature covers more than one model, and delete, or otherwise clearly indicate, all manufacturers' data with which this installation is not concerned. Catalog cuts alone are not acceptable unless they contain complete O & M and other instructional data and cross out any information not relevant to this project.

Any additional requirements included in the technical specifications

Include copies of all guarantees and warranties issued and copies of all approved submittals and shop drawings with all data concerning changes made during construction.

#### Record Documents

Maintain field record documents in clean, legible condition. Keep current, using permanent ink, and have available for inspection by Engineer at any time, at project site one copy of all drawings, specifications, addenda, approved submittals, shop drawings and engineering data, field test results, change orders, field orders and other Contract Documents. Do not use record documents for construction purposes.

If survey data will not be collected continuous, mark the locations and depths of installed work in a way that will preserve the data for the surveyor such as tracer wire and setting, labeling, and protecting PVC conduits or survey hubs at the locations. Hub or other engineer approved logging system shall log description, depth, swing ties to all the buried improvements. Wire and hub shall be protected until they can be surveyed by Contractor's surveyor typically at least on a monthly basis before submitting for each pay application. Contractor shall keep a written record of the information on each hub in case the hub is damaged. A copy of all the above required data shall be furnished to the Engineer at the end of each week for the work completed that week. Installation will not be considered completed until the data is furnished.

The Contractor shall deliver to the Engineer one complete set of final hard copy reproducible as-constructed drawings that clearly show the location of all piping (plan and profile), fittings, valves, appurtenances, manifolds,

meters, etc to scale and with detail drawings of the system of all work completed and all utilities and improvements exposed during contractor's operations for Owner records. The dimensional scale of such drawings shall be sufficiently large to clearly depict all aspects of the construction with detail drawings as needed to clearly show the Work. Also submit all information required in CAD (ACAD 2018 format dwg) and geo referenced shape files.

Such drawings shall at a minimum include:

1. Provide Northing, Easting, Elevation coordinates based on Ouray County control system using survey quality GPS or conventional survey equipment for horizontal and vertical location of all underground appurtenances and utilities, found or installed, referenced to at least 3 permanent surface improvements (property pin, power pole, street sign, fence corner, etc.) for each appurtenance. Provide coordinates for each meter, shutoff, fittings, valves,. etc. Also submit coordinate data as txt file containing Pt #, N, E, El, and description of point based on the Ouray County coordinate system.
2. Location of internal utilities and appurtenances concealed in construction, reference to visible and accessible features of the structure including but not limited to infrastructure concealed under or within the building. Document with photos and dimensions as well.
3. Changes made by Change Order or Field Order.
4. Details not on original Contract Drawings, including locations of buried utilities.
5. Furnish schematics as well as record drawings for pressure valves and meters
6. Shop Drawings - Maintain as record drawings: Legibly annotate shop drawings to record changes made after review and submit copies same as part of the Record Drawing package.

Submission of acceptable project record documents on paper, txt, shape, and cad to Engineer is prerequisite to final payment.

#### Failure to Comply/Furnish

If Contractor does not provide Record drawings or Operation and Maintenance manuals or other required submittals, the Owner may provide or contract those services (at Owner's discretion) and deduct the cost plus 10 percent of such services from payment due the Contractor. Retainage will not be released until acceptable O&M and Record data and drawings meeting the requirements above, in all the formats listed above are furnished.

#### Resubmission Requirements

Revise or provide new or additional data of submittals, shop drawings, samples, O&M information and record documents etc. as required from Engineer's review and resubmit as specified for initial submittal. Indicate any changes which have been made other than those requested by Engineer.

If more than one resubmittal is required to receive acceptance of the above by the Engineer, the cost of engineering review of the second and additional resubmittals may be deducted by the Owner from payment due to Contractor.

QUALITY CONTROL AND TESTING

All testing shall be performed by independent testing companies acceptable to the Owner and arranged and paid for by the Contractor to demonstrate his work is consistent with the contract requirements. For soils and concrete work, Contractor shall furnish preliminary representative test samples of structural fill and base materials, and concrete to an approved independent testing laboratory and shall pay for testing at the minimum frequencies specified for the work in Division 2 to determine that the materials and work conform with the Contract Documents. Contractor shall furnish casual labor and facilities to facilitate inspections and tests, obtain and handle samples at the site. Owner's Representative will designate the sites for testing and shall observe the testing for it to be considered a valid test.

Inspection, sampling and testing is required for the following work as well as other tests specifically enumerated in the technical specifications:

Excavation, Backfill, and Compaction	Section 02200
Piping	Section 02713

Notify OR and laboratory and testing personnel sufficiently in advance of operations to allow for assignment of personnel and scheduling of tests giving the OR written notice at least two work days before the time field tests for routine work are scheduled to be performed and a week for testing for equipment. Test results for quality control and quality assurance shall be provided to the Engineer as soon as the data is available and no later than a week from the testing.

The Contractor shall arrange and pay for concrete testing. Each concrete truck shall be tested for slump and air and at least one truck each day shall be tested for 7 and 28 day strength with 2 7 day cylinders and 3 28 day cylinders. If more than 25 cy are placed in a single day strength shall be tested for each 25 cy or portion thereof.

Contractor shall also arrange and pay for, any additional samples and tests for Contractor's convenience. "Convenience testing" is defined as testing to assist the Contractor in developing means and methods of optimizing equipment for handling, processing, and/or compacting the materials and tests to see how the work is progressing with respect to Contract requirements. Convenience testing results shall be provided to the OR as required for compliance testing. Changes in material characteristics, changes in compaction methods (number of passes, depths of lifts, percent moisture, etc.) and/or types of equipment used shall warrant additional testing.

If tests fail to meet specified requirements, the Contractor shall promptly determine the extent of the problem, e.g. testing on each side of the failed test, and shall remedy such deficiencies and shall be responsible for all costs associated with retesting deemed necessary by the OR to verify correction of deficiency.

Note that the Town reserves the right contract directly for testing as well for quality assurance.

The testing agencies and their representatives are not authorized to revoke, alter, relax, enlarge, or release any requirements of the contract documents nor to approve or accept any portion of the Work. The use of test results shall in no way relieve the Contractor of the responsibility to furnish materials and construction in full compliance with the Contract Documents.

CLEANING & SITE MAINTENANCE

Throughout the construction period, the Contractor shall provide all required personnel, equipment, and materials needed to maintain the site in a reasonable standard of cleanliness and in accordance with this sub-section.

Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws. Do not burn or bury rubbish or waste materials on project site. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains or in a manner which might cause ignition. Do not dispose of wastes into streams, ponds, or waterways.

#### Cleaning During Construction

Maintain work site, rights of way, and surrounding properties free from accumulations of waste, rubble, debris, and rubbish caused by construction operations. Wet down, as frequently as necessary, dry materials and rubbish to lay dust down and prevent blowing dust and debris both on and off site. At reasonable intervals during progress of work, clean site and surrounding properties, and dispose of waste materials, debris and rubbish in a legally allowable manner. Keep all work areas and other Contractor impacted areas in good usable condition. Provide on-site trash receptacles for collection and storage of waste materials in an orderly manner which will not impede normal or emergency access or people and equipment, nor obstruct drainage. Remove waste materials, rejected materials, debris and rubbish from the site and legally dispose of them at public or private facilities off Owner's property.

#### Pipe Line Cleaning

Contractor shall clean pipe lines, manholes, boxes, etc as needed for the progress of his work. The materials removed shall be disposed of in a legal, sanitary, and appropriate manner. Do not encumber public trash receptacles. As Contractor completes a section of work in an area, clean up and restoration of the area shall promptly follow. Requirements for cleaning and testing water lines are included in Section 02713.

#### Final Cleaning

At completion of work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all exposed and visible surfaces. Leave project clean and ready for use. Restore all disturbed areas to original condition. Clean specific equipment, products, and work as specified in the technical specification section for that work and in accordance with manufacturer's recommendations.

Maintain clean work site until project, or portion thereof, is occupied by Owner. Schedule final cleaning so Owner can accept a completely clean project. Owner will assume responsibility for cleaning at time of final payment.

If Contractor does not provide adequate cleanup the Owner may provide or contract those services (at Owner's discretion) and deduct the cost plus 15 percent of such services from payment due the Contractor.

#### PROJECT CLOSEOUT

##### Instruction

Instruct Owner's personnel in operation of all systems and other equipment, as required by specifications and for optimum operation. Contractor shall coordinate with the supplier to ensure that start up and training are provided in a timely fashion at times that work for the Town.

##### Final Inspection

Contractor shall submit written certification that he has inspected the project and found it to conform with the Contract Documents; work has been tested in presence of OR and is fully operational; and Project is completed. Engineer will make final inspection within 10 days after receipt of certification. Should Engineer consider that Work is finally complete in accordance with requirements of Contract Documents, he shall request Contractor to make Project Closeout submittals. Should Engineer determine that Work is not finally complete, he shall promptly notify Contractor, in writing, stating reasons. Contractor shall take immediate steps to remedy the stated

deficiencies and send a second written notice to Engineer certifying that Work is complete. Engineer will re-inspect the Work.

#### Reinspection Costs

Should Engineer be required to perform a second inspection because of failure of Work to comply with original certifications of Contractor, Owner will compensate Engineer for additional services, and deduct amount paid from final payment to Contractor.

#### Final Adjustment of Accounts

In coordination with the Engineer, Contractor shall submit final application for payment to Engineer in accordance with requirements of the Contract Documents (subject to the provisions of C.R.S. 38-26-107). Statement shall reflect all adjustments, including Original Contract Sum, additions and deductions resulting from previous change orders, changes in quantities, other adjustments, deductions for uncorrected work, penalties and bonuses, if any, liquidated damages, and re-review and reinspection payments; Total Contract Sum, as adjusted; previous payments; and sum remaining due. Engineer will then prepare final statement, reflecting approved adjustments to Contract Sum not previously made by change orders.

#### Closeout Submittals

Once the Engineer determined the Work is complete, he shall request the Contractor submit the following closeout submittals for review and approval by the Engineer and Owner:

- Request for Final Payment (on form included in the Contract Documents)
- Consent of Surety
- Release of liens from sub contractors and suppliers due more than 5% of Contract value
- Executed extended Warranties required in the Contract Documents

Closeout submittals shall be duly executed before delivery to Engineer.





## SECTION 02200 - SITE PREPARATION, EXCAVATION, BACKFILL, COMPACTION, AND RESTORATION

### PART I - GENERAL

These specifications are general in nature and are designed to cover excavation and backfill for trench, embankment, pipe line, manholes, fittings, service connections, appurtenances and structures. Additional requirements for a particular type of construction or use may also be covered in the specification for the specific application e.g. "Pipe Line Construction".

Where requirements for structures, embankments and/or piping are more stringent in other sections of these technical specifications than the requirements herein, these requirements shall be deemed to be superseded.

A Contractor shall comply with all applicable laws and regulations including "Rules and Regulations Governing Excavation Work" of the State of Colorado.

### DESCRIPTION

Work under this section includes clearing and grubbing, excavation, controlling surface flow, seep, and groundwater, dewatering and stabilization, bedding and backfilling, with moisture control, and grading, and compaction to specified density and elevations needed for construction of this project as well as complete site restoration. Also included are stockpiling excavated material to be used as fill and removal of unsuitable and excess soils from site and furnishing and installing flowable fill.

### RELATED WORK SPECIFIED ELSEWHERE

Section 02713 - Piping  
Section 03000 – Concrete

### SITE INFORMATION

Site information is presented in Section 01000.

### MEASUREMENTS AND LEVELS

Contractor shall verify all drawing measurements and levels in relation to existing elevations, grades, and adjacent structures, and determine conditions and requirements for excavations, fill, backfill, and all sheeting, shoring, bracing, and protection of the premises and buildings. Contractor shall carefully and accurately lay out all lines and levels of the new construction before proceeding with any Work.

### CONFORMANCE TESTING

All testing shall be performed by an independent testing lab acceptable to the Owner and arranged and paid for by the Contractor to demonstrate his work is consistent with the contract requirements and for all testing for his convenience and to establish methodology for his work. OR will determine location

and frequency of such tests to ensure that minimum requirements are met at all locations. Each lift shall be tested for compaction and moisture content at one OR designated locations per 300 lf of trench and one test per 1000 sf of embankment and results shall be approved by the OR. If tests fail to meet the specified density or moisture content, or to pass proof rolling tests, additional tests will be required in the vicinity of the failed test to determine the extent of the inadequate compaction, then corrective actions shall be taken by the Contractor. After the deficiencies have been corrected, additional tests will be taken in approximately the same location and number as was used to determine the extent of the failed area to demonstrate conformance with the specifications. The cost of all testing required due to failed tests and as needed to determine adequacy of compaction methods shall also be paid by the Contractor. Given the remote location of the work, the Town will allow for density testing to be reduced to every other day with the understanding that the Contractor may be asked to expose work already covered to allow for testing of lifts that were completed and covered when testing was not available. In addition, Town reserves the right to contract directly for any quality assurance testing it elects to have completed. The Contractor will be responsible to reimburse the Town for any quality assurance tests that fail to meet the contract requirements.

Tests for density control to verify the compaction of the materials in any area of backfill will be in accordance with the requirements of ASTM D 2922 - Density of Soil and Soil Aggregate In-Place by Nuclear Methods, or ASTM D 1556 - Density of Soil In-Place by the Sand-Cone Method. The Engineer will also use visual observations of deflection (proof-rolling) to determine the adequacy of moisture control and compaction. Contractor shall provide advance notice of when testing will be conducted. Testing conducted when the OR or Engineer is not present will be deemed to have been for the Contractor's convenience and shall be repeated OR or Engineer is present.

## PART II - PRODUCTS

### MATERIALS

#### Submittals

Contractor shall furnish preliminary representative test samples of native and base materials to an approved independent testing laboratory and shall pay for testing to determine that the materials conform with the Contract Documents and to determine proctor and optimum moisture values for each earthen and base material proposed for use on the project. Appropriately labeled samples of each material tested shall be kept on site in a one gallon zip lock bag for comparison with materials being placed. All fill and backfill material must be tested and proctor curves, and other required lab test results shall be available on site and approved by the Engineer before fill and backfill is started. These test results will be used as basis for density control of compaction operations.

Submittal information for materials specified by CDOT tables or maximum gradation requirements will require sieve analysis and other test results to demonstrate conformance with CDOT table data and notes. Submittal shall include optimum moisture density curve for each type of material or combination of materials encountered or utilized and Atterberg limits for each clayey materials. Owner will use test results as basis for density control of compaction operations.

Materials for foundation(s) shall meet the requirements in the approved foundation submittal.

Conduct tests for determination of maximum density and optimum moisture in accordance with the requirements of ASTM 698 - Moisture density relations of soils using a 5.5 lb. hammer and 12-inch drop for native materials and ASTM 1557 Modified Proctor for structural and road base materials. With ASTM 698 use method A, B, C, or D as appropriate, based on soil condition and judgment of the qualified party conducting tests. When appropriate, determine the correct rock correction. Samples tested shall be representative of materials to be placed.

Organic content test results shall represent organics by percent of volume and by weight.

### General Use Materials

General use materials are intended to be used in trenches above the pipe zone, and for embankment fill to sub-grade elevations.

On site materials obtained from excavation, free of any unsuitable materials (see below), shall be deemed acceptable for general use. On site materials encountered during excavations which are appropriate for specific uses shall be separated and stockpiled for their later intended use (i.e. topsoil, fine bedding, etc.).

Imported and on site material for general use shall be non-expansive soil, pit run, or bank run sands and gravels with 4" maximum rock size (up to 6" for gross embankment where lifts are 8" or more), adequate binders, capable of being compacted and tested as specified herein unless other material is specified for the particular structure or work.

Imported materials for general use shall be taken from borrow areas acceptable to the Engineer. All borrow materials shall meet the same quality criteria as is required herein for on site materials to be used as fill.

Engineer reserves right to reject any material he finds to be unacceptable.

### Bedding and Pipe Zone Materials Classification

Pipe zone area is defined as the backfill placed within twelve (12) inches of the pipes, fittings, and appurtenances. All pipe zone materials must be free of sharp edges and other matter which could damage the pipe.

Class A            Flowable fill having one half sack of cement per cubic yard of concrete. Aggregates and sands for flowable fill shall meet the requirements for concrete in in the CDOT standards.

Class B            Well graded crushed stone or crushed gravel meeting the requirements of Class 6 specified below for "Road Construction Materials" that are free of sharp edges.

- Class C Selected soil of low permeability free from clods and stones greater than 3/4 inch in maximum dimension and free of all unsuitable materials as defined below.
- Class D Screened or Washed Rock, of single grade 1-1/2" or less, free of clay and fine particles (for gravity sewer and process lines use only).
- Class E Bedding sand passing #4 screen or less (for pressurized lines only)

Road Construction Materials

Road construction materials are those used for road sub-base, base and finished road surfaces. Class 2 materials shall be well graded natural or crushed aggregate with sufficient filler or binding materials which when placed and compacted result in a firm, dense, unyielding foundation. Class 6 materials shall consist of crushed gravel or crushed stone base course material of hard, durable particles or fragments of stone or gravel crushed to required size and a filler of sand or other finely divided mineral matter. Not less than 60% by weight of the aggregate particles shall be particles having at least one fractured face. The composite base course material shall be free from vegetable matter, expansive materials, and lumps or balls of clay. The class 2 and 6 materials shall meet the following requirements:

Gradation (% Passing)	Class 2	Class 6
4"	100%	-----
3"	95-100%	-----
2"	-----	-----
1"	-----	-----
3/4"	-----	100%
No. 4	-----	30-65%
No. 8	-----	25-55%
No. 200	3-15%	3-12%
Liquid Limit	35 Max.	30 Max. (nonplastic)
Plasticity Index	6 Max.	6 Max.
Resistance Value	75 Min.	78 Min.

Inclusion of fractured concrete and/or recycled asphalt pavement is prohibited.

Structural Subgrade and Backfill Materials

Structural subgrade and backfill materials are defined as those materials used to prepare for structural construction.

- Class 6 Meeting the requirements of Class 6 specified above for "Road Construction Materials."
- Class D Washed Rock, of single grade 1-1/2" or less, free of clay and fine particles. (not for use around pressured pipe lines)

On site and borrow area sand and gravels if available may be used for structural backfill material except where special foundation material is otherwise specified.

### Unsuitable Materials

Expansive materials and material that contain sharp stones, trash, debris, roots, organics, sludge, other deleterious substances, or frozen materials, stone having a maximum dimension larger than 4" (6" where specifically allowed) or materials that are otherwise unsuitable for providing fill, backfill, foundation or subgrade material for pipes, structures, or surfaces shall be classified as unsuitable. Materials with insufficient fines to prevent nesting of rocks and/or with more than 25% rock and those which cannot be compacted to the required density shall also be considered unsuitable (unless graded clean rock is specified). Otherwise suitable material which is unsuitable due to excess moisture content will not be classified as unsuitable unless it cannot be dried by manipulation, aeration, or blending with other materials satisfactorily to meet moisture limits for proper compaction.

### Topsoil

Topsoil shall consist of loose friable loam with minimum 15% organic matter, reasonably free of admixtures of subsoil, refuse, stumps, roots, rocks, brush, weeds and weed seed, heavy clay, hard clods, toxic substances or other material which would be detrimental to the proper development of vegetative growth, including construction debris.

### Riprap

Material for riprap shall come from rock stockpiled while excavating or imported. Material used for riprap shall be dense, sound rock fragments which are resistant to abrasion and shall be free from cracks, seams, and other defects that would decrease its durability and to resist destruction by water and/or frost action. Unless otherwise called for on the plans riprap shall have a D-50 of 12".

### Spot Subgrade Reinforcement and Sub-Grade Stabilization

Material includes sound, tough, durable crushed stone, or gravel, consisting of angular pieces varying from 1 inch to 4 inches in maximum diameter or other engineer approved material, with necessary filler in dry conditions, and when a geotextile is used. In wet conditions, and without geotextile, rock shall be without fines. When a smaller material is necessary for filler, screened gravel, or sand may be used to completely fill all voids.

### Geotextiles

Geotextiles and geogrids used for stabilization shall be designed specifically for stabilization and/or soil reinforcement and a type recommended by the manufacturer for the application. Geotextiles for stabilization shall be a woven material Mirafi RS580i, or approved equal. Geogrids shall be at least equal to Miragrid or Tensar SS with a tensile strength of 200 x 134 psi. The grid shall have sufficiently large openings which are capable of interlocking with the on-site soils. Geotextile used to separate rock and gravel from native materials and for drains shall be non woven 12 oz/sy filter fabric, Mirafi 1120N or approved equal.

### Capillary Water Barrier Material (CWB)

Clean, crushed stone, crushed or uncrushed gravel composed of hard, durable particles, uniformly graded with 1-1/2 inch maximum particle size and not more than three percent (3%) of minimum particle size passing a No. 4 sieve.

## Seed, Mulch, and Tackifier

All seed shall be furnished in sealed bags or containers showing the name and address of the supplier, the seed name or mix, the lot number, net weight, % of weed seed content, and the guaranteed percentage of purity and germination. All seed furnished must be certified as free from noxious weeds as defined by local, state, BLM and USFS. Seed shall be harvested from a location of not more than 200 mile radius of the site. Seed which has become wet, moldy, old, or otherwise damaged or not labeled will be rejected. The Contractor shall furnish a signed statement certifying that the seed furnished is from a lot that has been tested by a recognized laboratory for seed testing within six months prior to the date of delivery and shall be certified weed free. Seed mix shall be a mix approved by BLM or CSU for the micro-climate where the seed is being placed. Grass areas on private property that are disturbed shall be replaced with sod of a mix similar to the surrounding area to the satisfaction of the owner.

Materials for straw mulching shall consist of straw from native grasses and shall be certified noxious weed free in accordance with State and Federal requirements for weed free straw. Straw in such an advanced stage of decomposition as to smother or retard the normal growth of grass will not be accepted. Old, dry straw, which breaks instead of bending will not be accepted. Mulch tackifier shall be consistent with CDOT section 213.

## PART III - EXECUTION

### PREPARATION AND LAYOUT

Engineer will provide horizontal and vertical control as provided for in Paragraph 10.11 of the Section 00500. Contractor shall protect and or maintain benchmarks and monuments and establish all lines and grades required for construction.

### TOLERANCES

Complete excavations and fills with suitable equipment to line and grades as shown on the plans within a horizontal tolerance of  $\pm 0.20$  ft and a vertical tolerance of  $\pm 0.1$  ft unless otherwise noted on the plans or specified for a specific location or application.

Subgrade excavations for structures and treatment cells shall be within a horizontal tolerance of  $\pm 0.10$  ft and a vertical tolerance of  $\pm 0.05$  ft unless otherwise noted on the plans or in an approved submittal.

Pipelines shall be installed to within a horizontal tolerance of  $\pm 0.10$  ft and a vertical tolerance of  $\pm 0.01$  ft and structures shall be installed to within a horizontal tolerance of  $\pm 0.05$  ft and a vertical tolerance of  $\pm 0.01$  ft unless otherwise noted on the plans or required by an approved foundation and/or structures submittal.

## CLEARING AND GRUBBING

The area to be occupied by permanent construction, including earthwork, shall be cleared and grubbed of trees, stumps, roots, brush, miscellaneous organics, rubbish, and other objectionable matter only to the extent necessary for orderly performance of the work and to a depth sufficient to remove organics and other materials unsuitable for the intended purpose. Unstable saturated materials shall be removed or stabilized. All clearing limits shall be staked by the Contractor and approved by the Engineer prior to any construction. The Contractor is responsible for and shall exercise care in his work area. If there is disturbance to improvements or vegetation outside the clearing limits, the Contractor shall take remedial action at his own expense. No trees shall be removed or injured without the prior approval of the property owner and the Engineer.

Where present, strip existing topsoil prior to excavating operations. Depth of stripping shall be determined by the Engineer based on depth of the topsoil and roots. Stockpile topsoil material for replacement after all backfilling and compacting operations are completed.

### Removal of Cleared and Unsuitable Materials

Unneeded materials from the clearing and excavation operations shall become the property of the Contractor and shall be removed from the site of the work and disposed of in a manner satisfactory to the Owner, and in accordance with state and local regulations at the expense of the Contractor. The Contractor shall make an effort to channel materials of value from the clearing and grubbing to beneficial use.

During the process of clearing or excavating, saturated soils, soils such as peat, soft clay, quicksand, cobble, large rock, or other materials which are unsuitable for bedding or foundation may be encountered. Unless there is a use for these materials elsewhere on the project, these materials shall be removed from the site and disposed of by the Contractor at his expense. If removal of unsuitable materials results in excavation below the grade required, the area shall be backfilled to grade with suitable bedding or fill materials complying with the provisions of applicable specifications for the work being constructed. This shall not entitle the Contractor to additional payment unless otherwise specified in these Documents and then only when agreed to in writing by the parties prior to over-excavation. Saturated or soft conditions, and/or pit run or rock in the excavation shall NOT be considered unanticipated site condition and over-excavation and stabilization for such conditions shall be expected be included in the cost of the work.

## ACCESS ROADS AND BYPASSES

The Contractor shall be responsible for providing all additional access roads required to get materials and equipment to the work areas. When required, the Contractor shall construct and maintain detours or bypasses around portions of the work that conflict with traffic, including Town's access to their existing facilities and infrastructure. When necessary, the Contractor shall provide suitable bridges (or steel plates) at crossings where traffic must cross open trenches. Construction of access ways on private or government property must have written approval of the effected property owner prior to commencing construction. Such access and construction shall be included in the cost of the work to which it is associated.

No road or access easement will be completely closed unless expressly approved by the Town where there is minimal traffic impact. If a detour around the construction is not feasible, then the installation across the road will be made one-half at a time to allow through traffic around the construction. Adequate traffic control and signage must be provided by the Contractor.

#### DUST CONTROL

The Contractor will be required to furnish and apply an environmentally acceptable dust palliative to control dust on the project site and along haul routes. Dust control may consist of water or other substances found not to be detrimental to the work or the surroundings as approved in writing by the Engineer. Spreading of water or water mixture shall be done with acceptable sprinkling equipment. Such equipment shall be a type which insures uniform and controlled distribution of the palliative without ponding, washing, or adverse impacts to the public, private property, or the environment.

#### DRAINAGE

Maintain the excavations, borrow areas, and site free from water throughout the work. Shape excavations and surrounding areas to minimize the entrance of water. Drain surface water or seepage by gravity or temporary pumps or other approved means. Discharge such waters in a manner which conforms with all federal, state, and local requirements. Use drainage methods which will prevent softening or undercutting of foundation bottoms, or other conditions detrimental to proper construction procedures. Accomplish the foregoing by the use of sumps and gravel blankets, well points, drain lines, or other means approved by the Engineer. Remove any water encountered to the extent necessary to provide firm subgrade. If the trench or foundation bottom or other excavation becomes unstable due to the entrance of water into the open excavation, the saturated soil shall be removed and suitable backfill placed and compacted to grade at Contractor's expense. Handling of drainage, live flow, seepage, groundwater, runoff, discharges, and other water shall be included in the scope of Contractor's unit costs for the work to which it is associated.

#### EXCAVATION

Perform excavation of every description to lines and grades indicated regardless of material encountered within the grading limits of the project. The Owner makes no representation as to the materials to be encountered. All trenching and excavation, regardless of materials encountered or equipment or methods required, shall be unclassified and included in the cost of the applicable work.

Utilize all suitable materials removed from the required excavation in the formation of embankments, and/or for bedding or backfill. Care shall be taken to not excavate below the indicated grade, except when approved by Engineer to remove unsuitable material. Foundation and structure subgrade materials are intended to be placed on undisturbed ground whenever topographically and geotechnically possible unless otherwise specified or called for on the plans.

All necessary precautions shall be taken to preserve the material below and beyond the established lines for all excavation in the soundest possible condition. Material removed below depths indicated



without specific direction of the Engineer is to be replaced, at no additional cost to the Owner, to the indicated excavation grade with suitable material and compacted as specified, except that foundations and footings may be increased in depth to the bottom of the overdepth excavations (to make depth and bearing surface uniform) at no additional cost to Owner.

Remove all organic material from the areas which will be covered by the liner. This is critical to the performance of the liner.

Make excavations for footings, foundations, and similar work of adequate size to allow for placing, inspection and removal of forms, installation of any piping, and observations of the work. Contractor shall form sides of foundation footings unless depositing concrete directly against earth has been approved by Engineer or is called for on the plans. For direct-deposited concrete, trim banks to one inch wider on each side than dimensions indicated on the plans and so there is 3" clearance for rebar.

Contractor shall protect the bottom and sides of excavations and soils around and beneath foundations from frost.

The Engineer must be allowed to inspect all foundation material after excavation and review all test results before the Contractor shall pour footings, foundations, and slabs.

If pumping, low density, or saturated pockets are encountered in excavations, they shall be removed. The type of fill to be placed in such pockets shall be based on the location and must be approved by the Engineer in advance of any construction (see also "Stabilization") below.

Do not exceed the angle of repose for the materials without providing necessary support.

Materials unsuitable for fill or other uses on the project shall be disposed of by the Contractor to the satisfaction of the Engineer at the Contractor's expense.

#### Stock Piling Material

Where material is excavated from the trenches and piled adjacent thereto, it shall be piled sufficiently away from the edge of the trench to prevent caving of the trench wall and to permit safe access along the excavation. In unsupported trenches the minimum distance from the edge of the trench to the toe of the spoil bank should not be less than one half the total depth of the excavation, nor less than three feet if soil conditions allow. Greater distances shall be required where soil conditions are not adequate. With sheeted trenches, the toe of the spoil bank should be at least 3 feet from the edge of the trench.

#### Sheeting, Bracing, and Shoring

Where necessary or called for on the excavation stabilization plan, or needed to control the width of the excavation, excavation shall be braced and sheeted to provide complete safety to persons working in or around the trenches and minimize the width of the trenches and shall comply with applicable federal (OSHA), state, and local laws, regulations, and ordinances. The Contractor shall be fully responsible for sufficiency and adequacy of bracing excavations with respect to work under construction and to adjacent utility lines and public and private property. Remove sheeting and shoring as excavations are backfilled in a manner to protect the material, construction, and compaction and/or other structures,

utilities or property. No such sheeting will be permitted to remain in the trench or excavation except when, in the opinion of the Contractor, field conditions or the type of sheeting or methods of construction used by the Contractor are such as to make the removal of sheeting unsafe. In such cases, with Engineer approval, portions of the sheeting to be cut off to such depth as he may approve and permit lower portions thereof to remain in the trench.

#### Ground Water

Groundwater will likely be encountered in some excavations. Information regarding groundwater is presented in "Site Information" in Section 01000. Groundwater should be anticipated and include handling it in the cost of the work.

Keep ground water level below final pipe and foundation grades, and prevent entrance of water into excavation and/or water or sewer lines. Water shall not be permitted to run through lengths of pipe already or being laid. Ends of pipes shall be capped or plugged to ensure that water, dirt, animals, etc., does not enter the pipe. Should any groundwater, dirt, mud, etc., enter the pipe during or after installation, the Contractor shall flush the pipe thoroughly in the presence of the Engineer to ensure complete removal of all foreign objects prior to connection to the existing system. Engineer may require Contractor at Contractor's expense to hydrojet and/or video inspect lines where mud, debris, etc have been allowed to enter lines to assure that lines have been adequately cleaned. Should such deleterious material enter the Town's sewage collection system, Contractor will be required to capture the material before it reaches a pump station or treatment plant at his expense.

When groundwater or other sources of water are encountered provide necessary pumps and other equipment necessary to completely remove the water so that work can be performed in dry conditions. Maintain dry excavations throughout construction. Dewatering activities should be controlled to avoid damage to surrounding property as well as protecting the work site and to comply with state and federal regulations. Costs for controlling water shall be included in the cost of the work to which it is associated.

#### Use of Explosives

Use of explosives is prohibited.

#### Stabilization

If ground pumping is a problem, track equipment rather than rubber tired equipment shall be utilized in the access and work area. Use of rubber tired equipment that results in yielding subgrade shall be remedied at the Contractor's expense. Saturated materials and groundwater shall be expected in some locations and need for dewatering and stabilization shall be included in the scope of the applicable work.

When authorized by the Engineer, stabilize the subgrade material with the use of sub-grade stabilization material or a stabilization fabric depending on the type and location of the instability. Remove as much of the unstable material as authorized by the Engineer and directed by the OR. Earthen stabilization material, when used, shall be sized based on the type of instability and shall

generally conform with the stabilization material specification listed above. The material shall be placed in uniform lifts at proper moisture and compacted in a manner which will not make the surrounding area unstable. Cover stabilization materials with a filtering geotextile fabric as directed. Stabilization geotextiles shall meet the materials specifications listed above. Fabric shall extend sufficiently beyond the unstable area to act as a bridge; the additional distance will depend on the type of instability and the type of fabric, but should not be less than 1 foot in any direction and will typically be 2' or more. Fabrics shall be placed on a smooth level surface and shall have at least 12" of cover between the fabric and finished grade unless otherwise approved by the Engineer.

If piping will be placed at an elevation below the elevation of the fabric, install piping before placing fabric. If fabric is cut for any reason, a patch of fabric which extends at least 2 feet past the cut in each direction shall be placed over the cut and proper fill placed over the patch.

**Contractor should anticipate that the existing materials in the excavation may be incompetent, wet, and / or rocky and require over excavation and/or reworking and should include that in his costs for the work. Rocky and/or soft saturated conditions will not constitute an unanticipated site condition.**

#### BEDDING, BACKFILL, AND COMPACTION OF EMBANKMENT, PIPE LINES, AND STRUCTURES

##### Bedding Preparation

The bottom of excavations shall be accurately graded to provide uniform bearing and support for the structure or pipe. Point loading will not be permitted. For pipes dig bell holes and depressions only of the size needed to accommodate the pipe joint. Use of earth mounds will not be permitted. Earthen materials for bedding shall be consistent with pipe zone or structural fill requirement as appropriate.

##### Bedding Placement

The bottom of trenches must be dry or well drained before bedding is placed. Place bedding below and around the pipe by hand to prevent damage or displacement of the pipe in 3" compacted lifts. Bedding for structures shall be structural fill materials placed on a firm foundation. It is anticipated that subgrade below the structures will be saturated and or rocky and that subgrade spot stabilization will be required. Contractor shall install and compact the subgrade reinforcement, foundation materials, and structural bedding in accordance with the approved submittal for the structure and its installation.

##### Backfill

The Contractor shall proceed with backfilling as soon as practicable, but not until Work is inspected by Engineer and any necessary tests satisfactorily completed. Unless unsuitable, materials from excavation may be used for backfill above the pipe zone. Do not begin backfilling until forms and any debris and trash have been removed, and where applicable, concrete has cured sufficiently to prevent displacement or damage to restraints, footings, foundations, or walls (typically 7 days). Maintain optimum moisture content of backfill materials and compact to required density. Whenever practical materials shall be brought to the specified moisture content in the borrow area rather than while being placed. Unless otherwise specified, unprocessed materials shall be compacted to 95% standard proctor

at +/- 2% of optimum moisture and processed materials (e.g. base materials) compacted to 95% modified proctor +/- 2% of optimum. Compaction or consolidation shall follow as soon after the placing as is practical.

Construct fills and embankments to the lines and grades indicated on the drawings. Immediately prior to placing fill material, scarify the entire area upon which fill is to be placed to a depth of 12 inches. The foundation for earthen fill shall also be prepared by disking or scarifying parallel to the axis of the fill. Once thoroughly scarified and moisture conditioned to between +/-2% of optimum compact to 93% modified proctor unless higher density is called for the application elsewhere in the Contract Document. Compact such that the surface materials of the foundation will bond well with the first layer of fill as is specified for the subsequent layers of earthen materials.

Ensure areas on which embankment is to be placed and areas to be backfilled and backfill materials are free from debris, large and/or sharp stones, loose materials, snow, ice, and water, other objectionable material that will cause interference with compaction, and that ground surfaces are not in a frozen condition. Do not allow the nesting of rocks. Do not backfill over existing subgrade surfaces which are frozen, porous, wet or spongy. Cut out soft areas of existing subgrade and stabilize (see Stabilization requirements above and below).

Compact existing subgrade surfaces if densities are not equal to that required for backfill materials. Plow, step, or bench sloped surfaces steeper than 4 to 1 on which backfill is to be placed in such a manner that fill material will adequately bond with existing surfaces. Scarify where necessary to ensure uniform compaction and good bonding between lifts.

Backfill areas to grades, contours, levels, and elevations required. Place approved excavated or imported material in successive horizontal layers of 8 inches or less loose depth for full width of cross section, bring to optimum moisture content for compaction, and compact each layer to the required density with equipment designed for compaction purposes for the type of material. Backfill systematically in continuous level layers for the full width of the cross section. Uniformly place each layer to the specified maximum lift (or less) and thoroughly blade mix or otherwise blend during the spreading to ensure uniformity of material in each layer. The distribution and gradation of the materials throughout the earthen fill shall be such that the fills will be free from lenses, pockets, streaks, or layers of material differing substantially in texture, gradation, or moisture from the surrounding materials. The materials, when compacted in the earthen fill, shall be blended sufficiently to secure the best practicable degree of compaction and stability. If there is a varying degree of permeability in the material the most impervious materials shall be placed in the central portion of the earthen fill and the more pervious materials shall be placed so that the permeability of the fill will be gradually increased toward the upstream and downstream slopes of the earthen fill. Testing of each lift shall be performed prior to placing the next lift in accordance with the specified testing requirements.

#### Structure and Appurtenance Backfill and Compaction

Backfill around structures and appurtenances such as vaults, manholes, foundations, buildings, valves, valve boxes, cleanouts, miscellaneous structures once they have achieved adequate strength with care to prevent damage to the work. Materials shall be compacted to 95% modified proctor at +/-2%

optimum, unless otherwise noted on the plans for a particular use, using equipment which will not damage the structures, appurtenances or surrounding construction.

Compact each layer continuously over its entire area or around a structure and make sufficient trips with the compaction equipment to ensure that the required density has been obtained uniformly. Backfill simultaneously on each side of foundation walls and other structures to equalize soil pressures. Do not backfill against or operate heavy equipment adjacent to walls until all structural elements are constructed, cured, properly braced, and approved by the Engineer. Do not operate heavy equipment closer to foundations than a horizontal distance equal to height of backfill above bottom of foundation. Compact remaining area with hand tampers suitable for material being compacted. Where needed, the hand work (e.g. compaction with a whacker) for a lift should be done in advance of and blended into the work of the larger equipment.

Perform all compaction with approved equipment well suited to location, structure, and materials being compacted. Do not begin compaction until structures are properly secured and have adequate strength. Perform compaction while the material is at the specified moisture content. Maintain optimum moisture content during final rolling and until compacted material is covered by subsequent construction. Remove loose material and protect material until covered.

#### Pipe Zone Compaction

After the pipeline has been installed, suitable bedding material (Class C, D, or E as appropriate) shall be hand placed in up to 3" lifts to the pipe centerline (springline) and hand tamped with appropriate tamping equipment and compacted to provide firm uniform support for the pipe. Take care to ensure that sufficient material has been worked and compacted under the haunch of the pipe to provide adequate side support. With rigid pipe, if care has been taken to shape the bedding material to the curvature of the pipe, only one stage of placement will be required to bring the haunching material to the spring line. Compact haunching material to a minimum Standard Proctor density of 95% at +/-2% of optimum moisture. Additional backfill shall then be hand placed and hand compacted in 3" lifts to provide at least six inches of suitable cover over the top of the pipe before any material is placed or compacted with machinery. Compact screen rock with vibratory equipment before covering with geotextile. Take care to avoid contact between the pipe and compaction equipment to avoid damage or displacement. Where specified or called for on the plans, pipe zone shall be backfilled with flowable fill.

Compaction of backfill materials shall be done in such a way that sufficient backfill has been placed to ensure that such compaction equipment will not have a damaging effect on the pipe or its installation yet ensure proper compaction through the depth of the trench and around the pipe. Any damage resulting from the backfilling or compaction of the backfill shall be repaired by the Contractor in a timely manner at his expense. At all times precautions should be taken to prevent flotation of the pipeline due to entry of water into the trench. Compaction in the pipe zone shall be to 95% Proctor (standard for unprocessed and modified for processed materials) +/- 2% of optimum moisture unless authorized or noted on the plans.

### Upper Trench Compaction

Minimum compaction through the entire depth shall be 95% of maximum dry density as measured by Standard Proctor tests for native materials. Structural materials such as road base shall be compacted to 95% of maximum dry modified Proctor. Moisture control at -1 to +2 % of optimum of all fill will be required to facilitate achieving acceptable densities. Top soil need not be compacted.

In general, backfill shall be mechanically compacted by means of tamping rollers, sheep foot rollers, pneumatic tire rollers, vibrating plate or roller or other mechanical tampers which are appropriate for the material being compacted. Compaction by jetting or flooding shall not be permitted. The trench shall be filled to provide a minimum of 3 feet of cover over the pipe before rolling equipment is used and 50 inches before utilizing a hydrohammer during compaction.

In the trench fill area above the pipe zone, pipe backfill material shall not exceed four (4) inches in largest dimension. Rocks shall be distributed through the fill to prevent nesting. All excess/unsuitable material shall be removed from the work area and disposed of at Contractor's expense.

### SURFACE RESTORATION

On completion of backfill operations and other work, the entire site shall be cleared of all debris, and ground surfaces shall be finished to smooth, uniform slopes and shall present a neat and workman-like appearance. The final grade will be graded to match existing grades without producing drainage or maintenance problems. Areas which are to receive base, pavements, surfacing, topsoil, or landscaping shall be graded as required to allow installation of the specific surface treatment. Note that if work is in a road right of way pavement will be required to be replaced promptly after completing of backfill. Restoration, or as needed replacement, of grass, shrubs, and other plants shall be done to the extent required to restore the damaged and disturbed areas to a condition as close as practical to that which existed prior to construction using at least 2x the plants removed. Replace in accordance with the topsoiling sub-section below. Tree and other vegetative damage shall be repaired in accordance with good horticultural practice.

The finished surface of roads impacted directly or indirectly by the project will be restored to their original or better condition as determined by the owner(s) involved. Asphalt damage shall be repaired with hot mix asphalt (4" minimum depth, and not less than the thickness of asphalt removed), and damaged concrete, repaired with concrete by cutting and replacing to the closest control joints. The Town, County, or State Road Department as applicable, shall be notified two working days prior to repair so that inspection can be provided. The Contractor shall be responsible for returning all roadways traversed with his equipment to conditions at least as good as existed prior to commencing construction.

The respective property owner shall be the final judge of the acceptance of restoration work. Again, in cases where sub-standard conditions existed prior to beginning construction, it shall be the Contractor's responsibility to have documented such conditions or to restore the site to standard conditions acceptable to the respective Owner, Engineer, and Town.

## TOPSOILING

### Conservation

When excavating, stockpile on site topsoil for future placement. Topsoil material is subject to approval. Conserve, or import if necessary, sufficient topsoil to cover a depth of 6" all disturbed areas which are not covered by riprap, roadbase, hard surface, or a structure.

### Clearing

Prior to placing topsoil remove vegetation and clear ground surface of all other materials that would hinder proper grading, tillage or subsequent maintenance operations.

### Placing Topsoil

Place topsoil on all disturbed areas which are not access or road ways, or designated to be covered by other materials. Prior to placing topsoil, prepare previously constructed grades as required such that when topsoiling is completed the proper grade will be achieved. After grading, scarify areas to be topsoiled to a depth of at least six inches. Perform work only during periods when beneficial results are likely to be obtained.

Perform spreading so that planting can proceed with little additional soil preparation or tillage.

Do not place topsoil when subgrade is frozen, excessively wet, extremely dry, or in a condition otherwise detrimental to proper grading or proposed planting.

## REVEGETATION

Prior to commencing construction it will be necessary to determine the amount and type of vegetation which naturally occurred on the areas to be disturbed. This will be done by counting the quantity of each type of vegetation in randomly selected representative quadrants of the site to be disturbed. Quadrants shall be either a square foot or a square yard depending on the density of the vegetation. Assessment shall be completed in accordance with the Contractor's Storm Water Management Plan.

Disturbed areas that are to be revegetated shall be left in a roughened condition. Roughen vertical depth shall be approximately 4". Roughening shall be completed with undulations running parallel to contouring. Use erosion control logs, silt berms, silt fence, steps, or other suitable means to limit erosion prior to revegetation.

Preparatory to seeding, the top 4" of the topsoil shall be tilled into an even and loose seed bed 4" deep, free of clods, in excess of 2" diameter and brought to desired line and grade. Reseeding shall be done in accordance with specifications, requirements of the landowner, the recommendations from CSU Extension, BLM, and good horticultural practice for the areas being revegetated. Seed mix on private property shall be selected by the land owner. Where lawn and in other grassy areas are disturbed sod shall be provided for restoration. Furnish and install sod in accordance with CDOT standard 212.05. Contractor shall make arrangements to keep it moist until it is established.

In all areas where the slope is 3:1 or flatter, seeding will be accomplished in general conformance with CDOT Section 213. In larger areas use an approved mechanical power drawn drill followed by packer wheels or drag chains. The drill shall be operated in a direction generally perpendicular to the direction of the slope. Drill seed 1/2" deep with rows spaced no more than 4" apart. Seed that is extremely small shall be sowed from a separate hopper adjusted to the proper rate of application. Hydromulching will be allowed only if adequate water will be applied to the seed to keep the mulch continuously moist until the seedlings are established.

On all slopes steeper than 3:1, and smaller areas seed shall be applied by means of a mechanical broadcaster at double the rate required for drill seeding. The surface shall be cat tracked up and down the side slope prior to, or just after, seeding to create depressions to help hold seed and moisture. All seed sown by mechanical broadcasters shall be raked into the soil to a depth of 1/2" prior to cat tracking.

Seed shall not be placed in windy weather or when the ground is frozen or likely to freeze in the next 48 hours. Seeding shall only take place in the fall or early spring. Hand broadcasting of seed will only be permitted for small areas which are not accessible to machine methods.

Unless more stringent requirements are specified in the storm water management plan, weed free native grass straw shall be applied at the rate of two tons per acre in areas that have native vegetation. It shall be uniformly crimped in with a crimper or other approved method to a minimum depth of 3". The seeded areas shall be mulched and crimped within 24 hours after seeding. Alternately a mulch with tackifier (200#/Ac) may be used. Jute, soils blanket, or other suitable covering shall be secured to all slopes steeper than 3:1 as soon after mulching as practical. The material shall be applied smoothly but loosely on the soil surface without stretching. Workers shall minimize the amount of walking of the seedbed even after the jute is applied. The upslope end of each piece of jute mesh shall be buried in a narrow trench about 6" deep. The jute shall be secured in the trench with compacted dirt fill. Where one roll of jute ends and a second begins, the upslope piece should be brought over the buried end of the second roll with a 12" overlap to form a junction slot. Where two or more widths are side by side the overlap shall be at least 6".

Seeded areas that have been disturbed prior to or during mulching operations shall be reseeded. Areas not properly mulched or that are damaged shall be repaired or remulched to meet the standards specified herein. Mulching activities shall not occur during windy weather. The Contractor shall keep the seedlings moist until they become established.

Where shrubs or trees were present prior to the disturbance, it is recommended that the same type shrubs and trees be re-planted at approximately the same density as originally present, unless the slope prohibits such plantings. Where trees in excess of 3" caliber are damaged or removed during project, replace trees with trees of similar species at twice the density. Protect such plantings from wildlife damage and keep them moist until established.



## SECTION 02713 - WATER SYSTEM CONSTRUCTION

### PART I - GENERAL

The water lines and appurtenances shall be constructed according to standard accepted practices, and as specified herein. Reference to standard specifications e.g. AWWA, ASTM, etc. made in a portion of these specifications by reference shall be the latest edition and revision thereof. All water line improvements and additions must also comply with the Minimum Standards portion of the Town Standards, Section 9.1 of the Ridgway Municipal Code, and all applicable Colorado Department of Public Health and Environment (CDPHE) and EPA regulations.

#### Description

This section covers the furnishing, installing, disinfecting, and testing of water distribution lines and appurtenances. Contractor shall furnish all equipment necessary for said Work and testing.

Contractor shall follow manufacturer's recommended procedures in all handling and installation operations. All water line improvement must also comply with the Town Standards and all applicable codes, laws, and regulations.

Contractor shall engage the services of a licensed surveyor to layout the locations and depths of the new water infrastructure in accordance with the project plans. The Contractor shall make such excavations as are necessary to determine the exact location of existing utilities which affect new construction. Where practical, new lines shall be routed to facilitate installation, allow for future maintenance, minimize existing utility conflicts and to minimize construction problems.

#### Related Work Specified Elsewhere

Section 02200 - Excavation, Backfill, and Compaction

#### Bypass Piping

In order to maintain water flow to the distribution system it will be necessary to provide bypass line(s) around the locations where the pipe is being replaced. Contractor is to furnish a method statement detailing the way he proposes to maintain continuous, sanitary water service to all customers.

#### Proximity Statement

There shall be no physical connection between a public or private potable water supply system and a sewer, other non-potable line, or appurtenance thereto which would permit the passage of any sewage, non-potable, or polluted water into the potable supply directly or through contamination of the surrounding soils.

Buried potable water lines shall not be laid closer horizontally than 10 feet outside edge to outside edge from non-potable lines and the water lines shall typically be at a higher elevation than the non-potable. If this is not possible, separate trenches will be required and the water line shall be at least 18" above the non-potable and a pipe with a water tight welded joint such as HDPE shall be used. When water and non-potable lines cross each other, the water line shall be at least 18" above the non-potable. If this condition is not met, then where practical, the non-potable line shall be encased with a 20' PVC casing pipe centered on the water line crossing.

If it is not practical to case the non-potable line, the potable line shall be so cased. Should the non-potable line be above the water line, no matter what vertical separation, a casing pipe shall be sealed to the carrier pipe with no-hub reducing couplings, Link-Seal or other approved method to provide a water tight seal.

Force main sewers require a separation from the water main of at least 10 feet measured horizontally unless both pipes are encased in and properly supported with pipe joints as far apart as possible with sealed end encasements. There shall be a 2' vertical separation at crossings or a watertight casing shall be provided around the force main.

There shall be a minimum clear distance vertically of 8" between the uppermost part of the lower utility and the lowermost part of the upper utility including casings to allow for proper bedding. In all cases, suitable backfill or other structural protection shall be provided to preclude settling and/or failure of any of the pipes.

No water pipe shall pass through or come within ten feet of a sewer manhole unless absolutely unavoidable, in which case adequate protection as determined by the Town Engineer must be provided.

Water lines shall have at least 5 foot horizontal separation from wire utilities.

These requirements for protection of the water system against contamination from non-potable water conveyances shall apply equally to water mains and service connections.

#### Cross Connections

There shall be no connection between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminated materials may be discharged or drawn into the Town potable water system. Any interconnections between potable water supplies shall have prior written approval of the Town.

#### Contractor Required Experience

In addition to requirements elsewhere in the contract documents, the Contractor's on site superintendent assigned to the project shall have experience in water distribution system construction having completed at least 3 water line replacement projects that involved removal, bypass, replacement, and reconnection of valve clusters, service connections and hydrants and possess a Class 1 Distribution license or have Owner approved equivalent training and experience. They shall also have installed a minimum of 8,000 LF thick walled (200 psi and greater) potable HDPE pipe at least 2,500 lf of which shall have been at least 8" in diameter.

#### **PART II - PRODUCTS**

All materials shall be new, unused, and of the best standard quality available for the purpose intended. All materials in contact or potential contact with potable water shall be NSF 61 certified and meet all current EPA and CDPHE requirements including the lead-free requirements. All iron and steel materials shall meet AISI requirements. All brass shall meet AWWA C-800. Where materials are specified by brand names, materials of equal quality may be substituted if the Contractor submits adequate technical and descriptive data and secures the approval of the Town. The Town or its designated representative shall be the sole judge of the suitability and acceptance of materials. The Town in some instances may insist on a particular brand or model (to match materials in use) to minimize the parts inventory and/or O and M requirements.

Certificates of Compliance

Certificate of Compliance shall be submitted to the Engineer stating all pipe and materials furnished under these specifications do in fact comply with all referenced specifications and meet the Safe Drinking Water Act, CDPHE, NSF 61 and AIS requirements.

Ductile Iron Pipe

Conformance	AWWA C151
Thickness	Class 50
Pressure Rating	150 PSI
Joints	Neoprene Gasket AWWA C111/ with Conductivity Straps
Fittings	ANSI/AWWA C153 when available or C110, epoxy lined
Corrosion Protection	Wrap pipe in polyethylene tubes and sealed

Plastic Pipe (PVC) - Water

Conformance	AWWA C900
Thickness	Class 150
Pressure Rating	DR-18 to line pressures of 100 psi DR-15 when typical line pressures are expected to exceed 100 psi
Joints	Rubber Gasket, bell and spigot
Fittings	Ductile Iron AWWA C153 when available or C110, epoxy lined Under 4", PVC with 200 PSI rating allowable
Marking	10 ga color coded tracer wire taped to pipe (blue for potable water and purple for non-potable. Metallic 6" wide color coded marking tape, located 12" above water line

HDPE Pipe – Water

Conformance	ASTM F714
Outside Dimension	Ductile Iron Pipe size
Pressure Rating	DR-7 (333 psi)
Joints	Fused joints
Fittings	Ductile Iron AWWA C153 when available or C110, epoxy lined Under 4", PVC with 200 PSI rating allowable
Marking	10 ga color coded tracer wire taped to pipe (blue for potable water and purple for non-potable. Metallic 6" wide color coded marking tape, located 12" above water line

Copper Tubing

Conformance	ASTM B88, lead free
Thickness	0.65" for ¾" and 1"
Service Type	Potable water service lines K soft copper

Corporation Valve

Corporation valves shall be A.Y. McDonald #5182 brass, **ONLY**. Valves shall be AWWA C-800 and NSF 61 certified.

Service Saddles

Service saddles shall be Mueller 13000 bronze saddle with bronze straps and O Ring sealed outlet, sized for the pipe to which it will be connected with the correct tap size and thread. Saddles shall be AWWA C-800 and NSF 61 certified. **Only this model will be allowed.**

Meter Setter

Meter setters shall be A.Y. McDonald #5141-077 **ONLY** compression brass with ball valve shut off and dual check valve. Meter setters shall be AWWA C-800 and NSF 61 certified.

Water Service Backflow Preventor

Mueller M-98 Angle Dual check valve or incorporated into meter setter.

Meter Can

Meter cans shall be Bingham Taylor MMP 24" diameter or Carson Oldcastle 24" diameter insulated can with the white interior. The Town may also consider Sigma 20 x 4" that tapers when the 24" diameter cans are not available.

Meter Can Lid

Castings – M 70 meter can cover with cast iron outer lid with 2 inch hole and M 70 aluminum inner frost lid.

Water Service Pressure Regulator

Pressure regulators with strainers shall be installed on the mainline side of meters when the pressure through the meter will exceed 80 psi. Regulators will be diaphragm type, easily field adjustable for pressure, and shall be accessible for repair without removal from the pipe line. Unless otherwise approved regulators shall be pre-set at 50 psi. A "Y" type strainer with plug and screen removable without removing the strainer or regulator shall be installed at the inlet end of each regulator.

Curb Stop and Box

Curb ball stops shall be McDonald brand brass with compression joints on both end and with cast brass pinned handle with box and cap lid.

Gate Valves

Conformance	AWWA C515
Material	Epoxy coated ductile
Body Type	Resilient seat, non-rising stem
Pressure Rating	150 PSI, minimum
Joints	Flange or Mechanical Joint end as required typically flanged to fitting, mechanical joint to pipe
Coating	Epoxy inside

Operating Nut	2" Square, open counterclockwise (buried) Handwheel (non-buried service)
Acceptable Models	Mueller (Only this product will be accepted by Town)

### Valve Box

Location	All buried valves not in vaults
Type	Slip type, two or three piece 5 1/4" as req'd, traffic rated
Base	Suitable for valve size, depth, and operating mechanism
Material	Cast Iron, 1/4" minimum wall thickness
Coating	Bituminous varnish, plastic wrapped
Cover	Cast Iron, traffic type, marked "WATER"
Location	All buried gate valves
Operator Extension	1" minimum diameter cold rolled steel rod (where depth greater than 5 feet)

### Butterfly 3-inch and Larger

Conformance	AWWA C504
Material	Iron Body, bronze mounted
Type	Resilient seat
Pressure Rating	150 PSI
Coating	Epoxy inside
Seat	Rubber
Joints	Flange
Operator	Electric Actuator (see below for details)
Operation	Open by turning counterclockwise
Acceptable Models	Bray, Mueller

### Butterfly Valve Electric Actuator

Actuator shall be UL listed, designed to be located in a wet environment, NEMA 4 rated. It shall include adjustable speed control for both opening and closing speeds such that operating the valve will not create water hammer in the line. Wiring shall go to a terminal strip. Actuator shall include a simple manual override handwheel system. Actuator shall be designed to function with the butterfly valve furnished. Actuator shall be Bray Series 70 or approved equal.

### Fire Hydrants

Conformance	AWWA C502
Material	Ductile iron body, fully bronze mounted
Pressure Rating	150 PSI, minimum
Type	Breakaway traffic w/easily replaced flange
Size	6" w/ 6" mechanical joint inlet, 5' minimum bury
Joints	Megalug, O.A.E. restraints on mechanical joints
Outlets	2 - 2 1/2" hose nozzles, 1 - 4 1/2" pumper nozzle all w/ National Standard Thread
Operating Nut	1 1/2" National Standard hex, open counter-clockwise
Main Shut off	Gate valve per spec. above

Acceptable Models      Mueller Super Centurion (Only this model will be accepted by Town)

Flushing Hydrants

Conformance      NSF/ANSI 372  
Service      Potable water, frost free, self-draining, with vacuum breaker  
Size      Inlet 2" or same as existing line, outlet 2-1/2" NST  
Bury match existing water line typically 5-6'  
Type      Breakaway traffic w/easily replaced flange  
Joints      Megalug 2000 series restraints on mechanical joints  
Outlets      1 - 2 1/2" hose nozzle w/ National Standard Thread  
Interior Operating Parts      Brass, bronze, and shall be removable for service and replacement without excavating the hydrant.  
Exterior Casing      Ductile Iron  
Operating Nut      1 1/2" National Standard hex, open counter-clockwise  
Main Shut off      Gate valve per spec. above  
Model      Mueller 2-1/8" Post type Hydrant w/ 1 2-1/2" nozzle or approved equal.

Yard Hydrants

Service      Potable water, frost free, with vacuum breaker  
Size      3/4" NPT inlet, 3/4" hose bib lockable, 5' bury  
Valve      Woodford Y34-4 or approved equal

Repair Clamps

Conformance      AWWA C230, NSF 61  
Body Material      304 Stainless Steel  
Bolts      UNC Rolled Thread 304 Stainless  
Washers      Plastic lubricated, 304 Stainless  
Nuts      ASTM A194, Coated, Stainless  
Gaskets      SBR per ASTM D2000 MAA 610  
Pressure Rating      150 PSI, minimum  
Length      12" OD or less 12" long, over 12" OD, 16" long  
Size      6" w/ 6" mechanical joint inlet, 5' minimum bury  
Number of sections      One  
Acceptable Models      Romac SS1 or equal

Air Valves

At high points and other locations in water mains where air can accumulate, provisions shall be made to remove air by means of air relief valves or other means approved by the Town. Air relief valves shall be placed in manholes / vaults which allow convenient service of the relief valve and provide for adequate drainage.

Material      Cast iron body, ASTM approved materials  
Pressure Rating      150 PSI  
Size      3/4" minimum, sized by air flow requirements  
Connection      3/4" tapping saddle, tap at high point in line

Main Shut off	Corporation stop
Support	Support weight so not transferred to water line
Vent	12" above ground, pointed downward, covered with #24 mesh
Acceptable Models	APCO or Valmatic automatic valves or approved equal

### Cross Connection Control Valves

Where there is a potential of backflow, either backpressure or back siphonage, into the potable water supply, the service line shall be isolated from the potable supply by a backflow prevention device such as a double check valve, reduced pressure principal device (RP), pressure or atmospheric vacuum breaker depending on the location and nature of the hazard. The Town shall approve the type of device to be installed. All cross connection control devices shall meet the standards of the Foundation for Cross Connection Control and Hydraulic Research (Foundation). The valves shall be used only as recommended by the Foundation and installation shall be in accordance with its recommendations. A list of currently approved devices and valves is available from the CDPHE. Valves shall be installed in vaults which allow for convenient testing and maintenance of the valves and they must be installed in a manner that allows for gravity drainage from the vault.

### Miscellaneous Valves

Plans for all large valves, control valves, pressure reducing valves, and other specialized valves shall be submitted to the Town for review and approval. In all cases such valves shall be installed in vaults or pits that are sufficiently large to accommodate all operation and maintenance required. Bypass lines are required.

### Bolts and Hardware

All bolts, nuts, and small miscellaneous hardware shall be Cor-Blu or other durable corrosion resistant material approved by the Engineer unless specifically noted.

### Compression Couplings

Compression couplings 2" or smaller shall be Mueller or Ford.

### Tracer Wire and Marking Tape

Tracer wire shall be fastened to all pipes and shall be fastened to and brought to the surface at all valves and other metallic structures along the line. Tracer wire shall be 10 gauge.

Marking tape at least 6" wide labeled "water" shall be placed 12" above pipes of all materials.

### Insulation

Trench insulation shall be high compressive strength extruded polystyrene ridge foam insulation designed for use in engineered applications for high load bearing uses. Materials shall be a closed cell structure and meet ASTM C578 type VII. Minimum compressive strength (ASTM D1621) shall be 60 psi with an R value (ASTM C518) of 5 per inch. Insulation shall be Foamular 600 XPS or each. Thickness and width shall be in accordance with the table below:

<u>Depth of Cover</u>	<u>Insulation Width and Thickness</u>
4.5' – 5'	2" thick, 3.5' wide
4.0' – 4.5'	3" thick, 3.5' wide
3.0' – 4.0'	4" thick, 4' wide
Pipe crossing above water line	3" thick, 3' each side of crossing

### Manholes

Manholes shall meet the requirements for manholes in the Section 02722 – Sewer of the Town Standards.

### Casing pipe

Casing pipe shall be at least 120 psi or SDR 35 PVC pipe. Note that concrete encasement is prohibited.

## **PART III - EXECUTION**

### FIELD LOCATIONS

The Contractor shall make such excavations as are necessary to determine the exact location of existing utilities which affect new construction. Where practical, new lines shall be routed to facilitate installation, allow for future maintenance, minimize existing utility conflicts and to minimize construction problems. Notify the Town if existing utilities present conflicts for the new infrastructure.

### SERVICE DISRUPTION

Service disruption shall conform to the requirements in the General Requirements.

### RECEIVING, HANDLING, AND STORAGE

Upon receipt make overall inspection that pipe has been received in good condition. Pipe and appurtenances should be inspected for any damage or imperfections and problem materials should be so marked set aside until removed from the job site. Town reserves the right to inspect all materials received and reject any which does not meet the requirements of Town specifications and standards.

Pipe, valves, fitting, and other appurtenances should be unloaded, handled, and stored in accordance with manufacturer's recommendations. Pipe shall be handled during all phases of construction in a manner that will provide the maximum protection of the pipe and any coating or lining and will prevent the intrusion of dirt or other foreign materials into the pipe. All slings, hooks, and other lifting or handling equipment which comes in contact with pipe and appurtenances shall be padded. Dropping the pipe during unloading or placing in the trench is prohibited and will be cause for rejecting that material. Do not dragging pipe spigot rings on the ground and do prevent damage to the ring from contact with abrasive or hard objects. Extreme care shall be used in the handling, storage, and installation of valves and other appurtenances to prevent damage or distortion to the equipment and to ensure proper performance and assure cleanliness. Valves shall not be lifted by operating stems. Dropping materials during unloading or placement in the trench is prohibited and will be cause for rejecting that material.

Only the amount of pipe and fittings necessary to ensure efficient installation progress shall be strung along the trenches. All other pipe and fittings shall be stored in the Contractor's yard. Piping strung or stored shall be



protected at all times from damage by traffic, workmen, construction operations, and other hazards. PVC pipe stored for a prolonged period of time shall be protected from sunlight.

#### ALIGNMENT AND GRADE

Pipe shall be laid and maintained to the required line and/or grade shown on the approved plans with fittings, valves, and hydrants at the required locations with spigots centered in the bells. Pipe and appurtenances shall be installed within 0.5' horizontal and 0.1 vertical of design.

Changes in horizontal or vertical alignment of the pipe at a joint shall not exceed the manufacturer's recommended deflection for the type and size pipe being laid. When the change required is more than that recommended, a fitting or several short joints of pipe shall be used. All changes in direction in excess of eight (8) degrees or the maximum deflection recommended by the manufacturer, shall require a fitting unless otherwise approved by the Town.

When new pipe is to be connected to an existing pipe or when crossing existing pipe line, the Contractor shall excavate the existing lines well in advance of the laying of the new line to enable the Contractor and OR to verify their elevation and placement and to make any adjustments in grade and/or alignment of the new pipe line that may be required.

The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground structures, both known and unknown, may be determined, and he shall be held responsible for the repair or replacement of such structures when broken or otherwise damaged. Temporary support, adequate protection, and maintenance of all underground and surface utility structures, drains, sewers, and other structures encountered in the progress of the Work shall be furnished by the Contractor at his expense.

Whenever obstructions are encountered during the progress of the Work and interfere to such an extent that an alteration in the approved plans is required, the Contractor shall notify the OR and the Engineer shall have the opportunity to change the plans and order a deviation from the line and/or grade or arrange with the owners of the structures for the removal, relocation, or reconstruction of the obstructions.

All pipe shall be laid to the depth shown on the approved plans or pipeline typical drawing. The depth of cover shall be measured from the top of the barrel of the pipe to the established finished grade of the street unless changes in street grade are proposed in which case the cover shall be measured to the proposed depth. Construction staking is required at minimum 50 ft intervals for line and grade control.

#### EXCAVATION AND TRENCH PREPARATION

Excavation shall be in accordance with Section 02200 Excavation, Compaction, and Backfilling Standard Specifications except as more stringent requirements are outlined herein.

#### Bedding

Bedding for water lines shall be in accordance with Section 02200 and manufacturer's recommendations including that select bedding for water taps and service lines shall be a low permeability material.

## PIPE LAYING

Lowering pipe into trench - Proper implements, tools and facilities shall be provided and used by the Contractor for the safe and convenient performance of the Work. All pipe, fittings, valves, and hydrants shall be carefully lowered into the trench piece by piece by means of a derrick, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to pipe and fittings. Under no circumstances shall the pipe or accessories be dropped or dumped into the trench. Dropped or dumped materials will be cause for rejection of same.

Inspection before installation - The pipe and accessories shall be carefully inspected for cracks and other damage before installation in the final position. Defective or unsound material shall be set aside for inspection by the Town who will determine if the material shall be repaired or rejected. Rejected materials shall be removed by the Contractor from the job.

Keeping pipe clean - Every effort shall be made to keep the interior of pipe and fittings clean during all phases of construction. This is especially important if the tablet method of disinfection is to be allowed. The interior of the pipe shall be thoroughly cleaned of foreign material before being lowered into the trench and shall be kept clean during operations by plugging or other approved means. Fittings shall be thoroughly cleaned, with a wire brush if necessary, taking care to not damage the internal coating. If the pipe laying crew cannot keep pipe clean while placing the pipe in the trench, Town may require that the ends of the pipe be covered before placing it in the trench and that the covers only be removed as the joints are assembled. If cleanliness is in question, the Town may require the line be swabbed and/or hydrojetted and video inspected at contractor's expense to confirm that it is clean. Providing access to all sections which are required to be videoed, then cleaning and reassembling pipe, shall be the responsibility of the Contractor.

Laying of Pipe - The full length of each section of pipe shall rest solidly upon the bed, with recesses excavated to accommodate bells and joints. Pipe shall be laid with bell ends facing the direction of laying unless directed otherwise by the Engineer. Pipe laid on slopes 10% and steeper shall be laid from the bottom and proceed upward and have restraints approved by the Engineer. Pipe shall not be laid in water or when trench or weather conditions are unsuitable for the Work unless expressly permitted by the Town.

The subgrade upon which the pipe is placed shall consist of materials suitable for supporting the pipe without excessive settlement or stress development. Low permeability, fine earthen materials shall be carefully placed and compacted around the pipe and up to a depth of six inches over the top of the pipe. Care shall be taken in backfilling to see that the pipe is not displaced, crushed, cracked, or otherwise injured. In the event that rock or excessively spongy materials are encountered, they shall be removed to a depth of not less than 6" below the bottom of the proposed lines and replaced with an approved material and mechanically compacted to grade. If no suitable subgrade material is available from the upper portion of the excavation, approved material shall be imported to the job site.

The sealing surface of the pipe, the bell to be joined, and the elastomeric gaskets shall be cleaned immediately before assembly. Assembly shall be made as recommended by the manufacturer. Unless otherwise directed, the gasket and the bell or the plain end of the pipe to be jointed shall both be lubricated with a suitable soft vegetable soap compound meeting NSF 61. The spigot end shall be centered in the bell and the pipe forced home and brought to correct line and grade. Pipe that is not furnished with a depth mark shall be marked before assembly to assure that the spigot end is inserted to the full marked depth of the joint. Care shall be taken to ensure that no damage is done to the pipe, collar, gasket, or bell when the pipe is being homed. Use of excessive force will not be permitted. Any pipe that has had the grade or joint disturbed during or after laying shall be taken out and relayed.

Any section of pipe, fittings, valves, or hydrants already laid and found to be defective shall be taken out and replaced without additional expense to the Town.

HDPE pipe shall be installed in strict accordance with manufacturer's recommendation. All workers welding HDPE pipe must be trained and approved by the manufacturer for welding pipe of the size and dimension ratio being used on this project. At the beginning of welding each day, each worker who will be welding pipe shall demonstrate his qualifications by successfully completing a bend back test prior to welding any pipe for use on the project. All welds shall be full depth and shall have a uniform bead around the joint.

Flange and mechanical joints shall be made with properly sized machine bolts and nuts. All nuts and bolts utilized in underground connections shall be Core-blue, coated high strength cast iron, or coated high strength wrought iron depending on soil conditions. All components of these types of joints shall be cleaned before jointing. Only one (1) gasket will be permitted in a flange joint. In a mechanical joint the plain end pipe shall be fully seated before the gland and gasket is slipped up to the bell; care shall be taken to locate the gasket evenly around the entire joint. All nuts on both types of joints shall be tightened by hand first then by alternating nuts 180 degrees apart to the manufacturer required torque. Deflection at a mechanical joint shall not exceed either the manufacturer's recommendation or Table 1 in AWWA C600. Buried bolts and nuts on mechanical and flanged joints shall be wrapped in a 10 mil plastic and taped closed.

When work is not in progress, open ends of pipe and fittings shall be securely closed by a watertight plug to prevent entry of foreign materials and/or water. If there is water in the trench, the seal shall remain in place until the trench is pumped completely dry. Whenever water is in the trench enough backfill shall be placed on the pipe to prevent floating. Should any foreign material be allowed to enter the line or to remain in the line after installation, the Contractor shall remove such accumulation with a pipeline scraper or other approved means. Should the Contractor repeatedly fail to prevent water, dirt, or other material from entering the line, he will be required to clean each section of pipe with a pipeline scraper or swab as it is installed. If pipeline cleanliness is in question the tablet method of disinfection will not be permitted.

Sequencing – Unless otherwise approved as part of an Engineer approved method statement, pipeline installation shall follow trench excavation within 100 lineal feet. Trench backfill shall follow pipe installation within 100 lineal feet. Approved cleanup shall follow trench excavation within 100 lineal feet. The Town may allow changes in these requirements if field conditions warrant.

Cutting of Pipe - The pipe shall be cut in a neat and workmanlike manner in accordance with manufacturer recommendations. No damage shall be done to the pipe or any lining or coating and the cut shall leave a smooth end at right angles to the axis of the pipe. Flame cutting of iron pipe by means of an oxyacetylene torch shall not be allowed.

Connection to and Crossing of Existing Lines - When new pipe is to be connected to or to cross an existing pipe, the Contractor shall excavate the existing lines well in advance of the laying of the new line to enable the OR to verify elevation and placement and to make any changes in grade and/or alignment of the new pipe line that may be required. Connections to existing lines shall be made at the locations shown on the approved plans unless changes are approved by the Engineer. In most cases where there is significant elevation adjustment (more than 18”), the Contractor shall use 22.5 degree fittings to make the adjustment. For lesser changes a gradual adjustment of elevation should be made. Place insulation where cover is less than specified depths. Coordinate timing of the cut with Town, and provide required notice to affected customers. In cutting the existing pipe take great care to minimize contamination of existing line. Keep water level in the trench below

the level of the pipes. Make connection using required fittings and restrain the joint. Disinfect the line as called for below for a repaired line. Cut off and seal abandoned section unless otherwise noted on the approved plans, remove abandoned sections of line.

#### WATER SERVICE INSTALLATION

All water services shall be stubbed out to through the utility easement. Generally, meters shall be set at property line. When sidewalks are set close to property line, meters shall be set in the green belt near the sidewalk. In all cases owner responsibility for the service line shall begin at the meter. Installation of service lines shall be by open cut with bedding, backfill, and compaction in conformance with the specifications herein and Standard Specifications for Excavation, Backfill, and Compaction. Depth of bury shall be 5' unless otherwise indicated on the Town approved plans. Care shall be taken in laying the service line to prohibit kinks in the line. In placing backfill around pipe use only select materials which will bed and support the pipe and not cause injury to it.

Meter Lid Elevation - The lid for the meter can boxes shall be flush to finished grade of the surrounding property and landscape. When a meter can must be set within a sidewalk the lid shall be set about ¼" below grade to avoid catching on a plow.

Curb Stop and Box – Install curb stop of services lines so that box will be upstream of the meter can. Boxes must be plumb and the box lid if in concrete shall be ¼" below the finished concrete.

#### SETTING OF FITTINGS, VALVES, AND HYDRANTS

All hydrants, valves, plugs, caps, and fittings shall be provided as shown on the approved plans and set and joined to the pipe in the manner specified herein for cleaning, laying, and joining pipe. Whenever practical, flanged fittings shall be used and gate valves bolted directly to crosses and tees as applicable. All valves, fittings, clamps, couplings, and hydrants including the connections shall be wrapped in a 10 mil plastic and sealed.

Valves and Valve Boxes - Gate valves shall be installed as shown on the typical drawing and in accordance with the Minimum Standards adopted by the Town at the locations shown on the approved plans. In general, a valve shall be provided on each branch of a tee or cross. Care shall be taken to assure that the valve and box are plumb and that the valve box is properly supported on a concrete base, and adjusted for the correct finished grade. A box shall be provided for each buried valve and the box shall not transmit shock or stress to the valve and shall be centered over the valve nut. Each valve not in the roadway shall be marked with a steel T post. The top of the post shall have a 4 x4 minimum steel plate welded to the top. The plate shall be labeled with the valve ID.

Hydrants - Hydrants shall be located as shown on the plans. Final location will be approved by the OR in the field and should provide complete accessibility and minimize the possibility of damage from vehicles or injury to pedestrians. Hydrants shall be accurately set to the proper bury lines so that bolts are accessible and shall be securely anchored when it is plumb. A clean gravel fill shall be placed around the hydrant barrel drain port as shown on the typical drawings. Each hydrant shall be connected to the main with a 6" minimum diameter branch controlled by an independent 6" gate valve, installed in accordance with the typical drawings for hydrant and gate valve installation adopted by the Town. The Contractor in the presence of the Town shall test each hydrant by operating it through several open and close cycles.

### DEAD ENDS

All unconnected ends of pipe shall have a valve, and plug or cap installed on it with appropriate restraint. In general, plugs shall be inserted into the bells of all dead-end fittings. Spigot ends of accessories, fittings and plain ends of plastic pipe shall be capped. Blind flanges shall be used on flange fittings. A reaction or thrust block and mechanical restraint such as a megalug shall be provided at all dead-ends of pipe.

### THRUST BLOCKS

A reaction or thrust block shall be provided at each bend, tee, valve, hydrant, plug, and at reducers or fittings where changes in pipe diameter or direction occur. The size and shape of the thrust blocking shall be as shown on the typical drawing. Concrete shall be a 6 sack, 4000 psi at 28 days mix approved by the Town. Maximum water cement ratio shall be 0.42. The concrete shall be placed between the poly wrapped pipe or appurtenance and the undisturbed wall of the trench. To ensure access for repair, the piping shall be poly-wrapped in such a manner that no concrete is in contact with any piping or bolts or nuts on the fitting etc and the wrap is taped closed. In addition, a joint restraint system such as a megalug shall also be provided on all mechanical joints.

### AIR VALVES

Air valves shall be installed in all locations where air is likely to accumulate in the water line, most often at high spots in the line. A tap shall be made in the top of the line and a corporation stop installed in the tap. The stop shall then be connected to an air valve installed in a manhole or vault that meets the requirements of the material specifications above and shall be installed in accordance the standard drawing adopted by the Town. The valve shall be installed at 4 feet below finished grade. A frost-free lid shall be provided. Adequate insulation shall be installed around the valve to protect it from freezing. A vent from the vault shall have a continuous positive slope to where the vent line is out of the travelled way and brought up above the potential snow line.

### CROSS CONNECTION CONTROL VALVES

Cross connection control valves shall be installed in a manner which conforms with the recommendations of the Foundation for Cross Connection Control and Hydraulic Research and applicable CDPHE regulations and shall have sufficient space around and access to the valve to allow for proper testing.

### VAULTS

Vaults where needed or required shall be of concrete with minimum wall thickness of 8 inches or the minimum required to properly encase the re-enforcing steel required by the structure. The vault shall be of such size as to allow easy operation and maintenance of the equipment contained therein. A 24" minimum frost protected access hatch shall be provided over the manway steps to allow access to the vault. Vaults shall include either a floor drain or sump depending on groundwater conditions.

Any temporary taps installed to facilitate construction, testing, etc. shall be removed at the pipe and a follow wrap around repair clamp installed over the hole and extending a minimum of 6" in each direction from the hole.

## BEDDING AND COMPACTION

Bedding, backfilling, and compaction shall be in accordance, with Excavation Backfill, and Compaction Standard Specifications of the Town and pipe manufacturer's specification. Special attention shall be given to placing and compacting select bedding material in the pipe zone. The haunching on PVC pipe shall be compacted to 95% Standard Proctor. Bedding and pipe zone backfill of water lines shall be fine grained and relatively impermeable rather than a graded material. Backfill shall not be wheel compacted until there is a minimum of 36" of compacted cover over the top of the pipe.

## HYDROSTATIC TESTING

In advance of hydrostatic testing and disinfection the Contractor shall furnish a method statement detailing how he intends to satisfactorily test the new work without impacting existing infrastructure. Temporary blowoffs in the new line must be kept to a minimal and any holes in the pipe that are permitted shall be removed and covered with a repair clamp. The method statement shall address phasing of the work as well the methods of accomplishing the work.

The Contractor shall be required to perform hydrostatic tests on all water mains, laterals, dead ends, and service lines in accordance with AWWA specifications C600. Prior to making the test the Contractor shall advise the Town of the time and place of the test so that adequate inspection can be provided. Prior to performance of the test the pipeline shall be completely filled with water for a period of 24 hours.

The test shall be conducted in the presence of the Town or its authorized representative. The testing of the lines shall be done without being connected to existing lines unless approved by the Town. All necessary apparatus for pressure testing including the pump, pipe connection, gauges, and measuring devices shall be furnished by the Contractor at no cost to the Town. If connections to the existing lines are allowed by the Town, it is with the understanding that the Contractor assumes any and all responsibility in case of damage or failure of the existing system. Leakage through connections to the existing system, leaks in the existing lines, or leaking valves under the test pressure will invalidate the test and required the Contractor to find another means to test the line.

Prior to testing, all air shall be bled from the lines. If permanent air vents are not located at all high points, the Contractor shall install corporation stops at such high points so the air can be expelled as the line is filled then the corps closed. The lines shall be tested at 150 psi or 1.5 times the normal working pressure of the lines, whichever is greater, for not less than two (2) hours when performing the combined pressure and leakage test. Test pressure shall be measured at the high point in the line. All taps, gauges (3" face, 0-200 psi, at least 5 psi gradations), and necessary equipment shall be provided by the Contractor as approved by the Town; however, the Town may utilize its own gauges if it so elects. Each section of the new line, between valves shall be tested to demonstrate that each valve will hold the test pressure. No pipe installed will be accepted if the leakage is greater than that determined by the following formula:

$$L = \frac{N * D * \sqrt{P}}{7400}$$

Where:

- L** = Allowable leakage (gal/ 2 hr)
- N** = Length of Pipe divided by 18
- D** = Nominal Pipe Diameter (in)
- P** = Testing pressure (psig)

During the test, the test pressure shall not lose more than 5 psig without being pumped back up to the test pressure. The total gallons of water required to return the line to the test pressure at the end of the test period is the total leakage. If the total leakage is less than the allowable, the line can be given preliminary acceptance. All visible leaks will be repaired regardless of the amount of leakage. If leakage exceeds that allowed based on the above formula, Contractor shall identify problems, make repairs, and repeat the test until the leakage is less than or equal to the allowable leakage.

When separate pressure and leakage tests are to be performed, test procedures shall conform with the procedures detailed in AWWA C600. The duration of the pressure test shall be a minimum of one (1) hour and the duration of the leakage test shall be a minimum of four (4) hours.

Each gate valve shall be tested to ensure that it operates properly and provides watertight seal under 1 1/2 times operating pressure in the closed position.

#### DISINFECTION OF POTABLE WATERLINES

General – Flushing and disinfection of potable waterlines shall be done in accordance with the procedure set forth in AWWA C651 Disinfecting Water Mains, Town Standards, CDPHE Low Risk Discharge Guidance (see below) and approved method statement. All water lines and sections of water line which have been exposed including lines owned by other parties must be disinfected. The Contractor shall provide all temporary blowoffs (only if included in the approved method statement), pumps, chlorination equipment, chlorine and all other necessary apparatus required. The placement of powder chlorine in each joint of pipe will not be allowed.

Pipe Cleaning - If the pipe contains dirt or heavy encrusted matter that in the opinion of the OR will not be removed during the flushing operation, the Contractor shall clean and swab the interior of the pipe with a 5 percent chlorine solution.

Preliminary Flushing - The pipeline shall be flushed prior to disinfection, except when the tablet method is used, to remove all remaining foreign material. The flushing operation shall develop a minimum velocity of 3 ft./sec. for 5 minutes minimum through the length of the pipe. If dirt cannot, in the opinion of the OR, be removed by flushing, the pipe shall be cleaned and swabbed with a 5% hypochlorite disinfecting solution. Preliminary flushing cannot be used with the Tablet Method. Use of tablet method for disinfection is only allowed if the pipe has been kept clean and dry duration installation. If the pipe has not been kept clean, the tablet method is not allowed and preliminary flushing is required.

Chlorine Application - In general, chlorine shall be applied using the continuous feed method. The tablet method may be used on short extensions (up to 2500 ft.) of small diameter mains (12-inch and smaller). Longer line segments require using the continuous feed method.

Continuous Feed Method – The continuous feed method shall be in accordance with AWWA C651 and consists of completely filling the main with potable water, removing air pockets, then flushing the completed main at 3 ft/sec to remove particulates, and refilling the main with potable water that has been chlorinated to 25 mg/l. After a 24 hour holding period in the main the residual chlorine shall be not less than 10 mg/l.

Final Flushing - After the required retention period, flush all heavily chlorinated water from the main until the chlorine concentration is no higher than that prevailing in the system, or less than 1 mg/l.

Disposal of super chlorinate waters - All flushing of chlorinated water shall be completed in conformance with CDPHE guidance and in a manner that protects with environment and all property and improvements.

Bacteriologic Tests - After completion of the final flushing and prior to placing the pipeline in service, collect samples from the end of the line and test for bacteriologic quality to show the absence of coliform organisms. The number and frequency of samples shall conform to the requirements of the public health authority having jurisdiction but in no case shall the number be less than one for chlorinated supplies and two collected 24 hours apart for unchlorinated supplies. Collect samples in sterile bottles from a standard corporation stop installed in the main. Do not collect samples using a hose or fire hydrant. Sterilize the corporation stop prior to sampling.

Repetition of Procedure - If the original disinfection fails to produce satisfactory samples, repeat the disinfection procedure until satisfactory results are obtained.

Disinfecting Existing Mains - The procedure outlined in this section apply primarily when mains are wholly or partially dewatered. Leaks or breaks that are repaired with clamping devices while the mains remain full of water under pressure present little danger of contamination and may not require disinfection as long as the repair parts and the pipe which will be covered are swabbed with chlorine immediately prior to connection.

When an old line is opened, either by accident or by design, the excavation is likely to be wet and could be contaminated. Liberal quantities of hypochlorite applied to open trench areas will lessen the danger from such pollution. Tablets have the advantage in such a situation because they dissolve slowly and continue to release hypochlorite as water is pumped from the excavation.

The following procedure is considered as a minimum that may be used.

Swabbing with Hypochlorite Solution - The interior of all pipe and fittings used in making the repair (particularly couplings and tapping sleeves) and the open section of the existing line shall be swabbed with a 5% hypochlorite solution before they are installed.

Flushing - Thorough flushing is the most practical means of removing contamination introduced during repairs. If valving and hydrant locations permit, flushing from both directions is recommended. Flushing shall be started as soon as the repairs are completed and continued until discolored water is eliminated and the water being discharged has a comparable chlorine residual to the water in the distribution system.

Where practicable, in addition to the above procedures a section of main in which the break is located shall be isolated, all service connections shut off, and the section flushed and chlorinated as described for new lines, except that the dose may be increased to as much as 500 mg/l, and the contact time reduced to as little as 1/2 hour. After chlorination, flushing shall be resumed and continued until discolored water is eliminated, and chlorine concentration is equal to that in the system.

Bacteriologic samples shall be taken after repairs to provide a record by which the effectiveness of the procedures can be determined. If the direction of flow is unknown, samples shall be taken on each side of the main break.





Dedicated to protecting and improving the health and environment of the people of Colorado

**Low Risk Discharge Guidance**  
**Discharges of Potable Water**  
January 15, 2016

**Scope and Purpose of Modification**

This revised guidance document is effective January 15, 2016. In addition to editorial revisions, the following substantive modifications were made:

- Added definitions.
- Clarified the limitations on discharges for which this guidance is applicable, including what is included in a “potable water distribution system.”
- Clarified that certain discharges associated with “super-chlorinated” water may be allowed under this guidance when the criteria and conditions are met.
- Added conditions allowing for the use of chemical dechlorination.
- Clarified the requirements and practices for preventing erosion.
- Identified an allowable concentration for residual chlorine in discharges to classified surface waters, consistent with 5 CCR 1002-31, The Basic Standards and Methodologies for Surface Water.

Changes related to potable water distribution systems were made in response to comments received on the draft permit COG604000 General Permit for Discharges from Hydrostatic Testing of Pipelines, Tanks, and Similar Vessels. The final permit was issued on November 23, 2015 and is effective on April 1, 2016. Summaries of the comments and the division’s responses are included in the fact sheet for the final permit. In the final permit, the division excluded discharges of potable water from potable water distribution systems and reaffirmed that these discharges are more appropriately covered in accordance with WQP-27, Low Risk Discharges Policy, as an alternative to general permit coverage. The division determined that clarifications should be made to this guidance regarding the issues raised during the general permit renewal process and aligned the timeline of this update with the timeline for issuance of the final permit.

In regard to clarifications regarding what is included in a potable water distribution system, the division found that discharges associated with testing of new lines were consistent with scope of the guidance as long as the construction and installation methods did not render the water non-potable. Clarity was added to this guidance since construction contractors had previously applied and obtained authorization for the discharge of water, including potable water, associated with the installation and testing of new lines, under the COG604000 General Permit.

In regard to super-chlorinated water, the division determined that the super-chlorination of water in potable water distribution systems does not render the water non-potable, and that control measures for dechlorination of superchlorinated water are highly effective and widely available. Since comments on the COG604000 General Permit requested clarification regarding whether permit coverage under the general

permit would be available for superchlorinated discharges, and since in response to other comments the division excluded all discharges from potable water systems from the COG604000 General permit, the division is clarifying in this modification to the guidance document that certain discharges associated with super-chlorinated water may be allowed under this guidance.

### **Background and Discussion**

This discharge policy guidance has been developed in accordance with WQP-27, Low Risk Discharges Policy. This guidance is only applicable to discharges meeting the low risk discharge criteria and conditions identified below. **Refer to the Alternative Disposal Options section at the end of this document for additional information for discharges that do not meet the criteria and conditions of this guidance.**

When the provisions of this guidance are met, the division will not actively pursue permitting or enforcement for the discharge of potable water, unless on a case-by-case basis the division finds that a discharge has resulted in an adverse impact to the quality of any state waters receiving the discharge.

Discharges of potable water are a type of industrial activity with short term, infrequent discharges that with proper management are not expected to contain pollutants in concentrations that are toxic or that would cause or contribute to a violation of a water quality standard. The typical pollutant of concern is total residual chlorine, however, depending on how the discharge occurs, total suspended solids and oil and grease may become pollutants of concern. These pollutants can be handled using dechlorination techniques, filters, oil booms, and other control measures.

There are a large number of discharges of potable water. For example, approximately 2,000 public water systems are subject to the Colorado Primary Drinking Water Regulations (5 CCR 1002-11). There are additional public and private systems that distribute water intended for human consumption which are not subject to 5 CCR 1002-11. These systems operate potable water distribution systems that generate the types of discharges covered by this guidance. From October 2001 through December 2008, the division had a general permit in place, the Treated Water Distribution Permit (COG380000), to authorize discharges from potable water distribution systems. During the seven years permit coverage was available, 35 systems applied for and obtained permit coverage, a small number relative to the number of systems expected to discharge. The division established the Low Risk Discharge Policy in June 2008 to provide an alternative to general permit coverage for low risk discharges. The division issued the first low risk discharge guidance for potable water discharges in January 2009, which aligned with the timeline for termination of the COG380000 general permit. The division finds that these types of discharges may occur at all times of the year, and require a resource intensive effort to permit, without resulting in a clear general benefit to environmental quality due to the low risk nature of the discharge.

The criteria provided in this guidance must be met, and all of these conditions must be followed, by anyone claiming to discharge under this low risk guidance.

The following are examples of common discharges that **do not meet** the criteria for discharging under this guidance. Discharges that do not meet the criteria for coverage under this guidance shall otherwise be disposed of properly, which may include sending to the sanitary sewer with permission of the local wastewater treatment facility or treating and discharging under a CDPS discharge permit (see the Alternative Disposal Options section at the end of this document).

- Discharges associated with installing or repairing pipe, fittings, and appurtenances for distribution of potable water and for which the discharge water would not meet the definition of potable water are not covered by this guidance. For example, the following would not be covered under this guidance:

discharges from cleaning debris and foreign materials from new sections of pipe which have pollutant concentrations making the water unsuitable for human consumption in accordance with Colorado Primary Drinking Water Regulations (5 CCR 1002-11).

- Discharges from cleaning or maintaining components at a construction or utility yard are not covered by this guidance.
- Discharges from a distribution system, tank or storage facility that is used for conveyance or storage of materials other than potable water are not covered under this guidance.

### Criteria, Conditions, and Control Measures

#### ➤ Definitions

- ❖ **Backflow Prevention Assembly or Device:** means any mechanical assembly or device installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the mechanical assembly is appropriate for the identified contaminant at the cross connection and is an in-line field-testable assembly.
- ❖ **Classified State Surface Water:** is a surface water with a classification in the Classification and Numeric Standards Regulation for each of the seven river basins in Colorado. Classifications for each segment within the river basin can be found in the numeric and standards table for each basin regulation.
- ❖ **Control measures:** are any best management practice or other method used to prevent or reduce the discharge of pollutants to waters of the state.
- ❖ **Potable Water:** means water suitable for human consumption in accordance with Colorado Primary Drinking Water Regulations (5 CCR 1002-11), or water intended for human consumption from a public or private supply system not subject to 5 CCR 1002-11.

#### ➤ Low Risk Discharge Criteria

This guidance is applicable to point source discharges that meet the following criteria and that meet the conditions listed in the next section. See the Alternative Disposal Options section for guidance on addressing water not meeting these criteria.

- ❖ The discharge shall be of potable water from a potable water distribution system, including tanks and storage facilities that are part of that system. This includes lines supplying potable source water to other systems, not separated by a backflow preventer, where free mixing with the potable system occurs (e.g. fire suppression lines, irrigation lines, etc.). A system has been “maintained for potable water distribution use” when it will be or is currently delivering or storing potable water (i.e. existing systems).

#### ➤ Conditions

The following conditions must be followed by anyone discharging potable water. See the Alternative Disposal Options section for guidance on addressing water not meeting these conditions.

❖ **Exclusion of Process Discharges:** With the exception of hydrostatic testing of potable water distribution systems, the potable water shall not be used in any additional processes. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, or hydrostatic testing of pipelines not associated with treated water distribution systems.

❖ **Requirement for Removal of Chlorine:** If the discharge is directly to a state surface water (any stream, creek, gully, whether dry or flowing), it must not contain any residual chlorine in excess of 0.011 mg/L. The operator is responsible for determining what is necessary for removing chlorine from the discharge. If the discharge is to a ditch, chlorine content may be limited by the owner of the ditch. However, if the ditch returns flow to classified state surface waters, it must not contain residual chlorine in excess of 0.011 mg/L at the point where it discharges to the classified state surface water. It is recommended that if an operator is unsure of the status of the receiving water for a discharge in accordance with this guidance, that they assume a receiving water is a classified state surface water and therefore subject to the 0.011 mg/L chlorine limitation.

❖ **Exclusion of Discharges with Cleaning Materials and Added Chemicals:** The addition of cleaning materials or chemicals to the potable water source water or discharge is not allowed under this guidance, except for additional chlorine and dechlorination chemicals meeting the conditions below.

- Additional chlorine may be added to the potable water source for the purposes of maintaining the potable water distribution system, including the use of super-chlorinated water. Special attention should be paid to the selection and use of control measures implemented for dechlorinating superchlorinated waters.
- Dechlorination chemicals may be added to the discharge for the purposes of removing residual chlorine and in accordance with the manufacturer's label.

❖ **Controlling Erosions:** The discharge shall not cause erosion of a land surface that could cause pollution of the receiving water. Signs of visible erosion that have the potential to cause pollution without downstream controls measures implemented include the formation of rills or gullies on the land surface. Energy dissipation devices designed to protect downstream areas from erosion by reducing velocity of flow (such as hose attachments and erosion controls), may be necessary to prevent erosion.

❖ **Limiting Solids in Discharge:** The discharge shall not contain solid materials in concentrations that can settle to form bottom deposits detrimental to the beneficial uses of the state waters or form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses.

❖ **Additional Requirements and Property Rights:**

- All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction.

- The guidance included in this document in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.

➤ **Implementation of Control Measures**

Control measures should be implemented as necessary to meet the conditions above, by anyone discharging in accordance with this guidance. The following control measures have been developed by the division to help ensure that the discharge will not negatively affect water quality. When implementing control measures to meet the criteria and conditions of this guidance may not be practical, see the Alternative Disposal Options section for additional solutions.

❖ **Discharges to the Ground:** For discharge to the ground, the water should not cause any toxicity to vegetation. When discharging, allow the water to drain slowly so that it soaks into the ground as much as possible.

❖ **Chlorine:**

▪ **Discharge to the Ground instead of Dechlorination:** The conditions for removing chlorine are not applicable when a discharge is to the ground and does not result in water reaching a state surface water. This option should be considered as an alternative to dechlorination.

▪ **Dechlorination:** Potable water is expected to contain chlorine at concentrations greater than the 0.011 mg/L chlorine limitation, and therefore removal of residual chlorine must be done for any direct discharge to state surface waters, or for any discharge to a storm sewer or conveyance where the chlorine will not dissipate to below the 0.011 mg/L limitation prior to reaching a state surface water. Dechlorination, if necessary, may be achieved by allowing water to stand uncovered until no chlorine is detected; ensuring dechlorination occurs between the location it is released from the potable water system but prior to reaching the classified state surface water; or by using a portable dechlorinator.

▪ **Additional Control Measures for Chemical Dechlorination:** Many portable dechlorinators rely on the addition of chemicals to remove chlorine from the discharge. All chemical additions must be in accordance with the manufacturer's specifications. When using chemicals in the dechlorination process, the operator must ensure the following: that proper quantities and rates are used, based on the concentration of chlorine; that adequate mixing occurs; and that enough time is allowed prior to flow reaching a surface water for the dechlorination chemicals to react with the chlorine in the water. In cases where the discharge of water that had been super-chlorinated will occur, operators should allow additional time for the chlorine to dissipate.

▪ **Determining if Chlorine Concentration is below 0.011 mg/L:** It is the operators' responsibility to ensure that adequate processes are followed to meet the 0.011 mg/L chlorine limitation prior to discharge to a classified state surface water. It is not required that an EPA approved test method be used to make this determination.

- **Discharge Testing:** There are a variety of methods to test for chlorine in the field, but the operator should ensure that the method selected is capable of detecting total residual chlorine down to the 0.011 mg/L limitation. For many methods, it will be necessary to have a test result indicating no (0 mg/L) residual chlorine to ensure that this limitation is met. A common and affordable test method is using a "color-wheel test kit" available from a variety of suppliers of chemical testing/analysis equipment. It is highly recommended that analysis occur for all superchlorinated discharges.

- **Discharging without Testing:** In some cases, it may be possible for an operator to make a determination that the chlorine concentration in a discharge is below 0.011 mg/L

without analysis. This may be based on a determination that the given hold time or travel time to a classified state water, based on other discharge-specific variables, will adequately reduce chlorine levels to result in the chlorine limitation being met. It is the operator's responsibility to ensure they understand the variables associated with a specific discharge to ensure that the chlorine limitation has been met.

- ❖ **Pollutants Picked Up After Release:** The discharge should be conducted to minimize the potential to pick up additional pollutants following release from the potable water distribution systems and prior to discharge to a water of the state.
  - The discharge should be conducted to minimize the potential to pick up additional suspended solids and to control erosion. It is understood that minimal suspension of sediment is inherent to any water running across soils. However potential water quality impacts should be minimized through practices such as diffusing flows and avoiding flows across bare soils.
  - The discharge should be conducted to minimize the potential that it will contact petroleum products/waste, and avoid picking up any oil and grease. When possible, an absorbent oil pad, boom or similar device should be used to eliminate oil from the discharge. A visible sheen must not be evident in the discharge.
  
- ❖ **Preparing and Installing Components:** When installing new pipe, fittings and appurtenances into a potable water distribution system, the components should be prepared and maintained in a way to minimize the potential for contribution of pollutants to discharges covered under this guidance.
  - All pipe, fittings, and other appurtenances associated with the discharge should meet industry standards for cleanliness for a public water. Examples of standard operating procedures include, but are not limited to, those found in ANSI/AWWA Standard C600-10, (*Installation of Ductile-Iron Mains and Their Appurtenances*), or any other applicable standard operating procedures that reflect industry standards of cleanliness. When it is necessary to remove debris, foreign material or other gross contamination from components prior to installation, wastewater generated from such activities may not be covered under this guidance. Such activity should occur at a location that allows for generated wastewater to be sent to the sanitary sewer with permission of the local wastewater treatment facility. Such wastewater could also be otherwise collected and disposed of.
  - Practices should be implemented during transport, storage, installation, and maintenance to minimize introduction of contaminants to pipe, fittings, and other appurtenances that could contribute pollutants to discharges.
  
- ❖ **Removing Pollutants:** Control measures for filtering or settling suspended solids and other debris should be used to remove solids or other debris that have either been picked up after discharge or that originated from within the potable water system. Examples of suspended solid removal practices include but are not limited to, check dams and filter bags. As a final measure downstream from additional control measures, inlet protection can be used to provide some additional removal and to allow for redundancy. Pollutant removal control measures should be used and maintained in accordance with the manufacturers' specifications.

### Alternative Disposal Options

Water that does not meet the criteria of this guidance or that cannot be discharged in a manner that meets the conditions of this guidance must be either authorized by a CDPS discharge permit issued by the division, or disposed of through an alternative means. Because the water sources addressed in this guidance are not covered by an existing general permit, it is expected that obtaining a CDPS permit will not be a practical solution for most discharges.

Water not meeting the criteria and conditions of this guidance may be sent to the sanitary sewer with permission of the local wastewater treatment facility or otherwise collected and disposed. If discharge is to the sanitary sewer, contact the local wastewater treatment facility prior to discharge. System owners may grant blanket authorization to discharge to their systems. This must be done to ensure that the facility is able to accept the discharge. Not all facilities are able to accept such discharges. Note that additional restrictions or local guidelines may apply.

If the waste is collected for disposal, it may be hauled off site for disposal at a facility that is authorized to discharge the water through an existing CDPS permit or in accordance with disposal requirements administered through the Colorado Hazardous Materials and Waste Management Division.

Alternatively the water may be land applied in a way that results in complete evapotranspiration. This will likely only be an option when the quantities of water are small.

