

**PROJECT SPECIFICATION MANUAL**

**PRESSURE BOOSTER PUMP IN-KIND  
REPLACEMENT**

**FOR**

**WEST GLOCESTER ELEMENTARY SCHOOL  
111 REYNOLDS RD,  
GLOCESTER, RI 02814  
PWS ID# RI1900041**

**May, 2026**

## **WEST GLOCESTER ELEMENTARY SCHOOL PRESSURE BOOSTER PUMP IN-KIND REPLACEMENT**

### **PROJECT SPECIFICATION MANUAL TABLE OF CONTENTS**

#### **DIVISION 0 – CONDITIONS OF CONTRACT**

00002	Project Directory
00020	Invitation to Bid
00300	Bid Form
Bid Bond:	EJCDC C-430 (2013)
Notice of Award:	EJCDC C-510 (2013)
Owner-Contractor Agreement:	EJCDC C-522 (2016)
Notice to Proceed:	EJCDC C-550 (2013)
Construction Performance Bond:	EJCDC C-610 (2013)
Construction Payment Bond:	EJCDC C-615 (2013)
Application for Payment:	EJCDC C-620 (2013)
Certificate of Substantial Completion:	EJCDC C-625 (2013)
Work Change Directive:	EJCDC C-940 (2013)
Contract Change Order:	EJCDC C-941 (2013)
Standard General Conditions:	EJCDC C-700 (2013)
RI Drinking Water State Revolving Fund Program – Contract Specification Package	
USEPA DBE Subcontractor Participation Form 6100-2	
USEPA DBE Subcontractor Performance Form 6100-3	
USEPA DBE Subcontractor Utilization Form 6100-4	
Disadvantaged Business Enterprise (DBE) Good Faith Efforts Provisions	
RI MBE Utilization Plan	
RI MBE Project Reporting Form	
Certification Regarding Debarment & Suspension, and Other Responsibility Matters	
American Iron & Steel (AIS) Provisions of P.L. 113-76	
Build America, Buy America (BABA) Implementation Act Procedures	
Davis-Bacon Prevailing Wage Requirements	
EPA Telecom Equipment Prohibition	
Relevant Federal and State Laws	
Federal Flood Risk Management Standard for SRF Programs	
SRF Signage Specifications	

**DIVISION 1 – GENERAL REQUIREMENTS**

01000	General Requirements
01010	Summary of Work
01015	Mobilization & Demobilization
01025	Measurement & Payment
01041	Project Coordination
01045	Cutting and Patching
01050	Field Engineering
01067	Permits
01090	Reference Standards
01153	Change Order Procedure
01200	Project Meetings
01340	Shop Drawings, Product Data and Samples
01380	Construction Record Photographs
01405	Contract Quality Control
01410	Testing Laboratory Services
01510	Temporary Utilities
01540	Security
01560	Temporary Controls
01620	Storage and Protection
01650	Start-Up of Systems
01700	Contract Close Out
01710	Cleaning Up

**DIVISION 2 – SITEWORK**

02001	General Site Conditions
02070	Selective Demolition
02650	Water Distribution Systems
02661	Installation of Water Piping Systems
02710	Testing & Disinfection of Potable Water Piping

**DIVISION 4 – MASONRY**

Not Applicable

**DIVISION 5 - METALS**

05500	Metal Fabrications
-------	--------------------

**DIVISION 6 – WOOD AND PLASTICS**

Not Applicable

**DIVISION 7 – THERMAL AND MOISTURE PROTECTION**

07920	Sealants and Caulking
-------	-----------------------

**DIVISION 8 – DOORS AND WINDOWS**

Not Applicable

**DIVISION 9 – FINISHES**

Not Applicable

**DIVISION 10 – SPECIALTIES**

Not Applicable

**DIVISION 11 – EQUIPMENT**

Not Applicable

**DIVISION 12 – FURNINSHINGS**

Not Applicable

**DIVISION 13 – SPECIAL CONSTRUCTION**

Not Applicable

**DIVISION 14 – CONVEYING SYSTEMS**

Not Applicable

**DIVISION 15 – MECHANICAL**

15050 Mechanical Basic Materials and Methods

15250 Mechanical Insulation

**DIVISION 16 – ELECTRICAL**

16010 Electrical General Provisions

16100 Basic Materials and Methods – Interior

16200 Testing and Coordination of Systems

**EQUIPMENT PROCUREMENT SPECIFICATION**

West Glocester Elementary School  
Pressure Booster Pumps In-Kind Replacement  
Equipment Procurement Specification May,  
2026

**SECTION 00002**  
**PROJECT DIRECTORY**

Owner: West Glocester Elementary School  
111 Reynolds Rd,  
Glocester, RI 02814  
Tel: 401-710-7500 x3172  
Attn: Gary Gras  
E-mail: ggras@fgschools.com

Design Engineer: Northeast Water Solutions, Inc.  
567 South County Trail, Suite 116  
Exeter, RI 02822  
Attn: Aiden Wright  
Tel: 401- 667-7463 x129  
E-mail: awright@nwsinc.net

**END OF SECTION 00002**

**SECTION 00020  
INVITATION TO BID**

Bids will be received by the Glocester Town Hall until **12:00PM on June 17<sup>th</sup>, 2026**. The project consists of booster pump replacement for the West Glocester Elementary School public water system. Bids shall be addressed to:

Attn: West Glocester Elementary School Business Office; Gary Gras  
Glocester Town Hall  
1145 Putnam Pike  
Chepachet, RI 02814

Copies of the Specifications (constituting one set) may be obtained in electronic (pdf) format, from Northeast Water Solutions, Inc., 567 South County Trail, Suite 116, Exeter, RI 02822; Tel. 401-667-7463 ext. 129, [awright@nwsj.net](mailto:awright@nwsj.net).

Prospective bidders may receive work site details by participating in a mandatory Pre-Bid Meeting, to be held at **3:30PM on June 3<sup>rd</sup>, 2026**, at:

West Glocester Elementary School  
111 Reynolds Rd  
Chepachet, RI 02814

No bids may be withdrawn for FORTY-FIVE (45) days after the scheduled closing time for the receipt of bids.

The Owner reserves the right to reject any and all bids, and to waive any informalities in the bidding and to accept that Proposal which, in its judgment, best serves the interest of the Owner.

**END OF SECTION**

**SECTION 003000  
BID FORM**

Project Identification: **West Glocester Elementary School – Pressure Booster Pump In-Kind Replacement**

**TABLE OF ARTICLES**

	Page
Article 1 - Bid Recipient	1
Article 2 - Bidder's Acknowledgments	1
Article 3 - Bidder's Representations	1
Article 4 – Bidder's Certification	3
Article 5 - Basis of Bid	4
Article 6 - Time of Completion	5
Article 7 - Attachments to Bid	5
Article 8 - Defined Terms	5
Article 9 - Bid Submittal	6

**ARTICLE 1 - BID RECIPIENT**

1.01 This Bid Is Submitted To:

Glocester Town Hall  
Attn: West Glocester Elementary School Business Office; Gary Gras  
1145 Putnam Pike,  
Glocester, RI 02814

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in the Bid and in accordance with the other terms and conditions of the Bidding Documents.

**ARTICLE 2 - BIDDER'S ACKNOWLEDGMENTS**

2.01 Bidder accepts all of the terms and conditions of the Advertisement and Instructions to Bidders, including without limitations those dealing with the dispositions of Bid security. The Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

**ARTICLE 3 - BIDDER'S REPRESENTATIONS**

3.01 In submitting this Bid, Bidder represents that:

### ARTICLE 3 - BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in SC-4.02, and (2) reports and drawings of Hazard Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as containing reliable "technical data."
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of the Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- J. Bidder will submit written evidence of its authority to do business in the State or other jurisdiction where the Project is located not later than the date of its execution of the Agreement.

#### **ARTICLE 4 - BIDDER'S CERTIFICATION**

4.01 Bidder further represents that:

- A. This Bid is genuine and not made in the interest of or on the behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
  - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

**ARTICLE 5 - BASIS OF BID**

Complete applicable sections for the Work to be completed by the bidder. Bidder may fill out all or selected sections depending work they are looking to complete bid.

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s).

**Lump Sum Bid Price for Pressure Booster Pump System:**

Equipment Only:

\_\_\_\_\_ (\$ \_\_\_\_\_)  
(use words) (numerals)

Electrical Installation/Equipment Installation Only:

\_\_\_\_\_ (\$ \_\_\_\_\_)  
(use words) (numerals)

Startup, Commissioning & Validation Only:

\_\_\_\_\_ (\$ \_\_\_\_\_)  
(use words) (numerals)

Operation & Maintenance Manual Only:

\_\_\_\_\_ (\$ \_\_\_\_\_)  
(use words) (numerals)

All specified cash allowances are included in the price(s) set forth above and have been computed in accordance with Paragraph 11.02 of the General Conditions.

**Total of All Bid Prices** (\$ \_\_\_\_\_)

All prices have been computed in accordance with Article 11 of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the contract Documents.

## **ARTICLE 6 - TIME OF COMPLETION**

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damage.

## **ARTICLE 7 - ATTACHEMENTS TO THIS BID**

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

- A. Required Bid security in the form of a Bid Bond (EJCDC No. C-430) or Certified Check (circle type of security provided);
- B. List of Proposed Subcontractors;
- C. List of Proposed Suppliers;
- D. List of Project References;
- E. Evidence of authority to do business in the state or jurisdiction of the Project; or a written covenant to obtain such license within the time frame for acceptance of Bids;
- F. Contractor's License No.: \_\_\_\_\_
- G. Required Bidder Qualification Statement with Supporting Data; and
- H. If Bid amount exceeds \$25,000, signed Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions;

## **ARTICLE 8 - DEFINED TERMS**

8.01 The terms used in this Bid with the initial capital letters have the meanings indicated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

## **ARTICLE 9 - BID SUBMITTAL**

9.01 This Bid is submitted by: If Bidder is:

**An Individual**

Name (typed or printed): \_\_\_\_\_ 

SEAL, if required by State
----------------------------------

By: \_\_\_\_\_  
*(Individual's signature)*

Doing business as: \_\_\_\_\_

**A Partnership**

Partnership Name: \_\_\_\_\_ 

SEAL, if required by State
----------------------------------

By: \_\_\_\_\_  
*(Signature of general partner -- attach evidence of authority to sign)*

Name (typed or printed): \_\_\_\_\_

**A Corporation**

Corporation Name: \_\_\_\_\_

State or Jurisdiction of Incorporation: \_\_\_\_\_

Type (General Business, Profession, Service, Limited Liability): \_\_\_\_\_

By: \_\_\_\_\_  
*(Signature -- attach evidence of authority to sign)*

Name (typed or printed): \_\_\_\_\_

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

CORPORATE SEAL, if required by State
--

Attest \_\_\_\_\_  
*(Signature of Corporate Secretary)*

Date of Qualification to do business in Rhode Island is \_\_\_ / \_\_\_ / \_\_\_\_\_

9.02 Bid submitted on \_\_\_\_\_, 20\_\_.

**END OF SECTION 00300**

## BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

---

BIDDER (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER

West Glocester Elementary School  
111 Reynolds Rd,  
Glocester, RI 02814

BID

Bid Due Date: June 17<sup>th</sup>, 2026  
Glocester Town Hall  
Attn: West Glocester Elementary School Business Office; Gary Gras  
1145 Putnam Pike,  
Glocester, RI 02814

BOND

Bond Number:  
Date:  
Penal sum \_\_\_\_\_

\$

(Words)

(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

**BIDDER**

**SURETY**

\_\_\_\_\_  
Bidder's Name and Corporate Seal (Seal)

\_\_\_\_\_  
Surety's Name and Corporate Seal (Seal)

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

By: \_\_\_\_\_  
Signature (Attach Power of Attorney)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Signature

Signature

Title

Title

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2 All Bids are rejected by Owner, or
  - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length.

If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

**NOTICE OF AWARD**

---

Date of Issuance:

Owner: West Gloucester Elementary School

Owner's Contract No.:

Engineer: Northeast Water Solutions, Inc.

Engineer's Project No.:

Project: Pressure Booster Pumps In-Kind Replacement

Contract Name:

Bidder:

Bidder's Address:

**TO BIDDER:**

You are notified that Owner has accepted your Bid dated [\_\_\_\_\_] for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

The Lawrence Sunset Cove Association Water Supply and Distribution System Improvements Project

The Contract Price of the awarded Contract is: \$ [\_\_\_\_\_] *[note if subject to unit prices, or cost-plus]*

Two (2) unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically. *[revise if multiple copies accompany the Notice of Award]*

Two (2) sets of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of this Notice of Award:

1. Deliver to Owner two (2) counterparts of the Agreement, fully executed by Bidder.
2. Deliver with the executed Agreement(s) the Contract security *[e.g., performance and payment bonds]* and insurance documentation as **specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.**
3. Other conditions precedent (if any):

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

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

---

Owner:

\_\_\_\_\_

(Authorized Signature)

By:

\_\_\_\_\_

(Printed Name)

Title:

\_\_\_\_\_ Project Administrator

West Gloucester Elementary School  
Pressure Booster Pumps In-Kind  
Replacement Equipment Procurement  
Specification May, 2026

Copy: Engineer

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

## CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

Prepared by



Issued and Published Jointly by



Copyright © 2016:

National Society of Professional Engineers  
1420 King Street, Alexandria, VA 22314-2794  
(703) 684-2882  
[www.nspe.org](http://www.nspe.org)

American Council of Engineering Companies  
1015 15th Street N.W., Washington, DC 20005  
(202) 347-7474  
[www.acec.org](http://www.acec.org)

American Society of Civil Engineers  
1801 Alexander Bell Drive, Reston, VA 20191-4400  
(800) 548-2723  
[www.asce.org](http://www.asce.org)

The copyright for this EJCDC document is owned jointly by the three sponsoring organizations listed above. The National Society of Professional Engineers is the Copyright Administrator for the EJCDC documents; please direct all inquiries regarding EJCDC copyrights to NSPE.

NOTE: EJCDC publications may be purchased at [www.ejcdc.org](http://www.ejcdc.org), or from any of the sponsoring organizations above.

## CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

This Contract is by and between West Gloucester Elementary School (Owner) and \_\_\_\_\_ (Contractor).

Owner and Contractor hereby agree as follows:

### ARTICLE 1 - THE WORK

#### 1.01 Work

- A. Work includes all labor, materials, equipment, services, and documentation necessary to construct the Project defined herein. The Work may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
- B. The Contractor shall complete all Work as specified or indicated in the Contract Documents. The Project is generally described as follows:
  - 1. Paige Associates – Community Improvement Project, which includes an upgrade of the Water Supply and Distribution System.
  - 2. The Site of the Work includes property, easements, and designated work areas described in greater detail in the Contract Documents but generally located at Paige Drive, Coventry, Rhode Island.

### ARTICLE 2 - CONTRACT DOCUMENTS

#### 2.01 Intent of Contract Documents

- A. It is the intent of the Contract Documents to describe a functionally complete project. The Contract Documents do not indicate or describe all of the Work required to complete the Project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the Owner and Engineer. This Contract supersedes prior negotiations, representations, and agreements, whether written or oral. The Contract Documents are complementary; what is required by one part of the Contract Documents is as binding as if required by other parts of the Contract Documents.
- B. During the performance of the Work and until final payment, Contractor and Owner shall submit all matters in question concerning the requirements of the Contract Documents, or relating to the acceptability of the Work under the Contract Documents to the Engineer. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- C. Engineer will render a written clarification, interpretation, or decision on the issue submitted, or initiate a modification to the Contract Documents.
- D. Contractor, and its subcontractors and suppliers, shall not have or acquire any title to or ownership rights to any of the Drawings, Specifications, or other documents (including copies or electronic media editions) prepared by Engineer or its consultants.

## 2.02 Contract Documents Defined

**NOTES TO USER: If any of the items listed are not to be included as Contract Documents, remove such item from the list and renumber the remaining items as necessary.**

- A. The Contract Documents consist of the following documents:
  - 1. This Contract.
  - 2. Performance bond.
  - 3. Payment bond.
  - 4. Specifications listed in the Table of Contents.
  - 5. Drawings as listed on the Drawing Sheet Index.
  - 6. Addenda.
  - 7. Contractor's Proposal
  - 8. The following which may be delivered or issued on or after the Effective Date of the Contract:
    - a. Work Change Directives (EJCDC C-940).
    - b. Change Orders (EJCDC C-941).
    - c. Field Orders.

## ARTICLE 3 - ENGINEER

### 3.01 Engineer

- A. The Engineer for this Project is Northeast Water Solutions, Inc.

## ARTICLE 4 - CONTRACT TIMES

### 4.01 Contract Times

- A. The Work will be substantially completed on or before **July 1<sup>st</sup>, 2026** and completed and ready for final payment on or before **July 15<sup>th</sup>, 2026**.
- B. The Work will be substantially completed within **150** days after the Effective Date of the Contract and completed and ready for final payment within **165 days** after the Effective Date of the Contract.

### 4.02 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence in the performance of the Contract, and that Owner will incur damages if Contractor does not complete the Work according to the requirements of Paragraph 4.01. Because such damages for delay would be difficult and costly to determine, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner **\$ 2,000.00** for each day that expires after the Contract Time for substantial completion.

#### 4.03 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor or their subcontractors or suppliers.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times.
- D. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor or Contractor's subcontractors or suppliers.

#### 4.04 Progress Schedules

- A. Contractor shall develop a progress schedule and submit to the Engineer for review and comment before starting Work on the Site. The Contractor shall modify the schedule in accordance with the comments provided by the Engineer.
- B. The Contractor shall update and submit the progress schedule to the Engineer each month. The Owner may withhold payment if the Contractor fails to submit the schedule.

### **ARTICLE 5 - CONTRACT PRICE**

#### 5.01 Payment

- A. Owner shall pay Contractor in accordance with the Contract Documents, the lump sum amount of \$\_\_\_\_\_ for all Work.

### **ARTICLE 6 - BONDS AND INSURANCE**

#### 6.01 Bonds

- A. Before starting Work, Contractor shall furnish a performance bond and a payment bond from surety companies that are duly licensed or authorized to issue bonds in the required amounts in the jurisdiction in which the Project is located. Each bond shall be in an amount equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until the completion of the correction period specified in Paragraph 7.12 but, in any case, not less than one year after the date when final payment becomes due.

#### 6.02 Insurance

- A. Before starting Work, Contractor shall furnish evidence of insurance from companies that are duly licensed or authorized in the jurisdiction in which the Project is located with a

minimum AM Best rating of A-VII or better. Contractor shall provide insurance in accordance with the following:

1. Contractor shall provide coverage for not less than the following amounts, or greater where required by Laws and Regulations:

- a. Workers' Compensation:

State:	Statutory
Employer's Liability:	
Bodily Injury, each Accident	\$ <u>500,000</u>
Bodily Injury By Disease, each Employee	\$ <u>2,000,000</u>
Bodily Injury/Disease Aggregate	\$ <u>1,000,000</u>

- b. Commercial General Liability:

General Aggregate	\$ <u>1,000,000</u>
Products - Completed Operations Aggregate	\$ <u>1,000,000</u>
Personal and Advertising Injury	\$ <u>1,000,000</u>
Each Occurrence (Bodily Injury and Property Damage)	\$ <u>1,000,000</u>

- c. Automobile Liability herein:

Bodily Injury:	
Each Person	\$ <u>1,000,000</u>
Each Accident	\$ <u>1,000,000</u>
Property Damage:	
Each Accident	\$ <u>1,000,000</u>
Combined Single Limit of:	\$ <u>1,000,000</u>

- d. Excess or Umbrella Liability:

Per Occurrence	\$ <u>1,000,000</u>
General Aggregate	\$ <u>1,000,000</u>

- e. Contractor's Pollution Liability:

Each Occurrence	\$ <u>1,000,000</u>
General Aggregate	\$ <u>1,000,000</u>

- B. All insurance policies required to be purchased and maintained will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the insured and additional insured.

- C. Automobile liability insurance provided by Contractor shall provide coverage against claims for damages because of bodily injury or death of any person or property damage arising out

- of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- D. Contractor's commercial general liability policy shall be written on a 1996 or later ISO commercial general liability occurrence form and include the following coverages and endorsements:
1. Products and completed operations coverage maintained for three years after final payment;
  2. Blanket contractual liability coverage to the extent permitted by law;
  3. Broad form property damage coverage; and
  4. Severability of interest; underground, explosion, and collapse coverage; personal injury coverage.
- E. The Contractor's commercial general liability and automobile liability, umbrella or excess, and pollution liability policies shall include and list Owner and Engineer and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each as additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis.
1. Additional insured endorsements will include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
  2. Contractor shall provide ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent for design professional additional insureds.
- F. Umbrella or excess liability insurance shall be written over the underlying employer's liability, commercial general liability, and automobile liability insurance. Subject to industry-standard exclusions, the coverage afforded shall be procured on a "follow the form" basis as to each of the underlying policies. Contractor may demonstrate to Owner that Contractor has met the combined limits of insurance (underlying policy plus applicable umbrella) specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policies and an umbrella or excess liability policy.
- G. The Contractor shall provide property insurance covering physical loss or damage during construction to structures, materials, fixtures, and equipment, including those materials, fixtures, or equipment in storage or transit.
- H. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 15.

## **ARTICLE 7 - CONTRACTOR'S RESPONSIBILITIES**

### 7.01 Supervision and Superintendence

- A. 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. Contractor shall be solely responsible for the means, methods, techniques, sequences, safety, and procedures of construction.
- B. Contractor shall assign a competent resident superintendent who is to be present at all times during the execution of the Work. This resident superintendent shall not be replaced without written notice to and approval by the Owner and Engineer except under extraordinary circumstances.
- C. Contractor shall at all times maintain good discipline and order at the Site.
- D. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday.

### 7.02 Other Work at the Site

- A. In addition to and apart from the Work of the Contractor, other work may occur at or adjacent to the Site. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.

### 7.03 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be new, of good quality and shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable supplier, except as otherwise may be provided in the Contract Documents.

### 7.04 Subcontractors and Suppliers

- A. Contractor may retain subcontractors and suppliers for the performance of parts of the Work. Such subcontractors and suppliers must be acceptable to Owner.

### 7.05 Quality Management

- A. Contractor is fully responsible for the managing quality to ensure Work is completed in accordance with the Contract Documents.

### 7.06 Licenses, Fees and Permits

- A. Contractor shall pay all license fees and royalties and assume all costs incident to performing the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others.

- B. Contractor shall obtain and pay for all construction permits and licenses unless otherwise provided in the Contract Documents.

#### 7.07 Laws and Regulations; Taxes

- A. Contractor shall give all notices required by and shall comply with all local, state, and federal Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages if Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations.
- C. Contractor shall pay all applicable sales, consumer, use, and other similar taxes Contractor is required to pay in accordance with Laws and Regulations.

#### 7.08 Record Documents

- A. Contractor shall maintain one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved shop drawings in a safe place at the Site. Contractor shall annotate them to show changes made during construction. Contractor shall deliver these record documents to Engineer upon completion of the Work.

#### 7.09 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.
- B. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
  - 1. All persons on the Site or who may be affected by the Work;
  - 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  - 3. Other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction.
- C. All damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, or anyone for whose acts the Contractor may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Contract Documents or to the acts or omissions of Owner or Engineer and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor).
- D. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

- E. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor shall act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

#### 7.10 Shop Drawings, Samples, and Other Submittals

- A. Contractor shall review and coordinate the shop drawing and samples with the requirements of the Work and the Contract Documents and shall verify all related field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information.
- B. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- C. With each submittal, Contractor shall give Engineer specific written notice, in a communication separate from the submittal, of any variations that the shop drawing or sample may have from the requirements of the Contract Documents.
- D. Engineer will provide timely review of shop drawings and samples.
- E. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs.
- F. Engineer's review and approval of a separate item does not indicate approval of the assembly in which the item functions.
- G. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of shop drawings and submit, as required, new samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
- H. Shop drawings are not Contract Documents.

#### 7.11 Warranties and Guarantees

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.

#### 7.12 Correction Period

- A. If within one year after the date of substantial completion, any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly and without cost to Owner, correct such defective Work.

### 7.13 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any subcontractor, any supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts they may be liable.

## ARTICLE 8 - OWNER'S RESPONSIBILITIES

### 8.01 Owner's Responsibilities

- A. Except as otherwise provided in the Contract Documents, Owner shall issue all communications to Contractor through Engineer.
- B. Owner shall make payments to Contractor as provided in this Contract.
- C. Owner shall provide Site and easements required to construct the Project.
- D. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, unless stated elsewhere in the Contract Documents, Owner shall have sole authority and responsibility for such coordination.
- E. The Owner shall be responsible for performing inspections and tests required by applicable codes.
- F. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- G. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- H. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

## ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

### 9.01 Engineer's Status

- A. Engineer will be Owner's representative during construction. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in this Contract.

- B. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any subcontractor, any supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- C. Engineer will make visits to the Site at intervals appropriate to the various stages of construction. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work.
- D. Engineer has the authority to reject Work if Contractor fails to perform Work in accordance with the Contract Documents.
- E. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work.
- F. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

## **ARTICLE 10 - CHANGES IN THE WORK**

### 10.01 Authority to Change the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work.

### 10.02 Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
  - 1. Changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
  - 2. Changes in the Work which are: (a) ordered by Owner or (b) agreed to by the parties or (c) resulting from the Engineer's decision, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
  - 3. Changes in the Contract Price or Contract Times or other changes which embody the substance of any final binding results under Article 12.
- B. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

## **ARTICLE 11 - DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS**

### **11.01 Differing Conditions Process**

- A. If Contractor believes that any subsurface or physical condition including but not limited to utilities or other underground facilities that are uncovered or revealed at the Site either differs materially from that shown or indicated in the Contract Documents or is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.
- B. After receipt of written notice, Engineer will promptly:
  - 1. Review the subsurface or physical condition in question;
  - 2. Determine necessity for Owner obtaining additional exploration or tests with respect to the condition;
  - 3. Determine whether the condition falls within the differing site condition as stated herein;
  - 4. Obtain any pertinent cost or schedule information from Contractor;
  - 5. Prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and
  - 6. Advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

## **ARTICLE 12 - CLAIMS AND DISPUTE RESOLUTION**

### **12.01 Claims Process**

- A. The party submitting a claim shall deliver it directly to the other party to the Contract and the Engineer promptly (but in no event later than 10 days) after the start of the event giving rise thereto.
- B. The party receiving a claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the claim through the exchange of information and direct negotiations. All actions taken on a claim shall be stated in writing and submitted to the other party.

- C. If efforts to resolve a claim are not successful, the party receiving the claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the claim within 45 days, the claim is deemed denied.
- D. If the dispute is not resolved to the satisfaction of the parties, Owner or Contractor shall give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction unless the Owner and Contractor both agree to an alternative dispute resolution process.

## **ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION OF DEFECTIVE WORK**

### **13.01 Tests and Inspections**

- A. Owner and Engineer will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access.
- B. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- C. If any Work that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense.

### **13.02 Defective Work**

- A. Contractor shall ensure that the Work is not defective.
- B. Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. The Contractor shall promptly correct all such defective Work.
- E. When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. If the Work is defective or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

## **ARTICLE 14 - PAYMENTS TO CONTRACTOR**

### **14.01 Progress Payments**

- A. The Contractor shall prepare a schedule of values that will serve as the basis for progress payments. The schedule of values will be in a form of application for payment acceptable to Engineer. The unit price breakdown submitted with the bid will be used for unit price work. Break lump sum items into units that will allow for measurement of Work in progress.

#### 14.02 Applications for Payments:

- A. Contractor shall submit an application for payment in a form acceptable to the Engineer, no more frequently than monthly, to Engineer. Applications for payment will be prepared and signed by Contractor. Contractor shall provide supporting documentation required by the Contract Documents. Payment will be paid for Work completed as of the date of the application for payment.
- B. Beginning with the second application for payment, each application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior applications for payment.

#### 14.03 Retainage

- A. The Owner shall retain 5% of each progress payment until the Work is substantially complete.

#### 14.04 Review of Applications

- A. Within 10 days after receipt of each application for payment, the Engineer will either indicate in writing a recommendation for payment and present the application for payment to Owner or return the application for payment to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. The Contractor will make the necessary corrections and resubmit the application for payment.
- B. Engineer will recommend reductions in payment (set-offs) which, in the opinion of the Engineer, are necessary to protect Owner from loss because the Work is defective and requires correction or replacement.
- C. The Owner is entitled to impose set-offs against payment based on any claims that have been made against Owner on account of Contractor's conduct in the performance of the Work, incurred costs, losses, or damages on account of Contractor's conduct in the performance of the Work, or liquidated damages that have accrued as a result of Contractor's failure to complete the Work.

#### 14.05 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

#### 14.06 Substantial Completion

- A. The Contractor shall notify Owner and Engineer in writing that the Work is substantially complete and request the Engineer issue a certificate of substantial completion when Contractor considers the Work ready for its intended use. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Engineer will make an inspection of the Work with the Owner and Contractor to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor and Owner in writing giving the reasons therefor.

- C. If Engineer considers the Work substantially complete or upon resolution of all reasons for non-issuance of a certificate identified in 14.06.B, Engineer will deliver to Owner a certificate of substantial completion which shall fix the date of substantial completion and include a punch list of items to be completed or corrected before final payment.

#### 14.07 Final Inspection

- A. Upon written notice from Contractor that the entire Work is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.08 Final Payment

- A. Contractor may make application for final payment after Contractor has satisfactorily completed all Work defined in the Contract, including providing all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents and other documents.
- B. The final application for payment shall be accompanied (except as previously delivered) by:
  - 1. All documentation called for in the Contract Documents;
  - 2. Consent of the surety to final payment;
  - 3. Satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any liens or other title defects, or will so pass upon final payment;
  - 4. A list of all disputes that Contractor believes are unsettled; and
  - 5. Complete and legally effective releases or waivers (satisfactory to Owner) of all lien rights arising out of the Work, and of liens filed in connection with the Work.
- C. The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

#### 14.09 Waiver of Claims

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted.

### **ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION**

#### 15.01 Owner May Suspend Work

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 60 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension.

#### 15.02 Owner May Terminate for Cause

- A. Contractor's failure to perform the Work in accordance with the Contract Documents or other failure to comply with a material term of the Contract Documents will constitute a default by Contractor and justify termination for cause.
- B. If Contractor defaults in its obligations, then after giving Contractor and any surety ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
  - 1. Declare Contractor to be in default, and give Contractor and any surety notice that the Contract is terminated; and
  - 2. Enforce the rights available to Owner under any applicable performance bond.
- C. Owner may not proceed with termination of the Contract under Paragraph 15.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- D. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- E. In the case of a termination for cause, if the cost to complete the Work, including related claims, costs, losses, and damages, exceeds the unpaid contract balance, Contractor shall pay the difference to Owner.

#### 15.03 Owner May Terminate for Convenience

- A. Upon seven days written notice to Contractor, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for, without duplication of any items:
  - 1. Completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  - 2. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
  - 3. Other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

#### 15.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner, and provided Owner does not remedy such

suspension or failure within that time, either stop the Work until payment is received, or terminate the Contract and recover payment from the Owner.

## **ARTICLE 16 - CONTRACTOR'S REPRESENTATIONS**

### **16.01 Contractor Representations**

#### **A. Contractor makes the following representations when entering into this Contract:**

1. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on:
  - a. The cost, progress, and performance of the Work;
  - b. The means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and
  - c. Contractor's safety precautions and programs.
5. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
6. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
7. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
8. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
9. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Contract are premised upon performing and furnishing the Work required by the Contract Documents.

## **ARTICLE 17 - MISCELLANEOUS**

### 17.01 Cumulative Remedies

- A. The duties and obligations imposed by this Contract and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

### 17.02 Limitation of Damages

- A. Neither Owner, Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

### 17.03 No Waiver

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

### 17.04 Survival of Obligations

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

### 17.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract.

### 17.06 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.

IN WITNESS WHEREOF, Owner and Contractor have signed this Contract.

This Contract will be effective on \_\_\_\_\_ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

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

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

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

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

*(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

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

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

Address for giving notices:

Address for giving notices:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

License No.: \_\_\_\_\_  
(where applicable)

**NOTICE TO PROCEED**

---

Owner: West Gloucester Elementary School	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer: Northeast Water Solutions, Inc.	Engineer's Project No.:
Project:	Contract Name: West Gloucester PFAS Project
	Effective Date of Contract:

---

**TO CONTRACTOR:**

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on [\_\_\_\_\_, 20\_\_]. [see Paragraph 4.01 of the General Conditions]

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, [the date of Substantial Completion is \_\_\_\_\_, and the date of readiness for final payment is \_\_\_\_\_] **or** [the number of days to achieve Substantial Completion is \_\_\_\_\_, and the number of days to achieve readiness for final payment is \_\_\_\_\_].

Before starting any Work at the Site, Contractor must comply with the following:  
*[Note any access limitations, security procedures, or other restrictions]*

---

Owner:

---

Authorized Signature

By:

Title:

Date Issued:

Copy:            Engineer

## PERFORMANCE BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER: West Glocester Elementary School  
Attn: Gary Gras  
111 Reynolds Rd,  
Glocester, RI 02814

### CONSTRUCTION CONTRACT

Effective Date of the Agreement:  
Amount:  
Description *(name and location)*:

### BOND

Bond Number:  
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:  
Amount:  
Modifications to this Bond Form:  None  See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
Contractor's Name and Corporate Seal *(seal)*

\_\_\_\_\_  
Surety's Name and Corporate Seal *(seal)*

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

By: \_\_\_\_\_  
Signature *(attach power of attorney)*

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title



1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:
  - 3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
  - 3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
  - 3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
  - 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
  - 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
  - 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
  - 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
    - 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
    - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
  - 7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
  - 7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
  - 7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by

the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

## PAYMENT BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER: West Glocester Elementary School  
Attn: Gary Gras  
111 Reynolds Rd,  
Glocester, RI 02814

Amount:  
Description:

### CONSTRUCTION CONTRACT

Effective Date of the Agreement:  
Amount:  
Description *(name and location)*:

### BOND

Bond Number:  
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:  
Amount:  
Modifications to this Bond Form:  None  See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
*(seal)*  
Contractor's Name and Corporate Seal

\_\_\_\_\_  
*(seal)*  
Surety's Name and Corporate Seal

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

By: \_\_\_\_\_  
Signature *(attach power of attorney)*

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

Title	Title
<p>1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.</p> <p>2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.</p> <p>3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.</p> <p>4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.</p> <p>5. The Surety's obligations to a Claimant under this Bond shall arise after the following:</p> <p style="padding-left: 20px;">5.1 Claimants who do not have a direct contract with the Contractor,</p> <p style="padding-left: 40px;">5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and</p> <p style="padding-left: 40px;">5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).</p> <p style="padding-left: 20px;">5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).</p> <p>6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to</p>	<p>satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.</p> <p>7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:</p> <p style="padding-left: 20px;">7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and</p> <p style="padding-left: 20px;">7.2 Pay or arrange for payment of any undisputed amounts.</p> <p style="padding-left: 20px;">7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.</p> <p>8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.</p> <p>9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.</p> <p>10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.</p> <p>11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.</p> <p>12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in</p>

the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

## 16. Definitions

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:



ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

**Contractor's Application for Payment No.**  

	Application Period:	Application Date:
To (Owner): West Glocester Elementary School	From (Contractor):	Via (Engineer): Northeast Water Solutions, Inc
Project:	Contract:	
Owner's Contract No.:	Contractor's Project No.:	Engineer's Project No.:

**Application For Payment  
Change Order Summary**

Approved Change Orders				
Number	Additions	Deductions		
TOTALS				
NET CHANGE BY CHANGE ORDERS				

1. ORIGINAL CONTRACT PRICE.....	\$	
2. Net change by Change Orders.....	\$	
3. Current Contract Price (Line 1 ± 2).....	\$	
4. TOTAL COMPLETED AND STORED TO DATE (Column F total on Progress Estimates).....	\$	#REF!
5. RETAINAGE:		
a. X #REF! Work Completed.....	\$	#REF!
b. X #REF! Stored Material.....	\$	#REF!
c. Total Retainage (Line 5.a + Line 5.b).....	\$	#REF!
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5.c).....	\$	#REF!
7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application).....	\$	
8. AMOUNT DUE THIS APPLICATION.....	\$	#REF!
9. BALANCE TO FINISH, PLUS RETAINAGE (Column G total on Progress Estimates + Line 5.c above).....	\$	#REF!

**Contractor's Certification**

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

---

**Contractor Signature**

By: _____	Date: _____
-----------	-------------

Payment of: \$ \_\_\_\_\_  
(Line 8 or other - attach explanation of the other amount)

is recommended by: \_\_\_\_\_ (Engineer) \_\_\_\_\_ (Date)

Payment of: \$ \_\_\_\_\_  
(Line 8 or other - attach explanation of the other amount)

is approved by: \_\_\_\_\_ (Owner) \_\_\_\_\_ (Date)

Approved by: \_\_\_\_\_ (Date)  
Funding or Financing Entity (if applicable)

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

Owner: West Glocester Elementary School  
 Contractor:  
 Engineer: Northeast Water Solutions, Inc.  
 Project:

Owner's Contract No.:  
 Contractor's Project No.:  
 Engineer's Project No.:  
 Contract Name:

**This Final Certificate of Substantial Completion applies to:**

- All Work  The following specified portions of the Work:

**Date of Substantial Completion**

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows:

Amendments to Owner's responsibilities:  None  
 As follows

Amendments to Contractor's responsibilities:  None  
 As follows:

The following documents are attached to and made a part of this Certificate: *[punch list; others]*

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

<b>EXECUTED BY ENGINEER:</b> By: _____ (Authorized signature) Title: _____ Date: _____	<b>RECEIVED:</b> By: _____ Owner (Authorized Signature) Title: _____ Date: _____	<b>RECEIVED:</b> By: _____ Contractor (Authorized Signature) Title: _____ Date: _____
--	--	---

**Work Change Directive No.**

Date of Issuance: \_\_\_\_\_ Effective Date: \_\_\_\_\_  
 Owner: West Gloucester Elementary School Owner's Contract No.: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Contractor's Project No.: \_\_\_\_\_  
 Engineer: Northeast Water Solutions, Inc. Engineer's Project No.: \_\_\_\_\_  
 Project: \_\_\_\_\_ Contract Name: \_\_\_\_\_

Contractor is directed to proceed promptly with the following change(s):  
 Description:

Attachments: *[List documents supporting change]*

**Purpose for Work Change Directive:**

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

- Non-agreement on pricing of proposed change.
- Necessity to proceed for schedule or other Project reasons.

**Estimated Change in Contract Price and Contract Times (non-binding, preliminary):**

Contract Price \$ \_\_\_\_\_ [increase] [decrease].  
 Contract Time \_\_\_\_\_ days [increase] [decrease].

**Basis of estimated change in Contract Price:**

- Lump Sum  Unit Price
- Cost of the Work  Other

	RECOMMENDED:	AUTHORIZED BY:	RECEIVED:
By: _____	By: _____	By: _____	
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)	
Title: _____	Title: _____	Title: _____	
Date: _____	Date: _____	Date: _____	

Approved by Funding Agency (if applicable)

By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Title: \_\_\_\_\_

**Change Order No.** \_\_\_\_\_

Date of Issuance:	Effective Date:
Owner: West Gloucester Elementary School	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer: Northeast Water Solutions, Inc.	Engineer's Project No.:
Project:	Contract Name:

The Contract is modified as follows upon execution of this Change Order:

Description:  
Attachments:

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price:  \$ _____	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___:  \$ _____	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for Final Payment: _____  days
Contract Price prior to this Change Order:  \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] of this Change Order:  \$ _____	[Increase] [Decrease] of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____  days or dates
Contract Price incorporating this Change Order:  \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____ Engineer (if required)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____ :	Title: _____ :	Title: _____ :
Date: _____ :	Date: _____ :	Date: _____ :

Approved by Funding Agency (if applicable)

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

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

## STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by



Endorsed by



These General Conditions have been prepared for use with the Agreement Between Owner and Contractor for Construction Contract (EJCDC® C-520, Stipulated Sum, or C-525, Cost-Plus, 2013 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other.

To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC's Guide to the Preparation of Supplementary Conditions (EJCDC® C-800, 2013 Edition). The full EJCDC Construction series of documents is discussed in the Commentary on the 2013 EJCDC Construction Documents (EJCDC® C-001, 2013 Edition).

Copyright © 2013:

National Society of Professional Engineers

1420 King Street, Alexandria, VA 22314-2794

(703) 684-2882

[www.nspe.org](http://www.nspe.org)

American Council of Engineering Companies

1015 15th Street N.W., Washington, DC 20005

(202) 347-7474

[www.acec.org](http://www.acec.org)

American Society of Civil Engineers

1801 Alexander Bell Drive, Reston, VA 20191-4400

(800) 548-2723

[www.asce.org](http://www.asce.org)

The copyright for this document is owned jointly by the three sponsoring organizations listed above. The National Society of Professional Engineers is the Copyright Administrator for the EJCDC documents; please direct all inquiries regarding EJCDC copyrights to NSPE.

NOTE: EJCDC publications may be purchased at [www.ejcdc.org](http://www.ejcdc.org), or from any of the sponsoring organizations above.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

## TABLE OF CONTENTS

	<b>Page</b>
Article 1 – Definitions and Terminology .....	1
1.01 Defined Terms .....	1
1.02 Terminology .....	5
Article 2 – Preliminary Matters .....	6
2.01 Delivery of Bonds and Evidence of Insurance .....	6
2.02 Copies of Documents .....	6
2.03 Before Starting Construction .....	6
2.04 Preconstruction Conference; Designation of Authorized Representatives .....	7
2.05 Initial Acceptance of Schedules .....	7
2.06 Electronic Transmittals.....	7
Article 3 – Documents: Intent, Requirements, Reuse .....	8
3.01 Intent.....	8
3.02 Reference Standards.....	8
3.03 Reporting and Resolving Discrepancies .....	8
3.04 Requirements of the Contract Documents .....	9
3.05 Reuse of Documents .....	10
Article 4 – Commencement and Progress of the Work .....	10
4.01 Commencement of Contract Times; Notice to Proceed .....	10
4.02 Starting the Work.....	10
4.03 Reference Points .....	10
4.04 Progress Schedule .....	10
4.05 Delays in Contractor’s Progress .....	11
Article 5 – Availability of Lands; Subsurface and Physical Conditions; Hazardous Environmental Conditions .....	12
5.01 Availability of Lands .....	12
5.02 Use of Site and Other Areas .....	12
5.03 Subsurface and Physical Conditions.....	13
5.04 Differing Subsurface or Physical Conditions .....	14
5.05 Underground Facilities .....	15

5.06	Hazardous Environmental Conditions at Site.....	17
Article 6 – Bonds and Insurance .....		19
6.01	Performance, Payment, and Other Bonds .....	19
6.02	Insurance—General Provisions .....	19
6.03	Contractor’s Insurance .....	20
6.04	Owner’s Liability Insurance .....	23
6.05	Property Insurance.....	23
6.06	Waiver of Rights .....	25
6.07	Receipt and Application of Property Insurance Proceeds .....	25
Article 7 – Contractor’s Responsibilities.....		26
7.01	Supervision and Superintendence .....	26
7.02	Labor; Working Hours .....	26
7.03	Services, Materials, and Equipment.....	26
7.04	“Or Equals” .....	27
7.05	Substitutes .....	28
7.06	Concerning Subcontractors, Suppliers, and Others .....	29
7.07	Patent Fees and Royalties .....	31
7.08	Permits .....	31
7.09	Taxes .....	32
7.10	Laws and Regulations.....	32
7.11	Record Documents .....	32
7.12	Safety and Protection.....	32
7.13	Safety Representative .....	33
7.14	Hazard Communication Programs .....	33
7.15	Emergencies .....	34
7.16	Shop Drawings, Samples, and Other Submittals.....	34
7.17	Contractor’s General Warranty and Guarantee.....	36
7.18	Indemnification .....	37
7.19	Delegation of Professional Design Services .....	37
Article 8 – Other Work at the Site .....		38
8.01	Other Work .....	38
8.02	Coordination .....	39
8.03	Legal Relationships.....	39

Article 9 – Owner’s Responsibilities .....	40
9.01 Communications to Contractor.....	40
9.02 Replacement of Engineer .....	40
9.03 Furnish Data .....	40
9.04 Pay When Due.....	40
9.05 Lands and Easements; Reports, Tests, and Drawings .....	40
9.06 Insurance .....	40
9.07 Change Orders.....	40
9.08 Inspections, Tests, and Approvals.....	41
9.09 Limitations on Owner’s Responsibilities .....	41
9.10 Undisclosed Hazardous Environmental Condition.....	41
9.11 Evidence of Financial Arrangements.....	41
9.12 Safety Programs .....	41
Article 10 – Engineer’s Status During Construction.....	41
10.01 Owner’s Representative.....	41
10.02 Visits to Site.....	41
10.03 Project Representative.....	42
10.04 Rejecting Defective Work.....	42
10.05 Shop Drawings, Change Orders and Payments.....	42
10.06 Determinations for Unit Price Work .....	42
10.07 Decisions on Requirements of Contract Documents and Acceptability of Work .....	42
10.08 Limitations on Engineer’s Authority and Responsibilities.....	42
10.09 Compliance with Safety Program.....	43
Article 11 – Amending the Contract Documents; Changes in the Work.....	43
11.01 Amending and Supplementing Contract Documents .....	43
11.02 Owner-Authorized Changes in the Work .....	44
11.03 Unauthorized Changes in the Work .....	44
11.04 Change of Contract Price .....	44
11.05 Change of Contract Times .....	45
11.06 Change Proposals .....	45
11.07 Execution of Change Orders.....	46
11.08 Notification to Surety.....	47
Article 12 – Claims.....	47

12.01	Claims .....	47
Article 13 –	Cost of the Work; Allowances; Unit Price Work .....	48
13.01	Cost of the Work .....	48
13.02	Allowances .....	50
13.03	Unit Price Work .....	51
Article 14 –	Tests and Inspections; Correction, Removal or Acceptance of Defective Work .....	52
14.01	Access to Work.....	52
14.02	Tests, Inspections, and Approvals .....	52
14.03	Defective Work.....	53
14.04	Acceptance of Defective Work.....	53
14.05	Uncovering Work .....	53
14.06	Owner May Stop the Work .....	54
14.07	Owner May Correct Defective Work.....	54
Article 15 –	Payments to Contractor; Set-Offs; Completion; Correction Period .....	55
15.01	Progress Payments .....	55
15.02	Contractor’s Warranty of Title .....	58
15.03	Substantial Completion .....	58
15.04	Partial Use or Occupancy .....	59
15.05	Final Inspection .....	59
15.06	Final Payment.....	59
15.07	Waiver of Claims .....	61
15.08	Correction Period .....	61
Article 16 –	Suspension of Work and Termination .....	62
16.01	Owner May Suspend Work .....	62
16.02	Owner May Terminate for Cause .....	62
16.03	Owner May Terminate For Convenience .....	63
16.04	Contractor May Stop Work or Terminate .....	63
Article 17 –	Final Resolution of Disputes .....	64
17.01	Methods and Procedures .....	64
Article 18 –	Miscellaneous .....	64
18.01	Giving Notice .....	64
18.02	Computation of Times.....	64
18.03	Cumulative Remedies .....	64

18.04	Limitation of Damages .....	65
18.05	No Waiver .....	65
18.06	Survival of Obligations .....	65
18.07	Controlling Law .....	65
18.08	Headings.....	65

## ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
  3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  5. *Bidder*—An individual or entity that submits a Bid to Owner.
  6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
  7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
  8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
  9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
  10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer

has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

## 1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
    - a. does not conform to the Contract Documents; or
    - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
    - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
  2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
  4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## **ARTICLE 2 – PRELIMINARY MATTERS**

### **2.01 *Delivery of Bonds and Evidence of Insurance***

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

### **2.02 *Copies of Documents***

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

### **2.03 *Before Starting Construction***

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
  1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
  2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

#### 2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

#### 2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
  1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
  2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
  3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

#### 2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or

computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

### **ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE**

#### **3.01 *Intent***

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

#### **3.02 *Reference Standards***

- A. Standards Specifications, Codes, Laws and Regulations
  - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
  - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

#### **3.03 *Reporting and Resolving Discrepancies***

- A. *Reporting Discrepancies:*
  - 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict,

error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
  - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
  - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

### 3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
  - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
  - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

## **ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK**

### 4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

### 4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

### 4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

### 4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
  - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

#### 4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
  2. abnormal weather conditions;
  3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
  4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

## **ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS**

### **5.01 *Availability of Lands***

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

### **5.02 *Use of Site and Other Areas***

#### **A. *Limitation on Use of Site and Other Areas:***

- 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
- 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part

by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

### 5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
  - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
  - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
  - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
  - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
  - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
  - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

#### 5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
  2. is of such a nature as to require a change in the Drawings or Specifications; or
  3. differs materially from that shown or indicated in the Contract Documents; or
  4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
    - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
  - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
  - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
  - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

#### 5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
  1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
  2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
    - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
    - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
    - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
    - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
  - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
    - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
    - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
    - d. Contractor gave the notice required in Paragraph 5.05.B.
  - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
  - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings*: The Supplementary Conditions identify:
1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
  2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
  2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

## ARTICLE 6 – BONDS AND INSURANCE

### 6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

### 6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is

maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

### 6.03 *Contractor's Insurance*

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
  - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
  - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
  - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).

4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
  2. claims for damages insured by reasonably available personal injury liability coverage.
  3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
    - a. Such insurance shall be maintained for three years after final payment.
    - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
  2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
  3. Broad form property damage coverage.
  4. Severability of interest.
  5. Underground, explosion, and collapse coverage.
  6. Personal injury coverage.
  7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
  8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. *Automobile liability:* Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result

of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.

- G. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
  - 1. include at least the specific coverages provided in this Article.
  - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
  - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
  - 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
  - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

#### 6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

#### 6.05 *Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
  - 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
  - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
  - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
  - 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).

5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
  6. extend to cover damage or loss to insured property while in transit.
  7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
  8. allow for the waiver of the insurer's subrogation rights, as set forth below.
  9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
  10. not include a co-insurance clause.
  11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
  12. include performance/hot testing and start-up.
  13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

## 6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
  - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
  - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

## 6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the

policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

## **ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES**

### *7.01 Supervision and Superintendence*

- A. Contractor shall supervise, inspect, 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. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

### *7.02 Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

### *7.03 Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and

guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
  - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
    - a. in the exercise of reasonable judgment Engineer determines that:
      - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
      - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
      - 3) it has a proven record of performance and availability of responsive service; and
      - 4) it is not objectionable to Owner.
    - b. Contractor certifies that, if approved and incorporated into the Work:
      - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
      - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

#### 7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
  - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
  - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
  - 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
    - a. shall certify that the proposed substitute item will:
      - 1) perform adequately the functions and achieve the results called for by the general design,
      - 2) be similar in substance to that specified, and
      - 3) be suited to the same use as that specified.
    - b. will state:
      - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
      - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
      - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
    - c. will identify:
      - 1) all variations of the proposed substitute item from that specified, and

- 2) available engineering, sales, maintenance, repair, and replacement services.
- d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

#### 7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.

- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.

O. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

#### 7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

#### 7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

#### 7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

#### 7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
  - 1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
  - C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
  - D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
  - E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
  - F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
  - G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

#### 7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

#### 7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or

exchanged between or among employers at the Site in accordance with Laws or Regulations.

#### 7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

#### 7.16 *Shop Drawings, Samples, and Other Submittals*

##### A. *Shop Drawing and Sample Submittal Requirements:*

1. Before submitting a Shop Drawing or Sample, Contractor shall have:
  - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
  - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
  - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
  - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

##### 1. *Shop Drawings:*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to

provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples:*
    - a. Contractor shall submit the number of Samples required in the Specifications.
    - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
  3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
  2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
  3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
  4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
  5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
  6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
  7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
  1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
  2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
  1. observations by Engineer;
  2. recommendation by Engineer or payment by Owner of any progress or final payment;
  3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
  4. use or occupancy of the Work or any part thereof by Owner;
  5. any review and approval of a Shop Drawing or Sample submittal;
  6. the issuance of a notice of acceptability by Engineer;
  7. any inspection, test, or approval by others; or
  8. any correction of defective Work by Owner.

- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

#### 7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
  - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

#### 7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop

Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

## **ARTICLE 8 – OTHER WORK AT THE SITE**

### **8.01 *Other Work***

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

## 8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
  - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
  - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
  - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

## 8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner for whom the Owner is responsible causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

## **ARTICLE 9 – OWNER'S RESPONSIBILITIES**

### **9.01 *Communications to Contractor***

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

### **9.02 *Replacement of Engineer***

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

### **9.03 *Furnish Data***

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

### **9.04 *Pay When Due***

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

### **9.05 *Lands and Easements; Reports, Tests, and Drawings***

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

### **9.06 *Insurance***

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

### **9.07 *Change Orders***

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

**ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION**

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during

or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

#### 10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

#### 10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

#### 10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

#### 10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

#### 10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

#### 10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

#### 10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

### **ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK**

#### 11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
  - 1. *Change Orders:*
    - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
    - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
  - 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an

adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

#### 11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

#### 11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

#### 11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
  1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
  2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
  3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on

the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
  2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
    - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
    - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.04.C.2.a and 11.04.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
    - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
    - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
    - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

#### 11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

#### 11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
  2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
  3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

#### 11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
  2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
  3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
  4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

**ARTICLE 12 – CLAIMS**

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
  - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
  - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
  - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
  - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
  - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim

submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

## **ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

### 13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
  1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
  2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
  1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable

thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
  - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
  - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
  - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
  - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
  - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
  - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes

other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.

E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

## 13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

- B. *Cash Allowances*: Contractor agrees that:
  - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
  - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

### 13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
  - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
  - 2. there is no corresponding adjustment with respect to any other item of Work; and
  - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

## ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

### 14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

### 14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
  - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
  - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
  - 3. by manufacturers of equipment furnished under the Contract Documents;
  - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
  - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

cover the same and Engineer had not acted with reasonable promptness in response to such notice.

#### 14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

#### 14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

#### 14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
  - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
  - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

#### 14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will

include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

## **ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD**

### **15.01 Progress Payments**

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
  2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
  3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
- C. *Review of Applications:*
1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
  2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
  - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
  - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
  - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
- a. to supervise, direct, or control the Work, or
  - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
  - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
  - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
  - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, requiring correction or replacement;
  - b. the Contract Price has been reduced by Change Orders;
  - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due:*

- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
  - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
  - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
  - c. Contractor has failed to provide and maintain required bonds or insurance;
  - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
  - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
  - f. the Work is defective, requiring correction or replacement;
  - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - h. the Contract Price has been reduced by Change Orders;
  - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
  - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
  - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
  - l. there are other items entitling Owner to a set off against the amount recommended.
- 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount

remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

#### 15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

#### 15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

#### 15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
  - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
  - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
  - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

#### 15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 15.06 *Final Payment*

- A. *Application for Payment:*
  - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of

inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:
  - a. all documentation called for in the Contract Documents;
  - b. consent of the surety, if any, to final payment;
  - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
  - d. a list of all disputes that Contractor believes are unsettled; and
  - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

**B. *Engineer's Review of Application and Acceptance:***

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

**C. *Completion of Work:*** The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

**D. *Payment Becomes Due:*** Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation,

including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

#### 15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

#### 15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
  - 1. correct the defective repairs to the Site or such other adjacent areas;
  - 2. correct such defective Work;
  - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
  - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

## **ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION**

### **16.01 *Owner May Suspend Work***

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

### **16.02 *Owner May Terminate for Cause***

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
  - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
  - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
  - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
  - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
  - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
  - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses,

and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

#### 16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
  - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
  - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

#### 16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for

expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

## **ARTICLE 17 – FINAL RESOLUTION OF DISPUTES**

### **17.01 *Methods and Procedures***

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
  - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
  - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
  - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
  - 2. agree with the other party to submit the dispute to another dispute resolution process; or
  - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

## **ARTICLE 18 – MISCELLANEOUS**

### **18.01 *Giving Notice***

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
  - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
  - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

### **18.02 *Computation of Times***

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

### **18.03 *Cumulative Remedies***

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.



## Rhode Island Department of Health Center for Drinking Water Quality

### Drinking Water State Revolving Fund Program Contract Specifications Package

#### A. Federal

- 1) Equal Employment Opportunity and Affirmative Action (Executive Order 11246)
  - i) OFCCP fact sheet.
  - ii) Equal Opportunity Clause and the Standard Federal Equal Employment Specifications.
  - iii) Notice of Non-Discrimination in Employment.
- 2) Non-discrimination in employment notice.
- 3) Assurance of compliance with Title VI of the Civil Rights Act of 1964 and Section 13 of the FWPCA Amendments of 1972 (EPA form 4700-1).
- 4) Affirmative steps for soliciting MBE/WBE (40 CFR 31.36(e))

Applicable cross-cutting Federal authorities for projects funded through SRF programs are made available at [http://water.epa.gov/grants\\_funding/dwsrf/xcuts.cfm](http://water.epa.gov/grants_funding/dwsrf/xcuts.cfm). Additional information is provided in the United States Environmental Protection Agency's cross-cutting handbook available at <https://www.epa.gov/sites/production/files/2015-08/documents/crosscutterhandbook.pdf>.

#### B. State of Rhode Island

- 1) RIGL 37-2.1, Domestic Steel
- 2) RIGL 37-12, Contractors Bonds
- 3) RIGL 37-12.1, Substitution of Security for Retained Earnings of Architects and Engineers.
- 4) RIGL 37-13, Labor and Payment of Debts by Contractors
  - i) Prevailing Wage Rates
- 5) RIGL 37-14.1, Minority Business Enterprise
  - i) Regulations Governing Participation by Minority Business Enterprises in State Funded and Directed Public Construction Projects, Construction Contracts and Procurement Contracts Goods and Services.
- 6) RIGL 37-16, Public Works Arbitration
- 7) RIGL 45-55, Award of Municipal Contracts

**NOTE:** This package is prepared by DOH as a service of the DWSRF program. While every attempt at accuracy has been made, these are not certified true copies of the laws presented. **The responsibility for compliance with all applicable provisions of Federal and State laws and regulations relating to the bidding, award, and performance of contracts is the applicant's and the bidder's.** Certified true and complete copies of any Rhode Island laws and regulations may be obtained from the Office of the Secretary of State.

# Employment Standards Administration Office of Federal Contract Compliance Programs

## Fact Sheet EXECUTIVE ORDER 11246

EEO and Affirmative Action Guidelines for Federal Contractors Regarding Race, Color, Gender, Religion, and National Origin.

### **BASIC PROVISIONS**

Since 1965, the U.S. Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) has been committed to ensuring that Government contractors comply with the equal employment opportunity (EEO) and the affirmative action provisions of their contracts.

OFCCP administers and enforces Executive Order 11246, as amended, which prohibits federal contractors and federally-assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin.

The Executive Order also requires Government contractors to take affirmative action to insure that equal opportunity is provided in all aspects of their employment.

### **AFFIRMATIVE ACTION REQUIREMENTS**

Each Government contractor with 50 or more employees and \$50,000 or more in government contracts is required to develop a written affirmative action program (AAP) for each of its establishments.

A written affirmative action program helps the contractor identify and analyze potential problems in the participation and utilization of women and minorities in the contractor's workforce.

If there are problems, the contractor will specify in its AAP the specific procedures it will follow and the good faith efforts it will make to provide equal employment opportunity.

Expanded efforts in outreach, recruitment, training and other areas are some of the affirmative steps contractors can take to help members of the protected groups compete for jobs on equal footing with other applicants and employees.

Affirmative action is not preferential treatment. It does not mean that unqualified persons should be hired or promoted over other people. What affirmative action does mean is that positive steps must be taken to ensure equal employment opportunity for traditionally disadvantaged groups.

### **ENFORCEMENT AND COMPLIANCE**

#### **Compliance Reviews**

OFCCP conducts compliance reviews to investigate the employment practices of Government contractors. During a compliance review, a compliance officer examines the contractor's affirmative action program; checks personnel, payroll, and other employment records; interviews employees and company officials; and investigates virtually all aspects of employment in the company.

The investigator also checks to see whether the contractor is making special efforts to achieve equal opportunity through affirmative action. If problems are discovered, OFCCP will recommend corrective action and suggest ways to achieve equal employment opportunity.

#### **Complaint Investigations**

Individuals may file complaints if they believe they have been discriminated against by federal contractors or subcontractors. Complaints also may be filed by organizations on behalf of the person or persons affected.

Complaints must be filed within 180 days from the date of the alleged discrimination, although filing time can be extended for a good reason.

If a complaint filed under Executive Order 11246 involves discrimination against only one person, OFCCP will normally refer it to the EEOC. Cases involving groups of people or indicating patterns of discrimination are generally investigated and resolved by OFCCP. Complaints may be filed directly with any of OFCCP's regional or district offices throughout the country, or with OFCCP in Washington, D.C.

### **Compliance Assistance**

To help contractors understand their contractual obligations for EEO and affirmative action, OFCCP provides technical assistance. District office staff offers guidance to contractors on how to develop an affirmative program through company seminars, training programs held in conjunction with industry liaison groups, and one-on-one consultations on affirmative action practices and procedures.

### **Enforcing Contract Compliance**

When a compliance review discloses problems, OFCCP attempts to work with the contractor, often entering into a conciliation agreement. A conciliation agreement may include back pay, job offers, seniority credit, promotions or other forms of relief for victims of discrimination. It may also involve new training programs, special recruitment efforts, or other affirmative action measures.

When conciliation efforts are unsuccessful, OFCCP refers the case to the Office of the Solicitor for enforcement through administrative enforcement proceedings. A contractor cited for violating EEO and affirmative action requirements may have a formal hearing before an administrative law judge.

If conciliation is not reached before or after the hearing, sanctions may be imposed. For example, a contractor could lose its government contracts or subcontracts or be debarred, i.e., declared ineligible for any future government contracts.

### **Further Information**

For more information about contract compliance, filing complaints, or compliance assistance, contact any of OFCCP's regional or district offices. All offices are listed in telephone directories under U.S. Department of Labor, Employment Standards Administration, Office of Federal Contract Compliance Programs.

# EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION

Executive Order 11246  
(Excerpts from 41 CFR 60 Parts 1 and 4)

## 41 CFR 60-1.4 - Equal opportunity clause

(b) Federally assisted construction contracts. Except as otherwise provided, each administering agency shall require the inclusion of the following language as a condition of any grant, contract, loan, insurance, or guarantee involving federally assisted construction which is not exempt from the requirements of the equal opportunity clause:

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following *equal opportunity clause*:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause. Such action shall include but not be limited to the following:
- (2) Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will

permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

(c) *Subcontracts.* Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.

(d) *Incorporation of the equal opportunity clause by reference.* The equal opportunity clause may be incorporated by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Director may designate.

(e) *Incorporation by operation of the order.* 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 in such contracts and whether or not the contract between the agency and the contractor is written.

(f) Adaptation of language. Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings.

## **41 CFR 60-4.3 - Equal opportunity clauses**

(a) The equal opportunity clause published at 41 CFR 60-1.4(a) of this chapter is required to be included in, and is part of, all nonexempt Federal contracts and subcontracts, including construction contracts and subcontracts. The equal opportunity clause published at 41 CFR 60-1.4(b) is required to be included in, and is a part of, all nonexempt federally assisted construction contracts and subcontracts. 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 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.

### *Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)*

1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
  - d. "Minority" includes:
    - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. 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 \$10,000 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.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown 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 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.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 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. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. 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.
6. 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.
7. The Contractor shall take specific affirmative actions 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 when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' 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 therefor, 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 area 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 7b 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 onsite 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

- serving 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 work force.
  - 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 classifications, 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 under these specifications are being carried out.
  - 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 supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a 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 7a through p of these 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
9. 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 Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. 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.
13. 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 7 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 60-4.8.

14. 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.

15. 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).

(b) The notice set forth in 41 CFR 60-4.2 and the specifications set forth in 41 CFR 60-4.3 replace the New Form for Federal Equal Employment Opportunity Bid Conditions for Federal and Federally Assisted Construction published at 41 FR 32482 and commonly known as the Model Federal EEO Bid Conditions, and the New Form shall not be used after the regulations in 41 CFR Part 60-4 become effective.

[43 FR 49254, Oct. 20, 1978; 43 FR 51401, Nov. 3, 1978, as amended at 45 FR 65978, Oct. 3, 1980]

**NOTICE TO LABOR UNIONS OR OTHER ORGANIZATIONS OF WORKERS**

**NON-DISCRIMINATION IN EMPLOYMENT**

TO: \_\_\_\_\_  
(Name of Union or Organization of Workers)

The undersigned currently holds contract(s) with \_\_\_\_\_  
(Name of Applicant)

involving funds or credit of the U.S. Government of (a) subcontract(s) with a prime contractor holding such contract(s).

You are advised that under the provisions of the above contract(s) or subcontract(s) and in accordance with Executive Order 11246, dated September 24, 1965, the undersigned is obliged not to discriminate against any employee or applicant for employment because of race, age, handicap, veteran status, color, creed, or national origin. This obligation not to discriminate in employment includes, but is not limited to, the following:

**HIRING, PLACEMENT, UPGRADING, TRANSFER, OR DEMOTION,  
RECRUITMENT, ADVERTISING, OR SOLICITATION FOR  
EMPLOYMENT TRAINING DURING EMPLOYMENT, RATES OF PAY  
OR OTHER FORMS OF COMPENSATION, SELECTION FOR TRAINING  
INCLUDING APPRENTICESHIP, LAYOFF, OR TERMINATION.**

This notice is furnished you pursuant to the provisions of the above contract(s) or subcontract(s) and Executive Order 11246.

**COPIES OF THIS NOTICE WILL BE POSTED BY THE UNDERSIGNED IN CONSPICUOUS PLACES AVAILABLE TO EMPLOYEES OR APPLICANTS FOR EMPLOYMENT.**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Contractor or Subcontractor)

\_\_\_\_\_  
(Date)



# **CONTRACTING WITH SMALL AND MINORITY FIRMS, WOMEN'S BUSINESS ENTERPRISE**

## **40 CFR 31.36(e)**

40 CFR 31.36(e) – Contracting with small and minority firms, women's business enterprise and labor surplus area firms.

(1) The grantee and sub-grantee will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

- (i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (ii) Assuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
- (iii) Dividing the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- (v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
- (vi) Requiring the prime contractor, if subcontracts are to be let, to take affirmative steps listed in paragraphs (e)(2)(i) through (v) of this section.

# TITLE 37

## CHAPTER 2.1 DOMESTIC STEEL

### Section

37-2.1-1.	Short Title
37-2.1-2.	Purpose
37-2.1-3.	Purchase of steel and steel products
37-2.1-4.	Payment
37-2.1-5.	Definitions

### **37-2.1-1. Short title.**

This chapter shall be known and may be cited as the "Steel Products Procurement Act".

### **37-2.1-2. Purpose.**

- (a) This chapter shall be deemed to be an exercise of the police powers of the state for the protection of the health, safety, and general welfare of the people of the state.
- (b) It is hereby determined by the general assembly of Rhode Island and declared as a matter of legislative findings that:
- (1) The United States is one of the leading countries in the production and use of steel and its allied products;
  - (2) The use of steel products constitutes a major industry of the United States and, as such, provides the jobs and family incomes of millions of persons in the United States;
  - (3) The taxes paid to Rhode Island and the United States by employers and employees engaged in the production and sale of steel products are one of the largest single sources of public revenues in this country;
  - (4) It has, for many years, been the policy of the state to aid and support the development and expansion of industry in the United States in order to foster the economic well-being of the state and its people; and
  - (5) The economy, general welfare, and national security of the United States, are inseparably related to the preservation and development of the steel industry in the United States.
- (c) The general assembly therefore declares it to be the policy of the state that all public officers and agencies should, at all times, aid and promote the development of the steel industry of the United States in order to stimulate and improve the economic well-being of the state and its people.

### **37-2.1-3. Purchase of steel and steel products.**

- (a) Every public agency shall require that every contract document for the construction, reconstruction, alteration, repair, improvement, or maintenance of public works contain a provision that, if any steel products are to be used or supplied in the performance of the contract, only steel products as herein defined shall be used or supplied in the performance of the contract or any subcontracts thereunder.
- (b) This section shall not apply in any case where the head of the public agency, in writing, determines that steel products as herein defined are not produced in, or readily available in the United States or that such steel products shall not exceed fifteen percent (15%) of the costs of any other steel products obtainable nationally or internationally.

### **37-2.1-4. Payment.**

No public agency shall authorize, provide for, or make any payments to any person under any contract containing the provision required by 37-2.1-3 unless the public agency is satisfied that such person has fully complied with that provision. Any such payments made to any person by any public agency which should not have been made, as a result of this section, shall be recoverable directly from the contractor or subcontractor who did not comply with 37-2.1-3 by either such public agency or the attorney general upon suit filed in the court of any county.

### **37-2.1-5. Definitions.**

The following words and phrases when used in this chapter shall have, unless the context clearly indicates otherwise, the meanings given to them in this section:

- (a) "Person" means natural persons as well as corporations, partnerships, business units, and associations;
- (b) "Public agency" means (1) the state and its departments, boards, commissions and agencies, (2) cities, towns, school districts, and any other governmental unit or district, (3) any and all other public bodies, authorities, officers, agencies, or instrumentalities, whether exercising a governmental or proprietary function;
- (c) "Public works" means steel to construct, frame or reinforce any public structure, building, highway, waterway, street, bridge, transit system, airport, or other betterment, work or improvement, whether of a permanent or temporary nature, and whether for governmental or proprietary use;
- (d) "Steel products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, or otherwise similarly processed, or processed by a combination of two or more of such operations, from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer, or other steel making process;
- (e) "United States" means the United States of America and includes all territory, continental or insular, subject to the jurisdiction of the United States.

# TITLE 37

## CHAPTER 12 CONTRACTORS' BONDS

### Sections

- 37-12-1. Contractors required to give bond – Terms and conditions.
- 37-12-2. Rights of persons furnishing labor and materials.
- 37-12-3. Remedies of creditors and state – Priority of claims.
- 37-12-4. Intervention by creditor in suit brought by state.
- 37-12-5. Time limitation on creditors' actions.
- 37-12-6. Intervention in suit brought by creditor – Consolidation of suits.
- 37-12-7. Notice of Pendency of Suit
- 37-12-8. Certified copies of documents.
- 37-12-9. Payment into court by surety – Discharge.
- 37-12-10. Retainers relating to contracts for public works or sewer or water main construction.
- 37-12-11. Substitution of securities for retained earnings.

**§ 37-12-1. Contractors required to give bond – Terms and conditions.** – Every person (which word for the purposes of this chapter shall include a co-partnership, a number of persons engaged in a joint enterprise, or a corporation), before being awarded a contract by the department of transportation or by the department of administration, as the case may be, and every person awarded such a contract as a general contractor or construction or project manager for the construction, improvement, completion, or repair of any public road or portion thereof or of any bridge in which the contract price shall be in excess of fifty thousand dollars (\$ 50,000), or for a contract for the construction, improvement, completion, or repair of any public building, or portion thereof, shall be required to furnish to the respective department a bond of that person to the state, with good and sufficient surety or sureties (hereafter in this chapter referred to as surety), acceptable to the respective department, in a sum not less than fifty percent (50%) and not more than one hundred percent (100%) of the contract price, conditioned that the contractor, principal in the bond, the person's executors, administrators, or successors, shall in all things, well and truly keep and perform the covenants, conditions, and agreements in the contract, and in any alterations thereof made as therein provided, on the person's part to be kept and performed, at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the state, the respective department, and all of its officers, agents, and employees, as therein stipulated, and shall also promptly pay for all such labor performed or furnished and for all such materials and equipment furnished, (which as to equipment shall mean payment of the reasonable rental value, as determined by the respective department, of its use during the period of its use), as shall be used in the carrying on of the work covered by the contract, or shall see that they are promptly paid for, whether or not the labor is directly performed for or furnished to the contractor or is even directly performed upon the work covered by the contract, and whether or not the materials are furnished to the contractor or become component parts of the work, and whether or not the equipment is furnished to the contractor or even directly used upon the work. The bond shall contain the provisions that it is subject to all such rights and powers of the respective department and such other provisions as are set forth in the contract and the plans, specifications, and proposal incorporated by reference in the contract, and that no extension of the time of performance of the contract or delay in the completion of the work thereunder or any alterations thereof, made as therein provided, shall invalidate the bond or release the liability of the surety thereunder. Waiver of the bonding requirements of this section is expressly prohibited.

### **37-12-2. Rights of persons furnishing labor and materials.**

Every person who shall have performed labor and every person who shall have furnished or supplied labor, material, or equipment in the prosecution of the work provided for in the contract, in respect of which a payment bond is furnished under § 37-12-1, and who has not been paid in full therefor before the expiration of a period of ninety (90) days after the day on which the last of the labor was performed or furnished by him or her, or material or equipment furnished or supplied by him or her for which a claim is made, shall have the right to sue on the payment bond for the amount, or the balance thereof, unpaid at the time of institution of the suit and to prosecute the action to final execution and judgment for the sum or sums justly due him or her; provided, however, that any person having direct contractual relationship with a subcontractor but no contractual relationship express or implied with the contractor

furnishing the payment bond shall have a right of action upon the payment bond upon giving written notice to the contractor within ninety (90) days from the date on which the person furnished or performed the last of the labor, or furnished or supplied the last of the material or equipment for which the claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the labor was furnished or performed or the material or equipment was furnished or supplied. The notice shall be served by mailing the same by certified mail, postage prepaid, in an envelope addressed to the contractor at any place he or she maintains an office, conducts his or her business, or his or her residence.

### **37-12-3. Remedies of creditors and state - Priority of claims.**

The remedy on the bond shall be by a civil action brought in the superior court for the counties of Providence and Bristol and in any suit brought on the bond the rights of the state shall be prior to those of all creditors. The rights of persons who shall have performed labor as aforesaid shall be prior to the rights of all other creditors, and there shall be no priorities among laborers or among other creditors under the bond. The state, either after having recovered a judgment against the contractor on the contract or without having recovered a judgment, may bring a suit on the bond against the contractor and surety on the bond, and may join as parties defendant in the suit any persons claiming to have rights under the bond as creditors; and, if it has not brought such a suit, it may at any time before a final and conclusive decree, intervene and become a party in any suit brought, as hereafter provided in this chapter, by any person claiming to be a creditor under the bond.

### **37-12-4. Intervention by creditor in suit brought by state.**

Any person claiming to be a creditor under the bond may at any time intervene and become a party in any pending suit brought as aforesaid by the state on the bond, and by so intervening may have the rights to the person adjudicated in the suit.

### **37-12-5. Time limitation on creditors' actions.**

No suit instituted under § 37-12-2 shall be commenced after the expiration of two (2) years, or under the maximum time limit as contained within any labor or material payment bond required under § 37-12-1, whichever period is longer, after the day on which the last of the labor was furnished or performed or material or equipment was furnished or supplied by any person claiming under the section.

### **37-12-6. Intervention in suit brought by creditor - Consolidation of suits.**

When a suit has been so brought on the bond by a person claiming to be a creditor under the bond and is pending, any other person claiming to be a creditor under the bond may intervene and become a party in the first suit thus brought and pending and by so intervening may have the rights of the other person adjudicated in the suit. If two (2) or more of the suits be filed in the court on the same day, the one in which the larger sum shall be claimed shall be regarded as the earlier suit. All suits brought upon the bond as provided in this chapter shall be consolidated together by the court and heard as one suit.

### **37-12-7. Notice of pendency of suit.**

In any suit brought under the provisions of this chapter such personal notice of the pendency of the suit as the court may order shall be given to all such known creditors and persons claiming to be creditors under the bond as shall not have entered their appearances in the suit and, in addition to the notice, notice of the pendency of the suit shall be given by publication in some newspaper published in this state of general circulation in the city or town or every city or town in which the work covered by the contract was carried on, once a week for three (3) successive weeks, in such form as the court may order. The court, however, may dispense with the notices if satisfied that sufficient notices shall have been given in some other suit brought under the provisions of this chapter.

### **37-12-8. Certified copies of documents.**

Any person claiming to be a creditor under the bond and having filed a claim with the respective department, in accordance with the requirements of § 37-12-2, shall have the right, at any time when the person could under this chapter file a suit or intervene in a pending suit, to require the respective department to furnish to the person certified copies of the contract, proposal, plans specifications, and bond.

### **37-12-9. Payment into court by surety - Discharge.**

The surety on the bond may pay into the registry of the court, for distribution among those who may be or become entitled thereto under the decree of the court, the penal sum named in the bond less any amount which the surety

may have paid to the state in satisfaction of the liability of the surety to the state under the bond, and then shall be entitled to be discharged from all further liability under the bond.

### **37-12-10. Retainers relating to contracts for public works or sewer or water main construction.**

(a) Upon substantial completion of the work required by a contract aggregating in amount less than five hundred thousand dollars (\$ 500,000) with any municipality, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair, or improvement of sewers and water mains, or any public works project defined in, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the contract price unless otherwise agreed to by the parties. Upon substantial completion of the work required by a contract aggregating in an amount of five hundred thousand dollars (\$ 500,000) or greater with any municipality, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair, or improvement of sewers and water mains, or any public works project defined in § 37-13-1, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the contract price. In the case of periodic payments with respect to contracts less than the aggregate amount of five hundred thousand dollars (\$ 500,000), the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the approved amount of any periodic payment unless otherwise agreed to by the parties. In the case of periodic payments with respect to contracts in the aggregate amount of five hundred thousand dollars (\$ 500,000) or greater, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the approved amount of any periodic payment.

(b) The retainage shall be paid to any contractor or subcontractor within ninety (90) days of the date the work is accepted by the awarding authority unless a dispute exists with respect to the work. If payment is not made within ninety (90) days for any reason other than a dispute, which, if resolved and it is not the fault of the contractor, interest shall be assessed at the rate of ten percent (10%) per annum on all money which is to be paid to the contractor or subcontractor.

(c) The retainage shall be paid to any contractor or subcontractor within ninety (90) days of the date his or her work is completed and accepted by the awarding authority. If payment is not made, interest shall be assessed at the rate of ten percent (10%) per annum.

(d) There shall also be deducted and retained from the contract price an additional sum sufficient to pay the estimated cost of municipal police traffic control on any public works project. Municipalities shall directly pay the officers working traffic details and shall bill and be reimbursed by the withholding authority for which the contract is being performed every thirty (30) days until the project is complete.

(e) Notwithstanding the foregoing, with respect to projects located within the town of Warren, the withholding authority shall hold an amount from the contract price which shall be reasonably sufficient to pay the estimated cost of municipal police traffic control. The withholding authority shall pay to the town of Warren within seventy-two (72) hours of written demand the actual costs of police traffic control associated with said project on an ongoing basis.

### **37-12-11. Substitution of securities for retained earnings.**

(a) Where any public works contract as defined by § 37-13-1 provides for the retention of earned estimates by the state of Rhode Island, the contractor may, from time to time, withdraw the whole or any portion of the amount retained for payments to the contractor pursuant to the terms of the contract, upon depositing with the general treasurer either; (1) United States treasury bonds, United States treasury notes, United States treasury certificates of indebtedness, or United States treasury bills; (2) Bonds or notes of the state of Rhode Island ; or (3) Bonds of any political subdivision in the state of Rhode Island.

(b) No amount shall be withdrawn in excess of the market value of the securities at the time of deposit or of the par value of the securities, whichever is lower. The general treasurer shall, on a regular basis, collect all interest or income on the obligations so deposited and shall pay the interest or income, when and as collected, to the contractor who deposited the obligations. If the deposit is in the form of coupon bonds, the general treasurer shall deliver each coupon as it matures to the contractor. Any amount deducted by the state, or by any public department or official thereof, pursuant to the terms of the contract, from the retained payments otherwise due the contractor, shall be

deducted, first from that portion of the retained payments for which no security has been substituted, then from the proceeds of any deposited security. In the latter case, the contractor shall be entitled to receive interest, coupons, or income only from those securities which remain after the amount has been deducted. The securities so deposited shall be properly endorsed by the contractor in such manner so as to enable the general treasurer to carry out the provisions of this section.

## TITLE 37

### CHAPTER 12.1 SUBSTITUTION OF SECURITY FOR RETAINED EARNINGS OF ARCHITECTS AND ENGINEERS

#### Sections

- 37-12.1-1. Definition of Terms.
- 37-12.1-2. Substitution of security for retained earnings by designers.
- 37-12.1-3. Deduction from retained earnings.
- 37-12.1-4. Endorsement on securities.
- 37-12.1-5. Applicability.

#### **37-12.1-1. Definition of terms.**

Terms used in this chapter shall be construed as follows:

- (a) "Designers", means any person, firm or corporation duly authorized pursuant to the laws of this state to engage in the practice of architecture and/or engineering within this state.
- (b) "Public works contract" means a contract to perform design or planning services by a designer with the state or any agency or governmental subdivisions thereof.
- (c) "Retained earnings" means any moneys or earned estimates withheld from a designer pursuant to the terms of a public works contract.

#### **37-12.1-2. Substitution of security for retained earnings by designers.**

(a) Where any public works contract provides for the holding of retained earnings from a designer, the designer may from time to time withdraw the whole or any portion of the amount retained upon either depositing with the general treasurer:

- (1) United States treasury bonds, United States treasury notes, United States treasury certificates of indebtedness, or United States treasury bills;
- (2) Bonds or notes of the state of Rhode Island; or
- (3) Bonds of any political subdivision of the state of Rhode Island.

(b) With respect to the deposit of securities, the general treasurer shall, on a regular basis, collect all interest or income on the securities so deposited and shall pay the interest or income when and as collected to the designer depositing the securities. If the security is in the form of coupon bonds, the general treasurer shall deliver each coupon as it matures to the designer.

#### **37-12.1-3. Deduction from retained earnings.**

In the event that pursuant to the terms of the public works contract it is necessary to deduct any sum from retained earnings, the state or governmental unit or agency thereof shall first apply such deduction against sums not withdrawn and thereafter from the proceeds of the sale of any securities deposited or from the income earned on such securities, whichever is applicable.

#### **37-12.1-4. Endorsement on securities.**

All securities deposited with the general treasurer pursuant to this chapter shall be properly endorsed by the designer in such manner as to enable the general treasurer to carry out the provisions of this chapter.

#### **37-12.1-5. Applicability.**

This chapter shall apply to all retained earnings held pursuant to any public works contract as of [June 16, 1991].

# TITLE 37

## CHAPTER 13 LABOR AND PAYMENT OF DEBTS BY CONTRACTORS

### Sections

- 37-13-1. "Public Works" defined
- 37-13-2. "Contractor" defined – information required.
- 37-13-3. Contractors subject to provisions – Weekly payment of employees.
- 37-13-3.1 State public works contract apprenticeship requirements
- 37-13-4. Provisions applicable to public works contracts – List of Subcontractors.
- 37-13-5. Payment for trucking or materials furnished – Withholding of sums due.
- 37-12-6. Ascertainment of prevailing rate of wages and other payments – Specification of rate in call for bids and in contract.
- 37-13-7. Specification in contract of amount and frequency of payment and wages.
- 37-13-8. Investigation and determination of prevailing wages – Filing of schedule.
- 37-13-9. Statutory provisions included in contracts.
- 37-13-10. Overtime compensation.
- 37-13-11. Posting of prevailing wage rates.
- 37-13-12. Wage records of contractors.
- 37-13-12.1. Obstruction of enforcement.
- 37-13-12.2. Subpoena powers.
- 37-13-12.3. Compelling obedience to subpoenas.
- 37-13-12.4. Penalty for violations.
- 37-13-13. Furnishing payroll record to director of labor.
- 37-13-13.1. Audits of wage records of out of state contractors and subcontractors.
- 37-13-14. Contractor's bond.
- 37-13-14.1. Enforcement – Hearings.
- 37-13-15. Review.
- 37-13-16. Termination of work on failure to pay agreed wages – Completion of work.
- 37-13-17. Private right of action to collect wages or benefits

### **37-13-1. "Public works" defined.**

"Public works" as used in this chapter shall mean any public work consisting of grading, clearing, demolition, improvement, completion, repair, alteration, or construction of any public road or any bridge, or portion thereof, or any public building or portion thereof, or any heavy construction, or any public works projects of any nature or kind whatsoever.

### **37-13-2. "Contractor" defined - Information required.**

The term "contractor" as used in this chapter shall mean the bidder whose bid has been accepted by an authorized agency or awarding authority as the bidder possessing the skills, ability, and integrity necessary to the faithful performance of the contract or work, and who shall certify that he or she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the contract or work. Essential information in regard to qualifications shall be submitted in such form to the awarding authority and the director of labor and training as the director of labor and training shall require. The authorized agency or awarding authority shall reserve the right to reject all bids, if it be in the public interest to do so.

### **37-13-3. Contractors subject to provisions - Weekly payment of employees.**

All contractors, who have been awarded contracts for public works by an awarding agency or authority of the state or of any city, town, committee, or by any person or persons therein, in which state or municipal funds are used and of which the contract price shall be in excess of one thousand dollars (\$1,000) whether payable at the time of the signing of the contract or at a later date, and their subcontractors, on such public works shall pay their employees at weekly intervals and shall comply with the provisions set forth in 37-13-4 - 37-13-14, inclusive, and 37-13-16.

### **37-13-3.1. State public works contract apprenticeship requirements.**

Notwithstanding any laws to the contrary, all general contractors and subcontractors who perform work on any public works contract awarded by the state after passage of this act and valued at one million dollars (\$ 1,000,000) or more shall employ apprentices required for the performance of the awarded contract. The number of apprentices shall comply with the apprentice to journeyman ratio for each trade approved by the apprenticeship council of the department of labor and training. To the extent that any of the provisions contained in this section conflict with the requirements for federal aid contracts, federal laws and regulations shall control.

### **37-13-4. Provisions applicable to public works contracts - Lists of subcontractors.**

All public works shall be done by contract, subject to the same provisions of law relating thereto and to the letting thereof, which are applicable to similar contracts of the awarding authority or authorized agency, hereinafter called the "proper authority," in the general location where the work is to be performed and which are not contrary to the provisions of 37-13-1 - 37-13-14, and 37-13-16. Each contractor after the award of a contract for public works shall submit to the proper authority a list of his or her subcontractors of any part or all of the work. The list shall be submitted in such manner or form as the proper authority shall uniformly require from contractors in all public works.

### **37-13-5. Payment for trucking or materials furnished - Withholding of sums due.**

A contractor or subcontractor on public works authorized by a proper authority shall pay any obligation or charge for trucking and material which have been furnished for the use of the contractor or subcontractor, in connection with the public works being performed by him or her, within ninety (90) days after the obligation or charge is incurred or the trucking service has been performed or the material has been delivered to the site of the work, whichever is later. When it is brought to the notice of the proper authority in a city or town, or the proper authority in the state having supervision of the contract, that the obligation or charge has not been paid by the contractor or subcontractor, the proper authority may deduct and hold for a period not exceeding sixty (60) days, from sums of money due to the contractor or subcontractor, the equivalent amount of such sums certified by a trucker or material man creditor as due him or her, as provided in this section, and which the proper authority determines is reasonable for trucking performed or materials furnished for the public works.

### **37-13-6. Ascertainment of prevailing rate of wages and other payments - Specification of rate in call for bids and in contract.**

Before awarding any contract for public works to be done, the proper authority shall ascertain from the director of labor and training the general prevailing rate of the regular, holiday, and overtime wages paid and the general prevailing payments on behalf of employees only, to lawful welfare, pension, vacation, apprentice training, and educational funds (payments to the funds must constitute an ordinary business expense deduction for federal income tax purposes by contractors) in the city, town, village, or other appropriate political subdivision of the state in which the work is to be performed, for each craft, mechanic, teamster, laborer, or type of worker needed to execute the contract for the public works. The proper authority shall, also, specify in the call for bids for the contract and in the contract itself the general prevailing rate of the regular, holiday, and overtime wages paid and the payments on behalf of employees only, to the welfare, pension, vacation, apprentice training, and education funds existing in the locality for each craft, mechanic, teamster, laborer, or type of worker needed to execute the contract or work.

### **37-13-7. Specification in contract of amount and frequency of payment of wages.**

Every call for bids for every contract in excess of one thousand dollars (\$ 1,000), to which the state of Rhode Island or any political subdivision thereof or any public agency or quasi-public agency is a party, for construction, alteration, and/or repair, including painting and decorating, of public buildings or public works of the state of Rhode Island or any political subdivision thereof, or any public agency or quasi-public agency and which requires or involves the employment of employees, shall contain a provision stating the minimum wages to be paid various types of employees which shall be based upon the wages that will be determined by the director of labor and training to be prevailing for the corresponding types of employees employed on projects of a character similar to the contract work in the city, town, village, or other appropriate political subdivision of the state of Rhode Island in which the work is to be performed. Every contract shall contain a stipulation that the contractor or his or her subcontractor shall pay all the employees employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment computed at wage rates not less than those stated in the call for bids, regardless of any contractual relationships which may be alleged to exist between the contractor or subcontractor and the employees, and that the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work; and the further stipulation that there may be withheld from the contractor so much of the accrued payments as may be considered necessary to pay to the employees employed by the contractor, or any subcontractor on the work, the difference between the rates of wages required by the contract to be paid the employees on the work and the rates of wages received by the employees and not refunded to the contractor, subcontractors, or their agents.

(b) The terms "wages" , "scale of wages" , "wage rates" , "minimum wages" , and "prevailing wages" shall include:

(1) The basic hourly rate of pay; and

(2) The amount of:

(A) The rate of contribution made by a contractor or subcontractor to a trustee or to a third person pursuant to a fund, plan, or program; and

(B) The rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing benefits to employees pursuant to an enforceable commitment to carry out a financially responsible plan or program which was communicated in writing to the employees affected, for medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing, for unemployment benefits, life insurance, disability and sickness insurance, or accident insurance, for vacation and holiday pay, for defraying costs of apprenticeship or other similar programs, or for other bona fide fringe benefits, but only where the contractor or subcontractor is not required by other federal, state, or local law to provide any of the benefits ; provided, that the obligation of a contractor or subcontractor to make payment in accordance with the prevailing wage determinations of the director of labor and training insofar as this chapter of this title and other acts incorporating this chapter of this title by reference are concerned may be discharged by the making of payments in cash, by the making of contributions of a type referred to in subsection ( b)(2), or by the assumption of an enforceable commitment to bear the costs of a plan or program of a type referred to in this subdivision, or any combination thereof, where the aggregate of any payments, contributions, and costs is not less than the rate of pay described in subsection (b)(1) plus the amount referred to in subsection (b)(2).

(c) The term "employees" , as used in this section, shall include employees of contractors or subcontractors performing jobs on various types of public works including mechanics, apprentices, teamsters, chauffeurs, and laborers engaged in the transportation of gravel or fill to the site of public works, the removal and/or delivery of gravel or fill or ready-mix concrete, sand, bituminous stone, or asphalt flowable fill from the site of public works, or the transportation or removal of gravel or fill from one location to another on the site of public works, and the employment of the employees shall be subject to the provisions of subsections (a) and (b) .

(d) The terms "public agency" and "quasi-public agency" shall include, but not be limited to, the Rhode Island industrial recreational building authority, the Rhode Island economic development corporation, the Rhode Island airport corporation, the Rhode Island industrial facilities corporation, the Rhode Island refunding bond authority, the Rhode Island housing and mortgage finance corporation, the Rhode Island resource recovery corporation, the Rhode Island public transit authority, the Rhode Island student loan authority, the water resources board corporate, the Rhode Island health and education building corporation, the Rhode Island turnpike and bridge authority, the Narragansett Bay water quality management district commission, Rhode Island telecommunications authority, the

convention center authority, the board of governors for higher education, the board of regents for elementary and secondary education, the capital center commission, the housing resources commission, the Quonset Point-Davisville management corporation, the Rhode Island children's crusade for higher education, the Rhode Island depositors economic protection corporation, the Rhode Island lottery commission, the Rhode Island partnership for science and technology, the Rhode Island public building authority, and the Rhode Island underground storage tank board.

### **37-13-8. Investigation and determination of prevailing wages - Filing of schedule.**

The director of labor and training shall investigate and determine the prevailing wages and payments made to or on behalf of employees, as set forth in § 37-13-7, paid in the trade or occupation in the city, town, village, or other appropriate political subdivision of the state and keep a schedule on file in his or her office of the customary prevailing rate of wages and payments made to or on behalf of the employees which shall be open to public inspection. In making a determination, the director of labor may adopt and use such appropriate and applicable prevailing wage rate determinations as have been made by the secretary of labor of the United States of America in accordance with the Davis-Bacon Act, as amended, 40 U.S.C. § 276a; provided, however, that each contractor awarded a public works contract after July 1, 2007 shall contact the department of labor and training on or before July first of each year, for the duration of such contract to ascertain the prevailing wage rate of wages on a hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done each year and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee every July first.

### **37-13-9. Statutory provisions included in contracts.**

A copy of 37-13-5, 37-13-6, and 37-13-7 shall be inserted in all contracts for public works awarded by the state or any city or town, committee, an authorized agency or awarding authority thereof, or any person or persons in their behalf in which state or municipal funds are used if the contract price be in excess of one thousand dollars (\$1,000).

### **37-13-10. Overtime compensation.**

Labor performed under the provisions of 37-13-1 - 37-13-16, inclusive, during the period of forty (40) hours in any one week and during the period of eight (8) hours in any one day, shall be considered a legal week's work or a legal day's work, as the case may be, and any number of hours of employment in any one week greater than the number of forty (40) hours or in any one day greater than the number of eight (8) hours shall be compensated at the prevailing rate of wages for overtime employment; provided, however, when the director of labor and training has determined in the investigation provided for in 37-13-7 and 37-13-8 that there is a prevailing practice in a city, town, or other appropriate political subdivision to pay an overtime rate of wages for work of any craft, mechanic, teamster, laborer, or type of worker needed to execute the work other than hours worked in any one week greater than the number of forty (40) or in hours worked in any one day greater than the number of eight (8), then the prevailing practice shall determine the legal workday and the legal workweek in the city or town for the work and the prevailing rate of overtime wages shall be paid for such work in excess of that legal workday or week, as the case may be.

### **37-13-11. Posting of prevailing wage rates.**

Each contractor awarded a contract for public works with a contract price in excess of one thousand dollars (\$ 1,000), and each subcontractor who performs work on those public works, shall post in conspicuous places on the project, where covered workers are employed, posters which contain the current, prevailing rate of wages and the current, prevailing rate of payments to the funds required to be paid for each craft or type of worker employed to execute the contract as set forth in §§ 37-13-6 and 37-13- 7, and the rights and remedies of any employee described in § 37-13-17 for nonpayment of any wages earned pursuant to this chapter. Posters shall be furnished to contractors and subcontractors by the director of labor and training, who shall determine the size and context thereof from time to time, at the time a contract is awarded. A contractor or subcontractor who fails to comply with the provisions of this section shall be deemed guilty of a misdemeanor and shall pay to the director of labor and training one hundred dollars (\$ 100) for each calendar day of noncompliance as determined by him or her. Contracts set forth in this section shall not be awarded by the state, any city, town, or any agency thereof until the director of labor and training has prepared and delivered the posters to the division of purchases, if the state or any agency thereof is the proper authority, or to the city, town, or an agency thereof, if it is the proper authority, and the contractor to whom the contract is to be awarded.

### **37-13-12. Wage records of contractors.**

Each contractor awarded a contract with a contract price in excess of one thousand dollars (\$1,000) for public works, and each subcontractor who performs work on those public works, shall keep an accurate record showing the name, occupation, and actual wages paid to each worker employed by him or her and the payments to all the employee funds specified in sections 37-13-6 and 37-13-7 by him or her in connection with the contract or work. The director and his or her authorized representatives shall have the right to enter any place of employment at all reasonable hours for the purpose of inspecting the wage records and seeing that all provisions of this chapter are complied with.

### **37-13-12.1. Obstruction of enforcement.**

Any effort of any employer to obstruct the director and his or her authorized representatives in the performance of their duties shall be deemed a violation of this chapter and punishable as such.

### **37-13-12.2. Subpoena powers.**

The director and his or her authorized representatives shall have power to administer oaths and examine witnesses under oath, issue subpoenas, subpoenas duces tecum, compel the attendance of witnesses, and the production of papers, books, accounts, records, payrolls, documents, and testimony, and to take depositions and affidavits in any proceeding before the director.

### **37-13-12.3. Compelling obedience to subpoenas.**

In case of failure of any person to comply with any subpoena lawfully issued, or subpoena duces tecum, or on the refusal of any witness to testify to any matter regarding which he may be lawfully interrogated, it shall be the duty of the superior court, or any judge thereof, on application by the director, to compel obedience by proceedings in the nature of those for contempt.

### **37-13-12.4. Penalty for violations.**

Except as otherwise provided in this chapter, any employer who shall violate or fail to comply with any of the provisions of this chapter shall be guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$500) nor more than one thousand dollars (\$1,000) for each separate offense, or by imprisonment of up to one year, or by both fine and imprisonment. Each day of failure to pay wages due an employee at the time specified in this chapter shall constitute a separate and distinct violation.

### **37-13-13. Furnishing payroll record to director of labor.**

(a) Every contractor and subcontractor awarded a contract for public works as defined by this chapter shall furnish a certified copy of his or her payroll records of his or her employees employed on the project to the awarding authority on a monthly basis for all work completed in the preceding month on a uniform form prescribed by the director of labor and training. Notwithstanding the foregoing, certified payrolls for department of transportation public works may be submitted on the federal payroll form, provided that, when a complaint is being investigated, the director or his or her designee may require that a contractor resubmit the certified payroll on the uniform department form.

(b) Awarding authorities, contractors and subcontractors shall provide any and all payroll records to the director of labor and training within ten (10) days of their request by the director or his or her designee.

(c) In addition, every contractor and subcontractor shall maintain on the site where public works are being constructed and the general or primary contract is one million dollars (\$1,000,000) or more, a daily log of employees employed each day on the public works project. The log shall include, at a minimum, for each employee his or her name, primary job title, and employer and shall be kept on a uniform form prescribed by the director of labor and training. Such log shall be available for inspection on the site at all times by the awarding authority and/or the director of the department of labor and training and his or her designee. This subsection shall not apply to road, highway, or bridge public works projects.

(d) The director of labor and training may promulgate reasonable rules and regulations to enforce the provisions of this section.

(e) The awarding authority of any public works project shall withhold the next scheduled payment to any contractor or subcontractor who fails to comply with the provisions of subsections (a) or (b) above and shall also

notify the director of labor and training. The awarding authority shall withhold any further payments until such time as the contractor or subcontractor has fully complied. If it is a subcontractor who has failed to comply, the amount withheld shall be proportionate to the amount attributed or due to the offending subcontractor as determined by the awarding authority. The department may also impose a penalty of up to five hundred dollars (\$500) for each calendar day of noncompliance with this section, as determined by the director of labor and training. Mere errors and/or omissions in the daily logs maintained under subsection (c) shall not be grounds for imposing a penalty under this subsection.

### **37-13-13.1. Audits of wage records of out of state contractors and subcontractors.**

Out of state contractors or subcontractors who perform work on public works in this state authorize the director of labor and training to conduct wage and hour audits of their payroll records pursuant to the provisions of chapter 14 of title 28.

### **37-13-14. Contractor's bond.**

The state or any city, town, agency, or committee therein awarding contracts for public works shall require the contractor awarded a contract with a contract price in excess of fifty thousand dollars (\$ 50,000) for public works to file with the proper authority good and sufficient bond with surety furnished by any surety company authorized to do business in the state, conditioned upon the faithful performance of the contract and upon the payment for labor performed and material furnished in connection therewith, a bond to contain the terms and conditions set forth in chapter 12 of this title, and to be subject to the provisions of that chapter. Waiver of the bonding requirements of this section is expressly prohibited.

### **37-13-14.1. Enforcement - Hearing**

(a) Before issuing an order or determination, the director of labor and training shall order a hearing thereon at a time and place to be specified, and shall give notice thereof, together with a copy of the complaint or the purpose thereof, or a statement of the facts disclosed upon investigation, which notice shall be served personally or by mail on any person, firm, or corporation affected thereby. The person, firm, or corporation shall have an opportunity to be heard in respect to the matters complained of at the time and place specified in the notice, which time shall be not less than five (5) days from the service of the notice personally or by mail. The hearing shall be held within ten (10) days from the order of hearing. The hearing shall be conducted by the director of labor and training or his or her designee. The hearing officer in the hearing shall be deemed to be acting in a judicial capacity and shall have the right to issue subpoenas, administer oaths, and examine witnesses. The enforcement of a subpoena issued under this section shall be regulated by Rhode Island civil practice law and rules. The hearing shall be expeditiously conducted, and upon such hearing, the hearing officer shall determine the issues raised thereon and shall make a determination and enter an order within ten (10) days of the close of the hearing, and forthwith serve a copy of the order, with a notice of the filing thereof, upon the parties to the proceeding, personally or by mail. The order shall dismiss the charges or direct payment of wages or supplements found to be due, including interest at the rate of twelve percent (12%) per annum from the date of the underpayment to the date of payment, and may direct payment of reasonable attorney's fees and costs to the complaining party.

(b) In addition to directing payment of wages or supplements including interest found to be due, the order shall also require payment of a further sum as a civil penalty in an amount up to three times the total amount found to be due. Further, if the amount of salary owed to an employee pursuant to this chapter but not paid to the employee in violation of thereof exceeds five thousand dollars (\$5,000), it shall constitute a misdemeanor and shall be referred to the office of the attorney general. The misdemeanor shall be punishable for a period of not more than one year in prison and/or fined not more than one thousand dollars (\$1,000). In assessing the amount of the penalty, due consideration shall be given to the size of the employer's business, the good faith of the employer, the gravity of the violation, the history of previous violations, and the failure to comply with recordkeeping or other nonwage requirements. The surety of the person, firm, or corporation found to be in violation of the provisions of this chapter shall be bound to pay any penalties assessed on such person, firm, or corporation. The penalty shall be paid to the department of labor and training for deposit in the state treasury; provided, however, it is hereby provided that the general treasurer shall establish a dedicated "prevailing wages enforcement fund" for the purpose of depositing the penalties paid as provided herein. There is hereby appropriated to the annual budget of the department of labor and training the amount of the fund collected annually under this section, to be used at the direction of the director of labor and training for the sole purpose of enforcing prevailing wage rates as provided in this chapter.

(c) For the purposes of this chapter, each day or part thereof of violation of any provision of this chapter by a person, firm, or corporation, whether the violation is continuous or intermittent, shall constitute a separate and succeeding violation.

(d) In addition to the above, any person, firm, or corporation found in violation of any of the provisions of this chapter by the director of labor and training, an awarding authority, or the hearing officer, shall be ineligible to bid on, or be awarded work by, an awarding authority or perform any such work for a period of no less than eighteen (18) months and no more than thirty-six (36) months from the date of the order entered by the hearing officer. Once a person, firm, or corporation is found to be in violation of this chapter, all pending bids with any awarding authority shall be revoked, and any bid awarded by an awarding authority prior to the commencement of the work shall also be revoked.

(e) In addition to the above, any person, firm, or corporation found to have committed two (2) or more willful violations in any period of eighteen (18) months of any of the provisions of this chapter by the hearing officer, which violations are not arising from the same incident, shall be ineligible to bid on, or be awarded work by, an awarding authority or perform any work for a period of sixty (60) months from the date of the second violation.

(f) The order of the hearing officer shall remain in full force and effect unless stayed by order of the superior court.

(g) The director of labor and training, awarding authority, or hearing officer shall notify the bonding company of any person, firm, or corporation suspected of violating any section of this chapter. The notice shall be mailed certified mail and shall enumerate the alleged violations being investigated.

(h) In addition to the above, any person, firm, or corporation found to have willfully made a false or fraudulent representation on certified payroll records shall be referred to the office of the attorney general. A first violation of this section shall be considered a misdemeanor and shall be punishable for a period of not more than one year in prison and/or fined one thousand dollars (\$1,000). A second or subsequent violation of this section shall be considered a felony and shall be punishable for a period of not more than three (3) years imprisonment, a fine of three thousand dollars (\$3,000), or both. Further, any person, firm, or corporation found to have willfully made a false or fraudulent representation on certified payroll records shall be required to pay a civil penalty to the department of labor and training in an amount of no less than two thousand dollars (\$2,000) and not greater than fifteen thousand dollars (\$15,000) per representation.

### **37-13-15. Review.**

(a) There is hereby created an appeals board which shall be comprised of three (3) members who shall be appointed by the governor; provided, however, that each member of the appeals board shall have at least five (5) years experience with prevailing wage rates as they apply to the construction industry. The members of such appeals board shall serve without compensation. The members of the appeals board shall be appointed for terms of three (3) years except that of the three (3) members originally appointed by each of the appointing authorities; one (1) shall be appointed for a term of one (1) year, one (1) shall be appointed for a term of two (2) years and one (1) for a term of three (3) years.

(b) Any person aggrieved by any action taken by the director of labor and training or his or her designated hearing officer under the authority of this chapter, or by the failure or refusal of the director of labor and training to take any action authorized by this chapter, may obtain a review thereof for the purpose of obtaining relief from the action or lack of action by filing a petition for administrative review and relief, to the appeals board as provided herein. The petition for administrative review shall be filed within twenty (20) days of the action taken by the director of labor and training or designated hearing officer: The petition for administrative review shall be heard within ten (10) days of the date of filing. An aggrieved person under this section shall include:

- (1) Any person who is required to pay wages to his or her employees or make payments to a fund on behalf of his or her employees, as provided in this chapter;
- (2) Any person who is required to be paid wages for his or her labor or on whose behalf payments are required to be paid to funds, as provided by this chapter;
- (3) The lawful collective bargaining representative of a person defined in subdivision (2) above;
- (4) A trade association of which a person defined in subdivision (1) above is a member;
- (5) A proper authority as defined in this chapter;

- (6) A contractor who submitted a bid for work to be or which has been awarded under the provisions of this chapter or a trade association of which he or her is a member, and
  - (7) A labor organization which has one or more written collective bargaining agreements with one or more employers or a trade association which sets forth the hours, wages, and working conditions of a craft, mechanic, teamster, or type of worker needed to execute the work, as provided in this chapter to the extent that it would be affected by the action or the failure to act of the director of labor and training or the hearing officer.
- (c) Any aggrieved person as defined herein may obtain a review of a decision of the appeals board by filing a petition in the superior court in Providence county pursuant to the provisions of the administrative procedures act, praying for review and relief and the petition shall follow the course of and be subject to the procedures for causes filed in the court.
- (d) The director is hereby empowered to enforce his or her decision and/or the decision of the appeals board in the superior court for the county of Providence.

### **37-13-16. Termination of work on failure to pay agreed wages - Completion of work.**

Every contract within the scope of this chapter shall contain the further provision that in the event it is found by the director of labor and training that any employee employed by the contractor or any subcontractor directly on the site of the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid as aforesaid, the awarding party may, by written notice to the contractor or subcontractor, terminate his or her right as the case may be, to proceed with the work, or such part of the work as to which there has been a failure to pay the required wages, and shall prosecute the work to completion by contract or otherwise, and the contractor and his or her sureties shall be liable to the awarding party for any excess costs occasioned the awarding authority thereby.

### **37-13-17. Private right of action to collect wages or benefits**

(a) An employee or former employee, or any organization representing such an employee or former employee, of a contractor or subcontractor may bring a civil action for a violation of § 37-13-7 for appropriate injunctive relief, or actual damages, or both within three (3) years after the occurrence of the alleged violation. An action commenced pursuant to this section, may be brought in the superior court for the county where the alleged violation occurred, the county where the complainant resides, or the county where the person against whom in the civil complaint is filed resides or has their principal place of business. Any contractor or subcontractor who violates the provisions of § 37-13-7 shall be liable to the affected employee or employees in the amount of unpaid wages or benefits, plus interest. A civil action filed in court under this section may be instituted instead of, but not in addition to the director of labor and training enforcement procedures authorized by § 37-13-14.1, provided the civil action is filed prior to the date the director of labor and training issues notice of an administrative hearing.

(b) An employer's responsibility and liability is solely for its own employees.

(c) An action instituted pursuant to this section may be brought by one or more employees or former employees on behalf of himself/herself or themselves and other employees similarly situated, except that no employee shall be a party plaintiff to any such action unless he/she gives his/her consent in writing to become such a party and such consent is filed in the court in which such action is brought.

(d) In an action filed under this section in which the plaintiff prevails, the court shall, in addition to any judgment awarded to the plaintiff, require reasonable attorneys' fees and the costs of the action to be paid by the defendant.

(e) The court in an action filed under this section shall award affected employees or former employees liquidated damages in an amount equal to two (2) times the amount of unpaid wages or benefits owed. Unpaid fringe benefit contributions owed pursuant to this section in any form shall be paid to the appropriate benefit fund, however, in the absence of an appropriate fund the benefit shall be paid directly to the individual.

(f) The filing of a civil action under this section shall not preclude the director of labor and training from referring a matter to the attorney general as provided in § 37-13-14.1(b), from prohibiting a contractor or subcontractor from bidding on or otherwise participating in contracts as provided in § 37-13-14.1(d), (e) and (h), or from prohibiting termination of work on failure to pay agreed wages pursuant to § 37-13-16.

(g) Any person, firm, or corporation found to have willfully made a false or fraudulent representation in connection with wage obligations owed on a contract shall be required to pay a civil penalty to the department of labor and training in an amount of no less than one thousand dollars (\$ 1,000) and not greater than three thousand dollars (\$ 3,000) per representation. Such penalties shall be recoverable in civil actions filed pursuant to this section. For purposes of this subsection "willfully" shall mean representations that are known to be false, or representations made with deliberate ignorance or reckless disregard for their truth or falsity.

(h) An employer shall not discharge, threaten, or otherwise discriminate against an employee, or former employee, regarding compensation terms, conditions, locations or privileges of employment because the employee or former employee, or a person or organization acting on his or her behalf: (1) Reports or makes a complaint under this section; or otherwise asserts his or her rights under this section; and/or (2) Participates in any investigation, hearing or inquiry held by the director of labor and training under § 37-13-14.1. In the event a contractor or subcontractor retaliates or discriminates against an employee in violation of this section, the affected employee may file an action in any court of competent jurisdiction and the court shall order reinstatement and/or restitution of the affected employee, as appropriate, with back pay to the date of the violation, and an additional amount in liquidated damages equal to two (2) times the amount of back pay and reasonable attorneys' fees and costs.

(i) If any one or more subsections of this section shall for any reason be adjudged unconstitutional or otherwise invalid, the judgment shall not affect, impair, or invalidate the remaining subsections.

## **PREVAILING WAGE RATES**

**(Appropriate wage rate to be inserted by bidder in specifications)**

**For a copy of the appropriate wage rate, contact:**

**R.I. Department of Labor and Training  
Center General Complex  
1511 Pontiac Avenue  
Cranston, RI 02920**

# TITLE 37

## CHAPTER 14.1 MINORITY BUSINESS ENTERPRISE

### Sections

37-14.1-1.	Purpose.
37-14.1-2.	Applicability.
37-14.1-3.	Definitions.
37-14.1-4.	Policy.
37-14.1-5.	Discrimination prohibited.
37-14.1-6.	Minority business enterprise guidelines.
37-14.1-7.	Establishment of criteria and guidelines.
37-14.1-8.	Sanctions.

### **37-14.1-1. Purpose.**

The purpose of this chapter is to carry out the state's policy of supporting the fullest possible participation of firms owned and controlled by minorities and women (MBE's), in state funded and state directed public construction programs and projects and in state purchases of goods and services. This includes assisting MBE's throughout the life of contracts in which they participate.

### **37-14.1-2. Applicability.**

This chapter shall apply to any and all state purchasing, including, but not limited to the procurement of goods and services and construction projects or contracts funded in whole or in part by state funds, or funds which, in accordance with a federal grant or otherwise, the state expends or administers or in which the state is a signatory to the construction contract.

### **37-14.1-3. Definitions.**

- (a) "Affirmative action" means taking specific steps to eliminate discrimination and its effects, to ensure nondiscriminatory results and practices in the future, and to involve minority business enterprises fully in contracts and programs funded by the state.
- (b) "Compliance" means the condition existing when a contractor has met and implemented the requirements of this chapter.
- (c) "Contract" means a mutually binding legal relationship or any modification thereof obligating the seller to furnish supplies or services, including construction, and the buyer to pay for them. For purposes of this chapter, a lease is a contract.
- (d) "Contractor" means one who participates, through a contract or subcontract, in any procurement or program covered by this chapter, and includes lessees and material suppliers.
- (e) "Minority" means a person who is a citizen or lawful permanent resident of the United States and who is:
  - (1) Black (a person having origins in any of the black racial groups of Africa);
  - (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
  - (3) Portuguese (a person of Portuguese, Brazilian, or other Portuguese culture or origin, regardless of race);
  - (4) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands);
  - (5) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America.); or
  - (6) Members of other groups, or other individuals, found to be economically and socially disadvantaged by the Small Business Administration under section 8(a) of the Small Business Act, as amended [15 U.S.C. 637(a)].
- (f) "Minority business enterprise" or "MBE" means a small business concern, as defined pursuant to section 3 of the federal Small Business Act [15 U.S.C. 632] and implementing regulations, which is owned and controlled by one or more minorities or women. For the purposes of this chapter, owned and controlled means a business.

- (1) Which is at least fifty-one percent (51%) owned by one or more minorities or women or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by one or more minorities or women; and
- (2) Whose management and daily business operations are controlled by one or more such individuals.

(g) "MBE coordinator" means the official designated to have overall responsibility for promotion of minority business enterprise in his or her departmental element.

(h) "Noncompliance" means the condition existing when a recipient or contractor has failed to implement the requirements of this chapter.

#### **37-14.1-4. Policy.**

It is the policy of the state of Rhode Island that minority business enterprises (MBE's) shall have the maximum opportunity to participate in the performance of procurements and projects outlined in 37-14.1-2.

#### **37-14.1-5. Discrimination prohibited.**

No person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against in connection with the award and performance of any project covered by this chapter, on the grounds of race, color, national origin, or sex.

#### **37-14.1-6. Minority business enterprise participation.**

Minority business enterprises shall be included in all procurements and construction projects under this chapter and shall be awarded a minimum of ten percent (10%) of the dollar value of the entire procurement or project. The director of the department of administration is further authorized to establish by rules and regulation formulas for giving minority business enterprises a preference in contract and subcontract awards.

#### **37-14.1-7. Establishment of criteria and guidelines.**

The director of the department of administration shall establish, by rule and regulations adopted in accordance with chapter 35 of title 42, standards which shall determine whether a construction project is covered by this chapter, compliance formulas, procedures for implementation, and procedures for enforcement which are not inconsistent with 49 CFR 23 of the federal regulations. As to Rhode Island department of transportation contracts, the director of administration may delegate this authority to the director of transportation.

#### **37-14.1-8. Sanctions.**

(a) The director of the department of administration shall have the power to impose sanctions upon contractors not in compliance with this chapter and shall include but not be limited to:

- (1) Suspension of payments;
- (2) Termination of the contract;
- (3) Recovery by the state of ten percent (10%) of the contract award price as liquidated damages; and
- (4) Denial of right to participate in future projects for up to three (3) years.

(b) As to Rhode Island department of transportation contracts, the director of the department of administration may delegate this authority to the director of transportation.

**REGULATIONS GOVERNING PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN STATE  
FUNDED AND DIRECTED PUBLIC CONSTRUCTION PROJECTS, CONSTRUCTION CONTRACTS  
AND PROCUREMENT CONTRACTS FOR GOODS AND SERVICES**

**I. GENERAL**

**1. Purpose**

(a) The purpose of these regulations is to carry out the state's policy of supporting the fullest possible participation of firms owned and controlled by minorities and women (MBEs) in state-funded and directed public construction programs and projects and in state purchases of goods and services. This includes assisting MBEs throughout the life of contracts in which they participate.

(b) These regulations implement, in part, R. I. Gen. Laws, Chapter 37-14.1. These regulations are effective immediately and supersede all Department of Administration regulations issued previously under these authorities insofar as such regulations affect minority business enterprise matters in the State.

**2. Applicability**

These regulations apply to any construction project, construction contract or procurement contract for goods and services funded in whole or in part by state funds, or funds which, in accordance with federal grant or otherwise, the state expends or administers or in which the state is a signatory. Quasi-independent state agencies, such as the Rhode Island Public Buildings Authority, the Narragansett Bay Commission and the Rhode Island Port Authority, are subject to the requirements outlined under these regulations. With respect to Department of Transportation contracts, The Director of Transportation may promulgate regulations consistent with R. I. Gen. Laws Sections 37-14.1-8 and 37-14.1-9, thereby exempting Department of Transportation contracts from the requirements of these regulations.

**3. Definition**

The terms "building" or "work" means construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvement of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing and landscaping. Unless conducted in connection with and at the site of such a building or work as described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of these regulations.

“**Compliance**” means the conditions existing when a prime contractor has met and implemented the requirements of these regulations.

“**Construction**” means all types of on-site work done on a particular building or work, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

“**Construction Project**” means a contract or group of contracts for construction work that a prime contractor has agreed to perform, whether directly or through the use of subcontractors.

**“Contract” means** a mutually binding legal relationship or any modification thereof obligating the seller to furnish supplies or services, including construction, and the buyer to pay for them. For purposes of these regulations, a lease is a contract.

**“Contractor” means** one who participates, through a contract or subcontract, in any program covered by these regulations and includes lessees.

**“Director” means** the Director of the Department of Administration or any person whom he/she has designated to act for him/her.

**“Goods” means** materials or supplies of any kind provided by a vendor, his agents or employees.

**“Services” means** professional or non-professional activities requiring mental or physical labor to be performed by the contractor, vendor, his agents or employees.

**“Minority” means** a person who is a citizen or lawful permanent resident of the United States and who is:

- (a) Black (a person having origins in any of the black racial groups of Africa);
- (b) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
- (c) Portuguese (a person of Portuguese, Brazilian or other Portuguese culture or origin, regardless of race);
- (d) Asian American a person having origins in any of the original peoples of the Far East, South East Asia, the Indian Subcontinent, or the Pacific Islands);
- (e) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America); or
- (f) Members of other groups or other individuals found to be economically and socially disadvantaged by the Small Business Administration under Section 8(a) of the Small Business Act, as amended (15 U.S.C. 637 (a)).

**“Minority Business Enterprise” or “MBE” means** a small business concern as defined pursuant to Section 3 of the Federal Small Business Act and implementing regulations, which is owned and controlled by one (1) or more minorities or women and which has been certified as a Minority Business Enterprise under these regulations by the Rhode Island Department of Administration. For the purposes of these regulations, an owned and controlled business means one:

- (a) which is at least 51% owned by one (1) or more minorities or women or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by one (1) or more minorities or women; and
- (b) whose management and daily business operations are controlled by one (1) or more such individuals.

**“MBE Coordinator” means** the official designated to have overall responsibility for promotion of minority business enterprises within each department and agency for each contract covered by these regulations. He or she shall be appointed not later than the time the Request for Proposal for each contract is submitted.

**“Non-compliance” means** the condition existing when a contractor has failed to implement the requirements of these regulations.

**“Prime Contractor” means** the contractor that is charged with total construction on a contract or group of contracts, portions of which are, or will be subcontracted to their parties.

**“Specialty Contractor” means** a contractor charged with total construction on a contract or group of contracts, portions of which will not be subcontracted to third parties.

**“Vendor” means** the party with which the State contracts to provide goods or services.

#### **4. Policy**

These regulations shall be construed in accordance with the policy of the State of Rhode Island that minority business enterprises (MBEs) shall have the maximum opportunity to participate in the performance of projects or provision of goods or services outlined hereunder.

#### **5. Construction Contracts**

(a) MBE Liaison Officer

The chief executive officer of each prime contractor shall designate an MBE Liaison Officer who will coordinate with the MBE Coordinator from the Department of Administration or other state department or agency responsible for monitoring the contract.

(b) Ten Percent (10%) Requirement

(i) Each Department shall structure its procedures for procuring construction contracts to attempt to achieve the result that a minimum of ten (10%) percent of the total dollar value of these procurements is made directly or indirectly from MBEs. This result shall be achieved through one of the two methods described in paragraphs 5(b) (ii) or 5 (b) (iii) below.

(ii) Prime Contractor Method. Each prime contractor shall ensure that a minimum of ten percent (10%) of the dollar value of work to be performed on a construction project will be performed by MBEs. The prime contractor must meet or exceed this requirement or demonstrate that it could not meet this requirement despite its good-faith efforts. A prime contractor that is an MBE will satisfy the ten percent (10%) requirement by ensuring that a least ten percent (10%) of the dollar volume of work performed under the contract is performed by its employees.

(iii) Construction Contracts not involving the use of prime contractors. In lieu of using the prime contractor method described in paragraph 5(b) (ii) above, a Department may meet the ten percent (10%) requirement under these regulations by ensuring that ten percent (10%) of the dollar value of construction contracts in the aggregate for each fiscal year is awarded to MBEs. MBEs may be solicited directly to accomplish this requirement.

(iv) The ten percent (10%) requirements set forth under these regulations can be satisfied concurrently with similar requirements mandated under federal law.

(v) Nothing in these regulations shall be construed to require the award of a contract to an MBE whose bid exceeds the lowest bid by five percent (5%). Nothing in these Regulations shall be construed to require the acceptance of non-conforming goods or services.

(c) Solicitation of Bids

All departments and agencies soliciting requests for proposals for construction projects identified as having subcontracting opportunities must include in the advertisements for the project the following language: "This project is subject to Chapter 37-14.1 of the Rhode Island General Laws, and regulations promulgated thereunder, which require that ten percent of the dollar value of work performed on the project be performed by minority business enterprises."

(ii) MBE Compliance Plan

A prospective prime contractor shall include in its bid on any construction project covered by these regulations, a simple statement acknowledging its obligation to meet the ten percent (10%) requirement under these regulations. After it has been identified as the apparent low bidder, the prime contractor shall, within ten (10) working days, prepare an MBE Compliance Plan and submit it to the Director or his designee for approval. The Plan shall identify by MBE name, subcontract dollar amount and type, each subcontract that the prime contractor projects will be awarded to MBEs over the period of the project.

(d) Approval or Disapproval of MBE Plan

(i) The Director or his designee will review and approve plans that reasonably ensure compliance with the ten percent (10%) requirement.

(ii) Where the prime contractor has proved that for reasons beyond the prime contractor's control, compliance with the ten percent (10%) requirement is impossible, the Director or his designee may approve a plan that ensures compliance with an MBE utilization rate of less than ten percent (10%). To prove impossibility of compliance, there shall be a hearing, which interested parties will be notified of and permitted to attend, during which the contractor shall demonstrate the following:

(1) The prime contractor is making all appropriate efforts, including those listed in paragraph 5 (e) of these regulations, to increase MBE participation in its construction project to the ten percent (10%) level.

(2) Despite the prime contractor's efforts, the prime contractor's plan represents a reasonable expectation for the participation of MBEs in state contracts given the availability of MBEs to work on the contract.

(iii) If the Director or his designee does not approve the plan the prime contractor has submitted, the prime contractor, after consulting with the Director or his designee, shall present a revised plan.

(iv) The Director may condition the approval or establishment of any adjusted requirement on any reasonable future action by the prime contractor.

(v) Each prime contract covered under these regulations shall include the following: "The contractor agrees to ensure that minority business enterprises as defined in R.I. Gen. Laws Section 37-14.1-3, shall have the maximum opportunity to participate in the performance of subcontracts performed under this agreement. The contractor will take all reasonable steps in accordance with regulations promulgated under Chapter 37-14.1 of the Rhode Island General Laws to ensure that minority business enterprises have the maximum opportunity to compete for and perform subcontracts under this agreement."

e. Compliance

(i) Each MBE coordinator will periodically conduct on-site inspections to determine compliance with the provisions of these regulations. The Division of Purchasing, the Director or the MBE Coordinator may require a prime contractor to furnish copies of purchase orders, subcontracts, cancelled checks, and other records that may indicate the number, names, dollar value of MBE subcontracts, dates, and schedule time for performance of work by an MBE subcontractor.

(ii) A prime contractor's failure to have an approved MBE Compliance Plan as required by these regulations constitutes non-compliance with these regulations.

(iii) If a prime contractor fails to meet the requirements outlined in its approved MBE Compliance Plan, it shall explain to the Director, in writing, why the requirements could not be met and why meeting the requirements was beyond the prime contractor's control.

(iv) To determine whether a prime contractor has a good faith reason for failing to meet its requirements, the Director may consider, among other factors:

(1) Whether the prime contractor attended any pre-solicitation or pre-bid meetings that were scheduled by the state contracting authority to inform MBEs of contracting or subcontracting opportunities;

(2) Whether the prime contractor advertised in general circulation, trade association, and minority focus media concerning the subcontracting opportunities;

(3) Whether the prime contractor provided written notice to a reasonable number of specific MBEs that their interest in a contract was being solicited, in sufficient time to allow the MBEs to participate effectively;

- (4) Whether the prime contractor followed up initial solicitations of interest by contacting MBEs to determine with certainty whether the MBEs were interested;
  - (5) Whether the prime contractor selected portions of work to be performed by MBEs in order to increase the likelihood of meeting MBE participation requirements (including, where appropriate, breaking down contracts into economically feasible units to facilitate MBE participation);
  - (6) Whether the prime contractor provided interested MBEs with adequate information about the plans, specifications and requirements of the contract;
  - (7) Whether the prime contractor negotiated in good faith with interested MBEs;
  - (8) Whether the prime contractor made suggestions to interested MBEs to assist them in obtaining bonding, lines of credit, or insurance required by the prime contractor;
  - (9) Whether the prime contractor effectively used the services of available minority community organizations, minority contractors' groups, local, state and Federal minority business assistance offices; and other organizations that provide assistance in the recruitment and placement of MBEs.
- (v) If the prime contractor does not make such an explanation, or if the Director determines that the prime contractor's explanation does not justify its failure to meet the requirements in its approved MBE Plan, the Director may direct the prime contractor to take appropriate remedial action. Failure to take remedial action directed by the Director is noncompliance with these regulations.
- (vi) In the event of non-compliance with these regulations, the Director may take appropriate enforcement action. Such action may include suspension of payments, termination of the contract, and recovery by the state of 10% of the contract price as liquidated damages and/or denial of the right to participate in future projects for up to three (3) years.

# TITLE 37

## CHAPTER 16 PUBLIC WORKS ARBITRATION

### Sections

37-16-1.	Short Title.
37-16-2.	Contract provisions for arbitration.
37-16-3.	Application for subcontracts.
37-16-4.	Stay of legal proceedings pending arbitration.
37-16-5.	Jurisdiction of superior court to enforce arbitration provisions and awards.
37-16-6.	Trial upon evidence of substantial issue.
37-16-7.	Method of appointing arbitrators.
37-16-8.	Scheduling and notice of arbitration hearing – Adjournment.
37-16-9.	Power of court to direct prompt hearing.
37-16-10.	Arbitrator's oath – Waiver.
37-16-11.	Powers of arbitrators.
37-16-12.	Fees.
37-16-13.	Validity of awards.
37-16-14.	Arbitration under chapter deemed special proceeding – Jurisdiction of superior court.
37-16-15.	Procedure for hearing of application to court.
37-16-16.	Form of award.
37-16-17.	Court order confirming award.
37-16-18.	Court order vacating award.
37-16-19.	Rehearing after vacation of award.
37-16-20.	Court order modifying or correcting award.
37-16-21.	Notice of motion to vacate, modify, or correct an award.
37-16-22.	Entry of judgment – Costs
37-16-23.	Filing of papers after judgment.
37-16-24.	Effect of judgment.
37-16-25.	Appeals.
37-16-26.	Satisfaction of award.
37-16-27.	Application of sureties.

### **37-16-1. Short title.**

This chapter shall be known as the "Public Works Arbitration Act".

### **37-16-2. Contract provision for arbitration.**

(a) A provision in a written contract executed on or after January 1, 1962, for the construction, alteration, repair, or painting of any public building, sewer, highway, bridge, water treatment or disposal projects one party to which is the state, a city, a town, or an authority, a board, a public corporation, or any similar body created by statute or ordinance or any committee, agency, or subdivision of any of them, to settle by arbitration any dispute or claim arising out of or concerning the performance or interpretation of the contract shall be valid, irrevocable, and enforceable, save upon grounds existing in law or equity for the revocation of the contract.

(b) (1) Every contract for the construction, alteration, repair, painting, or demolition of any public building, sewer, water treatment or disposal project, highway, or bridge one party to which is the state, a city, a town, or an authority, a board, a public corporation, or any similar body created by statute or ordinance or any committee, agency, or subdivision of any of them which has a contract price of ten thousand dollars (\$ 10,000) or more and which is executed on or after July 1, 1967, shall contain a provision for arbitration of disputes and claims arising out of or concerning the performance or interpretation of the contract as follows:

(2) "All claims, disputes, and other matters in question arising out of or relating to this contract or the performance or interpretation thereof shall be submitted to arbitration. Arbitration shall be commenced by a demand in writing made by one party to the contract upon the other within a reasonable time after the dispute, claim, or other matter in question arose but in no event after payment in full of the contract price has been made and accepted. The written demand shall contain a statement of the question to be arbitrated and a detailed statement of each item or matter in

dispute and the name of the arbitrator appointed by that party. The other party to the contract within ten (10) days of the receipt of the written demand shall appoint an arbitrator and give notice in writing thereof to the party who commenced arbitration. The two (2) arbitrators appointed by the parties shall within ten (10) days of the date of the appointment of the second arbitrator select a third arbitrator who shall be designated as chairperson and who immediately shall give written notice to the parties of his or her appointment. The third arbitrator shall select a time, date, and place for hearing and give each party five (5) days notice in writing thereof. The date for hearing shall not be more than fifteen (15) days after the date of appointment of the third arbitrator. The award shall be made promptly by the arbitrators and, unless otherwise agreed by the parties or specified by law, no later than thirty (30) days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the transmittal of the final statements and proofs to the arbitrators. The award shall be in writing and shall be signed by a majority of the arbitrators. It shall be executed in the manner required by law. The arbitrator shall provide a written explanation of the reasoning for the award. In the event the party of whom arbitration is demanded shall fail to appoint his or her arbitrator within the time specified or the two (2) arbitrators appointed by the parties are unable to agree on an appointment of the third arbitrator within the time specified, either party may petition the presiding justice of the superior court to appoint a single arbitrator who shall hear the parties and make an award as provided herein. The petitioner shall give five (5) days notice in writing to the other party before filing his or her petition."

(c) Any dispute involving claims less than one hundred thousand dollars (\$ 100,000) and associated with construction of a highway or bridge as referred to in subsection (b) shall be submitted to arbitration. Any dispute involving claims of one hundred thousand dollars (\$ 100,000) or more and associated with construction of a highway or bridge as referred to in subsection (b) shall only be arbitrated with the consent of the parties. If the parties fail to consent to arbitration and the state of Rhode Island is a party to the dispute, then the claim will proceed in accordance with § 37-13.1-1.

(d) For the purposes of this section, the term "claims" shall not mean the aggregate amount sought under the contract or in the arbitration, but shall refer specifically to each item or matter in dispute for which additional compensation is sought or for each item for which a credit is sought.

(e) Notwithstanding subsection (a) or (b) of this section, if any contract except for highway and bridge contracts provides for an arbitration procedure, and a method of appointment of an arbitrator or arbitrators, that method shall be followed instead of the method provided in subsection (b) of this section.

(f) This section shall apply to all written contracts executed on or after January 1, 1986.

### **37-16-3. Application to subcontracts.**

When a contract described in 37-16-2 is in effect and any party thereto has entered into a subcontract to perform part of the work and/or furnish any materials in connection with the work described in the contract and the terms of the subcontract provide for arbitration of a dispute or claim concerning the performance or interpretation thereof, or the subcontract, expressly or by reference to the terms of the contract, provides that the parties to the subcontract shall comply with the arbitration provisions of the contract, the following shall apply when a request is made or an order of court is entered for arbitration either under the terms of the contract or subcontract.

(a) When arbitration under the contract may adversely affect the interest of a party thereto because of the effect of an award of the arbitrator or arbitrators upon the performance or interpretation of the terms of a subcontract to which he or she is also a party, he or she may require any other party or all other parties to the subcontract to become a party or parties to the arbitration.

(b) When a party to a subcontract makes a demand or an order of court is entered for arbitration under the terms of the subcontract which comply with the provision of this chapter, any party thereto who is also a party to the contract and whose rights under the contract may be adversely affected by the effect of an award of the arbitrator or arbitrators upon the performance or interpretation of the contract, may require any other party to the contract to become a party to the arbitration.

(c) When a party to a contract or to a subcontract is made a party to arbitration by virtue of the provisions of this section, he or she shall have all the rights of a party to arbitration as provided in this chapter except the appointment of an arbitrator. Provided, however, he or she may object to the arbitrators appointed by the parties in which event a single arbitrator shall be appointed as provided in 37-16-2 in the petition of either of the original parties to arbitration. The award of the arbitrator or arbitrators shall be valid and shall be binding on him or her to

the extent that it affects the performance or interpretation of the contract and/or subcontract to which he or she is a party. The award of the arbitrator or arbitrators may be enforced, modified, or vacated as this chapter provides an award made in an arbitration of a contract described in 37-16-2 may be enforced, modified, or vacated.

#### **37-16-4. Stay of legal proceedings pending arbitration.**

If any suit or proceedings be brought upon any issue referable to arbitration under contract in writing providing for arbitration, the court in which the suit is pending upon being satisfied that the issue involved in the suit or proceedings is referable to arbitration under the contract, shall on application of one of the parties, stay the trial of the action until arbitration has been held.

#### **37-16-5. Jurisdiction of superior court to enforce arbitration provision and awards.**

The entering into a contract in writing providing for arbitration shall be deemed a consent of all parties, including those enumerated in 37-16-2, thereto to the jurisdiction of the superior court of this state to enforce the arbitration provision and any award made pursuant to that provision. A party aggrieved by the failure, neglect, or refusal of another to perform under a contract providing for arbitration, may petition the superior court, or a judge thereof, for an order directing that arbitration proceed in the manner provided for in the contract. Five (5) days' notice in writing of the application shall be served upon the part in default. Service thereof shall be made in the manner specified in the contract, and if no manner specified therein, then in the manner provided by law for personal service of a summons, within or without the state, or substituted service of a summons, or upon satisfactory proof that the party aggrieved has been or will be unable with due diligence to make service in any of the foregoing manners, then notice shall be served in such manner as the court or judge may direct. A judge of the superior court shall hear the parties and upon being satisfied that there is no substantial issue as to the making of the contract or the failure to comply therewith, the court, or the judge thereof, hearing the application, shall make an order directing the parties to proceed to arbitration in accordance with the terms of the contract.

#### **37-16-6. Trial upon evidence of substantial issue.**

If evidentiary facts are set forth raising a substantial issue as to the making of the contract or the failure to comply therewith, the court, or the judge thereof, shall proceed immediately to the trial of the issues. Whenever an immediate trial is ordered, the order therefor shall provide that, if the court finds that a written contract providing for arbitration was made, and that there was a failure to comply therewith, the parties shall proceed with the arbitration in accordance with the terms of the contract and the order shall provide that if the court finds that there was no contract or failure to comply with the contract, then the proceeding shall be dismissed.

#### **37-16-7. Method of appointing arbitrators or umpire.**

If in the contract providing for arbitration, provision is made for a method of naming or appointing an arbitrator or arbitrators or an umpire, that method shall be followed, but if no method be provided therein, then the parties to the contract shall agree to the method of naming or appointing an arbitrator or arbitrators or an umpire and if the parties shall fail to agree, then the court or the judge thereof upon application of either of the parties after due notice to the other party shall appoint an arbitrator to hear the dispute.

#### **37-16-8. Scheduling and notice of arbitration hearing - Adjournment.**

Subject to the terms of the contract, if any are specified therein, the arbitrators selected as prescribed in this chapter must appoint a time and place for the hearing of the matters submitted to them, and must cause notice thereof to be given to each of the parties. They, or a majority of them, may adjourn the hearing from time to time upon the application of either party for good cause shown or upon their own motion, but not beyond the day fixed if a date in the contract, if any, for rendering their award, unless the time so fixed is extended by the written consent of the parties to the contract or their attorney, or the parties have continued with the arbitration without objection to such adjournment.

#### **37-16-9. Power of court to direct prompt hearing.**

The court shall have power to direct the arbitrators to proceed promptly with the hearing and determination of the dispute, claim, or matter in question.

#### **37-16-10. Arbitrator's oath - Waiver.**

Before hearing any testimony, arbitrators selected as prescribed in this chapter must be sworn, by an officer authorized by law to administer an oath, faithfully and fairly to hear and examine the claim, dispute, or matter in question and to make a just award according to the best of their understanding, unless the oath is waived by the

written consent of the parties to the contract or their attorneys or the parties have continued with the arbitration without objection to the failure of the arbitrators to take the oath.

### **37-16-11. Powers of arbitrators.**

The arbitrator or arbitrators selected as prescribed in this chapter, may require any person to attend before them as a witness; and he or she and they have, and each of them has, the same powers with respect to all the proceedings before them which are conferred upon a board or a member of a board authorized by law to hear testimony. All the arbitrators selected as prescribed in this chapter must meet together and hear all the allegations and proofs of the parties; but an award by a majority of them is valid.

### **37-16-12. Fees.**

In any proceeding under this chapter, unless the parties agree as to the arbitrator's or arbitrators' fees, such fees shall be fixed by the court or the judges thereof who shall require the payment equally by both parties of the arbitrators' fees.

### **37-16-13. Validity of awards.**

An award shall be valid and enforceable according to its terms and under the provisions of this chapter, without previous adjudication of the existence of a contract to arbitrate, subject, nevertheless, to the provisions of this section:

- (a) A party who has participated in any of the proceedings before the arbitrator or arbitrators may object to the confirmation of the award only on one or more of the grounds hereinafter specified (provided that he did not continue with the arbitration with notice of the facts or defects upon which his objection is based) because of a failure to comply with 37-16-8 or with 37-16-10 or because of the improper manner of the selection of the arbitrators.
- (b) A party who has not participated in any of the proceedings had before the arbitrator or arbitrators and who has not made or been served with an application to compel arbitration under 37-16-5 may also put in issue the making of the contract or the failure to comply therewith, either by a motion for a stay of the arbitration or in opposition to the confirmation of the award. If a notice shall have been personally served upon such party of an intention to conduct the arbitration pursuant to the provisions of a contract specified in the notice, then the issues specified in this subdivision may be raised only by a motion for a stay of the arbitration, notice of which motion must be served within ten (10) days after the service of the notice of intention to arbitrate. The notice must state in substance that unless within ten (10) days after its service, the party served therewith shall serve a notice of motion to stay the arbitration, he or she shall thereafter be barred from putting in issue the making of the contract or the failure to comply therewith. The arbitration hearing shall be adjourned upon service of the notice pending the determination of the motion. Where the opposing party, either on a motion for a stay or in opposition to the confirmation of an award, sets forth evidentiary facts raising a substantial issue as to the making of the contract or the failure to comply therewith, an immediate trial of the same shall be had. In the event that the party is unsuccessful he or she may, nevertheless, participate in the arbitration if the same is still being carried on.

### **37-16-14. Arbitration under chapter deemed special proceeding - Jurisdiction of superior court.**

Arbitration of a claim, dispute, or matter in question under a contract described in this chapter shall be deemed a special proceeding, of which the superior court for Providence County shall have jurisdiction.

### **37-16-15. Procedure for hearing of application to court.**

Any application to the court, or a judge thereof, hereunder shall be made and heard in the manner provided by law for the making and hearing of motions, except as otherwise herein expressly provided.

### **37-16-16. Form of award.**

To entitle the award to be enforced, as prescribed in this chapter, it must be in writing; and, within the time limited in the contract, if any, subscribed by the arbitrator or arbitrators making it and either filed in the office of the clerk of the court having jurisdiction as provided in 37-16-14 or delivered to one of the parties or his or her attorney.

### **37-16-17. Court order confirming award.**

At any time within one year after the award is made, as prescribed in 37-16-16, any party to the contract by the terms of which arbitration was had, may apply to the court having jurisdiction as provided in 37-16-14 for an order confirming the award. Thereupon the court must grant the order unless the award is vacated, modified, or corrected, as prescribed in 37-16-18 and 37-16-19 or unless the award is unenforceable under the provisions of 37-16-13. Notice of the motion must be served upon the adverse party or parties or his or her or their attorneys, as prescribed by law for service of notice of a motion upon an attorney in an action in the same court.

### **37-16-18. Court order vacating award.**

In any of the following cases, the court must make an order vacating the award, upon the application of any party to the controversy which was arbitrated

- (a) When the award was procured by fraud.
- (b) Where the arbitrator or arbitrators exceeded their powers, or so imperfectly executed them, that a mutual, final, and definite award upon the subject matter submitted was not made.
- (c) If there was no valid contract, and the objection has been raised under the conditions set forth in 37-16-13.

### **37-16-19. Rehearing after vacation of award.**

Where an award is vacated, the court, in its discretion may direct a rehearing either before the same arbitrator or arbitrators or before a new arbitrator or arbitrators to be chosen in the manner provided in the contract for the selection of the original arbitrator or arbitrators or as provided for in 37-16-7 and any provision limiting the time in which the arbitrator or arbitrators may make a decision shall be deemed applicable to the new arbitration and to commence from the date of the court's order.

### **37-16-20. Court order modifying or correcting award.**

In any of the following cases, the court must make an order modifying or correcting the award, upon the application of any party to the contract by the terms of which the arbitration was held.

- (a) Where there was an evident miscalculation of figures or an evident mistake in the description of any persons, thing, or property referred to in the award.
- (b) Where the arbitrator or arbitrators have awarded upon a matter not submitted to them, not affecting the merits of the decision upon the matter submitted.
- (c) Where the award is imperfect in a matter of form not affecting the merits of the controversy, and, if it had been a master's report the defect could have been amended or disregarded by the court.

### **37-16-21. Notice of motion to vacate, modify, or correct an award.**

Notice of a motion to vacate, modify, or correct an award must be served upon all adverse parties, or their attorneys, within sixty (60) days after the award is filed or delivered, as prescribed by law for service of notice of a motion upon an attorney in an action; except that in opposition to a motion to confirm an award, any of the grounds specified in 37-16-18 may be set up. For the purpose of the motion, any judge who might make an order, to stay the proceedings in an action brought in the same court may make an order, to be served with the notice of motion, staying the proceedings of an adverse party or parties to enforce the award.

### **37-16-22. Entry of judgment - Costs.**

Upon the granting of an order confirming, modifying, or correcting an award, judgment may be entered in conformity therewith, except as is otherwise prescribed in this chapter. Costs of the application and of the proceedings subsequent thereto, not exceeding twenty-five dollars (\$25.00) and disbursements, may be awarded by the court in its discretion. If awarded, the amount thereof must be included in the judgment.

### **37-16-23. Filing of papers after judgment.**

(a) Immediately after entering judgment, the clerk must attach together and file the following papers:

- (1) The contract, and each written extension of the time, if any, within which to make the award.
- (2) The award.
- (3) Each notice, affidavit or other paper used upon an application to confirm, modify, or correct the award, and a copy of each order of the court upon the application.
- (4) A copy of the judgment.

(b) The judgment may be docketed as if it was rendered in an action.

### **37-16-24. Effect of judgment.**

The judgment so entered has the same force and effect, in all respects as, and is subject to all the provisions of law relating to a judgment in an action. The judgment may be enforced as if it had been rendered in an action in the court in which it is entered.

### **37-16-25. Appeals.**

An appeal may be taken from an order made in a proceeding under this chapter, or from a judgment entered upon an award. The proceedings upon the appeal, including the judgment thereupon and the enforcement of the judgment, are governed by the provisions of statute and rule regulating appeal in actions as far as they are applicable.

### **37-16-26. Satisfaction of award.**

- (a) An award which requires the payment of a sum of money by a city, town, or the state or any body described in 37-16-2 created or organized by or through the authority of any of them, shall be satisfied to the extent of payment of that sum by payment thereof to the party to whom the award was made by the treasurer or officer exercising the duties of a treasurer thereof from its general funds.
- (b) An award which requires the payment of a sum of money to a city, a town, or the state or any body described in 37-16-2 created or organized by or through the authority of any of them shall be satisfied to the extent of payment of that sum by payment thereof to its treasurer or officer exercising the duties of a treasurer thereof who shall deposit the same in its general funds.

### **37-16-27. Application to sureties.**

- (a) If a contractor principal on a bond furnished to guarantee performance or payment on a construction contract and the claimant are parties to a written contract with a provision to submit to arbitration any controversy thereafter arising under the contract, or subject to arbitration as provided in 37-16-2(b), the arbitration provisions shall apply to the surety for all disputes involving questions of the claimant's right of recovery against the surety. Either the claimant, the contractor principal, or surety may demand arbitration in accordance with the written contract or as provided in 37-16-2(b) if applicable in one arbitration proceeding, provided that the provisions of 37-16-3 shall be applicable to any such demand for arbitration. The arbitration award shall decide all controversies subject to arbitration between the claimant, on the one hand, and the contractor principal and surety on the other hand, including all questions involving liability of the contractor principal and surety on the bond, but a claimant must file suit for recovery against the surety within the time limits set forth in 37-12-2 and 37-12-5. The arbitration shall be in accordance with this chapter and the court shall enter judgment thereon as provided therein.
- (b) The arbitrator or arbitrators, if more than one, shall make findings of fact as to the compliance with the requirements for recovery against the surety, and those findings of fact shall be a part of the award binding on all parties to the arbitration.

# TITLE 45

## CHAPTER 55 AWARD OF MUNICIPAL CONTRACTS

### SECTIONS

- 45-55-1 Legislative findings
- 45-55-2. Method of source selection
- 45-55-3. Purchasing agent - Appointment - Duties.
- 45-55-4. Definitions.
- 45-55-5. Competitive sealed bidding.
- 45-55-5.1. Business exempt.
- 45-55-5.2. Town of North Smithfield - Exemption.
- 45-55-6. Competitive negotiation.
- 45-55-7. Negotiations after unsuccessful competitive sealed bidding
- 45-55-8. Sole source procurement and emergency procurements.
- 45-55-8.1 Qualification based selection of architects and engineers.
- 45-55-9. Small purchases.
- 45-55-10. Cancellation of invitation for bids and requests for proposals.
- 45-55-11. Responsibilities of bidders and offerors
- 45-55-12. Prequalification of contractors - General.
- 45-55-13. Exclusion of state mandated costs.
- 45-55-13.1. Exclusion of multi-cities or towns insurance corporations and cooperative risk management programs.
- 45-55-13.2. Exclusion of multi-cities or towns energy aggregation programs.
- 45-55-13.3. Exclusion of multi-school district combined purchasing consortia
- 45-55-14. Staff consultants.
- 45-55-15. Severability.
- 45-55-16 Prohibition against the use of lead based paints.
- 44-55-17 Penalties

#### **45-55-1. Legislative findings.**

It is hereby declared that a need exists to establish a uniform system for the award of contracts by municipalities, utilizing open cooperative bids.

#### **45-55-2. Method of source selection.**

Except as otherwise authorized by law, all municipal contracts shall be awarded by:

- (1) Competitive sealed bidding, pursuant to 45-55-5;
- (2) Competitive negotiations, pursuant to 45-55-6;
- (3) Non-competitive negotiations, pursuant to 45-55-7 and 45-55-8;
- (4) Small purchase procedures, pursuant to 45-55-9.
- (5) Qualification based selection (QBS) process for architects/engineers pursuant to 45-55-8.1

#### **45-55-3. Purchasing agent - Appointment - Duties.**

Within each city or town or quasi public agency there shall be designated a person or persons to act as purchasing officer to exercise the powers and duties as set forth in this chapter.

#### **45-55-4. Definitions.**

The words defined in this section have the following meanings whenever they appear in this chapter, unless the context in which they are used clearly requires a different meaning or a different definition is prescribed for a particular section, group of sections or provision.

- (1) "Business" means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or any other legal entity through which business is conducted.
- (2) "Change order" means a written order signed by the purchasing agent, or contractor directing or allowing the contractor to make changes which the changes clause of the contract authorizes the purchasing agent or contractor to order without the consent of the contractor or purchasing agent.
- (3) "Construction" means the process of building, altering, repairing, improving, or demolishing any public structures or building, or other public improvements of any kind to any public real property. It does not include the routine maintenance or repair of existing structures, buildings, or real property performed by salaried employees of the municipality in the usual course of their job.
- (4) "Contract" means all types of agreements, including grants and orders, for the purchase or disposal of supplies, services, construction, or any other item. It includes awards; contracts of a fixed-price, cost, cost-plus-a-fixed-fee, or incentive type; contracts providing for the issuance of job or task orders; leases; letter contracts, purchase orders, and construction management contracts. It also includes supplemental agreements with respect to any of the preceding. "Contract" does not include labor contracts with employees of the municipality.
- (5) "Contract modification" means any written alteration in the specifications, delivery point, rate of delivery, contract period, price, quantity, or other contract provisions of any existing contract, whether accomplished by unilateral action in accordance with a contract provision, or by mutual action of the parties to the contract. It includes bilateral actions, as supplemental agreements, and unilateral actions, as change orders, administrative changes, notices of termination, and notices of the exercise of a contract option.
- (6) "Contractor" means any person having a contract with a municipality.
- (8) "Data" means recorded information, regardless of form or characteristic.
- (8) "Designee" means a duly authorized representative of a person holding a superior position.
- (9) "Employee" means an individual drawing a salary from a municipality, whether elected or not, and any non-salaried individual performing personal services for any municipality.
- (10) "May" means permissive.
- (11) "Municipality" means the individual cities and towns of the state of Rhode Island.
- (12) "Negotiation" means contracting by either of the methods described in §§ 45-55-6, 45-55-7, and 45-55-8.
- (13) "Person" means any business, individual, organization, or group of individuals.
- (14) "Procurement" means the purchasing, buying, renting, leasing, or otherwise obtaining of any supplies, services, or construction. It also includes all functions that pertain to the obtaining of any supply, service, or construction item, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration.
- (15) "Purchasing officer" means the person designated in each municipality or quasi public agency pursuant to section 45-55-3.
- (16) "Regulations" means rules and regulations adopted by the individual cities or towns, concerning the implementation of the provisions of this chapter.

(17) "Services" means the rendering, by a contractor, of its time and effort rather than the furnishing of a specific end product, other than reports which are merely incidental to the required performance of services. "Services" does not include labor contracts with employees of governmental agencies.

(18) "Shall" means imperative.

(19) "Supplemental agreement" means any contract modification which is accomplished by the mutual action of the parties.

(20) "Supplies" means all property, including, but not limited to, leases of real property, printing and insurance, except land or permanent interest in land.

#### **45-55-5. Competitive sealed bidding.**

(a) Contracts exceeding the amount provided by 45-55-9 shall be awarded by competitive bidding unless they are professional engineering/architectural services pursuant to 45-55-8.1 and it is determined in writing that this method is not practicable. Factors to be considered in determining whether competitive sealed bidding is practicable shall include whether:

- (1) Specifications can be prepared that permit award on the basis of either the lowest qualified bid price or the lowest qualified evaluated bid price; and
  - (2) The available sources, the time and place of performance, and other relevant circumstances as are appropriate for the use of competitive sealed bidding.
- (b) The invitation for bids shall state whether award shall be made on the basis of the lowest bid price or the lowest evaluated or responsive bid price. If the latter basis is used, the objective measurable criteria to be utilized shall be stated in the invitation for bids, if available.
- (c) Adequate public notice of the invitation for bids shall be given a sufficient time prior to the date stated in the notice for the opening of bids. Notice may include publication in a newspaper of general circulation in the state as determined by the purchasing officer for the municipality not less than seven (7) days nor more than twenty-one (21) days before the date set for opening of the bids. The purchasing officer may make a written determination that the twenty-one (21) day limitation needs to be waived. The written determination shall state the reason why the twenty-one (21) day limitation is being waived and shall state the number of days, giving a minimum and maximum, before the date set for the opening of bids when public notice is to be given.
- (4) Bids shall be opened publicly in full view of the public at the time and place designated in the invitation for bids. Each bid, together with the name of the bidder, shall be recorded and an abstract made available for public inspection. Subsequent to the awarding of the bid, all documents pertinent to the awarding of the bid shall be made available and open to public inspection and retained in the bid file.
- (5) The contract shall be awarded with reasonable promptness by written notice to the responsive and responsible bidder whose bid is either the lowest bid price, or lowest evaluated or responsive bid price.
- (6) Correction or withdrawal of bids may be allowed only to the extent permitted by regulations issued by the purchasing officer.

#### **45-55-5.1. Business exempt.**

The North Kingstown Bus Contractors Association and the Scituate School Bus Owners Club shall be exempt from the provisions of this chapter.

#### **45-55-5.2. Town of North Smithfield - Exemption.**

The town of North Smithfield is exempt from the provisions of this chapter with regard to the contracting for fire and rescue services with the Primrose Volunteer Fire Department and/or North Smithfield Fire Department and/or their respective successors and assigns.

#### **45-55-6. Competitive negotiation.**

- (a) When, under regulations adopted by the city or town council, the purchasing agent determines in writing that the use of competitive sealed bidding is not practicable, and except as provided in 45-55-8, 45-55-9, and 45-55-10 a contract may be awarded by competitive negotiation.
- (b) Adequate public notice of the request for proposals shall be given in the same manner as provided in 45-55-5(c).
- (c) Contracts may be competitively negotiated when it is determined, in writing, by the purchasing agent that the bid prices received by competitive sealed bidding either are unreasonable as to all or part of the requirements, or were not independently reached in open competition, and for which:
  - (1) Each competitive bidder has been notified of the intention to negotiate and is given reasonable opportunity to negotiate; and
  - (2) The negotiated price is lower than the lowest rejected bid by any competitive bidder; and
  - (3) The negotiated price is the lowest negotiated price offered by a competitive offeror.
- (d) The request for proposals shall indicate the relative importance of price and other evaluation factors.
- (e) Award shall be made to the responsible offeror whose proposal is determined in writing to be the most advantageous to the municipality taking into consideration price and the evaluation factors set forth in the request for proposals.
- (f) Written or oral discussions shall be conducted with all responsible offerors who submit proposals determined, in writing, to be reasonably susceptible of being selected for award. Discussions shall not disclose any information derived from proposals submitted by competing offerors. Discussions need not be conducted:
  - (1) With respect to prices, where such prices are fixed by law or regulation, except that consideration shall be given to competitive terms and conditions; or
  - (2) Where time of delivery or performance will not permit discussions; or
  - (3) Where it can be clearly demonstrated and documented from the existence of adequate competition or accurate prior cost experience with the particular supply, service, or construction item, that acceptance of an initial offer without discussion would result in fair and reasonable prices, and the request for proposals notifies all offerors of the possibility that award may be made on the basis of the initial offers.

#### **45-55-7. Negotiations after unsuccessful competitive sealed bidding.**

- (a) In the event that all bids submitted pursuant to competitive sealed bidding under 45-55-5 result in bid prices in excess of the funds available for the purchase, and the purchasing officer determines in writing:
  - (1) That there are no additional funds available from any source so as to permit an award to the lowest responsive and responsible bidder, and
  - (2) The best interest of the municipality will not permit the delay attendant to a re-solicitation under revised specifications, or for revised quantities, under competitive sealed bidding as provided in 45-55-5, then a negotiated award may be made as stated in subsection (b) or (c) of this section.
- (b) Where there is more than one bidder, competitive negotiations pursuant to 45-55-6, shall be conducted with the three (3) (two (2) if there are only two (2)) bidders determined in writing, to be the lowest responsive and responsible bidders to the competitive sealed bid invitation. Competitive negotiations shall be conducted under the following restrictions:
  - (1) If discussions pertaining to the revision of the specifications or quantities are held with any potential offeror, all other potential offerors shall be afforded an opportunity to take part in the discussions; or

(2) A request for proposals, based upon revised specifications or quantities, shall be issued as promptly as possible, shall provide for an expeditious response to the revised requirements, and shall be awarded upon the basis of the lowest bid price, or lowest evaluated bid price submitted by any responsive and responsible offeror.

(c) When after competitive sealed bidding, it is determined in writing, that there is only one responsive and responsible bidder, a noncompetitive negotiated award may be made with such bidder in accordance with 45-55-8.

#### **45-55-8. Sole source procurement and emergency procurements.**

(a) A contract may be awarded for a supply, service, or construction item without competition when, under published regulations, the purchasing officer determines, in writing, that there is only one source for the required supply, service, or construction item.

(b) Notwithstanding any other provision of this chapter, the purchasing agent may make or authorize others to make emergency procurements when there exists a threat to public health, welfare, or safety under emergency conditions as defined in regulations or where the procurement will be in the best interest of the city as established by properly promulgated rules and regulations; provided, that such emergency procurements shall be made with such competition as is practicable under the circumstances. A written determination of the basis for the emergency, and for the selection of the particular contractor, shall be included in the contract file.

#### **45-55-8.1. Qualification based selection of architects and engineers.**

When the purchasing agent determines that the city or town needs the services of a professional architect or engineer, the purchasing agent shall follow the qualification based selection process for the procurement of architectural and engineering consulting services.

#### **45-55-9. Small purchases.**

Procurements, not to exceed an aggregate amount of ten thousand dollars (\$10,000) for construction and five thousand dollars (\$5,000) for all other purchases may be made in accordance with small purchase regulations promulgated by the municipality. These amounts shall be increased or decreased annually hereafter at the same rate as the Boston Regional Consumer Price Index. Procurement requirements shall not be artificially divided so as to constitute a small purchase under this section. A municipality may further reduce the aggregate purchase amount, as provided for in this section by ordinance.

#### **45-55-10. Cancellation of invitation for bids and requests for proposals.**

An invitation for bids, a request for proposals, or other solicitation may be canceled, or all bids or proposals rejected, if it is determined, in writing, that such action if taken is not in the best interest of the municipality and approved by the chief purchasing officer.

#### **45-55-11. Responsibilities of bidders and offerors.**

(1) A written determination of responsibility of a bidder or offeror shall be made and it shall be made in accordance with regulations issued by the municipality.

A reasonable inquiry to determine the responsibility of a bidder or offeror may be conducted. The failure of a bidder or offeror to promptly supply information in connection with a reasonable inquiry may be grounds for a determination of non-responsibility with respect to a bidder or offeror.

(2) Except as otherwise provided, by law, information furnished by a bidder or offeror pursuant to this section may not be disclosed outside of the purchasing department administering the contract without prior written consent of the bidder or offeror.

#### **45-55-12. Prequalification of contractors - General.**

The municipality may provide for prequalification of suppliers as responsible prospective contractors for particular types of supplies, services, and construction. Municipalities which choose to provide for prequalification of suppliers shall adopt regulations for prequalification in the same manner provided for in the adoption of ordinances in the manner provided for in the legislative or home rule charter of the municipality. Solicitation mailing lists of

potential contractors of supplies, services, and construction shall include but need not be limited to prequalified contractors. Prequalification shall not foreclose a written determination:

- (1) Between the time of the bid opening or receipt of offers and the making of an award, that a prequalified supplier is not responsible; or
- (2) That a supplier who is not prequalified at the time of bid opening or receipt of offers is responsible.

**45-55-13. Exclusion of state mandated costs.**

The provisions of 45-13-7 through 45-13-10 do not apply to this section.

**45-55-13.1. Exclusion of multi-cities or towns insurance corporations and cooperative risk management programs.**

The provisions of this chapter shall not apply to entities organized pursuant to section 45-5-20.1. Those entities are exempt from all of the provisions of this chapter.

**45-55-13.2. Exclusion of multi-cities or towns energy aggregation programs.**

The provisions of this chapter do not apply to entities organized for the purpose of negotiating the purchase of electric power pursuant to § 39-3-1.1, or energy or energy related services. Those entities are exempt from all provisions of this chapter.

**45-55-13.3. Exclusion of multi-school district combined purchasing consortia.**

The provisions of this chapter do not apply to purchases and contracts entered into by those consortia established pursuant to § 16-2-9.2, and such entities shall be exempt from all provisions of this chapter.

**45-55-14. Staff consultants.**

The procurement of the service of an attorney, physician or dentist by a municipality, is exempt from the provisions of this chapter.

**45-55-15. Severability.**

If any one or more sections, clauses, sentences or parts of this chapter are for any reason be adjudged unconstitutional or otherwise invalid in any court, that judgment shall not affect, impair or invalidate the remaining provisions of this chapter but shall be confined in its operation to the specific provisions so held unconstitutional or invalid and the inapplicability or invalidity of any section, clause or provisions of this chapter in any one or more instances or circumstances shall not be taken to affect or prejudice in any way its applicability or validity in any other instance.

**45-55-16. Prohibition against the use of lead based paints.**

When purchasing paint products or contracting or subcontracting for painting, construction, improvement, completion, or repair of any public buildings, public road, public bridge, or public construction, all municipalities, as defined by 45-55-4(11), shall be prohibited from the use of lead based paint.

**45-55-17. Penalties.**

Any person who knowingly and intentionally violates any provision of this chapter shall be subject to a misdemeanor, punishable by a fine of not more than five hundred dollars (\$500), or by imprisonment for not more than one year, or both.

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

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE<sup>1</sup> subcontractor<sup>2</sup> the opportunity to describe work received and/or report any concerns regarding the EPA-funded 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 EPA 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:	

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

<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 Performance Form**

This form is intended to capture the DBE<sup>1</sup> subcontractor's<sup>2</sup> description of work to be performed and the price of the work submitted to the prime contractor. An EPA 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: <input type="checkbox"/> DOT <input type="checkbox"/> SBA <input type="checkbox"/> Other: _____		Meets/ exceeds EPA certification standards? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown

<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 Performance 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>

<b>Subcontractor 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.

**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:			
<b>Subcontractor Name/ Company Name</b>	<b>Company Address/ Phone/ Email</b>	<b>Est. Dollar Amt</b>	<b>Currently DBE Certified?</b>

\_\_\_\_\_ 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.

# Good Faith Efforts

## What is the Purpose of the Good Faith Efforts?

The Good Faith Efforts are methods employed by all EPA financial assistance agreement recipients to ensure that disadvantaged business enterprises (DBEs) have the opportunity to compete for procurements funded by EPA financial assistance funds.

## What Are the Good Faith Efforts?

- ❖ Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and local government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
- ❖ Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- ❖ Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
- ❖ Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
- ❖ Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce.
- ❖ If the prime contractor awards subcontracts, require the prime contractor to take the steps in paragraphs (a) through (e) of this section.

## What are the New Contract Administration Provisions?

When the DBE rule goes into effect, there are a number of new provisions designed to prevent unfair practices that adversely affect DBEs. Those provisions are as follows:

- ❖ A recipient must require its prime contractor to pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient.
- ❖ A recipient must be notified in writing by its prime contractor prior to any

termination of a DBE subcontractor for convenience by the prime contractor.

- ❖ If a DBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the prime contractor to employ the Six Good Faith Efforts if soliciting a replacement subcontractor.
- ❖ A recipient must require its prime contractor to employ the Six Good Faith Efforts even if the prime contractor has achieved its fair share objectives.

### **What are the New Forms Associated With the New Contract Administration Provisions?**

EPA Form 6100-2 - DBE Program Subcontractor Participation Form. This form gives a DBE subcontractor the opportunity to describe the work the DBE subcontractor received from the prime contractor, how much the DBE subcontractor was paid and any other concerns the DBE subcontractor might have.

EPA Form 6100-3 - DBE Program Subcontractor Performance Form. This form captures an intended subcontractor's description of work to be performed for the prime contractor and the price of the work submitted to the prime.

EPA Form 6100-4 – DBE Program Subcontractor Utilization Form. This form captures the prime's intended use of an identified DBE subcontractor, and the estimated dollar amount of the subcontract.

<b>Form</b>	<b>Requirement</b>	<b>Provided By</b>	<b>Completed By</b>	<b>Submitted To</b>
EPA Form 6100-2	Recipients required to have prime contractors provide form to Subcontractors	Prime Contractors	DBE Subcontractors	EPA DBE Coordinator
EPA Form 6100-3	Recipients required to have prime contractors provide form to Subcontractors	Prime Contractors	DBE Subcontractors	Recipients as part of bid or proposal package
EPA Form 6100-4	Recipients required to have prime contractors complete the form	Recipients	Prime Contractors	Recipients as part of bid or proposal package



**Department of Administration**  
**Division of Equity, Diversity & Inclusion (DEDI)**  
**One Capitol Hill, 3rd Floor**  
**Providence, RI 02908**

www.dedi.ri.gov  
 mbe.compliance@doa.ri.gov  
 (401) 574-8606 - RI Relay 711

## **MINORITY BUSINESS ENTERPRISE (MBE) UTILIZATION PLAN**

Company Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_

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

City, State, Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_

Email: \_\_\_\_\_ Project Location: \_\_\_\_\_

Bid or Project #: \_\_\_\_\_ Date of Tentative Selection Letter: \_\_\_\_\_

Description of Work: \_\_\_\_\_

Total Contract \$: \_\_\_\_\_ MBE Utilization %: \_\_\_\_\_

Total # of **All** Subcontractors/Suppliers used: \_\_\_\_\_ # of MBE Subcontractors/Suppliers used: \_\_\_\_\_

### List All Subcontractors/Suppliers/Consultants/Independent Contractors

Subcontractor / Supplier	Dollar Award	Scope/Description of Work	RI Certified MBE/WBE? Yes/No

Pursuant to R.I. Gen. Laws § 37-14.1 et seq. and the regulations promulgated thereto, all state contracts and procurements are required to award 15% of their total dollar value to MBE/WBE certified firms. As part of this requirement, prime vendors are subject to monthly MBE project reporting. MBE/WBE firms must be certified by the Division of Equity, Diversity & Inclusion (DEDI), Minority Business Enterprise Compliance Office to receive credit. MBE/WBE firms must perform 100% of the work, or subcontract to another RI certified MBE/WBE firm to receive participation credit. \*Please note: MBE/WBE suppliers receive 60% participation credit. MBE/WBE brokers receive participation credit for the fees and commissions charged for the procurement of goods and materials, but not for the cost of the goods and materials themselves. For assistance identifying MBE/WBE firms, please refer to the MBE/WBE directory at: [www.dedi.ri.gov/directory](http://www.dedi.ri.gov/directory)

The above referenced contract will not be released until this MBE Utilization Plan has been approved by the MBE Compliance Office.

If you have any questions and would like to contact the MBE Compliance Office directly, you can call 401-574-8606 or email [mbe.compliance@doa.ri.gov](mailto:mbe.compliance@doa.ri.gov)

Signature of Authorized Agent: \_\_\_\_\_ Date: \_\_\_\_\_

**Email Completed Form and Tentative  
 Award Letter to  
 MBE.Compliance@doa.ri.gov**



**Department of Administration,  
Division of Equity, Diversity & Inclusion (DEDI)  
One Capitol Hill, 3rd Floor  
Providence, RI 02908**

[www.dedi.ri.gov](http://www.dedi.ri.gov)  
mbe.compliance@doa.ri.gov  
(401) 574-8606 - RI Relay 711

## MONTHLY PROJECT REPORT

Pursuant to R.I. Gen. Laws § 37-14.1 and the regulations promulgated thereto, you must submit this form to DEDI on a monthly basis during the life of the contract. If there are any outstanding issues, such as retainage or a dispute, please indicate below and attach supporting documentation. Attach additional pages if necessary.

Prime Contractor/Vendor Name: \_\_\_\_\_

Project Name & Location: \_\_\_\_\_

Solicitation Number (Ex. MPA Number): \_\_\_\_\_

Percent Completed: \_\_\_\_\_

Original Prime Contract Amount: \$ \_\_\_\_\_ Current Prime Contract Amount: \$ \_\_\_\_\_

Subcontractor	Amount Paid	Amount Due	Percent Completed	Retainage Amount	Retainage Percent	Explanation/Notes

I declare, under penalty of perjury, that the information provided in this form and any supporting documents is true and correct.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

Sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Signature

\_\_\_\_\_  
Commission Expires

# DEBARMENT & SUSPENSION

## Executive Order 12549--Debarment and Suspension

**Source:** The provisions of Executive Order 12549 of Feb. 18, 1986, appear at 51 FR 6370, 3 CFR, 1986 Comp., p. 189, unless otherwise noted.

By the authority vested in me as President by the Constitution and laws of the United States of America, and in order to curb fraud, waste, and abuse in Federal programs, increase agency accountability, and ensure consistency among agency regulations concerning debarment and suspension of participants in Federal programs, it is hereby ordered that:

**Section 1.** (a) To the extent permitted by law and subject to the limitations in Section 1(c), Executive departments and agencies shall participate in a system for debarment and suspension from programs and activities involving Federal financial and nonfinancial assistance and benefits. Debarment or suspension of a participant in a program by one agency shall have government-wide effect.

(b) Activities covered by this Order include but are not limited to: grants, cooperative agreements, contracts of assistance, loans, and loan guarantees.

(c) This Order does not cover procurement programs and activities, direct Federal statutory entitlements or mandatory awards, direct awards to foreign governments or public international organizations, benefits to an individual as a personal entitlement, or Federal employment.

**Sec. 2.** To the extent permitted by law, Executive departments and agencies shall:

(a) Follow government-wide criteria and government-wide minimum due process procedures when they act to debar or suspend participants in affected programs.

(b) Send to the agency designated pursuant to Section 5 identifying information concerning debarred and suspended participants in affected programs, participants who have agreed to exclusion from participation, and participants declared ineligible under applicable law, including Executive Orders. This information shall be included in the list to be maintained pursuant to Section 5.

(c) Not allow a party to participate in any affected program if any Executive department or agency has debarred, suspended, or otherwise excluded (to the extent specified in the exclusion agreement) that party from participation in an affected program. An agency may grant an exception permitting a debarred, suspended, or excluded party to participate in a particular transaction upon a written determination by the agency head or authorized designee stating the reason(s) for deviating from this Presidential policy. However, I intend that exceptions to this policy should be granted only infrequently.

**Sec. 3.** Executive departments and agencies shall issue regulations governing their implementation of this Order that shall be consistent with the guidelines issued under Section 6. Proposed regulations shall be submitted to the Office of Management and Budget for review within four months of the date of the guidelines issued under Section 6. The Director of the Office of Management and Budget may return for reconsideration proposed regulations that the Director believes are inconsistent with the guidelines. Final regulations shall be published within twelve months of the date of the guidelines.

**Sec. 4.** There is hereby constituted the Interagency Committee on Debarment and Suspension, which shall monitor implementation of this Order. The Committee shall consist of representatives of agencies designated by the Director of the Office of Management and Budget.

**Sec. 5.** The Director of the Office of Management and Budget shall designate a Federal agency to perform the following functions: maintain a current list of all individuals and organizations excluded from program participation under this Order, periodically distribute the list to Federal agencies, and study the feasibility of automating the list; coordinate with the lead agency responsible for government-wide debarment and suspension of contractors; chair the Interagency Committee established by Section 4; and report periodically to the Director on implementation of this Order, with the first report due within two years of the date of the Order.

**Sec. 6.** The Director of the Office of Management and Budget is authorized to issue guidelines to Executive departments and agencies that govern which programs and activities are covered by this Order, prescribe government-wide criteria and government-wide minimum due process procedures, and set forth other related details for the effective administration of the guidelines.

**Sec. 7.** The Director of the Office of Management and Budget shall report to the President within three years of the date of this Order on Federal agency compliance with the Order, including the number of exceptions made under Section 2(c), and shall make recommendations as are appropriate further to curb fraud, waste, and abuse.

### **Implementation in the SRF Programs**

A company or individual who is debarred or suspended cannot participate in primary and lower-tiered covered transactions. These transactions include SRF loans and contracts and subcontracts awarded with SRF loan funds.

Under 40 C.F.R. 32.510, the SRF agency must submit a certification stating that it shall not knowingly enter into any transaction with a person who is proposed for debarment, suspended, declared ineligible, or voluntarily excluded from participation in the SRF program. This certification is reviewed by the EPA regional office before the capitalization grant is awarded.

A recipient of SRF assistance directly made available by capitalization grants must provide a certification that it will not knowingly enter into a contract with anyone who is ineligible under the regulations to participate in the project. Contractors on the project have to provide a similar certification prior to the award of a contract and subcontractors on the project have to provide the general contractor with the certification prior to the award of any subcontract.

In addition to actions taken under 40 C.F.R. Part 32, there are a wide range of other sanctions that can render a party ineligible to participate in the SRF program. Lists of debarred, suspended and otherwise ineligible parties are maintained by the General Services Administration and should be checked by the SRF agency and all recipients of funds directly made available by capitalization grants to ensure the accuracy of certifications.

### **Additional References**

C 40 C.F.R. Part 32: EPA Regulations on Debarment and Suspension.

**CERTIFICATION REGARDING DEBARMENT & SUSPENSION  
AND OTHER RESPONSIBILITY MATTERS**

In accordance with the Executive Order 12549, the prospective primary participant certifies to the best of his / her knowledge and belief, that its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offence in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification.
- d. Have not within a three-year period preceding this application / proposal had one or more public transactions (federal, state, or local) terminated for cause of default.
- e. Acknowledge that all sub-contractors selected for this project must be in compliance with paragraphs (1) (a – d) of this certification.

\_\_\_\_\_  
Name and Title of Authorized Agent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorized Agent

\_\_\_\_\_  
Company Name

\_\_\_\_\_ I am unable to certify to the above statements. My explanation is attached.

**Debarment Statement**  
(For consulting agreements >\$25,000)

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER  
RESPONSIBILITY MATTERS (Executive Order 12549, Debarment and Suspension,  
34 CFR Part 85)

Consultant certifies to the best of its knowledge and belief, that it and its principals:

- (a)  Are  are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b)  Have  have not within a three-year period preceding award of this consulting agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c)  Are  are not presently indicted for or otherwise criminally charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in Paragraph (b) above; and
- (d)  Have  have not within a three-year period preceding award of this consulting agreement had one or more public transactions (Federal, State or Local) terminated for cause or default.

---

Consultant Signature

---

Date

---

Typed or Printed Name

---

Contractual Agreement No.



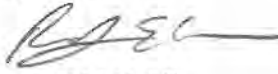
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

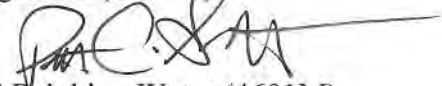
MAR 20 2014

OFFICE OF WATER

**MEMORANDUM**

SUBJECT: Implementation of American Iron and Steel provisions of P.L. 113-76,  
Consolidated Appropriations Act, 2014

FROM: <sup>For</sup> Andrew D. Sawyers, Director   
Office of Wastewater Management (4201M)

Peter C. Grevatt, Director   
Office of Ground Water and Drinking Water (4601M)

TO: Water Management Division Directors  
Regions I - X

P.L. 113-76, Consolidated Appropriations Act, 2014 (Act), includes an “American Iron and Steel (AIS)” requirement in section 436 that requires Clean Water State Revolving Loan Fund (CWSRF) and Drinking Water State Revolving Loan Fund (DWSRF) assistance recipients to 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 beginning January 17, 2014 (enactment of the Act), through the end of Federal Fiscal Year 2014.

Section 436 also sets forth certain circumstances under which EPA may waive the AIS requirement. Furthermore, the Act specifically exempts projects where engineering plans and specifications were approved by a State agency prior to January 17, 2014.

The approach described below explains how EPA will implement the AIS requirement. The first section is in the form of questions and answers that address the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The second section is a step-by-step process for requesting waivers and the circumstances under which waivers may be granted.

## Implementation

The Act states:

Sec. 436. (a)(1) 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.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) finds that—

(1) applying subsection (a) 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; or

(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.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

(e) The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean and Drinking Water State Revolving Funds for carrying out

the provisions described in subsection (a)(1) for management and oversight of the requirements of this section.

(f) This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of the enactment of this Act.

The following questions and answers provide guidance for implementing and complying with the AIS requirements:

### **Project Coverage**

#### **1) What classes of projects are covered by the AIS requirement?**

All treatment works projects funded by a CWSRF assistance agreement, and all public water system projects funded by a DWSRF assistance agreement, from the date of enactment through the end of Federal Fiscal Year 2014, are covered. The AIS requirements apply to the entirety of the project, no matter when construction begins or ends. Additionally, the AIS requirements apply to all parts of the project, no matter the source of funding.

#### **2) Does the AIS requirement apply to nonpoint source projects or national estuary projects?**

No. Congress did not include an AIS requirement for nonpoint source and national estuary projects unless the project can also be classified as a 'treatment works' as defined by section 212 of the Clean Water Act.

#### **3) Are any projects for the construction, alteration, maintenance, or repair of a public water system or treatment works excluded from the AIS requirement?**

Any project, whether a treatment works project or a public water system project, for which engineering plans and specifications were approved by the responsible state agency prior to January 17, 2014, is excluded from the AIS requirements.

#### **4) What if the project does not have approved engineering plans and specifications but has signed an assistance agreement with a CWSRF or DWSRF program prior to January 17, 2014?**

The AIS requirements do not apply to any project for which an assistance agreement was signed prior to January 17, 2014.

**5) What if the project does not have approved engineering plans and specifications, but bids were advertised prior to January 17, 2014 and an assistance agreement was signed after January 17, 2014?**

If the project does not require approved engineering plans and specifications, the bid advertisement date will count in lieu of the approval date for purposes of the exemption in section 436(f).

**6) What if the assistance agreement that was signed prior to January 17, 2014, only funded a part of the overall project, where the remainder of the project will be funded later with another SRF loan?**

If the original assistance agreement funded any construction of the project, the date of the original assistance agreement counts for purposes of the exemption. If the original assistance agreement was only for planning and design, the date of that assistance agreement will count for purposes of the exemption only if there is a written commitment or expectation on the part of the assistance recipient to fund the remainder of the project with SRF funds.

**7) What if the assistance agreement that was signed prior to January 17, 2014, funded the first phase of a multi-phase project, where the remaining phases will be funded by SRF assistance in the future?**

In such a case, the phases of the project will be considered a single project if all construction necessary to complete the building or work, regardless of the number of contracts or assistance agreements involved, are closely related in purpose, time and place. However, there are many situations in which major construction activities are clearly undertaken in phases that are distinct in purpose, time, or place. In the case of distinct phases, projects with engineering plans and specifications approval or assistance agreements signed prior to January 17, 2014 would be excluded from AIS requirements while those approved/signed on January 17, 2014, or later would be covered by the AIS requirements.

**8) What if a project has split funding from a non-SRF source?**

Many States intend to fund projects with “split” funding, from the SRF program and from State or other programs. Based on the Act language in section 436, which requires that American iron and steel products be used in any project for the construction, alteration, maintenance, or repair of a public water system or treatment works receiving SRF funding between and including January 17, 2014 and September 30, 2014, any project that is funded in whole or in part with such funds must comply with the AIS requirement. A “project” consists of all construction necessary to complete the building or work regardless of the number of contracts or assistance agreements involved so long as all contracts and assistance agreements awarded are closely related in purpose, time and place. This precludes the intentional splitting of SRF projects into separate and smaller contracts or assistance agreements to avoid AIS coverage on some portion of a larger

project, particularly where the activities are integrally and proximately related to the whole. However, there are many situations in which major construction activities are clearly undertaken in separate phases that are distinct in purpose, time, or place, in which case, separate contracts or assistance agreement for SRF and State or other funding would carry separate requirements.

**9) What about refinancing?**

If a project began construction, financed from a non-SRF source, prior to January 17, 2014, but is refinanced through an SRF assistance agreement executed on or after January 17, 2014 and prior to October 1, 2014, AIS requirements will apply to all construction that occurs on or after January 17, 2014, through completion of construction, unless, as is likely, engineering plans and specifications were approved by a responsible state agency prior to January 17, 2014. There is no retroactive application of the AIS requirements where a refinancing occurs for a project that has completed construction prior to January 17, 2014.

**10) Do the AIS requirements apply to any other EPA programs, besides the SRF program, such as the Tribal Set-aside grants or grants to the Territories and DC?**

No, the AIS requirement only applies to 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)

**Covered Iron and Steel Products**

**11) What is an iron or steel product?**

For purposes of the CWSRF and DWSRF 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 (defined in more detail below);
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel (defined in more detail below);
- Reinforced precast concrete; and
- Construction materials (defined in more detail below).

**12) What does the term ‘primarily iron or steel’ mean?**

‘Primarily iron or steel’ places constraints on the list of products above. For one of the listed products to be considered subject to the AIS requirements, it must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

**13) Can you provide an example of how to perform a cost determination?**

For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). However, the assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required. An exception to this definition is reinforced precast concrete, which is addressed in a later question.

**14) If a product is composed of more than 50% iron or steel, but is not listed in the above list of items, must the item be produced in the US? Alternatively, must the iron or steel in such a product be produced in the US?**

The answer to both question is no. Only items on the above list must be produced in the US. Additionally, the iron or steel in a non-listed item can be sourced from outside the US.

**15) What is the definition of steel?**

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels.

**16) What does ‘produced in the United States’ mean?**

Production in the United States of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the

material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

**17) Are the raw materials used in the production of iron or steel required to come from US sources?**

No. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-US sources.

**18) If an above listed item is primarily made of iron or steel, but is only at the construction site temporarily, must such an item be produced in the US?**

No. Only the above listed products made primarily of iron or steel, permanently incorporated into the project must be produced in the US. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.

**19) What is the definition of ‘municipal castings’?**

Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers;

Meter Boxes;  
Service Boxes;  
Steel Hinged Hatches, Square and Rectangular;  
Steel Riser Rings;  
Trash receptacles;  
Tree Grates;  
Tree Guards;  
Trench Grates; and  
Valve Boxes, Covers and Risers.

## **20) What is ‘structural steel’?**

Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

## **21) What is a ‘construction material’ for purposes of the AIS requirement?**

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered “structural steel”. This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

## **22) What is not considered a ‘construction material’ for purposes of the AIS requirement?**

Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and

data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

**23) If the iron or steel is produced in the US, may other steps in the manufacturing process take place outside of the US, such as assembly?**

No. Production in the US of the iron or steel used in a listed product requires that all manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives.

**24) What processes must occur in the US to be compliant with the AIS requirement for reinforced precast concrete?**

While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.

If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the US.

**Compliance**

**25) How should an assistance recipient document compliance with the AIS requirement?**

In order to ensure compliance with the AIS requirement, specific AIS contract language must be included in each contract, starting with the assistance agreement, all the way down to the purchase agreements. Sample language for assistance agreements and contracts can be found in Appendix 3 and 4.

EPA recommends the use of a step certification process, similar to one used by the Federal Highway Administration. The step certification process is a method to ensure that producers adhere to the AIS requirement and assistance recipients can verify that products comply with the AIS requirement. The process also establishes accountability and better enables States to take enforcement actions against violators.

Step certification creates a paper trail which documents the location of the manufacturing process involved with the production of steel and iron materials. A step certification is a process under which each handler (supplier, fabricator, manufacturer,

processor, etc) of the iron and steel products certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. A certification can be quite simple. Typically, it includes the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a manufacturer's responsible party. Attached, as Appendix 5, are sample certifications. These certifications should be collected and maintained by assistance recipients.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US. While this type of certification may be acceptable, it may not provide the same degree of assurance. Additional documentation may be needed if the certification is lacking important information. Step certification is the best practice.

## **26) How should a State ensure assistance recipients are complying with the AIS requirement?**

In order to ensure compliance with the AIS requirement, States SRF programs must include specific AIS contract language in the assistance agreement. Sample language for assistance agreements can be found in Appendix 3.

States should also, as a best practice, conduct site visits of projects during construction and review documentation demonstrating proof of compliance which the assistance recipient has gathered.

## **27) What happens if a State or EPA finds a non-compliant iron and/or steel product permanently incorporated in the project?**

If a potentially non-compliant product is identified, the State should notify the assistance recipient of the apparent unauthorized use of the non-domestic component, including a proposed corrective action, and should be given the opportunity to reply. If unauthorized use is confirmed, the State can take one or more of the following actions: request a waiver where appropriate; require the removal of the non-domestic item; or withhold payment for all or part of the project. Only EPA can issue waivers to authorize the use of a non-domestic item. EPA may use remedies available to it under the Clean Water Act, the Safe Drinking Water Act, and 40 CFR part 31 grant regulations, in the event of a violation of a grant term and condition.

It is recommended that the State work collaboratively with EPA to determine the appropriate corrective action, especially in cases where the State is the one who identifies the item in noncompliance or there is a disagreement with the assistance recipient.

If fraud, waste, abuse, or any violation of the law is suspected, the Office of Inspector General (OIG) should be contacted immediately. The OIG can be reached at 1-

888-546-8740 or [OIG\\_Hotline@epa.gov](mailto:OIG_Hotline@epa.gov). More information can be found at this website: <http://www.epa.gov/oig/hotline.htm>.

## **28) How do international trade agreements affect the implementation of the AIS requirements?**

The AIS provision applies in a manner consistent with United States obligations under international agreements. Typically, these obligations only apply to direct procurement by the entities that are signatories to such agreements. In general, SRF assistance recipients are not signatories to such agreements, so these agreements have no impact on this AIS provision. In the few instances where such an agreement applies to a municipality, that municipality is under the obligation to determine its applicability and requirements and document the actions taken to comply for the State.

### **Waiver Process**

The statute permits EPA to issue waivers for a case or category of cases where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent.

In order to implement the AIS requirements, EPA has developed an approach to allow for effective and efficient implementation of the waiver process to allow projects to proceed in a timely manner. The framework described below will allow States, on behalf of the assistance recipients, to apply for waivers of the AIS requirement directly to EPA Headquarters. Only waiver requests received from states will be considered. Pursuant to the Act, EPA has the responsibility to make findings as to the issuance of waivers to the AIS requirements.

### **Definitions**

The following terms are critical to the interpretation and implementation of the AIS requirements and apply to the process described in this memorandum:

Reasonably Available Quantity: The quantity of iron or steel products is available or will be available at the time needed and place needed, and in the proper form or specification as specified in the project plans and design.

Satisfactory Quality: The quality of iron or steel products, as specified in the project plans and designs.

Assistance Recipient: A borrower or grantee that receives funding from a State CWSRF or DWSRF program.

## Step-By-Step Waiver Process

### Application by Assistance Recipient

Each local entity that receives SRF water infrastructure financial assistance is required by section 436 of the Act to use American made iron and steel products in the construction of its project. However, the recipient may request a waiver. Until a waiver is granted by EPA, the AIS requirement stands, except as noted above with respect to municipalities covered by international agreements.

The waiver process begins with the SRF assistance recipient. In order to fulfill the AIS requirement, the assistance recipient must in good faith design the project (where applicable) and solicit bids for construction with American made iron and steel products. It is essential that the assistance recipient include the AIS terms in any request for proposals or solicitations for bids, and in all contracts (see Appendix 3 for sample construction contract language). The assistance recipient may receive a waiver at any point before, during, or after the bid process, if one or more of three conditions is met:

1. Applying the American Iron and Steel requirements of the Act 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; or
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.

Proper and sufficient documentation must be provided by the assistance recipient. A checklist detailing the types of information required for a waiver to be processed is attached as Appendix 1.

Additionally, it is strongly encouraged that assistance recipients hold pre-bid conferences with potential bidders. A pre-bid conference can help to identify iron and steel products needed to complete the project as described in the plans and specifications that may not be available from domestic sources. It may also identify the need to seek a waiver prior to bid, and can help inform the recipient on compliance options.

In order to apply for a project waiver, the assistance recipient should email the request in the form of a Word document (.doc) to the State SRF program. It is strongly recommended that the State designate a single person for all AIS communications. The State SRF designee will review the application for the waiver and determine whether the necessary information has been included. Once the waiver application is complete, the State designee will forward the application to either of two email addresses. For CWSRF waiver requests, please send the application to: [cwsrfwaiver@epa.gov](mailto:cwsrfwaiver@epa.gov). For DWSRF waiver requests, please send the application to: [dwsrfwaiver@epa.gov](mailto:dwsrfwaiver@epa.gov).

## Evaluation by EPA

After receiving an application for waiver of the AIS requirements, EPA Headquarters will publish the request on its website for 15 days and receive informal comment. EPA Headquarters will then use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.

In the event that EPA finds that adequate documentation and justification has been submitted, the Administrator may grant a waiver to the assistance recipient. EPA will notify the State designee that a waiver request has been approved or denied as soon as such a decision has been made. Granting such a waiver is a three-step process:

1. Posting – After receiving an application for a waiver, EPA is required to publish the application and all material submitted with the application on EPA’s website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to EPA. The website can be found at: [http://water.epa.gov/grants\\_funding/aisrequirement.cfm](http://water.epa.gov/grants_funding/aisrequirement.cfm)
2. Evaluation – After receiving an application for waiver of the AIS requirements, EPA Headquarters will use the checklist in Appendix 2 to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver – that it is quantitatively and qualitatively sufficient – and to determine whether or not to grant the waiver.
3. Signature of waiver approval by the Administrator or another agency official with delegated authority – As soon as the waiver is signed and dated, EPA will notify the State SRF program, and post the signed waiver on our website. The assistance recipient should keep a copy of the signed waiver in its project files.

## Public Interest Waivers

EPA has the authority to issue public interest waivers. Evaluation of a public interest waiver request may be more complicated than that of other waiver requests so they may take more time than other waiver requests for a decision to be made. An example of a public interest waiver that might be issued could be for a community that has standardized on a particular type or manufacturer of a valve because of its performance to meet their specifications. Switching to an alternative valve may require staff to be trained on the new equipment and additional spare parts would need to be purchased and stocked, existing valves may need to be unnecessarily replaced, and portions of the system may need to be redesigned. Therefore, requiring the community to install an alternative valve would be inconsistent with public interest.

EPA also has the authority to issue a public interest waiver that covers categories of products that might apply to all projects.

EPA reserves the right to issue national waivers that may apply to particular classes of assistance recipients, particular classes of projects, or particular categories of iron or steel products. EPA may develop national or (US geographic) regional categorical waivers through the identification of similar circumstances in the detailed justifications presented to EPA in a waiver request or requests. EPA may issue a national waiver based on policy decisions regarding the public's interest or a determination that a particular item is not produced domestically in reasonably available quantities or of a sufficient quality. In such cases, EPA may determine it is necessary to issue a national waiver.

If you have any questions concerning the contents of this memorandum, you may contact us, or have your staff contact Jordan Dorfman, Attorney-Advisor, State Revolving Fund Branch, Municipal Support Division, at [dorfman.jordan@epa.gov](mailto:dorfman.jordan@epa.gov) or (202) 564-0614 or Kiri Anderer, Environmental Engineer, Infrastructure Branch, Drinking Water Protection Division, at [anderer.kirsten@epa.gov](mailto:anderer.kirsten@epa.gov) or (202) 564-3134.

Attachments

## Appendix 1: Information Checklist for Waiver Request

The purpose of this checklist is to help ensure that all appropriate and necessary information is submitted to EPA. EPA recommends that States review this checklist carefully and provide all appropriate information to EPA. This checklist is for informational purposes only and does not need to be included as part of a waiver application.

Items	✓	Notes
<p>General</p> <ul style="list-style-type: none"> <li>• Waiver request includes the following information:               <ul style="list-style-type: none"> <li>— Description of the foreign and domestic construction materials</li> <li>— Unit of measure</li> <li>— Quantity</li> <li>— Price</li> <li>— Time of delivery or availability</li> <li>— Location of the construction project</li> <li>— Name and address of the proposed supplier</li> <li>— A detailed justification for the use of foreign construction materials</li> </ul> </li> <li>• Waiver request was submitted according to the instructions in the memorandum</li> <li>• Assistance recipient made a good faith effort to solicit bids for domestic iron and steel products, as demonstrated by language in requests for proposals, contracts, and communications with the prime contractor</li> </ul>		
<p>Cost Waiver Requests</p> <ul style="list-style-type: none"> <li>• Waiver request includes the following information:               <ul style="list-style-type: none"> <li>— Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products</li> <li>— Relevant excerpts from the bid documents used by the contractors to complete the comparison</li> <li>— Supporting documentation indicating that the contractor made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers</li> </ul> </li> </ul>		
<p>Availability Waiver Requests</p> <ul style="list-style-type: none"> <li>• Waiver request includes the following supporting documentation necessary to demonstrate the availability, quantity, and/or quality of the materials for which the waiver is requested:               <ul style="list-style-type: none"> <li>— Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials</li> <li>— Documentation of the assistance recipient’s efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers.</li> <li>— Project schedule</li> <li>— Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials</li> </ul> </li> <li>• Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought</li> <li>• Has the State received other waiver requests for the materials described in this waiver request, for comparable projects?</li> </ul>		

## Appendix 2: HQ Review Checklist for Waiver Request

Instructions: To be completed by EPA. Review all waiver requests using the questions in the checklist, and mark the appropriate box as Yes, No or N/A. Marks that fall inside the shaded boxes may be grounds for denying the waiver. If none of your review markings fall into a shaded box, the waiver is eligible for approval if it indicates that one or more of the following conditions applies to the domestic product for which the waiver is sought:

1. The iron and/or steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
2. The inclusion of iron and/or steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Review Items	Yes	No	N/A	Comments
<b>Cost Waiver Requests</b> <ul style="list-style-type: none"> <li>• Does the waiver request include the following information?               <ul style="list-style-type: none"> <li>— Comparison of overall cost of project with domestic iron and steel products to overall cost of project with foreign iron and steel products</li> <li>— Relevant excerpts from the bid documents used by the contractors to complete the comparison</li> <li>— A sufficient number of bid documents or pricing information from domestic sources to constitute a reasonable survey of the market</li> </ul> </li> <li>• Does the Total Domestic Project exceed the Total Foreign Project Cost by more than 25%?</li> </ul>				
<b>Availability Waiver Requests</b> <ul style="list-style-type: none"> <li>• Does the waiver request include supporting documentation sufficient to show the availability, quantity, and/or quality of the iron and/or steel product for which the waiver is requested?               <ul style="list-style-type: none"> <li>— Supplier information or other documentation indicating availability/delivery date for materials</li> <li>— Project schedule</li> <li>— Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of materials</li> </ul> </li> <li>• Does supporting documentation provide sufficient evidence that the contractors made a reasonable effort to locate domestic suppliers of materials, such as a description of the process for identifying suppliers and a list of contacted suppliers?</li> <li>• Based on the materials delivery/availability date indicated in the supporting documentation, will the materials be unavailable when they are needed according to the project schedule? (By item, list schedule date and domestic delivery quote date or other relevant information)</li> <li>• Is EPA aware of any other evidence indicating the non-availability of the materials for which the waiver is requested? Examples include:               <ul style="list-style-type: none"> <li>— Multiple waiver requests for the materials described in this waiver request, for comparable projects in the same State</li> <li>— Multiple waiver requests for the materials described in this waiver request, for comparable projects in other States</li> <li>— Correspondence with construction trade associations indicating the non-availability of the materials</li> </ul> </li> <li>• Are the available domestic materials indicated in the bid documents of inadequate quality compared those required by the project plans, specifications, and/or permits?</li> </ul>				

### **Appendix 3: Example Loan Agreement Language**

ALL ASSISTANCE AGREEMENT MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN SRF ASSISTANCE AGREEMENTS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE LAW:

Comply with all federal requirements applicable to the Loan (including those imposed by the 2014 Appropriations Act and related SRF Policy Guidelines) which the Participant understands includes, among other, requirements that all of the iron and steel products used in the Project are to be produced in the United States (“American Iron and Steel Requirement”) unless (i) the Participant has requested and obtained a waiver from the Agency pertaining to the Project or (ii) the Finance Authority has otherwise advised the Participant in writing that the American Iron and Steel Requirement is not applicable to the Project.

Comply with all record keeping and reporting requirements under the Clean Water Act/Safe Drinking Water Act, including any reports required by a Federal agency or the Finance Authority such as performance indicators of program deliverables, information on costs and project progress. The Participant understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the Clean Water Act/Safe Drinking Water Act and this Agreement may be a default hereunder that results in a repayment of the Loan in advance of the maturity of the Bonds and/or other remedial actions.

#### **Appendix 4: Sample Construction Contract Language**

ALL CONTRACTS MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE AIS REQUIREMENT. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN ALL CONTRACTS IN PROJECTS THAT USE SRF FUNDS. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE OR LOCAL LAW:

The Contractor acknowledges to and for the benefit of the City of \_\_\_\_\_ (“Purchaser”) and the \_\_\_\_\_ (the “State”) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as “American Iron and Steel;” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser 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, and (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 Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Purchaser 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 Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

## Appendix 5: Sample Certifications

The following information is provided as a sample letter of **step** certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

\_\_\_\_\_

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXXXXXXXX)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

\_\_\_\_\_

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF WATER

November 3, 2022

**MEMORANDUM**

**SUBJECT:** Build America, Buy America Act Implementation Procedures for EPA Office of Water Federal Financial Assistance Programs

**FROM:** Radhika Fox  
Assistant Administrator 

**TO:** EPA Regional Water Division Directors, Regions I – X  
EPA Office of Water Office Directors

**OVERVIEW**

The Biden-Harris Administration recognized the Nation's critical need for infrastructure investment, championing the Bipartisan Infrastructure Law (BIL), which Congress passed on November 15, 2021 (also known as the Infrastructure Investment and Jobs Act (IIJA)). The BIL will provide an unprecedented level of federal investment in water and wastewater infrastructure in communities across America.

In Title IX of the IIJA, Congress passed the Build America, Buy America (BABA) Act, which establishes strong and permanent domestic sourcing requirements across all Federal financial assistance programs for infrastructure. The U.S. Environmental Protection Agency (EPA) Office of Water is honored to help lead the implementation of these provisions and is proud of its near decade of successful implementation of the American Iron and Steel (AIS) provisions for its flagship water infrastructure programs.

This is a transformational opportunity to build a resilient supply chain and manufacturing base for critical products here in the United States that will spur investment in good-paying American manufacturing jobs and businesses. EPA's efforts to implement BABA will help cultivate the domestic manufacturing base for a wide range of products commonly used across the water sector but not currently made domestically. This will take time, and flexibility will be important to ensure that EPA can leverage critical water investments on time and on budget to protect public health and improve water quality.

## IMPLEMENTATION

Recognizing the opportunity and need for BABA implementation guidance, the Made in America Office (MIAO) of the Office of Management and Budget (OMB) published [Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure](#) (OMB Guidance M-22-11) on April 18, 2022. The guidance provides government-wide implementation direction for all Federal financial assistance programs for infrastructure. Despite the extensive guidance developed by MIAO, EPA's Office of Water infrastructure investment programs have received many questions that were not addressed in OMB Guidance M-22-11 or that require further clarification for EPA water infrastructure programs. The following questions and answers serve to supplement OMB Guidance M-22-11 with implementation procedures specific to EPA's relevant water infrastructure programs.

Section 70914(a) of the IIJA states when a Buy America preference under BABA applies: "Not later than... [May 14, 2022], the head of each Federal agency shall ensure that none of the funds made available for a Federal financial assistance program for infrastructure...may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States." Therefore, Federal financial infrastructure investments obligated on or after May 14, 2022, must comply with the BABA requirements. Absent a waiver, all iron, steel, manufactured products, and construction materials permanently incorporated into an infrastructure project subject to the BABA requirements must be produced in the United States. For many of EPA's Office of Water infrastructure investment programs, the vast majority of products permanently incorporated into construction, maintenance, or repair projects must comply with the BABA requirements, with the exception of select construction materials (cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives), which are specifically excepted by the BABA statute.

EPA's Office of Water implements many infrastructure investment programs subject to BABA requirements, including the following:

- Alaska Native Villages and Rural Communities Water Grant Program (ANV) (and any associated Interagency Agreements with the Indian Health Service)
- Clean Water and Drinking Water State Revolving Fund Programs (CW and DWSRF)
- Clean Water and Drinking Water Grants to U.S. Territories and the District of Columbia
- Clean Water Indian and Drinking Water Tribal Infrastructure Grant Set-aside (and any associated Interagency Agreements with the Indian Health Service)
- Coastal Wetlands Planning, Protection and Restoration Act, (CWPPRA) Programs
- Congressionally Directed Spending/Community Project Funding (also known as Community Grants)
- Geographic Programs<sup>1</sup>
- Gulf Hypoxia Program
- National Estuaries Program (CWA Section 320)

---

<sup>1</sup> Geographic Programs include: Great Lakes Restoration Initiative, Chesapeake Bay, San Francisco Bay, Puget Sound, Long Island Sound, Gulf of Mexico, South Florida, Lake Champlain, Lake Pontchartrain, Southern New England Estuaries, Columbia River Basin, Pacific Northwest

- 319 Nonpoint Source Management Program Implementation
- Reducing Lead in Drinking Water Grant Program (SDWA §1459B)
- Assistance for Small and Disadvantaged Communities Grants: Small, Underserved, and Disadvantaged Community Grant Program (SUDC), Emerging Contaminants in Small or Disadvantaged Communities (EC-SDC) and Drinking Water Infrastructure Resilience & Sustainability (SDWA §1459A)
- Sewer Overflow and Stormwater Reuse Municipal Grants (OSG)
- USMCA Implementing Legislation (Section 821 and Title IX, USMCA Supplemental Appropriations, 2020)
- U.S.-Mexico Border Water Infrastructure Program
- Voluntary School and Child Care Program Lead Testing and Remediation Grant Program (SDWA 1464(d))
- Water Infrastructure Finance and Innovation Act (WIFIA)

The questions and answers in this document apply to the implementation of BABA requirements for the Office of Water infrastructure programs listed above unless superseded by regulation, statute, or other applicable guidance. For many of the programs listed above which did not have domestic preference requirements prior to BABA, additional implementation details are pending or may be developed after the issuance of these procedures. In addition, EPA notes that more direction will be helpful to inform the determination and definition of domestic content in manufactured goods. Supplemental guidance on these and other issues, from either OMB or EPA, may be forthcoming. These implementation procedures may also apply to additional, unlisted EPA programs which may be required to apply BABA subsequent to publication of this memorandum (e.g., future funding programs which have been authorized, but not yet appropriated).

For more information on the BABA requirements, visit the EPA Office of Water’s dedicated website – <https://www.epa.gov/cwsrf/build-america-buy-america-baba> – or contact your funding authority (such as your grants officer, portfolio manager, or state contact) For information on approved waivers, visit <https://www.epa.gov/cwsrf/build-america-buy-america-baba-approved-waivers>. You may also email questions to [BABA-OW@epa.gov](mailto:BABA-OW@epa.gov).

This Implementation Procedures document is organized to provide responses to questions in the following topic areas:

- Section 1: General..... 4
- Section 2: Product Coverage..... 5
- Section 3: Co-funding ..... 9
- Section 4: Waivers ..... 10
- Section 5: Documenting Compliance ..... 12
- Section 6: Programs with American Iron and Steel Requirements..... 16
- Section 7: Program-Specific Issues ..... 17
- Appendix 1: Example Build America, Buy America (BABA) Act Construction Contract Language..... 22
- Appendix 2: Example Build America, Buy America (BABA) Act Assistance Agreement Language..... 23

## QUESTIONS AND ANSWERS

### SECTION 1: GENERAL

- Q1.1: Will EPA provide documentation for BABA for bid solicitations and suggested contract language? Will EPA provide suggested language for Assistance Agreements?
  - A1.1: See Appendix 1, which includes suggested language for construction contracts which addresses the BABA requirements. In addition to the language suggested in Appendix 1, EPA also recommends that assistance recipients prepare contract bid solicitation documents with a statement for the consulting engineers and construction firms as follows: “By signing payment application and recommending payment, Contractor certifies they have reviewed documentation for all products and materials submitted for payment, and the certifications are sufficient to demonstrate compliance with Build America, Buy America Act requirements.” In most cases, the assistance recipient’s representatives assume the responsibility for their clients to conduct due diligence on compliance with applicable domestic preference requirements.

All Federal Financial infrastructure assistance agreements subject to BABA must have a clause requiring compliance with the requirements. See Appendix 2 for example assistance agreement language.

- Q1.2: Would federally-financed infrastructure projects outside of the United States need to comply with the BABA requirements?
  - A1.2: No. According to the OMB Guidance (M-22-11), a “project” is defined as “...any activity related to the construction, alteration, maintenance, or repair of infrastructure in the United States.” Therefore, the BABA requirements are not implicated for infrastructure projects occurring outside of the United States, such as projects funded through the United States-Mexico-Canada Agreement with infrastructure activities occurring in Mexico or Canada (that is, outside the United States).
  -
- Q1.3: If most of the project is BABA compliant, and a small portion is not, can an assistance recipient self-fund (i.e., paying with non-federal dollars) the non-compliant products?
  - A1.3: Any project that is funded in whole or in part with federal assistance must comply with the BABA requirements, unless the requirements are otherwise waived. All iron, steel, manufactured products, and construction materials used in a project must meet the BABA requirements unless waived. Absent a waiver, there is no “small portion” or product that does not need to satisfy the BABA requirements unless the requirements are waived (or specifically excluded as is the case for cement and cementitious materials; aggregates such as stone, sand, or gravel; aggregate binding agents or additives; or non-permanent products). An assistance recipient may request a waiver or inquire as to whether a broad waiver, such as a *de minimis* waiver, might apply.

- Q1.4: How do international trade agreements affect the implementation of the BABA requirements?
  - A1.4: The BABA requirements apply in a manner consistent with United States obligations under international trade agreements. Typically, these obligations only apply to direct procurement by the entities that are signatories to these trade agreements. In general, assistance recipients are not signatories to such agreements, so these trade agreements have no impact on BABA implementation. In the few instances where such an agreement applies to a municipality, that municipality is responsible for determining its applicability and requirements and communicating with the funding authority (such as EPA and/or a state) on the actions taken to comply with BABA.

SECTION 2: PRODUCT COVERAGE

- Q2.1: For products made of iron and steel, what is the difference between predominantly and primarily iron and steel?
  - A2.1: EPA considers the terms “predominantly” and “primarily” to be interchangeable, such that a product is considered predominantly (or primarily) iron and steel if it contains greater than 50 percent iron and steel by material cost.
- Q2.2: What is the definition of construction materials (with examples)?
  - A2.2: From OMB Guidance M-22-11: “construction materials” include an article, material, or supply (other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; aggregate binding agents or additives; or non-permanent products) that is or consists primarily of:
    - non-ferrous metals,
    - plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables), (including optic glass),
    - lumber, and
    - drywall.

For example, a plate of glass would be a construction material under BABA, but a framed window that incorporates the glass into a frame would be a manufactured product. Another common construction material for water infrastructure projects would be polyvinyl chloride (PVC) pipe and fittings. However, if PVC components are incorporated into a more complex product such as instrumentation and control equipment or a water treatment unit, those items would be manufactured products.

- Q2.3: What are manufactured products (with examples)?
  - A2.3: From OMB Guidance M-22-11: “...all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total

cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation...”

The manufactured products category would cover the majority of potential water infrastructure products, including complex products made up of a variety of material types and components. For water infrastructure projects, common manufactured products would include, but not be limited to, pumps, motors, blowers, aerators, generators, instrumentation and control systems, gauges, meters, measurement equipment, treatment equipment, dewatering equipment, actuators, and many other mechanical and electrical items.

- Q2.4: Which category will valves fall under for BABA? Will it differ from the American Iron and Steel (AIS) requirements?
  - A2.4: For programs that are subject to BABA and AIS (SRF, WIFIA, and Community Project Funding), projects using valves should classify them as iron and steel products under BABA as long as their material cost is made up of more than 50 percent iron and/or steel. Valves with 50 percent or less iron and/or steel by material cost would be considered manufactured products under the BABA requirements.

In accordance with OMB Guidance M-22-11, an article, material, or supply should be classified into only one of the three categories: iron and steel, manufactured products, or construction materials. Under the AIS requirements, all valves made primarily of iron and steel (that is, those with iron and/or steel material cost greater than 50 percent) must comply with the AIS requirements. For BABA, EPA interprets Section IV of OMB Guidance M-22-11 to mean that iron and steel products are those items that are primarily iron and steel, the same as for the AIS requirements.

- Q2.5: Does EPA have a list of products to be classified as “Iron and Steel” under BABA?
  - A2.5: Although this list is not comprehensive, the following products were classified as AIS products if made primarily (more than 50 percent) of iron and/or steel by materials cost (for programs subject to both AIS and BABA, this list would be equivalent for “iron and steel” items or products under either requirement):

Products likely made “primarily” of iron and steel to be classified as <u>Iron and Steel</u> under BABA		
Lined and Unlined Pipe	Lined and Unlined Fittings	Tanks
Flanges	Pipe Clamps and Restraints	Structural Steel
Valves	Hydrants	Pre-Cast, Iron/Steel Reinforced Concrete (of all types, regardless of iron/steel content percentage)
Manhole Covers and other Municipal Castings	Access Hatches	Ballast Screens
Iron or Steel Benches	Bollards	Cast Bases
Cast Iron Hinged Hatches	Cast Iron Riser Rings	Catch Basin Inlets
Cleanout/Monument Boxes	Construction Covers and Frames	Curb and Corner Guards

Products likely made “primarily” of iron and steel to be classified as <u>Iron and Steel</u> under BABA		
Curb Boxes	Curb Openings	Curb Stops
Detectable Warning Plates	Downspout Shoes	Drainage Grates
Drainage Grate Frames and Curb Inlets	Inlets	Junction Boxes
Lampposts	Manhole Rings and Frames	Manhole Risers
Meter Boxes	Service Boxes	Steel Hinged Hatches
Steel Riser Rings	Trash Receptacles	Tree Grates
Tree Guards	Trench Grates	Valve Boxes
Valve Box Covers and Risers	Access Ramps	Aeration Pipes and Fittings (separate from aeration/blowers)
Angles	Backflow Preventers/Double Check Valves	Baffle Curtains
Iron or Steel Bar	Bathroom Stalls	Beam Clamps
Cable Hanging Systems	Clarifier Tanks	Coiled Steel
Column Piping	Concrete Reinforcing Bar, Wire, and Fibers	Condensate Sediment Traps
Corrugated Pipe	Couplings	Decking
Digester Covers	Dome Structures	Door Hardware
Doors	Ductwork	Expansion Joints
Expansion Tanks (diaphragm, surge, and hydropneumatics)	Fasteners	Fencing and Fence Tubing
Fire Escapes	Flanged Pipe	Flap Gates
Framing	Gate Valves	Generic Hanging Brackets
Grating	Ground Testing Boxes	Ground Test Wells
Guardrails	HVAC Registers, Diffusers, and Grilles	Joists
Knife Gates	Ladders	Lifting Hooks, J-bar, Connectors within, and Anchors for Concrete
Lockers	Man Baskets and Material Platforms	Manhole Steps
Mud Valves	Municipal Casting Junctions	Non-mechanical (aka stationary) Louvers and Dampers
Overhead Rolling Doors/ Uplifting Doors (manual open, no motor)	Pipe Connectors	Pipe Hangers
Pipe Piling (any type of steel piling)	Pipe Spool (pipe, flanges, connectors, etc.)	Pipe Supports
Pitless Adaptors	Pre-fab Steel Buildings/Sheds (simple structure, unfurnished)	Pre-stressed Concrete Cylinder Pipe (PCCP)
Railings	Reduced Pressure Zone (RPZ) Valves	Roofing
Service Saddles	Sheet Piling	Sinks (not part of eyewash systems)
Solenoid Valves	Stairs	Static Mixers
Stationary Screens	Surface Drains	Tapping Sleeves
Telescoping Valves	Tipping Buckets	Trusses
Tubing	Valve Stem Extensions	Valve Stems (excluding handwheels and actuators)
Wall Panels	Wall Sleeves/Floor Sleeves	Welding Rods
Well Casing	Well Screens	Wire
Wire Cloth	Wire Rod	Wire Rope and Cables

Q2.6: Does EPA have a list of products that could be made “primarily” of iron and steel but would be classified as “manufactured products” under BABA?

A2.6: Although this list is not comprehensive, the following products would be considered “manufactured products” under the BABA requirements, even if the item might be composed primarily of iron and steel by materials cost (Note: These items are not subject to the AIS requirements.):

Products likely made “primarily” of iron and steel to be classified as <u>Manufactured Products</u> under BABA		
Actuator Superstructures/ Support Structures	Aeration Nozzles and Injectors	Aerators
Analytical Instrumentation	Analyzers (e.g., ozone, oxygen)	Automated Water Fill Stations
Blowers/Aeration Equipment	Boilers, Boiler Systems	Chemical Feed Systems (e.g., polymer, coagulant, treatment chemicals)
Chemical Injection Quills	Chemical Injectors	Clarifier Mechanisms/Arms
Compressors	Controls and Switches	Conveyors
Cranes	Desiccant Air Dryer Tanks	Dewatering Equipment
Dewatering Roll-offs	Disinfection Systems	Drives (e.g., variable frequency drives)
Electric/Pneumatic/Manual Accessories Used to Operate Valves (such as electric valve actuators)	Electrical Cabinetry and Housings (such as electrical boxes/enclosures)	Electrical Conduit
Electrical Junction Boxes	Electronic Door Locks	Elevator Systems (hydraulic, etc.,)
Emergency Life Systems (including eyewash stations, emergency safety showers, fire extinguishers, fire suppression systems including sprinklers /piping/valves, first aid, etc.)	Exhaust Fans	Fall Protection Anchor Points
Fiberglass Tank w/Appurtenances	Filters (and appurtenances, including underdrains, backwash systems)	Flocculators
Fluidized Bed Incinerators	Galvanized Anodes/Cathodic Protection	Gear Reducers
Generators	Geothermal Systems	Grinders
Heat Exchangers	HVAC (excluding ductwork)	HVAC Dampers (if appurtenances to aerators/blowers)
HVAC Louvers (mechanical)	Intake and Exhaust Grates (if appurtenances to aerators/blowers)	Instrumentation
Laboratory Equipment	Ladder Fall Prevention Systems	Ladder Safety Posts
Lighting Fixtures	Lightning and Grounding Rods	Mechanical or Actuated Louvers/Dampers
Membrane Bioreactor Systems	Membrane Filtration Systems	Metal Office Furniture (fixed)
Meters (including flow, wholesale, water, and service connection)	Motorized Doors (unit)	Motorized Mixers
Motorized Screens (such as traveling screens)	Motors	Pelton Wheels
Pipeline Flash Reactors (similar to injectors)	Plate Settlers	Precast Concrete without Iron/Steel Reinforcement

Products likely made “primarily” of iron and steel to be classified as <u>Manufactured Products</u> under BABA		
Furnished Pre-fab Buildings (such as furnished with pumps, mechanics inside)	Presses (including belt presses)	Pressure Gauges
Pump Cans/Barrels and Strainers	Pumps	Mechanical Rakes
Safety Climb Cable	Sampling Stations (unless also act as hydrant)	Scrubbers
Sensors	Sequencing Batch Reactors (SBR)	Steel Shelving (fixed)
Slide and Sluice Gates	Spray Header Units	Steel Cabinets (fixed interior/furniture)
Supervisory Control and Data Acquisition (SCADA) Systems	Tracer Wire	Valve Manual Gears, Actuators, Handles
Voltage Transformer	Water Electrostatic Precipitators (WESP)	Water Heaters
Weir Gates		

- Q2.7: Is asphalt paving a covered product under BABA?
  - A2.7: No. EPA interprets Section 70917(c) of the IIA to exclude asphalt from BABA requirements. Asphalt paving is a type of concrete composed of an aggregate material mixed with a binder (bitumen). EPA considers asphalt concrete to be excluded by section 70917(c) due to its similarities with cement and cementitious materials.

SECTION 3: CO-FUNDING

- Q3.1: If projects are co-funded with funding mechanisms that don’t require BABA, must the entire project comply with BABA?
  - A3.1: Yes. Any project that is funded in whole or in part with federal assistance must comply with the BABA requirements, unless the requirements are otherwise waived. A “project” consists of all construction necessary to complete the building or work regardless of the number of contracts or assistance agreements involved so long as all the contracts and assistance agreements awarded are closely related in purpose, time, and place. This precludes the intentional splitting of projects into separate and smaller contracts or assistance agreements to avoid BABA’s applicability on some portions of a larger project, particularly where the activities are integrally and proximately related to the whole. However, there are many situations in which major construction activities are clearly undertaken in separate phases that are distinct in purpose, time, or place, in which case, separate contracts or assistance agreements would carry separate requirements.

- Q3.2: How will project requirements be determined for co-funded projects subject to potentially different general applicability/programmatic waiver conditions (such as different adjustment period waivers)?
  - A3.2: OMB Guidance M-22-11 addresses cases with project co-funding from separate programs. EPA would apply the guidance’s “cognizant” program determination to projects that are co-funded with different general applicability/programmatic waivers. For instance, if a project were co-funded between WIFIA and SRF and the majority of the Federal funding for the project is from WIFIA, then WIFIA would be the “cognizant” program for application and determination of waivers. In that case, any conditions from an applicable WIFIA waiver would apply.

#### SECTION 4: WAIVERS

- Q4.1: Who may apply for a waiver and how do you apply?
  - A4.1: Assistance recipients and their authorized representatives may apply for a project-specific waiver. EPA does not accept waiver requests from suppliers, distributors, or manufacturers unless the assistance recipient endorses and submits the request on its own behalf to the funding authority. In the case where multiple programs are providing federal funds to the project, the assistance recipient should submit the waiver request to the cognizant program, the one providing the greatest amount of federal funds for the project. For information on applying for cost waivers, see questions 4.4 and 4.5. For information on the SRF program roles and responsibilities, see question 7.6.

Project-specific waiver requests should generally include: (1) a brief summary of the project, (2) a description and explanation of the need for the waiver for the product(s) in question, (3) a brief summary of the due diligence conducted in search of domestic alternatives (which could include correspondence between assistance recipient and supplier/distributors), (4) the quantity and materials of the product(s) in question, (5) all engineering specifications and project design considerations relevant to the product(s) in question, (6) the approximate unit cost of items (both foreign and domestic) in addition to an estimated cost of the materials and overall project, (7) the date any products will be needed on site in order to avoid significant project schedule disruptions, and (8) any other pertinent information relevant to EPA’s consideration of the waiver (e.g., if relevant for SRF projects: whether the project is designated as an equivalency project, the date the plans and specifications were submitted to the state, the date of construction initiation, expected date of project completion, any special considerations such as local zoning and building ordinances, seismic requirements, or noise or odor control requirements).

In the case of indirect federal assistance, such as the SRF programs, the state authority reviews and conveys the waiver request to EPA. States should submit waiver requests to the appropriate program waiver request inbox. For SRF projects, please use [CWSRFWaiver@epa.gov](mailto:CWSRFWaiver@epa.gov) or [DWSRFWaiver@epa.gov](mailto:DWSRFWaiver@epa.gov).

- Q4.2: Can an assistance recipient request a waiver based on a specification written for a specific brand or model of product (that is, a specification that names a branded item or model)?
  - A4.2: In most cases, performance-based specifications are expected and required for the majority of infrastructure projects funded by EPA’s financial assistance programs. In rare cases where “branded” or product-specific sourcing may be included in project specifications, it is suggested that the specifications include the item in question (that is, not simply a catalog page, but also materials of construction, sizing, quantities, and applicable engineering performance design characteristics for the project, etc.) in addition to the standard phrase “or equal.” For the purposes of product alternative market research, EPA will evaluate the BABA requirements based on performance-based engineering specifications for the product(s) in question. If the project’s specifications do not include performance-based specifications, or at least an “or equal” designation, EPA will base its research on an “or equal” designation using best professional judgment to the extent practicable.
  
- Q4.3: If a manufactured product is not readily available domestically, will EPA provide short-term “limited availability” product waivers?
  - A4.3: EPA will address the unavailability of domestic products through the waiver process, including potential national short-term waivers for specific products, if appropriate. To the extent practicable and with the intent to maximize domestic market and supply chain development, EPA intends to address issues of broad product unavailability with targeted, time-limited, and conditional waivers, as prescribed in OMB Guidance M-22-11. EPA will follow its robust and thorough product research processes (those put into place for the AIS requirements for the SRF and WIFIA programs and expanded for the new BABA requirements) to identify and determine those products for which proposed national/general applicability waivers may be appropriate.
  
- Q4.4: What information is needed when applying for a cost waiver under BABA?
  - A4.4: As part of the cost waiver request, the assistance recipient must demonstrate that implementation of the BABA requirements will increase the overall project cost more than 25 percent. Depending on the circumstances of the overall project cost increases, documentation to justify the cost waiver can vary but may include itemized cost estimates or bid tabulations comparing project costs with and without BABA implementation. Assistance recipients should begin assessing the potential cost impacts of the BABA requirements during the design phase of a project.
  
- Q4.5: Can administrative costs associated with tracking and verification of certifications be considered when determining if the cost of a project increases by 25 percent or more?
  - A4.5: Yes. Section 70914(b)(3) of the IIJA states that a waiver may be provided if the overall cost of the project increases by more than 25 percent due to the “inclusion of iron, steel, manufactured products, or construction materials produced in the United States.” EPA interprets this to mean that the “inclusion” of the BABA-covered products could encompass

reasonable administrative costs associated with complying with the BABA requirements, such as staff, contractor, and technological resources to collect and track BABA compliance documentation.

- Q4.6: How can assistance recipients and construction contractors address product delivery delays?
  - A4.6: Assistance recipients should reasonably plan for material procurement to account for known potential supply chain issues or extended lead times and shall notify the funding authority well in advance of the issues so that prompt attention can be given to explore options. Where extended lead times for compliant products are impacting project schedules and may significantly impact construction progress, timely communication with the funding agency is important. For products that are unavailable within a reasonable timeframe to meet the objectives and schedule of a project, EPA may consider a non-availability waiver with adequate justification. An assistance recipient would need to apply for the waiver and contact its funding authority (such as EPA and/or a state) to initiate the waiver process.

#### SECTION 5: DOCUMENTING COMPLIANCE

- Q5.1: Who will be responsible for BABA enforcement?
  - A5.1: Responsibility for BABA implementation applies at all levels, from manufacturers to suppliers and distributors, construction contractors, assistance recipients, and funding authorities.

The manufacturers have responsibility to provide adequate and accurate documentation of the products manufactured. If suppliers and distributors are involved, they are responsible for passing along compliance documentation for products supplied to projects that are subject to the BABA requirements.

The assistance recipient and their representatives are primarily responsible for ensuring the documentation collected for products used on the project is sufficient to document compliance with the BABA requirements.

The funding authority is responsible for providing oversight and guidance as needed to ensure the proper implementation of the requirements. The Uniform Grants Guidance (UGG) (Title 2 of the Code of Federal Regulations (CFR) Part 200) applies to many Federal financial assistance agreements that will include BABA requirements. The general provisions of 2 CFR Part 200 determine the responsible party for the grant funding authority.

For information on SRF program roles and responsibilities, see question 7.6.

At all levels, where fraud, waste, abuse, or any violation of the law is suspected, the Office of Inspector General (OIG) should be contacted immediately. The OIG can be reached at 1-888-546-8740 or [OIG\\_Hotline@epa.gov](mailto:OIG_Hotline@epa.gov). More information can be found at this website: <http://www.epa.gov/oig/hotline.htm>.

- Q5.2: When will the BABA requirements be assessed for compliance? Do assistance recipients need to have waivers for potential non-domestic products before assistance agreements are in place, at the time products are procured or products are incorporated into the project (i.e., used)?
  - A5.2: Compliance is assessed where the domestic product is used (or installed) at the project site. Proper compliance documentation, whether it is a BABA certification letter or a waiver, should accompany a product prior to its “use”, in accordance with Section 70914(a) of IIJA. This may occur prior to assistance agreements being in place but is not necessary. Additionally, communication of BABA requirements through appropriate Terms and Conditions in financial assistance agreements and in project solicitation and contract documents is key in ensuring all parties involved are informed of the requirements for the project before construction is underway.
  
- Q5.3: How can product compliance with the BABA requirements be demonstrated?
  - A5.3: Assistance recipients and their representatives should ensure that the products delivered to the construction site are accompanied by proper documentation that demonstrate compliance with the law and be made available to the funding authority upon request. The documentation may be received and maintained in hard copy, electronically, or could be embedded in construction management software. The use of a signed certification letter for the project is the most direct and effective form of compliance documentation for ensuring products used on site are BABA-compliant prior to their installation; however, other forms of documentation are also acceptable as long as collectively, the following can be demonstrated:
    - (1) Documentation linked to the project. For example, this can be in the form of the project name, project location, contract number, or project number.
    - (2) Documentation linked to the product used on the project. For example, description of product(s) (simple explanation sufficient to identify the product(s)), or an attached (or electronic link to) purchase order, invoice, or bill of lading.
    - (3) Documentation includes statement attesting that the products supplied to the assistance recipient are compliant with BABA requirement. Reference to the Infrastructure Investment and Jobs Act (“IIJA”) or the Bipartisan Infrastructure Law (BIL) are also acceptable. For iron and steel items under BABA, references to the American Iron and Steel (AIS) requirements are also acceptable and reciprocal with BABA for such items.
    - (4) Documentation that manufacturing occurred in the United States, which could include, for example, the location(s) of manufacturing for each manufacturing step that is being certified. It is acceptable for manufactured products to note a single point of manufacturing, documenting that the final point of manufacturing is in the United States. Note that each BABA category may require different determinations for compliance.
    - (5) Signature of company representative (on company letterhead and signature can be electronic). The signatory of the certifying statement affirms their knowledge of the manufacturing processes for the referenced product(s) and attests that the product meets the BABA requirements.

In addition to compliance documentation, assistance recipients or their representatives should also conduct a visual inspection of the product when it arrives to the project site, especially for iron and steel products which are often stamped with the country of origin. (Note: A country of origin stamp alone is not sufficient verification of compliance with BABA and assistance receipts should not rely on it to ensure compliance.)

EPA may develop alternative procedures for demonstrating compliance. Additional project- or program-specific instructions may be developed on a case-by-case basis in order to meet individual circumstances.

- Q5.4: Will EPA provide a form or template for tracking and documenting compliance?
  - A5.4: EPA does not require a specified format for tracking or documenting compliance. Assistance recipients are free to develop any system (from simple to complex software) for tracking items used on the project and the accompanying compliance documentation, e.g., certification letters, applicable waivers, if it helps with implementation and compliance. Elements that may help with keeping track of compliance may include: product description, quantity required/used, product category (i.e., iron and steel, manufactured product, or construction material), status of obtaining certification letter, product cost, and whether the item might qualify as *de minimis*, or qualify under another applicable waiver.
- Q5.5: If a manufacturer claims to comply with the Buy American Act, does it also comply with BABA?
  - A5.5: No. With the exception of the AIS requirements – which EPA interprets to be equivalent to the “iron and steel” requirements under BABA – EPA does not have an interpretation about the comparability of other domestic preference requirements relative to BABA. Any products that are to be certified as compliant with BABA should include a specific reference to the BABA requirements and appropriate attestation from a responsible manufacturing company official. See Question 5.3 for EPA’s recommendations for BABA certification letters.
- Q5.6: How will assistance recipients manage certification letters for hundreds, possibly thousands of products?
  - A5.6: EPA recognizes that the new BABA requirements will cover most products used in typical water and wastewater infrastructure projects, and that the number of items which may require certification at large and/or complex projects may reach several hundred. EPA is concerned about the potential administrative burden that this would place on assistance recipients. EPA recommends that projects with a high number of potentially covered products meet with their funding authority about potential compliance strategies to minimize burden and streamline compliance activity. Assistance recipients should prepare contract bid solicitation documents with a statement for the consulting engineers and construction firms as follows: “By signing payment application and recommending payment, Contractor certifies they have reviewed documentation for all products and materials submitted for payment, and the documentation is sufficient to demonstrate compliance with Build America,

Buy America Act requirements.” In most cases, the assistance recipient’s representatives may assume the responsibility for their clients to conduct due diligence on compliance with applicable domestic preference requirements.

- Q5.7: Who is responsible for documenting the 55 percent content requirement for manufactured products under BABA? What if the final manufacturer cannot trace or verify domestic origin for all components?
  - A5.7: The manufacturer who signs a certification letter is responsible for documenting compliance with any of the three categories of products (iron and steel, manufactured products, or construction materials). For manufactured products, BABA requires that greater than 55 percent of the total cost of all components of the manufactured product be from domestic sources. EPA recommends that the certification letter for manufactured products document whether the item passes the content test in the final product along with a statement attesting to compliance with the BABA requirements for manufactured products.
- Q5.8: How do final product fabricators document compliance when the final step of manufacturing may be simply assembling components?
  - A5.8: It is acceptable, in many cases, especially for highly complex manufactured products that utilize many sub-components, for the final point of assembly to certify without using a “step certification” process. Multiple certifications (i.e., step certifications) or a singular certification can be used for a product, as long as the certifying official is willing to attest to the product’s compliance with BABA requirements at all stages of manufacturing.
- Q5.9: Will Material Test Reports be acceptable in lieu of a BABA certification for iron and steel?
  - A5.9: Material Test Reports (MTRs, commonly referred to as “Mill Certifications” or “Mill Certs”) provide the chemical composition of steel and iron from a mill or foundry. If an MTR accompanies the delivery of steel or iron to a project site with an invoice or bill of lading, EPA will consider it sufficient to demonstrate compliance (equivalent to a certification letter) as long as the MTR includes a manufacturer representative’s signature in addition to the location (city and state) of the mill/foundry. It is common for MTRs to be the first letter in a “step certification” if the product is further fabricated or painted, etc., by another manufacturer.
- Q5.10: Can a manufacturer use a fillable certification letter for products?
  - A5.10: EPA recommends that certifications be signed by representatives of the manufacturing entity. EPA does not oppose manufacturers using forms to internally develop letters within their company, thereby providing signed, non-manipulable certification letters to suppliers, distributors, and/or assistance recipients. A fillable form that can be changed by someone outside of the manufacturer after signature does not demonstrate compliance and may create compliance concerns for the manufacturer or assistance recipient.

- Q5.11: Are product certifications from suppliers and distributors allowed?
  - A5.11: EPA recommends that representatives of product manufacturers certify compliance and discourages suppliers and distributors from creating certification letters. EPA does not rule out the possibility that a third-party certification process, such as a certification by a distributor, may be viable. However, EPA is currently not aware of a system or proposed system that meets the EPA’s recommendations for documentation of product certification.
- Q5.12: How long should assistance recipients keep compliance documentation?
  - A5.12: Assistance recipients should apply recordkeeping requirements for the project according to the procedures dictated by the funding authority. For most EPA grant programs, this is prescribed in the UGG at 2 CFR 200.334-200.338; e.g., the SRF programs require a minimum of three years. Other funding programs may require longer documentation retention periods.

SECTION 6: PROGRAMS WITH AMERICAN IRON AND STEEL REQUIREMENTS

- Q6.1: Does BABA supersede the American Iron and Steel (AIS) Requirements?
  - A6.1: The BABA requirements for items considered “iron and steel” are equivalent to those for covered iron and steel products under the AIS requirements in the Clean Water Act and the Safe Drinking Water Act. These requirements apply to the CWSRF, DWSRF, WIFIA, and Water infrastructure Community Grants. BABA includes a “Savings Provision” (Section 70917(b)) that states that BABA does not affect existing domestic content procurement preferences for infrastructure projects funded by Federal financial assistance programs that meet the requirements of section 70914. EPA views the AIS requirements as meeting the “iron and steel” product requirements of BABA Section 70914, as they both include the key requirement that items made of iron and steel be wholly manufactured in the United States from the point of melting and/or pouring the iron or steel components through final manufacturing step. Because of the “Savings Provision” of Section 70917, the AIS requirements satisfy the “iron and steel” requirements of BABA. For the programs that have AIS requirements, EPA intends to implement BABA requirements the same way for iron and steel items as it has done for AIS products.
- Q6.2: For iron and steel products, does a manufacturer need to demonstrate compliance from initial melting through the finished product?
  - A6.2: For iron and steel products, the BABA requirements are the same as the existing AIS requirements, in that all of the iron and steel in a covered product (that is, the product is comprised of more than 50 percent iron and steel by material cost) must be melted and poured in the United States and all subsequent manufacturing processes (such as grinding, rolling, bending, reheating, and casting) must occur in the United States.

Q6.3: Will EPA apply the same manufacturing standards for BABA iron and steel products as for the American Iron and Steel (AIS) requirements?

- A6.3: Yes. For AIS, EPA did not require raw materials used in the production of steel or iron to be domestically sourced. For BABA, EPA interprets the requirements to be the same. Hence, like AIS, raw materials in the production of iron and steel subject to BABA requirements would not need to be domestically sourced. The key step for both AIS and BABA domestic iron and/or steel production is the melting/pouring (that is, the location of the furnace), which must be in the United States.
- Q6.4: Will the certification process be similar to the process established for the American Iron and Steel requirements?
  - A6.4: EPA expects the certification process for the BABA requirements to be very similar to that established for the AIS requirements. For iron and steel products, the process should remain the same for AIS and BABA. EPA recommends for manufactured products and for construction materials that certification letters include direct reference to the product/material content requirements under BABA, in addition to an affirmative statement verifying that the product meets the BABA requirements.
- Q6.5: Will duplicate certification letters be required for AIS and BABA for iron/steel products?
  - A6.5: No. Compliance with BABA requirements will be sufficient to demonstrate compliance with AIS requirements for iron and steel products. If a project is subject to BABA, the only demonstration of compliance necessary is with the BABA requirements, of which the iron and steel requirements are equivalent to those of the AIS statutory requirements: the iron or steel in a product made primarily or predominantly of iron and steel (comprising more than 50 percent iron and steel by material cost) must be melted and/or poured in the United States and all subsequent manufacturing processes must occur in the United States.

#### SECTION 7: PROGRAM-SPECIFIC ISSUES

- Q7.1.: How do the BABA requirements apply to Community Grants?
  - A7.1: The Community Project Funding/Congressionally Directed Spending grants for the construction of drinking water, wastewater, and stormwater infrastructure and for water quality protection are subject to the requirements specified in the explanatory statement accompanying the Consolidated Appropriations Act (Explanatory Statement for Division G of P.L. 117-13, the Consolidated Appropriations Act of 2022). The explanatory statement asserts: “Applicable Federal requirements that would apply to a Clean Water State Revolving Fund or Drinking Water State Revolving Fund project grant recipient shall apply to a grantee receiving a CPF grant under this section.” Therefore, the federally funded Community Project Funding/Congressionally Directed Spending grants are subject to the same requirements that apply to CWSRF or DWSRF projects, including BABA and AIS requirements. See also A1.2.

- Q7.2: Should SRF projects covered by the BABA SRF Projects Design Planning Adjustment Period Waiver follow the same procedures for demonstrating compliance as outlined for American Iron and Steel requirements?
  - A7.2: Yes. The SRF Design Planning Adjustment Period waiver does not waive the iron and steel requirements under BABA. The SRF programs have existing domestic preference requirements for SRF projects under CWA Section 608 and SDWA Section 1452(a)(4) (AIS requirements) to use iron and steel products that are produced in the United States. Sections 70917(a) and (b) of BIL explain the application of BABA to existing domestic preference requirements. Specifically, the savings provision in Section 70917(b) states that existing domestic preference requirements that meet BABA requirements are not affected by BABA. The statutory AIS requirements were existing at the time BABA became law and satisfy the BABA iron and steel requirements. Therefore, the statutory AIS requirements that have previously applied to SRF-funded projects will continue to do so, and compliance with AIS requirements will satisfy the BABA iron and steel requirements. Demonstration of compliance for iron and steel products will follow the AIS implementation policies for projects subject to the waiver.
- Q7.3: For SRF programs, is BABA considered a federal cross-cutting authority? (i.e., do “equivalency” rules apply?)
  - A7.3: Yes, BABA is considered a federal cross-cutting requirement that applies to SRF assistance equivalent to the federal capitalization grant (i.e., “equivalency” projects). EPA’s SRF regulations at 40 CFR 35.3145 and 35.3575 require states and recipients of SRF funds equivalent to the amount of the federal capitalization grant to comply with federal cross-cutting requirements. Section 70914 of the IIJA, which states when a Buy America preference applies, explains that “none of the funds made available for a Federal financial assistance program for infrastructure...may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States.” Therefore, BABA only applies to projects funded in an amount equivalent to the federal capitalization grant and not to those projects receiving funds in excess of the capitalization grant (i.e., “non-equivalency” projects). (Note: The AIS requirements continue to apply for all SRF projects, including non-equivalency projects, and all WIFIA and Community Grant projects, because equivalency does not apply.)
- Q7.4: Do the BABA requirements apply to Drinking Water State Revolving Fund set-asides?
  - A7.4: Due to requirements related to the deposit of funds in the DWSRF program, almost all of the funds used to conduct set-aside activities are Federal dollars. Therefore, Federal cross-cutting requirements must be applied to all set-aside activities. However, in the case of most set-aside activities, the cross-cutting requirements will not be implicated because of the nature of the activities conducted under the set-asides. Because the BABA requirements only apply to infrastructure, and infrastructure typically is not an eligible set-aside expenditure (with one potential exception being loans for incentive-based source water protection

measures under the Local Assistance and Other State Programs Set-Aside), the BABA requirements will not apply to most set-aside activities.

- Q7.5: What if an SRF project is refinanced using Federal financial assistance on or after May 14, 2022?
  - A7.5: If an SRF project began construction, financed from another funding source, prior to May 14, 2022, but is refinanced through an assistance agreement executed on or after that date, BABA requirements will apply to all construction that occurs on or after May 14, 2022, through completion of construction, unless a waiver applies. There is no retroactive application of the BABA requirements where a refinancing occurs for an SRF project that has completed construction prior to May 14, 2022. (Note: If SRF funding is used for the refinancing, the AIS requirements may still apply depending on the timing of construction.)
- Q7.6: What are the roles and responsibilities for SRF programs for BABA implementation?
  - A7.6: Implementation of the BABA requirements for the State Revolving Fund programs will continue the roles and responsibilities from the successful AIS implementation process.

As with AIS, it is both the assistance recipient's and the state's responsibility to ensure compliance with the BABA requirements. The state is the recipient of a federal capitalization grant and must comply with all grant conditions, including a condition requiring adherence to BABA requirements.

Consequently, states are strongly advised to conduct site visits of projects during construction and review documentation demonstrating the assistance recipient's proof of compliance. In EPA's experience, most states conduct periodic site visits and arrange timely meetings with funded projects. Observed best practices typically include a meeting early in the process (sometimes before bid and usually prior to commencing construction) and at least one project site visit during the construction process. Assistance recipients must maintain documentation of compliance with the BABA requirements, as explained in question 5.3. The documents must be kept by the assistance recipient and should be reviewed by the state during project reviews.

The state's role in the waiver process is to review any waiver requests submitted to the state to ensure that all necessary information has been provided by the assistance recipient prior to forwarding the request to EPA. If a state finds the request lacking, the state should work with the assistance recipient to help obtain complete information. Question 4.1 explains the information needed by EPA to expediently review a waiver request.

In order to implement the BABA requirements, EPA has developed an approach for effective and efficient implementation of the waiver process to allow projects to proceed in a timely manner. The framework described below will allow states, on behalf of the assistance recipients, to apply for waivers of the BABA requirements directly to EPA Headquarters. Only waiver requests received and/or endorsed from states will be considered. Pursuant to BABA, EPA has the responsibility to make findings as to the issuance of waivers to the BABA requirements.

### Step-by-step SRF Waiver Process

The waiver process begins with the assistance recipient. To fulfill the BABA requirements, the assistance recipient must in good faith design the project (where applicable) and solicit bids for construction with American-made iron and steel, manufactured goods, and construction materials. It is essential that the assistance recipient include the BABA terms in any request for proposals or solicitations for bids, and in all contracts (see Appendix 2 for sample construction contract language). The assistance recipient may receive a waiver at any point before, during, or after the bid process, if one or more of three statutory conditions is demonstrated to EPA and approved.

To apply for a project-specific waiver, the assistance recipient should email the request in the form of a Word document (.doc) or editable PDF (.pdf) to the funding program. It is strongly recommended that each state identify a person or persons for BABA communications. The state designee(s) will review the application for the waiver and determine whether the necessary information has been included (Note: More information may be provided in the future regarding what information is required to be included in waiver requests). Once the waiver application is complete, the designee will forward the application to [CWSRFWaiver@epa.gov](mailto:CWSRFWaiver@epa.gov) or [DWSRFWaiver@epa.gov](mailto:DWSRFWaiver@epa.gov).

### Evaluation by EPA

After receiving an application for waiver of the BABA requirements and ensuring sufficient information was provided, EPA will publish the request on its website for 15 days and receive public comment. EPA will then determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver.

In the event that EPA finds that adequate documentation and justification has been submitted, the Administrator may grant a waiver to the assistance recipient. EPA will notify the state designee whether a waiver request has been approved or not approved as soon as such a decision has been made. Granting such a waiver is a four-step process:

1. Research – After receiving an application for a waiver, EPA will perform market research to determine whether the iron, steel, manufactured goods, or construction materials are available domestically.
2. Posting – After research, if no domestic product has been identified, EPA is required to publish the application and all material submitted with the application on EPA's website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment to EPA. The website can be found at: <https://www.epa.gov/cwsrf/build-america-buy-america-baba-waivers-open-public-comment>.
3. Evaluation – After receiving an application for waiver of the BABA requirements, EPA will determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver to determine whether or not to grant the waiver.

3. Signature of waiver approval by the Administrator or another agency official with delegated authority – As soon as the waiver is signed and dated, EPA will notify the State SRF program and post the signed waiver on the Agency’s website. The assistance recipient should keep a copy of the signed waiver in its project files.

(Note: Additional steps may be required in the future regarding the waiver process depending on additional guidance from OMB)

## APPENDIX 1

### **Example Build America, Buy America (BABA) Act Construction Contract Language**

ALL CONSTRUCTION CONTRACTS MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE BABA REQUIREMENTS. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN A PROJECT'S CONSTRUCTION CONTRACT. EPA MAKES NO CLAIMS REGARDING THE LEGALITY OF THIS CLAUSE WITH RESPECT TO STATE OR LOCAL LAW:

The Contractor acknowledges to and for the benefit of the \_\_\_\_\_ (“Owner”) and the \_\_\_\_\_ (the “Funding Authority”) that it understands the goods and services under this Agreement are being funded with federal monies and have statutory requirements commonly known as “Build America, Buy America;” that requires all of the iron and steel, manufactured products, and construction materials used in the project to be produced in the United States (“Build America, Buy America Requirements”) including iron and steel, manufactured products, and construction materials provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and Funding Authority (a) the Contractor has reviewed and understands the Build America, Buy America Requirements, (b) all of the iron and steel, manufactured products, and construction materials used in the project will be and/or have been produced in the United States in a manner that complies with the Build America, Buy America Requirements, unless a waiver of the requirements is approved, and (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 Build America, Buy America Requirements, as may be requested by the Owner or the Funding Authority. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or Funding Authority to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Owner or Funding Authority resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the Funding Authority or any damages owed to the Funding Authority by the Owner). If the Contractor has no direct contractual privity with the Funding Authority, as a lender or awardee to the Owner for the funding of its project, the Owner and the Contractor agree that the Funding Authority is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the Funding Authority.

## APPENDIX 2

### **Example Build America, Buy America (BABA) Act Assistance Agreement Language**

ALL FEDERAL FINANCIAL INFRASTRUCTURE ASSISTANCE AGREEMENTS MUST HAVE A CLAUSE REQUIRING COMPLIANCE WITH THE BABA REQUIREMENTS. THIS IS AN EXAMPLE OF WHAT COULD BE INCLUDED IN AN ASSISTANCE AGREEMENT (E.G., SRF LOAN AGREEMENT). EPA MAKES NO CLAIMS REGARDING THE LEGAL SUFFICIENCY OF THIS CLAUSE WITH RESPECT TO STATE LAW:

Comply with all federal requirements applicable to the assistance received (including those imposed by the Infrastructure Investment and Jobs Act (“IIJA”), Public Law No. 117-58) which the Participant understands includes, but is not limited to, the following requirements: that all of the iron and steel, manufactured products, and construction materials used in the Project are to be produced in the United States (“Build America, Buy America Requirements”) unless (i) the Participant has requested and obtained a waiver from the cognizant Agency<sup>[1]</sup> pertaining to the Project or the Project is otherwise covered by a general applicability waiver; or (ii) all of the contributing Agencies have otherwise advised the Participant in writing that the Build America, Buy America Requirements are not applicable to the Project.

Comply with all record keeping and reporting requirements under all applicable legal authorities, including any reports required by the funding authority (such as EPA and/or a state), such as performance indicators of program deliverables, information on costs and project progress. The Participant understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the applicable legal requirements and this Agreement may result in a default hereunder that results in a repayment of the assistance agreement in advance of the maturity of the Bonds, termination and/or repayment of grants, cooperative agreements, direct assistance or other types of financial assistance, and/or other remedial actions.

<sup>[1]</sup> From OMB Guidance M-22-11: To avoid a need for duplicative waiver requests from entities that receive funding for one infrastructure project through multiple Federal agencies, the Federal agency contributing the greatest amount of Federal funds for the project should be considered the “Cognizant Agency for Made in America” and should take responsibility for coordinating with the other Federal awarding agencies. Such coordination will provide uniform waiver criteria and adjudication processes, minimize duplicative efforts among Federal agencies, and reduce burdens on recipients. The Cognizant Agency for Made in America shall be responsible for consulting with the other Federal awarding agencies, publicizing the proposed joint waiver, and submitting the proposed joint waiver for review to MIAO.



**Center for Drinking Water Quality**  
Drinking Water State Revolving Fund  
Davis-Bacon Labor Standards

All construction projects funded or financed by the Drinking Water State Revolving Fund (DWSRF) are subject to the Davis-Bacon wage rate requirements, including the requirements summarized below. Recipients must include the appropriate information and/or language from this document in its entirety in relevant contract documents.

1. Program Applicability
  - a. Program name: Drinking Water State Revolving Fund
  - b. Statute requiring compliance with Davis-Bacon: Section 1452(a)(5) of the *Safe Drinking Water Act*
  - c. Activities subject to Davis-Bacon: Any project for construction, alteration, or repair carried out in whole or part with assistance made available by the drinking water state revolving loan fund under Section 1452 of the *Safe Drinking Water Act*. This applies to all projects whether equivalency or not.
  - d. The recipient must work with the appropriate authorities to determine wage classifications for the specific project(s) or activities subject to Davis Bacon under any DWSRF grant (or cooperative agreement).
2. Davis-Bacon and Related Acts
  - a. [Davis-Bacon and Related Acts \(DBRA\)](#) is a collection of labor standards provisions administered by the Department of Labor, that are applicable to DWSRF grants involving construction. These labor standards include the:
    - i. *Davis-Bacon Act*, which requires payment of prevailing wage rates for laborers and mechanics on construction contracts in excess of \$2,000;
    - ii. *Copeland "Anti-Kickback" Act*, which prohibits a contractor or subcontractor from inducing an employee into giving up any part of the compensation to which he or she is entitled; and
    - iii. *Contract Work Hours and Safety Standards Act*, which requires overtime wages to be paid for over 40 hours of work per week, under contracts in excess of \$100,000.
3. Recipient Responsibilities When Entering Into and Managing Contracts:
  - a. Solicitation and Contract Requirements:
    - i. Include the correct wage determinations in bid solicitations and contracts: Recipients are responsible for complying with the procedures provided in [29 CFR 1.6](#) when soliciting bids and awarding contracts.
    - ii. Include DBRA requirements in all contracts: Include the following text on all contracts under any DWSRF grant:

"By accepting this contract, the contractor acknowledges and agrees to the terms provided in the [DBRA Requirements for Contractors and Subcontractors Under EPA Grants](#)."
  - b. After Award of Contract:
    - i. Approve and submit requests for additional wages rates: Work with contractors to request additional wage rates if required for contracts under any DWSRF grant, as provided in [29 CFR 5.5\(a\)\(1\)\(iii\)](#).
    - ii. Provide oversight of contractors to ensure compliance with DBRA provisions: Ensure contractor compliance with the terms of the contract, as required by [29 CFR 5.6](#).

For more information about the Rhode Island State Revolving Loan Fund, you can contact the RIDOH Center for Drinking Water Quality by calling 401-222-6867 or emailing [RIDOH.EngineeringDWQ@health.ri.gov](mailto:RIDOH.EngineeringDWQ@health.ri.gov).

4. Recipient Responsibilities When Establishing and Managing Additional Subawards:
  - a. Include DBRA requirements in all subawards (including Loans): Include the following text on all subawards under any DWSRF grant:

“By accepting this award, the EPA subrecipient acknowledges and agrees to the terms and conditions provided in the [DBRA Requirements for EPA Subrecipients](#).”
  - b. Provide oversight to ensure compliance with DBRA provisions: Recipients are responsible for oversight of subrecipients and must ensure subrecipients comply with the requirements in [29 CFR 5.6](#).
5. The contract clauses set forth herein, along with the correct wage determinations, will be considered to be a part of every prime contract covered by Davis-Bacon and Related Acts (see [29 CFR 5.1](#)), and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Department of Labor grants a variance, tolerance, or exemption. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

For more information about the Rhode Island State Revolving Loan Fund, you can contact the RIDOH Center for Drinking Water Quality by calling 401-222-6867 or emailing [RIDOH.EngineeringDWQ@health.ri.gov](mailto:RIDOH.EngineeringDWQ@health.ri.gov).

"General Decision Number: RI20250001 07/25/2025

Superseded General Decision Number: RI20240001

State: Rhode Island

Construction Types: Building, Heavy (Heavy and Marine) and Highway

Counties: Rhode Island Statewide.

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) HEAVY, HIGHWAY AND MARINE 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).

<p>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:</p>	<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 \$17.75 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 2025.</li> </ul>
<p>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:</p>	<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 \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.</li> </ul>

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	01/03/2025
1	03/07/2025
2	03/14/2025
3	05/16/2025
4	06/13/2025
5	07/04/2025
6	07/25/2025

ASBE0006-006 09/01/2024

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (Includes preparation, wetting, stripping, removal scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems).....	\$ 49.91	36.63

ASBE0006-008 09/01/2024

	Rates	Fringes
Asbestos Worker/Insulator Includes application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems.	\$ 49.91	36.63

BOIL0029-001 01/01/2025

	Rates	Fringes
BOILERMAKER.....	\$ 50.62	28.82

BRRIO003-001 06/01/2022

	Rates	Fringes
Bricklayer, Stonemason, Pointer, Caulker & Cleaner.....	\$ 46.86	29.14

BRRIO003-002 09/01/2022

	Rates	Fringes
Marble Setter, Terrazzo Worker & Tile Setter.....	\$ 46.54	30.34

BRRIO003-003 09/01/2022

	Rates	Fringes
Marble, Tile & Terrazzo Finisher.....	\$ 38.78	29.61

CARP0330-001 06/02/2025

Rates Fringes

CARPENTER (Includes Soft Floor Layer).....	\$ 47.88	30.50
Diver Tender.....	\$ 48.68	30.50
DIVER.....	\$ 60.83	30.50
Piledriver.....	\$ 41.53	29.35
WELDER.....	\$ 48.68	30.50

FOOTNOTES:

When not diving or tending the diver, the diver and diver tender shall receive the piledriver rate. Diver tenders shall receive \$1.00 per hour above the pile driver rate when tending the diver.

Work on free-standing stacks, concrete silos & public utility electrical power houses, which are over 35 ft. in height when constructed: \$.50 per hour additional.

Work on exterior concrete shear wall gang forms, 45 ft. or more above ground elevation or on setback: \$.50 per hour additional.

The designated piledriver, known as the ""monkey"": \$1.00 per hour additional.

-----  
 CARP1121-002 01/06/2025

	Rates	Fringes
MILLWRIGHT.....	\$ 45.72	31.50

-----  
 \* ELEC0099-002 06/01/2025

	Rates	Fringes
ELECTRICIAN.....	\$ 56.11	44.10%
Teledata System Installer.....	\$ 42.09	10.45%+15.31

FOOTNOTES:

Work of a hazardous nature, or where the work height is 30 ft. or more from the floor, except when working OSHA-approved lifts: 20% per hour additional.

Work in tunnels below ground level in combined sewer outfall: 20% per hour additional.

-----  
 ELEV0039-001 01/01/2025

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 64.52	38.435+a+b

FOOTNOTES:

a. PAID HOLIDAYS: New Years Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

b. Employer contributes 8% basic hourly rate for 5 years or more of service of 6% basic hourly rate for 6 months to 5 years of service as vacation pay credit.

-----  
 \* ENGI0057-001 06/01/2025

	Rates	Fringes
Operating Engineer: (power plants, sewer treatment plants, pumping stations, tunnels, caissons, piers, docks, bridges, wind turbines, subterranean & other marine and heavy construction work)		
GROUP 1.....	\$ 50.30	29.70
GROUP 2.....	\$ 48.30	29.70
GROUP 3.....	\$ 43.92	29.70
GROUP 4.....	\$ 41.07	29.70
GROUP 5.....	\$ 47.35	29.70
GROUP 6.....	\$ 38.15	29.70
GROUP 7.....	\$ 32.15	29.70
GROUP 8.....	\$ 44.00	29.70
GROUP 9.....	\$ 47.92	29.70

a. BOOM LENGTHS, INCLUDING JIBS:

- 150 feet and over + \$ 2.00
- 180 feet and over + \$ 3.00
- 210 feet and over + \$ 4.00
- 240 feet and over + \$ 5.00
- 270 feet and over + \$ 7.00
- 300 feet and over + \$ 8.00
- 350 feet and over + \$ 9.00
- 400 feet and over + \$10.00

a. PAID HOLIDAYS:

New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

a. FOOTNOTES:

Hazmat work: \$2.00 per hour additional.  
 Tunnel/Shaft work: \$5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks

GROUP 2: Digging machine, Ross Carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, graders, front end loader (3 yds. and over), vibratory hammer & vacuum truck, roadheaders, forklifts, economobile type equipment, tunnel boring machines, concrete pump and on site concrete plants.

GROUP 3: Oilers on cranes.

GROUP 4: Oiler on crawler backhoe.

GROUP 5: Bulldozer, bobcats, skid steer loader, tractor, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile-powered sweeper (3-yd. capacity), 8-ft. sweeper minimum 65 HP).

GROUP 6: Well-point installation crew.

GROUP 7: Utility Engineers and Signal Persons

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator and light plant, gas and electric driven pump and air compressor.

GROUP 9: Boat & tug operator.

-----  
ENGI0057-003 06/01/2025

BUILDING CONSTRUCTION

	Rates	Fringes
Power Equipment Operator		
GROUP 1.....	\$ 49.57	29.50
GROUP 2.....	\$ 47.57	29.50
GROUP 3.....	\$ 47.35	29.50
GROUP 4.....	\$ 43.35	29.50
GROUP 5.....	\$ 40.50	29.50
GROUP 6.....	\$ 46.65	29.50
GROUP 7.....	\$ 46.65	29.50
GROUP 8.....	\$ 43.54	29.50

a. BOOM LENGTHS, INCLUDING JIBS:

- 150 ft. and over: + \$ 2.00
- 180 ft. and over: + \$ 3.00
- 210 ft. and over: + \$ 4.00
- 240 ft. and over: + \$ 5.00
- 270 ft. and over: + \$ 7.00
- 300 ft. and over: + \$ 8.00
- 350 ft. and over: + \$ 9.00
- 400 ft. and over: + \$10.00

a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

- a. FOOTNOTE: Hazmat work: \$2.00 per hour additional.  
Tunnel/Shaft work: \$5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks.

GROUP 2: Digging machine, Ross carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, front end loader (3 yds. and over), vibratory hammer and vacuum truck

GROUP 3: Telehandler equipment, forklift, concrete pump & on-site concrete plant

GROUP 4: Fireman & oiler on cranes

GROUP 5: Oiler on crawler backhoe

GROUP 6: Bulldozer, skid steer loaders, bobcats, tractor, grader, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile powered sweeper (3 yds. capacity), 8-ft. sweeper (minimum 65 hp)

GROUP 7: Well point installation crew

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator for light plant, gas and electric driven pump & air compressor

-----  
ENGI0057-005 05/01/2025

Rates Fringes

Power Equipment Operator  
(highway construction projects; water and sewerline projects which are incidental to highway construction projects; and bridge projects that do not span water)

GROUP 1.....	\$ 45.45	29.70
GROUP 2.....	\$ 43.45	29.70
GROUP 3.....	\$ 38.15	29.70
GROUP 4.....	\$ 24.75	29.70
GROUP 5.....	\$ 32.15	29.70
GROUP 6.....	\$ 38.73	29.70
GROUP 7.....	\$ 42.43	29.70
GROUP 8.....	\$ 37.70	29.70

a. FOOTNOTE: a. Any employee who works three days in the week in which a holiday falls shall be paid for the holiday.

b. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Cranes, pile drivers, lighters, boom trucks, hoists, derricks

GROUP 2: Digging machines, excavators, locomotives, John Henry's, directional drilling machines, cold planers, reclaimers, pavers, spreaders, graders, front-end loaders (3yds & over), vacuum truck, drill/boring machine operators, vermeer saw, water blaster, hydraulic-demolition robot, Ross Carriers, concrete pump operators, asphalt/material transfer machines, rotating telehandlers, SPMT type equipment

GROUP 3: Wellpoint installation and drill/boring machine assistants

GROUP 4: Utility engineers

GROUP 5: Signal persons

GROUP 6: Oilers on cranes and deckhands

GROUP 7: Combination loader / backhoes, front-end loaders (less than 3 yds.), forklift, bulldozers, scrapers, boats, rollers, skid steer loaders (regardless of attachments),

street sweepers, mechanics, welders, operators in materials yards, shops and garages

GROUP 8: Gas and electric drive heaters, concrete mixers, light plants, welding machines, pumps and compressors

-----  
IRON0037-001 03/16/2025

	Rates	Fringes
IRONWORKER.....	\$ 42.58	32.98

-----  
LABO0271-001 12/03/2023

BUILDING CONSTRUCTION

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 37.00	26.90
GROUP 2.....	\$ 37.00	26.90
GROUP 3.....	\$ 37.00	26.90
GROUP 4.....	\$ 37.00	26.90
GROUP 5.....	\$ 39.00	26.90

LABORERS CLASSIFICATIONS

GROUP 1: Laborer, Carpenter Tender, Mason Tender, Cement Finisher Tender, Scaffold Erector, Wrecking Laborer, Asbestos Removal [Non-Mechanical Systems]

GROUP 2: Asphalt Raker, Adzemen, Pipe Trench Bracer, Demolition Burner, Chain Saw Operator, Fence & Guard Rail Erector, Setter of Metal Forms for Roadways, Mortar Mixer, Pipelayer, Riprap & Dry Stonewall Builder, Highway Stone Spreader, Pneumatic Tool Operator, Wagon Drill Operator, Tree Trimmer, Barco-Type Jumping Tamper, Mechanical Grinder Operator

GROUP 3: Pre-Cast Floor & Roof Plank Erectors

GROUP 4: Air Track Operator, Hydraulic & Similar Self-Powered Drill, Block Paver, Rammer, Curb Setter, Powderman & Blaster

GROUP 5: Toxic Waste Remover

LABORERS CLASSIFICATIONS

GROUP 1: Laborer, Carpenter Tender, Mason Tender, Cement Finisher Tender, Scaffold Erector, Wrecking Laborer, Asbestos Removal [Non-Mechanical Systems]

GROUP 2: Asphalt Raker, Adzemen, Pipe Trench Bracer, Demolition Burner, Chain Saw Operator, Fence & Guard Rail Erector, Setter of Metal Forms for Roadways, Mortar Mixer, Pipelayer, Riprap & Dry Stonewall Builder, Highway Stone Spreader, Pneumatic Tool Operator, Wagon Drill Operator, Tree Trimmer, Barco-Type Jumping Tamper, Mechanical Grinder Operator

GROUP 3: Pre-Cast Floor & Roof Plank Erectors

GROUP 4: Air Track Operator, Hydraulic & Similar Self-Powered Drill, Block Paver, Rammer, Curb Setter, Powderman & Blaster

GROUP 5: Toxic Waste Remover

-----  
 LAB00271-002 11/27/2022

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
LABORER		
COMPRESSED AIR		
Group 1.....	\$ 55.40	24.15
Group 2.....	\$ 52.93	24.15
Group 3.....	\$ 42.45	24.15
FREE AIR		
Group 1.....	\$ 46.00	24.15
Group 2.....	\$ 45.00	24.15
Group 3.....	\$ 42.45	24.15
LABORER		
Group 1.....	\$ 33.05	24.05
Group 2.....	\$ 35.75	24.85
Group 3.....	\$ 36.50	24.85
Group 4.....	\$ 29.00	24.85
Group 5.....	\$ 37.50	24.85
OPEN AIR CAISSON, UNDERPINNING WORK AND BORING CREW		
Bottom Man.....	\$ 41.50	24.15
Top Man & Laborer.....	\$ 35.60	24.15
TEST BORING		
Driller.....	\$ 41.95	24.15
Laborer.....	\$ 41.95	24.15
LABORER CLASSIFICATIONS		

GROUP 1: Laborer; Carpenter tender; Cement finisher tender; Wrecking laborer; Asbestos removers [non-mechanical systems]; Plant laborer; Driller in quarries

GROUP 2: Adzeperson; Asphalt raker; Barcotype jumping tamper; Chain saw operators; Concrete and power buggy operator; Concrete saw operator; Demolition burner; Fence and guard rail erector; Highway stone spreader; Laser beam operator; Mechanical grinder operator; Mason tender; Mortar mixer; Pneumatic tool operator; Riprap and dry stonewall builder; Scaffold erector; Setter of metal forms for roadways; Wagon drill operator; Wood chipper operator; Pipelayer; Pipe trench bracer

GROUP 3: Air track drill operator; Hydraulic and similar powered drills; Brick paver; Block paver; Rammer and curb setter; Powderperson and blaster

GROUP 4: Flagger & signaler

GROUP 5: Toxic waste remover

LABORER - COMPRESSED AIR CLASSIFICATIONS

GROUP 1: Mucking machine operator, tunnel laborer, brake person, track person, miner, grout person, lock tender, gauge tender, miner: motor person & all others in compressed air

GROUP 2: Change house attendant, powder watchperson, top person on iron

GROUP 3: Hazardous waste work within the ""HOT"" zone

## LABORER - FREE AIR CLASSIFICATIONS

GROUP 1: Grout person - pumps, brake person, track person, form mover & stripper (wood & steel), shaft laborer, laborer topside, outside motorperson, miner, conveyor operator, miner welder, heading motorperson, erecting operator, mucking machine operator, nozzle person, rodperson, safety miner, shaft & tunnel, steel & rodperson, mole nipper, concrete worker, form erector (wood, steel and all accessories), cement finisher (this type of work only), top signal person, bottom person (when heading is 50' from shaft), burner, shield operator and TBM operator

GROUP 2: Change house attendant, powder watchperson

GROUP 3: Hazardous waste work within the ""HOT"" zone

## LABORER CLASSIFICATIONS

GROUP 1: Laborer; Carpenter tender; Cement finisher tender; Wrecking laborer; Asbestos removers [non-mechanical systems]; Plant laborer; Driller in quarries

GROUP 2: Adzeperson; Asphalt raker; Barcotype jumping tamper; Chain saw operators; Concrete and power buggy operator; Concrete saw operator; Demolition burner; Fence and guard rail erector; Highway stone spreader; Laser beam operator; Mechanical grinder operator; Mason tender; Mortar mixer; Pneumatic tool operator; Riprap and dry stonewall builder; Scaffold erector; Setter of metal forms for roadways; Wagon drill operator; Wood chipper operator; Pipelayer; Pipe trench bracer

GROUP 3: Air track drill operator; Hydraulic and similar powered drills; Brick paver; Block paver; Rammer and curb setter; Powderperson and blaster

GROUP 4: Flagger & signaler

GROUP 5: Toxic waste remover

## LABORER - COMPRESSED AIR CLASSIFICATIONS

GROUP 1: Mucking machine operator, tunnel laborer, brake person, track person, miner, grout person, lock tender, gauge tender, miner: motor person & all others in compressed air

GROUP 2: Change house attendant, powder watchperson, top person on iron

GROUP 3: Hazardous waste work within the ""HOT"" zone

## LABORER - FREE AIR CLASSIFICATIONS

GROUP 1: Grout person - pumps, brake person, track person, form mover & stripper (wood & steel), shaft laborer, laborer topside, outside motorperson, miner, conveyor operator, miner welder, heading motorperson, erecting operator, mucking machine operator, nozzle person, rodperson, safety miner, shaft & tunnel, steel & rodperson, mole nipper, concrete worker, form erector (wood, steel and all accessories), cement finisher (this type of work only),

top signal person, bottom person (when heading is 50' from shaft), burner, shield operator and TBM operator

GROUP 2: Change house attendant, powder watchperson

GROUP 3: Hazardous waste work within the ""HOT"" zone

-----  
PAIN0011-005 06/01/2024

	Rates	Fringes
PAINTER		
Brush and Roller.....	\$ 38.07	25.80
Epoxy, Tanks, Towers, Swing Stage & Structural Steel.....	\$ 40.07	25.80
Spray, Sand & Water Blasting.....	\$ 41.07	25.80
Taper.....	\$ 38.82	25.80
Wall Coverer.....	\$ 38.57	25.80

-----  
PAIN0011-006 06/01/2024

	Rates	Fringes
GLAZIER.....	\$ 41.63	26.15

FOOTNOTES:

SWING STAGE: \$1.00 per hour additional.

PAID HOLIDAYS: Labor Day & Christmas Day.

-----  
PAIN0011-011 06/01/2024

	Rates	Fringes
Painter (Bridge Work).....	\$ 57.85	26.40

-----  
PAIN0035-008 06/01/2011

	Rates	Fringes
Sign Painter.....	\$ 24.79	13.72

-----  
PLAS0040-001 01/01/2025

BUILDING CONSTRUCTION

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 44.75	29.10

FOOTNOTE: Cement Mason: Work on free swinging scaffolds under 3 planks width and which is 20 or more feet above ground and any offset structure: \$.30 per hour additional.

-----  
PLAS0040-002 01/01/2025

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
--	-------	---------

CEMENT MASON/CONCRETE FINISHER...\$ 44.75 29.10  
-----

PLAS0040-003 01/01/2025

Rates Fringes

PLASTERER.....\$ 45.52 29.43  
-----

PLUM0051-002 08/26/2024

Rates Fringes

Plumbers and Pipefitters.....\$ 52.49 33.60  
-----

\* ROOF0033-004 06/01/2025

Rates Fringes

ROOFER.....\$ 46.49 31.44  
-----

SFRI0669-001 01/01/2025

Rates Fringes

SPRINKLER FITTER.....\$ 49.98 33.44  
-----

SHEE0017-002 12/01/2024

Rates Fringes

Sheet Metal Worker.....\$ 43.69 41.14  
-----

TEAM0251-001 05/01/2025

HEAVY AND HIGHWAY CONSTRUCTION

Rates Fringes

TRUCK DRIVER

GROUP 1.....	\$ 31.86	34.51+a+b
GROUP 2.....	\$ 32.01	34.51+a+b
GROUP 3.....	\$ 32.06	34.51+a+b
GROUP 4.....	\$ 32.11	34.51+a+b
GROUP 5.....	\$ 32.21	34.51+a+b
GROUP 6.....	\$ 32.61	34.51+a+b
GROUP 7.....	\$ 32.81	34.51+a+b
GROUP 8.....	\$ 32.31	34.51+a+b
GROUP 9.....	\$ 32.56	34.51+a+b
GROUP 10.....	\$ 32.36	34.51+a+b

FOOTNOTES:

A. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, plus Presidents' Day, Columbus Day, Veteran's Day & V-J Day, providing the employee has worked at least one day in the calendar week in which the holiday falls.

B. Employee who has been on the payroll for 1 year or more but less than 5 years and has worked 150 Days during the last year of employment shall receive 1 week's paid vacation; 5 to 10 years - 2 weeks' paid vacation; 10 or more years - 3 week's paid vacation.

C. Employees on the seniority list shall be paid a one hundred dollar (\$100.00) bonus for every four hundred (400) hours worked, up to a maximum of five hundred dollars (\$500.00)

All drivers working on a defined hazard material job site shall be paid a premium of \$2.00 per hour over applicable rate.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Pick-up trucks, station wagons, & panel trucks

GROUP 2: Two-axle on low beds

GROUP 3: Two-axle dump truck

GROUP 4: Three-axle dump truck

GROUP 5: Four- and five-axle equipment

GROUP 6: Low-bed or boom trailer.

GROUP 7: Trailers when used on a double hook up (pulling 2 trailers)

GROUP 8: Special earth-moving equipment, under 35 tons

GROUP 9: Special earth-moving equipment, 35 tons or over

GROUP 10: Tractor trailer

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

=====  
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)).  
-----

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

#### Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

#### Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

#### Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey

is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

#### State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

---

#### WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to [BCWD-Office@dol.gov](mailto:BCWD-Office@dol.gov) or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to [dba.reconsideration@dol.gov](mailto:dba.reconsideration@dol.gov) or by mail 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 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.

=====

END OF GENERAL DECISION"

**PROJECT FUNDED BY**

**President Joe Biden's**

**Bipartisan**

**Infrastructure Law**

---

---

**INVESTING IN  
AMERICA**

---

---



## Variations and Usage

There is one approved mark associated with the Investing In America logo. To preserve the integrity of the Investing In America logo mark, make sure to apply them correctly. Altering, distorting, or recreating the 'marks' in any way weakens the power of the image and what it represents. Layout and design of signs and communication materials will vary, so care must be taken when applying the logo mark.

## Primary Logo Mark

---

---




# INVESTING IN AMERICA

---

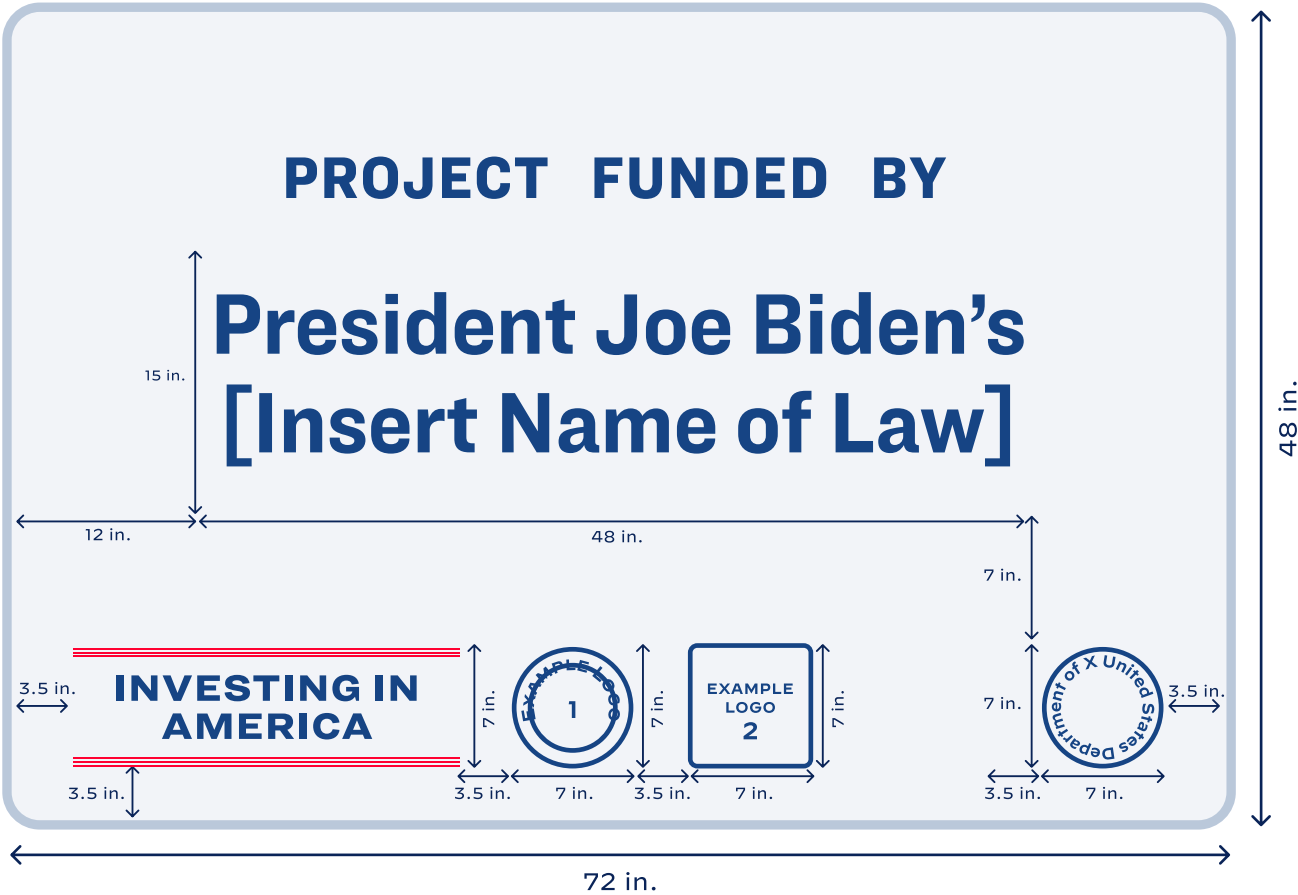
---

## Colors

The colors, graphics, and fonts used should conform to graphic standards.

COLOR	CMYK	RGB	HEX	PMS
 <b>Blue</b>	83, 48, 0, 48	22 / 68 / 132	#164484	PMS 7687 C
 <b>Red</b>	0, 100, 81, 0	255 / 0 / 49	#FF0031	PMS 185 C
 <b>White</b>	2, 2, 0, 3	242 / 244 / 248	#F2F4F8	Bright White

# Investing In America General Guidelines for Logo Applications



# EPA LOGO & SEAL SPECIFICATIONS FOR SIGNAGE PRODUCED BY EPA ASSISTANCE AGREEMENT RECIPIENTS

EPA's logo is a two-leaved flower, without stem, accompanied by the Agency's initials to the right. The EPA logo is the primary identifier for use on construction grant signage. Assistance agreement recipients are not required to receive EPA approval to use the EPA logo when used in accordance with the terms and conditions of their assistance agreement award.

The official seal of EPA is circular and is comprised of the two-leaved flower, with stem, encircled by the title UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. The EPA seal may be used only when official comparable seals are used and the recipient has received prior written EPA approval.

It is important that the EPA logo and seal always be reproduced with consistent high quality. The seal and logo must remain intact and unchanged (for example, don't use the flower from the seal by itself). The logo and seal may only be displayed using either the standard color scheme or a single color that complements the background where it appears.

## COLOR AND SPACING

- The entire logo and seal must appear in black, gray, or any uniform color or knock out white on a dark background. The flower and text may not be different colors. The flower itself may not contain more than one color. The seal can be monotone or full color, based on the rest of the seals that it's placed with.
- The relationship between the flower portion of the logo and Helvetica type should never be shifted or adjusted.



PMS 362



PMS 660



Process Black at 70%



Process Black 100%



Knock out on a dark color

## PREFERRED USE

Use the preferred presentation of the logo on products that do not have enough space for the full logo with text. It may also be used in the presence of other logos.



## SIZE AND LOGO WITH OTHER LOGOS

It's important that all parts of the EPA logo be readable. The EPA logo should not be reproduced at sizes any smaller than 1.0" height on a sign. There are no maximum size restrictions as long as the clear space requirements are met. The logo should be made the same relative size as the other logos on the signage.



## SIZE AND SEAL WITH OTHER SEALS

When there are multiple state or Federal seals/circular logos, the use of the EPA seal is appropriate with prior written EPA approval. The EPA seal should be the same size as the seals that accompany it and should be a minimum of 3 inches in height.



## IMPROPER LOGO USAGE





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF WATER

**MEMORANDUM**

**SUBJECT:** Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment in the SRF Programs

**FROM:** Kiri Anderer, P.E., Acting Associate Branch Chief  
Infrastructure Branch, OGWDW

Michael Deane, Branch Chief  
State Revolving Fund Branch, OWM

**TO:** SRF Branch Chiefs  
Regions 1-10

Effective August 13, 2020, recipients and subrecipients of EPA funded assistance agreements, including borrowers under EPA funded revolving loan funds, must comply with regulations at [2 CFR 200.216](#), *Prohibition on certain telecommunication and video surveillance services or equipment*, implementing section 889 of [Public Law 115-232](#). The regulation prohibits the use of Federal funds to procure (enter into, extend, or renew contracts) or obtain equipment, systems, or services that use “covered telecommunications equipment or services” identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system. Prohibitions extend to the use of Federal funds by recipients and subrecipients to enter into a contract with an entity that “uses any equipment, system, or service that uses covered telecommunications equipment or services” as a substantial or essential component of any system, or as critical technology as part of any system. Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the [System for Award Management](#) exclusion list.

As described in section 889 of Public Law 115-232, covered telecommunications equipment or services includes:

- Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Telecommunications or video surveillance services provided by such entities or using such equipment.

- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

### **Applicability in the State Revolving Fund (SRF) Programs**

Clean Water and Drinking Water SRF (CWSRF and DWSRF) programs may not expend equivalency funds for these products on or after August 13, 2020. States must ensure that equivalency assistance agreements include the telecommunications prohibition condition [provided by EPA's Office of Grants and Debarment](#) (OGD) in OGD's most recent EPA General Terms and Conditions. The condition must also be in construction contracts associated with equivalency assistance agreements.

There is no exhaustive list of components and services that fall under the prohibition. State SRF managers and local assistance recipients should exercise due diligence and be particularly mindful of project components with internet or cellular connections. For example, recipients should be mindful of automatic meter reading (AMR) technology and advanced metering infrastructure (AMI), instrumentation control systems (e.g. process control systems, distributed control systems and programmable logic controls), and security cameras and other electronic security measures to ensure that those items are procured from a non-excluded entity. Items included in the prohibition are not eligible SRF costs, and the SRF programs cannot reimburse borrowers for these costs.

The prohibition also applies to the CWSRF administrative funds (if states are billing those costs to the federal CWSRF capitalization grant) and the four DWSRF set-asides. States should be mindful of items such as cell phones, computers, and mobile WiFi routers or hotspots funded by those accounts.

If you have questions on the implementation of this grant condition, please contact Michael Deane at [Deane.Michael@epa.gov](mailto:Deane.Michael@epa.gov) or Kiri Anderer at [Anderer.Kirsten@epa.gov](mailto:Anderer.Kirsten@epa.gov).



## Rhode Island Department of Health Center for Drinking Water Quality

### Drinking Water State Revolving Fund Program Relevant Federal and State Laws

#### A. Federal

- 1) Equal Employment Opportunity and Affirmative Action (Executive Order 11246)
  - i) OFCCP fact sheet.
  - ii) Equal Opportunity Clause and the Standard Federal Equal Employment Specifications.
  - iii) Notice of Non-Discrimination in Employment.
- 2) Non-discrimination in employment notice.
- 3) Assurance of compliance with Title VI of the Civil Rights Act of 1964 and Section 13 of the FWPCA Amendments of 1972 (EPA form 4700-1).
- 4) Affirmative steps for soliciting MBE/WBE (40 CFR 31.36(e))

Applicable cross-cutting Federal authorities for projects funded through SRF programs are made available at [http://water.epa.gov/grants\\_funding/dwsrf/xcuts.cfm](http://water.epa.gov/grants_funding/dwsrf/xcuts.cfm). Additional information is provided in the United States Environmental Protection Agency's cross-cutting handbook available at <https://www.epa.gov/sites/production/files/2015-08/documents/crosscutterhandbook.pdf>.

#### B. State of Rhode Island

- 1) RIGL 37-2.1, Domestic Steel
- 2) RIGL 37-12, Contractors Bonds
- 3) RIGL 37-12.1, Substitution of Security for Retained Earnings of Architects and Engineers.
- 4) RIGL 37-13, Labor and Payment of Debts by Contractors
  - i) Prevailing Wage Rates
- 5) RIGL 37-14.1, Minority Business Enterprise
  - i) Regulations Governing Participation by Minority Business Enterprises in State Funded and Directed Public Construction Projects, Construction Contracts and Procurement Contracts Goods and Services.
- 6) RIGL 37-16, Public Works Arbitration
- 7) RIGL 45-55, Award of Municipal Contracts

**NOTE:** This package is prepared by DOH as a service of the DWSRF program. While every attempt at accuracy has been made, these are not certified true copies of the laws presented. **The responsibility for compliance with all applicable provisions of Federal and State laws and regulations relating to the bidding, award, and performance of contracts is the applicant's and the bidder's.** Certified true and complete copies of any Rhode Island laws and regulations may be obtained from the Office of the Secretary of State.

# Employment Standards Administration Office of Federal Contract Compliance Programs

## Fact Sheet EXECUTIVE ORDER 11246

EEO and Affirmative Action Guidelines for Federal Contractors Regarding Race, Color, Gender, Religion, and National Origin.

### **BASIC PROVISIONS**

Since 1965, the U.S. Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) has been committed to ensuring that Government contractors comply with the equal employment opportunity (EEO) and the affirmative action provisions of their contracts.

OFCCP administers and enforces Executive Order 11246, as amended, which prohibits federal contractors and federally-assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin.

The Executive Order also requires Government contractors to take affirmative action to insure that equal opportunity is provided in all aspects of their employment.

### **AFFIRMATIVE ACTION REQUIREMENTS**

Each Government contractor with 50 or more employees and \$50,000 or more in government contracts is required to develop a written affirmative action program (AAP) for each of its establishments.

A written affirmative action program helps the contractor identify and analyze potential problems in the participation and utilization of women and minorities in the contractor's workforce.

If there are problems, the contractor will specify in its AAP the specific procedures it will follow and the good faith efforts it will make to provide equal employment opportunity.

Expanded efforts in outreach, recruitment, training and other areas are some of the affirmative steps contractors can take to help members of the protected groups compete for jobs on equal footing with other applicants and employees.

Affirmative action is not preferential treatment. It does not mean that unqualified persons should be hired or promoted over other people. What affirmative action does mean is that positive steps must be taken to ensure equal employment opportunity for traditionally disadvantaged groups.

### **ENFORCEMENT AND COMPLIANCE**

#### **Compliance Reviews**

OFCCP conducts compliance reviews to investigate the employment practices of Government contractors. During a compliance review, a compliance officer examines the contractor's affirmative action program; checks personnel, payroll, and other employment records; interviews employees and company officials; and investigates virtually all aspects of employment in the company.

The investigator also checks to see whether the contractor is making special efforts to achieve equal opportunity through affirmative action. If problems are discovered, OFCCP will recommend corrective action and suggest ways to achieve equal employment opportunity.

#### **Complaint Investigations**

Individuals may file complaints if they believe they have been discriminated against by federal contractors or subcontractors. Complaints also may be filed by organizations on behalf of the person or persons affected.

Complaints must be filed within 180 days from the date of the alleged discrimination, although filing time can be extended for a good reason.

If a complaint filed under Executive Order 11246 involves discrimination against only one person, OFCCP will normally refer it to the EEOC. Cases involving groups of people or indicating patterns of discrimination are generally investigated and resolved by OFCCP. Complaints may be filed directly with any of OFCCP's regional or district offices throughout the country, or with OFCCP in Washington, D.C.

### **Compliance Assistance**

To help contractors understand their contractual obligations for EEO and affirmative action, OFCCP provides technical assistance. District office staff offers guidance to contractors on how to develop an affirmative program through company seminars, training programs held in conjunction with industry liaison groups, and one-on-one consultations on affirmative action practices and procedures.

### **Enforcing Contract Compliance**

When a compliance review discloses problems, OFCCP attempts to work with the contractor, often entering into a conciliation agreement. A conciliation agreement may include back pay, job offers, seniority credit, promotions or other forms of relief for victims of discrimination. It may also involve new training programs, special recruitment efforts, or other affirmative action measures.

When conciliation efforts are unsuccessful, OFCCP refers the case to the Office of the Solicitor for enforcement through administrative enforcement proceedings. A contractor cited for violating EEO and affirmative action requirements may have a formal hearing before an administrative law judge.

If conciliation is not reached before or after the hearing, sanctions may be imposed. For example, a contractor could lose its government contracts or subcontracts or be debarred, i.e., declared ineligible for any future government contracts.

### **Further Information**

For more information about contract compliance, filing complaints, or compliance assistance, contact any of OFCCP's regional or district offices. All offices are listed in telephone directories under U.S. Department of Labor, Employment Standards Administration, Office of Federal Contract Compliance Programs.

# EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION

Executive Order 11246  
(Excerpts from 41 CFR 60 Parts 1 and 4)

## 41 CFR 60-1.4 - Equal opportunity clause

(b) Federally assisted construction contracts. Except as otherwise provided, each administering agency shall require the inclusion of the following language as a condition of any grant, contract, loan, insurance, or guarantee involving federally assisted construction which is not exempt from the requirements of the equal opportunity clause:

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following *equal opportunity clause*:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause. Such action shall include but not be limited to the following:
- (2) Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will

permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

(c) *Subcontracts.* Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.

(d) *Incorporation of the equal opportunity clause by reference.* The equal opportunity clause may be incorporated by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Director may designate.

(e) *Incorporation by operation of the order.* 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 in such contracts and whether or not the contract between the agency and the contractor is written.

(f) Adaptation of language. Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings.

## **41 CFR 60-4.3 - Equal opportunity clauses**

(a) The equal opportunity clause published at 41 CFR 60-1.4(a) of this chapter is required to be included in, and is part of, all nonexempt Federal contracts and subcontracts, including construction contracts and subcontracts. The equal opportunity clause published at 41 CFR 60-1.4(b) is required to be included in, and is a part of, all nonexempt federally assisted construction contracts and subcontracts. 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 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.

### *Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)*

1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
  - d. "Minority" includes:
    - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. 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 \$10,000 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.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown 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 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.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 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. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. 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.
6. 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.
7. The Contractor shall take specific affirmative actions 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 when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' 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 therefor, 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 area 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 7b 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 onsite 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

- serving 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 work force.
  - 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 classifications, 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 under these specifications are being carried out.
  - 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 supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a 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 7a through p of these 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
9. 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 Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. 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.
13. 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 7 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 60-4.8.

14. 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.

15. 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).

(b) The notice set forth in 41 CFR 60-4.2 and the specifications set forth in 41 CFR 60-4.3 replace the New Form for Federal Equal Employment Opportunity Bid Conditions for Federal and Federally Assisted Construction published at 41 FR 32482 and commonly known as the Model Federal EEO Bid Conditions, and the New Form shall not be used after the regulations in 41 CFR Part 60-4 become effective.

[43 FR 49254, Oct. 20, 1978; 43 FR 51401, Nov. 3, 1978, as amended at 45 FR 65978, Oct. 3, 1980]

**NOTICE TO LABOR UNIONS OR OTHER ORGANIZATIONS OF WORKERS**

**NON-DISCRIMINATION IN EMPLOYMENT**

TO: \_\_\_\_\_  
(Name of Union or Organization of Workers)

The undersigned currently holds contract(s) with \_\_\_\_\_  
(Name of Applicant)

involving funds or credit of the U.S. Government of (a) subcontract(s) with a prime contractor holding such contract(s).

You are advised that under the provisions of the above contract(s) or subcontract(s) and in accordance with Executive Order 11246, dated September 24, 1965, the undersigned is obliged not to discriminate against any employee or applicant for employment because of race, age, handicap, veteran status, color, creed, or national origin. This obligation not to discriminate in employment includes, but is not limited to, the following:

**HIRING, PLACEMENT, UPGRADING, TRANSFER, OR DEMOTION,  
RECRUITMENT, ADVERTISING, OR SOLICITATION FOR  
EMPLOYMENT TRAINING DURING EMPLOYMENT, RATES OF PAY  
OR OTHER FORMS OF COMPENSATION, SELECTION FOR TRAINING  
INCLUDING APPRENTICESHIP, LAYOFF, OR TERMINATION.**

This notice is furnished you pursuant to the provisions of the above contract(s) or subcontract(s) and Executive Order 11246.

**COPIES OF THIS NOTICE WILL BE POSTED BY THE UNDERSIGNED IN CONSPICUOUS PLACES AVAILABLE TO EMPLOYEES OR APPLICANTS FOR EMPLOYMENT.**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Contractor or Subcontractor)

\_\_\_\_\_  
(Date)



# **CONTRACTING WITH SMALL AND MINORITY FIRMS, WOMEN'S BUSINESS ENTERPRISE**

## **40 CFR 31.36(e)**

40 CFR 31.36(e) – Contracting with small and minority firms, women's business enterprise and labor surplus area firms.

(1) The grantee and sub-grantee will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

- (i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (ii) Assuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
- (iii) Dividing the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- (v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
- (vi) Requiring the prime contractor, if subcontracts are to be let, to take affirmative steps listed in paragraphs (e)(2)(i) through (v) of this section.

# TITLE 37

## CHAPTER 2.1 DOMESTIC STEEL

### Section

37-2.1-1.	Short Title
37-2.1-2.	Purpose
37-2.1-3.	Purchase of steel and steel products
37-2.1-4.	Payment
37-2.1-5.	Definitions

#### **37-2.1-1. Short title.**

This chapter shall be known and may be cited as the "Steel Products Procurement Act".

#### **37-2.1-2. Purpose.**

- (a) This chapter shall be deemed to be an exercise of the police powers of the state for the protection of the health, safety, and general welfare of the people of the state.
- (b) It is hereby determined by the general assembly of Rhode Island and declared as a matter of legislative findings that:
- (1) The United States is one of the leading countries in the production and use of steel and its allied products;
  - (2) The use of steel products constitutes a major industry of the United States and, as such, provides the jobs and family incomes of millions of persons in the United States;
  - (3) The taxes paid to Rhode Island and the United States by employers and employees engaged in the production and sale of steel products are one of the largest single sources of public revenues in this country;
  - (4) It has, for many years, been the policy of the state to aid and support the development and expansion of industry in the United States in order to foster the economic well-being of the state and its people; and
  - (5) The economy, general welfare, and national security of the United States, are inseparably related to the preservation and development of the steel industry in the United States.
- (c) The general assembly therefore declares it to be the policy of the state that all public officers and agencies should, at all times, aid and promote the development of the steel industry of the United States in order to stimulate and improve the economic well-being of the state and its people.

#### **37-2.1-3. Purchase of steel and steel products.**

- (a) Every public agency shall require that every contract document for the construction, reconstruction, alteration, repair, improvement, or maintenance of public works contain a provision that, if any steel products are to be used or supplied in the performance of the contract, only steel products as herein defined shall be used or supplied in the performance of the contract or any subcontracts thereunder.
- (b) This section shall not apply in any case where the head of the public agency, in writing, determines that steel products as herein defined are not produced in, or readily available in the United States or that such steel products shall not exceed fifteen percent (15%) of the costs of any other steel products obtainable nationally or internationally.

#### **37-2.1-4. Payment.**

No public agency shall authorize, provide for, or make any payments to any person under any contract containing the provision required by 37-2.1-3 unless the public agency is satisfied that such person has fully complied with that provision. Any such payments made to any person by any public agency which should not have been made, as a result of this section, shall be recoverable directly from the contractor or subcontractor who did not comply with 37-2.1-3 by either such public agency or the attorney general upon suit filed in the court of any county.

### **37-2.1-5. Definitions.**

The following words and phrases when used in this chapter shall have, unless the context clearly indicates otherwise, the meanings given to them in this section:

- (a) "Person" means natural persons as well as corporations, partnerships, business units, and associations;
- (b) "Public agency" means (1) the state and its departments, boards, commissions and agencies, (2) cities, towns, school districts, and any other governmental unit or district, (3) any and all other public bodies, authorities, officers, agencies, or instrumentalities, whether exercising a governmental or proprietary function;
- (c) "Public works" means steel to construct, frame or reinforce any public structure, building, highway, waterway, street, bridge, transit system, airport, or other betterment, work or improvement, whether of a permanent or temporary nature, and whether for governmental or proprietary use;
- (d) "Steel products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, or otherwise similarly processed, or processed by a combination of two or more of such operations, from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer, or other steel making process;
- (e) "United States" means the United States of America and includes all territory, continental or insular, subject to the jurisdiction of the United States.

# TITLE 37

## CHAPTER 12 CONTRACTORS' BONDS

### Sections

- 37-12-1. Contractors required to give bond – Terms and conditions.
- 37-12-2. Rights of persons furnishing labor and materials.
- 37-12-3. Remedies of creditors and state – Priority of claims.
- 37-12-4. Intervention by creditor in suit brought by state.
- 37-12-5. Time limitation on creditors' actions.
- 37-12-6. Intervention in suit brought by creditor – Consolidation of suits.
- 37-12-7. Notice of Pendency of Suit
- 37-12-8. Certified copies of documents.
- 37-12-9. Payment into court by surety – Discharge.
- 37-12-10. Retainers relating to contracts for public works or sewer or water main construction.
- 37-12-11. Substitution of securities for retained earnings.

**§ 37-12-1. Contractors required to give bond – Terms and conditions.** – Every person (which word for the purposes of this chapter shall include a co-partnership, a number of persons engaged in a joint enterprise, or a corporation), before being awarded a contract by the department of transportation or by the department of administration, as the case may be, and every person awarded such a contract as a general contractor or construction or project manager for the construction, improvement, completion, or repair of any public road or portion thereof or of any bridge in which the contract price shall be in excess of fifty thousand dollars (\$ 50,000), or for a contract for the construction, improvement, completion, or repair of any public building, or portion thereof, shall be required to furnish to the respective department a bond of that person to the state, with good and sufficient surety or sureties (hereafter in this chapter referred to as surety), acceptable to the respective department, in a sum not less than fifty percent (50%) and not more than one hundred percent (100%) of the contract price, conditioned that the contractor, principal in the bond, the person's executors, administrators, or successors, shall in all things, well and truly keep and perform the covenants, conditions, and agreements in the contract, and in any alterations thereof made as therein provided, on the person's part to be kept and performed, at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the state, the respective department, and all of its officers, agents, and employees, as therein stipulated, and shall also promptly pay for all such labor performed or furnished and for all such materials and equipment furnished, (which as to equipment shall mean payment of the reasonable rental value, as determined by the respective department, of its use during the period of its use), as shall be used in the carrying on of the work covered by the contract, or shall see that they are promptly paid for, whether or not the labor is directly performed for or furnished to the contractor or is even directly performed upon the work covered by the contract, and whether or not the materials are furnished to the contractor or become component parts of the work, and whether or not the equipment is furnished to the contractor or even directly used upon the work. The bond shall contain the provisions that it is subject to all such rights and powers of the respective department and such other provisions as are set forth in the contract and the plans, specifications, and proposal incorporated by reference in the contract, and that no extension of the time of performance of the contract or delay in the completion of the work thereunder or any alterations thereof, made as therein provided, shall invalidate the bond or release the liability of the surety thereunder. Waiver of the bonding requirements of this section is expressly prohibited.

### **37-12-2. Rights of persons furnishing labor and materials.**

Every person who shall have performed labor and every person who shall have furnished or supplied labor, material, or equipment in the prosecution of the work provided for in the contract, in respect of which a payment bond is furnished under § 37-12-1, and who has not been paid in full therefor before the expiration of a period of ninety (90) days after the day on which the last of the labor was performed or furnished by him or her, or material or equipment furnished or supplied by him or her for which a claim is made, shall have the right to sue on the payment bond for the amount, or the balance thereof, unpaid at the time of institution of the suit and to prosecute the action to final execution and judgment for the sum or sums justly due him or her; provided, however, that any person having direct contractual relationship with a subcontractor but no contractual relationship express or implied with the contractor

furnishing the payment bond shall have a right of action upon the payment bond upon giving written notice to the contractor within ninety (90) days from the date on which the person furnished or performed the last of the labor, or furnished or supplied the last of the material or equipment for which the claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the labor was furnished or performed or the material or equipment was furnished or supplied. The notice shall be served by mailing the same by certified mail, postage prepaid, in an envelope addressed to the contractor at any place he or she maintains an office, conducts his or her business, or his or her residence.

### **37-12-3. Remedies of creditors and state - Priority of claims.**

The remedy on the bond shall be by a civil action brought in the superior court for the counties of Providence and Bristol and in any suit brought on the bond the rights of the state shall be prior to those of all creditors. The rights of persons who shall have performed labor as aforesaid shall be prior to the rights of all other creditors, and there shall be no priorities among laborers or among other creditors under the bond. The state, either after having recovered a judgment against the contractor on the contract or without having recovered a judgment, may bring a suit on the bond against the contractor and surety on the bond, and may join as parties defendant in the suit any persons claiming to have rights under the bond as creditors; and, if it has not brought such a suit, it may at any time before a final and conclusive decree, intervene and become a party in any suit brought, as hereafter provided in this chapter, by any person claiming to be a creditor under the bond.

### **37-12-4. Intervention by creditor in suit brought by state.**

Any person claiming to be a creditor under the bond may at any time intervene and become a party in any pending suit brought as aforesaid by the state on the bond, and by so intervening may have the rights to the person adjudicated in the suit.

### **37-12-5. Time limitation on creditors' actions.**

No suit instituted under § 37-12-2 shall be commenced after the expiration of two (2) years, or under the maximum time limit as contained within any labor or material payment bond required under § 37-12-1, whichever period is longer, after the day on which the last of the labor was furnished or performed or material or equipment was furnished or supplied by any person claiming under the section.

### **37-12-6. Intervention in suit brought by creditor - Consolidation of suits.**

When a suit has been so brought on the bond by a person claiming to be a creditor under the bond and is pending, any other person claiming to be a creditor under the bond may intervene and become a party in the first suit thus brought and pending and by so intervening may have the rights of the other person adjudicated in the suit. If two (2) or more of the suits be filed in the court on the same day, the one in which the larger sum shall be claimed shall be regarded as the earlier suit. All suits brought upon the bond as provided in this chapter shall be consolidated together by the court and heard as one suit.

### **37-12-7. Notice of pendency of suit.**

In any suit brought under the provisions of this chapter such personal notice of the pendency of the suit as the court may order shall be given to all such known creditors and persons claiming to be creditors under the bond as shall not have entered their appearances in the suit and, in addition to the notice, notice of the pendency of the suit shall be given by publication in some newspaper published in this state of general circulation in the city or town or every city or town in which the work covered by the contract was carried on, once a week for three (3) successive weeks, in such form as the court may order. The court, however, may dispense with the notices if satisfied that sufficient notices shall have been given in some other suit brought under the provisions of this chapter.

### **37-12-8. Certified copies of documents.**

Any person claiming to be a creditor under the bond and having filed a claim with the respective department, in accordance with the requirements of § 37-12-2, shall have the right, at any time when the person could under this chapter file a suit or intervene in a pending suit, to require the respective department to furnish to the person certified copies of the contract, proposal, plans specifications, and bond.

### **37-12-9. Payment into court by surety - Discharge.**

The surety on the bond may pay into the registry of the court, for distribution among those who may be or become entitled thereto under the decree of the court, the penal sum named in the bond less any amount which the surety

may have paid to the state in satisfaction of the liability of the surety to the state under the bond, and then shall be entitled to be discharged from all further liability under the bond.

### **37-12-10. Retainers relating to contracts for public works or sewer or water main construction.**

(a) Upon substantial completion of the work required by a contract aggregating in amount less than five hundred thousand dollars (\$ 500,000) with any municipality, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair, or improvement of sewers and water mains, or any public works project defined in, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the contract price unless otherwise agreed to by the parties. Upon substantial completion of the work required by a contract aggregating in an amount of five hundred thousand dollars (\$ 500,000) or greater with any municipality, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair, or improvement of sewers and water mains, or any public works project defined in § 37-13-1, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the contract price. In the case of periodic payments with respect to contracts less than the aggregate amount of five hundred thousand dollars (\$ 500,000), the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the approved amount of any periodic payment unless otherwise agreed to by the parties. In the case of periodic payments with respect to contracts in the aggregate amount of five hundred thousand dollars (\$ 500,000) or greater, the awarding authority may deduct from its payment a retention to secure satisfactory performance of the contractual work not exceeding five percent (5%) of the approved amount of any periodic payment.

(b) The retainage shall be paid to any contractor or subcontractor within ninety (90) days of the date the work is accepted by the awarding authority unless a dispute exists with respect to the work. If payment is not made within ninety (90) days for any reason other than a dispute, which, if resolved and it is not the fault of the contractor, interest shall be assessed at the rate of ten percent (10%) per annum on all money which is to be paid to the contractor or subcontractor.

(c) The retainage shall be paid to any contractor or subcontractor within ninety (90) days of the date his or her work is completed and accepted by the awarding authority. If payment is not made, interest shall be assessed at the rate of ten percent (10%) per annum.

(d) There shall also be deducted and retained from the contract price an additional sum sufficient to pay the estimated cost of municipal police traffic control on any public works project. Municipalities shall directly pay the officers working traffic details and shall bill and be reimbursed by the withholding authority for which the contract is being performed every thirty (30) days until the project is complete.

(e) Notwithstanding the foregoing, with respect to projects located within the town of Warren, the withholding authority shall hold an amount from the contract price which shall be reasonably sufficient to pay the estimated cost of municipal police traffic control. The withholding authority shall pay to the town of Warren within seventy-two (72) hours of written demand the actual costs of police traffic control associated with said project on an ongoing basis.

### **37-12-11. Substitution of securities for retained earnings.**

(a) Where any public works contract as defined by § 37-13-1 provides for the retention of earned estimates by the state of Rhode Island, the contractor may, from time to time, withdraw the whole or any portion of the amount retained for payments to the contractor pursuant to the terms of the contract, upon depositing with the general treasurer either; (1) United States treasury bonds, United States treasury notes, United States treasury certificates of indebtedness, or United States treasury bills; (2) Bonds or notes of the state of Rhode Island ; or (3) Bonds of any political subdivision in the state of Rhode Island.

(b) No amount shall be withdrawn in excess of the market value of the securities at the time of deposit or of the par value of the securities, whichever is lower. The general treasurer shall, on a regular basis, collect all interest or income on the obligations so deposited and shall pay the interest or income, when and as collected, to the contractor who deposited the obligations. If the deposit is in the form of coupon bonds, the general treasurer shall deliver each coupon as it matures to the contractor. Any amount deducted by the state, or by any public department or official thereof, pursuant to the terms of the contract, from the retained payments otherwise due the contractor, shall be

deducted, first from that portion of the retained payments for which no security has been substituted, then from the proceeds of any deposited security. In the latter case, the contractor shall be entitled to receive interest, coupons, or income only from those securities which remain after the amount has been deducted. The securities so deposited shall be properly endorsed by the contractor in such manner so as to enable the general treasurer to carry out the provisions of this section.

## TITLE 37

### CHAPTER 12.1 SUBSTITUTION OF SECURITY FOR RETAINED EARNINGS OF ARCHITECTS AND ENGINEERS

#### Sections

- 37-12.1-1. Definition of Terms.
- 37-12.1-2. Substitution of security for retained earnings by designers.
- 37-12.1-3. Deduction from retained earnings.
- 37-12.1-4. Endorsement on securities.
- 37-12.1-5. Applicability.

#### **37-12.1-1. Definition of terms.**

Terms used in this chapter shall be construed as follows:

- (a) "Designers", means any person, firm or corporation duly authorized pursuant to the laws of this state to engage in the practice of architecture and/or engineering within this state.
- (b) "Public works contract" means a contract to perform design or planning services by a designer with the state or any agency or governmental subdivisions thereof.
- (c) "Retained earnings" means any moneys or earned estimates withheld from a designer pursuant to the terms of a public works contract.

#### **37-12.1-2. Substitution of security for retained earnings by designers.**

(a) Where any public works contract provides for the holding of retained earnings from a designer, the designer may from time to time withdraw the whole or any portion of the amount retained upon either depositing with the general treasurer:

- (1) United States treasury bonds, United States treasury notes, United States treasury certificates of indebtedness, or United States treasury bills;
- (2) Bonds or notes of the state of Rhode Island; or
- (3) Bonds of any political subdivision of the state of Rhode Island.

(b) With respect to the deposit of securities, the general treasurer shall, on a regular basis, collect all interest or income on the securities so deposited and shall pay the interest or income when and as collected to the designer depositing the securities. If the security is in the form of coupon bonds, the general treasurer shall deliver each coupon as it matures to the designer.

#### **37-12.1-3. Deduction from retained earnings.**

In the event that pursuant to the terms of the public works contract it is necessary to deduct any sum from retained earnings, the state or governmental unit or agency thereof shall first apply such deduction against sums not withdrawn and thereafter from the proceeds of the sale of any securities deposited or from the income earned on such securities, whichever is applicable.

#### **37-12.1-4. Endorsement on securities.**

All securities deposited with the general treasurer pursuant to this chapter shall be properly endorsed by the designer in such manner as to enable the general treasurer to carry out the provisions of this chapter.

#### **37-12.1-5. Applicability.**

This chapter shall apply to all retained earnings held pursuant to any public works contract as of [June 16, 1991].

# TITLE 37

## CHAPTER 13 LABOR AND PAYMENT OF DEBTS BY CONTRACTORS

### Sections

- 37-13-1. "Public Works" defined
- 37-13-2. "Contractor" defined – information required.
- 37-13-3. Contractors subject to provisions – Weekly payment of employees.
- 37-13-3.1 State public works contract apprenticeship requirements
- 37-13-4. Provisions applicable to public works contracts – List of Subcontractors.
- 37-13-5. Payment for trucking or materials furnished – Withholding of sums due.
- 37-12-6. Ascertainment of prevailing rate of wages and other payments – Specification of rate in call for bids and in contract.
- 37-13-7. Specification in contract of amount and frequency of payment and wages.
- 37-13-8. Investigation and determination of prevailing wages – Filing of schedule.
- 37-13-9. Statutory provisions included in contracts.
- 37-13-10. Overtime compensation.
- 37-13-11. Posting of prevailing wage rates.
- 37-13-12. Wage records of contractors.
- 37-13-12.1. Obstruction of enforcement.
- 37-13-12.2. Subpoena powers.
- 37-13-12.3. Compelling obedience to subpoenas.
- 37-13-12.4. Penalty for violations.
- 37-13-13. Furnishing payroll record to director of labor.
- 37-13-13.1. Audits of wage records of out of state contractors and subcontractors.
- 37-13-14. Contractor's bond.
- 37-13-14.1. Enforcement – Hearings.
- 37-13-15. Review.
- 37-13-16. Termination of work on failure to pay agreed wages – Completion of work.
- 37-13-17. Private right of action to collect wages or benefits

### **37-13-1. "Public works" defined.**

"Public works" as used in this chapter shall mean any public work consisting of grading, clearing, demolition, improvement, completion, repair, alteration, or construction of any public road or any bridge, or portion thereof, or any public building or portion thereof, or any heavy construction, or any public works projects of any nature or kind whatsoever.

### **37-13-2. "Contractor" defined - Information required.**

The term "contractor" as used in this chapter shall mean the bidder whose bid has been accepted by an authorized agency or awarding authority as the bidder possessing the skills, ability, and integrity necessary to the faithful performance of the contract or work, and who shall certify that he or she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the contract or work. Essential information in regard to qualifications shall be submitted in such form to the awarding authority and the director of labor and training as the director of labor and training shall require. The authorized agency or awarding authority shall reserve the right to reject all bids, if it be in the public interest to do so.

### **37-13-3. Contractors subject to provisions - Weekly payment of employees.**

All contractors, who have been awarded contracts for public works by an awarding agency or authority of the state or of any city, town, committee, or by any person or persons therein, in which state or municipal funds are used and of which the contract price shall be in excess of one thousand dollars (\$1,000) whether payable at the time of the signing of the contract or at a later date, and their subcontractors, on such public works shall pay their employees at weekly intervals and shall comply with the provisions set forth in 37-13-4 - 37-13-14, inclusive, and 37-13-16.

### **37-13-3.1. State public works contract apprenticeship requirements.**

Notwithstanding any laws to the contrary, all general contractors and subcontractors who perform work on any public works contract awarded by the state after passage of this act and valued at one million dollars (\$ 1,000,000) or more shall employ apprentices required for the performance of the awarded contract. The number of apprentices shall comply with the apprentice to journeyman ratio for each trade approved by the apprenticeship council of the department of labor and training. To the extent that any of the provisions contained in this section conflict with the requirements for federal aid contracts, federal laws and regulations shall control.

### **37-13-4. Provisions applicable to public works contracts - Lists of subcontractors.**

All public works shall be done by contract, subject to the same provisions of law relating thereto and to the letting thereof, which are applicable to similar contracts of the awarding authority or authorized agency, hereinafter called the "proper authority," in the general location where the work is to be performed and which are not contrary to the provisions of 37-13-1 - 37-13-14, and 37-13-16. Each contractor after the award of a contract for public works shall submit to the proper authority a list of his or her subcontractors of any part or all of the work. The list shall be submitted in such manner or form as the proper authority shall uniformly require from contractors in all public works.

### **37-13-5. Payment for trucking or materials furnished - Withholding of sums due.**

A contractor or subcontractor on public works authorized by a proper authority shall pay any obligation or charge for trucking and material which have been furnished for the use of the contractor or subcontractor, in connection with the public works being performed by him or her, within ninety (90) days after the obligation or charge is incurred or the trucking service has been performed or the material has been delivered to the site of the work, whichever is later. When it is brought to the notice of the proper authority in a city or town, or the proper authority in the state having supervision of the contract, that the obligation or charge has not been paid by the contractor or subcontractor, the proper authority may deduct and hold for a period not exceeding sixty (60) days, from sums of money due to the contractor or subcontractor, the equivalent amount of such sums certified by a trucker or material man creditor as due him or her, as provided in this section, and which the proper authority determines is reasonable for trucking performed or materials furnished for the public works.

### **37-13-6. Ascertainment of prevailing rate of wages and other payments - Specification of rate in call for bids and in contract.**

Before awarding any contract for public works to be done, the proper authority shall ascertain from the director of labor and training the general prevailing rate of the regular, holiday, and overtime wages paid and the general prevailing payments on behalf of employees only, to lawful welfare, pension, vacation, apprentice training, and educational funds (payments to the funds must constitute an ordinary business expense deduction for federal income tax purposes by contractors) in the city, town, village, or other appropriate political subdivision of the state in which the work is to be performed, for each craft, mechanic, teamster, laborer, or type of worker needed to execute the contract for the public works. The proper authority shall, also, specify in the call for bids for the contract and in the contract itself the general prevailing rate of the regular, holiday, and overtime wages paid and the payments on behalf of employees only, to the welfare, pension, vacation, apprentice training, and education funds existing in the locality for each craft, mechanic, teamster, laborer, or type of worker needed to execute the contract or work.

### **37-13-7. Specification in contract of amount and frequency of payment of wages.**

Every call for bids for every contract in excess of one thousand dollars (\$ 1,000), to which the state of Rhode Island or any political subdivision thereof or any public agency or quasi-public agency is a party, for construction, alteration, and/or repair, including painting and decorating, of public buildings or public works of the state of Rhode Island or any political subdivision thereof, or any public agency or quasi-public agency and which requires or involves the employment of employees, shall contain a provision stating the minimum wages to be paid various types of employees which shall be based upon the wages that will be determined by the director of labor and training to be prevailing for the corresponding types of employees employed on projects of a character similar to the contract work in the city, town, village, or other appropriate political subdivision of the state of Rhode Island in which the work is to be performed. Every contract shall contain a stipulation that the contractor or his or her subcontractor shall pay all the employees employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment computed at wage rates not less than those stated in the call for bids, regardless of any contractual relationships which may be alleged to exist between the contractor or subcontractor and the employees, and that the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work; and the further stipulation that there may be withheld from the contractor so much of the accrued payments as may be considered necessary to pay to the employees employed by the contractor, or any subcontractor on the work, the difference between the rates of wages required by the contract to be paid the employees on the work and the rates of wages received by the employees and not refunded to the contractor, subcontractors, or their agents.

(b) The terms "wages" , "scale of wages" , "wage rates" , "minimum wages" , and "prevailing wages" shall include:

(1) The basic hourly rate of pay; and

(2) The amount of:

(A) The rate of contribution made by a contractor or subcontractor to a trustee or to a third person pursuant to a fund, plan, or program; and

(B) The rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing benefits to employees pursuant to an enforceable commitment to carry out a financially responsible plan or program which was communicated in writing to the employees affected, for medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing, for unemployment benefits, life insurance, disability and sickness insurance, or accident insurance, for vacation and holiday pay, for defraying costs of apprenticeship or other similar programs, or for other bona fide fringe benefits, but only where the contractor or subcontractor is not required by other federal, state, or local law to provide any of the benefits ; provided, that the obligation of a contractor or subcontractor to make payment in accordance with the prevailing wage determinations of the director of labor and training insofar as this chapter of this title and other acts incorporating this chapter of this title by reference are concerned may be discharged by the making of payments in cash, by the making of contributions of a type referred to in subsection ( b)(2), or by the assumption of an enforceable commitment to bear the costs of a plan or program of a type referred to in this subdivision, or any combination thereof, where the aggregate of any payments, contributions, and costs is not less than the rate of pay described in subsection (b)(1) plus the amount referred to in subsection (b)(2).

(c) The term "employees" , as used in this section, shall include employees of contractors or subcontractors performing jobs on various types of public works including mechanics, apprentices, teamsters, chauffeurs, and laborers engaged in the transportation of gravel or fill to the site of public works, the removal and/or delivery of gravel or fill or ready-mix concrete, sand, bituminous stone, or asphalt flowable fill from the site of public works, or the transportation or removal of gravel or fill from one location to another on the site of public works, and the employment of the employees shall be subject to the provisions of subsections (a) and (b) .

(d) The terms "public agency" and "quasi-public agency" shall include, but not be limited to, the Rhode Island industrial recreational building authority, the Rhode Island economic development corporation, the Rhode Island airport corporation, the Rhode Island industrial facilities corporation, the Rhode Island refunding bond authority, the Rhode Island housing and mortgage finance corporation, the Rhode Island resource recovery corporation, the Rhode Island public transit authority, the Rhode Island student loan authority, the water resources board corporate, the Rhode Island health and education building corporation, the Rhode Island turnpike and bridge authority, the Narragansett Bay water quality management district commission, Rhode Island telecommunications authority, the

convention center authority, the board of governors for higher education, the board of regents for elementary and secondary education, the capital center commission, the housing resources commission, the Quonset Point-Davisville management corporation, the Rhode Island children's crusade for higher education, the Rhode Island depositors economic protection corporation, the Rhode Island lottery commission, the Rhode Island partnership for science and technology, the Rhode Island public building authority, and the Rhode Island underground storage tank board.

### **37-13-8. Investigation and determination of prevailing wages - Filing of schedule.**

The director of labor and training shall investigate and determine the prevailing wages and payments made to or on behalf of employees, as set forth in § 37-13-7, paid in the trade or occupation in the city, town, village, or other appropriate political subdivision of the state and keep a schedule on file in his or her office of the customary prevailing rate of wages and payments made to or on behalf of the employees which shall be open to public inspection. In making a determination, the director of labor may adopt and use such appropriate and applicable prevailing wage rate determinations as have been made by the secretary of labor of the United States of America in accordance with the Davis-Bacon Act, as amended, 40 U.S.C. § 276a; provided, however, that each contractor awarded a public works contract after July 1, 2007 shall contact the department of labor and training on or before July first of each year, for the duration of such contract to ascertain the prevailing wage rate of wages on a hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done each year and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee every July first.

### **37-13-9. Statutory provisions included in contracts.**

A copy of 37-13-5, 37-13-6, and 37-13-7 shall be inserted in all contracts for public works awarded by the state or any city or town, committee, an authorized agency or awarding authority thereof, or any person or persons in their behalf in which state or municipal funds are used if the contract price be in excess of one thousand dollars (\$1,000).

### **37-13-10. Overtime compensation.**

Labor performed under the provisions of 37-13-1 - 37-13-16, inclusive, during the period of forty (40) hours in any one week and during the period of eight (8) hours in any one day, shall be considered a legal week's work or a legal day's work, as the case may be, and any number of hours of employment in any one week greater than the number of forty (40) hours or in any one day greater than the number of eight (8) hours shall be compensated at the prevailing rate of wages for overtime employment; provided, however, when the director of labor and training has determined in the investigation provided for in 37-13-7 and 37-13-8 that there is a prevailing practice in a city, town, or other appropriate political subdivision to pay an overtime rate of wages for work of any craft, mechanic, teamster, laborer, or type of worker needed to execute the work other than hours worked in any one week greater than the number of forty (40) or in hours worked in any one day greater than the number of eight (8), then the prevailing practice shall determine the legal workday and the legal workweek in the city or town for the work and the prevailing rate of overtime wages shall be paid for such work in excess of that legal workday or week, as the case may be.

### **37-13-11. Posting of prevailing wage rates.**

Each contractor awarded a contract for public works with a contract price in excess of one thousand dollars (\$ 1,000), and each subcontractor who performs work on those public works, shall post in conspicuous places on the project, where covered workers are employed, posters which contain the current, prevailing rate of wages and the current, prevailing rate of payments to the funds required to be paid for each craft or type of worker employed to execute the contract as set forth in §§ 37-13-6 and 37-13- 7, and the rights and remedies of any employee described in § 37-13-17 for nonpayment of any wages earned pursuant to this chapter. Posters shall be furnished to contractors and subcontractors by the director of labor and training, who shall determine the size and context thereof from time to time, at the time a contract is awarded. A contractor or subcontractor who fails to comply with the provisions of this section shall be deemed guilty of a misdemeanor and shall pay to the director of labor and training one hundred dollars (\$ 100) for each calendar day of noncompliance as determined by him or her. Contracts set forth in this section shall not be awarded by the state, any city, town, or any agency thereof until the director of labor and training has prepared and delivered the posters to the division of purchases, if the state or any agency thereof is the proper authority, or to the city, town, or an agency thereof, if it is the proper authority, and the contractor to whom the contract is to be awarded.

### **37-13-12. Wage records of contractors.**

Each contractor awarded a contract with a contract price in excess of one thousand dollars (\$1,000) for public works, and each subcontractor who performs work on those public works, shall keep an accurate record showing the name, occupation, and actual wages paid to each worker employed by him or her and the payments to all the employee funds specified in sections 37-13-6 and 37-13-7 by him or her in connection with the contract or work. The director and his or her authorized representatives shall have the right to enter any place of employment at all reasonable hours for the purpose of inspecting the wage records and seeing that all provisions of this chapter are complied with.

### **37-13-12.1. Obstruction of enforcement.**

Any effort of any employer to obstruct the director and his or her authorized representatives in the performance of their duties shall be deemed a violation of this chapter and punishable as such.

### **37-13-12.2. Subpoena powers.**

The director and his or her authorized representatives shall have power to administer oaths and examine witnesses under oath, issue subpoenas, subpoenas duces tecum, compel the attendance of witnesses, and the production of papers, books, accounts, records, payrolls, documents, and testimony, and to take depositions and affidavits in any proceeding before the director.

### **37-13-12.3. Compelling obedience to subpoenas.**

In case of failure of any person to comply with any subpoena lawfully issued, or subpoena duces tecum, or on the refusal of any witness to testify to any matter regarding which he may be lawfully interrogated, it shall be the duty of the superior court, or any judge thereof, on application by the director, to compel obedience by proceedings in the nature of those for contempt.

### **37-13-12.4. Penalty for violations.**

Except as otherwise provided in this chapter, any employer who shall violate or fail to comply with any of the provisions of this chapter shall be guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$500) nor more than one thousand dollars (\$1,000) for each separate offense, or by imprisonment of up to one year, or by both fine and imprisonment. Each day of failure to pay wages due an employee at the time specified in this chapter shall constitute a separate and distinct violation.

### **37-13-13. Furnishing payroll record to director of labor.**

(a) Every contractor and subcontractor awarded a contract for public works as defined by this chapter shall furnish a certified copy of his or her payroll records of his or her employees employed on the project to the awarding authority on a monthly basis for all work completed in the preceding month on a uniform form prescribed by the director of labor and training. Notwithstanding the foregoing, certified payrolls for department of transportation public works may be submitted on the federal payroll form, provided that, when a complaint is being investigated, the director or his or her designee may require that a contractor resubmit the certified payroll on the uniform department form.

(b) Awarding authorities, contractors and subcontractors shall provide any and all payroll records to the director of labor and training within ten (10) days of their request by the director or his or her designee.

(c) In addition, every contractor and subcontractor shall maintain on the site where public works are being constructed and the general or primary contract is one million dollars (\$1,000,000) or more, a daily log of employees employed each day on the public works project. The log shall include, at a minimum, for each employee his or her name, primary job title, and employer and shall be kept on a uniform form prescribed by the director of labor and training. Such log shall be available for inspection on the site at all times by the awarding authority and/or the director of the department of labor and training and his or her designee. This subsection shall not apply to road, highway, or bridge public works projects.

(d) The director of labor and training may promulgate reasonable rules and regulations to enforce the provisions of this section.

(e) The awarding authority of any public works project shall withhold the next scheduled payment to any contractor or subcontractor who fails to comply with the provisions of subsections (a) or (b) above and shall also

notify the director of labor and training. The awarding authority shall withhold any further payments until such time as the contractor or subcontractor has fully complied. If it is a subcontractor who has failed to comply, the amount withheld shall be proportionate to the amount attributed or due to the offending subcontractor as determined by the awarding authority. The department may also impose a penalty of up to five hundred dollars (\$500) for each calendar day of noncompliance with this section, as determined by the director of labor and training. Mere errors and/or omissions in the daily logs maintained under subsection (c) shall not be grounds for imposing a penalty under this subsection.

### **37-13-13.1. Audits of wage records of out of state contractors and subcontractors.**

Out of state contractors or subcontractors who perform work on public works in this state authorize the director of labor and training to conduct wage and hour audits of their payroll records pursuant to the provisions of chapter 14 of title 28.

### **37-13-14. Contractor's bond.**

The state or any city, town, agency, or committee therein awarding contracts for public works shall require the contractor awarded a contract with a contract price in excess of fifty thousand dollars (\$ 50,000) for public works to file with the proper authority good and sufficient bond with surety furnished by any surety company authorized to do business in the state, conditioned upon the faithful performance of the contract and upon the payment for labor performed and material furnished in connection therewith, a bond to contain the terms and conditions set forth in chapter 12 of this title, and to be subject to the provisions of that chapter. Waiver of the bonding requirements of this section is expressly prohibited.

### **37-13-14.1. Enforcement - Hearing**

(a) Before issuing an order or determination, the director of labor and training shall order a hearing thereon at a time and place to be specified, and shall give notice thereof, together with a copy of the complaint or the purpose thereof, or a statement of the facts disclosed upon investigation, which notice shall be served personally or by mail on any person, firm, or corporation affected thereby. The person, firm, or corporation shall have an opportunity to be heard in respect to the matters complained of at the time and place specified in the notice, which time shall be not less than five (5) days from the service of the notice personally or by mail. The hearing shall be held within ten (10) days from the order of hearing. The hearing shall be conducted by the director of labor and training or his or her designee. The hearing officer in the hearing shall be deemed to be acting in a judicial capacity and shall have the right to issue subpoenas, administer oaths, and examine witnesses. The enforcement of a subpoena issued under this section shall be regulated by Rhode Island civil practice law and rules. The hearing shall be expeditiously conducted, and upon such hearing, the hearing officer shall determine the issues raised thereon and shall make a determination and enter an order within ten (10) days of the close of the hearing, and forthwith serve a copy of the order, with a notice of the filing thereof, upon the parties to the proceeding, personally or by mail. The order shall dismiss the charges or direct payment of wages or supplements found to be due, including interest at the rate of twelve percent (12%) per annum from the date of the underpayment to the date of payment, and may direct payment of reasonable attorney's fees and costs to the complaining party.

(b) In addition to directing payment of wages or supplements including interest found to be due, the order shall also require payment of a further sum as a civil penalty in an amount up to three times the total amount found to be due. Further, if the amount of salary owed to an employee pursuant to this chapter but not paid to the employee in violation of thereof exceeds five thousand dollars (\$5,000), it shall constitute a misdemeanor and shall be referred to the office of the attorney general. The misdemeanor shall be punishable for a period of not more than one year in prison and/or fined not more than one thousand dollars (\$1,000). In assessing the amount of the penalty, due consideration shall be given to the size of the employer's business, the good faith of the employer, the gravity of the violation, the history of previous violations, and the failure to comply with recordkeeping or other nonwage requirements. The surety of the person, firm, or corporation found to be in violation of the provisions of this chapter shall be bound to pay any penalties assessed on such person, firm, or corporation. The penalty shall be paid to the department of labor and training for deposit in the state treasury; provided, however, it is hereby provided that the general treasurer shall establish a dedicated "prevailing wages enforcement fund" for the purpose of depositing the penalties paid as provided herein. There is hereby appropriated to the annual budget of the department of labor and training the amount of the fund collected annually under this section, to be used at the direction of the director of labor and training for the sole purpose of enforcing prevailing wage rates as provided in this chapter.

(c) For the purposes of this chapter, each day or part thereof of violation of any provision of this chapter by a person, firm, or corporation, whether the violation is continuous or intermittent, shall constitute a separate and succeeding violation.

(d) In addition to the above, any person, firm, or corporation found in violation of any of the provisions of this chapter by the director of labor and training, an awarding authority, or the hearing officer, shall be ineligible to bid on, or be awarded work by, an awarding authority or perform any such work for a period of no less than eighteen (18) months and no more than thirty-six (36) months from the date of the order entered by the hearing officer. Once a person, firm, or corporation is found to be in violation of this chapter, all pending bids with any awarding authority shall be revoked, and any bid awarded by an awarding authority prior to the commencement of the work shall also be revoked.

(e) In addition to the above, any person, firm, or corporation found to have committed two (2) or more willful violations in any period of eighteen (18) months of any of the provisions of this chapter by the hearing officer, which violations are not arising from the same incident, shall be ineligible to bid on, or be awarded work by, an awarding authority or perform any work for a period of sixty (60) months from the date of the second violation.

(f) The order of the hearing officer shall remain in full force and effect unless stayed by order of the superior court.

(g) The director of labor and training, awarding authority, or hearing officer shall notify the bonding company of any person, firm, or corporation suspected of violating any section of this chapter. The notice shall be mailed certified mail and shall enumerate the alleged violations being investigated.

(h) In addition to the above, any person, firm, or corporation found to have willfully made a false or fraudulent representation on certified payroll records shall be referred to the office of the attorney general. A first violation of this section shall be considered a misdemeanor and shall be punishable for a period of not more than one year in prison and/or fined one thousand dollars (\$1,000). A second or subsequent violation of this section shall be considered a felony and shall be punishable for a period of not more than three (3) years imprisonment, a fine of three thousand dollars (\$3,000), or both. Further, any person, firm, or corporation found to have willfully made a false or fraudulent representation on certified payroll records shall be required to pay a civil penalty to the department of labor and training in an amount of no less than two thousand dollars (\$2,000) and not greater than fifteen thousand dollars (\$15,000) per representation.

### **37-13-15. Review.**

(a) There is hereby created an appeals board which shall be comprised of three (3) members who shall be appointed by the governor; provided, however, that each member of the appeals board shall have at least five (5) years experience with prevailing wage rates as they apply to the construction industry. The members of such appeals board shall serve without compensation. The members of the appeals board shall be appointed for terms of three (3) years except that of the three (3) members originally appointed by each of the appointing authorities; one (1) shall be appointed for a term of one (1) year, one (1) shall be appointed for a term of two (2) years and one (1) for a term of three (3) years.

(b) Any person aggrieved by any action taken by the director of labor and training or his or her designated hearing officer under the authority of this chapter, or by the failure or refusal of the director of labor and training to take any action authorized by this chapter, may obtain a review thereof for the purpose of obtaining relief from the action or lack of action by filing a petition for administrative review and relief, to the appeals board as provided herein. The petition for administrative review shall be filed within twenty (20) days of the action taken by the director of labor and training or designated hearing officer: The petition for administrative review shall be heard within ten (10) days of the date of filing. An aggrieved person under this section shall include:

- (1) Any person who is required to pay wages to his or her employees or make payments to a fund on behalf of his or her employees, as provided in this chapter;
- (2) Any person who is required to be paid wages for his or her labor or on whose behalf payments are required to be paid to funds, as provided by this chapter;
- (3) The lawful collective bargaining representative of a person defined in subdivision (2) above;
- (4) A trade association of which a person defined in subdivision (1) above is a member;
- (5) A proper authority as defined in this chapter;

- (6) A contractor who submitted a bid for work to be or which has been awarded under the provisions of this chapter or a trade association of which he or her is a member, and
  - (7) A labor organization which has one or more written collective bargaining agreements with one or more employers or a trade association which sets forth the hours, wages, and working conditions of a craft, mechanic, teamster, or type of worker needed to execute the work, as provided in this chapter to the extent that it would be affected by the action or the failure to act of the director of labor and training or the hearing officer.
- (c) Any aggrieved person as defined herein may obtain a review of a decision of the appeals board by filing a petition in the superior court in Providence county pursuant to the provisions of the administrative procedures act, praying for review and relief and the petition shall follow the course of and be subject to the procedures for causes filed in the court.
- (d) The director is hereby empowered to enforce his or her decision and/or the decision of the appeals board in the superior court for the county of Providence.

### **37-13-16. Termination of work on failure to pay agreed wages - Completion of work.**

Every contract within the scope of this chapter shall contain the further provision that in the event it is found by the director of labor and training that any employee employed by the contractor or any subcontractor directly on the site of the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid as aforesaid, the awarding party may, by written notice to the contractor or subcontractor, terminate his or her right as the case may be, to proceed with the work, or such part of the work as to which there has been a failure to pay the required wages, and shall prosecute the work to completion by contract or otherwise, and the contractor and his or her sureties shall be liable to the awarding party for any excess costs occasioned the awarding authority thereby.

### **37-13-17. Private right of action to collect wages or benefits**

(a) An employee or former employee, or any organization representing such an employee or former employee, of a contractor or subcontractor may bring a civil action for a violation of § 37-13-7 for appropriate injunctive relief, or actual damages, or both within three (3) years after the occurrence of the alleged violation. An action commenced pursuant to this section, may be brought in the superior court for the county where the alleged violation occurred, the county where the complainant resides, or the county where the person against whom in the civil complaint is filed resides or has their principal place of business. Any contractor or subcontractor who violates the provisions of § 37-13-7 shall be liable to the affected employee or employees in the amount of unpaid wages or benefits, plus interest. A civil action filed in court under this section may be instituted instead of, but not in addition to the director of labor and training enforcement procedures authorized by § 37-13-14.1, provided the civil action is filed prior to the date the director of labor and training issues notice of an administrative hearing.

(b) An employer's responsibility and liability is solely for its own employees.

(c) An action instituted pursuant to this section may be brought by one or more employees or former employees on behalf of himself/herself or themselves and other employees similarly situated, except that no employee shall be a party plaintiff to any such action unless he/she gives his/her consent in writing to become such a party and such consent is filed in the court in which such action is brought.

(d) In an action filed under this section in which the plaintiff prevails, the court shall, in addition to any judgment awarded to the plaintiff, require reasonable attorneys' fees and the costs of the action to be paid by the defendant.

(e) The court in an action filed under this section shall award affected employees or former employees liquidated damages in an amount equal to two (2) times the amount of unpaid wages or benefits owed. Unpaid fringe benefit contributions owed pursuant to this section in any form shall be paid to the appropriate benefit fund, however, in the absence of an appropriate fund the benefit shall be paid directly to the individual.

(f) The filing of a civil action under this section shall not preclude the director of labor and training from referring a matter to the attorney general as provided in § 37-13-14.1(b), from prohibiting a contractor or subcontractor from bidding on or otherwise participating in contracts as provided in § 37-13-14.1(d), (e) and (h), or from prohibiting termination of work on failure to pay agreed wages pursuant to § 37-13-16.

(g) Any person, firm, or corporation found to have willfully made a false or fraudulent representation in connection with wage obligations owed on a contract shall be required to pay a civil penalty to the department of labor and training in an amount of no less than one thousand dollars (\$ 1,000) and not greater than three thousand dollars (\$ 3,000) per representation. Such penalties shall be recoverable in civil actions filed pursuant to this section. For purposes of this subsection "willfully" shall mean representations that are known to be false, or representations made with deliberate ignorance or reckless disregard for their truth or falsity.

(h) An employer shall not discharge, threaten, or otherwise discriminate against an employee, or former employee, regarding compensation terms, conditions, locations or privileges of employment because the employee or former employee, or a person or organization acting on his or her behalf: (1) Reports or makes a complaint under this section; or otherwise asserts his or her rights under this section; and/or (2) Participates in any investigation, hearing or inquiry held by the director of labor and training under § 37-13-14.1. In the event a contractor or subcontractor retaliates or discriminates against an employee in violation of this section, the affected employee may file an action in any court of competent jurisdiction and the court shall order reinstatement and/or restitution of the affected employee, as appropriate, with back pay to the date of the violation, and an additional amount in liquidated damages equal to two (2) times the amount of back pay and reasonable attorneys' fees and costs.

(i) If any one or more subsections of this section shall for any reason be adjudged unconstitutional or otherwise invalid, the judgment shall not affect, impair, or invalidate the remaining subsections.

## **PREVAILING WAGE RATES**

**(Appropriate wage rate to be inserted by bidder in specifications)**

**For a copy of the appropriate wage rate, contact:**

**R.I. Department of Labor and Training  
Center General Complex  
1511 Pontiac Avenue  
Cranston, RI 02920**

# TITLE 37

## CHAPTER 14.1 MINORITY BUSINESS ENTERPRISE

### Sections

37-14.1-1.	Purpose.
37-14.1-2.	Applicability.
37-14.1-3.	Definitions.
37-14.1-4.	Policy.
37-14.1-5.	Discrimination prohibited.
37-14.1-6.	Minority business enterprise guidelines.
37-14.1-7.	Establishment of criteria and guidelines.
37-14.1-8.	Sanctions.

### **37-14.1-1. Purpose.**

The purpose of this chapter is to carry out the state's policy of supporting the fullest possible participation of firms owned and controlled by minorities and women (MBE's), in state funded and state directed public construction programs and projects and in state purchases of goods and services. This includes assisting MBE's throughout the life of contracts in which they participate.

### **37-14.1-2. Applicability.**

This chapter shall apply to any and all state purchasing, including, but not limited to the procurement of goods, services, construction projects, or contracts funded in whole or in part by state funds, or funds which, in accordance with a federal grant or otherwise, the state expends or administers or in which the state is a signatory to the construction contract.

### **37-14.1-3. Definitions.**

- (a) "Affirmative action" means taking specific steps to eliminate discrimination and its effects, to ensure nondiscriminatory results and practices in the future, and to involve minority business enterprises fully in contracts and programs funded by the state.
- (b) "Compliance" means the condition existing when a contractor has met and implemented the requirements of this chapter.
- (c) "Contract" means a mutually binding legal relationship or any modification thereof obligating the seller to furnish supplies or services, including construction, and the buyer to pay for them. For purposes of this chapter, a lease is a contract.
- (d) "Contractor" means one who participates, through a contract or subcontract, in any procurement or program covered by this chapter, and includes lessees and material suppliers.
- (e) "Minority" means a person who is a citizen or lawful permanent resident of the United States and who is:
  - (1) Black (a person having origins in any of the black racial groups of Africa);
  - (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
  - (3) Portuguese (a person of Portuguese, Brazilian, or other Portuguese culture or origin, regardless of race);
  - (4) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands);
  - (5) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America.); or
  - (6) Members of other groups, or other individuals, found to be economically and socially disadvantaged by the Small Business Administration under section 8(a) of the Small Business Act, as amended [15 U.S.C. 637(a)].
- (f) "Minority business enterprise" or "MBE" means a small business concern, as defined pursuant to section 3 of the federal Small Business Act [15 U.S.C. 632] and implementing regulations, which is owned and controlled by one or more minorities or women. For the purposes of this chapter, owned and controlled means a business.

- (1) Which is at least fifty-one percent (51%) owned by one or more minorities or women or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by one or more minorities or women; and
- (2) Whose management and daily business operations are controlled by one or more such individuals.

(g) "MBE coordinator" means the official designated to have overall responsibility for promotion of minority business enterprise in his or her departmental element.

(h) "Noncompliance" means the condition existing when a recipient or contractor has failed to implement the requirements of this chapter.

#### **37-14.1-4. Policy.**

It is the policy of the state of Rhode Island that minority business enterprises (MBE's) shall have the maximum opportunity to participate in the performance of procurements and projects outlined in 37-14.1-2.

#### **37-14.1-5. Discrimination prohibited.**

No person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against in connection with the award and performance of any project covered by this chapter, on the grounds of race, color, national origin, or sex.

#### **37-14.1-6. Minority business enterprise participation.**

Minority business enterprises shall be included in all procurements and construction projects under this chapter and shall be awarded a minimum of ten percent (10%) of the dollar value of the entire procurement or project. The director of the department of administration is further authorized to establish by rules and regulation formulas for giving minority business enterprises a preference in contract and subcontract awards.

#### **37-14.1-7. Establishment of criteria and guidelines.**

The director of the department of administration shall establish, by rule and regulations adopted in accordance with chapter 35 of title 42, standards which shall determine whether a construction project is covered by this chapter, compliance formulas, procedures for implementation, and procedures for enforcement which are not inconsistent with 49 CFR 23 of the federal regulations. As to Rhode Island department of transportation contracts, the director of administration may delegate this authority to the director of transportation.

#### **37-14.1-8. Sanctions.**

(a) The director of the department of administration shall have the power to impose sanctions upon contractors not in compliance with this chapter and shall include but not be limited to:

- (1) Suspension of payments;
- (2) Termination of the contract;
- (3) Recovery by the state of ten percent (10%) of the contract award price as liquidated damages; and
- (4) Denial of right to participate in future projects for up to three (3) years.

(b) As to Rhode Island department of transportation contracts, the director of the department of administration may delegate this authority to the director of transportation.

**RHODE ISLAND REQUIREMENTS FOR PARTICIPATION BY MINORITY BUSINESS ENTERPRISES  
IN STATE FUNDED AND DIRECTED PUBLIC CONSTRUCTION PROJECTS, CONSTRUCTION  
CONTRACTS AND PROCUREMENT CONTRACTS**

In accordance with RI Gen. Law § 37-14.1-1, it is the policy of the State of Rhode Island to support the fullest possible participation of firms owned and controlled by minorities (MBEs) and women (WBEs). Pursuant to §§ 37-14.1-2 and 37-14.1-6, MBEs and WBEs shall be included in all state purchasing, including, but not limited to, the procurement of goods, services, construction projects, or contracts funded in whole or in part with state funds, or funds which, in accordance with a federal grant or otherwise, the state expends or administers. MBEs and WBEs shall be awarded a minimum of ten percent (10%) of the dollar value of the entire procurement or project. MBE participation credit shall only be granted for firms duly certified as MBEs or WBEs by the State of Rhode Island, Department of Administration, Office of Diversity, Equity and Opportunity, MBE Compliance Office (MBECO). The current directory of firms certified as MBEs or WBEs may be accessed at <http://odeo.ri.gov/offices/mbeco/mbe-wbe.php> or by contacting Elvys Ruiz at the MBECO at (401) 574-8253 or via email at [Elvys.Ruiz@doa.ri.gov](mailto:Elvys.Ruiz@doa.ri.gov)

# TITLE 37

## CHAPTER 16 PUBLIC WORKS ARBITRATION

### Sections

37-16-1.	Short Title.
37-16-2.	Contract provisions for arbitration.
37-16-3.	Application for subcontracts.
37-16-4.	Stay of legal proceedings pending arbitration.
37-16-5.	Jurisdiction of superior court to enforce arbitration provisions and awards.
37-16-6.	Trial upon evidence of substantial issue.
37-16-7.	Method of appointing arbitrators.
37-16-8.	Scheduling and notice of arbitration hearing – Adjournment.
37-16-9.	Power of court to direct prompt hearing.
37-16-10.	Arbitrator's oath – Waiver.
37-16-11.	Powers of arbitrators.
37-16-12.	Fees.
37-16-13.	Validity of awards.
37-16-14.	Arbitration under chapter deemed special proceeding – Jurisdiction of superior court.
37-16-15.	Procedure for hearing of application to court.
37-16-16.	Form of award.
37-16-17.	Court order confirming award.
37-16-18.	Court order vacating award.
37-16-19.	Rehearing after vacation of award.
37-16-20.	Court order modifying or correcting award.
37-16-21.	Notice of motion to vacate, modify, or correct an award.
37-16-22.	Entry of judgment – Costs
37-16-23.	Filing of papers after judgment.
37-16-24.	Effect of judgment.
37-16-25.	Appeals.
37-16-26.	Satisfaction of award.
37-16-27.	Application of sureties.

### **37-16-1. Short title.**

This chapter shall be known as the "Public Works Arbitration Act".

### **37-16-2. Contract provision for arbitration.**

(a) A provision in a written contract executed on or after January 1, 1962, for the construction, alteration, repair, or painting of any public building, sewer, highway, bridge, water treatment or disposal projects one party to which is the state, a city, a town, or an authority, a board, a public corporation, or any similar body created by statute or ordinance or any committee, agency, or subdivision of any of them, to settle by arbitration any dispute or claim arising out of or concerning the performance or interpretation of the contract shall be valid, irrevocable, and enforceable, save upon grounds existing in law or equity for the revocation of the contract.

(b) (1) Every contract for the construction, alteration, repair, painting, or demolition of any public building, sewer, water treatment or disposal project, highway, or bridge one party to which is the state, a city, a town, or an authority, a board, a public corporation, or any similar body created by statute or ordinance or any committee, agency, or subdivision of any of them which has a contract price of ten thousand dollars (\$ 10,000) or more and which is executed on or after July 1, 1967, shall contain a provision for arbitration of disputes and claims arising out of or concerning the performance or interpretation of the contract as follows:

(2) "All claims, disputes, and other matters in question arising out of or relating to this contract or the performance or interpretation thereof shall be submitted to arbitration. Arbitration shall be commenced by a demand in writing made by one party to the contract upon the other within a reasonable time after the dispute, claim, or other matter in question arose but in no event after payment in full of the contract price has been made and accepted. The written demand shall contain a statement of the question to be arbitrated and a detailed statement of each item or matter in

dispute and the name of the arbitrator appointed by that party. The other party to the contract within ten (10) days of the receipt of the written demand shall appoint an arbitrator and give notice in writing thereof to the party who commenced arbitration. The two (2) arbitrators appointed by the parties shall within ten (10) days of the date of the appointment of the second arbitrator select a third arbitrator who shall be designated as chairperson and who immediately shall give written notice to the parties of his or her appointment. The third arbitrator shall select a time, date, and place for hearing and give each party five (5) days notice in writing thereof. The date for hearing shall not be more than fifteen (15) days after the date of appointment of the third arbitrator. The award shall be made promptly by the arbitrators and, unless otherwise agreed by the parties or specified by law, no later than thirty (30) days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the transmittal of the final statements and proofs to the arbitrators. The award shall be in writing and shall be signed by a majority of the arbitrators. It shall be executed in the manner required by law. The arbitrator shall provide a written explanation of the reasoning for the award. In the event the party of whom arbitration is demanded shall fail to appoint his or her arbitrator within the time specified or the two (2) arbitrators appointed by the parties are unable to agree on an appointment of the third arbitrator within the time specified, either party may petition the presiding justice of the superior court to appoint a single arbitrator who shall hear the parties and make an award as provided herein. The petitioner shall give five (5) days notice in writing to the other party before filing his or her petition."

(c) Any dispute involving claims less than one hundred thousand dollars (\$ 100,000) and associated with construction of a highway or bridge as referred to in subsection (b) shall be submitted to arbitration. Any dispute involving claims of one hundred thousand dollars (\$ 100,000) or more and associated with construction of a highway or bridge as referred to in subsection (b) shall only be arbitrated with the consent of the parties. If the parties fail to consent to arbitration and the state of Rhode Island is a party to the dispute, then the claim will proceed in accordance with § 37-13.1-1.

(d) For the purposes of this section, the term "claims" shall not mean the aggregate amount sought under the contract or in the arbitration, but shall refer specifically to each item or matter in dispute for which additional compensation is sought or for each item for which a credit is sought.

(e) Notwithstanding subsection (a) or (b) of this section, if any contract except for highway and bridge contracts provides for an arbitration procedure, and a method of appointment of an arbitrator or arbitrators, that method shall be followed instead of the method provided in subsection (b) of this section.

(f) This section shall apply to all written contracts executed on or after January 1, 1986.

### **37-16-3. Application to subcontracts.**

When a contract described in 37-16-2 is in effect and any party thereto has entered into a subcontract to perform part of the work and/or furnish any materials in connection with the work described in the contract and the terms of the subcontract provide for arbitration of a dispute or claim concerning the performance or interpretation thereof, or the subcontract, expressly or by reference to the terms of the contract, provides that the parties to the subcontract shall comply with the arbitration provisions of the contract, the following shall apply when a request is made or an order of court is entered for arbitration either under the terms of the contract or subcontract.

(a) When arbitration under the contract may adversely affect the interest of a party thereto because of the effect of an award of the arbitrator or arbitrators upon the performance or interpretation of the terms of a subcontract to which he or she is also a party, he or she may require any other party or all other parties to the subcontract to become a party or parties to the arbitration.

(b) When a party to a subcontract makes a demand or an order of court is entered for arbitration under the terms of the subcontract which comply with the provision of this chapter, any party thereto who is also a party to the contract and whose rights under the contract may be adversely affected by the effect of an award of the arbitrator or arbitrators upon the performance or interpretation of the contract, may require any other party to the contract to become a party to the arbitration.

(c) When a party to a contract or to a subcontract is made a party to arbitration by virtue of the provisions of this section, he or she shall have all the rights of a party to arbitration as provided in this chapter except the appointment of an arbitrator. Provided, however, he or she may object to the arbitrators appointed by the parties in which event a single arbitrator shall be appointed as provided in 37-16-2 in the petition of either of the original parties to arbitration. The award of the arbitrator or arbitrators shall be valid and shall be binding on him or her to

the extent that it affects the performance or interpretation of the contract and/or subcontract to which he or she is a party. The award of the arbitrator or arbitrators may be enforced, modified, or vacated as this chapter provides an award made in an arbitration of a contract described in 37-16-2 may be enforced, modified, or vacated.

#### **37-16-4. Stay of legal proceedings pending arbitration.**

If any suit or proceedings be brought upon any issue referable to arbitration under contract in writing providing for arbitration, the court in which the suit is pending upon being satisfied that the issue involved in the suit or proceedings is referable to arbitration under the contract, shall on application of one of the parties, stay the trial of the action until arbitration has been held.

#### **37-16-5. Jurisdiction of superior court to enforce arbitration provision and awards.**

The entering into a contract in writing providing for arbitration shall be deemed a consent of all parties, including those enumerated in 37-16-2, thereto to the jurisdiction of the superior court of this state to enforce the arbitration provision and any award made pursuant to that provision. A party aggrieved by the failure, neglect, or refusal of another to perform under a contract providing for arbitration, may petition the superior court, or a judge thereof, for an order directing that arbitration proceed in the manner provided for in the contract. Five (5) days' notice in writing of the application shall be served upon the part in default. Service thereof shall be made in the manner specified in the contract, and if no manner specified therein, then in the manner provided by law for personal service of a summons, within or without the state, or substituted service of a summons, or upon satisfactory proof that the party aggrieved has been or will be unable with due diligence to make service in any of the foregoing manners, then notice shall be served in such manner as the court or judge may direct. A judge of the superior court shall hear the parties and upon being satisfied that there is no substantial issue as to the making of the contract or the failure to comply therewith, the court, or the judge thereof, hearing the application, shall make an order directing the parties to proceed to arbitration in accordance with the terms of the contract.

#### **37-16-6. Trial upon evidence of substantial issue.**

If evidentiary facts are set forth raising a substantial issue as to the making of the contract or the failure to comply therewith, the court, or the judge thereof, shall proceed immediately to the trial of the issues. Whenever an immediate trial is ordered, the order therefor shall provide that, if the court finds that a written contract providing for arbitration was made, and that there was a failure to comply therewith, the parties shall proceed with the arbitration in accordance with the terms of the contract and the order shall provide that if the court finds that there was no contract or failure to comply with the contract, then the proceeding shall be dismissed.

#### **37-16-7. Method of appointing arbitrators or umpire.**

If in the contract providing for arbitration, provision is made for a method of naming or appointing an arbitrator or arbitrators or an umpire, that method shall be followed, but if no method be provided therein, then the parties to the contract shall agree to the method of naming or appointing an arbitrator or arbitrators or an umpire and if the parties shall fail to agree, then the court or the judge thereof upon application of either of the parties after due notice to the other party shall appoint an arbitrator to hear the dispute.

#### **37-16-8. Scheduling and notice of arbitration hearing - Adjournment.**

Subject to the terms of the contract, if any are specified therein, the arbitrators selected as prescribed in this chapter must appoint a time and place for the hearing of the matters submitted to them, and must cause notice thereof to be given to each of the parties. They, or a majority of them, may adjourn the hearing from time to time upon the application of either party for good cause shown or upon their own motion, but not beyond the day fixed if a date in the contract, if any, for rendering their award, unless the time so fixed is extended by the written consent of the parties to the contract or their attorney, or the parties have continued with the arbitration without objection to such adjournment.

#### **37-16-9. Power of court to direct prompt hearing.**

The court shall have power to direct the arbitrators to proceed promptly with the hearing and determination of the dispute, claim, or matter in question.

#### **37-16-10. Arbitrator's oath - Waiver.**

Before hearing any testimony, arbitrators selected as prescribed in this chapter must be sworn, by an officer authorized by law to administer an oath, faithfully and fairly to hear and examine the claim, dispute, or matter in question and to make a just award according to the best of their understanding, unless the oath is waived by the

written consent of the parties to the contract or their attorneys or the parties have continued with the arbitration without objection to the failure of the arbitrators to take the oath.

### **37-16-11. Powers of arbitrators.**

The arbitrator or arbitrators selected as prescribed in this chapter, may require any person to attend before them as a witness; and he or she and they have, and each of them has, the same powers with respect to all the proceedings before them which are conferred upon a board or a member of a board authorized by law to hear testimony. All the arbitrators selected as prescribed in this chapter must meet together and hear all the allegations and proofs of the parties; but an award by a majority of them is valid.

### **37-16-12. Fees.**

In any proceeding under this chapter, unless the parties agree as to the arbitrator's or arbitrators' fees, such fees shall be fixed by the court or the judges thereof who shall require the payment equally by both parties of the arbitrators' fees.

### **37-16-13. Validity of awards.**

An award shall be valid and enforceable according to its terms and under the provisions of this chapter, without previous adjudication of the existence of a contract to arbitrate, subject, nevertheless, to the provisions of this section:

- (a) A party who has participated in any of the proceedings before the arbitrator or arbitrators may object to the confirmation of the award only on one or more of the grounds hereinafter specified (provided that he did not continue with the arbitration with notice of the facts or defects upon which his objection is based) because of a failure to comply with 37-16-8 or with 37-16-10 or because of the improper manner of the selection of the arbitrators.
- (b) A party who has not participated in any of the proceedings had before the arbitrator or arbitrators and who has not made or been served with an application to compel arbitration under 37-16-5 may also put in issue the making of the contract or the failure to comply therewith, either by a motion for a stay of the arbitration or in opposition to the confirmation of the award. If a notice shall have been personally served upon such party of an intention to conduct the arbitration pursuant to the provisions of a contract specified in the notice, then the issues specified in this subdivision may be raised only by a motion for a stay of the arbitration, notice of which motion must be served within ten (10) days after the service of the notice of intention to arbitrate. The notice must state in substance that unless within ten (10) days after its service, the party served therewith shall serve a notice of motion to stay the arbitration, he or she shall thereafter be barred from putting in issue the making of the contract or the failure to comply therewith. The arbitration hearing shall be adjourned upon service of the notice pending the determination of the motion. Where the opposing party, either on a motion for a stay or in opposition to the confirmation of an award, sets forth evidentiary facts raising a substantial issue as to the making of the contract or the failure to comply therewith, an immediate trial of the same shall be had. In the event that the party is unsuccessful he or she may, nevertheless, participate in the arbitration if the same is still being carried on.

### **37-16-14. Arbitration under chapter deemed special proceeding - Jurisdiction of superior court.**

Arbitration of a claim, dispute, or matter in question under a contract described in this chapter shall be deemed a special proceeding, of which the superior court for Providence County shall have jurisdiction.

### **37-16-15. Procedure for hearing of application to court.**

Any application to the court, or a judge thereof, hereunder shall be made and heard in the manner provided by law for the making and hearing of motions, except as otherwise herein expressly provided.

### **37-16-16. Form of award.**

To entitle the award to be enforced, as prescribed in this chapter, it must be in writing; and, within the time limited in the contract, if any, subscribed by the arbitrator or arbitrators making it and either filed in the office of the clerk of the court having jurisdiction as provided in 37-16-14 or delivered to one of the parties or his or her attorney.

### **37-16-17. Court order confirming award.**

At any time within one year after the award is made, as prescribed in 37-16-16, any party to the contract by the terms of which arbitration was had, may apply to the court having jurisdiction as provided in 37-16-14 for an order confirming the award. Thereupon the court must grant the order unless the award is vacated, modified, or corrected, as prescribed in 37-16-18 and 37-16-19 or unless the award is unenforceable under the provisions of 37-16-13. Notice of the motion must be served upon the adverse party or parties or his or her or their attorneys, as prescribed by law for service of notice of a motion upon an attorney in an action in the same court.

### **37-16-18. Court order vacating award.**

In any of the following cases, the court must make an order vacating the award, upon the application of any party to the controversy which was arbitrated

- (a) When the award was procured by fraud.
- (b) Where the arbitrator or arbitrators exceeded their powers, or so imperfectly executed them, that a mutual, final, and definite award upon the subject matter submitted was not made.
- (c) If there was no valid contract, and the objection has been raised under the conditions set forth in 37-16-13.

### **37-16-19. Rehearing after vacation of award.**

Where an award is vacated, the court, in its discretion may direct a rehearing either before the same arbitrator or arbitrators or before a new arbitrator or arbitrators to be chosen in the manner provided in the contract for the selection of the original arbitrator or arbitrators or as provided for in 37-16-7 and any provision limiting the time in which the arbitrator or arbitrators may make a decision shall be deemed applicable to the new arbitration and to commence from the date of the court's order.

### **37-16-20. Court order modifying or correcting award.**

In any of the following cases, the court must make an order modifying or correcting the award, upon the application of any party to the contract by the terms of which the arbitration was held.

- (a) Where there was an evident miscalculation of figures or an evident mistake in the description of any persons, thing, or property referred to in the award.
- (b) Where the arbitrator or arbitrators have awarded upon a matter not submitted to them, not affecting the merits of the decision upon the matter submitted.
- (c) Where the award is imperfect in a matter of form not affecting the merits of the controversy, and, if it had been a master's report the defect could have been amended or disregarded by the court.

### **37-16-21. Notice of motion to vacate, modify, or correct an award.**

Notice of a motion to vacate, modify, or correct an award must be served upon all adverse parties, or their attorneys, within sixty (60) days after the award is filed or delivered, as prescribed by law for service of notice of a motion upon an attorney in an action; except that in opposition to a motion to confirm an award, any of the grounds specified in 37-16-18 may be set up. For the purpose of the motion, any judge who might make an order, to stay the proceedings in an action brought in the same court may make an order, to be served with the notice of motion, staying the proceedings of an adverse party or parties to enforce the award.

### **37-16-22. Entry of judgment - Costs.**

Upon the granting of an order confirming, modifying, or correcting an award, judgment may be entered in conformity therewith, except as is otherwise prescribed in this chapter. Costs of the application and of the proceedings subsequent thereto, not exceeding twenty-five dollars (\$25.00) and disbursements, may be awarded by the court in its discretion. If awarded, the amount thereof must be included in the judgment.

### **37-16-23. Filing of papers after judgment.**

(a) Immediately after entering judgment, the clerk must attach together and file the following papers:

- (1) The contract, and each written extension of the time, if any, within which to make the award.
- (2) The award.
- (3) Each notice, affidavit or other paper used upon an application to confirm, modify, or correct the award, and a copy of each order of the court upon the application.
- (4) A copy of the judgment.

(b) The judgment may be docketed as if it was rendered in an action.

### **37-16-24. Effect of judgment.**

The judgment so entered has the same force and effect, in all respects as, and is subject to all the provisions of law relating to a judgment in an action. The judgment may be enforced as if it had been rendered in an action in the court in which it is entered.

### **37-16-25. Appeals.**

An appeal may be taken from an order made in a proceeding under this chapter, or from a judgment entered upon an award. The proceedings upon the appeal, including the judgment thereupon and the enforcement of the judgment, are governed by the provisions of statute and rule regulating appeal in actions as far as they are applicable.

### **37-16-26. Satisfaction of award.**

- (a) An award which requires the payment of a sum of money by a city, town, or the state or any body described in 37-16-2 created or organized by or through the authority of any of them, shall be satisfied to the extent of payment of that sum by payment thereof to the party to whom the award was made by the treasurer or officer exercising the duties of a treasurer thereof from its general funds.
- (b) An award which requires the payment of a sum of money to a city, a town, or the state or any body described in 37-16-2 created or organized by or through the authority of any of them shall be satisfied to the extent of payment of that sum by payment thereof to its treasurer or officer exercising the duties of a treasurer thereof who shall deposit the same in its general funds.

### **37-16-27. Application to sureties.**

- (a) If a contractor principal on a bond furnished to guarantee performance or payment on a construction contract and the claimant are parties to a written contract with a provision to submit to arbitration any controversy thereafter arising under the contract, or subject to arbitration as provided in 37-16-2(b), the arbitration provisions shall apply to the surety for all disputes involving questions of the claimant's right of recovery against the surety. Either the claimant, the contractor principal, or surety may demand arbitration in accordance with the written contract or as provided in 37-16-2(b) if applicable in one arbitration proceeding, provided that the provisions of 37-16-3 shall be applicable to any such demand for arbitration. The arbitration award shall decide all controversies subject to arbitration between the claimant, on the one hand, and the contractor principal and surety on the other hand, including all questions involving liability of the contractor principal and surety on the bond, but a claimant must file suit for recovery against the surety within the time limits set forth in 37-12-2 and 37-12-5. The arbitration shall be in accordance with this chapter and the court shall enter judgment thereon as provided therein.
- (b) The arbitrator or arbitrators, if more than one, shall make findings of fact as to the compliance with the requirements for recovery against the surety, and those findings of fact shall be a part of the award binding on all parties to the arbitration.

# TITLE 45

## CHAPTER 55 AWARD OF MUNICIPAL CONTRACTS

### SECTIONS

- 45-55-1 Legislative findings
- 45-55-2. Method of source selection
- 45-55-3. Purchasing agent - Appointment - Duties.
- 45-55-4. Definitions.
- 45-55-5. Competitive sealed bidding.
- 45-55-5.1. Business exempt.
- 45-55-5.2. Town of North Smithfield - Exemption.
- 45-55-6. Competitive negotiation.
- 45-55-7. Negotiations after unsuccessful competitive sealed bidding
- 45-55-8. Sole source procurement and emergency procurements.
- 45-55-8.1 Qualification based selection of architects and engineers.
- 45-55-9. Small purchases.
- 45-55-10. Cancellation of invitation for bids and requests for proposals.
- 45-55-11. Responsibilities of bidders and offerors
- 45-55-12. Prequalification of contractors - General.
- 45-55-13. Exclusion of state mandated costs.
- 45-55-13.1. Exclusion of multi-cities or towns insurance corporations and cooperative risk management programs.
- 45-55-13.2. Exclusion of multi-cities or towns energy aggregation programs.
- 45-55-13.3. Exclusion of multi-school district combined purchasing consortia
- 45-55-14. Staff consultants.
- 45-55-15. Severability.
- 45-55-16 Prohibition against the use of lead based paints.
- 44-55-17 Penalties

#### **45-55-1. Legislative findings.**

It is hereby declared that a need exists to establish a uniform system for the award of contracts by municipalities, utilizing open cooperative bids.

#### **45-55-2. Method of source selection.**

Except as otherwise authorized by law, all municipal contracts shall be awarded by:

- (1) Competitive sealed bidding, pursuant to 45-55-5;
- (2) Competitive negotiations, pursuant to 45-55-6;
- (3) Non-competitive negotiations, pursuant to 45-55-7 and 45-55-8;
- (4) Small purchase procedures, pursuant to 45-55-9.
- (5) Qualification based selection (QBS) process for architects/engineers pursuant to 45-55-8.1

#### **45-55-3. Purchasing agent - Appointment - Duties.**

Within each city or town or quasi public agency there shall be designated a person or persons to act as purchasing officer to exercise the powers and duties as set forth in this chapter.

#### **45-55-4. Definitions.**

The words defined in this section have the following meanings whenever they appear in this chapter, unless the context in which they are used clearly requires a different meaning or a different definition is prescribed for a particular section, group of sections or provision.

- (1) "Business" means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or any other legal entity through which business is conducted.
- (2) "Change order" means a written order signed by the purchasing agent, or contractor directing or allowing the contractor to make changes which the changes clause of the contract authorizes the purchasing agent or contractor to order without the consent of the contractor or purchasing agent.
- (3) "Construction" means the process of building, altering, repairing, improving, or demolishing any public structures or building, or other public improvements of any kind to any public real property. It does not include the routine maintenance or repair of existing structures, buildings, or real property performed by salaried employees of the municipality in the usual course of their job.
- (4) "Contract" means all types of agreements, including grants and orders, for the purchase or disposal of supplies, services, construction, or any other item. It includes awards; contracts of a fixed-price, cost, cost-plus-a-fixed-fee, or incentive type; contracts providing for the issuance of job or task orders; leases; letter contracts, purchase orders, and construction management contracts. It also includes supplemental agreements with respect to any of the preceding. "Contract" does not include labor contracts with employees of the municipality.
- (5) "Contract modification" means any written alteration in the specifications, delivery point, rate of delivery, contract period, price, quantity, or other contract provisions of any existing contract, whether accomplished by unilateral action in accordance with a contract provision, or by mutual action of the parties to the contract. It includes bilateral actions, as supplemental agreements, and unilateral actions, as change orders, administrative changes, notices of termination, and notices of the exercise of a contract option.
- (6) "Contractor" means any person having a contract with a municipality.
- (8) "Data" means recorded information, regardless of form or characteristic.
- (8) "Designee" means a duly authorized representative of a person holding a superior position.
- (9) "Employee" means an individual drawing a salary from a municipality, whether elected or not, and any non-salaried individual performing personal services for any municipality.
- (10) "May" means permissive.
- (11) "Municipality" means the individual cities and towns of the state of Rhode Island.
- (12) "Negotiation" means contracting by either of the methods described in §§ 45-55-6, 45-55-7, and 45-55-8.
- (13) "Person" means any business, individual, organization, or group of individuals.
- (14) "Procurement" means the purchasing, buying, renting, leasing, or otherwise obtaining of any supplies, services, or construction. It also includes all functions that pertain to the obtaining of any supply, service, or construction item, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration.
- (15) "Purchasing officer" means the person designated in each municipality or quasi public agency pursuant to section 45-55-3.
- (16) "Regulations" means rules and regulations adopted by the individual cities or towns, concerning the implementation of the provisions of this chapter.

(17) "Services" means the rendering, by a contractor, of its time and effort rather than the furnishing of a specific end product, other than reports which are merely incidental to the required performance of services. "Services" does not include labor contracts with employees of governmental agencies.

(18) "Shall" means imperative.

(19) "Supplemental agreement" means any contract modification which is accomplished by the mutual action of the parties.

(20) "Supplies" means all property, including, but not limited to, leases of real property, printing and insurance, except land or permanent interest in land.

#### **45-55-5. Competitive sealed bidding.**

(a) Contracts exceeding the amount provided by 45-55-9 shall be awarded by competitive bidding unless they are professional engineering/architectural services pursuant to 45-55-8.1 and it is determined in writing that this method is not practicable. Factors to be considered in determining whether competitive sealed bidding is practicable shall include whether:

- (1) Specifications can be prepared that permit award on the basis of either the lowest qualified bid price or the lowest qualified evaluated bid price; and
  - (2) The available sources, the time and place of performance, and other relevant circumstances as are appropriate for the use of competitive sealed bidding.
- (b) The invitation for bids shall state whether award shall be made on the basis of the lowest bid price or the lowest evaluated or responsive bid price. If the latter basis is used, the objective measurable criteria to be utilized shall be stated in the invitation for bids, if available.
- (c) Adequate public notice of the invitation for bids shall be given a sufficient time prior to the date stated in the notice for the opening of bids. Notice may include publication in a newspaper of general circulation in the state as determined by the purchasing officer for the municipality not less than seven (7) days nor more than twenty-one (21) days before the date set for opening of the bids. The purchasing officer may make a written determination that the twenty-one (21) day limitation needs to be waived. The written determination shall state the reason why the twenty-one (21) day limitation is being waived and shall state the number of days, giving a minimum and maximum, before the date set for the opening of bids when public notice is to be given.
- (4) Bids shall be opened publicly in full view of the public at the time and place designated in the invitation for bids. Each bid, together with the name of the bidder, shall be recorded and an abstract made available for public inspection. Subsequent to the awarding of the bid, all documents pertinent to the awarding of the bid shall be made available and open to public inspection and retained in the bid file.
- (5) The contract shall be awarded with reasonable promptness by written notice to the responsive and responsible bidder whose bid is either the lowest bid price, or lowest evaluated or responsive bid price.
- (6) Correction or withdrawal of bids may be allowed only to the extent permitted by regulations issued by the purchasing officer.

#### **45-55-5.1. Business exempt.**

The North Kingstown Bus Contractors Association and the Scituate School Bus Owners Club shall be exempt from the provisions of this chapter.

#### **45-55-5.2. Town of North Smithfield - Exemption.**

The town of North Smithfield is exempt from the provisions of this chapter with regard to the contracting for fire and rescue services with the Primrose Volunteer Fire Department and/or North Smithfield Fire Department and/or their respective successors and assigns.

#### **45-55-6. Competitive negotiation.**

- (a) When, under regulations adopted by the city or town council, the purchasing agent determines in writing that the use of competitive sealed bidding is not practicable, and except as provided in 45-55-8, 45-55-9, and 45-55-10 a contract may be awarded by competitive negotiation.
- (b) Adequate public notice of the request for proposals shall be given in the same manner as provided in 45-55-5(c).
- (c) Contracts may be competitively negotiated when it is determined, in writing, by the purchasing agent that the bid prices received by competitive sealed bidding either are unreasonable as to all or part of the requirements, or were not independently reached in open competition, and for which:
  - (1) Each competitive bidder has been notified of the intention to negotiate and is given reasonable opportunity to negotiate; and
  - (2) The negotiated price is lower than the lowest rejected bid by any competitive bidder; and
  - (3) The negotiated price is the lowest negotiated price offered by a competitive offeror.
- (d) The request for proposals shall indicate the relative importance of price and other evaluation factors.
- (e) Award shall be made to the responsible offeror whose proposal is determined in writing to be the most advantageous to the municipality taking into consideration price and the evaluation factors set forth in the request for proposals.
- (f) Written or oral discussions shall be conducted with all responsible offerors who submit proposals determined, in writing, to be reasonably susceptible of being selected for award. Discussions shall not disclose any information derived from proposals submitted by competing offerors. Discussions need not be conducted:
  - (1) With respect to prices, where such prices are fixed by law or regulation, except that consideration shall be given to competitive terms and conditions; or
  - (2) Where time of delivery or performance will not permit discussions; or
  - (3) Where it can be clearly demonstrated and documented from the existence of adequate competition or accurate prior cost experience with the particular supply, service, or construction item, that acceptance of an initial offer without discussion would result in fair and reasonable prices, and the request for proposals notifies all offerors of the possibility that award may be made on the basis of the initial offers.

#### **45-55-7. Negotiations after unsuccessful competitive sealed bidding.**

- (a) In the event that all bids submitted pursuant to competitive sealed bidding under 45-55-5 result in bid prices in excess of the funds available for the purchase, and the purchasing officer determines in writing:
  - (1) That there are no additional funds available from any source so as to permit an award to the lowest responsive and responsible bidder, and
  - (2) The best interest of the municipality will not permit the delay attendant to a re-solicitation under revised specifications, or for revised quantities, under competitive sealed bidding as provided in 45-55-5, then a negotiated award may be made as stated in subsection (b) or (c) of this section.
- (b) Where there is more than one bidder, competitive negotiations pursuant to 45-55-6, shall be conducted with the three (3) (two (2) if there are only two (2)) bidders determined in writing, to be the lowest responsive and responsible bidders to the competitive sealed bid invitation. Competitive negotiations shall be conducted under the following restrictions:
  - (1) If discussions pertaining to the revision of the specifications or quantities are held with any potential offeror, all other potential offerors shall be afforded an opportunity to take part in the discussions; or

(2) A request for proposals, based upon revised specifications or quantities, shall be issued as promptly as possible, shall provide for an expeditious response to the revised requirements, and shall be awarded upon the basis of the lowest bid price, or lowest evaluated bid price submitted by any responsive and responsible offeror.

(c) When after competitive sealed bidding, it is determined in writing, that there is only one responsive and responsible bidder, a noncompetitive negotiated award may be made with such bidder in accordance with 45-55-8.

#### **45-55-8. Sole source procurement and emergency procurements.**

(a) A contract may be awarded for a supply, service, or construction item without competition when, under published regulations, the purchasing officer determines, in writing, that there is only one source for the required supply, service, or construction item.

(b) Notwithstanding any other provision of this chapter, the purchasing agent may make or authorize others to make emergency procurements when there exists a threat to public health, welfare, or safety under emergency conditions as defined in regulations or where the procurement will be in the best interest of the city as established by properly promulgated rules and regulations; provided, that such emergency procurements shall be made with such competition as is practicable under the circumstances. A written determination of the basis for the emergency, and for the selection of the particular contractor, shall be included in the contract file.

#### **45-55-8.1. Qualification based selection of architects and engineers.**

When the purchasing agent determines that the city or town needs the services of a professional architect or engineer, the purchasing agent shall follow the qualification based selection process for the procurement of architectural and engineering consulting services.

#### **45-55-9. Small purchases.**

Procurements, not to exceed an aggregate amount of ten thousand dollars (\$10,000) for construction and five thousand dollars (\$5,000) for all other purchases may be made in accordance with small purchase regulations promulgated by the municipality. These amounts shall be increased or decreased annually hereafter at the same rate as the Boston Regional Consumer Price Index. Procurement requirements shall not be artificially divided so as to constitute a small purchase under this section. A municipality may further reduce the aggregate purchase amount, as provided for in this section by ordinance.

#### **45-55-10. Cancellation of invitation for bids and requests for proposals.**

An invitation for bids, a request for proposals, or other solicitation may be canceled, or all bids or proposals rejected, if it is determined, in writing, that such action if taken is not in the best interest of the municipality and approved by the chief purchasing officer.

#### **45-55-11. Responsibilities of bidders and offerors.**

(1) A written determination of responsibility of a bidder or offeror shall be made and it shall be made in accordance with regulations issued by the municipality.

A reasonable inquiry to determine the responsibility of a bidder or offeror may be conducted. The failure of a bidder or offeror to promptly supply information in connection with a reasonable inquiry may be grounds for a determination of non-responsibility with respect to a bidder or offeror.

(2) Except as otherwise provided, by law, information furnished by a bidder or offeror pursuant to this section may not be disclosed outside of the purchasing department administering the contract without prior written consent of the bidder or offeror.

#### **45-55-12. Prequalification of contractors - General.**

The municipality may provide for prequalification of suppliers as responsible prospective contractors for particular types of supplies, services, and construction. Municipalities which choose to provide for prequalification of suppliers shall adopt regulations for prequalification in the same manner provided for in the adoption of ordinances in the manner provided for in the legislative or home rule charter of the municipality. Solicitation mailing lists of

potential contractors of supplies, services, and construction shall include but need not be limited to prequalified contractors. Prequalification shall not foreclose a written determination:

- (1) Between the time of the bid opening or receipt of offers and the making of an award, that a prequalified supplier is not responsible; or
- (2) That a supplier who is not prequalified at the time of bid opening or receipt of offers is responsible.

#### **45-55-13. Exclusion of state mandated costs.**

The provisions of 45-13-7 through 45-13-10 do not apply to this section.

#### **45-55-13.1. Exclusion of multi-cities or towns insurance corporations and cooperative risk management programs.**

The provisions of this chapter shall not apply to entities organized pursuant to section 45-5-20.1. Those entities are exempt from all of the provisions of this chapter.

#### **45-55-13.2. Exclusion of multi-cities or towns energy aggregation programs.**

The provisions of this chapter do not apply to entities organized for the purpose of negotiating the purchase of electric power pursuant to § 39-3-1.1, or energy or energy related services. Those entities are exempt from all provisions of this chapter.

#### **45-55-13.3. Exclusion of multi-school district combined purchasing consortia.**

The provisions of this chapter do not apply to purchases and contracts entered into by those consortia established pursuant to § 16-2-9.2, and such entities shall be exempt from all provisions of this chapter.

#### **45-55-14. Staff consultants.**

The procurement of the service of an attorney, physician or dentist by a municipality, is exempt from the provisions of this chapter.

#### **45-55-15. Severability.**

If any one or more sections, clauses, sentences or parts of this chapter are for any reason be adjudged unconstitutional or otherwise invalid in any court, that judgment shall not affect, impair or invalidate the remaining provisions of this chapter but shall be confined in its operation to the specific provisions so held unconstitutional or invalid and the inapplicability or invalidity of any section, clause or provisions of this chapter in any one or more instances or circumstances shall not be taken to affect or prejudice in any way its applicability or validity in any other instance.

#### **45-55-16. Prohibition against the use of lead based paints.**

When purchasing paint products or contracting or subcontracting for painting, construction, improvement, completion, or repair of any public buildings, public road, public bridge, or public construction, all municipalities, as defined by 45-55-4(11), shall be prohibited from the use of lead based paint.

#### **45-55-17. Penalties.**

Any person who knowingly and intentionally violates any provision of this chapter shall be subject to a misdemeanor, punishable by a fine of not more than five hundred dollars (\$500), or by imprisonment for not more than one year, or both.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF WATER

**MEMORANDUM**

**SUBJECT:** Re-Instatement of Federal Flood Risk Management Standard for State Revolving Fund Programs

**FROM:** Anita Maria Thompkins, Director, Drinking Water Protection Division  
Office of Ground Water and Drinking Water

ANITA THOMPCKINS  
Digitally signed by ANITA THOMPCKINS  
Date: 2022.04.27 16:15:38 -04'00'

Raffael Stein, Director, Water Infrastructure Division  
Office of Wastewater Management

RAFFAEL  
STEIN  
Digitally signed by RAFFAEL STEIN  
Date: 2022.04.28 10:17:01 -04'00'

**TO:** Water Division Directors  
Regions I-X

Flooding is one of the most common hazards in the United States, accounting for roughly \$17 billion in damage annually between 2010 and 2018 according to the Federal Emergency Management Agency (FEMA), and it will continue to be an ongoing challenge for water infrastructure. Impacts can include physical damage to assets, soil and streambank erosion and contamination of water sources, loss of power and communication, loss of access to facilities, saltwater intrusion, and dangerous conditions for personnel.

On May 20, 2021, President Biden signed Executive Order (EO) 14030, *Climate-Related Financial Risk*, reinstating EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input* (January 30, 2015). EO 13690 amends the original floodplain management standard established in 1977 by EO 11988, and was revoked by EO 13807 in August 2017, though is now reinstated. This action reestablishes the Federal Flood Risk Management Standard (FFRMS) for federally funded projects.

The FFRMS will increase the resilience of infrastructure for flooding events caused by climate disasters. The new standard will go into effect in fiscal year 2022 for State Revolving Fund (SRF) capitalization grants (including the Bipartisan infrastructure Law funding). The FFRMS applies to actions where federal funds are used for new construction, substantial improvement (i.e., projects worth more than 50% of the market value or replacement cost of the facility), or to address substantial damage to structures and facilities. Much of the groundwork for this new standard was completed by an SRF

state/EPA workgroup in 2015 and 2016 prior to EO 13690 being revoked in 2017 but was never implemented for the SRF programs. Details about the new FFRMS can be found in the updated Floodplain Management section of the SRF Crosscutter Handbook (excerpt attached).

If a potential SRF assistance recipient needs assistance with evaluating their water system or project with respect to this new standard, EPA has several tools and resources available, including several that would assist with utilizing the climate-informed science approach.

EPA's [Creating Resilient Water Utilities](#) (CRWU) initiative assists drinking water, wastewater, and storm water (water sector) utilities by promoting a clear understanding of climate change and helps to identify potential long-term adaptation options for decision-making related to implementation and infrastructure financing. Tools and resources under CRWU to assess and address climate change risk include:

- [Climate Resilience Evaluation and Awareness Tool \(CREAT\)](#) – A climate change risk assessment application that assists water sector utilities in considering climate impacts and identifying adaptation options to increase overall climate resilience. Incorporating CREAT results into best management practices and capital investment decisions builds customer and stakeholder confidence that a utility is being proactive in identifying significant climate-related risks.
- [Resilient Strategies Guide](#) – Introduction of water sector utilities to the climate change adaptation planning process. Users identify their planning priorities, vulnerable assets, potential adaptation strategies, and available funding sources.
- [Scenario Based Projection Map](#) – Provides scenarios of projected changes in annual total precipitation, intensity, annual average temperature, 100-year storm events, and sea-level rise as a result of climate change.
- [Storm Surge Inundation Map and Hurricane Strike Frequency Map](#) – Provides the worst-case storm and inundation scenarios on the American Gulf and Atlantic coasts, including Puerto Rico. The map also includes data on: FEMA flood zones; hurricane strikes; and real time coastal flood advisories.
- [Streamflow Map](#) – Provides projections of possible changes in flow conditions for the U.S. streams and rivers under a range of future environmental conditions.
- [Case Studies Map](#) – Provides more than 60 water sector utility case studies and information on how to address climate change impacts.

Other Agency resources include:

- [Flood Resilience: A Basic Guide for Water and Wastewater Utilities](#) – This guide helps utilities become more resilient to flooding by examining the threat of flooding, determining impacts to utility assets, and identifying cost-effective mitigation options.
- [Federal Funding for Utilities – Water/Wastewater – in National Disasters](#) – Fed FUNDS provides information on SRF as well as funding from FEMA, U.S. Department of Agriculture, U.S. Department of Housing and Urban Development, and Small Business Administration.

While this requirement only applies to federal funding, EPA encourages states to consider utilizing this standard not just for equivalency projects, but for all SRF funded projects to bolster communities' climate resilience.

For inquiries, please contact Kiri Anderer, DWSRF Senior Environmental Engineer at (202) 564-3134 or [anderer.kirsten@epa.gov](mailto:anderer.kirsten@epa.gov), or Franny Josephs, CWSRF Financial Analyst at (202) 564-9541 or [josephs.frances@epa.gov](mailto:josephs.frances@epa.gov).

Attachment

SRF Crosscutter Handbook, Floodplain Management section revision

## **Floodplain Management**

### **Executive Order No. 11988 (1977), as amended by Executive Order No. 13690 (2015)**

Federal policy designed to promote the prudent management of floodplains has been in effect since 1968, with the passage of the National Flood Insurance Act. Pub. L. No. 90-448, 42 U.S.C. § 4001 *et seq.* By providing federal subsidies for private flood insurance and by requiring flood-prone communities to have the insurance as a condition to receiving federal assistance, that law and the Flood Disaster Protection Act of 1973, Pub. L. No. 93-234, 87 Stat. 939 (1973), recognized the serious economic and environmental damage that can result from flooding in developed lowland areas.

Executive Order No. 11988, as amended by Executive Order No. 13690<sup>1</sup>, regulates the actions of federal agencies that affect floodplains. This order requires all agencies undertaking, financing, or assisting proposed activities to determine whether they will occur in or affect a floodplain and to evaluate potential measures to avoid adversely affecting the floodplain. When determining whether or not an action is in a floodplain, agencies should draw on existing resources where possible. Federal Emergency Management Agency (FEMA) products, such as flood maps and Flood Insurance Studies (FIS), may serve as a good starting source. E.O. 13690 amended the term “floodplain” as used in the 1977 version of E.O. 11988 by establishing a Federal Flood Risk Management Standard (FFRMS) which describes three available approaches for determining the vertical flood elevation and corresponding horizontal floodplain for federally funded projects. These approaches are designed to recognize and incorporate future conditions rather than rely solely on existing data and information. One of these approaches must be used for determining the FFRMS floodplain for federal actions. The approaches currently described in the FFRMS are the following:

1. *Climate-informed Science Approach* – use best available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science and other factors or changes affecting flood risk to determine the vertical flood elevation and corresponding horizontal floodplain in a manner appropriate to policies, practices, criticality, and consequences.
2. *Freeboard Value Approach* – use the Base Flood Elevation (or 1-percent-annual-chance flood determined using best available data) and an additional height to calculate the freeboard value. The additional height (2’ non-critical or 3’ critical) will depend on whether or not the action is a critical action (i.e., any activity for which even a slight chance of flooding would be too great).
3. *The 0.2-percent-annual-chance Flood Approach* – use the 0.2-percent-annual-chance flood elevation (also known as the 500-year flood elevation).

---

<sup>1</sup> The Federal Flood Risk Management Standard and amendments found in E.O. 13690 include the following:

- Agencies, where possible, shall use natural systems, ecosystem processes, and nature-based approaches in the development of alternatives for all actions to which E.O. 11988 applies.
- Agencies are required to expand management from the base flood elevation to a higher vertical flood elevation and corresponding horizontal floodplain for federally funded projects.

Agencies must select, if they are available, viable alternative locations for their undertakings that will not affect floodplains. If construction or substantial improvements (i.e., projects worth more than 50% of the market value or replacement cost of the facility<sup>2</sup>) will be undertaken or supported in a floodplain because no practicable alternative locations are available, and the SRF agency has otherwise ensured compliance with the Executive Order, measures must be taken to minimize the risk of flood damage to or within the floodplain. Such measures could include flood proofing the facility to be constructed, elevating structures above base flood levels, providing compensatory flood storage, or any other means that allow structures and facilities to adapt to, withstand and rapidly recover from a flood event. In addition, public review is required for each plan or proposal for action taking place within a floodplain.

### **Implementation in the SRF Programs**

In consultation with the state SRF agency and the appropriate state floodplain management office, the SRF assistance recipient must first determine whether the proposed project will be located in or affect a floodplain. SRF assistance recipients will be required to use higher standards for actions determined to be critical actions. Critical actions are defined as any activity for which even a slight chance of flooding would be too great.

If the proposed project will be located in or will affect a floodplain, the assistance recipient must prepare a floodplain assessment. If there are no practicable alternatives to the proposed site, the assistance recipient must document the mitigating measures or design modifications that will be taken to reduce the threats from locating the project in the floodplain. In conjunction with the public notice procedures in the SERP, the project area community must be informed why the proposed project is to be located in a floodplain.

The environmental information documentation describing mitigating and design measures must be submitted by the assistance recipient to the SRF agency, which prepares a preliminary finding on whether the assistance recipient has ensured compliance with Executive Order No. 11988, as amended by Executive Order No. 13690. Notice of this finding should be given to FEMA, which may provide recommendations for improving mitigation measures or further modifying the project's design to enhance flood protection.

### **Additional References**

- 40 CFR Part 6 Appendix A: Statement of Procedures on Floodplain Management and Wetlands Protection.
- October 8, 2015: Water Resources Council's Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input. The Guidelines include a step-by-step decision making process.

---

<sup>2</sup> EPA has adopted the USDA Rural Development definition of "substantial improvement" as defined in "Environmental Policies and Procedures" 81 Fed. Reg. 41 (March 2, 2016)

Black

THIS PROJECT IS FUNDED BY THE



Navy Blue

# STATE REVOLVING FUND

JOINTLY ADMINISTERED BY THE

Black

Black

**Rhode Island  
Infrastructure Bank**

**State of Rhode Island  
Department of Health**

Navy Blue



**Vahid Ownjazayeri**  
Board Chair

**William J. Fazioli**  
Executive Director



**Daniel J. McKee**  
Governor

**Jerome M. Larkin, MD**  
Director - RI Health



Navy Blue

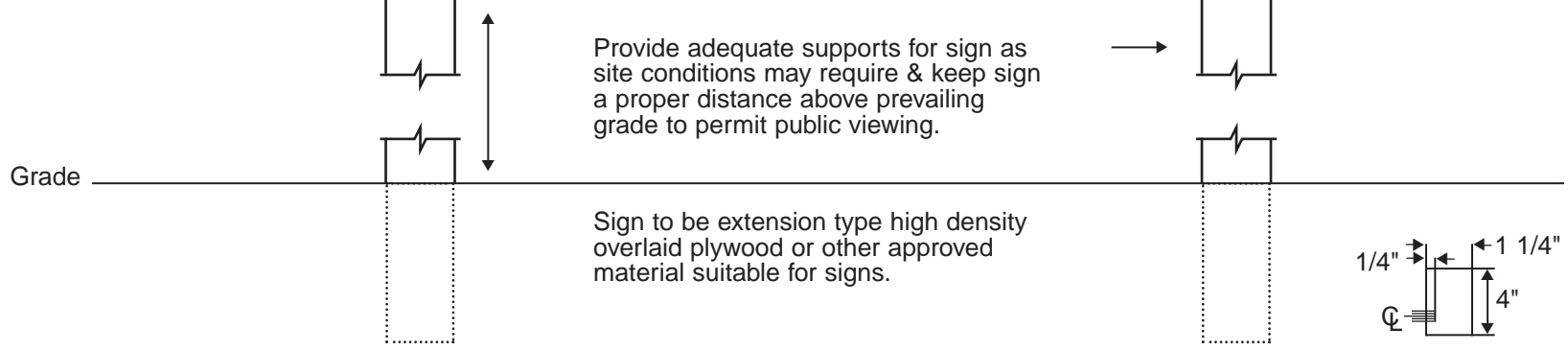
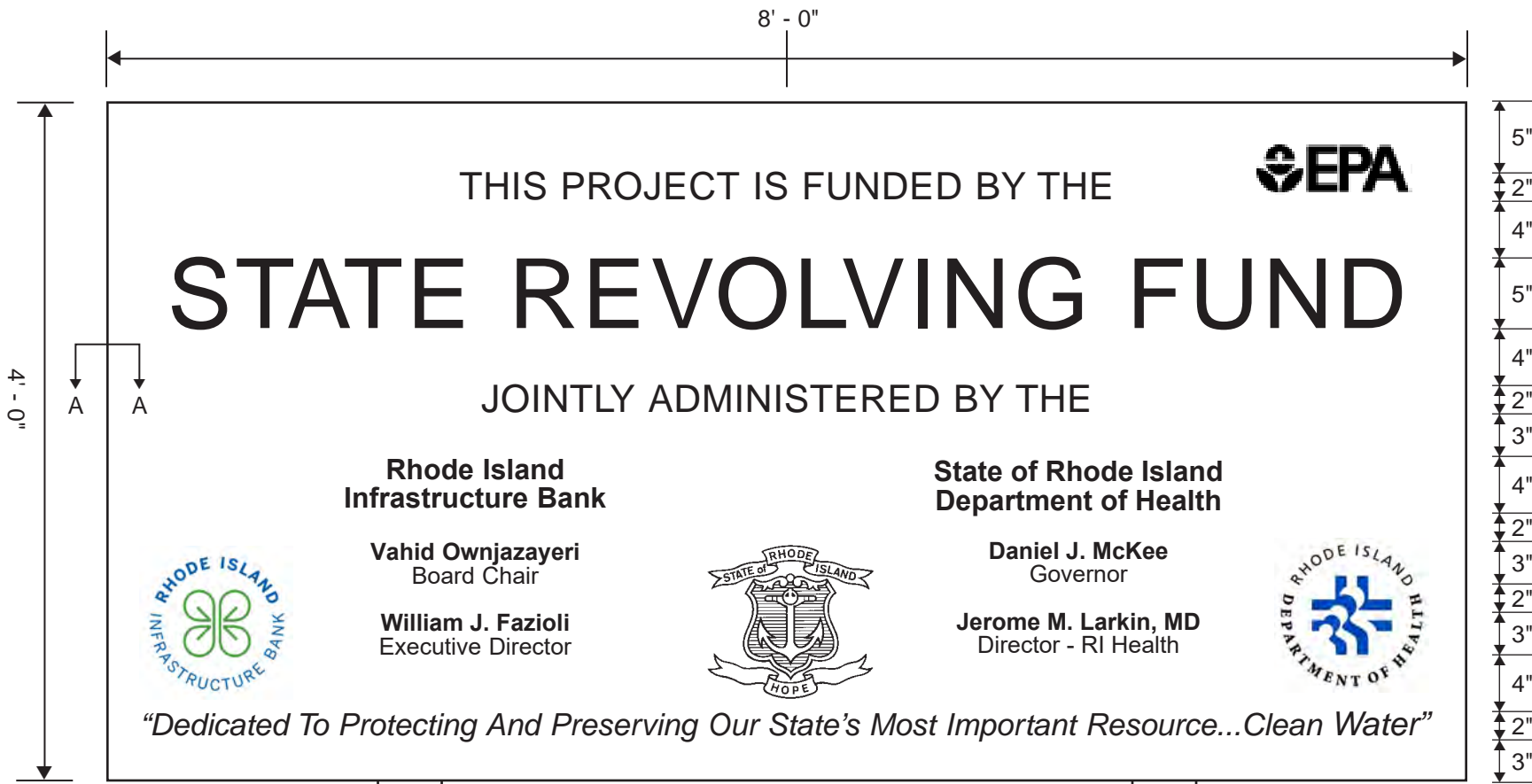
Navy Blue

*"Dedicated To Protecting And Preserving Our State's Most Important Resource...Clean Water"*

Grade

Navy Blue

Black



**SECTION 01000  
GENERAL REQUIREMENTS**

**PART 1      GENERAL**

**1.01      Scope of Work**

- A. Proposed improvements include but are not limited to: installation of new water distribution main and services, refurbishment of the existing water storage tank, demolition and disposal of existing interior equipment, modifications to the existing Pump House and mechanical/electrical systems, installation of a new pumping system, instrumentation and controls, provision of a new propane-fired emergency generator, upgrade of the electrical service, restoration of existing pavement, and loam and seeding.
  
- B. Work Included: The Contractor's attention is directed to the following general requirements for completing the work.
  - 1. Maintenance of Site and Community Access.
  - 2. Project Schedule and Sequence.
  - 3. Handling of Construction Debris, Excess Soil and Wastewater.
  - 4. Identification and Protection of Existing Utility Services
  - 5. Hours of Construction Work
  - 6. Permits and Fees
  
- C. Related Work: Documents related to, or affecting the work of this Section include, but are not necessarily limited to, the following:
  - 1. Section 01010 – Summary of Work
  - 2. Section 01030 – Special Requirements
  - 3. Section 01200 – Project Meetings
  - 4. Section 02070 – Selective Demolition

**1.02      Site and Community Access**

- A. Free access to the Paige Associates community and to individual residences by the community residents is of utmost importance and must be maintained by the Contractor at all times during the course of completing the work. The Contractor shall maintain continuous service of the existing water supply to the community excepting short-term shut-offs to complete tie-in and connections. All short-term disruptions in service must be scheduled and approved in writing by the Owner.

**1.03      Construction Sequence**

- A. Prior to the start of any mobilization, construction or ordering of materials the Contractor shall schedule a Pre-Construction Meeting and Site Walk with the Engineer and Owner. During the site walk the Engineer will clarify where erosion controls were anticipated to be necessary and clarify the location of any drainage work items in the contract.

- B. Erosion control measures shall be installed by the Contractor as indicated on the plans and as directed by the Engineer during the Site Walk prior to commencing any work. Additional erosion controls must be installed around stockpiled materials and as required to control erosion and sedimentation from the work area(s). Such measures shall be maintained throughout the contract period.
- C. The Contractor shall ensure that no excavation be left open, unguarded, or water filled during any period of time when work is not in progress. All subsurface work shall be completed with temporary surfacing in a particular area before proceeding to other work areas.
- D. Prior to the start of construction, the Contractor shall submit a schedule for the work to be completed under this contract for approval by the Owner.

#### **1.04 Change in Amount of Work**

- A. The Owner reserves the right to increase or decrease the amount of any item of work included in the Bid Form, as may be desirable or necessary during the course of this contract.

#### **1.05 Existing Utilities**

- A. Determining the location and depth of existing utilities will be the responsibility of the Contractor. The drawings do not show the exact location and depth of all utilities, nor do they show all utilities that may be encountered. If needed to perform the work, the Contractor shall locate all utilities in the area of the work by experimental excavations (if necessary) prior to and as the work progresses.
- B. The Contractor shall notify the proper utility companies and Owner to obtain the location of all utilities prior to beginning work. The marked locations shall be preserved by the Contractor during the course of the work, until such time as they are no longer needed.
- C. All utilities interfered with or damaged by the Contractor shall be immediately and properly restored by the Contractor. The Contractor shall fully compact all backfill material around and under all existing utilities encountered or crossed.

#### **1.06 Temporary Facilities**

- A. If needed, the Contractor shall obtain the prior approval of the Owner and electrical utility provider for the temporary use of unmetered electrical power.
- B. The use of any utility, including storm drainage and water supply systems, shall be coordinated with the Owner prior to such use.

### **1.07 Stockpile of Materials**

- A. The Contractor shall stockpile materials and equipment to be used in the construction in approved location(s) as directed by the Engineer. Erosion control measures shall be maintained by the Contractor around all stockpiles, as required by the Engineer. All storage locations shall be restored to their original condition by the Contractor at his/her expense.
- B. Materials shall be stored to preserve their quality and fitness for the work. Stockpiled materials approved before storage may be re-inspected prior to their use in the work.

### **1.08 Disposal of Surplus Material and Debris**

- A. The Contractor shall not dispose of any construction/demolition debris, scrap materials, excess soil or wastewater without prior approval by the Owner and all materials shall be handled as described herein.
  - 1. Construction Waste Materials and Debris: All construction materials, waste materials, pipe, concrete, building materials, wire, soil, etc. shall be inspected by the Owner prior to shipment off site for disposal in accordance with all applicable regulations. If the Owner determines that the means or methods of disposal are not appropriate, the Contractor shall stockpile the waste material on-site, in a secure condition, until an alternative disposal plan and methodology is approved by the Owner.
  - 2. Materials and components identified for salvage shall be removed from the existing installation and provided secure temporary storage by the contractor, prior to turning over to the Owner.
- B. During the progress of work the Contractor shall maintain the work site and adjoining areas in a neat and orderly manner and shall not allow the accumulation of construction debris. The Contractor shall use a suitable rubbish container at the site if so directed by the Owner or Engineer. Should the Contractor neglect to maintain the site free of accumulated debris, the Owner reserves the right to have the service performed by others at the Contractor's expense.
- C. Before acceptance and payment for the work at the substantial completion and final completion states of construction, all temporary structures, surplus materials including equipment, abandoned units, and debris with the Contractor may have accumulated during the work on the site or any adjoining property shall be removed of and properly disposed of at the Contractor's expense.

### **1.09 Permits and Fees**

- A. The Contractor shall obtain and comply with all required permits to complete the work, including all fees and bonds at his/her expense. The Contractor shall be solely responsible for performing all acts and providing all materials required to comply with all terms and conditions of required permits and licenses.

### **1.10 Notification of Construction**

- A. At least five (5) business days prior to beginning the work the Contractor shall notify the following agencies to provide information regarding proposed excavations:
  - 1. DIG SAFE;
  - 2. Police Department;
  - 3. Fire Department;
  - 4. Owner's Site Representative; and
  - 5. Engineer (Northeast Water Solutions, Inc.)

### **1.11 Submittals**

- A. The Contractor shall submit to the Engineer for acceptance, shop drawings and other forms as required in Section 00700 General Conditions Article 36, for all items to be furnished under this contract.
- B. The Contractor shall submit certificates of compliance for all backfill, bedding, pavement and other bulk materials from the source of supply demonstrating conformance with the contract specifications. If the Engineer so desires, materials may be approved at the source of supply before delivery is started.

### **1.12 Emergency Service**

- A. The Contractor shall maintain a full-time telephone service with access to his/her representative having the authority to respond to emergency situations such as settled trenches, weather damage, etc. The emergency telephone service number and list of contact personnel shall be submitted to the Owner prior to beginning work, and shall be maintained throughout the progress of work and the full contract period.
- B. The Contractor shall be capable of placing response personnel at the work site within one (1) hour of emergency notification.

### **1.13 Hours of Operation**

- A. No outdoor activity by the Contractor shall be permitted on the site outside of the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, except as required by the Contract Documents.
- B. The Owner may approve other work hours for special considerations such as work to be completed during off-peak hours. The Contractor must receive written approval from the Owner prior to working during such hours.

### **1.14 Preconstruction Conference**

- A. Prior to the start of the construction there will be a preconstruction conference and site

walk to discuss the phasing and scheduling of the construction project. The specific time and place of the conference will be arranged by the Owner after the Contract has been awarded.

### **1.15 Progress Meetings**

A. During the course of the construction project, the Contractor shall attend status meetings as scheduled by the Engineer or Owner to be held at the Site. The attendance of subcontractors and suppliers may be required during the progress of the work. The Contractor's Project Manager shall attend the meeting and shall be prepared and authorized to discuss the following items:

1. Progress of Work in relation to Contract Schedule;
2. Proposed Work activities for forthcoming period;
3. Resources committed to Contract;
4. Coordination of Work with others;
5. Status of procurement of equipment and materials;
6. Status of Submittals;
7. Outstanding actions, decisions, or approvals that affect Work activities;
8. Security issues;
9. Quality Issues;
10. Potential Claims;
11. Contract Changes;
12. Costs & Budget;
13. Labor; and
14. Insurance;

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01000**

**SECTION 01010**  
**SUMMARY OF WORK**

**PART I      GENERAL**

**1.01      Description**

- A.      This project involves the construction of improvements to the existing water distribution system including the replacement of the distribution system pressure booster pumps.
  
- B.      The work of this Contract includes, but is not limited to:
  - 1.      Provision of a temporary water supply to provide service to the community during each phase of the construction, when key components of the existing water system are removed from service for repair or replacement. Continuous potable water service shall be provided to the system.
  
  - 2.      Demolition: Includes demolition and disposal of existing pumps and controls, and interconnecting piping. This work shall include salvage of selected system components for re-installation in the improved system.
  
  - 3.      Equipment/Mechanical Installation: Interior installation of new equipment including duplex distribution pump system and controls. This work shall also include installation of interconnecting piping, mechanical specials including flowmeters, sample taps, check valves, and field-mounted instruments as required. The work shall also include hydro-static testing, flushing and sanitization of the installed equipment, piping and appurtenances.
  
- C.      The work performed under this contract shall be coordinated with the operating schedule of the school and also with the public water system certified operator.

**1.02      Sequence of Construction**

- A.      The work shall be executed in the following sequence of tasks. The Contractor shall obtain written approval from the Owner for any proposed changes or modifications of this sequence of construction work.
  - 1.      Interior Demolition:
    - a.      Provide identification of pipelines and equipment to be removed, including identification and sequence of pipeline cut locations;
    - b.      Electrical isolation and lockout/tag out of booster pumps;
    - c.      De-pressurize and drain pumps and associated piping;
    - d.      Dismantle and remove all existing water piping comprising the feed to the booster pumps;

- e. Dismantle and remove the existing water piping comprising the discharge of the booster pumps;
  - f. Dismantle and remove all motor starters, conduit, wiring and other electrical components associated with the booster pumps;
  - g. Cut and dismantle booster pump and equipment supports and mounting;
  - h. Remove all debris and provide broom-clean finish following completion of demolition;
2. Pump System Installation:
- a. Delivery, rigging and anchoring of new equipment components into position within the treatment room including; Duplex Distribution Pumps and Controllers;
  - b. Install interconnecting piping, valves, fittings and special components between equipment components, including connection to the distribution system;
  - c. Install field-mounted instruments including pressure switches, pressure transducers, electronic flowmeter, etc. as required by distribution pump manufacturer specifications;
  - d. Install identification labels on piping, equipment and instruments and identification tags on valves;
3. System Flushing, Testing, Sanitization, Validation & Startup:
- a. Cleaning and flushing of installed piping systems;
  - b. Hydrostatic testing of installed piping systems;
  - c. Inspection and final ID tagging of all wiring terminations and field connections;
  - d. Continuity testing of installed power and control wiring;
  - e. Testing and validation of generator and auto-transfer switch system;
  - f. Sanitization and flushing of installed piping systems;
  - g. Analytical validation of water quality;
  - h. Training of system operating personnel;

**PART II - PRODUCTS (SEE EQUIPMENT PROCUREMENT SPECIFICATIONS)**

**PART III – EXECUTION (NOT USED)**

**END OF SECTION 01010**

**SECTION 01015  
MOBILIZATION AND DEMOBILIZATION**

**PART 1     GENERAL**

**1.01 Scope**

- A.     The work shall consist of the mobilization and demobilization of the Contractor's forces and equipment necessary for performing the work required under the contract.
- B.     This work shall not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract.
- C.     Mobilization will not be considered as work in fulfilling the contract requirements for commencement of work.

**1.02 General**

- A.     Mobilization shall include all activities and associated costs for transportation of Contractor's personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the Contractor's operations at the site; premiums paid for performance and payment bonds, including coinsurance and reinsurance agreements as applicable; and other items specified in these specifications.
- B.     Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal and site cleanup of offices, buildings and other facilities assembled on the site specifically for this contract.
- C.     This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the Contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

**PART 2     PRODUCTS (NOT USED)**

**PART 3     EXECUTION (NOT USED)**

**END OF SECTION 01015**

**SECTION 01025  
MEASUREMENT AND PAYMENT**

**PART 1 – GENERAL**

**1.01.1 Summary**

- A. Section Includes
  - 1. Measurement and payment criteria applicable to the Work performed under a unit price or lump sum payment method of items listed in the Bid.
- B. Related Sections
  - 1. 00300 - Bid Form
  - 2. 00522 - Agreement

**1.02 Unit Quantities Specified**

- A. Quantities and measurements indicated in Section 00300 are for bidding and contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the Engineer shall determine payment.
- B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit price contracted.

**1.03 Measurement of Quantities**

- A. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- B. Measurement by Area: Measured by square dimension using mean length and width or radius.
- C. Linear Measurement: Measured by linear dimension, along the horizontal projection of the centerline or mean chord.
- D. At appropriate points in this text, specifications are given with respect to measuring or estimating certain quantities and the sums due for the same. Except as otherwise provided, the Engineer shall determine the appropriate method for measuring and computing each quantity, and for estimating the sums due for the various kinds of work and material, using such methods, tools and degrees of precision as are suitable for the particular measurement, item or computation. When so requested by the Engineer, assistance in measuring or determining quantities shall be provided by furnishing the help of unskilled laborers on the site, by furnishing copies of invoices, or by other means.

- E. For estimating quantities in which the computations of areas by analytic and geometric methods would be laborious, as determined by the Engineer, it is stipulated and agreed that the planimeter shall be considered an instrument of precision adapted to the measurement of such areas and may be used for this purpose.

#### **1.04 Unit Prices**

- A. Payment will be computed on the basis of the unit price bid in Section 00300 for each item and the quantity of units completed. Unit prices are to include cost of all necessary materials, labor, equipment, overhead, profit and other applicable costs to complete the work to the satisfaction of the Engineer. (See Paragraph 6, this Section.)
- B. The Owner reserves the right to increase or decrease the scope of the Contract work.

#### **1.05 Lump Sum Prices**

- A. Payment will be computed on the basis of the percentage of work completed on each item in the contract Bid as determined by the Engineer. Lump sum prices are to include the cost of all necessary materials, labor, equipment, overhead; profit and other applicable costs. (See Paragraph 6, this Section.)

#### **1.06 Prices Include**

- A. General
  - 1. Transportation of all materials and equipment to be included in bid prices.
  - 2. The prices stated in the Proposal include full compensation not only for furnishing all the labor, equipment and material needed for, and for performing the work and building the structures contemplated by, the Contract, but also for assuming all risks of any kind for expenses arising by reason of the nature of the soil, ground water, or the action of the elements; for all excavation and backfilling; for the removal of and delay or damage occasioned by trees, stumps, tracks, pipes, ducts, timber, masonry or other obstacles; for removing, protecting, repairing, or restoring, without cost to the Owner, all pipes, ducts, drains, sewers, culverts, conduits, curbs, gutters, walks, fences, tracks, or other obstacles, road pavements and other ground surfacing whether shown on plans or not for draining, damming, pumping or otherwise handling and removing, without damage to the work or to other parties, and without needless nuisance, all water or sewage from whatever source which might affect the work or its progress, or be encountered in excavations made for the work; for furnishing, inserting and removing all sheeting; shoring staging,. Cofferdams, etc.; for controlling dust; for all signs, fencing, lighting, watching guarding, temporary surfacing; bridging, snow removal, etc., necessary to maintain and protect travel on streets, walks and private ways; for making all provisions necessary to maintain and protect buildings, fences, poles, trees, structures, pipes, ducts and other public or private property affected or endangered by the work; for the repair or replacement of

such things if injured by neglect of such provisions for removing all surplus or rejected materials as may be directed; for replacing, repairing and maintaining the surfaces of streets, highways, public and private lands if and where disturbed by work performed under the Contract or by negligence in the performance of work under the Contract; for furnishing the requisite filling materials in case of any deficiency or lack of suitable materials; for obtaining all permits and licenses and complying with the requirements thereof, including the cost of furnishing any security needed in connection therewith; for any and all expense on account of the use of any patented device or process; for protection against inclement or cold weather; for all expenses incurred by or on account of the suspension interruption or discontinuance of work; for the cost of the surety bond and adequate insurance; for all taxes, fees, union dues, etc., for which the Contractor may be or become liable; arising out of his operations incidental to the Contract; equipment on the site and away therefrom; for providing a field office and its appurtenances and for all general and incidental expenses; for tools, implements and equipment required to build and put into good working order all work contemplated by the Contract; for maintaining and guaranteeing the same as provided; and for fulfilling all obligations assumed by the Contractor under the Contract and its related documents.

3. The Owner shall pay and the Contractor shall receive the prices stipulated in the Bid. Made a part hereof as full compensation for everything performed and for all risks and obligations undertaken by the Contractor under and as required by the Contract:

B. Traffic Control

1. There will be no separate payment for Traffic Control. The costs associated with providing appropriate signing, barricades, cones, flagmen, and uniformed police officer, will be included in the cost of construction. All traffic setups must be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).

C. Bid Prices Which Involve Excavation

1. The prices for those items which involve excavation shall include compensation for disposal of surplus excavated material, including bituminous concrete, and handling water.
2. In all items involving excavation, the price shall be based on doing the entire excavation in earth. Where rock is excavated, the price, therefore, shall be in addition to the cost of excavating earth and no deduction will be made in the amount for earth excavation.

D. Bid Prices for Pipe Items

1. The prices for all pipe items (i.e. sewers, service connections, drains, water etc.) shall constitute full compensation for furnishing, laying, jointing and testing, pipe

connection to exiting structures (manholes and catchbasins); earth excavation, backfill and compaction; materials for bedding pipe as specified; and cleaning up.

2. The Bid price for all pipe items shall also include the removal and disposal of the existing pipe being replaced or repaired, unless otherwise specified in the Contract.

#### **1.07 Payment**

- A. In general, payment will be made for all Contract work satisfactorily completed through the end of the previous month. The payment will include any additional work, which has been completed, and approved and change order work agreed upon by the Owner and Contractor which has been completed and approved.
- B. Each application for payment will indicate the total of a minimum five percent (5%) retainage held by the Owner on the total of all work completed under the contract and approved for payment to-date.
- C. Monthly applications for payment may also indicate reduction or increase of the total Contract price when an approved change order results in a net reduction or net increase in the cost and quantity of work to be performed under the Contract.
- D. Special billings and charges against the Contract as credit or payment to the Owner, that are not for change order work, may be subtracted from monies due on any monthly application for payment but shall not serve to reduce the total Contract price.
- E. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Engineer multiplied by the unit price for work which is incorporated in or made necessary by the Work.

#### **1.08 Temporary Utilities**

- A. All costs associated with providing, maintaining, operating and removal of the work described in the section titled Temporary Utilities - 01510, shall be considered part of the total price bid for the Work. It being understood and agreed to by the Contractor that the Contract Price, as indicated in the bid, shall constitute full and complete compensation to the Contractor for providing all provisions necessary and/or required for maintaining any of these facilities, controls or utilities during construction.

**END OF SECTION 01025**

**SECTION 01041  
PROJECT COORDINATION**

**PART I     GENERAL**

**1.01   Description**

A.    Work Included:

The Contractor shall assign a project manager that shall be responsible for the following:

1.    Preparing, implementing and maintaining a project schedule. This schedule shall be submitted to the Owner for review prior to the preconstruction meeting.
2.    Coordinating work of the Contractors employees and subcontractors.
3.    Scheduling, conducting and documenting the preconstruction meeting and progress meetings.
4.    Establishing procedures for intra-project communications.
  - a.    Submittals
  - b.    Reports
  - c.    Shop Drawings
5.    Obtaining all necessary construction and building permits.
6.    Overall management of the project.
7.    Scheduling and coordinating project testing and closeout.

**END OF SECTION**

**SECTION 01045  
CUTTING AND PATCHING**

**PART I     GENERAL**

**1.01    Description**

- A.    Work Included: The Contractor shall be responsible for all cutting, fitting and patching required to complete the Work or to:
1.     Make its several parts fit together properly.
  2.     Uncover portions of the work to provide for installation of the work.
  3.     Remove and replace defective work.
  4.     Repair disturbed areas to their original condition.
  5.     Remove and replace work not conforming to requirements of Contract Documents.
  6.     Remove samples of installed work as specified for testing.
  7.     Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

**1.02    Submittals**

- A.    Submit a written request to the Owner well in advance of executing any cutting or alteration that affects:
1.     Work of the Owner or any separate Contractor.
  2.     Structural value or integrity of any structural element or system.
  3.     Access to other areas of the Owner's facility or the site.
  4.     Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
  5.     Efficiency, operational life, maintenance or safety of operational elements.

- B. The written request shall include:
1. Identification of the Project.
  2. Description of affected work.
  3. The necessity for cutting, alteration or excavation.
  4. Effect on work of Owner or any separate contractor, or on structural or weatherproof integrity of the work.
  5. Description of Proposed Work
    - a. Scope of cutting, patching, alteration, or excavation.
    - b. Trades who will execute the work.
    - c. Products proposed to be used.
    - d. Extent of refinishing to be done.
  6. Alternatives to cutting and patching.
  7. Cost proposal, when applicable.
  8. Written permission of any separate contractor whose work is affected.

## **PART II PRODUCTS**

### **2.01 Materials**

- A. Comply with specifications and standards for each specific product involved.
- B. After uncovering work, inspect conditions affecting installation of Products, or performance of work.
- C. Report unsatisfactory or questionable conditions to the Owner in writing; do not proceed with work until the Owner has provided further instructions.

## **PART III EXECUTION**

### **3.01 Preparation**

- A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of work.
- B. Provide devices and methods to protect other portions of the project from damage.

- C. Provide protection from elements for that portion of the project which may be exposed by cutting and patching work, and maintain excavations free from water.
- D. Inspection
  - 1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavation, patching and backfilling.
  - 2. After uncovering work, inspect conditions affecting installation of new work. If the uncovered conditions are not as anticipated, the contractor shall immediately contact the Owner and secure the necessary direction.
  - 3. The contractor shall not proceed until unsatisfactory conditions are corrected.

### **3.02 Performance**

- A. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs.
- B. Execute excavating and backfilling by methods which will prevent settlement or damage to other work.
- C. Employ original installer or fabricator to perform cutting and patching for:
  - 1. Weather-exposed or moisture-resistant elements.
  - 2. Site-exposed finished surfaces.
- D. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- E. Restore work which has been cut or removed. Install new products to provide complete work in accord with requirements of Contract Documents.
- F. Fit work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- G. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
  - 1. For continuous surfaces, refinish to nearest intersection.
  - 2. For an assembly, refinish entire unit.

**END OF SECTION**

**SECTION 01050  
FIELD ENGINEERING**

**PART I     GENERAL**

**1.01    Description**

A.     Work Included

Providing such field engineering services as are required for proper completion of the work including, but not necessarily limited to:

1.     Establishing and maintaining lines and levels;
2.     Structural design of shores, forms, and similar items provided by the Contractor as part of his means and methods of construction.

B.     Related Work

1.     Additional requirements for field engineering also may be described in other Sections of these Specifications.
2.     The Owner will furnish information describing the physical characteristics, legal limitations, and general utility locations of the site.

**1.02    Quality Assurance**

- A.     Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

**1.03    Submittals**

- A.     Comply with pertinent provisions of Section 01340.

B.     Upon request of the Owner, submit:

1.     Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
2.     Documentation verifying accuracy of field engineering work.
3.     Certification, signed by the Contractor's retained field engineer, certifying that elevations and locations of improvements are in conformance or nonconformance with requirements of the Contract Documents.

#### **1.04 Procedures**

- A. In addition to procedures directed by the Contractor for proper performance of the Contractor's responsibilities:
1. Locate and protect control points before starting work on the site.
  2. Preserve permanent reference points during progress of the Work.
  3. Do not change or relocate reference points or items of the Work without specific approval from the Owner.
  4. Promptly advise the Owner when a reference point is lost or destroyed, or requires relocation because of other changes in the Work.
    - a. Upon direction of the Owner, require the field engineer to replace reference stakes or markers.
    - b. Locate such replacements according to the original survey control.

**END OF SECTION**

**SECTION 01067  
CONSTRUCTION PERMITS**

**PART 1      GENERAL**

1.01 GENERAL

A.     The Owner has or will obtain and pay for the permits listed below in Paragraph A.1, which are required for this project. The Contractor shall assist in obtaining certain permits, as indicated. The Contractor shall obtain and pay for all other permits required, as defined under the Permits subsection of Section 00700, GENERAL CONDITIONS. The Contractor shall obtain and pay for the permits listed below in Paragraph A.2, which are required for this project.

- 1. Permits by Contractor:    Building Permit (if necessary)  
   Plumbing Permit (if necessary)  
   Electrical Permit (if necessary)

B.     The Contractor shall perform the work in accordance with the Contract Documents, including the aforementioned permits/order of conditions, and any applicable municipal requirements.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION 01067**

**SECTION 01090**  
**REFERENCE STANDARDS**

**PART 1     GENERAL**

**1.01   Section Includes**

- A. Quality assurance.
- B. Schedule of references.

**1.02   Quality Assurance**

- A. For products or workmanship specified by association, trade, or Federal Standards comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents.
- C. Obtain copies of standards when required by Contract Documents.
- D. Maintain copy at job site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

**1.03   Schedule of References**

- AA           Aluminum Association  
              818 Connecticut Ave.,  
              N.W. Washington, DC 20006
  
- AASHTO     American Association of State Highway and Transportation Officials  
              444 North Capitol Street,  
              N.W. Washington, DC 20001
  
- ACI           American Concrete Institute Box 19150  
              Reford Station  
              Detroit, MI 48219

AGC Associated General Contractors of America  
1956 E Street  
N.W. Washington, DC 20006

AI Asphalt Institute  
Asphalt Institute Building  
College Park, MD 20740

AISC American Institute of Steel Construction  
400 North Michigan Avenue  
Eighth Floor  
Chicago, IL 60611

AISI American Iron and Steel Institute  
1000 16th Street, N.W.  
Washington, DC 20036

ANSI American National Standards Institute  
1430 Broadway  
New York, NY 10018

ASCE American Society of Civil Engineers  
345 East 47th Street  
New York, NY 10017

ASME American Society of Mechanical Engineers  
345 East 47th Street  
New York, NY 10017

ASTM American Society for Testing and Materials  
1916 Race Street  
Philadelphia, PA 19103

AWWA American Water Works Association  
6666 West Quincy Avenue  
Denver, CO 80235

BIA Brick Institute of America  
11490 Commerce Park Drive  
Reston, VA 22091

CRSI Concrete Reinforcing Steel Institute  
933 Plum Grove Road  
Schaumburg, IL 60195

EJCDC      Engineers' Joint Contract Documents Committee  
American Consulting Engineers Council  
1015 15th Street,  
N.W. Washington, DC 20005

FM          Factory Mutual System  
1151 Boston-Providence Turnpike  
P.O. Box 688  
Norwood, MA 02062

FS          Federal Specification  
General Services Administration  
Specifications and Consumer Information Distribution Section (WFSIS)  
Washington Navy Yard, Bldg. 197  
Washington, DC 20407

ICBO        International Conference of Building Officials  
5360 S. Workman Mill Road  
Whittier, CA 90601

IMIAC      International Masonry Industry All-Weather Council  
International Masonry Institute  
815 15th Street, N.W.  
Washington, DC 20005

MIL        Military Specification  
Naval Publications and Forms Center 5801  
Tabor Avenue  
Philadelphia, PA 19120

NASSCO    National Association of Sewer Service Companies  
101 Wymore Road, Suite 521  
Altamonte, FL 32714

NBS        National Bureau of Standards

NCMA      National Concrete Masonry Association  
P.O. Box 781  
Herndon, VA 22070

NFPA      National Fire Protection Association  
Battery March Park  
Quincy, MA 022.69

NSF        NSF International (formerly National Sanitation Foundation)  
789 N. Dixboro Road  
Ann Arbor, MI 48105

PCA Portland Cement Association  
5420 Old Orchard Road  
Skokie, IL 60077

PCI Prestressed Concrete Institute  
201 North Wells Street  
Chicago, IL 60606

PS Product Standard  
U.S. Department of Commerce  
Washington, DC 20203

UL Underwriters' Laboratories, Inc.  
333 Pfingston Road  
Northbrook, IL 60062

**PART II PRODUCTS**

**Not Used**

**PART III EXECUTION**

**Not Used**

**END OF SECTION 01090**

**SECTION 01153  
CHANGE ORDER PROCEDURE**

**PART I     GENERAL**

**1.01    Description**

- A.    Work Included: Making such changes in the scope of Work, in the Contract Sum, in the Contract Time of Completion, or any combination thereof, as are described in written Change Orders signed by the Owner and issued after execution of the Contract, in accordance with the provisions of this Section.
  
- B.    Related Work
  - 1.    Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

**1.02    Quality Assurance**

- A.    Include within the Contractor's quality assurance program such measures as are needed to assure familiarity of the Contractor's staff and employees with these procedures for processing Change Order data.

**1.03    Submittals**

- A.    Make submittals directly to the Owner and Engineer at the addresses presented in the Project Directory Section of this Specification.
  
- B.    Submit the number of copies called for under the various items listed in this Section.

**1.04    Product Handling**

- A.    Maintain a "Register of Bulletins and Change Orders" at the job site, accurately reflecting current status of all pertinent data.
  
- B.    Make the Register available to the Owner for review at his request.

**1.05    Processing Changes Initiated by the Owner**

- A.    Should the Owner contemplate making a change in the Work or a change in the Contract Time of Completion, a "Bulletin" will be issued to the Contractor.

1. Bulletins will be dated and will be numbered in sequence.
  2. The Bulletin will describe the contemplated change, and will carry one of the following instructions to the Contractor:
    - a. Make the described change in the Work at no change in the Contract Sum and no change in the Contract Time of Completion;
    - b. Make the described change in the Work, credit or cost for which will be determined in accordance with the General Conditions;
    - c. Promptly advise the Owner as to credit or cost proposed for the described change. This is not an authorization to proceed with the change.
- B. If the Contractor has been directed by the Owner to make the described change in the Work at no change in the Contract Sum and no change in the Contract Time of Completion, but the Contractor wishes to make a claim for one or both of such changes, the Contractor shall proceed with the change and shall notify the Owner as provided for in the General Conditions.
- C. If the Contractor has been directed by the Owner to make the described change subject to later determination of cost or credit in accordance with the General Conditions, the Contractor shall:
1. Take such measures as needed to make the change;
  2. Consult with the Owner and reach agreement on the most appropriate method for determining credit or cost for the change.
- D. If the Contractor has been directed by the Owner to promptly advise the Owner as to credit or cost proposed for the described change, the Contractor shall:
1. Analyze the described change and its impact on costs and time;
  2. Secure the required information and forward it to the Owner for review;
  3. Meet with the Owner as required to explain costs and, when appropriate, determine other acceptable ways to achieve the desired objective;
  4. Alert pertinent personnel and subcontractors as to the impending change and, to the maximum extent possible, avoid such work as would increase the Owner's cost for making the change, advising the Owner in writing when such avoidance no longer is practical.

## **1.06 Processing Changes Initiated by the Contractor**

- A. Should the Contractor discover a discrepancy among the Contract Documents, a concealed condition as described in the General Conditions, or other cause for suggesting a change in the Work, a change in the Contract Sum, or a change in the Contract Time of Completion, he shall notify the Engineer as required by pertinent provisions of the Contract Documents.
- B. Upon agreement by the Owner that there is reasonable cause to consider the Contractor's proposed change, the Owner will issue a Bulletin in accordance with the provisions described in Article 1.05 above.

## **1.07 Processing Bulletins**

- A. Make a written reply to the Owner in response to each Bulletin.
  - 1. State the proposed change in the Contract Sum, if any.
  - 2. State the proposed change in the Contract Time of Completion, if any.
  - 3. Clearly describe any other changes in the Work required by the proposed change, or desirable therewith, if any.
  - 4. Include full backup data such as the subcontractor's letter of proposal or similar information.
  - 5. Submit this response in a single copy.
- B. When cost or credit for the change has been agreed upon by the Owner and the Contractor, or the Owner has directed that cost or credit be determined in accordance with provisions of the General Conditions, the Owner will issue a "Change Order" to the Contractor.

## **1.08 Processing Change Orders**

- A. Change Orders will be dated and will be numbered in sequence.
- B. The Change Order will describe the change or changes, will refer to the Bulletin or Bulletins involved, and will be signed by the Owner.
- C. The Owner will issue four copies of each Change Order to the Contractor.
  - 1. The Contractor promptly shall sign all four copies and return three copies to the Owner.

D. Should the Contractor disagree with the stipulated change in Contract Sum or change in Contract Time of Completion, or both:

1. The Contractor promptly shall return three copies of the Change Order, unsigned by him, to the Owner with a letter signed by the Contractor and stating the reason or reasons for the Contractor's disagreement.
2. The Contractor's disagreement with the Change Order shall not in any way relieve the Contractor of his responsibility to proceed with the change as ordered and to seek settlement of the dispute under pertinent provisions of the Contract Documents.

**END OF SECTION**

**SECTION 01200  
PROJECT MEETINGS**

**PART I     GENERAL**

**1.01    Description**

A.     Work Included

To enable orderly review during progress of the Work, provide for systematic discussion of problems, and coordination of trades, personnel and schedule, the Owner will conduct project meetings throughout the construction period.

B.     Related work documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Special Requirements, and Sections in Division 1 of these Specifications.

1.     The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility and normally are not part of project meetings content.

**1.02    Quality Assurance**

A.     Those persons designated by the Contractor to attend and participate in project meetings, shall have the required authority to commit the Contractor to decisions or directives agreed upon in the project meetings.

**1.03    Submittals**

A.     Agenda Items

To the maximum extent practicable, advise the Owner at least 24 hours in advance of project meetings regarding items to be added to the agenda.

B.     Minutes

1.     The Owner will compile minutes of each project meeting, and will furnish three copies to the Contractor.
2.     Recipients of copies may make and distribute such other copies as they wish.

**PART II   PRODUCTS**

(No products are required in this Section)

## **PART III    EXECUTION**

### **3.01    Meeting Schedule**

- A.    Except as noted below for Preconstruction Meeting, project meetings will be held weekly.
- B.    Coordinate as necessary to establish mutually acceptable schedule for meetings.

### **3.02    Meeting Location**

- A.    The Owner will establish meeting location. To the maximum extent practicable, meetings will be held at the job site.

### **3.03    Preconstruction Meeting**

- A.    The Preconstruction Meeting will be scheduled to be held within 5 working days after the Owner has issued the Notice to Proceed.
  - 1.    Provide attendance by authorized representatives of the Contractor and major subcontractors.
  - 2.    The Owner will advise other interested parties, and request their attendance.
- B.    Minimum Agenda

Data will be distributed and discussed on at least the following items.

- 1.    Organizational arrangement of Contractor's forces and personnel, as well as those of subcontractors and materials suppliers.
- 2.    Channels and procedures for communication.
- 3.    Construction schedule, including sequence of critical work.
- 4.    Contract Documents, including distribution of required copies of original Documents and revisions.
- 5.    Processing of Shop Drawings and other data submitted.
- 6.    Processing of Bulletins, field decisions, and change orders.
- 7.    Rules and regulations governing performance of the work.
- 8.    Procedures for safety and first aid, security, quality control, housekeeping, and related matters.

### **3.04 Project Meetings**

#### **A. Attendance**

1. To the maximum extent practicable, assign the same person or persons to represent the Contractor at project meetings throughout progress of the Work.
2. Subcontractors, materials suppliers, and others may be invited to attend those project meetings in which their aspect of the Work is involved.

#### **B. Minimum Agenda**

1. Review, revisions as necessary, and approval of minutes of previous meetings.
2. Review of the progress of the Work since last meeting, including status of submittals for approval.
3. Identification of problems which impede planned progress.
4. Development of corrective measures and procedures to regain planned schedule.
5. Completion of other current business.

#### **C. Revisions of Meeting Minutes**

1. Unless published minutes are challenged in writing prior to the next regularly scheduled progress meeting, they will be accepted as properly stating the activities and decisions of the meeting.
2. Persons challenging published minutes shall reproduce and distribute copies of the challenge to all indicated recipients of the particular set of minutes.
3. Challenge to minutes shall be settled as priority portion of "old business" at the next regularly scheduled meeting.

**END OF SECTION**

**SECTION 01340**  
**SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

**PART I      GENERAL**

**1.01      Description**

A.      Work Included

1.      Preparing and submitting Shop Drawings, Product Data and Samples required by Contract Documents, and revising and resubmitting as necessary to establish compliance with the specified requirements.
2.      All submittals shall be sequentially numbered.
3.      Individual requirements for submittals also may be described in pertinent sections of these Specifications.

**1.02      Quality Assurance**

A.      Coordination of Submittals

1.      Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
2.      Verify that each item and the submittal for it conform in all respects with the specified requirements.
3.      By affixing the Contractor's signature to each submittal, certify that this coordination has been performed.

**1.03      Substitutions**

- A.      When three (3) or more products are specified, no substitutions therefore will be considered.
- B.      The Owner will consider a formal request for the substitution of a product specified, only under the following conditions:
1.      Requests for substitutions when forwarded by the Contractor to the Owner, are understood to mean that the Contractor:

- a. The Contractor has investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified. The burden of proof of equality or superiority of any proposed substitution is totally the responsibility of the Contractor;
  - b. Will provide the same guarantee for the substitution that he would for that specified;
  - c. Certifies that the cost data presented is complete and includes all related costs under this Contract, and that he waives all claims for additional costs related to the substitution which subsequently become apparent; and
  - d. Will coordinate the installation of the accepted substitute, making such changes as may be required for the work to be complete in all respects for all trades.
- C. When the Submittal Register includes materials or equipment not acceptable to the Owner, the Contractor shall be limited to one (1) additional resubmission within 10 calendar days. If, in the second submission any product or products fails to equal or exceed the materials and equipment specified in the Contract Documents, and the Owner rejects said products and refuses to permit further re-submittals. In such event, the Contractor, in lieu of the rejected products shall provide the items exactly as specified in the Contract Documents to avoid further delay.
- D. Products are generally specified by ASTM or other reference standard, and/or by manufacturer's name and model number or trade name.
- E. The decision of the Owner relative to substitutions shall be final.

## **PART II     PRODUCTS**

### **2.01     Submittals**

- A. Submittals shall be accomplished with a Contractor Transmittal Form containing the following information:
1. Sequential Submittal Number;
  2. Submittal date;
  3. Project title and number;
  4. Contractor's name and address;
  5. Number of each drawing and a description of material submitted;
  6. Notification of deviations from Contract Documents.

- B. Submittals shall include:
1. Dimensions, clearly identified as such.
  2. Applicable Specifications section numbers.
  3. Applicable standards, such as ASTM or Federal Specification number.
  4. Identification of known deviations from the Project Drawings and Specifications sections.
  5. Manufacturers' installation instructions.
  6. Contractor's stamp, initialed or signed, certifying:
    - a. Verification of field measurements.
    - b. Review of submittals for compliance with all Contract requirements except those specifically indicated.
    - c. Compatibility of the Work shown thereon with that of all affected trades.
- E. Changes in those products for which Shop Drawings have been accepted will not be permitted unless those changes have been accepted in writing by the Owner.

## **2.02 Shop Drawings**

- A. Scale and measurements used shall make Shop Drawings accurate to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the work.
- B. Types of Prints Required
1. Submit Shop Drawings in the form of five (5) blueline prints of each drawing.
  2. Review comments of the Owner shall be shown on the Shop Drawings. The Contractor shall make and distribute such copies as are required for the Contractor's purposes.

## **2.03 Manufacturer Literature and Product Data**

- A. Where contents of the submittal literature from manufacturers includes data not pertinent to the submittal, clearly show which portion of the contents is being submitted for review.
- B. Submit a minimum of five (5) copies of all literature and information.

## **2.04 Samples**

- A. Samples which can be conveniently mailed shall be sent directly to the Owner.
- B. All other samples shall be delivered to the Engineers field office, if any, or directly to the Engineers principal office, with sample identification tag attached and properly filled in. Transmittal notice of sample so delivered shall be sent to the Owner by the Contractor.
- C. Three specimens of each sample requested shall be submitted, unless otherwise specified in the individual Sections of the Specifications.
- D. Provide samples identical to the precise article or item to be provided.

## **2.05 Supplementary Drawings**

- A. As work progresses, in addition to the shop drawings required, drawings shall be prepared by the Contractor at a suitable scale not less than 1:25 for changes in the work, where an approved substitution for equipment required such changes. The Contractor shall provide five (5) blueline or blackline prints of each drawing.

## **PART III EXECUTION**

### **3.01 Identification of Submittals**

- A. All submittals shall be identified and submitted in accordance with Paragraph 2.01 of this Section of the Specifications.
- B. Consecutively number all submittals.
- C. Accompany each submittal with a letter of transmittal showing all information necessary for identification and checking.
- D. On re-submittals, cite the original submittal number for reference. Each re-submittal shall have a new letter of transmittal with the original submission number plus a re-submittal suffix letter (ie: A, B, C etc.).
- E. The Contractor shall maintain an accurate submittal log for the duration of Work. This log shall be available to the Owner upon request.

### **3.02 Re-submission Requirements**

- A. Re-submittals shall be submitted in a time which will avoid delaying the Project. Changes which are made, other than those suggested by the Owner, shall be indicated. If the Contractor considers any alteration to shop drawings suggested by

the Owner to constitute a change to the Contract Documents, the Contractor shall submit to the Owner notice as required in the GENERAL CONDITIONS.

1. Determine and verify all interface conditions, catalog numbers, and similar data.
2. Coordinate with other trades as required.
3. Clearly indicate all deviations from requirements of the Contract Documents.

### **3.03 Grouping of Submittals**

#### **A. Grouping of Submittals**

Unless otherwise specified, make all submittals in groups containing all associated items to ensure that information is available for checking each item when it is received. Partial submittals may be rejected as not complying with the provisions of the Contract Documents and the Contractor shall be strictly liable for all delays so occasioned.

### **3.04 Timing of Submittals**

#### **A. General**

Make all submittals far enough in advance of scheduled data for installation to provide all time required for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery.

#### **B. Review Time**

In scheduling, allow at least seven (7) calendar days for review by the Owner following the Owner's receipt of the submittal, except in the case of structural submittals.

The Contractor should allow fourteen (14) calendar days for review of structural submittals.

- C. The Owner reserves the right to review submissions in a proper sequence reflecting the logical sequence and relative priority of the construction components, so as to insure the preparation of a properly coordinated set of drawings. The Owner further reserves the right to keep related samples that have been submitted.

#### **D. Delays**

Delays caused by tardiness in receipt of submittals will not be an acceptable basis for extension of the Contract completion date.

### **3.05 Review Actions**

- A. The Owner will take one of the following actions on each submission:
1. "Action 1 - No Exceptions Taken"; this action means the fabrication, manufacture or construction may proceed providing the submittal complies with Contract Documents.
  2. "Action 2 - Make Corrections Noted. Resubmission for Record Only"; this action means that the fabrication, manufacture or construction may proceed provided that the submittal complies with the notations made by the Owner and the Contract Documents. If, for any reason the Contractor cannot comply with the notations, the contractor shall resubmit as described for submittals stamped Action 3.
  3. "Action 3 - Review and Resubmit"; this action means that the submittal does not comply with the Contract Documents and that the fabrication, manufacture or construction shall not proceed.
  4. "Action 4 - Rejected"; this action means that the submittal is not in conformance with the Contract Documents, is incomplete, or inadequate.
- B. The Contractor shall be limited to the original submittal plus one (1) re-submittal for each Shop Drawing, product data or sample required without incurring any cost or expenses. All subsequent re-submittals shall be reviewed by the Owner or Owner's representative at the expense of the Contractor.

### **3.06 Distribution of Submittals After Review**

- A. After review, Shop Drawings and product data bearing the review stamp and signature will be distributed to the Contractor, the Owner and record documents file.
- B. The Contractor shall distribute to concerned subcontractors, suppliers, and fabricators.

**END OF SECTION**

**SECTION 01380**  
**CONSTRUCTION PHOTOGRAPHS**

**PART I     GENERAL**

**1.01    Description**

A.     Work Included

1.     Employ competent photographer to take construction record photographs periodically during the course of the Work.

**1.02    Record Photographs Required**

A.     Provide photographs taken on cutoff date for each scheduled Application for Payment.

B.     Provide color photographs taken at each major stage of construction:

1.     Prior to initiation of demolition work, pavement removal or equipment removal.
2.     Installation of each equipment item.
3.     Installation of all other equipment items as they occur.
4.     Installation of major mechanical piping and valves.
5.     Substantial completion of work.
6.     Completion of final site restoration work.

C.     Views and Quantities Required

1.     At each specified time, photograph the work from three different views, as approved by the Owner.
2.     Provide one (1) print of each view plus one (1) final electronic file of all photographs.

D.     The Contractor shall pay the cost for the specified photography and prints.

**PART II    PRODUCTS**

**2.01    Prints**

- A.     Record photographs shall be digitally captured and embedded with descriptive text for PC compatible viewing and printing as Microsoft word documents. Each print shall be a full 8.5" X 11" format with a minimum picture dimension of 8" x 10".

B. Identify each print including the following, at a minimum:

1. Name of project.
2. Description of work.
3. Orientation of view.
4. Date and time of exposure.
5. Name and address of photographer.

**PART III EXECUTION**

**3.01 Views Required**

- A. Photograph from locations to adequately illustrate condition of construction and state of progress.
1. At successive periods of photography, take at least one photograph from the same overall view as previously.
  2. Consult with the Owner at each period of photography for instruction concerning views required.

**3.02 Delivery of Prints and Electronic Print File**

- A. Deliver prints to the Owner to accompany each Application for Payment.
- B. Deliver final set of prints as a condition of the final acceptance by the Owner, of the work.

**END OF SECTION**

**SECTION 01405**  
**CONTRACT QUALITY CONTROL**

**PART I      GENERAL**

**1.01    Description**

- A.    Quality control of products and workmanship.
- B.    Manufacturer's instructions.
- C.    Manufacturer's certificates and field services.

**1.02    Related Requirements**

- A.    Section 01340 - Shop Drawings, Product Data, and Samples: Field samples, Submittal of manufacturer's instructions.

**1.03    Description**

- A.    Maintain quality control over supervision, subcontractors, suppliers, manufacturers, products, services, workmanship, and site conditions, to produce Work in accordance with Contract Documents.

**1.04    Workmanship**

- A.    Comply with national or local codes and standards and the Owner's standards and requirements except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B.    Provide suitably qualified personnel to produce Work of specified quality and suitably experienced and qualified to work in a clean room work environment.
- C.    Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.
- D.    Provide finishes to match approved samples.

**1.05    Manufacturer's Instructions**

- A.    Require compliance with instructions in full detail, including each step, in sequence.
- B.    Should instruction conflict with Contract Documents, request clarification from Owner before proceeding.

**1.06 Manufacturer's Certificates**

- A. When required in individual Specifications Sections, submit manufacturer's certificate, in duplicate, certifying that products meet or exceed specified requirements, executed by responsible officer.

**1.07 Manufacturer's Field Services**

- A. When required in individual Specifications Sections, have manufacturer provide qualified representative to observe field conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to make written report of observations and recommendations to the Owner, Project Manager and Engineer.

**PART II PRODUCTS**

Not used.

**PART III EXECUTION**

Not Used.

**END OF SECTION**

**SECTION 01410**  
**TESTING LABORATORY SERVICES**

**PART I      GENERAL**

**1.01    Description**

A.    Section Includes

1.    Qualification, duties and responsibilities of testing laboratories.
2.    Coordination and scheduling responsibilities of the Contractor.

**1.02    Payment Procedures**

A.    Initial Testing:

1.    The Contractor will pay for initial testing services required by the Engineer.

B.    Retesting:

1.    When initial tests indicate non-compliance with the Contract Documents, subsequent re-testing occasioned by the non-compliance shall be performed by the same testing agency, and costs thereof will be deducted by the Owner from the Contract Sum.

C.    Contractors Convenience Testing;

1.    Inspecting and testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

**1.03    References**

A.    American Society for Testing and Materials (ASTM)

1.    E-329-90, Use in the Evaluation of Testing and Inspection Agencies as Used in Construction.

**1.04    Requirements**

A.    Work Included:

1.    Cooperate with the Owner's selected testing agency and all others responsible for testing and inspecting the work.

2. Provide other testing and inspecting as specified to be furnished by the Contractor in this section and/or elsewhere in the Contract Documents.
3. Where no testing requirements are described, but the Owner directs testing, the Contractor shall provide testing under the requirements of this Specification.

B. Wort Not Included:

1. Selection of testing laboratory: The Owner will select a prequalified independent testing laboratory.

**1.05 Quality Assurance**

A. Qualifications:

1. The testing laboratory will be qualified to the Owner's approval in accordance with ASTM E329-90.

B. Regulatory Requirements:

1. Testing, when required, will be in accordance with all pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.
2. Regulatory Requirements: Inspections and tests required by codes or ordinances, or by a plan approved by a Regulatory Agency, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

**1.06 Delivery, Storage and Handling**

A. Comply with pertinent provisions of Section 01600 – Materials and Equipment.

B. Promptly process and distribute to the Engineer, required copies of test reports and instruction to assure necessary re-testing and replacement of materials with the least possible delay in progress of the Work.

**1.07 Scheduling**

A. Establishing Schedule:

1. By advance discussion with the testing laboratory selected by the Owner, determine the time required for the laboratory to perform its tests and to issue each of its findings.
2. Provide all required time within the construction schedule.

3. Coordinate testing activity with the appropriate testing laboratory.
- B. Revising Schedule:
1. When changes of construction schedule are necessary during construction, coordinate all such changes with the testing laboratory as required.
- C. Adherence to Schedule:
1. When the testing laboratory is ready to test according to the established schedule, but is prevented from testing or taking specimens due to incompleteness of the Work, all extra charges for testing attributable to the delay may be back-charged to the Contractor and shall not be borne by the Owner.

**PART II     PRODUCTS**

Not used.

**PART III    EXECUTION**

**3.01   Field Quality Control**

- A. Site Tests:
1. Representatives of the testing laboratory shall have access to the Work at all times and at all locations where the Work is in progress. Provide facilities for such access to enable the laboratory to perform its functions properly.
  2. All specimen and samples for testing, unless otherwise provided in the Contract Documents, shall be taken by the testing personnel. All sampling equipment and personnel will be provided by the testing laboratory. All deliveries of specimen and samples to the testing laboratory will be performed by the testing laboratory.

**END OF SECTION**

**SECTION 01510  
TEMPORARY UTILITIES**

**PART I     GENERAL**

**1.01    Description**

- A.     Work Included: Furnish, install and maintain temporary utilities services required for construction. Temporary utilities shall be removed upon completion of the Work.

**1.02    Requirements Of Regulatory Agencies**

- A.     Comply with National Electric Code.
- B.     Comply with Federal, State and local codes and regulations and with utility company requirements.

**PART II    PRODUCTS**

**2.01    Materials - General**

- A.     Materials may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

**2.02    Temporary Electricity And Lighting**

- A.     Provide connections to existing facility utility services, which are of adequate capacity to provide service required for power and lighting; Owner will pay the costs of power used.
- B.     Install circuit and branch wiring, with area distribution boxes located so that power and lighting is available throughout the construction by the use of construction-type power cords.
- C.     Provide adequate artificial lighting for all areas of work when natural light or the existing lighting is not adequate for work.

**2.03    Temporary Heat And Ventilation**

- A.     Provide temporary heat and ventilation, as required, to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation of materials, and to protect materials and finishes from damage due to temperature, humidity or particulate contamination.

- B. Provide adequate forced ventilation of enclosed work areas for curing of installed materials, to disperse humidity, and to prevent accumulations of dust, fumes, vapors or gases.
- C. Portable heaters and ventilation units shall be standard approved units complete with controls.
- D. Provide connections to existing facilities, extend and supplement with temporary units as required to comply with requirements. Pay all costs of installation, maintenance, operation and removal. Owner will pay costs of fuel used from the existing system.
- E. Ventilation systems used to exhaust enclosed work areas shall be installed such that the external ventilation exhaust stream is not in proximity to other ventilation intakes or to personnel areas or public access ways.

### **PART III    EXECUTION**

#### **3.01    General**

- A. Maintain and operate systems to assure continuous service.
- B. Modify and extend systems as work progress requires.

#### **3.02    Removal**

- A. Completely remove temporary materials and equipment when their use is no longer required.
- B. Clean and repair damage caused by temporary installations or use of temporary facilities.
- C. Restore existing facilities used for temporary service to specified, or to original, condition.

**END OF SECTION**

**SECTION 01540  
SECURITY**

**PART I     GENERAL**

**1.01   Description**

A.    Work Included

1.     Provide a project security program to:
  - a.     Protect Work, stored products and construction equipment from theft and vandalism.
  - b.     Protect premises and work area from entry by unauthorized persons.

B.    Related Work

Protect Owner's operations at site from theft, vandalism or damage from Contractor's work or employees.

**1.02   Maintenance of Security**

- A.    Initiate security program in compliance with Owner's system, prior to job mobilization. Maintain the security program throughout construction period, until the Owner's acceptance of the work precludes the need for Contractor security.
- B.    Require that identification be displayed by all persons entering, and on, the premises.
  1.     Exclude from site personnel not properly identified.

**1.03   Entrance Control**

- A.    Provide control of all persons and vehicles entering and leaving project site.
  1.     Require display of proper identification by each person.
  2.     Allow no visitors except with issuance of temporary identification.
  3.     Maintain log of visitors.
- B.    Owner will control deliveries and vehicles related to his own operations.

**PART II    PRODUCTS**

Not used.

**PART III    EXECUTION**

Not Used.

**END OF SECTION**

**SECTION 01560  
TEMPORARY CONTROLS**

**PART 1     GENERAL**

**1.01     Description**

A.     Work Included

Provide and maintain methods, equipment, and temporary construction, as necessary, to provide controls over environmental conditions at the construction site and related areas under Contractor's control; remove physical evidence of temporary facilities at completion of Work.

**1.02     Dust Control**

- A.     Provide positive methods and apply dust control materials to minimize raising dust from construction operations, and provide positive means to prevent airborne dust from dispersing into the atmosphere and to adjacent manufacturing and personnel areas.

**1.03     Construction Water Control**

- A.     Provide methods to control spills, cleaning and flushing discharges and hydraulic testing discharges to prevent damage to the work, release to the site or adjoining properties or water bodies and to prevent overloading of the on-site wastewater collection, transfer and treatment systems.

**1.04     Maintain Water and Wastewater Utility Services to Users**

- A.     Provide methods, materials and controls to protect and maintain the existing water distribution service to the community during the construction of the Pump House modifications and the water distribution system. Interruptions of service for cut-in of new water service connections to individual residences, or modification of Pump House piping, equipment, controls or power supply shall be scheduled in advance, and shall be for maximum 4-hour duration, unless otherwise approved in writing, by the Owner.
- B.     The community sanitary wastewater collection and transfer systems, and the individual and community on-site wastewater treatment and disposal systems shall be protected from damage and loss of service. Operation of these systems shall be maintained continuously, throughout the duration of the construction Work.

**1.05     Debris Control**

- A.     Maintain all areas under Contractor's control free of extraneous debris.

- B. Initiate and maintain a specific program to prevent accumulation of debris at construction site, storage and parking areas, or along access roads and haul routes.
  - 1. Provide containers for deposit of debris.
  - 2. Prohibit overloading of trucks to prevent spillage on access and haul routes.
- C. Schedule periodic collection and disposal of debris.

**PART II     PRODUCTS**

Not used.

**PART III    EXECUTION**

Not Used.

**END OF SECTION**

**SECTION 01620**  
**TRANSPORT, STORAGE AND PROTECTION**

**PART I     GENERAL**

**1.01    Description**

- A.    Work Included:
1.     Provide secure storage and protection for materials and equipment to be incorporated into the Work.
  2.     Provide maintenance and protection of the installed materials and equipment until completion of the Work.

**1.02    Transportation and Handling**

- A.    Transport and handle products in accordance with manufacturer's instructions. Deliver products in undamaged condition in manufacturers unopened containers or packaging, dry.
- B.    Transport products and materials by methods to avoid product damage.
- C.    Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.
- D.    Promptly inspect shipments to assure that products and materials comply with requirements and specifications, tht quantities are correct, and products are undamaged.
- E.    Storage and demurrage charges by transportation companies and vendors shall be borne by the Contractor.

**1.03    Storage**

- A.    Store products immediately upon delivery and protect until installed in the Work.
1.     Store in accordance with manufacturer's instructions, with seals and labels intact and legible.
  2.     Arrange storage of products and materials to provide assess for inspection. Periodically inspect to assure that products and materials are undamaged and are maintained under specified conditions.
  3.     The Owner shall designate storage areas for all materials and equipment.

- B. Store products subject to damage by elements in weather tight enclosures.
  - 1. Maintain temperatures within ranges required by manufacturer's instructions.
  - 2. Provide humidity control for sensitive products, as required by manufacturer's instructions.
  - 3. Store unpacked products on shelves, in bins or in neat piles, accessible for inspections.
  
- C. Exterior Storage
  - 1. Provide substantial platforms, blocking or skids to support fabricated products above ground, prevent soiling or staining. Arrange storage in manner to provide easy access and inspection.
  - 2. Cover products subject to discoloration, corrosion or deterioration from exposure to the elements, with impervious sheet coverings. Provide adequate ventilation to avoid condensation.
  - 4. Granular media materials should be delivered to the site in clearly labeled, weathertight containers, and stored on pallets on solid, level surfaces.
  - 5. Store loose, granular materials on solid surfaces in a well-drained area. Prevent mixing with foreign matter.
  - 6. Provide surface drainage to prevent flooding of materials and equipment in temporary storage.

#### **1.04 Maintenance of Storage**

- A. Maintain periodic system of inspection of stored products on scheduled basis to assure that:
  - 1. Storage facilities are adequate to maintain the original condition of the materials and equipment.
  - 2. Required environmental conditions are maintained continuing basis.
  - 3. Surfaces of products exposed to elements are not adversely affected.

#### **1.05 Protection After Installation**

- A. Provide protection of installed products to prevent damage from subsequent operations. Remove upon completion of the work, immediately prior to initiation of system startup.

- B. Control traffic to prevent damage to equipment and surfaces.
- C. Provide coverings to protect finished surfaces from damage.
  - 1. In areas subject to foot traffic secure heavy paper, sheet goods, or other materials in place.
  - 2. For movement of heavy products, lay planking or similar materials in place.
  - 3. For storage of products, lay tight wood sheathing in place.
- D. Waterproofed and Roofing Surfaces
  - 1. Prohibit use of surfaces for traffic of any kind and for storage of any products.
  - 2. When some activity must take place in order to carry out the Contract, obtain recommendations of installer for protection of surface.
    - a. Install recommended protection, remove upon completion of that activity.
    - b. Restrict use of adjacent unprotected areas.

**PART II PRODUCTS**

**Not Used**

**PART III EXECUTION**

**Not Used**

**END OF SECTION**

**SECTION 01650  
START-UP OF SYSTEMS**

**PART I     GENERAL**

**1.01    Description**

A.     Work Included

Execute the precise, sequential and orderly inspection, testing, cleaning, and start-up of the completed wastewater treatment system.

B.     Related Work

1.     Division 15, Mechanical.
2.     Division 16, Electrical.
3.     Division 11, Equipment.
4.     Section 01560 Temporary Controls.
5.     Section 01700 Contract Closeout.

**1.02    Quality Assurance**

- A.     Use adequate numbers of trained, skilled workmen, experienced in the procedures and crafts required to execute the specified procedures and methods for proper performance of the work in this Section.

**1.03    Submittals**

- A.     The Contractor shall submit written notice and documentation of all procedures completed including:
1.     Substantial completion.
  2.     Punch list inspection.
  3.     Final inspection.
  4.     Final pipeline flushing, pressure and hydrostatic testing of pipe, valves, fittings, pressure vessels and appurtenances.
  5.     Final electrical and instrument testing and evaluation.

6. Final sanitization of pipelines, filters, and wetted equipment.
  7. Final analytical validation of water quality.
  8. Final wet start-up of all process systems.
- B. All submittals shall be typed, on 8-1/2" x 11" sheets or shall be on approved test documentation forms.
- C. Submittals shall be made directly to the Owner.

**1.04 Procedures**

- A. All procedures shall be in accordance with Section 15050 of this Specification, the Equipment Procurement Specifications and the specific manufacturer recommendations.

**PART II PRODUCTS**

Not used.

**PART III EXECUTION**

Not Used.

**END OF SECTION**

**SECTION 01700  
CONTRACT CLOSEOUT**

**PART I     GENERAL**

**1.01   Description**

A.    Work Included

Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the work.

**1.02   Substantial Completion**

A.    When Contractor considers the Work is substantially complete, he shall submit to Owner:

1.     A written notice that the work, or designated portion thereof, is substantially complete.
2.     A list of items to be completed or corrected.

B.    Within a reasonable time after receipt of such notice, the Owner shall make an inspection to determine the status of completion.

C.    Should Owner determine that the work is not substantially complete:

1.     Owner shall promptly notify the contractor in writing, giving the reasons therefore.
2.     Contractor shall remedy the deficiencies in the work, and send a second written notice of substantial completion to the Owner.
3.     Owner shall re-inspect the work.

**1.03   Final Inspection**

A.    When Contractor considers the work is complete, he shall submit written certification that:

1.     Contract Documents have been revised.
2.     Work has been inspected for compliance with Contract Documents.
3.     Work has been completed in accordance with Contract Documents.
4.     Equipment and systems have been tested in the presence of the Owner's representative and are operational.

5. Work is completed and ready for final operation.

**1.04 Contractor's Closeout Submittals**

- A. Certificates of Inspection.
- B. Project Record Documents.
- C. Operating and Maintenance Data, Instructions to Owner's Personnel.
- D. Warranty Certificates.
- E. Spare Parts and Maintenance Materials.
- F. Certificate of Insurance for Products and Completed Operations.
- G. Laboratory Certificates of Analysis for final water quality validation.
- H. Conformance Inspection Approval by RI Department of Health.

**PART II PRODUCTS**

Not used.

**PART III EXECUTION**

Not Used.

**END OF SECTION**

**SECTION 01710  
CLEANING UP**

**PART 1      GENERAL**

**1.01   Scope**

- A.     The Contractor must employ at all times during the progress of his work adequate cleanup measures and safety precautions to prevent injuries to persons or damage to property. The Contractor shall immediately, upon direction by the Engineer provide adequate material, equipment and labor to cleanup and make safe any and all areas deemed necessary by the Engineer.

**PART 2      PRODUCTS**

**2.01   Materials Used for Restoration**

- A.     All materials used for the restoration of damaged property shall be of equal or greater quality and shall be as approved by the Engineer, see Section 3.04.

**PART 3      EXECUTION**

**3.01   Daily Cleanup**

- A.     The Contractor shall clean up, at least daily, all refuse, rubbish, scrap and surplus material, debris and unneeded construction equipment resulting from the construction operations and sweep the area. The site of the work and the adjacent areas affected thereby shall at all times present a neat, orderly and workmanlike appearance.
- B.     Upon written notification by the Engineer, the Contractor shall within twenty-four (24) hours clean up those areas which in the Engineer's opinion are in violation of this section and the above referenced sections of the specifications.
- C.     If in the opinion of the Engineer, the referenced areas are not satisfactorily cleaned up, all other work on the project shall stop until the cleanup is satisfactory.
- D.     Should the Contractor fail or neglect, after backfilling, to promptly remove all surplus materials, tools and other incidentals, or promptly do the required paving when ordered, the Owner may, after twenty-four (24) hours written notice, cause the work to be done and the cost thereof shall be deducted from any monies then or thereafter due the Contractor.

**3.02   Material or Debris in Drainage Facilities**

- A.     Where material or debris has washed or flowed into or has been placed in existing watercourses, ditches, gutters, drains, pipes, structures, such material or debris shall be entirely removed and satisfactorily disposed of during progress of the work, and the ditches, channels, drains, pipes, structures, and work shall, upon completion of the work, be left in a clean and neat condition.

**3.03   Removal of Temporary Buildings, Structures and Equipment**

- A. On or before completion of the work, the Contractor shall, unless otherwise specifically directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools and machinery or other construction equipment furnished by him; shall remove all rubbish from any grounds which he has occupied; shall remove silt fences and hay bales used for trapping sediment; and shall leave the roads and all parts of the property and adjacent property affected by his operations in a neat and satisfactory condition.

**3.04 Restoration of Damaged Property**

- A. The Contractor shall restore or replace, when and as directed, any property damaged by his work, equipment or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk and landscaping work. Materials, equipment, and methods for such restoration shall be as approved by the Engineer.

**3.05 Final Cleanup**

- A. Before acceptance by the Owner, the Contractor shall perform a final cleanup to bring the construction site to its original or specified condition. This cleanup shall include removing all trash and debris off of the premises. Before acceptance, the condition of the site shall be approved by the Engineer.

**END OF SECTION 01710**

**SECTION 02001  
GENERAL SITE CONDITIONS**

**PART 1     GENERAL**

**1.01     Related Documents**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

**1.02     Scope**

- A. Provide all labor, materials and equipment necessary to complete all GENERAL SITE CONDITIONS WORK indicated on the Drawings, herein specified or both. The work of this Section includes, but is not necessarily limited to, coordination and control of all site related work.

**1.02     Related Work Specified Elsewhere**

- A. Division 1: For Sections on Project Meetings, Submittals, and Protection from inclement weather.
- B. Division 2: For Sections on Clearing & Grubbing, Protection of Plants to remain, Earthwork, Concrete Paving, Site Utilities, Site Improvements, and Landscaping.

**1.03     Quality Assurance:**

- A. Standards: See Section 01400, and below.

**PART II     PRODUCTS**

**Not Applicable**

**PART III     EXECUTION**

**3.01     Excavations – All Classes, All Trades**

**A.     Dig Safe:**

1. Be aware of and comply with all laws governing work in areas of existing underground utilities on Federal, State, Municipal, and private land.
2. Before beginning any demolition, excavation or other Site related underground work, verify the locations of all underground utilities shown on the Drawings by any and all means necessary.

3. In addition, contact "Dig Safe" and individual utility companies to check for any additional utility lines not shown.

### **3.02 Protection of Existing Utilities**

- A. In addition to the Contractor's requirements in Division One and elsewhere, and in coordination with the Contractor, protect all existing utility lines and ways from all damage throughout the work of this Project, using only means and methods approved in advance by the applicable utility companies and the and/or Engineer.
- B. Proceed only with utmost caution in areas of existing underground, above ground and aerial utilities, as prescribed by the pertinent utility companies and by applicable law. Immediately repair or replace any damaged utility lines and ways per the utility companies involved, at no additional cost to the Owner.

### **3.03 Awareness of Historical Artifacts**

- A. Prior to and during any excavation performed by the Contractor or his forces, the Contractor shall notify the Contractor and/or Owner immediately should any of the following be encountered:
  1. Charcoal, bones, sea shells, rocks that appear to have been burned, and any obvious evidence of prior human habitation, such as arrowheads, pottery shards, hewed timber, etc.
  2. No additional excavation work shall take place in the areas of such discoveries until the Contractor has been directed by the Engineer to proceed.

### **3.04 Maintenance of Existing Utilities**

- A. In addition to the requirements in Division 1 and elsewhere, and in coordination with the Contractor, take all necessary measures to insure all existing utilities remain active and available to the community throughout the construction period.
  1. When any utility must be temporarily disrupted for connection to the new building or for any other approved reason, provide 72 hours advance notice to the Owner and to the utility involved.

### **3.05 Protection of Open Excavations**

- A. In addition to the requirements of Division 1, provide - for the life of this Project protection of and from all open excavations, including but not limited to, trench excavations, open foundation excavations, excavations resulting from site clearing & demolition operations or from removal of ledge.

- B. Using approved methods, protect all excavations to prevent cave-ins, erosion, and side slippage. Concurrently, using approved methods protect all excavations from being a hazardous condition to all workers and to the public.

### **3.06 Permits**

- A. Before beginning any work in any public highways, streets or ways, confirm through the Contractor that all necessary permits relating to such work have been obtained.

### **3.07 Access & Egress**

- A. In addition to the Contractor's requirements set forth in Division 1 and elsewhere, coordinate with the Contractor - who shall coordinate with the Owner and make whatever provisions are necessary to maintain unobstructed access to and egress from the site for both regular and emergency vehicular and pedestrian traffic.
- B. Assure, through the Contractor, that all proper authorities and the Owner have been notified before beginning any work that might impede vehicular traffic adjacent to the site or to and from the site.

### **3.08 Licenses Required**

- A. Prior to beginning any site related work, insure that operators of all equipment used in the sitework are properly and currently licensed to operate such equipment.

### **3.09 Clean Up**

- A. In addition to the General Contractor's requirements in Division One and elsewhere, insure at all times that debris, rubbish and excess materials from all Site work operations are removed from the site daily, and lawfully disposed of.
  - 1. See Section 1710 — Cleaning Up.

### **3.10 Applicable Standards**

- A. Refer to Section 01090 — Reference Standards

### **3.11 Submittals**

- A. In addition to the requirements of Division 1, the following shall be the case:
  - 1. Any Material, Labor or Equipment provided for this Project that has not first been approved by the Engineer shall be deemed to be provided solely at the provider's risk.

### **3.12 Storage of Materials**

- A. The on-site storage of all materials, whether new, excavated, deemed excess, salvage and any other type shall be coordinated through the Contractor, and approved by the Engineer, before such storage takes place.

**END OF SECTION**

**SECTION 02070  
SELECTIVE DEMOLITION**

**PART I      GENERAL**

**1.01      Description**

A.      Work Included

1.      The work to be performed under this Section includes the furnishing of all materials, equipment, transportation and labor and all operations for the dismantling and removal of all or portions of the existing interior and exterior water transfer pipeline and associated piping, fittings, valves and specialties. The work also includes cutting foundation/wall penetrations into the Pump House Building, to permit installation of new water transfer piping and electrical/controls conduit. The work further includes removal of existing Pump House building materials and preparation of the building to receive new materials.

B.      Related Work Described Elsewhere

1.      Division 15 - Mechanical
2.      Division 16 - Electrical
3.      Section 01045 - Cutting and Patching
4.      Section 01510 - Temporary Utilities
5.      Section 01540 - Security
6.      Section 01560 - Temporary Controls

**1.02      Quality Assurance**

- A.      Only skilled workman regularly employed and engaged in performing work of this type, experienced in working within electronics manufacturing environments shall be employed.
- B.      The work in this Section shall conform to all applicable Federal, State and local codes as well as to codes, regulations and standards established and published by the Owner.

**1.03      Protection**

- A.      The Contractor shall accept the premises as they are prepared by the Owner, and carry out the work specified. The Owner assumes no responsibility for the conditions of the premises or a continuation in conditions existing after equipment demolition and removal is begun.

- B. Do not interfere with use of adjacent work areas. Maintain free and safe access to and from other buildings areas.
- C. Cease operations and notify the Owner immediately, if the safety of any structure appears to be endangered or contamination of the adjacent manufacturing or personnel areas occurs. Do not resume operations until safety and/or the integrity of the structural enclosure is restored.
- D. The Contractor shall provide adequate protection to surrounding structures, equipment, piping and facilities to prevent damage or interference with operations.
  - 1. The Contractor shall assume all liability for damage or contamination to adjacent surfaces, equipment or material resulting from site demolition work.
  - 2. The Contractor shall notify the Owner in the event settlement or damage is apparent in materials or equipment or systems that are to remain or if such materials equipment or surfaces are endangered. Provide additional protection as required. Failure to notify the Owner of damage, settlement or impending danger or contamination to existing materials, equipment or surfaces to remain in no way relieves the Contractor of liability.
  - 3. The Contractor shall repair, at his expense, any damage, settlement or contamination of materials, equipment and systems to remain that is caused by site demolition work.
  - 4. The Contractor shall locate existing utilities or drains in the work area and protect same from damage in areas of work. Where drains or utilities are uncovered by the work and are not shown on plans, Contractor shall plainly mark said utilities and notify the Owner immediately. In no event shall said utilities be re-covered without concurrence of Owner.
  - 5. During all demolition/dismantling work, the Contractor shall provide mechanical ventilation systems to control and capture particulate contaminants.

#### **1.04 Existing Services**

- A. Place markers to indicate location of existing services. Identify service lines and capping locations on Project Record Documents.

## **PART II PRODUCTS**

### **2.01 Materials**

- A. Except where equipment or materials are designated for salvage, the Contractor shall maintain possession of materials being demolished and immediately remove from site.

## **PART III    EXECUTION**

### **3.01    Preparation**

- A.    Erect and maintain containment and control systems as required to prevent spread of dust, fumes and other airborne contaminants to other parts of the Owners site, operating and personnel areas. Upon completion of all work under this Contract, remove controls systems and repair damaged surfaces to match adjacent surfaces.
- B.    Carry out demolition work to cause as little inconvenience to adjacent occupied building areas as possible.
- C.    Prior to initiation of demolition, the Contractor shall inspect the existing equipment, structures, utilities and systems for the following purposes:
  - 1.    Familiarizing all Contractor personnel with the work to be executed.
  - 2.    Identify and tagging all equipment, structures, materials, etc., to be dismantled. Identification and tagging shall include the following designations.
    - a.    Equipment and materials to be dismantled and turned over the Owner for final disposition.
    - b.    Equipment and materials to be dismantled or demolished and removed from the site by the Contractor.
  - 3.    Locate and identify all utility services.
  - 4.    Identify all equipment and systems which must remain protected, undamaged and uncontaminated by the demolition process.

### **3.02    Demolition**

- A.    Demolish in an orderly and careful manner as required to accommodate new work, including that required for connection to the existing building. Protect existing foundations, equipment, control systems and supporting structural members.
- B.    The Contractor shall remove materials and equipment as shown on the Drawings and specified herein. Materials shall be removed or demolished in a manner that will cause the least disturbance to surrounding materials and equipment that are to remain.
- C.    Perform demolition in accordance with applicable authorities having jurisdiction.
- D.    Repair all demolition performed in excess of that required, at no cost to the Owner.

- E. Removal of mechanical equipment and piping system components shall be done in a manner that will leave adjacent piping, supports, fittings, equipment, etc. undamaged. All bolted, riveted or welded joints shall be carefully removed by hand tools to leave remaining members undamaged.
- F. The Contractor shall remove all rubble, debris, scrap and demolition materials, leaving the work area clear and ready for new work. See Drawings for areas and equipment to be cleared.
- G. Removal of waste materials requires that said materials be completely removed from the Owner's property, unless otherwise directed by the Owner, and legally disposed. The Owner shall retain possession of all principle mechanical and electrical process and utility components, equipment and materials that have been previously designated for salvage.

**END OF SECTION**

**SECTION 02650**  
**WATER DISTRIBUTION SYSTEMS**

**PART I      GENERAL**

**1.01      Description**

A.      Work Included

1.      This work includes the furnishing of all materials, labor and equipment for the installation and testing of all exterior water distribution piping, fitting, valves, specialties, new water service connections to existing services, replacement of existing water services, corporation stops, curb stops, curb boxes and all appurtenances and related items, complete, in-place, as shown on the Drawings, as specified herein or as otherwise directed by the Engineer or Owner, under this contract.

B.      Related Work Described Elsewhere

1.      Section 02101 - Project Surveying and Staking
2.      Section 02205 - Soil Materials
3.      Section 02215 - Aggregate Materials
4.      Section 02220 - Excavating, Backfilling & Compaction for Utilities & Structures

**1.02      Quality Assurance**

A.      The contractor shall furnish to the Owner, when requested, manufacturers written transcripts in accordance with AWWA C151.

B.      The inspection, receiving, handling and storage of all materials shall conform to the requirements of AWWA C600.

C.      Piping materials shall bear the label, stamp or other markings of the specified testing agency.

D.      NSF Compliance: All water potable service piping, valves, fittings and specialties shall comply with the requirements of ANSI/NSF 61. Demonstration of compliance with ANSI/NSF 61 must be provided for all pipe, valves, fittings and specials.

E.      Applicable Publications

1.      Standards of the American Society for Testing and Materials (ASTM), latest edition.

2. Standard Specifications of the American National Standards Institute (ANSI), latest edition.
3. AWWA C800: Underground Service Line Valves and Fittings.
4. ASTM B88: Seamless Copper Water Tube.

### **1.03 Submittals**

- A. Shop Drawings, maintenance data and operating instructions for all hydrants, fixtures, backflow preventers, specialties, equipment, materials, etc., shall be submitted to the Owner.
- B. The following items shall be submitted for approval:
  1. Pipe, Tubing, Fittings, Joints, Corporation Stops, Curb Boxes, Hoses and appurtenant items;
  2. Piping Specialties, Quick Disconnect Fittings, Strainers, Gauges, etc.
  3. Valves and Actuators
  4. Hydrants, Backflow Preventers, Enclosures, etc.
- C. Provide all valves as specified herein and as shown on the Drawings. Submit for approval by the Owner, a schedule of all valves indicating the service, size, and connections, make, model number and any special features such as chain wheel operators, etc.
- D. Comply with the pertinent provisions of Section 01340 of this Specification.

### **1.04 Project Conditions**

- A. Existing Utilities: Do not interrupt utilities serving the facilities occupied by the Owner or others unless approved, in writing, by the Owner. Provide 72-hour notification of the Owner of any interruption of utility service, and provide temporary utility service where applicable and requested by the Owner.

## **PART II PRODUCTS**

### **2.01 Pipe and Fittings**

- A. Polyvinyl Chloride Pipe (PVC)
  1. PVC Pipe and fittings < 4" diameter shall be manufactured from PVC Type I, Grade I materials conforming to ASTM D-1785. Fittings shall be socket type conforming to ASTM D-2467 or flanged type as indicated on the Drawings or as required.

2. PVC pipe and fittings, 4" to 12" diameter shall be AWWA C900 PVC Pressure Pipe, Class 200, DR 14, unless otherwise noted on the Drawings. Fittings shall be class-rated, ductile iron with mechanical joints, AWWA C153.
3. Joints:
  - a. Pipe <3" diameter shall utilize threaded (ASTM-2464) or solvent welded (ASTM-2467) joints. Use Teflon tape or liquid Teflon thread lubricant on all threaded joints.
  - b. Piping 4" and larger diameter shall utilize push-on type joints with factory installed solid cross-section elastomeric ring (ASTM F-477).

#### B. Copper Pipe and Fittings

1. Copper pipe shall conform to ASTM Designation B-88, Type K; soft tempered annealed with flared pattern cast bronze fittings conforming to ANSI B16.26 for underground installation. Type L: hard tempered and annealed with cast red bronze to wrought copper solder type fittings conforming to ANSI B16.18 or B16.22 for above ground, exposed installation.
2. Copper Tubing shall conform to ASTM Designation B75 drawn temper, annealed, type optional to suit intended purpose. Fittings shall be flared cast bronze fitting conforming to ANSI B16.18 or B16.22.

#### C. Ductile Iron Pipe and Fittings

1. Ductile Iron Centrifugally Cast in Metal Molds or Sand-Lines Molds, for Water or Other Liquids - ANSI A21.51 (AWWA C151-76), Class 50, 51, 52, 53. Piping shall be pressure class 350 for pipe 4" to 12" diameter and pressure class 250 for pipe greater than 12" diameter. Piping shall be provided standard thickness cement mortar lining, and interior asphaltic seal coat (AWWA C104) and exterior asphaltic coating, in accordance with AWWA and ANSI standards.
2. Fittings for water mains shall be of ductile iron and shall conform to AWWA C110 or C153, rated for pressure class 350. The interior surface of fittings shall be cement-lined, double thickness, with bituminous seal coat. Exterior surfaces shall be provided a coal tar bituminous coating, minimum 1-mil thickness.
2. Joints for Ductile Iron Pipe - Mechanical type or "push-on" type as specified in ANSI A21.11 (AWWA C111), to be installed as per manufacturer's instructions.
3. Rubber ring gaskets shall be full-face type, AWWA C111, 1/16" thickness, of composition suitable for the application.
4. Flanged fittings shall conform to AWWA C115 and shall be furnished flat-faced and

drilled to 125 psi template in accordance with ANSI B16.1.

D. Polyethylene (PE) Piping and Fittings

1. All polyethylene (PE) pipe and fittings shall be conform to ASTM D-2239 and AWWA-C901 for potable water service.
2. Flanges shall be suitable for mating with Standard ANSI 150 lb. flanges. Flanges shall be furnished with full faced, 1/8" thick gaskets or EPDM or approved equal. Flange bolts, nuts, and washers shall be of Type 304 stainless steel.
3. Fittings shall conform to ASTM D-3261.

**2.02 Non-Metallic Valves**

A. General

1. Valves shall be manufactured of the same material as the associated pipe and fittings, to assure compatibility.

B. Ball Valves

1. Ball valves shall have permanently lubricated Teflon ball seats backed with Viton O-Rings and Viton stem and body seals.
2. Ball valves shall have a pressure rating of 150 psi at 73°F.
3. Ball valves shall be of true union design.
4. The ball shall have 90-degree rotation from fully closed to fully open position and shall have straight through full port flow in the open position.
5. All ball valves shall be Plastic Piping Systems, ASAHI/AMERICA, George Fischer or equal.

C. Check Valves - Swing Type

1. The valve shall be of top entry design with a single disc. The disc shall seat under 0.5 psi back pressure and shall be suitable for horizontal or vertical installation. Swing check valves shall be rated for minimum, 70 psig at 210°F, bubble tight.
2. Check valves shall be provided with a removable cover to allow cleaning of the valve without removal from the line.
3. Check valves shall have Teflon seats and seals.

4. Check valves shall be flanged type, drilled and tapped for conformance with standard ANSI 150 lb. flanges.
5. Check valves shall be Plastic Piping Systems, ASAHI/AMERICA, George Fischer or equal.

D. Check Valves - Ball Type

1. The valve shall be of either true-union or single union design, with the ball seating under a maximum of 0.5 psig backpressure, and shall be suitable for mounting in a horizontal or vertical position.
2. The valve shall be rated for 150 psig at 140°F, bubble tight.
3. Valves shall have Teflon seats and seals.
4. Valves shall be as by ASAHI/AMERICA, George Fischer or equal.

E. Globe Control Valves

1. The valve shall be either water type or flanged type. Flanged valve, shall conform to ANSI requirements for standard 150 lb. flanges.
2. Stem seals shall be of Teflon and the stem shall be of stainless steel. The valve plug and seat ring shall be of the same material as the valve body.
3. The valve stem seal shall be of the bellows type.
4. Valves shall be as by ASAHI/AMERICA, George Fischer or equal.

**2.03 Metallic Valves**

A. Gate Valves

1. Gate valves shall be resilient seated, ductile iron body, bronze mounted, with inclined seats, non-rising stem type, counter-clockwise rotation to open, conforming to AWWA C509.
2. Valve Operators: Below Ground: Except for use with post-indicators, furnish valves with 2" nut for socket wrench operation. Post indicator shall conform to requirements of NFPA 24 and shall be fully compatible with the valve provided.

B. Ball Valves

1. NIBCO Fig. T-590, or equal for sized 1/2 through 2", three-piece bronze construction, 150 psi SWF conventional port, blow-out proof, Teflon seats, soldered or threaded ends with chrome plated steel handle.
2. Valves to be used on screwed or soldered piping only.

C. Check Valves (Swing Type)

1. Valves shall be Powell, Fairbanks, Jenkins or approved equal.
2. Valves 2" and smaller shall be all bronze with screw-in cap, regrinding disc and threaded ends.
3. Valves 2-1/2" and larger shall be iron body, bronze mounted with bolted cover, regrinding disc and flanged ends.
  - a. Up to 125 psi - Powell Co., Fig. 559
  - b. Up to 250 psi - Powell Co., Fig. 576
4. Valves 2" and smaller for copper tubing shall be all bronze with screw over cap and solder ends up to 125 psi similar to the Powell Company, Fig. 1825 or equal by Fairbanks, Jenkins or approved equal.

D. Butterfly Valves

1. Butterfly valves shall conform in all respects to AWWA Specification C-504, latest revision, Class 10513, except as specified herein. Butterfly valves shall incorporate the following:
  - a. Cast iron body, ASTM A126, Class B;
  - b. Mechanical Joint (Buried Service), ANSI A21.11;
  - c. Valve Disc: Cast iron, ASTM A48, Class 40 or Ductile Iron, ASTM A536, GR 65-45-12, epoxy coated;
  - d. Valve Seat: Rubber seat mechanically secured to disc with stainless steel retaining ring;
  - e. Valve Shaft: 18-8 stainless steel, type 304, AWWA C504;
  - f. Operator: Manual, travelling nut or worm gear;
2. All valves shall be provided with shaft seals designed for the use of stuffing boxes with pull-down packing. Stuffing boxes shall be of cast iron, conforming to ASTM A126, Class 13, with cast bronze gland assemblies and flax packing or split-vee chevron type.
3. Butterfly valves shall be furnished with a protective epoxy coating system applied to the interior waterway and the valve disc.

E. Tapping Sleeves and Valves

1. Tapping sleeves shall be extra heavy pattern designed to withstand the strains of making wet tap connections and they shall be of sizes suitable for use on the pipe on which the respective sleeve is to be installed, and for use with the tapping valve.
2. Tapping sleeves shall be of the mechanical joint type, designed for a working water pressure of 200 psig and shall be of the same manufacture as the tapping valve.
3. Tapping valves shall be furnished with flanged ends on the upstream side which shall register with the flange of the tapping sleeve. Downstream ends shall be furnished with a tapping flange for attaching the drilling machine, and also with a bell end for connection to the branch water main, using a mechanical joint.

F. Air and Water Solenoid Valves

1. Solenoid valves for the air applications shall be 1/2" NPT. Solenoid valves for water application shall be 1" NPT. All valves shall be 120 psi, threaded ends, forged brass body, Teflon discs, 304 stainless steel core tube, 430°F stainless steel core and plugnut, 302 stainless steel springs and copper shading coil; 20 watt Class F 120 volt coil.
2. Solenoid enclosure shall have a watertight enclosure (NEMA 4X).
3. Solenoid valves shall be normally closed, direct operation.
4. Solenoid valves shall be ASCO Red Hat bulleting 8223 or equal.

**2.04 Curb Stops, Curb Stop Boxes and Valve Boxes**

- A. Curb Stops or Curb Valves shall be Mueller H-15204, H-15209 or B-25209, or equal for 1" and 2" sizes. Curb stops shall be of the quarter turn cylindrical plug type with a closed bottom and top O-ring seal construction with integral stops build into the bottom of the plug and body, The curb valve design shall include markings to identify the valve position.
- B. Curb Stop Boxes shall be of cast iron, extension type, with screw or slide type adjustment and flared base. The box shall be adaptable, without full extension, to the depth of cover required over the pipe, at the stop location. The word "WATER" shall be cast into the cover and the cover shall be set flush with finished grade. The curb stop shut off rod shall extend a minimum of 24" above the top of the deepest curb stop box.
- C. Valve Boxes shall be of the extension type, with screw or slide type adjustment and flared base. The box shall be adaptable, without full extension, to the depth of cover required over the pipe, at the valve location. The minimum box material thickness shall be 3/16". The word "WATER" shall be cast into the cover. Provide a minimum of two (2) "T" handle

socket wrenches of 5/8" thick round stock, long enough to extend 24" above the top of the deepest valve box.

## **2.05 Link Seals and Wall Sleeves**

- A. Where so depicted the pipe to wall penetration closures shall be "Chemical Service Link-Seal" as manufactured by Thunderline Corporation - Belleville, Mich. 48111. Seals shall be modular mechanical type, consisting of interlocking synthetic rubber links shaped to continuously fill the annular space between the pipe and wall opening. Links shall be loosely assembled with bolts to form a continuous rubber belt around the pipe with a pressure plate under each bolt head and nut. After the seal assembly is positioned in the sleeve, tightening of the bolts shall cause the rubber sealing elements to expand and provide an absolutely water-tight seal between the pipe and wall opening. The seal shall be constructed so as to provide electrical insulation between the pipe and wall sleeve, thus reducing chances of cathodic reaction between these two members.
- B. Sleeves through exterior building walls shall be schedule 80 black steel with 150 lb. black steel slip-on welding flanged welded at the center of the outside. Extend sleeves 1/2" beyond each side of the wall. Pack the space between sleeve and pipe with oakum to within 2" of each face of the wall. Pack the remaining space and made watertight with a waterproof compound.
- C. Sleeves through masonry floors or interior masonry walls shall be schedule 40 black steel pipe, set flush with finished wall or ceiling surfaces, but extending 2" above finished floors.
- D. Provide 22-gauge galvanized steel sleeves through interior partitions set flush with finished surfaces of the partitions.
- E. Provide individual or strip type inserts pressed steel construction with accommodation for removable nuts and threaded rods up to 3/4" diameter, permitting lateral adjustment. Individual inserts shall have an opening at the top to allow reinforcing rods to 1/2" diameter to be passed through the insert body and shall be similar to Fee and Mason Manufacturing Company, Fig. 178. Strip inserts shall have attached rods with hooded ends to allow fastening to reinforcing rods and shall be similar to Fee and Mason Manufacturing Company Fig. 190.

## **2.06 Connections and Couplings**

- A. Couplings
  - 1. All couplings on steel pipe shall be Style 38 couplings as manufactured by Dresser Industries, Bradford, PA. Couplings to have steel middle ring, flanges, track head and rolled thread bolts. Two rubber compounded wedge section gaskets to be furnished with each coupling. Style 440 Joint Harnesses shall be used except as noted otherwise. Lugs and bolts shall be in accordance with the manufacturer's selection for line working pressure and pipe size. Similar coupling by Rockwell

International, Pittsburgh, PA or approved equal will be acceptable.

2. In some locations, it may be necessary to furnish a coupling which shall be suitable for different materials of pipe. Such couplings to connect steel pipe to cast iron pipes, etc., shall be Dresser Style 62, or approved equal. Coupling rings shall be furnished without pipe stops and gaskets shall be of the plain type. Follower rings shall be designed to adequately confine the gaskets.
3. Flexible couplings on pressure lines shall be suitably harnessed in accordance with the recommendations of the manufacturer, or otherwise protected against a separation from thrust. All joints shall be arranged to prevent rotation of the pipe by a method approved by the Owner.
4. Couplings not shown on the drawings may be installed by the Contractor to permit non-rigid connection to equipment, wall flanges, etc. and as required to facilitate piping installation.

B. Quick Couplings

1. Quick couplings shall be OPW Kamloc Quick Couplers as manufactured by Dover Corporation, Cincinnati, OH. Couplings to be furnished as a set, with one adaptor and one coupling per fitting.

**2.07 Flanged Joints**

- A. Cast Iron Pipe Flanges shall conform to ANSI B16.1 "Cast Iron Flanges and Flanged Fittings". Steel flanges shall be raised face except when bolted to flat face cast iron flange.
- B. Flanged joints shall be made with bolts, bolt studs with nut on each end, or studs with nuts where the flange is tapped. The number and size of bolts shall conform to the same ANSI Standard as the flanges.
- C. Bolting for services up to 500° F shall be ANSI/ASTM A307 Grade B with square head bolts and heavy hexagonal nuts conforming to ANSI B18.2.1 "Square and Hex Bolts" and B18.2.2 "Square and Hex Nuts". Bolt studs and studs shall be of the same quality as machine bolts.
- D. Gaskets for flat face flanges shall be full face type. Gaskets for raised face flanges shall conform to requirements for "Group I Gaskets" in ANSI B16.5. Gaskets for stainless steel flanged connections shall be ring type, solid, virgin Teflon, white, 1/16" thickness.

**2.08 Fire Hydrants**

- A. The hydrant hose thread, size of fire apparatus connection, and the shape, size and direction of rotation of the operating head of the hydrant shall be identical with the existing local fire

department and/or public water system standards.

- B. The hydrant interior shall be removable without excavating the hydrant. The main valve opening of each hydrant shall be minimum 5". The hydrant shall be provided with 6" bell connections, one (1) steamer nozzle and two (2) hose nozzles with nozzle caps securely chained to the barrel. The hydrant shall be provided a suitable drainage device, nozzles, stuffing boxes, wedge nuts, seat rings, clamp plates, etc. Threaded joints or spindles shall be bronze. The upper and lower barrels shall be of equal diameter and the upper barrel shall be of sufficient length to permit setting hydrant with the barrel flange not more than 2" above finished grade. All hydrants shall have a 6" bottom connection.
- C. Provide a minimum of two (2) wrenches with handles not less than 14" long.

### **2.09 Warning Tape**

- A. All underground piping and conduit shall be provided 4-mil polyethylene identification tape, minimum 3" width. The tape shall be blue, with black letters, imprinted with "CAUTION, BURIED WATER PIPELINE BELOW"

### **2.10 Pipe, Specials and Valves Not Specifically Covered**

Where indicated on the plans, elsewhere specified, or required by the work to be performed, pipe, specials, valves and accessories of materials, classifications, type, style, etc., not specifically covered by this section of the specifications, shall be furnished and installed by the Contractor. All such materials shall be installed in a first-class and workmanlike manner. The Contractor shall obtain prior review and approval of the Owner before ordering any such materials.

## **PART III EXECUTION**

### **3.01 General**

- A. Product Delivery, Storage and Handling: Do not deliver water service materials to the job site until ready for installation. Water service materials shall be stored in a clean dust free environment and shall be properly handled to prevent damage to materials.
- B. Handling of Pipe
  - 1. Storage of pipe valves, fittings, etc. shall be as approved by the manufacturer so as not to expose the pipe to damage.
  - 2. Pipe, valves, fittings etc. shall be stored in an area approved by the Owner, and in a manner so as not to create a safety hazard or nuisance.
  - 3. Pipe, valves, fittings, etc. shall be handled in a manner approved by the

manufacturer, using slings or other approved devices. No materials shall be dropped from vehicles or handled in a manner as to cause damage.

C. Inspection of Materials

1. Carefully inspect all pipe, fittings, valves, equipment, and accessories for cracks, flaws or other defects, prior to installation. Any items which are unsuitable, cracked or otherwise defective shall be rejected and removed from the job immediately. All pipe, fittings, valves, equipment and accessories shall have factory applied markings, stampings or nameplates with sufficient data for identification to determine their conformance with specified requirements.
2. The interior of pipe and fittings shall be thoroughly cleaned of foreign matter before being lowered into the trench and shall be kept clean during installation operations.
3. Exercise all necessary care to prevent entry of foreign matter into piping, fittings, or install any item which is not clean. During construction, until system is fully operational, all openings in piping and equipment must be kept closed at all times except when work is being performed on that item or system. Closures shall be plugs, caps, blind flanges or other items specifically designed for this purpose.

D. Water Service Locations:

1. The locations of water service line connections and replacement presented on the Drawings is based upon the best available information, and must be confirmed in the field by the Contractor.
2. A water service connection is defined as the installation of new water service tubing or piping, as specified, from the new water main, to a point at which the connection is made to the existing copper water service, as indicated on the drawings or as directed in the field.
3. A water service connection replacement is defined as the installation of new water service tubing or piping, as specified, from the new or existing water main, to the specified curb stop location, and beyond, as required for connection, as indicated on the drawings or as directed in the field.

**3.02 Installation of Pipe Systems**

- A. Removal of Existing Water Services: The Contractor shall be responsible for removing existing services where indicated on the Drawings or as directed by the Engineer. The work will require the removal of the existing water service pipe from the corporation stop to the curb stop, and the removal of the existing curb stop including curb box. The Contractor shall shut off the existing water service at the corporation stop. Corporation stops which cannot be operated or are observed to be leaking, shall be tightened, capped or replaced with suitable plugs, if necessary, to stop the leakage from the water main. The work required for

the removal of existing water services will include pavement removal, excavation, backfilling, refill and all other necessary restoration work required to satisfactorily complete the removal of the existing water service and its appurtenances. The Contractor shall be responsible for the proper disposal of the items removed.

B. Pipe, Fitting and Valve Installation

1. Watermain pipe, fittings, specials and accessories shall be installed in accordance with AWWA C600, latest revision. Pipelines shall be installed straight and true to line and grade and in such manner as to form a close constriction joint with the adjoining pipe segment, and to prevent sudden offsets in the grade line. All piping shall be maintained accurately to line and grade. Any pipe that has the grade joint disturbed after laying shall be re-laid.
2. Valve boxes shall be provided for all valves and they shall be set plumb. Valve boxes shall be centered on the valve operating nut. Care shall be taken that no part of the riser section, and its pad, shall bear on any part of the valve. Provision shall be made to keep any stones, mud or debris from entering the riser section during and after backfilling. Any blockage of the box shall be remedied by the Contractor at this own expense. Valves and riser section shall be centered on valves and the cover shall be set flush with the finished surface. The bottom of the cover shall have a minimum clearance of 3" from the top of the rise pipe.
3. The installation trench shall be kept free from water to prevent flotation of the pipe, and pipelines shall be constructed in dry conditions, and shall not be laid when the condition of the trench or the weather is unsuitable for such work. At times when the work is not in progress, open ends of pipe and fittings shall be securely closed so that no trench water, earth or other substance will enter the pipe or fittings. Valve installations shall not be made when the trench or weather conditions are unsuitable for the work. All excavations and valve structures shall be kept free of water during installation of the valves and jointing operations, and for such additional lengths of time as may be required to insure the satisfactory installation of the valve assemblies and appurtenant work.
4. All fittings shall be anchored to prevent any movement of the fittings or the adjacent pipe. In general, this anchorage shall be provided by the installation of Class B Portland Cement concrete thrust blocks, and clamps, yokes, tie rods as specified and shown on the Drawings, as restrain all fittings and appurtenances. Hand excavation may be required for thrust blocks. The Owner may require concrete to be placed at points on the pipeline other than at fittings, depending upon field conditions. All concrete used for thrust blocks shall be exposed for a minimum of sixteen (16) hours before being covered. Insofar as possible, thrust blocking shall be placed so that the pipe and fitting joints will be accessible for repair.
5. Taps for water service corporation stops shall be made where shown on the Drawings or as directed by the Owner. The tapping machine shall be of approved

design and in good operating condition. Only a clean, sharp drill-tap tool of the proper size and thread shall be used. The tapping machine shall be firmly clamped to the pipe at a 90° angle, threads shall be clean and sharp and sufficiently deep so that no more than three (3) threads show when the stop is inserted and tightened with the operation nut on top. The stop shall be tightened only enough to make a watertight joint and not over-tightened.

6. Jointing of mechanical joint fittings, specials and valves shall be provided in accordance with the recommendations of the pipe manufacturer, and as specified. The mechanical joint fittings, joint restraints systems, specials and valves shall be suitable for jointing with the pipe with which they are used. The Contractor shall provide all necessary adapters for the proper jointing of pipe, pipe fittings, specials and valves. The last 8" of the outside spigot end of pipe and the inside of the bell of the mechanical joint shall be thoroughly cleaned to remove all oil, grit and other debris from the joint. When assembling a joint, it is essential that the gland be brought into place and bolts tightened in a manner to insure maintaining of the unit assembly.
7. Provide flanges at all final connections to equipment, traps and valves to facilitate dismantling. Arrange piping and piping connections so that equipment being served may be serviced or totally removed without disturbing piping beyond final connections and associated shutoff valves.
8. All pipe shall be installed without springing or forcing. Particular care shall be taken to avoid creating, even temporarily, undue loads, forces or strains on valves, equipment or building elements with piping connections or piping supports.
9. Install all work so that all parts required are readily accessible for inspections, operation, maintenance and repair. Minor deviations from the drawings may be made to accomplish this, but changes of magnitude shall not be made without prior written approval from the Owner. No work shall be closed in, covered and/or hidden from view before it has been examined by the Owner.
10. Any and all unsatisfactory work or materials shall be corrected and/or removed immediately after being condemned, and furnish other work and materials, satisfactory to the Owner, at no additional cost.
11. All packing, gaskets, discs, seats, diaphragms, lubricants, etc., shall conform to recommendations of the valve manufacturer for the intended service.
12. Valves shall be installed with the stems positioned in the vertical position, above the centerline of the pipe.
13. Provide to the Owner, one operating wrench for every ten (10) valves of each type (but not less than 2 wrenches per type).

C. Sleeves and Plates

1. Provide sleeves for all pipes passing through walls and foundations.
2. Lay out, size and locate all sleeves such that they be set and/or installed prior to pouring concrete. In the event sleeves must be placed after wall, grade beam, etc., has been constructed, submit in writing to and obtain approval from the Owner, quantity and proposed method of core drilling and installing. Cored openings must be clean and neat without cracking or spalling.
3. Unless otherwise specified, sleeves shall be standard weight galvanized steel pipe having square cut ends with anchoring lugs welded on. Horizontal sleeves through walls, grade beams, foundations and partitions shall be flush with finished wall faces and have a water stop. Vertical sleeves through floors shall extend 3 inches above finished floor and be flush on ceiling or under side.
4. Size sleeves such that internal diameter is a minimum of 2" larger than the outside diameter of the bare pipe for un-insulated lines and 2 in. larger than outside diameter of the insulation and jacket for insulated lines. Center pipes and sleeves. Sleeves in pits or below grade shall be painted or coated with one coat of coal tar pitch paint and have an integral waterstop.
5. All pipes passing through walls or floors except in factory spaces, equipment rooms, pits, below grade, or concealed above ceilings shall be provided with chrome plated brass solid type escutcheon plates large enough to conceal the pipe sleeve and fitting snugly around pipe or insulation. Approved manufacturer and model numbers are Ritter Pattern and Casting Company, Inc., 1, 3A or 36A.

**3.03 Welded Pipe Connections**

- A. Welders assigned to the work shall be duly qualified in accordance with ASME Section IX Boiler and Pressure Vessel Code for Welder's Qualification Test, Welding Procedures and Quality Requirements, and Procedures and Tests for Qualifying Welders. Qualification proof shall be available on request of the Owner.
- B. The base metal may be prepared for welding by shearing, gas cutting, etc. Metal shall be cleaned of grease, oil, paint, rust, scale, burrs, pipe cuttings or anything else which may be detrimental to the finished weld.

C. Welding Methods

1. No welding shall be done if the metal temperature is below 0°F or if the surfaces are wet. Between 0°F and 32°F the metal shall be heated until warm to the hand.
2. In the installation of socket weld fittings and valves a 1/16" clearance shall be left between the end of the pipe and the shoulder in the socket.

3. Butt welds shall be prepared with welding grooves by machining or flame cutting and grinding. Ends shall be free of scale and oxide, smooth, and leveled, leaving a 1/16" land on the bottom of the welding edge. A minimum 3/32" separation shall be allowed between the lands. A 1/16" separation shall be allowed between the lands. A 1/16" separation shall be used for gas welding.
4. The 2 pieces to be welded shall be held for welding by alignment fixtures. Tack welds in the grooves may be used if fixtures cannot be used but shall be kept to a minimum.
5. The number of passes for welding joints and the method of welding shall be sufficient to satisfy good practice and pressure requirement specified. The average thickness of each layer of welding metal shall not exceed 1/8 inch. Complete fusion shall be obtained and care shall be taken that full penetration is obtained through thickness of metal without stalactite or dripping. All slag and flux shall be removed by wire brushing before each succeeding pass is made. The completed weld shall be free from all defects including undercutting, porosity and cracking. Welds shall present a smooth, regular workmanship appearance.
6. Welding equipment shall be properly grounded to prevent induced current in structural steel, piping or other metals.

### **3.04 Testing of Installed Piping Systems**

#### **A. Preparation**

1. The Contractor shall furnish all equipment and labor necessary to perform the field tests called for in this Specification.
2. The Contractor shall give ample notice to the Owner that tests are to be conducted. The Owner shall witness all pipeline tests or otherwise shall give written authorization to the Contractor to perform un-witnessed pipe tests.
3. No test shall be performed until all anchors, thrust blocks, supports, test gauges, plugs, bulkheads, blanks, etc., are installed.
4. Piping that connects to or is continuous with lines installed by others shall be isolated from such lines by valves or test blanks located at or near the junctions. When necessary to include parts of such lines in the test, the Owner shall be given prior notice so that test conditions may be mutually agreed upon. Special test conditions must be approved in writing prior to performing any such tests.
5. Underground pipe joints shall be exposed during the test program. When piping is required to be painted or insulated, the paint or insulation shall not be applied to the pipe joints until the tests are completed.

6. Safety precautions shall be taken to prevent open ends of piping being in position to cause injury to personnel when blowing out or testing systems.
7. One or more calibrated indicating test gauges shall be connected directly to the piping as necessary to coordinate the pressuring operation. The indicating gauges shall be visible to the operator controlling the pressure. Pressure gauges used shall have dials graduated over a range approximately 2 times the intended medium test pressure.
8. The interior of all piping shall be free from loose mill scale, sand, dirt, slag, weld, spatter, rust and other foreign matter, when installed.
9. After installation of piping, all those lines requiring hydrostatic testing shall be flushed with water. Terminal visual inspection in the presence and to the satisfaction of the Owner must be made after flushing procedure is completed. A minimum of 5 gallons is to be flushed from each corporation stop or use point under full flow to ensure adequate cleaning of valve seats. Inspect and replace valve seats where necessary to ensure nonclulsion of particulates. Flushing shall be considered complete when no sediment is visible in a water sample in a clean glass vessel, standing for five minutes.

#### B. Pressure Testing

1. As far as is practicable, all pressure tests shall be complete system tests conducted in the presence of the Owner. All pressure vessels, instruments, and equipment connected to the piping system shall be included in the tests. The piping system shall be hydrostatically tested after flushing has been completed.
2. Every precaution shall be taken during testing to ensure the safety of the operator. Systems to be pressurized shall be provided with appropriate gauges and pressure relieving devices, furnished by the Contractor.
3. All joints are to be left uninsulated and exposed for examination during testing.
4. Equipment not to be subjected to the pressure test shall be either disconnected from the piping or isolated by blinds or other means during the test. Valves may be used provided that the valve is suitable for the proposed test procedure.
5. Pressure gauges shall not be subjected to pressure in excess of their scale range. All pieces of equipment which do not have their test pressure indicated or whose test pressures are below the piping system test pressure shall be excluded from the test.
6. Pressure relief and thermal relief valves shall be excluded from these tests.
7. Before every test, the piping systems shall be visually inspected to assure that there

are not visual defects and that all connections are tight.

8. Control valves, unless being tested, shall be set and maintained in the full-open position.
9. Lines containing check valves shall have the pressure applied upstream of the check valve so that pressure is applied under the seat.
10. All in-line instruments, gauge glasses, flow meter pots, liquid level float gauges, and all other pressure parts of instruments shall be included in these tests, where feasible.
11. Joints found to be defective shall be repaired and retested. Retesting of pipelines after repairs shall be done at the pressures originally specified for the test.

#### C. Hydrostatic Tests

1. The hydrostatic test pressure shall be calculated in accordance with the applicable section of ANSI B31.3, but shall not exceed the maximum test pressure of any vessels or components included in the test.
2. Temperature and head adjustments shall be made in accordance with ANSI B31.3, paragraphs 337.4.1 and 337.4.2.
3. All hydrostatically tested systems shall be tested in a one and one-half times the design pressure or to a minimum pressure of 100 psig, whichever is greater. All test pressures shall be maintained a minimum of ten minutes before visual examination of joints begins.
4. Hydrostatic test pressures shall not be applied until the piping system and the testing medium have reached thermal equilibrium.
5. During the tests, hydrostatic pressures shall be monitored and corrections shall be made to compensate for thermal expansion or contraction. By this procedure, the test pressure shall be kept within five (5) psig or one percent, whichever is greater, of its intended value. All joints shall be visually examined for leakage during the test.
6. No repair welding shall be done on any section of piping that contains water.

#### D. Test Reports: The Contractor shall prepare a "Test Report" record for each piping system or pipe segment tested, including the following data and information:

1. Date and duration of Test;
2. Pipe Line Identification;
3. Type of test, pressure applied and length of time at test pressure and pressure at end of test;
4. Name of personnel and company performing test;
5. Comments, if any.

**END OF SECTION**

**SECTION 02661**  
**INSTALLATION OF WATER PIPING SYSTEMS**

**PART I     GENERAL**

**1.01   Related Documents**

- A. Drawings and general provisions of the Contract, including General Conditions and Division I Specification Sections, apply to this Section.

**1.02   Work Included**

- A. This section covers the furnishing, installation, testing and disinfection of the buried water service pipeline system, including all pipe, fittings, valves, hydrants, wet taps, thrust blocks, and all appurtenant work, complete in-place and accepted.

**1.03   Related Work**

- A. Section 02220 - Excavation, Backfilling and Compaction for Utilities  
B. Section 02650 - Water Distribution Systems

**1.04   Quality Assurance**

- A. Reference Standards: Except as modified or supplemented herein, the installation of the pipeline system shall meet the requirements of the following standard specifications.

1. American Water Works Association
  - a. C600-93: Installation of Ductile-Iron Water Mains and their Appurtenances.
  - b. C0651-92: Disinfecting Water Mains.

- B. Submittals:

1. Submit name and evidence of qualification of firm contracted to perform pressure testing and disinfection for approval prior to commencement of the work.
2. Submit name of testing laboratory and evidence of qualification to perform the required bacteriological testing. The approved qualified independent testing laboratory will furnish certified reports of the required bacteriologic tests. Submit three (3) copies of the reports.

**1.05   Job Conditions**

- A. Protection:
1. Prevent foreign material from entering the pipe, fittings and valves during installation. No debris, tools, clothing or other materials shall be placed in the pipe fittings and valves. Whenever pipeline installation is stopped, seal the open end of the pipe with a watertight plug to prevent trench water, debris or other material from entering the pipe. Take adequate measures to prevent flotation.
  2. Pipe shall be installed in dry excavations. If water is present in the trench after installation, then the plug shall be left in place until the trench has been pumped dry.
  3. The Engineer or Owner's Representative will be present during the times the Contractor operates all valves, hydrants, blow-offs and curb stops and other control unit.
- B. Unsuitable Conditions: No pipe shall be installed when, in the opinion of the Engineer of Owner's Representative, trench or weather conditions are unsuitable.

**1.06 Product Delivery, Storage and Handling**

- A. The Contractor shall examine all materials upon delivery so as to insure an accurate assessment of any broken, damaged or otherwise defective materials requiring replacement.
- B. All pipe, fittings, valves, and appurtenances shall be carefully handled, stored and protected in such a manner as to prevent damage to materials and protective coatings and linings. Under no circumstances shall such materials be dropped or dumped into the trench. Any material broken or damaged by the Contractor through negligence or by accident shall be replaced by the Contractor at no additional expense to the Owner. Remove any broken or damaged materials from the construction site and do not use in any portion of the construction. Any broken, damaged, or otherwise defective materials which are included in the construction shall be removed and replaced at no additional expense to the Owner.

**PART II PRODUCTS**

**2.01 Materials**

- A. All materials to be used shall be furnished as specified and in accordance with the applicable sections of these Contract Specifications.

**2.02 Concrete for Thrust Blocks and Encasements**

- A. Concrete shall have a minimum compressive strength of 3,000 psi after 28 days.

## **PART III    EXECUTION**

### **3.01    Preparation**

- A.    Excavation: Perform excavation in accordance with the requirements of Section 02220 Excavation, Backfilling and Compaction for Utilities.
  
- B.    Cleaning and Inspection: The interior of all pipe, fittings, valves and appurtenances shall be thoroughly cleaned of all foreign material and inspected for cracks, flaws or other defects before installation and shall be kept clean until the work is accepted. All joint contact surfaces shall be kept clean until the joint is completed. Mark all defective, damaged or unsound materials with bright marking crayon or paint and remove from job site.
  
- C.    Excavation of Existing Facilities: When connections are to be made to existing pipelines or appurtenances, the actual elevation of which cannot be determined without excavation, the Contractor shall excavate for and expose the existing facility before laying any pipe or conduit. The Engineer or the Owner's Representative will inspect the existing facility and will make any necessary adjustments in the line or grade of the proposed pipeline to accomplish the connection.

### **3.02    Installation of Pipe**

- A.    General:
  - 1.    As each length of pipe is placed in the trench, the joint shall be completed as specified herein and pipe shall be brought to the correct line and grade. No spalls, shims or lumps shall be used to raise the pipe to grade, secure the pipe in place with the specified bedding materials tamped under and around the pipe except at the joints. Bell holes shall be excavated so that after placement only the barrel of the pipe receives bearing pressure from the trench bottom. No joints shall be covered in any way until the joints have been inspected. Do not walk on small diameter pipe or otherwise disturb any conduit after jointing has been completed.
  
  - 2.    When necessary, pipe shall be cut without damage to the pipe or cement lining leaving a smooth end at right angles to the axis of the pipe. When push-on joint type pipe is cut in the field, the plain end shall be beveled with a heavy file or grinder to remove all sharp edges. All pipe cutting shall be done with approved mechanical cutters, Flame cutting using an oxyacetylene torch shall not be used.
  
  - 3.    In addition to the requirements specified herein, the pipe fittings, valves and appurtenances shall be installed in strict accordance with the printed recommendations of the respective material manufacturer and as approved.
  
- B.    Pipe Laying:
  - 1.    Pipe shall be laid true to line and grade and joined in such a manner that the offset of the inside of the pipe at any joint is held to a minimum. The maximum allowable joint deflection shall be as shown in Table 4 and Table 5 of AWWA C-600 for push, on joint pipe and mechanical joint pipe, respectively.

2. Deflections from a straight line or grade, as required by vertical curves, horizontal curves or offsets shall be made using fittings or specials as indicated on the drawings or as otherwise designated by the Engineer or the Owner's Representative to accommodate field conditions.
3. Install all valves and tapping sleeves at the locations indicated on the drawings or as otherwise designated by the Engineer or the Owner's Representative to accommodate field conditions.
4. Valves shall be adequately supported with crushed stone or other suitable means so that the pipe will not be required to support the weight of the valve.
5. Valves shall be installed in the closed position.
6. Valve boxes shall be installed on all buried valves. Install boxes such that no stress is transmitted to the valve. Set boxes plumb and directly over the valve with the top of the box placed flush with the finished grade. Backfill and thoroughly compact around each box. Care shall be exercised to prevent stones, mud or debris from entering the boxes during and after backfilling.
7. Unless specifically authorized otherwise by the Engineer or the Owner's Representative in writing, the pipeline shall be installed so that a positive or negative grade is maintained between high and low points to avoid airpockets. If permanent air vents are not provided, record location of all high points so they may be readily located.
8. Install pipe with bell ends facing \*the direction of laying, unless directed otherwise by the Engineer or the Owner's Representative. Where pipe is laid on a grade of 10 percent or greater, the installation shall proceed uphill with the bell ends facing upgrade.
9. Record "as-built" locations and depths of all pipe, fittings, valves and connections to existing water mains prior to backfilling. All bends, fittings and valves shall be located with three measurements to permanent aboveground structures, not including ties to the new or existing water system.

C. Jointing the Pipe:

1. Push-on joints:
  - a. Thoroughly clean the groove and bell socket and insert the gasket making sure that it faces the proper direction and that it is correctly seated.

- b. After cleaning dirt or foreign material from the plain end, apply lubricant in accordance with the pipe manufacturer's recommendations. The lubricant is supplied in sterile cans and every effort should be made to keep it sterile.
- c. Be sure that the plain end is beveled. When pipe is cut in the field, bevel the plain end with a heavy file or grinder to remove all sharp edges. Push the plain end into the bell of the pipe, taking care to prevent contact of the jointing surfaces with the ground. Keep the joint straight while pushing. Make deflection after the joint is assembled. Pipe that is not furnished with a depth mark shall be marked before assembly to assure the spigot end is fully inserted into the bell end.

2. Mechanical Joints:

- a. Wipe clean the socket and the plain end. The plain end, socket, and gasket shall be washed with a soap solution to improve gasket seating. Place the gland on the plain end with the lip extension toward the plain end, followed by the gasket with the narrow edge of the gasket toward the plain end.
- b. Insert the pipe into the socket and press the gasket firmly and evenly into the gasket recess, taking care to prevent contact of the jointing surfaces with the ground. Keep the joint straight during assembly. Make deflection after joint assembly, but before tightening bolts.
- c. Push the gland toward the socket and center it around the pipe with the gland lip against the gasket. Insert bolts and hand tighten nuts.
- d. Tighten the bolts with a torque limiting wrench to the normal range of bolt torque as indicated in Table 3 of AWWA C600. Overtightening to compensate for poor installation practice will not be permitted. Nuts spaced 180 degrees apart shall be tightened alternately to produce equal pressure on all parts of the gland.

3. Push-on Restrained Joints:

- a. Thoroughly clean the bell socket of all dirt, sand, gravel or foreign matter and insert the gasket, making sure that it faces the proper direction and that it is correctly seated.
- b. Apply lubricant onto the exposed surface of the gasket and pipe spigot end to retainer weldment. Make conventional push-on joint assembly ensuring that pipe is fully inserted, in alignment, with first assembly stripe in the socket. Insert right-hand locking segment into slot and slide segment down around pipe. Insert left hand locking segment into slot and

slide segment up around pipe. Wedge rubber retainer between locking segments. (For pipe diameters of 12 inches and larger, multiple locking segments and rubber retainers are used. Repeat locking segment and retainer installation steps accordingly.) After completion of joint assembly, set any desired deflection in the joint in accordance with the manufacturer's maximum deflection limits.

- c. When restrained joint pipe is cut in the field, gripper rings shall be used to provide joint restraint. Cut pipe square using gasoline powered abrasive saw. Bevel the field cut end with a disk grinder. Make an assembly mark on the pipe barrel as a guide to assure that the pipe is inserted the proper depth into the socket. Follow same procedure as above for inserting gasket. Insert the beveled end of the pipe into the socket to the guide mark. Position the gripper ring segments into the bell locking segment cavity so that the locking segment handles protrude beyond the bell face, Install the bolts into the locking segment handles. Tighten the first pair of handles to approximately 35-foot pounds torque, then tighten second pair of handles to approximately 35-foot pounds torque. Do not deflect the joint prior to tightening. (For pipe diameters 24 inches and larger, four gripper ring segments with a jack screw between two segments are used. In this case, tighten three pairs of handles together, and then the last pair.)

#### 4. Mechanical Couplings

- a. The ends of the pipes shall be prepared and the couplings installed in strict accordance with the coupling manufacturer's printed recommendations.

#### D. Wet Taps:

1. Wet taps shall be made at a time and in a manner authorized by the Engineer or the Owner's Representative.
2. The work of installing tapping sleeves and valves and for making the wet taps under full main pressure shall be done only by workmen who are thoroughly experienced in this type of work.
3. The Contractor shall furnish the services of factory-trained personnel and special factory equipment, as necessary, for making wet tap connections, at no additional expense to the Owner.
4. The Contractor shall take all precautions necessary to prevent contamination of the existing potable water system when making the wet tap. Before the tapping sleeve is installed, the exterior of the main to be tapped shall be thoroughly cleaned and the interior surface of the sleeve shall be lightly dusted with calcium hypochlorite powder.

5. The tapping sleeve, valve, adaptor and tapping machine assembly shall be pressure tested in-place before making the tap.
6. The wet tap connections shall be made in accordance with the printed recommendations of the tapping machine manufacturer and as directed.

E. Reaction Anchorage and Blocking:

1. Provide thrust blocks, anchors, joint harness or other approved means for preventing pipe movement at all push-on or mechanical joint plugs, tees, crosses; bends deflecting 11-1/4 degrees or more; reducers and valves.
2. Construct thrust blocks in accordance with details shown on the drawings, sized to accommodate the specified test pressure of the pipeline. Thrust blocks shall extend from the fitting to solid undisturbed earth and shall be constructed so the joints are accessible for repair. If adequate support against undisturbed earth cannot be obtained, provide joint harnesses.
3. Provide joint harness or other supports for fittings installed in fills or other unstable soil, above grade, or exposed within structures as required by the drawings, as specified in other sections of the Specifications or as necessary to prevent movement.

F. Concrete Encasement: Install concrete encasement where indicated on the drawings and as directed in the field by the Engineer or the Owner's Representative. Block all pipes in place to prevent flotation.

G. Installation of Concrete for Thrust Blocks and Encasements: All concrete used for thrust blocks and encasements shall remain uncovered for at least 16 hours after installation.

H. Protection of Metal Surfaces: Protect all ferrous metal rods, clamps, bolts, and other accessories subject to submergence or contact with earth or fill material and not encased in concrete with 2 coats of coal tar paint. Apply first coat to clean, dry metal surfaces and allow to dry before applying the second coat.

3.04 Field Quality Control

A. Alignment Tests:

Each section of pipe will be checked by the Engineer or the Owner's Representative in order to suitable assistance to the Engineer or the Owner's Representative. The Contractor shall repair any poor alignment, displaced pipe, or other defects discovered, as directed by the Engineer or the Owner's Representative.

B. Hydrostatic Tests:

1. After the pipe has been laid and the trench has been backfilled, all newly laid pipe or any valved section thereof shall be subjected to a pressure and leakage test, in accordance with Section 02710 of the contract Specifications and as approved by the Engineer or the Owner's Representative.
2. All newly rehabilitated pipelines shall be subjected to a similar test as directed and approved by the Engineer.
3. The Contractor shall provide all pumps, pipe, connections, gages, measuring devices, and all other apparatus necessary for the test and shall conduct the test in the presence of and to the satisfaction of the Engineer or the Owner's Representative. The Owner will supply water to the Contractor for testing purposes at no expense to the Contractor.

### **3.05 Disinfection of Potable Water Pipelines and Systems**

#### **A. General:**

Flushing and disinfection of potable waterlines shall be done in accordance with the procedures set forth in Section 02710, "Testing and Disinfection of Potable Water Piping" of these Contract Specifications, and shall be witnessed by the Engineer or the Owner's Representative unless otherwise approved. Said procedures, as applied to newly rehabilitated (cleaned and lined) existing water mains, may be modified in the field as directed by the Engineer. Prior to commencement of any disinfection operations, the Contractor will submit his proposed sequence and methods of flushing and disinfection to the Engineer for approval by the Engineer or the Owner's Representative.

#### **B. Water Quality Testing:**

Upon completion of the final flushing of the pipelines (including temporary bypass piping), and prior to placing the pipelines in service, all water quality sampling and bacteriological testing will be administered and performed as specified in Section 02710 of these Contract Specifications.

**END OF SECTION**

**SECTION 02710**  
**TESTING AND DISINFECTING OF POTABLE WATER PIPING**

**PART I      GENERAL**

**1.01      Related Documents**

- A. Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections, apply to this Section.

**1.02      Work Included**

- A. The work covered under this section of the Specifications shall include furnishing of all plant, labor, equipment, appliances, and materials, and in performing all operations in connection with conducting tests for leakage and disinfecting all completed water pipelines in accordance with this Section of the Specifications and as directed by the Engineer. The Contractor shall also be responsible for performing sampling and testing for the water quality tests indicated in this Section.
- B. The Work of this Section includes both exterior (yard) piping and interior piping of all potable water systems, valves and appurtenances.

**1.03      Related Work**

- A. Section 02661 - Installation of Water Piping Systems

**1.04      References**

- A. American Water Works Association Standard for Pressure and Leakage Testing for Ductile-Iron Mains and Appurtenances - AWWA C600 (latest revision).
- B. American Water Works Association Standard for Disinfecting Water Mains AWWA C651 (latest revision).

**PART II      PRODUCTS**

**2.01      Materials**

- A. Chlorine for disinfection shall be provided and used by the Contractor, and shall conform to AWWA Specification B-300 (Hypochlorite) and C651, latest revisions.
- B. The Contractor shall furnish the Engineer or the Owner's Representative a certificate of compliance that the disinfectant specified above conforms to these AWWA standards.

## **PART III EXECUTION**

### **3.01 Hydrostatic Testing**

- A. Tests for leakage shall be conducted on all portions of completed water pipelines and appurtenances, and all methods and procedures for performing the testing of water mains (both interior and exterior pipeline systems) shall be subject to the approval of the Engineer. Unless otherwise permitted, the testing shall be conducted with partial backfilling over the barrel of any new pipe, between new pipes, pipe fittings, valves and appurtenances of the section before testing. Completed interior pipelines (exposed service) shall be subjected to hydrostatic test pressures as specified herein. Interiors of all pipe shall be cleaned of all dirt and foreign materials, the water pipelines may be tested in convenient sections as approved by the Engineer or the Owner's Representative.
- B. Testing of water mains shall conform to the requirements of Section 4, Hydrostatic Testing, of the AWWA Specification C 600 (latest revision), except as herein specified.
- C. The test shall be run for at least two (2) hour duration.
- D. The test pressure shall be one hundred fifty (150) psi, plus or minus five (+5) psi. Test pressure shall not vary by more than  $\pm 5$  psig for the duration of the test.
- E. The test pressure for interior pipeline systems (piping, pumps, valves and appurtenances) shall be held for at least two hours after all visible leaks, if any, have been stopped and until each and every pipe and fitting and all leaks have been inspected for defects, breakage or leakage. Pipe, fittings or valves found defective shall be replaced by the Contractor, and all leaking joints shall be made tight by the Contractor satisfactory to the Engineer or the Owner's Representative. The tests shall be repeated as often as necessary, at no additional expense to the Engineer or the Owner's Representative, to assure that all piping and valves are free of defects, and that all joints are tight.
- F. Maximum allowable leakage shall be as specified in the following table for the appropriate pipe diameter. Leakage shall be defined as the quantity of water that must be supplied into the pipe or any valved section thereof to maintain pressure within five (5) psi of the specified test pressure after the pipe has been filled with water and the air has been expelled. Leakage shall not be measured by a drop in pressure in a test section over a period of time. The flow meter for measuring leakage shall be accurate to within 0-1 gallons.

- 1. The Maximum allowable leakage shall be:

Nominal Diameter	4"	6"	8"	10"	12"	14"	16"
Allowable Leakage per 1,000 ft. (gph)	0.37	0.55	0.74	0.92	1.10	1.29	1.40

- G. If the pipeline under test contains sections of various diameters, the allowable leakage will be the sum of the computed leakage for each size.

- H. Testing of water mains shall be performed by the Contractor at his expense as witnessed by the Engineer. Notarized records of the test results shall be submitted by the Contractor to the Engineer for approval.
- 1. In case the specified rate of leakage for the portion of the pipeline being tested is exceeded, the Contractor shall find and repair the leaks and the pipelines shall be retested, repeatedly if necessary, by the Contractor, until the required conditions are met, at no additional expense to the Owner. All visible leaks are to be repaired, regardless of the amount of leakage.
- J. Piping specialties which are not intended to be subjected to the test pressures specified shall be removed and replaced with suitable spool pieces until they have been completed. Upon completion of tests the piping specialties which have been removed shall be satisfactorily installed in the work.
- K. The Contractor shall provide all materials, temporary work, equipment, labor, instruments and do all work necessary to satisfactorily complete the testing of pipelines and shall remove all temporary work at no additional expense to the Owner. Equipment not designed for the system test pressures shall be isolated from the system during testing.

### **3.02 Disinfecting New Interior and Exterior Piping and Appurtenances**

- A. All portions of completed potable water piping and appurtenances are to be disinfected by the Contractor before acceptance for operation by the Engineer.
- B. The water mains will be disinfected per AWWA C651-14. All discharged water will be dechlorinated/neutralized utilizing sulfur dioxide, sodium bisulfite, sodium sulfite, or sodium thiosulfate. Once the water has been dechlorinated it will be tested for residual chlorine which will not exceed the RIDEM ambient water quality criteria of 0.019 ppm. Dechlorinated water will be discharged to the storm sewer system pending approval of the owner of the storm sewer system as appropriate.
- C. Pipelines shall be disinfected by the Contractor in conformance with AWWA Specification C 651-14 (latest revision). In particular, the Contractor shall follow all of the disinfection procedures of Section 9 - "Disinfection Procedures When Cutting Into or Repairing Existing Mains" of AWWA Specification C 651 and it relates to tie-in of new piping to existing piping.
- D. The Contractor shall be responsible for satisfactory disposal of all flushing water and chlorinated water at no additional expense to the Owner. The Contractor shall be responsible for contacting State and local regulatory agencies to determine special provisions for the disposal of heavily chlorinated water.
- E. The Contractor shall use either the "Continuous-Feed Method" or the "Slug Method" of disinfecting water mains, as described in AWWA 0651. In either case, the Contractor shall be responsible for measuring the chlorine concentration at regular intervals in

accordance with the procedures described in the current edition of Standard Methods for the Examination of Water or Wastewater or AWWA Manual M 12, or using appropriate chlorine test kits as specified in AWWA C651, Appendix A.

- F. Prior to potable water pipeline installation, the Contractor shall submit to the Engineer a description of the methodology which he will employ for the disinfection and flushing of the pipelines for approval by the Engineer. This shall include equipment which will be used and proposed chlorine dosage rates.
- F. After the pipelines and appurtenances have been flushed clean (less than 1.0 Cl<sub>2</sub> residual), water quality sampling will commence. The Contractor shall arrange for samples of the water contained in the mains to be taken by an approved testing laboratory for bacterial analysis in accordance with Standard Methods for the Examination of Water and Wastewater at no additional cost to the Owner. All water quality sampling and bacteriological testing will be administered and performed under the supervision of the Engineer or the Owner's Representative.
  - 1. Only after the analyses of the samples are approved by the Rhode Island Department of Health and Engineer or the Owner's Representative shall the mains be made part of the water system. In event that positive reports of coliform are received, the Contractor shall flush and re-chlorinate pipelines and appurtenances as many times as may be necessary to obtain approved results.
  - 2. The tests shall show the complete absence of coliform bacteria. The Laboratory testing results shall also show evidence that the water is consistent in quality with the water in the system to which the pumping station will be connected. Water quality must be acceptable to the Rhode Island Department of the Environmental Management.
  - 3. Samples shall be obtained from corporation cocks with copper gooseneck assemblies installed as directed along the pipelines to be disinfected. After samples have been collected, the gooseneck assembly shall be removed and retained for future use.
- G. The Contractor shall be advised that water pipeline and appurtenance disinfection will be accomplished by specially trained personnel with a minimum of three (3) years of documented experience.
- H. The Contractor's workers who are responsible for the water main work should be aware of the potential health hazards with chlorine and should be trained to observe carefully the prescribed construction practices and disinfection procedures. The effectiveness of disinfection depends in large measure on maintaining clean pipes and avoiding major contamination -during construction.
  - 1. An adequate amount of reducing agent should be applied by the Contractor to water being disposed of in order to neutralize thoroughly the chlorine residual remaining in the water before final disposal, Arrangements for final disposal, including procurement of

any necessary discharge permits by State or local regulatory agencies, shall be made by the Contractor.

- J. To prevent possible backflow or siphoning of contaminants into the existing water distribution system(s) which are in service, the Contractor will be required to provide a reduced pressure principal backflow prevention device in the temporary piping which is supplying water from the distribution system to the water main being treated and to provide such other safety and control measures as directed by the Engineer. The Contractor shall not disrupt the existing potable water system service.

### **3.03 Disinfecting Existing Water Mains and Appurtenances**

- A. When the existing water distribution mains are exposed, liberal quantities of hypochlorite shall be applied to the open trench areas.
- B. The interiors of all pipe and fittings, couplings and sleeves, used in making connections to the existing water distribution piping, shall be swabbed or sprayed with a one (1 %) percent hypochlorite solution before installation.
- C. Contractor shall abide by all requirements of AWWA C651, Section 9: Disinfection Procedures When Cutting Into or Repairing Existing Mains.

### **3.04 Required Water Quality Tests**

- A. The Contractor will administer and perform all water quality sampling and testing under the supervision of the Engineer or the Owner's Representative.
- B. The Contractor will take the required water samples after completion of flushing and disinfecting of the water mains, equipment and appurtenances, as directed by the Engineer or Owner's Representative. If, through no fault of the Engineer or the Owner's Representative, the new water mains, equipment, or appurtenances, or existing facilities become contaminated (subsequent to the successful disinfection and testing of the aforementioned), due to Contractor error or other ongoing construction operations, the Contractor shall bear the costs of all supplemental water quality testing and analysis expenses required by the Engineer or the Owner's Representative. The Engineer may also require additional testing if deemed necessary, at no additional expense to the Owner.

**END OF SECTION**

**SECTION 05500  
METAL FABRICATIONS**

**PART I     GENERAL**

**1.01    Description**

A.     Work Included

Miscellaneous metal fabrications for equipment supports, pipe support frames, structural modifications, etc.

B.     Related Work

1.     Section 15050: Mechanical-Basic Materials and Methods
2.     Section 09900: Painting

**1.02    Quality Assurance**

- A.     Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section. The Contractor shall submit welder qualifications certificates for all welding personnel employed on this project.
- B.     Perform shop and/or field welding required in connection with the work of this Section in strict accordance with pertinent recommendations of the American Welding Society.

**1.03    Submittals**

- A.     Comply with pertinent provisions of Section 01340.
- B.     Product Data: Within 10 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
1.     Materials list of items proposed to be provided under this Section;
  2.     Manufacturer's specifications and other data needed to prove compliance with the specified requirements;
  3.     Shop Drawings in sufficient detail to show fabrication, installation, anchorage and interface of the work of this Section, with the work of the adjacent trades;

4. Manufacturer's recommended installation procedures, approved by the Owner, will become the basis for accepting or rejecting the installation procedures to be used on the work.

## **PART II     PRODUCTS**

### **2.01   Materials**

- A. In fabricating items that will be exposed to view, limit materials to those which are free from surface blemishes, pitting, rolled trade names, and roughness.
- B. Comply with following standards, as pertinent.
  1. Steel plates, shapes, and bars: ASTM A36.
  2. Steel bars and bar-size shapes: ASTM A36.
  3. Galvanized carbon steel sheets: ASTM A526, with G90 zinc coating in accordance with ASTM A525.
  4. Stainless steel sheets: AISI type 302 or 304, 24 gage, with number 4 finish.
  5. Concrete Inserts
    - a. Threaded or wedge type galvanized ferrous castings of malleable iron complying with ASTM A27.
    - b. Provide required bolts, shims, and washers, fabricated of stainless steel.
  6. Steel plates to be bent or cold framed: ASTM A 283, Grade C.
  7. Steel tubing (hot formed, welded or seamless); ASTM A 501.

### **2.02   Fasteners**

- A. General
  1. Provide stainless steel fasteners.
  2. Provide fasteners of type, grade, and class required for the particular use.
- B. Comply with following standards as pertinent:
  1. Bolts and Nuts: Provide hexagon-head regular type complying with ASTM A307, grade A.

2. Washers
  - a. Plain Washers: Comply with Fed Spec FF-W-92, round, carbon steel.
  - b. Lock Washers: Comply with Fed Spec Ff-W-84, helical spring type carbon steel.
3. Toggle Bolts: Provide type, class, and style needed but complying with Fed Spec Ff-B-588.
4. Anchorage Devices: Provide Molly Parabolts or equal.

### **2.03 Other Materials**

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Owner.

### **2.04 Shop Paint**

- A. Conforming to Section 09900 of this Specification.

### **2.05 Fabrication**

- A. Except as otherwise shown on the Drawings or the approved Shop Drawings, use materials of size, thickness, and type required to produce reasonable strength and durability in the work of this Section.
- B. Fabricate with accurate angles and surfaces that are true to the required lines and levels, grinding exposed welds smooth and flush, forming exposed connections with hairline joints, and using concealed fasteners wherever possible.
- C. Prior to shop painting or priming, properly clean metal surfaces as required for the applied finish and for the proposed use of the item.
- D. On surfaces inaccessible after assembly or erection, apply two coats of the specified primer. Change color of second coat to distinguish it from the first.
- E. The Contractor shall obtain accurate "as-built" measurements before fabrication of any steel members has begun.

## **PART III    EXECUTION**

### **3.01    Site Conditions**

- A.    Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

### **3.02    Coordination**

- A.    Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.

### **3.03    Installation**

- A.    General
  - 1.    Set work accurately into position, plumb, level, true, and free from rack.
  - 2.    Anchor firmly into position.
  - 3.    Where field welding is required, comply with AWS recommended procedures of manual-shielded metal-arc welding for appearance and quality of weld and for methods to be used in correcting welding work.
  - 4.    Grind exposed welds smooth and touch-up shop prime coats.
- B.    Immediately after erection, clean the field welds, bolted connections, and abraded areas of shop priming. Paint the exposed areas with same material used for shop priming.

**END OF SECTION**

**SECTION 07920  
SEALANTS AND CAULKING**

**PART I     GENERAL**

**1.01    Description**

A.     Work Included

Throughout the Work, seal and caulk joints and wall penetrations where shown on the Drawings and elsewhere as required to provide a positive barrier against passage of moisture and air. The required applications include, but are not necessarily limited to, the following:

1.     Interior building walls and partition walls in concrete masonry, dry wall, metal, plywood and where required to insure a watertight building.
2.     Expansion joints in the cast-in-place concrete.
3.     All joints between dissimilar materials.

B.     Related Work

1.     Documents affecting work of this Section include, but are not necessarily limited to, Sections in Division 1 of these Specifications.
2.     Section 09900 - Painting.

**1.02    Quality Assurance**

- A.     Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

**1.03    Submittals**

- A.     Comply with pertinent provisions of Section 01340.

B.     Product Data

Within 10 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:

1.     Materials list of items proposed to be provided under this Section.
2.     Manufacturer's specifications and other data needed to prove compliance with the specified requirements. Manufacturer's recommended installation procedures

which, when approved by the Owner, will become the basis for accepting or rejecting actual installation procedures used on the Work.

C. **Samples**

Upon request of the Owner, submit Samples of each sealant, each backing material, each primer, and each bond breaker proposed to be used.

1. Submit samples of each color required (except black) for each type of joint sealer exposed to view. Samples will be reviewed by the Owner for color, installation requirements and performance in this application.

**1.04 Product Handling**

- A. Comply with pertinent provisions of Section 01620.
- B. Do not retain at the job site material which has exceeded the shelf life recommended by its manufacturer.

**1.05 Job Conditions**

- A. Examine the joint surfaces and backing, and their anchorage to the structure, and the conditions under which the joint sealer work is to be performed, and correct conditions detrimental to the proper and timely completion of the work and performance of the sealers. Do not proceed with the joint sealer work until unsatisfactory conditions have been corrected.
- B. Weather Conditions: Do not proceed with installation of sealants under adverse weather conditions, or when temperatures are below or above manufacturer's recommended limitations for installation. Proceed with the work only when forecasted weather conditions are favorable for proper cure and development of high early bond strength. Wherever joint width is affected by ambient temperature variations, install elastomeric sealants only when temperatures are in the lower third of manufacturer's recommended installation temperature range.

**PART II PRODUCTS**

**2.01 Material, General**

- A. Sealant for interior walls shall be a two part Polyurethane-Dynatrol II manufactured by Pecora or approved equal, color to match adjacent surfaces.
- B. Joint Beads

Extruded Polyethylene foam rod equal to one of the following:

1. Ethafoam SB - Dow Chemical.

2. Minicel Backer Rod - Hasken, Inc.

NOTE: Bead diameter shall be 40% greater than width of joint.

- C. Primer shall be of the type recommended by the manufacturer of the sealant. Primers shall be non-staining.
- D. The sealant for expansion joints cut in the concrete flooring system shall be Flexjoint Pouring Grade Sealant, by ATO Chem, or equal.
- E. Caulking shall be Tremco Acrylic Latex Caulk or equal.
- F. Joint back-up filler 1/4" or deeper - closed cell neoprene, polyurethane foam rod, or polyethylene foam rod.

### **PART III    EXECUTION**

#### **3.01    Surface Conditions**

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

#### **3.02    Preparation**

- A. Concrete and Ceramic Tile Surfaces:

1. Install only on surfaces which are dry, sound, and well brushed, wiping free from dust. At open joints, remove dust and trapped solid materials by mechanical methods or compressed air as required.
2. To remove oil and grease, use sandblasting or wire brushing.
3. Where surfaces have been treated, remove the surface treatment by sandblasting or wire brushing.
4. Remove laitance and mortar from joint cavities.

- B. Steel Surfaces:

1. Steel Surfaces in Contact With Sealant:
  - a. Sandblast as required to achieve acceptable surface for bond.
  - b. If sandblasting is not practical, or would damage adjacent finish, scrape the metal or wire brush to remove mill scale and rust.

- c. Use solvent to remove oil and grease, wiping the surfaces with clean white rags only.
  - 2. Remove protective coatings on steel by sandblasting or by using a solvent which leaves no residue.
- C. Aluminum Surfaces:
  - 1. Aluminum Surfaces In Contact With Sealant:
    - a. Remove temporary protective coatings, dirt, oil and grease.
    - b. When masking tape is used for protective cover, remove the tape just prior to applying the sealant.
  - 2. Use only such solvents to remove protective coatings as are recommended for that purpose by the manufacturer of the aluminum work, and which are non-staining.

### **3.03 Installation of Backup Material**

- A. When using backup of tube or rod stock, avoid lengthwise stretching of the material. Do not twist or braid hose or rod backup stock.
- B. Installation Tool
  - 1. For installation of backup material, provide a blunt-surfaced tool of wood or plastic, having shoulders designed to ride on the adjacent finished surface and a protrusion of the required dimensions to assure uniform depth of backup material below the sealant. Do not, under any circumstance, use a screwdriver or similar tool for this purpose.
  - 2. Using the approved tool, smoothly and uniformly place the backup material to the depth indicated on the Drawing or otherwise required, compressing the backup material 25% to 50% and securing a positive fit.

### **3.04 Priming**

- A. Use the primer approved by the Owner for the particular installation, applying in strict accordance with the manufacturer's recommendation approved by the Owner.

### **3.05 Bond-breaker Installation**

- A. Provide an approved bond-breaker where recommended by the manufacturer of the sealant, and where directed by the Owner, adhering strictly to the manufacturer's installation recommendations.

### **3.06 Installation of Sealants**

- A. Prior to start of installation in each joint, verify the joint type according to details on the Drawings, or as otherwise directed by the owner and verify that the required proportion of width of joint to depth of joint has been secured.
- B. Equipment:
  - 1. Apply sealant under pressure with power-actuated hand gun or manually-operated hand gun, or by other appropriate means.
  - 2. Use guns with nozzle of proper size and providing sufficient pressure to completely fill the joints as designed.
- C. Thoroughly and completely mask joints where the appearance of primer or sealant on adjacent surfaces would be objectionable.
- D. Install the sealant in strict accordance with the manufacturer's recommendations, thoroughly filling joints to the recommended depth.
- E. Tool joints to the profile shown on the Drawings, or as otherwise required are such profiles are not shown on the Drawings.
- F. Cleaning Up:
  - 1. Remove masking tape immediately after joints have been tooled.
  - 2. Clean adjacent surfaces free from sealant as the installation progresses, using solvent or cleaning agent recommended by the manufacturer of the sealant used.
  - 3. Upon completion of the work of this Section, promptly remove from the job sit all debris, empty containers, and surplus material derived from this portion of the Work.

**END OF SECTION**

**SECTION 15050**  
**MECHANICAL - BASIC MATERIALS AND METHODS**

**PART I      GENERAL**

**1.01      Description**

A.      Work Included

1.      This work includes the furnishing of all materials, labor and equipment for the installation and testing of all mechanical piping, fitting, valves, specialties, and related items under this contract.
2.      All motors for mechanical equipment shall be provided and installed under this Section.
3.      Provide all necessary pipe supports, anchors, placement devices and supplementary steel for hanging, placement and support of all mechanical equipment, piping, valves, fittings and specialties.
4.      Installation of all mechanical process equipment components provided by the Owner.

B.      Related Work Described Elsewhere

1.      All wiring, disconnect switches, thermal protection, power feed, and control instrumentation for motors furnished under Division 15, shall be furnished and installed under Division 16, Electrical.
2.      Installation of all equipment described under Division 11 of this specification.

**1.02      Quality Assurance**

A.      Only skilled workmen regularly employed and engaged in the installation of the materials specified shall be employed.

B.      At the request of the Owner, Contractors employing welding operators shall be prepared to furnish proof of the competency of each operator.

C.      Welders assigned to the work shall be duly qualified in accordance with the ASME Section IX Boiler and Pressure Vessel Code for Welders Qualification Test, Welding Procedures and Quality Requirements and Procedures and Tests for Qualifying Welders.

D.      Applicable Publications

1.      Standards of the American Society for Testing and Materials (ASTM), latest edition.

2. Standard Specifications of the American National Standards Institute (ANSI), latest edition.
3. Standards of the American Welding Society.
4. Standards of the American Society of Mechanical Engineers (ASME).

### **1.03 Submittals**

- A. Shop Drawings, maintenance data and operating instructions for all fixtures, equipment, materials, etc., shall be submitted to the Owner.
- B. The following items shall be submitted for approval:
  1. Pipe, Tubing, Fittings, Hoses;
  2. Piping Specialties, Quick Disconnect Fittings, Strainers, Gauges, etc.
  3. Valves and Actuators
  4. Supports and Hangers, Anchors
  5. Insulation
- C. Provide all valves as specified herein and as shown on the Drawings. Submit for approval by the Owner, a schedule of all valves indicating the service, size, and connections, make, model number and any special features such as chain wheel operators, etc.
- D. Comply with the pertinent provisions of Section 01340 of this Specification.
- E. Welding procedures, procedure qualification records and samples of weld quality.

## **PART II PRODUCTS**

### **2.01 Pipe and Fittings**

- A. Steel Pipe and Fittings
  1. Steel pipe shall consist of welded or seamless carbon steel pipe in accordance with ASTM A53, schedule 40 unless otherwise noted. Pipe dimensions shall conform to ANSI B36.10.
  2. Where flanged pipe is required the flanges shall be ANSI 150 lb.
  3. Fittings shall be seamless steel, Schedule 40 conforming to ASTM A234.

B. Stainless Steel Tubing, Fittings and Appurtenances

1. Tubing: All stainless tubing shall be Type 316L, seamless, welded, in accordance with ASTM-A270. All tubing shall be of 16-gage wall thickness (0.062" or 1.59 mm) and shall be electro-polished Type 316L, ASTM A-249.
2. Fittings: Fittings shall be type 316L stainless steel, welded, austenitic, in accordance with ASTM A-778 and A-774. Fittings shall be compatible with tubing and shall be electro-polished.
3. Flanges:
  - a. Flanges shall be forged, welding neck, AISI Type 316L stainless steel, Class 150 in accordance with ASTM A182, dimensions and drilling to ANSI B16.5.
  - b. Gasket, ring-type, solid virgin Teflon, white, 1/16" thickness.
4. Flange - Bolts & Nuts: Cap screw, hex-head, stainless steel 18-8, shall conform to ANSI B18.2.1 UNC Class 2A threads. Nuts, hexagon, specs same as screws.
5. Sanitary Quick Disconnect Couplings: Quick disconnect couplings for stainless steel tubing shall be equal to TRI-CLAMP Model 13MHLA and shall be constructed of type 304 stainless steel. Gaskets shall be equal to TRI-CLAMP Viton gasket Model 42MP-SFY.

C. Polyvinyl Chloride Pipe (PVC)

1. Pipe and fittings shall be manufactured from PVC Type I, Grade I materials conforming to ASTM D-1784.
2. Fittings shall be socket type conforming to ASTM D-2467 or flanged type as indicated on the Drawings or as required.
3. All PVC pipe and fittings shall be schedule 80 unless otherwise noted on the Drawings.

D. CPVC Pipe and Fittings

1. Chemical feed pipes and fittings for acid and caustic delivery shall be class 23447-B chlorinated polyvinyl chloride (CPVC) conforming to ASTM D-1784.
2. All CPVC fittings shall be Schedule 80 conforming to ASTM D-2467 for socket type fittings, unless otherwise noted.
3. All solvent weld CPVC joints shall conform to ASTM D-2564.

E. Secondary Containment Piping System

1. Primary (carrier) pipe shall be PVC. Secondary (containment) pipe shall be polyethylene. Polyethylene pipe and fittings shall be a high density, ultraviolet stabilized, carbon filled compound conforming to ASTM D-1248 requirements.
2. Secondary pipe shall conform to ASTM D-2837 for hydrostatic design basis. Pressure rating for all secondary pipe shall be 90 psi at 68°F.
3. Secondary pipe fittings shall be electrofusion type conforming to ASTM F-1055 and compatible with the pipe for fusion joining by means of the electrofusion (ELGEF System) process.
4. Primary pipe and fittings shall be joined using standard solvent cement joining techniques in accordance with ASTM D-2855. After final primary joint is completed, a gap must remain between secondary pipe ends for visual inspection of the primary joint. Inspection gap shall be filled with a split ring of polyethylene piping material before electrofusion coupling is positioned for closure of secondary pipe.
5. Secondary pipe and fittings shall be joined using thermal electrofusion in accordance with ASTM F-1290. Secondary pipe and fittings shall be manufactured by George Fischer Signet or equal.

F. Polypropylene Pipe and Fittings

1. Pipe and fittings materials shall meet the requirements of Type II copolymer in accordance with ASTM D-2146. Pipe and fittings shall conform to the requirements of ASTM D-2837-85 and SDR-11 and shall be pressure rated to 150 psi at 73° F.
2. All pipe and fitting joints shall be of the butt fusion type in accordance with ASTM D-2657, Section 9.

G. Polyvinylidene Fluoride (PVDF) Pipe and Fittings

1. Pipe and fitting materials shall meet the requirements for Type I resin, in accordance with Table 2 of ASTM D-3222. Pipe and fittings shall conform to the requirements of ASTM D-2837-85. The pipe and fittings shall be pressure rated to 230 psi at 73° F. for piping up to and including 2-1/2" nominal diameter, and 150 psi at 73° F. for piping larger than 2-1/2" nominal diameter.
2. All pipe and fitting joints shall be of the butt fusion type in accordance with ASTM D-2657, Section 9.

3. Quick Disconnect fittings for PVDF tubing shall be equal to the quick disconnect fittings used for stainless steel tubing.

#### H. Copper Pipe and Fittings

1. Copper pipe shall conform to ASTM Designation B-88, Type K; soft tempered annealed with flared pattern cast bronze fittings conforming to ANSI B16.26 for underground installation. Type L: hard tempered and annealed with cast red bronze to wrought copper solder type fittings conforming to ANSI B16.18 or B16.22 for above ground, exposed installation.
2. Copper Tubing shall conform to ASTM Designation B75 drawn temper, annealed, type optional to suit intended purpose. Fittings shall be flared cast bronze fitting conforming to ANSI B16.18 or B16.22.

#### I. Flexible Teflon-Lined Steel Hose

1. Hose shall be convoluted Teflon with type 304 stainless steel mesh braid and type 304 stainless steel overbraid.
2. Hose fittings shall be type 316 L stainless steel connections conforming to ASTM A-774.
3. All hose connections to solid pipe shall be made via quick disconnect couplings welded at each end.

#### J. Polyethylene Chemical Service Tubing

1. Polyethylene chemical service tubing shall conform to ASTM D-1248, Type 1, Class A, category 4. The tubing shall be capable of conveying corrosive fluids.

#### K. Chemical Service Hose

1. Chemical hose is a general classification of hose selected to convey corrosive or otherwise aggressive fluids. The tube inside the hose shall be suitable for the fluid contact. The tube shall be backed up with synthetic fabric reinforcement and wire helix. The outer covering shall be synthetic rubber which is formulated for resistance to flexing, abrasion, oil, and outdoor weathering.
2. Chemical hoses shall be equipped with either quick couplings or flanged ends. Quick couplings shall be OPW Kamlok as manufactured by Dover Corp., Cincinnati, OH. The material shall be compatible with the fluid handled. Where flanged ends are used, they shall be used on hand-built hose where the cover, reinforcing piles, breaker fabric and the tube are all extended to the extreme diameter of the steel retaining ring. Tube material shall thus form the gasketing.

3. Where chemical hose is used to isolate a pump from pipe stress, a quick disconnect is required on both ends of the hose. The pump must be removable as a unit from the pipe or hose.
4. The hose shall be Black Flexwing as manufactured by Goodyear Tire and Rubber Co., Akron, OH.

L. Compressed Air Hoses

1. Flexible air hose for non-submerged service shall be Type 306 hose by Aeroquip Corporation, Jackson, MI.
2. Coiled flexible compressed air hose shall be Poly-Flo as manufactured by Imperial Eastman Company, Manitowoc, WI.

M. Ductile Iron Pipe and Fittings

1. Ductile Iron Centrifugally Cast in Metal Molds or Sand-Lines Molds, for Water or Other Liquids - ANSI A21.51 (AWWA C151-76), Class 50, 51, 52, 53.
2. Joints for Ductile Iron Pipe - Mechanical type or "push-on" type as specified in ANSI A21.11 (AWWA C111) or intertest Revision - joints to be installed as per manufacturer's instructions. Class 53 Ductile Iron Fittings (350 psi) shall be acceptable.

**2.02 Non-Metallic Valves**

A. General

1. Valves shall be manufactured of the same material as the associated pipe and fittings, to assure compatibility.

B. Ball Valves

1. Ball valves shall have permanently lubricated Teflon ball seats backed with Viton O-Rings and Viton stem and body seals.
2. Ball valves shall have a pressure rating of 150 psi at 73° F.
3. Ball valves shall be of true union design.
4. The ball shall have 90° rotation from fully closed to fully open position and shall have straight through full port flow in the open position.
5. All ball valves shall be Plastic Piping Systems, ASAHI/AMERICA, George Fischer or equal.

C. Check Valves - Swing Type

1. The valve shall be of top entry design with a single disc. The disc shall seat under 0.5 psi back pressure and shall be suitable for horizontal or vertical installation. Swing check valves shall be rated for minimum, 70 psig at 210° F, bubble tight.
2. Check valves shall be provided with a removable cover to allow cleaning of the valve without removal from the line.
3. Check valves shall have Teflon seats and seals.
4. Check valves shall be flanged type, drilled and tapped for conformance with standard ANSI 150 lb. flanges.
5. Check valves shall be Plastic Piping Systems, ASAHI/AMERICA, George Fischer or equal.

D. Check Valves - Ball Type

1. The valve shall be of either true-union or single union design, with the ball seating under a maximum of 0.5 psig backpressure and shall be suitable for mounting in a horizontal or vertical position.
2. The valve shall be rated for 150 psig at 140°F, bubble tight.
3. Valves shall have Teflon seats and seals.
4. Valves shall be as by ASAHI/AMERICA, George Fischer or equal.

E. Globe Control Valves

1. The valve shall be either water type or flanged type. Flanged valve, shall conform to ANSI requirements for standard 150 lb. flanges.
2. Stem seals shall be of Teflon and the stem shall be of stainless steel. The valve plug and seat ring shall be of the same material as the valve body.
3. The valve stem seal shall be of the bellows type.
4. Valves shall be as by ASAHI/AMERICA, George Fischer or equal.

**2.03 Metallic Valves**

A. Gate Valves

1. Gate valves 3" and larger shall be resilient seated, ductile iron body, bronze

mounted, with inclined seats, non-rising stem type, counter-clockwise rotation to open, conforming to AWWA C509.

2. Valve Operators: Below Ground: Except for use with post-indicators, furnish valves with 2" nut for socket wrench operation. Post indicator shall conform to requirements of NFPA 24 and shall be fully compatible with the valve provided

#### B. Ball Valves

1. Nibco Fig. T-590, or equal for sized 1/2 through 2", three-piece bronze construction, 150 psi SWF. conventional port, blow-out proof, Teflon seats, soldered or threaded ends with chrome plated steel handle.
2. Valves to be used on screwed or soldered piping only.

#### C. Check Valves (Swing Type)

1. Valves shall be Powell, Fairbanks, Jenkins or approved equal.
2. Valves 2" and smaller shall be all bronze with screw-in cap, regrinding disc and threaded ends.
3. Valves 2-1/2" and larger shall be iron body, bronze mounted with bolted cover, regrinding disc and flanged ends.
  - a. Up to 125 psi - Powell Co., Fig. 559
  - b. Up to 250 psi - Powell Co., Fig. 576
4. Valves 2" and smaller for copper tubing shall be all bronze with screw over cap and solder ends up to 125 psi similar to the Powell Company, Fig. 1825 or equal by Fairbanks, Jenkins or approved equal.

#### D. Air and Water Solenoid Valves

1. Solenoid valves for the air applications shall be 1/2" NPT, solenoid valves for water application shall be 1" NPT. All valves shall be 120 psi, threaded ends, forged brass body, Teflon discs, 305 stainless steel core tube, 430 F stainless steel core and plugnut, 302 stainless steel springs and copper shading coil; 20-watt Class F 120 volt coil.
2. Solenoid enclosure shall have a watertight enclosure (NEMA 4X).
3. Solenoid valves shall be normally closed, direct operation.
4. Solenoid valves shall be ASCO Red Hat bulleting 8223 or equal.

D. Reduced Pressure Backflow Preventer (RPBP)

1. Backflow preventers shall be of bronze construction for horizontal installation, provided with two (2) check valves and pressure differential relief valve and relief vent. Backflow preventers shall be tested and certified under ASSE, AWWA and CSA standards and shall be as manufactured by Watts, Inc. or approved equal.

**2.04 Link Seals and Wall Sleeves**

- A. Where so depicted the pipe to wall penetration closures shall be "Chemical Service Link-Seal" as manufactured by Thunderline Corporation - Belleville, Mich. 48111. Seals shall be modular mechanical type, consisting of interlocking synthetic rubber links shaped to continuously fill the annular space between the pipe and wall opening. Links shall be loosely assembled with bolts to form a continuous rubber belt around the pipe with a pressure plate under each bolt head and nut. After the seal assembly is positioned in the sleeve, tightening of the bolts shall cause the rubber sealing elements to expand and provide an absolutely water-tight seal between the pipe and wall opening. The seal shall be constructed so as to provide electrical insulation between the pipe and wall sleeve, thus reducing chances of cathodic reaction between these two members.
- B. Sleeves through exterior building walls shall be schedule 80 black steel with 150 lb. black steel slip-on welding flanged welded at the center of the outside. Extend sleeves 1/2" beyond each side of the wall. Pack the space between sleeve and pipe with oakum to within 2" of each face of the wall. Pack the remaining space and made watertight with a waterproof compound.
- C. Sleeves through masonry floors or interior masonry walls shall be schedule 40 black steel pipe, set flush with finished wall or ceiling surfaces, but extending 2" above finished floors.
- D. Provide 22-gauge galvanized steel sleeves through interior partitions set flush with finished surfaces of the partitions.
- E. Provide individual or strip type inserts pressed steel construction with accommodation for removable nuts and threaded rods up to 3/4" diameter, permitting lateral adjustment. Individual inserts shall have an opening at the top to allow reinforcing rods to 1/2" diameter to be passed through the insert body and shall be similar to Fee and Mason Manufacturing Company, Fig. 178. Strip inserts shall have attached rods with hooded ends to allow fastening to reinforcing rods and shall be similar to Fee and Mason Manufacturing Company Fig. 190.

**2.05 Connections and Couplings**

A. Couplings

1. All couplings on steel pipe shall be Style 38 couplings as manufactured by Dresser Industries, Bradford, PA. Couplings to have steel middle ring, flanges, track head

and rolled thread bolts. Two rubber compounded wedge section gaskets to be furnished with each coupling. Style 440 Joint Harnesses shall be used except as noted otherwise. Lugs and bolts shall be in accordance with the manufacturer's selection for line working pressure and pipe size. Similar coupling by Rockwell International, Pittsburgh, PA or approved equal will be acceptable.

2. In some locations, it may be necessary to furnish a coupling which shall be suitable for different materials of pipe. Such couplings to connect steel pipe to cast iron pipes, etc., shall be Dresser Style 62, or approved equal. Coupling rings shall be furnished without pipe stops and gaskets shall be of the plain type. Follower rings shall be designed to adequately confine the gaskets.
3. Flexible couplings on pressure lines shall be suitably harnessed in accordance with the recommendations of the manufacturer, or otherwise protected against a separation from thrust. All joints shall be arranged to prevent rotation of the pipe by a method approved by the Owner.
4. Couplings not shown on the drawings may be installed by the Contractor to permit non-rigid connection to equipment, wall flanges, etc. and as required to facilitate piping installation.

B. Quick Couplings

1. Quick couplings shall be OPW Kamloc Quick Couplers as manufactured by Dover Corporation, Cincinnati, OH. Couplings to be furnished as a set, with one adaptor and one coupling per fitting.

**2.06 Flanged Joints**

- A. Steel pipe flanges shall conform to ANSI B16.5 "Steel Pipe Flanges and Flanged Fittings". Cast Iron Pipe Flanges shall conform to ANSI B16.1 "Cast Iron Flanges and Flanged Fittings". Steel flanges shall be raised face except when bolted to flat face cast iron flange.
- B. Flanged joints shall be made with bolts, bolt studs with nut on each end, or studs with nuts where the flange is tapped. The number and size of bolts shall conform to the same ANSI Standard as the flanges.
- C. Bolting for services up to 500° F shall be ANSI/ASTM A307 Grade B with square head bolts and heavy hexagonal nuts conforming to ANSI B18.2.1 "Square and Hex Bolts" and B18.2.2 "Square and Hex Nuts". Bolt studs and studs shall be of the same quality as machine bolts.
- D. Gaskets for flat face flanges shall be full face type. Gaskets for raised face flanges shall conform to requirements for "Group I Gaskets" in ANSI B16.5. Gaskets for stainless steel flanged connections shall be ring type, solid, virgin Teflon, white, 1/16" thickness.

## **2.07 Pipe Supports**

- A. Pipe supports shall be similar to Fee and Mason Mfg. Co. as follows:
1. Clevis hangers - Fig. 239
  2. Adjustable swivel roller hangers - Fig. 2729
  3. Adjustable socket roller hangers - Fig. 170
  4. Offset Clamps - Fig. 366
  5. Floor stand - Fig. 295
  6. Fixed roller-stand - Fig. 160
  7. Adjustable roller-stand - Fig. 161
  8. Wall brackets - Fig. 150, 151, 155
  9. Hood plates - Fig. 178
  10. U-bolts - Fig. 178
  11. Riser clamps - Fig. 241, 238
  12. Split ring hanger - Fig. 302
- B. Trapeze hangers shall consist of two structural steel channels bolted back to back with space between for hanger rods and hold down bolts.
- C. Beam clamps shall be wrought steel adjustable type suitable for beam size and supported load.

## **2.08 Rotameters**

- A. Rotameter flow metering tubes shall be of acrylic construction with 316 SS float, polysulfonate float stops and 316 SS guide rod.
- B. Each rotameter shall be capable of reading flows to 20 gpm.
- C. Rotameters shall be capable of withstanding temperatures to 200 degrees F. at fifty (50) psig.
- D. End fittings shall be carbon steel or other design capable of withstanding constant temperatures of 125° F.

- E. Rotameter connections shall be 1-1/2" diameter NPT.

## **2.09 Emergency Deluge Shower/Eyewash Stations**

- A. Emergency deluge shower/eyewash stations shall have a 10" diameter shower head and twin eyewash with anti-surge heads.
- B. Indoor water receptors shall be of stainless steel or have a polyurethane coating which is corrosion resistant.
- C. Deluge shower and eyewash stations shall have 1-1/2" diameter female NPT inlet.
- D. Eyewash station shall be operated by a push flag.
- E. Emergency deluge shower/eyewash stations shall be by Hans Company, Bradley Corporation or equal.

## **2.10 Pipe, Specials and Valves Not Specifically Covered**

Where indicated on the plans, elsewhere specified, or required by the work to be performed, pipe, specials, valves and accessories of materials, classifications, type, style, etc., not specifically covered by this section of the specifications, shall be furnished and installed by the Contractor. All such materials shall be installed in a first-class and workmanlike manner. The Contractor shall obtain prior review and approval of the Owner before ordering any such materials.

## **PART III EXECUTION**

### **3.01 General**

- A. Handling of Pipe
  - 1. Storage of pipe valves, fittings, etc. shall be as approved by the manufacturer so as not to expose the pipe to damage.
  - 2. Pipe, valves, fittings etc. shall be stored in an area approved by the Owner, and in a manner so as not to create a safety hazard or nuisance.
  - 3. Pipe, valves, fittings, etc. shall be handled in a manner approved by the manufacturer, using slings or other approved devices. No materials shall be dropped from vehicles or handled in a manner as to cause damage.
- B. Inspection of Materials
  - 1. Carefully inspect all pipe, fittings, valves, equipment, and accessories prior to

installation. Any items which are unsuitable, cracked or otherwise defective shall be rejected and removed from the job immediately. All pipe, fittings, valves, equipment and accessories shall have factory applied markings, stampings or nameplates with sufficient data for identification to determine their conformance with specified requirements.

2. Exercise all necessary care to prevent entry of foreign matter into piping, fittings, or install any item which is not clean. During construction, until system is fully operational, all openings in piping and equipment must be kept closed at all times except when work is being performed on that item or system. Closures shall be plugs, caps, blind flanges or other items specifically designed for this purpose.

### **3.02 Installation of Pipe Systems**

#### **A. Pipe and Valve Installation**

1. Pipelines shall be installed straight and true, parallel to structure lines with a minimum use of offsets and couplings. Provide only such offsets as may be required to provide necessary headroom or clearance and to provide necessary flexibility in pipe lines.
2. Changes in direction of pipelines shall be made only with fittings to pipe bends. Changes in size shall be made only with fittings.
3. Provide flanges or unions at all final connections to equipment, traps and valves to facilitate dismantling. Arrange piping and piping connections so that equipment being served may be serviced or totally removed without disturbing piping beyond final connections and associated shutoff valves.
4. Unless otherwise indicated, install all supply piping, including shut off valves and strainers, to coils, pumps and other equipment at line size with reduction in size being made only at inlet to control valve or pumps. Install supply piping from outlet of control valve at full size to connection of equipment served.
5. All pipe shall be cut to each measurement and installed without springing or forcing. Particular care shall be taken to avoid creating, even temporarily, undue loads, forces or strains on valves, equipment or building elements with piping connections or piping supports.
6. Install all work so that all parts required are readily accessible for inspections, operation, maintenance and repair. Minor deviations from the drawings may be made to accomplish this, but changes of magnitude shall not be made without prior written approval from the Owner.
7. Make easily accessible all equipment such as sample ports, controls, valves, etc., and any and all other equipment and apparatus, as may be required to be reached from time to time for operation and maintenance.

8. No work shall be closed in, covered and/or hidden from view before it has been examined by the Owner.
9. Any and all unsatisfactory work or materials shall be corrected and/or removed immediately after being condemned, and furnish other work and materials, satisfactory to the Owner, at no additional cost.
10. Connections of the piping to the equipment with bolts more than finger-tight will not be permitted until the equipment has been leveled, grouted in, and the installation inspected and approved by the Owner and the manufacturer of the equipment. In the event the piping does not exactly match the equipment connections, the piping installation shall be revised until it does match those connections. In the case of flanged connections, it must be possible to insert the bolts by hand without "springing" the piping. In no event during the erection of the piping shall it be permitted to support the weight of any fitting, valve, piping, etc., from the equipment connections.
11. All piping connections to pumps and other equipment shall be made in such a manner as to avoid any strain being transmitted from the piping to the equipment. Flanged piping shall be carefully installed so that the pipe flanges exactly match and are perfectly parallel to the flanged equipment connections.
12. All packing, gaskets, discs, seats, diaphragms, lubricants, etc., shall conform to recommendations of the valve manufacturer for the intended service.
13. Valves shall be installed with the stems positioned in the horizontal or above the centerline of the pipe. Operators shall be positioned so that they do not interfere with pedestrian traffic. In passageways or above a platform the minimum clearance between the floor and the lowest protruding point on the valve or operator shall be 6'-8". All valves shall be accessible for operation, maintenance or removal. Valves shall be arranged to open counterclockwise by handwheel or level operation unless otherwise indicated in these specifications. Valve operators which are 7'-0" or more above the operating floor or platform shall be chain wheel operated. Where necessary for operations as described above, valves shall be bevel or spur gear operated. Plug valves 6" and larger shall be gear operated.
14. Provide to the Owner, one operating wrench for every 10 valves of each type (but not less than 2 wrenches per type), not equipped with handwheels or levers.

B. Hangers and Supports

1. The requirements of the applicable section of ANSI B31 "Pressure Piping" shall be considered as minimum requirements governing fabrication, installation and support of piping systems except where more specific or stringent requirements are stated herein or shown on the drawings.

2. Piping less than 10" Ø may be supported from or on the building slabs. Pipe hangers shall be in accordance with those manufactured by ITT Grinnell Corp., Providence, RI; Carpenter & Patterson, Inc., Woburn, MA; Fee and Mason Mfg., or equal.
3. All piping and connected equipment, including pumps, valves, strainers, traps and other specialties and accessories shall be supported in a manner that will not result in or product objectionable or excessive stress, deflection, swaying, sagging or vibration in the piping or in the building structure either during erection, cleaning, testing or normal operation of the systems. Piping shall not shake or buckle between supports or anchors or prevent proper movement due to expansion and contraction. Piping shall be supported at equipment and valves such that they can be disconnected and removed without further supporting the piping. Piping shall not introduce any strains or distortion to the connected equipment.
4. All concrete inserts for support shall be set in place prior to pouring concrete.
5. All auxiliary structural steel required for the support of piping systems and not shown on the drawings as having been installed shall be furnished, installed and prime painted as part of the work under this section.
6. Hangers and supports shall be installed complete, including lock nuts, clamps, rods, bolts, couplings, swivels, inserts and required accessory items. Hangers for horizontal piping shall have adequate means of vertical adjustment for proper alignment of pipe and shall be provided with lock nuts.
7. Parallel runs of horizontal pipe 3 in. and under may be supported on trapeze type hangers made up of structural shapes and hanger rods. Otherwise, pipe lines shall be supported with individual pipe hangers.
8. Hanger rods for both single and double rod hangers shall conform to the following:

<u>Pipe Size</u>	<u>Hanger Rod Ø</u>
2" and smaller	3/8"
2-1/2" to 3-1/2"	1/2"
4" and larger	5/8"

9. It shall be the responsibility of the Contractor to coordinate the location and method of support of the piping system with that of all installations under other sections of the specifications. Piping shall be supported in such a manner as to impose no eccentric loading on structural members. The loading of any hanger or support shall in no case exceed the manufacturer's recommended maximum load.
10. Hangers for insulated piping shall be sized for the outside diameter of the pipe insulation or the insulation protection saddle.

### C. Draining and Venting

1. Unless otherwise indicated on the Drawings, all plant air lines, including runouts and branches, shall pitch or slope to low points to provide for complete drainage, removal of condensate and venting. Maintain accurate grade where lines are pitched or sloped for venting and drainage. No pipelines shall have pockets due to changes in elevation unless indicated on the Drawings and only then with proper provisions for draining and venting.
2. Provide drip legs at low points and at the base of all risers in plant air lines. Unless otherwise shown, drip legs shall be full line sizes on lines up to 4" inside diameter.
3. Use eccentric reducing fittings on horizontal runs when changing size of lines in order to provide proper drainage and venting. Install plant air lines with bottom of pipe and eccentric reducers in a continuous line; all other liquid lines with top of pipe and eccentric reducers in a continuous line.
4. Provide automatic air release vents at high points and wherever else required for elimination of air in all water and waste water solution piping systems.
5. All vent and drain piping shall be of same materials and construction as specified for the service involved unless specified or indicated otherwise.

### D. Sleeves and Plates

1. Provide sleeves for all pipes passing through walls and foundations.
2. Lay out, size and locate all sleeves such that they be set and/or installed prior to pouring concrete. In the event sleeves must be placed after wall, grade beam, etc., has been constructed, submit in writing to and obtain approval from the Owner, quantity and proposed method of core drilling and installing. Cored openings must be clean and neat without cracking or spalling.
3. Unless otherwise specified, sleeves shall be standard weight galvanized steel pipe having square cut ends with anchoring lugs welded on. Horizontal sleeves through walls, grade beams, foundations and partitions shall be flush with finished wall faces and have a water stop. Vertical sleeves through floors shall extend 3 inches above finished floor and be flush on ceiling or under side.
4. Size sleeves such that internal diameter is a minimum of 2" larger than the outside diameter of the bare pipe for un-insulated lines and 2" larger than outside diameter of the insulation and jacket for insulated lines. Center pipes and sleeves. Sleeves in pits or below grade shall be painted or coated with one coat of coal tar pitch paint and have an integral waterstop.

5. All pipes passing through walls or floors except in factory spaces, equipment rooms, pits, below grade, or concealed above ceilings shall be provided with chrome plated brass solid type escutcheon plates large enough to conceal the pipe sleeve and fitting snugly around pipe or insulation. Approved manufacturer and model numbers are Ritter Pattern and Casting Company, Inc., 1, 3A or 36A.

### **3.03 Welded Pipe Connections - General**

- A. Welders assigned to the work shall be duly qualified in accordance with ASME Section IX Boiler and Pressure Vessel Code for Welder's Qualification Test, Welding Procedures and Quality Requirements, and Procedures and Tests for Qualifying Welders. Qualification proof shall be available on request of the Owner.
- B. The base metal may be prepared for welding by shearing, gas cutting, etc. Metal shall be cleaned of grease, oil, paint, rust, scale, burrs, pipe cuttings or anything else which may be detrimental to the finished weld.
- C. Welding Methods
  1. No welding shall be done if the metal temperature is below 0°F or if the surfaces are wet. Between 0°F and 32°F the metal shall be heated until warm to the hand.
  2. In the installation of socket weld fittings and valves a 1/16" clearance shall be left between the end of the pipe and the shoulder in the socket.
  3. Butt welds shall be prepared with welding grooves by machining or flame cutting and grinding. Ends shall be free of scale and oxide, smooth, and leveled, leaving a 1/16" land on the bottom of the welding edge. A minimum 3/32" separation shall be allowed between the lands. A 1/16" separation shall be used for gas welding.
  4. The 2 pieces to be welded shall be held for welding by alignment fixtures. Tack welds in the grooves may be used if fixtures cannot be used but shall be kept to a minimum.
  5. The number of passes for welding joints and the method of welding shall be sufficient to satisfy good practice and pressure requirement specified. The average thickness of each layer of welding metal shall not exceed 1/8 inch. Complete fusion shall be obtained and care shall be taken that full penetration is obtained through thickness of metal without stalactite or dripping. All slag and flux shall be removed by wire brushing before each succeeding pass is made. The completed weld shall be free from all defects including undercutting, porosity and cracking. Welds shall present a smooth, regular workmanship appearance.
  6. Welding equipment shall be properly grounded to prevent induced current in structural steel, piping or other metals.

### **3.04 Welded Connections - Stainless Steel Tubing**

- A. Welders assigned to the work shall be duly qualified in accordance with ASME Section IX Boiler and Pressure Vessel Code for Welder's Qualification Test, Welding Procedures and Quality Requirements, and Procedures and Tests for Qualifying Welders. Qualification proof shall be available on request of the Owner.
- B. The base metal may be prepared for welding by shearing, gas cutting, etc. Metal shall be cleaned of grease, oil, paint, rust, scale, burrs, pipe cuttings or anything else which may be detrimental to the finished weld.
- C. Welding Methods
  - 1. The Contractor shall show evidence that all procedures, welders, and welding operators for work covered by these specifications have been qualified in accordance with ASME Code, Section IX. An up-to-date certificate for each welder shall be on file at the work site and available to the Owner's inspector upon request.
  - 2. Polished tubing requires automatic Gas Tungsten Arc welding with Argon or Helium gas backing as the only allowable process for welding. Semiautomatic or manual welding procedures will not be acceptable. The Contractor shall submit weld procedures specification(s), procedure qualification records and samples of weld quality to the Owner or his Agent for approval prior to the start of any work.
  - 3. Welding procedures shall assure uniform and complete penetration of the weld at all times.
  - 4. Each day, two sample weld pieces shall be provided by the Contractor - one in the morning and one after lunch break - to inspect quality of weld and full penetration. Also, whenever equipment modifications are made during the work period, a new sample shall be taken. These samples, with documented welding parameters, shall be maintained by the Contractor until tubing is approved by the inspector. In addition to the above, random weld samples may be requested at any time during the work day.
  - 5. The area to be welded shall be free of all grease or oil, paint, and other foreign material. Proper degreasing, with approved materials and stainless-steel wire brushes, external only, can be used to clean joint area around at least 2 inches from the weld area.
  - 6. The weld should be made as rapidly as possible, with the least amount of generated heat.
  - 7. The purge gas flow rate and sequence shall be maintained during welding in the range developed under the Welding Procedures submitted by the Contractor.

8. No slag or spatter metal is acceptable on any weld.
9. It is preferred that welding be accomplished without tack welding. However, small sound tack welds which penetrate to the bottom of the weld joint may become a part of the finished weld. The sample welds prepared shall be completed with the same technique as to be used on the production welds. Improper tack welds are not acceptable.
10. Tack welds shall be of the same quality and made by the same process as the rest of the weld or they shall be removed from the weld prior to the completion of the weld.
11. Arc strikes and weld starts shall not be made purposely on the base metal outside the weld groove. Inadvertent arc strikes outside of a weld zone shall be visually examined under 5X magnification or liquid penetrant examination.
12. All welds rejected by the Owner or Engineer shall be removed and the joints shall be properly re-welded.

### **3.05 Soldered Joints**

- A. Outside surface at end-of-pipe and inside surface of fittings shall be thoroughly cleaned with steel wool or emery cloth and all burrs there shall be removed. After cleaning, surfaces to be jointed shall be evenly and completely covered with flux.
  1. Support joints during the heating process and do not strain during the cooling period.
  2. Use 95-5, lead-free, wire solder for pipe joints.
- B. Soldered joints for refrigerant piping shall be made with silver solder.
- C. Excess solder shall be removed while still in a plastic state leaving a fillet around the cup of the fittings as it cools.

### **3.06 Butt-Fusion Joining PVDF Piping Systems**

- A. All PVDF piping systems shall utilize butt-fusion joining of pipe and fittings. Connections to equipment shall be made with flanged or union connections.
- B. All pipe cuts must be made square with no level. All burrs shall be removed prior to final planning of the cut end. All cutting and end preparation shall be executed immediately prior to the fusion joining process.
- C. The pipe ends to be joined should be cleaned and wiped immediately prior to the butt-fusion process. The use of solvents is not acceptable. Distilled or deionized water shall be used with a clean cloth for all final pipe cleaning.

- D. Fusion of the two pipe elements shall be performed with automatic fusion machines, in accordance with the recommended procedures of the pipe and fitting manufacturer.
1. The fusion temperature shall be checked prior to each joint.
  2. The pipe ends opposite the joint shall be sealed to the maximum extend practical, to prevent air currents from flowing through the pipe and cooling the fusion area.
  3. Fusion Temperature, heating time, heat soak time, joining pressures and cooling time shall be in accordance with the pipe manufacturer recommendations. The use of airflow or liquid coolants to reduce the cooling time shall not be acceptable.

### **3.07 Testing of Installed Piping Systems**

A. Preparation

1. The Contractor shall furnish all equipment and labor necessary to perform the field tests called for in this Specification.
2. The Contractor shall give ample notice to the Owner that tests are to be conducted. The Owner shall witness all pipeline tests or otherwise shall give written authorization to the Contractor to perform unwitnessed pipe tests.
3. No test shall be performed until all anchors, hangers, supports, test gauges, plugs, bulkheads, blanks, etc., are installed. Tests shall be made against bulkheads or where permitted by the Owner.
4. Piping that connects to or is continuous with lines installed by others shall be isolated from such lines by valves or test blanks located at or near the junctions. When necessary to include parts of such lines in the test, the Owner shall be given prior notice so that test conditions may be mutually agreed upon. Special test conditions must be approved in writing prior to performing any such tests.
5. When piping is required to be painted or insulated, the paint or insulation shall not be applied to the pipe joints until the tests are completed. Underground pipe joints shall be exposed while testing.
6. Safety precautions shall be taken to prevent open ends of piping being in position to cause injury to personnel when blowing out or testing systems.
7. One or more calibrated indicating test gauges shall be connected directly to the piping as necessary to coordinate the pressuring operation. The indicating gauges shall be visible to the operator controlling the pressure. Pressure gauges used shall have dials graduated over a range approximately 2 times the intended medium test pressure.

8. The interior of all piping shall be free from loose mill scale, sand, dirt, slag, weld, spatter, rust and other foreign matter, when erected.
9. After erection and welding of piping, all those lines requiring hydrostatic testing shall be flushed with potable water. Terminal visual inspection in the presence and to the satisfaction of the Owner must be made after flushing procedure is completed. A minimum of 5 gallons is to be flushed from each use point under full flow to ensure adequate cleaning of valve seats. Inspect and replace valve seats where necessary to ensure nonclusion of particulates. Flushing shall be considered complete when no sediment is visible in a clean glass of effluent standing for five minutes.

B. Pressure Testing

1. As far as is practicable, all pressure tests shall be complete system tests conducted in the presence of the Owner. All pressure vessels, instruments, and equipment connected to the piping system shall be included in the tests. The piping system shall be hydrostatically tested after flushing has been completed.
2. Every precaution shall be taken during testing to ensure the safety of the operator. Systems to be pressurized shall be provided with appropriate gauges and pressure relieving devices, furnished by the Contractor.
3. All joints including welds, are to be left uninsulated, unpainted, and exposed for examination during testing.
4. Equipment which is not to be subjected to the pressure test shall be either disconnected from the piping or isolated by blinds or other means during the test. Valves may be used provided that the valve is suitable for the proposed test procedure.
5. Pressure gauges shall not be subjected to pressure in excess of their scale range. All pieces of equipment which do not have their test pressure indicated, or whose test pressures are below the piping system test pressure shall be excluded from the test.
6. Pressure relief and thermal relief valves shall be excluded from these tests.
7. Before every test, the piping systems shall be visually inspected to assure that there are not visual defects and that all connections are tight.
8. Control valves, unless being tested, shall be set and maintained in the full-open position.
9. Lines containing check valves shall have the pressure applied upstream of the check valve so that pressure is applied under the seat.

10. All in-line instruments, gauge glasses, flow meter pots, liquid level float gauges, and all other pressure parts of instruments shall be included in these tests, where feasible.
11. Joints found to be defective shall be repaired and retested. Retesting of pipelines after repairs shall be done at the pressures originally specified for the test.

C. Hydrostatic Tests

1. The hydrostatic test pressure shall be calculated in accordance with the applicable section of ANSI B31.3 but shall not exceed the maximum test pressure of any vessels or components included in the test.
2. Temperature and head adjustments shall be made in accordance with ANSI B31.3, paragraphs 337.4.1 and 337.4.2.
3. All hydrostatically tested systems shall be tested in a one and one-half times the design pressure or to a minimum pressure of 100 psig, whichever is greater. All test pressures shall be maintained a minimum of ten minutes before visual examination of joints begins.
4. Hydrostatic test pressures shall not be applied until the piping system and the testing medium have reached thermal equilibrium.
5. During the tests, hydrostatic pressures shall be monitored and corrections shall be made to compensate for thermal expansion or contraction. By this procedure, the test pressure shall be kept within five (5) psig or one percent, whichever is greater, of its intended value. All joints shall be visually examined for leakage during the test.
6. No repair welding shall be done on any section of tubing that contains water.
7. All stainless steel pipelines shall be emptied and dried immediately after hydrostatic tests are completed. To avoid the possibility of pitting due to chlorine contents in water, demineralized water shall be used as the testing medium.

D. Test Reports: The Contractor shall make a record of the test on a "Test Report" form for each piping system tested, which shall consist of the following data:

1. Date and duration of Test;
2. Pipe Line Identification;
3. Type of test, pressure applied and length of time at test pressure and pressure at end of test;
4. Name of personnel and company performing test;
5. Comments, if any.

**3.08 Final Cleaning, Flushing and Sanitization of Installed Piping Systems**

- A. Before placing into service, all fabricated pipe, fittings and valves shall undergo final cleaning and flushing to remove debris, all cutting oils, protective coatings, etc.
1. Prior to initiating flushing, all pipe, fittings and valves shall be inspected to verify proper alignment, support and apparent joint integrity. The operation of all valves in the portion of the system to be flushed and cleaned shall be tested for function and shall be set into their correct position for flushing.
  2. All pipe lines and piping systems shall be flushed with potable water of sufficient flowrate to achieve a minimum pipeline velocity of 5 fps, to scour solids and debris from the interior of the piping. All connections and points of discharge shall be flushed for a minimum of 5 minutes, longer if necessary to flush the upstream pipelines for a minimum of 15 minutes. Cleaning shall not be started until leak and hydrostatic tests have been approved by the Owner.
- B. Following the completion of the system flushing, the entire water supply and treatment system including the water supply well, cartridge filter, greensand filter, storage tanks, and associated piping shall be flushed, disinfected and re-flushed. The disinfection treatment must be sufficient to ensure at least 99.9% inactivation of *Giardia lamblia* cysts and 99.99% inactivation of viruses.
1. The disinfection procedures shall conform to ANSI/AWWA C654, AWWA 652-19 Disinfection of Water Storage Facilities and AWWA 653-03 Disinfection of Water Treatment Plants. All chemicals used for disinfection shall conform to the requirements of ANSI/NSF Standard 60-1988.
  2. The chlorine solution used for disinfection of the well system, equipment, storage tanks and associated piping shall be applied such that a chlorine concentration of at least 100 mg/l of available chlorine be available for the entire water depth of the well and throughout the supply and treatment system, into the storage tanks.
  3. The disinfection solution shall remain within the well, storage tanks and distribution piping system for a minimum of 24 hours. Upon completion of the disinfection hold time the system shall be flushed to remove the excess chlorine residual, flushing each point of use until the chlorine residual is <0.5 mg/l.
- C. Following the completion of the disinfection procedure, the system shall be flushed to remove the excess chlorine residual. A minimum of 2 sets of samples taken at least 24-hours apart, of the raw water supply, as well as from distribution system locations determined by the Owner shall be obtained and analyzed for Total Coliform and Heterotrophic Plate Count (HPC). The sampling and analytical protocols shall conform to the requirements of the RI Department of Health and Good Engineering Practice, in accordance with Appendix 1 of the State of Rhode Island Rules and Regulations Pertaining to Public Drinking Water. The results of the bacteriological testing shall be submitted to the Rhode Island Department of Health, on the correct and appropriate reporting forms, for review and approval, prior to the water supply system being placed

into service. Individuals performing sampling shall have knowledge of the protocols for collection, storage and preservation of samples as outlined in the respective methods utilized to analyze potable water samples.

- D. The complete analytical report shall be submitted by the Engineer to the RI Department of health for review and approval, prior to initiation of service.

**END OF SECTION**

**SECTION 15250  
MECHANICAL INSULATION**

**PART I      GENERAL**

**1.01          Description**

A.      Work Included

1.      This work includes the furnishings of all materials, labor and equipment for the installation of process mechanical piping insulation systems.

B.      Related Work Described Elsewhere

1.      Section 15050 - Mechanical: Basic Materials and Methods

**1.02          Quality Assurance**

- A.      Only skilled workmen regularly employed and engaged in the installation of the materials specified shall be employed.

**1.03          Submittals**

- A.      The following items shall be submitted in accordance with the requirements of Section 01340 of this Specification.

1.      Insulation.
2.      Insulation Jackets.
3.      Sealants and Adhesives.

**PART II      PRODUCTS**

**2.01          Materials**

A.      Schedule of Piping Insulation

1.      All insulation shall be in accordance with the following schedule:

<u>Service</u>	<u>Size</u>	<u>Pipe Type</u>	<u>Insulation Thickness</u>	<u>Insulation</u>
Domestic Cold Water		All	P1	½"
Domestic Hot Waters		All	P1	½"
Heating Hot Water		Thru 3"	P1	1"
Heating Hot Water		Over 3"	P1	1-½"
Steam Condensate		Thru 2"	P1	1"
Steam Condensate		Over 2"	P1	1-½"
Steam (up to 200 psig)		Thru 1"	P1	1-½"
Steam (up to 200 psig)		Thru 4"	P1	2-½"
Steam (up to 200 psig)		Over 4"	P1	3-½"
Feedwater and Blowdown Lines		Thru 3"	P1	1"
Chilled Water		Thru 6"	P1	1-½"
Chilled Water		8" thru 14"	P1	2"
Chilled Water		Over 14"	P1	2-½"

B. Insulation - Type P1

1. Sectional molded glass fiber. Minimum density 4.5 pounds per cubic foot. Factory applied jacket shall consist of white, flame retardant jacket of .001" minimum aluminum foil, laminated to glass fiber reinforced kraft paper with a flame-retardant snuffer type adhesive. The jacket shall have a minimum 1-½" longitudinal sealing lap. Circumferential sealing strips shall be a minimum of 3" wide.
2. Fittings, Valves and Flanges: Molded, precut, or segmental insulation equal in thickness to adjoining pipe insulation. Alternate, hydraulic-setting insulating cement. Surface finish pre-molded PVC fitting cover system. Alternate: Fitting mastic, fiberglass, reinforcing strips and top coat of fitting mastic.

C. Surface Finish

1. One-piece pre-molded PVC fitting covers with galvanized coated tack fasteners. Tape circumferential joint between insulation and premolded fitting cover with 2" pressure sensitive polyvinyl tape. Note: Wipe all joints clean before applying tape.

**PART III EXECUTION**

**3.01 Preparation**

- A. Apply insulation after all pressure tests, cleaning, and pipe finishing has been completed.
- B. Clean all exposed surfaces of loose scale, dirt, oil and other foreign matter and dry, prior to insulating.

### **3.02            Installation**

#### **A.     Piping**

1.     Apply insulation to completely cover piping surface. Do not insulate over weld certification stamp.
2.     Fill surface imperfections in the insulation such as chipped edges, small joints or cracks, and small voids or holes with appropriate insulation material and smooth with skim coat of hydraulic-setting insulating cement. Vapor barriers shall be continuous and unbroken at hanger installations.
3.     Fit inside diameter of insulation sections or segments to outside curvature of pipe or previous insulation layer.
4.     Where standard insulation shapes are not available cut, score, or miter segments of appropriate block to fit contour of pipe. Stagger joints of adjoining segments. Fit insulation carefully and secure with No. 20-gauge galvanized annealed steel wire. Finish with a smoothing coat of hydraulic-setting insulating cement.

#### **B.     Valves, Fittings and Specials**

1.     Insulate valves, strainer, fittings, and flanges with identical material, density, thickness, and surface finish as the piping insulation. All edges shall be filled with filler and finished with a smoothing coat of hydraulic-setting insulating cement.
2.     Insulate the entire surface of fittings and strainers. Insulate valves up to and including bonnets, unless authorized otherwise by facilities project engineer. Removal valve bonnets shall not be covered.
3.     Insulate strainers to permit removal of the basket without disturbing the insulation of the strainer body. Strainer covers shall be molded and taped to upper section of insulation.
4.     Bevel the ends of pipe insulation adjacent to flanges to permit bolt removal. Provide a collar of sectional block insulation over the flanges and extend a minimum of 2" over the adjacent pipe insulation. Fasten with staples to permit easy removal. Prior to applying collar fill annular spaces with loose insulation.

C. Wall Penetrations

1. Where pipelines pass through masonry walls or floors, completely fill the space between outside of pipe or insulation and the inside of the sleeve or framed opening with fibrous mineral wool or fiberglass pipe insulation.

D. Pipe Supports

1. For all insulated piping, cold and hot, supported on rollers, install minimum 120°F segment rigid insulation and galvanized shields.
2. When it is avoidable and hangers for cold lines must be installed directly on the pipe, insulate and finish the entire hanger and the rod for a length of not less than 12" above the pipe.
3. For hot lines supported on rollers, provide pipe covering protection saddles and fill the hollow interior of saddles with insulating cement or fibrous glass.
4. Insulate Dresser-type couplings and other gasketed joints in refrigerant systems in a manner to allow removal of insulation, without damage, for repair and leak-checking of couplings and gasketed joints.

**3.03 Surface Finish**

- A. Apply surface finish to present a tight smooth appearance.
- B. Do not apply sealant or cement until all previous applications of cement and adhesives have thoroughly dried.
- C. Extend surface finish to protect all insulation surfaces. No raw edges or ends of insulation shall be exposed.

**END OF SECTION**

**SECTION 16010**  
**ELECTRICAL - GENERAL PROVISIONS**

**PART I      GENERAL**

**1.01      Description**

**A.      Work Included**

1.      The electrical work includes the following:
  - a.      Complete interconnecting power distribution wiring.
  - b.      Grounding.
  - c.      Testing.
  - d.      Connection to and installation of all instruments, instrument cabinets and panels.
  - e.      Removal of existing electrical equipment & wiring as indicated on Electrical Plan.
  - f.      Complete installation of stand-by generator & associated equipment.
2.      Provide all conduit; conduit fittings, junction boxes and fittings; conduit hangers, clamps and supports; pull boxes; splice boxes; wires and cables; insulating materials; wire connectors; ground connectors; identification nameplates; tags; and all other equipment and accessories necessary, implied or specified herein or indicated on the Drawings or schedules, including all necessary anchors, sleeves, hangers, and such other items as may be required for attaching or connecting this work to the work of others.
3.      Work to be performed, furnished, installed, located, set or connected by others as listed or described herein or in other sections of these specifications shall be coordinated with the electrical contractor.
4.      The Contractor shall familiarize himself with the existing facilities and difficulties by visiting the job site and shall be responsible for the execution of all the work related to these specifications. No claims will be allowed resulting from any discrepancies.

**B.      Related Work Described Elsewhere**

1.      The responsibility for electrical work and items in connection with electrically operated equipment furnished by others or under other divisions of these specifications is as follows:
  - a.      Equipment sections: Furnishing power and control wiring, control interlocks and miscellaneous equipment.

### **1.02 Materials and Workmanship**

- A. All the materials shall be new and shall conform to the standard of the Underwriters' Laboratories, Inc. in every case where such a standard, listing or label has been established for the particular type of material in question.
- B. Laws and regulations. The installation shall comply with all State and local laws and regulations applying to electrical installations in the applicable City or Town, with all applicable requirements to the National Electrical Code and its latest revisions.
- C. The electrical contractor shall obtain all permits, pay all fees and give all proper authorities all requisite notices.
- D. Names of manufacturers, catalog numbers, models or types, when used in this Section of the Specifications and the included drawings, are intended to indicate the standards of type and quality of material, when apparatus or equipment is mentioned, any first-class product made by a reputable manufacturer may be used providing it conforms to the requirements of these Specifications and meets with the approval of the Owner.

### **1.03 Drawings**

- A. The Drawings illustrate the layout of the ELECTRICAL work and indicate the approximate locations of apparatus and equipment. The exact routing of conduit shall be determined by the structural conditions and other obstructions as determined by final field measurements made at the time of the installation. This shall not be construed to mean that the design of the systems may be changed but refers only to exact runs of conduit between given points.
- B. Review all Drawings that affect the location of any apparatus and equipment to avoid possible interference and permit full coordination of all work. The right to make any reasonable change in location of apparatus and equipment up to the time of roughing-in is reserved by the Owner and such change shall be made without additional expense to the Owner.
- C. It shall be the responsibility of the Contractor to see that all electrical equipment such as junction and pull boxes, controls and such other apparatus as may require maintenance and operation from time to time is made easily accessible. Although the equipment may be shown on the Drawings in certain locations, the construction may disclose the fact that such locations do not make its position readily accessible. In such cases, this contractor shall call the attention of the Owner to the condition before advancing the construction to a state where a change will reflect additional expenses.

### **1.04 Shop Drawings and Samples**

- A. Before ordering material shipped to the job, submit shop drawings for approval giving all dimensions and details. Each drawing shall be marked for this project.
- B. Shop Drawings and samples shall be provided in accordance with Section 01340 of these Specifications.
- C. General bulletins or catalogs will not be accepted as Shop Drawings unless the equipment on which approval is to be obtained is specifically marked and all information pertaining to the item, including dimensions were required for installation, is included.
- D. In case any of the above materials are delivered or installed on the job for which Shop Drawings or requests samples have not been approved and/or which are not in accordance with the Specification, the Contractor will be required to remove such materials and substitute approved materials at his own expense and as directed.

#### **1.05 Guarantee**

- A. The Contractor shall guarantee all systems, to be free from short circuits, open circuits, loose connections over-heating and such other defects.

#### **1.06 Equipment and Scaffolding**

- A. The Contractor performing work under this section shall be responsible for furnishing all tools and equipment, scaffolding and other temporary construction required for the execution of the work.

#### **1.07 Inspection and Tests**

- A. All connections at cabinets, switches, circuit breakers and all splices shall be made at the time of final inspection and testing. All circuits shall be continuous from service switches to each panel. Each system shall test free from short circuits and ground and shall have an insulation resistance between conductors and ground based on maximum load not less than requirements of the latest edition of the National Electrical Code.
- B. Voltages shall be tested at the line side of the main secondary breaker with all circuit breakers in the open position.
- C. The Contractor shall be responsible for correct voltages, and correct phase designations on all equipment.
- D. All testing equipment necessary to satisfactorily conduct the tests mentioned above shall be provided. The tests shall be made under the direction of the Owner at no additional expense to the Owner.
- E. Failure or defects in workmanship or materials revealed by tests or inspection shall be corrected promptly and tests shall be repeated. Defective material shall be replaced promptly at no additional expense to the Owner. The results of all tests conducted shall

be forwarded in writing to the Owner, insofar as practical a normal full load test shall be made on the power and lighting systems.

**1.08 Notification**

- A. The Contractor shall arrange with the Owner for all switching and connecting on all electric lines.

**1.09 Coordination**

- A. The Contractor shall be responsible for fully coordinating all of the various parts of the work included under this Section, and such other work of this Contract as it may affect the work of this Section, throughout the various phases of construction and before the ordering or fabrication of the various parts of the work, so as to ensure compliance with the Drawings and Specifications, and as necessary to provide the installations complete and in satisfactory operating condition.

**END OF SECTION**

**SECTION 16100**  
**BASIC MATERIAL AND METHODS - INTERIOR**

**PART I**      **GENERAL**

**1.01**    **Description**

A.    Work Included

1.    The work covered by this Section of the Specifications includes the furnishing of all labor, equipment, appliances and materials, and performing all operations in connection with providing and installing the interior electrical work, complete, in strict accordance with this Section of the Specifications and the applicable Drawings and subject to the terms and conditions of the Contract.

B.    Related Work Described Elsewhere

1.    Division 15 – Mechanical
2.    Applicable requirements of Section 16010 shall apply to this Section.
3.    Section 01510 - Temporary Utilities

**PART II**      **PRODUCTS**

**2.01**    **Raceway Systems**

A.    All conductors for feeders, branch circuits and controls, shall be installed in raceways as herein specified and as indicated. Raceways shall be of the sizes indicated and shall bear the label of the Underwriter's Laboratories, Incorporated. Raceways shall include rigid polyvinyl chloride (PVC) conduit & liquidtight flexible PVC conduit.

B.    Raceways shall be installed as follows:

1.    Conduits installed shall be Schedule 40 polyvinyl chloride (PVC).
2.    All conduits shall contain a grounding conductor.

C.    Liquidtight flexible PVC conduit shall be furnished and installed where indicated and for final connections to motors, transformers, and equipment. Exposed (in view) liquid tight flexible conduit to motors, transformers and devices shall not exceed 18 inches; other lengths shall be as required. Liquidtight flexible conduit shall be Anaconda Metal Hose Company, "Sealtite" type "UA".

D.    Supports shall be provided for conduit at distance as required by the NEC. The supports shall consist of approved types of clamps or straps required for type of conduit secured by screws, bolts or expansion bolts.

- E. Expansion fittings shall be provided at building expansion joints. Expansion fittings shall be PVC.
- F. Vapor seals shall be installed at all locations required by the National Electrical Code.

## **2.02 Boxes and Fittings**

- A. Provide junction boxes, pull boxes and conduit bodies as indicated, specified herein or wherever they shall be necessary to facilitate the pulling of wires and cables.
- B. Junction or pull boxes not over 100 cubic inches in size shall be standard outlet boxes. Junction and pull boxes over 100 cubic inches in size shall be constructed of PVC with screw covers and gaskets. Boxes shall be secured in position independently of conduits entering them. Boxes shall be installed so they are readily accessible.
- C. Outlets and boxes shall be secured to conduit by means of locknuts (inside and outside) and insulating bushings.
- D. Boxes and fittings shall be PVC.

## **2.03 Wires and Cable**

- A. All wire and cable shall be of the sizes, wire numbers and types shown on the Drawings or specified herein and be provided by the Electrical Contractor.
- B. All wire and cable work shall be in strict accordance with the requirements of the National Electrical Code and its latest revisions, both with respect to material and workmanship except where insulation thickness and covering are required by these Specifications in excess of Code requirements.
- C. The minimum size wiring for power branch circuits and all circuits emanating from panelboards shall be a minimum of No. 12 AWG. Minimum size for control and signal wiring shall be a minimum of No. 14 AWG.
- D. All wiring within the building shall be Type THWN/THHN. All wiring shall have insulation thickness for 600 volts in accordance with the National Electrical Code with dual rating of 75 degrees C. wet/90 degrees C. dry.
- E. Wire and cables shall be single conductor except where otherwise specified or indicated on the Drawings. Conductors of sizes No. 6 AWG and larger shall be stranded. Wires of sizes smaller than No. 6 AWG shall be solid.
- F. Conductors shall be soft-drawn copper and have a conductivity of not less than 98 percent of ASTM standards for annealed copper.

- G. Wires and cables shall be carefully handled during storage and installation to avoid mechanical injury to the conductor, insulation and covering.
- H. Wires and cables shall be as manufactured by the Okonite Company, General Electric Company, Plastic Wire and Cable Company, or an approved equal.
- I. "Y ER EAS", or and approved equal, shall be used as a lubricant where necessary when pulling wire or cable. No wire or cable shall be pulled into the circuit system until all work which could cause injury to the wiring has been completed. All wires and cables shall, insofar as practicable, be continuous from origin to termination without running splices. The installation of wires and cables shall include the provision of all hanger, racks, cable cleats and supports necessary to make a neat and substantial installation.
- J. Each feeder cable in pull boxes, panels and at equipment shall be tagged with the proper feeder number and phase designation. Wires and cables of all branch circuits shall be identified by adhesive bands as manufactured by Brady Metal Products, Thomas and Betts or an approved equal.
- K. The Electrical contractor shall use feeding tubes where cables pass into mouth of conduits. To avoid injury to sheathing, cable shall not be subjected to a bending radius less than 6 times its overall diameter.

#### **2.04 Gutter Wiring**

- A. All gutter wiring in panels and such other equipment shall be neatly formed and tied with cable ties and straps. The ties and straps shall be Burndy, General Electric, Thomas and Betts Company, Types TY-5, TY-15, TY-25 and TY-35 or an approved equal.

#### **2.05 Color Coding**

- A. All sizes of wires and cable shall be factory color-coded with a separate color for each phase and neutral used consistently throughout the power and lighting systems. The neutral wire of all branch circuits shall have a white covering and all connections to single pole switches shall be so made that the operation of the switch opens the ungrounded conductor. Color coding shall be as listed below:
- B. 480 Volts, 3 Phase, 4 Wire System:
  - 1. Phase A - Brown
  - 2. Phase B - Orange
  - 3. Phase C - Yellow
  - 4. Neutral - Gray
- C. 120/208 Volts, 3 Phase, 4 Wire System:

1. Phase A - Black
2. Phase B - Blue
3. Phase C - Red
4. Neutral - White

D. All grounding conductors shall have green insulation.

E. Sizes AWG #4 and larger may be taped for color coding, providing all exposed cables outside of raceways be completely color-taped or printed in accordance with IPCEA S-19-81 Method 3.

## **2.06 Caulking Compound**

A. The plugging for conduits and ducts shall be of putty-like consistency workable with the hands at temperatures as low as 35° F., shall not slump at a temperature of 300 degrees F., and shall not harden materially when exposed to air. The compound shall readily caulk and adhere to clean surfaces of fiber conduit, concrete, masonry, lead, rubber, polychlorprene, polyvinylchloride and the common metals. The compound shall have no injurious effects on the materials or the hands of workman. The compound shall form a seal with the above-mentioned materials without dissolving, noticeably changing characteristics or removing any of the ingredients.

## **2.07 Nameplates and Indexing**

A. Equipment not normally supplied with directory frames, whether supplied under this Section or other Sections of these Specifications, shall be provided with dark engraved Bakelite nameplates with engraving through to white core. Nameplate markings shall be approved by the Owner. Only a part of the required nameplates are indicated. Nameplates on boxes shall supplement painting.

B. Engraved Bakelite nameplates with engraving through to a white core shall be provided on the following equipment including equipment provided under other Sections:

1. Panelboards and power centers.
2. Control panels.
3. Boxes.
4. Motor starters and controls
5. Any other unit of equipment shown on the Drawing and/or directed by the Owner.

C. All nameplates for equipment 120 volts and above shall indicate voltage.

## **2.08 Motor and Control Wiring**

A. Unless otherwise noted, the work under all electrical sections of the Specifications shall include providing all conductors, raceways and connections necessary to operate motors and

their control and signal equipment. This shall include all wiring indicated on all or any of the Contract Drawings for pumps, pressure switches, motor starters and such other related items as may be furnished under any division. The Contractor shall provide a suitable fused disconnect switch for each motor and its controller.

- B. Unless otherwise noted, the work under this Section of the Specifications shall include all conductors, raceways and connections necessary to operate motors and their control for collateral equipment installed under other sections and Owner's equipment.
- C. Motor starters shall be full voltage, non-reversing combination fused disconnect switch magnetic motor starters. Starters shall be size 1 minimum rated at 600 volts maximum, and shall be furnished with three universal type auxiliary contacts and over current protection in all phases. A 120 volt control transformer shall be provided with each starter. The combination starters located in the passivation room shall have NEMA 4X fiberglass enclosures and hand-off-automatic selector switches. The starters located in the pretreatment room shall be NEMA type 12 complete with stop/start push-button control stations. Starters shall be as manufactured by Cutler Hammer, Allen Bradley or an approved equal.
- D. Motor controls, selector switches and push button stations, pilot lights and accessories shall be heavy duty oil tight type and rated for 480 volts. Motor controls shall be as manufactured by Cutler Hammer, Allen Bradley or an approved equal.

## **2.09 Grounding**

- A. All conduit, supports, transformers, breakers, cabinets and equipment shall be grounded in accordance with the latest issue of the National Electrical Code.
- B. Every non-metallic raceway shall include a grounding conductor which shall be connected as required by the National Electrical Code. Sizes of grounding conductors shall be in accordance with Table 250-95 of the National Electrical Code.
- C. The grounding system shall have a resistance not greater than 25 ohms and shall be measured prior to placing equipment in operation. Water meters shall be bonded around with copper jumper.
- D. All ground connectors shall be clamp style and bolts, nuts and washers other components of the connectors shall assure a permanent corrosion-resistant assembly. Connectors shall be as manufactured by Burndy Engineering Co. Inc., Thomas and Betts Co., Cadweld by Erico Products Company, or an approved equal.
- E. All building steel, water, sewage and gas piping shall be grounded with a common ground.

**END OF SECTION**

**SECTION 16200**  
**TESTING AND COORDINATION OF SYSTEMS**

**PART I      GENERAL**

**1.01    Work Included**

- A.    Furnish all plant, labor, equipment, appliances, and materials, and perform all operations in connection with testing the systems and providing complete short circuit and coordination studies, in strict accordance with this section of the Specifications and the applicable Drawings, and as directed, complete in place and accepted, and in satisfactory operating conditions.

**1.02    Related Work Described Elsewhere**

- A.    Applicable requirements of Section 16010 shall apply to this section.

**PART II     PRODUCTS**

(None for this section)

**PART III    EXECUTION**

**3.01    Testing**

- A.    During the progress of the work it shall be subject to the inspection of the Owner and to such other inspectors as may have jurisdiction, including those of the local Electrical Inspector.
- B.    As the various parts of the work are installed and completed the Contractor shall make preliminary insulation resistance tests to insure that the systems are free from short circuits and grounds and that all connections, switches, controls and equipment are in proper operating condition.
- C.    At the time of final tests, all splices must be completed and all connections made at equipment, apparatus, cabinets panelboards, circuit breakers, switches, starters, grounding and such other items for all electrical systems. All circuits, feeders, lines and controls must be continuous for services to each and every outlet. Functional tests as may be required to satisfy the owner that the work has been accomplished as intended by the specifications and drawings, and to prove the integrity of the work shall be made.
- D.    The insulation resistance between conductors and between conductors and grounds for the secondary distribution systems shall be not less than the requirements of the latest edition of the National Electrical Code.

- E. The Contractor shall be responsible for correct voltages, tap settings, trip settings and correct phasing on all equipment. Secondary voltages shall be measured at the line side of the main breakers with the breakers in an open position, at panelboards, and at such other locations on the distribution systems and branch circuits as directed by the Owner.
- F. High voltage D.C. tests shall be provided as specified under Section 16100.
- G. Measure minimum and maximum voltages, measure voltage between phase wires and neutral, and immediately deliver to the Owner a report on all voltage measurements.
- H. Malfunctions on the above mentioned equipment shall be promptly corrected with assistance from the manufacturer of the equipment.
- I. Failure or defects in workmanship or materials revealed by tests shall be corrected promptly and tests shall be reconducted. Defective materials shall be replaced promptly at no additional expense to the Owner. The cost of electrical current for all tests shall be paid for by the Contractor. The results of all tests conducted by the Contractor shall be forwarded in writing to the Owner. A full load test shall be made on the power systems.

**END OF SECTION**



**N O R T H E A S T**  
**Water Solutions**  
**I N C .**

**EQUIPMENT PROCUREMENT  
SPECIFICATIONS**

**PRESSURE BOOSTER PUMP SYSTEM  
IN-KIND REPLACEMENT**

**FOR**

**WEST GLOCESTER ELEMENTARY  
SCHOOL**

**111 REYNOLDS ROAD  
GLOCESTER, RI 02814**

**PWS # RI1900041**

**April XX<sup>th</sup>, 2026**

## TABLE OF CONTENTS

### **PART I      GENERAL**

- 1.01      Description of Work Included
- 1.02      Work By Vendor
- 1.03      Owner Responsibilities
- 1.04      Vendor Submittals
- 1.05      Quality Assurance
- 1.06      Equipment Delivery, Acceptance & Storage
- 1.07      Warranty

### **PART II     PRODUCTS**

- 2.01      Pressure Booster Pump System

### **PART III    EXECUTION**

- 3.01      Inspection
- 3.02      Delivery, Storage & Handling
- 3.03      Mechanical Installation
- 3.04      Electrical Installation
- 3.05      Pressure Testing of Tanks and Piping Systems
- 3.06      Field Tests and System Operational Validation
- 3.07      Final System Disinfection and Analytical Monitoring
- 3.08      Final System Startup

## **PART I      GENERAL**

### **1.01      Description of Work Included**

- A.      This specification includes all equipment, components, accessories and appurtenances necessary to implement the in-kind replacement of the pressure booster pump system at West Glocester Elementary School, 111 Reynolds Rd, Glocester RI 02814. The scope of equipment to be provided shall include all accessories and appurtenances, whether or not specifically mentioned or fully detailed, but which are deemed necessary or reasonably required to render the furnished equipment in complete and fully operable condition.
1.      Provide one (1), skid-mounted, duplex pump system including two (2) horizontal, centrifugal pressure booster pumps, suction manifold with isolation valves, discharge manifold with isolation and check valves, pressure gages, steel channel base, frame-mounted controls.
- B.      All equipment, mechanical and plumbing devices, media, chemicals, lubricants, joining and sealing materials and other materials furnished for use in this potable water treatment system shall conform to ANSI/NSF 60 and ANSI/NSF 61, where applicable.**

### **1.02      Work by Vendor**

- A.      The term "Vendor" shall refer to the equipment manufacturer or representative submitting a proposal in accordance with this Specification.
- B.      The Vendor shall satisfy all conditions of this specification, including but not limited to submittal of all information requested. Refer to Part I, Section 1.04 of this Specification for Vendor submittal requirements.
- C.      All Vendor quotations provided in response to this specification shall include freight (FOB) to West Glocester Elementary School, taxes, tariffs, and any other costs. Vendor bids shall be valid for a minimum of sixty (60) days from the date of submittal.
- D.      The Vendor shall furnish the equipment as specified herein. The equipment shall include all accessories and appurtenances, whether or not specifically mentioned or fully detailed, but which are deemed necessary or reasonably required to render the furnished equipment in complete and fully operable condition.
- E.      The Vendor shall furnish all supervision, labor, materials, tools, equipment and supplies necessary to perform final system fabrication design, fabrication, factory testing, and delivery of the equipment. The Vendor shall be responsible to certify that system components provided by sub-vendors and/or subcontractors comply with this Specification.

- F. The Vendor shall provide three (3) copies of the complete operations and maintenance manual (O&M), as well as three (3) copies of all installation instructions for each item of equipment provided.
- G. The Vendor shall furnish all special tools required for routine service and maintenance on equipment furnished as specified herein. The special tools supplied for each specific piece of equipment or system component shall be packaged separately and labeled to clearly indicate with which item of equipment they are to be used. The Vendor shall provide written notification to the Owner with this Proposal of any special tools, instruments or other equipment necessary for the installation, checkout, calibration, startup, or operation of the system.
- H. All equipment and systems provided shall comply with or exceed all local, State, and Federal codes in effect at that time. All electrical work shall be in accordance with the latest edition of the National (USA) Electrical Code. All equipment shall be supplied and/or manufactured in the United States of America unless specifically approved by the Owner.
- I. It shall be the responsibility of the Vendor to perform all inspections, process performance tests, certifications, hydraulic and hydrostatic tests, fabrication quality control tests and analysis, controls system testing and any other work necessary in addition to that required by this Specification for the proper design, fabrication and operation of the equipment.
- J. The Vendor shall submit one (1) signed original proposal plus two (2) photocopies of all supporting documentation.
- K. Vendors must bid to the Base Specification detailed herein.

### **1.03 Owner Responsibilities**

- A. The Owner shall refer to the West Glocester Elementary School or their authorized representative.
- B. The Owner shall provide a clean, accessible, secure storage to receive the equipment.
- C. The Owner shall review each Shop Drawing submittal and return it to the Vendor within 5 days of receipt of said submittal from the Vendor.
- D. The Owner shall provide the necessary primary utility systems at the jobsite, including:
  - 1. Electrical Power: 120/208 VAC, 3 phase, 60 Hz.
  - 2. General Space Lighting and Heating.

#### **1.04 Vendor Submittals**

- A. Submittals With Proposal - The Vendor shall provide one (1) original signed Bid Proposal.
- B. Submittals Prior to Equipment Fabrication
1. Final procurement of the water and distribution system equipment shall not occur until final submittals and shop drawings are approved by the Owner. Any rework, re-stocking charges or other costs incurred as a result of procurement prior to Owner approval of submittals and Shop Drawings, shall be done at the expense of the Vendor.
  2. Shop Drawings and Submittals shall be provided for equipment and materials to be installed including: the submersible well pump, cables and controls; water storage tank, accessories and appurtenances; pressure bladder tanks, water distribution booster pumps, systems and controls, PLC control panel and all field-mounted instruments.
  3. The Owner shall review all shop drawings and other submittals, returning one (1) copy of each document to the Vendor designated either "Acceptable", "Rejected", or "Revise and Resubmit as Noted".
    - a. Documents which are "rejected" must be a modified, corrected or re-designed as required, with new documents submitted to the Owner for approval, prior to initiation of fabrication.
    - b. Documents which are noted "Revise and Resubmit as Noted" must be re-submitted for final review by the Owner after the noted corrections are made. Each shop drawing and other document submittal shall be limited to a maximum of one (1) re-submittal. Reviews of subsequent re-submittals in addition to that specified above shall be at the expense of the Vendor.
  4. All Shop Drawings/Submittals shall be submitted electronically (pdf format), for review, with capability for printing on standard "A" size (8.5" x 11") or "D" size 24" x 36" drawings, unless otherwise approved by the Owner.
  5. Shop Drawings and related documents shall be provided for the submersible well pump and motor; water storage tanks and accessories; distribution booster pumps, pump drives and control systems; electronic ball valve; instrumentation components; the PLC monitoring & control panel; gas-fired engine generator system; mechanical components including pipe, valves, fittings and specials, at a minimum.

- a. The shop drawings shall include the manufacturers' standard data sheets, exploded view mechanical diagrams, wiring diagrams, parts lists and standard informational literature.
- b. The monitoring & control panel drawings and documentation shall include a panel elevation drawing, wiring diagrams, ladder logic diagrams and termination list, at a minimum.

C. Submittals Prior to Shipment of Equipment

1. The Vendor shall submit three (3) copies of the installation procedures and operation and maintenance manual for the tank provided.
  - a. Detailed drawings and list of all tank components and fittings, model numbers, sizes and manufacturer.
  - b. Tank installation procedures, including positions of lifting lugs and methods of lifting and setting in place; anchoring; grounding; installation of accessories, access ladder and platform; hydrostatic testing; field installation of insulation; etc.
  - c. Equipment maintenance description, both preventive and corrective, with suggested daily, weekly, monthly, semiannual and annual inspections and procedures. This should include trouble shooting guide in tabular format listing malfunction symptoms, probable causes and remedies.
  - d. Spare parts list indicating recommended quantities.

D. Submittals Prior to Installation of Equipment

1. The Vendor shall submit one (1) copy of the manufacturers' installation instructions and Operations and Maintenance Manual for each item of equipment.

**1.05 Quality Assurance**

A. General

1. The Vendor shall perform all factory tests necessary to assure that materials and workmanship are in accordance with the specifications including all tests called for by applicable codes.

2. In the event of failure to meet the equipment or component performance specifications or test requirements, the Vendor shall change, replace, adjust or otherwise correct and retest the equipment to obtain the specified performance.

B. Welding

1. Qualification of welders and procedures shall be at Vendors expense.
2. All welding procedures and welder certificates shall be made available for inspection by the Owner.

C. Codes, Standards and Regulations

The design, fabrication, materials, workmanship, installation, erection and testing shall be in accordance with the edition in force at the time of contract award, of applicable portions of the following codes, standards, regulations and ordinances:

1. American Gear Manufacturers Association (AGMA) Publications - Latest Edition:
  - a. 211.02 Rating for the Durability of Helical and Herringbone Gears for Enclosed Drives.
  - b. 420.04 Practice for Enclosed Speed Reducers or Increasesers Using Spur, Helical, Herringbone and Spiral Bevel Gears.
2. American Iron and Steel Institute (AISI) Publications – Latest Edition:
  - a. Steel Products Manual for Stainless and Heat Resisting Steels.  
Type 304 Stainless Steel  
Type 316 Stainless Steel
3. American National Standards Institute (ANSI) Standards – Latest Edition:
  - a. A58.1 Minimum Design Loads for Buildings and Other Structures.
  - b. B31.1 Power Piping Code
  - c. B73.1 Horizontal End Suction Centrifugal Pumps for Chemical Process.
  - d. B16.5 Steel Pipe Flanges and Flanged Fittings.
4. American Society of Mechanical Engineers (ASME) Publications – Latest Edition:
  - a. Boiler and Pressure Vessel Code and Interpretations:  
Section VIII Pressure Vessels  
Section IX Welding and Brazing Qualifications

- b. PTC 8.2 Performance Test Code for Centrifugal Pumps
5. American Society for Testing and Materials (ASTM) Standards – Latest Edition:
- a. A36-81a Structural Steel
  - b. A167-81a Stainless and Heat-Resisting Chromium-Nickel Steel Plate, heat and Strip
  - c. A193-82 Alloy-Steel and Stainless-Steel Bolting Materials for High-Temperature Service
  - d. A194-82 Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service
  - e. A283 Low and Intermediate Tensile Strength Carbon Steel Plates of Structural Quality
  - f. A351-82 Austenitic Steel Castings for High-Temperature Service
  - g. D4097-82 Contact-Molded (with Glass-Reinforced Thermoset Appendixes) Resin Chemical-Resistant Tanks
  - h. D2563-70 (1977) Recommended Practice for Classifying Visual Defects in Glass Reinforced Plastic Parts
  - i. D3486-80 Recommended Practices for Installation of Vulcanizable Rubber Tank Linings
  - j. F593-82 Stainless Steel Bolts, Hex Cap Screws, and Studs
  - k. F594-82 Stainless Steel Nuts
6. American Welding Society (AWS) Standards – Latest Edition:
- a. B3.0-77 Welding Procedure and Performance Qualification
  - b. D1.1-82 Structural Welding Code
7. Hydraulic Institute (HI) Standards – Latest Edition:
- a. Standards for Centrifugal, Rotary & Reciprocating Pumps
8. Manufacturers Standardization Society of the Valve and Fitting Industry, Inc. (MSS) Publications – Latest Edition:
- a. SP58 Pipe Hangers and Supports - Materials, Design and Manufacture
  - b. SP69 Pipe Hangers and Supports - Selection and Application
9. Institute of Electrical and Electronics Engineers Publication – Latest Edition:
- a. IEEE81 Grounding

10. National Electrical Manufacturers Association (NEMA) Standards – Latest Edition:
  - a. ICS 1-6 Enclosures for Industrial Controls & Systems,
  - b. MG 1 Motors and Generators
  
11. National Fire Protection Association (NFPA) Publication – Latest Edition:
  - a. No. 70 National Electrical Code – Latest Edition
  
12. Steel Structures Painting Council (SSPC) Specifications – Latest Edition:
  - a. SSPC-Guide 6 Guide for Containing Debris Generated During Paint Removal Operations
  - b. SSPC-SP 15 Commercial Grade Power Tool Cleaning
  - c. SSPC-SP 13 Surface Preparation of Concrete
  - d. SSPC-SP 10 Near-White Metal Blast Cleaning
  - r. SSPC-SP 11 Power Tool Cleaning to Bare Metal
  - f. SSPC-SP 6 Commercial Blast Cleaning
  - g. SSPC-PA 2 measurement of Dry Film Thickness with Magnetic Gages
  - h. SSPC-VIS 1 Visual Standard for Abrasive Blast Cleaned Steel
  - l. SSPC-AB 1 Mineral and Slag Abrasives
  - j. SSPC-AB 2 Cleanliness of Recycled Ferrous Metallic Abrasive
  - k. SSPC-AB 3 Ferrous Metallic Abrasive
  - l. SSPC-QP 1 Standard Procedure for Evaluating Painting Contractors Field Application to Complex Industrial Structures
  - m. SSPC-Paint 36 Two-Component Weatherable Aliphatic Polyurethane Topcoat, Performance-Based
  - n. SSPC-Paint 42 Polyamide/Polyamidoamine Primer, Performance-Based
  
13. Electrical materials, design, fabrication and workmanship shall conform to the latest edition of the applicable codes and standards as listed below. In the event of a conflict, they shall take precedence in the listed order.
  - a. National Electrical Code (NEC).
  - b. Underwriters Laboratories (UL).
  - c. American National Standards Institute (ANSI).
  - d. National Fire Protection Association (NFPA).
  - e. National Electrical Manufacturers Association (NEMA).
  - f. Institute of Electrical and Electronic Engineers (IEEE).

- g. Insulated Power Cable Engineers Association (IPCEA).
14. American Water Works Association – Latest Edition
- a. AWWA C 652 Standard for Disinfection of Water Storage Facilities
  - b. AWWA D 100-11 Standard for Welded Steel Tanks for Water Storage
  - c. AWWA D 102-14 Standard for Coating Steel Water Storage Tanks
15. NSF International (NSF)
- a. ANSI/NSF Standard 61 Drinking Water System Health Effects

D. Materials

1. Materials shall conform to the specification requirements herein or, where unspecified, shall be materials that have demonstrated acceptability for the intended service and are approved in writing by the Owner.
2. All materials shall be in accordance with ASTM Specifications, where such exist, or with other nationally recognized institutional standards. Proprietary materials or others for which no generally recognized standard exists shall not be used without prior written concurrence from governing authorities, insuring organization, the Engineer, and the Owner.
3. All materials shall be new and of first quality. Defective fabrications shall not be repaired and used in the construction of the equipment. No peening, caulking, or filling shall be permitted in repairing cracks, pinholes, or blowholes. Defective welds in fabricated components shall be repaired by chipping out the defective weld and re-welding.
4. Materials containing asbestos, mercury, PCB's and chlorofluorocarbons shall not be used.
5. All non-metallic materials shall be submitted in accordance with Section 1.05 of this specification to the Owner for approval.

**1.06 Equipment Delivery, Acceptance and Storage**

- A. All equipment shall be delivered to the job site, FOB West Glocester Elementary School, 111 Reynolds Rd, Glocester RI 02814.

- B. Shipping containers shall be designed to accept all stresses and loads experienced during packing, lifting, transport, unloading and storage of the equipment.
- C. If temporary storage of the materials and equipment is necessary following delivery to the job-site, the Contractor shall provide a clean, secure, exterior storage container for all equipment and material covered by this specification. The storage container shall provide appropriate environmental conditions for the materials contained within, in accordance with the written requirements provided by the material manufacturer. Storage facilities and equipment provided by the Contractor shall be designed to contain spills or leaks of materials, such that there is no release to the Owners property. The Contractor shall retain responsibility for all materials and equipment stored on-site.
- D. The water storage tanks shall be shipped to the jobsite on an open, flat-bed truck, protected from weather conditions and damage. Upon delivery to the jobsite the tank shall be transferred directly from the truck to the prepared support foundation. Accessory component shipping containers shall be designed to accept all stresses and loads experienced during packing, lifting, transport, unloading and storage of the equipment.
- E. Upon delivery to the jobsite, each individual equipment component, package, container and system shall be inspected for conformance to specifications and packing lists and for evidence of damage. Upon successful completion of the inspection, the equipment will be approved for installation, by the Owner or their authorized representative.
- F. The Owner shall not accept financial responsibility for damage to the equipment or any individual component which occurs prior to delivery and acceptance at the jobsite.
- G. Following acceptance, the Owner shall be responsible for the care, storage and maintenance of all equipment and material covered by this specification. Storage and handling of all equipment shall be as approved by the manufacturer so as not to expose any equipment to damage.

#### **1.07 Worker Protection/Safety**

- A. The Contractor shall maintain the work area in a clean, orderly and safe condition.
- B. The Contractor shall provide and equip personnel with safety clothing and personal protective equipment as required to perform the work. This shall include, but not be limited to, shoes with steel toes and non-sparking soles; safety eye ware; gloves and other protective clothing; respiratory protection; explosion-proof lighting, ventilation fans, pumps, sprayers, flashlights, and other necessary equipment in all painting and

curing areas.

- C. The Contractor and all personnel in the work area shall be prohibited from smoking, or possessing matches, lighters or other spark/flame producing items.
- D. The Contractor shall maintain adequate ventilation during surface preparation, coating applications, and curing phases of the work to adequately remove dust and fumes to prevent injury to personnel or accumulation of volatile gases.
- E. The Contractor will provide and maintain safe, secure field rigging and scaffolding in accordance with 29 CFR 1926.450-454. The Contractor will carefully evaluate all rigging and existing attachments for the type and magnitude of loads that will be imposed on the structure, immediately prior to use. Rigging and scaffolding shall require certification by a Professional Engineer licensed to practice in the State of Rhode Island.
- F. The Contractor shall prepare a project-specific Confined Space Entry Procedure in accordance with CFR 1910.146, and comply with any state and/or local requirements that are more restrictive than Federal requirements. A written copy of the Confined Space Entry Procedure shall be maintained and be available at the project work site, at all times. The Contractor will provide confined space monitoring before and during entry of all personnel in accordance with OSHA requirements.
- G. The Contractor shall maintain an accurate, written record and file of all accidents, occupational illnesses, fatalities or OSHA citation, during the performance of the work.

**1.08 Use of Premises and Access to Site**

- A. The Contractor shall visit the site and evaluate the contract documents to determine the level of effort to complete the work safely, and in accordance with the specifications.
- B. The Contractor shall inspect and evaluate the site and access requirements and shall notify the Owner and Engineer in writing, prior to mobilization to the site, of any constraints that will limit access or adversely impact performance and completion of the work, and any special access requirements to allow the work to be performed and completed.
- C. The Contractor shall inspect and evaluate the horizontal and vertical spatial requirements to complete the work and to identify any staging or work area limitations due to the existing site conditions, or as established on the design drawings. The Contractor shall notify the Owner and Engineer of any spatial limitations or conflicts, in writing prior to mobilization, and as appropriate, shall anticipate any access or spatial limitations when preparing their bid.
- D. The Contractor shall confine equipment, materials and work operations to the limits

prescribed in the contract documents or as may be directed by the Owner and Engineer. The work by the Contractor shall not unreasonably encumber the premises.

- E. Existing Site Operations: Access to building/vehicle areas in close proximity to the work, and other areas of the campus during construction is of utmost importance and must be maintained. The Contractor shall maintain such access at all times during the course of completing the work. The Contractor shall maintain continuous service of the existing general site and facility utilities unless scheduled and approved in writing with the Owner. The Contractor shall present a schedule for obstruction to site access of any existing operations, prior to the start of work. The Contractor shall not create any obstruction without prior written approval of the Owner.

### **1.09 Warranty**

- A. The Vendor shall provide a written materials and workmanship warranty for all equipment, coatings and coating systems, insulation and insulation jackets, monitoring & control panel, instrumentation, controls programming and sub-components provided to the Owner. The Vendor shall warrant to repair or replace, at no cost to the Owner, any materials, equipment, sub-components, parts or programming found to be defective in materials or workmanship, under normal use and operating conditions, for a minimum period of one (1) calendar year following the date of the Owner's written acceptance of the equipment or component system.
- B. The Vendor shall also provide documentation of all pass-through warranties from sub-component vendors.

**PART II      PRODUCTS**

**2.01      Pressure Booster Pumps**

- A. Provide one (1), skid-mounted, duplex pump system including two (2) horizontal, centrifugal booster pumps, suction manifold with isolation valves, discharge manifold with isolation valves and check valves, pressure gages, steel channel base, and frame-mounted controls.
  
- B. Each pump shall be of close-coupled design. The pump casing shall be of Cast Iron ASTM A48/A48M-03 Class 30A material, fitted with ANSI Class 250# flanged suction and discharge connections conforming to ANSI Standard B16.1. The pump suction inlet shall be horizontal and the pump discharge outlet shall be vertical. The pump impeller shall be of Stainless Steel ASTM A351/A351M-08 material and 6-inch diameter. The pump shaft shall be of Carbon Steel material with Bronze ASTM B584-98A C92200 shaft sleeve. The pump mechanical seal shall be of Ceramic/EPT material with Copper & Brass C3600 seal flush line assembly. The pump shall be NSF-61 Certified. The pump system shall conform to the design and operating criteria presented in Table 2.01-1, below:

**Table 2.01-1  
 Pressure Booster Pump System Design and Operating Criteria**

Quantity:	Two (2)
Manufacturer:	Taco Comfort Solutions
Pump Model No.:	CI Series Model 1506D
Pump Type:	Horizontal
Casing Material:	Cast Iron
Impeller Material:	Stainless Steel
Impeller Size:	6" Ø
Shaft Material:	Carbon Steel
Mechanical Seal Material:	Ceramic/EPT
Seal Flush Line Assembly:	Copper & Brass C3600
Inlet:	2 ½" Ø Flange
Outlet:	1 ½" Ø Flange
Drive:	Constant Speed
Maximum Speed:	3500 RPM
Motor:	3 HP TEFC
Power:	208 VAC/3 Phase/60 Hz
Drive Enclosure	NEMA 1
Pump Capacity	160 gpm @ 135 ft. TDH

C. Pump Skid, Interconnecting Piping, and Controls:

1. The pump skid base shall be fabricated of 304 stainless steel channel structural elements, welded to provide a stable base mounting. The superstructure to support the drives and controls shall be fabricated of square tubular stainless steel structural elements.
2. The pump suction and discharge manifolds shall be fabricated of 2 ½" Ø pipe, provided an end feed with branch supply service to each pump. Each pump supply and discharge branch service shall be provided a ball type isolation valve. The pump discharge manifold shall have pressure gage with a ball-type isolation valve immediately downstream of the discharge connection at each pump, then immediately adapt to the discharge manifold pipe. Each pump discharge shall be provided a vertically mounted, 1 ½" Ø Flomatic 888S6VFD stainless steel wafer check valve. A ball-type isolation valve shall be located downstream of each check valve.
3. The pump suction manifold and pump discharge manifold shall each be provided with an expansion joint for absorption of thermal expansion and contraction stresses and vibration isolation.
4. The pump system shall be controlled by a local frame-mounted pump control panel with hand/off/auto switches and run status indication for each pump. The pump system shall be controlled on the basis of downstream system pressure, monitored by a pressure switch.

### **PART III    EXECUTION**

#### **3.01    Inspection**

- A.    The Vendor shall be responsible to perform sufficient pre-bid site visits and other tasks to prepare a complete and thorough bid proposal. The Vendor proposal shall be inclusive of all defined system components, accessories, appurtenances and mechanical/electrical installation components which are deemed necessary or reasonably required to render the installed system in a complete and fully operable condition.

#### **3.02    Delivery, Storage and Handling**

- A.    The pressure booster pump skid shall be shipped to the jobsite as a shop fabricated, floor-mounted unit. Face piping and accessories may be dismantled for final re-assembly at the job-site. All other components and items shall be shipped to the site for field installation.
- B.    Field installation shall require external piping fit-up, power, interconnections between equipment components and anchoring as necessary.
- C.    Spare parts, tools, and miscellaneous items shall be packed securely into shipping boxes with the contents clearly identified on the containers.
- D.    The Vendor and the equipment manufacturer shall be responsible for providing the proper packing and transport of all equipment to the job site. The equipment shall be delivered and off-loaded free of defects or damage, in shipping containers designed for interior, on-site storage until the time for equipment installation.
- E.    The Vendor shall notify the Owner, in a minimum of two (2) business days prior to the scheduled delivery, of the following:
1.    The delivery date.
  2.    Container or packaging measurements and weights.
  3.    Storage and handling requirements.
- F.    The Vendor and equipment manufacturer shall prepare, package and ship the equipment in accordance with the following criteria, at a minimum.
1.    All gasket surfaces, flange faces, and machined or ground-metal surfaces, except those designed for welding, shall be thoroughly cleaned and protected with suitable wood, metal or other covering to insure their full protection.

2. All exposed threaded parts shall be greased and protected with suitable metallic or other substantial type protectors.
3. All female threaded connections shall be cleaned and closed with pipe plugs or snap-in protection plugs.
4. Painted or primed surfaces shall be protected during moving and handling by special provisions including padding, blocking, and the use of canvas or nylon slings.
5. All tanks, vessels, equipment and panels shall be protected from mechanical damage.
6. Small diameter piping shall be protected from mechanical damage and shall not be over stressed.
7. Control valves, controllers and panels shall be covered with heavy-duty plastic weather covers.
8. The Vendor shall correct any damage to equipment or materials due to shipping or handling or any defective shop fabrication that is identified during installation or testing.

### **3.03 Mechanical Installation**

#### **A. Work Included**

1. This work includes the furnishing of all materials, labor and equipment for the installation and testing of all equipment, mechanical piping, fitting, valves, specialties, and related items under this contract.
2. Provide all necessary pipe supports, anchors, placement devices and supplementary steel for hanging, placement and support of all mechanical equipment, piping, valves, fittings and specialties.

#### **B. Mechanical Piping**

1. All process piping, unless otherwise noted, shall be Schedule 80 PVC, provided with either cemented or flanged connections.
2. Connections to valves, tanks or equipment shall be made with flanged or threaded connections, unless specifically approved by the Owner or specified

elsewhere herein.

3. The minimum pipe size for water system piping shall be 3/4". Vents shall be a minimum 1/2" or as noted on the Drawings.
4. Pipe Installation:
  - a. Horizontal pipes shall be supported at uniform spacing. Continuous supports using angles or channel members may be substituted in lieu of the individual supports.
  - b. Changes in pipe size shall be done with the appropriate size concentric reducing fitting.
  - c. No connection at any tank or equipment component, no valve, nor any other item of equipment shall support the weight of any pipe.
  - d. Pipelines shall be installed straight and true, parallel to structure lines with a minimum use of offsets and couplings. Provide only such offsets as may be required to provide necessary headroom or clearance and to provide necessary flexibility in pipe lines.
  - e. Changes in direction of pipelines shall be made only with fittings to pipe bends. Changes in size shall be made only with fittings.
  - f. Unless otherwise indicated, install all supply piping, including isolation valves, to equipment, tanks and control valves at line size, with reduction in size being made only at inlet to the control valve or equipment component.
  - g. All pipe shall be cut to each measurement and installed without springing or forcing. Particular care shall be taken to avoid creating, even temporarily, undue loads, forces or strains on valves, equipment or building elements with piping connections or piping supports.
  - h. Install all work so that all parts required are readily accessible for inspections, operation, maintenance and repair. Minor deviations from the drawings may be made to accomplish this, but changes of magnitude shall not be made without prior, written Owner approval.
  - i. Make easily accessible all equipment, sample locations, controls, valves, etc., and any and all other equipment and apparatus, as may be required to be reached for operation and maintenance.
  - j. All piping and connected equipment, including flow meters, filters, strainers, traps and other specialties and accessories shall be supported in a manner that will not result in or produce objectionable or excessive stress, deflection, swaying, sagging or vibration in the piping or in the building structure either during erection, cleaning, testing or normal operation of the systems. Piping shall not shake or buckle between supports or anchors or prevent proper movement due to expansion and contraction. Piping shall be supported at equipment and valves such that they can be disconnected and removed without further

- supporting the piping. Piping shall not introduce any strains or distortion to the connected equipment.
- k. Hangers and supports shall be installed complete, including lock nuts, clamps, rods, bolts, couplings, swivels, inserts and required accessory items. Hangers and supports for horizontal piping shall have adequate means of vertical adjustment for proper alignment of pipe and shall be provided with lock nuts.
5. Flexible Tank Connectors (expansion joints)
    - a. Piping connections to Water Storage Tank shall be isolated by the use of a flexible pipe connector (expansion joint).
    - b. The flexible connector shall have 150 lb. carbon steel flanges, with a single spool expansion bellow to allow axial, lateral and angular movement.
    - c. The flexible connectors shall be single spool expansion joints, with NSF 61 compliant elastomers, as manufactured by Flexicraft, or approved equal.
  6. Valves:
    - a. Valves shall be installed with the stems positioned in the horizontal or above the centerline of the pipe. All valves shall be accessible for operation, maintenance or removal.
    - b. All packing, gaskets, discs, seats, diaphragms, lubricants, etc., shall conform to recommendations of the valve manufacturer for the intended service.
  7. Floor Penetrations: Sleeves through masonry floors shall be schedule 40 black steel pipe, provided with a waterstop, extending 2" above finished floors.
  8. Restraint Couplings:
    - a. Flexible of pipe couplings shall be Dresser Style 62, or approved equal. Coupling rings shall be furnished without pipe stops and gaskets shall be of the plain type. Follower rings shall be designed to adequately confine the gaskets.
    - b. Flexible couplings on pressure lines shall be suitably harnessed in accordance with the recommendations of the manufacturer, or otherwise protected against a separation from thrust. All joints shall be arranged to prevent rotation of the pipe by a method approved by the Owner.
  9. Unions:
    - a. Unions shall be installed at all locations shown on the drawings and as required for the isolation of all traps, threaded valves, and connections to threaded equipment, unless shown otherwise on the drawings.
    - b. Unions in piping 2" and smaller shall be ground joint, screwed; 125 psig

working pressure.

- c. Connections in piping 2.5" and larger shall be flanged type with gaskets designed for the working pressure of the unions.

10. Flanged Joints:

- a. Flanged connections shall conform to the requirements of ANSI B16.
- b. Flanged joints shall be made with bolts, bolt studs with nut on each end, or studs with nuts where the flange is tapped. The number and size of bolts shall conform to the same ANSI Standard as the flanges.
- c. Bolting for services up to 500° F shall be ANSI/ASTM A307 Grade B with square head bolts and heavy hexagonal nuts conforming to ANSI B18.2.1 "Square and Hex Bolts" and B182.2 "Square and Hex Nuts". Bolt studs and studs shall be of the same quality as machine bolts.
- d. Gaskets for flat face flanges shall be full face type. Gaskets for raised face flanges shall conform to requirements for "Group I Gaskets" in ANSI B16.5. Gaskets 12" in diameter and smaller shall be 1/16 in. thick Teflon coated type by John Crane - Style 11FF, free flow with neoprene insert.

- C. Pipe, Specials and Valves Not Specifically Covered: Where indicated on the Drawings, elsewhere specified, or required by the work to be performed, pipe, specials, valves and accessories of materials, classifications, type, style, etc., not specifically covered by this section of the specifications, shall be furnished and installed by the Contractor. All such materials shall be installed in a first-class and workmanlike manner. The Contractor shall obtain prior review and approval of the Owner before ordering any such materials.

### **3.04 Electrical Installation**

A. Work Included

1. The electrical work includes providing 208/3Ph/60 Hz service to the pressure booster pumps and 120vac/1ph/60Hz power service for all other equipment, instrumentation and general utility service.
2. Provide all conduit; conduit fittings, junction boxes and fittings; conduit hangers, clamps and supports; splice boxes; wires and cables; wire connectors; ground connectors; identification nameplates; tags; and all other equipment and accessories necessary, implied or specified herein or indicated on the Drawings or schedules, including all necessary anchors, sleeves, hangers, and such other items as may be required for attaching or connecting this work to the work of others.

B. Electrical Installation Materials and Workmanship

1. All the materials shall be new and shall conform to the standard of the Underwriters' Laboratories, Inc. in every case where such a standard, listing or label has been established for the particular type of material in question.
2. The installation shall comply with all Federal, State and local codes, laws and regulations applying to electrical installations. Additionally, the electrical installation shall comply with all applicable requirements to the National Electrical Code and its latest revisions.
3. All conduits shall be heavy wall rigid, threaded polyvinyl chloride (PVC). Minimum size shall be 3/8". All conduits shall be threaded at both ends. Threadless fittings will not be acceptable.
4. Flexible PVC conduit shall be furnished and installed for final connections to equipment. Exposed liquid tight flexible conduit shall not exceed 18".
5. Supports shall be provided every 5 ft. for all conduits wherever possible, within 3 ft. of outlets, boxes or fittings. Points of support shall be determined in the field.
6. The complete conduit system shall be continuous PVC throughout its entire length and the entire system shall be electrically continuous and shall be thoroughly grounded in accordance with the requirements of the National Electrical Code and its latest revisions.
7. Provide junction boxes and conduit fittings wherever they shall be necessary to facilitate the pulling or splicing of wires and cables.
  - a. Junction boxes shall be standard PVC or fiberglass outlet boxes with screw covers and gaskets. Boxes shall be secured in position independently of conduits entering them. Junction boxes shall be installed so they are accessible.
  - b. Junction boxes shall be secured to conduit by means of stainless-steel locknuts (inside and outside) and PVC insulating bushings.
8. All wire and cable work shall be in strict accordance with the requirements of the National Electrical Code and its latest revisions, both with respect to material and workmanship.

### **3.05 Pressure Testing of Tanks and Piping Systems**

- A. As far as is practicable, all pressure tests shall be complete system tests conducted in the presence of the Owner. All pressure vessels, instruments, and equipment connected to the piping system shall be included in the tests. The piping system shall be hydrostatically tested after flushing has been completed. The water storage tank shall be hydrostatically tested in a 100% full condition. The installed piping and equipment shall be pressure tested to 100 psig.
- B. Preparation:
1. The Contractor shall furnish all equipment and labor necessary to perform the field tests called for in this specification.
  2. The Contractor shall give ample notice to the Owner that tests are to be conducted. The Owner shall witness all pipeline tests or otherwise shall give written authorization to the Contractor to perform unwitnessed pipe tests.
  3. No test shall be performed until all anchors, hangers, supports, test gauges, plugs, bulkheads, blanks, etc., are installed. Tests shall be made against bulkheads or where permitted by the Owner.
  4. Piping that connects to or is continuous with lines installed by others shall be isolated from such lines by valves or test blanks located at or near the junctions. When necessary to include parts of such lines in the test, the Owner shall be given prior notice so that test conditions may be mutually agreed upon. Special test conditions must be approved in writing prior to performing any such tests.
  5. When piping is required to be painted or insulated, the paint or insulation shall not be applied to the pipe joints until the tests are completed. Underground pipe joints shall be exposed while testing.
  6. Safety precautions shall be taken to prevent open ends of piping being in position to cause injury to personnel when blowing out or testing systems.
  7. One or more calibrated indicating test gauges shall be connected directly to the piping as necessary to coordinate the pressuring operation. The indicating gauges shall be visible to the operator controlling the pressure. Pressure gauges used shall have dials graduated over a range approximately 2 times the intended medium test pressure.
  8. The interior of all piping shall be free from loose mill scale, sand, dirt, slag, weld, spatter, rust, debris, solvent cement, burs, and other foreign matter, when erected.

9. After erection of piping, all those lines requiring hydrostatic testing shall be flushed with potable water. Terminal visual inspection in the presence and to the satisfaction of the Owner must be made after flushing procedure is completed. A minimum 1-minute flush duration from each use point under full flow shall be used to ensure adequate cleaning of valve seats. Inspect and replace valve seats where necessary to ensure nonclulsion of particulates. Flushing shall be considered complete when no sediment is visible in a sample of flush water standing for five minutes.

C. Pressure Testing

1. As far as is practicable, all pressure tests shall be complete system tests conducted in the presence of the Owner. All pressure vessels, instruments, and equipment connected to the piping system shall be included in the tests. The piping system shall be hydrostatically tested after flushing has been completed.
2. Every precaution shall be taken during testing to ensure the safety of the operator. Systems to be pressurized shall be provided with appropriate gauges and pressure relieving devices, furnished by the Contractor.
3. All joints are to remain uninsulated, unpainted, and exposed for examination during testing.
4. Equipment that is not to be subjected to the pressure test shall be either disconnected from the piping or isolated by blinds or other means during the test. Valves may be used provided that the valve is suitable for the proposed test procedure.
5. Pressure gauges shall not be subjected to pressure in excess of their scale range. All pieces of equipment that do not have their test pressure indicated or whose test pressures are below the piping system test pressure shall be excluded from these tests.
6. Pressure relief and thermal relief valves shall be excluded from these tests.
7. Before every test, the piping systems shall be visually inspected to assure that there are not visual defects and that all connections are tight.
8. Control valves, unless being tested, shall be set and maintained in the full-open position.
9. Lines containing check valves shall have the pressure applied upstream of the check valve so that pressure is applied under the seat.

10. All in-line instruments, gauge glasses, flow meter pots, liquid level float gauges, and all other pressure parts of instruments shall be included in these tests, where feasible.
11. Joints found to be defective shall be repaired and retested.
12. Retesting of lines after repairs shall be done at pressures originally specified for the test.

D. Hydrostatic Tests

1. The hydrostatic test pressure shall be calculated in accordance with the applicable section of ANSI B31.3, but shall not exceed the maximum test pressure of any vessels or components included in the test.
2. Temperature and head adjustments shall be made in accordance with ANSI B31.3, paragraphs 337.4.1 and 337.4.2.
3. All hydrostatically tested systems shall be tested in a one and one-half times the design pressure or to a minimum pressure of 100 psig, whichever is greater. All test pressures shall be maintained a minimum of ten minutes before visual examination of joints begins.
4. Hydrostatic test pressures shall not be applied until the piping system and the testing medium have reached thermal equilibrium.
5. During the tests, hydrostatic pressures shall be monitored and corrections shall be made to compensate for thermal expansion or contraction. By this procedure, the test pressure shall be kept within five (5) psig or 1%, whichever is greater, of its intended value. All joints shall be visually examined for leakage during the test.
6. No repairs or corrective action shall be done on any section of piping that contains water.

E. Test Reports: The Contractor shall make a record of the test on a "Test Report" form for each piping system tested, which shall consist of the following data:

1. Pipe Line Identification:
2. Date of test:
3. Type of test:
4. Test pressure applied:
5. Time duration of test pressure:
6. Pressure at end of test:

7. Tested by:
8. Comments:

### **3.06 Field Tests and System Operational Validation**

- A. The purpose of the system test program shall be to validate the system operation and performance. The Owner will perform checkout and operational tests and provide labor, equipment, and incidentals required for testing. Deficiencies found shall be rectified and work affected by such deficiencies shall be re-tested at the Vendor's expense. The Owner will maintain equipment in proper operational condition during field testing. All chemicals and utilities required for system operation shall be furnished by the Owner.
- B. Operational and performance test runs shall be made over the full design load range, or simulated for other conditions. Tests shall continue for specified periods of time to demonstrate that each sub-component, all system controls and the overall system operate as designed. During test runs all necessary adjustments shall be made, controls and motors checked for proper operation, motors checked for overload, and the entire system checked for abnormal conditions.
- C. Operational and performance testing to demonstrate control and operational performance shall be conducted under full load range and cycling conditions and continuous operation to show conformance with these specifications. Tests shall include the following:
  1. Hydraulic testing of each subsystem and support systems shall be made, using potable water, to demonstrate proper functioning. Air testing as a substitute for potable water testing is not acceptable.
  2. Proper operation of all control panel devices, monitoring and control instruments, chemical metering pumps, distribution pumps, level controls, panels, etc., including all alarms, shall be demonstrated.
- D. In the event of controls or equipment malfunction, defects shall be corrected and the test procedures repeated a sufficient number of times to satisfy the Owner that the repairs are permanent and correct, and that system reliability has been demonstrated. The Owner may request additional testing to demonstrate correct operation at no additional cost to the Owner.
- E. After test runs have been concluded and systems have been demonstrated to comply with these specifications and are ready for permanent operation, all permanent pipe line strainers and filters shall be cleaned, air filters cleaned or replaced, valve packing adjusted, belt tensions adjusted, drive guards secured in place, lubrication checked and replenished. Items including temporary piping, wiring, and instrument connections shall be removed and openings sealed in a permanent manner as directed. Electrical conduit requiring sealing shall be sealed.

- F. Written records shall be kept for each test showing date, system or equipment tested, test method and test results. Test records and certificates of final inspection or approval issued by authorities having jurisdiction shall be submitted to the Owner for each test within 10 working days after test completion.

**3.07 Final System Disinfection and Analytical Monitoring**

- A. Following the completion of the system pressure testing, the water supply wells, transmission piping, filters, pressure bladder tanks, water storage tank, booster pumps, interconnecting piping, fittings and accessories shall be flushed, disinfected and re-flushed.
- B. The disinfection treatment must be sufficient to ensure at least 99.9% inactivation of *Giardia lamblia* cysts and 99.99% inactivation of viruses.
1. The disinfection procedures shall conform to ANSI/AWWA C654, AWWA 652-19 Disinfection of Water Storage Facilities and AWWA 653-03 Disinfection of Water Treatment Plants. All chemicals used for disinfection shall conform to the requirements of ANSI/NSF Standard 60-1988.
  2. The chlorine solution used for disinfection of the well system, treatment system equipment, hydro-pneumatic tanks and associated piping shall be applied such that a chlorine concentration of at least 50 mg/l of available chlorine be available for the entire water depth of the wells and throughout the supply, storage and distribution system.
  3. The disinfection solution shall remain within the well, storage tank and associated piping system for a minimum of 8 hours.
  4. If water supply samples collected following the disinfection procedure demonstrate bacterial contamination, the disinfection procedure shall be repeated.
  5. Following the completion of the disinfection procedure, the system shall be flushed to remove the excess chlorine residual, flushing each point of use until the chlorine residual is 0.5 mg/l.
- C. Following the completion of the disinfection procedure, the system shall be flushed to remove the excess chlorine residual. A minimum of 2 sets of samples taken at least 24-hours apart, of the raw water supply (Sample Taps ST-1, ST-2), the storage tank discharge (Sample Taps ST-5, ST-6) and the primary distribution service point-of-entry (Sample Tap ST-7) shall be obtained and analyzed for Total Coliform and Heterotrophic Plate Count (HPC). The sampling and analytical protocols shall conform to the requirements of the RI Department of Health and Good Engineering

- Practice, in accordance with Appendix 1 of the State of Rhode Island Rules and Regulations Pertaining to Public Drinking Water. The results of the bacteriological testing shall be submitted to the Rhode Island Department of Health, on the correct and appropriate reporting forms, for review and approval, prior to the water supply system being placed into service. Individuals performing sampling shall have knowledge of the protocols for collection, storage and preservation of samples as outlined in the respective methods utilized to analyze potable water samples.
- D. The potable water storage tanks shall undergo monitoring for Volatile Organic Compounds (VOC's). Following the completion of the disinfection procedure, the tank shall be flushed to remove the excess chlorine residual. A minimum of 2 sets of samples taken at least 24-hours apart, of the water in the tank shall be obtained at Sample Taps ST-5 and ST-6, and analyzed for VOC's. The sampling and analytical protocols shall conform to the requirements of the RI DOH Rules and Regulations Drinking Water Standards. The results of the VOC monitoring shall be submitted to the RI DOH on the correct and appropriate reporting forms, for review and approval, prior to the water supply, storage and treatment system being placed into service. Individuals performing sampling shall have knowledge of the protocols for collection, storage and preservation of samples as outlined in the respective methods utilized to analyze potable water samples.

### **3.08 Final System Start-Up**

- A. Following the successful completion of the system cleaning, flushing, disinfection and pressure testing, the installed system shall be deemed ready for permanent operation.
- B. The final system start-up shall be in accordance with the O&M Manual prepared by the Engineer.