



City of Tacoma  
Environmental Services Department

# **SPECIFICATION NO. ES24-0213N**

## **SWM EXPANDED POLYSTYRENE DENSIFIER**

**Project No. ENV-02013-03**

**CITY OF TACOMA**  
**ENVIRONMENTAL SERVICES DEPARTMENT**

REQUEST FOR BIDS, SPECIAL PROVISIONS, BID PROPOSAL AND CONTRACT

FOR

**SPECIFICATION NO. ES24-0213N**  
**SWM EXPANDED POLYSTYRENE DENSIFIER**

PROJECT NO. ENV-02013-03



Daniel M. Drathman, P.E.  
Science & Engineering Division  
Environmental Services Department  
326 East D Street  
Tacoma, Washington 98421-1801

SPECIFICATION NO. ES24-0213N

**TABLE OF CONTENTS**

NOTE: ALL BIDDERS MUST HAVE A COPY OF THE SPECIFICATIONS AND THE BID SUBMITTAL PACKAGE

REQUEST FOR BIDS

SPECIAL REMINDER TO ALL BIDDERS

SPECIAL NOTICE TO BIDDERS

PART I BID PROPOSAL AND CONTRACT FORMS

- 1 Bid Proposal
- 2 Signature Page
- 3 Certification Of Compliance With Wage Payment Statutes
- 4 State Responsibility and Reciprocal Bid Preference Information
- 5 Contract
- 6 Payment Bond to the City of Tacoma
- 7 Performance Bond to the City of Tacoma
- 8 General Release Form

PART II CITY OF TACOMA GENERAL PROVISIONS

PART III SUPPLEMENTAL CONDITIONALS AS MODIFIED BY THE CITY OF TACOMA

PART IV GENERAL CONDITIONS FOR WASHINGTON STATE FACILITY CONSTRUCTION

PART V TECHNICAL SPECIFICATIONS

<b>SECTION</b>	<b>TITLE</b>
01_11_00	Summary of Work
01_14_00	Work Restriction
01_29_77	Applications for Payment
01_31_19	Project Meetings
01_31_24	Web Based Construction Documentation Management
01_32_16	Progress Schedules and Reports
01_32_34	Photographic Documentation
01_33_00	Submittal Procedures
01_35_21	Selective Alterations and Demolition
01_35_22	Safety Plan
01_41_50	Environmental and Sustainability Management System (ESMS)
01_45_00	Quality Control
01_50_00	Temporary Facilities and Controls
01_60_00	Product Requirements

01\_77\_00 Closeout Procedures  
01\_78\_23 Operation and Maintenance Data  
01\_81\_02 Seismic Design Criteria  
26\_05\_00 Common Work Results for Electrical  
26\_05\_03 Utility Coordination  
26\_05\_18 600-Volt or Less Wires and Cables  
26\_05\_33 Conduits

PART VI STATE PREVAILING WAGE RATES AND GENERAL REQUIREMENTS

PART VII INSURANCE REQUIREMENTS

PART VIII PLANS



**City of Tacoma  
Environmental Services / Science & Engineering**

**REQUEST FOR BIDS ES24-0213N  
SWM Expanded Polystyrene Densifier**

**Submittal Deadline: 11:00 a.m., Pacific Time, Wednesday, January 29, 2025**

Submittals must be received by the City’s Procurement and Payables Division by 11:00 a.m. Pacific Time.

For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email server, as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals. Include the specification number in the subject line of your email. Your submittal must be sent as an attachment, links to your electronic submittal will not be accepted.

For in person submittals, the City of Tacoma will designate the time of receipt recorded by the timestamp located at the lobby security desk, as the official time of receipt. Include the specification number on the outside of the sealed envelope. Late submittals will be returned unopened and rejected as non-responsive.

**Submittal Delivery:** Sealed submittals will be received as follows:

<p><b>By Email:</b>  <a href="mailto:sendbid@cityoftacoma.org">sendbid@cityoftacoma.org</a>  Maximum email size including attachments: 35 MB.  Multiple emails may be sent for each submittal.</p> <p><b>Note:</b> Email may pass through multiple servers before arriving at its destination. Please allow sufficient time for email delivery of submittals. Timely electronic delivery is at the risk of the supplier.</p>	<p><b>In Person:</b>  Tacoma Public Utilities Administration Building North,  Main Floor, Lobby Security Desk  3628 South 35<sup>th</sup> Street  Tacoma, WA 98409  Monday – Friday 8:00 am to 4:30 pm</p>
--	--

**Solicitation Documents:** An electronic copy of the complete solicitation documents may be viewed and obtained by accessing the City of Tacoma Purchasing website at [www.TacomaPurchasing.org](http://www.TacomaPurchasing.org).

- [Register for the Bid Holders List](#) to receive notices of addenda, questions and answers and related updates.
- Click here to see a [list of vendors registered for this solicitation](#).

**Pre-Proposal Meeting:** A pre-proposal meeting will be held at 10:00AM Wednesday January 22nd, 2025 in the Cascades conference room in the Administrative Building at the Tacoma Recovery and Transfer Center, 3510 S Mullen Street, Tacoma, WA 98409. A tour of the existing Expanded Polystyrene Densifier building will follow the meeting. Interested Bidders are encouraged to attend. High visibly vests are required.

**Project Scope:** The Work generally consists of removing and replacing the existing Expanded Polystyrene Densifier equipment at the Recycle Center located at the City of Tacoma Recovery and Transfer Center. This includes removing and disposing of existing equipment, control panels, conduit, and wire; procuring and installing the new EPS equipment and control panel; performing a Tacoma Power permitted electrical installation; equipment startup, commissioning, and Owner training.

**Estimate:** \$125,000.00

**Paid Sick Leave:** The City of Tacoma requires all employers to provide paid sick leave in accordance with State of Washington law.

**Americans with Disabilities Act (ADA Information):** The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. Specification materials can be made available in an alternate format by emailing the contact listed below in the Additional Information section.

**Title VI Information:** “The City of Tacoma” in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

**Additional Information:** Requests for information regarding the specifications may be obtained by contacting Anela Olson by email to [aolson1@cityoftacoma.org](mailto:aolson1@cityoftacoma.org) .

**Protest Policy:** City of Tacoma protest policy, located at [www.tacomapurchasing.org](http://www.tacomapurchasing.org), specifies procedures for protests submitted prior to and after submittal deadline.



**Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.**

## **SPECIAL REMINDER TO ALL BIDDERS**

**HEALTH & SAFETY:** Be sure to comply with all City of Tacoma health and safety requirements.

**PLEASE NOTE:** Be sure you have complied with all specifications and requirements and have signed all required documents.

**YOUR ATTENTION IS PARTICULARLY CALLED** to the following forms, which must be executed in full and submitted with your bid response:

1. **BID PROPOSAL:** The unit prices bid must be shown in the space provided. Check your computations for omissions and errors.
2. **SIGNATURE PAGE:** To be filled in and executed by a duly authorized officer or representative of the bidding entity. If the bidder is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.
3. **CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES:** Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2017).
4. **STATE RESPONSIBILITY AND RECIPROCAL BID PREFERENCE INFORMATION:** Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2010).

### **POST AWARD FORMS EXECUTED UPON AWARD:**

- A. **CONTRACT:** Must be executed by the successful bidder.
- B. **PAYMENT BOND TO THE CITY OF TACOMA:** Must be executed by the successful bidder and his/her surety company.
- C. **PERFORMANCE BOND TO THE CITY OF TACOMA:** Must be executed by the successful bidder and his/her surety company.
- D. **CERTIFICATE OF INSURANCE:** Shall be submitted with all required endorsements.
- E. **GENERAL RELEASE.**

**CODE OF ETHICS:** The successful bidder agrees that its violation of the City's Code of Ethics contained in TMC Chapter 1.46 shall constitute a breach of the contract subjecting the contract to termination.

**CITY OF TACOMA  
FINANCE/PURCHASING DIVISION  
SPECIAL NOTICE TO BIDDERS**

Public works and improvement projects for the City of Tacoma are subject to Washington state law and Tacoma Municipal Code, including, but not limited to the following:

**I. STATE OF WASHINGTON**

**A. RESPONSIBILITY CRITERIA – STATE OF WASHINGTON**

In order to be considered a responsible bidder the bidder must meet the following mandatory state responsibility criteria contained in RCW 39.04.350:

1. Have a current certificate of registration as a contractor in compliance with chapters 18.27 RCW, 18.106 RCW, 70.87 RCW, 19.28 RCW, which must have been in effect **at the time of bid submittal**;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. If applicable:
  - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
  - b. Have a Washington Employment Security Department number, as required in Title 50 RCW;
  - c. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW and;
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).
5. Have received training on the requirements related to public works and prevailing wage under this chapter and chapter 39.12 RCW and must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection.

**B. RECIPROCAL PREFERENCE FOR RESIDENT CONTRACTORS:**

Effective March 30, 2012, RCW 39.04.380 imposes a reciprocal preference for resident contractors. Any bid received from a non-resident contractor from a state that provides an in-state percentage bidding preference is subject application of a comparable percentage disadvantage.

A non-resident contractor from a state that provides an in-state percentage bidding preference means a contractor that:

1. Is from a state that provides a percentage bid preference to its resident contractors bidding on public works projects, and
2. Does not have a physical office located in Washington at the time of bidding on the City of Tacoma public works project.

The state of residence for a non-resident contractor is the state in which the contractor was incorporated, or if not a corporation, the state in which the contractor's business entity was formed.



The City of Tacoma will evaluate all non-resident contractors for an out of state bidder preference. If the state of the non-resident contractor provides an in state contractor preference, a comparable percentage disadvantage will be applied to the non-resident contractor's bid prior to contract award. The responsive and lowest and best responsible bidder after application of any non-resident disadvantage will be awarded the contract.

The reciprocal preference evaluation does not apply to public works procured pursuant to RCW 39.04.155, RCW 39.04.280, federally funded competitive solicitations where such agencies prohibit the application of bid preferences, or any other procurement exempt from competitive bidding.

Bidders must provide the City of Tacoma with their state of incorporation or the state in which the business entity was formed and include whether the bidder has a physical office located in Washington.

The bidder shall submit documentation demonstrating compliance with above criteria on the enclosed State Responsibility and Reciprocal Bidder Information form.

### **C. SUBCONTRACTOR RESPONSIBILITY**

1. The Contractor shall include the language of this subcontractor responsibility section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. The requirements of this section apply to all subcontractors regardless of tier.
2. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:
  - a. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
  - b. Have a current Washington Unified Business Identifier (UBI) number;
  - c. If applicable, have:
    - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
    - b. A Washington Employment Security Department number, as required in Title 50 RCW;
    - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
    - d. An electrical contractor license, if required by Chapter 19.28 RCW;
    - e. An elevator contractor license, if required by Chapter 70.87 RCW and;
3. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).

## **II. CITY OF TACOMA**

### **A. SUPPLEMENTAL RESPONSIBILITY CRITERIA – CITY OF TACOMA:**

In order to be considered a responsible bidder, the prospective bidder shall have all of the following qualifications set forth in Tacoma Municipal Code 1.06.262:

1. Adequate financial resources or the ability to secure such resources;
2. The necessary experience, stability, organization and technical qualifications to perform the proposed contract;
3. The ability to comply with the required performance schedule, taking into consideration all existing business commitments;
4. A satisfactory record of performance, integrity, judgment and skills; and
5. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.
  - a. Bidder Responsibility. Bidders shall not be in violation of 39.04.350 RCW Bidder Responsibility Criteria - Supplemental Criteria.

In addition to the mandatory bidder responsibility criteria listed immediately above, the City may, in addition to price, consider any or all of the following criteria contained in Tacoma Municipal Code Chapter 1.06.262 in determining bidder responsibility:

1. The ability, capacity, experience, stability, technical qualifications and skill of the respondent to perform the contract;
2. Whether the respondent can perform the contract within the time specified, without delay or interference;
3. Integrity, reputation, character, judgment, experience, and efficiency of the respondents, including past compliance with the City's Ethics Code;
4. Quality of performance of previous contracts;
5. Previous and existing compliance with laws and ordinances relating to contracts or services;
6. Sufficiency of the respondent's financial resources;
7. Quality, availability, and adaptability of the supplies, purchased services or public works to the particular use required;
8. Ability of the respondent to provide future maintenance and service on a timely basis;
9. Payment terms and prompt pay discounts;
10. The number and scope of conditions attached to the submittal;
11. Compliance with all applicable City requirements, including but not limited to the City's Ethics Code and its Equity in Contracting and Local Employment and Apprenticeship Training programs;
12. Other qualification criteria set forth in the specification or advertisement that the appropriate department or division head determines to be in the best interests of the City.

The City may require bidders to furnish information, sworn or certified to be true, to demonstrate compliance with the City responsibility criteria set forth above. If the city manager or director of utilities is not satisfied with the sufficiency of the information provided, or if the prospective respondent does not substantially meet all responsibility requirements, any submittal from such respondent must be disregarded.

## **B. ADDITIONAL SUPPLEMENTAL CRITERIA – NOT APPLICABLE**

## **C. MODIFICATIONS TO SUPPLEMENTAL CRITERIA**

Potential bidders may request modifications to the City's **supplemental criteria** by submitting a written request to the Purchasing Division via email to [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org) no later than 5:00 p.m. Pacific Time, three days prior to the submittal deadline. Please include the Specification No. and Title when submitting such requests. Requests must include justification for why certain criteria should be modified. Requests received after this date and time will not be considered.

The City will respond to a timely submitted request prior to the bid opening date. Changes to the supplemental criteria, if warranted, will be issued by addendum to the solicitation documents and posted to the City's website for the attention of all prospective bidders.

## **D. DETERMINATION OF BIDDER RESPONSIBILITY**

If the City determines the bidder does not meet the criteria above and is therefore not a responsible bidder, the City shall notify the bidder in writing with the reasons for its determination. If the bidder disagrees, the bidder may appeal the determination in a manner consistent with the City's Protest Policy. Appeals are coordinated by the Purchasing Division heard by the Procurement and Payables Division manager for contracts less than or equal to \$500,000 and by Contracts and Awards Board for contracts greater than \$500,000.

**PART I**

**BID PROPOSAL AND CONTRACT FORMS**

# **BID PROPOSAL**

SPECIFICATION NO. ES24-0213N

## SWM Expanded Polystyrene (EPS) Densifier

The undersigned hereby certifies that he/she has examined the location and construction details of work as outlined on the Plans and Specifications ES24-0213N and has read and thoroughly understands the Plans and Specifications and contract governing the work embraced in this improvement and the method by which payment will be made for said work, and hereby proposes to undertake and complete the work embraced in this improvement in accordance with said Plans, Specifications and contract and at the following schedule of rates and prices:

### **1 – General**

- A. Bids are requested for the purchase and installation of one (1) new and unused expanded polystyrene (EPS) foam densifier per the following specifications, to be used by City of Tacoma Solid Waste Management to densify EPS foam as part of their recycling operations.
- B. Bidders must provide detailed specifications and manufacturer's most current actual printed literature regarding the unit being offered.
- C. All equipment and components necessary for operation and listed as standard equipment shall be supplied unless replaced by specified optional equipment.
- D. The completed unit(s) shall meet all of the specifications outlined in the Proposal, Technical Provisions, and Drawings of this specification.
- E. The completed unit shall be delivered F.O.B. to Tacoma Solid Waste Management, 3510 South Mullen Street, Tacoma, WA 98409, complete and ready for immediate placement into service. Vendor shall contact Max Drathman at (253) 502-2276 for instructions prior to delivery. Deliveries will only be accepted Monday through Friday, 9:00 a.m. – 3:00 p.m. (excluding holidays).
- F. Electrical installation shall be performed by WA State licensed electricians and in accordance with the National Electric Code and Tacoma Power requirements.

**If additional space is required to fully explain bid exceptions, attach additional typed pages to the submitted bid and indicate the section number and sub-section that has the exception along with your explanation.**

**Notice: The " As Specified" and/or "Describe Bid Exceptions" question must be completed for each item. Failure to comply may result in disqualification of the bid.**

Bidder's Name: \_\_\_\_\_

Specification No. ES24-0213N

Page 1 of 6

## 2 – General

	Required Specifications	<input checked="" type="checkbox"/> As Specified	Describe Bid Exceptions
A	Densifier shall have a minimum compression ratio of 85 to 1.		
B	Densifier shall have a minimum rated capacity of 400 lbs/hr.		
C	Densifier shall be able to melt Polystyrene, Polyethylene, and Polypropylene materials.		
D	Specify overall height, width, and length of densifier with conveyor and confirm it will fit and be operational inside the existing building.		
E	The product shall be identified by manufacturer, model, series, and year		
F	Provide documentation certifying that normal operation of the machine does not create any harmful air emissions and does not violate any WISHA or OSHA requirements.		

## 3 – Electrical and Controls

The successful bidder must meet or exceed the following Technical Requirements:

	Required Specifications	<input checked="" type="checkbox"/> As Specified	Describe Bid Exceptions
A	Specify electrical requirements. Existing available circuit is 480V, 3 Phase, 75 Amp. Changes to this will be at Bidder's cost.		
B	Provide and install floor mounted Control Panel for EPS Densifier. Indicate Control Panel size. Bidder to enlarge existing equipment pad at their own expense if needed.		

Bidder's Name: \_\_\_\_\_

Specification No. ES24-0213N

C	Control panel shall have separate temperature indicators for all heating elements to show heating element temperature and target operating temperature.		
D	Control panel shall have alarm indicators to indicate high temperature conditions and overloaded conditions.		
E	Control panel and/or Densifier shall have an emergency stop switch.		
F	Indicate warm up time required for heating elements to reach target operating temperature.		
G	Control panel and densifier shall be UL listed.		

#### 4 – Parts & Service

To be eligible for bid award, vendor must meet or exceed the following Parts and Service Specifications:

	<b>Required Specifications</b>	<input checked="" type="checkbox"/> <b>As Specified</b>	<b>Describe Bid Exceptions</b>
A	Replacement parts shall be locally available or delivered within 72-hours when required.		
B	While under warranty, all shipping costs to provide this 72-hour delivery shall be paid for by the winning Bidder, barring extenuating circumstances as approved by the City		

Bidder's Name: \_\_\_\_\_

Specification No. ES24-0213N

C	Manufacturer shall have service technicians within 250-miles from 98409 zip code.		
D	Manufacturer or manufacturer's service provider shall perform all service for two (2) years after Substantial Completion Date. Equipment shall be serviced at least once per year.		

### 5 – Operation & Maintenance Manuals

The successful bidder shall supply Operation and Maintenance Manuals meeting or exceeding the following specifications:

	<b>Required Specifications</b>	<input checked="" type="checkbox"/> <b>As Specified</b>	<b>Describe Bid Exceptions</b>
A	Three (3) hardcopy sets of operation and maintenance manuals.		
B	One (1) electronic copy of the operation and maintenance manuals		
C	One (1) hardcopy and one (1) electronic set of wiring diagrams for each unit as-built shall be included with operator's manuals after installation.		

### 6 – Training

The successful bidder shall supply Operation and Maintenance Training meeting or exceeding the following specifications:

	<b>Required Specifications</b>	<input checked="" type="checkbox"/> <b>As Specified</b>	<b>Describe Bid Exceptions</b>
A	4 hours of on-site operator training for each unit purchased. Include a demonstration of all the equipment provided under actual working conditions (in the field)		

Bidder's Name: \_\_\_\_\_

Specification No. ES24-0213N



B	The training shall be conducted by an employee of the selling dealer who is fully qualified to conduct such training		
C	The bidder shall have a qualified service representative in attendance during the first full day of start-up operations to make any adjustments. This is in addition to any training required in these specifications.		

### 7 – Warranty

The successful bidder must meet or exceed the following Warranty Requirements:

	<b>Required Specifications</b>	<input checked="" type="checkbox"/> <b>As Specified</b>	<b>Describe Bid Exceptions</b>
A	Explain in detail and provide copies of all warranties applicable to this equipment with your proposal.		
B	The City requires a minimum two (2) year full warranty on all parts and labor (including travel time for any remotely dispatched technician)		

### 8 – Delivery and Installation

The successful bidder must meet or exceed the following Delivery and Installation Requirements:

	<b>Required Specifications</b>	<input checked="" type="checkbox"/> <b>As Specified</b>	<b>Describe Bid Exceptions</b>
A	Remove and dispose of existing EPS Densifier equipment, control panel, and associated conduit and wiring.		
B	Delivery, installation, and startup of completed unit(s) must be accomplished within 90 calendar days after receipt of purchase order or as otherwise agreed to by the City.		
C	Required at delivery: original Manufacturer’s Statement of Origin (MSO).		

Bidder’s Name: \_\_\_\_\_

Specification No. ES24-0213N

D	Required at delivery: an original invoice for the unit		
E	The entire unit shall have a complete pre-delivery service and inspection completed by the selling dealer. Courtesy delivery by another dealer is not allowed.		
F	The unit shall arrive at the prescribed delivery point having been completely pre-serviced; with all equipment completely assembled, installed, and operating as designed; and all required adjustments and corrections made to make the unit immediately ready for its designed and continuous operation. All prescribed precautions pertaining to first operations and break-in of the unit shall be posted conspicuously on the unit for ready observance by the operator.		
G	All electrical work shall be performed by a licensed WA State electrician and completed in accordance with the National Electric Code and Tacoma Power Requirements.		
H	The successful bidder shall prepare and submit the necessary documentation to obtain an electrical permit from Tacoma Power. The City of Tacoma Solid Waste Management Division will pay all permit fees, but the successful Bidder will act as the permit holder and perform all work and coordination necessary to obtain an approved Final Inspection.		

- 1. Total for Items 1-8 \$ \_\_\_\_\_
- 2. Sales Tax @ 10.3% \$ \_\_\_\_\_
- 3. **Total Cost (line 1 + line 2)** **\$ \_\_\_\_\_**

Bidder's Name: \_\_\_\_\_

Specification No. ES24-0213N

**SIGNATURE PAGE**

**CITY OF TACOMA  
ENVIRONMENTAL SERVICES / SCIENCE & ENGINEERING**

All submittals must be in ink or typewritten, executed by a duly authorized officer or representative of the bidding/proposing entity, and received and time stamped as directed in the **Request for Bids page near the beginning of the specification**. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

**REQUEST FOR BIDS SPECIFICATION NO. ES24-0213N  
SWM EXPANDED POLYSTYRENE DENSIFIER**

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all materials, labor, tools, equipment and all other facilities and services in accordance with these specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

**Non-Collusion Declaration**

*The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).*

\_\_\_\_\_  
Bidder/Proposer's Registered Name

\_\_\_\_\_  
Signature of Person Authorized to Enter      Date  
into Contracts for Bidder/Proposer

\_\_\_\_\_  
Address

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
(Area Code) Telephone Number / Fax Number

\_\_\_\_\_  
Authorized Signatory E-Mail Address

\_\_\_\_\_  
State Business License Number  
in WA, also known as UBI (Unified Business Identifier) Number

\_\_\_\_\_  
E.I.No. / Federal Social Security Number Used on Quarterly  
Federal Tax Return, U.S. Treasury Dept. Form 941

\_\_\_\_\_  
State Contractor's License Number  
(See Ch. 18.27, R.C.W.)

\_\_\_\_\_  
E-Mail Address for Communications

Addendum acknowledgement #1 \_\_\_\_\_ #2 \_\_\_\_\_ #3 \_\_\_\_\_ #4 \_\_\_\_\_ #5 \_\_\_\_\_

***THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.***



City of Tacoma

## Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date January 15, 2025, that the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

\_\_\_\_\_  
Bidder

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

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
City

\_\_\_\_\_  
State

*Check One:*

Individual

Partnership

Joint Venture

Corporation

State of Incorporation, or if not a corporation, the state where business entity was formed:

\_\_\_\_\_

If a co-partnership, give firm name under which business is transacted:

\_\_\_\_\_

*\* If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

Specification No. \_\_\_\_\_

Name of Bidder: \_\_\_\_\_

## State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor  
(Must be in effect at the time of bid submittal):

Number: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Current Washington Unified Business Identifier  
(UBI) Number:

Number: \_\_\_\_\_

Do you have industrial insurance (workers' compensation)  
Coverage nor your employees working in Washington?

Yes       No  
 Not Applicable

Washington Employment Security Department Number

Number: \_\_\_\_\_

Not Applicable

Washington Department of Revenue state excise tax  
Registration number:

Number: \_\_\_\_\_

Not Applicable

Have you been disqualified from bidding any public  
works contracts under RCW 39.06.010 or 39.12.065(3)?

Yes       No  
If yes, provide an explanation of your  
disqualification on a separate page.

Do you have a physical office located in the state of  
Washington?

Yes       No

If incorporated, in what state were you incorporated?

State: \_\_\_\_\_  Not Incorporated

If not incorporated, in what state was your business  
entity formed?

State: \_\_\_\_\_

Have you completed the training required by RCW  
39.04.350, or are you on the list of exempt businesses  
maintained by the Department of Labor and Industries?

Yes       No

## CONTRACT

Resolution No.  
Contract No.

This Contract is made and entered into effective as of [Month], [Day], [Year] (“Effective Date”) by and between the City of Tacoma, a Municipal Corporation of the State of Washington (“City”), and [supplier name as it appears in Ariba, including dbas or trade names] (“Contractor”).

That in consideration of the mutual promises and obligations hereinafter set forth the Parties hereto agree as follows:

- I. Contractor shall fully execute and diligently and completely perform all work and provide all services and deliverables described herein and in the items listed below each of which are fully incorporated herein and which collectively are referred to as “Contract Documents”:

---

  1. Specification No. [Spec Number] [ Spec Title] together with all authorized addenda.
  2. Contractor’s submittal [or specifically described portions thereof] dated [Enter Submittal Date] submitted in response to Specification No. [Spec Number] [Spec Title].
  3. Describe with specific detail and list separately any other documents that will make up the contract (fee schedule, work schedule, authorized personnel, etc.) or any other additional items mutually intended to be binding upon the parties.

---
- II. If federal funds will be used to fund, pay or reimburse all or a portion of the services provided under the Contract, the terms and conditions set forth at this Appendix A are incorporated into and made part of this Contract and CONTRACTOR will comply with all applicable provisions of Appendix A and with all applicable federal laws, regulations, executive orders, policies, procedures, and directives in the performance of this Contract.  
  
If CONTRACTOR’s receipt of federal funds under this Contract is as a sub-recipient, a fully completed Appendix B, “Sub-recipient Information and Requirements” is incorporated into and made part of this Contract.
- III. In the event of a conflict or inconsistency between the terms and conditions contained in this document entitled Contract and any terms and conditions contained the above referenced Contract Documents the following order of precedence applies with the first listed item being the most controlling and the last listed item the least controlling:
  1. Contract, inclusive of Appendices A and B.
  2. List remaining Contract Documents in applicable controlling order.
- IV. The Contract terminates on xxxxx, and may be renewed for xxxxxxxx
- V. The total price to be paid by City for Contractor’s full and complete performance hereunder, including during any authorized renewal terms, may not exceed:  
\$[Dollar Amount], plus any applicable taxes.
- VI. Contractor agrees to accept as full payment hereunder the amounts specified herein and in Contract Documents, and the City agrees to make payments at the times and in the manner and upon the terms and conditions specified. Except as may be otherwise provided herein or in Contract Documents Contractor shall provide and bear the expense of all equipment, work and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work and providing the services and deliverables required by this Contract.
- VII. The City’s preferred method of payment is by ePayables (Payment Plus), followed by credit card (aka procurement card), then Electronic Funds Transfer (EFT) by Automated Clearing House (ACH), then check or other cash equivalent. CONTRACTOR may be required to have the capability of accepting the City’s ePayables or credit card methods of payment. The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used. The City, in its sole discretion, will determine the method of payment for this Contract.

VIII. Failure by City to identify a deficiency in the insurance documentation provided by Contractor or failure of City to demand verification of coverage or compliance by Contractor with the insurance requirements contained in the Contract Documents shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

IX. Contractor and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the requirements contained herein and in Contract Documents.

It is further provided that no liability shall attach to City by reason of entering into this Contract, except as expressly provided herein.

IN WITNESS WHEREOF, the Parties hereto have accepted and executed this Contract, as of the Effective Date stated above, which shall be Effective Date for bonding purposes as applicable.

CITY OF TACOMA:  
Signature:

CONTRACTOR:  
Signature:

Name:

Name:

Title:

Title:

(City of Tacoma use only - blank lines are intentional)

Director of Finance: \_\_\_\_\_

Deputy/City Attorney (approved as to form): \_\_\_\_\_

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

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

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

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

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

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

**APPENDIX A  
FEDERAL FUNDING**

## 1. Termination for Breach

CITY may terminate this Contract in the event of any material breach of any of the terms and conditions of this Contract if CONTRACTOR's breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach.

## 2. Prevailing Wages

1. If federal, state, local, or any applicable law requires CONTRACTOR to pay prevailing wages in connection with this Contract, and CONTRACTOR is so notified by the CITY, then CONTRACTOR shall pay applicable prevailing wages and otherwise comply with the Washington State Prevailing Wage Act (RCW 39.12) in the performance of this Contract.
2. If applicable, a Schedule of Prevailing Wage Rates and/or the current prevailing wage determination made by the Secretary of Labor for the locality or localities where the Contract will be performed is made of part of the Contract by this reference. If prevailing wages apply to the Contract, CONTRACTOR and its subcontractors shall:
  - i. Be bound by and perform all transactions regarding the Contract relating to prevailing wages and the usual fringe benefits in compliance with the provisions of Chapter 39.12 RCW, as amended, the Washington State Prevailing Wage Act and/or the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable, including the federal requirement to pay wages not less than once a week.
  - ii. Ensure that no worker, laborer or mechanic employed in the performance of any part of the Contract shall be paid less than the prevailing rate of wage specified on that Schedule and/or specified in a wage determination made by the Secretary of Labor (unless specifically preempted by federal law, the higher of the Washington state prevailing wage or federal Davis-Bacon rate of wage must be paid.
  - iii. Immediately upon award of the Contract, contact the Department of Labor and Industries, Prevailing Wages section, Olympia, Washington and/or the federal Department of Labor, to obtain full information, forms and procedures relating to these matters. Per such procedures, a Statement of Intent to Pay Prevailing Wages and/or other or additional documentation required by applicable federal law, must be submitted by CONTRACTOR and its subcontractors to the CITY, in the manner requested by the CITY, prior to any payment by the CITY hereunder, and an Affidavit of Wages Paid and/or other or additional documentation required by federal law must be received or verified by the CITY prior to final Contract payment.

## 3. COPELAND ANTI-KICKBACK ACT

For Contracts subject to Davis Bacon Act the following clauses will be incorporated into the Contract:

- A. CONTRACTOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this Contract.
- B. CONTRACTOR or subcontractor shall insert in any subcontracts the clause above and such other clauses federal agencies may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.



The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these Contract clauses.

- C. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

#### **4. EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this Contract, CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. If the CONTRACTOR does over \$10,000 in business a year that is funded, paid or reimbursed with federal funds, CONTRACTOR will take specific and affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

- A. 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. 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.
- B. CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- C. 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.
- D. 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.
- E. 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.
- F. In the event of 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 federally funded 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.

- G. CONTRACTOR will include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (G) 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. 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 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.

## **5. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

- A. Overtime requirements. Neither CONTRACTOR or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (3)(A) of this section the CONTRACTOR and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such CONTRACTOR and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (3)(A) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (3)(A) of this section.
- C. Withholding for unpaid wages and liquidated damages. The CITY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the CONTRACTOR or subcontractor under any such contract or any other Federal

contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such CONTRACTOR or sub-contractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (3)(B) of this section.

- D. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (3)(A) through (D) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (3)(A) through (D) of this section.

## **6. CLEAN AIR ACT**

- A. CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- B. CONTRACTOR agrees to report each violation to the CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal funds.

## **7. FEDERAL WATER POLLUTION CONTROL ACT**

- A. CONTRACTOR agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- B. CONTRACTOR agrees to report each violation to the CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the appropriate federal agency.
- C. CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal funding.

## **8. DEBARMENT AND SUSPENSION**

- A. This Contract is a Covered Transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- B. CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier Covered Transaction it enters into.

- C. This certification is a material representation of fact relied upon by the CITY. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to CITY, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- D. CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C throughout the period of this Contract and to include a provision requiring such compliance in its lower tier covered transactions.

**9. BYRD ANTI-LOBBYING AMENDMENT**

- A. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification with CITY. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the CITY.
- B. If applicable, CONTRACTOR must sign and submit to the CITY the certification required by Appendix A to 44 CFR Part 18 contained at Appendix A-1 to this Contract.

**10. PROCUREMENT OF RECOVERED MATERIALS**

- A. In the performance of this Contract, CONTRACTOR shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
  - i. Competitively within a timeframe providing for compliance with the contract performance schedule;
  - ii. Meeting contract performance requirements; or
  - iii. At a reasonable price.
- B. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
- C. CONTRACTOR also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

**APPENDIX A-1**

**APPENDIX A to 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING  
Certification for Contracts, Grants, Loans, and Cooperative Agreements**

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap.38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

\_\_\_\_\_  
Signature of Contractor's Authorized Official

\_\_\_\_\_  
Name and Title of Contractor's Authorized Official

\_\_\_\_\_  
Date

**APPENDIX B—Sub-recipient information and requirements**

Pursuant to 2 CFR 200.332(a)(1) Federal Award Identification

(i) Agency Name (must match the name associated with its unique entity identifier)		(ii) Unique Entity Identifier <i>(i.e., DUNS)</i>	City of Tacoma Number for This Agreement
(iii) Federal Award Identification Number (FAIN)	(iv) Federal Award Date	(v) Federal Period of Performance Start and End Date	(vi) Federal Budget Period Start and End Date
(vii) Amount of Federal Funds <i>Obligated</i> to the agency <i>by this action</i> : \$	(viii) Total Amount of Federal Funds <i>Obligated</i> to the agency	(ix) Total Amount of the Federal Award <i>Committed</i> to the agency \$	
(x) Federal Award Project Description:  CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS– City of Tacoma			
(xi) Federal Awarding Agency:  DEPARTMENT OF THE TREASURY	Pass-Through Entity:  City of Tacoma	Awarding Official Name and Contact Information:	
(xii) Assistance Listing Number and Name (the pass-through entity must identify the dollar amount made available under each Federal award and the Assistance Listing number at time of disbursement)			(xiii) Identification of Whether the Award is R&D
(xiv) Indirect Cost Rate for the Federal Award	Award Payment Method (lump sum payment or reimbursement)  REIMBURSEMENT		



# PAYMENT BOND TO THE CITY OF TACOMA

Resolution No. [Enter Reso # Here]  
Bond No.

That we, the undersigned, [Supplier name] \_\_\_\_\_  
as principal, and \_\_\_\_\_  
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of,  
[\$dollar value], plus any applicable taxes \_\_\_\_\_, for the payment whereof Contractor and Surety bind themselves,  
their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. [Enter Spec # Here]

Specification Title: [Enter Spec Title Here]

Contract No. [Enter Contract # Here]

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28, including all workers, laborers, mechanics, subcontractors, and materialmen, and all person who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract shall in any way affect its obligation on this bond, and waives notice of any changes, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the City, and where required, the Contractor, in accordance with RCW 39.08.030.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.

If any claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the City as a result of such suit. Venue for any action arising out of or in connection with this bond shall be in Pierce County, WA.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.

Resolution No. [Enter Reso # Here]  
Specification No. [Enter Spec # Here]  
Contract No. [Enter Contract # Here]

One original bond shall be executed, and be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: [Supplier name]

\_\_\_\_\_

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

Surety:

\_\_\_\_\_

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

Agent's Name: \_\_\_\_\_

Agent's Address: \_\_\_\_\_





# PERFORMANCE BOND TO THE CITY OF TACOMA

Resolution No. [Enter Reso # Here]  
Bond No.

That we, the undersigned, [Supplier Name] \_\_\_\_\_  
as principal, and \_\_\_\_\_  
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of  
\$[dollar value], plus any applicable tax, for the payment whereof Contractor and Surety bind themselves,  
their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. [Enter Spec # Here] \_\_\_\_\_  
Specification Title: [Enter Spec Title Here] \_\_\_\_\_  
Contract No. [Enter Contract # Here] \_\_\_\_\_

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory performance bond shall become null and void, if and when the principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the Contract and fulfill all terms and conditions of all duly authorized modifications, additions and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increase.

If the City shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgement, shall pay all costs and attorney's fees incurred by the City in enforcement of its rights hereunder. Venue for any action arising out of in in connection with this bond shall be in Pierce County, Washington.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.

One original bond shall be executed, and signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: [Supplier name] \_\_\_\_\_  
\_\_\_\_\_

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

Surety: \_\_\_\_\_  
\_\_\_\_\_

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

Agent's Name: \_\_\_\_\_

Agent's Address: \_\_\_\_\_

## GENERAL RELEASE TO THE CITY OF TACOMA

The undersigned, named as the contractor for \_\_\_\_\_  
Project / Spec. #  
between \_\_\_\_\_ and the City of Tacoma,  
(Themselves or Itself)  
dated \_\_\_\_\_, 20\_\_\_\_, hereby releases the City of  
Tacoma, its departmental officers and agents from any and all claim or claims  
whatsoever in any manner whatsoever at any time whatsoever arising out of and/or in  
connection with and/or relating to said contract, excepting only the equity of the  
undersigned in the amount now retained by the City of Tacoma under said contract,  
to-wit the sum of \$\_\_\_\_\_.

Signed at Tacoma, Washington this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Contractor

By \_\_\_\_\_

Title \_\_\_\_\_

**P A R T   I I**

**CITY OF TACOMA GENERAL PROVISIONS**

# GENERAL PROVISIONS

(Revised October 8, 2024)

## SECTION I - BIDDING REQUIREMENTS

SECTION I REQUIREMENTS ARE BINDING ON ALL RESPONDENTS.

### 1.01 USE AND COMPLETION OF CITY PROPOSAL SHEETS

#### A. Respondent's Proposal

Each Respondent must bid exactly as specified on the Proposal sheets. All proposals must remain open for acceptance by the City for a period of at least 60 calendar days from the date of opening of the bids.

#### B. Alterations of Proposals Not Allowed

Proposals that are incomplete or conditioned in any way contain alternatives or items not called for in the General Provisions and Specifications, or not in conformity with law may be rejected as being nonresponsive. The City cannot legally accept any proposal containing a substantial deviation from these Specifications.

#### C. Filling Out City Proposal Sheets

All proposals must be completed using the proposal sheets and forms included with this specification, and the prices must be stated in figures either written in ink or typewritten. No proposal having erasures or interlineations will be accepted unless initialed by the Respondent in ink.

### 1.02 CLARIFICATION OF PROPOSAL FOR RESPONDENT

If a prospective Respondent has any questions concerning any part of the Proposal, he/she may submit a written request for answer of his/her questions. Any interpretation of the Proposal will be made by an Addendum duly issued and mailed or delivered to each prospective Respondent. Such addendum must be acknowledged in the proposal. The City of Tacoma will not be responsible for any other explanation or interpretation of the bid documents.

### 1.03 RESPONDENT'S BOND OR CERTIFIED CHECK

Each bid for construction must be accompanied either by a certified or cashier's check for 5 percent of the total amount bid, including tax, payable to the City Treasurer, or an approved bid bond, by a surety company authorized to do business in the State of Washington, for 5 percent of the total amount bid. The person legally authorized to sign the bid must sign all bid bonds. The approved bid bond form attached to these Specifications should be used: no substantial variations from the language thereof will be accepted.

If a bid bond is used, the 5 percent may be shown either in dollars and cents, or the bid bond may be filled in as follows, "5 percent of the total amount of the accompanying proposal."

The check of the successful Respondent will be returned after award of the Contract, acceptance of the Payment and Performance Bond and City's receipt of the signed Contract. The checks of all other Respondents will be returned immediately upon the award of the Contract. Bid bonds will not be returned.

### 1.04 DELIVERY OF PROPOSALS TO THE CITY'S PURCHASING OFFICE

- A. Proposal packages must be received by the City's Procurement and Payables Division in SAP Ariba (unless another form of delivery is stated), prior to the scheduled time and date stated in the Solicitation.
- B. Supplier is solely responsible for timely delivery of its Submittal.
- C. Submittals received after the time stated in the solicitation will not be accepted.
- D. For purposes of determining whether a Submittal has been timely received in SAP Ariba, the City's Procurement and Payables Division will rely on the submittal clock in SAP Ariba.

## **1.05 LICENSES/PERMITS**

- A.** Suppliers, if applicable, must have a Washington state business license at the time of Submittal and throughout the term of the Contract. Failure to include a Washington state business license may be grounds for rejection of the Submittal or cancellation of contract award. Information regarding Washington state business licenses may be obtained at <http://bls.dor.wa.gov>.
- B.** Upon award, it is the responsibility of the Supplier to register with the City of Tacoma's Tax and License Division, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, 253-591-5252, [https://www.cityoftacoma.org/government/city\\_departments/finance/tax\\_and\\_license/](https://www.cityoftacoma.org/government/city_departments/finance/tax_and_license/). Supplier shall obtain a business license as is required by Tacoma Municipal Code Subtitle 6C.20.
- C.** During the term of the Contract, Supplier, at its expense, shall obtain and keep in force any and all necessary licenses and permits.

## **1.06 CONTRACTOR'S STATE REGISTRATION NUMBER**

Contractors for construction or public works construction are required to be licensed by the state. If the provisions of Chapter 18.27 of the Revised Code of Washington apply to the Respondent, then the Respondent's Washington State Contractor's Registration No. must accompany the bid.

## **1.07 BID IS NONCOLLUSIVE**

The Respondent represents by the submission of the Proposal that the prices in this Bid are neither directly nor indirectly the result of any formal or informal agreement with another Respondent.

## **1.08 EVALUATION OF BID**

### **A. Price, Experience, Delivery Time and Responsibility**

In the evaluation of bids, the Respondent's experience, delivery time, quality of performance or product, conformance to the specifications and responsibility in performing other contracts (including satisfying all safety requirements) may be considered in addition to price. In addition, the bid evaluation factors set forth in City Code Section 1.06.262 may be considered by the City. Respondents who are inexperienced or who fail to properly perform other contracts may have their bids rejected for such cause.

### **B. Prequalified Electrical Contractor**

Certain types of electrical construction require special expertise, experience, and prequalification of the Contractor (or subcontractor) by the City. In such cases, the Respondent must be prequalified or the Respondent must subcontract with a City prequalified electrical contractor for the specialty work.

### **C. Insertions of Material Conflicting with Specifications**

Only material inserted by the Respondent to meet requirements of the Specifications will be considered. Any other material inserted by the Respondent will be disregarded as being nonresponsive and may be grounds for rejection of the Respondent's Proposal.

### **D. Correction of Ambiguities and Obvious Errors**

The City reserves the right to correct obvious errors in the Respondent's proposal. In this regard, if the unit price does not compute to the extended total price, the unit price shall govern.

## **1.09 WITHDRAWAL OF BID**

### **A. Prior to Bid Opening**

Any Respondent may withdraw his/her Proposal prior to the scheduled bid opening time by delivering a written notice to the City's Procurement and Payables Office. The notice may be submitted in person or by mail; however, it must be received by the City's Procurement and Payables Office prior to the time of bid opening.

### **B. After Bid Opening**

No Respondent will be permitted to withdraw his/her Proposal after the time of bid opening, as set forth in the Call for Bids, and before the actual award of the Contract, unless the award of Contract is delayed more than sixty (60) calendar days after the date set for bid opening. If a delay of more than 60 calendar days does occur, then the Respondent must submit written notice withdrawing his/her Proposal to the Purchasing Manager.

## **1.10 OPENING OF BIDS**

At the time and place set for the opening of bids, all Proposals, unless previously withdrawn, will be publicly opened and read aloud, irrespective of any irregularities or informalities in such Proposal.

## **1.11 CITY COUNCIL/PUBLIC UTILITY BOARD FINAL DETERMINATION**

The City Council or Public Utility Board of the City of Tacoma shall be the final judge as to which is the lowest and best bid in the interest of the City of Tacoma. The City reserves the right to reject any and all bids, waive minor deviations or informalities, and if necessary, call for new bids.

## **1.12 RESPONDENT'S REFUSAL TO ENTER INTO CONTRACT**

Any Respondent who refuses to enter into a Contract after it has been awarded to the Respondent will be in breach of the agreement to enter the Contract and the Respondent's certified or cashier's check or bid bond shall be forfeited.

## **1.13 TAXES**

### **A. Include In Proposal All Taxes**

Respondent shall include in his/her Proposal all applicable local, city, state, and federal taxes. It is the Respondent's obligation to state on his/her Proposal sheet the correct percentage and total applicable Washington State and local sales tax. The total cost to the City including all applicable taxes may be the basis for determining the low Respondent.

### **B. Federal Excise Tax**

The City of Tacoma is exempt from federal excise tax. Where applicable, the City shall furnish a Federal Excise Tax Exemption certificate.

### **C. City of Tacoma Business and Occupation Tax**

Sub-Title 6A of the City of Tacoma Municipal Code (TMC) provides that transactions with the City of Tacoma, may be subject to the City of Tacoma's Business and Occupation Tax. It is the responsibility of the Respondent awarded the Contract to register with the City of Tacoma's Department of Tax and License, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, telephone 253-591-5252. The City's Business and Occupation Tax amount shall not be shown separately but shall be included in the unit and/or lump sum prices bid.

## **1.14 FIRM PRICES/ESCALATION**

Except as specifically allowed by the Special Provisions, only firm prices will be accepted.

## **1.15 AWARD**

### **A. Construction and/or Labor Contracts**

Unless specifically noted in the Special Provisions or Proposal sheets, all construction and/or labor contracts will be awarded to only one Respondent.

### **B. Supply/Equipment Contracts**

The City reserves the right to award an equipment or supply contract for any or all items to one or more Respondents as the interests of the City will be best satisfied.

## **1.16 INCREASE OR DECREASE IN QUANTITIES**

The City of Tacoma reserves the right to increase or decrease the quantities of any items under this Contract and pay according to the unit prices quoted in the Proposal (with no adjustments for anticipated profit).

## **1.17 EXTENSION OF CONTRACT**

Contracts resulting from this specification shall be subject to extension by mutual agreement per the same prices, terms and conditions.

## 1.18 PAYMENT TERMS

- A. Prices will be considered as net 30 calendar days if no cash discount is shown. Payment discount periods of twenty (20) calendar days or more if offered in the submittal, will be considered in determining the apparent lowest responsible submittal. Discounts will be analyzed in context of their overall cumulative effect. Invoices will not be processed for payment nor will the period of cash discount commence until receipt of a properly completed invoice and until all invoiced items are received and satisfactory performance of the Contractor has been attained. If an adjustment in payment is necessary due to damage or dispute, the cash discount period shall commence on the date final approval for payment is authorized.
- B. ePayable/Credit Card Acceptance. Submittals offering ePayable/Credit card acceptance may be compared against submittals offering a prompt payment discount to evaluate the overall cumulative effect of the discount against the advantage to the City of the ePayable/Credit card acceptance, and may be considered in determining the apparent lowest responsible submittal.

## 1.19 PAYMENT METHOD – EPAYABLES – CREDIT CARD ACCEPTANCE – EFT/ACH ACCEPTANCE

- A. Payment methods include:
  - EPayables (Payment Plus). This is payment made via a virtual, single use VISA card number provided by the City's commercial card provider. Suppliers accepting this option will receive "due immediately" payment terms. Two options for acceptance are available to suppliers. Both are accompanied by an emailed advice containing complete payment details:
    - Straight-through processing (buyer initiated). Immediate, exact payments directly deposited to supplier accounts by the City's provider bank; the supplier does not need to know card account details.
    - Supplier retrieves card account through the secure, on-line portal provided via email notifications sent by the City's commercial card provider.
  - Credit card. Tacoma's VISA procurement card program is supported by standard bank credit suppliers and requires that merchants abide by the VISA merchant operating rules. It provides "due immediately" payment terms.
    - Suppliers must be PCI-DSS compliant (secure credit card data management) and federal FACTA (sensitive card data display) compliant.
    - Suppliers must be set up by their card processing equipment provider (merchant acquirer) as a minimum of a Level II merchant with the ability to pass along tax, shipping and merchant references information.
  - Electronic Funds Transfer (EFT) by Automated Clearing House (ACH). Standard terms are net 30 for this payment method.
  - Check or other cash equivalent. Standard terms are net 30 for this payment method.
- B. The City's preferred method of payment is by ePayables (Payment Plus) followed by credit card (aka procurement card). Suppliers may be required to have the capability of accepting the City's ePayables or credit card methods of payment. **The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used.**
- C. The City, in its sole discretion, will determine the method of payment for goods and/or services as part of the Contract.

## 1.20 COOPERATIVE PURCHASING

The Washington State Interlocal Cooperative Act RCW 39.34 provides that other governmental agencies may purchase goods and services on this solicitation or contract in accordance with the terms and prices indicated therein if all parties are agreeable.

## 1.21 PUBLIC DISCLOSURE: PROPRIETARY OR CONFIDENTIAL INFORMATION

- A. Respondent's Submittals, all documents and records comprising any Contract awarded to Respondent, and all other documents and records provided to the City by Respondent are deemed public records subject to disclosure under the Washington State Public Records Act, Chapter 42.56 RCW (Public Records Act). Thus, City may be required, upon request, to disclose the Contract and documents or records related to it unless an exemption under the Public Records Act or other laws applies. In the event CITY receives a request for such disclosure, determines in its legal judgment that no applicable exemption to disclosure applies; and Respondent has complied with the requirements to Respondent has complied with the requirements to mark records considered confidential or proprietary

as such requirements are stated below, City agrees to provide Respondent 10 days written notice of impending release. Should legal action thereafter be initiated by Respondent to enjoin or otherwise prevent such release, all expense of any such litigation shall be borne by Respondent, including any damages, attorneys' fees or costs awarded by reason of having opposed disclosure. City shall not be liable for any release where notice was provided and Respondent took no action to oppose the release of information.

**B.** If Respondent provides City with records or information that Respondent considers confidential or proprietary, Respondent must mark all applicable pages or sections of said record(s) as "Confidential" or "Proprietary." Further, in the case of records or information submitted in response to a Request for Proposals, an index must be provided indicating the affected pages or sections and locations of all such material identified Confidential or Proprietary. Information not included in the required index will not be reviewed for confidentiality or as proprietary before release. If Supplier fails to so mark or index Submittals and related records, then the City, upon request, may release said record(s) without the need to satisfy the requirements of subsection A above; and Respondent expressly waives its right to allege any kind of civil action or claim against the City pertaining to the release of said record(s). Submission of materials in response to City's Solicitation shall constitute assent by Respondent to the foregoing procedure and Respondent shall have no claim against the City on account of actions taken pursuant to such procedure.

## **1.22 FEDERAL AID PROJECTS**

The City of Tacoma in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR, part 26, will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

## **SECTION II - CONTRACT REQUIREMENTS**

### **2.01 CONTRACTOR'S RESPONSIBILITY**

#### **A. Contract Documents**

The Respondent to whom the Contract is awarded, hereinafter called the Contractor, shall enter into a Contract with the City of Tacoma, , within 10 days after receipt from the City of Tacoma of a properly prepared Contract. In addition, the Contractor will do all things required to promptly perform this Contract pursuant to the terms of this Contract. Certain contracts for supplies, goods or equipment may use the City Purchase Order in place of a formal contract document.

#### **B. Surety Bonds**

Except as modified by the Special Provisions, the Respondent to whom the Contract is awarded shall provide a payment and performance bond, including power of attorney, for 100 percent of the amount of his/her bid (including sales taxes), to insure complete performance of the Contract including the guarantee. The bonds must be executed by a surety company licensed to do business in the State of Washington. For a supply-type contract, a cashier's check or cash may be substituted for the bonds; however, this cash or cashier's check must remain with the City through the guarantee period and any interest on said amount shall accrue to the City.

#### **C. Independent Contractor**

Contractor is an independent contractor; no personnel furnished by the Contractor shall be deemed under any circumstances to be the agent or servant of the City. Contractor shall be fully responsible for all acts or omissions of Subcontractors and its and their suppliers and of persons employed by them, and shall be specifically responsible for sufficient and competent supervision and inspection to assure compliance in every respect with the Contract. There shall be no contractual relationship between any Subcontractors or supplier and the City arising out of or by virtue of this agreement. No provision of the Contract is intended or is to be construed to be for the benefit of any third party.



## **2.02 CONFLICTS IN SPECIFICATIONS**

Anything mentioned in the Specifications and not shown on the Drawings and anything on the Drawings and not mentioned in the Specifications shall be of like effect and shall be understood to be shown and/or mentioned in both. In case of differences between Drawings and Specifications, the Specifications shall govern. In addition, in the event of any conflict between these General Provisions, the Special Provisions, the Technical Provisions and/or the Proposal pages, the following order of precedence shall control:

1. Proposal pages prevail if they conflict with the General, Special or Technical Provisions.
2. Special Provisions prevail if they conflict with the General Provisions and/or Technical Provisions.
3. Technical Provisions prevail if they are in conflict with the General Provisions.

In case of discrepancy of figures between Drawings, Specifications or both, the matter shall immediately be submitted to the Engineer for determination. Failure to submit the discrepancy issue to the Engineer shall result in the Contractor's actions being at his/her own risk and expense. The Engineer shall furnish from time to time such detailed drawings and other information as he/she may consider necessary.

## **2.03 INSPECTION**

### **A. Of the Work**

All materials furnished and work done shall be subject to inspection.

The Inspector administering the Contract shall at all times have access to the work wherever it is in progress or being performed, and the Contractor shall provide proper facilities for such access and inspection. Such inspection shall not relieve the Contractor of the responsibility of performing the work correctly, utilizing the best labor and materials in strict accordance with the Specifications of this Contract. All material or work approved and later found to be defective shall be replaced without cost to the City of Tacoma.

### **B. Inspector's Authority**

The inspector shall have power to reject materials or workmanship which do not fulfill the requirements of these Specifications, but in case of dispute the Contractor may appeal to the Director or Superintendent, whose decision shall be final. The word "Director" means the Director of the City of Tacoma General Government department that is administering the contract. The word "Superintendent" means the Superintendent of the City of Tacoma, Department of Public Utilities Division that is administering the contract.

The Contract shall be carried out under the general control of the representative of the particular City Department or Division administering the Contract, who may exercise such control over the conduct of the work as may be necessary, in his or her opinion, to safeguard the interest of the City of Tacoma. The Contractor shall comply with all orders and instructions given by the representative of the particular Department or Division administering the Contract in accordance with the terms of the Contract.

Provided, that for the purposes of construction contracts, such control shall only apply (a) to the extent necessary to ensure compliance with the provisions of this contract, and (b) to the extent necessary to fulfill any nondelegable duty of the City for the benefit of third parties not engaged in promoting the activity of this contract.

Nothing herein contained, however, shall be taken to relieve the Contractor of his/her obligations or responsibilities under the Contract.

## **2.04 FEDERAL, STATE AND MUNICIPAL REGULATIONS**

All federal, state, municipal and/or local regulations shall be satisfied in the performance of all portions of this Contract. The Contractor shall be solely responsible for all violations of the law from any cause in connection with work performed under this Contract.

## **2.05 INDEMNIFICATION**

### **A. Indemnification**

Contractor acknowledges that pursuant to the terms of this agreement, Contractor is solely and totally responsible for the safety of all persons and property in the performance of this Contract. To the greatest extent allowed by law, Contractor assumes the risk of all damages, loss, cost, penalties and expense and agrees to indemnify, defend and hold harmless the City of Tacoma, from and against any and all liability which may accrue to or be sustained by the City of Tacoma on account of any claim, suit or legal action made or brought against the City of Tacoma for the death of or injury to persons (including Contractor's or subcontractor's employees) or damage to property involving Contractor, or subcontractor(s) and their employees or agents, arising out of and in connection with or incident to the performance of the Contract including if the City is found to have a nondelegable duty to see that work is performed with requisite care, except for injuries or damages caused by the sole negligence of the City. In this regard, Contractor recognizes that Contractor is waiving immunity under industrial Insurance Law, Title 51 RCW. This indemnification extends to the officials, officers and employees of the City and also includes attorney's fees and the cost of establishing the right to indemnification hereunder in favor of the City of Tacoma. In addition, within the context of competitive bidding laws, it is agreed that this indemnification has been mutually negotiated. Provided however, this provision is intended to be applicable to the parties to this agreement and it shall not be interpreted to allow a Contractor's employee to have a claim or cause of action against Contractor.

### **B. Limitation of Liability for Primarily Supply-Type Contracts**

In all contracts where the total cost of the supply of materials and/or equipment constitute at least 70 percent of the total contract price (as determined by the City), the City agrees that it will not hold the contractor, supplier or manufacturer liable for consequential damages for that part of the contract related to the manufacture and/or design of the equipment, materials or supplies.

## **2.06 CONTRACTOR'S INSURANCE**

**A.** During the course and performance of a Contract, Contractor will provide proof and maintain the insurance coverage in the amounts and in the manner specified in the City of Tacoma Insurance Requirements as is applicable to the services, products, and deliverables provided under the Contract. The City of Tacoma Insurance Requirements document, if issued, is fully incorporated into the Contract by reference.

**B.** Failure by City to identify a deficiency in the insurance documentation provided by Contractor or failure of City to demand verification of coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

## **2.07 ASSIGNMENT AND SUBLETTING OF CONTRACT**

### **C. Assignment**

The Contract shall not be assigned except with the consent of the Superintendent or his/her designee.

Requests for assignment of this contract must be in writing with the written consent of the surety, and the request must show the proposed person or organization to which the contract is assigned is capable, experienced and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his/her experience, financial ability and give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of assignment.

### **D. Subletting**

The Contract shall not be sublet except with the written consent of the Superintendent or his/her designee. In the event that a prequalified electrical contractor is necessary to perform certain portions of the work, such work may be subcontracted with a City prequalified electrical contractor for the type of work involved.

Requests for subletting of this Contract must be in writing with the written consent of the Surety, and the request must show the proposed person or organization to which the Contract is sublet is capable, experienced and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his experience, financial ability and give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of subletting.

The written consent approving the subletting of the Contract shall not be construed to relieve the Contractor of his/her responsibility for the fulfillment of the Contract. The Subcontractor shall be considered to be the agent of the Contractor and the Contractor agrees to be responsible for all the materials, work and indebtedness incurred by the agent.

A subcontractor shall not sublet any portion of a subcontract for work with the City without the written consent of the City.

## **2.08 DELAY**

### **E. Extension of Time**

With the written approval of the Superintendent or his/her designee, the Contractor may be granted additional time for completion of the work required under this Contract, if, in the Superintendent's opinion the additional time requested arises from unavoidable delay.

### **F. Unavoidable Delay**

Unavoidable delays in the prosecution of the work shall include only delays from causes beyond the control of the Contractor and which he/she could not have avoided by the exercise of due care, prudence, foresight and diligence. Delay caused by persons other than the Contractor, Subcontractors or their employees will be considered unavoidable delays insofar as they necessarily interfere with the Contractor's completion of the work, and such delays are not part of this Contract.

Unavoidable delay will not include delays caused by weather conditions, surveys, measurements, inspections and submitting plans to the Engineer of the particular Division involved in administering this Contract.

## **2.09 GUARANTEE**

### **A. Guarantee for Construction, Labor or Services Contract**

Neither the final certificate of payment or any provision in the Contract Documents, nor partial or entire occupancy of the premises by the City, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. The City will give notice of observed defects with reasonable promptness.

If it has been discovered, before payment is required under the terms of the Contract, that there is a failure to comply with any of the terms and provisions of this Contract, the City has the right and may withhold payment.

In case of a failure of any part of the work, materials, labor and equipment furnished by the Contract or to fully meet all of the requirements of the Contract, the Contractor shall make such changes as may be necessary to fully meet all of the specifications and requirements of this Contract. Such changes shall be made at the Contractor's sole cost and expense without delay and with the least practicable inconvenience to the City of Tacoma. Rejected material and equipment shall be removed from the City's property by and at the expense of the Contractor.

### **B. Guarantee for Supply Contracts**

Unless a longer period is specified, the supplier and/or manufacturer of the supplies, materials and/or equipment furnished pursuant to this Contract agrees to correct any defect or failure of the supplies, materials and/or equipment which occurs within one year from the date of: (1) test energization if electrical or mechanical equipment; (2) commencement of use if supplies or materials, provided, however, said guarantee period shall not extend beyond eighteen months after date of receipt by the City. All of the costs (including shipping, dismantling and reinstallation) of repairs and/or corrections of defective or failed equipment, supplies and/or material is the responsibility of the supplier and/or manufacturer.

When the supplier is not the manufacturer of the item of equipment, supplier agrees to be responsible for this guarantee and supplier is not relieved by a manufacturer's guarantee.

### **C. Guarantee Period Extension**

The Contract guarantee period shall be suspended from the time a significant defect is first documented by the City until the work or equipment is repaired or replaced by Contractor and accepted by the City. In addition, in the event less than ninety (90) days remain on the guarantee period (after recalculating), the guarantee period shall be extended to allow for at least ninety (90) days from the date the work or equipment is repaired or replaced and accepted by the City.

### **2.10 DEDUCTIONS FOR UNCORRECTED WORK**

If the City of Tacoma deems it expedient to correct work not done in accordance with the terms of this Contract, an equitable deduction from the Contract price shall be made.

### **2.11 CITY OF TACOMA'S RIGHT TO TERMINATE CONTRACT**

#### **A. Termination for Convenience**

1. **Supplies.** The City may terminate a Contract for supplies at any time upon prior written notice to Contractor. Upon the effective date of termination specified in such notice, and payment by the City, all conforming supplies, materials, or equipment previously furnished hereunder shall become its property.
2. **Services.** The City may terminate a Contract for services at any time, with or without cause, by giving 10-business day's written notice to Supplier. In the event of termination, all finished and unfinished work prepared by Supplier pursuant to the Contract shall be provided to the City. In the event City terminates the Contract due to the City's own reasons and without cause due to Supplier's actions or omissions, the City shall pay Supplier the amount due for actual work and services necessarily performed under the Contract up to the effective date of termination, not to exceed the total compensation set forth in the Contract.

#### **B. Termination for Cause**

1. The City may terminate a Contract for either services or supplies in the event of any material breach of any of the terms and conditions of the Contract if the Contractor's breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach
2. **Bankruptcy.** If the Contractor should be adjudged as bankrupt, or makes a general assignment for the benefit of creditors, or a receiver should be appointed on account of his/her insolvency, or if he/she or any of his/her subcontractors should violate any of the provisions of the Contract, or if the work is not being properly and diligently performed, the City of Tacoma may serve written notice upon the Contractor and Surety, executing the Payment and Performance Bond, of its intention to terminate the Contract; such notice will contain the reasons for termination of the Contract, and unless within 10 days after the serving of such notice, such violation shall cease and an arrangement satisfactory to the City of Tacoma for correction thereof shall be made, the Contract shall, upon the expiration of said 10 days, cease and terminate and all rights of the Contractor hereunder shall be forfeited. In the event the Contract is terminated for cause, Contractor shall not be entitled to any lost profits resulting therefrom.
3. **Notice.** In the event of any such termination for cause, the City of Tacoma shall immediately send (by regular mail or other method) written notice thereof to the Surety and the Contractor. Upon such termination the Surety shall have the right to take over and perform the Contract, provided however, the Surety must provide written notice to the City of its intent to complete the work within 15 calendar days of its receipt of the original written notice (from the City) of the intent to terminate. Upon termination and if the Surety does not perform the work, the City of Tacoma may take over the work and prosecute the same to completion by any method it may deem advisable, for the account of and at the expense of the Contractor, and the Contractor and the Surety shall be liable to the City of Tacoma for all cost occasioned to the City of Tacoma thereby. The City of Tacoma may without liability for doing so, take possession of and utilize in completing the work, such materials, equipment, plant and other property belonging to the Contractor as may be on the site of the work and necessary therefore.

**2.12 LIENS**

In the event that there are any liens on file against the City of Tacoma, the City of Tacoma shall be entitled to withhold final or progress payments to the extent deemed necessary by the City of Tacoma to properly protect the outstanding lien claimants until proper releases have been filed with the City Clerk.

**2.13 LEGAL DISPUTES**

**A. General**

Washington law shall govern the interpretation of the Contract. The state or federal courts located in Pierce County Washington shall be the sole venue of any mediation, arbitration, or litigation arising out of the Contract.

Respondents providing submittals from outside the legal jurisdiction of the United States of America will be subject to Tacoma’s City Attorney’s Office (CAO) opinion as to the viability of possible litigation pursuant to a contract resulting from this Specification. If it is the opinion of the CAO that any possible litigation would be beyond reasonable cost and/or enforcement, the submittal may be excluded from evaluation.

**B. Attorney Fees**

For contracts up to \$250,000, which become the subject of litigation or arbitration, the substantially prevailing party may be entitled to reasonable attorney fees, as provided in RCW 39.04.240. Provided, however, the attorney fee hourly rate for the City of Tacoma’s assistant city attorneys is agreed to be \$150 per hour or the same as the hourly rate for Contractor’s legal counsel, whichever is greater.

**2.14 DELIVERY**

Prices must be quoted F.O.B. destination, freight prepaid and allowed with risk of loss during transit remaining with Contractor/Supplier (unless otherwise stated in these Specifications) to the designated address set forth in these Specifications.

Deliveries shall be between 9:00 a.m. and 3:30 p.m.; Monday through Friday only (except legal holidays of the City of Tacoma).

Legal holidays of the City of Tacoma are:

New Year's Day	January 1
Martin Luther King's Birthday	3rd Monday in January
Washington's Birthday	3rd Monday in February
Memorial Day	Last Monday in May
Juneteenth	June 19
Independence Day	July 4
Labor Day	1st Monday in September
Veteran's Day	November 11
Thanksgiving Day	4th Thursday of November
Day after Thanksgiving	4th Friday of November
Christmas Day	December 25

When any of these holidays occur on Saturday or Sunday, the preceding Friday or the following Monday, respectively, is a legal holiday for the City of Tacoma.

**2.15 PACKING SLIPS AND INVOICES**

**A.** Packing slips and shipping notices shall be sent to the specific City Division or Department receiving the item(s) at the address stated in City’s Solicitation or as otherwise stated in the Contract and include complete description of items, contents of items if crated or cased, quantity, shipping point, carrier, bill of lading number and City of Tacoma purchase order.

**B.** Each invoice shall show City of Tacoma purchase order number, release number if applicable, quantity, unit of measure, item description, unit price and extended price for each line if applicable, services and deliverables provided if applicable. Line totals shall be summed to give a grand total to which sales tax shall be added, if applicable.

1. For transactions conducted in SAP Ariba, invoices shall be submitted through Ariba.
2. For invoices paid by ACH or by check, unless stated otherwise, invoices shall be electronically submitted by email with corresponding PO number listed in the subject line to [accountspayable@cityoftacoma.org](mailto:accountspayable@cityoftacoma.org).

3. For invoices paid by credit card, invoices shall also display the last name of the cardholder and last four digits (only) of the card number (e.g., Jones/6311). Unless stated otherwise, invoices shall be electronically submitted by email with corresponding PO number listed in the subject line to (do not combine different POs into one invoice or charge) to [pcardadmin@cityoftacoma.org](mailto:pcardadmin@cityoftacoma.org).

## **2.16 APPROVED EQUALS**

**A.** Unless an item is indicated as "No substitute", special brands, when named, are intended to describe the standard of quality, performance or use desired. Equal items will be considered by the City, provided that the respondent specifies the brand and model, and provides all descriptive literature, independent test results, product samples, local servicing and parts availability to enable the City to evaluate the proposed "equal".

**B.** The decision of the City as to what items are equal shall be final and conclusive. If the City elects to purchase a brand represented by the respondent to be an "equal", the City's acceptance of the item is conditioned on the City's inspection and testing after receipt. If, in the sole judgment of the City, the item is determined not to be an equal, the item shall be returned at the respondent's expense.

**C.** When a brand name or level of quality is not stated by the respondent, it is understood the offer is exactly as specified. If more than one brand name is specified, respondents must clearly indicate the brand and model/part number being bid.

## **2.17 ENTIRE AGREEMENT**

This written contract represents the entire Agreement between the parties and supersedes any prior oral statements, discussions or understandings between the parties.

## **2.18 CODE OF ETHICS**

The City's Code of Ethics, Chapter 1.46, Tacoma Municipal Code, provides ethical standards for City personnel and prohibits certain unethical conduct by others including respondents and contractors. Violation of the City's Code of Ethics will be grounds for termination of this contract.

## **2.19 FEDERAL FINANCIAL ASSISTANCE**

If federal funds, including FEMA financial assistance to the City of Tacoma, will be used to fund, pay or reimburse all or a portion of the Contract, Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives and the following clauses will be incorporated into the Contract:

**A. EQUAL EMPLOYMENT OPPORTUNITY** During the performance of this Contract, 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, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

1. 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.
2. 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 consideration 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 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.
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.

## **B. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (B)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (B)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

3. Withholding for unpaid wages and liquidated damages. The City shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (B)(2) of this section.
4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (B)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (B)(1) through (4) of this section.

**C. CLEAN AIR ACT**

1. Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

**D. FEDERAL WATER POLLUTION CONTROL ACT**

1. Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. Contractor agrees to report each violation to the City, understands, and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

**E. DEBARMENT AND SUSPENSION**

1. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
2. Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
3. This certification is a material representation of fact relied upon by the City. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (insert name of recipient/subrecipient/applicant), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
4. Contractor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.



**F. BYRD ANTI-LOBBYING AMENDMENT**

1. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification with City. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the City.
2. If applicable, Contractor must sign and submit to the City the following certification:

**APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING**

**Certification for Contracts, Grants, Loans, and Cooperative Agreements**

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap.38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

\_\_\_\_\_  
Signature of Contractor's Authorized Official

\_\_\_\_\_  
Name and Title of Contractor's Authorized Official

\_\_\_\_\_ Date

## **G. PROCUREMENT OF RECOVERED MATERIALS**

1. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
  - a. Competitively within a timeframe providing for compliance with the contract performance schedule;
  - b. Meeting contract performance requirements; or
  - c. At a reasonable price.
2. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
3. Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

[Section III is for contracts that involve construction and/or labor, and are not applicable to contracts solely for material/supply purchases.]

## **GENERAL PROVISIONS**

### **SECTION III - CONSTRUCTION AND/OR LABOR CONTRACTS**

SECTION III REQUIREMENTS APPLY ONLY TO CONSTRUCTION AND/OR LABOR CONTRACTS AND ARE IN ADDITION TO APPLICABLE REQUIREMENTS CONTAINED IN SECTION II CONTRACT REQUIREMENTS.

#### **3.01 RESPONDENT'S DUTY TO EXAMINE**

The Respondent agrees to be responsible for examining the site(s) and to have compared them with the Specifications and Contract Drawings, and to be satisfied as to the facilities and difficulties attending the execution of the proposed Contract (such as uncertainty of weather, floods, nature and condition of materials to be handled and all other conditions, obstacles and contingencies) before the delivery of his/her Proposal. No allowance will be subsequently made by the City on behalf of the Respondent by reason of any error or neglect on Respondent's part, for such uncertainties as aforesaid.

#### **3.02 PERMITS**

Except when modified by the Special Provisions, the Contractor shall procure and pay for all permits and licenses necessary for the completion of this Contract including those permits required by the City of Tacoma. The City will obtain county or state road crossing permits if required. In the event a necessary permit is not obtained, the Contractor will not be permitted to work on items subject to said permit and any delays caused thereby will not be subject to extra compensation or extensions.

#### **3.03 NOTIFICATION OF OTHER GOVERNMENTAL AGENCIES AND UTILITIES WHEN UNDERGROUND WORK IS INVOLVED**

The Contractor shall notify all other affected governmental agencies and utilities whenever underground work is done under the terms of this Contract. The Contractor is required to obtain permission of the appropriate public and private utilities and governmental agencies before performing underground work pursuant to the terms of this Contract. The Contractor is required to call "one call" at 1-800-424-5555 for all work involving excavation or digging more than 12 inches beneath ground or road surface.

The City may have indicated on the plans and specifications the existence of certain underground facilities that are known to the City department responsible for this Contract. It is the Contractor's responsibility to fully comply with the Underground Utility Locate Law, Chapter 19.122 RCW. If the site conditions are "changed or differing" as defined by RCW 19.122.040(l), the Contractor may pursue the party responsible for not properly marking or identifying the underground facility. The Contractor agrees not to file any claim or legal action against the City (department responsible for this Contract) for said "changed or differing" conditions unless said City department is solely responsible for the delay or damages that the Contractor may have incurred.

### **3.04 TRENCH EXCAVATION BID ITEM**

In the event that "trench excavation" in excess of four feet requires a safety system pursuant to Washington State law and safety shoring, sloping, sheeting, or bracing is used, a separate bid item should be set forth in the Proposal for this work. If a separate bid item is not set forth in the Proposal pages, said installed safety system shall be paid at \$3.00 per lineal foot of trench, which unit price includes both sides of the trench.

### **3.05 SAFETY**

#### **A. General**

The Contractor shall, at all times, exercise adequate precautions for the safety of all persons, including its employees and the employees of a Subcontractor, in the performance of this Contract and shall comply with all applicable provisions of federal, state, county and municipal safety laws and regulations. It is the Contractor's responsibility to furnish safety equipment or to contractually require Subcontractors to furnish adequate safety equipment relevant to their responsibilities.

The Contractor shall obtain the necessary line clearance from the inspector before performing any work in, above, below or across energized Light Division circuits.

The Inspector and/or Engineer may advise the Contractor and the Safety Officer of any safety violations. It is the Contractor's responsibility to make the necessary corrections. Failure to correct safety violations is a breach of this Contract and, as such, shall be grounds for an order from the Safety Officer, Inspector or Engineer to cease further work and remove from the job site until the condition is corrected. Time and wages lost due to such safety shutdowns shall not relieve the Contractor of any provisions of Section 3.14 of this Specification and shall be at the sole cost of the Contractor. The purpose of this authority to stop work is to enforce the contract and not to assume control except to the extent necessary to ensure compliance with the provisions of this contract.

Any of the above actions by employees of the City of Tacoma shall in no way relieve the Contractor of his/her responsibility to provide for the safety of all persons, including his/her employees.

#### **B. Work Hazard Analysis Report**

The Contractor will be required to complete a work hazard analysis report. This report shall outline how the Contractor proposes to satisfy all safety laws and regulations involved in performing the work. This report shall be completed and submitted to the City Safety Officer before the pre-construction conference. A copy of the report shall be maintained at the work site (accessible to the supervisor).

### **3.06 PROTECTION OF WORKERS AND PROPERTY**

The Contractor shall erect and maintain good and sufficient guards, barricades and signals at all unsafe places at or near the work and shall, in all cases, maintain safe passageways at all road crossings, and crosswalks, and shall do all other things necessary to prevent accident or loss of any kind.

The Contractor shall protect from damage all utilities, improvements, and all other property that is likely to become displaced or damaged by the execution of the work under this Contract.

The Contractor is responsible for all roads and property damaged by his/her operations as shall be determined by the Engineer administering this Contract. The Contractor shall be responsible for repairing all damage to roads caused by his/her operations to the satisfaction of the particular governmental body having jurisdiction over the road.

### **3.07 CONTRACTOR - SUPERVISION AND CHARACTER OF EMPLOYEES**

#### **A. Superintendent to Supervise Contractor's Employees**

The Contractor shall keep on his/her work, during its progress, a competent superintendent and any necessary assistants, all of whom must be satisfactory to the City of Tacoma. The Contractor's superintendent shall not be changed except with the consent of the City of Tacoma, unless the Contractor's superintendent proves to be unsatisfactory to the Contractor and ceases to be in his/her employ. The Contractor's superintendent shall represent the Contractor in his/her absence and all directions given to him/her shall be binding as if given to the Contractor directly. The Contractor shall give efficient supervision to the work, using his/her best skill and attention.

## **B. Character of Contractor's Employees**

The Contractor shall employ only competent, skillful, faithful and orderly persons to do the work, and whenever the Engineer administering the Contract shall notify the Contractor in writing that any person on the work is, in his or her opinion, incompetent, unfaithful, disorderly or otherwise unsatisfactory, the Contractor shall forthwith discharge such persons from the work and shall not again employ him or her on this Contract.

### **3.08 CONTRACTOR'S COMPLIANCE WITH THE LAW**

#### **A. Hours of Labor**

The Contractor and Subcontractors shall be bound by the provisions of RCW Chapter 49.28 (as amended) relating to hours of labor. Except as set forth in the Special Provisions, eight (8) hours in any calendar day shall constitute a day's work on a job performed under this Contract.

In the event that the work is not performed in accordance with this provision and in accordance with the laws of the State of Washington, then this Contract may be terminated by the City of Tacoma for the reason that the same is not performed in accordance with the public policy of the State of Washington as defined in said statutes.

#### **B. Prevailing Wages**

If federal, state, local, or any applicable law requires Supplier to pay prevailing wages in connection with a Contract, and Supplier is so notified by the City, then Supplier shall pay applicable prevailing wages.

If applicable, a Schedule of Prevailing Wage Rates and/or the current prevailing wage determination made by the Secretary of Labor for the locality or localities where the Contract will be performed is attached and made of part of the Contract by this reference. If prevailing wages do apply to the Contract, Supplier and its subcontractors shall:

1. Be bound by and perform all transactions regarding the Contract relating to prevailing wages and the usual fringe benefits in compliance with the provisions of Chapter 39.12 RCW, as amended, the Washington State Prevailing Wage Act and/or the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable, including the federal requirement to pay wages not less than once a week,
2. Ensure that no worker, laborer or mechanic employed in the performance of any part of the Contract shall be paid less than the prevailing rate of wage specified on that Schedule and/or specified in a wage determination made by the Secretary of Labor (unless specifically preempted by federal law, the higher of the Washington state prevailing wage or federal Davis-Bacon rate of wage must be paid)and Additionally, in compliance with applicable federal law, contractors are required to pay wages not less than once a week.
3. Immediately upon award of the Contract, contact the Department of Labor and Industries, Prevailing Wages section, Olympia, Washington and/or the federal Department of Labor, to obtain full information, forms and procedures relating to these matters. Per such procedures, a Statement of Intent to Pay Prevailing Wages and/or other or additional documentation required by applicable federal law, must be submitted by Contractor and its subcontractors to the City, in the manner requested by the City, prior to any payment by the City hereunder, and an Affidavit of Wages Paid and/or other or additional documentation required by federal law must be received or verified by the City prior to final Contract payment. In the event any dispute arises as to what are the prevailing rates of wages for work of a similar nature and such dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the State of Washington, Department of Labor and industries whose decision shall be final, conclusive and binding on all parties involved in the dispute.

### 3.09 COPELAND ANTI-KICKBACK ACT

For contracts subject to Davis Bacon Act the following clauses will be incorporated into the Contract:

**A. Contractor.** The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

**B. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

**C. Breach.** A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

### 3.10 CHANGES

#### A. In Plans or Quantities

The City of Tacoma, without invalidating this Contract, or any part of this Contract, may order extra work or make reasonable changes by altering, adding to or deducting from the materials, work and labor and the Contract sum will be adjusted accordingly. All such work and labor shall be executed under the conditions of the original Contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change. When work or bid items are deducted, reduced or eliminated, it is agreed that no payment will be made to Contractor for anticipated profit.

#### B. Extra Work

Any claim or order for extra materials, work and labor made necessary by alterations or additions to the plans or by other reasons for which no price is provided in this Contract, shall not be valid unless the Contractor and Engineer administering the Contract have agreed upon a price prior to commencing extra work, and the agreement has been signed by the Contractor and approved by the Superintendent or his/her designee, and approved by the payment and performance bond surety.

#### C. Extra Work - No Agreed Price

If it is impracticable to fix an increase in price definitely in advance, the order may fix a maximum price which shall not under any circumstances, be exceeded, and subject to such limitation, such alteration, modification, or extra shall be paid for at the actual necessary cost as determined by the City of Tacoma, which cost (including an allowance for profit) shall be determined as the sum of the following items (1) to (7) inclusive:

- (1) Labor, computed at regular wage scale, including premium on compensation insurance and charge for social security taxes, and other taxes, pertaining to labor; no charge for premium pay shall be allowed unless authorized by the Engineer administering the Contract;
- (2) The proportionate cost of premiums on comprehensive general liability and other insurance applicable to the extra work involved and required under this Contract;
- (3) Material, including sales taxes pertaining to materials;
- (4) Plant and equipment rental, to be agreed upon in writing before the work is begun; no charge for the cost of repairs to plant or equipment will be allowed;
- (5) Superintendence, general expense and profit computed at 20 percent of the total of paragraphs (1) to (4) inclusive;
- (6) The proportionate cost of premiums on bonds required by this Contract, computed by 1 1/2 percent of the total of paragraphs (1) to (5) inclusive.
- (7) The City of Tacoma reserves the right to furnish such materials as it may deem expedient, and no allowance will be made for profit thereon.

Whenever any extra work is in progress, for which the definite price has not been agreed on in advance, the Contractor shall each day, report to the Engineer the amount and cost of the labor and material used, and any other expense incurred in such extra work on the preceding day, and no claim for compensation for such extra work will be allowed unless such report shall have been made.

The above-described methods of determining the payment for work and materials shall not apply to the performance of any work or the furnishing of any material, which, in the judgment of the Engineer administering the Contract, may properly be classified under items for which prices are established in the Contract.

#### **D. Claims for Extra Work**

If the Contractor claims that any instructions by drawings or otherwise, involve extra cost under this Contract, he/she shall give the City of Tacoma written notice thereof within 30 days after receipt of such instruction, and in any event before proceeding to execute the work, except in an emergency endangering life or property, and the procedures governing the same shall be as provided for immediately above in this paragraph. The method in these paragraphs is the only method available to the Contractor for payment of claims for extra work performed under the terms of this Contract.

### **3.11 CLEANING UP**

The Contractor shall at all times, at his/her own expense, keep the premises free from accumulation of waste materials or debris caused by any workers or the work, at the completion of the work the Contractor shall remove all his waste materials from and about the site and all his/her equipment, sanitary facilities and surplus materials. In the case of dispute, the City of Tacoma may remove the debris and charge the cost to the Contractor as the City of Tacoma shall determine to be just. All material that is deposited or placed elsewhere than in places designated or approved by the Engineer administering the Contract will not be paid for and the Contractor may be required to remove such material and deposit or place it where directed.

### **3.12 PROGRESS PAYMENT**

Progress payments will be made up to the amount of ninety-five percent (95%) of the actual work completed as shall be determined by the Engineer administering the Contract.

The Contractor may request that an escrow account be established as permitted by law, in which event the Contractor will earn interest on the retained funds.

When the time for construction, services and/or installation will exceed thirty (30) days, the Contractor may request, by invoice, to be paid a progress payment based on percentage of work completed. The Engineer will review and approve the progress payment request on a monthly basis.

### **3.13 FINAL PAYMENT**

The final payment of five percent (5%) of the Contract price shall be approved on final acceptance of the work under this Contract by the Superintendent or his/her designee. In addition, before final payment is made, the Contractor shall be required to:

- A. Provide a certificate from the Washington State Department of Revenue that all taxes due from the Contractor have been paid or are collectible in accordance with the provisions of Chapter 60.28 and Title 82 of the Revised Code of Washington;
- B. Provide the General Release to the City of Tacoma on the form set forth in these Contract documents;
- C. Provide a release of any outstanding liens that have been otherwise filed against any monies held or retained by the City of Tacoma;
- D. File with the City Director of Finance, and with the Director of the Washington State Department of Labor and Industries, on the state form to be provided, an affidavit of wages paid;
- E. File with the City Director of Finance, on the state form to be provided, a statement from the State of Washington, Department of Labor and Industries, certifying that the prevailing wage requirements have been satisfied.
- F. File with the City Director of Finance, on the state form to be provided, a statement of release from the Public Works Contracts Division of the State of Washington, Department of Labor and Industries, verifying that all industrial insurance and medical aid premiums have been paid.

If there is a fee assessed to the City for any certificate, release or other form required by law, the contractor agrees that the fee amount may be passed on to the Contractor and deducted from the monies paid to the Contractor.

**3.14 FAILURE TO COMPLETE THE WORK ON TIME**

Should the completion of the work required under the Contract be delayed beyond the expiration of the period herein set for the completion of said work, or such extension of said period as may be allowed by reason of unavoidable delays, there shall be deducted from the total Contract price of work, for each calendar day by which such completion shall be delayed beyond said period of such extension thereof the sum of \$300 or a sum of money as set forth hereinafter in these Specifications, as the amount of such deduction per calendar day.

Said sum shall be considered not as a penalty, but as liquidated damages, which the City will suffer by reason of the failure of the Contractor to perform and complete the work within the period, herein fixed or such extensions of said period as may be allowed by reason of unavoidable delays.

Any money due or to become due the Contractor may be retained by the City to cover said liquidated damages, and should such money not be sufficient to cover such damages, the City shall have the right to recover the balance from the Contractor or his/her Sureties.

The filing of any bid for the work herein contemplated shall constitute acknowledgment by the Respondent that he/she understands, agrees and has ascertained that the City will actually suffer damages to the amount hereinabove fixed for each and every calendar day during which the completion of the work herein required shall be delayed beyond the expiration of the period herein fixed for such completion or such extension of said period as may be allowed by reason of unavoidable delays.

**3.15 CITY RESERVES RIGHT TO USE FACILITIES PRIOR TO ACCEPTANCE**

The City of Tacoma hereby reserves the right to use the facilities herein contracted prior to final acceptance under this Contract. The use of said facilities, as mentioned herein, shall not be construed as a waiver or relinquishment of any rights that the City of Tacoma has under this Contract.

**3.16 LIST OF SUBCONTRACTORS**

Bid proposals for construction, alteration or repair of any building or other public works that may exceed \$1,000,000 including tax shall satisfy the following requirement: Respondent shall submit as part of the bid, the names of the subcontractors, with whom the respondent, if awarded the contract, will subcontract performance of the work of heating, ventilation and air conditioning, plumbing as described in chapter 18.106 RCW, and electrical as described in chapter 19.28 RCW, or to name itself for the work. The respondent shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the respondent must indicate which subcontractor will be used for which alternate. Failure to comply with this provision or the naming of two or more subcontractors to perform the same work shall require the City (pursuant to state law RCW 39.30.060) to determine that respondent's bid is nonresponsive; therefore, the bid will be rejected.

**P A R T   I I I**  
**S U P P L E M E N T A L   C O N D I T I O N S   A S   M O D I F I E D   B Y**  
**T H E   C I T Y   O F   T A C O M A**



# Table of Contents

<b>PART 1</b>	<b>GENERAL PROVISIONS.....</b>	<b>3</b>
1.01	DEFINITIONS .....	3
1.02	ORDER OF PRECEDENCE.....	5
1.03	EXECUTION AND INTENT .....	5
1.04	SUBSTITUTIONS.....	7
1.05	REQUEST FOR INFORMATION.....	8
1.06	OBJECTIONS TO APPLICATION OF PRODUCTS .....	8
1.07	DISQUALIFICATION OF BIDDERS .....	9
1.08	AWARD OF CONTRACT .....	9
1.09	UTILITY COORDINATION .....	10
1.10	TRAFFIC CONTROL.....	10
<b>PART 2</b>	<b>INSURANCE AND BONDS .....</b>	<b>10</b>
2.01	CONTRACTOR'S LIABILITY INSURANCE .....	10
2.02	COVERAGE LIMITS .....	10
2.03	INSURANCE COVERAGE CERTIFICATES.....	11
2.04	PAYMENT AND PERFORMANCE BONDS .....	11
2.06	BUILDER'S RISK .....	11
2.07	BID DEPOSIT .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>PART 3</b>	<b>TIME AND SCHEDULE .....</b>	<b>11</b>
3.01	PROGRESS AND COMPLETION .....	11
3.02	CONSTRUCTION SCHEDULE .....	11
3.05	DELAY .....	11
3.07	DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION .....	13
3.08	SUSPENSION OF WORK.....	14
3.09	MAINTENANCE DURING SUSPENSION .....	15
3.10	EXECUTION OF CONTRACT - SCHEDULE .....	15
<b>PART 4</b>	<b>SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS .....</b>	<b>16</b>
4.01	DISCREPANCIES AND CONTRACT DOCUMENT REVIEW.....	16
4.03	SHOP DRAWINGS .....	16
4.05	OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS .....	16
<b>PART 5</b>	<b>PERFORMANCE .....</b>	<b>17</b>
5.01	CONTRACTOR CONTROL AND SUPERVISION .....	17
5.02	PERMITS, FEES AND NOTICES.....	17
5.04	PREVAILING WAGES .....	17

SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA

5.07	SAFETY PRECAUTIONS.....	18
5.10	UNFORESEEN PHYSICAL CONDITIONS.....	18
5.14	AVAILABILITY AND USE OF UTILITY SERVICES .....	19
5.15	TESTS AND INSPECTION .....	19
5.16	CORRECTION OF NONCONFORMING WORK.....	20
5.17	CLEAN UP .....	20
5.20	SUBCONTRACTORS AND SUPPLIERS .....	20
5.22	INDEMNIFICATION .....	21
<b>PART 6</b>	<b>PAYMENTS AND COMPLETION .....</b>	<b>21</b>
6.02	SCHEDULE OF VALUES.....	21
6.03	APPLICATION FOR PAYMENT .....	21
6.04	PROGRESS PAYMENTS .....	22
6.05	PAYMENTS WITHHELD .....	23
6.07	SUBSTANTIAL COMPLETION .....	23
6.09	FINAL COMPLETION, ACCEPTANCE, AND PAYMENT .....	24
<b>PART 7</b>	<b>CHANGES .....</b>	<b>25</b>
7.01	CHANGE IN THE WORK .....	25
7.02	CHANGE IN THE CONTRACT SUM.....	26
7.03	CHANGES IN THE CONTRACT TIME.....	29
7.04	DELETED OR TERMINATED WORK .....	30
<b>Part 8</b>	<b>CLAIMS AND DISPUTE RESOLUTION .....</b>	<b>30</b>
8.01	CLAIMS PROCEDURE .....	30
8.02	ARBITRATION .....	31
8.03	CLAIMS AUDIT .....	31
8.04	AUDIT .....	31
<b>PART 9</b>	<b>TERMINATION OF THE WORK .....</b>	<b>32</b>
9.01	TERMINATION BY OWNER FOR CAUSE.....	32
9.02	TERMINATION BY OWNER FOR CONVENIENCE .....	32
<b>PART 10</b>	<b>MISCELLANEOUS PROVISIONS .....</b>	<b>32</b>
10.11	PROTECTION OF THE ENVIRONMENT.....	32
10.12	ASBESTOS.....	33
10.13	LEAD-BASED PAINT .....	33
10.14	COVID-19 REQUIREMENTS .....	33

**PART 1 GENERAL PROVISIONS**

**1.01 DEFINITIONS**

*Replace Article F in Section 1.01 with the following:*

- F. "Contract Documents" means the Advertisement for Bids, Instructions for Bidders, completed Bid Form, General Conditions, Modifications to the General Conditions, Supplemental Conditions, Public Works Contract, other Special Forms, Drawings and Specifications, Payment Bond, Performance Bond, and all addenda and modifications thereof.

*Replace Article H in Section 1.01 with the following:*

- H. "Contract Time" is the number of calendar days or the dates stated in the Contract to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Owner for final payment.

*Replace Article O in Section 1.01 with the following:*

- O. "Notice" means a written or electronic notice which has been delivered to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail to the last business address known to the party giving notice

*Replace Article Q in Section 1.01 with the following:*

- Q. "Owner" means the City of Tacoma or its authorized representative with the authority to enter into, administer, and/or terminate the work in accordance with the Contract Documents and make related determinations and findings.

*Add the following articles to Section 1.01 of the General Provisions:*

- AC. "Abbreviations" refer to trade association names and titles of general standards that are frequently abbreviated. Where such acronyms or abbreviations are used in the specifications or other contract documents, they mean recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision. Refer to the "Encyclopedia of Associations" published by Gale Research Co., available in most libraries.
- AD. "Advertisement for Bids" is equivalent to and used interchangeably with the term Advertisement for Proposals.
- AE. "Allowance" is a predefined, not to exceed amount reserved for specific work packages. The Owner will define the scope of each work package, and Work shall not take place without Owner's prior approval. All Work is subject to the Owner's discretion, and Owner may delete all or portions of Allowance work without cost or penalty. The Work will be priced in accordance with the methods defined in Part 7 Changes.
- AF. "Alternate Bid" (or Alternate) is an amount stated in the Bid to be added or deducted from the amount of the Base Bid if the corresponding change in project scope or materials or methods of construction described in the Bidding Documents is accepted by the Contracting Agency.

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

- AG. "Base Bid" is the sum stated in the Bid Proposal Form for which the Bidder offers to perform the work described as the base, to which work may be added or deducted for sums stated in Alternate Bid and Unit Prices. The Base Bid does not include Force Account work and taxes.
- AH. "Calendar Day" is the 24-hour period from midnight to midnight.
- AI. "City" is the City of Tacoma.
- AJ. "Construction Manager" is the Owner's designated representative and is equivalent to, and used interchangeably with term "Project Representative".
- AK. "Contracting Agency" (or Owner) is the City of Tacoma.
- AL. "Contract Provisions" is the publication addressing the work required for an individual project. At the time of the call for proposals, the contract provisions may include, for a specific individual project, the general conditions, supplements to the general conditions, the special provisions, a listing of the applicable standard plans, the prevailing minimum hourly wage rates, contract forms, affirmative action requirements, and EIC.
- AM. "Engineer" is the City of Tacoma's registered design professional who will act as the City's authorized representative when so designated by the City.
- AN. "Furnish" is used to mean supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and other.
- AO. "Holiday(s)" means the following calendar days: January 1st, 3rd Monday of January, 3rd Monday of February, last Monday of May, June 19<sup>th</sup>, July 4th, 1st Monday of September, November 11th, 4th Thursday of November, Friday after 4th Thursday of November, December 25th. If a holiday is on a Saturday, the previous Friday will be observed as a holiday. If the holiday is on a Sunday, the following Monday will be observed as a holiday.
- AP. "Indicated" refers to graphic representations, notes or schedules on the drawings, or other paragraphs or schedules in the specifications, and similar requirements in the Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used, it is to help the reader locate the reference; no limit on location is intended.
- AQ. "Install" is used to describe operations at the project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- AR. "Installer" is the Contractor or an entity engaged by the Contractor, either as an employee, subcontractor, or Contractor of lower tier for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.
- AS. "Milestone" means a principal event specified in the Contract Documents relating to an intermediate completion date or time for a Phase prior to Substantial Completion of all Work. Milestones may be adjusted at the sole discretion of the Owner.
- AT. "Provide" means to purchase, manufacture, fabricate, deliver, furnish, install, complete, assemble, erect in place, test, render ready for use or operation, including necessary related material, labor, appurtenances, services, and incidentals

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

- AU. “Project Site” is the space available to the Contractor for performance of construction activities, either exclusively or in conjunction with others performing other work as part of the project. The extent of the project site is shown in the plans and may or may not be identical with the description of the land on which the project is to be built.
- AV. “Request for Information” is a request from the Contractor to the Owner seeking an interpretation or a clarification of some requirement of the Contract Documents.
- AW. “Unit Price” is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Contract Documents.

**1.02 ORDER OF PRECEDENCE**

*Replace the entire Section 1.02 with the following provisions:*

- A. Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order.
  - 1. Signed Public Works Contract, including any Change Orders, and any Special Forms.
  - 2. Addenda issued during the bidding period.
  - 3. General Provisions (PART II)
  - 4. Supplemental Conditions as modified by the City of Tacoma (PART III).
  - 5. General Conditions for Washington State Facility Construction (PART IV).
  - 6. Specifications – provisions in Division 1 shall take precedence over provisions of any other Division.
  - 7. Drawings – in case of conflict within the Drawings, large scale drawings shall take precedence over small scale drawings.
  - 8. Construction Documents Appendices.
  - 9. Signed and Completed Bid Proposal Form.
  - 10. Special Notice to Bidders.
  - 11. Advertisement for Bids.
  - 12. Supplemental Documentation.
  - 13. Reference Documents.
- B. In the event there exists a conflict, inconsistency, or ambiguity within the terms or conditions of one of the Contract Documents categories set forth above, the more stringent or more costly requirements shall be deemed to have been intended and to have been included in the Original Contract Price.

**1.03 EXECUTION AND INTENT**

*Replace Item 2 of Section 1.03 of the General Provisions with the following:*

- 2. Contractor familiar with project: Contractor has carefully reviewed the Contract Documents, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor,

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

materials, equipment, goods, supplies, work, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof. This includes, but is not limited to:

- a. Examine and carefully study of the Contract Documents, including any Addenda and the other related data identified in the Contract Documents.
- b. Become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- c. Become familiar with all federal, state, and local Laws and Regulations that may affect cost, progress, or performance of the Work.
- d. Carefully study of all reports of exploration and tests of subsurface conditions at or contiguous to the Site, all drawings of physical conditions in or relating to existing surface structures at or contiguous to the Site (except Underground Facilities), and all Reference Documents.
- e. Obtain and carefully study (or assume responsibility for doing so) examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site, including information known to Contractor doing business in the locality of the Site, which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents, and safety precautions and programs incident thereto.
- f. Agree that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the proposal price bid and within the times and in accordance with the other terms and conditions of the Contract Documents.
- g. Become 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 Contract Documents;
- h. Correlate the information known to proposer, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- i. Promptly give Owner written notice of all conflicts, errors, ambiguities, or discrepancies that proposer discovers in the Contract Documents and confirm that the written resolution thereof by Owner is acceptable to Contractor.
- j. Determine that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.

*Add the following new Item to Section 1.03 of the General Provisions:*

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

5. The intent of the Contract is to describe a complete project. Omissions from the Contract of details of work, which are necessary to carry out the Contract, shall not relieve the Contractor from providing a complete and functional project.

**1.04 SUBSTITUTIONS**

*Add the following new Section 1.04 to General Provisions:*

- A. Substitution Requests made after Award of Contract: Requests for approval of substitute materials or products will not be considered, except if one or more of the following conditions exists.
  1. Indicate one or more reasons why substitution is required with Substitution Request.
    - a. Unavailability: A substitution is required because the specified item is not available, due to factors beyond the control of the Contractor or subcontractor. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the work promptly or coordinate activities properly.
    - b. Unsuitability: Subsequent information or changes disclose inability of the specified item to perform as intended, and where the Contractor certifies that the proposed substitution will overcome such non-performance.
    - c. Regulatory Requirements: Final interpretations of Code, regulatory requirements, safety requirements, or insurance requirements necessitate a change to due inability of the specified item to conform, and the proposed substitution can be approved.
    - d. Warranty: Manufacturer or fabricator cannot certify or warrant performance of specified item as required, and where the Contractor certifies that the proposed substitution will provide the required warranty.
    - e. Owner's Benefit: Acceptance of the proposed substitution is clearly in the Owner's best interest because of cost, quality, or other consideration. In requesting a substitution under this clause, the Contractor shall furnish substantiation of any such reason.
  2. During the construction period, Contractor will be notified in writing of decision to accept or reject the Substitution Request by the Owner. Permission to make any substitution after award of Contract shall be effected by a Change Order.
  3. The Contractor shall accompany any request for substitution with such drawings, specifications, samples, manufacturer's literature, performance data, and other information necessary to describe and evaluate the proposed substitution completely as defined in Section 01\_60\_00 of the Technical Specifications. The burden of proof shall be on the Contractor.
  4. Redesign and Coordination: In making request for approval of substitute materials, the Contractor must represent that it has investigated the proposed product and, in its opinion, it is equal or equivalent in all respects to that specified. Also, Contractor will coordinate all trades including changes thereto as may be required, that it waives all claims for additional costs which subsequently become apparent as a consequence of the substitution and that it will bear all costs related hereto, including costs of Owner's Representative's services for extensive investigation and for redesign if deemed necessary.

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

5. Substitutions will not be considered if they are indicated or implied on Shop Drawings or other project data submittals, without proper notice shown on attached form.
6. Where the phrase "or equal" or "equal as approved by the Engineer" occurs in the Contract Documents, do not assume that the materials, equipment, or methods will be approved as equal unless the item has been specifically so approved for this work by the Owner. This applies to all items and materials on this project. The decision of the Owner shall be final and binding.

**1.05 REQUEST FOR INFORMATION**

*Add the following new Section 1.05 to General Provisions:*

- A. If the Contractor determines that some portion of the drawings, specifications or other Contract Documents require clarification or interpretation by the Owner because of an apparent error, inconsistency, omission, or lack of clarity in the Contract, the Contractor shall promptly submit a Request For Information (RFI) and, unless otherwise directed, shall not proceed with the affected Work until the Owner has responded to the RFI. The Contractor shall plan its work in an efficient manner so as to allow for timely responses to RFIs.
- B. RFIs shall only be submitted by the Contractor utilizing e-Builder as described in Specification Section 01\_31\_24. The Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed by the Owner. In the RFI the Contractor shall set forth its own interpretation or understanding of the requirement along with reasons why it reached such an understanding and any adjustments recommended to proceed with the Work.
- C. The Owner will review RFIs to determine whether they meet the requirements identified above in paragraph B to qualify as an RFI. If the Owner determines that the document is not an RFI it will be returned to the Contractor unreviewed as to content. When appropriate the Contractor may resubmit the RFI, with all required information and in the proper manner.
- D. The Owner shall respond in writing within fourteen (14) calendar days to Contractor's RFI.
  1. At the request of the Owner, the Contractor shall prioritize its RFIs, identify a date by which the Contractor prefers the RFI be answered, and reasons for such priority.
  2. If the Contractor submits a RFI on an activity less than twenty-one (21) days prior to the commencement of that activity, the Contractor shall not be entitled to any time extension or adjustment in Contract Price due to the time it takes the Owner to respond to the RFI provided that the Owner responds within fourteen (14) days. No delay to the Contractor's work or damages to the Contractor shall be attributable to the failure by the Owner to respond to the RFI until fourteen (14) days after the Owner's receipt of the RFI, and then only if the failure by the Owner to respond is unreasonable and affects the Contract completion date.
- E. The Owner's response to a RFI shall not be considered a change to the Contract requirements. To the extent the Contractor believes that the Owner's response to the RFI constitutes changed work impacting Contract Price or Contract Time, the Contractor shall submit a Contractor's Change Order Proposal.

**1.06 OBJECTIONS TO APPLICATION OF PRODUCTS**

*Add the following new Section 1.06 to the General Provisions:*



**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

- A. Bidders are required to thoroughly familiarize themselves with specified products and installation procedures and submit to the Owner any objections (in writing) no later than 10 days prior to the Bid Submittal Date. Submittal of Bid constitutes acceptance of products and procedures specified.

**1.07 DISQUALIFICATION OF BIDDERS**

*Add the following new Section 1.07 to the General Provisions:*

- A. A Bidder may be deemed non-responsive and the bid proposal rejected by the Owner for any of the following reasons:
1. More than one bid proposal is submitted for the same project from a Bidder under the same or different name;
  2. Evidence of collusion exists with any other Bidder. Participants in collusion will be restricted from submitting further bids;
  3. A Bidder is not qualified for the work or to the full extent of the bid requirements;
  4. An unsatisfactory performance record exists based on past or current work;
  5. There is uncompleted work which might hinder or prevent the prompt completion of the proposed work;
  6. The Bidder failed to settle bills for labor or materials on past or current contracts;
  7. The Bidder has failed to complete a written public contract or has been convicted of a crime arising from a previous public contract;
  8. The Bidder is unable, financially or otherwise, to perform the work;
  9. A Bidder is not authorized to do business in the state of Washington;
  10. Failure by the Bidder to properly review the project documents and/or site;
  11. Submittals are not provided in the time specified;
  12. Receipt of addenda is not acknowledged;
  13. Bidder is unable to provide acceptable bonding;
  14. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
  15. The authorized proposal form furnished by the Contracting Agency is not used or altered;
  16. The completed proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
  17. The Proposal form is not properly executed;
  18. The Bidder fails to complete and submit the forms included in the Bid Submittal Package;
  19. The Bidder is suspended, debarred, proposed for debarment, declared ineligible, or otherwise excluded from contracting with the federal government; or
  20. There are any other reasons deemed proper by the Owner.

**1.08 AWARD OF CONTRACT**

*Add the following new Section 1.08 to the General Provisions:*

## SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA

- A. The Owner reserves the right to Award, in any order or combination, such Additives, Deductives, or Alternates, as may be set forth in the Bid Forms.
- B. The award procedure is governed by the City's formal bidding regulations. Normally, contract award or rejection will occur within 60 days after the Bid opening.

### **1.09 UTILITY COORDINATION**

*Add the following new Section 1.09 to the General Provisions:*

- A. The Contractor is responsible for location of private underground utilities within the private property which are not maintained by an outside utility company, and which are not located through the One Call Locators Service.
  - 1. The Contractor shall provide and pay for a private locator service to locate private utilities.

### **1.10 TRAFFIC CONTROL**

*Add the following new Section 1.10 to the General Provisions:*

- A. All road closures, obstructions, or detours will require approval by the Owner and the City of Tacoma Planning and Development Services Department. The Contractor must submit a written request 72-hours in advance of any planned work that will impact a roadway. There is no guarantee that such request will be granted.
- B. The design, construction, and maintenance of all detours, including traffic control, traffic control signage, and ADA access and pedestrian access is the sole responsibility of the Contractor. This includes detours both outside the limits of the project and within the limits of the project.
- C. For any road closures, obstructions, or detours, the Contractor shall submit a traffic control plan for approval by the Owner and City of Tacoma Planning and Development Services Department. The detour plan shall be in accordance with the City of Tacoma Traffic Control Handbook, Manual on Uniform Traffic Control Devices (MUTCD), state standard specifications, and these specifications.
- D. The Contractor shall be responsible for obtaining all permits from the City of Tacoma Planning and Development Services Department necessary to implement the traffic control plan.

## **PART 2 INSURANCE AND BONDS**

### **2.01 CONTRACTOR'S LIABILITY INSURANCE**

*Delete this section and replace with the following:*

Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part VII of the Specifications.

Owner as Additional Insured: All insurance coverages shall be endorsed to include the Owner as an additional insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence the Owner as an additional insured.

### **2.02 COVERAGE LIMITS**

*Delete this section and replace with the following:*

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part VII of the Specifications.

**2.03 INSURANCE COVERAGE CERTIFICATES**

*Delete this section and replace with the following:*

Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part VII of the Specifications.

**2.04 PAYMENT AND PERFORMANCE BONDS**

*Replace the entire Section 2.04 with the following:*

A Payment and a Performance Bond shall be obtained by the Contractor utilizing the forms entitled "Payment Bond to the City of Tacoma" and "Performance Bond to the City of Tacoma" as found at the front of the Contract Documents under Part I Bid Proposal and Contract Forms. Contractor shall provide a Payment and a Performance Bond, including power of attorney, for 100 percent of the amount of the Bid (including sales tax) per RCW 39.08, securing performance of work; all Contract obligations; materials, and payment of laborers, manufacturers, and subcontractors. Contractor shall include in its bid the bond costs required to complete the base work, accepted alternates, and sales tax.

In the event that the Contractor intends to have a subcontractor perform all or a portion of the project, the Contractor should consider requiring its own performance bond from the subcontractor to guarantee successful performance of this project component.

**2.06 BUILDER'S RISK**

*Replace Article A of Section 2.06 with the following:*

- A. Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part VII of the Specifications.

*Delete Articles B and C.*

**PART 3 TIME AND SCHEDULE**

**3.01 PROGRESS AND COMPLETION**

*Replace the entire Section 3.01 with the following:*

Contractor to meet schedule: Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion as defined in the Contract Documents.

**3.02 CONSTRUCTION SCHEDULE**

*Delete Section 3.02 in its entirety. Refer to Specification Section 01\_32\_16 Progress Schedules and Reports for requirements related to the construction schedule:*

**3.05 DELAY**

*Replace the entire Section 3.05 with the following:*

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

A. Avoidable delays in the prosecution or completion of the Work shall include all delays that might have been avoided by the exercise of care, prudence, foresight, or diligence on the part of the Contractor. Avoidable delays may include, but are not limited to:

1. Reasonable loss of time resulting from the necessity of submitting drawings or plans to the Owner or permitting agency for review,
2. Collecting survey/field/analytical information,
3. Site management and coordination,
4. Measurements and inspections,
5. Subcontractor management,
6. Such interruptions as may occur in the prosecution of the Work on account of the interference of other Contractors employed by the Owner, and
7. Loss of time due to weather.

These delays, which may interrupt the prosecution of parts of the Work, while at the time may be unavoidable but do not necessarily prevent or delay the prosecution of other parts of the Work, or prevent the completion of the whole Work within the time herein specified, will be deemed avoidable within the meaning of this contract.

B. Unavoidable delays in the prosecution or completion of the Work under this contract shall include all delays which may result through causes beyond the control of the Contractor, and which he could not have provided against by the exercise of care, prudence, foresight, or diligence. Unavoidable delays shall hereinafter be referred to as "Force Majeure".

Force Majeure include, but are not limited to:

1. Acts of God or the public enemy;
2. Fire or other casualty for which Contractor is not responsible;
3. Quarantine or epidemic;
4. Strike or defensive lockout;
5. Orders issued by the Owner changing the amount of Work to be accomplished in excess of 25% per single change;
6. Failure of the Owner to provide rights-of-entry.

These delays shall be considered unavoidable so far as they necessarily interfere with the Contractor's completion of the whole Work.

C. Whenever the Contractor foresees any delay in the prosecution of the Work, and in any event immediately upon the occurrence of any such delay, the Contractor shall submit a written notice to the Owner as provided in Section 7.02 of the General Conditions. The Owner may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work are to be delayed thereby.

Contractor may be entitled to an equitable adjustment in the Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request according to sections 7.02 and 7.03.

After the completion of any part or the whole of the Work, the Owner, in approving the amount due the Contractor, will assume that any and all delays which have occurred in its prosecution and completion have been avoidable, except such delays as shall

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

have been called to the attention of the Owner in writing at the time of their occurrence, and later found by the Owner to have been unavoidable. The Contractor shall make no claims that any delay not called to the attention of the Owner, in writing, at the time of its occurrence has been and unavoidable delay ("Force Majeure").

- D. For delays which are unavoidable ("Force Majeure"), as determined by the City, an extension of time beyond the time specified for completion will be allowed, within which to complete the Contract. The Contractor will not be charged, because of any extension of time for such unavoidable delay, any liquidated damages or engineering and related costs, as are charged in the case of avoidable delays. Contractors overhead cost associated with "Force Majeure" are excluded from equitable adjustment.
- E. If the Work called for under this Contract is not finished and completed by the Contractor, in all parts and in accordance with all requirements in the time specified, including extensions of time granted because of an unavoidable delay; the Contractor will be charged liquidated damages, or direct engineering and related costs as provided for in the Standard Specifications.

In addition, the City shall charge to the Contractor, and may deduct from the final payment for the Work, all engineering and related costs incurred by the City in connection with the Work during the period of such extension or extensions. The City shall make the final determination as to the appropriateness of charges required to complete the Work.

- F. The granting of any extension of time on account of delays, which in the judgment of the Owner are avoidable delays, shall in no way operate as a waiver on the part of the Owner of its rights under this contract.

**3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION**

*Add the following items 4 and 5 to the end of Article A of Section 3.07 of Time and Schedule:*

- 4. Time is of the essence on the Contract. Delays inconvenience the City's daily operation and add undue time and cost required for administration, engineering, inspection, and supervision. Accordingly, the Contractor agrees to pay liquidated damages, according to the formula below, for each calendar day beyond the number of calendar days or date established for each Milestone Completion or Substantial Completion until associated Completion has been achieved, and to authorize the Owner to deduct these liquidated damages from any money due or coming due to the Contractor.

LIQUIDATED DAMAGES FORMULA

$$LD = \frac{0.20 \times C}{T}$$

Where: LD = Liquidated damages per calendar day  
C = Original contract amount (excluding sales tax)  
T = Original time for Milestone or Substantial completion

- 5. When the contract work has progressed to the extent that the City and Husky Terminal has full use and benefit of their facilities, both from the operational and safety standpoint, and only minor incidental work, replacement of temporary substitute

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

facilities, or correction or repair remains to physically complete the total contract, the City may determine the work is substantially complete. The City will notify the Contractor in writing of the substantial completion date. For overruns in contract time occurring after the substantial completion date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the final completion date of all contract work. The Contractor shall complete the remaining work as promptly as possible.

**3.08 SUSPENSION OF WORK**

*Add the following new Section 3.08 to Part 3 Time and Schedule:*

- A. The Owner may order suspension of all or any part of the work if the Contractor does not comply with the Contract or the Owner's orders.
- B. When ordered by the Owner to suspend or resume work, the Contractor shall do so immediately.
- C. If the work is suspended, the period of work stoppage will be counted as calendar days. The lost work time, however, shall not relieve the Contractor from any contract responsibility.
- D. If the performance of all or any part of the work is suspended, delayed, or interrupted for an unreasonable period of time by an act of the Owner in the administration of the contract, or by failure to act within the time specified in the contract (or if no time is specified, within a reasonable time), the Owner will make an adjustment for any increase in the cost or time for the performance of the contract (excluding profit, overhead, home office expense, supervisory personnel labor not specifically assigned to the project) necessarily caused by the suspension, delay, or interruption. However, no adjustment will be made for any suspension, delay, or interruption if (1) the performance would have been suspended, delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or (2) an equitable adjustment is provided for or excluded under any other provision of the contract.
- E. If the Contractor believes that the performance of the work is suspended, delayed, or interrupted for an unreasonable period of time and such suspension, delay, or interruption is the responsibility of the Owner, the Contractor shall immediately submit a written request for equitable adjustment to the Owner as provided in section 7.02. No adjustment shall be allowed for any costs incurred more than 20 calendar days before the date the Owner receives the Contractor's written request for equitable adjustment. If the Contractor contends damages have been suffered as a result of such suspension, delay, or interruption, the protest shall not be allowed unless the request for equitable adjustment (stating the amount of damages) is asserted in writing as soon as practicable, but no later than the date of Final Completion. The Contractor shall keep full and complete records of the costs and additional time of such suspension, delay, or interruption and shall permit the Owner to have access to those records and any other records as may be deemed necessary by the Owner to assist in evaluating the protest.
- F. The Owner will determine if an equitable adjustment in cost or time is due as provided in this section. The equitable adjustment for increase in costs, if due, shall be subject to the limitations provided in Section 7.02, provided that no profit of any kind will be allowed on any increase in cost necessarily caused by the suspension, delay, or interruption.
- G. Request for extensions of time will be evaluated in accordance with Section 7.03.
- H. No claim by the Contractor under this clause shall be allowed unless the Contractor has followed the procedures provided in this Section and Sections 7.02 and 7.03.
- I. The Contractor shall notify the surety of all claims.

**3.09 MAINTENANCE DURING SUSPENSION**

*Add the following new Section 3.09 to Part 3 Time and Schedule:*

- A. Before and during any suspension (as described in Section 3.08) the Contractor shall protect the work from damage, deterioration, or collapse. Suspension shall not relieve the Contractor from anything the contract requires unless this section states otherwise.
- B. At no expense to the Owner, the Contractor shall provide a safe and unobstructed facility access for ongoing operation. This may include temporary facilities, temporary access, or removal of incomplete work if left in an unsafe condition. The Contractor shall ensure existing systems are operational, functional, and safe in order to continue operations throughout the suspension.
- C. If the Owner determines that the Contractor failed to pursue the work diligently before the suspension, or failed to comply with the Contract or orders, then the Owner may determine that the Contractor shall maintain the facility during suspension and maintain compliance with the City's NPDES permit. In this case, the Contractor shall bear the maintenance costs. If the Contractor fails to maintain the facility, the Owner will do the work and deduct all resulting costs from payments due to the Contractor.
- D. If the Owner determines that the Contractor has pursued the work diligently before the suspension, then the Contracting Agency will do the routine maintenance work (and bear its cost). This Owner-provided maintenance work will include only routine maintenance of the building services and equipment operation including routine maintenance necessary for the facility to operate and maintain compliance with the City's NPDES permit.
- E. The Contractor shall protect and maintain (and bear the costs of doing so) all other work in areas secured at the time of the suspension.
- F. After any suspension during which the Owner has done the routine maintenance, the Contractor shall accept the area and facilities when work resumes, the Contractor shall make no claim against the Owner for the condition of the sites.
- G. After any suspension, the Contractor shall retain all responsibilities the contract assigns for repairing or restoring the construction area to the requirement of the plans.

**3.10 EXECUTION OF CONTRACT - SCHEDULE**

*Add the following new section 3.10 to Part 3 Time and Schedule:*

- A. Contracts will be signed electronically through DocuSign. The Contracting Agency will provide a draft copy of the contract for the successful Bidder's Surety to obtain the performance and payment bonds. Copies of the Contract Provisions, including the draft Contract, will be available for electronic signature by the successful Bidder within 5 business days following award. Within 10 calendar days after the award date, the successful Bidder shall return the signed contract documents including the contract, insurance certification and related endorsements, and satisfactory bonds as required.
- B. The Contracting Agency will review the bonds, insurance documents, contractor submittals, and contract for conformance. The approved documents will be routed through DocuSign for final approval and signature by the Contracting Agency.

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

- C. Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.
- D. If the Bidder experiences circumstances beyond their control that prevents return of the contract documents within 10 calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 2 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

**PART 4 SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS**

**4.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW**

*Replace Articles A, B, and C with the following:*

- A. Specifications and Drawings are basis of the Work: The Specifications and Drawings describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.
- B. Parts of the Contract Documents are complementary: The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both, and the stricter or greater requirement of either the Specifications or Drawings shall govern.
- C. Contractor knowledge of discrepancy in document – responsibility: The Contractor to report discrepancies in Contract Documents: Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly (within 72 hours) and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to A/E in writing

*Delete Article E in its entirety.*

**4.03 SHOP DRAWINGS**

*Replace Article E with the following:*

- E. Contractor to submit Shop Drawings electronically: Unless otherwise provided in Specification Section 01\_33\_30, the Contractor shall submit to Owner for approval Shop Drawings electronically through e-Builder.

**4.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

*Add the following to Article B of Section 4.05 of Specifications, Drawings, and Other Documents:*



**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

Owner shall furnish to Contractor up to 8 copies of conformed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies of the conformed Contract Documents will be furnished upon request at the cost of reproduction.

**PART 5 PERFORMANCE**

**5.01 CONTRACTOR CONTROL AND SUPERVISION**

*Add the following provision to Article B of Section 5.01 of Performance:*

A supervisor with authority to act for the Contractor must be on site when work is taking place.

**5.02 PERMITS, FEES AND NOTICES**

*Add the following Articles to Section 5.02 of Performance:*

- D. Electrical Permit: The Contractor shall prepare and submit the necessary documentation to obtain an electrical permit from Tacoma Power. The Owner will pay electrical permit fee(s), but the Contractor shall act as the Permit Holder and be responsible for securing the permit, coordinating new services with Tacoma Public Utilities (TPU), and scheduling inspections and shutdowns. Fees for this permit should not be included in the Contractor's Price Proposal.
  
- E. The Contractor shall submit copies of each permit required on the project to the Owner's representative. Nothing in this part shall be construed as imposing a duty upon the Owner to secure permits.

**5.04 PREVAILING WAGES**

*Replace the entire Article F of Section 5.04 with the following:*

- F. Contractor to pay for Statements of Intent and Affidavits: In compliance with chapter 296-127 WAC, Contractor shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification. The Contractor shall use the label "Tacoma, City of" when adding the project to the Department of Labor and Industries' Awarding Agency Portal website.

*Add the following Article to Section 5.04 of Performance:*

- H. Copies of approved Intents to Pay Prevailing Wages for the Contractor and all subcontractors shall be submitted with the Contractor's first application for payment. As additional subcontractors perform work on the project, their approved Intent forms shall be submitted with the Contractor's next application for payment. The Owner reserves the right to withhold payment for failure to provide Intent to Pay Prevailing Wages forms.
  - 1. The Contractor and all subcontractors shall promptly submit to the Owner certified payroll copies with monthly progress payments. Payment will be withheld if certified payroll copies are not provided with progress payments.

**5.07 SAFETY PRECAUTIONS**

*Replace the entire Article A of Section 5.07 with the following:*

- A. In performing this contract, the Contractor shall provide for protecting the lives and health of employees and other persons; preventing damage to property, materials, supplies, and equipment; and avoid work interruptions. For these purposes, the Contractor shall:
1. Follow Washington Industrial Safety and Health Act (WISHA) regional directives and provide a site-specific safety program that will require an accident prevention and hazard analysis plan for the Contractor and each subcontractor on the work site. The Contractor shall submit a site-specific safety plan to the Owner's representative prior to the initial scheduled construction meeting.
  2. Provide adequate safety devices and measures including, but not limited to, the appropriate safety literature, notice, training, permits, placement and use of barricades, signs, signal lights, fall protection, ladders, scaffolding, staging, runways, hoist, construction elevators, shoring, temporary lighting, grounded outlets, wiring, hazardous materials, vehicles, construction processes, and equipment required by Chapter 19.27 RCW, State Building Code (Uniform Building, Electrical, Mechanical, Fire, and Plumbing Codes); Chapter 212-12 WAC, Fire Marshal Standards, Chapter 49.17 RCW, WISHA; Chapter 296-155 WAC, Safety Standards for Construction Work; Chapter 296-65 WAC; WISHA Asbestos Standard; WAC 296-62-071, Respirator Standard; WAC 296-62, General Occupation Health Standards, WAC 296-24, General Safety and Health Standards, WAC 296-24, General Safety and Health Standards, Chapter 49.70 RCW, and Right to Know Act.
  3. Comply with the State Environmental Policy Act (SEPA), Clean Air Act, Shoreline Management Act, and other applicable federal, state, and local statutes and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources.
  4. Post all permits, notices, and/or approvals in a conspicuous location at the construction site.
  5. Provide any additional measures that the Owner determines to be reasonable and necessary for ensuring a safe environment in areas open to the public. Nothing in this part shall be construed as imposing a duty upon the Owner to prescribe safety conditions relating to employees, public, or agents of the Contractors.
  6. All construction personnel shall wear high visibility reflective vests, hardhats, and other appropriate personal protective equipment in accordance with the Contractor's Safety Plan while on the Project Site.

**5.10 UNFORESEEN PHYSICAL CONDITIONS**

*Replace Article A of Section 5.10 with the following:*

- A. Notice requirement for concealed or unknown conditions: If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than 2 days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.

#### 5.14 AVAILABILITY AND USE OF UTILITY SERVICES

*Replace the entire Section 5.14 with the following:*

- A. Contractor to provide utilities: Unless otherwise indicated in the Contract Documents, the Contractor shall be responsible for providing all temporary utilities needed to complete the Work. Contractor responsible for coordinating all temporary and permanent utility services included in the Work. Contractor shall carefully conserve any utilities furnished. Contractor is responsible for removing temporary service prior to Substantial Completion.

#### 5.15 TESTS AND INSPECTION

*Replace Article A of Section 5.15 with the following:*

- A. General requirements for tests and inspections: Unless specifically noted otherwise in the technical specifications, the Owner will retain the services of one or more independent third-parties to perform specialty testing and specialty inspections such as those performed by a certified testing laboratory. The Contractor shall coordinate and schedule the inspections and tests directly with the testing agency. The Owner will pay for all tests that are favorably reviewed per the Contract requirements. The Contractor shall bear all costs for any non-conforming work, including the cost of re-testing required as a result of non-conforming work. In addition to specialty inspections, the Contractor shall be responsible for all other testing as specified and quality surveillance of all its work and all work performed by any Subcontractor. Contractor shall maintain complete inspection records and make them available to Owner.

*Add the following Article to Section 5.15 of Performance:*

- E. Tests and Inspections shall include the following minimum requirements:
1. Preparatory Inspection (pre-installation meetings) shall be performed prior to beginning any work and shall include:
    - a. Review applicable Contract Documents to verify that all materials have been tested, submitted and approved and that all Contractual provisions have been met for the control of inspection and testing;
    - b. Examine the work area to verify that all required preliminary work has been completed and complies with contractual requirements;
    - c. Physically examine required materials, equipment and sample work to verify conformance with approved shop drawings and/or submitted data, and that materials and equipment are properly stored;
    - d. Discuss (with Owner and Contractor) procedures for constructing the work, including repetitive deficiencies, construction tolerances and workmanship standards specified in the documents.
  2. Initial Inspection shall be performed as soon as work begins on a definable feature of the Project in order to accomplish the following:
    - a. Review preliminary work to verify compliance with contractual requirements;
    - b. Verify that required control inspection and testing is underway and meets contractual requirements;
    - c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards, and that completed work compares favorably with sample work;
    - d. Resolve all differences;
    - e. Repeat this initial inspection phase for each new crew on site performing the work, or any time standards are not being met.

- a definable feature of work and the following shall be accomplished:
- a. A check of preliminary work to ensure that it is in Contract compliance and review of the preparatory meeting minutes;
  - b. Verification of full Contract compliance and verify that required control inspection and testing is underway;
  - c. Establish level of workmanship, verify that it meets minimum acceptable workmanship standards, and compare work with sample panels, etc., as appropriate;
  - d. Resolve all differences;
  - e. This inspection phase shall be repeated for each new crew on site performing the work, or any time standards are not being met.
3. Follow-Up Inspections: These follow up inspections shall be performed daily to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. The City or City's representative may require joint Contractor inspections at any time and on a periodic basis to evaluate the effectiveness of the quality control system.
  4. Tests: All operation and acceptance tests, where specified, are to be performed to verify control measures are adequate.
    - a. Costs for re-testing work that was previously tested but did not meet the requirements for the work shall be the responsibility of the Contractor.

## **5.20 SUBCONTRACTORS AND SUPPLIERS**

*Replace Section 5.20.B with City Supplemental Conditions:*

- B. The Contractor shall submit the Request for Sublet Form provided by the City of Tacoma for every subcontractor used on the project prior to construction. Contractor shall not utilize any subcontractor or manufacturer to whom the City has a reasonable objection, and shall obtain City's written consent before making any substitutions or additions.

*Add Section 5.20.F, 5.20.G, 5.20.H, 5.20.I with City Supplemental Conditions:*

- F. The LEAP and EIC Programs have been adopted by the City to counteract economic and social ills, which accompany high rates of unemployment within the City of Tacoma.
  1. The Tacoma City Council established the LEAP Program for Public Works Contracts pursuant to City of Tacoma Ordinance No. 26301. The primary goal for this program is to provide an opportunity for City of Tacoma and Empowerment Zone/Enterprise Community residents to acquire skills, enter Apprenticeship Programs, and perform work that provides living wages.
  2. The Tacoma City Council established the EIC Program for Public Works Contracts pursuant to City of Tacoma Ordinance No. 28625. The primary goal for this program is to ensure equitable participation of historically under- utilized business enterprises, by establishing

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

3. Create any contract between the Owner and the subcontractor; or
  4. Convey to the subcontractor any rights against the Owner.
- G. The Owner will not consider the following subcontracting:
1. Purchase of sand, gravel, crushed stone, crushed slag, batched concrete aggregates, ready mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any other materials supplied by established and recognized commercial plants; or
  2. Delivery of these materials to the work site in vehicles owned or operated by such plants or by recognized independent or commercial hauling companies.
- I. If Owner determines that any Subcontractor is performing services in an unsatisfactory manner or is not completing the Work in accordance with the requirements of the Contract Documents or is otherwise undesirable or unacceptable, Owner will by written notice so notify Contractor. Contractor shall then take immediate steps to rectify and correct the situation. If Owner and Contractor mutually agree such actions are ineffective or infeasible, Contractor shall terminate such Subcontractor. Subcontracting by Subcontractors will be subject to the same regulations.

**5.22 INDEMNIFICATION**

*Add the following article to Section 5.22 of Performance:*

- C. The Owner and Engineer shall be named as additional primary insured(s) by the Contractor's General Liability and Builders All Risk insurance policies without offset and all Construction Documents and insurance certificates shall include wording acceptable to the parties herein with reference to such provisions.
- D. The Owner and Engineer shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by Contractors or the safety precautions and programs incident to the work of Contractors and will not be responsible for Contractors' failure to carry out work in accordance with the Contract Documents.

**PART 6 PAYMENTS AND COMPLETION**

**6.02 SCHEDULE OF VALUES**

*Add the following paragraph to Section 6.02 of Payments and Completion:*

Subcontracted Work shall be paid to the Contractor on the basis of Contractor's actual cost of amounts properly paid to such Subcontractors. A Schedule of Values shall be submitted for the Work of each Subcontractor, as well as suppliers providing material in excess of \$2,500.00. Subcontractor invoices in support of this Schedule of Values shall be submitted with progress payments. The total for all progress payments shall not exceed the Contract Sum, as may be adjusted by Change Orders. The Contractor shall provide a schedule of values for Lump Sum bid items for review and acceptance.

The Contractor shall submit signed lien waivers by Corporate Officers for all parties. The Contractor shall submit the anticipated cash flow for the project and update monthly.

**6.03 APPLICATION FOR PAYMENT**

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

*Replace Article B in Section 6.03 with the following:*

- B. Contractor certifies Subcontractors paid: By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.011, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in section 1.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment. Contractor shall submit application for payment on AIA form G702/G703, with modifications made for payment certification. Payment shall be certified by a corporate officer of the Contractor.

*Replace Article D in Section 6.03 with the following:*

- D. Payment for material delivered to site or stored off-site: If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. No payment will be made for material stored at an alternate location. The Contractor shall comply with or furnish satisfactory evidence of the following:

*Delete items 1 through 8 of Article D of Section 6.03 of Payments and Completion and replace with the following:*

1. Contractor assumes total responsibility for stored materials: Contractor and its surety assume total responsibility for the stored materials; and
2. Title: Title to all Work and materials covered by an accepted and paid Application For Payment shall pass to the Owner at the time of such payment, free and clear of all liens, claims, security interest, and encumbrances. Passage of title shall not, however, (1) relieve Contractor from any of its duties and responsibilities for the Work or materials, (2) waive any rights of the Owner to insist on full compliance by Contractor with the Contract requirements, or (3) constitute acceptance of the Work or materials.

**6.04 PROGRESS PAYMENTS**

*Modify the first sentence of Article B to read:*

Owner shall retain 5% of the amount of each progress payment until 60 days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including at Owner's request, consent of surety to release of the retainage.

*Add the following Article to Section 6.04 of Payments and Completion:*

- E. Taxes.

Unless otherwise required in this Specification, applicable federal, state, city and local taxes shall be included in the bid submittal as indicated below. The total cost to the City, including all applicable taxes, may be the basis for contract award determination. As used herein, the term "taxes" shall include any and all taxes, assessments, fees, charges, interest, penalties, and/or fines imposed by applicable laws and regulations in connection with the procurement of goods and/or services hereunder.

**1. Federal Excise Tax**

The City of Tacoma is exempt from federal excise tax. The City will furnish a Federal Excise Tax Exemption certificate, if required. If the Bidder fails to include applicable tax in its submittal, then Bidder shall be solely responsible for the payment of said tax.

**2. State and Local Sales Tax**

The City of Tacoma is subject to Washington state sales tax. It is the Bidder's obligation to state the correct sales tax percentage and include the applicable Washington state, city, and local sales tax as a separate line item(s) in the submittal.

**3. City of Tacoma Business and Occupation Tax**

It is the Bidder's obligation to include City of Tacoma Business and Occupation tax in the unit and/or lump sum prices submitted; it shall not be shown separately on the submittal. Per Sub-Title 6A of the City of Tacoma Municipal Code, transactions with the City of Tacoma may be subject to the City's Business and Occupation Tax.

It is the responsibility of the Bidder awarded the contract to register with the City of Tacoma's Tax and License Division, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, telephone (253) 591-5252, website

[http://www.cityoftacoma.org/government/city\\_departments/finance/tax\\_and\\_license/](http://www.cityoftacoma.org/government/city_departments/finance/tax_and_license/)

**4. Any or All Other Taxes**

Any or all other taxes are the responsibility of the Bidder unless otherwise required by law.

**6.05 PAYMENTS WITHHELD**

*Add the following Items to the end of Article A in Section 6.05 of Payments and Completion:*

6. Failure of Contractor to repair damaged materials, equipment, property, or Work.
7. Failure of the Contractor to provide or obtain review of Submittals.
8. Failure to pay Subcontractors or Suppliers.
9. Failure to keep Record Documents up to date.
10. Failure to comply with all applicable federal, state, and local laws, statutes, regulations, codes, licenses, easements, and permits.
11. Failure to obtain and maintain applicable permits, insurance, and bonds.
12. Failure to provide Statement of intent to Pay Prevailing Wage and/or Affidavits of Wages Paid.
13. Failure to comply with the Contract safety requirements.

**6.07 SUBSTANTIAL COMPLETION**

*Add the following Article A to Section 6.07 of Payments and Completion:*

- A. When the Contractor considers that all Work is substantially complete, the Contractor shall give written Notice to the Owner. The prerequisites for issuance of Substantial Completion by the Owner for the Work associated with the Notice are as follows:
  1. Submit the final progress payment showing 100% completion for the work being claimed as substantially complete. List any incomplete items of work along with their value and an explanation of why the work is incomplete.

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

2. Submit a statement summarizing all changes to the contract. Identify that Contractor has no claims pending or provide a list of any known pending claims associated with the Work.
3. Coordinate with the Owner for changeover of all insurance coverage.
4. Submit all warranties, maintenance agreements, and workmanship bonds as required by the Contract Documents.
5. Deliver all tools, spare parts, "Attic Stock" and other deliverables to the Owner as required by the Contract Documents.
6. Complete start-up and testing of all systems to ensure required functional operation. Submit a copy of test and start-up forms, signed off by Owner
7. Complete all required training and final Operation and Maintenance Manuals.
8. Remove from the project site all temporary facilities and services, including tools, equipment, mockups, and similar elements that are under the Contractor's control.
9. Perform all work as required to obtain an approved final inspection for the Electrical Permit.
10. Punch List Procedures
  - a. Prior to providing notice of Substantial Completion (approximately 14 calendar days), the Contractor shall provide an initial List of Deficiency's for the Owner's review. The Owner will review and make additions or deletions as they deem appropriate. The List of Deficiencies will be sent back to the Contractor for the Contractor to perform work. The Contractor must complete the work in a satisfactorily manner before the Owner will accept as complete.
11. Submit verification that Contractor is up to date on all progress payments to laborers, subcontractors, or others performing work or supplying materials to the Project.

**6.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT**

*Add the following Article to Section 6.09 of Payments and Completion:*

**D. Prerequisites for Final Acceptance**

1. Submit final Payment Request, which shall be supported by final releases, and supporting documentation not previously accepted by the Owner.
2. Obtain the Owner's written approval that all items on the List of Deficiencies as prepared by the Owner have been completed.
3. Submit consent of Surety. Provide the standard form of the surety company or submit consent using the AIA Document G-707 form.
4. Submit all Record Drawings and Record Specifications.
5. Submit the final Logs of all submittals.
6. Submit evidence of Compliance with Requirements of Governing Authorities including, but not limited to, permit approvals and Certificates of Occupancy.
7. Submit final Warranty and Bond in accordance with Specification Section 01\_77\_00.
8. Complete final clean up and repair of items damaged during construction.



**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

9. Temporary Facilities: Remove temporary protection and facilities installed for protection and administration of the Work during construction, along with construction tools, mock-ups, temporary signage, and similar elements.
10. Final Inspection and Final Punch List:
  - a. All remaining Punch List items that were not corrected prior to Substantial Completion shall be successfully completed by the Contractor prior to the Contractor's request for Final Acceptance. When the Contractor considers that all Contract Work is ready for final inspection and Final Acceptance, the Contractor shall give written Notice to the Owner.
  - b. Upon receipt of the Contractor's Notice that work on the List of Deficiencies has been completed, the Owner will visit the site to determine if the work has progressed to an acceptable level of quality justifying a final inspection.
  - c. Owner shall promptly perform a final inspection of the Work and, if necessary, prepare a Final Punch List (a list of items to be completed or corrected by the Contractor prior to the Owner granting Final Acceptance).

**PART 7 CHANGES**

**7.01 CHANGE IN THE WORK**

*Replace the entire Article B of Section 7.01 with the following:*

- B. Owner may request COP from Contractor: If Owner desires to order a change in the Work, it may request a written Change Order Proposal from Contractor. Contractor shall submit a Change Order Proposal within 7 calendar days of the request from Owner, or within such other period as mutually agreed. Contractor's Change Order Proposal shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.

*Replace the entire Article E of Section 7.01 with the following:*

- E. Failure to agree upon terms of Change Order; Final offer and Claims: If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 14 Days of Contractor's request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer, or the parties are otherwise unable to reach agreement, Contractor's only remedy shall be to file a Claim as provided in Part 8.

*Replace the entire Article F of Section 7.01 with the following:*

- F. The Field Authorization (FA) is executed as a directive to proceed with work when the processing time for an approved change order would impact the project.
1. Situations may arise not included in the Contract Documents requiring immediate action on the part of the Contractor for safety, to protect personnel from injury, to protect property from damage, or to prevent delay, all or any as determined necessary by the Owner. In situations where processing time for a Change Order might impact the success of the project, the Owner may elect to issue a Field Authorization in writing, giving approval to proceed with a specific scope of work for an amount to be determined after the work is completed. This procedure will only be implemented in situations that are an

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

emergency as determined by the Owner. The Owner will specify a “not to exceed” amount for this work when issuing this authorization.

2. A scope of work must be defined, a maximum not to exceed cost agreed upon, and any estimated modification to the contract completion time determined. The method of final cost verification must be noted and supporting cost data must be submitted in accordance with the requirements of Part 7 of the General Conditions. Upon satisfactory submittal and approval of supporting cost data, the completed FA will be processed into a change order. No payment will be made to the Contractor for FA work until that FA is incorporated into a Change Order.
3. All FAs must include total cost and impact on completion schedule, if any. If the cost is unknown prior to beginning the work on a FA, then a not-to-exceed dollar limit must be established.
4. Payment for work on a FA will be on the same basis as for a Change Order. Should the amount of the cost exceed the “not to exceed” amount specified in the FA, the Owner will audit the costs for reasonableness and approve for payment only that which meets that test.

*Add the following Article to Section 7.01 of Changes:*

**G. Change Order Documentation**

1. A log will be maintained by the Contractor subject to review and comment by Owner for each of the documents identified in this section leading up to issuances of Change Order. These logs will record transmittals, suspense dates, review stopovers, dates of actions, and other specific pertinent information to track the progress of the subject documents. The Owner reserves the right to dispute any and all entities the Contractor includes in the log.
2. The Owner reserves the right to include and exclude as many Requests for Proposals and or Change Order Proposals into one Change Order as the Owner determines is in its best interest.

**7.02 CHANGE IN THE CONTRACT SUM**

*Replace Items b and c of Section 7.02.A.2 with the following:*

- (b) Content of notice for equitable adjustment; Failure to comply: Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 2 Days before Contractor’s written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.
- (c) Contractor to provide supplemental information: Within 14 Days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph a. above with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with Section 7.03C. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment

*Replace Section 7.02.B.4 with the following:*

4. Markups on additive and deductive Work: The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work unless deductive change exceeds \$10,000. Where a change in the Work involves additive or deductive Work by the same Contractor or Subcontractor, small tools, overhead, profit, bond, and insurance markups will apply to the net difference.

*Replace Section 7.02.B.7.a(1) with the following:*

- (1) Basic wages and benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved "statement of intent to pay prevailing wages" or a higher amount if approved by the City only if supported by certified payrolls. Direct supervision shall be a reasonable percentage not to exceed 10% of the cost of direct labor. No supervision markup shall be allowed for a working supervisor's hours.

*Delete Section 7.02.B.7.a(4) in its entirety*

*Delete and replace Section 7.02.B.7.c with the following:*

- c. Equipment costs: This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work, or for additional rental costs actually incurred by the Contractor. Equipment charges shall be computed on the basis of actual invoice costs or if owned, from the current edition of one of the following sources:
  - (1) Associated General Contractors - Washington State Department of Transportation (AGC WSDOT) Equipment Rental Agreement.
  - (2) The state of Washington Utilities and Transportation Commission for trucks used on highways.
  - (3) The National Electrical Contractors Association for equipment used on electrical work.
  - (4) The Mechanical Contractors Association of America for equipment used on mechanical work.

The Primedia Equipment Watch (Blue Book) shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed that shown in the AGC WSDOT Equipment Rental Agreement.

*Replace Section 7.02 B.7.d with the following:*

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

- d. Allowance for small tools, expendables & consumable supplies: Small tools consist of tools which cost \$250 or less and are normally furnished by the performing Contractor. The maximum rate for small tools shall not exceed the following:
- 1.) For Contractor, 2% of direct labor costs.
  - 2.) For Subcontractors, 3% of direct labor costs.
- Expendables and consumables supplies directly associated with the change in Work must be itemized.

*Replace Articles (a), (b) and (c) of Section 7.02 B.7.f.(1) with the following:*

- (a) Contractor markup on Contractor Work: For Contractor, for any Work actually performed by Contractor's own forces, 10% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
- (b) Subcontractor markup for Subcontractor Work: For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 10% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
- (c) Contractor markup for Subcontractor Work: For Contractor, for any work performed by its Subcontractor(s) 5% of the first \$50,000 of the amount due each Subcontractor, and 4% of the remaining amount if any.

*Replace Articles (a), (b), (c) and (d) of Section 7.02B.7.f.(2) with the following:*

- (a) Contractor markup on Contractor Work: For Contractor, for any Work actually performed by Contractor's own forces, 10% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
- (b) Subcontractor markup for Subcontractor Work: For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 10% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
- (c) Contractor markup for Subcontractor Work: For Contractor, for any Work performed by its Subcontractor(s), 3% of the first \$50,000 of the amount due each Subcontractor, and 2% of the remaining amount if any.
- (d) Subcontractor markup for lower tier Subcontractor Work: For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 2% of the first \$50,000 of the amount due the sub-Subcontractor, and 1% of the remaining amount if any.

*Add the following paragraph under Article D in Section 7.02 of Changes:*

4. Subcontractor and sub-subcontractor proposals to the Contractor for time and material Work shall include all direct costs plus overhead, profit, bond and insurance costs, calculated as provided in Section 7.02B.

*Add the following Article to Section 7.02 of Changes:*

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

- E. Notwithstanding any other provision of the Contract Documents, no claim by the Contractor for an equitable adjustment hereunder will be allowed if not asserted within 7 days following the date of the changed condition.

**7.03 CHANGES IN THE CONTRACT TIME**

*Replace Section 7.03.B.2 with the following:*

2. Timing and content of Contractor's Notice: Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 3 Days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

*Replace Section 7.03.B.3 with the following:*

3. Contractor to provide supplemental information: Within 7 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph 7.03B.2 with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

*Replace Item 4 of Section 7.03.D with City Supplemental Conditions:*

4. Limitations no daily costs: The daily cost of any change in Contract Time shall be limited to the items below, less the amount of any change in the Contract Sum the Contractor may otherwise be entitled pursuant to Section 7.02B 7f for any change in the Work that contributed to this change in Contract Time:
  - a. Non-productive supervision or labor: cost of Contractor and its crews specifically assigned to the project. Home office cost is not allowed;
  - b. Temporary facilities or equipment rental: cost of temporary facilities or equipment rental extended because of the delay, at invoiced cost, no mark-ups allowed;
  - c. Insurance premium: cost of insurance by invoice extended because of delay;
  - d. Overhead: general and administrative overhead in an amount to be agreed upon, but not to exceed, 1% of the Contract Award Amount divided by the originally specified Contract Time for each Day of the delay.

*Add the following Article to Section 7.03 of Changes:*

- E. Notwithstanding any other provision of the Contract Documents, no claim by the Contractor for an equitable adjustment hereunder will be allowed if not asserted within 7 days of discovery.

**7.04 DELETED OR TERMINATED WORK**

*Add the following new Section 7.04 to Part 7 Changes:*

- A. If the Agreement is terminated for convenience in accordance with Section 9.02, or as modified or if any item of Work is deleted in whole or in part, payment will be made for partially completed items mutually agreed or as determined by the Owner in the proportion that the partially completed Work is to the total item. No claim for damages of any kind or for loss of anticipated profits on deleted or uncompleted work will be allowed because of the termination or deductive Change Order. No claim for the cost of preparing the proposal will be allowed because of the termination of the Agreement.
- B. If the Agreement is terminated for convenience or parts of the Work are deleted, the Contract Time shall be adjusted as the Parties agree. If the Parties cannot agree, the Owner shall determine the equitable adjustment for Contract Time.
- C. Materials approved by the Owner and ordered by the Contractor or delivered on the Work prior to the date the Work was terminated or deleted by the Owner, will either be purchased from the Contractor by the Owner at the actual cost and shall become the property of the Owner, or the Owner will reimburse the Contractor for the actual costs connected with returning these materials to the suppliers.
- D. If a portion of the Work that has a value of \$25,000 or more is deleted, the Contractor shall reimburse the Owner for the value of the work plus mark-up on profit.

**PART 8 CLAIMS AND DISPUTE RESOLUTION**

**8.01 CLAIMS PROCEDURE**

*Replace Article B of Section 8.01 with the following:*

- B. Claim filing deadline for Contractor: Contractor shall file its Claim within 30 Days from Owner's final offer made in accordance with paragraph 7.01E, or by the date of Substantial Completion, whichever occurs first.

*Replace Item 6 of Section 8.01.C with the following:*

- 6. Copies of supporting documentation: Copies of any identified documents, inclusive of contract documents, that support the Claim;

*Replace the entire Article D of Section 8.01 with the following:*

- D. Owner's response to Claim filed: After Contractor has submitted a fully documented Claim that complies with all applicable provisions of Parts 7 and 8, Owner shall respond, in writing, to Contractor as follows:
  - 1. Response time for Claim less than \$50,000: If the Claim amount is less than \$50,000, with a decision within **30** Days from the date the Claim is received; or
  - 2. Response time for Claim of \$50,000 or more: If the Claim amount is \$50,000 or more, with a decision within **45** Days from the date the Claim is received, or with notice to Contractor of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.

*Add the following new Article to Section 8.01 of Claims and Dispute Resolution:*

**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

- G. Subcontractor Claims: Contractor shall fully investigate its subcontractor's claims and process said claim(s) as Contractor's Claim. Any and all claims which do not meet notification requirements shall be considered null and void.

**8.02 ARBITRATION**

*Replace the entire Article B of Section 8.02 with the following:*

- B. Filing of Notice for arbitration: Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), in the state where the project is located, with a copy provided to the City. The parties shall negotiate or mediate under the Voluntary Construction Mediation Rules of AAA, or mutually acceptable service, before seeking arbitration in accordance with the Construction Industry Arbitration Rules of AAA as follows:
1. Claims less than \$30,000: Disputes involving \$30,000 or less shall be conducted in accordance with the Northwest Region Expedited Commercial Arbitration Rules; or
  2. Claims greater than \$30,000: Disputes over \$30,000 shall be conducted in accordance with the Construction Industry Arbitration Rules of AAA, unless the parties agree to use the expedited rules.

*Add the following Article to Section 8.02 of Claims and Dispute Resolution:*

- F. Location of arbitration proceedings shall be in a mutually-agreed to location in Pierce County, Washington State.

**8.03 CLAIMS AUDIT**

*Add the following Paragraphs under Article B in Section 8.03 of Claims and Dispute Resolution:*

25. Schedules;
26. Expediting Records and Information;
27. Original Cost Estimates;
28. Privilege documentation shall be allowed for all Claims of \$500,000 and over.

*Add the following new Section 8.04 to Claims and Dispute Resolution:*

**8.04 AUDIT**

- A. At such times as Owner deems necessary for reasonable cause, Contractor shall permit the Owner to inspect and audit all pertinent books and records of the Contractor and its Subcontractors or other persons or entities that have performed work in connection with or related to the Contractor's Work under this Agreement. The audit may take place up to three years after Completion. The books and records are to be made available at reasonable times in Pierce County, Washington, or at such other reasonable location as Owner selects. At Owner's request, Contractor shall supply Owner with, or shall permit Owner to make a copy of, any books and records and any portion thereof. Contractor shall ensure that such inspection, audit and copying right is a condition of any Subcontract, agreement or other arrangement under which any person or entity is permitted to perform work in connection with or related to the Work under this Agreement. Any failure of the Contractor to incorporate contract requirements shall be at the expense of the Contractor.

## **PART 9 TERMINATION OF THE WORK**

### **9.01 TERMINATION BY OWNER FOR CAUSE**

*Add the following Articles to Section 9.01 of Termination of the Work:*

- H. If the Contractor defaults, fails, or neglects to carry out the Work in accordance with the Contract Documents, the Owner may give written notice to cure the problem within seven (7) days. If the problem is not cured or the Owner determines the effort for correction is inadequate within this time, the Owner may give a second notice to cure within seven (7) days. If the problem is not cured within this time, the Owner may issue a notice to terminate for cause, which shall be effective immediately upon issuance.
- I. The Owner rights to the site are subject to the rights and duties of the surety, if any, that may be obligated under any bond provided in accordance with the Contract Documents.
- J. In a termination situation, the Owner reserves the right to use any subcontractor, material manufacturer, fabricator, or any vendor originally contracted by the Contractor or to assign their contract with the Contractor to the Owner. The cost of completing the work shall include additional management, design services, legal fees, and other associated costs to complete the project as scheduled.
- K. The Contractor will be terminated for cause if any employee, agent, or representative of the Contractor gives, or offers to give, any gratuity such as a gift or entertainment to an official, employee, officer, or agent of the Owner.

### **9.02 TERMINATION BY OWNER FOR CONVENIENCE**

*Add the following Articles to Section 9.02 of Termination of the Work:*

- E. This Contract may be terminated by the Owner upon fourteen (14) days written notice to the Contractor in the event the Owner determines it is in the best interest of the Owner to terminate this project. If such termination occurs, the Owner shall only pay the Contractor for work completed and materials or equipment delivered as previously approved by the Owner after Notice to Proceed.
- F. This Contract may be terminated by the Owner prior to Notice to Proceed in the event the Owner determines it is in the best interest of the Owner to terminate this project. If such termination occurs, the Contractor shall not be entitled to any monetary remuneration.

## **PART 10 MISCELLANEOUS PROVISIONS**

*Add the following new Section 10.11 to Miscellaneous Provisions*

### **10.11 PROTECTION OF THE ENVIRONMENT**

**Protection of the Environment:** No construction related activity shall contribute to the degradation of the environment, allow material to enter surface or ground waters, or allow particulate emissions to the atmosphere, which exceed state or federal standards.



**SUPPLEMENTAL CONDITIONS AS MODIFIED BY THE CITY OF TACOMA**

*Add the following new Section 10.12 to Miscellaneous Provisions*

**10.12 ASBESTOS**

- A. Asbestos Products: Contractor shall ensure that no Asbestos products in any form are incorporated into the Work.
- B. Contractor shall inspect materials, equipment, and surfaces scheduled for demolition or modification for the presence of Asbestos prior to beginning the Work.
- C. Notice: If in the course of performing the Work, Contractor encounters or disturbs Asbestos, Contractor shall immediately stop work in the area and notify Owner. Contractor shall not recommence work in the area until authorized by Owner.
- D. Contractor shall perform all work in accordance with Specification Section 01\_35\_44.
- E. Delays: If Contractor is delayed during the course of performance because the presence of Asbestos not identified in the Contract Documents, Contractor may request an equitable adjustment in the Contract Sum or Contract Time in accordance with the provisions of Part 7.

*Add the following new Section 10.13 to Miscellaneous Provisions*

**10.13 LEAD-BASED PAINT**

- A. Lead Paint: Contractor shall ensure that no lead-based paint is incorporated into the Work.
- B. Contractor shall inspect all painted surfaces for the presence of lead prior to making any modifications.
- C. Contractor shall perform all work in accordance with Specification Section 01\_35\_44.

*Add the following new Section 10.14 to Miscellaneous Provisions*

**10.14 COVID-19 REQUIREMENTS**

- A. The Contractor shall comply will all safety requirements and work restrictions imposed by the Washington State Governor’s Office, Department of Labor and Industries, and other regulatory agencies in response to COVID-19 in effect on the Bid Submittal Date. The Contractor shall be responsible for maintaining compliance with all regulatory requirements associated with COVID-19. The Contractor shall perform all work in accordance with these restrictions while they remain in effect. The cost of compliance shall be included in the base bid.

**P A R T I V**

**GENERAL CONDITIONS FOR  
WASHINGTON STATE FACILITY  
CONSTRUCTION**

<u>Section</u>	<u>Description</u>	<u>Page</u>
<b>PART 1 – GENERAL PROVISIONS</b>		
1.01	Definitions.....	3
1.02	Order of Precedence.....	4
1.03	Execution and Intent.....	5
<b>PART 2 – INSURANCE AND BONDS</b>		
2.01	Contractor’s Liability Insurance.....	5
2.02	Coverage Limits.....	6
2.03	Insurance Coverage Certificates.....	6
2.04	Payment and Performance Bonds.....	6
2.05	Alternative Surety.....	7
2.06	Builder’s Risk.....	7
<b>PART 3 – TIME AND SCHEDULE</b>		
3.01	Progress and Completion.....	7
3.02	Construction Schedule.....	7
3.03	Owner’s Right to Suspend the Work for Convenience.....	8
3.04	Owner’s Right to Stop the Work for Cause.....	9
3.05	Delay.....	9
3.06	Notice to Owner of Labor Disputes.....	10
3.07	Damages for Failure to Achieve Timely Completion.....	10
<b>PART 4 – SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS</b>		
4.01	Discrepancies and Contract Document Review.....	11
4.02	Project Record.....	11
4.03	Shop Drawings.....	12
4.04	Organization of Specifications.....	13
4.05	Ownership and Use of Drawings, Specifications & other Documents.....	13
<b>PART 5 – PERFORMANCE</b>		
5.01	Contractor Control and Supervision.....	13
5.02	Permits, Fees and Notices.....	14
5.03	Patents and Royalties.....	14
5.04	Prevailing Wages.....	15
5.05	Hours of Labor.....	15
5.06	Nondiscrimination.....	16
5.07	Safety Precautions.....	16
5.08	Operations, Material Handling, and Storage Areas.....	18
5.09	Prior Notice of Excavation.....	19
5.10	Unforeseen Physical Conditions.....	19
5.11	Protection of Existing Structures, Equipment, Vegetation, Utilities, & Improvements.....	19
5.12	Layout of Work.....	19
5.13	Material and Equipment.....	20
5.14	Availability and Use of Utility Services.....	20
5.15	Tests and Inspections.....	20
5.16	Correction of Nonconforming Work.....	21
5.17	Clean Up.....	22
5.18	Access to Work.....	22
5.19	Other Contracts.....	23
5.20	Subcontractors and Suppliers.....	23
5.21	Warranty of Construction.....	24

**PART 5 – PERFORMANCE (continued)**

5.22	Indemnification.....	25
------	----------------------	----

**PART 6 – PAYMENTS AND COMPLETION**

6.01	Contract Sum.....	25
6.02	Schedule of Values.....	25
6.03	Application for Payment.....	25
6.04	Progress Payments.....	26
6.05	Payments Withheld.....	27
6.06	Retainage and Bond Claim Rights.....	27
6.07	Substantial Completion.....	27
6.08	Prior Occupancy.....	28
6.09	Final Completion, Acceptance, and Payment.....	28

**PART 7 – CHANGES**

7.01	Change in the Work.....	28
7.02	Change in the Contract Sum.....	30
7.03	Change in the Contract Time.....	36

**PART 8 – CLAIMS AND DISPUTE RESOLUTION**

8.01	Claims Procedure.....	38
8.02	Arbitration.....	39
8.03	Claims Audits.....	40

**PART 9 – TERMINATION OF THE WORK**

9.01	Termination by Owner for Cause.....	41
9.02	Termination by Owner for Convenience.....	42

**PART 10 – MISCELLANEOUS PROVISIONS**

10.01	Governing Law.....	43
10.02	Successors and Assigns.....	43
10.03	Meaning of Words.....	43
10.04	Rights and Remedies.....	44
10.05	Contractor Registration.....	44
10.06	Time Computations.....	44
10.07	Records Retention.....	44
10.08	Third-Party Agreements.....	44
10.09	Antitrust Assignments.....	44
10.10	Headings and Captions.....	44

## PART 1 – GENERAL PROVISIONS

### 1.01 DEFINITIONS

- A. “Application for Payment” means a written request submitted by Contractor to A/E for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner or A/E may require.
- B. “Architect,” “Engineer,” or “A/E” means a person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.
- C. “Change Order” means a written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any.
- D. “Claim” means Contractor’s exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in Part 8.
- E. “Contract Award Amount” is the sum of the Base Bid and any accepted Alternates.
- F. “Contract Documents” means the Advertisement for Bids, Instructions for Bidders, completed Bid Form, General Conditions, Modifications to the General Conditions, Supplemental Conditions, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.
- G. “Contract Sum” is the total amount payable by Owner to Contractor, for performance of the Work in accordance with the Contract Documents, including all taxes imposed by law and properly chargeable to the Work, except Washington State sales tax.
- H. “Contract Time” is the number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- I. “Contractor” means the person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.
- J. “Day(s)”: Unless otherwise specified, day(s) shall mean calendar day(s).”
- K. “Drawings” are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.
- L. “Final Acceptance” means the written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents, as more fully set forth in Section 6.09 B.
- M. “Final Completion” means that the Work is fully and finally complete in accordance with the Contract Documents, as more fully set forth in Section 6.09 A.
- N. “Force Majeure” means those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in paragraph 3.05A.
- O. “Notice” means a written notice which has been delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice.

- P. “Notice to Proceed” means a notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- Q. “Owner” means the state agency, institution, or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.
- R. “Person” means a corporation, partnership, business association of any kind, trust, company, or individual.
- S. “Prior Occupancy” means Owner’s use of all or parts of the Project before Substantial Completion, as more fully set forth in Section 6.08 A.
- T. “Progress Schedule” means a schedule of the Work, in a form satisfactory to Owner, as further set forth in Section 3.02.
- U. “Project” means the total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.
- V. “Project Record” means the separate set of Drawings and Specifications as further set forth in paragraph 4.02A.
- W. “Schedule of Values” means a written breakdown allocating the total Contract Sum to each principal category of Work, in such detail as requested by Owner.
- X. “Specifications” are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.
- Y. “Subcontract” means a contract entered into by Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for or in connection with the Work.
- Z. “Subcontractor” means any person, other than Contractor, who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.
- AA. “Substantial Completion” means that stage in the progress of the Work when the construction is sufficiently complete, as more fully set forth in Section 6.07.
- AB. “Work” means the construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.

**1.02 ORDER OF PRECEDENCE**

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order:

1. Signed Public Works Contract, including any Change Orders.
2. Supplemental Conditions.
3. Modifications to the General Conditions.
4. General Conditions.

5. Specifications. Provisions in Division 1 shall take precedence over provisions of any other Division.
6. Drawings. In case of conflict within the Drawings, large scale drawings shall take precedence over small scale drawings.
7. Signed and Completed Bid Form.
8. Instructions to Bidders.
9. Advertisement for Bids.

### 1.03 EXECUTION AND INTENT

Contractor Representations: Contractor makes the following representations to Owner:

1. Contract Sum reasonable: The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;
2. Contractor familiar with project: Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;
3. Contractor financially capable: Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents; and
4. Contractor can complete Work: Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform the obligations required by the Contract Documents and has sufficient experience and competence to do so.

## PART 2 – INSURANCE AND BONDS

### 2.01 CONTRACTOR'S LIABILITY INSURANCE

General insurance requirements: Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured. Review of the Contractor's insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by this part shall be licensed to do business under Chapter 48 RCW or comply with the Surplus Lines Law of the State of Washington. Contractor shall include in its bid the cost of all insurance and bond costs required to complete the base bid work and accepted alternates. Insurance carriers providing insurance in accordance with the Contract Documents shall be acceptable to Owner, and its A.M. Best rating shall be indicated on the insurance certificates.

- A. Term of insurance coverage: Contractor shall maintain the following insurance coverage during the Work and for one year after Final Acceptance. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by Section 5.16.

1. General Liability Insurance: Commercial General Liability (CGL) on an Occurrence Form. Coverage shall include, but not be limited to:
    - a. Completed operations/products liability;
    - b. Explosion, collapse, and underground; and
    - c. Employer's liability coverage.
  2. Automobile Liability Insurance: Automobile liability
- B. Industrial Insurance compliance: Contractor shall comply with the Washington State Industrial Insurance Act and, if applicable, the Federal Longshoremen's and Harbor Workers' Act and the Jones Act.
- C. Insurance to protect for the following: All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.
- D. Owner as Additional Insured: All insurance coverages shall be endorsed to include Owner as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence the Owner as an additional insured.

## **2.02 COVERAGE LIMITS**

Insurance amounts: The coverage limits shall be as follows:

- A. Limits of Liability shall not be less than \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage (other than Automobile Liability) Each Occurrence; Personal Injury and Advertising Liability Each Occurrence.
- B. \$2,000,000 Combined Single Limit Annual General Aggregate.
- C. \$2,000,000 Annual Aggregate for Products and Completed Operations Liability.
- D. \$1,000,000 Combined Single Limit for Automobile Bodily Injury and Property Damage Liability, Each Accident or Loss.

## **2.03 INSURANCE COVERAGE CERTIFICATES**

- A. Certificate required: Prior to commencement of the Work, Contractor shall furnish to Owner a completed certificate of insurance coverage.
- B. List Project info: All insurance certificates shall name Owner's Project number and Project title.
- C. Cancellation provisions: All insurance certificates shall specifically require 45 Days prior notice to Owner of cancellation or any material change, except 30 Days for surplus line insurance.

## **2.04 PAYMENT AND PERFORMANCE BONDS**

Conditions for bonds: Payment and performance bonds for 100% of the Contract Award Amount, plus state sales tax, shall be furnished for the Work, using the Payment Bond and Performance Bond form published by and available from the American Institute of Architects (AIA) – form A312. Prior to execution of a Change Order that, cumulatively with previous Change Orders, increases the Contract Award Amount by 15% or more, the Contractor shall provide either new payment and performance bonds for the



revised Contract Sum, or riders to the existing payment and performance bonds increasing the amount of the bonds. The Contractor shall likewise provide additional bonds or riders when subsequent Change Orders increase the Contract Sum by 15% or more. No payment or performance bond is required if the Contract Sum is \$35,000 or less and Contractor agrees that Owner may, in lieu of the bond, retain 50% of the Contract Sum for the period allowed by RCW 39.08.010.

## **2.05 ALTERNATIVE SURETY**

When alternative surety required: Contractor shall promptly furnish payment and performance bonds from an alternative surety as required to protect Owner and persons supplying labor or materials required by the Contract Documents if:

- A. Owner has a reasonable objection to the surety; or
- B. Any surety fails to furnish reports on its financial condition if required by Owner.

## **2.06 BUILDER'S RISK**

- A. Contractor to buy Property Insurance: Contractor shall purchase and maintain property insurance in the amount of the Contract Sum including all Change Orders for the Work on a replacement cost basis until Substantial Completion. For projects not involving New Building Construction, "Installation Floater" is an acceptable substitute for the Builder's Risk Insurance. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear.
- B. Losses covered: Contractor property insurance shall be placed on an "all risk" basis and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for A/E's services and expenses required as a result of an insured loss.
- C. Waiver of subrogation rights: Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/E's subconsultants, separate contractors described in Section 5.20, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

## **PART 3 – TIME AND SCHEDULE**

### **3.01 PROGRESS AND COMPLETION**

Contractor to meet schedule: Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within a reasonable period thereafter.

### **3.02 CONSTRUCTION SCHEDULE**

- A. Preliminary Progress Schedule: Unless otherwise provided in Division 1, Contractor shall, within 14 Days after issuance of the Notice to Proceed, submit a preliminary Progress Schedule. The Progress Schedule shall show the sequence in which Contractor proposes to perform the Work,

and the dates on which Contractor plans to start and finish major portions of the Work, including dates for shop drawings and other submittals, and for acquiring materials and equipment.

- B. Form of Progress Schedule: Unless otherwise provided in Division 1, the Progress Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Progress Schedule may be general, showing the major portions of the Work, with a more detailed Progress Schedule submitted as directed by Owner.
- C. Owner comments on Progress Schedule: Owner shall return comments on the preliminary Progress Schedule to Contractor within 14 Days of receipt. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted which meets the requirements of this section.
- D. Monthly updates and compliance with Progress Schedule: Contractor shall utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Progress Schedule at its own expense to Owner indicating actual progress. If, in the opinion of Owner, Contractor is not in conformance with the Progress Schedule for reasons other than acts of Force Majeure as identified in Section 3.05, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule, and if directed by Owner, Contractor shall submit a corrective action plan or revise the Progress Schedule to reconcile with the actual progress of the Work.
- E. Contractor to notify Owner of delays: Contractor shall promptly notify Owner in writing of any actual or anticipated event which is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Progress Schedule, and the action being or to be taken to correct the problem. Provision of such notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.

**3.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE**

- A. Owner may suspend Work: Owner may, at its sole discretion, order Contractor, in writing, to suspend all or any part of the Work for up to 90 Days, or for such longer period as mutually agreed.
- B. Compliance with suspension; Owner's options: Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 Days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:
  - 1. Cancel the written notice suspending the Work; or
  - 2. Terminate the Work covered by the notice as provided in the termination provisions of Part 9.
- C. Resumption of Work: If a written notice suspending the Work is cancelled or the period of the notice or any extension thereof expires, Contractor shall resume Work.
- D. Equitable Adjustment for suspensions: Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance

directly attributable to such suspension, provided Contractor complies with all requirements set forth in Part 7.

**3.04 OWNER'S RIGHT TO STOP THE WORK FOR CAUSE**

- A. Owner may stop Work for Contractor's failure to perform: If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Contractor, in writing, to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.
- B. No Equitable Adjustment for Contractor's failure to perform: Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

**3.05 DELAY**

- A. Force Majeure actions not a default; Force Majeure defined: Any delay in or failure of performance by Owner or Contractor, other than the payment of money, shall not constitute a default hereunder if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party ("Force Majeure"). Acts of Force Majeure include, but are not limited to:
  - 1. Acts of God or the public enemy;
  - 2. Acts or omissions of any government entity;
  - 3. Fire or other casualty for which Contractor is not responsible;
  - 4. Quarantine or epidemic;
  - 5. Strike or defensive lockout;
  - 6. Unusually severe weather conditions which could not have been reasonably anticipated; and
  - 7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.
- B. Contract Time adjustment for Force Majeure: Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of Force Majeure, provided it makes a request for equitable adjustment according to Section 7.03. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of Force Majeure.
- C. Contract Time or Contract Sum adjustment if Owner at fault: Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request according to Sections 7.02 and 7.03.
- D. No Contract Time or Contract Sum adjustment if Contractor at fault: Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.

- E. Contract Time adjustment only for concurrent fault: To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment according to Section 7.03, but shall not be entitled to an adjustment in Contract Sum.
- F. Contractor to mitigate delay impacts: Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of Force Majeure or otherwise.

**3.06 NOTICE TO OWNER OF LABOR DISPUTES**

- A. Contractor to notify Owner of labor disputes: If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.
- B. Pass through notification provisions to Subcontractors: Contractor agrees to insert a provision in its Subcontracts and to require insertion in all sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

**3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION**

A. Liquidated Damages

- 1. Reason for Liquidated Damages: Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.
- 2. Calculation of Liquidated Damages amount: The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.
- 3. Contractor responsible even if Liquidated Damages assessed: Assessment of liquidated damages shall not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.

B. Actual Damages

Calculation of Actual Damages: Actual damages will be assessed for failure to achieve Final Completion within the time provided. Actual damages will be calculated on the basis of direct architectural, administrative, and other related costs attributable to the Project from the date when Final Completion should have been achieved, based on the date Substantial Completion is actually achieved, to the date Final Completion is actually achieved. Owner may offset these costs against any payment due Contractor.

## PART 4 – SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

### 4.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

- A. Specifications and Drawings are basis of the Work: The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.
- B. Parts of the Contract Documents are complementary: The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.
- C. Contractor to report discrepancies in Contract Documents: Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to A/E in writing.
- D. Contractor knowledge of discrepancy in documents – responsibility: Contractor shall do no Work without applicable Drawings, Specifications, or written modifications, or Shop Drawings where required, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or reasonably should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.
- E. Contractor to perform Work implied by Contract Documents: Contractor shall provide any work or materials the provision of which is clearly implied and is within the scope of the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Interpretation questions referred to A/E: Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

### 4.02 PROJECT RECORD

- A. Contractor to maintain Project Record Drawings and Specifications: Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction, including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, and Change Order Proposals (COP). This separate set of Drawings and Specifications shall be the "Project Record."
- B. Update Project Record weekly and keep on site: The Project Record shall be maintained on the project site throughout the construction and shall be clearly labeled "PROJECT RECORD." The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.
- C. Final Project Record to A/E before Final Acceptance: Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

**4.03 SHOP DRAWINGS**

- A. Definition of Shop Drawings: “Shop Drawings” means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Shop Drawings include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents. For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose Shop Drawings provided in accordance with the Contract Documents.
- B. Approval of Shop Drawings by Contractor and A/E: Contractor shall coordinate all Shop Drawings, and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, Shop Drawings shall be stamped by an appropriate professional licensed by the state of Washington. Shop Drawings submitted to A/E without evidence of Contractor’s approval shall be returned for resubmission. Contractor shall review, approve, and submit Shop Drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor’s submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the Shop Drawings. Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to Shop Drawing submittals with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed Shop Drawings. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.
- C. Contractor not relieved of responsibility when Shop Drawings approved: Approval, or other appropriate action with regard to Shop Drawings, by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such Shop Drawings, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor’s means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.
- D. Variations between Shop Drawings and Contract Documents: If Shop Drawings show variations from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the Shop Drawings, at the time it submits the Shop Drawings containing such variations. If A/E approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be recorded upon the Project Record.
- E. Contractor to submit 5 copies of Shop Drawings: Unless otherwise provided in Division 1, Contractor shall submit to A/E for approval 5 copies of all Shop Drawings. Unless otherwise indicated, 3 sets of all Shop Drawings shall be retained by A/E and 2 sets shall be returned to Contractor.

**4.04 ORGANIZATION OF SPECIFICATIONS**

Specification organization by trade: Specifications are prepared in sections which conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

**4.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

- A. A/E, not Contractor, owns Copyright of Drawings and Specifications: The Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.
- B. Drawings and Specifications to be used only for this Project: The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner and A/E. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.
- C. Shop Drawing license granted to Owner: Contractor and all Subcontractors grant a non-exclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all Shop Drawings, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing Shop Drawings, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the Shop Drawings, and that such license is not in violation of any copyright or other intellectual property right. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in Section 5.03 and 5.22 from any violations of copyright or other intellectual property rights arising out of Owner's use of the Shop Drawings hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.
- D. Shop Drawings to be used only for this Project: The Shop Drawings and other submittals prepared by Contractor, Subcontractors of any tier, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor of any tier, or material or equipment supplier, on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Shop Drawings and other submittals appropriate to and for use in the execution of their Work under the Contract Documents.

**PART 5 – PERFORMANCE**

**5.01 CONTRACTOR CONTROL AND SUPERVISION**

- A. Contractor responsible for Means and Methods of construction: Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the

Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.

- B. Competent Superintendent required: Performance of the Work shall be directly supervised by a competent superintendent who has authority to act for Contractor. The superintendent must be satisfactory to the Owner and shall not be changed without the prior written consent of Owner. Owner may require Contractor to remove the superintendent from the Work or Project site, if Owner reasonably deems the superintendent incompetent, careless, or otherwise objectionable, provided Owner has first notified Contractor in writing and allowed a reasonable period for transition.
- C. Contractor responsible for acts and omissions of self and agents: Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- D. Contractor to employ competent and disciplined workforce: Contractor shall enforce strict discipline and good order among all of the Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times conduct business in a manner which assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor to keep project documents on site: Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed Shop Drawings, and permits and permit drawings.
- F. Contractor to comply with ethical standards: Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the Ethics in Public Service Act RCW 42.52, which, among other things, prohibits state employees from having an economic interest in any public works contract that was made by, or supervised by, that employee. Contractor shall remove, at its sole cost and expense, any of its, or its Subcontractors' employees, if they are in violation of this act.

#### **5.02 PERMITS, FEES, AND NOTICES**

- A. Contractor to obtain and pay for permits: Unless otherwise provided in the Contract Documents, Contractor shall pay for and obtain all permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.
- B. Allowances for permit fees: If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor's bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.
- C. Contractor to comply with all applicable laws: Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.

#### **5.03 PATENTS AND ROYALTIES**

Payment, indemnification, and notice: Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a



particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

**5.04 PREVAILING WAGES**

- A. Contractor to pay Prevailing Wages: Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of the Department of Labor and Industries. The schedule of prevailing wage rates for the locality or localities of the Work, is determined by the Industrial Statistician of the Department of Labor and Industries. It is the Contractor's responsibility to verify the applicable prevailing wage rate.
- B. Statement of Intent to Pay Prevailing Wages: Before payment is made by the Owner to the Contractor for any work performed by the Contractor and subcontractors whose work is included in the application for payment, the Contractor shall submit, or shall have previously submitted to the Owner for the Project, a Statement of Intent to Pay Prevailing Wages, approved by the Department of Labor and Industries, certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.
- C. Affidavit of Wages Paid: Prior to release of retainage, the Contractor shall submit to the Owner an Affidavit of Wages Paid, approved by the Department of Labor and Industries, for the Contractor and every subcontractor, of any tier, that performed work on the Project.
- D. Disputes: Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Department of Labor and Industries. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.
- E. Statement with pay application; Post Statements of Intent at job site: Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefiled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.
- F. Contractor to pay for Statements of Intent and Affidavits: In compliance with chapter 296-127 WAC, Contractor shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification.
- G. Certified Payrolls: Consistent with WAC 296-127-320, the Contractor and any subcontractor shall submit a certified copy of payroll records if requested.

**5.05 HOURS OF LABOR**

- A. Overtime: Contractor shall comply with all applicable provisions of RCW 49.28 and they are incorporated herein by reference. Pursuant to that statute, no laborer, worker, or mechanic employed by Contractor, any Subcontractor, or any other person performing or contracting to do the whole or any part of the Work, shall be permitted or required to work more than eight hours in any one calendar day, provided, that in cases of extraordinary emergency, such as danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of eight hours of each calendar day shall be not less than one and one-half times the rate allowed for this same amount of time during eight hours of service.

- B. 4-10 Agreements: Notwithstanding the preceding paragraph, RCW 49.28 permits a contractor or subcontractor in any public works contract subject to those provisions, to enter into an agreement with its employees in which the employees work up to ten hours in a calendar day. No such agreement may provide that the employees work ten-hour days for more than four calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of RCW 49.28 shall not apply to the hours, up to forty hours per week, worked pursuant to any such agreement.

**5.06 NONDISCRIMINATION**

- A. Discrimination prohibited by applicable laws: Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans Readjustment Act of 1974, Sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of 1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, RCW 49.60, and Gubernatorial Executive Order 85-09. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.

B. During performance of the Work:

1. Protected Classes: Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in RCW 49.60.
2. Advertisements to state nondiscrimination: Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment, without regard to race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability.
3. Contractor to notify unions and others of nondiscrimination: Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and RCW 49.60.
4. Owner and State access to Contractor records: Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.
5. Pass through provisions to Subcontractors: Contractor shall include the provisions of this section in every Subcontract.

**5.07 SAFETY PRECAUTIONS**

- A. Contractor responsible for safety: Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.
- B. Contractor safety responsibilities: In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether on site or stored off-site; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations,

and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.

- C. Contractor to maintain safety records: Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.
- D. Contractor to provide HazMat training: Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
1. Information. At a minimum, Contractor shall inform persons working on the Project site of:
    - a. WAC: The requirements of chapter 296-62 WAC, General Occupational Health Standards;
    - b. Presence of hazardous chemicals: Any operations in their work area where hazardous chemicals are present; and
    - c. Hazard communications program: The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-62 WAC.
  2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:
    - a. Detecting hazardous chemicals: Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
    - b. Hazards of chemicals: The physical and health hazards of the chemicals in the work area;
    - c. Protection from hazards: The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
    - d. Hazard communications program: The details of the hazard communications program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.
- E. Hazardous, toxic or harmful substances: Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:
1. Illegal use of dangerous substances: Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or

harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 Days on the Project site.

2. Contractor notifications of spills, failures, inspections, and fines: Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.
- F. Public safety and traffic: All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.
- G. Contractor to act in an emergency: In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.
- H. No duty of safety by Owner or A/E: Nothing provided in this section shall be construed as imposing any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

**5.08 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS**

- A. Limited storage areas: Contractor shall confine all operations, including storage of materials, to Owner-approved areas.
- B. Temporary buildings and utilities at Contractor expense: Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall be removed by Contractor at its expense upon completion of the Work.
- C. Roads and vehicle loads: Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.
- D. Ownership and reporting by Contractor of demolished materials: Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.
- E. Contractor responsible for care of materials and equipment on-site: Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of

Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.

- F. Contractor responsible for loss of materials and equipment: Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

**5.09 PRIOR NOTICE OF EXCAVATION**

- A. Excavation defined; Use of locator services: "Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities or utilities, through locator services.

**5.10 UNFORESEEN PHYSICAL CONDITIONS**

- A. Notice requirement for concealed or unknown conditions: If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than 7 Days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.
- B. Adjustment in Contract Time and Contract Sum: If such conditions differ materially and cause a change in Contractor's cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum, or both, provided it makes a request therefore as provided in Part 7.

**5.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES AND IMPROVEMENTS**

- A. Contractor to protect and repair property: Contractor shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation: at or near the Project site; and on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor.
- B. Tree and vegetation protection: Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.

**5.12 LAYOUT OF WORK**

- A. Advanced planning of the Work: Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.

- B. Layout responsibilities: Contractor shall lay out the Work from Owner-established baselines and bench marks indicated on the Drawings, and shall be responsible for all field measurements in connection with the layout. Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. Contractor shall be responsible for executing the Work to the lines and grades that may be established. Contractor shall be responsible for maintaining or restoring all stakes and other marks established.

**5.13 MATERIAL AND EQUIPMENT**

- A. Contractor to provide new and equivalent equipment and materials: All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E, is equal to that named in the specifications, unless otherwise specifically provided in the Contract Documents.
- B. Contractor responsible for fitting parts together: Contractor shall do all cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.
- C. Owner may reject defective Work: Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever stage of completion, may be rejected by Owner.

**5.14 AVAILABILITY AND USE OF UTILITY SERVICES**

- A. Owner to provide and charge for utilities: Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities furnished.
- B. Contractor to install temporary connections and meters: Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices, and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to the date of Final Acceptance, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

**5.15 TESTS AND INSPECTION**

- A. Contractor to provide for all testing and inspection of Work: Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and

where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.

- B. Owner may conduct tests and inspections: Owner may, at any reasonable time, conduct such inspections and tests as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:
1. Constitute or imply acceptance;
  2. Relieve Contractor of responsibility for providing adequate quality control measures;
  3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment;
  4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents; or
  5. Impair Owner's right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled.
- C. Inspections or inspectors do not modify Contract Documents: Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.
- D. Contractor responsibilities on inspections: Contractor shall promptly furnish, without additional charge, all facilities, labor, material and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes reinspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

**5.16 CORRECTION OF NONCONFORMING WORK**

- A. Work covered by Contractor without inspection: If a portion of the Work is covered contrary to the requirements in the Contract Documents, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at the Contractor's expense and without change in the Contract Time.
- B. Payment provisions for uncovering covered Work: If, at any time prior to Final Completion, Owner desires to examine the Work, or any portion of it, which has been covered, Owner may request to see such Work and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and, if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes such a request as provided in Part 7. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.
- C. Contractor to correct and pay for non-conforming Work: Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or

completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.

- D. Contractor's compliance with warranty provisions: If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or within one year after the date for commencement of any system warranties established under Section 6.08, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner to do so. Owner shall give such notice promptly after discovery of the condition. This period of one year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for one year from the date of repair or replacement. Obligations under this paragraph shall survive Final Acceptance.
- E. Contractor to remove non-conforming Work: Contractor shall remove from the Project site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.
- F. Owner may charge Contractor for non-conforming Work: If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.
- G. Contractor to pay for damaged Work during correction: Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- H. No Period of limitation on other requirements: Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations which Contractor might have according to the Contract Documents. Establishment of the time period of one year as described in Section 5.16D relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.
- I. Owner may accept non-conforming Work and charge Contractor: If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum may be reduced as appropriate and equitable.

#### **5.17 CLEAN UP**

Contractor to keep site clean and leave it clean: Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

#### **5.18 ACCESS TO WORK**

Owner and A/E access to Work site: Contractor shall provide Owner and A/E access to the Work in progress wherever located.



**5.19 OTHER CONTRACTS**

Owner may award other contracts; Contractor to cooperate: Owner may undertake or award other contracts for additional work at or near the Project site. Contractor shall reasonably cooperate with the other contractors and with Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with these Contract Documents to reasonably accommodate the other work.

**5.20 SUBCONTRACTORS AND SUPPLIERS**

A. Subcontractor Responsibility: The Contractor shall include the language of this paragraph in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this paragraph apply to all subcontractors regardless of tier. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. If applicable, have:
  - a. Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
  - b. A Washington Employment Security Department number, as required in Title 50 RCW;
  - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
  - d. An electrical contractor license, if required by Chapter 19.28 RCW;
  - e. An elevator contractor license, if required by Chapter 70.87 RCW.
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).
5. On a project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the Owner's first advertisement of the project.

B. Provide names of Subcontractors and use qualified firms: Before submitting the first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or supplier to whom the Owner has a reasonable objection, and shall obtain Owner's written consent before making any substitutions or additions.

- C. Subcontracts in writing and pass through provision: All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.
- D. Coordination of Subcontractors; Contractor responsible for Work: Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- E. Automatic assignment of subcontracts: Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:
1. Effective only after termination and Owner approval: The assignment is effective only after termination by Owner for cause pursuant to Section 9.01 and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and
  2. Owner assumes Contractor's responsibilities: After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor which Contractor assumed in the Subcontract.
  3. Impact of bond: The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

## **5.21 WARRANTY OF CONSTRUCTION**

- A. Contractor warranty of Work: In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed by Contractor.
- B. Contractor responsibilities: With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:
1. Obtain warranties: Obtain all warranties that would be given in normal commercial practice;
  2. Warranties for benefit of Owner: Require all warranties to be executed, in writing, for the benefit of Owner;
  3. Enforcement of warranties: Enforce all warranties for the benefit of Owner, if directed by Owner; and
  4. Contractor responsibility for subcontractor warranties: Be responsible to enforce any subcontractor's, manufacturer's, or supplier's warranties should they extend beyond the period specified in the Contract Documents.
- C. Warranties beyond Final Acceptance: The obligations under this section shall survive Final Acceptance.

**5.22 INDEMNIFICATION**

- A. Contractor to indemnify Owner: Contractor shall defend, indemnify, and hold Owner and A/E harmless from and against all claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, caused by or resulting from:
1. Sole negligence of Contractor: The sole negligence of Contractor or any of its Subcontractors;
  2. Concurrent negligence: The concurrent negligence of Contractor, or any Subcontractor, but only to the extent of the negligence of Contractor or such Subcontractor; and
  3. Patent infringement: The use of any design, process, or equipment which constitutes an infringement of any United States patent presently issued, or violates any other proprietary interest, including copyright, trademark, and trade secret.
- B. Employee action and RCW Title 51: In any action against Owner and any other entity indemnified in accordance with this section, by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under RCW Title 51, the Industrial Insurance Act, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with RCW Title 51.

**PART 6 – PAYMENTS AND COMPLETION**

**6.01 CONTRACT SUM**

Owner shall pay Contract Sum: Owner shall pay Contractor the Contract Sum plus state sales tax for performance of the Work, in accordance with the Contract Documents.

**6.02 SCHEDULE OF VALUES**

Contractor to submit Schedule of Values: Before submitting its first Application for Payment, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principal category of work, in such detail as requested by Owner (“Schedule of Values”). The approved Schedule of Values shall include appropriate amounts for demobilization, record drawings, O&M manuals, and any other requirements for Project closeout, and shall be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

**6.03 APPLICATION FOR PAYMENT**

- A. Monthly Application for Payment with substantiation: At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.
- B. Contractor certifies Subcontractors paid: By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.011, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in Section 1.03, are true and correct, to the best of Contractor’s knowledge, as of the date of the Application for Payment.

- C. Reconciliation of Work with Progress Schedule: At the time it submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Progress Schedule.
- D. Payment for material delivered to site or stored off-site: If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:
1. Suitable facility or location: The material will be placed in a facility or location that is structurally sound, dry, lighted and suitable for the materials to be stored;
  2. Facility or location within 10 miles of Project: The facility or location is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;
  3. Facility or location exclusive to Project's materials: Only materials for the Project are stored within the facility or location (or a secure portion of a facility or location set aside for the Project);
  4. Insurance provided on materials in facility or location: Contractor furnishes Owner a certificate of insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;
  5. Facility or location locked and secure: The facility or location (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access;
  6. Owner right of access to facility or location: Owner shall at all times have the right of access in company of Contractor;
  7. Contractor assumes total responsibility for stored materials: Contractor and its surety assume total responsibility for the stored materials; and
  8. Contractor provides documentation and Notice when materials moved to site: Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish Notice to Owner when materials are moved from storage to the Project site.

**6.04 PROGRESS PAYMENTS**

- A. Owner to pay within 30 Days: Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 Days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with chapter 39.76 RCW if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Withholding retainage; Options for retainage: Owner shall retain 5% of the amount of each progress payment until 45 Days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including, at Owner's request, consent of surety to release of the retainage. In accordance with chapter 60.28 RCW, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.

- C. Title passes to Owner upon payment: Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents.
- D. Interest on unpaid balances: Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in chapter 39.76 RCW.

#### **6.05 PAYMENTS WITHHELD**

- A. Owner's right to withhold payment: Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:
1. Non-compliant Work: Work not in accordance with the Contract Documents;
  2. Remaining Work to cost more than unpaid balance: Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum;
  3. Owner correction or completion Work: Work by Owner to correct defective Work or complete the Work in accordance with Section 5.16;
  4. Contractor's failure to perform: Contractor's failure to perform in accordance with the Contract Documents; or
  5. Contractor's negligent acts or omissions: Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions.
- B. Owner to notify Contractor of withholding for unsatisfactory performance: In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with chapter 39.76 RCW.

#### **6.06 RETAINAGE AND BOND CLAIM RIGHTS**

Chapters 39.08 RCW and 60.28 RCW incorporated by reference: Chapters 39.08 RCW and 60.28 RCW, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

#### **6.07 SUBSTANTIAL COMPLETION**

Substantial Completion defined: Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner has full and unrestricted use and benefit of the facilities (or portion thereof designated and approved by Owner) for the use for which it is intended. All Work other than incidental corrective or punch list work shall be completed. Substantial Completion shall not have been achieved if all systems and parts are not functional, if utilities are not connected and operating normally, if all required occupancy permits have not been issued, or if the Work is not accessible by normal vehicular and pedestrian traffic routes. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion which must be approved by Change Order. Owner's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.

**6.08 PRIOR OCCUPANCY**

- A. Prior Occupancy defined; Restrictions: Owner may, upon written notice thereof to Contractor, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, Prior Occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.
- B. Damage; Duty to repair and warranties: Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy. Contractor's one year duty to repair any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

**6.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT**

- A. Final Completion defined: Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing, but in no case shall constitute Final Acceptance which is a subsequent, separate, and distinct action.
- B. Final Acceptance defined: Final Acceptance shall be achieved when the Contractor has completed the requirements of the Contract Documents. The date Final Acceptance is achieved shall be established by Owner in writing. Prior to Final Acceptance, Contractor shall, in addition to all other requirements in the Contract Documents, submit to Owner a written notice of any outstanding disputes or claims between Contractor and any of its Subcontractors, including the amounts and other details thereof. Neither Final Acceptance, nor final payment, shall release Contractor or its sureties from any obligations of these Contract Documents or the payment and performance bonds, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Final payment waives Claim rights: Acceptance of final payment by Contractor, or any Subcontractor, shall constitute a waiver and release to Owner of all claims by Contractor, or any such Subcontractor, for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in Part 8.

**PART 7 – CHANGES**

**7.01 CHANGE IN THE WORK**

- A. Changes in Work, Contract Sum, and Contract Time by Change Order: Owner may, at any time and without notice to Contractor's surety, order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in Section 7.02 or 7.03, respectively, and such adjustment(s) shall be incorporated into a Change Order.
- B. Owner may request COP from Contractor: If Owner desires to order a change in the Work, it may request a written Change Order Proposal (COP) from Contractor. Contractor shall submit a Change Order Proposal within 14 Days of the request from Owner, or within such other period as mutually agreed. Contractor's Change Order Proposal shall be full compensation for

implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.

- C. COP negotiations: Upon receipt of the Change Order Proposal, or a request for equitable adjustment in the Contract Sum or Contract Time, or both, as provided in Sections 7.02 and 7.03, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change Order, Owner may direct Contractor to proceed immediately with the Change Order Work. Contractor shall not proceed with any change in the Work until it has obtained Owner's approval. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.
- D. Change Order as full payment and final settlement: If Owner and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.
- E. Failure to agree upon terms of Change Order; Final offer and Claims: If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 Days of Contractor's request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer, or the parties are otherwise unable to reach agreement, Contractor's only remedy shall be to file a Claim as provided in Part 8.
- F. Field Authorizations: The Owner may direct the Contractor to proceed with a change in the work through a written Field Authorization (also referred to as a Field Order) when the time required to price and execute a Change Order would impact the Project.

The Field Authorization shall describe and include the following:

1. The scope of work
2. An agreed upon maximum not-to-exceed amount
3. Any estimated change to the Contract Time
4. The method of final cost determination in accordance with the requirements of Part 7 of the General Conditions
5. The supporting cost data to be submitted in accordance with the requirements of Part 7 of the General Conditions

Upon satisfactory submittal by the Contractor and approval by the Owner of supporting cost data, a Change Order will be executed. The Owner will not make payment to the Contractor for Field Authorization work until that work has been incorporated into an executed Change Order.

**7.02 CHANGE IN THE CONTRACT SUM**

**A. General Application**

1. Contract Sum changes only by Change Order: The Contract Sum shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Sum in its Change Order Proposal.
  
2. Owner fault or negligence as basis for change in Contract Sum: If the cost of Contractor's performance is changed due to the fault or negligence of Owner, or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent: Contractor's changed cost of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible; the change is concurrently caused by Contractor and Owner; or the change is caused by an act of Force Majeure as defined in Section 3.05.
  - (a) Notice and record keeping for equitable adjustment: A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 Days of the occurrence of the event giving rise to the request. For purposes of this part, "occurrence" means when Contractor knew, or in its diligent prosecution of the Work should have known, of the event giving rise to the request. If Contractor believes it is entitled to an adjustment in the Contract Sum, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested shall promptly furnish copies of such records to Owner.
  
  - (b) Content of notice for equitable adjustment; Failure to comply: Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 7 Days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
  
  - (c) Contractor to provide supplemental information: Within 30 Days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph a. above with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with Section 7.03C. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.



- (d) Contractor to proceed with Work as directed: Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
  - (e) Contractor to combine requests for same event together: Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Contract Time that arise out of the same event(s) shall be submitted together.
3. Methods for calculating Change Order amount: The value of any Work covered by a Change Order, or of any request for an equitable adjustment in the Contract Sum, shall be determined by one of the following methods:
- a. Fixed Price: On the basis of a fixed price as determined in paragraph 7.02B.
  - b. Unit Prices: By application of unit prices to the quantities of the items involved as determined in paragraph 7.02C.
  - c. Time and Materials: On the basis of time and material as determined in paragraph 7.02D.
4. Fixed price method is default; Owner may direct otherwise: When Owner has requested Contractor to submit a Change Order Proposal, Owner may direct Contractor as to which method in subparagraph 3 above to use when submitting its proposal. Otherwise, Contractor shall determine the value of the Work, or of a request for an equitable adjustment, on the basis of the fixed price method.

**B. Change Order Pricing – Fixed Price**

Procedures: When the fixed price method is used to determine the value of any Work covered by a Change Order, or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:

- 1. Breakdown and itemization of details on COP: Contractor's Change Order Proposal, or request for adjustment in the Contract Sum, shall be accompanied by a complete itemization of the costs, including labor, material, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below, and shall be submitted on breakdown sheets in a form approved by Owner.
- 2. Use of industry standards in calculating costs: All costs shall be calculated based upon appropriate industry standard methods of calculating labor, material quantities, and equipment costs.
- 3. Costs contingent on Owner's actions: If any of Contractor's pricing assumptions are contingent upon anticipated actions of Owner, Contractor shall clearly state them in the proposal or request for an equitable adjustment.
- 4. Markups on additive and deductive Work: The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Contractor or Subcontractor, small tools, overhead, profit, bond and insurance markups will apply to the net difference.
- 5. Breakdown not required if change less than \$1,000: If the total cost of the change in the Work or request for equitable adjustment does not exceed \$1,000, Contractor shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.

6. Breakdown required if change between \$1,000 and \$2,500: If the total cost of the change in the Work or request for equitable adjustment is between \$1,000 and \$2,500, Contractor may submit a breakdown in the following level of detail if the description of the change in the Work or if the request for equitable adjustment is sufficiently definitive to permit the Owner to determine fair value:
- a. lump sum labor;
  - b. lump sum material;
  - c. lump sum equipment usage;
  - d. overhead and profit as set forth below; and
  - e. insurance and bond costs as set forth below.
7. Components of increased cost: Any request for adjustment of Contract Sum based upon the fixed price method shall include only the following items:
- a. Craft labor costs: These are the labor costs determined by multiplying the estimated or actual additional number of craft hours needed to perform the change in the Work by the hourly labor costs. Craft hours should cover direct labor, as well as indirect labor due to trade inefficiencies. The hourly costs shall be based on the following:
    - (1) Basic wages and benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved "statement of intent to pay prevailing wages" or a higher amount if approved by the Owner. Direct supervision shall be a reasonable percentage not to exceed 15% of the cost of direct labor. No supervision markup shall be allowed for a working supervisor's hours.
    - (2) Worker's insurance: Direct contributions to the state of Washington for industrial insurance; medical aid; and supplemental pension, by the class and rates established by the Department of Labor and Industries.
    - (3) Federal insurance: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.
    - (4) Travel allowance: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.
    - (5) Safety: Cost incurred due to the Washington Industrial Safety and Health Act, which shall be a reasonable percentage not to exceed 2% of the sum of the amounts calculated in (1), (2), and (3) above.
  - b. Material costs: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed first from actual known costs, second from supplier quotations or if these are not available, from standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges, shall be itemized.

**DOCUMENT 00720**  
**GENERAL CONDITIONS**  
**FOR WASHINGTON STATE FACILITY CONSTRUCTION**  
**Page 33 of 44**

c. Equipment costs: This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work, or for additional rental costs actually incurred by the Contractor. Equipment charges shall be computed on the basis of actual invoice costs or if owned, from the current edition of one of the following sources:

- (1) Associated General Contractors Washington State Department of Transportation (AGC WSDOT) Equipment Rental Agreement current edition, on the Contract execution date.
- (2) The National Electrical Contractors Association for equipment used on electrical work.
- (3) The Mechanical Contractors Association of America for equipment used on mechanical work.

The EquipmentWatch Rental Rate Blue Book shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed that shown in the AGC WSDOT Equipment Rental Agreement, current edition on the Contract execution date.

d. Allowance for small tools, expendables & consumable supplies: Small tools consist of tools which cost \$250 or less and are normally furnished by the performing contractor. The maximum rate for small tools shall not exceed the following:

- (1) 3% for Contractor: For Contractor, 3% of direct labor costs.
- (2) 5% for Subcontractors: For Subcontractors, 5% of direct labor costs.

Expendables and consumables supplies directly associated with the change in Work must be itemized.

e. Subcontractor costs: This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work shall be calculated and itemized in the same manner as prescribed herein for Contractor.

f. Allowance for overhead: This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Owner of any change in the Contract Sum. If the Contractor is compensated under Section 7.03D, the amount of such compensation shall be reduced by the amount Contractor is otherwise entitled to under this subsection (f). This allowance shall compensate Contractor for all noncraft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, B&O taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It shall be strictly limited in all cases to a reasonable amount, mutually acceptable, or if none can be agreed upon to an amount not to exceed the rates below:

- (1) Projects less than \$3 million: For projects where the Contract Award Amount is under \$3 million, the following shall apply:

**DOCUMENT 00720**  
**GENERAL CONDITIONS**  
**FOR WASHINGTON STATE FACILITY CONSTRUCTION**  
**Page 34 of 44**

- (a) Contractor markup on Contractor Work: For Contractor, for any Work actually performed by Contractor's own forces, 16% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
  - (b) Subcontractor markup for Subcontractor Work: For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 16% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
  - (c) Contractor markup for Subcontractor Work: For Contractor, for any work performed by its Subcontractor(s) 6% of the first \$50,000 of the amount due each Subcontractor, and 4% of the remaining amount if any.
  - (d) Subcontractor markup for lower tier Subcontractor Work: For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first \$50,000 of the amount due the sub-Subcontractor, and 2% of the remaining amount if any.
  - (e) Basis of cost applicable for markup: The cost to which overhead is to be applied shall be developed in accordance with Section 7.02B 7a. – e.
- (2). Projects more than \$3 million: For projects where the Contract Award Amount is equal to or exceeds \$3 million, the following shall apply:
- (a) Contractor markup on Contractor Work: For Contractor, for any Work actually performed by Contractor's own forces, 12% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
  - (b) Subcontractor markup for Subcontractor Work: For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 12% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
  - (c) Contractor markup for Subcontractor Work: For Contractor, for any Work performed by its Subcontractor(s), 4% of the first \$50,000 of the amount due each Subcontractor, and 2% of the remaining amount if any.
  - (d) Subcontractor markup for lower tier Subcontractor Work: For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first \$50,000 of the amount due the sub-Subcontractor, and 2% of the remaining amount if any.
  - (e) Basis of cost applicable for markup: The cost to which overhead is to be applied shall be developed in accordance with Section 7.02B 7a. – e.
- g. Allowance for profit: Allowance for profit is an amount to be added to the cost of any change in contract sum, but not to the cost of change in Contract Time for which contractor has been compensated pursuant to the conditions set forth in Section 7.03. It shall be limited to a reasonable amount, mutually acceptable, or if none can be agreed upon, to an amount not to exceed the rates below:
- (1) Contractor / Subcontractor markup for self-performed Work: For Contractor or Subcontractor of any tier for work performed by their forces, 6% of the cost developed in accordance with Section 7.02B 7a. – e.

- (2) Contractor / Subcontractor markup for Work performed at lower tier: For Contractor or Subcontractor of any tier for work performed by a subcontractor of a lower tier, 4% of the subcontract cost developed in accordance with Section 7.02B 7a. – h.
- h. Insurance and bond premiums: Cost of change in insurance or bond premium: This is defined as:
  - (1) Contractor's liability insurance: The cost of any changes in Contractor's liability insurance arising directly from execution of the Change Order; and
  - (2) Payment and Performance Bond: The cost of the additional premium for Contractor's bond arising directly from the changed Work.

The cost of any change in insurance or bond premium shall be added after overhead and allowance for profit are calculated in accordance with subparagraph f. and g above.

**C. Change Order Pricing – Unit Prices**

- 1. Content of Owner authorization: Whenever Owner authorizes Contractor to perform Work on a unit-price basis, Owner's authorization shall clearly state:
  - a. Scope: Scope of work to be performed;
  - b. Reimbursement basis: Type of reimbursement including pre-agreed rates for material quantities; and
  - c. Reimbursement limit: Cost limit of reimbursement.
- 2. Contractor responsibilities: Contractor shall:
  - a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Contractor shall identify workers assigned to the Change Order Work and areas in which they are working;
  - b. Leave access as appropriate for quantity measurement; and
  - c. Not exceed any cost limit(s) without Owner's prior written approval.
- 3. Cost breakdown consistent with Fixed Price requirements: Contractor shall submit costs in accordance with paragraph 7.02B and satisfy the following requirements:
  - a. Unit prices must include overhead, profit, bond and insurance premiums: Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead, profit, bond, and insurance costs; and
  - b. Owner verification of quantities: Quantities must be supported by field measurement statements signed by Owner.

**D. Change Order Pricing – Time-and-Material Prices**

- 1. Content of Owner authorization: Whenever Owner authorizes Contractor to perform Work on a time-and-material basis, Owner's authorization shall clearly state:
  - a. Scope: Scope of Work to be performed;

- b. Reimbursement basis: Type of reimbursement including pre-agreed rates, if any, for material quantities or labor; and
  - c. Reimbursement limit: Cost limit of reimbursement.
2. Contractor responsibilities: Contractor shall:
- a. Identify workers assigned: Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working;
  - b. Provide daily timesheets: Identify on daily time sheets all labor performed in accordance with this authorization. Submit copies of daily time sheets within 2 working days for Owner's review.
  - c. Allow Owner to measure quantities: Leave access as appropriate for quantity measurement;
  - d. Perform Work efficiently: Perform all Work in accordance with this section as efficiently as possible; and
  - e. Not exceed Owner's cost limit: Not exceed any cost limit(s) without Owner's prior written approval.
3. Cost breakdown consistent with Fixed Price requirements: Contractor shall submit costs in accordance with paragraph 7.02B and additional verification supported by:
- a. Timesheets: Labor detailed on daily time sheets; and
  - b. Invoices: Invoices for material.

### **7.03 CHANGE IN THE CONTRACT TIME**

- A. COP requests for Contract Time: The Contract Time shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Time in its Change Order Proposal.
- B. Time extension permitted if not Contractor's fault: If the time of Contractor's performance is changed due to an act of Force Majeure, or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible.
- 1. Notice and record keeping for Contract Time request: A request for an equitable adjustment in the Contract Time shall be based on written notice delivered within 7 Days of the occurrence of the event giving rise to the request. If Contractor believes it is entitled to adjustment of Contract Time, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such record and if requested, shall promptly furnish copies of such record to Owner.
  - 2. Timing and content of Contractor's Notice: Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 Days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the

Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

3. Contractor to provide supplemental information: Within 30 Days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph 7.03B.2 with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
  4. Contractor to proceed with Work as directed: Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- C. Contractor to demonstrate impact on critical path of schedule: Any change in the Contract Time covered by a Change Order, or based on a request for an equitable adjustment in the Contract Time, shall be limited to the change in the critical path of Contractor's schedule attributable to the change of Work or event(s) giving rise to the request for equitable adjustment. Any Change Order Proposal or request for an adjustment in the Contract Time shall demonstrate the impact on the critical path of the schedule. Contractor shall be responsible for showing clearly on the Progress Schedule that the change or event: had a specific impact on the critical path, and except in case of concurrent delay, was the sole cause of such impact; and could not have been avoided by resequencing of the Work or other reasonable alternatives.
- D. Cost of change in Contract Time: Contractor may request compensation for the cost of a change in Contract Time in accordance with this paragraph, 7.03D, subject to the following conditions:
1. Must be solely fault of Owner or A/E: The change in Contract Time shall solely be caused by the fault or negligence of Owner or A/E;
  2. Procedures: Contractor shall follow the procedure set forth in paragraph 7.03B;
  3. Demonstrate impact on critical path: Contractor shall establish the extent of the change in Contract Time in accordance with paragraph 7.03C; and
  4. Limitations on daily costs: The daily cost of any change in Contract Time shall be limited to the items below, less the amount of any change in the Contract Sum the Contractor may otherwise be entitled to pursuant to Section 7.02B 7f for any change in the Work that contributed to this change in Contract Time:
    - a. Non-productive supervision or labor: cost of nonproductive field supervision or labor extended because of delay;
    - b. Weekly meetings and indirect activities: cost of weekly meetings or similar indirect activities extended because of the delay;

- c. Temporary facilities or equipment rental: cost of temporary facilities or equipment rental extended because of the delay;
- d. Insurance premiums: cost of insurance extended because of the delay;
- e. Overhead: general and administrative overhead in an amount to be agreed upon, but not to exceed 3% of the Contract Award Amount divided by the originally specified Contract Time for each Day of the delay.

## PART 8 – CLAIMS AND DISPUTE RESOLUTION

### 8.01 CLAIMS PROCEDURE

- A. Claim is Contractor's remedy: If the parties fail to reach agreement on the terms of any Change Order for Owner-directed Work as provided in Section 7.01, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in Section 7.02 or the Contract Time as provided in Section 7.03, Contractor's only remedy shall be to file a Claim with Owner as provided in this section.
- B. Claim filing deadline for Contractor: Contractor shall file its Claim within 120 Days from Owner's final offer made in accordance with paragraph 7.01E, or by the date of Final Acceptance, whichever occurs first.
- C. Claim must cover all costs and be documented: The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It shall be fully substantiated and documented. At a minimum, the Claim shall contain the following information:
  - 1. Factual statement of Claim: A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the Claim;
  - 2. Dates: The date on which facts arose which gave rise to the Claim;
  - 3. Owner and A/E employee's knowledgeable about Claim: The name of each employee of Owner or A/E knowledgeable about the Claim;
  - 4. Support from Contract Documents: The specific provisions of the Contract Documents which support the Claim;
  - 5. Identification of other supporting information: The identification of any documents and the substance of any oral communications that support the Claim;
  - 6. Copies of supporting documentation: Copies of any identified documents, other than the Contract Documents, that support the Claim;
  - 7. Details on Claim for Contract Time: If an adjustment in the Contract Time is sought: the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted; and Contractor's analysis of its Progress Schedule to demonstrate the reason for the extension in Contract Time;
  - 8. Details on Claim for adjustment of Contract Sum: If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories set forth in, and in the detail as required by Section 7.02; and



9. Statement certifying Claim: A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is liable.
- D. Owner's response to Claim filed: After Contractor has submitted a fully documented Claim that complies with all applicable provisions of Parts 7 and 8, Owner shall respond, in writing, to Contractor as follows:
1. Response time for Claim less than \$50,000: If the Claim amount is less than \$50,000, with a decision within 60 Days from the date the Claim is received; or
  2. Response time for Claim of \$50,000 or more: If the Claim amount is \$50,000 or more, with a decision within 60 Days from the date the Claim is received, or with notice to Contractor of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.
- E. Owner's review of Claim and finality of decision: To assist in the review of Contractor's Claim, Owner may visit the Project site, or request additional information, in order to fully evaluate the issues raised by the Claim. Contractor shall proceed with performance of the Work pending final resolution of any Claim. Owner's written decision as set forth above shall be final and conclusive as to all matters set forth in the Claim, unless Contractor follows the procedure set forth in Section 8.02.
- F. Waiver of Contractor rights for failure to comply with this Section: Any Claim of the Contractor against the Owner for damages, additional compensation, or additional time, shall be conclusively deemed to have been waived by the Contractor unless made in accordance with the requirements of this Section.

## **8.02 ARBITRATION**

- A. Timing of Contractor's demand for arbitration: If Contractor disagrees with Owner's decision rendered in accordance with paragraph 8.01D, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 Days after the date of Owner's decision on such Claim; failure to demand arbitration within said 30 Day period shall result in Owner's decision being final and binding upon Contractor and its Subcontractors.
- B. Filing of Notice for arbitration: Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), with a copy provided to Owner. The parties shall negotiate or mediate under the Voluntary Construction Mediation Rules of the AAA, or mutually acceptable service, before seeking arbitration in accordance with the Construction Industry Arbitration Rules of AAA as follows:
1. Claims less than \$30,000: Disputes involving \$30,000 or less shall be conducted in accordance with the Northwest Region Expedited Commercial Arbitration Rules; or
  2. Claims greater than \$30,000: Disputes over \$30,000 shall be conducted in accordance with the Construction Industry Arbitration Rules of the AAA, unless the parties agree to use the expedited rules.
- C. Arbitration is forum for resolving Claims: All Claims arising out of the Work shall be resolved by arbitration. The judgment upon the arbitration award may be entered, or review of the award may

occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.

- D. Owner may combine Claims into same arbitration: Claims between Owner and Contractor, Contractor and its Subcontractors, Contractor and A/E, and Owner and A/E shall, upon demand by Owner, be submitted in the same arbitration or mediation.
- E. Settlement outside of arbitration to be documented in Change Order: If the parties resolve the Claim prior to arbitration judgment, the terms of the resolution shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of the Claim, including all claims for time and for direct, indirect, or consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity.

### **8.03 CLAIMS AUDITS**

- A. Owner may audit Claims: All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Contractor, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.
- B. Contractor to make documents available: In support of Owner audit of any Claim, Contractor shall, upon request, promptly make available to Owner the following documents:
  - 1. Daily time sheets and supervisor's daily reports;
  - 2. Collective bargaining agreements;
  - 3. Insurance, welfare, and benefits records;
  - 4. Payroll registers;
  - 5. Earnings records;
  - 6. Payroll tax forms;
  - 7. Material invoices, requisitions, and delivery confirmations;
  - 8. Material cost distribution worksheet;
  - 9. Equipment records (list of company equipment, rates, etc.);
  - 10. Vendors', rental agencies', Subcontractors', and agents' invoices;
  - 11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts;
  - 12. Subcontractors' and agents' payment certificates;
  - 13. Cancelled checks (payroll and vendors);
  - 14. Job cost report, including monthly totals;
  - 15. Job payroll ledger;
  - 16. Planned resource loading schedules and summaries;

17. General ledger;
  18. Cash disbursements journal;
  19. Financial statements for all years reflecting the operations on the Work. In addition, the Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work;
  20. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others;
  21. If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents;
  22. All nonprivileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in Contract Sum or Contract Time sought by each Claim;
  23. Work sheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents which establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals; and
  24. Work sheets, software, and all other documents used by Contractor to prepare its bid.
- C. Contractor to provide facilities for audit and shall cooperate: The audit may be performed by employees of Owner or a representative of Owner. Contractor, and its Subcontractors, shall provide adequate facilities acceptable to Owner, for the audit during normal business hours. Contractor, and all Subcontractors, shall make a good faith effort to cooperate with Owner's auditors.

## **PART 9 – TERMINATION OF THE WORK**

### **9.01 TERMINATION BY OWNER FOR CAUSE**

- A. 7 Day Notice to Terminate for Cause: Owner may, upon 7 Days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:
1. Contractor fails to prosecute Work: Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time;
  2. Contractor bankrupt: Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;
  3. Contractor fails to correct Work: Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;
  4. Contractor fails to supply workers or materials: Contractor repeatedly fails to supply skilled workers or proper materials or equipment;
  5. Contractor failure to pay Subcontractors or labor: Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor;

6. Contractor violates laws: Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or
  7. Contractor in material breach of Contract: Contractor is otherwise in material breach of any provision of the Contract Documents.
- B. Owner's actions upon termination: Upon termination, Owner may at its option:
1. Take possession of Project site: Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;
  2. Accept assignment of Subcontracts: Accept assignment of subcontracts pursuant to Section 5.20; and
  3. Finish the Work: Finish the Work by whatever other reasonable method it deems expedient.
- C. Surety's role: Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.
- D. Contractor's required actions: When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in paragraph 9.02B, and shall not be entitled to receive further payment until the Work is accepted.
- E. Contractor to pay for unfinished Work: If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.
- F. Contractor and Surety still responsible for Work performed: Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.
- G. Conversion of "Termination for Cause" to "Termination for Convenience": If Owner terminates Contractor for cause and it is later determined that none of the circumstances set forth in paragraph 9.01A exist, then such termination shall be deemed a termination for convenience pursuant to Section 9.02.

**9.02 TERMINATION BY OWNER FOR CONVENIENCE**

- A. Owner Notice of Termination for Convenience: Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.
- B. Contractor response to termination Notice: Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:
1. Cease Work: Stop performing Work on the date and as specified in the notice of termination;

2. No further orders or Subcontracts: Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;
  3. Cancel orders and Subcontracts: Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;
  4. Assign orders and Subcontracts to Owner: Assign to Owner all of the right, title, and interest of Contractor in all orders and subcontracts;
  5. Take action to protect the Work: Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest; and
  6. Continue performance not terminated: Continue performance only to the extent not terminated
- C. Terms of adjustment in Contract Sum if Contract terminated: If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination, plus reasonable allowance for overhead and profit on Work performed prior to termination, plus the reasonable administrative costs of the termination, but shall not be entitled to any other costs or damages, whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of Part 7.
- D. Owner to determine whether to adjust Contract Time: If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

## **PART 10 – MISCELLANEOUS PROVISIONS**

### **10.01 GOVERNING LAW**

Applicable law and venue: The Contract Documents and the rights of the parties herein shall be governed by the laws of the state of Washington. Venue shall be in the county in which Owner's principal place of business is located, unless otherwise specified.

### **10.02 SUCCESSORS AND ASSIGNS**

Bound to successors; Assignment of Contract: Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Work without written consent of the other, except that Contractor may assign the Work for security purposes, to a bank or lending institution authorized to do business in the state of Washington. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

### **10.03 MEANING OF WORDS**

Meaning of words used in Specifications: Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the code of any governmental authority,

whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in these Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the drawings, or required to complete the installation.

#### **10.04 RIGHTS AND REMEDIES**

No waiver of rights: No action or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall action or failure to act constitute approval or an acquiescence in a breach therein, except as may be specifically agreed in writing.

#### **10.05 CONTRACTOR REGISTRATION**

Contractor must be registered or licensed: Pursuant to RCW 39.06, Contractor shall be registered or licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27.

#### **10.06 TIME COMPUTATIONS**

Computing time: When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

#### **10.07 RECORDS RETENTION**

Six year records retention period: The wage, payroll, and cost records of Contractor, and its Subcontractors, and all records subject to audit in accordance with Section 8.03, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

#### **10.08 THIRD-PARTY AGREEMENTS**

No third party relationships created: The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

#### **10.09 ANTITRUST ASSIGNMENT**

Contractor assigns overcharge amounts to Owner: Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

#### **10.10 HEADINGS AND CAPTIONS**

Headings for convenience only: All headings and captions used in these General Conditions are only for convenience of reference, and shall not be used in any way in connection with the meaning, effect, interpretation, construction, or enforcement of the General Conditions, and do not define the limit or describe the scope or intent of any provision of these General Conditions.

**P A R T V**

**TECHNICAL SPECIFICATIONS**

## SECTION 01\_11\_00

### SUMMARY OF WORK

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes: Detailed description of the Work.

##### 1.02 THE WORK

- A. The Work generally consists of removing and replacing the existing Expanded Polystyrene Densifier (EPS) equipment at the Recycle Center located at the City of Tacoma Recovery and Transfer Center (RTC). This includes removing and disposing of existing equipment, control panels, conduit, and wire; procuring and installing the new EPS equipment and control panel; Tacoma Power permitted electrical installation; equipment startup, commissioning, and training.
- B. Price Proposal Summary:
  - 1. Lump sum descriptions for each scope of Work shall reflect furnishing all labor, equipment, materials, and incidentals necessary to perform all Work shown and specified:
    - a. EPS Densifier Replacement: All costs associated with completing all Work listed in the Contract Documents and any incidentals not listed that are needed to complete the project.

##### 1.03 LOCATION OF PROJECT

- A. The Work is located at City of Tacoma Recovery and Transfer Center, 3510 S Mullen Street, Tacoma, Washington 98409.

##### 1.04 OWNER ASSIGNED SUBCONTRACTORS (NOT USED)

##### 1.05 OWNER FURNISHED EQUIPMENT (NOT USED)

##### 1.06 ACTIVITIES BY OTHERS

- A. Activities by others which may affect performance of work include those defined in Section 01\_14\_00 – Work Restrictions:
  - 1. Ongoing RTC operation: Ongoing operations of RTC to operate the facility must be maintained. Refer to Section 01\_14\_00 – Work Restrictions.
  - 2. Ongoing RTC maintenance: Ongoing maintenance activities at RTC to operate the facility must be maintained.
  - 3. Ongoing RTC customer access: Customer access to RTC facilities must be maintained. The EPS Building is not accessible to customers but it is accessed by roads serving customers.
  - 4. Work, as needed, by utilities.



## **1.07 COORDINATION OF WORK**

- A. Contractor shall have a preconstruction video made that records the project sites (with the Owner and Engineer present), including all concrete and asphalt pavements, curb and gutter, buildings, electrical panels and conduit, structures to be demolished, and existing structures and facilities that are to be modified:
  - 1. The original and 2 copies of the DVD or flash drive shall be turned over to Engineer and Owner prior to beginning construction activities.
  - 2. The format of the video file on the DVD or flash drive shall be 1 file that can be played on a desktop in the windows media player.
  - 3. The video shall clearly identify existing site and structural conditions prior to construction.

## **1.08 USE OF SITE**

- A. Contractor shall confine use of the site for work, parking, and storage to within the RTC property as shown on the Contract Drawings. The Contractor's use of roads for access to move onto and off of the site and for daily access of workers, material and equipment shall be arranged and scheduled to minimize interference with the Owner's continued operations and Customer access:
  - 1. Refer to Site Plan drawing for additional information.
- B. Contractor shall request approval from the Owner 7 days prior to any construction activity that will block vehicle access to any of the on site roads.
- C. Restrictions to the site:
  - 1. Speed limit: 10 mph.
  - 2. Follow all posted signs.
  - 3. Smoking in designated areas.
  - 4. Cellphone use limited to non-traffic areas.

## **PART 2 PRODUCTS**

Not Used.

## **PART 3 EXECUTION**

Not Used.

END OF SECTION

## **SECTION 01\_14\_00**

### **WORK RESTRICTIONS**

#### **PART 1 GENERAL**

##### **1.01 SUMMARY**

- A. Section includes: Requirements for sequencing and scheduling the Work affected by existing site and facility, work restrictions, and coordination between construction operations and RTC operations.

##### **1.02 CONTRACT COMPLETION TIMES**

- A. Substantial Completion: Achieve within 90 calendar days from NTP.
- B. Achieve Final Completion within 30 calendar days after substantial completion.

##### **1.03 SECURITY**

- A. Make adequate provisions for protection of on-site staff and visitors against exposure to injury related to constructing the project improvements.
- B. Personnel identification:
  - 1. The Contractor shall issue an identification badge to each team member during site orientation. The badge shall remain highly visible on each team member's personal protective equipment (PPE) via hardhat or on safety vests at all times while working on-site.
  - 2. The identification badge shall, at a minimum, contain:
    - a. Project name.
    - b. Company.
    - c. Employee name.

##### **1.04 GENERAL CONSTRAINTS ON WORK AND SCHEDULING OF WORK**

- A. Transfer Center operations:
  - 1. The Tacoma Recovery and Transfer Center (RTC) is the City of Tacoma's primary means collecting, compacting, and disposing of municipal solid waste, recyclable material, and yard waste.
  - 2. Conduct Work in a manner that will not impair the operational capabilities of essential elements of the RTC.
- B. Environmental:
  - 1. Mitigation of construction impacts:
    - a. Requirements: All construction activities shall comply with all federal, state and local regulations pertaining to water, air, solid waste, and noise pollution.

2. Construction storage areas: Storage of construction equipment and materials shall be limited to the Owner approved Contractor's staging plan. Potential staging areas are shown on the Drawings:
  - a. Store equipment at the designated Contractor's storage area. Equipment shall not be serviced on site. Containers shall be required at the construction site for the disposal of materials such as paint, paint thinner, solvents, motor oil, fuels, resins and other environmentally deleterious substances. No dumping of surplus concrete or grout on the site will be permitted.
3. Disposal operations:
  - a. Solid waste management:
    - 1) Contractor shall make every effort to recycle demolished material, construction waste, and other materials prior to landfilling.
    - 2) Supply covered solid waste transfer containers for all construction activities. Remove daily, all debris such as spent air filters, oil cartridges, cans, bottles, combustibles and litter. Take care to prevent trash and papers from blowing onto adjacent property. Personnel are required to use refuse containers. Convey contents to a sanitary landfill weekly. Comply with City of Tacoma Stormwater Management Manual BMP A404.
    - 3) Washing of concrete containers where runoff may reach adjacent property or natural water courses will not be permitted. Remove any excess concrete to the sanitary landfill. Capture and dispose of concrete slurry water. Comply with City of Tacoma Stormwater Management Manual BMP A302.
  - b. Chemical waste and hazardous materials management: Furnish containers for storage of spent oil and chemicals used during construction operations. Dispose of accumulated chemicals and hazardous materials in accordance with applicable regulations on a weekly basis, unless otherwise approved by Owner.
  - c. Garbage: Store garbage in covered containers, pick up garbage daily and dispose of in a sanitary landfill each week.
- C. Contractor's use of site:
  1. The Contractor shall confine his use of the site for work and storage to within the work areas designated on the drawings unless otherwise noted. Comply with all posted signs and obey all traffic laws:
    - a. Refer to the Drawings for Traffic Control and Construction Staging areas.
- D. Working hours: between the hours of 7 a.m. and 4 p.m. Monday through Friday, or as otherwise approved by Owner.

## **1.05 OPERATIONS AND MAINTENANCE ACCESS**

- A. Owner must have access to and around the entire site including areas of Work. Coordinate work activities with Owner to facilitate and ensure safe and reasonable access is maintained for personnel as well as emergency vehicles. In addition, the Contractor shall be responsible for maintaining safe emergency exiting for the Owner's and Contractor's personnel in all areas affected by the Contractor's work.
- B. At all times, the Contractor shall provide safe and adequate passage of RTC staff and truck deliveries in terms of vehicular and pedestrian traffic through, around, and

adjacent to all construction operations by use of detours, bridging, backfilling, paving, traffic barriers or other favorably-reviewed means.

#### **1.06 UTILITIES**

- A. Provide advance notice to and utilize services of Utilities Underground Location Center at 1-800-424-5555 (or 811) for location and marking of underground utilities operated by utility agencies other than the Owner.
- B. Maintain electrical, telephone, water, gas, sanitary facilities, and other utilities within existing facilities in service. Provide temporary utilities when necessary.

#### **1.07 WORK SEQUENCE**

- A. All Project Work will follow an approved Work Sequence.
- B. Work Sequence shall include the following activities:
  - 1. Providing submittals for materials to be installed
  - 2. Procure EPS equipment.
  - 3. Demolish existing EPS equipment.
  - 4. Obtain Electrical Permit and perform electrical work to receive approved final inspection.
  - 5. Install, startup, and commission all equipment.
  - 6. Train Owner and provide all O&M documentation.
- C. The Contractor shall submit a Work Sequence plan including all work:
  - 1. The submittal will comprise the Work Sequence that was developed based on Notice to Proceed (NTP).
  - 2. The plan must be submitted for Owner approval.

#### **PART 2 PRODUCTS**

Not Used.

#### **PART 3 EXECUTION**

Not Used.

END OF SECTION



## **SECTION 01\_29\_77**

### **APPLICATIONS FOR PAYMENT**

#### **PART 1 GENERAL**

##### **1.01 SUMMARY**

- A. Section includes:
  - 1. Schedule of Values.
  - 2. Procedures for preparation and submittal of Applications for Payment.

##### **1.02 FORMAT**

- A. Develop satisfactory spreadsheet-type form generated from the Progress Schedule.
- A. When Change Orders are executed, add Change Orders at end of listing of scheduled activities:
  - 1. Identify change order by number and description.
  - 2. Provide cost of change order in appropriate column.
- B. After completing, submit Application for Payment.
- C. Owner will review application for accuracy.
- D. Execute application with signature of responsible officer of Contractor.

##### **1.03 SUBSTANTIATING DATA**

- A. Provide Substantiating Data with cover letter identifying:
  - 1. Owner's specification number and project number.
  - 2. Project name and location.
  - 3. Contractor's name and address.
  - 4. Application number and date of submittal.
  - 5. Detailed list of enclosures.
  - 6. For stored products with item number and identification on application, description of specific material, and proof of insurance coverage for stored products.
  - 7. Submit certified payroll.

##### **1.04 SUBMITTALS**

- A. Application for Payment and Substantiating Data with cover letter: Submit 3 hard copies in accordance with Section 01\_33\_00 – Submittal Procedures and electronic in accordance with Section 01\_31\_24 – Web Based Construction Document Management.
- B. Prepare progress payment requests on a monthly basis. Base requests on the breakdowns of costs for each scheduled activity and the percentage of completion for each activity.

## 1.05 SCHEDULE OF VALUES

- A. Submit, in conjunction with the Baseline Schedule, a Schedule of Values per Document 00\_72\_00, Article 6.02 and Document 00\_73\_00 Article 6.02, identifying costs of all construction activities as generated by the schedule. Equate the aggregate of these costs to the Contract Sum.
- B. Submit corrected schedule of values within 5 calendar days upon receipt of reviewed Schedule of Values.
- C. Submit per unit material, equipment, and labor costs used in developing the final bid for the civil and electrical project elements, for the express purpose of pricing and cost justification for any proposed change orders. In addition to the items shown on the schedule of values, provide per unit material and labor costs for conduit and wire installation for specific types, sizes, and locations as indicated on the Drawings. It is the responsibility of the electrical subcontractor to prove to the Owner's satisfaction that said per unit costs were used in the development of the final Bid amount.
- D. Provide certified payroll statements with application for payment.
- E. Additional breakdown requirements:
  - 1. Separate by defined Phases of Work (if applicable). Provide sub-schedules showing values correlated with each Phase.
  - 2. For items on which progress payments will be requested for materials or equipment purchased/fabricated/delivered but not yet installed, show "initial value" for payment request and "value added" for subsequent stage(s) of completion on that unit of Work. Identify materials stored on-site or off-site.
  - 3. For each line item of installed value exceeding 5 percent of the Contract Sum, show breakdown by major products or plant operations under each item for ease of review and confirmation of Work completed. Identify material and labor as separate items.
  - 4. Identify each administrative and procedural requirement separately by Phase as a separate line item:
    - a. Mobilization.
    - b. Contract Administration.
    - c. Construction schedule.
    - d. Bonds and insurance at actual cost.
    - e. Demolition and repair.
    - f. Cleanup.
    - g. Operation and Maintenance Manuals with Parts Lists – paid upon acceptance.
    - h. Special warranties.
  - 5. The minimum value shall be no less than 2-percent of the Contract Sum for each requirement listed:
    - a. Cleanup.
    - b. Operation and Maintenance Manuals.
  - 6. Round figures to nearest dollar amount.
  - 7. Coordinate items of the Schedule of Values so that there is a corresponding item in the Construction Progress Schedule. If activities are added or removed from the Progress Schedule, revise the Schedule of Values and resubmit.

## 1.06 PAYMENT APPLICATIONS

- A. General:
1. Submit itemized payment request as required in Documents 00\_72\_00 and 00\_73\_00 together with Schedule of Values and other submittals as listed herein.
  2. Except as otherwise indicated, sequence of progress payments is to be regular, and each must be consistent with previous applications and payments; it is recognized that certain applications involve extra requirements, including initial application, application at times of Substantial Completion, and final payment application.
  3. By submitting an Application for Payment, Contractor is certifying that to the best of Contractor's knowledge, information, and belief, the work covered by each Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by him for work for which previous Applications for Payment were issued and payments received from the Owner, and that current payment is now due.
  4. Contractor certifying Subcontractor payment: In accordance with Documents 00\_72\_00 and 00\_73\_00.
- B. Submit progress payment requests at progress meetings.
- C. Payment Application Times: The Owner at the pre-construction meeting will establish the date for each progress payment and the period of construction Work covered by each Application for Payment.
- D. Payment Application Forms: In accordance with Documents 00\_72\_00 and 00\_73\_00. Provide with continuation sheets for the schedule of values, and place the following paragraphs at the end for signatures:
- "The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Document, that all amounts have been paid by the contractor to employees, subcontractors, suppliers, etc. for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payments shown herein is now due.
- (Contracting Firm)
- By \_\_\_\_\_ "   
 (SIGN IN INK)                      Date
- E. Application Preparation: Complete every entry on form. Notarize and execute by an Officer of the Company authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action:
1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
  2. Include amounts of Change Orders issued before last day of construction period covered by application.



- F. Transmittal: Submit (3) three signed and notarized original copies of each Application for Payment to Owner by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments, if required:
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Statement of Intent to pay prevailing wages in accordance with Davis Bacon and related Acts.
  3. Schedule of Values.
  4. Contractor's Construction Schedule (preliminary if not final).
  5. Products list.
  6. Schedule of unit prices.
  7. Submittals Schedule (preliminary if not final).
  8. List of Contractor's staff assignments.
  9. List of Contractor's principal suppliers and subcontractors.
  10. Copies of permits.
  11. Copies of authorizations and licenses from Owner for performance of the Work.
  12. Initial progress report.
  13. Report of preconstruction conference.
  14. Certificates of insurance and insurance policies.
  15. Performance and payment bonds.
  16. Data needed to acquire Owner's insurance.
  17. Other documents as may be required in the Contract Documents.
- I. Applications each Month During Construction: Submit itemized application, in number of copies as specified herein, each with Contractor's notarized affidavit and signed receipts from Principal Subcontractors and Suppliers as specified below. Also include with each application:
1. Updated construction schedule in accordance with Section 01\_32\_16 – Progress Schedules and Reports.
- J. Construction Schedule Update: Submit with applications for payment a revised updated project CPM schedule for evaluation and measurement of actual work-in-place with said applications for payment:
1. Application for Payment at Substantial Completion: In accordance with Documents 00\_72\_00 and 00\_73\_00.
  2. Final Payment Application: In accordance with Documents 00\_72\_00 and 00\_73\_00.
- K. On-going documentation verifications prior to payment: Owner will verify the following documentation prior to payment. Failure to provide current documentation to Owner's satisfaction shall be considered grounds for withholding progress

payment and/or final payment to the Contractor in accordance with Documents 00\_72\_00 and 00\_73\_00:

1. Current Record Documents: With each Progress Meeting, Contractor is required to present for review to the Owner, a current set of Record Documents in accordance with Section 01\_77\_00 – Closeout Procedures.
2. Compliance documents required to satisfy federal and state loan requirements.

L. Notarization and Signed Receipts: Contractor's Affidavit:

1. After the first request for payment, all copies of each subsequent request shall be accompanied by Contractor's notarized original signature with the statement that all subcontractors and suppliers have been paid to date as their interests appeared in the last payment received (less earned retainage applicable to subcontractors). And shall also be accompanied by a signed receipt from the Principal Subcontractors and Suppliers stating that all sub-subcontractors, suppliers, wages, fringes, and taxes arising out of such subcontract have been paid in full as their interest appeared in the last payment received. Any amounts withheld from any subcontractor's or supplier's payment due to lack of performance, or other reason, shall be fully documented with the statement, indicating the amount and justification of payment(s) withheld.
2. No application for payment by the Contractor shall be processed unless accompanied by both the affidavit and the receipts.

## **1.07 PAYMENT FOR STORED MATERIAL**

A. Payment for stored items will be subject to the following:

1. On-Site Materials: Progress payments shall be made for permanent materials and equipment to be incorporated in the Work and properly protected and stored on the project site with invoices from the original supplier provided to substantiate the value.
2. Off-Site Materials: No payment will be made for materials stored off site.

B. Stored materials items may be included in monthly application for payment only after drawing and data submittals, if any are required, have been completed and approved per Contract Documents. A maximum of 50 percent will be paid for materials stored.

C. Partial payment for materials and equipment in advance of installation shall not constitute acceptance thereof and will not relieve Contractor of full responsibility for condition and subsequent acceptance by the City. Faulty materials discovered will be rejected even though partial payment may have been made.

## **1.02 FORCE ACCOUNT**

A. The Owner will indicate to the Contractor when Work is to be performed under Force Account:

1. Force account work administered by the Contractor shall be consistent with the requirements of the Contract Documents.
2. Prior to performing Force Account Work, the Contractor shall submit an equipment list containing equipment type, horsepower, attachments, etc. as well as labor rates.

- B. Payment for Force Account Work shall be agreed to in writing by the Owner and Contractor prior to performance of the Force Account Work.
- C. Force Account work will be tracked and reconciled daily.

**1.03 OVERTIME**

- A. Overtime, double shifts and longer than normal shifts will not be considered reason or justification for extra compensation, unless specifically approved in advance and in writing by the Owner.

**1.04 SUBSTANTIATING DATA**

- A. When Owner requires substantiating information, submit data within 3 days justifying line item amounts in question.

**PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

END OF SECTION

## **SECTION 01\_31\_19**

### **PROJECT MEETINGS**

#### **PART 1 GENERAL**

##### **1.01 SUMMARY**

- A. Section includes: Requirements for conducting conferences and meetings for the purposes of addressing issues related to the Work, reviewing and coordinating progress of the Work and other matters of common interest, and includes the following:
  - 1. Preconstruction Conference.
  - 2. Progress Meetings.
  - 3. Post Construction Meetings.

##### **1.02 QUALIFICATIONS OF MEETING PARTICIPANTS**

- A. Representatives of entities participating in meetings shall be qualified and authorized to act on behalf of entity each represents.

##### **1.03 PRE-CONSTRUCTION CONFERENCE**

- A. Upon issuance of Notice to Proceed (NTP), or earlier when mutually agreeable, Owner will arrange pre-construction conference in place convenient for most invitees.
- B. Pre-construction Conference invitees: Contractor's project manager and superintendent, Owner, Engineer, representatives of utilities, major subcontractors and others involved in performance of the Work, and others necessary to agenda.
- C. Owner will preside at conference.
- D. Purpose of conference: To establish working understanding between parties and to discuss Construction Schedule, shop drawing and other submittals, cost breakdown of major lump sum items, processing of submittals and applications for payment, and other subjects pertinent to execution of the Work.
- E. Owner will prepare the agenda. Contractor shall be prepared to discuss the following:
  - 1. Adequacy of distribution of Contract Documents.
  - 2. Distribution and discussion of list of major subcontractors and suppliers.
  - 3. Proposed progress schedules and critical construction sequencing.
  - 4. Major equipment deliveries and priorities.
  - 5. Project coordination.
  - 6. Designation of responsible personnel.
  - 7. Procedures and processing of:
    - a. Field decisions.
    - b. Proposal requests.
    - c. Submittals.
    - d. Change Orders.

- e. Request for Information/Interpretations.
  - f. Applications for Payment.
  - g. Record Documents.
  - 8. Use of premises:
    - a. Office, construction, and storage areas.
    - b. Owner's requirements.
  - 9. Construction facilities, controls, and construction aids.
  - 10. Temporary utilities.
  - 11. Safety and first aid procedures.
  - 12. Security procedures.
  - 13. Housekeeping procedures.
- F. Owner will record minutes of meeting and distribute copies of minutes within 3 days of meeting to participants and interested parties.

#### **1.04 PROGRESS MEETINGS**

- A. Contractor shall conduct progress meetings at Tacoma Transfer Center Conference Room. Progress meetings shall be conducted, at a minimum, weekly for the project duration. The frequency of meetings may be adjusted as required. Virtual meetings may be allowed as the Owner's discretion. Virtual meetings will take place using Microsoft Teams software.
- B. Distribute to each anticipated participant written notice and agenda of each meeting at least 3 days before meeting.
- C. Require attendance of Contractor's superintendent and subcontractors who are or are proximate to be actively involved in the Work, or who are necessary to agenda.
- D. Invite Owner and Engineer to all meetings and others necessary to agenda.
- E. Complete and bring Application for Payment in accordance with Section 01\_29\_77 - Applications for Payment and updated Progress Schedule to progress meeting.
- F. The Contractor shall prepare and distribute agenda. All meetings shall include the following minimum agenda items:
  - 1. Review of Critical Items/action List.
  - 2. Review work progress and "3 week look-ahead schedule", and compare projected and actual progress with planned progress and methods to correct deficiencies.
  - 3. Review submittal status, delivery dates, and deadlines for critical items.
  - 4. Review change order status.
  - 5. Review RFI status.
  - 6. Review quality control issues including field observations/problems and out-of-compliance inspection/test results.
  - 7. Review deficiency list maintained and updated by Contractor throughout the project.
  - 8. Review coordination problems.
  - 9. Schedule needed meetings, deliveries, inspections, testing, start-up and training.
  - 10. Changes to Contractor's safety plan and report on safety incidents, if any.
  - 11. Other business as necessary.

- G. Contractor will preside at meetings.
- H. Purpose of progress meetings:
  - 1. Review progress of the Work, Progress Schedule, narrative report, Application for Payment, record documents, and additional items of current interest that are pertinent to execution of the Work.
- I. To expedite work of subcontractors or other organizations that are not meeting scheduled progress, resolve conflicts, and coordinate and expedite execution of the Work. Verify:
  - 1. Actual start and finish dates of completed activities since last progress meeting.
  - 2. Durations and progress of activities not completed.
  - 3. Reason, time, and cost data for Change Order Work that will be incorporated into Progress Schedule and application for payment.
  - 4. Percentage completion of items on Application for Payment, on a monthly basis.
  - 5. Reasons for required revisions to Progress Schedule and their effect on Contract Time and Contract Price.
- J. Discuss potential problems which may impede scheduled progress and corrective measures.
- K. Contractor will record minutes of meeting and distribute copies of minutes within 3 days of meeting to participants and interested parties.

#### **1.05 POST CONSTRUCTION MEETINGS**

- A. Purpose: prepare a list of corrective work required prior to the expiration of warranty period for the project.
- B. Meet with and inspect the Work with Owner and Engineer 11 months following the accepted Substantial Completion date or 45 days before expiration of warranty period, whichever occurs earlier.
- C. Schedule meeting at least 14 days in advance of meeting.
- D. Require attendance of Superintendent, appropriate manufacturers and installers of major units of construction, and affected subcontractors.
- E. Meet in Owner's office or other mutually agreed upon place.
- F. Inspect the Work and draft list of items to be completed or corrected. The Contractor shall correct all items found to be defective within 20 days of receipt of the list of items to be corrected.
- G. Review service and maintenance contracts, and take appropriate corrective action when necessary.

#### **PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

END OF SECTION

## SECTION 01\_31\_24

### WEB BASED CONSTRUCTION DOCUMENT MANAGEMENT

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
1. Requirements for web-based construction document management.

##### 1.02 REQUIREMENTS

- A. The Owner, Engineer, and Contractor shall utilize e-Builder® ASP software (e-Builder) and protocols as the primary means for submission and tracking of data and documents (unless specified otherwise in this Section) throughout the duration of the Contract. Certain documents (such as those requiring original signatures, product samples and large format documents) will require hard-copy submittal instead. This specification section describes document submittal procedures and requirements for e-Builder submittal requirements only. Refer to Section 01\_33\_00 - Submittal Procedures which describes general submittal procedures and submittal content requirements:
1. e-Builder is a web-based electronic media site hosted by e-Builder, Inc.
  2. e-Builder is paid for by the Owner. Access to the web site will be by individuals who are licensed users.
  3. Access to the e-Builder project will be made available by the Owner for up to a total of four (4) licensed user accounts for Contractor's personnel at no cost. The joint use of this system is to facilitate electronic exchange of information, automation of key processes, and overall management of Contract Documentation.
  4. The joint use of this system is to facilitate electronic exchange of information, automation of key processes, and overall management of Contract Documentation.
  5. e-Builder shall be the primary means of project information submission and management.
- B. User access limitations:
1. The Owner will control the Contractor's access to e-Builder by allowing access and assigning user profiles to accepted Contractor personnel. User profiles will define levels of access into the system; determine assigned function based authorizations and user privileges. The Contractor may choose to provide subcontractors and suppliers access to e-Builder through the Contractor's accounts. Entry of information exchanged and transferred between the Contractor and its subcontractors and suppliers on e-Builder shall be the responsibility of the Contractor.
  2. Only entities with a direct contract with the Owner will be allowed to be an authorized user. The Owner reserves the right to perform a security check on all potential users.



- C. Joint ownership of data:
1. Data entered in a collaborative mode (entered with the intent to share as determined by permissions and workflows within the e-Builder system) by the Owner, Engineer, and the Contractor will be jointly owned. The use of CAD files, processes or design information distributed in this system is intended only for the project specified herein.
  2. **DO NOT POST PRIVATE OR YOUR COMPANY CONFIDENTIAL ITEMS IN THE DATABASE!**
  3. The Owner may, at the Owner's discretion, provide electronic copies of CAD Drawings of the Contract Drawings for Contractor's use in preparing submittal drawings. The Contractor must complete and submit the indemnification form for Owner approval before electronic files will be released. Contractor shall be responsible for distributing copies of CAD drawings to subcontractors for use in submittal drawings. Contractor shall not release any drawings to subcontractors without first receiving and forwarding a copy of the completed release and indemnification paperwork signed by the subcontractor to the Owner. Release form is included at the end of the section. Owner makes no representations as to the accuracy or completeness of CAD Drawings as they relate to the Contract Drawings.
- D. Automated system notification and audit log tracking:
1. Review comments made (or lack thereof) by the Owner on Contractor submitted documentation shall not relieve the Contractor from compliance with requirements of the Contract Documents. The Contractor is responsible for managing, tracking, and documenting the Work to comply with the requirements of the Contract Documents. Owner's acceptance via automated system notifications or audit logs extends only to the face value of the submitted documentation and does not constitute validation of the Contractor's submitted information.
- E. Computer Requirements:
1. The Contractor shall use computer hardware and software that meets the requirements of the e-Builder system as recommended by e-Builder, Inc. to access and utilize e-Builder. As recommendations are modified by e-Builder, the Contractor will upgrade their system(s) to meet or exceed the recommendations. Upgrading of the Contractor's computer systems will not be justification for a cost or time modification to the Contract.
  2. The Contractor shall ensure that connectivity to the e-Builder system is accomplished through DSL, cable, T-1 or wireless communications systems. The Owner will not be liable for any delays associated from the usage of e-Builder including, but not limited to slow response time, down time periods, connectivity problems, or loss of information. The Contractor will ensure that connectivity to the e-Builder system meets the minimum requirements described in this Section. Under no circumstances shall the usage of the e-Builder be grounds for a time extension or cost adjustment to the contract.
  3. The e-Builder mobile application is available on the iOS and Android platforms only.
- F. Contractor responsibility:
1. The Contractor shall be responsible for the validity of their information placed in e-Builder and for the abilities of their personnel.

2. Accepted users shall be knowledgeable in the use of computers, including Internet Browsers, email programs, CAD drawing applications, Microsoft Office Suite, and Adobe Portable Document Format (PDF) document distribution program.
  3. The Contractor shall utilize the existing forms in e-Builder to the maximum extent possible. If a form does not exist in e-Builder the Contractor must include a form of their own or provided by the Owner as an attachment to a submittal. Owner may create an e-Builder form based on Contractor request.
  4. Adobe PDF documents will be created through electronic conversion rather than optically scanned whenever possible. The Contractor is responsible for the training of their personnel in the use of e-Builder (outside what is provided by the Owner) and the other programs indicated above as needed. e-Builder may be contacted directly to provide training as needed at proposer's cost.
- G. Documents that shall be transmitted and otherwise processed utilizing the e-Builder system shall include, but not be limited to the following:
1. Construction Correspondence.
  2. Submittals.
  3. Requests for Information and responses.
  4. Change Order Requests.
  5. Meeting Minutes and Agendas.

### **1.03 SUBMITTALS**

- A. Use e-Builder for submittals.
- B. Preconstruction Submittals: List of Contractor's key e-Builder personnel. Include descriptions of key personnel's roles and responsibilities for this project. Contractor shall also identify their organization's administrator on the list.
- C. All other submittals: Establish a list of all submittals in accordance with Section 01\_33\_00 - Submittal Procedures, and identify which submittals are anticipated to be submitted through e-Builder and which submittals in paper form only.

### **1.04 TRAINING & SUPPORT**

- A. One group training session scheduled by the Owner will be provided for the Contractor at an Owner training facility. The training session duration is generally four (4) hours.
- B. Companies may also obtain group training from e-Builder at their own expense. Contact e-Builder for availability and cost.
- C. e-Builder will provide on-going support through on-line help files and technical support available at [support@e-builder.net](mailto:support@e-builder.net) or 1-888-288-5717.

## **PART 2 PRODUCTS**

### **2.01 DESCRIPTION**

- A. e-Builder project management application provided by e-Builder, Inc. [www.e-Builder.net](http://www.e-Builder.net).

## **PART 3 EXECUTION**

### **3.01 UTILIZATION**

- A. e-Builder shall be utilized in connection with all document and information management required by these Contract Documents otherwise in the Specifications.
- B. Track and send notifications for all documents requiring Owner input (such as submittals, RFIs, and change orders) using the e-Builder system. In cases requiring hard-copy submittal, also submit the submittal cover (or transmittal cover sheet) sheet simultaneously through e-Builder.

### **3.02 RECORD KEEPING:**

- A. Except for paper documents which require original signatures or large format documents (greater than 11 x 17 inches) and photographic documentation, all documents shall be submitted by transmission solely in electronic form to the e-Builder web site by licensed users, except as noted otherwise:
  - 1. The Owner and his representatives, the Construction Manager and his representatives, and the Contractor shall respond to documents received in electronic form through the web site, and consider them as if received in paper document form.
  - 2. The Owner and his representatives, the Construction Manager and his representatives, and the Contractor reserves the right to and shall reply or respond by transmissions in electronic form on the web site to documents actually received in paper document form.
  - 3. The Owner and his representatives, the Construction Manager and his representatives, and the Contractor reserves the right to and shall copy any paper document into electronic form and make same available on the web site.
  - 4. Paper documents with original signature(s) shall be submitted for certain key forms. Once received, reviewed and otherwise completed, the Owner will scan and upload these signed forms to e-Builder. The following are some but not all of the paper documents which require original signature:
    - a. Contract.
    - b. Change Orders.
    - c. Application & Certificates for Payment.
  - 5. Photographic Documentation: in accordance with Section 01\_32\_34 - Photographic Documentation.

### **3.03 DESIGN DOCUMENTS**

- A. All design drawings and specifications shall be submitted as CAD (in AutoCAD 2022 format) files whenever possible and in PDF format as attachments (depending on specific requirements of other specification sections) to e-Builder.

### **3.04 SUBMITTALS**

- A. Shop drawings:
  - 1. Shop drawing and design data documents shall be submitted as PDF attachments to the e-Builder submittal module, with exceptions noted below. Examples of shop drawings include, but are not limited to:
    - a. Standard manufacturer installation drawings.
    - b. Drawings prepared to illustrate portions of the work designed or developed by the Contractor.
    - c. Steel fabrication, piece, and erection drawings.
  - 2. Hard copy submittals will be allowed where the page size exceeds 11-inches x 17-inches, and where paper documents with original signatures are required. Hard-copy submittals may also be allowed, if approved by the Owner on a case-by-case basis:
    - a. Hard copy submittals shall follow procedures for Samples defined below.
  - 3. Unless noted otherwise or if requested by the Owner to assist submittal review, hardcopies will be submitted in addition to electronic submittals.

### **3.05 PRODUCT DATA**

- A. Product catalog data and manufacturer's instructions shall be submitted as PDF attachments to the e-Builder submittal module. Examples of product data include, but are not limited to:
  - 1. Manufacturer's printed literature.
  - 2. Preprinted product specification data and installation instructions.

### **3.06 SAMPLES**

- A. Sample submittals shall be physically submitted as specified in Section 01\_33\_00 - Submittal Procedures. The Contractor shall enter submittal data information into e-Builder with a copy of the submittal form(s) attached to the sample. Examples of samples include, but are not limited to:
  - 1. Product finishes and color selection samples.
  - 2. Product finishes and color verification samples.
  - 3. Finish/color boards.
  - 4. Physical samples of materials.

### **3.07 ADMINISTRATIVE SUBMITTALS**

- A. All correspondence and pre-construction submittals shall be submitted using e-Builder. Examples of administrative submittals include, but are not limited to:
  - 1. Permits.
  - 2. Requests for substitutions (RFS).
  - 3. List of contact personnel.
  - 4. Requests for Information (RFI).
  - 5. Survey Requests.
- B. Progress Schedules and associated reports and updates. Each schedule submittal specified in these Contract Documents shall be submitted as a native backed-up file of the scheduling program being used. The schedule shall also be posted as a PDF file in the format specified in these Contract Documents.
- C. Plans for safety, demolition, environmental protection, and similar activities.

- D. Quality Control Plan(s), Testing Plan and Log, Quality Control Reports, Production Reports, Quality Control Specialist Reports, Preparatory Phase Checklist, Initial Phase Checklist, Field Test reports, Summary reports, Rework Items List, etc.
- E. Meeting minutes of pre-SP meetings, progress meetings, pre-installation meetings, etc.
- F. Any general correspondence submitted.

### **3.08 COMPLIANCE SUBMITTALS**

- A. Test reports, certificates, and manufacture field report submittals shall be submitted on e-Builder as PDF attachments. Examples of compliance submittals include, but are not limited to:
  - 1. Inspection requests:
    - a. When a portion of Work is ready for inspection and prior to covering up the Work, inspection requests shall be submitted via e-Builder and approved via e-Builder.
    - b. Reports associated with this element of the Work will be submitted via e-Builder and associated with the inspection request.
  - 2. Field test reports.
  - 3. Quality Control certifications.
  - 4. Manufacturer's documentation and certifications for quality of products and materials provided.

### **3.09 RECORD AND CLOSEOUT SUBMITTALS**

- A. Operation and maintenance data and closeout submittals shall be submitted on e-Builder as PDF documents during the approval and review stage as specified, with actual set of documents (format as specified in Section 01\_78\_23) submitted for final in hard copy format. Examples of record submittals include, but are not limited to:
  - 1. Operation and Maintenance Manuals: final documents shall be submitted as specified.
  - 2. As-built drawings: Final documents shall be submitted as specified.
  - 3. Extra materials, spare stock, etc.: submittal forms shall indicate when actual materials are submitted.
- B. Training: submitted in hard copy/DVD format (format as specified in Section 01\_75\_17 - Commissioning):
  - 1. Videograph of sessions.
  - 2. Training materials.

### **3.10 FINANCIAL SUBMITTALS**

- A. Schedule of Values and Change Request Proposals shall be submitted using e-Builder. Supporting material for Change Requests shall be submitted using e-Builder. Examples of compliance submittals include, but are not limited to:
  - 1. Contractor's Schedule of Values.
  - 2. Contract Change proposals requested by the Owner.

END OF SECTION

## SECTION 01\_32\_16

### PROGRESS SCHEDULES AND REPORTS

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes: Preparation, submittal, and maintenance of computerized progress schedule, contract time adjustments, including the following:
  - 1. Baseline Schedule.
  - 2. Progress Schedule.
  - 3. Schedule Updates.
- B. Failure to comply with the requirements of this section shall be deemed a material breach of contract documents, allowing the City to withhold payment.

##### 1.02 SCHEDULING FORMAT AND SOFTWARE

- A. Schedule format: Utilize CPM format.
- B. Prepare computerized schedule utilizing MS Project or approved equal, most current version:
  - 1. If software other than MS Project is used, the Contractor shall provide one (1) licensed copy of the scheduling software to the Owner, registered in the Owner's name, for the duration of the project. The provided copy of the software shall be a standalone version for installation on a standalone computer.

##### 1.03 SCHEDULE PREPARATION

- A. Preparation and submittal of Progress Schedule represents Contractor's commitment to execute the Work within specified time and constraints. Failure to conform to requirement may result in termination for cause as specified in:
  - 1. Document 00\_72\_00, Paragraph 3 Time and Schedule.
  - 2. Document 00\_73\_00, Paragraph 3.08 Suspension of Work.
- B. Contractor's bid covers all costs associated with the execution of the Work in accordance with the Progress Schedule.
- C. During preparation Progress Schedule, Owner will facilitate Contractor's efforts by being available to answer questions regarding sequencing issues, scheduling constraints, interface points, and dependency relationships.
- D. Prepare schedule utilizing Precedence Diagramming Method (PDM).
- E. Prepare schedule utilizing activity durations in terms of calendar days. Do not exceed 19 calendar day duration on activities except concrete curing, submittal review, and equipment fabrication, procurement, and deliveries. Where duration of continuous work exceeds 19 calendar days, subdivide activities by location,

stationing, or other sub-element of the Work. Coordinate holidays to be observed with the Owner and incorporate them into the schedule as Owner non-working days.

- F. Failure to include an activity required for execution of the Work does not excuse Contractor from completing the Work and portions thereof within specified times and at price specified in Agreement. Contract requirements are not waived by failure of Contractor to include required schedule constraints, sequences, or milestones in schedule. Contract requirements are not waived by Owner's acceptance of the schedule. In event of conflict between accepted schedule and Contract requirements, terms of Contract govern at all times, unless requirements are waived in writing by the Owner.
- G. Reference schedule to calendar days with beginning of Contract Time Notice to Proceed as Day "1."
- H. Baseline Schedule and Project Completion: Should Contractor submit a Baseline Schedule showing project completion more than 26 calendar days prior to Contract completion date Owner may issue Change Order, at no cost to Owner, revising time of performance of Work and Contract completion date to match Contractor's schedule completion date. Adjust accordingly any Contract milestone dates.
- I. Contract float is for benefit of the Project, and may be utilized by both Owner and Contractor, at the Owner's sole discretion. Changes to the project that can be accomplished within the Contract Time may be made by Owner by utilizing float. Extensions to the Contract Time will not be granted nor delay damages owed until all float is utilized, and Work extends beyond currently accepted Contract completion date. Upon utilization of all available float, extensions of the Contract time will be granted by Owner for valid Owner-caused or third party-caused delays, which affect the planned completion date and which have been properly documented and demonstrated by Contractor.
- J. Schedule logic: Assembled to show order in which Contractor proposes to carry out Work, indicate restrictions of access, availability of Work areas, and availability and use of manpower, materials, and equipment. Form basis for assembly of schedule logic on the following criteria:
  - 1. Which activities must be completed before subsequent activities can be started.
  - 2. Which activities can be performed concurrently.
  - 3. Which activities must be started immediately following completed activities.
  - 4. What major facility, equipment or manpower restrictions are required for sequencing these activities.
- K. Non-sequestering of float: Pursuant to float sharing requirements of Contract, schedule submittals can be rejected for use of float suppression techniques such as preferential sequencing or logic, special lead or lag logic restraints, extended activity durations or imposed dates.

#### **1.04 SUBMITTAL OF PROGRESS SCHEDULES**

- A. Submittals shall be made in electronic format in accordance with Sections 01\_33\_00 – Submittal Procedures and 01\_31\_24 – Web Based Construction Document Management.

- B. Submit baseline schedule.
- C. Submit, on a monthly basis, updated schedules as specified. Submit final schedule update as specified.
- D. Submit schedules in the media and number of copies as follows:
  - 1. One PDF of the CPM network and/or bar chart (as specified by the Owner) on 11-inch x 17-inch sheets.

#### **1.05 BASELINE SCHEDULE**

- A. Submit Baseline Schedule for all Work on the project within 14 calendar days after Notice to Proceed. Show sequence and interdependence of all activities required for complete performance of all Work, beginning with date of Notice to Proceed and concluding with date of final completion of Contract.
- B. Submit schedule of costs for all activities on Baseline Schedule.
- C. Schedule of costs:
  - 1. Schedule of Values required under Article 6.02 of the General and Special Conditions for first 90 calendar days of Work.
  - 2. No pay item Work shall commence until Baseline Schedule and schedule of costs have been accepted by Owner.

#### **1.06 NETWORK DETAILS AND GRAPHICAL OUTPUT**

- A. Produce a clear, legible, and accurate calendar based, time scaled, graphical network diagram. Group activities related to the same physical areas of the Work. Produce the network diagram based upon the early start of all activities.
- B. Include for each activity, the description, activity number, estimated duration in calendar days, total float, and all activity relationship lines.
- C. Illustrate order and interdependence of activities and sequence in which Work is planned to be accomplished. Incorporate the basic concept of the precedence diagram network method to show how the start of one activity is dependent upon the start or completion of preceding activities and its completion restricts the start of following activities.
- D. Indicate the critical path for the project.
- E. Include, in addition to construction activities:
  - 1. Submission dates and review periods for major design and equipment submittals.
  - 2. Any activity by the Owner or the Engineer that may affect progress or required completion dates.
  - 3. Equipment and long-lead material deliveries over 6 weeks.
  - 4. Approvals required by regulatory agencies or other third parties.
- F. Identify the execution of the following per identified Phase:
  - 1. Mobilization.



2. All required submittals and submittal review times showing 14 calendar day duration for standard submittals or 21 calendar day duration for complicated submittals and equal amount of time for re-submittal reviews.
3. Equipment and materials procurement/fabrication/delivery.
4. Preliminary performance, field, and functional testing of equipment, instrumentation, and controls.
5. Manufacturer's services.
6. Submission of Operation and Maintenance Manual.
7. Each Operation and maintenance training session.
8. Performance testing.
9. Field testing.
10. Functional testing.
11. Operational testing.
12. Installation certifications.
13. Record Drawings.
14. Milestone or Substantial Completion, as defined in Documents 00\_72\_00 and 00\_73\_00.
15. Punch list work.
16. Demobilization.

#### **1.07 UPDATING THE SCHEDULE**

- A. Update the schedule on a monthly basis, using a date as specified by the Owner.
- B. Should monthly Schedule Update show project completion earlier than current Contract completion date, show early completion time as schedule activity, identified as "Project Float."
- C. Should monthly Schedule Update show project completion later than current Contract completion date, prepare and submit a Schedule Revision in accordance with the Revisions to Schedule.

#### **1.08 PROGRESS SCHEDULE**

- A. Submit to Owner, at each progress meeting, a progress schedule showing the activities completed during the previous week and the schedule of activities for the following 3 weeks.
- B. Use the logic and conform to the status of the current progress schedule when producing a Progress Schedule in CPM schedule or a bar chart format. In the event that the Progress Schedule no longer conforms to the current schedule, Contractor may be required to revise the schedule.
- C. The activity designations used in the Progress Schedule must be consistent with those used in the Baseline Schedule and the monthly Schedule Updates.
- D. Contractor and Owner must agree on the format of the Progress Schedule.

#### **1.09 ADJUSTMENT OF CONTRACT TIME**

- A. If the Contractor believes that the Owner has impacted its work, such that the project completion date will be delayed, the Contractor must submit proof

demonstrating the delay to the critical path in accordance with Documents 00\_72\_00 and 00\_73\_00, Article 7.03.

- B. When a delay to the project as a whole can be avoided by revising preferential sequencing or logic, and the Contractor chooses not to implement the revisions, the Contractor may be entitled to a time extension but no additional compensation.
- C. Utilize the latest version of the Schedule Update at the time of the alleged delay, and all other relevant information, to determine the adjustment of the contract time.
- D. If completion of the project occurs within the specified contract time, the Contractor is not entitled to job-site or home office overhead beyond the Contractor's originally planned occupancy of the site.

#### **1.10 FINAL SCHEDULE SUBMITTAL**

- A. The final Schedule Update becomes the Record Schedule:
  - 1. The Record Schedule reflects the exact manner in which the project was constructed by reflecting actual start and completion dates for all activities accomplished on the project.
  - 2. Contractor's Project Manager and scheduler sign and certify the Record Schedule as being an accurate record of the way the project was actually constructed.
- B. Retainage will not be released until final Schedule Update is provided.

#### **PART 2 PRODUCTS**

Not Used.

#### **PART 3 EXECUTION**

Not Used.

END OF SECTION

## SECTION 01\_32\_34

### PHOTOGRAPHIC DOCUMENTATION

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes requirements for:
  - 1. Pre-construction photographs and video.
  - 2. Construction progress photographs and video.
  - 3. Post-construction photographs and video.
- B. The purpose of the photographs and videos is to document the condition of the facilities prior to the Contractor beginning work at the Project site, during, and after Substantial Completion of the Work.
- C. Areas to be photographed shall include the site of the Work and all existing facilities either on or adjoining the Project site, including the interior of existing structures that could be damaged as a result of the Contractor's Work.
- D. The scope of the photographic documentation shall be the sole responsibility of the Contractor, but shall be acceptable to the Owner.

##### 1.02 SUBMITTALS

- A. Key plan: Submit key plan of Project site with notation of vantage points marked for location and direction of each photograph. Include the same label information as the corresponding set of photographs. At a minimum, photographs shall be taken at locations designated in the table below:

Location	Direction
Outside	<ul style="list-style-type: none"><li>• All four exterior sides of the EPS Building</li><li>• Pavement around facility</li><li>• Rollup doors</li></ul>
Inside	<ul style="list-style-type: none"><li>• All four interior sides of the EPS Building</li><li>• Ceiling and lights</li><li>• Electrical panels and conduit</li></ul>

- B. Photographs: Digital Media only:
  - 1. Submit each photographic view within three (3) days of taking photographs.
  - 2. Provide photos as individual, indexed JPG files corresponding to the Key Plan with the following characteristics:
    - a. Compression shall be set to preserve quality over file size.
    - b. Highest resolution JPG images shall be submitted. Resizing to a smaller size when high resolution JPGs are available shall not be permitted.
    - c. JPG image resolution shall be 800 by 600 or higher.
    - d. Images shall have rectangular clean images. Artistic borders, beveling, drop shadows, etc., are not permitted.
  - 3. Date stamp: Date and time stamp shall be integral to each photograph.

- C. Pre-construction photographs: Submit prior to beginning work at the Project site.
- D. Construction progress photographs: Take construction photographs monthly at a minimum. Construction photographs shall be date-stamped.
- E. Post-construction photographs: Submit with project closeout documents as specified in Section 01\_77\_00 - Closeout Procedures.

## **PART 2 PRODUCTS**

### **2.01 MEDIA**

- A. Upload electronic files to e-Builder for acceptance.

## **PART 3 EXECUTION**

### **3.01 GENERAL**

- A. Date stamp: Unless otherwise indicated, date and time stamp each photograph as it is being taken so stamp is integral to photograph.

END OF SECTION

**SECTION 01\_33\_00**  
**SUBMITTAL PROCEDURES**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section includes: Requirements and procedures for submittals.
- B. Insofar as practical, and unless specifically noted otherwise, the Contractor, Owner and Engineer will utilize the Owner's web-based construction document management system (e-Builder) to process submittals.
- C. No fabrication or construction work shall occur on a specific submittal item without a submittal review designation of Reviewed (No Comments) or Reviewed With Comments. Any procurement or construction activity undertaken by the Contractor without such review designation will be at the Contractor's risk and may require removal, replacement, or additional work at the Contractor's sole expense.
- D. Unless specified other in this Contract, preparation and revision of submittals is to be an incidental expense and not a pay item.
- E. Review of submittals shall not relieve the Contractor of its responsibility for errors or omission therein and shall not be regarded as an assumption of risks or liability by the Owner.

**1.02 DEFINITIONS**

- A. Certificates: means document affirmations by the Contractor, subcontractor, or manufacturer entities that the work is in accordance with the Contract Documents.
- B. Manufacturer's instructions: means instructions, stipulations, directions, and recommendations issued in printed form by the manufacturer of a product addressing handling, installation, erection, and application of the product; manufacturer's instructions are not prepared especially for the Work.
- C. Product data: usually consists of manufacturers' printed data sheets or catalog pages illustrating the products to be incorporated into the project.
- D. Samples: full-size actual products required to illustrate the products to be incorporated into the project. Sample submittals are often necessary for such characteristics as colors, textures, and other appearance issues.
- E. Spare parts: uninstalled spare parts necessary for the Owner's use in facility operation and maintenance with type and quantity identified as part of the specification of the product.
- F. Shop drawings: Shop drawings are prepared specifically for the project to illustrate details, dimensions, and other data necessary for satisfactory fabrication or construction that are not shown in the contract documents. Shop drawings could

include graphic line-type drawings, single-line diagrams, or schedules and lists of products and their application.

- G. Submittals: means samples, product data, shop drawings, and others that demonstrate how Contractor intends to conform with the Contract Documents.
- H. Tools: generally defined as items such as special wrenches, gauges, circuit setters, and other similar devices required for the proper operation or maintenance of a system that would not normally be in the Owner's tool kit.

### **1.03 MASTER SUBMITTAL LIST**

- A. Prepare and submit within 30 days of Notice to Proceed, a Master Submittal List including all items for which submittals are required by the Contract Documents. Organize the Master Submittal List by Specification Section number and include the following information for all listed items:
  - 1. Item name.
  - 2. Specification section number.
  - 3. Planned submittal date.
  - 4. Identification of items that are substitutions or contain deviations from the Contract Documents.
  - 5. Identification of items that require other jurisdictional review and approval.
  - 6. The list shall include columns for future use as information becomes available for the following items:
    - a. Trade name, model, and catalog description.
    - b. The scheduled need dates for control purposes.
    - c. Date submitted.
    - d. The date approval is needed.
    - e. The date on which material is needed.
- B. Provide monthly updates to the Master Submittal List.
- C. Provide final and fully completed Master Submittal List prior to Substantial Completion.

### **1.04 GENERAL INSTRUCTIONS**

- A. The Owner, Engineer and Contractor shall utilize e-Builder software (e-Builder is a registered trademark of e-Builder, Inc.). As the primary means for submission of data and documents (unless specified otherwise in this Section) throughout the duration of the Contract. Certain documents (such as those requiring original signatures, product samples and large format documents) will require hard-copy submittal instead. This specification section describes document submittal procedures and requirements for e-Builder submittal requirements only. Refer to Section 01\_31\_24 - Web Based Construction Document Management which describes general Web-based construction document management procedures.
- B. Provide submittals that are specified or reasonably required for construction, operation, and maintenance of the Work.
- C. Contractor shall not utilize or copy any Contract Documents in part or whole as the primary basis for submittal approval. Each submittal shall clearly demonstrate the Contractor's understanding of the scope required.

- D. Edit all submittals so that the submittal specifically applies to only the equipment furnished. Neatly cross out all extraneous text, options, models, etc. that do not apply to the equipment being furnished, so that the information remaining is only applicable to the equipment being furnished. Highlight or use other methods to clearly show the submitted product details.
- E. Prepare submittals in the English language. Do not include information in other languages.
- F. Present measurements in customary American units (feet, inches, pounds, etc.). Metric units will not be acceptable.
- G. Show dimensions, construction details, wiring diagrams, controls, manufacturers, catalog numbers, and all other pertinent details.
- H. Where multiple submittals are required, provide a separate submittal for each specification section:
  - 1. In order to expedite construction, the Contractor may make more than one (1) submittal per specification section, but a single submittal may not cover more than one specification section.
  - 2. The only exception to this requirement is when one specification section covers the requirements for a component of equipment specified in another section and submittal must be coordinated with other work.
- I. Submittals must be clear and legible, and of sufficient size for presentation of information:
  - 1. Minimum page size shall be 8 1/2 inches by 11 inches.
  - 2. Maximum page size shall be 11 inches by 17 inches.
- J. Submittals in electronic media format:
  - 1. In accordance with Section 01\_31\_24 - Web Based Construction Document Management.
  - 2. General: Provide all information in PC compatible format using Windows operating system as utilized by the Owner.
  - 3. Text: Provide text documents and manufacturer's literature using Portable Document Format (PDF) as utilized by the Owner.
  - 4. Graphics: Provide all graphic submittals (drawings, diagrams) utilizing Portable Document Format (PDF) as utilized by the Owner.
  - 5. Contractor using other software shall be required to provide to the Owner conclusive evidence of 100 percent data transfer compatibility.

## **1.05 SUBMITTAL CONTENTS**

- A. Complete the Owner's Submittal Transmittal Form provided in e-builder:
  - 1. Hard copy submittals or samples provided by Contractor must include a Submittal Transmittal Form providing the same information, statements, and certifications.
  - 2. Required submittal numbering format: Submittal number--resubmittal number:
    - a. Example: 132-1:
      - 1) "132" indicates the submittal number is 132.
      - 2) "1" indicates the first resubmittal of Submittal 132.

- b. Contractor may add a separate numbering scheme for Contractor's internal use. However, all correspondence with Owner must include the required submittal numbering.
- 3. Specification section: Include with each submittal a copy of the relevant specification section, including relevant addendum updates:
  - a. Indicate in the left margin, next to each pertinent paragraph, either compliance with a check (√) or deviation with a consecutive number (1, 2, 3).
  - b. Provide a list of all numbered deviations with a clear explanation and reason for the deviation.
- 4. Drawings: Include with each submittal a copy of the relevant Drawing, including relevant addendum or change order updates. Areas affected by addendum or change order updates shall be clearly identified using a "bubble" designation and referenced with the addendum or change order number:
  - a. Indicate either compliance with a check (√) or deviation with a consecutive number (1, 2, 3).
  - b. Provide a list of all numbered deviations with a clear explanation and reason for the deviation.
  - c. Provide field dimensions and relationship to adjacent or critical features of the Work or materials.
- 5. Other information or materials as needed.
- 6. Contractor: stamp, sign and date submittals indicating review and approval:
  - a. Signature indicates Contractor has satisfied submittal review responsibilities, submittal meets all requirements, and constitutes Contractor's written approval of submittal.
  - b. Submittals without Contractor's signature will be returned to the Contractor unreviewed. Subsequent submittal of this information will be counted as the first resubmittal.

## 1.06 SUBMITTAL FORMAT

- A. Fully indexed with a tabbed divider for every component.
- B. Sequentially number pages within the tabbed sections:
  - 1. Submittals that are not fully indexed and tabbed with sequentially numbered pages, or are otherwise unacceptable, will be returned without review.
- C. Organize submittals in exactly the same order as the items are referenced, listed, and/or organized in the specification section.
- D. For submittals that cover multiple devices used in different areas under the same specification section, the submittal for the individual devices must list the area where the device is used.
- E. Consolidate electronic format submittals with multiples pages into a single file.
- F. PDF Bookmarks:
  - 1. Bookmarks shall match the table of contents.
  - 2. Update order of table of contents and associated pages within document as requested by Owner.
  - 3. Bookmark each section (tab) and heading.
  - 4. Drawings: Bookmark at a minimum, each discipline, area designation, or appropriate division.



5. At file opening, display all levels of bookmarks as expanded.
6. Ensure all bookmarks navigate to correct PDF page.

## 1.07 SUBMITTAL PROCEDURE

- A. Contractor: Prepare submittal information in sufficient detail to show compliance with specified requirements:
  1. Determine and verify quantities, field dimensions, product dimensions, specified design and performance criteria, materials, catalog numbers, and similar data.
  2. Coordinate submittal with other submittals and with the requirements of the Contract Documents.
  3. Check, verify, and revise submittals as necessary to bring them into conformance with Contract Documents and actual field conditions.
  
- B. Contractor: Send submittal to Owner:
  1. Provide specified number of copies of submittal.
  2. Delivery:
    - a. Deliver electronic submittals to Owner using web based construction document management system described in Section 01\_31\_24 - Web Based Construction Document Management.
  3. Timeliness: Schedule and make submissions and resubmissions in accordance with the requirements of the individual specification sections and in such a sequence as to cause no delay in Work.
  4. Contractor assumes risk of expense and delays when proceeding with work related to required submittals without review and acceptance.
  
- C. Owner: Review submittal and provide response:
  1. Review description:
    - a. Owner will be entitled to rely upon the accuracy or completeness of designs, calculations, or certifications made by licensed professionals accompanying a particular submittal whether or not a stamp or seal is required by Contract Documents or Laws and Regulations.
    - b. Owner's review of submittals shall not release Contractor from Contractor's responsibility for performance of requirements of Contract Documents. Owner's review will not release Contractor from fulfilling purpose of installation or from Contractor's liability to replace defective work.
    - c. Owner's review of shop drawings, samples, or test procedures will be only for conformance with design concepts and for compliance with information given in Contract Documents.
    - d. Owner's review does not extend to:
      - 1) Accuracy of dimensions, quantities, or performance of equipment and systems designed by Contractor.
      - 2) Contractor's means, methods, techniques, sequences, or procedures except when specified, indicated on the Drawings, or required by Contract Documents.
      - 3) Safety precautions or programs related to safety which shall remain the sole responsibility of the Contractor.
    - e. Owner can accept or reject any exception at their sole discretion.

2. Review timeframe:
  - a. Except as may be provided in technical specifications, a submittal will be returned within 14 calendar days; however, more complicated submittals will be reviewed within 21 calendar days.
  - b. When a submittal cannot be returned within the specified period, Owner will, within a reasonable time after receipt of the submittal, give notice of the date by which that submittal will be returned.
  - c. Owner's acceptance of progress schedule containing submittal review times less than those specified or agreed to in writing by Owner will not constitute Owner's acceptance of review times.
  - d. Critical submittals:
    - 1) Contractor will notify Owner in writing that timely review of a submittal is critical to the progress of Work.
    - 2) Owner will provide decision on request.
    - 3) Written acceptance of request:
      - a) Written agreement by Owner to reduce submittal review time will be made only for unusual situations.
      - b) Written rejection of request.
3. Schedule delays:
  - a. No adjustment in Contract Times or Contract Price will be allowed due to Owner's review of submittals if:
    - 1) Contractor fails to submit appropriate submittals in adequate timeframe in order to procure necessary equipment and maintain project schedule.
    - 2) Owner has failed to review and return first submission within the agreed upon time frame.
    - 3) Contractor demonstrates that delay in progress of Work is directly attributable to Owner's failure to return submittal within time indicated and accepted by Owner.
4. Review responses: Submittal will be returned to Contractor with one of the following reviewer's response and stamp on the transmittal form included as Appendix A:
  - a. Reviewed (No Comments):
    - 1) Contractor may proceed with the work described in the submittal.
  - b. Reviewed with Comments:
    - 1) Contractor shall incorporate all review comments into the work, but resubmittal of an amended submittal package is not required.
    - 2) Resubmit only the portion of package necessary to respond to Owner's comments.
  - c. Revise and Resubmit:
    - 1) Contractor shall incorporate the review comments into a complete revised package and resubmit it for review.
  - d. Rejected:
    - 1) Contractor shall review comments.
    - 2) Contractor shall develop a new submittal package with materials, equipment, methods, etc. that meet the requirements of the Contract Documents.
  - e. Submittal not reviewed, filed for record:
    - 1) Contractor has no further action required.
  - f. Submittal not reviewed:
    - 1) Submittals not required by these Contract Documents will be returned to the Contractor without review.

- D. Contractor: Prepare resubmittal, if applicable:
1. Clearly identify each correction or change made.
  2. Include a response in writing to each of the Owner's comments or questions for submittal packages that are resubmitted in the order that the comments or questions were presented throughout the submittal:
    - a. Acceptable responses to Owner's comments are listed below:
      - 1) "Incorporated" Owner's comment or change is accepted and appropriate changes are made.
      - 2) "Response" Owner's comment not incorporated. Explain why comment is not accepted or requested change is not made. Explain how requirement will be satisfied in lieu of comment or change requested by Owner.
    - b. **Any resubmittal that does not contain responses to the Owner's previous comments shall be returned "Revise and Resubmit". No further review by the Owner will be performed until a response for previous comments has been received.**
  3. Review costs:
    - a. Costs incurred by Owner as a result of additional reviews of a particular submittal after the second time it has been reviewed shall be borne by Contractor.
    - b. Reimbursement to Owner will be made by deducting such costs from Contractor's subsequent progress payments.

## 1.08 SUBMITTALS

- A. General:
1. Submittals shall be made in electronic format in accordance with Section 01\_31\_24 - Web Based Construction Document Management. Electronic submittals shall be supplemented with paper documents, which either require original signatures or large format documents (greater than 11 by 17 inches).
  2. All paper documents submitted by the Contractor shall be in accordance with the City of Tacoma's Sustainable Purchasing Policy (Resolution 38248). Documents shall be produced on recycled paper containing the highest level of post-consumer and recycled content available. At a minimum, paper with 30 percent post-consumer recycled content shall be used.
  3. If required, number of hard copies: 5 minimum except where noted.
- B. Shop Drawings:
1. Details:
    - a. Fabrication drawings: drawn to scale and dimensioned.
    - b. Front, side, and, rear elevations, and top and bottom views, showing all dimensions.
    - c. Locations of conduit entrances and access plates.
    - d. Component layout and identification.
    - e. Weight.
    - f. Finish.
    - g. Temperature limitations, as applicable.
    - h. Nameplate information.

- C. Product Information:
  - 1. Product Data:
    - a. Details:
      - 1) Supplier name and address.
      - 2) Subcontractor name and address.
    - b. Include:
      - 1) Catalog cuts.
      - 2) Bulletins.
      - 3) Brochures.
      - 4) Manufacturer's Certificate of Compliance: signed by product manufacturer along with supporting reference data, affidavits, and tests, as appropriate.
      - 5) Manufacturer's printed recommendations for installation of equipment.
      - 6) Quality photocopies of applicable pages from manufacturer's documents.
  - 2. Samples:
    - a. Number of samples: 3 minimum.
    - b. Details:
      - 1) Submit labeled samples.
      - 2) Samples will not be returned.
      - 3) Provide samples from manufacturer's standard colors, materials, products, or equipment lines:
        - a) Clearly label samples to indicate any that represent non-standard colors, materials, products, or equipment lines and that if selected, will require an increase in Contract Time or Contract Price.
  - 3. Minor or incidental products and equipment schedules:
    - a. Details:
      - 1) Shop Drawings of minor or incidental fabricated products will not be required, unless requested.
      - 2) Submit tabulated lists of minor or incidental products showing the names of the manufacturers and catalog numbers, with Product Data and Samples as required to determine acceptability.
- D. Design calculations:
  - 1. Details:
    - a. Defined in technical sections.
    - b. Calculations must bear the original seal and signature of a Professional Engineer licensed in the state of Washington and who provided responsible charge for the design. The Professional Engineer shall be registered in a discipline appropriate for the design calculations submitted.
- E. Qualifications Statements:
  - 1. Details:
    - a. Defined in technical sections.
    - b. Licensing documentation.
    - c. Certification documentation.
    - d. Education documentation.
- F. Quality assurance/control submittals:
  - 1. Mill test reports:

- a. Details:
  - 1) Submit certified copies of factory and mill test reports.
  - 2) Do not incorporate Products in the Work which have not passed testing and inspection satisfactorily.
  - 3) Pay for mill and factory tests.
- 2. Test reports:
  - a. Details:
    - 1) Include the following information:
      - a) A description of the test.
      - b) List of equipment used.
      - c) Name of the person conducting the test.
      - d) Date and time the test was conducted.
      - e) Ambient temperature and weather conditions.
      - f) All raw data collected.
      - g) Calculated results.
      - h) Clear statement if the test passed or failed the requirements stated in Contract Documents.
      - i) Signature of the person responsible for the test.
- 3. Source Testing:
  - a. Details: Include complete test procedure and all forms to be used during test.
- 4. Certificates:
  - a. Details: Defined in technical sections.
- 5. Manufacturers' field reports:
  - a. Details: Certificate of proper installation.
- 6. Field Samples:
  - a. Details: Defined in technical sections.
- 7. Field Test Plans:
  - a. Details: Defined in technical sections.

G. Project management submittals:

- 1. Applications for payment:
  - a. Details:
    - 1) As specified in Documents 00\_72\_00 and 00\_73\_00, and Section 01\_29\_77 - Applications for Payment.
- 2. Schedules:
  - a. Details:
    - 1) Progress schedules: As specified in Section 01\_32\_16 - Progress Schedules and Reports.
    - 2) Schedule of values: As specified in Documents 00\_72\_00 and 00\_73\_00.
    - 3) Schedule of submittals: As specified in Section 01\_32\_16 - Progress Schedules and Reports.
- 3. Progress reports and quantity charts:
  - a. Details: As specified in Section 01\_32\_16 - Progress Schedules and Reports.

**1.09 CLOSEOUT SUBMITTALS**

- A. Provide closeout submittals as specified in Section 01\_77\_00 - Closeout Procedures.

**PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

END OF SECTION

APPENDIX A  
SUBMITTAL RESPONSE FORM



326 East D Street  
Tacoma, WA 98421

City of Tacoma  
Environmental Services Department  
Science & Engineering Division

Phone: (253) 591-5588  
FAX: (253) 502-2107

**SUBMITTAL REVIEW COMMENTS**

**Project/Spec No.:** ES24-0213N  
**Project Name:** SWM Expanded Polystyrene (EOS) Densifier  
**Submittal Number:**  
**Spec Section:**  
**Description:**  
**Date Submitted:**  
**Response Date:**

<b>SUBMITTAL REVIEW ACTION (select one)</b>	
The Engineer's review of drawings and data submitted by the Contractor will cover only general conformity with the contract drawings and specifications. The Engineer's review of submittals shall not relieve the Contractor from responsibility for errors, omissions, deviations, or responsibility for compliance with the contract.	
A	<b>Reviewed (no Comments):</b> Contractor may proceed with the work described in the submittal.
B	<b>Reviewed with Comments:</b> Contractor shall incorporate all review comments into the work, but resubmittal of an amended submittal package is not required. Resubmit only the portion of package necessary to respond to Owner's comments.
C	<b>Revise and Resubmit:</b> Contractor shall incorporate the review comments into a complete revised package, and resubmit it for review.
D	<b>Rejected:</b> Contractor shall review comments. Contractor shall develop a new submittal package with materials, equipment, methods, etc. that meet the requirements of the Contract Documents.
E	<b>Submittal not Reviewed, Filed for Record:</b> Contractor has no further action required.
F	<b>Submittal not Reviewed:</b> Submittals not required by these Contract Documents will be returned to the Contractor without review.

**COMMENTS:**

No.	Reviewer	Pg./Sheet/ Spec #	Comment
1.			
2.			
3.			

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

**CITY OF TACOMA**



## SECTION 01\_35\_21

### SELECTIVE ALTERATIONS AND DEMOLITION

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
  - 1. Cutting or modifying of existing and new work.
  - 2. Partial demolition of structures and conduit.
  - 3. Removal, storage, and reinstallation of equipment.

##### 1.02 REFERENCES

- A. American National Standards Institute (ANSI):
  - 1. A10.6 - Safety and Health Program Requirements for Demolition Operations.
- B. International Concrete Repair Institute (ICRI):
  - 1. Guideline No. 310.2R - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair.
  - 2. Guideline No. 310.3R - Guide for the Preparation of Concrete Surfaces for Repair Using Hydrodemolition Methods.

##### 1.03 DEFINITIONS

- A. Chipping hammer: A hand-operated electrical or pneumatic demolition device for removal of hardened concrete or masonry materials having a weight of less than 15 pounds and an impact frequency of greater than 2,000 blows/minute.
- B. Concrete breaker: A hand-operated electrical or pneumatic demolition device for removal of hardened concrete or masonry materials having a weight greater or impact frequency less than the limits defined for a chipping hammer.
- C. Coring equipment: Non-impact rotary drill with diamond cutting edges.

##### 1.04 DESCRIPTION OF WORK

- A. The work includes disassembly, partial demolition, cutting, modifying, disposal, and reinstallation of existing facilities, utilities, and/or structures.
- B. These facilities may be occupied and/or operational. Satisfactory completion of the work will require that the Contractor plan activities carefully to work around unavoidable obstacles and to maintain overall stability of structures and structural elements. It will further require restoration of existing facilities, utilities, and structures that are to remain in place and that are damaged by demolition or removal operations.

##### 1.05 SUBMITTALS

- A. General:

1. Submit specified in Section 01\_33\_00 - Submittal Procedures.
- B. Submittals for information only:
  1. Selective Demolition Plan.
- C. Quality assurance submittals:
  1. Qualifications of non-destructive testing agency/agencies.
- D. Project record documents.
- E. Drawings and/or other media documenting locations of service lines and capped utilities discovered during demolition.

#### **1.06 QUALITY ASSURANCE**

- A. Qualifications:
  1. Assign relocation, removal, crane operating, cutting, coring and patching to trades and workers qualified to perform the Work in manner that causes the least damage and that provides means of returning surfaces to an appearance at least equal to that of the surrounding areas unaffected by the Work.
  2. Non-destructive testing agencies: Minimum of 5 years' experience performing non-destructive testing for location of steel reinforcement in existing concrete under conditions similar to that required for this Work.

#### **1.07 SEQUENCING**

- A. Perform Work in sequences and within times specified in Section 01\_14\_00 - Work Restrictions.
- B. If the facility or utility to be modified cannot be removed from service, perform the Work while the facility is in operation using procedures and equipment that do not jeopardize operation or materially reduce the efficiency of that facility.
- C. Coordinate the Work with operation of the facility:
  1. Do not begin alterations of designated portions of the Work until specific permission for activities in each area has been granted by Owner in writing.
- D. Complete Work as quickly and with as little delay as possible. Operational functions of the facility that are required to be performed to facilitate the Work will be performed by facility personnel only.
- E. Owner will cooperate in every way practicable to assist in expediting the Work.
- F. When necessary for the proper operation or maintenance of portions of the facility, reschedule operations so the Work will not conflict with required operations or maintenance.

#### **1.08 REGULATORY REQUIREMENTS**

- A. Dispose of debris in accordance with governing regulatory agencies.
- B. Comply with applicable air pollution control regulations.

- C. Obtain permits for building demolition, transportation of debris to disposal site and dust control.

## **1.09 PREPARATION**

- A. Non-destructive evaluation of existing concrete and masonry:
  - 1. Prior to cutting, drilling, coring, and/or any other procedure that penetrates existing concrete or masonry, retain and pay for the services of a qualified non-destructive testing agency to perform investigations to determine the location of existing steel reinforcement, plumbing, conduit, and/or other embedments in the concrete.
  - 2. Submit documentation of the investigations to the Owner for review and approval as specified in Section 01\_33\_00 - Submittal Procedures before any work involving penetration of existing concrete is initiated.

## **1.10 PROJECT CONDITIONS**

- A. Do not interfere with use of adjacent structures and elements of the facility not subject to the Work described in this Section. Maintain free and safe passage to and from such facilities.
- B. Prevent movement, settlement, or collapse of structures:
  - 1. Notify Owner prior to any work that will require bracing, shoring, or other protective measures to prevent movement.
  - 2. Provide and place bracing or shoring.
  - 3. Cease operations and notify Owner immediately when safety of structures appears to be endangered. Take precautions to properly support structure. Do not resume operations until safety is restored.
  - 4. Assume liability for movement, settlement, or collapse. Promptly repair damage.
- C. Arrange and pay for capping and plugging utility services. Disconnect and stub off:
  - 1. Notify affected utility company in advance and obtain approval before starting demolition.
  - 2. Place markers to indicate location of disconnected services.
- D. Unknown conditions:
  - 1. The drawings may not represent all conditions at the site and adjoining areas. Compare actual conditions with drawings before commencement of Work.
  - 2. Existing utilities and drainage systems below grade are located from existing documents and from surface facilities such as manholes, valve boxes, area drains, and other surface fixtures.
  - 3. If existing active services encountered are not indicated or otherwise made known to the Contractor and interfere with the permanent facilities under construction, notify the Owner in writing, requesting instructions on their disposition. Take immediate action to ensure that the service provided is not interrupted, and do not proceed with the Work until written instructions are received from the Owner.

## **PART 2 PRODUCTS**

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Prior to beginning selective demolition operations, perform a thorough inspection of the facility and site, and report to the Owner defects and structural damage to or deterioration of existing construction to remain.
- B. Examine areas affected by the Work and verify the following conditions prior to commencing demolition:
  - 1. Disconnection of utilities as required in accordance with Specification Section 01\_35\_22.
  - 2. That utilities serving occupied or active portions of surrounding facilities will not be disturbed, except as otherwise indicated.
- C. If unsatisfactory conditions exist, notify the Owner, and do not begin demolition operations until such conditions have been corrected.

### **3.02 PREPARATION**

- A. Selective Demolition Plan:
  - 1. Prepare and submit a comprehensive selective demolition plan for the Work. Describe, at a minimum, the following elements:
    - a. Proposed sequence, temporary support, and equipment for demolition, removal, and disposal of portions of structure(s).
  - 2. Submit plan a minimum two (2) weeks before demolition is scheduled to begin.
  - 3. Lay out demolition and removal work at the site and coordinate with related Work for which demolition and removal is required. Clearly mark the extent of elements to be removed on the actual surfaces that will be removed.
  - 4. Arrange for Owner's inspection of the lay out extents.
  - 5. Do not begin demolition/removal operations until the lay out markings have been reviewed by the Owner.

### **3.03 DEMOLITION**

- A. General:
  - 1. Perform demolition work in accordance with ANSI A10.6.
  - 2. Demolish designated portions of structures and appurtenances in orderly and careful manner in accordance with the Selective Demolition Plan.
  - 3. Conduct demolition and removal work in a manner that will minimize dust and flying particles:
    - a. Use water or dust palliative when necessary to prevent airborne dust.
    - b. Provide and maintain hoses and connections to water main or hydrant.
    - c. Collect and properly dispose of all water used to control dust.
    - d. Protect facility and equipment from exposure to dust control water.
  - 4. Demolish concrete and masonry in small sections. Perform demolition with small tools as much as possible. Blasting with explosive charges is not permitted.
  - 5. Remove materials carefully, to the extent indicated and as required:
    - a. Provide neat and orderly junctions between existing and new materials.

- b. Use methods that terminate surfaces in straight lines at natural points of division.
  - 6. Do not remove anything beyond the limits of Work indicated without prior written authorization of the Owner. If in doubt about whether to remove an item, obtain written authorization of the Owner prior to proceeding.
  - 7. Perform work so as to provide the least interference and most protection to existing facilities to remain.
  - 8. Assume possession of demolished materials, unless otherwise indicated on the Drawings or specified:
    - a. Remove demolished materials from site at least weekly and dispose of in accordance with Laws and Regulations.
    - b. Do not burn materials on site.
- B. Immediately upon discovery, remove and dispose of contaminated, vermin-infested, or dangerous materials using best practices that will not endanger health of workers and public. Notify Owner upon discovery.
- C. Remove demolished materials, tools, and equipment upon completion of demolition.

### **3.04 RESTORATION**

- A. General:
  - 1. Repair damage caused by demolition to a conditions equal to those that existing prior to beginning of demolition:
    - a. Patch and replace portions of existing finished surfaces that are damaged, lifted, and discolored with matching material. Refinish patched portion surfaces in a manner which produces uniform color and texture to entire surface.
    - b. When existing finish cannot be matched, refinish entire surface to nearest change of plane where angle of change exceeds 45 degrees.
  - 2. The cost of repairs shall be at the Contractor's expense at no increase in the Contract Price.
  - 3. Match patched construction with adjacent construction in texture and appearance so that patch or transition is invisible at 5-foot distance.
  - 4. When finished surfaces are cut so that smooth transition is impossible, terminate existing surface in neat manner along straight line at natural line of division and provide appropriate trim.
- B. Restore areas affected by removal of existing equipment, equipment pads and bases, piping, supports, electrical panels, electric devices, and conduits such that little or no evidence of the previous installation remains:
  - 1. Fill areas in existing floors, walls, and ceilings from removed piping, conduit, and fasteners with non-shrink grout and finish smooth.
  - 2. Remove concrete bases for equipment and supports by:
    - a. Saw cutting clean, straight lines with a depth equal to the concrete cover over reinforcement minus 1/2 inch below finished surface:
      - 1) Do not cut existing reinforcement on floors.
    - b. Chip concrete within scored lines and cut exposed reinforcing steel and anchor bolts.
    - c. Patch with non-shrink grout to match adjacent grade and finish.
  - 3. Terminate abandoned piping and conduits with blind flanges, caps, or plugs.

### **3.05 FIELD QUALITY CONTROL**

- A. Do not proceed with demolition without Owner's inspection of lay out.
- B. Do not deviate from the submitted demolition plan without notifying the Owner prior to Work.

END OF SECTION

# Lock Out/Tag Out (Control of Hazardous Energy)

CH 21 Lockout Tagout.docx

09/13/11

## Responsibilities

### Supervisors

- Establish written lockout/tagout procedures that will protect employees who service and maintain machines or equipment from potentially hazardous energy.
- Ensure that a lockout system is used if an energy-isolating device can be locked-out.
- Ensure that if an energy-isolating device cannot be locked out and a tagout system is used, the tagout system meets all of the requirements outlined herein.  
**Note:** Employees who fall under WAC 296-45 Electrical Workers, General or WAC 296-155-429 Construction, Electrical must comply with those regulations.
- Ensure that all employees that may be exposed to potentially hazardous energy are properly trained and understand the requirements and the significance of lockout/tagout procedures.
- Ensure that all employees follow the lockout/tagout procedures established.
- Provide and assign individual locks to authorized employees as needed.

**Note:** As an alternative to assigning individual locks, a lockout station from which employees checkout locks is an acceptable alternative as long as the same level of protection is provided *and* the following conditions are always met:

1. There are enough locks so that each trained, authorized employee has an individual lock available whenever needed.
  2. There is only one key to each lock provided.
  3. An effective system is in place that easily and quickly identifies the employee that applied the lock.
- Ensure that any new equipment that may need to be locked out has a place to apply a lock or other effective energy-isolating device.
  - Review lockout/tagout procedures at least annually with the employees who use them to ensure compliance with and understanding of this program.
  - Document that the initial training and annual reviews have been completed.
  - Coordinate lockout/tagout procedures with any outside vendors that maintain or service City of Tacoma equipment.
  - Correct any deviations or inadequacies identified in the lockout/tagout procedures immediately.

### Employees

- Attend lockout/tagout training so that you can understand the requirements and significance of the lockout/tagout procedures.
- Participate in the annual reviews to ensure compliance with specific lockout/tagout procedures.
- Always follow proper lockout/tagout procedures.
- Use individual lockout locks, tags and devices as required by this program.
- Promptly report any potential hazards to your supervisor.

### Risk Management

- Provide training as requested.
- Provide guidance and consultation.
- Serve as a resource for additional information.

### **Purpose**

This program will protect employees who service and maintain equipment from injuries due to potentially hazardous energy. These procedures establish minimum requirements for the lockout/tagout of energy isolating devices used in the service and maintenance of machines and equipment, including piping systems.

These procedures must be followed if employees could be injured by either of the following:

- The unexpected energization or start up of a machine or equipment  
or
- The release of stored energy sources which include mechanical, hydraulic, pneumatic, chemical, thermal, or other energy, including gravity.

### **Exemptions**

This Lockout/Tagout Program does not apply to:

- Installations for generating, transmitting, and distributing electrical power (including related communication and metering equipment) that are controlled exclusively by electric utilities (WAC 296-45-175 Electrical Workers, General).
- Construction activities covered by chapter WAC 296-155-429 Construction, Electrical.
- Hot tap operations of pressurized pipelines used to transmit and distribute substances such as gas, steam, water, or petroleum products if the employer can demonstrate that all of the following apply:
  - Continuity of service is essential.
  - Shutdown of the system is impractical.
  - Proven effective employee protection is provided by following documented procedures and using special equipment.
- Service and maintenance of fire alarm and extinguishing systems and their components if all of the following apply:
  - Other employees depend on these systems for fire safety
  - Employees working on fire extinguishing systems are protected from the unexpected release of hazardous energy by appropriate alternative measures.
- Work on electric equipment receiving power only through a cord and plug If all of the following apply:
  - Unplugging the equipment eliminates the possibility of unexpected energization, unexpected start up, or the release of stored energy
  - The plug is kept under the exclusive control of the employee doing the service or maintenance.

Exposure to electrical hazards from electrical work on, near or with conductors or equipment that is covered by chapter 296-24, Part L, General Workplace Electrical Safety Requirements and chapter 296-800-280, Basic Electrical Rules.
- Service and maintenance during normal production operations, if an employee isn't required to:



- Remove or bypass a guard or other safety device or place a body part into the point of operation or any other hazardous area created by machine operation.
- Minor tool changes, adjustments, and other minor service during normal production operations if all of the following apply:
  - They are routine, repetitive, and integral to the use of the equipment for production.
  - The work is done using measures which provide effective protection from hazards.

## Definitions

**Affected employee** – An employee who's required to operate, use, or be in the area where a machine or equipment could be locked or tagged out for service or maintenance.

**Authorized employee** – An employee who locks or tags out a machine or equipment to do service or maintenance.

**Energized** – Connected to an energy source or containing residual or stored energy.

**Energy isolating device** – A mechanical device that physically prevents transmitting or releasing energy. This includes but is not limited to:

- Disconnect switches
- Manually operated electrical circuit breakers
- Manually operated switches that disconnect the conductors of a circuit from all ungrounded supply conductors if no pole of the switch can be operated independently
- Blind flanges and line valves
- Blocks
- Similar devices used to block or isolate energy

**Note:** Push buttons, selector switches and other control circuit devices are not energy isolating devices.

**Energy source** – Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy, including gravity.

**Hot tap** – A procedure which involves welding on pressurized pipelines, vessels, or tanks to install connections or accessories. *Hot tap is commonly used to replace or add sections of pipeline used in air, gas, water, steam, and petrochemical distribution systems without interrupting service.*

**Lockout** – Placing a lockout device on an energy-isolating device using an established procedure to make sure the machine or equipment can't be operated until the lockout device is removed.

**Lockout device** – A device that uses a positive means, such as a key to hold an energy-isolating device in the "safe" or "off" position. This includes blind flanges and bolted slip blinds.

**Primary authorized employee** – is the authorized employee who has overall responsibility for meeting the requirements of the lockout/tagout procedures during a group lockout/tagout event.

**Service and maintenance** – Activities such as constructing, installing, setting-up, adjusting, inspecting, modifying, maintaining, and servicing machines or equipment. It also includes lubricating, cleaning, unjamming, and making tool changes.

**Tagout** – Placing a tagout device on an energy-isolating device using an established procedure to indicate that the energy-isolating device and the machine or equipment being controlled may not be operated until the tagout device is removed.

**Tagout device** – A prominent warning device, such as a tag and a means of attachment. It can be securely fastened to an energy-isolating device to indicate that the energy-isolating device and the machine or equipment being controlled may not be operated until the tagout device is removed.

**Note:** If an energy-isolating device cannot be locked out and a tagout system is used, the tagout device must be attached where a lockout device would have been attached and the tagout system must include additional safety measures to provide the same level of employee protection and safety as a lockout system.

**Note:** Employees who fall under WAC 296-45 Electrical Workers, General or WAC 296-155-429 Construction, Electrical must comply with those regulations.

### **Energy Control Program**

This energy control program protects employees that service or maintain machines or equipment from exposure to potentially hazardous energy. This energy control program contains the following required elements:

- Energy control procedures.
- Employee training.
- Periodic reviews.

A sample Lockout/Tagout Procedure can be found at the end of this document and downloaded as a .pdf from the City of Tacoma's intranet site.

### **Energy Control Procedures**

Energy control procedures must clearly and specifically outline the scope, purpose, authorization, rules and techniques to control hazardous energy. Each supervisor must make sure that these procedures are followed.

Energy control procedures must specifically identify at least the following:

- When the procedure must be used.
- The purpose of the specific procedural steps.
- How to test the machine or equipment to verify effectiveness.

**Note:** *Similar machines and equipment may be covered by a single written energy control procedure if they use the same type and magnitude of energy, have similar controls and are identified by type and location.*

Make sure new or modified machines and equipment can accept lockout devices.

A lockout system must be used if an energy-isolating device can be locked out.

**Note:** *If a machine or equipment needs maintenance or servicing and will not accept a lockout device, contact the Safety Office for assistance.*

### **Energy Control Devices**

The City of Tacoma must provide appropriate means to control energy such as: locks, chains, wedges, key blocks, adapter pins, self-locking fasteners, blind flanges or cribbing. ***The City highly recommends that tags alone are not used as a means to control hazardous energy.***

Lockout and tagout devices must meet all of the following criteria:

- Create **no** additional hazards.
- Have a distinctive design or appearance.
- Are the only devices used for controlling energy.
- Are **not** used for any other purpose.
- Are durable enough to withstand the environment they're used in for the maximum time they're expected to be used.
- Are standardized within the facility by color, shape or size.
- Identify the person applying the device.

Lockout devices must also be strong enough so that removing them by other than the normal unlocking method requires excessive force or unusual techniques (i.e. bolt cutters or other metal cutting tools).

Tagout devices must meet these additional requirements:

- Use the same print and format within a facility
- Are constructed and printed so they won't deteriorate and the message on the tag remains legible when exposed to weather and when used in wet locations and corrosive environments.
- Have a warning about not energizing the machine or equipment.  
Warnings on tags should include word such as:  
Do Not Start, Do Not Operate, Do Not Close, Do Not Open or Do Not Energize
- Are strong enough to prevent unintentional or accidental removal
- Have means used to attach the tag to the energy-isolating device that must not be reusable, must be self-locking, can be attached by hand, can't be released with a force of less than 50 pounds and must be similar in design and basic characteristics to a one-piece, all-environment, nylon cable tie.

### **Applying Lockout/Tagout Devices**

Before beginning service or maintenance on a machine or equipment that may expose employees to potentially hazardous energy, the machine or equipment being worked on must be locked out or tagged out by the authorized employee using the following sequence of operations:

Note: *Prior to lockout/tagout, the authorized employee must know **all** of the following:*

- Type and magnitude of the energy to be controlled.
  - Hazards of the energy to be controlled.
  - Method or means to control the energy.
1. Notify all affected employees that the machine or equipment is being locked out or tagged out and the reason for the lockout/tagout.
  2. Turn off or shut down the machine or equipment using established procedures (depress stop button, open toggle switch, etc.).
  3. Completely isolate the machine or equipment from its energy source(s) using the appropriate energy-isolating devices. (i.e. operate the disconnect switch, valve, or other energy-isolating device(s) so that the equipment is isolated from every potential energy source).
  4. Dissipate or restrain any stored energy (such as that in springs; elevated machined members; rotating flywheels; hydraulic systems; and air, gas, steam, or water pressure, etc.) by methods such as repositioning, blocking, bleeding down.
  5. Apply a lockout/tagout device on each energy-isolating device. Make sure lockout/tagout device(s) effectively holds the energy-isolating device in a safe or off position.
  6. Try out the system. As a check, ensure that no personnel are exposed. Operate the push button or other normal operating controls to make certain the equipment will not operate.  
**Caution: Return operating control(s) to "neutral" or "off" position after the test.**

The equipment is now locked or tagged out.

Note: *Continue to verify the isolation of machines and equipment that could reaccumulate stored energy to a hazardous level until service or maintenance is complete or the possibility of reaccumulating hazardous energy doesn't exist.*

### **Removing Lockout/Tagout Devices and Reenergizing**

Following completion of service or maintenance, the authorized employee will re-energize the machine or equipment using the following sequence of operations:

1. Inspect the work area to make sure nonessential items have been removed (i.e. tools removed, guards reinstalled, etc.).
2. Verify the machine or equipment is in operating condition and ready to energize.

3. Notify all affected employees that servicing or maintenance is complete and the lock or tag out is being removed. Visually verify that all employees in the area are in safe positions.
4. Remove lockout/tagout device(s) from each energy-isolating device.
5. Turn on the machine or equipment using established procedures (stop button, toggle switch, etc.).
6. Operate the equipment to ensure it functions correctly.

Only the authorized employee who applied the lockout/tagout device may remove it unless **all** of the following conditions are met:

1. The energy control program has documented specific procedures and training for this situation.
2. The specific procedures used are as safe as having the device removed by the authorized employee who applied it.
3. The procedures include **all** of the following:
  - Verifying the authorized employee who applied the device is not at the facility.
  - Making all reasonable efforts to contact and inform the authorized employee that the device is being removed.
  - Making sure the authorized employee is informed, before resuming work at the facility that the device has been removed.
  - Notifying all affected employees that the lockout/tagout device(s) have been removed.

### **Temporary Energization for Testing or Positioning**

Follow normal energy control procedures if it is necessary to temporarily energize a machine, equipment, or component for testing or positioning.

### **Shift of Personnel Changes**

During shift changes, make sure there is continuous lockout/tagout protection and provide for the orderly transfer of lockout/tagout device protection between employees.

### **Group Lockout/Tagout**

Energy control procedures must provide each member of a crew, craft, department or other group with the same level of protection as that provided by an individual lockout/tagout device.

1. Each authorized employee must put a personal lockout/tagout device on the group lockout/tagout device, lockbox or comparable mechanism before beginning work and must not remove it until they have finished their work.
2. One primary authorized employee must have overall responsibility for the service or maintenance.

3. The primary authorized employee must attach their lockout/tagout device before work begins and must be the last to remove their device when the work is complete.

If more than one group works on a machine or equipment that has to be locked or tagged out:

1. One authorized employee must be assigned as group coordinator with overall responsibility to coordinate the different work groups and maintain continuous Lockout/tagout.
2. A primary authorized employee must be assigned to each work group. The primary authorized employee must have:
  - The means to determine which employees of the group may be exposed to the machine or equipment being locked or tagged out.
  - The overall responsibility to protect the work group.

### **Outside Employers Servicing or Maintaining City Equipment**

When outside employers are servicing or maintaining City of Tacoma equipment and lockout/tagout is required:

1. Inform the employer of the facility's lockout/tagout procedures.
2. Make sure the outside employer informs you of their lockout/tagout procedures.
3. Confirm that all employees (City of Tacoma and outside employer's) understand and will follow the restrictions of each other's energy control program.

### **Employee Training**

Provide and document employee training on the energy control program. Employees will be trained to this specific program and training shall ensure that employees:

- Understand the purpose and function of the energy control program.
- Have the knowledge and skills to carry out their responsibilities.

Authorized employees must:

- Know the type and magnitude of the energy available in the workplace.
- Recognize hazardous energy sources that apply.
- Know the methods and means to isolate and control the energy.

Affected employees must be trained in the purpose and use of the energy control procedures.

All employees who work or may work where energy control procedures might be used must be instructed about the procedure being used and the prohibition against attempting to restart or reenergize a machine or equipment that's locked or tagged out.

Documentation of training must be kept up to date and include the employee's name and the training date.

**Employees must receive additional training if tagout devices are used.** The training must cover information about the following:

- Tags are warning devices and don't provide the same level of protection as a lock.
- Tags must not be removed without the approval of the authorized employee responsible for its placement.
- Tags must not be bypassed, ignored or otherwise defeated.
- Tags must be legible and clear to be effective
- Tags must be securely attached to energy-isolating devices so they cannot inadvertently or accidentally be detached.
- Tags must be made of material that will withstand the environmental conditions they will be exposed to.

Employees must also understand how tags fit into the overall energy control program and that tags may evoke a false sense of security

### **Retraining**

Retrain authorized and affected employees if **any** of the following occur:

- New or revised control methods or procedures are introduced.
- Changes occur in job assignment or energy control procedures.
- Machines, equipment or processes present a new hazard
- Periodic review shows an employee deviates from, or has inadequate knowledge of the energy control procedures.
- The employer has any other reason to believe retraining is necessary.

### **Periodic Review**

Supervisors must ensure that a periodic review of the energy control procedures is done at least annually and that any deviations or inadequacies identified be corrected. The review must:

- Be done by an authorized employee other than the ones using the procedures.
- Will verify that employees know and can apply the procedures.
- Review responsibilities with each authorized employee who uses the procedures.

Periodic reviews must be documented and documentation must include:

- Machine or equipment the energy control procedure was used for.
- The date of the review.
- Employees included in the review.
- Person doing the review.

Energy control procedures used less frequently than once a year only need to be reviewed before being used.

Note: *Reviews using procedures involving only lockout devices can be done in a group meeting if desired.*

**Reference**

WAC 296-803 Lockout/Tagout (Control of Hazardous Energy)

WAC 296-800-280 Basic Electrical Rules

WAC 296-45-175 Electrical Workers, General

WAC 296-155-429 Construction, Electrical

WAC 296-24 Part L General Workplace Electrical Safety Requirements



# City of Tacoma Lockout Procedure (Sample)

Use with Lockout/Tagout (Control of Hazardous Energy), Chapter 296-803 WAC

## SCOPE:

This lockout procedure is for:

---

---

Indicate the specific machine or equipment that this procedure applies to. For additional information, see WAC 296-803-20005, in this chapter.

## PURPOSE:

- This procedure contains the minimum requirements to protect employees from injury caused by the unexpected energization, start up, or release of stored energy during service or maintenance.
- Use this procedure to make sure the machine or equipment is stopped and isolated from all potentially hazardous energy sources, and locked out before any employee begins work.

## AUTHORIZATION:

The following persons are authorized to lock out the machine or equipment using this procedure: *(List above the names of authorized employees you want to use this procedure.)*

---

---

## MEETING THE REQUIREMENTS OF THIS PROGRAM:

- Authorized employees will perform lockout as described in this procedure.
- No employee will attempt to start, energize or use any machine or equipment that is locked out.
- All employees need to follow the restrictions and limitations that result from this procedure.
- Failure to follow this procedure will result in the following action:

---

---

*(List above the actions that will be taken if employees violate the procedure.)*

## INTENDED USE:

This procedure will be used for the following service or maintenance actions:

---

---

*(List above the service and maintenance activities that require use of the procedure.)*

## SPECIFIC PROCEDURAL STEPS:

**Step 1:** The authorized employee will identify the type and magnitude of the energy that the machine or equipment uses, understand the hazards of the energy, and know the methods to control the energy as follows before using this procedure:

---

---

*(List above the type and magnitude of the energy, its hazards, and the methods to control the energy. For additional information, see WAC 296-803-50010, in this chapter. )*

**Step 2:** Notify all of the following affected employees that the machine or equipment will be shut down and locked out for service or maintenance:

---

---

*(List above the names or job titles of affected employees and how to notify them. For additional information, see WAC 296-803-50010, in this chapter.)*

**Step 3:** Shut down the machine or equipment by the normal stopping procedure (such as depressing a stop button, opening switches, or closing valves).

---

---

*(List above the types and locations of machine or equipment operating controls. For additional information, see WAC 296-803-50010, in this chapter.)*

**Step 4:** Completely isolate the machine or equipment from its energy sources by using the appropriate energy-isolating devices.

---

---

*(List above types and locations of energy isolating devices. For additional information, see WAC 296-803-50010, in this chapter.)*

**Step 5:** Lock out the energy isolating devices with assigned individual locks.

---

---

*(List above any additional procedural requirements, such as putting on a tag with amplifying information, necessary for the authorized employee to know. For additional information, see WAC 296-803-50010, in this chapter.)*

**Step 6:** Dispel or restrain stored and residual energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, using methods such as grounding, repositioning, blocking, or bleeding down.

---

---

*(List above the types of stored and residual energy and the methods to dispel or restrain them. For additional information, see WAC 296-803-50025, in this chapter.)*

---

---

*(List above any actions necessary to prevent stored energy from reaccumulating to a hazardous level. For additional information, see WAC 296-803-50025, in this chapter.)*

**Step 7:** Make sure the equipment is disconnected from the energy sources, and stored and residual energy has been made safe. Check that no employees are exposed, and then verify the isolation of the equipment by doing the following:

---

---

*(List above the method of verifying machine or equipment isolation, such as operating the push button or other normal operating controls or by testing to make certain the equipment will not operate. For additional information, see WAC 296-803-50030 in this chapter.)*

**CAUTION:** Return the operating controls to the safe, neutral, or off position, after verifying the equipment is isolated from its energy source.

#### **THE MACHINE OR EQUIPMENT IS NOW LOCKED OUT:**

Restore the machine or equipment to service after the service or maintenance is completed and the machine or equipment is ready to return to its normal operating condition by following these steps:

**Step 1:** Check the machine or equipment and the immediate area around it to make sure all nonessential items have been removed and that the machine or equipment is in operating condition and ready to energize.

**Step 2:** Make sure all employees are safely positioned for starting or energizing the machine or equipment.

**Step 3:** Verify that the controls are in neutral.

**Step 4:** Remove the lockout devices and reenergize the machine or equipment.

**Note:** *You may need to re-energize the machine before you can safely remove some forms of energy blocking.*

**Step 5:** Notify affected employees that the service or maintenance is completed and the machine or equipment is ready to use.

*For additional information, see Meet these requirements when removing lockout or tagout devices and energizing the machine or equipment, WAC 296-803-50035, in this chapter*



# ENVIRONMENTAL SERVICES/OPERATIONS AND MAINTENANCE (O&M) and BUSINESS OPERATIONS (BUSOPS) DIVISIONS

## POLICY

SUBJECT: DIVISIONAL SUPPLEMENT TO THE CITY OF TACOMA LOCKOUT/TAGOUT PROGRAM DATE: 02/15/2017

---

### REFERENCES:

- WAC 296-803
- City of Tacoma Safety Manual, Lockout/Tagout Chapter

## Purpose of Program

### **Scope**

This program shall apply to personnel assigned to/or working for the City of Tacoma, Environmental Services Department, Wastewater Operations and Maintenance (O&M) and Business Operations (BO) Divisions. It shall include, but not be limited to, Maintenance Mechanics, WWTP Operators, Electricians, Instrumentation Technicians, and Fabricators, both temporary and permanent employees.

### **Application**

This program applies to the control of energy during servicing and/or maintenance of machines and equipment in which the unexpected energization, start-up, or release of stored or residual energy could cause injury to personnel or damage to equipment.

Normal production operations are not covered by this standard. Servicing and/or maintenance which takes place during normal production operations is covered by this standard, only if:

- An employee is required to remove or bypass a guard or other safety device; or
- An employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

This program does not apply to the following:

- Work on cord and plug connected for which exposure to the hazards of unexpected energization or start up of the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing or maintenance.
- Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water, or petroleum products when they are performed on pressurized pipelines, provided that the employer can demonstrate that:
  - Continuity of service is essential:
  - Shutdown of the system is impractical: and
  - Documented procedures are followed, and special equipment is used which will provide proven effective protection for employees.

## **Purpose**

The purpose of this program shall be to establish the minimum lockout requirements necessary to ensure a safe working environment for all employees. The program shall be used to provide guidance and outline procedures to control or eliminate potential hazards such as: electrical, pneumatic, hydraulic, mechanical, or other, prior to the commencement of any repair or maintenance activity. The procedures and responsibilities outlined within this program may be unique to the Sewer Utility and expand upon those procedures established in the City of Tacoma Safety Manual. When other Title 296 WAC vertical standards require the use of lockout or tagout, they shall be used and supplemented by the procedural and training requirements of this program.

## **Definitions**

**Affected Employee:** An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance could be performed.

**Authorized Employee:** A person who locks out or tags out machines or equipment in order to perform servicing or maintenance. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this policy.

**Capable of Being Locked Out:** An energy-isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices are capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy-isolating device or permanently alter its energy control capability.

**Energized (alive):** Connected to an energy source or containing residual or stored energy.

**Energy Isolating Device:** A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches, and other control circuit type devices are not energy isolating devices.

**Energy Source:** Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy, including gravity.

**Hot Tap:** A procedure used in the repair, maintenance, and services activities which involves welding on a piece of equipment (pipelines, vessels, or tanks) under pressure, in order to install connections or appurtenances. It is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems.

**Lockout:** The placement of a lockout device on an energy-isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

**Lockout Device:** A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevents the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

**Servicing and/or Maintenance:** Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning, or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

## **Program Structure**

Only "authorized" employees shall perform lockout. An "authorized" employee is:

- Able to recognize hazardous energy sources and their type and amount of energy
- Able to isolate and control energy in the performance of their duties to prevent accidents
- Able to perform the steps required to complete a lockout sequence
- Is aware of the dangers and consequences of, failure to, or improper application of, lockout
- Has been deemed “authorized” by the Employer

“Affected” employees must know:

- Why lockout is important and how the program works
  - The requirement to lockout equipment before performing repairs or service
  - The importance of not trying to remove or work around locks or tags
  - The importance of communicating with “Authorized” parties to avoid dangerous situations
1. Tags are not an authorized means to control energy except as explained in 2. below. They are utilized for warning and to provide information. They should accompany a lockout method and are used to identify the “authorized” employee and detail any specific hazards.
  2. If by nature of design an item of equipment or process is not compatible with lockout or other suitable securing methods, if permission is granted by the Division Manager, then, the term tagout will be recognized and carry the same importance as the term lockout. A specific written procedure will be created and approved to document how the task will be safely accomplished.
  3. An attached tag shall identify the lockout device. The employee’s name shall be written legibly in permanent ink, but to conserve resources the tag may be reused and the date of application applied in a removable, yet durable, material such as grease pencil.
  4. The tag shall be attached with a substantial device such as a nylon cable tie.
  5. The tag shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: Do not start, do not open, do not close, do not energize, or do not operate.
  6. Locks of different employees are not to be keyed alike; locks assigned to an individual may be keyed alike, however no spare or master keys are to be available to anyone except that individual.
  7. Identification means shall be included on both the key and the lock, the identification may be by name, but by key number or serial number is preferred.
  8. Locks and keys shall be assigned and tracked, they will adhere to the following plant/off-site wide color coding system:
    - Operations- Blue
    - Mechanical- Yellow
    - Electrical- Orange
    - Instrumentation- Green
    - Other- Black
  9. Locks will be standardized in color, size, and shape.
  10. Lockout devices shall only be used for lockout. Locks are not to be used for personal use or for securing toolboxes. Means shall be provided for storage of extra out of use locks, such as a lock rack with individual identification slots.
  11. Means shall be implemented to assign and record the lock and key set being taken from stock.
  12. “Authorized” personnel may keep in their possession a variety of common energy control devices such as breaker lockouts or valve lockouts, but shall return to stock any excessive quantity, large, expensive, or specialty lockout devices.

13. All equipment being repaired or serviced shall be locked out to prevent against accidental or inadvertent operation that could cause injury to personnel, or damage to equipment. Due to the complex nature of some plant processes lockout is often difficult, due care must be exercised to release, drain, and lockout all sources of stored, potential, and residual energy. For testing and positioning, see General Testing or Positioning of Machines, Equipment, or Components.
14. No attempt shall be made to operate, bypass, or otherwise tamper with any switch, valve, or other energy-isolating device that is locked out.
15. It is recognized that no written procedure can cover every situation. The knowledge, experience, and resourcefulness of the work crew will be the key to a safe work site and a successful Energy Control Program.

## ***Assignment of Responsibilities***

### ***Employee***

Shall attend, and participate in, initial program training and periodic refresher training.

Shall exercise due diligence and caution at all times to eliminate or minimize potential sources of hazard.

Shall discontinue job assignment and notify Lead/Senior/Supervisor if job requirements prevent compliance with this program. In that situation a mutually agreed upon plan shall be documented and implemented to ensure safety in complex situations.

Shall communicate with their Lead/Senior/Supervisor and the Lead Operator and other “affected” employees to notify and inform them of their lockout action.

Shall not remove the lock of another without approval of a supervisor, nor shall an attempt be made to bypass a safety device or operate a switch, valve, or other item that has been locked out.

Shall report to their Lead/Senior/Supervisor any unsafe practices, procedures, or materials.

Shall be held accountable for compliance of program requirements.

### ***Senior***

Shall ensure the delegation of job assignments includes a discussion of proper lockout practices and program compliance procedures.

Shall ensure proper communications have been established so that all “affected” parties are aware of the lockout action and possible consequences.

If an Energy Control Program requirement cannot be met, shall implement, document and oversee a contingency plan that will allow the maintenance activity to proceed safely.

Shall order a lock removed only after following the procedures outlined in the Unattended Lock Removal section of this program.

### ***Warehouse Technician***

Shall maintain an inventory of lockout/tag devices and accessories, to include, but not limited to:

Locks & keys, multiple lock safety lockouts, fuse lockouts, switch and circuit breaker lockouts in various sizes, cord-end lockouts, lockout chains and cables, various configurations of valve and handle lockouts, and a wide assortment of tags and all-environment nylon ties

Shall maintain a central “Lockout Station” to organize storage and retrieval of lockout equipment and supplies, and in which to quickly identify shortages of stock.

Shall maintain the integrity of the color coding/numbering system of locks and keys.

Shall issue initial supplies of locks and keys, inventorying and tracking their assignments.

Shall issue additional/replacement locks and keys again inventorying and tracking those issues.

Shall supply a list of Lock and Key numbers to be included with this program and assessable to Lead/Senior/Supervisory personnel.

### **Safety Staff**

Shall conduct initial program training for all present employees, and thereafter, all newly acquired employees.

Shall maintain a database of related safety courses or training available.

Shall review training requirements and recommend program and training improvements.

Shall maintain Training Attendance Sheets, and identify individual personnel training short falls.

Shall provide technical assistance in the review, implementation, and administration of this program.

Shall inform all responsible parties of compliance and code changes and/or updates.

Shall be a resource available to interpret safety material and situations, and to provide guidance and recommendations concerning the program.

Shall keep Employer informed of all program related safety concerns and problems.

Shall keep employees informed of program requirements and procedures.

### **Supervisor/Manager**

Shall have overall jurisdiction in the implementation, administration, enforcement and upkeep of this program.

Shall ensure those working under their jurisdiction have received program training and are qualified to perform the duties assigned to them.

Shall ensure individual refresher training is done as required.

Shall initiate an annual audit of the program in accordance with WAC 296-803-70005 and City Safety Policy, looking specifically for shortcomings and areas for improvement.

Shall initiate corrective action and make annotations on the audit, and maintain an audit record for at least three years.

Shall hold accountable all other parties in the performance of their duties as related to this program.

Shall initiate disciplinary actions should any incident or investigation concerning this program warrant that action.

Shall debrief the crew of program audit results and corrective actions.

*Nothing contained within this document shall prohibit an employer or his authorized representative from disciplining employees for their failure to comply with the provisions of this or any other safety code, policy, practice, or program.*



## ***Application & Procedures***

### ***Job Assignment***

Consideration of job assignment should take into account an employee's skill level, competence, and familiarity of equipment. If necessary, provisions should be provided to assign a mentor for training purposes.

Upon assignment of a job, discussion between employee and Senior should involve lockout procedures and other safety aspects.

The job assignment should make clear whom the points of contact, and the "affected" parties are, concerning a lockout activity.

### ***Survey, Preparation, and Planning***

Locate and identify all isolation devices and methods pertaining to the job assignment.

Plan the job taking into consideration the impact the work will have on personnel, materials, on the particular process, and on the overall operation of the plant or system.

Decide on the number and type of energy control lockout devices necessary.

Obtain needed supplies from the warehouse, placing any out of stock or unique requirements on order. Inform the Senior of job status and communicate any delays.

### ***Communications & Affected Parties***

Communicate job requirements and potential impacts with all "affected" parties. This will include informing "affected" personnel of the impending equipment shutdown, scheduling, and coordination of that activity.

Provisions and plans should be developed at that time, if necessary, to allow for bypassing of process or equipment, activating backup or redundant systems, and estimates of the length of equipment down time.

### ***Taking Out of Service and Application of Lockout Devices***

With knowledge of power sources and their controls, and after coordinating the shutdown sequence with "affected" parties, the shutdown sequence can be started if the system is currently in service.

Alert employees in the area or others who may be affected elsewhere that the equipment will be turned off and locked out.

If others normally perform the shutdown sequence, such as Operators, accompany them and verify the proper sequence and procedures.

Turn off all energy sources and place locks on all control points. Install any required chains, wedges, blocking, pins, fasteners, or other hardware, securing, or safety devices. Test the security of the locks and devices by attempting to operate the switch, valve, gear, motor, or other device.

After ensuring that no personnel are exposed to hazards, check that the equipment is unresponsive by turning the controls "On" and trying to start the equipment, being sure to return the controls to the "Off" position.

If the system is presently out of service or offline, the shutdown sequence shall also be performed in a verification type of procedure. For instance, if the normal shutdown procedure calls for closing of a valve, it will not be assumed that the valve is closed and locked out because the unit is offline. Check and verify that the valve is actually closed, then secure it with the appropriate lockout device.

Stored energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and compressed air, gas, steam, or water pressure, etc.) must be discharged, dissipated or restrained by methods such as repositioning, blocking, bleed down, etc. Items or accessories used to block, position, or pin out etc. need to be tagged.

## ***Procedures for Multiple Workers***

When a maintenance activity involves more than one worker, all workers involved shall practice the procedures as outlined above. Each worker shall place their personal lockout on the control point, using multiple lockout devices (hasps) as necessary.

It is acknowledged that not all devices support the weight or size of multiple locks, and other arrangements may be made. Such an arrangement may be the use of a "Lock Box" whereas one unassigned lock is used to secure that device and access to that one lock's key is restricted inside of a lockable box secured by use of individual assigned locks.

Some jobs are lengthy and several workers or trades come and go, applying and removing their locks as they do. The recognized preferred method would be to keep all locks attached until the completion of the task, removing them only at that time. This method, with all parties present, would ensure the best communications and verification of other's actions and job status.

## ***Procedures for Shift Change or Job Reassignment***

When handing off job responsibility, such as at a shift change or upon job reassignment, provisions must be made to ensure the on-coming shift or worker is provided a safe environment. This can only be accomplished by performing the lockout sequence from beginning to end as outlined above. When the procedure calls for the installation of a lockout device the on-coming party will verify the proper lockout technique and install their new lock or device. The off-going party will then remove their device.

This is the preferred scenario, however, if a situation prevents the addition of a lock or device prior to the removal of the existing device, then care should be exercised to prevent unintended energization while the original device is removed and prior to the installation of the new device.

When the situation requires the off-going party to leave prior to the arrival of the on-coming party, the supervisor will act as the intermediary by doing the following:

- The supervisor will install their lock or device allowing the off-going party to remove theirs.
- The supervisor will maintain responsibility for the security and safety of this equipment until the arrival of on-coming party.
- At that time, the supervisor will remove their lock or device only after the on-coming party has installed theirs.

## ***Restoration of Normal operation***

Upon completion of maintenance or repair activity communications with "affected" parties should be established to notify them of the impending start-up.

Make certain that all repair procedures have been completed, all pieces reassembled, guards back in place, debris cleaned up etc.

Check the area around the machine or equipment to ensure it is clear and that no one will be exposed to a hazard.

Remove the lockout devices and restore operation as per normal procedures, being especially watchful for unsafe or abnormal operation. If the equipment is normally started or operated by others, accompany them and ensure the proper sequence and start-up practices.

## ***General Testing or Positioning of Machines, Equipment, or Components Thereof***

In situations in which lockout and/or tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine, equipment or component thereof, the following sequence of actions shall be followed:

- Clear the machine or equipment of tools and materials by inspecting the work area to ensure that nonessential items have been removed and to ensure that machine or equipment components are operationally intact.
- Remove employees from the machine or equipment by checking the work area to ensure that all employees have been safely positioned or removed.

- Removal of the lockout or tagout devices from each energy isolating device by the employee who applied the device.
- Energize and proceed with testing and positioning.
- De-energize all systems and re-apply energy control measures in accordance with WAC 296-24-11007 to continue the servicing and/or maintenance.

### ***Outside Personnel (Contractors)***

- Whenever outside servicing personnel are to be engaged in activities covered by this standard, the on-site employer and outside employer shall inform each other of their respective lockout and tagout procedures.
- The outside employer shall assure that his/her employees understand and comply with the restrictions and prohibitions of the onsite employer's energy control program.

### ***Procedures for Unattended Lock Removal***

**Each lockout/tagout device shall only be removed from each energy-isolating device by the employee who applied it.**

**Exception:** When the authorized employee who applied the lockout or tagout device (installer) is not available to remove it, that device may be removed under the direction of the installer's supervisor. Each department involved in lockout or tagout operations shall follow specific training and procedures for such removal. The specific procedure shall include at least the following elements:

- Verification of Ownership: Identify the owner of the lock and confirm that the individual is not still working on the equipment or physically at the location.
- Supervisor Notification: Notify the individual's supervisor of the situation.
- Attempt to Communicate/Recall: Make valid attempts to contact and communicate with the individual and further establish the status of the equipment, Lockout/Tagout procedure, and the individual's whereabouts.
- Lock Removal: Once the status of the equipment, Lockout/Tagout procedure, and the individual have been verified, the supervisor may remove the lock after completing all the normal start up procedures required above.
- Employee Notification: The original Lock/Tagout device installer will be notified of the lock removal before they resume work at the facility.
- Replacement of Damaged Locks: The supervisor will insure all damaged locks are replaced and available for future Lockout/Tagout.

\* See attached checklist.

### ***Training and Auditing***

The employer will provide effective initial training and retraining as necessary and certify that such training has been given to all employees covered by the standard. The certification must contain each employee's name, date and outline of the training covered.

This employee training program will ensure that all affected employees understand the purpose, function, and restrictions of the energy control program and that authorized employees possess the knowledge and skills necessary for the safe application, use, and removal of energy controls.

Training programs for authorized employees to comply with this standard, will deal with the equipment, type(s) of energy, and hazard(s) specific to the workplace being covered.

Retraining must be provided whenever there is a change in job assignments, a change in machines, equipment, or processes that present a new hazard or a change in energy control procedures. Additional retraining must be conducted whenever a periodic inspection reveals, or whenever the employer has reason to believe, that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedure.

A periodic inspection of this program will be performed at least annually to assure that the energy control procedures continue to be implemented properly and that the employees are familiar with their responsibilities under those procedures. The periodic inspections will be used to correct any deviations or inadequacies observed. An authorized employee other than the one(s) using the energy control procedure will perform the periodic inspections. In addition,

records will be maintained that verify these periodic inspections have been performed. Supervisors will ensure the annual performance of this requirement.

**Reviewed and Approved:**

Judith Scott 2-16-17  
Judith Scott                      DATE  
Operations and Maintenance  
Division Manager

D. C. Thompson 1-24-17  
Daniel Thompson                      DATE  
Business Operations  
Division Manager

# Unattended Lock Removal Checklist

(This Form Is To Be Filled Out Any Time A Lock Is To Be Removed By Someone Other Than The Owner)

Date: \_\_\_\_\_ Location: \_\_\_\_\_ Time Reported: \_\_\_\_\_

## VERIFICATION OF OWNERSHIP

Lock Color \_\_\_\_\_ Lock # \_\_\_\_\_ Lock Owner \_\_\_\_\_

Lock Owner is not Working on the Equipment .....  Verified By \_\_\_\_\_  
Lock Owner is not at the Facility .....  Verified By \_\_\_\_\_

## SUPERVISOR NOTIFICATION

Lock Owner's Supervisor or Senior Person  
in Chain of Command at Facility is Notified .....  Verified By \_\_\_\_\_  
Supervisor Takes Control of Process .....  Verified By \_\_\_\_\_

## ATTEMPT TO COMMUNICATE WITH LOCK OWNER (Try All Possible)

Home Phone # \_\_\_\_\_ Called By \_\_\_\_\_ Time \_\_\_\_\_  
Cell Phone # \_\_\_\_\_ Called By \_\_\_\_\_ Time \_\_\_\_\_  
Pager # \_\_\_\_\_ Called By \_\_\_\_\_ Time \_\_\_\_\_

(If lock owner is contacted, verify the status of the lockout. If desired, have lock owner come in to remove lock or continue with steps below. If **no** contact is made, **continue with steps below**)

## LOCK REMOVAL

Work on Equipment is Completed .....  Verified By \_\_\_\_\_  
Equipment is Operationally Intact .....  Verified By \_\_\_\_\_  
All Machine Guards are in Place .....  Verified By \_\_\_\_\_  
Area Clear of People and Non-Essential Items .....  Verified By \_\_\_\_\_  
Affected Personnel Notified .....  Verified By \_\_\_\_\_  
All Lockout Devices Removed .....  Verified By \_\_\_\_\_  
Operate Machinery as Required

## LOCK OWNER NOTIFICATION

Lock Owner has Been Notified of the Lock Removal Prior to Returning to Work .....

## REPLACEMENT OF DAMAGED LOCKS

Supervisor Will Insure all Damaged Locks are Replaced for Future use .....

Supervisor Signature \_\_\_\_\_ Date \_\_\_\_\_

## **SECTION 01\_35\_22**

### **SAFETY PLAN**

#### **PART 1 GENERAL**

##### **1.01 SUMMARY**

- A. Section includes: Development and maintenance of a Construction Safety Plan.

##### **1.02 REFERENCES**

- A. National Fire Protection Association (NFPA):
  - 1. 70E - Standard for Electrical Safety in the Workplace.
- B. Occupational Safety and Health Administration (OSHA).
- C. Washington Industrial Safety and Health Act (WISHA).
- D. Washington Administrative Code (WAC):
  - 1. Chapter 295-155 Safety Standards for Construction Work.

##### **1.03 CONSTRUCTION SAFETY PLAN**

- A. In accordance with Documents 00\_72\_00 and 00\_73\_00.
- B. Develop the Methods and Procedures to comply with NFPA 70E, WAC 296-155, and other federal, state, and Local Health and Safety Laws, Rules and Requirements for the duration of the Contract Times. Methods and procedures must also comply with the Owner's Safety Plan. Include the following:
  - 1. Identification of the Certified or Licensed Safety Consultant who will prepare, initiate, maintain and supervise safety programs, and procedures.
  - 2. Procedures for providing workers with an awareness of safety and health hazards expected to be encountered in the course of construction.
  - 3. Safety equipment appropriate to the safety and health hazards expected to be encountered during construction. Include warning devices, barricades, safety equipment in public right-of-way and protected areas, safety equipment used in multi-level structures, personal protective equipment (PPE) as required by NFPA 70E, OSHA, WISHA, WAC, Documents 00\_72\_00, and 00\_73\_00.
  - 4. Methods for minimizing employees' exposure to safety and health hazards expected during construction.
  - 5. Procedures for reporting safety or health hazards.
  - 6. Procedures to follow to correct a recognized safety and health hazard.
  - 7. Procedures for investigation of accidents, injuries, illnesses, and unusual events that have occurred at the construction site.
  - 8. Periodic and scheduled inspections of general work areas and specific workstations.
  - 9. Training for employees and workers at the jobsite.
  - 10. Methods of communication of safe working conditions, work practices and required personal protection equipment.

11. Contractor's Lockout/Tagout Procedures that are in accordance with the Owner's Policy.

- C. Assume responsibility for every aspect of Health and Safety on the jobsite, including the health and safety of subcontractors, suppliers, and other persons on the jobsite:
  - 1. Forward available information and reports to the Safety Consultant who shall make the necessary recommendations concerning worker health and safety at the jobsite.
  - 2. Employ additional health and safety measures specified by the Safety Consultant, as necessary, for workers in accordance with OSHA guidelines.
- D. Transmit to Owner, copies of reports and other documents related to accidents or injuries encountered during construction.

#### **1.04 SUBMITTALS**

- A. Contractor shall submit the Safety Plan before performing any work on site in accordance with Section 01\_33\_00 – Submittal Procedures.

#### **1.05 CONTRACTOR QUALITY ASSURANCE**

- A. The Contractor shall be responsible for carefully reviewing the entire scope of work, the work site location, adjacent structures and systems, and applicable Contract Document requirements to fully inform and satisfy itself, by personal review and examination or by such other means as they prefer, of the safety considerations and requirements that must be addressed and planned prior to the start of work.
- B. The Contractor shall ensure that all Contractor employees, subcontractor employees, vendors, and other site visitors comply with the Contractor's Safety Plan.
- C. The Contractor shall designate a safety supervisor on site with appropriate training, responsibility, and full authority to coordinate, implement, and enforce the Safety Plan for the duration of this Contract. The name and telephone number of the safety supervisor shall appear in the Safety Plan.

#### **1.06 SAFETY PLAN COMPLIANCE**

- A. The Contractor shall provide the necessary protective equipment, fall protection, and other specified supplies and equipment to employees to facilitate implementation of the Safety Plan.
- B. Notify the Owner of all accidents and on the job injuries within the same workday.
- C. Submit documentation of all pre-job safety meetings with employees and subcontractors.
- D. Conduct, document, and submit meeting minutes from weekly safety tailgate meetings.
- E. Submit any reports generated as part of the Safety Plan on a monthly basis.

- F. The Owner may notify the Contractor of any suspected or observed inadequacies in the implementation of the Safety Plan, and may contact the regulatory agencies with jurisdiction if such inadequacies are not addressed.
- G. The Contractor shall prepare and implement Lock Out/Tag Out procedures that comply with the Owner's procedures include in this Section.

**1.07 SILICA**

- A. The Contractor shall anticipate encountering silica when core drilling or performing other building penetrations through existing concrete and masonry. Contractor shall take all precautions necessary to protect workers and public from silica dust while performing Contract Work in accordance with WAC 296-840.

**PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

END OF SECTION



## SECTION 01\_41\_50

### ENVIRONMENTAL AND SUSTAINABILITY MANAGEMENT SYSTEM (ESMS)

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. The City of Tacoma Solid Waste Management Division (SWM) operates an ISO 14001 Environmental and Sustainability Management System (ESMS). An ESMS is a process with procedures that will allow SWM to operate legally, safely, and efficiently while reducing the environmental impacts of our activities. All contractors and vendors are required to comply with the ESMS and Environmental Policy. As part of the ESMS SWM has identified the following Significant Environmental Aspects:
  - 1. Potential Spills
  - 2. Fire Hazards
  - 3. Air Emissions
  - 4. Resource Consumption
- B. Contractors and vendors must ensure that their activities do not negatively affect the Significant Environmental Aspects.
- C. All contractors and vendors are required to adhere to the following safety 21 rules and requirements:

##### 1.02 GENERAL SAFETY RULES

- A. Restricted Access – Contractors and vendors shall stay within the designated areas.
- B. Smoking – Smoking is prohibited in building and within 25 feet of windows and doors.
- C. Eye and Hearing Protection – Eye and hearing protection is required in designated areas.
- D. Accidents, near misses, and first aid – Contractors, truck drivers and visitors are required to report all accidents, near misses, and first aid incidents to City employees.
- E. Drugs and Alcohol – Alcoholic beverages and illicit drugs are prohibited on City property.
- F. Guns – Contractors are prohibited from carrying guns on City property.
- G. Emergency Procedures – Follow directions announced by City staff. To report a fire or emergency, contact any SWM employee.
- H. Vehicle Safety – Be aware and cautious of vehicle and pedestrian traffic.

### **1.03 CONTRACTOR REQUIREMENTS**

- A. Contractors are expected to understand and comply with all general federal, state, and local safety regulations and specific work practices applicable to the immediate project. These include, but are not limited to:
  - 1. Storage, handling and use of flammable liquids and hazardous materials.
  - 2. Periodic safety inspections and housekeeping.
  - 3. Use of all protection, if applicable.
  - 4. Following electrical safety practices and lock out/tag out procedures.
  - 5. Proper use of PPE.
  - 6. Proper maintenance and use of ladders and other equipment, if applicable.
  - 7. Contractors are responsible for removing and proper disposal of any hazardous materials or hazardous wastes utilized or generated while onsite at SWM.
  - 8. Contractors must notify the PM immediately of any leaks or spills.
  - 9. Requirements outlined in the signed contract or agreement to perform the contracted work.
  
- B. Agreements acknowledging you have read and understood this information must be signed prior to starting work. It is the responsibility of the contracting company to ensure anyone working for or on their behalf adhere to these requirements.

### **1.04 SUBMITTALS**

- A. Contractor shall complete and return to the Owner before project work begins, the ESMS form "Contractor and Vendor Environmental and Sustainability Management System Information Sheet" shown in Appendix D.

## **PART 2 PRODUCTS**

Not Used.

## **PART 3 EXECUTION**

### **3.01 OWNER'S RESPONSIBILITY:**

- A. The Owner's ESMS on-site representative will provide a 30-minute on-site training for Contractor's on-site personnel before project work begins. If applicable meeting can be scheduled after pre-construction meeting. Training may be performed over Microsoft Teams at Owner's discretion.

### **3.02 CONTRACTOR WILL:**

- A. Provide training of all employees, subcontractors, and vendors in accordance with training requirements, as per ESMS documents and procedures. Contractor shall provide additional training as needed due to personnel changes throughout the project.
  
- B. Verify and complete of all forms listed under submittals in this specification. Forms are required to be uploaded into e-Builder as submittals.

- C. Notification to the responsible ESMS on-site representative of planned activities and submission/approval of any required on-site ESMS forms as may be required.

END OF SECTION



## **Contractor and Vendor Environmental and Sustainability Management System Information Sheet**

**Welcome.** The City of Tacoma Central Treatment Plant (CTP) operates under an ISO 14001 Environmental and Sustainability Management System (ESMS). An ESMS is a process with procedures that will allow the CTP to operate legally, safely, and efficiently while reducing the environmental impacts of our activities. All contractors and vendors are required to comply with the ESMS and Environmental Policy published on the other side of this document. As part of the ESMS the CTP has identified the following four Significant Environmental Aspects:

- Air Emissions: Convert 40% of biogas emissions to fuel
- Energy Conservation: Reduce annual energy use by 2%
- Resource Consumption: Reduce impacts from fleet vehicles and deliveries
- Water Conservation: Optimize the use of water sources

Contractors and vendors must ensure that their activities do not negatively affect the Significant Environmental Aspects.

**All contractors and vendors are required to adhere to the following safety rules and requirements:**

### **GENERAL SAFETY RULES**

- **Restricted Access:** Contractors and vendors shall stay within the designated areas.
- **Smoking:** Smoking is prohibited in the buildings and within 25 feet of windows and doors
- **Eye and Hearing Protection:** Eye and Hearing protection is required in designated areas. Designated hearing protection areas are marked with appropriate signs.
- **Accidents, Near Misses, and First Aid:** Contractors, truck drivers and visitors are required to report all accidents, near misses, and first aid incidents to a City employee.
- **Drugs and Alcohol:** Alcoholic beverages and illicit drugs are prohibited on City property.
- **Guns:** Contractors are prohibited from carrying guns on City property.
- **Emergency Procedures:** Follow directions announced over Public Address system or from CTP employees. To report a fire or emergency, contact any CTP employee.
- **Vehicle Safety:** Be aware and cautious of vehicle and pedestrian traffic.

### **CONTRACTOR REQUIREMENTS**

Contractors are expected to understand and comply with all federal, state and local safety regulations and work practices applicable to the activities they perform. These include, but are not limited to:

- Storage, handling and use of flammable liquids and hazardous materials and hazardous wastes
- Periodic safety inspections and housekeeping.
- Use of fall protection while working at heights.
- Following electrical safety practices and lock out /tag out procedures.
- Proper use of Personal Protective Equipment.
- Proper maintenance and use of ladders and other equipment.
- Contractors are responsible for removing and the proper disposal of any hazardous materials or hazardous wastes utilized or generated while on-site at the CTP.
- Contractors may not dispose of any chemical or waste on-site.
- Contractors must notify the Project Manager immediately of any spills or leaks.
- Requirements as outlined in the signed contract or agreement to perform the contracted work.

Agreements acknowledging you have read and understood this information must be signed prior to starting work. It is the responsibility of the contracting company to ensure anyone working for or on their behalf adheres to these requirements.



City of Tacoma  
Environmental Services

### ESMS Policy – 5.2-2 Environmental Policy

The City of Tacoma, Environmental Services Department believes that everything we do supports healthy neighborhoods and a thriving Puget Sound, leaving a better Tacoma for all.

As such, the Environmental Policy serves as written communication of the department's intent to implement sustainable, innovative solutions that measure and improve our environmental performance through a formal Environmental and Sustainability Management System (ESMS).

Through this policy the City of Tacoma, Environmental Services Department commits to:

- Environmental protection and sustainability in the planning stages of new programs, construction, and in all work conducted;
- Compliance with all applicable local, state, and federal regulations and policies verified and supported by regularly-scheduled internal reviews;
- Minimization of significant environmental impacts identified in the ESMS by establishing environmental and sustainability objectives, targets, and programs;
- Evaluation of the effectiveness of the environmental performance to ensure that established objectives, targets, and programs are met;
- Provide necessary education and tools to all staff and those working on their behalf in order to successfully carry out this policy in their daily responsibilities and work functions; and
- Strive for continuous improvements in sustainability through life cycle thinking, environmental consciousness, and pollution prevention.

The City of Tacoma, Environmental Services Department's Environmental Policy will be communicated to all staff and those working on their behalf, including all contractors and vendors, and will be made available to the public via the City of Tacoma, Environmental Service Department's website. In order to fulfill the commitments made in this policy, all staff and those working on their behalf are responsible for incorporating this policy into their plans and work.

  
\_\_\_\_\_  
Michael P. Slevin III, P.E.  
Environmental Services Director

19 JUN 18  
Date

## Contractor/Vendor Acknowledgement and Agreement

Company Name: \_\_\_\_\_

The undersigned hereby acknowledges receiving the contractor/vendor informational materials for the City of Tacoma, Central Wastewater Treatment Plant, Environment and Sustainability Management System (ESMS). We further acknowledge having the responsibility to provide the training to all personnel who will be working on the property. We further agree to abide by all environmental regulations and policies whenever on the property. Sign-in sheets will be maintained as evidence that the ESMS training has been conducted and will be made available upon request. The Project Manager, primary City staff contact for the contract, or designee will communicate applicable changes to the ESMS to my company. Retraining of affected individuals will be conducted, as needed.

### Contractor/Vendor Training Acknowledgment

Primary Company Contact: \_\_\_\_\_

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

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Secondary Company Contact: \_\_\_\_\_

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

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

For questions or additional information contact the designated City contact as outlined in the contract.

Return the completed signed copy to the City of Tacoma staff contact.

-----  
For City use only:

\_\_\_\_\_  
Project Manager/Project Lead

\_\_\_\_\_  
Date

Retain a copy of the completed agreement with the contract and submit a copy to the



City of Tacoma  
Environmental Services

Verification	Originator	Revised	Approved	Issued
Initials	Core Team	Core Team	Mgmt Rep	Sr Mgmt
Date	6/24/14	2/5/15	2/11/15	1/12/15

## ESMS Procedure – 4.4.6-6 Contractor Management Environmental Manual

Person Responsible: James G. Parvey, P.E.

Area of Application: Central Wastewater Treatment Plant

Document Location: eO&M Manual

Original Issue Date: January 12, 2015

### Revision History

Change #	Date of Change	Summary of Changes
001	2/5/15	Updated text for consistencies.
002		

### Procedure Index

1.0	Introduction .....	2
2.0	General Environmental Management Procedures .....	2
3.0	Waste Disposal .....	3
4.0	Equipment Decommissioning .....	3
5.0	Water Discharges .....	3
6.0	Material Storage / Spills .....	3
7.0	Stormwater Management .....	4
8.0	PCBs .....	4
9.0	Asbestos .....	4
10.0	Lead .....	4
11.0	CFCs .....	5
12.0	Contractor Environmental Review .....	5

## 1.0 Introduction

References to the “Contractors” includes anyone working for or on behalf of the contracting company, including contractors, subcontractors, vendors, and suppliers at the Central Wastewater Treatment Plant (CTP). It is the responsibility of the contracting company to ensure anyone working for or on their behalf adhere to these requirements.

- 1.1 The following information is supplied to contractors who perform work onsite for CTP. The information presented in these guidelines has been developed in response to the Environmental and Sustainability Management System (ESMS) developed for CTP. The intent of this information is to make Contractors aware of the ESMS and to ensure conformance to applicable ESMS procedures and work instructions.
- 1.2 An important part of the ESMS relates to the control of Contractors who are required to comply with relevant environmental policies and procedures. Contractors, working for or on behalf of CTP must be aware of the importance of compliance with relevant environmental legislation and regulations, and of the consequence of non-compliance. Contractors and City of Tacoma personnel must work together to achieve the goals of the ESMS in order to protect the environment.
- 1.3 The CTP operates an ESMS that meets the requirements of International Organization of Standardization 14001 standard. Conformance with the environmental policy and all requirements noted in this document is required of all Contractors while working onsite. Failure to follow these requirements can be grounds for termination of the onsite contract work.
- 1.4 For further information, please contact the individual assigned to oversee the project at CTP herein referred to as the Project Manager.

## 2.0 General Environmental Management Procedures

- 2.1 Contractors will not transport hazardous chemicals onsite without having prior knowledge of the associated Safety Data Sheets (SDS). These materials include but are not limited to sealers, adhesives, paints, coatings, fuels, oils, acids and caustics. All sizes of containers require review and approval before their use onsite.
- 2.2 Contractors will provide adequate control of fugitive dust emissions during all operations and activities.
- 2.3 Contractors will not discharge anything directly or indirectly to the stormwater system or wastewater system without the prior approval of the Project Manager or designee.
- 2.4 Contractors will provide adequate spill/release prevention for all bulk materials.
- 2.5 Contractors will immediately notify the Project Manager of any reportable spills, releases or other environmental incidents. Contractors will follow up by submitting a written report of any spills or releases.
- 2.6 Contractors will properly label, store and dispose of all waste materials.
- 2.7 Contractors will be sensitive to the effects of noise, odor, light, and traffic movement to the local community.
- 2.8 All contractors shall practice good housekeeping. Contractors are responsible for the proper disposal of all waste materials generated by their activities. Contractors are responsible for keeping the site clean and orderly.
- 2.9 Contractors will not engage in any excavation activities onsite without the prior approval of the Project Manager.



### 3.0 Waste Disposal

- 3.1 The Contractor shall provide all equipment, personnel, and materials necessary to load, transport, and dispose of waste materials, including contaminated soils and debris, for off-site treatment or disposal in accordance with federal, state and local regulations.
- 3.2 The Project Manager must be informed of all generated hazardous waste streams before a waste is generated and collected onsite.
- 3.3 The Project Manager must be informed of the location of all generated hazardous waste storage areas, maximum quantities and the container type.
- 3.4 Containers must be labeled with their contents and the responsible Contractor's name and contact information. No unlabeled containers are permitted onsite.
- 3.5 Shipping information and paperwork (SDS, waste profiles, bills of lading and inventory) must be provided upon request.
- 3.6 Contractors are responsible for all regulated wastes.

### 4.0 Equipment Decommissioning

- 4.1 All equipment will be thoroughly inspected by Contractors for fluids and other hazardous materials prior to removal.
- 4.2 All fluids and other hazardous materials will be removed prior to decommissioning and disposal of any waste generated will be handled in accordance with the above instructions in 3.0.

### 5.0 Water Discharges

- 5.1 Discharge of materials to any stormwater system or wastewater system, is prohibited without a Special Approved Discharge (SAD) permit and the prior consent of the Project Manager.
- 5.2 Discharges of any material besides clean stormwater runoff to the stormwater system are prohibited under the established guidelines of the Tacoma Municipal Code as mandated by the Clean Water Act.
- 5.3 In the event that the Project Manager approves discharges to the stormwater system or wastewater system, the CTP Managers must be notified prior to discharges of any significant volume or any discharges that could affect the operations of CTP.

### 6.0 Material Storage / Spills

- 6.1 There will be no outside storage of any chemical materials without the consent of the Project Manager.
- 6.2 Approved outside storage areas for chemical materials must be equipped with non-earthen secondary containment equal to 150% of the capacity of the largest container by Contractors.
- 6.3 Contractors will ensure that all material containers they own or manage will be properly labeled in accordance with the OSHA hazard communication standard (i.e., contents, primary hazard).
- 6.4 Contractors will have available the SDS for all chemical products in use at all times that their employees are working onsite. SDS's shall be made available upon request.
- 6.5 Contractors will ensure that chemical containers are closed except when in use.

- 6.6 Contractors will maintain spill kits to contain and clean up spills they cause. Spill kits will be kept on site and will be easily accessible during an emergency.
- 6.7 Contractors will immediately report all spills or releases of materials other than incidental spills to the 24 Hour Sewer Emergency Line at 253-591-5585. Contractors will follow up by submitting a written report on the spill or release to the Project Manager.

## 7.0 Stormwater Management

- 7.1 No process materials or any other pollutants shall be allowed to contact stormwater runoff.
- 7.2 Sediments and pollutants must be prevented from entering the stormwater system or wastewater system. Roadways and outside areas must be kept clean. Track out is prohibited.
- 7.3 It is the Contractors responsibility to install temporary erosion and sediment control measures to ensure pollutants do not enter the stormwater system or wastewater system. Refer to City of Tacoma Stormwater Management Manual (SWMM) Volume 2 and Volume 4 for activity specific Best Management Practices (BMPs).
- 7.4 All stockpiles must be covered per SWMM, BMP C123: Plastic Covering or BMP S105: Cover the Activity with an Anchored Tarp or Plastic Sheet or a City of Tacoma approved equivalent to prevent potential pollutants from entering the stormwater system or wastewater system.
- 7.5 Vehicle maintenance shall not be performed over or near stormwater catch basins unless provisions have been made to contain any spills of vehicle fluids, including oil, gasoline and antifreeze.
- 7.6 In the event that a Construction Stormwater Pollution Prevention Plan (CSWPPP) is required (i.e. add or replace greater than 2,000 square feet of impervious surface or disturb more than 7,000 square feet of land), the plan will be submitted to the Project Manager for approval, prior to beginning work.

## 8.0 PCBs

- 8.1 If a material is suspected to have PCB contamination, the Project Manager is to be notified.
- 8.2 All PCB removal and disposal activities will be conducted in accordance with procedures approved by the Project Manager and shall follow the guidelines noted in 3.0 Waste Disposal.
- 8.3 Any lighting ballast that does not state that it is a 'non-PCB containing ballast' must be disposed of as PCB containing.

## 9.0 Asbestos

- 9.1 Contractors will contact the Project Manager prior to any construction or demolition work that could disturb existing structures or equipment that contain or suspected to contain asbestos.
- 9.2 All asbestos removal and disposal activities will be conducted in accordance with procedures approved by the Project Manager and shall follow the guidelines noted in 3.0 Waste Disposal.

## 10.0 Lead

- 10.1 Contractors are responsible for testing for the presence of lead based paints when grinding or welding on building or building structural steel. Testing will be done by an approved certified lab approved by the Project Manager.
- 10.2 All lead removal and disposal activities will be conducted in accordance with procedures approved by the Project Manager and shall follow the guidelines noted in 3.0 Waste Disposal.

#### 11.0 Dangerous or Hazardous Wastes.

- 11.1 Persons involved in the handling, cleaning up, and corrective actions associated with Dangerous Waste or Hazardous Waste are to be currently certified, at a minimum, to the forty (40) hour HAZWOPER level – 29 CFR 1910.120

#### 12.0 CFCs

- 12.1 Contractors will provide copies of employee training certificates to the Project Manager upon request.
- 12.2 Intentional venting of chlorofluorocarbons (CFCs) to the atmosphere is prohibited.

#### 13.0 Contractor Environmental Review

- 13.1 Upon request, contractors are to submit the following form which contains written information outlining their activities and procedures for minimizing and managing the actual or potential environmental impacts of their operations. This must include an assessment of the potential risks to the environment, contractors, employees and other personnel associated with onsite activities and proposed measures for minimizing these risks.



### ESMS Contractor Environmental Review Form

*This form must be filled out by the Contractor, signed by the Contractor and reviewed by Project Manager, and returned before the contracted work commences.*

Information:

Company Name: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Secondary Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

Activities or Work Description:

Project Location at CTP: \_\_\_\_\_

Briefly describe the activities or work to be undertaken by your company at the CTP site.

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

Air Emissions:

Will the activities or work you perform produce or cause the release of any air emissions?

Yes       No

If yes, list the air emissions and the method for preventing impact to the environment.

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

Water Discharges:

Will the activities or work you perform produce or cause the release of any wastewater?

Yes       No

If yes, how will the wastewater be handled?

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



Materials:

What materials (chemicals, oils, etc.) and/or equipment will you be handling or bringing on site to perform the contracted work?

---

---

Training:

Your employees should be trained on the proper handling of materials and equipment, and the proper response to incidents involving these materials. Describe the training that your employees receive.

---

---

Waste Generation:

Will the activities or work you perform result in the generation of any wastes?  Yes  No

If yes, list the amounts and the types of wastes expected and the proposed disposal method.

---

---

Are any waste generated to be recycled?  Yes  No

If yes, list the recyclables, where and how they will be recycled.

---

---

Energy:

Will the activities or work consume energy (electricity, compressed air, natural gas, steam, etc.)?  Yes  No

If yes, explain what type of energy will be consumed, and how you will minimize consumption.

---

---

Other:

Are there any other ways in which your activities will affect or protect the environment?

Yes  No

If yes, please describe below.

---

---



**Tacoma**

City of Tacoma  
Environmental Services

Environmental Agreement

*My company and subcontractors that I may bring to the site will abide by all environmental regulations and policies whenever on the property. My company will train all personnel contracting on the property. Evidence that environmental training has been conducted for all applicable staff will be maintained and made available upon request. The Project Manager will communicate applicable changes of the Environmental and Sustainability Management System to my company. Retraining of affected individuals will be conducted, as appropriate.*

For questions or additional information contact the Project Manager.

Print Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

*The following will be completed by the Project Manager:*

Review and Approval:

A review of the above-submitted document has been found to be:

- Complete – approved, no further action is needed.
- Incomplete – a response must be received by: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



Verification	Originator	Revised	Reviewed and Approved	Issued
Initials	Core Team	Core Team	Mgmt Rep	Sr Mgmt
Date	4/2/2014	3/3/2023	3/3/2023	1/12/2015

## ESMS Document – 8.1-2-1 Operational Control Environmental Checklist

The following information is required by the City of Tacoma prior to contracted activity or service.

Check yes or no to identify which of the following will be included in the contracted activity or service.

### Combustion Sources:

- Air heating and supply.....  Yes  No
- Mobile transportation.....  Yes  No  
*(i.e. forklift or carts)*
- Construction activities .....  Yes  No
- Excavation or grading .....  Yes  No
- Drilling or blasting .....  Yes  No
- Rock crushing .....  Yes  No
- Demolition .....  Yes  No
- Welding or soldering .....  Yes  No
- Painting.....  Yes  No
- Asphalt paving .....  Yes  No
- Use or storage of chemicals or fuels .....  Yes  No
- Transfer of bulk materials.....  Yes  No
- Disposal of chemical wastes .....  Yes  No

If yes, please describe waste streams:

### Building Maintenance Activities:

- Architectural paint removal.....  Yes  No
- Architectural painting.....  Yes  No
- Hydroblasting .....  Yes  No
- Sandblasting .....  Yes  No
- Surface preparation/treatments .....  Yes  No  
*(i.e. floors and roof repair)*
- Purging or repair of distribution lines .....  Yes  No  
*(i.e. those for fuel, oil or solvents)*
- Use of chemicals, solvents, corrosives, acids, oils, etc..  Yes  No

Use of herbicides, pesticides, or insecticides .....  Yes  No

**Business or Work Related Activities:**

Use or receipt of chemical materials.....  Yes  No  
(other than janitorial or cleaning materials)

Generation and disposal of chemical wastes.....  Yes  No

Generation of sealers, adhesives, coatings, or paints....  Yes  No

Welding, soldering, brazing or similar activities .....  Yes  No

Use of caustics or acids .....  Yes  No

Use of combustion gases .....  Yes  No

If yes, please list the fuels used:

Laboratory installation .....  Yes  No

Medical waste .....  Yes  No

Discharge to storm drains .....  Yes  No

---

To be completed by the City of Tacoma, Project Manager or assigned staff prior to the contracted work or service.

A review of the above activities determined:

- No further action is required
- Contractor/supplier must refer to the project specification book/contract for the assigned operational controls

Signature:

\_\_\_\_\_

\_\_\_\_\_

Name, Title

Date

Refer to [8.1-2 Operational Control Contractor Management Procedure](#) and [8.1-3 Operational Control Vendor Procedure](#) for information regarding the use, routing and approval of this form.

**Revision History**

Change	Date of	Revised By	Summary of Changes
001	2/2/2015	Core Team	Updated for consistencies and issue date
002	3/3/2023	Core Team	Updated title of document with new number convention and updated reference to 8.1-2 and 8.1-3 procedures.



## **SECTION 01\_45\_00**

### **QUALITY CONTROL**

#### **PART 1 GENERAL**

##### **1.01 SUMMARY**

- A. Section includes:
  - 1. Quality control and control of installation.
  - 2. Tolerances.
  - 3. References.
  - 4. Authority and duties of Owner's representative or inspector.
  - 5. Testing and inspection services.
  - 6. Contractor's responsibilities.

##### **1.02 QUALITY CONTROL AND CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Owner before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. When specified, products will be tested and inspected at point of origin and/or at Work site:
  - 1. Notify Owner in writing in accordance with the notification timeframe requirements defined in other technical specifications when products will be ready for testing and inspection at point of origin.
  - 2. Do not construe that satisfactory tests and inspections at point of origin is final acceptance of products, or system as a whole. Satisfactory tests or inspections at point of origin do not preclude retesting or re-inspection at Work site.
- H. Do not ship products which require testing and inspection at point of origin prior to testing and inspection.

### **1.03 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When Manufacturers' tolerances conflict with Contract Documents, request clarification from Owner before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

### **1.04 AUTHORITY AND DUTIES OF OWNER'S REPRESENTATIVE OR INSPECTOR**

- A. Inspections may extend to entire or part of the Work and to preparation, fabrication, and manufacture of products for the Work.
- B. Deficiencies or defects in the Work which have been observed will be called to Contractor's attention.
- C. Inspector will not:
  - 1. Alter or waive provisions of Contract Documents.
  - 2. Inspect Contractor's means, methods, techniques, sequences, or procedures for construction.
  - 3. Accept portions of the Work, issue instructions contrary to requirements of Contract Documents, or act as foreman for Contractor; supervise, control, or direct Contractor's safety precautions or programs; or inspect for safety conditions on Work site, or of persons thereon, whether Contractor's employees or others.
- D. Inspector will:
  - 1. Conduct on-site observations of the Work in progress to assist Owner in determining when the Work is, in general, proceeding in accordance with Contract Documents.
  - 2. Report to Owner whenever Inspector believes that Work is faulty, defective, does not conform to Contract Documents, or has been damaged; or whenever there is defective material or equipment; or whenever Inspector believes the Work should be uncovered for observation or requires special procedures.

### **1.05 TESTING AND INSPECTION SERVICES**

- A. In accordance with Documents 00\_72\_00 and 00\_73\_00.
- B. The Owner's independent testing firm will perform tests, inspections and other services specified in individual specification sections and as required by Owner.
- C. Testing, inspections and source quality control may occur on or off project site. Perform off-site testing inspections and source quality control as required by the Contract Documents.
- D. Reports will be submitted by independent testing firm to Owner and Contractor indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents. Each report shall include:
  - 1. Date issued.

2. Project title and number.
  3. Testing laboratory name, address, and telephone number.
  4. Name and signature of laboratory inspector.
  5. Date and time of sampling or inspection.
  6. Record of temperature and weather conditions.
  7. Date of test.
  8. Identification of product and specification section.
  9. Location of sample or test in Project.
  10. Type of inspection or test.
  11. Results of tests and compliance with Contract Documents.
  12. Interpretation of test results, when requested by Owner.
- E. Contractor shall cooperate with independent testing firm, furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested:
1. Notify Owner and independent testing firm seven (7) days prior to expected time for operations requiring testing.
  2. Make arrangements with independent testing firm and pay for additional samples and tests required for Contractor's use.
- F. Limitations of authority of testing Laboratory: Owner's independent testing firm or Laboratory is not authorized to:
1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  2. Agency or laboratory may not approve or accept any portion of the Work.
  3. Agency or laboratory may not assume duties of Contractor.
  4. Agency or laboratory has no authority to stop the Work.
- G. Testing and employment of an independent testing firm or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- H. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent testing firm. Payment for re-testing or re-inspection will be the sole responsibility of the Contractor.
- I. The Owner's independent testing firm responsibilities will include:
1. Test samples of mixes submitted by Contractor.
  2. Provide qualified personnel at site. Cooperate with Owner, Engineer, and Contractor in performance of services.
  3. Perform specified sampling and testing of products in accordance with specified standards.
  4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  5. Promptly notify Owner and Contractor of observed irregularities or non-conformance of Work or products.
  6. Perform additional tests required by Contract Documents.
  7. Attend preconstruction meetings and progress meetings, as requested by Owner.

- J. Independent testing firm individual test reports: After each test, independent testing firm will promptly submit report electronically through e-Builder to Owner and to Contractor. Include the following:
1. Date issued.
  2. Project title and number.
  3. Name of inspector.
  4. Date and time of sampling or inspection.
  5. Identification of product and specifications section.
  6. Location in Project.
  7. Type of inspection or test.
  8. Date of test.
  9. Certified test results stamped and signed by a registered Engineer in the State of Washington, if required.
  10. Summary of conformance with Contract Documents.

#### **1.06 CONTRACTOR'S RESPONSIBILITIES**

- A. Cooperate with independent testing firm or laboratory personnel and provide access to construction operations.
- B. Notify Owner's Project Representative of work requiring scheduled testing in accordance with the notification timeframe requirements defined in other technical specifications or a minimum of seven (7) days in advance, whichever is earlier.
- C. Furnish product test reports electronically in accordance with Section 01\_31\_24 - Web Based Construction Document Management.
- D. Furnish incidental labor and facilities:
1. To provide access to construction to be tested.
  2. To obtain and handle samples at work site or at source of product to be tested.
  3. To facilitate inspections and tests.
- E. For all Contractor-required testing, the Contractor shall provide the services of an independent testing laboratory which complies with the requirements of ASTM E329.
- F. Contractor shall verify and provide expiration dates for all material used for any concrete and surface restoration.

#### **1.07 COSTS**

- A. PAID BY THE OWNER:
1. Special inspection and testing, as specified in this Section and Section 01\_45\_24.15, will be paid by the Owner. Retests and reinspection required due to defective work are not included.
- B. PAID BY THE CONTRACTOR:
1. Testing to demonstrate and confirm conformance with the Contract Documents and applicable permits and codes, with the exception of Special Inspections and associated testing for compliance with IBC, Chapter 17.
  2. Retesting and reinspections required due to defective work.
  3. Testing performed for the convenience of the Contractor.

**PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

END OF SECTION

## SECTION 01\_50\_00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
  - 1. Furnishing, maintaining, and removing construction facilities and temporary controls, including temporary utilities, construction aids, barriers and enclosures, security, access roads, temporary controls, project sign, field offices and sheds, and removal after construction.

##### 1.02 TEMPORARY UTILITIES

- A. Temporary electrical power:
  - 1. Connect to the Owner's existing electrical service with a service disconnect switch to provide adequate temporary electrical service for Contractor's trailer.
  - 2. Contractor shall provide overcurrent and ground fault protection.
- B. Temporary electrical lighting:
  - 1. In work areas, provide temporary lighting sufficient to maintain lighting levels during working hours not less than lighting levels required by OSHA and state agency which administers OSHA regulations where Project is located.
- C. Temporary heating, cooling, and ventilating:
  - 1. Heat and ventilate work areas to protect the Work from damage by freezing, high temperatures, weather, and to provide safe environment for workers.
  - 2. Owner's permanent heating system may be utilized where sufficient to allow or safe operation.
- D. Temporary water:
  - 1. Pay for and construct facilities necessary to connect to Owner's existing potable water service.
  - 2. Contractor shall provide an approved backflow prevention device.
- E. Temporary sanitary facilities:
  - 1. Provide and maintain self-contained portable sanitary facilities for the Contractor's and subcontractor's use. Facilities shall be serviced, cleaned and disinfected frequently. The Owner's existing sanitary facilities shall not be available for Contractor's use.
  - 2. Provide suitable and adequate sanitary facilities that are in compliance with applicable Laws and Regulations.
  - 3. At completion of the Work, remove sanitary facilities and leave site in neat and sanitary condition.
- F. Temporary Fire Protection:
  - 1. Provide and maintain fire protection equipment, including extinguishers, fire hoses, and other equipment required by law, insurance carriers, or necessary for proper fire protection during the course of the work.

2. Use fire protection equipment only for fighting fires.
  3. Locate fire extinguishers in field offices, storage sheds, tool houses, temporary buildings, and throughout the construction site.
- G. First aid:
1. Post first aid facilities and information posters conforming to requirements of OSHA and other applicable Laws and Regulations in readily accessible locations.

### **1.03 CONSTRUCTION AIDS**

- A. Provide railings, kick plates, enclosures, safety devices, and controls required by Laws and Regulations and as required for adequate protection of life and property.
- B. Use construction hoists, elevators, scaffolds, stages, shoring, and similar temporary facilities of ample size and capacity to adequately support and move loads.
- C. Design temporary supports with adequate safety factor to assure adequate load bearing capability:
1. When requested, submit design calculations by professional registered engineer in Washington prior to application of loads.
  2. Submitted design calculations are for information and record purposes only.
- D. Accident prevention:
1. Exercise precautions throughout construction for protection of persons and property.
  2. Observe safety provisions of applicable Laws and Regulations.
  3. Guard machinery and equipment, and eliminate other hazards.
  4. Make reports required by authorities having jurisdiction, and permit safety inspections of the Work.
  5. Before commencing construction work, take necessary action to comply with provisions for safety and accident prevention.
- E. Barricades:
1. Place barriers at ends of stairs to warn pedestrians and workers of stairs and handrails being constructed.
  2. Keep barriers in place until stairs and handrails are completely constructed.
  3. Barricade or provide other protection around the open holes at the top of the Quads while work is being performed inside of the towers.
- F. Warning devices and barricades: Adequately identify and guard hazardous areas and conditions by visual warning devices and, where necessary, physical barriers:
1. Devices shall conform to minimum requirements of OSHA and State agency which administers OSHA regulations where Project is located.

### **1.04 ACCESS ROADS**

- A. On-site access roads: As shown in the Drawings:
1. Maintain access roads to delivery areas, storage areas, and other areas to which frequent access is required daily.
  2. Maintain similar roads to existing facilities on site of the Work to provide access for maintenance and operation daily.

3. Maintain on-site access roads free of mud and debris in accordance with the Contractor's Construction Stormwater Pollution Prevention Plan (SWPPP). Under no circumstances shall vehicles leaving the site track mud off the site onto the public right-of-way.

#### **1.05 TEMPORARY CONTROLS**

- A. Noise control:
  1. Comply with City of Tacoma Noise Ordinance limiting construction noise levels. Use whisper-quiet air compressors. Use jack hammers with exhaust mufflers. Prevent noise disturbance to the public and adjacent property owners.

#### **1.06 FIELD OFFICES AND SHEDS**

- A. Contractor's field office:
  1. Maintain on Project Site weather tight space in which to keep copies of Contract Documents, progress schedule, shop drawings, and other relevant documents.
  2. Provide field office with adequate space to examine documents, and provide lighting and telephone service in that space.
  3. Have field office ready for occupancy prior to start of site work.

#### **1.07 REMOVAL**

- A. Remove temporary buildings and furnishings before inspection for Final Completion or when directed.
- B. Clean and repair damage caused by installation or use of temporary facilities.
- C. Remove underground installations to minimum depth of 24 inches and grade to match surrounding conditions.
- D. Restore existing facilities used during construction to specified or original condition.

### **PART 2 PRODUCTS**

Not Used.

### **PART 3 EXECUTION**

Not Used.

END OF SECTION



**SECTION 01\_60\_00**  
**PRODUCT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section includes: Product requirements; product selection; product options and substitutions; quality assurance; delivery, handling, and storage; and manufacturer's instructions.

**1.02 DEFINITIONS**

- A. Execution: Inclusive of performance, workmanship, installation, erection, application, field fabrication, field quality control, and protection of installed products.
- B. Products: Inclusive of material, equipment, systems, shop fabrications, mixing, source quality control.

**1.03 PRODUCT REQUIREMENTS**

- A. Comply with Specifications and referenced standards as minimum requirements.
- B. Provide products by same manufacturer when products are of similar nature, unless otherwise specified.
- C. Provide identical products when products are required in quantity.
- D. Provide products with interchangeable parts whenever possible.
- E. Require each equipment manufacturer to have maintenance facilities meeting the following requirements and submit to Owner:
  - 1. Minimum 5 years operational experience.
  - 2. Location in continental United States.
  - 3. Equipment and tools capable of making repairs.
  - 4. Staff qualified to make repairs.
  - 5. Inventory of maintenance spare parts.
  - 6. Manufacturer shall have service technicians within 250-miles from 98409 zip code.
- F. If conflicts or discrepancies are found within the specifications, the greater or more strict requirement will apply.

**1.04 PRODUCT SELECTION**

- A. When products are specified by standard or specification designations of technical societies, organizations, or associations only, provide products that meet or exceed reference standard and Specifications.

- B. When products are specified with names of manufacturers but no model numbers or catalog designations, provide:
  - 1. Products by one of named manufacturers that meet or exceed Specifications.
  - 2. Accepted or approved equal.
- C. When products are specified with names of manufacturers and model numbers or catalog designations, provide:
  - 1. Products with model numbers or catalog designations by one of named manufacturers.
  - 2. Accepted or approved equal.
- D. When products are specified with names of manufacturers, but with brand or trade names, model numbers, or catalog designations by one manufacturer only, provide:
  - 1. Products specified by brand or trade name, model number, or catalog designation.
  - 2. Products by one of named manufacturers proven in accordance with requirements for or approved equals to meet or exceed quality, appearance and performance of specified brand or trade name, model number, or catalog designation.
  - 3. Accepted or approved equal.
- E. When Products are specified with only one manufacturer followed by "or Approved Equal," provide:
  - 1. Products meeting or exceeding Specifications by specified manufacturer.
  - 2. Accepted or approved equal.

#### **1.05 QUALITY ASSURANCE**

- A. Inspect conditions before executing subsequent portions of the Work. Accept responsibility for correcting unsatisfactory conditions prior to executing subsequent portions of the Work.
- B. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

#### **1.06 DELIVERY, HANDLING, STORAGE, AND PROTECTION**

- A. Prepare products for shipment by:
  - 1. Tagging or marking products to agree with delivery schedule or shop drawings.
  - 2. Including complete packing lists and bills of material with each shipment.
  - 3. Packaging products to facilitate handling and protection against damage during transit, handling, and storage.
  - 4. Packing shall include Owner's name, Project number, and address.
- B. Ensure existing EPS equipment has been removed from site prior to arrival of new equipment.
- C. Transport products by methods that avoid product damage. Deliver products in undamaged condition in manufacturer's unopened containers or packaging.
- D. Provide equipment and personnel to handle products by methods to prevent damage.

- E. Upon delivery, promptly inspect shipments:
  - 1. Verify compliance with Contract Documents, correct quantities, and undamaged condition of products.
  - 2. Immediately store and protect products and materials until installed in Work.
  - 3. Photograph delivery and acceptance of major items.
  - 4. Damaged material shall be rejected with no additional time or cost provided.
  
- F. Furnish covered, weather-protected storage structures providing a clean, dry, noncorrosive environment for all mechanical equipment, electrical and instrumentation equipment and special equipment to be incorporated into this project:
  - 1. Storage of equipment shall be in strict accordance with the “instructions for storage” of each equipment supplier and manufacturer including connection of heaters, placing of storage lubricants in equipment, etc.
  - 2. The Contractor shall furnish a copy of the manufacturer’s instructions for storage to the Owner prior to storage of all equipment and materials.
  - 3. Corroded, damaged, or deteriorated equipment and parts shall be replaced before acceptance of the project.
  - 4. The Owner will not authorize payment for equipment and materials that are not properly stored.
  
- G. Store products with seals and legible labels intact.
  
- H. Store moisture sensitive products in weathertight enclosures.
  
- I. Maintain products within temperature and humidity ranges required or recommended by manufacturer.
  
- J. Maintain storage areas at ambient temperatures recommended by manufacturer.
  
- K. Protect painted surfaces against impact, abrasion, discoloration, and other damage. Repaint damaged painted surfaces.
  
- L. Store all products inside the EPS Facility.
  
- M. Provide access for inspection.
  
- N. Maintain equipment per the manufacturer’s recommendation and industry standards, including oil changes, rotation, etc. Provide a log of equipment maintenance to the Owner on a monthly basis:
  - 1. Rotation log shall include, as a minimum, the equipment identification, date stored, date removed from storage, copy of manufacturer’s recommended storage guidelines, date of rotation of equipment, and signature of party performing rotation.
  - 2. Submit sample log for approval.

## **1.07 MANUFACTURER'S INSTRUCTIONS**

- A. Deliver, handle, store, install, erect, or apply products in accordance with manufacturer's instructions, Contract Documents, and industry standards.
  
- B. Periodically inspect to assure products are undamaged and maintained under required conditions.

## **PART 2 PRODUCTS**

### **2.01 SPARE PARTS AND SPECIAL TOOLS**

- A. Contractor shall provide a single spare parts and special tools inventory list for all equipment furnished as required by the Specifications. The list shall include the following information:
  - 1. Equipment tag number.
  - 2. Equipment manufacturer.
  - 3. Subassembly component, if appropriate.
  - 4. Quantity.
  - 5. Storage location.
  
- B. Store spare parts, maintenance products, and special tools in enclosed, weather-proof, and lighted facility during the construction period:
  - 1. Contractor is responsible for spare parts and special tools until acceptance by Owner.
  - 2. Protect parts subject to deterioration, such as ferrous metal items and electrical components with appropriate lubricants, desiccants, or hermetic sealing.

## **PART 3 EXECUTION**

### **3.01 CLOSEOUT ACTIVITIES**

- A. Owner may request advanced delivery of spare parts and special tools:
  - 1. Deduct the delivered items from inventory and provide transmittal documentation.
  
- B. Immediately prior to the date of Substantial Completion, arrange to deliver spare parts and special tools to Owner at a location on site chosen by the Owner:
  - 1. Provide itemized list of spare parts and special tools that matches the identification tag attached to each item.
  - 2. Owner and Engineer will review the inventory and the itemized list to confirm it is complete and in good condition prior to signing for acceptance.

END OF SECTION

**SECTION 01\_77\_00**  
**CLOSEOUT PROCEDURES**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section includes: Contract closeout requirements including:
  - 1. Final cleaning.
  - 2. Waste disposal.
  - 3. Touch-up and repair.
  - 4. Preparation and submittal of closeout documents.
  - 5. Certificate of Substantial Completion.

**1.02 REFERENCES**

**1.03 REFERENCES (NOT USED)**

**1.04 FINAL CLEANING**

- A. Perform final cleaning prior to inspections for Final Acceptance as defined in Documents 00\_72\_00 and 00\_73\_00.
- B. Employ skilled workers who are experienced in cleaning operations.
- C. Use cleaning materials which are recommended by manufacturers of surfaces to be cleaned.
- D. Prevent scratching, discoloring, and otherwise damaging surfaces being cleaned.
- E. Clean grease, mastic, adhesives, dust, dirt, stains, fingerprints, paint, blemishes, sealants, plaster, concrete, and other foreign materials from sight-exposed surfaces, and fixtures and equipment.
- F. Remove non-permanent protection and labels.
- G. Removal all debris and construction materials.
- H. Patch any holes, chips or defects in construction including finished surfaces.
- I. Touch up painted surfaces that are soiled, chipped or otherwise flawed.

**1.05 WASTE DISPOSAL**

- A. Arrange for and properly dispose of surplus materials, waste products, and debris off-site.

## 1.06 TOUCH-UP AND REPAIR

- A. Touch-up or repair finished surfaces on structures, equipment, fixtures, and installations that have been damaged prior to inspection for Final Acceptance. Owner will repaint equipment or patched portions of painted or coated surfaces following repair of finished surfaces by Contractor allowing for uniform texture to entire surface.
- B. Refinish or replace entire surfaces which cannot be touched-up or repaired satisfactorily.

## 1.07 PROJECT RECORD DOCUMENTS

- A. Maintain at Project site and update weekly, available to Owner and Engineer, one consolidated hard copy of the Contract Documents, shop drawings, and other submittals in good order:
  - 1. Mark and record field changes and detailed information contained in submittals and change orders in accordance with Owner standards.
  - 2. Identify specific details of conduit connections, the final locations of piping, equipment, valves, and hatches.
  - 3. Make annotations with erasable colored pencil conforming to the following color code:

Additions:	Red
Deletions:	Green
Comments	Blue
Dimensions:	Graphite

- B. Maintain documents separate from those used for construction:
  - 1. Label documents "RECORD DOCUMENTS."
- C. Keep documents current:
  - 1. Provide photographic records with required information at the time the material and equipment is installed and before permanently concealing.
  - 2. Submit photos in accordance with Section 01\_32\_34 – Photographic and Videographic Documentation and cross-reference to record documents.
- D. Deliver record documents with transmittal letter containing date, Project title, Contractor's name and address, list of documents, and signature of Contractor.
- E. Record documents will be reviewed monthly to determine the percent complete for the monthly pay application.
- F. During progress meetings, record documents will be reviewed to ascertain that changes have been recorded.
- G. Final Schedule Submittal as specified in Section 01\_32\_16 - Progress Schedules and Reports.

## 1.08 MAINTENANCE SERVICE

- A. Maintenance service as specified in technical specifications.

## **1.09 SUBSTANTIAL COMPLETION**

- A. In accordance with Documents 00\_72\_00 and 00\_73\_00, Section 6.07.
- B. In accordance with Section 01\_14\_00 – Work Restrictions.
- C. Submit AIA Document G704 Substantial Completion Certificate.

## **1.10 FINAL COMPLETION**

- A. When Contractor considers the Work is complete, submit written certification that:
  - 1. Work has been completed in accordance with the Contract Document.
  - 2. Punch list items have been completed or corrected.
  - 3. Work is ready for final inspection.
- B. Engineer and Owner will make an inspection to verify the status of completion with reasonable promptness.
- C. Should the Owner consider that the Work is incomplete or defective:
  - 1. Owner will promptly notify the Contractor in writing, listing the incomplete or defective work.
  - 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to the Owner that the Work is complete.
  - 3. Engineer and Owner shall re-inspect the Work.

## **1.11 FINAL ADJUSTMENT OF ACCOUNTS**

- A. Submit a final statement of accounting to the Owner at least seven (7) days prior to final Application for Payment.
- B. Statement shall reflect all adjustments to the Contract amount:
  - 1. The original Contract amount.
  - 2. Additions and deductions resulting from:
    - a. Change Orders.
    - b. Units installed and unit prices.
    - c. Set-offs for uncorrected or incomplete Work.
    - d. Set-offs for liquidated damages.
    - e. Set-offs for reinspection payments.
    - f. Extended engineering and/or inspection services and inspection overtime.
    - g. Excessive shop drawings review cost by the Owner.
    - h. Other adjustments.
  - 3. Total Contract amount, as adjusted.
  - 4. Previous payments.
  - 5. Remaining payment due.
- C. Owner will prepare a final Change Order reflecting approved adjustments to the Contract amount which were not previously made by Change Orders.

## **1.12 FINAL APPLICATION FOR PAYMENT**

- A. Contractor shall submit the final Application for Payment reflecting the agreed upon information provided in the final statement of accounting.

**PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

END OF SECTION



## SECTION 01\_78\_23

### OPERATION AND MAINTENANCE DATA

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes: Preparation and submittal of Operation and Maintenance Manuals.

##### 1.02 GENERAL

- A. Submit Operation and Maintenance Manuals as specified in technical sections.
- B. Make approved manuals available at project site for use by construction personnel and Owner.

##### 1.03 SUBMITTALS

- A. Draft Operation and Maintenance Manuals:
  - 1. Submit prior to shipment of equipment to site.
  - 2. Shipment will be considered incomplete without the draft Operation and Maintenance Manuals.
  - 3. Quantity:
    - a. Electronic: Submit PDF via e-Builder per Section 01\_33\_00 - Submittal Procedures.
- B. Final Operation and Maintenance Manuals:
  - 1. Make additions and revisions in accordance with Owner's and Engineer's review comments on draft manuals.
  - 2. Submit approved Operation and Maintenance Manuals at least 60 days prior to Substantial Completion.
  - 3. Quantity:
    - a. Electronic: Submit PDF via e-Builder per Section 01\_33\_0 - Submittal Procedures.

##### 1.04 PREPARATION

- A. General requirements:
  - 1. Provide dimensions in English units.
  - 2. Assemble material, where possible, in the same order within each volume.
  - 3. Reduce drawings and diagrams to 8 1/2 by 11-inch size, if possible unless otherwise specified.
  - 4. Complete forms on computer, handwriting not acceptable.
  - 5. Delete items or options not provided in the supplied equipment or system.
- B. Electronic requirements:
  - 1. File format:
    - a. Entire manual in PDF format:
      - 1) Include text and drawing information.

- 2) Provide a single PDF file even if the hard copy version is broken into separate binders due to being large.
- 3) Create PDF from the native format of the document (Microsoft Word, graphics programs, drawing programs, etc.):
  - a) In addition, provide copies of native files separately.
  - b) If material is not available in native format and only available in paper format, remove smudges, fingerprints, and other extraneous marks before scanning to PDF format.
  - c) Hard copy record drawing requirements:
    - (1) Provide a single multipage PDF file of each set of the scanned drawings.
    - (2) Page 1 shall be the cover of the drawing set.
  - d) At file opening, display the entire cover:
    - (1) Scan drawings at 200 to 300 dots per inch (DPI), black and white, Group IV Compression, unless otherwise specified.
    - (2) Scan drawings with photos in the background at 400 dots per inch (DPI), black and white, Group IV Compression.
- 4) Pagination and appearance to match hard copy.
- 5) Searchable.
- 6) Scanned images are not acceptable.
- 7) Bookmarks:
  - a) Bookmarks shall match the table of contents.
  - b) Bookmark each section (tab) and heading.
  - c) Drawings: Bookmark at a minimum, each discipline, area designation, or appropriate division.
  - d) At file opening, display all levels of bookmarks as expanded.
- 8) Thumbnails optimized for fast web viewing.
- b. Drawing requirements:
  - 1) Provide additional copy of drawings in AutoCAD 2018 format.
  - 2) Drawings shall have a white background.
  - 3) Drawing shapes shall not degrade when closely zoomed.
  - 4) Screening effects intended to de-emphasize detail in a drawing must be preserved.
  - 5) Delete items or options not provided in the supplied equipment or system.
2. Label media with the following information:
  - a. Operation and Maintenance Manual.
  - b. Equipment name.
  - c. Specification Section Number.
  - d. Equipment tag number.
  - e. Owner's name.
  - f. Project number and name.
  - g. Date.
3. If multiple submittals are made together, each submittal must have its own subdirectory that is named and numbered based on the submittal number.

## 1.05 CONTENTS

- A. Cover page:
  1. Operation and Maintenance Manual.
  2. Equipment name.
  3. Specification Section Number.

4. Equipment tag number.
  5. Owner's name.
  6. Project number and name.
  7. Date.
- B. Table of Contents: General description of information provided within each tab section.
- C. Equipment Summary Form: Completed form as specified in Appendix A of this Section.
- D. Equipment Maintenance Summary Form: Completed form as specified in Appendix B of this Section.
- E. Description of equipment function, normal operating characteristics, and limiting conditions.
- F. Manufacturer's product data sheets:
1. Where printed material covers more than 1 specific model, indicate the model number, calibrated range, and other special features.
- G. Assembly, installation, alignment, adjustment, and checking instructions.
- H. Start-up procedures: Recommendations for installation, adjustment, calibration, and troubleshooting.
- I. Preventative maintenance procedures:
1. Recommended steps and schedules for maintaining equipment.
  2. Troubleshooting.
- J. Lubrication information: Required lubricants and lubrication schedules.
- K. Overhaul instructions: Directions for disassembly, inspection, repair and reassembly of the equipment; safety precautions; and recommended tolerances, critical bolt torques, and special tools that are required.
- L. Parts list:
1. Complete parts list for equipment including but not limited to the following information.
  2. Catalog data: Generic title and identification number of each component part of equipment.
  3. Include bearing manufacturer, model and ball or roller pass frequencies for every bearing.
  4. Availability.
  5. Service locations.
- M. Spare parts list: Recommended number of parts to be stored at the site and special storage precautions.
- N. Engineering data:
1. Drawings: Complete set of 11-inch by 17-inch equipment drawings.
  2. Exploded view or plan and section views with detailed callouts.
  3. Outline, cross-section, and assembly drawings.

4. System drawings and data sheets: Include drawings and data furnished by the Engineer and the Supplier; provide "as installed" version.
- O. Test data and performance curves, when applicable.
- P. Manufacturer's technical reference manuals.

#### **1.06 ARCHIVAL DOCUMENTATION**

- A. Typically does not require updating to remain valid and should be stored in a format that preserves the document and limits one's ability to make changes.
- B. Types of archival documents include the following:
1. Record drawings.
  2. Reports.
  3. Specifications.
  4. Shop drawings.
  5. Vendor Equipment O & M Manuals.
  6. Photos.
  7. Demonstration and training videos.
  8. Other.

#### **1.07 LIVING DOCUMENTATION**

- A. Requires periodic updates to remain valid and should be stored in formats that are easy to update.
- B. Types of living documents include the following:
1. Facility O&M Manuals.
  2. Standard Operating Procedures.

### **PART 2 PRODUCTS**

Not Used.

### **PART 3 EXECUTION**

Not Used.

END OF SECTION

APPENDIX A  
EQUIPMENT SUMMARY FORM

1. EQUIPMENT ITEM \_\_\_\_\_
2. MANUFACTURER \_\_\_\_\_
3. EQUIPMENT IDENTIFICATION NUMBER(S) \_\_\_\_\_  
(maps equipment number)
4. LOCATION OF EQUIPMENT \_\_\_\_\_
5. WEIGHT OF INDIVIDUAL COMPONENTS (OVER 100 POUNDS) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- NAMEPLATE DATA -
  - Horsepower \_\_\_\_\_
  - Amperage \_\_\_\_\_
  - Voltage \_\_\_\_\_
  - Service Factor (S.F.) \_\_\_\_\_
  - Speed \_\_\_\_\_
  - ENC Type \_\_\_\_\_
  - Capacity \_\_\_\_\_
  - Other \_\_\_\_\_
7. MANUFACTURER'S LOCAL REPRESENTATIVE
  - Name \_\_\_\_\_
  - Address \_\_\_\_\_
  - Telephone Number \_\_\_\_\_
8. MAINTENANCE REQUIREMENTS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. LUBRICANT LIST \_\_\_\_\_  
\_\_\_\_\_
10. SPARE PARTS (recommendations) \_\_\_\_\_  
\_\_\_\_\_
11. COMMENTS \_\_\_\_\_

**APPENDIX B  
EQUIPMENT MAINTENANCE SUMMARY**

1. Equipment Item: \_\_\_\_\_
2. Manufacturer: \_\_\_\_\_
3. Serial No. (if applicable): \_\_\_\_\_
4. Manufacturer's Order No. (if applicable): \_\_\_\_\_
5. Nameplate Data (horsepower, voltage, speed, etc.): \_\_\_\_\_

6. Manufacturer's Local Representative:  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Telephone: \_\_\_\_\_

7. Maintenance Requirements:

Maintenance Operation	Frequency	Lubricant (if applicable)	Comments
(List each operation required. Refer to specific information in Manufacturer's Manual, if applicable)	(List required frequency of each maintenance operation)	(Refer by symbol to lubricant list as required)	

8. Lubricant List:

Reference Symbol	Conoco Phillips	Exxon/Mobil	BP/Amoco	Other (List)
(Symbols used in Item 7 above)	(List equivalent lubricants, as distributed by each manufacturer for the specific use recommended)			

9. Spare Parts: (Include recommendation on what spare parts should be kept on the job):

\_\_\_\_\_

\_\_\_\_\_

## SECTION 01\_81\_02

### SEISMIC DESIGN CRITERIA

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes: Seismic design criteria for the following:
1. Anchorage of mechanical and electrical equipment.

##### 1.02 REFERENCES

- A. American Society of Civil Engineers (ASCE):
1. 7-10 - Minimum Design Loads for Buildings and Other Structures.

##### 1.03 SYSTEM DESCRIPTION

- A. Design in accordance with the requirements of the building code as specified in Section 01\_41\_00 - Regulatory Requirements.
- B. Design spectral acceleration at short period,  $S_{DS}$ : 0.862 g.
- C. Design of non-structural components and their connections to structures:
1. Component amplification factor,  $a_p$ : In accordance with ASCE 7, Tables 13.5-1 and 13.6-1.
  2. Component response modification factor,  $R_p$ : In accordance with ASCE 7, Tables 13.5-1 and 13.6-1.
  3. Component importance factor,  $I_p$ :

<b>Component</b>	<b>Description</b>	<b><math>I_p</math></b>
Electrical	Equipment and appurtenances provided and installed under Division 26.	1.5

- D. **Seismic Design Category (SDC): D.**
- E. Design requirements: Anchorage of equipment to structures:
1. Do not use friction to resist sliding due to seismic forces. Do not design or provide connections that use friction to resist seismic loads. Resist seismic forces through direct tension and/or shear on anchors and fasteners.
  2. Do not use more than 60 percent of the weight of the mechanical and electrical equipment for designing anchors for resisting overturning due to seismic forces.
  3. Anchoring and fastening to concrete and masonry:
    - a. Provide anchors specified in Section 03\_21\_17 - Adhesive-Bonded Reinforcing Bars and All-Thread Rods.
    - b. Use only cast-in anchors (anchor bolts or welded studs) for anchors at connections that resist seismic forces.

- c. Do not use concrete anchors, flush shells, sleeve anchors, screw anchors, powder actuated fasteners, or other types of post-installed mechanical anchors unless indicated on the Drawings or accepted in writing by the Owner.

#### **1.04 SUBMITTALS**

- A. Shop drawings and calculations: Complete shop drawings and seismic calculations.
- B. Calculations shall be signed and stamped by a civil or structural engineer licensed in the state of Washington.

#### **PART 2 PRODUCTS**

Not Used.

#### **PART 3 EXECUTION**

Not Used.

END OF SECTION



## SECTION 26\_05\_00

### COMMON WORK RESULTS FOR ELECTRICAL

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
  - 1. General requirements applicable to all Electrical Work.
  - 2. General requirements for electrical submittals.
  
- B. Interfaces to equipment, instruments, and other components:
  - 1. The Drawings, Specifications, and overall design are based on preliminary information furnished by various equipment manufacturers which identify a minimum scope of supply from the manufacturers.
  - 2. Provide all material and labor needed to install the actual equipment furnished, and include all costs to add any additional conduit, wiring, terminals, or other electrical hardware to the Work, which may be necessary to make a complete, functional installation based on the actual equipment furnished:
    - a. Make all changes necessary to meet the manufacturer's wiring requirements.
  
- C. Contract Documents:
  - 1. General:
    - a. The Drawings and Specifications are complementary and are to be used together in order to fully describe the Work.
  - 2. Contract Drawings:
    - a. The Electrical Drawings show desired locations, arrangements, and components of the Electrical Work in a diagrammatic manner.
    - b. Locations of equipment, control devices, instruments, boxes, panels, etc. are approximate only; exercise professional judgment in executing the Work to ensure the best possible installation:
      - 1) The Contractor has the freedom to select any of the named manufacturers identified in the individual specification sections; however, the Engineer has designed the spatial equipment layout based upon a single manufacturer and has not confirmed that every named manufacturer's equipment fits in the allotted space. It is the Contractor's responsibility to ensure that the equipment being furnished fits within the defined space.

##### 1.02 REFERENCES

- A. Code compliance:
  - 1. As specified in Section 01\_41\_00 - Regulatory Requirements.
  - 2. The publications are referred to in the text by the basic designation only. The latest edition accepted by the Authority Having Jurisdiction of referenced publications in effect at the time of the bid governs.
  - 3. The standards listed are hereby incorporated into this Section:
    - a. American National Standards Institute (ANSI).
    - b. American Society of Civil Engineers (ASCE):

- 1) ASCE 7 - Minimum Design Loads for Buildings and Other Structures.
- c. ASTM International (ASTM).
- d. Illuminating Engineering Society (IES).
- e. Institute of Electrical and Electronics Engineers (IEEE).
- f. Insulated Cable Engineers Association (ICEA).
- g. International Code Council (ICC):
  - 1) International Code Council Evaluation Service (ICC-ES):
    - a) AC 156 - Acceptance Criteria for Seismic Certification by Shake Table Testing of Non-Structural Components (ICC-ES AC 156).
- h. International Society of Automation (ISA).
- i. National Electrical Manufacturers Association (NEMA):
  - 1) 250 - Enclosures for Electrical Equipment (1000 V Maximum).
- j. National Fire Protection Association (NFPA):
  - 1) 70 - National Electrical Code (NEC).
- k. National Institute of Standards and Technology (NIST).
- l. Underwriters' Laboratories, Inc. (UL).

### 1.03 DEFINITIONS

- A. Definitions of terms and other electrical and instrumentation considerations as set forth by:
  - 1. IEEE.
  - 2. NETA.
  - 3. IES.
  - 4. ISA.
  - 5. NEC.
  - 6. NEMA.
  - 7. NFPA.
  - 8. NIST.
- B. Specific definitions:
  - 1. FAT: Factory acceptance test.
  - 2. LCP: Local control panel: Operator interface panel that may contain an HMI, pilot type control devices, operator interface devices, control relays, etc. and does not contain a PLC or RIO.

### 1.04 SYSTEM DESCRIPTION

- A. General requirements:
  - 1. The Work includes everything necessary for and incidental to executing and completing the Electrical Work indicated on the Drawings and specified in the Specifications and reasonably inferable there from:
    - a. The Electrical Drawings are schematic in nature; use the Structural, Architectural, Mechanical, and Civil Drawings for all dimensions and scaling purposes.
  - 2. Provide all necessary material and labor for the complete system from source of power to final utilization equipment, including all connections, testing, calibration of equipment furnished by others as well as equipment furnished by the Contractor, whether or not specifically mentioned but which are necessary for successful operation.
  - 3. Provide all Electrical Work, including conduit, field wiring, and connections for all aspects of the Work.

4. Demolition:
    - a. Where demolition is specified or indicated on the Drawings, disconnect all associated electrical equipment and render the equipment safe.
    - b. Remove and dispose of all conduit, wire, electrical equipment, controls, etc. associated with the items and/or areas to be demolished as indicated on the Drawings unless otherwise indicated.
    - c. For each piece of equipment to be removed, remove all ancillary components (e.g. instruments, solenoid valves, disconnect switches, etc.).
    - d. Remove all wire back to the source for all conduits to be removed or abandoned in place.
    - e. Provide new typewritten schedules for all modified panelboards.
  5. Portions of this Project involve installation in existing facilities and interfaces to existing circuits, power systems, controls, and equipment:
    - a. Perform and document comprehensive and detailed field investigations of existing conditions (circuits, power systems, controls, equipment, etc.) before starting any Work. Determine all information necessary to document, interface with, modify, upgrade, or replace existing circuits, power systems, controls, and equipment.
    - b. Provide and document interface with, modifications to, upgrades, or replacement of existing circuits, power systems, controls, and equipment.
- B. Existing system modifications:
1. The City of Tacoma Recovery and Transfer Center's (RTC) existing EPS equipment requires replacement. The Contractor shall demolish all existing equipment, conduit, and wiring downstream of the existing circuit breaker feeding the existing EPS Densifier system and replace with in kind components.

## 1.05 SUBMITTALS

- A. Furnish submittals as specified in Section 01\_33\_00 - Submittal Procedures and this Section.
- B. Seismic requirements:
  1. **Provide equipment with construction and anchorage to supporting structures designed to resist site seismic loads based on the seismic design criteria in Section 01\_81\_02 - Seismic Design Criteria.**
  2. Submit the following:
    - a. Statement of seismic qualification, and special seismic certification:
      - 1) "Statement of seismic qualification:" Provide manufacturer's statement that the equipment satisfies the seismic design requirements of the building code indicated in Section 01\_41\_00 - Regulatory Requirements, including the requirements of ASCE 7, Chapter 13.
      - 2) "Special seismic certification:" Provide manufacturer's certification that the equipment, when subjected to shake table testing in accordance with ICC-ES AC 156, meets the "Post-Test Functional Compliance Verification" requirements of ICC-ES AC 156 for "Components with  $I_p = 1.5$ ." Compliance shall include both operability and containment of hazardous materials as appropriate to the unit being tested.

- b. Substantiating test data: With seismic qualification and special seismic certification statements, submit results of testing in accordance with ICC-ES AC 156.
    - c. Anchoring design calculations and details:
      - 1) Submit project-specific drawings and supporting calculations, prepared and sealed by a professional engineer licensed in the state of Washington, and showing details for anchoring electrical equipment to its supports and for anchoring supports provided with the equipment to the structure. Prepare calculations in accordance with the requirements of Section 01\_81\_02 - Seismic Design Criteria.
  - 3. Exemptions: A “statement of seismic qualification” and a “special seismic certification” are not required for the following equipment:
    - a. Temporary or moveable equipment.
    - b. Equipment anchored to the structure and having a total weight of 20 pounds or less.
- C. Operation and maintenance manuals:
  - 1. As specified in Section 01\_78\_23 - Operation and Maintenance Data.
- D. Test reports:
  - 1. As specified in Section 01\_33\_00 - Submittal Procedures.
- E. Calculations:
  - 1. Where required by NEC or Tacoma Power:
    - a. Because these calculations are being provided by a registered professional engineer licensed in the state of Washington, they will be reviewed for form, format, and content but will not be reviewed for accuracy and calculation means.

## **1.06 QUALITY ASSURANCE**

- A. Furnish all equipment listed by and bearing the label of UL or of an independent testing laboratory acceptable to the City and the Authority Having Jurisdiction.

## **1.07 DELIVERY, STORAGE, AND HANDLING**

- A. As specified in Section 01\_60\_00 - Product Requirements.
- B. Delivery and inspection:
  - 1. Deliver products in undamaged condition, in manufacturer’s original container or packaging with identifying labels intact and legible. Include date of manufacture on label.
- C. Special instructions:
  - 1. Securely attach special instructions for proper field handling, storage, and installation to each piece of equipment before packaging and shipment.

## **1.08 PROJECT OR SITE CONDITIONS**

- A. Site conditions:
  - 1. Seismic load resistance:

- a. Provide electrical equipment with construction and anchorage to supporting structures designed to resist site seismic loads as specified in Section 01\_81\_02 - Seismic Design Criteria.
- B. Provide enclosures for electrical, instrumentation and control equipment, regardless of supplier or subcontractor furnishing the equipment, that meet the requirements outlined in NEMA Standard 250 for the following types of enclosures:
  - 1. NEMA Type 3R: Intended for indoor or outdoor use; protects the equipment inside the enclosure against ingress of solid foreign objects (falling dirt); provide a degree of protection due to the ingress of water (rain, sleet, snow).
  - 2. NEMA Type 4: Intended for indoor or outdoor use, primarily to protect equipment from exposure to windblown dust and rain, splashing or hose directed water, ice formation and freezing.
- C. Electrical Work requirements:
  - 1. Provide all Electrical Work in accordance with the following table, unless otherwise specifically indicated on the Drawings:

LOCATION	NEMA ENCLOSURE TYPE	EXPOSED CONDUIT TYPE	ENVIRONMENT W = WET D = DAMP C = CLEAN/DRY X = CORROSIVE H = HAZARDOUS	SUPPORT MATERIALS
All Areas	3R, 4	GRC	D	GRC

**1.09 SEQUENCING (NOT USED)**

**1.10 SYSTEM START-UP**

- A. Replace or modify equipment and materials that do not achieve design requirements after installation in order to attain compliance with the design requirements:
  - 1. Following replacement or modification, retest the system and perform additional testing to place the complete system in satisfactory operation and obtain compliance acceptance from the Owner.

**1.11 OWNER'S INSTRUCTIONS (NOT USED)**

**1.12 MAINTENANCE**

- A. Before Substantial Completion, perform all maintenance activities required by any sections of the Specifications including any calibrations, final adjustments, component replacements or other routine service required before placing equipment or systems in service.
- B. Furnish all spare parts as required by other sections of the Specifications.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Provide similar items of same manufacturer throughout the electrical and instrumentation portion of the Project.
- B. Allowable manufacturers are specified in individual Electrical Specifications.

### **2.02 EXISTING PRODUCTS (NOT USED)**

### **2.03 MATERIALS**

- A. Furnish all materials under this Contract that are new, free from defects, and standard products produced by manufacturers regularly engaged in the production of these products and that bear all approvals and labels as required by the Specifications.
- B. Stainless steel:
  - 1. Where stainless steel is indicated or used for any portion of the Electrical Work, provide a non-magnetic, corrosion-resistant alloy, ANSI Type 316, satin finish.
  - 2. Provide exposed screws of the same alloys.
  - 3. Provide finished material free of any burrs or sharp edges.
  - 4. Use only stainless steel hardware, when chemically compatible, in all areas that are or could be in contact with corrosive chemicals.
  - 5. Use stainless steel hardware, when chemically compatible, in all chemical areas or areas requiring NEMA Type 4X construction.

### **2.04 MANUFACTURED UNITS (NOT USED)**

### **2.05 EQUIPMENT (NOT USED)**

### **2.06 COMPONENTS (NOT USED)**

### **2.07 ACCESSORIES (NOT USED)**

### **2.08 MIXES (NOT USED)**

### **2.09 FABRICATION (NOT USED)**

### **2.10 FINISHES (NOT USED)**

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. The electrical subcontractor is required to thoroughly examine the Bid Documents and is **highly encouraged** to visit the site to examine the premises completely before bidding.

- B. It is the Contractor's responsibility to be fully familiar with the existing conditions and local requirements and regulations.
- C. Review the site conditions and examine all shop drawings for the various items of equipment in order to determine exact routing and final terminations for all wiring and cables.

### **3.02 PREPARATION (NOT USED)**

### **3.03 INSTALLATION**

- A. Equipment locations shown on Drawings may change due to variations in equipment size. Confirm final locations in field with Owner.
- B. Install the equipment in accordance with the accepted installation instructions and anchorage details to meet the seismic requirements at the Project site.
- C. Cutting and patching:
  - 1. Perform all cutting, patching, channeling, core drilling, and fitting required for the Electrical Work, except as otherwise directed:
- D. Install all conduits and equipment in such a manner as to avoid all obstructions and to preserve headroom and keep openings and passageways clear:
  - 1. Install all conduits and equipment in accordance with working space requirements in accordance with the NEC:
    - a. This includes any panel, disconnect switch or other equipment that can be energized while open exposing live parts regardless of whether it is likely to require examination or has serviceable parts.
  - 2. Where the Drawings do not show dimensions for locating equipment, install equipment in the approximate locations indicated on the Drawings:
    - a. Adjust equipment locations as necessary to avoid any obstruction or interferences.
  - 3. Where an obstruction interferes with equipment operation or safe access, relocate the equipment.
  - 4. Where the Drawings do not indicate the exact mounting and/or supporting method to be used, use materials and methods similar to the mounting details indicated on the Drawings.
- E. Terminations:
  - 1. Provide and terminate all conductors required to interconnect power, controls, instruments, panels, and all other equipment.
- F. Labeling:
  - 1. Provide all nameplates and labels
- G. Equipment tie-downs:
  - 1. Anchor all instruments, control panels, and equipment by methods that comply with seismic criteria, which apply to the Site.
  - 2. All control panels must be permanently mounted and tied down to structures in accordance with the Project seismic criteria.

### **3.04 ERECTION, INSTALLATION, APPLICATION, CONSTRUCTION (NOT USED)**

### **3.05 REPAIR/RESTORATION (NOT USED)**

### **3.06 RE-INSTALLATION (NOT USED)**

### **3.07 COMMISSIONING**

- A. Commission all equipment in accordance with manufacturer's recommendation.
- B. Testing:
  - 1. Test all equipment and wiring accordance with manufacturer's recommendations.

### **3.08 FIELD QUALITY CONTROL**

- A. Inspection:
  - 1. Allow for inspection of electrical system installation as specified in Section 01\_45\_00 - Quality Control.
  - 2. Provide any assistance necessary to support inspection activities.
  - 3. Owner inspections may include, but are not limited to, the following:
    - a. Inspect equipment and materials for physical damage.
    - b. Inspect installation for compliance with the Drawings and Specifications.
    - c. Inspect installation for obstructions and adequate clearances around equipment.
    - d. Inspect equipment installation for proper leveling, alignment, anchorage, and assembly.
    - e. Inspect equipment nameplate data to verify compliance with design requirements.
    - f. Inspect cable terminations.
- B. Field acceptance testing (Functional Testing):
  - 1. Notify the Owner when the Electrical Work is ready for field acceptance testing.
  - 2. Record results of the required tests along with the date of test:
    - a. Use conduit identification numbers to indicate portion of circuit tested.
- C. Workmanship:
  - 1. Leave wiring in panels, manholes, boxes, and other locations safe, neat, clean, and organized:
    - a. Neatly coil and label spare wiring lengths.
    - b. Shorten, re-terminate, and re-label excessive used as well as spare wire and cable lengths, as determined by the Owner.

### **3.09 ADJUSTING (NOT USED)**

### **3.10 CLEANING**

- A. As specified in Section 01\_77\_00 - Closeout Procedures.
- B. Remove all foreign material and restore all damaged finishes to the satisfaction of the Engineer and Owner.



- C. Clean and vacuum all enclosures to remove all metal filings, surplus insulation and any visible dirt, dust or other matter before energization of the equipment or system start-up:
  - 1. Use of compressors or air blowers for cleaning is not acceptable.
- D. As specified in other sections of the Contract Documents.

**3.11 PROTECTION**

- A. Protect all Work from damage or degradation until Substantial Completion.

**3.12 SCHEDULES (NOT USED)**

END OF SECTION

## SECTION 26\_05\_03

### UTILITY COORDINATION

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
  - 1. Coordination with the utility companies for permit compliance.
  - 2. Descriptions of utility services required.

##### 1.02 REFERENCES

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

##### 1.03 DEFINITIONS

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. Tacoma Public Utilities – Power (TPU):
  - 1. Distribution and Transmission (T&D) - new service design/connections.
  - 2. Permitting – inspections/AHJ.
- C. Utility point contact:
  - 1. Electric utility:
    - a. Name: Jayce Booker.
    - b. Utility: Tacoma Public Utilities – Power, Transmission & Distribution.
    - c. Address: 3628 South 35th Street, Tacoma WA 98409.
    - d. Phone number: 253-441-4545.
    - e. Email: [jbooker@cityoftacoma.org](mailto:jbooker@cityoftacoma.org)

##### 1.04 SYSTEM DESCRIPTION

- A. Electrical service:
  - 1. Provide all Work and materials and bear all costs for installing the new equipment and wiring, including but not limited to:
    - a. Obtain all permits required by the electric utility. Permit fees will be paid by the Owner. Notify the Owner when fees are due.
    - b. Coordinate utility work with requirements of Section 01\_14\_00 – Work Restrictions and 01\_50\_00 – Temporary Facilities and Controls.
  - 2. Provide electrical conductors, connections, and conduit indicated on the Drawings. If Drawings do not indicate conductor size and type, Contractor to determine based on equipment and materials provided by Contractor. Contractor to perform all other Work and materials required for a complete permanent electrical service, including but not limited to the following:
    - a. Coordinate with TPU-Inspections to obtain permits and complete inspections for all new electrical work.
    - b. All electrical work shall be in compliance with Tacoma Public Utilities – Power Electrical Service Handbook and Electrical Construction Standards, current edition.

- B. General:
  - 1. Coordinate and obtain inspections and final installation approval from the serving utilities and other authorities having jurisdiction.

#### **1.05 SUBMITTALS**

- A. Furnish submittals as specified in Sections 01\_33\_00 - Submittal Procedures and 26\_05\_00 - Common Work Results for Electrical.
- B. Certification:
  - 1. Submit certification that the intended installation has been coordinated with the utility companies.
  - 2. Include a narrative description of the utility's requirements and points of connection, names, and telephone numbers for contacts at the utilities.
- C. Additional Requirements:
  - 1. Documentation and final permitting/acceptance from TPU.
  - 2. Final signed off permit or approval forms from TPU.

#### **1.06 QUALITY ASSURANCE**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. Materials and equipment used in performance of Electrical Work shall be listed or labeled by UL, or other equivalent recognized independent testing laboratory, for the class of service intended.

#### **1.07 DELIVERY, STORAGE, AND HANDLING (NOT USED)**

#### **1.08 PROJECT OR SITE CONDITIONS**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

#### **1.09 SEQUENCING (NOT USED)**

#### **1.10 SCHEDULING**

#### **1.11 WARRANTY**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

#### **1.12 SYSTEM START-UP**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

#### **1.13 OWNER'S INSTRUCTIONS (NOT USED)**

#### **1.14 MAINTENANCE (NOT USED)**

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS (NOT USED)**

### **2.02 EXISTING PRODUCTS (NOT USED)**

### **2.03 MATERIALS**

- A. Furnish materials in accordance with the applicable requirements of the utilities and as specified in these Specifications.

### **2.04 MANUFACTURED UNITS (NOT USED)**

### **2.05 EQUIPMENT**

- A. Furnish equipment in accordance with the applicable requirements of the utilities and as specified in these Specifications.

### **2.06 COMPONENTS (NOT USED)**

### **2.07 ACCESSORIES (NOT USED)**

### **2.08 MIXES (NOT USED)**

### **2.09 FABRICATION (NOT USED)**

### **2.10 FINISHES (NOT USED)**

### **2.11 SOURCE QUALITY CONTROL (NOT USED)**

## **PART 3 EXECUTION**

### **3.01 EXAMINATION (NOT USED)**

### **3.02 PREPARATION (NOT USED)**

### **3.03 INSTALLATION**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

### **3.04 ERECTION, INSTALLATION, APPLICATION, CONSTRUCTION (NOT USED)**

### **3.05 REPAIR/RESTORATION (NOT USED)**

### **3.06 RE-INSTALLATION (NOT USED)**

### **3.07 COMMISSIONING**

### **3.08 FIELD QUALITY CONTROL**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**3.09 ADJUSTING (NOT USED)**

**3.10 CLEANING**

A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**3.11 PROTECTION**

A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**3.12 SCHEDULES (NOT USED)**

END OF SECTION

## SECTION 26\_05\_18

### 600-VOLT OR LESS WIRES AND CABLES

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
  - 1. 600 volt class or less wire and cable.

##### 1.02 REFERENCES

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. ASTM International (ASTM):
  - 1. B3 - Standard Specification for Soft or Annealed Copper Wire.
  - 2. B8 - Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft.
- C. CSA International (CSA).
- D. Insulated Cable Engineers Association (ICEA):
  - 1. NEMA WC 70/ICEA S-95-658-1999 - Standard for Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy.
  - 2. NEMA WC 57/ICEA S-73-532 - Standard for Control, Thermocouple Extension, and Instrumentation Cables.
- E. National Fire Protection Association (NFPA):
  - 1. 72 - National Fire Alarm and Signaling Code.
  - 2. 101 - Life Safety Code.
- F. Telecommunications Industry Association/Electronics Industry Association (TIA/EIA):
  - 1. 568-C.2 - Balanced Twisted-Pair Telecommunication Cabling and Components Standard.
  - 2. 569-B – Commercial Building Standards for Telecommunications Pathways and Spaces.
  - 3. 1005 – Industrial Cabling Standard.
- G. Underwriter's Laboratories Inc., (UL):
  - 1. 44 - Thermoset-Insulated Wires and Cables.
  - 2. 1277 - Standard for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members.
  - 3. 1424 - Standard for Cables for Power-Limited Fire-Alarm Circuits.
  - 4. 1569 - Standard for Metal-Clad Cables.
  - 5. 2196 - Standard for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control, and Data Cables.
  - 6. 2225 - Standard for Cables and Cable-Fittings for Use in Hazardous (Classified) Locations.

### **1.03 DEFINITIONS**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. Specific definitions and abbreviations:
  - 1. AWG: American wire gauge.
  - 2. BCCS: Bare copper-covered steel.
  - 3. CPE: Chlorinated polyethylene.
  - 4. FEP: Fluorinated ethylene propylene.
  - 5. FHDPE: Foam high-density polyethylene.
  - 6. FPE: Foam polyethylene.
  - 7. OD: Outside diameter.
  - 8. PVC: Polyvinyl chloride.
  - 9. XHHW: Cross-linked high heat water resistant insulated wire.
- C. Definitions of terms and other electrical considerations as set forth in the:
  - 1. ASTM.
  - 2. ICEA.

### **1.04 SYSTEM DESCRIPTION**

- A. Furnish and install the complete wire and cable system.

### **1.05 SUBMITTALS**

- A. Furnish submittals as specified in Sections 01\_33\_00 - Submittal Procedures and 26\_05\_00 - Common Work Results for Electrical.
- B. Product data:
  - 1. Manufacturer of wire and cable.
  - 2. Insulation:
    - a. Type.
    - b. Voltage class.
  - 3. AWG size.
  - 4. Conductor material.
  - 5. Pulling compounds.
- C. Shop drawings:
  - 1. Show splice locations:
    - a. For each proposed splice location provide written justification describing why the splice is necessary.
- D. Test reports:
  - 1. Submit test reports for meg-ohm tests.

### **1.06 QUALITY ASSURANCE**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. All wires and cables shall be UL listed and labeled.

## **1.07 DELIVERY, STORAGE, AND HANDLING**

A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

## **1.08 PROJECT OR SITE CONDITIONS (NOT USED)**

## **1.09 SEQUENCING (NOT USED)**

## **1.10 SCHEDULING (NOT USED)**

## **1.11 WARRANTY**

A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

## **1.12 SYSTEM START-UP**

A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

## **1.13 OWNER'S INSTRUCTIONS (NOT USED)**

## **1.14 MAINTENANCE (NOT USED)**

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. One of the following or equal:
1. 600 volt class wire and cable:
    - a. General Cable.
    - b. Okonite Co.
    - c. Southwire Co.
    - d. Service Wire.

### **2.02 EXISTING PRODUCTS (NOT USED)**

### **2.03 MATERIALS**

- A. Conductors:
1. Copper in accordance with ASTM B3.

### **2.04 MANUFACTURED UNITS**

- A. General:
1. Provide new wires and cables manufactured within 1 year of the date of delivery to the Site.
  2. Permanently mark each wire and cable with the following at 24-inch intervals:
    - a. AWG size.
    - b. Voltage rating.
    - c. Insulation type.
    - d. UL symbol.
    - e. Month and year of manufacture.
    - f. Manufacturer's name.



3. Identify and mark wire and cable as specified in Section 26\_05\_53 - Identification for Electrical Systems:
    - a. Use integral color insulation for #2 AWG and smaller wire.
    - b. Wrap colored tape around cable larger than #2 AWG.
- B. 600 volt class wire and cable:
1. Provide AWG or kcmil sizes as indicated on the Drawings or in the Conduit Schedules:
    - a. When not indicated on the Drawings, size wire as follows:
      - 1) In accordance with the NEC:
        - a) Use 75 degree Celsius ampacity ratings.
        - b) Ampacity rating after all derating factors, equal to or greater than rating of the overcurrent device.
      - 2) Provide #12 AWG minimum for power conductors.
      - 3) Provide #14 AWG minimum for control conductors.
  2. Provide Class B stranding in accordance with ASTM B8:
    - a. Provide Class C stranding where extra flexibility is required.
  3. Insulation:
    - a. THHN.
  4. Multiconductor cables:
    - a. Number and size of conductors as indicated on the Drawings or in the Conduit Schedules.
    - b. Individual conductors with THHN insulation.
    - c. Overall PVC jacket.
    - d. Tray cable rated.
    - e. Color-coding for control wire in accordance with ICEA Method 1, E-2 in accordance with NEMA WC 57/ICEA S-73-532.
    - f. Ground conductor: Insulated, green:
      - 1) Sized in accordance with NEC.

## **2.05 EQUIPMENT (NOT USED)**

## **2.06 COMPONENTS (NOT USED)**

## **2.07 ACCESSORIES**

- A. Wire ties:
1. One of the following or equal:
    - a. T&B, "Ty-Rap" cable ties.
    - b. Panduit, cable ties.

## **2.08 MIXES (NOT USED)**

## **2.09 FABRICATION (NOT USED)**

## **2.10 FINISHES (NOT USED)**

## **2.11 SOURCE QUALITY CONTROL**

- A. Assembly and testing of cable shall comply with the applicable requirements of ICEA S-95-658-1999.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION (NOT USED)**

### **3.02 PREPARATION (NOT USED)**

### **3.03 INSTALLATION**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. Color-coding:
  - 1. Color-coding shall be consistent throughout the facility.
  - 2. The following color code shall be followed for all 240/120 volt and 208/120 volt systems:
    - a. Phase A: Black.
    - b. Phase B: Red.
    - c. Phase C: Blue.
    - d. Single phase system: Black for 1 hot leg, red for the other.
    - e. Neutral: White.
    - f. High phase or wild leg: Orange.
    - g. Equipment ground: Green.
  - 3. The following color code shall be followed for all 480/277 volt systems:
    - a. Phase A: Brown.
    - b. Phase B: Orange.
    - c. Phase C: Yellow.
    - d. Neutral: Gray.
    - e. Equipment ground: Green.
  - 4. The following color code shall be followed for all 120 VAC control wiring:
    - a. Power: Red.
    - b. Neutral: White.
  - 5. The following color code shall be followed for all general purpose DC control circuits:
    - a. Grounded conductors: White with blue stripe.
    - b. Ungrounded conductors: Blue.
  - 6. Switch legs shall be violet. 3-way switch runners shall be pink.
  - 7. Wires in intrinsically safe circuits shall be light blue.
  - 8. Wire colors shall be implemented in the following methods:
    - a. Wires manufactured of the desired color.
    - b. Continuously spiral wrap the first 6 inches of the wire from the termination point with colored tape:
      - 1) Colored tape shall be wrapped to overlap 1/2 of the width of the tape.
- C. Install conductors only after the conduit installation is complete, and all enclosures have been vacuumed clean, and the affected conduits have been swabbed clean and dry:
  - 1. Install wires only in approved raceways.
  - 2. Do not install wire:
    - a. In incomplete conduit runs.
    - b. Until after the concrete work and plastering is completed.
- D. Properly coat wires and cables with pulling compound before pulling into conduits:
  - 1. For all #4 AWG and larger, use an approved wire-pulling lubricant while cable is being installed in conduit:

- a. Ideal Products.
  - b. Polywater Products.
  - c. 3M Products.
  - d. Greenlee Products.
  - e. Or equal as recommended by cable manufacturer.
  - f. Do not use oil, grease, or similar substances.
- E. Cable pulling:
1. Prevent mechanical damage to conductors during installation.
  2. For cables #1 AWG and smaller, install cables by hand.
  3. For cables larger than #1 AWG, power pulling winches may be used if they have cable tension monitoring equipment.
  4. Provide documentation that maximum cable pulling tension was no more than 75 percent of the maximum recommended level as published by the cable manufacturer. If exceeded, the Owner may, at his discretion, require replacement of the cable.
  5. Ensure cable pulling crews have all calculations and cable pulling limitations while pulling cable.
  6. Make splices or add a junction box or pullbox where required to prevent cable pulling tension or sidewall pressure from exceeding 75 percent of manufacturer's recommendation for the specified cable size:
    - a. Make splices in manholes or pull boxes only.
    - b. Leave sufficient slack to make proper connections.
- F. Use smooth-rolling sheaves and rollers when pulling cable into cable tray to keep pulling tension and bending radius within manufacturer's recommendations.
- G. Install and terminate all wire in accordance with manufacturer's recommendations.
- H. Neatly arrange and lace conductors in all switchboards, panelboards, pull boxes, and terminal cabinets by means of wire ties:
1. Do not lace wires in gutter or panel channel.
  2. Install all wire ties with a flush cutting wire tie installation tool:
    - a. Use a tool with an adjustable tension setting.
  3. Do not leave sharp edges on wire ties.
- I. Terminate stranded conductors on equipment box lugs such that all conductor strands are confined within the lug:
1. Use ring type lugs if box lugs are not available on the equipment.
- J. Splices:
1. Provide continuous circuits from origin to termination whenever possible:
    - a. Obtain Owner's approval prior to making any splices.
- K. Apply wire markers to all wires at each end after being installed in the conduit and before meg-ohm testing and termination.
- L. Multi-conductor cable:
1. Where cable is not routed in conduit with a separate ground conductor, use 1 conductor in the cable as a ground conductor:
    - a) Use an internal ground conductor, if it is no smaller than as indicated on the Drawings and in accordance with NEC requirements for equipment ground conductor size.

- b) Where 2 parallel cables are used, and the internal ground conductor in each cable does not meet NEC requirements for the combined circuit, use 4-conductor cable, with one of the full-sized conductors serving as ground.

M. Wiring allowances:

- 1. Equipment locations may vary slightly from the drawings. Include an allowance for necessary conductors and terminations for motorized equipment, electrical outlets, fixtures, communication outlets, instruments, and devices within 10 linear feet of locations indicated on the Drawings.

**3.04 ERECTION, INSTALLATION, APPLICATION, CONSTRUCTION (NOT USED)**

**3.05 REPAIR/RESTORATION (NOT USED)**

**3.06 RE-INSTALLATION (NOT USED)**

**3.07 COMMISSIONING**

**3.08 FIELD QUALITY CONTROL**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**3.09 ADJUSTING (NOT USED)**

**3.10 CLEANING (NOT USED)**

**3.11 PROTECTION**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**3.12 SCHEDULES (NOT USED)**

END OF SECTION

## SECTION 26\_05\_33

### CONDUITS

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section includes:
  - 1. Metallic conduits.
  - 2. Nonmetallic conduits.
  - 3. Conduit bodies.
  - 4. Conduit fittings and accessories.
  - 5. Conduit installation.

##### 1.02 REFERENCES

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. American National Standards Institute (ANSI):
  - 1. C80.1 - Electrical Rigid Steel Conduit.
  - 2. C80.3 - Steel Electrical Metallic Tubing.
  - 3. C80.5 - Electrical Rigid Aluminum Conduit.
  - 4. C80.6 - Electrical Intermediate Metal Conduit.
- C. National Electrical Manufacturer's Association (NEMA):
  - 1. RN-1 - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Steel Conduit.
  - 2. TC2 - Electrical Polyvinyl Chloride (PVC) Conduit.
  - 3. TC3 - Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing.
  - 4. TC7 - Smooth-Wall Coilable Electrical Polyethylene Conduit.
  - 5. TC13 - Electrical Nonmetallic Tubing.
  - 6. TC14 - Reinforced Thermosetting Resin Conduit (RTRC) and Fittings.
- D. Underwriters Laboratories (UL):
  - 1. 1 - Standard for Flexible Metal Conduit.
  - 2. 6 - Standard for Electrical Rigid Metal Conduit - Steel.
  - 3. 6A - Standard for Electrical Rigid Metal Conduit - Aluminum, Red Brass, and Stainless Steel.
  - 4. 360 - Standard for Liquidtight Flexible Steel Conduit.
  - 5. 651 - Standard for Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings.
  - 6. 651B - Standard for Continuous Length HDPE Conduit.
  - 7. 797 - Standard for Electrical Metallic Tubing - Steel.
  - 8. 1242 - Standard for Electrical Intermediate Metal Conduit - Steel.
  - 9. 1653 - Standard for Electrical Nonmetallic Tubing.
  - 10. 1660 - Standard for Liquidtight Flexible Nonmetallic Conduit.
  - 11. 1684 - Standard for Reinforced Thermosetting Resin Conduit (RTRC) and Fittings.

### **1.03 DEFINITIONS**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. Specific definitions and abbreviations:
  - 1. Conduit bodies: A separate portion of a conduit system that provides access through a removable cover to the interior of the system at a junction of 2 or more conduit sections. Includes, but not limited to, Shapes C, E, LB, T, X, etc.
  - 2. Conduit fitting: An accessory that primarily serves a mechanical purpose. Includes, but not limited to, bushings, locknuts, hubs, couplings, reducers, etc.
  - 3. GRC: Galvanized rigid steel conduit.
  - 4. PCS: Polyvinyl chloride (PVC) coated rigid steel conduit.
  - 5. PVC: Polyvinyl chloride rigid nonmetallic conduit.
  - 6. HDPE: High-density polyethylene conduit.
  - 7. SLT: Sealtight-liquidtight flexible conduit.
  - 8. FRD: Fiberglass-reinforced duct.
  - 9. NPT: National pipe thread.

### **1.04 SYSTEM DESCRIPTION**

- A. Provide conduits, conduit bodies, fittings, junction boxes, and all necessary components, whether or not indicated on the Drawings, as required, to install a complete electrical raceway system.

### **1.05 SUBMITTALS**

- A. Furnish submittals as specified in Sections 01\_33\_00 - Submittal Procedures and 26\_05\_00 - Common Work Results for Electrical.
- B. Product data:
  - 1. Furnish complete manufacturer's catalog sheets for every type and size of conduit, fitting, conduit body, and accessories to be used on the Project.
  - 2. Furnish complete manufacturer's recommended special tools to be used for installation if required.
- C. Record Documents:
  - 1. Incorporate all changes in conduit routing on electrical plan drawings.
  - 2. Dimension underground and concealed conduits from building lines.
  - 3. Furnish hard copy drawings and electronic files in PDF.

### **1.06 QUALITY ASSURANCE**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. All conduits, conduit bodies, and fittings shall be UL listed and labeled.

### **1.07 DELIVERY, STORAGE, AND HANDLING**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.
- B. Do not expose non-metallic conduit to direct sunlight.
- C. Do not store conduit in direct contact with the ground.

## **1.08 PROJECT OR SITE CONDITIONS**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

## **1.09 SEQUENCING**

- A. Before installing any conduit or locating any device box:
  - 1. Verify all dimensions and space requirements and make any minor adjustments to the conduit system as required to avoid conflicts with the building structure, other equipment, or the work of other trades.

## **1.10 SCHEDULING (NOT USED)**

## **1.11 WARRANTY**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

## **1.12 SYSTEM START-UP**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

## **1.13 OWNER'S INSTRUCTIONS (NOT USED)**

## **1.14 MAINTENANCE (NOT USED)**

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Galvanized rigid steel conduit:
  - 1. One of the following or equal:
    - a. Western Tube and Conduit.
    - b. Allied Tube and Conduit.
    - c. Wheatland Tube Co.
- B. Sealtight-liquidtight flexible conduit:
  - 1. One of the following or equal:
    - a. Southwire.
    - b. AFC Cable Systems.
    - c. Electri-Flex Co.
    - d. Anaconda.
- C. Rigid nonmetallic PVC conduit:
  - 1. One of the following or equal:
    - a. Carlon.
    - b. Cantex.
    - c. Triangle Conduit and Cable.
- D. Conduit bodies:
  - 1. One of the following or equal:
    - a. Crouse-Hinds.
    - b. Appleton.

- c. O-Z/Gedney.
  - d. Ocal, Inc.
  - e. Robroy Ind.
  - f. Calbond.
  - g. Carlon.
- E. Joint compound:
- 1. The following or equal:
    - a. Thomas and Betts.
- F. Galvanized rigid steel conduit expansion fittings:
- 1. One of the following or equal:
    - a. Crouse-Hinds.
    - b. Appleton.
    - c. O-Z/Gedney.
- G. Conduit sleeve:
- 1. One of the following or equal:
    - a. Crouse-Hinds.
    - b. Appleton.
    - c. O-Z/Gedney.
- H. Conduit seals:
- 1. One of the following or equal:
    - a. Appleton.
    - b. Crouse-Hinds.
    - c. O-Z/Gedney.
- I. Conduit through wall and floor seals:
- 1. The following or equal:
    - a. O-Z/Gedney:
      - 1) Type "WSK."
      - 2) Type "CSM."

**2.02 EXISTING PRODUCTS (NOT USED)**

**2.03 MATERIALS (NOT USED)**

**2.04 MANUFACTURED UNITS (NOT USED)**

**2.05 EQUIPMENT (NOT USED)**

**2.06 COMPONENTS**

- A. GRC:
- 1. All threads: NPT standard conduit threads with a 3/4-inch taper per foot:
    - a. Running conduit threads are not acceptable.
  - 2. Hot-dip galvanized inside and out:
    - a. Ensures complete coverage and heats the zinc and steel to a temperature that ensures the zinc alloys with the steel over the entire surface.
    - b. Electro-galvanizing is not acceptable.
  - 3. Manufactured in accordance with:
    - a. UL-6.



- b. ANSI C80.1.
- 4. Coated conduit NEMA Standard RN-1:
  - a. The galvanized coating may not be disturbed or reduced in thickness during the cleaning and preparatory process.
- 5. Factory-bonded PVC jacket:
  - a. The exterior galvanized surfaces shall be coated with primer before PVC coating to ensure a bond between the zinc substrate and the PVC coating.
  - b. Nominal thickness of the exterior PVC coating shall be 0.040 inch except where part configuration or application of the piece dictates otherwise.
  - c. PVC coating on conduits and associated fittings shall have no sags, blisters, lumps, or other surface defects and shall be free of holes and holidays.
  - d. The PVC adhesive bond on conduits and fittings shall be greater than the tensile strength of the PVC plastic coating:
    - 1) Confirm bond with certified test results.
- 6. A urethane coating shall be uniformly and consistently applied to the interior of all conduits and fittings:
  - a. Nominal thickness of 0.002 inch.
  - b. Conduits having areas with thin or no coating are not acceptable.
  - c. All threads shall be coated with urethane.
- 7. The PVC exterior and urethane interior coatings applied to the conduits shall afford sufficient flexibility to permit field bending without cracking or flaking at temperature above 30 degrees Fahrenheit (-1 degree Celsius).

B. SLT:

- 1. Temperature rated for use in the ambient temperature at the installed location but not less than the following:
  - a. General purpose:
    - 1) Temperature range: -20 degrees Celsius to +80 degrees Celsius.
  - b. Oil-resistant:
    - 1) Temperature range: -20 degrees Celsius to +60 degrees Celsius.
- 2. Sunlight-resistant, weatherproof, and watertight.
- 3. Manufactured from single strip steel, hot-dip galvanized on all 4 sides before conduit fabrication.
- 4. Strip steel spiral wound resulting in an interior that is smooth and clean for easy wire pulling.
- 5. Overall PVC jacket.
- 6. With integral copper ground wire, built in the core, in conduit trade sizes 1/2 inch through 1-1/4 inch.

C. PVC:

- 1. Extruded from virgin PVC compound:
  - a. Schedule 40 unless otherwise specified.
- 2. Rated for 90 degrees Celsius conductors or cable.
- 3. Rated for use in direct sunlight.

D. Conduit bodies:

- 1. Material consistent with conduit type:
  - a. Malleable iron bodies and covers when used with Type GRC.
  - b. PVC bodies and covers when used with Type PVC.

- c. PVC-coated malleable iron bodies and covers when used with Type PCS.
2. Conduit bodies to conform to Form 8, Mark 9, or Mogul design:
  - a. Mogul design conforming to NEC requirements for bending space for large conductors for conduit trade sizes of 1 inch and larger with conductors #4 AWG and larger, or where required for wire-bending space.
3. Gasketed covers attached to bodies with stainless steel screws secured to threaded holes in conduit body.

## 2.07 ACCESSORIES

- A. Connectors and fittings:
  1. Manufactured with compatible materials to the corresponding conduit.
- B. Insulated throat metallic bushings:
  1. Construction:
    - a. Malleable iron or zinc-plated steel when used with steel conduit.
    - b. Positive metallic conduit end stop.
    - c. Integrally molded non-combustible phenolic-insulated surfaces rated at 150 degrees Celsius.
    - d. Use fully insulated bushings on nonmetallic conduit system made of high-impact 150 degrees Celsius rated non-combustible thermosetting phenolic.
- C. Insulated grounding bushings:
  1. Construction:
    - a. Malleable iron or steel, zinc-plated, with a positive metallic end stop.
    - b. Integrally molded non-combustible phenolic-insulated surfaces rated at 150 degrees Celsius.
    - c. Tin-plated copper grounding saddle for use with copper or aluminum conductors.
- D. Electrical unions (Erickson Couplings):
  1. Construction:
    - a. Malleable iron for use with steel conduit.
    - b. Concrete tight, 3-piece construction.
- E. SLT fittings:
  1. Construction:
    - a. Malleable iron.
    - b. Furnished with locknut and sealing ring.
    - c. Liquidtight, raintight, oiltight.
    - d. Insulated throat.
    - e. Furnish as straight, 45-degree elbows, and 90-degree elbows.
    - f. Designed to prevent sleeving:
      - 1) Verify complete bonding of the raceway jacket to the plastic gasket seal.
    - g. Equipped with grounding device to provide ground continuity irrespective of raceway core construction. Grounding device, if inserted into raceway and directly in contact with conductors, shall have rolled-over edges for sizes under 5 inches.
    - h. Where terminated into a threadless opening using a threaded hub fitting, a suitable moisture-resistant/oil-resistant synthetic rubber gasket shall be

provided between the outside of the box or enclosure and the fitting shoulder. Gasket shall be adequately protected by and permanently bonded to a metallic retainer.

- F. Hubs for threaded attachment of steel conduit to sheet metal enclosures:
  - 1. Construction:
    - a. Insulated throat.
    - b. PVC-coated when used in corrosive areas.
    - c. Bonding locknut.
    - d. Recessed neoprene o-ring to ensure watertight and dusttight connector.
    - e. 1/2-inch through 1-1/4-inch steel zinc electroplated.
    - f. 1-1/2-inch through 6-inch malleable iron zinc plated.
  - 2. Usage:
    - a. All conduits in damp, wet, outdoor, and corrosive areas shall use threaded hubs for connections to sheet metal enclosures.
  
- G. PVC fittings:
  - 1. Shall include the following:
    - a. Couplings.
    - b. Terminal adapters.
    - c. Female adapters.
    - d. Caps.
    - e. Reducer bushings.
    - f. Duct couplings.
    - g. End bells.
    - h. Expansion couplings.
    - i. Duct couplings: 5 degree.
    - j. C-Type pull fittings.
    - k. E-Type pull fittings.
    - l. LB-Type pull fittings.
    - m. LL-Type pull fittings.
    - n. LR-Type pull fittings.
    - o. T-Type pull fittings.
    - p. X-Type pull fittings.
    - q. Service entrance caps.
  - 2. Materials:
    - a. All devices shall be made of PVC, using the same materials as used for Type PVC conduit.
    - b. All metal hardware shall be stainless steel.
  
- H. Through wall and floor seals:
  - 1. Materials:
    - a. Body: Casting of malleable or ductile iron with a hot-dip galvanized finish.
    - b. Grommet: Neoprene.
    - c. Pressure rings: PVC-coated steel.
    - d. Disc material: PVC-coated steel.
  
- I. Expansion/deflection couplings:
  - 1. Use to compensate for movement in any directions between 2 conduit ends where they connect.
  - 2. Shall allow movement of 3/4 inch from the normal in all directions.

3. Shall allow angular movement for a deflection of 30 degrees from normal in any direction.
4. Constructed to maintain electrical continuity of the conduit system.
5. Materials:
  - a. End couplings: Bronze or galvanized ductile iron.
  - b. Sleeve: Neoprene.
  - c. Bands: Stainless steel.
  - d. Bonding jumper: Tinned copper braid.

J. Expansion couplings:

1. Shall allow for expansion and contraction of conduit:
  - a. Permitting 8-inch movement, 4 inches in either direction.
2. Constructed to maintain electrical continuity of the conduit system.
3. Materials:
  - a. Head: Malleable or ductile iron.
  - b. Sleeve: Steel.
  - c. Insulating bushing: Phenolic.
  - d. Finish: Hot-dip galvanized.
  - e. PVC-coated when used with Type PCS.

**2.08 MIXES (NOT USED)**

**2.09 FABRICATION (NOT USED)**

**2.10 FINISHES (NOT USED)**

**2.11 SOURCE QUALITY CONTROL**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**PART 3 EXECUTION**

**3.01 EXAMINATION (NOT USED)**

**3.02 PREPARATION (NOT USED)**

**3.03 INSTALLATION**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

B. General:

1. Conduit routing:
  - a. The electrical drawings are diagrammatic in nature:
    - 1) Install conduit runs as specified with schematic representation indicated on the Drawings and as specified.
    - 2) Modify conduit runs to suit field conditions, as accepted by the Owner:
      - a) Make changes in conduit locations that are consistent with the design intent but are dimensionally different, or routing to bypass obstructions.
      - b) Make changes in conduit routing due to the relocation of equipment.

- 3) The electrical drawings do not indicate all required junction boxes and pull boxes:
  - a) Provide junction boxes and pull boxes to facilitate wire pulling as required:
    - (1) To meet cable manufacturer's pulling tension requirements.
    - (2) To limit total conduit bends between pull locations.
  - b) Install junction boxes and pull boxes at locations acceptable to the Owner.
- b. The Contractor is responsible for any deviations in general location, conduit size, routing, or changes to the conduit schedule without the express written approval or direction by the Owner:
  - 1) The Owner is the sole source in determining whether the change is constituted as a deviation.
  - 2) Perform any changes resulting in additional conduits, or extra work from such deviations.
  - 3) Incorporate any deviations on the Record Documents.
2. Use only tools recommended by the conduit manufacturer for assembling the conduit system.
3. Provide adequate clearances from high-temperature surfaces for all conduit runs. Provide minimum clearances as follows:
  - a. Clearance of 6 inches from surfaces 113 degrees Fahrenheit to 149 degrees Fahrenheit.
  - b. Clearance of 12 inches from surfaces greater than 149 degrees Fahrenheit.
  - c. Where it is necessary to route conduits close to high-temperature surfaces, provide a high-reflectance thermal barrier between the conduit and the surface.
4. Install conduits with total conduit bends between pull locations less than or equal to 270 degrees.
5. Route all exposed conduits to preserve headroom, access space and work space, and to prevent tripping hazards and clearance problems:
  - a. Install conduit runs so that runs do not interfere with proper and safe operation of equipment and do not block or interfere with ingress or egress, including equipment-removal hatches.
  - b. Route conduits to avoid drains or other gravity lines. Where conflicts occur, relocate the conduit as required.
6. Plug conduits brought into pull boxes, manholes, handholes, and other openings until used to prevent entrance of moisture.
7. For existing and new 2-inch and larger conduit runs, snake conduits with a conduit cleaner equipped with a cylindrical mandrel of a diameter not less than 85 percent of nominal diameter of the conduit:
  - a. Remove and replace conduits through which mandrel will not pass.
8. Provide all sleeves and openings required for the passage of electrical raceways or cables even when these openings or sleeves are not specifically indicated on the Drawings.
9. Install complete conduit systems before conductors are installed.
10. Provide metallic conduits terminating in transformer, switchgear, motor control center, or other equipment conduit windows with grounding bushings and ground with a minimum No. 6 AWG ground wire.

C. Conduit usage:

1. Exposed conduits:
  - a. Rigid conduit:
    - 1) Install the rigid conduit type for each location as specified in Section 26\_05\_00 - Common Work Results for Electrical.
    - 2) Minimum size: 3/4-inch.
  - b. Flexible conduit:
    - 1) Use flexible conduit for final connections between rigid conduit and motors, vibrating equipment, instruments, control equipment, or where required for equipment servicing:
      - a) Use Type SLT with rigid metallic conduit.
    - 2) Minimum size: 3/4-inch:
      - a) 1/2 when required for connection to instruments.
    - 3) Maximum length:
      - a) Fixed equipment:

Conduit Trade Size	Flexible Conduit Length (inch)
3/4	18
1	18
1-1/4	18
1-1/2	18
2	36
2-1/2	36
3	36
3-1/2	38
4	40

- b) Removable instruments or hinged equipment:
  - (1) As required to allow complete removal or full movement without disconnecting or stressing the conduit.

D. Conduit joints and bends:

1. General:
  - a. Keep bends and offsets in conduit runs to an absolute minimum.
  - b. All bends shall be symmetrical.
  - c. Provide large-radius factory-made bends for 1-1/4-inch trade size or larger.
  - d. Make field bends with a radius of not less than the requirements found in the NEC:
    - 1) The minimum bending radius of the cable must be less than the radius of the conduit bend.
    - 2) Make all field bends with power bending equipment or manual benders specifically intended for the purpose:
      - a) Make bends so that the conduit is not damaged and the internal diameter is not effectively reduced.
      - b) For the serving utilities, make bends to meet their requirements.
  - e. Replace all deformed, flattened, or kinked conduit.
2. Threaded conduit:

- a. Cut threads on rigid metallic conduit with a standard conduit-cutting die that provides a 3/4-inch per foot taper and to a length such that all bare metal exposed by the threading operation is completely covered by the couplings or fittings used. In addition, cut the lengths of the thread such that all joints become secure and wrench-tight just preceding the point where the conduit ends would butt together in couplings or where conduit ends would butt into the ends or shoulders of other fittings.
  - b. Thoroughly ream conduit after threads have been cut to remove burrs.
  - c. Use bushings or conduit fittings at conduit terminations.
  - d. On exposed conduits, repair scratches and other defects with galvanizing repair stick, Enterprise Galvanizing "Galvabar™," or CRC "Zinc It."
  - e. Coat conduit threads with an approved electrically conductive sealant and corrosion inhibitor that is not harmful to the conductor insulation:
    - 1) Apply to the male threads and tighten joints securely.
    - 2) Clean excess sealant from exposed threads after assembly.
  - f. Securely tighten all threaded connections.
  - g. Any exposed threaded surfaces must be cleaned and coated with a galvanizing solution so that all exposed surfaces have a galvanized protective coating.
3. PVC:
- a. Use approved solvent-weld cement specifically manufactured for the purpose. Spray-type cement is not allowed.
  - b. Apply heat for bends so that conduit does not distort or discolor. Use a spring mandrel as required to ensure full inside diameter at all bends:
    - 1) Utilize a heater specifically for PVC conduit as recommended by the conduit manufacturer.

E. Conduit sealing and drainage:

1. Conduit drainage and sealing other than required for hazardous and classified areas:
  - a. Provide conduit seals with drains in areas of high humidity and rapidly changing temperatures:
2. Install seals with drains at any location along conduit runs where moisture may condense or accumulate. This requirement includes, but is not limited to, the following locations: control panels, junction boxes, pullboxes, or low points of the conduit.

F. Expansion or expansion/deflection fittings:

1. General:
  - a. Align expansion coupling with the conduit run to prevent binding.
  - b. Follow manufacturer's instructions to set the piston opening.
  - c. Install expansion fittings across concrete expansion joints and at other locations where necessary to compensate for thermal or mechanical expansion and contraction.
  - d. Furnish fittings of the same material as the conduit system.

G. Miscellaneous:

1. Provide electrical unions at all points of union between ends of rigid conduit systems that cannot otherwise be coupled:
  - a. Running threads and threadless couplings are not allowed.
2. Replace any conduits installed that the Owner determines do not meet the requirements of this Specification.

3. Provide conduit housekeeping curb around all embedded or below-grade conduits exiting or entering the slab.

**3.04 ERECTION, INSTALLATION, APPLICATIONS, CONSTRUCTION (NOT USED)**

**3.05 REPAIR/RESTORATION**

**3.06 RE-INSTALLATION (NOT USED)**

**3.07 COMMISSIONING**

**3.08 FIELD QUALITY CONTROL**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**3.09 ADJUSTING (NOT USED)**

**3.10 CLEANING (NOT USED)**

**3.11 PROTECTION**

- A. As specified in Section 26\_05\_00 - Common Work Results for Electrical.

**3.12 SCHEDULES (NOT USED)**

END OF SECTION



**P A R T VI**

**STATE PREVAILING WAGE RATES AND  
GENERAL REQUIREMENTS**

## PREVAILING WAGE RATES

This project requires prevailing wages under [39.12 RCW](#). Any worker, laborer, or mechanic employed in the performance of any part of the work shall be paid not less than the applicable prevailing rate of wage.

The project site is located in Pierce County.

The effective date for prevailing wages on this project will be the **submittal deadline** with these exceptions:

- a. If the project is not awarded within six months of the submittal deadline, the award date is the effective date.
- b. If the project is not awarded pursuant to a competitive solicitation, the date the contract is executed is the effective date.
- c. Janitorial contracts follow WAC 296-127-023.

Except for janitorial contracts, these rates shall apply for the duration of the contract unless otherwise noted in the solicitation.

Look up prevailing rates of pay, benefits, and overtime codes from this link:

<https://secure.lni.wa.gov/wagelookup/>

## REQUIRED FILINGS

The contractor and all subcontractors covered under [39.12 RCW](#) shall submit to the Department of Labor and Industries (L&I) for work provided under this contract:

1. A Statement of Intent to Pay Prevailing Wages must be filed with and approved by L&I upon award of contract.
2. An Affidavit of Wages Paid must be filed with and approved by L&I upon job completion.

Payments cannot be released by the City until verification of these filings are received by the engineer. Additional information regarding these filings can be obtained by calling the Department of Labor & Industries, Prevailing Wage at 360-902-5335, <https://www.lni.wa.gov/> or by visiting their MY L&I account.

**P A R T VII**

**INSURANCE REQUIREMENTS**



# CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

---

This Insurance Requirements shall serve as an attachment and/or exhibit form to the Contract. The Agency entering a Contract with City of Tacoma, whether designated as a Supplier, Contractor, Vendor, Proposer, Bidder, Respondent, Seller, Merchant, Service Provider, or otherwise referred to as "Contractor".

## 1. GENERAL REQUIREMENTS

The following General Requirements apply to Contractor and to Subcontractor(s) performing services and/or activities pursuant to the terms of this Contract. Contractor acknowledges and agrees to the following insurance requirements:

- 1.1. Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the City of Tacoma.
- 1.2. Contractor shall keep in force during the entire term of the Contract, at no expense to the City of Tacoma, the insurance coverage and limits of liability listed below and for Thirty (30) calendar days after completion of all work required by the Contract, unless otherwise provided herein.
- 1.3. Liability insurance policies, except for Professional Liability and Workers' Compensation, shall:
  - 1.3.1. Name the City of Tacoma and its officers, elected officials, employees, and agents as **additional insured**
  - 1.3.2. Be considered primary and non-contributory for all claims with any insurance or self-insurance or limits of liability maintained by the City of Tacoma
  - 1.3.3. Contain a "Waiver of Subrogation" clause in favor of City of Tacoma
  - 1.3.4. Include a "Separation of Insureds" clause that applies coverage separately to each insured and additional insured
  - 1.3.5. Name the "City of Tacoma" on certificates of insurance and endorsements and not a specific person or department
  - 1.3.6. Be for both ongoing and completed operations using Insurance Services Office (ISO) form CG 20 10 04 13 and CG 20 37 04 13 or the equivalent
  - 1.3.7. Be satisfied by a single primary limit or by a combination of a primary policy and a separate excess umbrella
- 1.4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements below. Verification of coverage shall include:
  - 1.4.1. An ACORD certificate or equivalent
  - 1.4.2. Copies of requested endorsements
- 1.5. Contractor shall provide to City of Tacoma Procurement & Payable Division, prior to the execution of the Contract, Certificate(s) of Insurance and endorsements from the insurer certifying the coverage of all insurance required herein. Contract or Permit number and the City of Tacoma Department must be shown on the Certificate of Insurance.
- 1.6. A renewal Certificate of Insurance shall be provided electronically prior to coverage



# CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

---

expiration via email sent annually to [coi@cityoftacoma.org](mailto:coi@cityoftacoma.org).

- 1.7. Contractor shall send a notice of cancellation or non-renewal of this required insurance within Thirty (30) calendar days to [coi@cityoftacoma.org](mailto:coi@cityoftacoma.org).
- 1.8. "Claims-Made" coverages, except for pollution coverage, shall be maintained for a minimum of three years following the expiration or earlier termination of the Contract. Pollution coverage shall be maintained for six years following the expiration of the Contract. The retroactive date shall be prior to or coincident with the effective date of the Contract.
- 1.9. Each insurance policy must be written by companies licensed or authorized (or issued as surplus line by Washington surplus line broker) in the State of Washington pursuant to RCW 48 with an (A-) VII or higher in the A.M. Best key rating guide.
- 1.10. Contractor shall not allow any insurance to be cancelled, voided, suspended, or reduced in coverage/limits, or lapse during any term of this Contract. Otherwise, it shall constitute a material breach of the Contract.
- 1.11. Contractor shall be responsible for the payment of all premiums, deductibles and self-insured retentions, and shall indemnify and hold the City of Tacoma harmless to the extent such a deductible or self-insured retained limit may apply to the City of Tacoma as an additional insured. Any deductible or self-insured retained limits in excess of Twenty Five Thousand Dollars (\$25,000) must be disclosed and approved by City of Tacoma Risk Manager and shown on the Certificate of Insurance.
- 1.12. City of Tacoma reserves the right to review insurance requirements during any term of the Contract and to require that Contractor make reasonable adjustments when the scope of services changes.
- 1.13. All costs for insurance are included in the initial Contract and no additional payment will be made by City of Tacoma to Contractor.
- 1.14. Insurance coverages specified in this Contract are not intended and will not be interpreted to limit the responsibility or liability of Contractor or Subcontractor(s).
- 1.15. Failure by City of Tacoma to identify a deficiency in the insurance documentation or to verify coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- 1.16. If Contractor is a government agency or self-insured for any of the above insurance requirements, Contractor shall be liable for any self-insured retention or deductible portion of any claim for which insurance is required. A certification of self-insurance shall be attached and incorporated by reference and shall constitute compliance with this Section.

## 2. SUBCONTRACTORS



# CITY OF TACOMA

## INSURANCE REQUIREMENTS FOR CONTRACTS

---

It is Contractor's responsibility to ensure that each subcontractor obtain and maintain adequate liability insurance coverage that applies to the service provided. Contractor shall provide evidence of such insurance upon City of Tacoma's request. Failure of any subcontractor to comply with insurance requirements does not limit Contractor's liability or responsibility.

### 3. REQUIRED INSURANCE AND LIMITS

The insurance policies shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve Contractor from liability in excess of such limits.

#### 3.1 Commercial General Liability Insurance

Contractor shall maintain Commercial General Liability Insurance policy with limits not less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) annual aggregate. This policy shall be written on ISO form CG 00 01 04 13 or its equivalent and shall include product liability especially when a Contract is solely for purchasing supplies. It includes Products and Completed Operations for three years following the completion of work related to performing construction services. It shall be endorsed to include: A per project aggregate policy limit (using ISO form CG 25 03 05 09 or equivalent endorsement)

#### 3.2 Commercial (Business) Automobile Liability Insurance

Contractor shall maintain Commercial Automobile Liability policy with limits not less than One Million Dollars (\$1,000,000) each accident for bodily injury and property damage and bodily injury and property damage coverage for owned (if any), non-owned, hired, or leased vehicles. Commercial Automobile Liability Insurance shall be written using ISO form CA 00 01 or equivalent. Contractor must also maintain MCS 90 and CA 99 48 endorsements or equivalent if "Pollutants" are to be transported unless in-transit Pollution coverage is covered under required Contractor's Pollution Liability Insurance.

#### 3.3 Workers' Compensation

Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington, as well as any other similar coverage required for this work by applicable federal laws of other states. Contractor must comply with their domicile State Industrial Insurance laws if it is outside the State of Washington.

#### 3.4 Employers' Liability Insurance

Contractor shall maintain Employers' Liability coverage with limits not less than One Million Dollars (\$1,000,000) each employee, One Million Dollars (\$1,000,000) each accident, and One Million Dollars (\$1,000,000) policy limit.

#### 3.5 Installation Floater Insurance

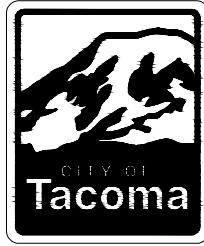
Contractor shall maintain during the term of the Contract, at its own expense, Installation Floater Insurance covering Contractor's labor, materials, and equipment to be used for completion of the work performed under this Contract against all risks of direct physical loss, excluding earthquake and flood, for an amount equal to the full amount of the Contract improvements.

#### 3.6 Other Insurance

Other insurance may be deemed appropriate to cover risks and exposures related to the scope of work or changes to the scope of work required by City of Tacoma. The costs of such necessary and appropriate Insurance coverage shall be borne by Contractor.

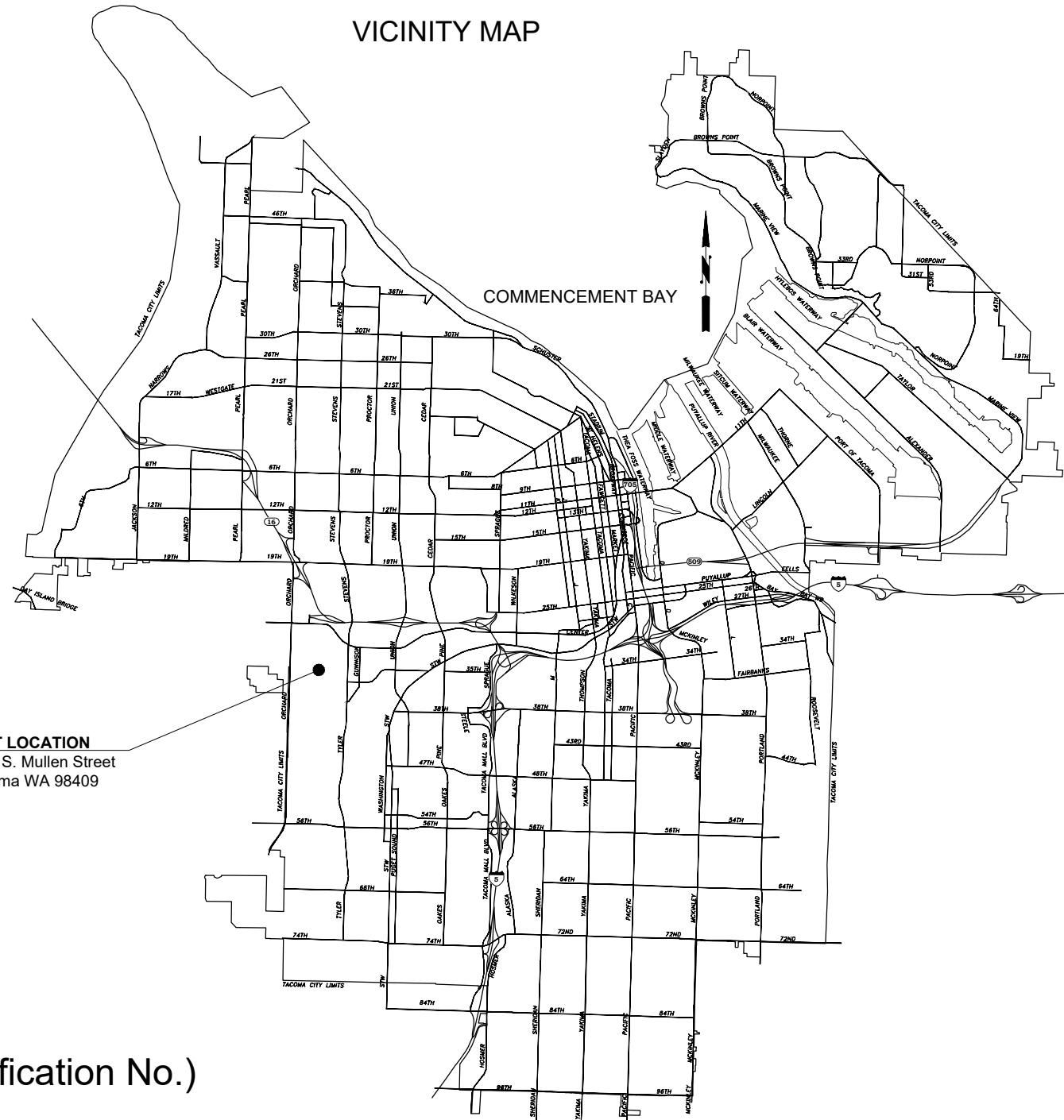
**P A R T V I I I**

**P L A N S**



# SWM Expanded Polystyrene Densifier

Environmental Services Department  
January 2025



## INDEX OF DRAWINGS

SHEET NUMBER	TITLE OF DRAWINGS
1	Cover Sheet
A-1	Abbreviations, General Notes and Symbols
A-3	Floor Plan
A-5	Exterior Elevations
M-1	Mechanical Symbols, Abbreviations, Notes and Schedules
E-1	Abbreviations, General Notes and Symbols
E-3	Electrical Power, Lighting, and Fire Alarm Plan
E-5	Electrical Schedules

ENV-02013-03  
ES24-0213N (Specification No.)

BID SET



GENERAL NOTES

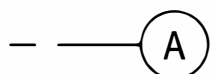
ABBREVIATIONS

1. VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK. NOTIFY THE DESIGNER OF RECORD IN WRITING OF ANY EXISTING CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE DRAWINGS.
2. DRAWINGS SHALL NOT BE SCALED. GRAPHIC SCALES ARE INCLUDED ON THE DRAWINGS FOR CONVENIENCE ONLY. WHERE DIMENSIONS SHOWN IN THE DRAWINGS CONFLICT, LARGER SCALE DRAWINGS SHALL HAVE PRECEDENCE.
3. WALLS ARE PARALLEL OR PERPENDICULAR TO COLUMN LINES UNLESS NOTED OTHERWISE.
4. CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION AND COORDINATION OF THE WORK OF ALL TRADES, TO ASSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS.
5. SEE SHEET NOTES ON INDIVIDUAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
6. DIMENSIONS SHOWN ARE TO THE FACE OF FINISH UNLESS OTHERWISE NOTED.
7. WHERE EXISTING EQUIPMENT OR FINISHES ARE DAMAGED BY DEMOLITION OR CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT, THE CONTRACTOR SHALL MAKE REPAIRS AND/OR REPLACE DAMAGED AREAS WITH NEW MATERIALS TO MATCH EXISTING, AT NO ADDITIONAL COST TO THE OWNER.

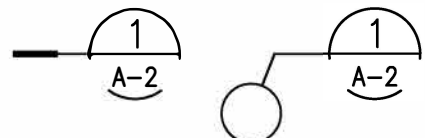
&	AND	EEWS	EMERGENCY EYE-WASH AND SHOWER	LB	POUND	S.O.G.	SLAB ON GRADE
⊙	AT	EEW	EMERGENCY EYE-WASH	MATL.	MATERIAL	SQ. FT.	SQUARE FEET
∅	DIAMETER	EJC	SEISMIC/EXPANSION JOINT COVER	MAX.	MAXIMUM	SQ. IN.	SQUARE INCHES
ADA	AMERICANS WITH DISABILITIES ACT	ELEC.	ELECTRIC, ELECTRICAL	MFR.	MANUFACTURER	SCW	SOLID CORE WOOD
AFF	ABOVE FINISHED FLOOR	EQ.	EQUAL	MFG.	MANUFACTURER	S.S.	STAINLESS STEEL
ALUM	ALUMINUM	E.W.C.	ELECTRIC WATER COOLER	MIN.	MINIMUM	SHT.	SHEET
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	EXP	EXPANSION	M.O.	MASONRY OPENING	SHTS.	SHEETS
APPROX.	APPROXIMATE, APPROXIMATELY	EXT.	EXTERIOR	MOD	MODIFIED	SIM.	SIMILAR
AC	ACCESSORY/FIXTURE	F.E.	FIRE EXTINGUISHER	MTD	MOUNTED	SPECS	SPECIFICATIONS
ACT	ACOUSTICAL CEILING TILE	FF	FACTORY FINISH	MTL.	METAL	STL.	STEEL
B.O.	BOTTOM OF	FIN.	FINISH(ED)	NO.	NUMBER	T	TILE
BD.	BOARD	F.O.	FACE OF	NOM.	NOMINAL	T & G	TONGUE AND GROOVE
BGS	BELOW GROUND SURFACE	FRT	FIRE RETARDANT TREATED	N/A	NOT APPLICABLE	THICK	THICKNESS
BLDG.	BUILDING	GA.	GAUGE	O.C.	ON CENTER	THRESH	THRESHOLD
BMP	BEST MANAGEMENT PRACTICES	G.C.	GENERAL CONTRACTOR	O.D.	OUTSIDE DIAMETER	T.O.	TOP OF
BRG.	BEARING	GSE	GROUND SERVICE EQUIPMENT	O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED	TYP	TYPICAL
CCTV	CLOSED-CIRCUIT TELEVISION	GSF	GROSS SQUARE FOOT	O.H.	OPPOSITE HAND	U.O.N.	UNLESS OTHERWISE NOTED
CL	CENTERLINE	GYP.	GYPSUM	OPNG.	OPENING	VB	VINYL BASE
CG	CEILING GRID	H	HIGH	OPP.	OPPOSITE	VCT	VINYL COMPOSITION TILE
CJ	CONSTRUCTION JOINT	HB.	HOSE BIBB	P	PAINT	VIF	VERIFY IN FIELD
CLG.	CEILING	HDW	HARDWARE	P. LAM.	PLASTIC LAMINATE	W	WIDE
CLR.	CLEAR	HGT.	HEIGHT	PART.	PARTITION, PARTIAL	W/	WITH
CMU	CONCRETE MASONRY UNIT	HM	HOLLOW METAL	PEMB	PRE-ENGINEERED METAL BUILDING	WD	WOOD
COL.	COLUMN	HT.	HEIGHT	PLYWD.	PLYWOOD	WSEC	WASHINGTON STATE ENERGY CODE
COLS.	COLUMNS	I.D.	INSIDE DIAMETER	PL	PLATE/PLASTIC LAMINATE	WWF	WELDED WIRE FABRIC
CONC.	CONCRETE	i.e.	THAT IS	PTD	PAINTED		
CONT.	CONTINUOUS	INSUL.	INSULATION	RECEP.	RECEPTACLE		
D.S.	DOWNSPOUT	INT	INTERIOR	REF.	REFER, REFERENCE		
DIA.	DIAMETER	JAN.	JANITOR	REQ'D	REQUIRED		
DIM.	DIMENSION	JT.	JOINT	R.O.	ROUGH OPENING		
DISP.	DISPLAY OR DISPENSER						
DTL.	DETAIL						

REFERENCE SYMBOLS USED ON ARCHITECTURAL DRAWINGS

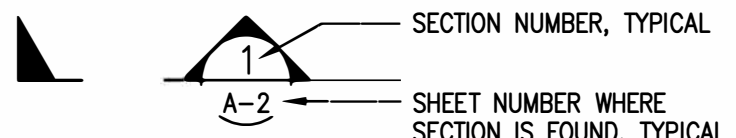
STRUCTURAL GRID



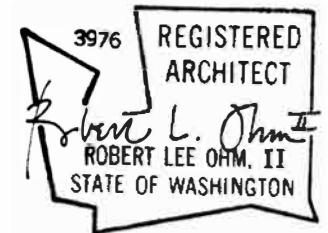
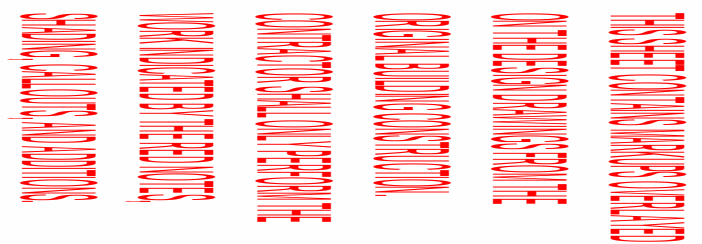
DETAIL CALL OUTS



BUILDING SECTION



BUILDING ELEVATION



ISSUED FOR BID 1-7-2011



DATE	SCALE
1-7-2011	NONE
DESIGNED	CHECKED
D. TAUBER	R. OHM
DRAWN	PROJECT NAME
12-10-2010	PEMB BLDG
DRAWING NAME	
ABBREV. NOTES, SYMBOLS	

CITY OF TACOMA  
DEPARTMENT OF PUBLIC WORKS  
DENSIFIER BUILDING  
EPS RECYCLING FACILITY  
ABBREVIATIONS, GENERAL NOTES AND SYMBOLS

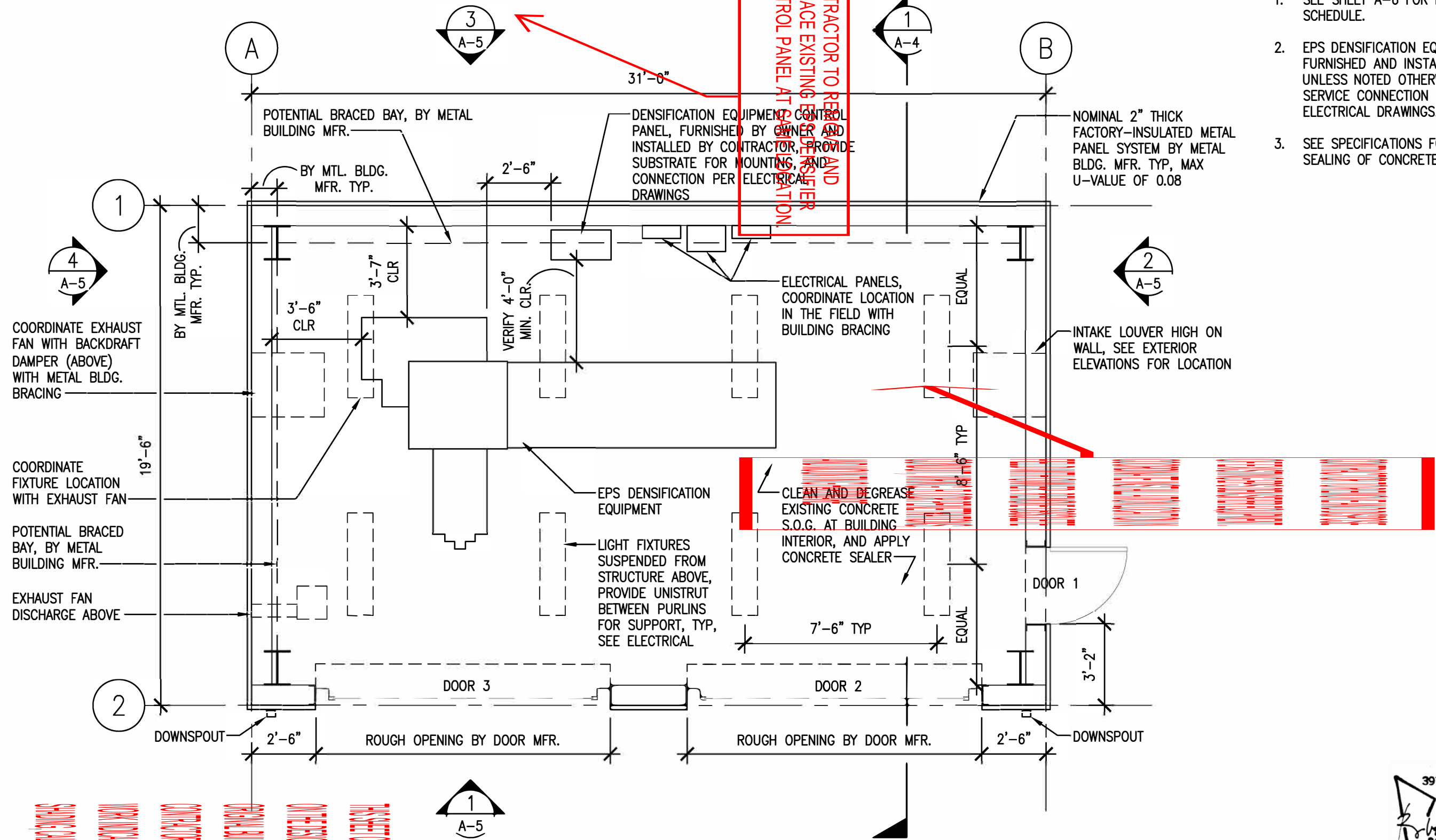
ENV-02007  
33762624  
SHEET NO. A-1  
SHEET 6 OF 23

\\Seacocon\163\tacoma Solid Waste\6 Densifier Building\3 Dwgs\A-1 Abbrev & Notes.dwg Jan 07, 2011 - 4:32pm

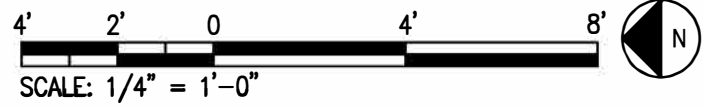
\\Seacocon\163\Tacoma Solid Waste\6 Densifier Building\3 Dwgs\A-3 Floor Plan.dwg Jan 07, 2011 - 4:32pm

**SHEET NOTES:**

1. SEE SHEET A-6 FOR DOOR AND FRAME SCHEDULE.
2. EPS DENSIFICATION EQUIPMENT WILL BE FURNISHED AND INSTALLED BY OTHERS UNLESS NOTED OTHERWISE. COORDINATE SERVICE CONNECTION FOR EQUIPMENT PER ELECTRICAL DRAWINGS.
3. SEE SPECIFICATIONS FOR CLEANING AND SEALING OF CONCRETE SLAB ON GRADE.



**1 FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



3976 REGISTERED ARCHITECT  
*Robert L. Ohm II*  
ROBERT LEE OHM, II  
STATE OF WASHINGTON

ISSUED FOR BID 1-7-2011

**URS**  
1501 4th Avenue Suite 1400  
Seattle, WA 98101-1616  
P: 206-438-2700 F: 866-495-5288

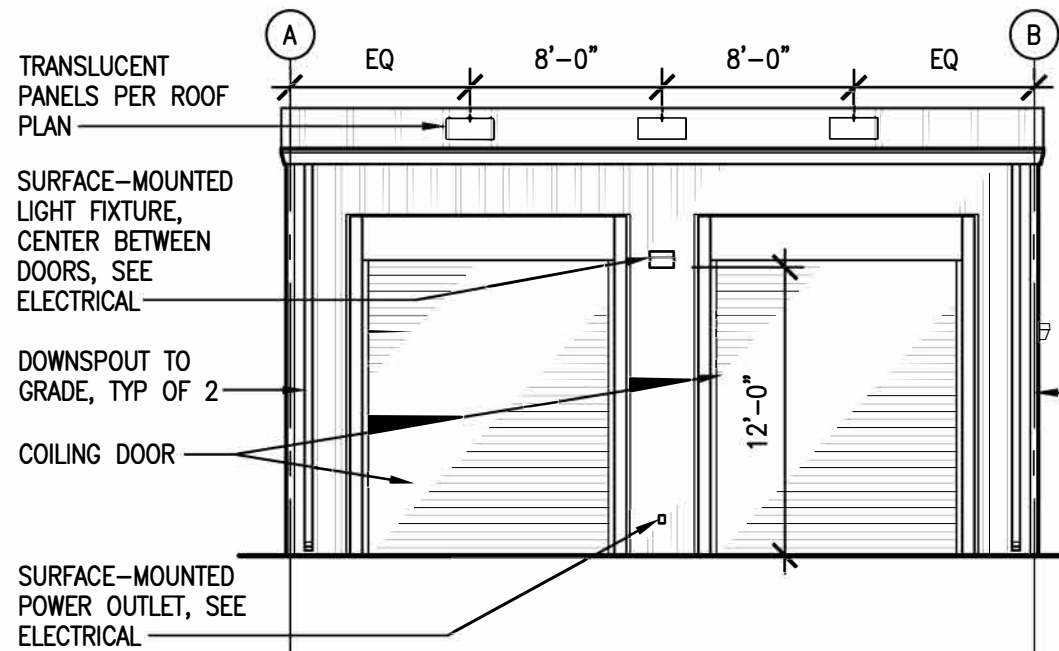
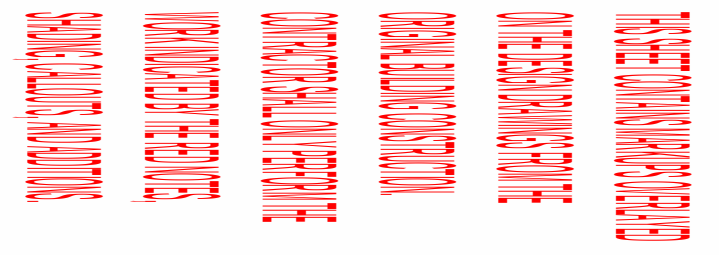
DATE	SCALE
1-7-2011	1/4" = 1'-0"
DESIGNED	CHECKED
D. TAUBER	R. OHM
DRAWN	PROJECT NAME
12-10-2010	PEMB BLDG
DRAWING NAME	
FLOOR PLAN	

CITY OF TACOMA  
DEPARTMENT OF PUBLIC WORKS  
DENSIFIER BUILDING  
EPS RECYCLING FACILITY  
FLOOR PLAN

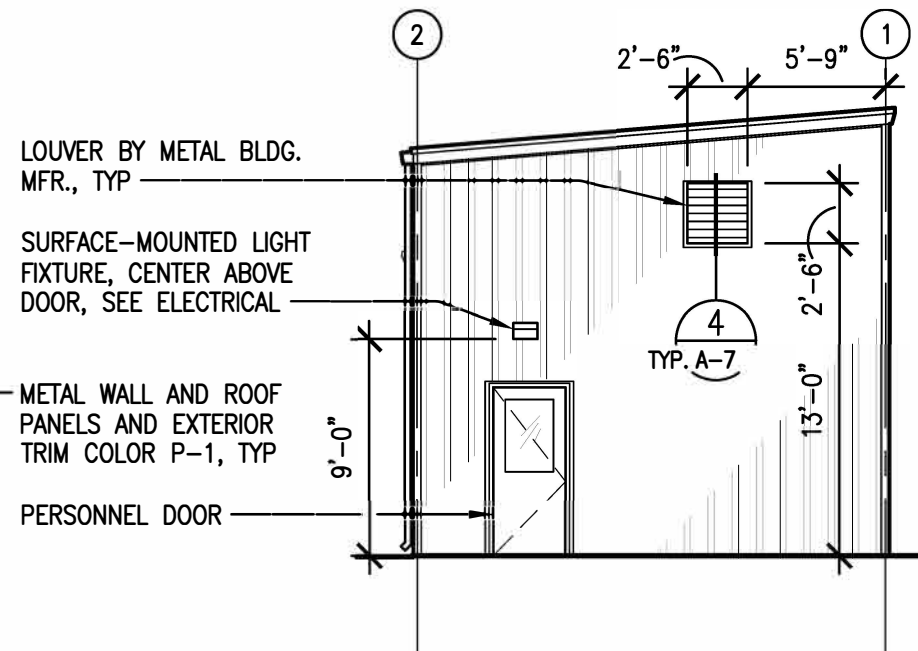
ENV-02007  
33762624  
SHEET NO. **A-3**  
SHEET 8 OF 23

**SHEET NOTES:**

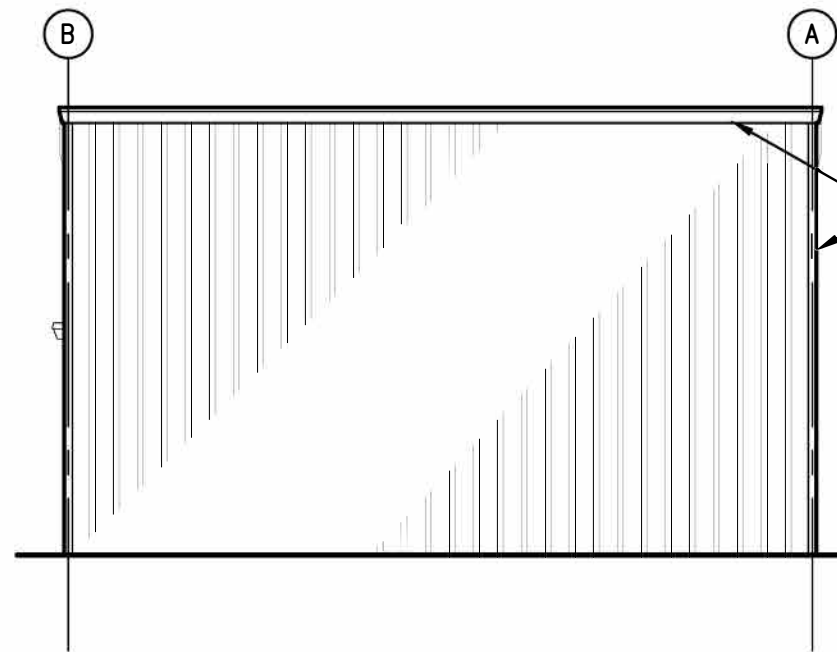
- SEE SHEET A-6 FOR FINISH DESIGNATIONS.



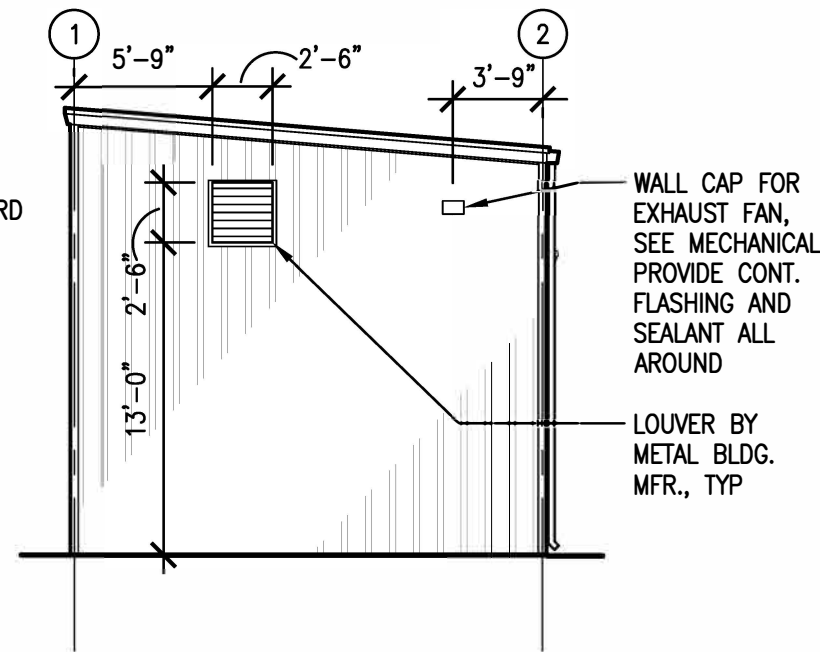
**1 WEST ELEVATION**  
A-5 SCALE: 1/8" = 1'-0"



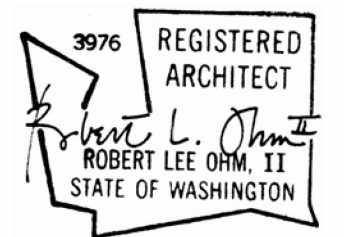
**2 SOUTH ELEVATION**  
A-5 SCALE: 1/8" = 1'-0"



**3 EAST ELEVATION**  
A-5 SCALE: 1/8" = 1'-0"



**4 NORTH ELEVATION**  
A-5 SCALE: 1/8" = 1'-0"



ISSUED FOR BID 1-7-2011

# MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	HEAVY LINE INDICATES NEW WORK
	LIGHT LINE INDICATES EXISTING WORK OR BACKGROUND
	KEY NOTE CALLOUT
	REVISION CALLOUT

# SYMBOLS

DOUBLE	SINGLE	DESCRIPTION
		DUCT: 1ST SIZE (IN) INDICATES SIDE SHOWN, 2ND SIZE (IN) INDICATES SIDE NOT SHOWN, INSIDE FREE AREA
		SUPPLY AIR DUCT - TURNING UP OR TOWARD
		SUPPLY AIR DUCT - TURNING DOWN OR AWAY
		RETURN OR EXHAUST AIR DUCT - TURNING UP OR TOWARD
		RETURN OR EXHAUST AIR DUCT - TURNING DOWN OR AWAY
		SUPPLY GRILLE (SIDEWALL)
		RETURN/EXHAUST GRILLE (SIDEWALL)

# MECHANICAL ABBREVIATIONS

AFF	ABOVE FINISH FLOOR	LVG	LEAVING
ARCH	ARCHITECTURAL	MAX	MAXIMUM
BDD	BACKDRAFT DAMPER	MBH	BRITISH THERMAL UNIT PER HOUR (THOUSAND)
BHP	BRAKE HORSEPOWER	MCA	MINIMUM CURRENT AMPACITY
CAP	CAPACITY	MECH	MECHANICAL
CENT	CENTRIFUGAL	MFR	MANUFACTURER
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
CONN	CONNECTION	MOD or M	MOTOR OPERATED DAMPER
CONT	CONTINUATION	NC	NOISE CRITERIA
DEG	DEGREE	OA	OUTSIDE AIR
DIA	DIAMETER	PH	PHASE
DN	DOWN	POC	POINT OF CONNECTION
DWG	DRAWING	PSI	POUNDS PER SQUARE INCH
EF	EXHAUST FAN	QTY	QUANTITY
EFF	EFFICIENCY	RA	RETURN AIR
ESP	EXTERNAL STATIC PRESSURE	RPM	REVOLUTIONS PER MINUTE
EXH	EXHAUST	SA	SUPPLY AIR
EXIST (E)	EXISTING	SO	SCREENED OPENING
F	FAHRENHEIT	SP	STATIC PRESSURE
FLA	FULL LOAD AMPACITY	SPEC	SPECIFICATION
FLR	FLOOR	TSP	TOTAL STATIC PRESSURE
FPM	FEET PER MINUTE	TYP	TYPICAL
FT	FEET/FOOT	V	VENT
HP	HORSEPOWER	VEL	VELOCITY
IE	INVERT ELEVATION	WG	WATER GAUGE
IN	INCH	WSEC	WASHINGTON STATE ENERGY CODE
KW	KILOWATT		
KWH	KILOWATT HOUR		
LAT	LEAVING AIR TEMPERATURE		

# GENERAL NOTES

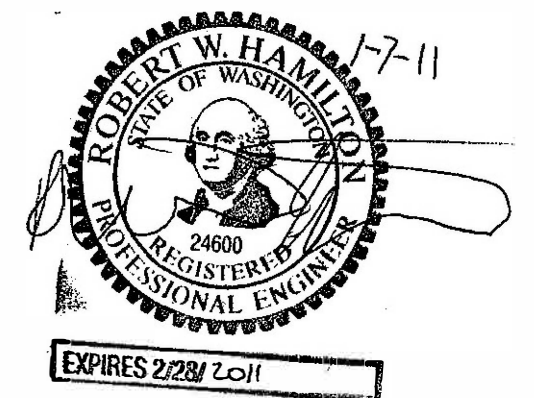
- THE MECHANICAL SYSTEM SHALL CONSIST OF ALL WORK SHOWN ON DRAWINGS, DIAGRAMS, AND AS DESCRIBED IN SPECIFICATIONS.
- THE MECHANICAL PLANS ARE DIAGRAMMATIC IN NATURE AND DO NOT SHOW ALL REQUIRED OFFSETS. CONTRACTOR DESIGN DRAWINGS TO PROVIDE ADDITIONAL CONSTRUCTION DETAILS.
- FAN MOTORS SHALL HAVE MINIMUM PERFORMANCE AT SPECIFIED RATING CONDITIONS NOT LESS THAN THE VALUES INDICATED IN ENERGY CODE
- PROVIDE NEC CODE MINIMUM HORIZONTAL AND VERTICAL WORKING CLEARANCES FOR ALL ELECTRICAL PANELS AND EQUIPMENT. OFFSET MECHANICAL WORK AS REQUIRED.
- COORDINATE ALL MECHANICAL WORK WITH THAT OF OTHER TRADES TO ENSURE PROPER AND ADEQUATE INTERFACE OF THEIR WORK WITH THE WORK OF THIS CONTRACTOR. PROVIDE COORDINATED SHOP DRAWINGS PRIOR TO FABRICATION AND INSTALLATION.
- COORDINATE EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT WITH STRUCTURAL STEEL, LIGHTS, AND MACHINERY PRIOR TO INSTALLATION.
- SEE ELECTRICAL DRAWINGS FOR SWITCH CONTROL OF FANS.
- RECORD DRAWINGS SHALL BE PROVIDED TO THE OWNER WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE. THE DRAWINGS SHALL INDICATE THE LOCATION AND PERFORMANCE DATA OF EQUIPMENT, GENERAL CONFIGURATION OF DUCTWORK AND PIPING DISTRIBUTION SYSTEMS, INCLUDING FLOW RATES AS A MINIMUM.
- OPERATION AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE OWNER AT PROJECT COMPLETION. AS A MINIMUM, THE MANUALS SHALL INCLUDE:
  - SUBMITTAL DATA.
  - OPERATION AND MAINTENANCE DATA FOR EQUIPMENT.
  - NAMES AND ADDRESSES OF SERVICE AGENCIES.
  - NARRATIVE OF HOW SYSTEM IS INTENDED TO OPERATE.
- VENTILATION SYSTEMS SHALL BE BALANCED AS REQUIRED BY THE WSEC.
- COMMISSIONING SHALL BE PROVIDED AND REPORT OF COMMISSIONING SHALL BE SUBMITTED TO THE OWNER AS REQUIRED BY THE WSEC.

# MECHANICAL EQUIPMENT SCHEDULES

FANS																			
MARK	BUILDING SERVED	SERVICE	LOCATION	TYPE	INLET SIZE (IN x IN.)	OVERALL SIZE (IN x IN.)	CFM	TSP (IN WG)	DRIVE TYPE	FAN RPM	FAN BHP	MAX SONES	MOTOR RPM	MOTOR HP (WATTS)	MOTOR VOLTAGE/ PH	WEIGHT	BASIS OF DESIGN		NOTES
																	MANUFACTURER	MODEL	
EF-1	DENSIFIER	HEAT/FUMES	WALL	WALL PANEL	25X25	25W/25HX24D	1500	0.375	DIRECT	1140	0.37	15	1140	1/3	120/1	110	COOKE	AWD - 20	
EF-2	DENSIFIER	VENTILATION	HUNG	CENTRIFUGAL CABINET	13X13	14X14	75	0.375	DIRECT	1700	1/25	4.8	1700	(80)	120/1	30	COOKE	GC-142	

1) CAST ALUMINUM BLADE, MFR WALL MOUNT FLANGE AND COLLAR WITH ALUMINUM BACKDRAFT DAMPER, OSHA WIRE GUARD INLET CAGE.

2) CEILING HUNG WITH UNISTRUT BELOW JOISTS WITH FAN REMOVEABLE THROUGH GRILLE. PROVIDE WITH STEEL FACE GRILLE, INTEGRAL BACKDRAFT DAMPER, MFR SPEED CONTROL, AND 10"X 7" WALL DISCHARGE CAP WITH 6" ROUND TRANSITION FITTING.



ISSUED FOR BID 1-7-2011

**URS**  
 1501 4th Avenue Suite 1400  
 Seattle, WA 98101-1616  
 P: 206-438-2700 F: 866-495-5288

DATE	SCALE
1-7-2011	NONE
DESIGNED	CHECKED
R. HAMILTON	J. GIBSON
DRAWN	PROJECT NAME
12-9-2010	PEMB BLDG
DRAWING NAME	
M-1 Abbrev & Notes.dwg	

CITY OF TACOMA DEPARTMENT OF PUBLIC WORKS		ENV-02007
DENSIFIER BUILDING EPS RECYCLING FACILITY		33762624
MECHANICAL SYMBOLS, ABBREVIATIONS, NOTES AND SCHEDULES		SHEET NO. M-1 16 OF 23

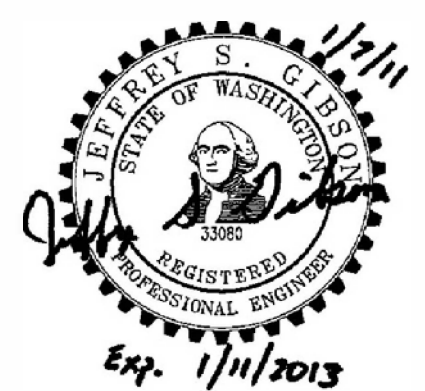
SHEET NOTES:  
 1. REPLACE AN EXISTING SPARE 40A CIRCUIT BREAKER WITH A 100A 3P BREAKER.

LEGEND

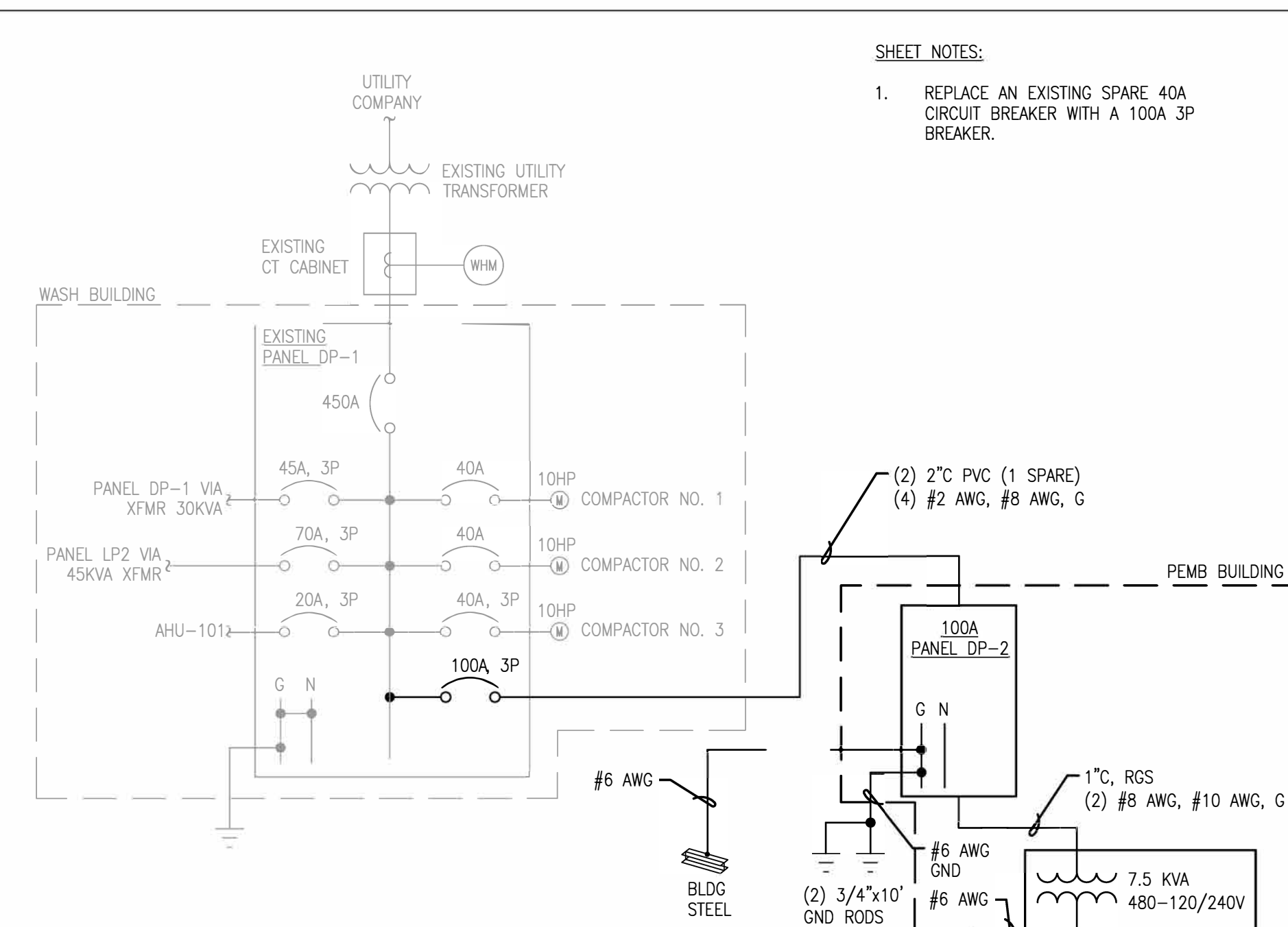
	HORN / STROBE ALARM 30 = STROBE CANDELA		OVERHEAD LIGHT FIXTURE
	STROBE ALARM 30 = STROBE CANDELA		A 48x24 FLUORESCENT B WALL MOUNTED FIXTURE
	EXHAUST FAN		FIRE ALARM CONTROL PANEL (FACP)
	TOGGLE SWITCH		277/480 VAC ELECTRICAL BOX
	TOGGLE SWITCH WITH INDICATING LIGHT		120/240 VAC ELECTRICAL BOX
	GFCI OUTLET, WALL MOUNTED		SMOKE DETECTOR
	HOME RUN TO PANEL, TEXT INDICATE PANEL AND CIRCUIT(S). 3/4" MINIMUM CONDUIT. 12 AWG MINIMUM WIRE SIZE.		STRUCTURAL GRID
	FIRE ALARM PULL STATION		SECTION NUMBER, TYPICAL
	MOTOR		SHEET NUMBER WHERE SECTION IS FOUND, TYPICAL
			DETAIL, PLAN VIEW

ABBREVIATION

AFF	ABOVE FINISHED FLOOR	THIS SHEET CONTAINS MARKUPS OVERLAPPED ON THE DESIGN DRAWINGS FROM THE ORIGINAL BUILDING CONSTRUCTION. CONTRACTOR SHALL OBL PERFORM THE WORK INDICATED BY THE RED NOTES, SHADING, CALLOUTS, AND ADDITIONS.
A, AMP	AMPERE	
AWG	AMERICAN WIRE GAUGE	
BLDG	BUILDING	
C	CONDUIT	
CB	CIRCUIT BREAKER, CALL BOX	
CKT	CIRCUIT	
DB	DUCT BANK	
DET	DETAIL	
DP	DISTRIBUTION PANEL	
EF	EXHAUST FAN	
EL, ELEV	ELEVATION	
FL	FLOOR	
GFCI	GROUND FAULT CIRCUIT INTERRUPTION	
GND	GROUND	
HP	HORSE POWER	
KAIC	KILOAMPERE INTERRUPTING CIRCUIT	
KCMIL	THOUSAND CIRCULAR MILLS	
KVA	KILOVOLT AMPERES (APPARENT POWER)	
KW	KILOWATTS (REAL POWER)	
LP	LIGHTING PANEL	
PNL	PANEL	
PVC	POLYVINYL CHLORIDE	
RGS	RIGID GALVANIZED STEEL	
TYP	TYPICAL	
V	VOLTS	
VAC	VOLTS ALTERNATING CURRENT	
WP	WEATHER PROOF	
XFMR	TRANSFORMER	



ISSUED FOR BID 1-7-2011



LOAD SUMMARY - EXISTING SERVICE DP-1			
	CONN. KVA	DEMAND FACTOR	DEMAND KVA
TYPE "L": LIGHTING LOADS	14.87	125%	18.59
TYPE "C": CONTINUOUS LOADS		125%	
TYPE "R": RECEPTACLES (FIRST 10KVA)	6.14	100%	6.14
TYPE "R": RECEPTACLES (OVER 10KVA)		50%	
TYPE "M": LARGEST MOTOR LOAD	16.67	125%	20.84
TYPE "M": OTHER MOTOR LOADS	115.88	100%	115.88
TYPE "N": NON-CONTINUOUS LOADS	16.14	100%	16.14
TYPE "K": KITCHEN LOADS			
TYPE "S": SUB-FEED (INCLUDED IN LOADS ABOVE)			
<b>TOTAL</b>	<b>175.01</b>		<b>177.59</b>
			<b>DEMAND AMPS</b>
			<b>214</b>

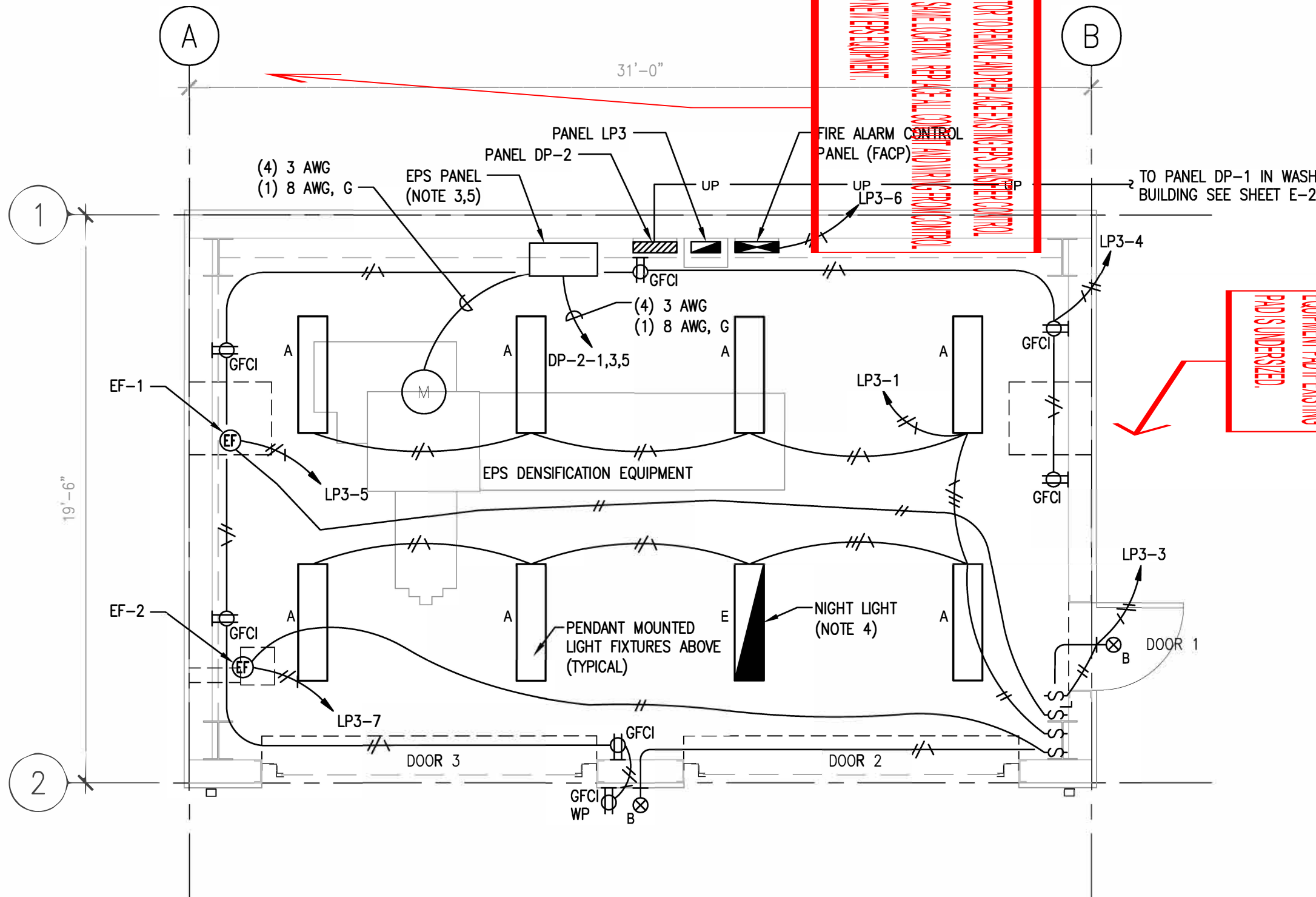
\\Seacocon\162\tacoma Solid Waste\6 Densifier Building\3 Dwgs\E-1 Abbrev & Notes.dwg Jan 07, 2011 - 4:34pm



DATE	1-7-2011	SCALE	NONE
DESIGNED	H. MAC	CHECKED	J. GIBSON
DRAWN	12-10-2010	PROJECT NAME	PEMB BLDG
DRAWING NAME	E-1 Abbrev & Notes.dwg		

CITY OF TACOMA DEPARTMENT OF PUBLIC WORKS		ENV-02007
DENSIFIER BUILDING EPS RECYCLING FACILITY ABBREVIATIONS, GENERAL NOTES AND SYMBOLS		33762624
		SHEET NO. <b>E-1</b>
		SHEET 88 OF 23

\\Seacocon\163\tacoma Solid Waste\6 Densifier Building\3 Dwgs\E-3 Power & Lighting Plan.dwg Jan 07, 2011 - 4:34pm



**SHEET NOTES:**

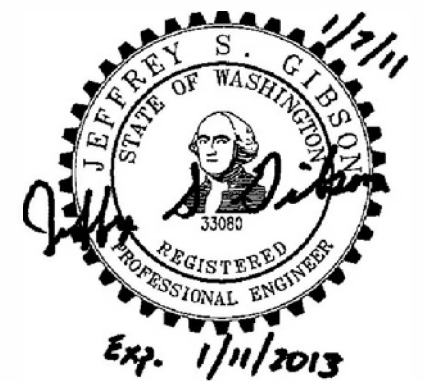
- UNLESS OTHERWISE NOTED, ELECTRICAL DEVICES AND CONDUIT SHOWN SHALL BE SURFACED MOUNTED TO BUILDING WALL.
- LIGHT FIXTURES SHALL BE INSTALLED 13'-0" AFF, PENDANT MOUNTED, AND SUPPORTED BY UNISTRUT. CONTRACTOR SHALL USE STRUCTURAL BEAMS TO INSTALL UNISTRUT. CONTRACTOR SHALL ADHERE TO SEISMIC REQUIREMENTS AS LISTED ON SHEET S-1. SEE STRUCTURAL DRAWING FOR MORE DETAILS.
- CONTRACTOR SHALL COORDINATE WITH EPS MANUFACTURER ON ADDITIONAL CONDUITS AND WIRING FROM EPS PANEL AND TO THE EPS DENSIFICATION EQUIPMENT. CONTRACTOR SHALL PROVIDE A LUMP SUM BID FOR THIS INSTALLATION.
- FIXTURE SHALL BE UNSWITCHED AND REMAIN ON 24/7.
- INSTALL EPS PANEL ON 6" THICK CONCRETE PAD. PAD SHALL BE 3" LARGER THAN EPS PANEL ON ALL SIDES.

REMOVE AND REPLACE  
EQUIPMENT PAD IF EXISTING  
PAD IS UNDERSIZED

REMOVE AND REPLACE  
EQUIPMENT PAD IF EXISTING  
PAD IS UNDERSIZED

REMOVE AND REPLACE  
EQUIPMENT PAD IF EXISTING  
PAD IS UNDERSIZED

**1 FLOOR PLAN**  
E-3 SCALE: 1/4" = 1'-0"

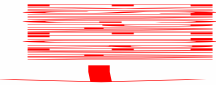


ISSUED FOR BID 1-7-2011

**URS**  
1501 4th Avenue Suite 1400  
Seattle, WA 98101-1616  
P: 206-438-2700 F: 866-495-5288

DATE	SCALE
1-7-2011	1/4" = 1'-0"
DESIGNED	CHECKED
H. MAC	J. GIBSON
DRAWN	PROJECT NAME
12-10-2010	PEMB BLDG
DRAWING NAME	
E-3 Electrical Plan.dwg	

CITY OF TACOMA DEPARTMENT OF PUBLIC WORKS		ENV-02007
DENSIFIER BUILDING EPS RECYCLING FACILITY		33762624
ELECTRICAL POWER, LIGHTING, AND FIRE ALARM PLAN		SEE E-3 REV 1 2020 02323

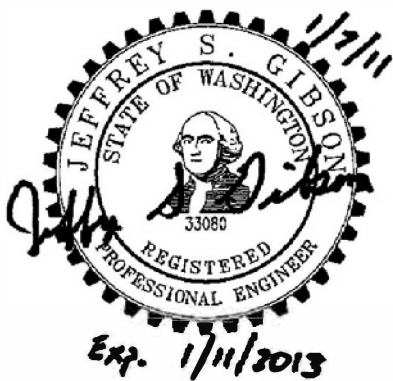


Job: Tacoma Public Recycling Facility											Panelboard LP3			Rev:	
Location: Pemb Building														Date:	
POLE NO.	C.B.		SERVICE	LOAD KVA						SERVICE	C.B.		POLE NO.		
	AMP	POLES		TOTAL	TYPE	A	B	TYPE	TOTAL		AMP	POLES			
1	20	1	INTERIOR LIGHTING	0.464	L	1.004				R	0.54	RECEPTACLES	20	1	2
3	20	1	EXTERIOR LIGHTING	0.1	L		0.64			R	0.54	RECEPTACLES	20	1	4
5	20	1	EXHAUST FAN (EF-1)	0.9	M	1.2				C	0.3	FIRE ALARM CONTROL PANEL (FACP)	20	1	6
7	20	1	EXHAUST FAN (EF-2)	0.11	M		0.11					SPARE	20	1	8
9	20	1	SPARE									SPARE	20	1	10
CONNECTED LOAD PER PHASE						2.204	0.75								
LOAD SUMMARY						CONN. KVA	DEMAND FACTOR	DEMAND KVA	PRIMARY VOLTS: 480V 1PH SEC. VOLTS: 120/240V 1PH 3W PRIMARY C.B.: 30Amps SECONDARY C.B.: 40Amps BUS: 100 AMP POLES: 10				PANEL FEATURES PANEL WITH XFMR		
TYPE "L": LIGHTING LOADS						0.56	125%	0.71	MOUNTING: SURFACE				BRKR FEATURES		
TYPE "C": CONTINUOUS LOADS						0.30	125%	0.38	AIC RATING: 18,000						
TYPE "R": RECEPTACLES (FIRST 10KVA)						1.08	100%	1.08	DEMAND AMPS				HIGH LEG CONNECTED AMPS		
TYPE "R": RECEPTACLES (OVER 10KVA)							50%								
TYPE "M": LARGEST MOTOR LOAD						0.90	125%	1.13							
TYPE "M": OTHER MOTOR LOADS						0.11	100%	0.11							
TYPE "N": NON-CONTINUOUS LOADS							100%								
TYPE "K": KITCHEN LOADS															
TYPE "S": SUB-FEED (INCLUDED IN LOADS ABOVE)															



Job: Tacoma Public Recycling Facility											Panelboard DP2			Rev:	
Location: Pemb Building														Date:	
POLE NO.	C.B.		SERVICE	LOAD KVA						SERVICE	C.B.		POLE NO.		
	AMP	POLES		TOTAL	TYPE	A	B	C	TYPE		TOTAL	AMP		POLES	
1	75	3	DENSIFIER	16.67	M	18.874				S	2.204	PANEL LP3 VIA XFMR	40	2	2
3				16.67	M		17.42			S	0.75				4
5				16.67	M			16.67							6
7															8
9															10
11															12
CONNECTED LOAD PER PHASE						18.874	17.42	16.67							
LOAD SUMMARY						CONN. KVA	DEMAND FACTOR	DEMAND KVA	VOLTS: 277/480V 3PH 4W MAIN C.B.: 100 A BUS: 225 AMP POLES: 12				PANEL FEATURES		
TYPE "L": LIGHTING LOADS						0.56	125%	0.70	MOUNTING: SURFACE				BRKR FEATURES		
TYPE "C": CONTINUOUS LOADS						0.30	125%	0.38	AIC RATING: 14,000						
TYPE "R": RECEPTACLES (FIRST 10KVA)						1.08	100%	1.08	DEMAND AMPS				HIGH LEG CONNECTED AMPS		
TYPE "R": RECEPTACLES (OVER 10KVA)							50%								
TYPE "M": LARGEST MOTOR LOAD						50.01	125%	62.51							
TYPE "M": OTHER MOTOR LOADS						1.01	100%	1.01							
TYPE "N": NON-CONTINUOUS LOADS							100%								
TYPE "K": KITCHEN LOADS															
TYPE "S": SUB-FEED (INCLUDED IN LOADS ABOVE)															
TOTAL						52.96		65.68							

LIGHTING SCHEDULE					
TYPE	DESCRIPTION	LAMPS	WATT	MOUNT	REMARKS
A	FLUORESCENT 120V, 1'X4' FULLY GASKETED, REFLECTOR COVER	(2)-32W T8	64	PENDANT	PROVIDE MOUNTING ACCESSORIES. MOUNT FIXTURE 13'-0" AFF.
B	METAL HALIDE 120V, LOW TEMPERATURE BALLAST	(1)-70W MH	80	SURFACE	RATED FOR WET LOCATION
AE	FLUORESCENT 120V, 1'X4' FULLY GASKETED, REFLECTOR COVER, EMERGENCY BATTERY PACK	(2)-32W T8	64	PENDANT	90 MIN, 2-LAMP BATTERY OPERATION. PROVIDE MOUNTING ACCESSORIES. MOUNT FIXTURE 13'-0" AFF.



ISSUED FOR BID 1-7-2011

**URS**  
1501 4th Avenue Suite 1400  
Seattle, WA 98101-1616  
P: 206-438-2700 F: 866-495-5288

DATE	1-7-2011	SCALE	NONE
DESIGNED	H. MAC	CHECKED	J. GIBSON
DRAWN	12-10-2010	PROJECT NAME	PEMB BLDG
DRAWING NAME	E-5 Schedules.dwg		

CITY OF TACOMA  
DEPARTMENT OF PUBLIC WORKS  
DENSIFIER BUILDING  
EPS RECYCLING FACILITY  
ELECTRICAL SCHEDULES

ENV-02007  
33762624  
SHEET NO. E-5  
SHEET 22 OF 23

\\Seacocon\162\tacoma Solid Waste\6 Densifier Building\3 Dwgs\E-5 Schedules.dwg Jan 07, 2011 4:38pm

CHECKED BY: [Signature]  
 CHECKED BY: [Signature]  
 CHECKED BY: [Signature]  
 CHECKED BY: [Signature]  
 CHECKED BY: [Signature]  
 CHECKED BY: [Signature]