



City of Tacoma, WA

PUBLIC WORKS / FACILITIES MANAGEMENT DIVISION

REQUEST FOR BIDS

**ELECTRICIANS MAINTENANCE BUILDING EXTERIOR
REFURBISH AND ROOF REPLACEMENT**

SPECIFICATION NO. PW23-0033F



City of Tacoma
Department of Public Works
Facilities Management Division

PROJECT MANUAL

ELECTRICIANS MAINTENANCE BUILDING EXTERIOR REFURBISH AND ROOF REPLACEMENT

**SPECIFICATION
NO.: PW23-0033F**

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**City of Tacoma
Facilities Management**

**REQUEST FOR BIDS PW23-0033F
Electricians Maintenance Building
Exterior Refurbish and Roof Replacement**

Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday, May 23, 2023

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

For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email, sendbid@cityoftacoma.org, as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals. Late submittals will be returned unopened and rejected as non-responsive.

Submittal Delivery: Sealed submittals will be received as follows:

By Email:

sendbid@cityoftacoma.org

Maximum file size: 35 MB. Multiple emails may be sent for each submittal

Bid Opening: Sealed submittals in response to a RFB will be opened Tuesday's at 11:15 AM by a purchasing representative and read aloud during a public bid opening held at the Tacoma Public Utilities Administrative Building North, 3628 S. 35th Street, Tacoma, WA 98409, conference room M-1, located on the main floor. They will also be held virtually Tuesday's at 11:15 AM. Attend [via this link](#) or call 1 (253) 215 8782. Submittals in response to an RFP, RFQ or RFI will be recorded as received. As soon as possible, after 1:00 PM, on the day of submittal deadline, preliminary results will be posted to www.TacomaPurchasing.org.

Solicitation Documents: An electronic copy of the complete solicitation documents may be viewed and obtained at the City's plan distribution service provider, ARC, 632 Broadway, Tacoma, WA, or by going to <http://www.e-arc.com/location/tacoma>. Prospective bidders will be required to pay reproduction costs. A list of vendors registered for this solicitation is also available at their website.

Pre-Proposal Meeting: A pre-proposal meeting will be held virtually via Microsoft Teams on 5/9/23 at 10:00 am with an expected conclusion by 11:30 am.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 233 547 036 795

Passcode: T25p6A

[Download Teams](#) | [Join on the web](#)

Or call in (audio only)

[+1 253-666-4424,832554096#](#) United States, Tacoma

Phone Conference ID: 832 554 096#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

On 5/11/23 there will be an onsite walk around at the EMB commencing at 9:00am at 425 Tacoma AVE South, Tacoma, WA 98402. Meeting location shall be on public sidewalk in front of the building. This onsite meeting is expected to conclude no later than 10:00 am.

Project Scope: The project consists of a roof replacement, structural reinforcement of roof rafter to wall connection, siding repair, window repair, lead paint removal, and building repainting.

Estimate: \$346,000

Paid Sick Leave: The City of Tacoma requires all employers to provide paid sick leave as set forth in Title 18 of the Tacoma Municipal Code and 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 Tina Eide, Senior Buyer by email to teide@cityoftacoma.org.

Protest Policy: City of Tacoma protest policy, located at 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.

**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 chapter 18.27 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 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.

BID PERIOD FORMS

The following forms shall be used during the bidding process to request clarifications and request substitutions. These forms are not required to be submitted with the Bid.

- Bidder Question Form
- Substitution Request Form

BIDDER QUESTION FORM

Electricians Maintenance Building Exterior Refurbish and Roof Replacement SPECIFICATION NO.: PW23-0033F

Prospective bidders must submit questions or clarifications in writing on this form allowing time for a written reply to reach all prospective bidders before the submission of the bids. Bidder questions shall be submitted on this form via e-mail to:

Tina Eide, Senior Buyer.
E-mail address: teide@cityoftacoma.org

All e-mails must be received by **Noon on Friday, May 12, 2023**. Where changes in the project documents are required, an addendum will be issued to everyone on the plan holder's list and posted on www.tacomapurchasing.org.

I have the following question(s): _____

Submitted by:

Name

Representing

Address

Fax Number

Phone Number

SUBSTITUTION REQUEST FORM

Electricians Maintenance Building Exterior Refurbish and Roof Replacement SPECIFICATION NO.: PW23-0033F

Prospective bidders may request substitutions in writing on this form. Substitutions shall be submitted on this form via e-mail to:

Tina Eide, Senior Buyer.

E-mail address: Teide@cityoftacoma.org

All e-mails must be received by **Noon on Friday, May 12, 2023**. Where changes in the project documents are required, an addendum will be issued to everyone on the plan holder's list and posted on www.tacomapurchasing.org.

Submitted By

Signature _____

Company _____

Mailing Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ E-mail _____

☐ Please check if there are attachments

1. We hereby submit for your consideration the following product instead of the specified item for the above project:

<u>Section</u>	<u>Page</u>	<u>Line/Paragraph</u>	<u>Specified Item</u>
_____	_____	_____	_____

2. Proposed Substitution. _____

3. Reason for Substitution. _____

4. Attach complete technical data, catalog cuts, drawings, samples, etc. Exact models and description of products shall be noted with any deviation noted.

5. Include complete information on changes to Drawings, and/or Specifications which proposed substitution will require for its proper installation. _____

6. Does the substitute affect dimensions shown on Drawings? _____

6a. If so, how? _____

7. Describe the effect substitution has on other trades. _____

8. Describe differences between proposed substitution and specified item. _____

9. Manufacturer's warranties of the proposed and specified items are: ☐ Same ☐ Different (explain on attachment)

The undersigned states that the function, appearance and quality are equivalent or superior to the specified item. The undersigned agrees to pay for changes to the building and systems design, including engineering and detailing costs caused by the requested substitution.

SUBSTITUTION REQUEST FORM

Electricians Maintenance Building Exterior Refurbish and Roof Replacement
SPECIFICATION NO.: PW23-0033F

For Reviewer

☐ Approved for Bidding subject to review and approval of Submittals (and as noted below) ☐ Rejected - Inadequate Information

☐ Not Accepted ☐ Received Too Late

By _____ Date _____

Remarks

PROPOSAL FORMS

The following forms must be completed in their entirety and submitted with the bid. Bidders must use the forms provided. Do not modify or substitute forms. Failure to complete and submit all the forms in this section may result in the bid being declared unresponsive and rejected.

1. BID PROPOSAL
2. SIGNATURE PAGE
3. BID BOND
4. SUBCONTRACTOR CATEGORIES OF WORK
5. STATE RESPONSIBILITY FORM
6. GENERAL CONTRACTOR QUALIFICATION SUBMITTAL
7. CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES
FORM
8. EIC UTILIZATION FORM

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

SPECIFICATION NO.: PW23-0033F

BID PROPOSAL

City of Tacoma Department of Public Works Facilities Management

Name of Firm: _____
(Write in company name)

In compliance with the contract documents, the following bid proposal is submitted:

BASE BID:

Lump sum base bid is inclusive of the Scope of Work described in the Contract Documents.

BASE BID:	\$	_____
ALLOWANCE # 1:	\$	_____ \$10,000.00
SUBTOTAL:	\$	_____
<u>WA STATE SALES TAX @ 10.3%:</u>	\$	_____
GRAND TOTAL:	\$	_____

ALLOWANCE # 1: (Do not include Washington State Sales Tax)

- This allowance shall be included in all submitted bids and shall be used solely to address any unforeseen conditions not already known or present in the construction documents, specifications, contract documents, or on-site visual condition assessment performed by the contractor at the pre-proposal meeting. This allowance shall not be used to address any issue, which the contractor knew or should have known about at the time of bidding based on the evaluation of existing on-site conditions, provided construction documents, specifications, and contracts associated with the project.

BID ALTERNATES:

- The undersigned proposes to modify the contract requirements and scope of work as defined in the Contract Documents and as described in the Project Manual, for the following amounts to be added to the Base Bid. The Owner reserves the right to accept or reject any or alternates within (90) days of the bid date.
- This alternate shall be for the provision and installation of flexible membrane flashing over the entire roof area in addition to the 30" inward beyond exterior wall installation included in the base bid per the project manual, specifications, and drawings contained within this project.

Additive Alternate #01

\$ _____

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

SPECIFICATION NO.: PW23-0033F

BID PROPOSAL

UNIT PRICES: (Not used)

INTENT AND AFFIDAVIT OF WAGES PAID:

In compliance with Chapter 296-127 WAC the Contractor shall pay all fees associated with the Intent and Affidavit of Wages Paid to the Department of Labor and Industries. These costs shall be included in the base bid.

CITY OF TACOMA PROGRAMS:

The City of Tacoma's Equity in Contracting (EIC) Program has 7% MBE, 4% WBE, and a 6% SBE or DBE requirement assigned to this project. There are LEAP requirements on this project, 15 percent of total labor hours. Reference the LEAP section in the project manual.

TIME FOR COMPLETION:

The undersigned hereby agrees to substantially complete all the work under the Base Bid (and accepted alternates and/or unit prices) within **66** calendar days after the Notice to Proceed.

LIQUIDATED DAMAGES:

The undersigned agrees to pay the Owner as liquidated damages the sum of \$500 for each consecutive calendar day beyond the SUBSTANTIAL COMPLETION date. Liquidated damages shall be deducted from the contract by change order.

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

SPECIFICATION NO.: PW23-0033F

BID PROPOSAL

SUSTAINABILITY:

1) Have you incorporated sustainability into your everyday business practices? **Yes / No**

Please Describe:

2) Have you taken measures to minimize impacts to the environment in the delivery of proposed goods and services? **Yes / No**

Please Describe:

3) Will you be incorporating and implementing sustainable practices during the construction of this project? **Yes / No**

Please Describe:

SIGNATURE PAGE

CITY OF TACOMA Public Works / Facilities Management

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**. 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. PW23-0033F Electricians Maintenance Building Exterior Refurbish and Roof Replacment

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.

Herewith find deposit in the form of a cashier's check in the amount of \$_____ which amount is not less than 5-percent of the total bid.

SIGN HERE_____

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto the City of Tacoma, as Obligee, in the penal sum of _____ dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for

according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure to do so, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS _____ DAY OF _____, 20_____.

PRINCIPAL:

SURETY:

_____, 20_____

Received return of deposit in the sum of \$ _____

List of Subcontractor Categories of Work

Project Name _____

Subcontractor(s) that are proposed to perform the work of heating, ventilation and air conditioning, and/or plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. **This information must be submitted with the bid proposal or within one hour of the published bid submittal time via email to bids@cityoftacoma.org.**

Subcontractor(s) that are proposed to perform the work of structural steel installation and/or rebar installation must be listed below. **This information must be submitted with the bid proposal or within forty-eight hours of the published bid submittal time via email to bids@cityoftacoma.org.**

Failure to list subcontractors or naming more than one subcontractor to perform the same work will result in your bid being non-responsive. Contractors self-performing must list themselves below. The work to be performed is to be listed below the subcontractor(s) name.

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

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

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

SPECIFICATION NO.: PW23-0033F General Contractor Qualification Submittal

This form shall be completed in its entirety, **submitted with the bid**, and shall be used to demonstrate the General Contractor's minimum experience. Failure to submit this form may be grounds for bid rejection.

The City shall be the sole judge in determining if the prospective Contractor meets the bidder minimum experience requirements. The City reserves the right to take whatever action it deems necessary to ascertain the ability of the bidder to perform the work satisfactorily.

Qualification of General Contractor: General Contractor shall have a minimum of five (5) projects, of similar size and scope within the last five (5) years, demonstrating an ability to meet the contract schedule and requirements. General Contractor shall meet all Local and State Certifications and License requirements prior to bidding. Copies of the required Certificates and Licenses shall be made available upon request.

Roofing Contractor shall have a minimum of five (5) projects, of similar size and scope within the last five (5) years, demonstrating an ability to meet the contract schedule and requirements. **If General Contractor is the same as the Roofing Contractor than the General contractor must show roofing replacements of similar size and scope in provided qualifications section below.** Copies of the required Certificates and Licenses shall be made available upon request.

Name: _____

Address: _____

Contact Person: _____ Phone: _____

Project Experience – General Contractor:

Project No. 1 Name:
Project Owner:
Owner Contact / Phone No.:
Date Work Completed:
Description of Work:

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

SPECIFICATION NO.: PW23-0033F

General Contractor Qualification Submittal

Project No. 2 Name:
Project Owner:
Owner Contact / Phone No.:
Date Work Completed:
Description of Work:

Project No. 3 Name:
Project Owner:
Owner Contact / Phone No.:
Date Work Completed:
Description of Work:

Project No. 4 Name:
Owner Contact / Phone No.:
Contact Person:
Date Work Completed:
Description of Work:

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

SPECIFICATION NO.: PW23-0033F
General Contractor Qualification Submittal

Project No. 5 Name:
Owner Contact / Phone No.:
Contact Person:
Date Work Completed:
Description of Work:

Project Experience – Roofing Contractor

(Completed by General Contractor if performed by the General Contractor):

Project No. 1 Name:
Project Owner:
Owner Contact / Phone No.:
Date Work Completed:
Description of Work:

Project No. 2 Name:
Project Owner:
Owner Contact / Phone No.:
Date Work Completed:

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

SPECIFICATION NO.: PW23-0033F
General Contractor Qualification Submittal

Description of Work:

Project No. 3 Name:

Project Owner:

Owner Contact / Phone No.:

Date Work Completed:

Description of Work:

Project No. 4 Name:

Owner Contact / Phone No.:

Contact Person:

Date Work Completed:

Description of Work:

Project No. 5 Name:

Owner Contact / Phone No.:

Contact Person:

Date Work Completed:

Description of Work:



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, May 02, 2023, 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.*



City of Tacoma
Community & Economic Development
Office of Equity in Contracting
747 Market Street, Rm 900
Tacoma WA 98402
253-591-5826
Email: EICOffice@cityoftacoma.org

EQUITY IN CONTRACTING UTILIZATION FORM

This form is to document **only** the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- Prime contractors are **required** to solicit bids from Businesses that are "Certified" by the Office of Minority and Women's Business Enterprises (OMWBE) www.omwbe.wa.gov as a MBE, WBE, and SBE to be known as "Certified Business".
- It is the Prime contractor's responsibility to verify the certification status of the business(s) intended to be utilized prior to the submittal deadline.

Bidder's Name: _____

Address: _____ City/State/Zip: _____

Spec. No. _____ Base Bid * \$ _____ **Complete business names and phone numbers are required to verify your usage of Certified Businesses**

a. Business Name and Certification Number(s)	b. MBE, WBE, or SBE (Write all that apply)	c. NAICS code(s)	d. Contractor Bid Amount (100%)	e. Material Supplier Bid Amount (20%)	f. Estimated MBE Usage Dollar Amount	g. Estimated WBE Usage Dollar Amount	h. Estimated SBE Usage Dollar Amount
i. MBE Utilization %	j. WBE Utilization %	k. SBE Utilization %					

By signing and submitting this form the bidder certifies that the OMWBE Certified Business(s) listed will be used on this project including all applicable change orders.

Type or Print Name of Responsible Officer / Title

Signature of Responsible Officer

Date

INSTRUCTIONS FOR COMPLETING EIC UTILIZATION FORM

The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.

This form when submitted with your bid, provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. * Base Bid is the prime contractor's bid, plus any alternates, additives and deductibles selected by the City of Tacoma. Also, please refer to Items #10-12 below.
2. Column "a" – List all **Certified Business(s)** that you will be awarding a contract to if you are the successful bidder.
3. Column "b" – Identify if the **Certified Business(s)** is being utilized as an MBE, WBE, or SBE. (Businesses may count towards multiple requirements).
4. Column "c" – List the appropriate NAICS code(s) for the scope of work, services, or materials/supplies for each **Certified Business**.
5. Column "d" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the **Certified Businesses** have negotiated prior to bid opening.
6. Column "e" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.
7. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
8. Column "g" – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
9. Column "h" – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, Multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
10. Block "i" – The percentage of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column "f") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "f" divided by Base Bid (*) x 100 = MBE usage as a percentage of the Base Bid.)
11. Block "j" – The percentage of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column "g") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "g" divided by Base Bid (*) x 100 = WBE usage as a percentage of the Base Bid.)

12. Block “k” – The percentage of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column “h”) by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column “h” divided by Base Bid (*) x 100 = SBE usage as a percentage of the Base Bid.)

It is the prime contractor’s responsibility to check the status of **Certified Businesses** prior to bid opening. Call the EIC Office at 253-591-5826 or email at EICOffice@cityoftacoma.org for additional information.

CONTRACT FORMS (POST AWARD)

1. CONTRACT
2. INSURANCE CERTIFICATE REQUIREMENTS
3. PERFORMANCE BOND TO THE CITY OF TACOMA
4. PAYMENT BOND TO THE CITY OF TACOMA
5. GENERAL RELEASE TO THE CITY OF TACOMA

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:

Name:

Title:

CONTRACTOR:

Signature:

Name:

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		



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.

- 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.
- 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.



CITY OF TACOMA

INSURANCE REQUIREMENTS FOR CONTRACTS

2. SUBCONTRACTORS

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.



CITY OF TACOMA

INSURANCE REQUIREMENTS FOR CONTRACTS

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.



PERFORMANCE BOND TO THE CITY OF TACOMA

Resolution No.
Bond No.

That we, the undersigned,

as principal, and _____
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of
\$ _____, 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. _____

Specification Title: _____

Contract No. _____

(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 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: Enter Vendor Legal Name

By: _____

Surety:

By: _____

Agent's Name: _____

Agent's Address: _____



PAYMENT BOND TO THE CITY OF TACOMA

Resolution No.
Bond No.

That we, the undersigned,

as principal, and _____
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of,
\$ _____, 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. _____

Specification Title: _____

Contract No. _____

(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.
Bond No.
Specification No.
Contract No.

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: Enter Vendor Legal Name

By: _____

Surety:

By: _____

Agent's Name: _____

Agent's Address: _____

GENERAL RELEASE TO THE CITY OF TACOMA

The undersigned, named as the contractor for the _____ between _____ and the City of Tacoma, Contract No. _____ 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 _____ excluding sales tax.

Signed at _____, Washington this _____ day of _____, 20__.

Contractor

By _____
Title _____

STATE OF WASHINGTON)
) ss
COUNTY OF)

I, _____, a Notary Public in and for the said State, do hereby certify that on this _____, day of _____, 20____, that _____, executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said company, for the uses and purposes therein mentioned, and on oath stated that he/she was authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public in and for the State of Washington
My appointment expires _____

WASHINGTON STATE **PREVAILING WAGE RATES**

- **STATE PREVAILING WAGE RATES FOR PIERCE COUNTY**

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.

CITY PROGRAMS

- **EQUITY IN CONTRACTING – EIC REQUIREMENTS**
- **LEAP REQUIREMENTS**

EIC REQUIREMENT FORM

EQUITY IN CONTRACTING REQUIREMENTS & PROCEDURES:

All bidders must complete and submit with their bid the following solicitation form contained in the bid submittal package:

City of Tacoma – EIC Utilization Form

IMPORTANT NOTE:

It is the bidder's responsibility to ensure that the subcontractor(s) listed on the EIC Utilization Form are currently certified by the State of Washington's Office of Minority and Women Business Enterprises (OMWBE) at the time of bid opening. This may be verified by contacting the EIC Office at 253-591-5075 between 8 AM and 5 PM, Monday through Friday or the [OMWBE](http://www.omwbe.com) Office at (866) 208-1064. Please refer to the City of Tacoma EIC code.

EQUITY IN CONTRACTING REQUIREMENTS

Minority Business
Enterprise Requirement

7%

Women Business
Enterprise Requirement

4%

Small Business Enterprise
Requirement

6%

A list of EIC-eligible companies is available on the following web site addresses:

www.omwbe.diversitycompliance.com*

MATERIAL MISSTATEMENTS CONCERNING COMPLETED ACTIONS BY THE BIDDER IN ANY SWORN STATEMENT OR FAILURE TO MEET COMMITMENTS AS INDICATED ON THE EIC UTILIZATION FORM MAY RENDER THE BIDDER IN DEFAULT OF CITY ORDINANCE 1.07

CCD/SBE: GNF-00007-04

Date of Record: 02/21/2023

Project Spec#: PW23-0033F

Project Title: Electrical Maintenance Exterior & Roof Replacement

*For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office if you have any questions.



City of Tacoma
Community & Economic Development
747 Market Street, Rm 900
Tacoma WA 98402

CITY OF TACOMA EQUITY IN CONTRACTING (EIC) AND LEAP PROGRAMS

Bidders Special Instructions

As part of the City of Tacoma's ongoing work to address past disparities and to increase the City's contracting with and utilization of historically underutilized businesses, the Equity in Contracting (EIC) Program places requirements on City contracts for utilization of businesses certified by the Washington State Office of Minority and Women's Business Enterprise (OMWBE) and approved by the Equity in Contracting Program ("Certified Businesses"). The EIC Program also provides guidance and technical assistance to Certified Businesses who are interested in providing supplies, services and public works to the City of Tacoma.

The EIC Program requirements are contained in [Tacoma Municipal Code Chapter 1.07](#).

Contractors bidding on City of Tacoma projects are required to meet the stated EIC requirements. Bids will be evaluated on an individual basis to determine EIC compliance. **A contractor who fails to meet the stated EIC requirements will be considered non-responsible.** Bidders are also subject to the City's Equal Employment Opportunity policies prohibiting discrimination.

The stated EIC requirements may be met by the contractor or by identified subcontractors. All EIC Requirements may be met by using MBEs, WBEs, DBEs or SBEs from the OMWBE certified list ([OMWBE website](#)). It is the bidder's responsibility to ensure that their firm or identified subcontractors are certified by OMWBE and approved by the City of Tacoma EIC Program **at the time of bid submittal**. Business certification may be verified by contacting the EIC Office*.

For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office if you have any questions.*

The Equity in Contracting (EIC) forms included in these bid documents must be fully completed (including attachments) and included with bid submittals. Failure to include the required forms will result in the submittal being rejected as nonresponsive.

Post-Award Important Information

For all contracts that have requirements related to the EIC and LEAP policies, the City of Tacoma is utilizing two cloud-based software systems:

- **B2Gnow** - Contractors and subcontractors must report payment information in the B2Gnow System on a monthly basis. The EIC Staff will monitor/audit that retainage is paid by the prime contractor to the subcontractor(s) within 10 [working] days after the subcontractors' work is satisfactorily completed. This will be monitored/audited using the B2Gnow System.
- **LCP Tracker** - This system must be used for submitting certified payroll(s) for both EIC and LEAP compliance.



City of Tacoma
Community & Economic Development
747 Market Street, Rm 900
Tacoma WA 98402

Both systems are monitored/audited by EIC and LEAP staff to ensure contract compliance, proactively identify potential issues and track contract progress.

***EIC & LEAP STAFF Contact Information**

- **For questions regarding Certifications, EIC Compliance and B2GNow support, contact EIC Staff:**
Malika Godo at (253) 591-5630, or via email at mgodo@cityoftacoma.org
Gary Lizama at (253) 591-5826, or via email at glizama@cityoftacoma.org
- **For questions in regards to LEAP compliance and LCP Tracker support, contact LEAP Staff:**
Deborah Trevorrow at (253) 591-5590, or via email at dtrevorrow@cityoftacoma.org



City of Tacoma
Community & Economic Development
Office of Equity in Contracting
747 Market Street, Rm 900
Tacoma WA 98402
253-591-5826
Email: EICOffice@cityoftacoma.org

EQUITY IN CONTRACTING UTILIZATION FORM

This form is to document **only** the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- Prime contractors are **required** to solicit bids from Businesses that are "Certified" by the Office of Minority and Women's Business Enterprises (OMWBE) www.omwbe.wa.gov as a MBE, WBE, and SBE to be known as "Certified Business".
- It is the Prime contractor's responsibility to verify the certification status of the business(s) intended to be utilized prior to the submittal deadline.

Bidder's Name: _____

Address: _____ City/State/Zip: _____

Spec. No. _____ Base Bid * \$ _____ **Complete business names and phone numbers are required to verify your usage of Certified Businesses**

a. Business Name and Certification Number(s)	b. MBE, WBE, or SBE (Write all that apply)	c. NAICS code(s)	d. Contractor Bid Amount (100%)	e. Material Supplier Bid Amount (20%)	f. Estimated MBE Usage Dollar Amount	g. Estimated WBE Usage Dollar Amount	h. Estimated SBE Usage Dollar Amount
i. MBE Utilization %	j. WBE Utilization %	k. SBE Utilization %					

By signing and submitting this form the bidder certifies that the OMWBE Certified Business(s) listed will be used on this project including all applicable change orders.

Type or Print Name of Responsible Officer / Title

Signature of Responsible Officer

Date

INSTRUCTIONS FOR COMPLETING EIC UTILIZATION FORM

The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.

This form when submitted with your bid, provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. * Base Bid is the prime contractor's bid, plus any alternates, additives and deductibles selected by the City of Tacoma. Also, please refer to Items #10-12 below.
2. Column "a" – List all **Certified Business(s)** that you will be awarding a contract to if you are the successful bidder.
3. Column "b" – Identify if the **Certified Business(s)** is being utilized as an MBE, WBE, or SBE. (Businesses may count towards multiple requirements).
4. Column "c" – List the appropriate NAICS code(s) for the scope of work, services, or materials/supplies for each **Certified Business**.
5. Column "d" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the **Certified Businesses** have negotiated prior to bid opening.
6. Column "e" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.
7. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
8. Column "g" – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
9. Column "h" – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, Multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
10. Block "i" – The percentage of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column "f") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "f" divided by Base Bid (*) x 100 = MBE usage as a percentage of the Base Bid.)
11. Block "j" – The percentage of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column "g") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "g" divided by Base Bid (*) x 100 = WBE usage as a percentage of the Base Bid.)

12. Block “k” – The percentage of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column “h”) by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column “h” divided by Base Bid (*) x 100 = SBE usage as a percentage of the Base Bid.)

It is the prime contractor’s responsibility to check the status of **Certified Businesses** prior to bid opening. Call the EIC Office at 253-591-5826 or email at EICOffice@cityoftacoma.org for additional information.

CHAPTER 1.07

EQUITY IN CONTRACTING

Sections:

- 1.07.010 Policy and purpose.
- 1.07.020 Definitions.
- 1.07.030 Discrimination prohibited.
- 1.07.040 Program administration.
- 1.07.050 Approval as a Certified Business.
- 1.07.060 Program requirements.
- 1.07.070 Evaluation of submittals.
- 1.07.080 Contract compliance.
- 1.07.090 Program monitoring.
- 1.07.100 Enforcement.
- 1.07.110 Remedies.
- 1.07.120 Unlawful acts.
- 1.07.130 Severability.
- 1.07.140 Review of program.

1.07.010 Policy and purpose.

It is the policy of the City of Tacoma that citizens be afforded an opportunity for full participation in our free enterprise system and that historically underutilized business enterprises shall have an equitable opportunity to participate in the performance of City contracts. The City finds that in its contracting for supplies, services and public works, there has been historical underutilization of small and minority-owned businesses located in certain geographically and economically disfavored locations and that this underutilization has had a deleterious impact on the economic well-being of the City. The purpose of this chapter is to remedy the effects of such underutilization through use of narrowly tailored contracting requirements to increase opportunities for historically underutilized businesses to participate in City contracts. It is the goal of this chapter to facilitate a substantial procurement, education, and mentorship program designed to promote equitable participation by historically underutilized businesses in the provision of supplies, services, and public works to the City. It is not the purpose of this chapter to provide any person or entity with any right, privilege, or claim, not shared by the public, generally, and this chapter shall not be construed to do so. This chapter is adopted in accordance with Chapter 35.22 RCW and RCW 49.60.400.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.020 Definitions.

Terms used in this chapter shall have the following meanings unless defined elsewhere in the Tacoma Municipal Code (“TMC”), or unless the context in which they are used clearly indicates a different meaning.

1.07.020.B

A. “Bid” means an offer submitted by a Respondent to furnish Supplies, Services, and/or Public Works in conformity with the Specifications and any other written terms and conditions included in a City request for such offer.

B. “Bidder” means an entity or individual who submits a Bid, Proposal or Quote. See also “Respondent.”

1.07.020.C

“Certified Business” means an entity that has been certified as a Disadvantaged Business Enterprise (“DBE”), Small Business Enterprise (“SBE”), Minority Business Enterprise (“MBE”), Women Business Enterprise (“WBE”), or Minority and Women’s Business Enterprise (“MWBE”) by the Washington State Office of Minority and Women’s Business Enterprise and meets the criteria set forth in Section 1.07.050 (2) of this chapter and has been approved as meeting that criteria by the Community and Economic Development Department Program Manager.

“City” means all Departments, Divisions and agencies of the City of Tacoma.

“Contract” means any type of legally binding agreement regardless of form or title that governs the terms and conditions for procurement of Public Works and Improvements and/or Non-Public Works and Improvements Supplies and Services. Contracts include the terms and conditions found in Specifications, Bidder or Respondent Submittals, and purchase orders issued by the City. A “Contract” as used in this chapter shall include an agreement between the City and a non-profit entity to perform construction-related services for Public Works. A “Contract” does not include: (1) awards made by the City with

federal/state grant or City general funds monies to a non-profit entity where the City offers assistance, guidance, or supervision on a project or program, and the recipient of the grant awards uses the grant moneys to provide services to the community; (2) sales transactions where the City sells its personal or real property; (3) a loan transaction where the City is acting as a debtor or a creditor; (4) lease, franchise; (5) agreements to use City real property (such as Licenses, Permits and Easements) and, (6) banking and other financial or investment services.

“Contractor” means any Person that presents a Submittal to the City, enters into a Contract with the City, and/or performs all or any part of a Contract awarded by the City, for the provision of Public Works, or Non-Public Works and Improvements, Supplies or Services.

1.07.020.G

“Goals” means the annual level of participation by Certified Businesses in City Contracts as established in this chapter, the Program Regulations, or as necessary to comply with applicable federal and state nondiscrimination laws and regulations. Goals for individual Contracts may be adjusted as provided for in this chapter and shall not be construed as a minimum for any particular Contract or for any particular geographical area.

1.07.020.N

“Non-Public Works and Improvements” means all competitively solicited procurement of Supplies and/or Services by the City not solicited as Public Works.

1.07.020.P

“Person” means individuals, companies, corporations, partnerships, associations, cooperatives, any other legally recognized business entity, legal representative, trustee, or receivers.

“Program Manager” means the individual appointed, from time to time, by the City’s Community and Economic Development Director to administer the Program Regulations.

“Program Regulations” means the written regulations and procedures adopted pursuant to this chapter for procurement of Supplies, Services and Public Works.

“Proposal” means a written offer to furnish Supplies or Services in response to a Request for Proposals. This term may be further defined in the Purchasing Policy Manual and/or in competitive solicitations issued by the City.

“Public Works (or “Public Works and Improvements)” means all work, construction, alteration, repair, or improvement other than ordinary maintenance, executed at the cost of the City, or that is by law a lien or charge on any property therein. This term includes all Supplies, materials, tools, and equipment to be furnished in accordance with the Contract for such work, construction, alteration, repair, or improvement.

1.07.020.Q

“Quote” means a competitively solicited written offer to furnish Supplies or Services by a method of procurement that is less formalized than a Bid or a Proposal. This term may be further defined in the Purchasing Policy Manual.

1.07.020.R

“Respondent” means any entity or Person, other than a City employee, that provides a Submittal in response to a request for Bids, Request for Proposals, Request for Qualifications, request for quotes or other request for information, as such terms are defined in Section 1.06.251 TMC. This term includes any such entity or Person whether designated as a supplier, seller, vendor, proposer, Bidder, Contractor, consultant, merchant, or service provider that; (1) assumes a contractual responsibility to the City for provision of Supplies, Services, and/or Public Works; (2) is recognized by its industry as a provider of such Supplies, Services, and/or Public works; (3) has facilities similar to those commonly used by Persons engaged in the same or similar business; and/or (4) distributes, delivers, sells, or services a product or performs a Commercially Useful Function.

1.07.020.S

“Services” means non-Public Works and Improvements services and includes professional services, personal services, and purchased services, as such terms are defined in Section 1.06.251 TMC and/or the City’s Purchasing Policy Manual.

“Submittal” means Bids, Proposals, Quotes, qualifications or other information submitted in response to requests for Bids, Requests for Proposals, Requests for Qualifications, requests for Quotations, or other City requests for information, as such terms are defined in Section 1.06.251 TMC.

“Supplies” means materials, Supplies, and other products that are procured by the City through a competitive process for either Public Works procurement or Non-Public Works and Improvements procurement unless an approved waiver has been granted by the appropriate authority.

1.07.020.T

“Tacoma Public Utilities Service Area” means any ZIP code in which Tacoma Public Utilities maintains infrastructure or provides retail services.

1.07.020.W

“Waiver” means a discretionary decision by the City that the one or more requirements of this chapter will not be applied to a Contract or Contracts.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28274 Ex. A; passed Dec. 16, 2014: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.030 Discrimination prohibited.

A. No person that is engaged in the construction of public works for the City, engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services to the City, shall discriminate against any other person on the basis of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, or the presence of any sensory, mental or physical disability in employment. Such discrimination includes the unfair treatment or denial of normal privileges to a person as manifested in employment upgrades, demotions, transfers, layoffs, termination, rates of pay, recruitment of employees, or advertisement for employment.

B. The violation of the terms of RCW 49.60 or Chapter 1.29 TMC by any person that is engaged in the construction of public works for the City, is engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services shall result in the rebuttable presumption that the terms of this chapter have also been violated. Such violation may result in termination of any City contract the violator may have with the City and/or the violator’s ineligibility for further City Contracts.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.040 Program administration.

A. The Community and Economic Development Director, or their designated Program Manager, shall be responsible for administering this chapter and obtaining compliance with respect to contracts entered into by the City and/or its contractors. It shall be the duty of the Director to pursue the objectives of this chapter by conference, conciliation, persuasion, investigation, or enforcement action, as may be necessary under the circumstances. The Director is authorized to implement an administrative and compliance program to meet these responsibilities and objectives.

B. The Director is hereby authorized to adopt and to amend administrative regulations known as the Program Regulations, to properly implement and administer the provisions of this chapter. The Program Regulations shall be in conformance with City of Tacoma policies and state and federal laws and be designed to encourage achievement of the Goals set forth herein.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.050 Approval as a Certified Business.

A. The Program Manager shall approve an entity as a Certified Business if all of the following criteria are satisfied:

1. The entity is certified as a DBE, SBE, MBE, WBE, or MWBE through the state of Washington’s Office of Minority & Women Business Enterprises; and
2. The entity can demonstrate that it also meets at least one of the following additional requirements:
 - a. The personal residence of the owner is located within the City of Tacoma or Tacoma Public Utilities Service Area, or
 - b. The entity’s business offices are located in any county of the Tacoma Public Utilities Service Area or any county adjacent to Pierce County, or
 - c. When the work is performed outside of Pierce County, the entity’s business offices may be located in an adjacent county in which the work is performed, or
 - d. Such additional information as the Program Manager or designee may require.
3. When another governmental entity has an equivalent business classification process, the City may enter into an interlocal cooperative agreement for mutual recognition of certifications.

B. Appeals.

The applicant may appeal any approval determination by the Program Manager under this chapter to the Director. The appeal must be made in writing and must set forth the specific reasons for the appeal. The Director shall make a decision on the appeal request within a reasonable time, which decision shall be final unless further appeal is made to the Hearing Examiner. In that event, the Hearing Examiner Rules of Procedure for Hearings, Chapter 1.23 TMC, shall be applicable to that appeal proceeding.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28274 Ex. A; passed Dec. 16, 2014: Ord. 28147 Ex. A; passed May 7, 2013: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.060 Program requirements.

A. The program shall meet the following requirements:

1. Establishment of Annual Goals.

The Program Regulations adopted pursuant to this chapter shall state reasonably achievable cumulative annual goals for utilization of Certified Businesses in the provision of supplies, services, and public works procured by the City. Cumulative annual goals for the participation of Certified Businesses in City contracts shall be based on the number of qualified Certified Businesses operating within the Tacoma Public Utilities Service Area. The dollar value of all contracts awarded by the City to Certified Businesses in the procurement of supplies, services, and public works shall be counted toward the accomplishment of the applicable goal.

2. Application of Annual Goals to Contracts.

The Program Manager shall consult with City departments/divisions to establish department/division specific goals for competitively solicited contracts in accordance with this chapter and the Program Regulations.

B. Exceptions:

City departments/divisions or the Program Manager may request an exception to one or more of the requirements of this chapter as they apply to a particular Contract or Contracts. Exceptions may be granted in any one or more of the following circumstances:

1. Emergency:

The supplies, services and/or public works must be provided with such immediacy that neither the City nor the contractor can comply with the requirements herein. Such emergency will be deemed documented whenever a waiver of competitive solicitation for emergency situations is authorized under Tacoma Municipal Code Chapter 1.06.257 or as may be hereinafter amended.

2. Not Practicable:

The Contract involves special facilities or market conditions or specially tailored or performance criteria-based products, such that compliance with the requirements of this chapter would cause financial loss to the City or an interruption of vital services to the public. Such circumstances must be documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over \$500,000 (excluding sales tax), approved by the Board of Contracts and Awards ("C&A Board").

3. Sole source:

The supplies, services, and/or public works are available from only one feasible source, and subcontracting possibilities do not reasonably exist as documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over \$500,000 (excluding sales tax), approved by the C&A Board.

4. Government purchasing.

The Contract or Contracts are the result of a federal, state or inter-local government purchasing agreement and the use of such agreement in lieu of a bid solicitation conducted by the City is approved by the senior financial manager.

5. Lack of certified contractors:

An insufficient number of qualified contractors exist to create any utilization opportunities as documented by the Program Manager.

C. Waiver:

If, after receipt of Submittals but prior to Contract award, it is determined that due to unforeseen circumstances, waiver of goals is in the best interests of the City, the Director or Superintendent of the department/division awarding the Contract may request in writing that the City Manager or designee, on behalf of General Government, or the Director of Utilities or designee, on behalf of the Department of Public Utilities, approve such waiver..

Waivers may be granted only after determination by the City Manager or Director of Utilities that compliance with the requirements of this chapter would impose unwarranted economic burden on, or risk to, the City of Tacoma as compared with the degree to which the purposes and policies of this chapter would be furthered by requiring compliance.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.070 Evaluation of submittals.

A. All submittals for a supplies, services, or public works and improvements contracts shall be evaluated for attainment of the Certified Business requirements established for that contract in accordance with this chapter and the Program Regulations.

B. The determination of Certified Business usage and the calculation of Certified Business requirements per this section shall include the following considerations:

1. General.

The dollar value of the contract awarded by the City to a Certified Business in the procurement of supplies, services, or public works shall be counted toward achievement of the respective goal.

2. Supplies.

A public works and improvements contractor may receive credit toward attainment of the Certified Business requirement(s) for expenditures for supplies obtained from a Certified Business; provided such Certified Business assumes the actual and contractual responsibility for delivering the supplies with its resources. The contractor may also receive credit toward attainment of the Certified Business goal for the amount of the commission paid to a Certified Business resulting from a supplies contract with the City; provided the Certified Business performs a commercially useful function in the process.

3. Services and Public Works subcontracts.

Any bid by a Certified Business or a bidder that utilizes a Certified Business shall receive credit toward requirement attainment based on the percentage of Certified Business usage demonstrated in the bid. A contractor that utilizes a Certified Business as a subcontractor to provide services or public works shall receive a credit toward the contractor's attainment of the respective requirement based on the value of the subcontract with that firm.

4. Brokers, Fronts, or Similar Pass-Through Arrangements.

Certified Business acting as brokers, fronts, or similar pass-through arrangements (as such terms are defined in the Program Regulations) shall not count toward the requirement attainment unless the activity reflects normal industry practices and the broker performs a commercially useful function.

C. Evaluation of competitively solicited submittals for public works and improvements and for services when a requirement has been established for the contract to be awarded shall be as follows:

1. When contract award is based on price.

The lowest priced bid submitted by a responsive and responsible bidder will be reviewed to determine if it meets the requirement. Certified Businesses may self-count utilization on such bids if they will perform the work for the scope the requirement is based upon.

a. If the low bidder meets the requirements, the bid shall be presumed the lowest and best responsible bid for contract award.

b. Any bidder that does not meet the stated Certified Business requirements shall be considered a non-responsible bidder unless a waiver of one or more of the requirements of this chapter is granted, in the City's sole discretion, pursuant to the criteria and processes in Tacoma Municipal Code 1.07.060.C.

2. When contract award is based on qualifications or other performance criteria in addition to price, solicitations shall utilize a scoring system that promotes participation by certified contractors. The Program Regulations may establish further requirements and procedures for final selection and contract award, including:

a. Evaluation of solicitations for Architectural and Engineering (A&E) services;

b. Evaluation and selection of submittals in response to requests for proposals; and

c. Selection of contractors from pre-qualified roster(s).

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.080 Contract compliance.

A. The contractor awarded a contract based on Certified Business participation shall, during the term of the contract, comply with the requirements established in said contract. To ensure compliance with this requirement following contract award, the following provisions apply:

1. Any substitutions for or failure to utilize Certified Business projected to be used must be approved in advance by the Program Manager. Substitution of one Certified Business with another shall be allowed where there has been a refusal to execute necessary agreements by the original Certified Business, a default on agreements previously made or other reasonable excuse; provided that the substitution does not increase the dollar amount of the bid.
2. Where it is shown that no other Certified Business is available as a substitute and that failure to secure participation by the Certified Business identified in the solicitation is not the fault of the respondent, substitution with a non-Certified Business shall be allowed; provided, that, the substitution does not increase the dollar amount of the bid.
3. If the Program Manager determines that the contractor has not reasonably and actively pursued the use of replacement Certified Business, such contractor shall be deemed to be in non-compliance.

B. Record Keeping.

All contracts shall require contractors to maintain relevant records and information necessary to document compliance with this chapter and the contractor's utilization of Certified Businesses, and shall include the right of the City to inspect such records.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.090 Program monitoring.

A. An Advisory Committee shall monitor compliance with all provisions of this chapter and the related Regulations. The Program Manager shall establish procedures to collect data and monitor the effect of the provisions of this chapter to assure, insofar as is practical, that the remedies set forth herein do not disproportionately favor one or more racial, gender, ethnic, or other protected groups, and that the remedies do not remain in effect beyond the point that they are required to eliminate the effects of under utilization in City contracting, unless such provisions are supported by a Disparity Study. The Program Manager shall have the authority to obtain from City departments/divisions, respondents, and contractors such relevant records, documents, and other information as is reasonably necessary to determine compliance.

B. The Program Manager shall submit an annual report to the Community and Economic Development Director, Director of Utilities, and the City Manager detailing performance of the program. The report shall document Certified Business utilization levels, waivers, proposed modifications to the program, and such other matters as may be specified in the Program Regulations.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.100 Enforcement.

The Director, or designee, may investigate the employment practices of contractors to determine whether or not the requirements of this chapter have been violated. Such investigation shall be conducted in accordance with the procedures established in the Program Regulations.

(Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.110 Remedies.

A. Upon receipt of a determination of contractor violation by the Program Manager, the City Manager or Director of Utilities, as appropriate, may take the following actions, singly or together, as appropriate:

1. Forfeit the contractor's bid bond and/or performance bond;

2. Publish notice of the contractor's noncompliance;
3. Cancel, terminate, or suspend the contractor's contract, or portion thereof;
4. Withhold funds due contractor until compliance is achieved; and/or
5. Recommend appropriate action including, but not limited to, disqualification of eligibility for future contract awards by the City (debarment) per Section 1.06.279 TMC;

B. Prior to exercise of any of the foregoing remedies, the City shall provide written notice to the contractor specifying the violation and the City's intent to exercise such remedy or remedies. The notice shall provide that each specified remedy becomes effective within ten business days of receipt unless the contractor appeals said action to the Hearing Examiner pursuant to Chapter 1.23 TMC.

C. When non-compliance with this chapter or the Program Regulations has occurred, the Program Manager and the department/division responsible for enforcement of the contract may allow continuation of the contract upon the contractor's development of a plan for compliance acceptable to the Director.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 28110 Ex. B; passed Dec. 4, 2012; Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.120 Unlawful acts.

It shall be unlawful for any Person to willfully prevent or attempt to prevent, by intimidation, threats, coercion, or otherwise, any Person from complying with the provisions of this chapter.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.130 Severability.

If any section of this chapter or its application to any Person or circumstance is held invalid by a court of competent jurisdiction, then the remaining sections of this chapter, or the application of the provisions to other Persons or circumstances, shall not be affected.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.140 Review of program.

This chapter shall be in effect through and until December 31, 2024, unless the City Council shall determine at an earlier date that the requirements of this chapter are no longer necessary. If this chapter has not been repealed by July 1, 2024, the City Council shall determine by the end of that year whether substantial effects or lack of opportunity of MWBEs and/or SBEs remain true in the relevant market and whether, and for how long, some or all of the requirements of this chapter should remain in effect.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28274 Ex. A; passed Dec. 16, 2014; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 27867 Ex. A; passed Dec. 15, 2009)



City of Tacoma
Community and Economic Development Department
LEAP Office
747 Market Street, Room 900
Tacoma, WA 98402
(253) 591-5590
leap@cityoftacoma.org

LEAP LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM ABBREVIATED PROGRAM REQUIREMENTS

LEAP is a mandatory City of Tacoma program adopted to provide employment opportunities for City of Tacoma residents and residents of Economically Distressed Areas of the Tacoma Public Utilities Service Area. Based on the dollar amounts of projects, it requires Prime Contractors performing qualifying public works projects or service contracts ensure that a percentage of the total labor hours worked on the project are performed by LEAP-Qualified local employees and/or LEAP-Qualified apprentices approved by the Washington State Apprenticeship Council (SAC), youth, veterans, residents of Tacoma, residents of surrounding Economically Distressed Areas, and/or TPU Service Areas (as outlined below). Compliance may be met through any combination LEAP-Qualified employees.

Prime Contractors may obtain further information by contacting the City of Tacoma's LEAP Coordinator, Deborah Trevorow, at (253) 591-5590, or e-mail leap@cityoftacoma.org. The LEAP Coordinator can assist contractors in the recruitment of qualified entry-level workers to work on City of Tacoma Public Works projects. The LEAP Office is in the Tacoma Municipal Building, 747 Market Street, Rm 900.

LEAP PROGRAM REQUIREMENTS:

1. **LOCAL EMPLOYMENT GOAL:** The Prime Contractor is required to ensure that 15 percent of the total Labor Hours worked on the project are performed by residents of the City of Tacoma or Economically Distressed ZIP Codes for the following projects:
 - a) Civil Projects over \$250,000
 - b) Building Projects over \$750,000
2. **APPRENTICE GOAL:** The Contractor is required to ensure that an additional 15 percent of the total Labor Hours worked on any project over \$1,000,000 are performed by Apprentices who are residents of the Tacoma Public Utilities Service Area. This is in addition to the Local Employment Goal.
3. **SUBCONTRACTOR NOTIFICATION:** Prime Contractors shall notify all Subcontractors of the LEAP Program requirement. Subcontractor labor hours may be utilized towards achievement of the LUG. Owner/Operator hours may be used for the Local Employment Goal.
4. **FAILURE TO MEET LEAP UTILIZATION GOAL:** Contractors shall be assessed an amount for each hour that is not achieved. The amount per hour shall be based on the extent the Contractor met its goal. The amount per hour that shall be assessed shall be as follows:

• 100% achievement	\$0.00 penalty	
• 99% to 90% achievement	\$2.00 penalty	
• 89% to 75% achievement	\$3.50 penalty	
• 74% to 50% achievement	\$5.00 penalty	
• 49% to 1% achievement	\$7.50 penalty	
• 0% achievement	\$10.00 penalty	

*Penalty may be waived in the best interests of the City of Tacoma.

LEAP DOCUMENT SUBMITTALS:**

1. *LEAP EMPLOYEE VERIFICATION FORM*: The Contractor must provide the LEAP Office with a form for every person whom the contractor thinks will assist with attaining credit towards meeting the LEAP Utilization requirements with at least one piece of verifying documentation. The LEAP Office staff will respond regarding whether or not the employee is LEAP-Qualified.
2. *WEEKLY CERTIFIED PAYROLL*: In LCP Tracker: the Prime and Subcontractors must submit weekly Certified Payrolls that include, employee name, address, social security number, craft/trade, class, hours worked on this job, rate of pay, and gross wages paid including benefits for this job.
3. *DEPARTMENT OF LABOR & INDUSTRIES (L&I)*: The Prime must enter the project in the L&I project site under the 'Tacoma, City of' account and notify the LEAP Office when this has been completed.

****WITHHOLDING PROGRESS PAYMENTS**: The LEAP Coordinator may withhold progress payments for failure to follow the above-outlined procedures



City of Tacoma
LEAP Office
747 Market Street, Room 900
Tacoma, WA 98402
(253) 591-5590 or leap@cityoftacoma.org

LEAP

Documents and Submittal Schedule

In the attached packet, you will find the LEAP forms that are required to be submitted by the Prime and Sub Contractors.

- ❑ **LEAP Abbreviated Program Requirements:** brief overview of LEAP Program requirements
- ❑ **LEAP Employee Verification Form:** to be submitted on an ongoing basis for each employee who may be a LEAP-qualified employee
- ❑ **Tacoma Public Utilities Service Area Map and List, Economically Distressed ZIP Codes Map and List:** for your reference on LEAP-qualified zoning areas

In addition, the City of Tacoma will also require from the Prime Contractor and all its Subcontractors:

- ❑ **Weekly Certified Payrolls:** to be submitted via LCP Tracker weekly, biweekly or monthly with the LEAP Payroll Report attached as scheduled by the Prime
- ❑ **Statement of Intent to Pay Prevailing Wages:** to be submitted prior to commencing work
- ❑ **Affidavit of Wages Paid:** to be submitted upon completion of each contractor's work
- ❑ **Document Verification:** provide required information when requested from LEAP Office

Please submit above documents as instructed by the LEAP Coordinator.

If you have any questions or request further information, please feel free to contact the City of Tacoma's LEAP Program at (253) 591-5590 or email dtrevorrow@cityoftacoma.org

CHAPTER 1.90
LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM

Sections:

- 1.90.010 Purpose.
- 1.90.020 Scope.
- 1.90.030 Definitions.
- 1.90.040 LEAP goals.
- 1.90.050 *Repealed.*
- 1.90.060 Effect of program on prime contractor/subcontractor relationship.
- 1.90.070 Apprentice utilization requirements – Bidding and contractual documents.
- 1.90.080 Enforcement.
- 1.90.090 Compliance with applicable law.
- 1.90.100 Review and reporting.
- 1.90.105 Authority
- 1.90.110 Interpretation.

1.90.010 Purpose.

The purpose of this Chapter is to establish a means of providing for the development of a trained and capable workforce possessing the skills necessary to fully participate in the construction trades.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.020 Scope.

The provisions of this Chapter shall apply to all Public Works or Improvements funded in whole or in part with City funds or funds which the City expends or administers in accordance with the terms of a grant.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.030 Definitions.

As used in this chapter, the following terms shall have the following meanings:

- A. “Apprentice” shall mean a person enrolled in a course of training specific to a particular construction trade or craft, which training shall be approved by the Washington State Apprenticeship and Training Council established pursuant to RCW 49.04.010.
- B. “Building Projects” shall mean all Public Works or Improvements having an Estimated Cost greater than \$750,000.00, and for which a building permit must be issued pursuant to Chapter 1 of the current edition of the state building code (Uniform Building Code).
- C. “City” shall mean all divisions and departments of the City of Tacoma, and all affiliated agencies, provided, however, that the Tacoma Community Redevelopment Authority shall not be included within this definition.
- D. “Civil Projects” shall mean all Public Works or Improvements that are not defined as a “Building Project,” provided that those projects having an Estimated Cost of less than \$250,000.00 shall not be included in this definition.
- E. “Contractor or Service Provider” means a person, corporation, partnership, or joint venture entering into a contract with the City to construct a Public Work or Improvement.
- F. “Director” shall mean the Director of Community and Economic Development, or the Director’s Designee.
- G. “Economically Distressed ZIP Codes” shall mean ZIP codes in the Tacoma Public Utilities Service Area that meet two out of three (2/3) of the thresholds of:

1. High concentrations of residents living under 200% of the federal poverty line in terms of persons per acre (69th percentile)
2. High concentrations of unemployed people in terms of persons per acre (45th percentile)
3. High concentrations of people 25 years or older without a college degree in terms of persons per acre (75th percentile)

Said thresholds shall be updated within 30 days following any Prevailing Wage updates issued by the Washington State Labor and Industry. All updates are to be published on the first business day in August and in February of each calendar year.

H. “Electrical Utility” and “Water Utility” shall mean, respectively, the Light Division of the Department of Public Utilities of the City of Tacoma, and shall include the electrical and telecommunications services of that Division, and the Water Division of the Department of Public Utilities of the City of Tacoma.

I. “Estimated Cost” shall mean the anticipated cost of a Public Work or Improvement, as determined by the City, based upon the expected costs of materials, supplies, equipment, and labor, but excluding taxes and contingency funds.

J. “Estimated Labor Hours” shall mean the anticipated number of Labor Hours determined by the City to be necessary to construct a Public Work or Improvement and set forth in the specifications for the project, or as may be subsequently revised due to contract or project adjustment, or pursuant to an agreed upon change order.

K. “Existing Employee” shall mean an employee whom the Contractor or Service Provider can demonstrate was actively employed by the Contractor or Service Provider for at least 1000 hours in the calendar year prior to bid opening plus one month following bid opening, and who was performing work in the construction trades.

L. “Labor Hours” shall mean the actual number of hours worked by workers receiving an hourly wage who are employed on the site of a Public Work or Improvement, and who are subject to state or federal prevailing wage requirements. The term “Labor Hours” shall include hours performed by workers employed by the Contractor or Service Provider and all Subcontractors, and shall include additional hours worked as a result of a contract or project adjustment or pursuant to an agreed upon change order. The term “Labor Hours” shall not include hours worked by workers who are not subject to the prevailing wage requirements set forth in either RCW 39.12 or the Davis-Bacon Act - 40 U.S.C. 276 (a).

M. “LEAP Coordinator” shall mean the City of Tacoma staff member who administers LEAP.

N. “LEAP Program” or “Program” shall mean the City of Tacoma’s Local Employment and Apprenticeship Training Program, as described in this chapter.

O. “LEAP Regulations” or “Regulations” shall mean the rules and practices established in this document.

P. “LEAP Utilization Plan” shall mean the document submitted by the Contractor to the LEAP Coordinator which outlines how the associated goals will be met on the project.

Q. “Priority Hire Resident” shall mean any resident within the Economically Distressed ZIP Codes.

R. “Project Engineer” shall mean the City employee who directly supervises the engineering or administration of a particular construction project subject to this chapter.

S. “Public Work or Improvement” shall have the same meaning as provided in Section 39.04.010 RCW, as that Section may now exist or hereafter be amended.

T. “Resident of Tacoma” shall mean any person, not defined as a Resident of the Community Empowerment Zone, who continues to occupy a dwelling within the boundaries of the City of Tacoma, has a present intent to continue residency within the boundaries of the City, and who demonstrates the genuineness of that intent by producing evidence that the person’s presence is more than merely transitory in nature.

U. “Service Area - Electrical” or “Electrical Service Area” shall mean that area served with retail sales by the Electrical Utility of the City of Tacoma at the time a bid is published by the Electrical Utility for a Public Work or Improvement to be performed primarily for the Electrical Utility.

V. “Service Area - Water” or “Water Service Area” shall mean that area served with retail sales by the water utility of the City of Tacoma at the time a bid is published by the water utility for a Public Work or Improvement to be performed primarily for the water utility.

W. “Service Contract” shall mean all City contracts relating to a Public Work or Improvement which utilize labor at a City site and which are not within the exceptions to nor defined as “Building Projects” or “Civil Projects.”

X. “Subcontractor” means a person, corporation, partnership, or joint venture that has contracted with the Contractor or Service Provider to perform all or part of the work to construct a Public Work or Improvement by a Contractor.

Y. “Tacoma Public Utilities” means the City of Tacoma, Department of Public Utilities.

Z. “Tacoma Public Utilities Service Area” shall mean every ZIP code listed by Tacoma Public Utilities as an area that either receives services or maintains infrastructure to provide services.

AA. Washington State Labor and Industry Prevailing Wage shall mean the hourly wage, usual benefits and overtime, paid in the largest city in each county, to the majority of workers, laborers, and mechanics. Prevailing wages are established, by the Department of Labor & Industries, for each trade and occupation employed in the performance of public work. They are established separately for each county, and are reflective of local wage conditions.

(Ord. 28520 Ex. A; passed Jul. 17, 2018; Ord. 28147 Ex. B; passed May 7, 2013; Ord. 28110 Ex. C; passed Dec. 4, 2012; Ord. 27815 Ex. A; passed Jun. 30, 2009; Ord. 27368 § 1; passed Jun. 21, 2005; Ord. 26698 § 1; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.040 LEAP goals.

A. Utilization Goals.

1. All Contractors constructing Civil Projects or Building Projects, and all Service Providers involved with the construction of a Public Work or Improvement, shall ensure that at least 15 percent of the total Labor Hours actually worked on the Project are performed by persons having their residence within the boundaries of the City of Tacoma or Economically Distressed ZIP Codes, whether or not any such person is an Apprentice.

a. The thresholds for this section shall be \$250,000.00 for Civil Projects and \$750,000.00 for Building Projects.

2. Fifteen percent (15%) of the Total Labor Hours on contracts above one-million dollars (\$1,000,000.00) shall have work performed by Apprentices who are residents of the Tacoma Public Utilities Service Area consistent with RCW 39.04.320(1)(a), subject to waiver based on exceptions as specified in RCW 39.04.320(2)(a), (b), and (c).

3. Labor Hours performed by non-residents of the State of Washington will be deducted from a project's total Labor Hours for purposes of determining compliance with the requirements of this chapter.

4. All Contractors and Service Providers shall submit a LEAP Utilization Plan as provided for in the regulations adopted under this chapter, and shall meet with the LEAP Coordinator to review said Plan prior to being issued a Notice to Proceed. Failure to submit a LEAP Utilization Plan may be grounds for the City to withhold remittance of a progress payment until such Plan is received from the responsible Contractor or Provider. A meeting with the LEAP Coordinator prior to issuance of a Notice to Proceed shall be excused only when the LEAP Coordinator is unavailable to meet prior to the scheduled date for issuance of the Notice to Proceed and the Contractor and the LEAP Coordinator have otherwise scheduled a meeting for the coordinator to review the Contractor's or Provider's plan.

The Contractor or Service Provider shall be responsible for meeting the LEAP utilization goal requirements of the contract, including all amendments and change orders thereto, and shall be responsible for overall compliance for all hours worked by Subcontractors. To the extent possible, the Contractor or Service Provider shall recruit Apprentices from multiple trades or crafts.

B. Failure to Meet Utilization Goal.

1. Contracts for the construction of Building projects or Civil projects and Service Contracts shall provide that Contractors or Service Providers failing to meet the LEAP utilization goals shall be assessed an amount for each hour that is not achieved. The amount per hour shall be based on the extent the Contractor or Service Provider met its goal. The amount per hour that shall be assessed shall be as follows:

Percent of Goal Met	Assessment per unmet hour
100%	\$ 0.00
90% - 99%	\$ 2.00
75% to 89%	\$ 3.50
50% to 74%	\$ 5.00
1% to 49%	\$ 7.50
0%	\$10.00

When determining the percent of goal that is met, all rounding shall be down to the nearest whole percent. No penalty shall be waived by the City unless it is determined by the Director to be in the best interests of the City, which determination shall be made after consultation with the LEAP Coordinator.

2. Deposit of Assessments. All assessments imposed pursuant to this section shall be deposited into a separate account and utilized to support the City's pre-apprenticeship and training program. The policies and regulations adopted by the City Manager and Director of Utilities pursuant to this chapter shall address issues pertaining to a Contractor's existing workforce. Contributions need not be made for Labor Hours that have been adjusted in accordance with Section 1.90.040(E).

C. LEAP Reports.

Notwithstanding the provisions of TMC 1.90.100, the Director shall, not less than annually, publish a LEAP report setting forth Contractor compliance with this chapter. Said report shall include information on all contracts and all Contractors to which this chapter applies, and shall detail the level and nature of LEAP participation by contract and by Contractor, The

Director's LEAP report may include such other information as may be helpful to assuring fair and accurate representation of the contracts, Contractors or projects covered in the report. The Director's LEAP reports may be considered by the Board of Contracts and Awards in its determinations as to bidder responsibility.

D. LEAP Goal Adjustments.

1. LEAP utilization goals may be adjusted prior to bid opening and/or as a result of a contract amendment or change order on a Building Project, Civil Project, or Service Contract.

a. If LEAP utilization goals are adjusted prior to bid opening, they shall be set forth in the bid or Request For Proposal advertisement and specification documents or in an addendum timely provided to prospective bidders, provided that such adjustment shall be based upon a finding by the Project Engineer that the reasonable and necessary requirements of the contract render LEAP utilization unfeasible at the required levels. The Director shall concur with the Project Engineer's finding, provided that should the Project Engineer and the Director fail to reach agreement on the Project Engineer's finding, then in that circumstance the matter shall be referred to the City Manager or the Director of Utilities, as appropriate, for ultimate resolution. Notwithstanding any other provision of this chapter to the contrary, the decision of the City Manager or the Director of Utilities with regard to LEAP goal adjustment may not be appealed.

b. If LEAP utilization goals are adjusted due to contract amendment or change order, the amount of adjustment shall be consistent with the utilization goals set forth in this chapter and shall be determined pursuant to regulations adopted pursuant to this chapter for administration of LEAP utilization goal adjustments.

2. The methodology of determining the appropriate adjustments to LEAP utilization goals shall be determined in consultation with the LEAP Advisory Committee, established pursuant to this ordinance for so long as the LEAP Advisory Committee remains in existence.

3. LEAP utilization goals shall not apply to those portions of a project that are funded by sources other than (a) City funds, or (b) funds which the City expends or administers in accordance with the terms of a grant to the City, provided that the Project Engineer shall notify the Director of such non-application prior to bid advertisement. For the purposes of this paragraph, credits extended by another entity for the purpose of providing project funding shall not be considered to be City funds.

E. Utilization - Electrical Projects Outside Electrical Service Area.

Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City's Electrical Utility, which are wholly situated outside the Electrical Service Area, and for which the estimated cost is less than \$1,000,000.00, are exempt from the requirements of this chapter.

F. Utilization - Water Projects Outside Water Service Area.

Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City's water utility, which are wholly situated outside the Water Service Area, and for which the estimated cost is less than \$1,000,000.00 are exempt from the requirements of this chapter.

G. Utilization - Projects Outside Tacoma Public Utilities Service Area.

Civil Projects or Building Projects that are constructed primarily for the benefit or use by Tacoma Public Utilities, which are wholly situated outside the retail service area of the Tacoma Public Utilities Service Area, and for which the estimated cost is less than \$1,000,000.00 are exempt from the requirements of this chapter. Projects wholly situated outside the Tacoma Public Utilities Service Area, and for which the estimated cost is more than \$1,000,000.00, shall be exempt from 15% utilization goal specified in subsection A1. of this section. The 15% utilization goal specified in subsection A2. of this section may be met if project work is performed by Apprentices who are enrolled in a course of training specific to a particular construction trade or craft, provided such training has been approved by the Washington State Apprenticeship and Training Council in accordance with Chapter 49.04, RCW.

H. Emergency.

This chapter shall not apply in the event of an Emergency. For the purposes of this section, an "Emergency" means unforeseen circumstances beyond the control of the City that either: (a) present a real, immediate threat to the proper performance of essential functions; or (b) will likely result in material loss or damage to property, bodily injury, or loss of life if immediate action is not taken.

I. Conflict with State or Federal Requirements.

If any part of this chapter is found to be in conflict with federal or state requirements which are a prescribed condition to the allocation of federal or state funds to the City, then the conflicting part of this chapter is inoperative solely to the extent of the conflict and with respect to the City departments directly affected. This provision does not affect the operation of the

remainder of this chapter. Administrative rules or regulations adopted under this chapter shall meet federal and state requirements which are a necessary condition to the receipt of federal or state funds by the City.

(Ord. 28520 Ex. A; passed Jul. 17, 2018; Ord. 28147 Ex. B; passed May 7, 2013; Ord. 27815 Ex. A; passed Jun. 30, 2009; Ord. 27368 § 2; passed Jun. 21, 2005; Ord. 26992 § 1; passed Oct. 15, 2002; Ord. 26698 § 2; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.050 Repealed by Ord. 27368. Good faith efforts.

(Ord. 27368 § 3; passed Jun. 21, 2005; Ord. 26698 § 3; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.060 Effect of program on prime contractor/service provider - subcontractor relationship.

The LEAP Program shall not be construed so as to modify or interfere with any relationship between any Contractor or Service Provider and Subcontractor. The LEAP Program shall not grant the City any authority to control the manner or method of accomplishing any construction work that is additional to any authority retained by the City in a Public Works contract.

(Ord. 26698 § 4; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.070 Apprentice utilization requirements – Bidding and contractual documents.

All packages of bid documents for every Building Project and every Civil Project shall incorporate provisions satisfactory to the City Attorney so as to allow enforcement of the provisions contained in this Chapter. Such contractual provisions may include liquidated damages, calculated to reimburse the City for the Contractor's breach of these performance requirements, which shall be published with the City's call for bids.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.080 Enforcement.

A. The Director shall review the Contractor's or Service Provider's and all Subcontractor's employment practices during the performance of the work for compliance with LEAP Program requirements. On-site visits may be conducted as necessary to verify compliance with the requirements of the LEAP Program. The Contractor, Service Provider, or Subcontractors shall not deny to the City the right to interview its employees, provided that the Director shall make reasonable efforts to coordinate employee interviews with employers.

B. Any knowing failure or refusal to cooperate in compliance monitoring may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

C. The making of any material misrepresentation may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

D. Any action by the City, its officers and employees, under the provisions of this Chapter may be reviewed by the Board of Contracts and Awards, upon written application of the party so affected. Application shall be made within twenty (20) days of the date of the action upon which the appeal is based, and provided to the City by certified mail or by personal service. Any action taken by the Board of Contracts and Awards may be appealed to the City Council or Public Utility Board, as appropriate, and thereafter if desired, to the Superior Court of Pierce County, Washington, within fifteen (15) days of the previous decision.

(Ord. 26698 § 5; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.090 Compliance with applicable law.

Nothing in this Chapter shall excuse a Prime Contractor, Service Provider, or Subcontractor from complying with all relevant federal, state, and local laws.

(Ord. 26698 § 6; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.100 Review and reporting.

The City Manager and Director of Utilities shall review the Program on or before January 1, 2000, and every two (2) years thereafter, and shall report to the City Council and Public Utility Board the Manager's and Director's findings, conclusions, and recommendations as to the continued need for the Program, and any revisions thereto that should be considered by the Council and Board.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.105 Authority.

The City Manager and the Director of Utilities shall have authority to jointly adopt policies and regulations consistent with this chapter to implement the LEAP program.

(Ord. 26698 § 7; passed Sept. 12, 2000: Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.110 Interpretation.

This Chapter shall not be interpreted or construed so as to conflict with any state or federal law, nor shall this Chapter be enforced such that enforcement results in the violation of any applicable judicial order.

(Ord. 26301 § 1; passed Oct. 6, 1998)

LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP)

LEAP REQUIREMENTS & PROCEDURES:

The LEAP office enforces post-award mandatory requirements. Bidders do not have to submit any information in the bid submittal package to be in compliance with LEAP.

Post-award Submittals:

- *LEAP Employee Verification Form.* This form is to be completed for employees who may be LEAP-Qualified and may be able to help meet the LEAP Goals.
- *LEAP Weekly Payroll.* These must be submitted via LCP Tracker. By submitting payrolls in LCP Tracker before the Labor & Industry's website, you can reduce data entry.

The City of Tacoma's LEAP office enforces two mandatory requirements on City projects based on certain monetary thresholds.

Local Employment Utilization Goal - the Prime Contractor performing a qualifying public works project must ensure that 15 percent of the total labor hours worked on the project are performed by residents of the City of Tacoma or Economically Distressed Zip Codes ,whether or not any such person is an apprentice.

Apprenticeship Utilization Goal – for contracts above one-million dollars, the Prime Contractor performing a qualifying public works project must ensure that 15 percent of the total labor hours worked on the project are performed by Apprentices who are residents of the City of Tacoma or Tacoma Public Utilities Service Area. The accompanying LEAP Regulations, forms, and maps are included in these specifications.

***Exceptions:** If the project is located outside of the retail service area of the Tacoma Public Utilities Service Area, then Apprentices may come from the county in which the work is performed.

This project is below \$1 million and is thusly subject to the:

1. 15% Local Employment Utilization Goal

LEAP staff can assist contractors in the recruitment, screening and selection of qualified City of Tacoma residents, Economically Distressed Area residents, and Apprentices. Contractors may obtain further information by contacting the City's LEAP Office at (253) 316-3057 or (253) 591-5590. The LEAP Office is located in the Tacoma Municipal Building, 747 Market Street, Room 900, Tacoma, WA 98402. www.cityoftacoma.org/leap



City of Tacoma LEAP Office
747 Market Street, Room 900
Tacoma, WA 98402
(253) 591-5590 or leap@cityoftacoma.org
www.cityoftacoma.org/leap

LEAP EMPLOYEE VERIFICATION FORM

Contractor/Sub: _____ Specification Number: _____

Project Description: _____

Employee Name: _____ Craft: _____

Ethnic Group (*optional*): ☐ Asian/Pac Isl. ☐ Black ☐ Hispanic ☐ Native American ☐ White ☐ Other

Gender (*optional*): ☐ MALE ☐ FEMALE

Complete Physical Address (No PO Boxes): _____

City: _____ State: _____ Zip: _____ Telephone: _____ Date of Hire: _____

Apprenticeship County: _____ Apprentice Registration I.D. (*if applicable*): _____

Age: _____ Copy of DD-214: _____

*******Please fill out entire form for tracking LEAP performance*******

LEAP qualified employee categories: (check all that apply and provide evidence for each check)

_____ a. Resident (journey level or certified apprentice) within the geographic boundaries of the City of Tacoma

_____ b. Resident (journey level or certified apprentice) within Economically Distressed ZIP Codes of the Tacoma Public Utilities Service Area

_____ c. WA State Approved Apprentice living in the Tacoma Public Utilities Service Area (Only valid for projects over \$1,000,000)

_____ d. WA State Approved Apprentice *(Only valid for contracts where 100% of work is performed outside of Pierce County)

Signature of Employee: _____ Date: _____

Contractor Representative: _____ Date: _____

LEAP EMPLOYEE VERIFICATION FORM

To be Completed by Contractor or Subcontractor

Please attach a legible copy of one or more of the following document(s) showing the address of residence as proof of local (Tacoma) and/or Economically Distressed Area and/or TPU Service Areas residency. For youth, see first line and for veteran status, see second line.

.....

_____ For Youth - Copy of Birth Certificate or WA State ID or
_____ WA Driver's License (projects advertised after 05-20-13)

_____ For Veterans – Copy of DD-214(Projects advertised after
_____ 05-20-13)

_____ Driver's License with current address

_____ Utility Bill/Phone Bill/Cell Bill/Cable Bill with current
_____ address

_____ Copy of current tax form W-4

_____ Rental Agreement/Lease (residential)

_____ Computer Printout From Other Government Agencies

_____ Property Tax Records

_____ Apprentice Registration I.D.

_____ Food Stamp Award Letter

_____ Housing Authority Verification

_____ Insurance Policy (Residence/Auto)

*Any of the above must have a complete physical address verified by the www.govme.org website.

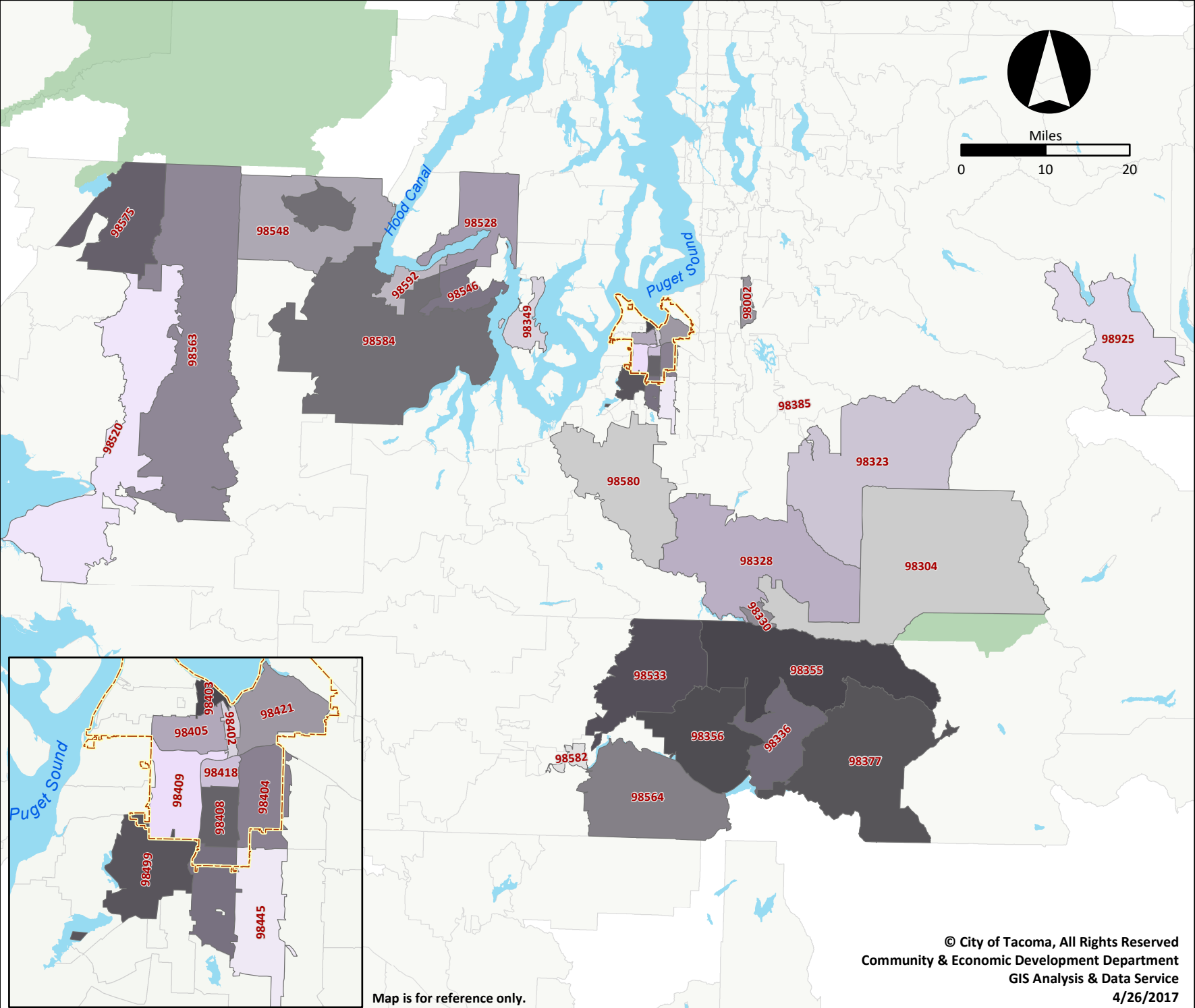
No PO Boxes


Contractor Representative:_____

Date:_____

Title:_____

Appendix C: Economically Distressed ZIP Codes Map





City Limits

98002
98304
98323
98328
98330
98336
98349
98355
98356
98377
98385
98520
98528
98533
98546
98548
98563
98564
98575
98580
98582
98584
98592
98925
98402
98403
98404
98405
98408
98409
98418
98421
98444
98445
98499

Economically Distressed ZIP Codes (Journeyman AND Apprentice)

Zip Code	200% Pov	Unemployed	25+ College	Area
98002	Y		Y	Auburn
98304	Y		Y	Ashford/Rainier
98323	Y	Y	Y	Carbonado
98328	Y		Y	Eatonville
98330	Y		Y	Elbe
98336	Y		Y	Glenoma
98349	Y	Y		Lakebay
98355		Y	Y	Mineral
98356	Y	Y	Y	Morton
98377	Y	Y	Y	Randle
98385		Y	Y	South Prairie
98402	Y	Y		Downton
98403	Y	Y		Stadium/St. Helens
98404	Y	Y		Eastside
98405	Y	Y		Hilltop/Central
98408	Y		Y	South End
98409	Y	Y		South Tacoma
98418	Y		Y	Lincoln/South End
98421	Y	Y	Y	Port
98439	Y	Y		McChord AFB
98444	Y	Y		Parkland
98445	Y		Y	Midland
98499	Y	Y		Lakewood
98520	Y	Y	Y	Aberdeen
98528	Y		Y	Belfair
98533		Y	Y	Cinebar
98546	Y	Y	Y	Grapeview
98548	Y	Y	Y	Hoodsport
98563	Y	Y	Y	Montesano
98564	Y	Y	Y	Mossyrock
98575	Y		Y	Quinault
98580	Y		Y	Roy
98582	Y		Y	Salkum
98584	Y		Y	Shelton
98591	Y		Y	Toledo
98592		Y	Y	Union
98925	Y		Y	Easton

GENERAL CONDITIONS AND OTHER CONTRACT TERMS & CONDITIONS

1. CITY OF TACOMA, GENERAL PROVISIONS
2. MODIFICATIONS TO THE GENERAL CONDITIONS,
AS MODIFIED BY THE CITY OF TACOMA
3. GENERAL CONDITIONS FOR WASHINGTON STATE FACILITY
CONSTRUCTION

GENERAL PROVISIONS

(Revised December 15, 2020)

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/. 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 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 Contractor 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
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.

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.

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.

**CITY OF TACOMA MODIFICATIONS TO THE
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**CITY OF TACOMA MODIFICATIONS TO THE
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PART 1 GENERAL PROVISIONS

1.01 DEFINITIONS

Replace the following article in Section 1.01:

- Q. "Owner" means the City 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:

- AC. "Abbreviations" refer to trade association names and titles of general standards 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. "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.
- AE. "Base Bid" is the sum stated in the Bid 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 Bids and Unit Prices. The base bid does not include Allowances, Force Account work and Washington State Sales taxes. Owner shall pay Contractor the Contract Sum plus state sales tax for performance of the Work, in accordance with the Contract Documents.
- AF. "Contracting Agency" (or Owner) is the City of Tacoma.
- AG. "Contract Provisions" is the publication addressing the work required for an individual project. At the time of the call for bids, 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, LEAP and EIC requirements.
- AH. "Furnish" is used to mean supply and deliver to the project site, ready for unloading, unpacking, assembly, installation and other.
- AI. "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.
- AJ. "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.

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- AK. “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.
- AL. “Provide” means to furnish and install, complete and ready for intended use.
- AN. “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.

1.03 EXECUTION AND INTENT

Add the following to Section 1.03:

The intent of the contract is to be prescribing a complete work. Omissions from the contract of details of work, which are necessary to carry out the contract, shall not relieve the Contractor from performing the omitted work.

1.04 OBJECTIONS TO APPLICATION OF PRODUCTS

Add the following new Section 1.04:

Bidders for this project are required to thoroughly familiarize themselves with specified products and installation procedures and submit to the Senior Buyer any questions or objections (in writing) no later than **the date specified on the “Bidder Question Form.”** Submittal of Bid constitutes acceptance of products and procedures specified.

1.05 DISQUALIFICATION OF BIDDERS

Add the following new Section 1.05:

A bidder may be deemed not responsible, and the proposal rejected by the Owner for any of the following:

- A. More than one bid proposal is submitted for the same project from a bidder under the same or different names;
- B. Evidence of collusion exists with any other bidder. Participants in collusion will be restricted from submitting future bids;
- C. A bidder is not pre-qualified for the work or to the full extent of the bid;
- D. An unsatisfactory performance record exists based on past or current work;
- E. There is incomplete work which may hinder or prevent the prompt completion of the work bid upon;
- F. The bidder failed to settle bills for labor or materials on past or current contracts;
- G. The bidder has failed to complete a written public contract or has been convicted of a crime arising from a previous public contract;
- H. The bidder is unable, financially or otherwise, to perform the work;
- I. A bidder is not authorized to do business in the state of Washington;
- J. Failure by the contractor to properly review the project documents and/or site;

**CITY OF TACOMA MODIFICATIONS TO THE
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- K. The bid proposal was not received by the submittal deadline;
- L. The contractor fails to meet the LEAP or EIC requirements as described in these documents;
- M. Receipt of addenda is not acknowledged; or
- N. There are any other reasons deemed proper by the Owner.

1.06 PRE-AWARD INFORMATION

Add the following new Section 1.06:

Before awarding any contract, the Owner may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Owner requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Bid evaluation submittals related to the contractors ability to perform the work including experience on similar projects, project personnel and equipment, and financial resources, or
7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

PART 2 INSURANCE AND BONDS

2.01 CONTRACTOR'S LIABILITY INSURANCE

Replace the entire Section 2.01 with the following:

Insurance shall be per the City's standard "City of Tacoma Insurance Requirements" provided in the Contract Forms section of the Project Manual.

2.02 COVERAGE LIMITS

Replace the entire Section 2.02 with the following:

Insurance shall be per the City's standard "City of Tacoma Insurance Requirements" provided in the Contract Forms section of the Project Manual.

**CITY OF TACOMA MODIFICATIONS TO THE
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2.03 INSURANCE COVERAGE CERTIFICATES

Replace the entire Section 2.03 with the following:

Insurance shall be per the City's standard "City of Tacoma Insurance Requirements" provided in the Contract Forms section of the Project Manual.

2.04 PAYMENT AND PERFORMANCE BONDS

Add the following to Section 2.04:

For contracts of \$150,000 or less, the Contractor may, at the Contractor's option authorize the Contracting Agency to retain 10% of the contract amount in lieu of furnishing a performance and/or payment bond. For contracts over \$150,000, a Payment Bond and 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 Project Manual under "Contract Forms".

2.06 BUILDER'S RISK

Replace the entire Section 2.06 with the following:

Insurance shall be per the City's standard "City of Tacoma Insurance Requirements" provided in the Contract Forms section of the Project Manual.

PART 3 TIME AND SCHEDULE

3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION

Delete Section 3.07 B – Actual Damages.

PART 5 PERFORMANCE

5.04 PREVAILING WAGES

Replace Section 5.04 G with the following.

- G. Certified Payrolls: Consistent with WAC 296-127-320, the contractor and any subcontractor shall submit a certified copy of payroll records monthly. All certified payrolls must be filled with L&I's online reporting system consistent with RCW 31.12.120 with a copy of such fillings being provided to the City of Tacoma per and in accordance with the project documents unless specified by owner in writing. Any contractor or subcontractor failing to comply with this requirement will be in violation of RCW 39.12.050.

5.14 AVAILABILITY AND USE OF UTILITY SERVICES

Delete Section 5.14 A – Owner to provide and charge for utilities.

**CITY OF TACOMA MODIFICATIONS TO THE
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5.15 TESTS AND INSPECTIONS

Replace Section 5.15 A with the following.

A. 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 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.

Owner will contract separately with an independent testing laboratory for code required special inspections, if applicable. Contractor shall give Owner timely notice of when and where special inspections are to be made.

5.20 SUBCONTRACTORS AND SUPPLIERS

Delete Section 5.20 E – Automatic assignment of subcontracts.

PART 10 MISCELLANEOUS PROVISIONS

10.11 DIVERSE BUSINESS PARTICIPATION

Replace Section 10.11 with the following:

The City of Tacoma requires participation by Diverse Businesses in its' contracts as supported by the City's Equity in Contracting office, Municipal code TMC 1.07.040, RCW chapters 39, 43, and WAC326. Refer to the City Programs section of the contract documents for specific project requirements.

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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 that has been delivered to the authorized representative or officer of the addressed party by registered or certified mail, or by email as a PDF attachment. Notices should clearly identify the project number and date of notice.

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- 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

A. Insurance Coverage Certificates and Policies

The Contractor shall furnish acceptable proof of insurance coverage on the state of Washington Certificate of Insurance form SF500A, dated 07/02/92 or ACORD form, as well as copies of insurance policies.

B. Required Insurance Coverages

1. For a contract less than \$100,000.00, the coverage required is:

- a. Comprehensive General Liability Insurance – The Contractor shall at all times during the term of this contract, at its cost and expense, carry and maintain general public liability insurance, including contractual liability, against claims for bodily injury, personal injury, death or property damage occurring or arising out of services provided under this contract. This insurance shall cover claims caused by any act, omission, or negligence of the Contractor or its officers, agents, representatives, assigns or servants. The limits of liability insurance, which may be increased as deemed necessary by the contracting parties, shall be:

Each Occurrence	\$1,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$1,000,000.00
Products – Commercial Operations Limit	\$1,000,000.00
Personal and Advertising Injury Limit	\$1,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expense Limit (any one person)	\$5,000.00

- b. If the contract is for underground utility work, then the Contractor shall provide proof of insurance for that above in the form of Explosion, Collapse and Underground (XCU) coverage.
- c. Employers Liability on an occurrence basis in an amount not less than \$1,000,000.00 per occurrence.
2. For contracts over \$100,000.00 but less than \$5,000,000.00 the contractor shall obtain the coverage limits as listed for contracts below \$100,000.00 and General Aggregate and Products – Commercial Operations Limit of not less than \$2,000,000.00.

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3. Coverage for Comprehensive General Bodily Injury Liability Insurance for a contract over \$5,000,000.00 is:

Each Occurrence	\$2,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$4,000,000.00
Products – Commercial Operations limit	\$4,000,000.00
Personal and Advertising Injury Limit	\$2,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expense Limit (any one Person)	\$5,000.00

4. For all Contracts – Automobile Liability: in the event that services delivered pursuant to this contract involve the use of vehicles or the transportation of clients, automobile liability insurance shall be required. If Contractor-owned personal vehicles are used, a Business Automobile Policy covering at a minimum Code 2 “owned autos only” must be secured. If Contractor employee’s vehicles are used, the Contractor must also include under the Business Automobile Policy Code 9, coverage for non-owned autos. The minimum limits for automobile liability is: \$1,000,000.00 per occurrence, using a combined single limit for bodily injury and property damage.
5. For Contracts for Hazardous Substance Removal (Asbestos Abatement, PCB Abatement, etc.)
- a. In addition to providing insurance coverage for the project as outlined above, the Contractor shall provide Pollution Liability insurance for the hazardous substance removal as follows:

<u>EACH OCCURRENCE</u>	<u>AGGREGATE</u>
\$500,000.00	\$1,000,000.00

or \$1,000,000.00 each occurrence/aggregate bodily injury and property damage combined single limit.

- i. Insurance certificate must state that the insurer is covering hazardous substance removal.
- ii. Should this insurance be secured on a “claims made” basis, the coverage must be continuously maintained for one year following the project’s “final completion” through official completion of the project, plus one year following.

For Contracts where hazardous substance removal is a subcomponent of contracted work, the general contractor shall provide to the Owner a certificate of insurance for coverage as defined in 5a. above. The State of Washington must be listed as an additional insured. This certificate of insurance must be provided to the Owner prior to commencing work.

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 \$150,000 or less and the Contractor or General Contractor/Construction Manager agrees that Owner may, in lieu of the bond, retain 10% 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: The Progress Schedule shall be in the form of a Critical Path Method (CPM) logic network or, with the approval of the Owner, a bar chart schedule may be submitted. The scheduling of construction is the responsibility of the Contractor and is included in the contract to assure adequate planning and execution of the work. The schedule will be used to evaluate progress of the work for payment based on the Schedule of Values. The schedule shall show the Contractor's planned order and interdependence of activities, and sequence of work. As a minimum the schedule shall include:
1. Date of Notice to Proceed;
 2. Activities (resources, durations, individual responsible for activity, early starts, late starts, early finishes, late finishes, etc.);
 3. Utility Shutdowns;
 4. Interrelationships and dependence of activities;
 5. Planned vs. actual status for each activity;
 6. Substantial completion;
 7. Punch list;
 8. Final inspection;
 9. Final completion, and
 10. Float time

The Schedule Duration shall be based on the Contract Time of Completion listed on the Bid Form. The Owner shall not be obligated to accept any Early Completion Schedule suggested by the Contractor. The Contract Time for Completion shall establish the Schedule Completion Date.

If the Contractor feels that the work can be completed in less than the Specified Contract Time, then the Surplus Time shall be considered Project Float. This Float time shall be shown on the Project Schedule. It shall be available to accommodate changes in the work and unforeseen conditions.

Neither the Contractor nor the Owner have exclusive right to this Float Time. It belongs to the project.

- 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.

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- 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.

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- 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

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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, at no cost to the Owner for delay or any other claim, if Owner reasonably deems the superintendent incompetent, negligent, or otherwise objectionable, provided Owner has first notified Contractor in writing and allowed a reasonable period for transition. Noncompliance with the Owner's request to remove and replace the superintendent for a material reason shall also be grounds for terminating the Contract for cause.
- 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, require

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Contractor to remove from the Work or Project site, at no cost to the Owner for delay or any other claim, any employee Owner reasonably deems incompetent, negligent, or otherwise objectionable. Noncompliance with the Owner's request to remove and replace personnel at any level for a material reason shall also be grounds for terminating the Contract for cause.

- 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: The actual cost of the general building permit (only) and the public utility hook-up fees will be a direct reimbursement to the Contractor or paid directly to the permitting agency by the Owner. ***Fees for these permits should not be included by the Contractor in his bid amount.***
- 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.
- D. Contractor to submit copies: The General Contractor shall submit copies of each valid permit required on the project to the Owner's representative. Nothing in this part shall be construed as imposing a duty upon the Owner or A/E to secure permits.

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 or applicable Federal 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 (L&I). 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. If applicable, the Contractor shall comply with all Federal Funding requirements of the Davis

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Bacon Act that will be addressed in a separate "DIVISION 00 SPECIAL CONDITIONS" specification section that will be based on the specific requirements of the funding source.

- 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 L&I, 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 L&I, 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 L&I. 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 L&I 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 L&I the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the L&I for certification.
- G. Certified Payrolls: Consistent with RCW 31.12.120, contractors, subcontractors, or employers shall file a copy of its certified payroll records using the L&I' online system at least once per month. If the L&I' online system is not used, a contractor, subcontractor, or employer shall file a copy of its certified payroll records directly with the L&I in a format approved by the L&I at least once per month. A contractor, subcontractor, or employer's noncompliance with this section constitutes a violation of RCW 39.12.050.
- H. Compliance with Federal Funding requirements: If applicable, the Contractor shall comply with all Federal Funding requirements of the Davis Bacon Act that will be addressed in a separate "DIVISION 00 SPECIAL CONDITIONS" specification section that will be based on the specific requirements of the funding source.

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

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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: The Contractor and all Subcontractors shall comply with all applicable federal and state non-discrimination laws, regulations, and policies. No person shall, on the grounds of age, race, creed, color, sex, sexual orientation, religion, national origin, marital status, honorably discharged veteran or military status, or disability (physical, mental, or sensory) be denied the benefits of, or otherwise be subjected to discrimination under any project, program, or activity, funded, in whole or in part, under this Agreement
- 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. 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, ladders, scaffolding, staging, runways, hoist, construction elevators, shoring, temporary lighting, grounded outlets, wiring, hazardous materials, vehicles, construction

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processes, and equipment required by all applicable state, federal, and local laws and regulations.

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 or A/E to prescribe safety conditions relating to employees, public, or agents of the Contractors.
- 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.);

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- 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

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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. Use of asbestos-containing building materials: The use of asbestos-containing building materials in new construction or renovation work is strictly prohibited. For the determination of asbestos-containing building materials, the following shall apply:
 - 1. Until January 1, 2025, asbestos deliberately added in any concentration that contains more than one percent asbestos by weight or area as determined using the United States environmental protection agency method for the determination of asbestos in bulk building materials, EPA/600/R-93/116, July 1993.
 - 2. Following January 1, 2025, asbestos building material deliberately added in any concentration that contains more than 1/10th of one percent asbestos by weight or area for the determination of asbestos in bulk building materials, EPA/600/R-93/116, July 1993.
- C. 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.

- D. 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.

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- 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.

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- 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;

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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.
 6. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the L&I or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW.
- B. Provide names of Subcontractors and use qualified firms: 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. Substitutions of subcontractors listed on Forms A and B are only allowable according to RCW 39.30.060.
- 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:

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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 CON TRUCTIO

- 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;

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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.

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- 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

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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.
- . 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:

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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 L&I 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 L&I.

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- (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.
- 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) The National Electrical Contractors Association for equipment used on electrical work.
 - (2) The Mechanical Contractors Association of America for equipment used on mechanical work.
 - (3) The EquipmentWatch Fleet Manager Estimator Package (digital). The maximum rate for standby equipment shall not exceed that shown in the Associated General Contractors Washington State Department of Transportation (AGC WSDOT) Equipment Rental Agreement, current edition on the Contract execution date.
- 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:
- (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.

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- (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:

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- 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

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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;

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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

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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;

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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:

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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

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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.

10.11 DIVERSE BUSINESS PARTICIPTION

The state of Washington encourages participation in all of its contracts by Diverse Businesses as found in RCW Chapters 39, 43, and WAC 326. The voluntary Diverse Business goal of 26%, which is an aggregate of: 10% Minority Business Enterprises (MBE), 6% Women Business Enterprises (WBE), 5% Veteran-owned Business, and 5% Washington Small Businesses self-identified in the Washington Electronic Business Solution (WEBS). Contractors are encouraged to meet or exceed the project goals in the advertisement by any level of participation, regardless of category.

DES reserves the right to adjust the voluntary participation goals.

Businesses are encouraged to register in WEBS, as well as registering as a state certified M/WBE/Veteran Business.

For reporting, Contractor is required to register and create an account in the DES Public Works Diversity Tracking & Management System powered by B2GNow.

Every month for the duration of your contract, and while your contract is active in the DES Public Works Diversity Tracking & Management System, submit and accurately maintain the following information:

1. Payments received by the prime contractor from the Agency
2. Payments paid to each first tier subcontractor
3. Payments paid to each first tier supplier

You must also ensure the following information is reported in the DES Public Works Diversity Tracking & Management System by your first tier subcontractors and suppliers for the duration of your contract:

1. Confirmation of payments from the prime contractor to the first tier subcontractor
2. Confirmation of payments from the prime contractor to first tier suppliers

10.12 MINIMUM LEVELS OF APPRENTICESHIP PARTICIPATION

In accordance with RCW 39.04.320, the State of Washington requires 15% apprenticeship participation for projects estimated to cost one million dollars or more. Contractors who meet or exceed minimum participation requirement are eligible for monetary incentive. Contractors failing to meet minimum apprenticeship participation requirement are subject to monetary penalty.

- A. Apprentice participation, under this contract, may be counted towards the required percentage (%) only if the apprentices are from an apprenticeship program registered and approved by the Washington State Apprenticeship and Training Council (RCW 49.04 and WAC 296-05).
- B. Bidders may contact the L&I to obtain more information about apprenticeship programs.

- C. No changes to the required percentage (%) of apprentice participation shall be allowed without written approval of the Owner. In any request for the change, the Contractor shall clearly demonstrate a good faith effort to comply with the requirements for apprentice participation.
- D. Any substantive violation of the mandatory requirements of this part of the contract may be a material breach of the contract by the Contractor. The Owner may withhold payment pursuant to Part 6.05, stop the work for cause pursuant to Part 3.04, and terminate the contract for cause pursuant to Part 9.01.

10.13 SPECIAL CONDITIONS

The Owner may have Federal Funding or other special requirements for this project. If applicable, the Contractor will be required to comply with the "DIVISION 00 SPECIAL CONDITIONS" section in the specifications that will be based on the specific requirements of the funding source.

DIVISION 01
GENERAL REQUIREMENTS

SECTION 00 01 10
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SPECIFICATIONS

. DIVISION 01 – GENERAL REQUIREMENTS

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- 01 78 00 - Closeout Submittals

SECTION 01 11 00

SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General Conditions, Modifications to the General Conditions and Divisions 00 and 01 Specification Sections, apply to work of this section.

1.02 SECTION INCLUDES

- A. Summary of Work, including:
 - 1. Project Description
 - 2. Contract Method
 - 3. Permit Conditions
 - 4. Objection to Application of Products
 - 5. Existing Information
 - 6. Completion Time
 - 7. Contractor's Use of Building and Site
 - 8. Construction Documents

1.03 PROJECT DESCRIPTION

- A. The work of the project is defined by the Contract Documents and generally consists of the following:

Electricians Maintenance Building Exterior Refurbish and Roof Replacement

– consists of improving the structural and lateral connection between the roof rafters and associated bearing walls of the building, followed by a complete re-roof, siding and glazing repairs and lead paint removal with an associated complete building re-paint in accordance with the permitted drawings completed by WJE architects and associated consultant team, located in Tacoma, Washington.

- i. Removal of existing un-attached lead paint and facade restorative measures in accordance with Architect issued technical specifications and PBS issued specifications.
- ii. Removal of portions of existing roof sheathing/decking to expose structural rafters for new lateral tie connections.
- iii. Removal of existing roofing to sheathing of structure.
- iv. Replacement of all damages or decaying roof sheathing/decking as needed.
- v. Installation of new roof underlayment per plans and new roofing.

- vi. Removal of broken glass window pains and replacement of same
 - vii. Hazardous material abatement – Provide hazardous material abatement in the area of work. Refer to Reports included in the Project Manual.
 - viii. Repair and replacement of exposed roof rafters and existing wood siding throughout building where needed.
 - ix. Repaint entire building in accordance with historic paint colors.
- B. Provide materials, labor, equipment, temporary facilities and construction expertise as required to complete the Project as shown in the Contract Documents.
- C. Contractor represents that he has carefully examined prior to bidding, Contract Documents and site conditions, and understands the character, quality and quantity of work called for and conditions affecting the Contract Work.

1.04 CONTRACT METHOD

- A. Construct the Work under a guaranteed single fixed-price Contract.
- B. The General Contractor is responsible for coordinating, understanding and directing the work of trades involved in the project.
- C. General Contractor is responsible for coordinating and scheduling work of each subcontractor to expedite progress of the Project. Cooperate and coordinate with any other separate Contractors under Contract with the Owner. The Contractor shall involve the City's assigned Project Manager in all communication with the tenant department where work is occurring, and shall to the extent possible conduct all such communication through the City's Project Manager throughout the project.
- D. The General Contractor shall not make changes, or modifications to the scope of work, or any alteration to the scope set forth in the attached plans and remaining specifications without the consent of the City's assigned Project Manager. Such consent shall be communicated by the City's assigned Project Manager in writing. The Contractor shall not accept on-site direction from tenant department staff as approval, acceptance, or agreement to any modification or scope of work changes to any portion of the work herein described, as authorization for any such modification or alteration. Upon such requests the General Contractor shall direct tenant department staff to contact the City's assigned Project Manager directly, and that no changes can be made without the Project Manager's approval per the specifications stated herein.

1.05 PERMIT CONDITIONS

- A. Conform to permit conditions and requirements imposed by authority(s) having jurisdiction.
- B. The Owner has submitted and obtained the Commercial Building permits for the Electricians Maintenance Building Exterior Refurbish and Roof Replacement. The General Contractor is responsible for obtaining all other permits, including but not limited to plumbing, electrical, roadway or sidewalk closure, and barricade permits for site dumpsters.

- C. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction. Contractor is responsible for coordinating and paying for the cost of any special permit requirements for staging and delivery of materials within the right-of-way.

1.06 OBJECTIONS TO APPLICATION OF PRODUCTS

- A. Subcontractors and suppliers submitting a bid for this Project shall thoroughly familiarize themselves with specified products and installation procedures and submit any questions or substitutions (in writing). Submittal of Bid constitutes acceptance of products and procedures specified.

1.07 EXISTING INFORMATION

- A. Subcontractors and suppliers are encouraged to familiarize themselves with existing site conditions prior to bidding. Submit any questions or substitutions (in writing). Submittal of Bid constitutes acceptance of products and procedures specified.

1.08 COMPLETION TIME

- A. Time is of the essence, the Owner needs this project completed within the times listed. Provide the necessary management, equipment and manpower, including any overtime, double-shifting or special work schedules, required to achieve completion of the Project within the times listed in the following Completion Schedule.
- B. Substantial Completion for this project will be considered to have been achieved when all of the Work shown on the drawings has been satisfactorily completed in accordance the Contract Documents and an Occupancy Permit (or Temporary Occupancy Permit or final permit sign off) has been issued by the City. Minor punch list items may be completed after Substantial Completion date within the time frame listed in the Completion Schedule. The Contractor shall provide written notice, three (3) days prior to anticipated substantial completion date.
- C. **Anticipated Construction Completion Schedule:**
 - 1. Substantially complete all the work within 66 Calendar Days (estimated 2 months) after the Notice to Proceed.
 - 2. Anticipated Notice to Proceed: mid-August 2023
 - 3. Anticipated Substantial Completion Date: late October 2023
- D. Early completion of the Work is allowed provided that the Owner shall not be obligated for any costs associated with delays to the Contractor's accelerated schedule which are within the stipulated contract completion schedule above.

1.09 CONTRACTOR'S USE OF BUILDING AND SITE

- A. The Contractor has direct responsibility for and control of the Contractor occupied construction areas for the duration of the Project, subject to this Section.
- B. Contractor's Use of Site: Limit use of the site for work, storage and access only as required to achieve work of this contract. Contractor shall maintain a clean and secure site.
 - 1. Owner will not reserve parking stalls for the Contractor's use to park equipment and store materials.
 - 2. Owner will not reserve parking stalls for the Contractor's or subcontractor's vehicles.
- C. Contractor's Materials / Equipment: Limit storage of materials and equipment to within Contractor occupied construction areas.
- D. Construction Facilities and Temporary Controls: Refer to Section 01 50 00.
- E. Emergency Vehicle Access: Maintain access roadway and fire lanes on site for use by emergency vehicles. Coordinate requirements with local authority having jurisdiction.
- F. Access Routes to Construction Areas: Contractor shall maintain site access routes in a clean and safe manner free of construction materials, debris and dirt. Maintain access to existing walkways, sidewalks, parking spots, entrances, and other adjacent occupied or used facilities. Do not close or obstruct walkways, sidewalks, parking spots, entrances, or other occupied or used facilities without written approval of authorities having jurisdiction.
- G. Public Safety: Contractor is responsible for performing a safety analysis for the construction work on the project site and shall:
 - 1. Implement and enforce conclusions from safety analysis for duration of project.
 - 2. Maintain site and building in a manner that prevents any unsafe or potentially unsafe condition.
- H. Construction Areas: Monitor to prevent unauthorized persons from entering during construction work. After work hours remove ladders and tools.
 - 1. Contractor shall assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.

- I. Owner Occupancy During Construction: Owner will occupy site and existing building during entire construction period, EXCEPT the Owner will provide access to areas of the building as needed for Contractor to complete work to the extent possible for continued operation of the building. Contractor shall coordinate in advance with owner for access to areas of work to be performed. It is understood that some level of Fire Department operations will continue throughout the construction process.
 - 1. Contractor to provide temporary barriers to separate areas of work for security and safety.
 - 2. Coordinate with City's assigned Project Manager during construction operations to minimize conflicts and facilitate Owner usage.
 - 3. Perform the Work so as not to interfere with Owner's day-to-day operations.
 - 4. Maintain existing exits at all times.
- J. Noise: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruptions with the Owner. Contractor work hours and noise levels shall comply with Tacoma Municipal Code, Chapter 8.122 – Noise Enforcement.
 - 1. Construction and demolition activity which exceeds the noise limits of Tacoma Municipal Code Section 8.122.060(a) is not allowed between 9pm and 7am on weekdays.
 - 2. Construction and demolition activity which exceeds the noise limits of Tacoma Municipal Code Section 8.122.060(a) is not allowed between 9pm and 9am on weekends and federal holidays.
- K. Contractor shall provide a site-specific safety plan.

1.10 CONSTRUCTION DOCUMENTS

- A. Contractor is responsible for posting any addendums in the Contract Drawings and Project Manual.
- B. The General Contractor is responsible for costs to reproduce the Construction Documents.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01 12 00

PERMITS AND FEES

PART 1 - GENERAL

1.01 PERMITS PAID FOR BY OWNER

- A. The Owner has paid for the primary Commercial Building Permit (and its related plan check fee) as issued by the City of Tacoma and is outside of the contract. Do not include the cost of this permit in the bid. The Owner has previously submitted the construction documents to the City of Tacoma and has received Commercial Building permit approval.

1.02 PERMITS PAID FOR BY CONTRACTOR

- A. Contractor is responsible to acquire and pay for all other permits and fees required by all other agencies having jurisdiction. These may include: electrical, plumbing permits and dumpster or right of way permits.

1.03 PERMIT RECORDS

- A. Maintain notebook on site with copies of all permits and inspection reports. Include same in Maintenance and Operation Manuals furnished at conclusion of project.

1.04 UTILITY SERVICE CONNECTION FEES PAID FOR BY OWNER (Permanent)

- A. The Owner will pay directly for fees required for all permanent service connections to utilities (natural gas, electricity, water, sewer, telecommunications). Make all final connection application(s) required, advise Owner when connection fee is ready for payment, and notify Owner of all pertinent permit payment details so that payment can be made.

1.05 UTILITY SERVICE CONNECTION FEES PAID FOR BY CONTRACTOR (Temporary)

- A. Pay for all utility service connection fees required by utility vendors that are required for temporary use during the course of construction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 22 00

UNIT PRICES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Administrative and procedural requirements for unit prices and allowances.

1.02 UNIT PRICING

- A. A unit price is stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.
 - 1. There are no unit price requirements specified for this project.

1.03 PROCEDURES

- A. Unit prices include all necessary equipment, labor, materials including cost for delivery, installation or removal, disposal, insurance, applicable taxes, overhead, and profit.
- B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

END OF SECTION

SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Division 00 - Bid Period Forms – Substitution Request Form
- B. Section 01 30 00 - Administrative Requirements: Submittal procedures, coordination.

1.2 SECTION INCLUDES

- A. Procedural requirements for proposed substitutions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Furnish and install products in accordance with options and conditions for substitutions stated in this Section.
 - 1. Where specified only by performance or reference standards, select a product meeting standards by any Manufacturer.
 - 2. Where specified by naming several products or Manufacturers, select any product and Manufacturer named.
 - 3. Where specified by naming one or more products, but indicating "or approved" or similar wording after specified listing, select specified product or submit Request for Product Substitution on attached form.
 - 4. Where specified by naming only one product and Manufacturer, there is no option, and no substitution will be allowed.

B. SUBSTITUTIONS (PRIOR TO BID DATE)

- 1. Prior to Bid Date, substitution requests shall be submitted utilizing the form provided under "Bid Period Forms" to the Senior Buyer. Substitution requests must be received no later than the date specified on the "Substitution Request Form" to be included in an addendum:
 - a. Submit electronic copy of request for substitution for consideration. Limit each request to one proposed substitution.
 - b. Requests received after the due date will not be reviewed or considered regardless of cause. No request for approval will be considered unless submitted in accordance with this Section.
 - c. Bidders will be notified by written Addendum of materials and products approved for use in addition to those specified. No other form of approval,

including verbal or implied, is acceptable as indicator of accepted Substitution Requests.

C. SUBSTITUTIONS (AFTER AWARD OF CONTRACT)

1. After award of the Contract, the Owner may, at their option, consider certain other substitutions submitted in accordance with requirements of this Section. Indicate one or more of the following reasons for request:
 - a. Substitution is required for compliance with final code interpretation requirements, or insurance regulation.
 - b. Specified product is unavailable through no fault of Contractor.
 - c. Subsequent information discloses specified product unable to perform properly or fit designated space.
 - d. Manufacturer or fabricator refuses to certify or guarantee performance of specified product, as required.
 - e. Substitution saves substantial cost, time. (Submit accurate cost and/or time data for proposed substitution in lieu of product specified.)

D. In making request for Substitution, Manufacturer/Contractor represents:

1. It has personally investigated proposed product and, in his opinion, it is equal or superior in all respects to that specified.
 - a. Substantiate whenever requested by Architect.
2. It will coordinate installation of accepted substitution into the Work and guarantees to complete it in all respects.
3. It has identified any and all changes, if any, required to other portions of the Work as a result of the proposed product.
4. It will provide the same or an improved guarantee for the proposed substitution as for the specified product.
5. It waives all claims for additional costs related to the proposed substitution that consequently become apparent.
6. It agrees to pay all of the Owner's additional costs related to the proposed substitution that consequently become apparent, such as redesign expenses, utility and service relocations, etc.
7. Cost data is complete and includes all related costs under its Contract, but excludes:
 - a. Cost under separate Contractors.
 - b. Design Consultants' redesign, unless designated.
8. Substitutions will not be considered if:
 - a. They are indicated or implied on Shop Drawings or other submittals without proper submittal on attached Form.
 - b. Acceptance will require substantial revisions of Contract Documents.

9. Contractor shall pay Architect and his Consultants for time required to review substitutions, if requested.
10. Architect is sole judge of suitability of substitution and decision is final.

3.2 ACCEPTANCE

- A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

END OF SECTION

SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 GENERAL

- A. Changes to and/or clarifications of the Work may be initiated by a Request for Information, Architect's Supplemental Instruction, Construction Change Directive, or a Change Order.
- B. A monetary change to the Contract Sum is only implemented by a Change Order.

1.2 DOCUMENTATION OF COSTS

- A. Unit prices noted on the Bid Form shall include all overhead, profit and related costs. Adjustments shall be made in accordance with General Conditions. The Contractor shall document quantities used.
- B. All actual or proposed costs, whether initiated by a Change Order Proposal or Construction Change Directive, shall be summarized on forms acceptable to the Owner, with all necessary substantiating documentation attached thereto. Contractor and Subcontractors of all tiers shall submit Change in the Work Summary Calculation Sheets, Forms A and B, respectively.
- C. Estimates of Not-to-Exceed costs may only be used for the purpose of expediting the Work.
- D. The Owner reserves the right to request notarized time sheets, invoices and other documentation as necessary to protect the public interest.
- E. The Contractor's quotations shall be valid for 60 days.

1.3 CHANGES TO CONTRACT TIME

- A. The Contractor shall make every effort to comply with the Contract Dates of Substantial and Final Completion.
- B. The Contractor may not make claim for costs or losses associated with the use of float time, if any, between anticipated completion dates and the Contract Dates of Substantial and Final Completion.
- C. Only impacts on critical path activities which can be documented as delaying the Contract Date of Substantial Completion shall be considered for changes in the Contract Time. 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.

1.4 REQUEST FOR INFORMATION (RFI)

- A. Prepared by Contractor and distributed to Owner and Architect.
- B. Form provided by Architect, or on a form approved by the Owner and the Architect.
- C. Response provided by Architect.
- D. Distributed by the Owner following acceptance of Architect response.
- E. Contractor must either:
 - 1. Proceed upon receipt of response if no cost impact, or,
 - 2. Submit a statement of cost impact within 7 days of receipt of response.
 - a. If cost impact is justified, Owner shall issue a CCD and/or COP.
 - b. If cost impact is not justified, Owner will issue a Notice to Proceed, directing the Contractor to proceed with the Work in question, with no change to the Contract Sum.
- F. RFIs and responses to RFIs shall be numbered consecutively. RFIs reissued for additional clarification or information shall be given decimal extensions (e.g. 12.1).
- G. Responses shall be recorded weekly on record drawings and specifications.

1.5 ARCHITECT'S SUPPLEMENTAL INSTRUCTION (ASI)

- A. Prepared by Architect.
- B. Form provided by Architect.
- C. No change in time or cost as determined by Architect.
- D. Acceptance by Owner required prior to issuance to Contractor.
- E. Transmitted to Contractor for signature.
- F. Contractor must either:
 - 1. Proceed upon receipt.
 - 2. Submit a statement of cost impact within 7 days of receipt.
 - a. If cost impact is justified, Owner shall issue a CCD and/or COP.
 - b. If cost impact is not justified, Owner will issue a Notice to Proceed, directing the Contractor to proceed with the work in question, with no change to the Contract sum.

- G. Architect's Supplemental Instructions shall be numbered consecutively. Reissued ASIs shall be given decimal extensions (e.g. 17.1).
- H. Changes shall be recorded weekly on record drawings and specifications.

1.6 CONSTRUCTION CHANGE DIRECTIVE (CCD)

- A. Issued by Owner in response to:
 - 1. An unresolved Architect's Supplemental Instruction.
 - 2. The absence of agreement on Change Order Proposal costs submitted by Contractor.
 - 3. The need to expedite the work and avoid delays.
- B. Form provided by Architect.
- C. Signed by Owner.
- D. Contractor must proceed immediately with the work identified in the CCD.
- E. Method of adjustment of the Contract Sum shall be determined per General Conditions.

1.7 CHANGE ORDER PROPOSAL (COP)

- A. Issued by Owner and distributed to Contractor and Architect.
- B. May be initiated by Contractor by submitting a written notice to Owner indicating justification and proposed cost impact.
- C. Contractor must provide cost data and substantiating documentation within 14 days of receipt of COP.
- D. All costs must be summarized on the forms provided by the Owner, utilizing the fees indicated.
- E. Direct costs of labor and fringe benefits shall be limited to the amounts shown in Statements of Intent to pay Prevailing Wages. Additional labor burden costs shall be limited to actual costs substantiated in writing by the Contractor and approved by the Owner and Architect.
 - 1. All indirect costs, including but not limited to such items as insurance, taxes, (except Sales Tax), general conditions, small tool allowance, plant and equipment costs, and the like, shall be included in the fees as provided for on the forms, which shall not exceed the percentages specified in the General Conditions.
- F. Prime Contractor Change Order Proposal provided to the Owner, must be submitted together with all necessary substantiating documentation.

- G. Each subcontractor or sub-subcontractor of any tier must prepare and submit, through the Contractor, all of its costs together with all necessary substantiating documentation.
- H. Architect makes recommendation.
- I. Owner accepts or rejects:
 - 1. Owner prepares Change Order, or,
 - 2. Owner requests additional cost data, and/or issues CCD.
 - 3. Owner may issue Notice to Proceed to expedite Work.
- J. Accepted and signed COP is binding on both Owner and Contractor. It is the Notice to Proceed and authorization to do the work as soon as practical.
- K. COPs shall be numbered consecutively. Reissued COPs shall be given decimal extensions.
- L. Changes shall be recorded on record drawings and specifications.

1.8 CHANGE ORDER (CO)

- A. Prepared by Owner.
- B. May include several COPs or CCDs.
- C. Shall be signed by Contractor as soon as practicable.
- D. Change Orders shall be numbered consecutively.
- E. Changes shall be marked on record drawings and specifications.
- F. Costs May be included in Applications for Payment only following approval of the Change Order by the Board of Directors.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 29 00

APPLICATION FOR PAYMENT

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Division 0 (Bidding & Contract Requirements) – Section E. City Programs: LEAP Requirements
- B. Section 01 26 00 – Contract Modification Procedures
- C. Section 01 78 00 - Closeout Submittals: Project record documents.

1.02 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Procedures for preparation and submittal of application for final payment.

1.03 SCHEDULE OF VALUES

- A. Forms: Use AIA G703 or other form agreed to by the Architect & Owner for the Schedule of Values.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values electronically within 15 days after the Notice to Proceed.
- E. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification section. Identify site mobilization, bonds and insurance, and Contractor's General Conditions.
 - 1. Provide additional breakdown of line items if requested by the Architect or the Owner's Representative.
- F. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 PRIOR TO APPLICATION FOR PROGRESS PAYMENT

- A. Submit Contractor's Construction Schedule for information and Submittal Schedule.
- B. Submit a list of all Subcontractors and Suppliers.
- C. City of Tacoma LEAP Program Documentation Forms.

1.05 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit monthly.
- B. Forms: Use modified AIA G702 or other form provided by or agreed to by the Architect & Owner for Applications for Payment.
 - 1. Application for Payment must identify sales tax as a separate item.

- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- D. Forms filled out by hand will not be accepted.
- E. For each item, provide a column for listing each of the following:
 - 1. Item Number.
 - 2. Description of work.
 - 3. Scheduled Values.
 - 4. Previous Applications.
 - 5. Work in Place and Stored Materials under this Application.
 - 6. Authorized Change Orders.
 - 7. Total Completed and Stored to Date of Application.
 - 8. Percentage of Completion.
 - 9. Balance to Finish.
 - 10. Retainage.
- F. Execute certification by signature of authorized officer.
- G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
 - 1. Stored Materials: Requests for payment on materials stored shall be for materials properly stored on the site. Materials stored off-site may be included subject to the following conditions:
 - a. A paid invoice from Supplier is provided.
 - b. Materials are stored in a secure facility.
 - c. Contractor and its bonding company accepts total responsibility for the stored materials.
- H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
- I. Submit one electronic and three hard-copies of each Application for Payment.
- J. Include the following with the application:
 - 1. Transmittal letter as specified for submittals in Section 01 30 00.
 - 2. Partial release of liens from major subcontractors and vendors.
 - 3. Affidavits attesting to off-site stored products.
- K. When Architect requires substantiating information, submit data justifying dollar amounts in question.
- L. Submit City of Tacoma LEAP Program Documentation Forms.

1.06 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.

- B. Application for Final Payment will not be considered until the following have been accomplished:
1. All closeout procedures specified in Section 01 78 00.
 2. Satisfactory completion of the following:
 - a. Ensure that unsettled claims will be settled. Receipt by the Owner of General Release of Liens.
 - b. Receipt by the Owner of proof of all project tax payments to the State of Washington Department of Revenue and Department of Labor and Industries for the entire length of the project.
 - c. Receipt by the Owner of release by the Washington State Employment Security Department.
 - d. Receipt by the Owner of all approved Affidavit of Wages Paid.
 - e. Punch list items complete and accepted.
 - f. Contract closeout document submittals received and accepted.
 - g. Original documentation of all required permits signed off by Authorities Having Jurisdiction.
 - h. Submittal of Operating and Maintenance Data.
 - i. LEAP Program Documentation Forms.
- C. Retainage payment will be made separately. Once all completion and release forms have been received, the retainage payment may be released and a Final Acceptance Letter issued by the Owner.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 00

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Administrative and Procedural Requirements for:
 - 1. Project Management
 - 2. Coordination
 - 3. Variations, revisions and clarifications
 - 4. Request For Information
 - 5. Preconstruction conference
 - 6. Progress meetings

1.02 PROJECT MANAGEMENT

- A. General: Provide direct, effective, experienced, cooperative, team-oriented, hands-on management of the Work including the daily construction operations on the project site and that part of the Work that the Contractor chooses to delegate to Subcontractors / Suppliers.
 - 1. Project management personnel shall be employees of the Contractor and shall not be subcontracted, or delegated to others.
 - 2. Failure to provide the specified project management personnel is a breach of Contract and subject to Owner's termination of Contract for cause.
 - 3. Site Management Personnel: This Project requires a minimum of one (1) project management personnel on the Project site as follows:
 - a. Superintendent on site full time.
 - b. The management personnel listed herein are minimums and shall not be construed as limiting the Contractor from employing additional or other types of management personnel.
- B. SUPERINTENDENT: Employ a Project Superintendent to oversee, direct, and manage the construction of the Work and including, but not limited to, the following minimum characteristics and responsibilities:

1. A good communicator, organized, effective and capable of managing multiple tasks, difficult personalities and tight deadlines without losing self-control or management effectiveness.
2. Trained, knowledgeable and experienced in jobsite safety and shall be responsible for managing safety issues on site in conformance with Federal, State and Local regulations.
3. Superintendent shall become thoroughly familiar with the requirements of the Contract Documents before work is started.
4. Responsible for executing the Work in conformance with the Construction Schedule specified in Section 01 3215 so that Project is completed on time.
5. Oversee and direct the work of Subcontractors and suppliers and confirm they are conforming to the requirements of the Contract Documents.
6. Jointly with the Project Engineer, coordinate the Work of this project as specified under "Coordination" in this section.
7. Responsible for determining the means and methods used to execute the Work.
8. Responsible for managing and controlling the quality of the Work (including work by Subcontractors) in conformance with the Contract Documents and good construction practice.
9. Responsible for coordinating with the local Building Department and Building Inspector(s) inspections and requirements.
10. Responsible for coordinating the final inspections required by Authorities having jurisdiction required for issuance of the Certificate of Occupancy.
11. Responsible for inspecting the work and preparing the Contractor's Punch List as specified in Section 01 7800.

1.04 COORDINATION

- A. General: Coordinate the Work and construction operations required in different sections of the Specifications:
 1. Ensure efficient and orderly installation of each part of the Work.
 2. Coordinate different work and trades that depends on each other for proper installation, connection, and operation.
 3. No additional compensation will be approved for extra work incurred through the lack of cooperation and coordination.

- B. Coordination Planning and Administration: Plan out the Work in advance and anticipate the interrelationships between each subcontractor and their relationship to the overall Project.
1. Provide the leadership, direction and decisions necessary to prevent subcontractor and supplier problems and disputes from affecting the project schedule or the quality of the work.
 2. Coordinate scheduling, submittals, and Work of the various sections of Specifications to assure proper, efficient and orderly sequence of preparation and installation of interdependent construction elements, with provisions for accommodating items installed later.
 3. Hold coordination meetings with each trade to determine Work requiring coordination with other trades / sections.
 4. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordination Drawings: Before materials are fabricated or Work begun, prepare coordination drawings including plans, elevations, sections and other details as required to clearly define relationships between Work sharing the same space / area, or installed within or passing through Work by other trades so as to avoid any conflicts.
1. Calculate, backcheck and lay out the horizontal dimensions in conformance with the design concept indicated on the Drawings.
 2. Consult with Owner whenever available space or conditions do not permit any element of the Work to be accomplished in conformance with the design concept indicated on the Drawing.
 3. When requested by Owner, provide copy of coordination drawings; submit with any Request for Information involving coordination issues.
 4. Distribute coordination drawings to affected Subcontractors / suppliers.
- D. Subcontractor Coordination: Provide direct supervision and coordination of each Subcontractor and each part of the Work; require each Subcontractor to coordinate their portion of the Work and provide their requirements for coordination of their Work with other related Work.
1. Schedule such work so as to prevent delays in dependent work and so that related work will progress together.
 2. Fully inform each trade or Subcontractor of the relation of its work to other work, and require each to make necessary provisions for the requirements of such other work.

3. Do not delegate Subcontractor coordination responsibility to any subcontractor.
- E. Sequence of Work Coordination: Coordinate the Work of trades and other sections to ensure that elements of the work are installed in their proper sequence, without the need for unplanned modifications to work already installed.
- F. Completion and Closeout Coordination: Coordinate the efficient completion and closeout of the Work by each Subcontractor.
1. Coordinate completion and cleanup of Work of separate trades in preparation for Completion.
 2. After substantial completion, coordinate access to site for correction punch list items; minimize disruption to the building occupants if applicable.
- G. Existing Conditions Coordination:
1. Lay out and mark existing utilities requiring protection or which remain operational or active during construction, to prevent any accidental damage or disruption of building services during this Project.
- H. Coordination With Owner:
1. Cooperate with the Owner to resolve any scheduling or construction coordination concerns or problems that arise during the course of this Project and coordinate the work accordingly to minimize the disruption to the Owner and to the construction schedule.
 2. Schedule shutdowns of existing equipment, utilities and building systems with the Owner, refer to Section 01 5000 for requirements.
 3. Coordinate with the Owner for the scheduling of any construction activities that could potentially disturb or threaten the life safety of any building occupants involving the building structure, chemical fumes and smells, noise, change of exiting or access, blocking of any site path or road, or that could potentially result in disruption or damage to any existing utility or building system. Work that involves any of these potential disturbances, poses a threat to life safety, or involves any element of risk to building occupants shall be subject to the Owner's direction to accomplish this work at a time when the building is not occupied.
 4. Coordinate with and follow Owner's security procedures and requirements to maintain building and area / room security throughout the Project.
 5. Coordinate deliveries in advance with the Owner. Schedule delivery times so that Owner's use of the site is not hindered.

1.05 VARIATIONS, REVISIONS AND CLARIFICATIONS

- A. Variations, revisions and clarifications to the work not involving an adjustment to the Contract Sum or Contract Time will be confirmed in writing. These written confirmations may be included in the project minutes, memos to the Contractor and Owner, e-mail correspondence, or in answers to written Requests for Information (RFI).

1.06 PRECONSTRUCTION CONFERENCE

- A. Owner will schedule a preconstruction conference at start of construction.
- B. Attendance Required: Contractor, Owner and Architect / Engineer.
- C. Agenda:
 - 1. Designation of personnel representing the parties in Contract and the Architect.
 - 2. Discussion of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 3. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.
 - 4. Scheduling.
 - 5. Coordination with Owner.
 - 6. Procedures for maintaining record documents.
 - 7. Requirements for start-up of equipment.
 - 8. Inspection and acceptance of equipment put into service during construction period.
 - 9. Contractor Safety.

1.07 PROGRESS MEETINGS

- A. Progress meetings will be held on a regularly scheduled basis not exceeding once per week.
 - 1. Owner will administer the meeting, record decisions and actions from the meeting and send copies of meeting notes to Owner and Contractor.
 - 2. The Contractor will be responsible to distribute copies to his field representative and to Subcontractors.

- B. Location of Meeting: Progress meetings will be held at the job site. The contractor shall make physical arrangements for the meeting space.
- C. Attendance: Contractor's management team, Owner, Architect and professional Consultants; subcontractors; suppliers and others as appropriate to agenda may attend.
- D. Agenda:
 - 1. Approval of minutes of previous meetings.
 - 2. Review of Work progress since previous meeting and work planned.
 - 3. Review project schedule (4-week and Master Project Schedule).
 - 4. Review submittal schedules; expedite as required.
 - 5. Review of Request for Information (RFI).
 - 6. Review deliveries.
 - 7. Review proposed changes.
 - 8. Review technical and administrative questions / concerns from Contractor, Owner, Architect, Consultants.
 - 9. Review As-Built Drawings.
 - 10. Field Observations.
- E. Four-Week Schedule:
 - 1. Prior to each meeting, prepare a four (4) week schedule showing work completed during the previous week, work that is in progress for the current week and work planned for the following two weeks. This four week schedule, which is revised weekly by the Contractor, will be presented by the Contractor at the progress meeting and a copy will be given to the Owner at that time.
 - 2. In the event that a progress meeting is not scheduled for the current week, prepare the 4 week schedule and forward it to the Owner in the same week.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION Not Used

END OF SECTION

SECTION 01 32 15

CONSTRUCTION SCHEDULE

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Administrative and procedural requirements for the contractor's construction schedule.

1.02 GENERAL

- A. The intent of the construction schedule is to assist the Contractor in planning and execution of the Work in a timely manner and assist the Contractor, Architect and Owner in monitoring the construction progress for the purpose of coordination, communication, evaluation of Applications and Certificates for Payment, and evaluation of time extension requests.
- B. The Owner's review of the schedule will be to ensure that it conforms to the requirements of the specifications. The sequence and scheduling of the work is the Contractor's responsibility. Contract completion date(s) is as specified in the Contract Documents. The Owner's review of the schedule does not change, revise, or amend that date(s).
- C. This section supplements the General Conditions and the Modifications to the General Conditions with additional schedule requirements, where conflicts exist, the most restrictive requirement shall govern.
- D. Any plan by the Contractor to complete the Work or any part of the Work earlier than any contract required milestone or specific completion date shall not be construed as creating any responsibility or liability for the Owner or Architect should their actions, or lack thereof, prevent the Contractor from achieving the planned early completion. The Owner and Architect shall not be liable to the Contractor for any costs or other damages if the Contractor is unable to achieve early completion of the Work before a milestone or completion date.
- E. Float Time: Float time is the amount of time between the earliest start date and the latest start date, or between the earliest finish date and the latest finish date of a chain of activities on the CPM Schedule. Float time belongs to the project and is not for the exclusive use or benefit of either the Contractor or the Owner; float time may be used by either the Contractor or Owner for offsetting delays. Use of float suppression techniques such as preferential sequencing, special lead / lag logic restraints, zero total or free float constraints, extended activity times or imposed dates shall be cause for rejection of the Construction Schedule or any revisions or updates.

- F. Schedule shall anticipate and include sufficient float time for weather dependent work tasks to allow for any delays due to normal inclement weather (defined as any inclement weather within the ten year average of accumulated record mean values from climatological data compiled by the National Oceanic and Atmospheric Administration (NOAA), for the locale of the project, over the full duration of the Contract Time).

1.03 FORMAT

- A. Listings: Reading from left to right, in ascending order for each activity. Identify each activity with the applicable specification section number.
- B. Diagram Sheet Size: 11 x 17 inches.
- C. Scale and Spacing: Weekly increments to be a minimum of 5/8-inch long. Lettering to be a minimum of 1/16-inch high. Schedule to be legible and allow for notations and revisions.

1.04 SCHEDULES

- A. Provide a time scaled diagram with a separate activity bar for each work activity. Diagram to illustrate order and interdependence of activities and sequence of work, how start of a given activity depends on completion of preceding activities and how completion of the activity may restrain start of subsequent activities. Indicate early and late start, early and late finish, manpower loading and description of each activity. Indicate critical path.
- B. Provide as many activities as necessary to clearly show how the project will be constructed within the time allowed. As a minimum, every item on the schedule of values must be shown on the progress schedule. Provide sub-net schedules where necessary to enhance clarity.
- C. Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities.
- D. Show accumulated percentage of completion of each item of work at time of each Application for Progress Payment.
- E. As a sub-net show submittal dates including specified Architects' review time for shop drawings, product data and samples. Indicate decision date for selection of finishes.
- F. Show product delivery dates, including those furnished and / or installed by Owner.
- G. Show dates when application for separate permits (i.e., fire alarm, fire sprinkler, etc.) will be made and when permit will be received.
- H. Show dates when application for warranties / guarantees will be made and when warranties will be delivered. Final payment will not be made until all warranties / guarantees have been received and found to be acceptable.

1.05 UPDATING SCHEDULES

- A. Update the construction schedules monthly to reflect actual work activity dates accomplished and any revised work activity dates.
- B. Maintain Construction Schedules to record actual start and finish dates of activities as they are completed.
- C. Indicate progress of each activity at the time of the revision date. Update diagrams to graphically depict current status of Work.
- D. Indicate revision date on revised schedule.
- E. Show changes occurring since previous Schedule submission such as:
 - 1. Any major changes in scope;
 - 2. Activities modified since previous submission;
 - 3. Revised projections for progress and completion, as applicable;
 - 4. Any other identifiable changes.
- F. Provide narrative report as needed to define:
 - 1. Problem areas; anticipated delays; and impact on schedule.
 - 2. Corrective action to be taken by the Contractor to get the project back on schedule. This report will define how and when the Contractor will accomplish this.

1.06 SUBMITTALS

- A. Prepare and submit proposed construction schedule to Owner and Architect as soon as possible after Notice to Proceed and prior to first Application for Payment.
 - 1. Submit schedule in both paper and digital computer formats acceptable to the Owner.
- B. Submit updated schedule with each Application for Payment or more frequent if required.
- C. Applications for Payment will not be processed until schedule is in conformance with requirements of the specifications.

1.07 DISTRIBUTION

- A. Distribute copies of construction schedule to project site file, subcontractors, suppliers, Owner, Architect, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 33 00

SUBMITTALS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Administrative and Procedural Requirements for Project Submittals

1.02 SUBMITTAL PROCEDURES

- A. Schedule submittals to expedite the Project. Transmit submittals in accordance with Construction Schedule and in such sequence to avoid delay in the Work. Coordinate submission of related items with schedule.
- B. Electronic Submittals – Format: Shop Drawings, Product Data, Certificates, Warranties and any similar submittals, other than physical samples, shall be provided as digital submittals in PDF format suitable for sending via electronic mail or downloaded from internet file transfer website.
 - 1. PDF security permissions shall be formatted to allow printing, reviewing and editing functions by Architect and Owner using any PDF compatible computer program.
 - 2. When electronic submittals are required to be accompanied by a physical sample, the submittal will not be returned until both the electronic submittal and physical sample are reviewed.
- C. Contractor Shall:
 - 1. Prepare / obtain submittals for each item required in the specifications in accordance with the Contractor's submission schedule and as required to prevent delays in the ordering, fabrication, delivery and installation of the Work.
 - a. Sequence the frequency rate of submittals sent to the Architect to avoid submitting more submittals within the same week than can receive a thorough, timely review, generally 4 to 5 submittals per week. Include a review priority for Architect if multiple and / or large submittals are transmitted to Architect in the same week and plan for longer review times by Architect.
 - 2. Review each submittal for compliance to the Contract Documents, note any deviations and approve in writing prior to submission to Architect; each submittal shall bear the Contractor's review and approval stamp, with the review date and name of reviewer.
 - 3. Reproduce and distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with

provisions. Pay costs for reproduction, distribution and materials.

4. Coordinate submittals into logical groupings to facilitate inter-relation of the several items:
 - a. Finishes which involve Architect selection of colors, textures, or patterns.
 - b. Associated items which require correlation for efficient function or for installation.
5. Identify, in writing, variations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed Work.
6. Accompany submittals with transmittal letter containing:
 - a. Date.
 - b. Project title and number.
 - c. Contractor's name and address.
 - d. Number of copies of Shop Drawings, Product Data and Samples submitted.
 - e. Identification of submittal as it relates to:
 - 1) Subcontractor / Supplier / Manufacturer:
Name.
Address.
Telephone number.
Representative's name.
 - 2) Detail number and location in Construction Documents.
 - 3) Specification reference number and paragraph.
 - 4) Applicable Standards.
 - 5) Finishes.
 - 6) Identification of deviations from Contract Documents.

D. Additional Information Required:

1. Relation to adjacent structure or materials.
 2. Fabrication methods, assembly, special installation requirements, accessories, fasteners, and other pertinent information.
 3. Field dimensions, clearly identified.
 4. Coordination with other trades. Stamped and signed by affected trades.
- E. Distribution:
1. Send submittals to Owner and Architect via electronic mail or from internet file transfer website.
 2. Architect will return reviewed submittals to Contractor and Owner via electronic mail or Architect's internet file transfer system.
 3. Send copy of Architect reviewed submittal to Subcontractors / Suppliers.

1.03 SUBCONTRACTOR AND SUPPLIER LIST

- A. Prior to submission of First Application for Payment, submit complete list of subcontractors and suppliers to be used for the Work. Provide specification section identification number, addresses and telephone numbers for each listed subcontractor and supplier providing materials.

1.04 SHOP DRAWINGS

- A. Present in clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.
- B. Identify field dimensions; show relation to adjacent or critical features or Work or products.
- C. Do not submit freehand drawings.
- D. Shop Drawings Requiring Code Agency Approval: Submit on format and media required by Approval Agency. Include information required by Project Documents and Approval Agency.

1.05 PRODUCT DATA

- A. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement

standard information and to provide information specifically applicable to the Work. Delete information not applicable.

1.06 SAMPLES

- A. Submit two samples of the specified color and texture for each product unless specified otherwise in individual specification sections; samples will be retained by Architect.
- B. Where a specific color has not been specified, submit full range of manufacturer's standard and special finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for Architect selection.
- C. Label each sample with identification required for transmittal letter.
- D. Field samples are to be maintained at the site of the Work and are to be removed after substantial completion unless directed otherwise.

1.07 CONTRACTOR REVIEW

- A. Coordinate submittals with requirements of the Work and Contract Documents.
- B. Apply Contractor's approval stamp with signature. The submittal signed by the Contractor certifies that the Contractor has reviewed the submittal for accuracy, completeness and compliance with the Contract Documents. It also certifies that the Contractor has verified products required, field dimensions, adjacent construction work, and coordination of information, in accordance with the requirements of the Work and Contract Documents. Submittals without Contractor's stamp and signature are rejected. Notify Architect in writing at time of submittal, of any deviations from requirements of Contract Documents.

1.08 RESUBMITTALS

- A. Revise and resubmit submittals as required, identify changes made since previous submittal.
- B. Shop Drawings, Product Data and Calculations:
 - 1. Revise initial drawings, data or calculations and resubmit as specified for the initial submittal.
 - 2. Indicate any changes which have been made including those requested by the Architect.
- C. Samples: Submit new samples as required.
- D. Architect reserves the right to charge the Contractor for reviewing non-responsive resubmittals.

1.09 ARCHITECT REVIEW

- A. Architect or their consultant(s) will review shop drawings, product data, calculations and samples and return submittals to Contractor as soon as possible, generally within 10 working days, except Contractor shall plan for large submittals such as mechanical and electrical product binders or numerous submittals sent to Architect at the same timing taking a longer period of time.
- B. Architect's review is qualified by the following language included on the review stamp: "This review is only for general conformance with design concept of the Project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of his or her Work with that of all other trades; and for performing all work in a safe and satisfactory manner".
1. Any action shown is subject to Contract Document's requirements. Architect will mark the review submittal in one of the following boxes on review stamp:
- ☐ Reviewed
 - ☐ Reviewed with Comments / Corrections
 - ☐ Rejected
 - ☐ Revise and Resubmit
 - ☐ Submit Specified Item
 - ☐ Informational Submittal – Not Reviewed
- C. Architect / Engineer review of individual or separate items does not constitute review of assembly in which it functions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 35 16

ALTERATION PROJECT PROCEDURES, CUTTING AND PATCHING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Alteration Project Procedures.
- B. Cutting and Patching.

1.02 REGULATORY REQUIREMENTS

- A. Obtain required permits from authorities.
- B. Do not close or obstruct egress from any building exit.
- C. Do not disable or disrupt existing building utilities or fire and life safety systems without 3 days prior written notice to the Owner; proceed only after receiving the Owner's confirmation of approval.
- D. Conform to procedures and requirements of authorities having jurisdiction when hazardous or contaminated materials are discovered. Notify the Owner and Architect immediately.

1.03 QUALIFICATIONS

- A. Contractor's on-site management personnel shall be competent to survey the condition of the structures and building systems to determine both their condition and the possibility of unplanned structural collapse or failure. Management Personnel shall be capable of taking prompt corrective action when necessary to protect the safety of persons and the integrity of the building structure or systems.
- B. DEFINITIONS:
 - 1. SKILLED CRAFTSMAN is someone who has journeyman level abilities in a specific trade or craft and is currently working at that trade or craft on a regular basis, is capable of competently performing all aspects of the specific trade or craft and, if work has special warranties involved, has received special training to qualify their work for warranty.
 - 2. QUALIFIED INSTALLER is someone who has journeyman level abilities for installing a particular product or system and is currently doing this installation work on a regular basis, is capable of competently performing all aspects of the installation and, if work has special warranties involved, has received special training to qualify their work for warranty.

- C. Demolition, moving, removing, cutting and drilling is required to be performed by trades qualified to perform the work in a manner to cause the least damage and disruption to existing structure and finishes. Use skilled craftsmen or qualified installers wherever waterproof integrity, structural integrity, sight-exposed finishes or materials or systems that are under warranty are involved.
- D. Patching, repair and restoration work shall be accomplished by skilled craftsmen and qualified installers in those specific trades that normally perform the type of work required (e.g. finish carpentry work by a finish carpenter, plaster work by a plasterer, etc.).

1.04 QUALITY ASSURANCE

- A. Assign the specific demolition, cutting and patching work required for the work of this contract to the appropriate skilled craftsman or qualified installer.
- B. Lay out, coordinate, and direct the demolition and cutting accomplished by the various trades to:
 - 1. Minimize patching work required for restoration.
 - 2. Accommodate the existing conditions.
 - 3. Prevent damage to existing building structure, finishes or equipment / systems.
 - 4. Prevent removal or cutting of existing elements intended to remain.

1.05 PROTECTION

- A. Protect and prevent damage to existing finishes, equipment / systems and adjacent work scheduled to remain.
- B. Protection shall include, but not be limited to, wood timbers or framing, plywood panels, plastic sheeting, canvas drop cloths, carpet scraps etc. or anything required to protect item(s) or areas from damage.
- C. Protection shall be in place prior to specific demolition, cutting or patching work is started.

1.06 EXISTING CONDITIONS

- A. UNFORESEEN CONDITIONS: Should unforeseen conditions be encountered that affect the design or function of the project or the structural or functional integrity of the structure or any building system, notify the Architect and Owner immediately in writing.

PART 2 - PRODUCTS

2.01 PRODUCTS / MATERIALS FOR PATCHING AND EXTENDING WORK

- A. New Products / Materials: As specified in Product sections; match existing products / materials and work for patching and extending work.
- B. Type and Quality of Existing Products / Materials: Determine by inspecting and testing Products where necessary, referring to existing Work as a standard.
- C. As applicable, salvage sufficient quantities of cut or removed material to replace damaged work of existing construction, when materials are not obtainable on the current market. Do not incorporate salvaged or used materials in new construction except with permission of Architect and Owner. Protect stored salvage items in dry, secure place.

PART 3 - EXECUTION

3.01 COORDINATION

- A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section so as to facilitate the execution of the overall Work of this project in a coordinated and efficient manner.

3.02 ALTERATION PROJECT PROCEDURES

A. PREPARATION

- 1. Replace and restore at completion.
- 2. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- 3. Remove debris and abandoned items from area and from concealed spaces.
- 4. Prepare surface and remove surface finishes to provide for proper installation of new work and finishes.
- 5. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Insulate duct work and piping to prevent condensation in exposed areas.

B. INSTALLATION

- 1. Coordinate and direct the work of alterations and renovations to expedite completion sequentially.

2. Remove, cut and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original condition. If original condition is substandard or damaged, restore to level of quality required for new work.
3. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes
4. Install Products as specified in individual sections.

C. TRANSITIONS

1. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patched Work to match existing adjacent Work in texture and appearance.
2. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and provide trim appropriate to new surface or as determined by Architect.

D. ADJUSTMENTS

1. Where a change of plane occurs, provide a smooth transition
2. Trim existing doors as necessary to clear new floor finish. Refinish trim as required.
3. Fit work at penetrations of surfaces as described in Cutting and Patching.

E. REPAIR OF DAMAGED SURFACES

1. Patch or replace portions of existing surfaces which are damaged, lifted, discolored or showing other imperfections.
2. Repair substrate prior to patching finish.

F. FINISHES

1. Finish surfaces as specified in individual Product sections.
2. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.03 CUTTING AND PATCHING

A. EXAMINATION:

1. Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.
2. After uncovering existing work, inspect conditions affecting performance of work.
3. Beginning of cutting or patching means acceptance of existing conditions.

B. PREPARATION

1. Layout and coordinate the cutting work so that new work can be completed free from conflicts with work of other trades and existing conditions / systems not scheduled for removal. Do not proceed with cutting work until conflicts are resolved.
2. Provide, erect and maintain temporary barriers and exterior enclosures and protect existing and installed work.
3. Provide temporary supports, braces or shoring to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.
4. Provide protection from elements for areas which may be exposed by uncovering work.
5. Maintain excavations free of water.

C. CUTTING AND PATCHING

1. Provide the tools and equipment best suited for the specific type of cutting and patching required.
2. Plan and execute cutting work in a manner that results in the least negative impact to the surrounding work.
3. Execute cutting, fitting and patching including excavation and fill, wherever necessary to construct the work.
4. Fit products together, to integrate with other work.
5. Uncover work to install ill-timed work.
6. Remove and replace defective or non-conforming work.
7. Remove samples of installed work for testing, when requested.
8. Provide openings in the work for penetration of mechanical and electrical work.

9. Provide access for installation of items too large to fit through permanent openings.

D. PERFORMANCE

1. Execute work using methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.
2. Employ skilled craftsmen and / or qualified installer to perform cutting and patching for weather exposed and moisture resistant elements, sight-exposed surfaces and warranted work.
3. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval. Do not overcut corners of materials exposed to view or where overcutting would weaken its structural integrity.
4. Restore work with new products in accordance with requirements of Contract Documents.
5. Fit work tight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
6. At penetrations of fire rated walls, partitions, ceiling or floor construction, completely seal voids with fire rated material of equal fire rating.
7. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.

3.04 EXISTING ITEMS FOR REUSE

- A. Remove the existing item carefully so as not to damage the item.
- B. Carefully clean item and store item in a protected location.
- C. If the item is damaged during the removal process, replace with new that matches the existing at the Contractor's expense.
- D. Reinstall item using procedures for installing new work.

END OF SECTION

SECTION 01 45 00

QUALITY CONTROL

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Administrative and procedural requirements for project quality control.

1.02 REFERENCES

- A. References shall be the edition current as of the date of the Contract Documents.
- B. Obtain current copies of referenced standards.
- C. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.
- E. International Code Council (ICC):
 - 1. ICC / ANSI A117 - Accessible and Usable Buildings and Facilities

1.03 CONTRACTOR'S QUALITY ASSURANCE / CONTROL OF CONSTRUCTION

- A. Employ / assign quality control personnel to monitor the work of this project for conformance to the requirements of the Contract Documents and to good construction practices.
 - 1. Prior to starting their work, review the scope of work, performance requirements, materials and workmanship requirements with each trade and subcontractor.
 - 2. Review materials when delivered to the site for conformance to the Contract Documents and submittals.
 - 3. Monitor work in progress for conformance to the Contract Documents and submittals.
- B. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of the Contract Documents.
- C. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Work shall be performed by trained and experienced workers qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion and disfigurement.

1.04 ADA TOLERANCES

- A. ADA Tolerances: The ADA tolerances shown on the Drawings represent the allowable tolerances required for conformance with the ADA and ICC / ANSI A117. Strict conformance with the ADA tolerances shown on the Drawings is required for this project; non-conforming work will require correction at Contractor's expense.
 - 1. ADA tolerances shown on the Drawings supersede industry standard tolerances and any other tolerances included in any specification section.
- B. Submittal Review: Review submittals for conformance with the accessibility requirements of ICC / ANSI A117 and the ADA tolerances shown on the Drawings; mark up submittals that have incorrect or missing ADA tolerance information.
- C. Review with Workers: Review the accessibility requirements of ICC / ANSI A117 and the ADA tolerances shown on the Drawings with workers performing work that is required to conform to the accessibility requirements of ICC / ANSI A117.
- D. Monitoring: Monitor the work of this project for compliance with the accessibility requirements of ICC / ANSI A117 and the ADA tolerances shown on the Drawings on work that is required to conform to ICC / ANSI A117.
- E. Inspection: Inspect the completed work that is required to conform to ICC / ANSI A117 for conformance with the ADA tolerances shown on the Drawings. Inspection shall require accurate measurements to confirm that dimensions, slopes and relationships shown on the Drawings have been constructed within the ADA tolerances shown on the Drawings.

1.05 MANUFACTURER'S INSTRUCTIONS

- A. Comply with manufacturer's installation / assembly instructions in full detail, including each step in sequence.
- B. Substrates, Site Conditions And Work By Others shall conform to manufacturer's requirements:
 - 1. Inspect substrate, site conditions and work by others for conformance to manufacturer's requirements for material and condition prior to starting any work.

2. Do not start work if substrate construction, site conditions or work by others does not comply with manufacturer's recommendations; report any problems to Contractor and Architect.
 3. Start of work / installation indicates installer's acceptance of substrate, site conditions and work by others as meeting manufacturer's requirements.
- C. Should manufacturer's instructions conflict with Contract Documents, request clarification from Architect before proceeding.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION Not Used

END OF SECTION

SECTION 01 50 00

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Requirements for the contractor's construction facilities and temporary controls.

1.02 DESCRIPTION

- A. This section specifies minimum actions required. Other actions may be specified elsewhere in the Contract Documents, manufacturer's literature, and governing regulations.
- B. Nothing in this section is intended to limit types or amounts of construction facilities and temporary controls.
- C. No omission from this section will be recognized as a temporary activity that is not required to complete the Work.

1.03 PROTECTION OF EXISTING UTILITIES

- A. If unknown utilities are encountered in the course of construction, protect them from damage and notify the utility Owner immediately. Do not remove or disable any unknown existing utility without the approval of the Owner.
- B. In the event utilities are damaged during construction, temporary services and / or repairs must be made immediately to maintain continuity of services at Contractor's expense.

1.04 DISPOSAL OF WASTE MATERIALS

- A. Transportation and disposal of solid waste shall meet the requirements of Tacoma Municipal Code 12.09.50. Coordinate with the City of Tacoma Solid Waste Division for the collection and disposal of solid wastes.
- B. Dispose of refuse and waste material off Owner's property. Do not stockpile waste material on Owner's property. Immediately clean up any spilled material.
- C. Clean trash and debris from work area daily. Keep work area, site, and adjacent properties free from accumulations of waste materials, rubbish and windblown debris resulting from construction operations.
- D. Provide on-site containers for collection of waste materials, debris and rubbish. Periodically remove waste from the site.

- E. Waste Construction Liquid Disposal: Provide portable containers for disposal of any waste construction liquids or fluids that are generated by or needed for the construction work. Do not dump any waste construction liquid or fluid (including oil, solvent, cleaning compound, paint, plaster mud, brush and tool cleanup water, etc.) onto the ground or down the building sanitary or storm drain systems or anywhere on the site. Dispose of contents of all portable containers off site daily.
- F. Dispose of flammable, hazardous, and toxic waste materials daily.
- G. Conform to work place safety regulations for storage, mixing, application and disposal of all cleaning, sealing and repair related materials to requirements of those authorities having jurisdiction, including Federal, State and Local.
- H. Conform to safety precautions in accordance with the latest requirements to Health and Safety regulations, latest edition, of authorities having jurisdiction.

1.05 TEMPORARY ELECTRICITY

- A. The Owner will allow the Contractor to use the existing building's electricity for the duration of the construction without charge.
- B. Provide power outlets for construction operations, with branch wiring and distribution boxes. Provide OSHA / WISHA approved flexible power cords as needed.
- C. Provide over current protection at convenient locations for large loads on the existing electrical panels.
- D. Permanent convenience receptacles may be utilized during construction, provided they are replaced if damaged or defaced in any way.

1.06 TEMPORARY LIGHTING

- A. Provide and maintain temporary lighting for construction operations. Provide sufficient lighting to ensure proper workmanship everywhere.
 - 1. The Owner will allow the Contractor to use the existing building's lighting for the duration of the construction without charge. If the lighting levels are too low, temporary lighting may be required.
- B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required to do the Work safely and at the light levels required by each trade to produce work conforming to the quality specified.
- C. Maintain lighting and provide routine repairs.

1.07 TEMPORARY TELEPHONE SERVICE

- A. Superintendent shall carry a cellular phone to allow voice communication at all times.

1.08 TEMPORARY WATER SERVICE

- A. The Owner will allow the Contractor to use the existing building's water service for the duration of the construction without charge.
- B. Provide backflow prevention device approved by State of Washington Department of Health for any water connection to domestic water main or system serving the public.

1.09 TEMPORARY SANITARY FACILITIES

- A. Contractor shall provide and maintain required facilities and enclosures. Provide at time of project mobilization. Maintain daily in clean and sanitary condition.

1.10 TEMPORARY HEAT

- A. The Owner will allow the Contractor to use the existing building's heating system for the duration of the construction without charge. Direct fired gas / oil heaters are not allowed for supplemental heat, all combustion / exhaust gases shall be vented to building exterior.
- B. Install MERV 8 HEPA filters at return air intakes where construction activities are occurring.
- C. Maintain minimum ambient temperature of 50 degrees F in areas where construction is in progress, unless required otherwise by manufacturers, trade associations, and / or the specification sections.
- D. Maintain current temperature settings in the existing building. Coordinate with the Owner to determine the correct temperature setting.

1.11 TEMPORARY VENTILATION

- A. Provide temporary ventilation equipment to assist curing and drying out of materials, to dissipate humidity, to maintain consistent temperature in areas and to prevent accumulation of dust, fumes, vapors, or gases.

1.12 TEMPORARY DEHUMIDIFICATION

- A. Provide temporary dehumidification equipment as required to lower the moisture content of the building interior and allow materials to dry out to required levels.

1.13 BUILDING MATERIALS ACCLIMATIZATION AND DRY OUT

- A. Prior to installation of any wall surfaces or finishes, the Contractor shall provide the equipment and expertise required to dry out the building structure and materials, including concrete slabs, to conform with the following minimum criteria:

1. Contractor is responsible for selecting the means and methods utilized to dry out, ventilate and acclimate the building materials, including deciding the proper sequence of construction and other determinates affecting the dry out process; and shall hire an expert consultant to advise in this process if problems or questions are encountered.
2. Acclimate, ventilate and dry out structure and materials as required by manufacturers of finishes or coverings applied over, onto or within the structure or material.
3. Acclimate, ventilate and dry out structure and materials as required to allow installed materials to dry evenly and rapidly as recommended by manufacturer or reference standard.
4. Acclimate, ventilate and dry out structure and materials as required to prevent the formation of water condensation on any material.
5. Test and record moisture content of each different material on a daily basis during and after acclimatization and dry out process.

1.14 TEMPORARY BARRIERS AND TRAFFIC CONTROL

- A. Provide temporary barriers within the building as required.
- B. Provide barriers to protect the public from any potentially unsafe conditions, and from damage from construction operations.
- C. Provide protection for existing plant life designated to remain. Replace damaged plant life.
- C. Protect non-owned vehicular traffic, stored materials, site and structures from damage.
- D. Provide vehicular and pedestrian traffic control as appropriate for the work.

1.15 TEMPORARY STORAGE

- A. Make whatever provisions are necessary to ensure the safe and weathertight protection of materials and equipment temporarily stored.

1.16 PROTECTION OF EXISTING AND INSTALLED WORK

- A. Protect installed work. Provide special protection where specified in individual specification sections or as required to prevent any type of damage or defacement.
- B. Provide temporary and removable protection for existing and installed products. Control activity in immediate work area to minimize damage.
- C. Prohibit traffic in landscaped areas.

- D. Prohibit construction worker access to rooms and areas which do not have construction work. After work in any area or room is complete, prohibit further worker access.
- E. Prevent any construction dust and dirt from entering the HVAC equipment and ductwork, computer equipment, electrical switchgear, building systems / equipment, smoke detectors or anything that will be adversely affected.

1.17 SECURITY

- A. Provide site and building security as required to protect work in progress, stored materials, tools and equipment from vandalism and theft.
- B. Maintain security until Substantial Completion when Owner takes responsibility for security.

1.18 ACCESS ROADS

- A. Provide and maintain access to fire hydrants, free of obstructions. Do not block access roads or prevent emergency vehicles access to site.
- B. Maintain the emergency vehicle access road on the site in good, drivable condition for any type of emergency vehicle as required by the City of Tacoma code and permit conditions.

1.19 PROGRESS CLEANING

- A. Provide periodic cleaning to prevent any buildup or accumulation of construction debris in the building or on the site.
- B. Pre-Cover Cleaning: Remove construction debris and vacuum clean dirt and dust from concealed spaces that will be enclosed or inaccessible after completion of the work, including concealed spaces within walls, shafts, attics, and void spaces.
- C. Maintain building and site in a clean and orderly condition.
- D. Remove waste materials, debris, and rubbish from building and site weekly and dispose off-site.
- E. Provide final cleaning at substantial completion

1.20 ENVIRONMENTAL PROCEDURES

- A. Comply with environmental and health safety regulations. Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result.
- B. Burning on site is not permitted.

1.21 MACHINERY AND EQUIPMENT RESTRICTIONS

- A. Equipment and Internal Combustion Engine Noise: The noise level of each vehicle or piece of equipment shall not be greater than 90 DB(A) at a distance of 50 feet as measured under noisiest operating conditions. Mufflers for stationary engines shall be hospital-area quality of silencing.

1.22 REMOVAL OF UTILITIES, FACILITIES AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, etc.
- B. Clean and repair damage caused by installation or use of temporary work.

1.23 EMERGENCY CONTACTS

- A. Provide Owner with two emergency contact names (Superintendent and Project Manager), with cell phone numbers.

1.24 CONSTRUCTION PARKING

- A. Contractor is responsible to provide temporary parking areas for construction personnel.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Section 01 25 00 – Substitution Procedures

1.02 SECTION INCLUDES

- A. Requirements for Materials and Equipment related to:
 - 1. Transportation and handling
 - 2. Storage and protection
 - 3. Product options

1.03 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the work. Products may also include existing materials or components required for reuse.
- B. Provide interchangeable components of the same manufacturer, for similar components.
- C. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

1.04 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.

1.05 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated products, place on sloped supports, above

ground.

- C. Provide and pay for off-site storage and protection when site does not permit on-site storage or protection.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

1.06 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by naming a Manufacturer "or approved equal", or with a provision for Substitution Request: Submit a request for substitution for any manufacturer not named.
- D. Products Specified by "or approved equal" to a Listed Manufacturer: Products with same function and similar quality and features to listed manufacturer.
- E. Products Specified by "Similar To" a Listed Manufacturer: Products with same function and similar quality and features to listed manufacturer.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 70 00

EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. General Installation of Products
 - 2. Progress Cleaning
 - 3. Starting and Adjusting
 - 4. Protection of Installed Construction
 - 5. Correction of the Work

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Acceptance of Conditions: Start of work / installation indicates acceptance of existing conditions as not conflicting with the requirements of the Contract Documents or the design intent and being acceptable without any modification.

3.02 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a Request for Information (RFI) to Owner and Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.03 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
- G. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.04 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Pre-Cover Cleaning: Remove construction debris and vacuum clean dirt and dust from concealed spaces that will be enclosed or inaccessible after completion of the work, including concealed spaces within walls, shafts, attics, and void spaces.
- C. Site: Maintain Project site free of waste materials and debris.
- D. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

- E. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- F. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- G. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.05 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each installed utility and piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: Arrange for a factory-authorized service representative to inspect and repair any piece of equipment that does not function properly or cannot be made to operate as specified.

3.06 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

3.07 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction.
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- C. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

END OF SECTION

SECTION 01 78 00

CLOSEOUT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Administrative and Procedural Requirements for the Contract Closeout.
 - 1. Final Cleaning
 - 2. Adjusting
 - 3. Extra Stock
 - 4. Project Record Documents
 - 5. AHJ Approved Permit Drawing Set
 - 6. Operation And Maintenance Data
 - 7. Warranties
 - 8. Spare Parts And Maintenance Materials
 - 9. Punch List
 - 10. Final Adjustment of Accounts

1.02 CLOSEOUT PROCEDURES

- A. Comply with the General Conditions of the Contract.

1.03 FINAL CLEANING

- A. Execute final cleaning prior to Substantial Completion review and during the period between Substantial and Final Completion where punch list work causes waste, rubbish or debris.
- B. Clean surfaces exposed to view, remove temporary labels, stains and foreign substances. Follow manufacturer's recommendations for cleaning installed products.
- C. Clean equipment and fixtures to sanitary condition.
- D. Clean site; sweep paved areas, rake clean landscaped surfaces if they were impacted by the work of this Project.

- E. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.04 ADJUSTING

- A. Adjust operating products and equipment in accordance with manufacturer's recommendations and specification section to ensure smooth and unhindered operation.

1.05 EXTRA STOCK

- A. Make arrangements with the Owner to deliver extra stock items.
- B. Document receipt of extra stock by Owner's representative by listing each extra stock item and obtaining the signature of the Owner's representative for it. Include this document in Part 1 of the O and M Manual.

1.06 PROJECT RECORD DOCUMENTS

- A. The Project Record Documents shall consist of the following:
 - 1. Contract Documents (Drawings, Project Manual, Addendums and Change Orders).
- B. Maintain on-site throughout the construction period, one set of the project record documents and record actual revisions to the work on these documents. Project record documents and recordings specified below may be kept in electronic format with on-site access and with off-site weekly backup.
 - 1. Store Record Documents separate from documents used for construction.
 - 2. Record information concurrent with construction progress.
 - 3. Project Manual: Legibly mark, cloud and flag Project Manual changes and include a description of actual Products installed, including the following:
 - a. Manufacturer's name and product model and number.
 - b. Product substitutions or alternates utilized.
 - c. Changes made by Addenda and Change Order.
 - 4. Contract Drawings: Legibly mark, cloud and flag each item to record actual construction including:
 - a. Measured location of internal utilities concealed in construction, referenced to visible and accessible features of the work.
 - b. Field changes of dimensions and detail.

- c. Details not on original Contract Drawings.
 - d. Transcribe Addenda to Project Record Documents.
 - e. Transcribe Change Orders to Project Record Documents.
- C. Prior to contract closeout, prepare and deliver record documents to Owner as follows:
 - 1. Project Record Drawings: One photocopy set of Drawings legibly marked in red ink to show revisions and changes made during construction and as-built conditions. Mark or stamp bottom of each sheet "As-Built Drawings, Name of Construction Company, Date"
 - a. Digital Copy: Provide a digital copy of each sheet of the Project Record Drawings on a 4-1/2 inch compact disc or USB compatible flash/thumb drive in PDF format.
 - 2. Project Record Manual: One copy of Project Manual (in good, clean condition) legibly marked with red ink to record construction changes and as-built conditions.
 - a. Digital Copy: Provide a digital copy of each sheet of the Project Record Manual on a 4-1/2 inch compact disc or USB compatible flash drive in PDF format.
 - 3. A copy of each addendum and each change order in three-ring binder(s) (match binders specified for Operations and Maintenance Data), 4-1/2 inch compact disc, or USB compatible flash drive in PDF format. Include the Field Authorizations and / or Change Order Proposals directly behind each Change Order. Insert a labeled, tabbed divider for each Addendum and Change Order. Label front cover and spine of binder as follows:

Record Addendums and Change Orders

Project Name – City of Tacoma

Prepared by (Name of Contractor and Date)

1.07 AHJ APPROVED PERMIT DRAWING SET

- A. Transmit the AHJ approved Permit Set of drawings to the Owner for their permanent record.
- B. Maintain Permit Set of drawings in good, clean condition, protect from damage or marks.

1.08 OPERATION AND MAINTENANCE DATA

- A. Submit three (3) sets, on 8-1/2 x 11 inch text pages, bound in black three ring binders and in also in PDF electronic format. Binders shall have heavy-duty durable vinyl covers, heavy duty metal D-rings with cover label on front and on spine. All binders shall be same manufacturer, size and color where more than one binder is required.
- B. Prepare binder cover labels with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, year project completed, and volume number and subject matter of binder when multiple binders are required.
- C. Internally subdivide the binder contents with permanent page dividers similar to Avery PI Series dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified. Type on 30 lb. white paper.
- E. Part 1: Directory, listing names, addresses, and telephone numbers of Architect / Engineer, Contractor, Subcontractors, and major equipment suppliers. Name and signature of Owner's representatives instructed in operation of equipment. Extra parts listing with signature of Owner's representative acknowledging receipt.
- F. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category identify names, addresses and telephone numbers of Subcontractors and suppliers. Identify the following:
 - 1. Significant design criteria.
 - 2. List of equipment.
 - 3. Parts list for each component.
 - 4. Operating instructions.
 - 5. Maintenance instructions for equipment and systems.
 - 6. Maintenance instructions for special finishes, including recommended cleaning methods and materials and any special precautions.
- G. Part 3: Project documents and certificates, including the following:
 - 1. Shop drawings and product data.
 - 2. Certificates required by specification sections.

- H. Submit one (1) draft copy of completed volumes in final form prior to Substantial Completion for review by Owner. These copies will be returned to Contractor with Owner comments. Revise content of documents as required by Owner comments.
- I. Submit three (3) sets of the final revised volumes no later than the Substantial Completion date.

1.09 WARRANTIES

- A. Execute and assemble warranty documents from Subcontractors, suppliers, and manufacturers.
- B. Provide Table of Contents and assemble in one, three ring binder with durable plastic cover matching the binders provided for operation and maintenance data.
- C. Submit at same time as operation and maintenance manuals.
- D. For items of Work delayed beyond date of Project Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period for those items.

1.10 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.
- B. Deliver to project site and place in location as directed. Obtain receipt signed by Owner's representative prior to final payment and include receipts in Part 1 of Operation and Maintenance binders.

1.11 PUNCH LIST

- A. Upon completion of the Work, the Contractor shall walk-through each room / area of the Project and prepare a punch list of each item of work that is not completed or does not conform to the requirements of the Contract Documents.
- B. After completion of the punch list by the Contractor, provide written notice that the Work has been substantially completed and schedule a room by room punch list walk-through with the Architect and Owner to review the finished work and Contractor's punch list items.
 - 1. Any additional items of uncompleted or unacceptable work that are found during this walk-through shall be added onto the Punch List for completion / correction.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION Not Used

END OF SECTION

TECHNICAL SPECIFICATIONS

- DIVISION 00 – Procurement and Contracting Requirements
 - 00 01 10 – Table of Contents
 - 00 01 15 – List of Drawing Sheets
- DIVISION 04 – Masonry
 - 04 01 20 – Mortar Joint Repointing
 - 04 05 01 - Masonry Mortar
- DIVISION 06 – Wood and Plastics
 - 06 10 00 - Rough Carpentry
 - 06 20 13 – Exterior Finish Carpentry
- DIVISION 07 – Thermal and Moisture Protection
 - 07 31 13 – Asphalt Shingle Roofing
 - 07 62 00 – Sheet Metal Flashing and Trim
 - 07 71 00 – Roof Specialties
 - 07 92 00 – Joint Sealants
- DIVISION 08 – Windows
 - 08 01 52.99 – Wood Window Restoration
- DIVISION 09 – Finishes
 - 09 91 00 - Painting
- Attachments
 - Fall Restraint Anchor Design



ELECTRICAL MAINTENANCE BUILDING Building Envelope Repairs

425 Tacoma Avenue South
Tacoma, Washington

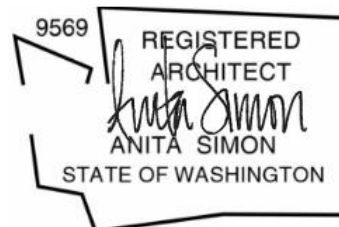


BID SET

April 24, 2023
WJE No. 2019.4897.1

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SECTION 00 01 10

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END OF SECTION

SECTION 04 01 20

MORTAR JOINT REPOINTING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Repointing of exterior brick masonry mortar joints at the chimney.
- B. Related Sections
 - 1. Section 04 05 01 - Masonry Mortar.

1.2 REFERENCES

- A. Reference Standards: Latest edition as of Specification date.
 - 1. ASTM International (ASTM):
 - a. C144 - Standard Specification for Aggregate for Masonry Mortar.
 - b. C150 - Standard Specification for Portland Cement.
 - c. C207 - Standard Specification for Hydrated Lime for Masonry Purposes.
 - d. C270 - Standard Specification for Mortar for Unit Masonry.
 - e. E2260 – Standard Guide for Repointing (Tuckpointing) Historic Masonry
 - 2. Brick Industry Association (BIA):
 - a. Technical Note 1 – Hot and Cold Weather Construction.

1.3 DEFINITIONS

- A. Original or existing mortar: Mortar currently in joint, including original setting mortar, and subsequent repair mortar.
- B. Repointing: Process of removing a specified amount of mortar from joint and repacking the joint with fresh mortar; also called tuckpointing.
- C. Deteriorated, cracked joints: Joints where the mortar is cracked, has separated from the masonry unit, is missing, or has eroded or weathered and is recessed from the surface of the joint.
- D. Half-moon: Concave configuration of mortar resulting from removal of mortar by grinding only middle portion of joint.
- E. Rake out mortar joint: Removal of hardened mortar from joint.
- F. Thumbprint hard: Mortar that has reached initial set. Time required to achieve initial set varies based on masonry characteristics, weather conditions, and mortar composition.
- G. Low-pressure water spray: 100 to 400 pounds per square inch; 4 to 6 gallons per minute.
- H. Very-low-pressure water spray: less than 100 pounds per square inch.

1.4 COORDINATION

- A. Following submittal and mock-up review, order materials at earliest possible date to avoid delaying completion of Work.
- B. Coordinate Work to ensure that adjacent areas are not adversely affected. Coordinate:
 - 1. With Owner's Representative.
 - 2. With other trades:
 - a. To ensure that work done by other trades is complete and ready for repointing Work.
 - b. To avoid or minimize work on, or in immediate vicinity of, repointing Work in progress.
 - c. To ensure that subsequent work will not adversely affect completed repointed mortar joints.
- C. Perform repointing work in the following sequence relative to other trades:
 - 1. Clean masonry and remove plant growth per Section 04 01 20.
 - 2. Rake out and repoint mortar joints.

1.5 SUBMITTALS

- A. Product Data
 - 1. Manufacturer's product data for each type of proprietary product specified. Include recommendations for application and use. Include test data substantiating that products comply with requirements.
 - 2. Test data that non-proprietary products and materials (e.g., sand) comply with specified requirements.
 - 3. Safety Data Sheets (SDS) or Material Safety Data Sheets (MSDS).
- B. Repointing Subcontractor Qualifications
 - 1. Evidence that Subcontractor's existing company has minimum ten years of continuous experience in similar repointing work, including list of at least five representative, successfully completed projects of similar scope and size, including:
 - a. Project name.
 - b. Owner's name.
 - c. Owner's Representative name, address, and telephone number.
 - d. Description of repointing work.
 - e. Project supervisor.
 - f. Total cost of repointing work and total cost of project.
 - g. Completion date.
- C. Prepared Mortar Samples: As Specified in Section 04 50 00 - Masonry Mortar.

1.6 QUALITY ASSURANCE

- A. Repointing Contractor Qualifications
 - 1. Experienced firm that has successfully completed repointing Work similar in material, design, and extent to that indicated for the Project. Must have successful construction with specified materials in local area in use for minimum of five years.
 - a. Employ foreman with minimum five years of experience as foreman on similar projects, to be on Site at all times during the Work. Do not change foreman during the course of the Project except for reasons beyond the control of Subcontractor; inform Architect/Engineer in advance of any changes.
 - b. Employ masons with minimum two years of experience in placement of repointing mortar. Fully supervise apprentices with experienced masons.
- B. Mock-Ups: Each mason to rake out joints in chimney at an area approximately 3 feet by 3 feet and repoint joints in half of area to demonstrate surface preparation, execution quality, and aesthetic effect.
 - 1. Prepare mock-up as specified herein and in accordance with ASTM E2260.
 - 2. Prepare mock-ups under same weather conditions anticipated during Work.
 - 3. Include cleaning mortar from masonry units adjacent to joints.
 - 4. Allow mock-up to cure 14 days minimum prior to inspection by Architect/Engineer.
 - 5. If Architect/Engineer determines mock-up does not comply with requirements, modify mock-up or construct new mock-up until mock-up is approved.
 - 6. Approved mock-ups will be the standard for judging completed Work.
 - 7. Approved mock-ups may become part of completed Work if undisturbed at time of Substantial Completion.
- C. Field Quality Control: Work in place may be subject to inspection testing. Work found to be unacceptable shall be replaced with new, acceptable Work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials according to manufacturer's recommendations and in such a manner as to prevent damage to materials or structure
- B. Deliver materials to Site in original packaging with seals unbroken, labeled with manufacturer's name, product brand name and type, date of manufacture, lot number, directions for storing, and mixing with other components.
- C. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, and installation. Reject and remove from Site new materials that have been exposed to moisture to their detriment.
- D. Store materials in original, undamaged containers in clean, dry, protected location on raised platforms with weather-protective coverings.
- E. Limit stored materials on structures to safe loading capacity of structure at time materials are stored, and to avoid permanent deck deflection.
- F. Locate materials in a secure location approved by Owner's Representative.

- G. Conspicuously mark damaged or opened containers or containers with contaminated materials and remove from Site as soon as possible.
- H. Remove and replace materials that cannot be applied within stated shelf life.

1.8 PROJECT CONDITIONS

- A. Comply with Owner's limitations and restrictions for Site use and accessibility. The building will be occupied during the Work. Take precautions to protect the interior from infiltration of dust and other airborne debris.
- B. Environmental Limitations:
 - 1. Place mortar in joints only when substrate and ambient temperatures are above 40 degrees Fahrenheit and predicted to remain so for at least seven days after completion of Work, unless procedures and precautions approved by Architect/Engineer are used in response to lower temperatures.
 - 2. Place mortar in joints only when substrate and ambient temperatures are at or below 90 degrees Fahrenheit and predicted to remain so for at least seven days after completion of Work, unless procedures and precautions approved by Architect/Engineer are used in response to higher temperatures.
- C. Handle and install materials in accordance with safety requirements required by material manufacturers; SDS; and local, state, and federal rules and regulations, including dust and noise restrictions. Maintain applicable SDS or MSDS with materials in storage area and available for ready reference on Site.
- D. Protecting Work
 - 1. Cover walls when Work is not in progress and inclement weather is present to protect raked joints that have not been fully repointed.
 - 2. Extend cover a minimum of 24 inches beyond each side of area to be protected.
 - 3. Securely hold cover in place.

1.9 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials that could jeopardize the integrity or performance of the Work.
 - 1. Notify Architect/Engineer of conditions that may interfere with proper execution of the Work or jeopardize performance of the Work prior to proceeding with the Work.

PART 2 PRODUCTS

2.1 MORTAR MATERIALS

- A. Refer to Section 04 05 01 – Masonry Mortar.

2.2 CLEANING MATERIALS

- A. Chemical cleaner for localized cleaning of mortar spills:

1. Prosoco, Inc: Limestone and Masonry Afterwash
 2. American Building Restoration Products, Inc.: 500 Limestone Afterwash
 3. Diedrich Technologies of Wisconsin: Green Clean 250
 4. Do not use products containing hydrochloric (muriatic) acid, hydrofluoric acid, or ammonium bifluoride.
- B. Water: Clean and potable; free from deleterious amounts of acids, alkalis, or organic materials.
- C. Soft, natural bristle brush or roller.

2.3 AUXILIARY MATERIALS

- D. Masking
1. Tarps, tape, sheeting, and other materials necessary to protect masonry and other building surfaces from stains and spills.
 2. Masking materials shall leave no marks, residue, or permanent damage to the surfaces on which they are applied.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions for compliance with requirements and other conditions affecting installation or performance of repointing Work.
1. Ensure that Work by other trades is complete and ready for repointing Work.
 2. Verify that areas and conditions under which repointing Work is to be performed permit proper and timely completion of Work.
 3. Notify Architect/Engineer of conditions that may adversely affect installation or performance of repointing Work and recommend corrections.
 4. Do not proceed with repointing Work until adverse conditions have been corrected and reviewed by Architect/Engineer.
 5. Commencing repointing Work constitutes acceptance of Work conditions and the substrates over which the Work is being installed.

3.2 PROTECTION

- A. Prevent mortar from staining face of surrounding masonry and other surfaces.
1. Cover sills, ledges, and projections to protect from mortar droppings. Do not extend coverings into mortar joints.
 2. Keep wall area wet below repointing Work to discourage mortar from adhering.
 3. Immediately remove mortar in contact with exposed masonry and other surfaces before mortar hardens.
- B. Comply with cleaning-material manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products.
- C. Cover adjacent surfaces with materials that are proven to resist cleaners being used unless cleaners will not damage adjacent surfaces.

- D. Take precautions to ensure safety of people (including building users, passers-by, and workers) and protection of property (including adjacent building elements).
- E. Take precautions to protect against air-borne materials and run-off.
- F. Protect adjacent building areas from mechanical damage due to scaffolding and other equipment.
- G. Prevent dust, debris, coating overspray/spatter, and other construction materials from coming into contact with occupants, adjacent property, and other surfaces that could be harmed by such contact.
- H. Limit access to Work areas.
- I. Protect from damage, elements of completed Work and original construction to remain.
- J. Assume responsibility for injury to persons or damage to property due to Work, and remedy at no cost to Owner.
- K. Existing building surfaces, finishes, landscaping, equipment, and other items damaged due to improper protection or containment of Work, shall be repaired or replaced to the satisfaction of the Owner and Architect/Engineer.

3.4 REPOINTING MORTAR JOINTS

- A. Remove mortar from joints and repoint all exterior chimney brick mortar joints.
- B. Rake out and repoint mortar joints as demonstrated in approved mock-up:
 - 1. Remove mortar from joints to depth of at least 2-1/2 times the minimum joint width from face of unit, to expose sound, unweathered mortar. If unsound mortar extends more than 1 inch from face of units, stop Work and notify Architect/Engineer.
 - 2. Remove mortar to provide reveals with square backs and to expose clean masonry surfaces. Do not leave half-moons.
 - 3. Demonstrate ability of operators to use tools without damaging masonry.
 - 4. Width of power tool blade should not exceed 1/3 the width of the joints.
 - 5. Do not spall edges of masonry units or widen joints.
 - 6. Remove sealant and soiling from bond surfaces of masonry, if present.
 - 7. Brush, vacuum, or flush joints with water to remove dirt and loose debris.
- C. Cover chimney in ground-out areas that have not yet been fully repointed when Work is not in progress.
 - 1. Extend cover 24 inches minimum beyond ground-out area.
 - 2. Hold cover securely in place.
- D. Preblended Mortar: Mix mortar in accordance with Section 04 05 01
- E. Repoint joints
 - 1. Remove loose mortar and dust from prepared joints by methods demonstrated in approved mock-up.
 - 2. Rinse joint surfaces with very-low-pressure water spray to remove residual dust and mortar particles. Time rinsing so the masonry is saturated, and the joint surfaces are damp but

- free of standing water at time of repointing. If joint surface is dry, dampen before repointing.
3. Place mortar in areas with greater removal depths than surrounding areas until uniform depth is achieved.
 - a. Place in layers not greater than 1/4 inch.
 - b. Fully compact each layer to fill voids and allow mortar to become thumbprint hard before applying next layer.
 - c. Where existing masonry has worn or rounded edges, slightly recess finished mortar surface from face of masonry to avoid wider joints.
 - d. Take care not to spread mortar onto exposed masonry surfaces or to feather edge mortar.
 4. When mortar is thumbprint hard, tool joints as approved in mock-up. Remove excess mortar from edges of joints by brushing.
- F. Cure mortar by maintaining in damp condition for at least 72 hours, including weekends and holidays.
1. Acceptable curing methods include covering with wet, cleaned/washed burlap, and plastic sheeting; periodic hand misting; or periodic mist spraying using system of pipes, mist heads, and timers.
 2. Adjust curing method to ensure that repointing mortar is damp throughout its depth without eroding surface mortar.

3.5 FIELD QUALITY CONTROL

- A. Owner may retain Architect/Engineer or qualified independent inspection agency to observe the progress and quality of Work and prepare inspection reports.
1. Allow access to Work areas.
 2. Notify inspector at least 48 hours in advance of times when means of access will be relocated.

3.6 CLEANING

- A. Within one hour of final tooling of an area of repointing, remove excess mortar from exposed masonry and other surfaces.
1. Wipe excess mortar from masonry surfaces adjacent to mortar joints with clean, damp sponge or cloth.
 - a. Use sponge or cloth that is damp, not wet or saturated. When tightly squeezed, water should not run from damp sponge or cloth. Surface of masonry shall not have visible accumulation of water immediately following cleaning.
 - b. Do not touch or disturb newly installed repointing mortar during cleaning.
 - c. Clean until mortar and mortar haze are removed from adjacent masonry surfaces.
 2. Wash adjacent non-masonry surfaces with detergent and soft brushes or cloths.
- B. Within seven days of final tooling, thoroughly rinse masonry surfaces affected by repointing Work to remove dust and other surface residue resulting from repointing Work. Use very-low-pressure water spray.
- C. Remove excess mortar and foreign matter from exposed masonry surfaces with wood scrapers, stiff-nylon or fiber brushes, and water spray.
1. Do not use metal scrapers or brushes.

2. Do not use acidic or alkaline cleaners unless specified herein or approved by Architect/Engineer.
- D. Patch anchor holes as scaffolding is removed, if any.
- E. Remove debris from Work from roof, gutters, and downspouts. Rinse off roof and flush gutters and downspouts.
- F. At the end of each workday, broom-clean Site and Work areas and place items to be discarded in appropriate containers.
- G. Return building surfaces, landscaping, and grounds to condition prior to cleaning Work to satisfaction of Architect/Engineer at no additional cost to Owner.
- H. At conclusion of repointing Work, remove scaffolding and equipment used in Work.
- I. Repair at no cost to Owner items damaged during the Work.
- J. Remove debris and surplus materials from Site.

END OF SECTION

SECTION 04 05 01
MASONRY MORTAR

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Supply labor, materials, and equipment necessary to complete the work of this Section, including preparation of mortar for brick masonry repairs.
- B. Related Sections:
 - 1. Section 04 01 20 - Mortar Joint Repointing.

1.2 REFERENCES

- A. Reference Standards: Latest edition as of Specification date.
 - 1. ASTM International (ASTM)
 - a. C144 - Standard Specification for Aggregate for Masonry Mortar.
 - b. C150 - Standard Specification for Portland Cement.
 - c. C207 - Standard Specification for Hydrated Lime for Masonry Purposes.
 - d. C270 - Standard Specification for Mortar for Unit Masonry.

1.3 DEFINITIONS

- A. Original or existing mortar: Mortar currently in joint, including original setting mortar, and subsequent repair mortar.
- B. Masonry cement mortar: A preblended product, consisting of a mix of portland or blended hydraulic cement, and plasticizing materials (such as limestone, hydrated or hydraulic lime) together with one or more additives introduced to enhance certain properties such as setting time, workability, water retention, or durability.
- C. Mortar cement mortar: A preblended product that meets all the requirements for masonry cement with the addition of a flexural bond strength requirement.
- D. Preblended cement-lime mortar: A factory-blended product containing only portland cement and lime with strictly no additives, except for pigments to produce a desired color. Sand may be included in the factory preblended product, depending on the regional customs and availability.
- E. Repointing: Process of removing a specified amount of mortar from joint and repacking the joint with fresh mortar; also called tuckpointing.

1.4 SUBMITTALS

- A. Product Data
 - 1. Supplier's literature indicating compliance with specified requirements.
 - a. Color admixtures: Product name and type, and name of manufacturer.
 - b. Dry, preblended mortar mix: Types of ingredients.

- c. Include Globally Harmonized System (GHS) or, if not yet available, Material Safety Data Sheets (MSDS) for information only.
- B. Certificates: Indicating compliance with specified requirements.
 - 1. Preblended, dry mortar mixes: Product description, including type of ingredients.
- C. Test Reports: aggregates, indicating type, gradation, impurities, and source
- D. Prepared Mortar Samples:
 - 1. Before erecting mock-up specified in Section 04 10 20 - Mortar Joint Repointing, submit samples of the following:
 - a. Each type of sand used for mortar.
 - 1) For blended sands, provide samples of each component and blend.
 - b. Each type of mortar in the form of sample mortar strips, 6 inches long by 1/2 inch wide, set in aluminum or plastic channels.
 - 1) Include with each sample a list of ingredients with proportions of each. Identify sources, both supplier and quarry, of each type of sand and brand names of cementitious materials and pigments, if any.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials according to manufacturer's recommendations and in such a manner as to prevent damage to materials or structure.
- B. Deliver materials to Site in original packages with seals unbroken, labeled with manufacturer's name, product brand name and type, date of manufacture, and lot number.
- C. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, and installation. Reject and remove from Site new materials that exhibit evidence of moisture during application or that have been exposed to moisture.
- D. Store materials in original, undamaged containers in clean, dry, protected location on raised platforms with weather-protective coverings, within temperature range required by manufacturer. Protect stored materials from direct sunlight.
 - 1. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- E. Limit stored materials on structures to safe loading capacity of structure at time materials are stored and to avoid permanent deck deflection.
- F. Conspicuously mark damaged or opened containers or containers with contaminated materials, and remove from Site as soon as possible.
- G. Remove and replace materials that cannot be applied within stated shelf life.

1.6 PROJECT CONDITIONS

- A. Handle and install materials in strict accordance with safety requirements required by material manufacturer; GHS or Material Safety Data Sheets; and local, state, and federal rules and regulations. Maintain GHS or Material Safety Data Sheets with materials in storage area and available for ready reference on Site.
- B. Comply with limitations and restrictions for Site use, accessibility, and work hours imposed by codes, ordinances, rules, regulations, orders, laws, and other legal requirements of public authorities having jurisdiction, and by Owner.

PART 2 PRODUCTS

2.1 MORTAR MATERIALS

- A. Cementitious Materials formulated to match existing mortar:
 - 1. Portland Cement: ASTM C150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color to match existing.
 - 2. Hydrated Lime: ASTM C207, Type S.
 - 3. Do not use masonry cement.
- B. Aggregate:
 - 1. ASTM C144: washed aggregate consisting of natural sand or crushed stone; the grading shall comply with the property limits specified in ASTM C270.
 - 2. Aggregate shall contain no more than 50 parts per million of chloride ions and free of organic contaminants.
- C. Mortar Pigment: if required to match existing adjacent mortar joints, as determined in mock-up:
 - 1. Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes. Use only pigments with record of satisfactory performance in masonry mortar.
 - a. Products:
 - 1) Solomon Colors, Inc: SGS Mortar Colors
 - 2) Lanxess Corporation: Bayferrox iron oxide pigments
 - 3) Davis Color: True Tone Sweet 16 Mortar Colors
- D. Water: Clean and potable; free from deleterious amounts of acids, alkalis, or organic materials.
- E. Admixtures: none permitted.

2.2 MORTAR MIX

- A. General: Do not use admixtures, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.
 - 1. Do not use calcium chloride in mortar.
 - 2. Limit cementitious chloride in mortar.

- B. Preblended Cement-Lime Mortar: ASTM C270. A factory packaged dry blend of portland cement, lime, and sand. Preblended cement-lime mortar may not contain any other ingredients, except pigment, if required.
 - 1. SPEC MIX: Portland Lime and Sand Masonry Mortar Type N
 - 2. Holcim, Inc.: Mortamix Rainbow Custom Color Cement-Lime Type N
 - 3. Lafarge North America, Inc.: Eaglebond Portland and Lime Type N
 - 4. Approved equal.
- C. Color: Match color of mortar to existing mortar joints.

PART 3 EXECUTION

3.1 SITE MIXING

- A. Develop batching and mixing operations so that quality control is assured.
- B. Designate 1 or 2 individuals to batch and mix mortar. Fully instruct these individuals on batching and mixing procedures. No other persons shall batch or mix mortar without prior notification to Architect/Engineer.
- C. Mix materials in appropriate drum-type batch machine mixer for uniform consistency.
 - 1. Mix mortar for three to five minutes after materials are in mixer.
 - 2. Provide sufficient number of mixers, including reserve mixers, so that mortar placement operations will proceed uninterrupted.
 - 3. Hand-mixing is permitted upon prior written approval of Architect/Engineer.

3.2 REPOINTING AND MORTAR MIXING

- A. Pre-hydrate mortar:
 - 1. Thoroughly mix ingredients except water.
 - 2. Continue mixing, adding only enough water to produce damp workable mix that will retain its form when pressed into ball.
 - 3. Maintain mortar in dampened condition for 1 to 1-1/2 hours.
- B. Add sufficient water to bring mortar to proper consistency; that is, somewhat drier than conventional masonry mortars.
 - 1. If mortar begins to stiffen, it may be retempered.
 - 2. Discard mortar not placed within 2-1/2 hours after initial mixing.
- C. Refer to Section 04 01 20 – Mortar Joint Repointing for repointing process.

3.3 FIELD QUALITY CONTROL

- A. Owner may engage qualified testing agency to sample and test mortar per ASTM C780.
 - 1. Provide access to Work and samples of materials.
 - 2. Pay for retesting of materials failing to comply with specified requirements.

END OF SECTION

**SECTION 06 10 00
ROUGH CARPENTRY**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Supply and construction of wood framing and miscellaneous wood construction.
- B. Related Sections:
 - 1. Section 07 31 13 - Asphalt Shingle Roofing.
 - 2. Section 07 62 00 - Sheet Metal Flashing and Trim.
- C. Base Bid Scope of Work
 - 1. Install plywood sheathing over existing roof sheathing on EMB roof as shown in Drawings.
 - 2. Install new blocking as shown in Drawings.

1.2 REFERENCES

- A. Abbreviations:
 - 1. ALSC: American Lumber Standard Committee.
 - 2. APA: APA - The Engineered Wood Association.
- B. Reference Standards: Latest edition as of Specification date.
 - 1. American Lumber Standard Committee (ALSC):
 - a. ALSC PS 20 - Voluntary Product Standard, American Softwood Lumber Standard.
 - 2. American National Standards Institute (ANSI)/American Wood Council (AWC):
 - a. National Design Specification for Wood Construction (ANSI/AWC NDS).
 - 3. American Wood Council (AWC):
 - a. AWC WCD 1 - Details for Conventional Wood Frame Construction.
 - 4. APA-The Engineered Wood Association (APA):
 - a. Engineered Wood Construction Guide (Construction Guide).
 - b. PRP-108 - Performance Standards and Qualification Policy for Structural-Use Panels.
 - 5. ASTM International (ASTM):
 - a. ASTM F1667 - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
 - 6. American Wood Protection Association (AWPA):
 - a. AWPA Standard U1.

1.3 DEFINITIONS

- A. Rough carpentry: Carpentry Work that is not exposed; that is, concealed by other construction.

1.4 SUBMITTALS

- A. Product Data

1. Dimension Lumber and Preservative-Treated Wood:
 - a. Species, grading, and intended use of lumber proposed for use on Project; by grading agency accredited by ALSC Board of Review. Clearly note requested substitutions that differ from those specified.
 - b. Include Safety Data Sheets (SDS) for information only; safety restrictions are sole responsibility of Contractor.
2. Sheathing:
 - a. Manufacturer's literature indicating conformance with requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials to prevent damage to materials or structure.
- B. Deliver materials to Site in original packages with seals unbroken, labeled with manufacturer's name, product brand name and type, date of manufacture, lot number, and directions for storing and mixing with other components.
- C. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, and installation. Reject and remove from the Site new materials that exhibit evidence of moisture damage.
- D. Store materials in original, undamaged containers in clean, dry, protected location on raised platforms with weather-protective coverings, within temperature range required by manufacturer.
- E. Stack lumber, plywood, and other panels. Protect from water and weather. Place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.
- F. Limit stored materials on structure to safe loading capacity of structure at time materials are stored, and to avoid permanent deck deflection.
- G. Conspicuously mark damaged materials, damaged or opened containers, or containers with contaminated materials, and remove from the Site as soon as possible.

1.6 PROJECT CONDITIONS

- A. Verify existing dimensions and details prior to start of rough carpentry Work. Notify Architect/Engineer of conditions found to be different than those indicated in the Contract Documents. Architect/Engineer will review situation and inform Contractor of changes.
- B. Comply with Owner's limitations and restrictions for Site use and accessibility.
- C. Handle and install materials in accordance with safety requirements required by manufacturer; SDS; and local, state, and federal rules and regulations. Maintain SDS with materials in storage area and available for ready reference on Site.

1.7 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at variance with the Contract Documents. Such conditions may interfere with the Work

and may consist of damage or deterioration of the substrate or surrounding materials that could jeopardize the integrity or performance of the Work.

1. Notify Architect/Engineer of conditions that may interfere with the proper execution of the Work or jeopardize the performance of the Work prior to proceeding with the Work.

PART 2 PRODUCTS

2.1 DIMENSION LUMBER

- A. See sheet S500 of the drawings for specified dimension lumber.
 1. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2 inch nominal thickness or less.

2.2 PLYWOOD

- A. See sheet S500 of the drawings for specified plywood.
- B. Kiln-dry material after treatment to maximum moisture content of 19 percent for lumber and 15 percent for plywood. Do not use material that is warped or does not comply with requirements for untreated material.

2.3 AUXILIARY MATERIALS

- A. Blocking for Crickets, Cants, and Other Roofing Components:
 1. Preservative Treatment by Pressure Process: AWWPA U1; Use Category UC2
 - a. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium
 2. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
 3. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- B. Miscellaneous Lumber:
 1. Provide lumber for support or attachment of other construction, including blocking, cants, nailers, and furring.
 2. Construction grade or better, with 19 percent maximum moisture content.
 - a. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails or damage to paneling.
- C. Fasteners: ANSI/AWC NDS.
 1. Nails: Box American or Canadian Manufacturer only and per ASTM F1667; refer to Drawings for nail sizes.
 - a. Minimum edge distance, end distance, and spacing: Maintain minimum distances and spacings specified by ANSI/AWC NDS to prevent splitting of wood.
 - b. Use hot-dipped galvanized fasteners complying with ASTM A153/A153M or Type 304 stainless steel fasteners.
 2. Connectors: As shown on Drawings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions for compliance with requirements and other conditions affecting installation or performance of rough carpentry Work.
 - 1. Ensure that work done by other trades is complete and ready for rough carpentry Work.
 - 2. Verify that areas and conditions under which rough carpentry Work is to be performed permit proper and timely completion of Work.
 - 3. Notify Architect/Engineer in writing of conditions that may adversely affect installation or performance of rough carpentry Work and recommend corrections.
 - 4. Do not proceed with rough carpentry Work until adverse conditions have been corrected and reviewed by Architect/Engineer.
 - 5. Commencing rough carpentry Work constitutes acceptance of Work surfaces and conditions.

3.2 PROTECTION

- A. Take precautions to ensure safety of people, including building users, passers-by, and workmen, and animals, and protection of property, including adjacent building elements, landscaping, and motor vehicles.
- B. Prevent construction debris, coatings, and other materials from coming into contact with pedestrians, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
- C. Protect paving and sidewalks, and adjacent building areas from mechanical damage due to scaffolding and other equipment.
- D. Limit access to Work areas.
- E. Erect temporary protective canopies, as necessary, over walkways and at points of pedestrian and vehicular access that must remain in service during Work.
- F. Assume responsibility for injury to persons or damage to property due to Work, and remedy at no cost to Owner.

3.3 INSTALLATION, GENERAL

- A. Install wood construction according to Drawings and Specifications, and minimum requirements of local building code and International Building Code. Notify Architect/Engineer of deviations between Drawings and Specifications.
- B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted.
 - 1. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit.
 - 2. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- C. Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with minimum number of joints or optimum joint arrangement.

1. Do not splice structural members between supports unless indicated otherwise on Drawings.
- D. Securely connect rough carpentry and attach to substrate as indicated on Drawings.
 1. Make tight connections between members.
 2. Space and install fasteners without splitting wood.
 3. Use common wire nails, unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials.
 4. For hardware, anchors, and connectors, use fasteners in all holes per manufacturer's recommendations unless indicated otherwise.

3.4 BLOCKING AND NAILER INSTALLATION

- A. Install where indicated on Drawings and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading.
 1. Recess bolts and nuts flush with surfaces unless otherwise indicated.

3.5 SHEATHING INSTALLATION

- A. General
 1. Comply with recommendations of APA Construction Guide.
 - a. Install roof sheathing with long edge perpendicular to joists or rafters.

3.6 FIELD QUALITY CONTROL

- A. Notify Architect/Engineer of field conditions that deviate from details in Drawings.
- B. Allow Architect/Engineer use of lift device or scaffolding to observe progress and quality of Work.

3.7 CLEANING

- A. At the end of each workday, clean Site and Work areas and place debris and rubbish in appropriate containers.
- B. After completing rough carpentry Work, clean up debris and surplus materials and remove from Site.

3.8 PROTECTION OF INSTALLED WORK

- A. Protect installed rough carpentry from damage due to exposure to harmful weather, physical abuse, and other causes. Temporarily cover rough carpentry Work exposed to weather as soon as practical after installation to prevent deterioration from wetting.

END OF SECTION

SECTION 06 20 13
EXTERIOR FINISH CARPENTRY

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Localized replacement of exterior cedar plank and shingle siding with metal corner trim to match existing materials.
- B. Related Sections:
 - 1. Section 09 91 00 – Painting.

1.2 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate Work to ensure that adjacent areas are not adversely affected. Coordinate:
 - 1. With Owner's Representative.
 - 2. With other trades:
 - a. To ensure that work done by other trades is complete and ready for siding Work.
 - b. To avoid or minimize work on, or in immediate vicinity of, siding Work in progress.
 - c. To ensure that subsequent work will not adversely affect completed siding Work.
- B. Pre-installation Meeting:
 - 1. Participate in meeting at Site.
 - 2. Review requirements for siding Work, including:
 - a. Construction schedule.
 - b. Availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - c. Site use, access, staging, and set-up location limitations.
 - d. Approved mock-up procedures.
 - e. Forecast weather conditions.
 - f. Surface preparation and substrate condition and pre-treatment, including Contractor's lead abatement protocol.
 - g. Installation procedures.
 - h. Special details.
 - i. Testing and inspection requirements.
 - j. Site protection measures.
 - k. Governing regulations.
 - 3. Contractor's Site superintendent, siding Installer, Owner's Representative, and Architect/Engineer shall attend.

1.3 SUBMITTALS

- A. Product Data
 - 1. For each siding type: indicate wood species, dimensions, profiles, and textures.
 - a. Statement that moisture content of materials was reduced before shipment to Project site to specified levels.
 - 2. For metal trim corner pieces.

3. For bird netting, showing manufacturer's standard color options.
 4. Fasteners.
- B. Physical Samples:
1. Provide samples for each type of siding and metal corner trim to match thickness, width, texture and edge profile of existing siding.
 - a. Sample size: minimum 50 square inches or 12 inches long.
 2. Provide two samples for metal corner trim to match existing dimensions, profile, and thickness.
 3. Provide two 12 inch square samples for bird netting of each color for Owner consideration.
- C. Installer Qualifications: Evidence that Installer's existing company has minimum five years of continuous experience in similar siding Work; list of at least five representative, successfully completed projects of similar scope and size, including:
1. Project name.
 2. Owner's name.
 3. Owner's Representative name, address, and telephone number.
 4. Description of work.
 5. Siding type installed.
 6. Project supervisor.
 7. Total cost of siding work and total cost of project.
 8. Completion date.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Experienced firm that has successfully completed siding work similar in material, design, and extent to that indicated for Project. Must have successful installations of specified materials in local area in use for minimum of five years.
1. Employ foreman with minimum five years of experience as foreman on similar projects, to be on Site at all times during Work. Do not change foreman during the course of the Project except for reasons beyond the control of the Installer; inform Architect/Engineer in advance of any changes.
- B. Mock-ups: Build mock-ups to demonstrate aesthetic effects and set quality standards for installation.
1. Mock-up of plank siding integrated with existing siding, minimum 48 inches long. Leave half of new siding exposed to view to demonstrate fastener placement.
 2. Mock-up of shingle siding integrated with existing siding minimum 48 inches long. Leave half of new siding exposed to view to demonstrate fastener placement.
 3. Mock-up of installation of two metal corner trim pieces.
 4. Approved mock-ups may become part of completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials in such a manner as to prevent damage to materials or structure.
- B. Stack lumber and other panels flat with spacers between each bundle to provide air circulation. Protect materials from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

1.6 PROJECT CONDITIONS

- A. Architect/Engineer will inspect condition of exposed sheathing at areas of removed siding. Do not proceed with siding installation until back-up wall conditions are determined to be sound.
- B. Verify existing dimensions and details prior to start of siding Work. Notify Architect/Engineer of conditions found to be different than those indicated in the Contract Documents. Architect/Engineer will review situation and inform Contractor and Installer of changes.
- C. Comply with Owner's limitations and restrictions for Site use and accessibility.
- D. Do not install finish carpentry materials that are wet, moisture damaged, or contain organic growth.
 - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that materials contain organic growth include, but are not limited to, the presence of spores, biological growth, or splotchy surface contamination and discoloration.
- E. Environmental Limitations
 - 1. Proceed with installation only when existing and forecast weather conditions permit Work to be performed and at least one coat of specified coating can be applied without exposure to rain, snow, or dampness.

1.7 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials that could jeopardize the integrity or performance of the Work.
 - 1. Notify Architect/Engineer of conditions that may interfere with the proper execution of the Work or jeopardize the performance of the Work prior to proceeding with the Work.

PART 2 PRODUCTS

2.1 SIDING MATERIALS

- A. Provide kiln-dried lumber siding complying with American Soft Wood Lumber Standard PS 20 and the following grading rules:
 - 1. WWPA: Western Wood Products Association, "Western Grading Rules".
 - 2. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
 - 3. Grade type to be identified in the field to match existing.
- B. Species: Cedar with specific species type identified in the field to match existing. Species may include but are not limited to:
 - 1. Western red cedar
 - 2. Northern white cedar

- C. Pattern: Match existing dimensions, profile, and face width (coverage) of existing siding at locations indicated on Drawings, measured on the face and thick edge at 19 percent moisture content.

2.2 SIDING FASTENERS

- A. Provide nails in sufficient length to penetrate not less than 1-1/2 inches into wood substrate.
 - 1. Provide hot-dipped galvanized steel fasteners.
 - 2. Locate fasteners to match existing blind or face nailed configuration.
- B. Metal Corner Trim: paintable galvanized steel, prepared for painting to match siding color scheme.
 - 1. Dimensions and thickness to match existing.

2.3 BIRD NETTING

- A. Knotted polyethylene net, flame-resistant, ultra-violet light treated, 1/2 inch mesh with selvage edge for fastening.
 - 1. Color: Selected by Owner to visually match the color of the area surrounding eaves.
 - 2. Fasteners: 20 gauge stainless steel staples, 5/16 inch leg and 1/2 inch crown.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions with Installer for compliance with requirements and other conditions affecting performance of siding Work.
- B. Surfaces shall be sound, dry, clean, and free of oil, grease, dirt, excess mortar, or other contaminants.
- C. Ensure that work done by other trades is complete and ready for siding Work.
- D. Verify that areas and conditions under which siding Work is to be performed permit proper and timely completion of Work.
- E. Verify that surfaces and conditions are ready to accept the Work of this section.
 - 1. Notify Architect/Engineer in writing of conditions that may adversely affect installation or performance of siding Work and recommend corrections.
 - 2. Do not proceed with installation of siding and accessories until adverse conditions have been corrected and reviewed by Architect/Engineer.
 - 3. Commencing siding Work constitutes acceptance of Work surfaces and conditions.

3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.
- B. Disturb existing siding in accordance with safety conditions or applicable rules and regulations of local, state, and federal authorities having jurisdiction.
- C. Prime lumber and moldings to be painted, including both faces and edges, unless factory primed. Cut to required lengths and prime ends.

- D. Comply with requirements in Section 09 91 00 – Painting.

3.3 INSTALLATION

- A. Remove existing siding at locations identified in Drawings. Notify Architect/Engineer if damaged materials are identified beyond the anticipated siding replacement areas.
- B. Do not use materials that are unsound, warped, improperly treated or finished, inadequately seasoned, or too small to fabricate with proper jointing arrangements.
- C. Install siding true and aligned with adjacent materials. Use concealed shims where necessary for alignment.
 - 1. Scribe and cut exterior finish carpentry to fit adjoining work.
 - 2. Install adjoining exterior finish carpentry with offset dimensions for reveals and to produce a flush installation to the existing.
 - 3. Coordinate exterior finish carpentry with materials and systems in or adjacent to it.
 - 4. Provide cutouts for mechanical and electrical items that penetrate exterior siding.
- D. Apply starter strip along bottom edge of sheathing or sill.
- E. Install first course of siding, with lower edge lap distance to match existing dimension below starter strip and subsequent courses lapped with to match existing over course below.
 - 1. Nail at each stud.
 - 2. Do not allow nails to penetrate more than one thickness of siding.
 - 3. Match dimension of existing adjacent gap at trim or other terminations.
 - 4. Butt joints only over framing or blocking, nailing top and bottom on each side and staggering joints in subsequent courses.
- F. Apply siding in manner to blend into existing configuration so replaced material is not distinguishable from the existing. Adjust joinery for uniform appearance.
- G. Dispose of waste created from Work legally and in accordance with OSHA, EPA, and other federal, state, and local regulations for the types of hazardous materials present.
- H. Install metal corner trim pieces over primed wood and painted to match existing color scheme.
- I. Finish: Apply coating system within two weeks of installation.

3.4 CLEANING

- A. Clean exterior finish carpentry on exposed and semi-exposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas.
- B. At the end of each workday, clean Site and Work areas and place rubbish, empty cans, rags, and other discarded materials in appropriate containers.
- C. After completing siding Work:
 - 1. Clean spillage and soiling from adjacent surfaces using cleaning agents and procedures recommended by manufacturer of affected surface. Exercise care to avoid scratching or damage to surfaces.
 - 2. Repair surfaces stained, marred, or otherwise damaged during Work.
 - 3. Clean up debris and surplus materials and remove from Site.

3.5 PROTECTION

- A. Protect existing and installed products from damage from weather and other causes during construction.
- B. Protect replaced siding from damage and wear during remainder of construction period.
- C. Remove and replace siding materials that are wet, moisture damaged, and mold damaged.
 - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION

SECTION 07 31 13
ASPHALT SHINGLE ROOFING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Removal of existing asphalt shingle roofing, deck preparation, and installation of plywood sheathing, and installation of fiberglass-reinforced asphalt shingle roofing system including:
 - 1. Self-adhered underlayment.
 - 2. Felt underlayment at eaves and roof edges.
 - 3. Eave protection.
 - 4. Edge metal.
 - 5. Starter shingles.
 - 6. Ridge cap shingles.
 - 7. Penetration flashings.
 - 8. New roof vents.
 - 9. New fall restraint anchors.
- B. Alternate Scope of Work: Install self-adhering underlayment throughout all roofs.
- C. Related Sections
 - 1. Section 06 10 00 - Rough Carpentry.
 - 2. Section 07 62 00 - Sheet Metal Flashing and Trim.
 - 3. Section 07 71 00 – Roof Specialties.
 - 4. Section 07 92 00 - Joint Sealants.

1.2 REFERENCES

- A. Reference Standards: Latest edition as of Specification date.
 - 1. National Roofing Contractors Association (NRCA).
 - a. “Roofing and Waterproofing Manual - Fifth Edition.”
 - b. “NRCA Guidelines for Asphalt Shingle Roof Systems.”
 - 2. ASTM International
 - a. C920: Standard Specification for Elastomeric Joint Sealants.
 - b. D1079: Standard Terminology Relating to Roofing and Waterproofing.
 - c. D1970: Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 - d. D3161: Standard Test Method for Wind Resistance of Steep Slope Roofing Products.
 - e. D3462: Standard Specification for Asphalt Shingles Made from Glass Felt and Surface with Mineral Granules.
 - f. D4586: Standard Specification for Asphalt Roof Cement, Asbestos-Free.
 - g. D6757: Standard Test Method for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.
 - h. D7158: Standard Test Method for Wind Resistance of Asphalt Shingles.
 - i. E108: Standard Test Methods for Fire Tests of Roof Coverings.
 - j. F1667: Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.

3. Underwriters Laboratory (UL)
 - a. UL 790: Standard Test Methods for Fire Tests of Roof Coverings.

1.3 DEFINITIONS

- A. Roofing Terminology: See ASTM D1079 for definitions of terms related to roofing Work in this Section.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate Work to ensure that adjacent areas are not adversely affected.
 1. Coordinate:
 - a. With Owner's Representative.
 - b. With other trades:
 - 1) To ensure that work done by other trades is complete and ready for waterproofing Work.
 - 2) To avoid or minimize work on, or in immediate vicinity of, roofing Work in progress.
 - 3) To ensure that subsequent work will not adversely affect quality of completed roofing.
- B. Pre-installation Meeting
 1. Conduct meeting at Project site.
 2. Review requirements for roofing system, including:
 - a. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Site use, access, staging, and set-up location limitations.
 - c. Forecast weather conditions.
 - d. Surface preparation and substrate condition and pretreatment.
 - e. Installation procedures.
 - f. Testing and inspection requirements.
 - g. Temporary protection and repair of roofing system.
 - h. Structural loading limitations of roof deck.
- C. Contractor's site foreman, roofing-system manufacturer's technical representative, roofing Installer, Owner's Representative, Architect/Engineer, and testing agency representative shall attend.
- D. Conduct regular progress meetings on site as directed by Owner.

1.5 SUBMITTALS

- A. Product Data
 1. Manufacturer's product description and technical data, including:
 - a. Application instructions.
 - b. Safety Data Sheets (SDS) for information only.
 - c. Sample copies of applicable guarantees.
 - d. Sample of shingle color.
 - e. Manufacturer's guarantee.
- B. Samples for Initial Selection
 1. Laminated-Strip Asphalt Shingle with color options to match existing.

- C. Installer Qualifications
 - 1. Certification signed by roofing-system manufacturer, certifying that Installer complies with manufacturer's requirements to install specified, warranted, roofing system.
 - 2. Submit evidence that Installer's existing company has minimum of five years continuous experience in application of specified materials. Submit list of at least five completed projects of similar scope and size, including:
 - a. Project name.
 - b. Owner's name.
 - c. Owner's Representative name, address, and telephone number.
 - d. Description of work.
 - e. Built-up asphalt materials used.
 - f. Project supervisor.
 - g. Total cost of roofing work and total cost of project.
 - h. Completion date.
- D. Sample Warranty
 - 1. Copy of roofing-system manufacturer's warranty stating obligations, remedies, limitations, and exclusions.
 - 2. Copy of Installer's warranty stating obligations, remedies, limitations, and exclusions.
- E. Close-Out Submittals:
 - 1. Following completion of Work, submit roofing-system manufacturer's inspection report of completed roofing installation and completed warranty.
 - 2. Completed Installer's warranty.
 - 3. Maintenance data for roofing system.
 - 4. Furnish extra asphalt shingles that match product installed and packaged with protective covering for storage and identified with labels describing contents. Provide 100 square feet.

1.6 QUALITY ASSURANCE

- A. Source Limitations: Obtain roofing materials from one manufacturer. Provide material not available from the manufacturer from sources THAT are recommended and approved by the manufacturer.
- B. Installer Qualifications
 - 1. Qualified firm that is approved, authorized, or licensed by roofing-system manufacturer to install roofing system and that is eligible to receive roofing-system manufacturer's warranty. Must have installations of specified materials in local area in use for minimum of five years.
 - a. Employ foreman with minimum five years of experience as foreman on similar projects to be on site at all times during Work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in original packages with seals unbroken, labeled with roofing-system manufacturer's name, product brand name and type, date of manufacture, and lot number.

- B. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, or installation. Reject and remove from Site new materials that have been exposed to moisture to their detriment.
- C. Store and handle materials in accordance with manufacturer's written instructions, safety requirements, and all applicable laws and regulations. Remove from Site, and replace at no cost to Owner, any materials that are damaged or otherwise negatively affected by not being stored or handled in accordance with manufacturer's written instructions.
- D. Store materials in original, undamaged containers and packaging in clean, dry location on raised platforms and protected from weather, within temperature range required by roofing-system manufacturer. Protect stored materials from direct sunlight and sources of ignition. Manufacturer's standard packaging and covering alone are not considered adequate weather protection.
- E. Locate materials in a secure location approved by Owner's Representative.
- F. Conspicuously mark damaged or wet materials, damaged or opened containers, containers with contaminated materials, and materials that cannot be used within stated shelf life and remove from Site as soon as possible. Replace discarded materials in a timely manner at no cost to Owner.
- G. Store rolled materials on ends only, unless otherwise required by roofing-system manufacturer's written instructions. Discard rolls that have been flattened, creased, or otherwise damaged.
- H. Do not store materials at locations where new roofing materials have been installed.
- I. Limit stored materials on structures so as to preclude damage to materials and structures.
- J. Handle materials to avoid damage.

1.8 PROJECT CONDITIONS

- A. Verify existing dimensions and details prior to installation of materials. Notify Architect/Engineer of conditions found to be different than those indicated in the Contract Documents. Architect/Engineer will review situation and inform Contractor and Installer how to proceed.
- B. Comply with Owner's limitations and restrictions for site use and accessibility.
- C. Protect existing roof structure from damage from construction activities. Repair damage to roofing from construction activities and damage that results in leakage.
- D. Environmental Limitations
 - 1. Install roofing when existing and forecast weather conditions permit roofing system to be installed according to roofing-system manufacturer's written instructions and warranty requirements.
 - a. Observe cold-weather precautions and guidelines recommended by roofing-system manufacturer when applying roofing materials below 40 degrees F.

- b. Do not proceed with installation during inclement weather except for temporary work necessary to protect building interior and installed materials. Remove temporary work and Work that becomes moisture damaged.
- E. Install materials in accordance with safety requirements required by roofing-system manufacturer, material SDS, and local, state, and federal rules and regulations.

1.9 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at a variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials that could jeopardize integrity or performance of the Work.
 - 1. Notify Architect/Engineer of conditions that may interfere with proper execution of the Work or jeopardize performance of the Work prior to proceeding with the Work.

1.10 WARRANTY

- A. Manufacturer's Warranty:
 - 1. Written warranty, signed by roofing-system manufacturer, including:
 - a. Repair or replace components of roofing system that do not comply with requirements; that do not remain watertight; that fail in adhesion, cohesion, or general durability; or that deteriorate in manner not clearly specified by submitted roofing-system manufacturer's data as inherent quality of material for application indicated.
 - b. Warranty includes replacing materials including removal and replacement of roof sheathing, base sheet, and temporary vapor retarder.
 - c. Labor and materials to perform warranty work.
 - 2. Warranty Period: 30 years from date of completion of roofing system.
- B. Roofing Installer's Warranty:
 - 1. Completed warranty form at end of Section, signed by Installer.
 - a. Repair or replace components of roofing system that do not comply with requirements; that do not remain watertight; that fail in adhesion, cohesion, or general durability; or that deteriorate in manner not clearly specified by submitted roofing-system manufacturer's data as inherent quality of material for application indicated. Warranty includes defects such as blisters, ridging, and excessive surfacing loss.
 - b. Warranty includes replacing materials including removal and replacement of roof sheathing, base sheet, and temporary vapor retarder.
 - c. Labor and materials to perform warranty work.
 - 2. Warranty Period: Two years from date of completion of roofing system.

PART 2 PRODUCTS

2.1 ROOFING MATERIALS

- A. General
 - 1. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing-system manufacturer based on testing and field experience.

2.2 PERFORMANCE REQUIREMENTS

- A. Exterior Fire-Test Exposure
 - 1. Provide asphalt shingles and related roofing materials identical to those of assemblies tested for Class A fire resistance in accordance with ASTM E108 or UL 790 by Underwriters Laboratories or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing agency.
- B. Wind Resistance
 - 1. Provide asphalt shingles that comply with requirements of ASTM D3161, Class F, and with ASTM D7158, Class H.

2.3 GLASS FIBER-REINFORCED ASPHALT SHINGLES

- A. Laminated-Strip Asphalt Shingles: ASTM D3462, laminated, multi-ply overlay construction; fiberglass reinforced, mineral-granule surfaced, and self-sealing.
 - 1. Strip Size: Manufacturer's standard.
 - 2. Starter Strip Shingles/Hip and Ridge Shingles.
 - a. Starter Strip: As required by manufacturer at eaves and rakes to achieve wind warranty, double layer if required by manufacturer.
 - b. Hip and Ridge: Type required by manufacturer and to match shingles.
 - 3. Algae Resistance: Granules resist algae discoloration.
 - 4. Color and Blends: Match Architect's sample as selected by Architect from manufacturer's full range.
- B. Roofing-system manufacturer that has approval for roofing system identical to that specified for this Project. Use one of the following or approved equal.
 - 1. CertainTeed Corporation.
 - 2. GAF.
 - 3. Owens Corning Building Products.
 - 4. Malarkey Roofing Company.
 - 5. TAMKO Roofing Products, Inc.

2.4 ACCESSORIES

- A. Self-Adhered Underlayment at Eaves and Roof Edges: Suitable for high temperatures, minimum 30 to 40 mils thick, consisting of slip-resisting polyethylene-film top surface laminated to layer of butyl or SBS-modified asphalt adhesive, with release paper backing; cold applied. Provide primer when recommended by underlayment manufacturer.
 - 1. Thermal Stability: ASTM D1970; stable after testing at 240 degrees F.
 - 2. Low-Temperature Flexibility: ASTM D1970; passes after testing at minus 20 degrees F.
 - 3. Products
 - a. Single-sourced by same manufacturer submitted with the roofing system, or equal product approved in writing by roofing manufacturer to comply with system warranty requirements.
- B. Felt Underlayment
 - 1. Glass-Reinforced Felt: ASTM D6757, asphalt-saturated, glass-reinforced organic felt or inorganic fiber-based felt. Subject to compliance with requirements, use one of the following or approved equal.
 - a. Certain Teed Corporation.

- b. GAF.
 - c. Owens Corning Building Products.
 - d. Atlas Molded Products.
- C. Underlayment Fasteners Stainless steel or hot-dip galvanized-steel wire nails with low-profile metal or plastic caps, one inch minimum diameter.
- D. Rigid Ridge Vent: Manufacturer's standard, rigid-section, high-density, UV-stabilized plastic ridge vent fabricated with nonwoven geotextile filter strips and external deflector baffles, for use under ridge shingles.
 - 1. Manufacturers: Subject to compliance with requirements, use one of the following or approved equal:
 - a. CertainTeed Saint-Gobain.
 - b. GAF.
 - c. Owens Corning.
 - d. Cor-A-Vent, Inc.
 - e. TAMKO Building Products, Inc.
 - 2. Minimum Net Free Area: 1/150 of total roof area.
- E. Asphalt Roofing Cement: ASTM D4586 Type II, asbestos free as recommended by roofing manufacturer.
- F. Butyl Sealant: ASTM C1311, single-component, solvent-release, butyl-rubber sealant; polyisobutylene-plasticized; heavy-bodied for hooked-type expansion joints with limited movement.
- G. Elastomeric Flashing Sealant: ASTM C920, Type S, Grade NS, one-part, non-sag, elastomeric polymer sealant; of class and use classifications required to seal joints and remain watertight; recommended in writing by manufacturer for installation of flashing systems.
- H. Roofing Nails: ASTM F1667, aluminum, stainless steel, or hot-dip galvanized-steel wire shingle nails, minimum 0.120 inch diameter, sharp-pointed, with a 3/8 to 7/16 inch diameter flat head and of sufficient length to penetrate 3/4 inch into wood decking or extend at least 1/8 inch through sheathing less than 3/4 inch thick.
 - 1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.
- I. Wood Blocking and Plywood: For crickets, cants, or miscellaneous blocking: See Section 06 10 00 - Rough Carpentry.
- J. Sheet Metal Flashing: Refer to Section 07 62 00 - Sheet Metal Flashing and Trim.
- K. Bird Netting: Refer to Section 06 20 13 - Exterior Finish Carpentry.

2.5 GUTTERS

- A. Manufactured in uniform section lengths not exceeding 12 feet, with matching corner units, ends, outlet tubes, and other accessories. Elevate back edge at least 1 inch above front edge. Furnish flat-stock gutter straps, gutter brackets, expansion joints, and expansion-joint covers fabricated from same metal as gutters.
 - 1. Aluminum sheet: 0.040 inch, pre-finished gutter color to match existing. Downspouts painted to match siding color scheme.

2. Gutter Profile: From manufacturer's standard range in closest match to existing.
 3. Corners: Factory mitered and mechanically clinched and sealed watertight.
 4. Gutter Supports: Gutter brackets, straps, spikes and ferrules, and manufacturer's standard supports with finish matching the gutters.
- B. Downspouts: plain rectangular complete with smooth-curve elbows manufactured from the same metal as the gutter. Furnish with metal hangers from same material as downspouts and anchors.
1. Formed Aluminum: 0.040 inch thick.

2.6 ROOF VENTS

- A. Provide static roof exhaust vents to match existing layout. Vent type and exhaust pipe diameter to match existing. Use single-source manufacturer.
1. Pre-finished aluminum of thickness to match existing.
 2. Color to match existing, manufacturer's standard range in closest match to existing.
 3. Vent Profile: Closest approximation to match existing.
 4. Provide integral flanges to match roof slope and integrate roof vent with new roofing system.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions with Installer and roofing-system manufacturer's representative for compliance with requirements and for other conditions affecting performance of roofing system.
1. Examine roof sheathing to verify installation is within flatness tolerances.
 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and that provisions have been made for flashings and penetrations through the shingles.
 3. Verify that vent stacks, fall restraint anchors, and other penetrations through roofing are installed and securely fastened.
 4. Notify Architect/Engineer in writing of conditions that may adversely affect roofing system installation or performance. Do not proceed with roofing system installation until these conditions have been corrected and reviewed by Architect/Engineer.

3.2 COORDINATION

- A. Coordinate Work to ensure that new roofing materials and building interior are kept continuously dry and that continuous, watertight, new roofing system is provided. Coordinate:
1. With Owner's Representative.
 2. With other trades to avoid or minimize work on, or in immediate vicinity of, installation in progress and completed new roofing.
 3. To avoid or minimize adverse effects on completed new roofing.
- B. Ensure gutters are operational at end of each workday or if precipitation is forecast.

3.3 SURFACE PREPARATION

- A. Remove existing roofing system and other materials to expose sheathing substrate.

1. Remove only as much of existing roofing as can be prepared and new roofing system installed in one day unless provisions are implemented to maintain water tightness in interim or larger removal areas are approved by Owner's Representative.
 2. Provide temporary protection as needed if water tightness is compromised.
 3. Do not begin removal of existing roofing system when weather conditions are not conducive to maintaining water tightness or for application of new construction.
- B. Clean existing substrate of dust, debris, moisture, and other substances detrimental to new sheathing and subsequent roofing installation. Prepare substrate according to roofing-system manufacturer's written instructions.
- C. Architect/Engineer will examine exposed existing substrate and identify locations for replacement prior to installation of new sheathing. Replacement material and size to match existing.
- D. Installer and roofing-system manufacturer's representative shall examine new plywood sheathing and substrate to ensure that it is properly prepared and ready to receive roofing system. Roofing-system manufacturer's representative shall report in writing to Installer and Architect/Engineer conditions that will adversely affect roofing system installation or performance. Do not proceed with roofing-system installation until these conditions have been corrected and reviewed by Architect/Engineer.
- E. Proceed with installation only after unsatisfactory conditions have been corrected. Commencing installation constitutes acceptance of work surfaces and conditions.

3.4 ROOFING SYSTEM INSTALLATION

- A. Install new plywood roof sheathing over existing as shown in Drawings and per Section 06 10 00 - Rough Carpentry.
- B. Clean and prepare new plywood roof sheathing according to roofing-system manufacturer's written instructions. Provide clean, dust-free, and dry substrate for roofing application.
- C. Eave Protection
1. Self-adhering sheet underlayment:
 - a. Comply with low-temperature installation restrictions of underlayment manufacturer.
 - b. Install lapped in direction that sheds water.
 - 1) Lap ends not less than 6 inches.
 - 2) Roll laps with roller. Install without wrinkles.
 - c. Eaves: Extend from edges of eaves 30 inches beyond interior face of exterior wall.
 - d. Valleys: Extend from lowest to highest point 18 inches on each side of centerline.
 - e. Sidewalls: Return vertically against sidewalls not less than 6 inches.
 - f. Cover self-adhering sheet underlayment within seven days.
- D. Underlayment: Comply with asphalt shingle and underlayment manufacturers' written installation instructions and with recommendations in "The NRCA Roofing Manual: Steep-Slope Roof Systems" applicable to products and applications indicated unless more stringent requirements are specified in this Section or indicated on Drawings.
1. Asphalt-Saturated Felt: Install on roof deck parallel with and starting at eaves and fasten with underlayment nails.
 2. Single-Layer Installation: To be installed at all roofs except shed roof at south facade.

- a. Lap horizontal or bottom edges a minimum of 2 inches over underlying course.
 - b. Lap vertical edges or ends a minimum of 4 inches.
 - c. Stagger vertical edges or end laps between succeeding courses at least 72 inches.
 3. Double-Layer Installation: To be installed at shed roof on south facade.
 - a. Install a 19 inch wide starter course at eaves and completely cover with a 36 inch wide second course.
 - b. Install succeeding 36 inch wide courses lapping previous courses 19 inches in shingle fashion.
 - c. Lap ends a minimum of 4 inches. Stagger end laps between succeeding courses at least 72 inches.
 - d. Apply a continuous layer of asphalt roofing cement over starter course and on felt surface to be concealed by succeeding courses as each felt course is installed. Apply over entire shed roof at south facade.
 4. Terminate felt extended up not less than 6 inches against sidewalls.
- E. Metal Flashing and Trim: Install metal flashings and trim per Section 07 62 00 - Sheet Metal Flashing and Trim and in accordance with recommendations in NRCA Guidelines for Asphalt Shingle Roof Systems.
- F. Asphalt Shingles
 1. Install asphalt shingle roofing according to roofing-system manufacturer's written instructions and applicable recommendations of NRCA/ARMA Quality Control Guidelines for Application of Asphalt Shingle Roofing.
 2. Install starter strip along lowest roof edge, consisting of an asphalt shingle strip at least seven inches wide with self-sealing strip face up at roof edge.
 - a. Extend asphalt shingles 3/4 inch beyond fascia at eaves and rakes.
 - b. Install starter strip along rake edge.
 3. Install first and remaining courses of three-tab-strip asphalt shingles stair-stepping diagonally across roof deck with offset pattern matching that of existing roofing at succeeding courses, maintaining uniform exposure.
 4. Fasten asphalt shingle strips with a minimum of five roofing nails, but not less than the number indicated in manufacturer's written instructions for roof slope and design wind speed indicated on Drawings and for warranty requirements specified in this Section.
 - a. Locate fasteners in accordance with manufacturer's written instructions.
 - b. Where roof slope is less than 4:12, hand seal self-sealing asphalt shingles to improve the shingles' positive bond by applying asphalt roofing cement spots between course overlaps after nailing the upper course.
 - c. When ambient temperature during installation is below 50 degrees, hand seal self-sealing asphalt shingles by applying asphalt roofing cement spots between course overlaps after nailing the upper course.
 5. Open Valleys: Cut and fit asphalt shingles at open valleys, trimming upper concealed corners of shingle strips.
 - a. Maintain uniform width of exposed open valley from highest to lowest point.
 - b. Extend shingle a minimum of 4 inches over valley metal.
 - c. Set valley edge of asphalt shingles in a 3 inch wide bed of asphalt roofing cement.
 - d. Do not nail asphalt shingles to metal open-valley flashings.
- G. Vents
 1. Install continuous ridge vents over asphalt shingles in accordance with manufacturer's written instructions.

2. Confirm configuration of vents to match existing configuration of vents; where present, connect new vents to existing ducts and quantity of vents that provide attic ventilation.
 3. Integrate flanges with self-adhered membrane flashing and new roofing system.
 4. Fasten with roofing nails of sufficient length to penetrate new sheathing.
- H. Install materials in strict accordance with safety requirements required by asphalt shingle manufacturer, Material Safety Data Sheets, and local, state, and federal rules and regulations.
1. Follow safety procedures of OSHA and other applicable governing agencies. Assume responsibility for Work area safety at all times.
- I. Cooperate with Architect/Engineer in performing inspections of roofing system.

3.5 GUTTER-SYSTEM INSTALLATION

- A. Install components to produce a complete roof-edge drainage system in accordance with manufacturer's written instructions. Coordinate installation of roof perimeter flashing with installation of roof-edge drainage system.
- B. Gutters: Join and seal gutter lengths. Allow for thermal expansion. Attach gutters to firmly anchored gutter supports spaced not more than 24 inches apart. Attach ends with rivets and seal with sealant to make watertight. Slope to downspouts.
- C. Install gutter with expansion joints not exceeding 50 feet apart. Install expansion-joint caps.
- D. Downspouts: Join sections with manufacturer's standard telescoping joints. Provide hangers with fasteners designed to hold downspouts securely to walls and 1 inch away from walls; locate fasteners at top and bottom and at approximately 60 inches on center.
1. Connect downspouts to underground drainage system to match existing configuration.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Owner may engage qualified, independent, testing and inspecting agency to perform roof inspections and tests, and to prepare reports.
- B. Interim and Final Roof Inspection: Arrange for roofing-system manufacturer's technical personnel to inspect roofing during installation and on completion. Submit reports to Architect/Engineer. Notify Architect/Engineer and Owner's Representative 48 hours in advance of date and time of inspections.
- C. Repair or remove and replace components of roofing system where test results or inspections indicate that they do not comply with specified requirements.
- D. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.7 CLEANING

- A. At the end of each workday, clean Site and Work areas and place rubbish and other discarded materials in appropriate containers.
- B. After completing roofing Work:

1. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected surface. Exercise care to avoid scratching or damage to surfaces.
 2. Repair surfaces stained, marred, or otherwise damaged during roofing Work.
 3. Clean up debris and surplus materials and remove from Site.
- C. Waste Management:
1. Collect surplus waterproofing materials that cannot be reused and deliver to recycling or disposal facility.

3.8 PROTECTION OF INSTALLED WORK

- A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for damage. If damage is observed, describe nature and extent in writing, with copies to Architect/Engineer and Owner's Representative.
- B. Repair or remove and replace roofing system that does not comply with requirements, to condition free of damage at time of Substantial Completion and according to warranty requirements.

END OF SECTION

SECTION 07 62 00
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Base scope of work: Supply, fabrication, and installation of roof and wall flashings and counterflashings.
 - 2. Alternate scope of work: Supply, fabrication, and installation of gutters and downspouts to match existing.
- B. Related Sections:
 - 1. Section 04 01 20 - Mortar Joint Repointing
 - 2. Section 04 05 01 - Masonry Mortar
 - 3. Section 07 31 13 - Asphalt Shingle Roofing
 - 4. Section 07 92 00 - Joint Sealants

1.2 REFERENCES

- A. Reference Standards: Latest edition as of Specification date.
 - 1. ASTM International:
 - a. A240: Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
 - b. A755: Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.
 - c. B32: Standard Specification for Solder Metal.
 - d. B370: Standard Specification for Copper Sheet and Strip for Building Construction.
 - e. B749: Standard Specification for Lead and Lead Alloy Strip, Sheet, and Plate Products.
 - f. C920: Standard Specification for Elastomeric Joint Sealants.
 - g. C1311: Standard Specification for Solvent Release Sealants.
 - h. D226: Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 - 2. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA).
 - a. Architectural Sheet Metal Manual.

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate Work to ensure that adjacent areas are not adversely affected. Coordinate:
 - 1. With Owner's Representative.
 - 2. With other trades:
 - a. To ensure that work done by other trades is complete and ready for sheet metal Work.
 - b. To avoid or minimize work on, or in immediate vicinity of, sheet metal Work in progress.

- c. To ensure that subsequent work will not adversely affect completed sheet metal Work.
- 3. With interfacing and adjoining construction to provide leakproof, secure, and non-corrosive installation. Coordinate:
 - a. Installation of roof drainage system with installation of roof perimeter flashing.
 - b. Counterflashing installation with base flashing installation.
 - c. Installation of roof-penetration flashing with installation of roofing and other items penetrating roof.
 - d. Installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.
- B. Pre-installation Meeting:
 - 1. Participate in meeting at Site.
 - 2. Review requirements for sheet metal Work, including:
 - a. Construction schedule.
 - b. Availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - c. Site use, access, staging, and set-up location limitations.
 - d. Approved mock-up procedures.
 - e. Forecast weather conditions.
 - f. Surface preparation and substrate condition and pretreatment.
 - g. Installation procedures.
 - h. Special details.
 - i. Testing and inspection requirements.
 - j. Site protection measures.
 - k. Governing regulations.
 - 3. Contractor's Site superintendent, waterproofing/roofing manufacturer's technical representative, waterproofing Installer, sheet metal fabricator, sheet metal Installer, Owner's Representative, and Architect/Engineer shall attend.

1.4 SUBMITTALS

- A. Product Data
 - 1. Provide manufacturer's literature, including written instructions for evaluating, preparing, and treating substrate; technical data including tested physical and performance properties; and installation instructions, for each product specified.
 - 2. Safety Data Sheets (SDS) for each product for information only; safety restrictions are sole responsibility of Contractor.
- B. Shop Drawings
 - 1. Show layouts, profiles, shapes, seams, dimensions, and details for fastening, joining, supporting, interface conditions with other materials, and anchoring sheet metal flashing and trim.
- C. Samples
 - 1. Provide physical samples for each type of sheet metal flashing, trim, manufactured reglet, gutter, coping, and scupper. Construct typical lap splice or seam for mechanically-jointed systems, and solder lap or seam for field-solderable systems.

- D. Installer Qualifications: Evidence that Installer's existing company has minimum five years of continuous experience in similar sheet metal Work; list of at least five representative, successfully completed projects of similar scope and size, including:
1. Project name.
 2. Owner's name.
 3. Owner's Representative name, address, and telephone number.
 4. Description of work.
 5. Sheet metal members installed.
 6. Project supervisor.
 7. Total cost of sheet metal work and total cost of project.
 8. Completion date.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Experienced firm that has successfully completed sheet metal work similar in material, design, and extent to that indicated for Project. Must have successful installations of specified materials in local area in use for minimum of five years.
1. Employ foreman with minimum five years of experience as foreman on similar projects, who is fluent in English, to be on Site at all times during Work. Do not change foreman during the course of the Project except for reasons beyond the control of the Installer; inform Architect/Engineer in advance of any changes.
- B. Mock-ups: Build mock-ups to demonstrate aesthetic effects and set quality standards for fabrication and installation.
1. Mock-up of flashing at chimney.
 2. Mock-up of typical gutter section, minimum 48 inches long.
 3. Mock-up of downspout section, minimum 48 inches long.
 4. Approved mock-ups may become part of completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials in such a manner as to prevent damage to materials or structure.
- B. Sealants, Coatings, and Miscellaneous Materials:
1. Deliver materials to Site in original containers and packaging with seals unbroken, labeled with manufacturer's name, product brand name and type, date of manufacture, lot number, and directions for storing.
 2. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, and installation. Reject and remove from Site new materials that exhibit evidence of moisture during application, or have been exposed to moisture.
 3. Store materials in original, undamaged containers in clean, dry, protected location on raised platforms with weather-protective coverings, within temperature range required by manufacturer. Protect stored materials from direct sunlight. Manufacturer's standard packaging and covering are not considered adequate weather protection.
 4. Handle materials to avoid damage.
 5. Conspicuously mark damaged or opened containers or containers with contaminated materials, and remove from the Site as soon as possible.
 6. Remove and replace materials that cannot be applied within stated shelf life.

- C. Limit stored materials on structures to safe loading capacity of structure at time materials are stored, and to avoid permanent deck deflection.

1.7 PROJECT CONDITIONS

- A. Verify existing dimensions and details prior to start of sheet metal Work. Notify Architect/Engineer of conditions found to be different than those indicated in the Contract Documents. Architect/Engineer will review situation and inform Contractor and Installer of changes.
- B. Comply with Owner's limitations and restrictions for Site use and accessibility.
- C. Environmental Limitations
 - 1. Install sheet metal members when existing and forecast weather conditions permit sealants, coatings, and miscellaneous materials to be installed according to sealant, coating, or miscellaneous material manufacturer's written instructions and warranty requirements.
- D. Handle and install materials in accordance with safety requirements required by sheet metal manufacturer; Safety Data Sheets (SDS); and local, state, and federal rules and regulations. Maintain SDS with materials in storage area and available for ready reference on Site.

1.8 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials that could jeopardize the integrity or performance of the Work.
 - 1. Notify Architect/Engineer of conditions that may interfere with the proper execution of the Work or jeopardize the performance of the Work prior to proceeding with the Work.

1.9 WARRANTY

- A. Contractor's Warranty
 - 1. Written warranty, signed by Contractor, including:
 - a. Replace sheet metal Work that does not comply with requirements; that has corroded surface, coating that fails cohesively or adhesively, or other surface defects or imperfections; or that deteriorates in a manner not clearly specified by material supplier's data as an inherent quality of the material for the application indicated.
 - b. Remove and replace sealant that has failed cohesively or adhesively; or that deteriorates in a manner not clearly specified by sealant manufacturer's data as an inherent quality of the material for the application indicated.
 - c. Repair or replacement, to satisfaction of Owner, of other work or items that may have been displaced or damaged as consequence of defective Work.
 - d. Warranty does not include deterioration or damage from changes in sheet metal environment from that reasonably anticipated at Substantial Completion, or physical damage from adjacent activities.
 - 2. Warranty Period: Two years after Substantial Completion date.

PART 2 PRODUCTS

2.1 DESIGN REQUIREMENTS

- A. Design sheet metal fastenings for the following forces:
 - 1. Field of roof: 24 pounds per square foot uplift.
 - 2. Perimeter: 38 pounds per square foot uplift.
 - 3. Corners: 52 pounds per square foot uplift.
 - 4. Vertical surfaces: 31 pounds per square foot outward.

2.2 SHEET METAL

- A. For eave, rake, ridge, and hip flashings; apron, step, cricket, and backer flashings:
 - 1. Stainless-Steel Sheet: ASTM A240, Type 304; No. 2D finish; 26 gauge.
- B. Roof Pipe Penetrations: Lead sheet, ASTM B749, Grade L51121, 4.0 pounds per square foot.
- C. Manufactured Reglets: Units of type, material, and profile indicated, formed to provide secure interlocking of separate reglet and counterflashing pieces, and compatible with flashing indicated. From one of the following manufacturers or approved equal:
 - 1. Cheney Flashing Company.
 - 2. Fry Reglet Corporation.
 - 3. Heckmann Building Products Inc.
 - 4. W. P. Hickman Company.

2.3 AUXILIARY MATERIALS

- A. Underlayment Materials:
 - 1. Felt Underlayment: See Section 07 31 13 - Asphalt Shingle Roofing.
 - 2. Self-Adhered Membrane Flashing at Eaves: See Section 07 31 13 - Asphalt Shingle Roofing.
- B. Miscellaneous Materials:
 - 1. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items required for installation.
 - 2. Fasteners: Wood screws, annular-threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads. Size fasteners to provide penetration into substrate of at least 1-1/4 inches for nails and 3/4 inch for wood screws.
 - a. Use stainless-steel fasteners.
 - b. Fasteners for Flashing and Trim:
 - 1) Blind Fasteners: High-strength aluminum or stainless-steel rivets.
 - 2) Exposed Fasteners: Self-drilling screws, gasketed, with hex washer head. Heads match color of sheet metal by means of plastic caps or factory-applied coating.
 - 3. Sealing Tape: Pressure-sensitive, 100 percent solids, polyisobutylene-compound sealing tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, non-staining tape.
 - 4. Elastomeric Sealant: ASTM C920, elastomeric polyurethane sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain water tight.

5. Butyl Sealant: ASTM C1311, single-component, solvent-release, butyl-rubber sealant; polyisobutylene-plasticized; heavy-bodied for hooked-type expansion joints with limited movement.

2.4 FABRICATION

- A. Custom fabricate to comply with recommendations in SMACNA's Architectural Sheet Metal Manual that apply to design, dimensions, metal, and other characteristics of item indicated. Conform to dimensions and profiles shown in SMACNA's Architectural Sheet Metal Manual unless requirements that are more stringent are indicated.
 1. Obtain field measurements for accurate fit before fabrication.
 2. Shop fabricated items where practicable.
- B. Fabricate without excessive oil canning, buckling, or tool marks that are visually objectionable in opinion of Architect/Engineer, and true to line and levels indicated, with exposed edges folded back to form hems.
 1. Seams: Fabricate nonmoving seams in accessories with drive cleat seams. Dowel caps to be soldered to through-wall flashings.
- C. Sealed Joints: Form non-expansion but movable joints in metal to accommodate elastomeric sealant and in compliance with recommendations in SMACNA's Architectural Sheet Metal Manual.
- D. Expansion Provisions: Use lapped or bayonet-type expansion provisions where possible; otherwise, form expansion joints of intermeshing hooked flanges, not less than one inch deep, filled with elastomeric sealant concealed within joints.
- E. Conceal fasteners and expansion provisions, where possible, on exposed-to-view sheet metal flashing and trim, unless otherwise indicated.
- F. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, non-corrosive metal, and in thickness not less than that of metal being secured.
- G. Roof Drainage Fabrications:
 1. Hanging Gutters: Fabricate in minimum 8 foot long sections, cross section to match existing, complete with end pieces, outlet tubes, and other accessories as required.
 - a. Furnish flat-stock gutter spacers and gutter brackets fabricated from same metal as gutters, of size recommended in SMACNA's Architectural Sheet Metal Manual, but not less than twice the gutter thickness.
 - b. Fabricate expansion joints, expansion-joint covers, gutter bead reinforcing bars, and gutter accessories from same metal as gutters.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions with Installer for compliance with requirements and other conditions affecting performance of sheet metal flashings and trim.

- B. Surfaces shall be sound, dry, clean, and free of oil, grease, dirt, excess mortar, or other contaminants.
- C. Ensure that work done by other trades is complete and ready for sheet metal Work.
- D. Verify that areas and conditions under which sheet metal Work is to be performed permit proper and timely completion of Work.
- E. Verify that surfaces and conditions are ready to accept the Work of this section.
 - 1. Notify Architect/Engineer in writing of conditions that may adversely affect installation or performance of sheet metal Work and recommend corrections.
 - 2. Do not proceed with installation of sheet metal flashings and trim until adverse conditions have been corrected and reviewed by Architect/Engineer.
 - 3. Commencing sheet metal Work constitutes acceptance of Work surfaces and conditions.

3.2 PROTECTION

- A. Take precautions to ensure safety of people, including building users, passers-by, and workmen, and animals, and protection of property, including adjacent building elements, landscaping, and motor vehicles.
- B. Prevent construction debris and other materials from coming into contact with pedestrians, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
- C. Protect paving and sidewalks, and adjacent building areas from mechanical damage due to scaffolding and other equipment.
- D. Limit access to Work areas.
- E. Erect temporary protective canopies, as necessary, over walkways and at points of pedestrian and vehicular access that must remain in service during Work.
- F. Assume responsibility for injury to persons or damage to property due to Work, and remedy at no cost to Owner.

3.3 INSTALLATION

- A. General: Install sheet metal flashings and trim according to recommendations in SMACNA's Architectural Sheet Metal Manual and as indicated.
- B. Install sheet metal flashing and trim to fit substrates and to result in water tight performance.
 - 1. Install true to line and levels indicated.
 - 2. Where exposed, install without excessive oil canning, buckling, or tool marks.
 - 3. Provide uniform, neat seams with minimum exposure of solder, welds, or sealant.
 - 4. Do not torch cut sheet metal.
- C. Provide for thermal expansion of exposed flashing and trim.
 - 1. Space movement joints no more than 10 feet apart, with no joint within 24 inches of corner or intersection.

2. Where lapped or bayonet-type expansion provisions cannot be used or would not be sufficiently water tight, form expansion joints of intermeshing hooked flanges, not less than one inch deep, filled with elastomeric sealant concealed within joints.
- D. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by fabricator or manufacturers of dissimilar metals.
- E. Anchor sheet metal flashing and trim and other components of Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required.
 1. Space cleats not more than 12 inches apart. Anchor each cleat with two fasteners. Bend tabs over fasteners
- F. Seal joints with elastomeric sealant as required for water tight construction.
- G. Roof Drainage System Installation:
 1. Hanging Gutters:
 - a. Join sections with riveted and soldered joints.
 - b. Slope to downspouts.
 - c. Attach gutters at eave or fascia to firmly anchored gutter brackets spaced not more than 36 inches apart.
 - d. Provide end closures and seal watertight with sealant.
 - e. Install expansion joints with caps at locations indicated but not exceeding 50 feet apart.
- H. Roof Flashing Installation:
 1. General:
 - a. Set units true to line and level as indicated.
 - b. Provide concealed fasteners where possible.
 - c. Install Work with laps, joints, and seams that will be permanently water tight.
 2. Roof Edge Flashing:
 - a. Anchor to resist specified uplift and outward forces.
 - b. Interlock bottom edge of roof edge flashing with continuous cleats anchored to substrate at 16 inch centers.
 3. Counterflashing: Coordinate with installation of base flashing and fit tightly to base flashing. Lap joints a minimum of 4 inches secured in a waterproof manner Insert counterflashing in reglets or receivers and fit tightly to base flashing.
 - a. Extend counterflashing 4 inches over base flashing.
 - b. Secure in waterproof manner.
 - c. Lap counterflashing joints at least 4 inches and bed with elastomeric sealant.
 - d. Bed flanges of metal flashings using asphalt roofing cement or elastomeric flashing sealant.
 4. Apron Flashings: Extend lower flange over and beyond each side of downslope asphalt shingles and up the vertical surface.
 5. Step Flashings: Install with a head lap of 2 inches and extend over underlying shingle and up the vertical face.
 - a. Install with lower edge of flashing just upslope of, and concealed by, butt of overlying shingle.
 - b. Fasten to roof deck only.

6. Cricket and Backer Flashings: Install against roof-penetrating elements extending concealed flange beneath upslope asphalt shingles and beyond each side.
 7. Open-Valley Flashings: Install centered in valleys, lapping ends at least 8 inches in direction that sheds water. Fasten upper end of each length to roof deck beneath overlap.
 - a. Secure hemmed flange edges into metal cleats spaced 12 inches apart and fastened to roof deck.
 - b. Adhere minimum 9 inch wide strips of self-adhering membrane flashing to metal flanges and to underlying self-adhering membrane flashing.
 - 1) Place strips parallel to and over flanges so that they will be concealed by installed shingles.
 8. Rake Drip Edges: Install over underlayment materials and fasten to roof deck.
 9. Eave Drip Edges: Install above eave protection and below underlayment materials and fasten to roof deck.
 10. Pipe Flashings: Form flashing around pipe penetrations and asphalt shingles. Fasten and seal to asphalt shingles as recommended by manufacturer.
 11. Roof-Penetration Flashing:
 - a. Seal with elastomeric sealant and clamp to pipe, except for lead flashing on vent piping.
 - 1) Turn lead sheet down inside vent piping, being careful not to block vent piping.
- I. Wall Flashing Installation: Install continuous head, sill, and similar flashings to extend 4 inches beyond wall openings.

3.4 CLEANING

- A. At the end of each workday, clean Site and Work areas and place rubbish, empty cans, rags, and other discarded materials in appropriate containers.
- B. After completing sheet metal Work:
 1. Clean spillage and soiling from adjacent surfaces using cleaning agents and procedures recommended by manufacturer of affected surface. Exercise care to avoid scratching or damage to surfaces.
 2. Repair surfaces stained, marred, or otherwise damaged during Work.
 3. Clean up debris and surplus materials and remove from Site.

3.5 PROTECTION

- A. Protect sheet metal flashings from damage and wear during remainder of construction period.

END OF SECTION

SECTION 07 71 00
ROOF SPECIALTIES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Installation of rooftop fall protection system.
 - 1. Two fall restraint anchors are present on the roof. Remove and dispose of both anchors and install new anchors in same location in conjunction with roofing replacement. Confirm specific location of new anchors with Owner.
 - 2. Fall restraint anchors design is by others. Refer to the following within the Project Manual:

Title: Tacoma Fire Facilities Fall Protection
Date: November 30, 2020
Sheets: S-SK-03a through S-SK-03e
Structural Calculations: 8 Sheets
Engineer of Record: Lund Opsahl

- B. Related Sections
 - 1. Section 07 31 13 - Asphalt Shingle Roofing.

1.2 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate questions and use of rooftop fall protection system with the rooftop fall protection system Engineer of Record. Coordination includes obtaining information included but not limited to requirements identified in the Pre-Installation Meeting specified in this Section.
- B. Coordinate Work to ensure that adjacent areas are not adversely affected.
 - 1. Coordinate:
 - a. With Owner's Representative.
 - b. With other trades:
 - 1) To ensure that work done by other trades is complete and ready for Work.
 - 2) To avoid or minimize work on, or in immediate vicinity of, roofing Work in progress.
 - 3) To ensure that subsequent work will not adversely affect quality and watertightness of completed roofing.
- C. Pre-installation Meeting
 - 1. Conduct meeting at Project site.
 - 2. Review requirements for roofing fall protection system, including:
 - a. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Site use, access, staging, and set-up location limitations.
 - c. Forecast weather conditions.
 - d. Confirmation that concealed conditions comply with fall protection system design requirements.
 - e. Installation procedures.

- f. Testing and inspection requirements.
 - g. Temporary protection and repair of roofing system.
 - h. Structural loading limitations of roof deck.
- D. Contractor's site foreman, roofing-system manufacturer's technical representative, roofing Installer, Owner's Representative, Architect/Engineer, and testing agency representative shall attend.
- E. Conduct regular progress meetings on site as directed by Owner.

1.3 SUBMITTALS

- A. Provide submittals to Owner for review and approval.
- B. Product Data
 - 1. Manufacturer's product description and technical data, including:
 - a. Application instructions.
 - b. Safety Data Sheets (SDS) for information only.
 - c. Sample copies of applicable warranty.
 - d. Manufacturer's warranty.
- C. Samples for Initial Selection
 - 1. Physical sample of one fall restraint anchor.
- D. Installer Qualifications
 - 1. Certification signed by fall restraint anchor manufacturer, certifying that Installer complies with manufacturer's requirements to install specified products.
- E. Sample Warranty
 - 1. Copy of roofing-system manufacturer's warranty stating obligations, remedies, limitations, and exclusions.
 - 2. Copy of Installer's warranty stating obligations, remedies, limitations, and exclusions.
- F. Close-Out Submittals:
 - 1. Following completion of Work, submit manufacturer's inspection report, if required for warranty, of completed fall restraint anchor installation and completed warranty.
 - 2. Completed Installer's warranty.
 - 3. Maintenance information for fall restraint anchor.

1.4 PROJECT CONDITIONS

- A. Verify existing dimensions and details prior to installation. Notify Owner of conditions found to be different than those indicated in the referenced rooftop fall protection system design. Owner will review situation and inform Contractor and Installer how to proceed.
- B. Comply with Owner's limitations and restrictions for site use and accessibility.
- C. Protect existing roof structure from damage from construction activities. Repair damage to roofing from construction activities and damage that results in leakage.
- D. Install materials in accordance with safety requirements required by rooftop fall protection system manufacturer, material SDS, and local, state, and federal rules and regulations.

1.5 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at a variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials that could jeopardize integrity or performance of the Work.
 - 1. Notify Owner of conditions that may interfere with proper execution of the Work or jeopardize performance of the Work prior to proceeding with the Work.

1.6 WARRANTY

- A. Coordinate manufacturer and Installer warranty requirements with Owner.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 07 92 00

JOINT SEALANTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Surface preparation and installation of sealant in exterior joints.
- B. Joint sealants for following applications, including those specified by reference to this Section:
 - 1. Exterior window perimeter.
 - 2. Miscellaneous joints and penetrations in exterior enclosure cladding.
- C. Related Sections:
 - 1. Section 07 62 00 - Sheet Metal Flashing and Trim.
 - 2. Section 08 01 52.99 - Wood Window Restoration.
 - 3. Section 09 91 00 - Painting.

1.2 REFERENCES

- A. Reference Standards: Latest edition as of Specification date.
 - 1. ASTM International:
 - a. C920: Standard Specification for Elastomeric Joint Sealants.
 - b. C1193: Standard Guide for Use of Joint Sealants
 - c. C1248: Standard Test Method for Staining of Porous Substrate by Joint Sealants.
 - d. C1521: Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints.

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate Work to ensure that adjacent areas are not adversely affected; that new materials and building interior are kept continuously dry; and that continuous, water tight, new sealant installation is provided. Coordinate:
 - 1. With Architect/Engineer.
 - 2. With Owner's Representative.
 - 3. With other trades:
 - a. To ensure that work done by other trades is complete and ready for sealant Work.
 - b. To avoid or minimize work on, or in immediate vicinity of, sealant Work in progress.
 - c. To ensure that subsequent work will not adversely affect completed sealant Work.

1.4 SUBMITTALS

- A. Product Data: Sealant manufacturer's literature including written instructions for evaluating, preparing, and treating substrate; technical data including tested physical and performance properties; and installation instructions.
 - 1. Include temperature ranges for storage and application of materials, and special cold-weather application requirements or limitations.

2. Product data sheet for substrate cleaner and substrate primer recommended by sealant manufacturer for specific substrate surface and conditions.
 3. Include Safety Data Sheets (SDS) for information only; safety restrictions are sole responsibility of Contractor.
- B. Samples: Sealant manufacturer's color sample card, either printed or with thin sealant beads, showing range of colors available for each product exposed to view.
- C. Manufacturer's Reports and Certifications:
1. Prior to sealant installation, report from sealant manufacturer with results of sealant mock-up adhesion tests. Report shall:
 - a. Include sealant manufacturer's interpretation of test results relative to material performance.
 - b. Include sealant manufacturer's recommendations for substrate preparation and primer needed to obtain durable adhesion and installation procedures successfully used in mock-ups and field tests.
 2. Product Certificates: For each sealant product, accessory, related products, joint type, and substrate, sealant manufacturers' written approval of their products' use for specified conditions; based on mock-ups and field tests.
- D. Installer Qualifications:
1. Certificate signed by sealant manufacturer, certifying that Installer complies with requirements.
 2. Evidence that Installer's existing company has minimum five years of continuous experience in similar sealant work; list of at least five representative, successfully completed projects of similar scope and size, including:
 - a. Project name.
 - b. Owner's name.
 - c. Owner's Representative name, address, and telephone number.
 - d. Description of work.
 - e. Sealant used.
 - f. Project supervisor.
 - g. Total cost of sealant work and total cost of project.
 - h. Completion date.
- E. Sample Warranty: Copy of sealant manufacturer's warranty, stating obligations, remedies, limitations, and exclusions. Submitted with bid.
- F. Close-Out Submittals:
1. Following completion of the Work, submit sealant manufacturer's inspection report of completed sealant installation and completed warranty.
 2. Completed warranty from Installer.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Experienced firm that has successfully completed sealant work similar in material, design, and extent to that indicated for Project; that is approved, authorized, or licensed by sealant manufacturer to install sealant; and that is eligible to receive sealant manufacturer's warranty. Must have successful installations of specified materials in local area in use for minimum of five years.
 - 1. Employ foreman with minimum five years of experience as foreman on similar projects, to be on Site at all times during Work. Do not change foreman during the course of the Project except for reasons beyond the control of the Installer; inform Architect/Engineer in advance of any changes.
- B. Mock-Up: Install sealant at full perimeter of at least one window and one penetration to verify and set quality standards for materials and installation procedures, and to demonstrate aesthetic effects.
 - 1. Include backing material, sealant, primer and other related products.
 - 2. Mock-up to be accessible or located as indicated by Owner's Representative.
 - 3. Notify Owner's Representative and Architect/Engineer seven days in advance of date when mock-up will be constructed.
 - 4. Field-Adhesion Testing: After sealants have cured, perform field-adhesion tests according to ASTM C1521.
 - a. Conduct tests for each type of sealant and joint substrate, with and without primer.
 - b. Arrange for tests to take place with sealant manufacturer's technical representative present.
 - c. Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Use alternate materials or modify installation procedure, or both, for sealants that fail to adhere to substrates.
 - 5. If Architect/Engineer determines mock-up does not comply with requirements, modify mock-up or construct new mock-up until mock-up is approved.
 - 6. Mock-ups, when approved by Owner's Representative and Architect/Engineer, will become standard for Work.
 - 7. Approved mock-ups may become part of completed Work if undisturbed at time of Substantial Completion.
 - 8. Do not begin joint sealant Work until mock-up is accepted by Owner's Representative and Architect/Engineer.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials according to manufacturer's recommendations and in such a manner as to prevent damage to materials or structure.
- B. Deliver materials to Site in original packages with seals unbroken, labeled with manufacturer's name, product brand name and type, date of manufacture, lot number, and directions for storing and mixing with other components.
- C. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, or installation. Reject and remove from Site new materials that exhibit evidence of moisture during application or that have been exposed to moisture.

- D. Store materials in original, undamaged containers and packaging in clean, dry, protected location on raised platforms with weather-protective coverings, within temperature range required by manufacturer. Protect stored materials from direct sunlight. Manufacturer's standard packaging and covering are not considered adequate weather protection.
- E. Limit stored materials on structures to safe loading capacity of structure at time materials are stored, and to avoid permanent deck deflection.
- F. Conspicuously mark wet or damaged materials and remove from Site as soon as possible.
- G. Remove and replace materials that cannot be applied within stated shelf life.

1.7 PROJECT CONDITIONS

- A. Verify existing dimensions and details prior to start of sealant Work. Notify Architect/Engineer of conditions found to be different than those indicated in the Contract Documents. Architect/Engineer will review situation and inform Contractor and Installer of changes.
- B. Comply with Owner's limitations and restrictions for the Site use and accessibility.
- C. Environmental Limitations: Install sealant when existing and forecast weather conditions permit sealant to be installed according to sealant manufacturer's written instructions and warranty requirements.
 - 1. Do not install sealant when ambient or substrate temperatures are below 40 degrees F or are expected to fall below 40 degrees F in next 12 hours.
 - 2. Do not proceed with installation during inclement weather except for temporary work necessary to protect building interior and installed materials. Remove temporary work and Work that becomes moisture damaged.
- D. Handle and install materials in strict accordance with safety requirements required by sealant manufacturer; Safety Data Sheets (SDS); and local, state, and federal rules and regulations. Maintain SDS with materials in storage area and available for ready reference on Site.

1.8 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials that could jeopardize the integrity or performance of the Work.
 - 1. Notify Architect/Engineer of conditions that may interfere with the proper execution of the Work or jeopardize the performance of the Work prior to proceeding with the Work.

1.9 WARRANTY

- A. Manufacturer's Warranty:
 - 1. Written warranty, signed by sealant manufacturer, including:
 - a. Repair or replace sealant that does not comply with requirements; that does not remain watertight; that fails in adhesion, cohesion, or general durability; or that deteriorates in a manner not clearly specified by submitted sealant manufacturer's data as an inherent quality of the material for the application indicated.
 - b. Removal and replacement with new bond breaker materials.

- c. Labor and materials to perform warranty Work.
 - d. Warranty does not include sealant deterioration or failure due to the following.
 - 1) Excessive joint movement caused by structural settlement or errors attributable to design or construction, resulting in stresses in sealant exceeding sealant manufacturer's written specifications for sealant elongation or compression.
 - 2) Deterioration or failure of sealant due to failure of substrate prepared according to requirements.
 - 3) Mechanical damage caused by individuals, tools, or other outside agents.
 - 4) Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.
 - 2. Warranty Period: Ten years from date of Substantial Completion.
- B. Installer's Warranty:
- 1. Completed warranty form at the end of the Section, signed by sealant Installer, including:
 - a. Repair or replace sealant that does not comply with requirements; that does not remain watertight; that fails in adhesion, cohesion, or general durability; or that deteriorates in a manner not clearly specified by submitted sealant manufacturer's data as an inherent quality of the material for the application indicated.
 - b. Removal and replacement with new bond breaker materials.
 - c. Labor and materials to perform warranty Work.
 - d. Warranty does not include sealant deterioration or failure due to the following.
 - 1) Excessive joint movement caused by structural settlement or errors attributable to design or construction, resulting in stresses in sealant exceeding sealant manufacturer's written specifications for sealant elongation or compression.
 - 2) Deterioration or failure of sealant due to failure of substrate prepared according to requirements.
 - 3) Mechanical damage caused by individuals, tools, or other outside agents.
 - 4) Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.
 - 2. Warranty Period: Two years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 ELASTOMERIC JOINT SEALANTS

- A. General:
 - 1. Comply with ASTM C920 and other requirements indicated.
 - 2. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing on similar projects, mock-ups and preconstruction testing for Project, and field experience.
 - 3. Select products based on mock-ups, preconstruction testing, and sealant manufacturer's previous testing and experience.
 - 4. Source Limitations: Obtain each type of joint sealant through one source from single manufacturer.
 - 5. Colors of Exposed Joint Sealants: Selected and approved in writing by Owner's Representative, from sealant manufacturer's full range.
- B. Single-Component, Non-sag, Polyurethane Sealants, for use at concrete and wood substrates, and other substrates to be painted:

1. BASF Building Systems: MasterSeal NP 1
 2. Sika Corporation: SikaFlex-1a
 3. Tremco Commercial Sealants & Waterproofing: Vulkem 116
- C. Single-component, Non-sag, Silicone Sealants, for use at masonry substrates and other substrates not to be painted:
1. DOWSIL: 756 SMS Building Sealant
 2. Pecora Corporation: 890 NST, Non-Staining, Ultra-Low Modulus Silicone Sealant
 3. Momentive Performance Materials Inc.: SCS2000 SilPruf

2.2 AUXILIARY MATERIALS

- A. Sealant Backer Materials: Recommended by sealant manufacturer, that are compatible with substrates; based on mock-ups, preconstruction testing, and sealant manufacturer's previous testing and experience.
1. Cylindrical Sealant Backings: ASTM C1330, Type B (bi-cellular material) and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
 2. Bond Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in three-sided adhesion. Provide self-adhesive tape where applicable.
- B. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates, as determined from preconstruction joint-sealant-substrate tests and field tests.
- C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions with Installer and sealant manufacturer's representative for compliance with requirements and for other conditions affecting installation or performance of sealant.
1. Verify dimensions of sealant joints at Site by field measurement so that proper sealant profiles will be accurately maintained.
 2. Ensure that work done by other trades is complete and ready for sealant Work.
 3. Verify that areas and conditions under which sealant Work is to be performed permit proper and timely completion of Work.
 4. Notify Architect/Engineer in writing of conditions that may adversely affect installation or performance of sealant, including joints with widths less than those allowed by sealant manufacturer for applications indicated, and recommend corrections.
 5. Do not proceed with sealant Work until adverse conditions have been corrected and reviewed by Architect/Engineer.
 6. Commencing sealant Work constitutes acceptance of Work surfaces and conditions.

3.2 PROTECTION

- A. Take precautions to ensure safety of people, including building users, passers-by, and workmen, and animals, and protection of property, including adjacent building elements, landscaping, and motor vehicles.
- B. Prevent construction debris and other materials from coming into contact with pedestrians, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
- C. Protect paving and sidewalks, and adjacent building areas from mechanical damage due to scaffolding and other equipment.
- D. Limit access to Work areas.
- E. Erect temporary protective canopies, as necessary, over walkways and at points of pedestrian and vehicular access that must remain in service during Work.
- F. Comply with sealant manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products.
- G. Cover adjacent surfaces with materials that are proven to resist sealant.
- H. Assume responsibility for injury to persons or damage to property due to Work, and remedy at no cost to Owner.

3.3 SURFACE PREPARATION

- A. Remove existing sealant and other foreign material from joints.
- B. Repair damaged or deteriorated substrate surfaces according to sealant manufacturer's written instructions and as approved by Architect/Engineer.
- C. Clean joint substrates immediately before installing sealant, to comply with sealant manufacturer's written instructions based on mock-ups and preconstruction testing.
 - 1. Remove from substrate foreign material that could interfere with adhesion of sealant, including dirt, dust, existing sealant, oil, grease, and surface coatings.
 - 2. Provide dry substrate; prevent wetting of substrate prior to sealant installation.
 - 3. Clean porous substrates, such as concrete, masonry, stone, wood by brushing, grinding, blast-cleaning, mechanical-abrading, or combination of methods to produce clean, sound substrate capable of developing optimum bond with sealant. Remove laitance and form-release agents from concrete. Remove loose particles remaining after cleaning operations by vacuuming or blowing out joints with oil-free, compressed air.
 - 4. Clean nonporous surfaces, such as metal, with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of sealant.
 - 5. Joints with silicone sealant should generally be masked as subsequent cleanup of spillage and smears may be difficult.

- D. Install masking tape on adjacent surfaces to prevent permanent staining or damage due to contact with sealant or cleaning methods to remove sealant smears. Install masking tape on sides of joints where sealant will be recessed. Remove tape immediately after tooling sealant without disturbing sealant.

3.4 INSTALLATION OF SEALANT

- A. General: Comply with sealant manufacturer's written installation instructions for products and applications indicated, based on mock-ups and preconstruction testing.
- B. Joint Priming: Prime joint substrates where recommended in writing by sealant manufacturer, based on mock-ups and preconstruction testing. Apply primer to comply with sealant manufacturer's written instructions.
 - 1. Confine primer to areas of sealant bond; do not allow spillage or migration onto adjoining surfaces.
 - 2. Limit priming to areas that will be covered with sealant in same day. Unless recommended otherwise by sealant manufacturer, reprime areas exposed for more than 24 hours.
- C. Install sealant backer and position to produce cross-sectional shape and proper depth of installed sealant.
 - 1. Use properly sized backer. Do not use multiple backer units or braided backer units to accommodate wide joints.
 - 2. Install backer with device that will provide consistent depth between substrate surface and outer surface of backer.
 - 3. Do not leave gaps between ends of sealant backers.
 - 4. Do not stretch, twist, puncture, or tear sealant backers.
 - 5. Remove wet backers and replace with dry materials.
- D. Install bond-breaker tape at back of designated joints.
- E. Install sealant after installing backer material: To produce uniform, cross-sectional shape and depth; to directly contact and fully wet joint sides and backer material; and to completely fill recesses in joint configuration.
 - 1. Install sealant flush with surface.
 - 2. Immediately after sealant application and before skinning or curing begins, tool joint with slightly concave surface, compressing sealant into joint to form smooth, uniform sealant bead; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint. Do not use tooling agent.
 - 3. Remove excess sealant from surfaces adjacent to joints, taking care not to damage the adjacent surfaces.

3.5 FIELD QUALITY CONTROL

- A. At completion of Project, observe installed sealant for damage or deterioration. If damage or deterioration occurs, neatly cut out and remove damaged or deteriorated sealant, prepare and prime surfaces, and install new sealant. Replace sealant immediately so new sealant is indistinguishable from original Work.

- B. Field-Adhesion Testing: Architect/Engineer or sealant manufacturer's representative will perform non-destructive and destructive field adhesion tests on sealant in accordance with ASTM C1521. Schedule testing to be performed in presence of Architect/Engineer and Owner's representative.
1. Destructive testing:
 - a. Cut 6 inch long tail of sealant loose from substrate.
 - b. Mark tail one inch from adhesive bond.
 - c. Grasp tail one inch from adhesive bond and pull until tail extends to two times the published movement capability of sealant. If sealant has not failed, continue pulling to failure.
 - d. Record elongation at failure and if failure was adhesive or cohesive.
 - e. Observe sealant for complete filling of joint with absence of voids, and for joint configuration in compliance with requirements. Record observations and sealant dimensions
 - f. Perform test every 100 feet for first 1,000 linear feet of joint; if no test failure at 2x the movement capability occurs, test every 1,000 feet thereafter or approximately once per floor per facade, whichever is more frequent.
 2. Test reports shall include date when sealant was installed, name of person who installed sealant, test date, test location, and whether primer was used.
 3. Immediately after testing, Contractor shall replace failed sealant in test areas. Neatly cut out and remove failed sealant, prepare and prime surfaces, and install new sealant. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.
 4. Sealant not evidencing adhesive failure from testing or noncompliance with requirements will be considered satisfactory.
 5. Where Architect/Engineer determines that sealant has failed adhesively from testing or does not comply with requirements, additional testing will be performed to determine extent of non-conforming sealant. Neatly cut out and remove non-conforming sealant, prepare and prime surfaces, and install new sealant. Perform field adhesion tests on new sealant. Additional testing and replacement of non-conforming sealant shall be at Contractor's expense.

3.6 CLEANING

- A. As sealant Work progresses, clean off excess sealant or sealant smears by methods and with cleaning materials approved in writing by sealant manufacturer and manufacturers of products in which joints occur. Exercise care to avoid scratching or damage to surfaces.
- B. At the end of each workday, clean Site and Work areas and place rubbish, empty cans, rags, and other discarded materials in appropriate containers.
- C. After completing sealant Work:
 1. Repair surfaces stained, marred, or otherwise damaged during sealant Work.
 2. Clean up debris and surplus materials and remove from Site.

3.7 PROTECTION

- A. Protect sealant during and after curing period from contact with contaminating substances and from damage, so sealants are without deterioration or damage at time of Substantial Completion.

3.8 SCHEDULE

- A. Apply coating to polyurethane joint sealants designated for painting. Proceed with coating application only after sealants have cured.
- B. Concrete and wood substrates and other substrates to be painted:
 - 1. Polyurethane sealants: Use approved submitted product, colors to be determined in the field and based on mock-up.
- C. Masonry substrates and other substrates not to be painted:
 - 1. Silicone sealant: Use approved submitted product, colors to be determined in the field and based on mock-up.

END OF SECTION

SEALANT INSTALLER'S WARRANTY

WHEREAS <Insert name> of <Insert address>, herein called *Sealant Installer*, has performed sealant and associated work, designated *Work*, on the following project:

Owner: <Insert name of Owner.>
Address: <Insert address.>
Building Name/Type: <Insert information.>
Address: <Insert address.>
Area of Work: <Insert information.>
Acceptance Date: <Insert date.>
Warranty Period: <Insert warranty period.>
Expiration Date: <Insert date.>

AND WHEREAS Sealant Installer has contracted, either directly with Owner or indirectly as subcontractor, to warrant said Work against leaks and faulty or defective materials and workmanship for designated Warranty Period,

NOW THEREFORE Sealant Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period it will, at its own cost and expense, make or cause to be made such repairs to or replacement of said Work as are necessary to correct faulty and defective Work and as are necessary to maintain said Work in watertight condition, and warrants against the following.

1. Components of sealant system that do not comply with requirements; that do not remain watertight; that fail in adhesion, cohesion, or general durability; or that deteriorate in a manner not clearly specified by submitted sealant manufacturer's data as an inherent quality of the material for the application indicated, regardless of whether the Work was previously accepted by Owner.
2. Damage by exposure to foreseeable weather; and damage by intrusion of foreseeable wind-borne moisture.

Warranty is made subject to the following terms and conditions:

3. Specifically excluded from Warranty are damages to Work and other parts of the building, and to building contents, caused by:
 - a. lightning;

<i>Insert required wind speed below.</i>
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peak gust wind speed exceeding <Insert wind speed> miles per hour;

- c. fire;
 - d. failure of sealant substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
 - e. activity adjacent to sealant Work by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner's Representative.
4. When Work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Sealant Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
5. Sealant Installer is responsible for damage to Work covered by Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of Work.
6. During Warranty Period, if Owner allows alteration of Work by anyone other than Sealant Installer, including cutting, patching, and maintenance, Warranty shall become null and void on date of said alterations, but only to extent said alterations affect Work covered by Warranty. If Owner engages Sealant Installer to perform said alterations, Warranty shall not become null and

void unless Sealant Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate Work, thereby reasonably justifying limitation or termination of Warranty.

7. Owner will promptly notify Sealant Installer of observed, known, or suspected leaks, defects, or deterioration and will afford reasonable opportunity for Sealant Installer to inspect Work and to examine evidence of such leaks, defects, or deterioration. Sealant Installer shall inspect leak, defect, or deterioration within 24 hours of notification.
8. If permanent repair or replacement of warranted condition cannot be made immediately, due to weather conditions, availability of appropriate labor or materials, building occupancy, etc., Sealant Installer must make, or cause to be made, immediate temporary repairs to prevent any further damage, deterioration, or unsafe conditions. Permanent repair or replacement of warranted condition shall be scheduled as soon thereafter as practical, and with Owner's consent and approval.
9. If Owner notifies Sealant Installer of warranted condition that requires immediate attention to prevent potential injury or damage, and Sealant Installer cannot or does not promptly inspect and repair same, either permanently or temporarily, then Owner may make, or cause to be made, such temporary repairs as may be essential and Sealant Installer will reimburse Owner for cost of such repairs. Such action will not relieve Sealant Installer of its obligation to perform any necessary permanent repairs, and Warranty shall remain in full force and effect for remaining portion of its original term.
10. Sealant Installer shall provide equipment, labor, and material required to remedy warranted conditions, including repair or replacement of damage to other work resulting therefrom, and removal and replacement of other work required to access warranted condition. Additional required work will be at Sealant Installer's sole expense for full term of Warranty. Warranty includes removal and replacement of sealant-backer material and sealant.
11. Warranty is recognized to be only Warranty of Sealant Installer on said Work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of sealant failure. Specifically, Warranty shall not operate to relieve Sealant Installer of responsibility for performance of original Work according to requirements of Contract Documents, regardless of whether Contract was directly with Owner or with Owner's General Contractor.

**Electrical Maintenance Building –
Building Envelope Repairs**

07 92 00
JOINT SEALANTS

IN WITNESS THEREOF, and intending to be legally bound hereby, Sealant Installer has caused this document to be executed by undersigned, duly-authorized officer.

(Sealant Installer) Corporate Seal:

By: _____
(Signature)

(Name)

(Date)

Subscribed and sworn to before me this ____ day of _____, 20__

Notary Public
My commission expires _____

SECTION 08 01 52.99

WOOD WINDOW RESTORATION

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Repair or replacement of damaged, deteriorated, or missing wood window components, to match existing.
 - 1. Reuse existing materials, including wood elements, hardware, and glass, that are determined to be of historical significance whenever possible. Replace window elements only when deterioration circumvents their useful function and if approved by Owner's Representative.
 - 2. Contractor is responsible for determining if hazardous materials are present.
- B. Related Sections:
 - 1. Section 07 62 00 - Sheet Metal Flashing and Trim.
 - 2. Section 07 92 00 - Joint Sealants.
 - 3. Section 09 91 00 - Painting.
- C. Base Bid Scope of Work:
 - 1. Surface preparation and coating of wood window frames as shown in Drawings.
 - 2. Removal and replacement of damaged glass lites, to match existing, as shown in Drawings.
- D. Unit Prices:
 - 1. Supply and installation of new glass lites to match existing, including materials incidental to installation, to replace existing lites damaged or broken through no negligence of Contractor. Payment based on number of glass lites installed.

1.2 REFERENCES

- A. Reference Standards: Latest edition as of Specification date.
 - 1. ASTM International (ASTM)
 - a. ASTM C1036 - Standard Specification for Flat Glass.
 - b. ASTM D1212 - Standard Test Methods for Measurement of Wet Film Thickness of Organic Coatings.
 - c. ASTM D3359 - Standard Test Methods for Measuring Adhesion by Tape Test.
 - d. ASTM D6132 - Standard Test Method for Nondestructive Measurement of Dry Film Thickness of Applied Organic Coatings Using an Ultrasonic Gage.
 - 2. Glass Association of North America (GANA):
 - a. Glazing Manual.

1.3 DEFINITIONS

- A. Window Components:
 - 1. Frame components, including head, jambs, sill, parting beads, and stops.
 - 2. Sash components, including rails, stiles, and muntins.
 - 3. Trim components, including interior and exterior casings, drip cap, stool, and apron.

4. Glazing components: glass panes, glazing points, glazing stops, and glazing compound.
5. Hardware.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate Work to ensure that adjacent areas are not adversely affected. Coordinate:
 1. With Owner's Representative, particularly as Work affects use of interior spaces.
 2. With other work in progress to ensure proper sequencing and satisfactory completed construction.
 3. With other trades to avoid or minimize work on, or in immediate vicinity of, window restoration Work in progress. Ensure that dust from other operations will not adversely affect quality of completed installation.
- B. Sequencing and Scheduling:
 1. Sequence window restoration Work to minimize time from window component removal to reinstallation
 2. Schedule window restoration Work to allow for proper reinstallation of restored window components, including installation of perimeter sealant and flashing and weather-tight integration with surrounding construction.

1.5 SUBMITTALS

- A. Product Data
 1. Submit manufacturer's literature, technical data, and hardware cuts for each product indicated, including:
 - a. Descriptions of materials and hardware.
 - b. Include product descriptions; instructions for handling, storage, and application/installation; precautions and limitations in use of products; and test reports and certifications substantiating that products comply with requirements.
 - c. Color chart for wood coating.
 - d. Coating and glazing manufacturer's recommendations for coloring glazing putty/seals to match coating color of restored window sash, or for preparing and painting glazing putty/seals to match coating color of fully restored window unit.
 - e. Include Safety Data Sheets (SDS) for information only; safety restrictions are sole responsibility of Contractor.
- B. Shop Drawings
 1. Replacement Window Components: Show fabrication and installation details of replacement window components. For each component, indicate material, full-scale profile, joinery, finish, and method of splicing or attaching to existing window.
 2. Weather-stripping details.
 3. Glazing details.
- C. Samples
 1. Label samples for location and application area.
 - a. Replacement Window Components
 - 1) Three 12 inch long, full-size sections with applied finish; to match existing components.
 - b. Repaired and Refinished Components
 - 1) Three sections of existing components, removed from Site, repaired with epoxy, and refinished.

- c. Finishes and Coatings
 - 1) Three sample panels of each finish and color on wood substrate similar to existing windows.
 - a) Step and label coats for each coat of system.
 - d. Glass
 - 1) Three 12 inch square panes, with ground or taped edges.
 - e. Weather Stripping
 - 1) Three 12 inch long sections, with fastening system.
 - f. Accessories
 - 1) Three samples of each type of fastener, glazing points, and other accessories. Indicate intended use.
- D. Photographic Documentation:
- 1. General
 - a. Document window restoration Work with digital photographs.
 - b. Adjust lighting and photographic techniques to best show conditions.
 - 2. Existing Conditions
 - a. Record general appearance of windows and surrounding construction.
 - b. Use close-range photography to record notable defects, missing or detached parts and hardware, and similar conditions prior to dismantling and removing window components.
 - c. Provide reference plan or elevation identifying location and orientation of each photograph.
 - 3. Completed Work
 - a. At representative locations throughout Project.
 - 1) Four photographs of completed installation of each window component, from same angles and perspectives utilized during photographic documentation of existing conditions.
- E. Restoration Program Plan
- 1. Written description of restoration program, including protection of adjacent elements on and inside building and on Site during operations; details of abatement of hazardous materials; and materials, methods, equipment, and sequence of operations for each phase of window-restoration Work. Include:
 - a. Drawings and diagrams illustrating construction, detailing, and installation of temporary weather protection at rough openings.
 - b. Protection and containment measures for dry-grit blasting media.
- F. Qualifications of Window Restoration Subcontractor
- 1. Submit evidence that Restoration Subcontractor's *existing company* has minimum five years of continuous experience in restoration of similar window systems. Submit list of at least five completed projects of similar scope and size, including:
 - a. Project name.
 - b. Owner's name.
 - c. Owner's Representative name, address, and telephone number.
 - d. Description of work.
 - e. Types of windows restored.
 - f. Project supervisor.
 - g. Total cost of window restoration work and total cost of project.
 - h. Completion date.

- G. Sample Warranty
 - 1. Copy of warranty from Contractor stating obligations, remedies, limitations, and exclusions. Submitted with bid.
- H. Following completion of Work:
 - 1. Completed warranty from Contractor.

1.6 QUALITY ASSURANCE

- A. Window Restoration Subcontractor Qualifications
 - 1. Experienced in restoration of historic wood windows.
 - a. Must have successful restoration projects with similar scope, design, and materials in local area in use for minimum of five years.
 - b. Employ experienced foreman with minimum five years of experience as foreman on similar projects, who is fluent in English, to be in shop and on Site at all times during Work. Do not change foreman during the course of the Project except for reasons beyond the control of the Subcontractor; inform Architect/Engineer in advance of any changes.
 - a. Subcontractor shall have sufficiently skilled and available craftsmen to perform Work in accordance with Project schedule.
- B. Mock-ups
 - 1. Complete one full-size in situ, fully-restored mock-up of each window type as shown in Drawings, to demonstrate installation details, quality of materials and installation, and aesthetic effects.
 - a. Use materials and methods proposed for Work.
 - b. Notify Architect/Engineer seven days in advance of date and time when mock-up is scheduled to begin.
 - c. Obtain approval of Architect/Engineer of mock-ups after restoration is complete.
 - d. Coordinate installation of mock-ups with work of other trades directly responsible for repair and restoration of surrounding construction. Install mock-ups in presence of Architect/Engineer.
 - e. If Architect/Engineer determines mock-up does not comply with requirements, modify mock-up or construct new mock-up until mock-up is approved.
 - f. Maintain approved mock-ups during construction in undisturbed condition to serve as baseline standard for quality and workmanship. Provide temporary protection as required to prevent incidental damage, or damage incurred due to work of other trades, until Substantial Completion of Project.
 - g. Approved mock-ups may become part of completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials according to manufacturer's recommendations and in such a manner as to prevent damage to materials or structure.
- B. Deliver materials to Site in original containers and packaging with seals unbroken, labeled with manufacturer's name, product brand name and type, date of manufacture, lot number, and directions for storing and mixing with other components; labeled to correspond with intended window unit.

- C. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, and installation. Reject and remove from Site new materials that exhibit evidence of moisture damage during application or that have been exposed to moisture.
- D. Store materials in original, undamaged containers in clean, dry, protected location on raised platforms with weather-protective coverings, within temperature range required by manufacturer. Protect stored materials from direct sunlight. Manufacturer's standard packaging and covering is not considered adequate weather protection.
- E. Storage and Handling of Window Components:
 - 1. Interleave components with corrugated cardboard and pack in wooden crates with sufficient packing material to prevent shifting.
 - 2. Provide additional packaging and protection as required to prevent damage or deformation to each window unit or component thereof.
- F. Storage and Handling of Other Materials:
 - 1. Comply with manufacturer's recommendations and precautions for storage and handling of replacement hardware, materials, and parts.
 - 2. Store materials off ground in clean, dry, and restricted locations; cover materials and protect from weather, damage, and accidental opening.
 - 3. Store coating materials, thinners, solvents, product applicators, and other combustible materials in tightly-closed, approved safety containers in covered, well-ventilated area where they will be protected from exposure to direct sunlight, heat, sparks, flames, weather, and temperatures below 45 degrees F or above 100 degrees F.
 - a. Limit amount of combustible liquids at Site to maximum amount necessary for daily use.
 - b. Clearly label containers with proper warning to prevent accidental use by unauthorized persons.
 - c. Maintain containers in clean condition, free of foreign materials and residue.
- G. Labeling and Tagging:
 - 1. Label window unit and tag components prior to dismantling.
 - 2. Use metal label or tag engraved or indelibly marked with permanent ink and attached with wire.
 - 3. Labels and tags shall remain securely attached to window sashes and components until restoration, re-assembly, and reinstallation are complete.
- H. Limit stored materials on structures to safe loading capacity of structure at time materials are stored, and to avoid permanent deck deflection.
- I. Conspicuously mark damaged or opened containers or materials that are damaged or otherwise not suitable for use, and remove from Site as soon as possible.
- J. Remove and replace materials that cannot be applied within stated shelf life.

1.8 PROJECT CONDITIONS

- A. Verify existing dimensions and details prior to start of window-restoration Work. Notify Architect/Engineer of conditions found to be different than those indicated in the Contract Documents. Architect/Engineer will review situation and inform Contractor of changes.
- B. Comply with Owner's limitations and restrictions for Site use and accessibility.

1. Do not perform work involving combustible liquids when adjacent areas are occupied.
- C. Do not perform Work when ambient air temperature is less than or is predicted to be less than 40 degrees F.
- D. Install coatings, sealant, and other materials at temperatures, humidity, and other environmental conditions recommended by material manufacturer.
- E. Handle and install materials in strict accordance with safety requirements of material manufacturers; GHS or Material Safety Data sheets; and local, state, and federal rules and regulations. Maintain GHS or Material Safety Data Sheets with materials in storage area and available for ready reference on Site.
 1. Strictly prohibit smoking materials and electrical devices in vicinity of combustible materials during handling, application, and drying.
- F. Provide adequate ventilation when solvents, cleaners, strippers, and varnishes are used so that accumulations of volatile vapors are below flammable or explosive range and workers and building users are not exposed to harmful fumes.

1.9 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials or components that could jeopardize the integrity or performance of the Work.
 1. Notify Architect/Engineer of conditions that may interfere with the proper execution of the Work or jeopardize the performance of the Work prior to proceeding with the Work.

1.10 WARRANTY

- A. Contractor's Warranty
 1. Written warranty, signed by Contractor, including:
 - a. Repair or replacement of coating that does not comply with requirements; that fails in adhesion, cohesion, or general durability; that cracks, checks, fades, or chalks; where visible rust occurs; or that deteriorates in a manner not clearly specified by submitted coating manufacturer's data as an inherent quality of the material for the application indicated.
 - b. Warranty includes:
 - 1) Removal of deteriorated coating and, as necessary, adjacent sound coating.
 - 2) Surface preparation.
 - 3) Supply and application of new coating material. New coating material shall extend to joints or other natural terminations to blend in with existing coating.
 - 4) Providing access to warranty Work locations.
 2. Warranty Period: Two years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain each new material that will be visible, such as replacement glass, wood coating system, hardware, sealant, and weather stripping, from single source with resources to provide

materials of consistent quality in appearance, physical properties, characteristics, and performance.

2.2 WINDOW RESTORATION AND REPLACEMENT MATERIALS

- A. Replacement Wood:
 - 1. Clear fine-grained lumber; of same species as existing components.
 - 2. Kiln dried to moisture content of 6 to 8 percent for interior components and 9 to 14 percent for exterior components at time of fabrication.
 - 3. Free of finger joints, blue stain, knots, pitch pockets, and surface checks larger than 1/32 inch wide by 2 inches long.
- B. Replacement Glass
 - 1. Locations indicated on Drawings.
 - a. Match visible transparency and reflectivity of existing glass.
 - b. Annealed Float Glass: ASTM C1036, Type I, Class 1, Quality Q3; thickness to match that of existing.

2.3 AUXILIARY MATERIALS

- A. Glazing Materials:
 - 1. Glazing Putty
 - a. Oil-based, non-staining and non-bleeding; use one of the following or approved equal:
 - 1) Wonder Putty manufactured by Atlas Putty Products.
 - 2) DAP 33 Glazing manufactured by DAP Products Inc.
 - b. Glazing Points
 - 1) Type 304 stainless steel; diamond point to match existing dimensions.
- B. Weather-Stripping
 - 1. Match existing materials, style, and profiles.
- C. Window Hardware:
 - 1. Reuse existing hardware.
 - a. Remove hardware as required to install repairs and reinstall.
- D. Wood Coating:
 - 1. See Section 09 91 00 - Painting.

2.4 FABRICATION OF GLAZING UNITS

- A. Fabricate glazing units to fit openings, with edge and face clearances, bite, and edge and surface conditions, complying with written instructions of glass manufacturer and GANA Glazing Manual.

PART 3 EXECUTION

3.1 GENERAL

- A. Examine substrates and conditions with restoration Subcontractor for compliance with requirements and other conditions affecting installation or performance of window-restoration Work.
 - 1. Ensure that work done by other trades is complete and ready for window-restoration Work.
 - 2. Verify that areas and conditions under which window restoration Work is to be performed permit proper and timely completion of Work.
 - 3. Notify Architect/Engineer in writing of conditions that may adversely affect installation or performance of window restoration Work and recommend corrections. Include:
 - a. Damage or deterioration to window elements that would preclude quality restoration Work and where replacement is desirable.
 - b. Deterioration or other distress of wall construction adjacent to frames.
 - 4. Do not proceed with window restoration Work until adverse conditions have been corrected and reviewed by Architect/Engineer.
 - 5. Commencing window restoration Work constitutes acceptance of Work surfaces and conditions.

3.2 ABATEMENT OF HAZARDOUS MATERIALS

- A. Retain industrial hygienist or other consultant to develop plan to remove, contain, capture, collect, and legally dispose of hazardous materials.
- B. Remove and dispose of hazardous materials in accordance with Restoration Program Plan and federal, state, and local restrictions.
 - 1. Provide enclosures to contain, capture, and collect hazardous materials.
 - 2. Filter hazardous materials from wastewater.
 - 3. Monitor airborne dust and debris.

3.3 PROTECTION

- A. Take precautions to ensure safety of people, including building users, passers-by, and workmen, and animals, and protection of property, including adjacent building elements, landscaping, and motor vehicles.
- B. Prevent construction debris, coatings, and other materials from coming into contact with pedestrians, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
- C. Protect paving and sidewalks, and adjacent building areas from mechanical damage due to scaffolding and other equipment.
- D. Limit access to Work areas.
- E. Erect temporary protective canopies, as necessary, over walkways and at points of pedestrian and vehicular access that must remain in service during Work.
- F. Comply with coating manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products.

- G. Cover adjacent surfaces with materials that are proven to resist coating system.
- H. Assume responsibility for injury to persons or damage to property due to Work, and remedy at no cost to Owner.
- I. Temporary Window Enclosures: Protect window openings with temporary water tight enclosures to resist penetration of wind, rainwater, and debris from construction operations, and to prevent occupants from accessing exterior.
 - 1. Perform cutting, drilling, and fitting required for water tight installation.
 - 2. Minimize connection to existing construction and connect on interior of wall. Use connections that will not permanently deface existing construction and that can be easily repaired at conclusion of Work, as approved by Architect/Engineer.
 - 3. Form tight joints with exposed connections accurately fitted.
 - 4. Seal perimeter of enclosure and joints in enclosure with sealant or tape to prevent water penetration.
 - a. Obtain written confirmation from sealant manufacturer that primer and sealant to be used will not permanently stain or otherwise discolor surrounding existing construction.

3.4 PREPARATION

- A. Survey and document on elevation drawings location, size, configuration, and existing condition of each window unit that is to be repaired.
- B. Remove damaged glass panes, as indicated in the Drawings.
 - 1. Remove and dispose of glazing putty and sealant.
 - 2. Dispose of broken or otherwise unusable glass panes.

3.5 WOOD CLEANING AND REPAIR

- A. General
 - 1. Repair and restore each window unit in appearance to allow application of new paint coating. Extensive repair and restoration to like-new appearance is not necessary.
 - 2. Perform window restoration on Site.
- B. Wood Cleaning
 - 1. Use gentlest procedure that is effective; do not damage wood.
- C. Wood Repairs
 - 1. Window Frame Crack Repair
 - a. For cracks in window frames that do not inhibit the operation of the window:
 - 1) Fill the length of the crack with wood repair material, per wood filler manufacturer instructions. Allow wood filler to cure prior to coating window frame.

3.6 WOOD COATING

- A. Clean wood surfaces and apply coating system according to coating manufacturer's recommendations.
- B. Clean surfaces as necessary to restore clean wood surfaces.
 - 1. Clean surfaces by scrubbing in cleaning solution and allowing wood to thoroughly dry.

2. Sand smooth surfaces that will be exposed to view and dust off.
3. Notify Architect/Engineer of conditions that may adversely affect application or performance of coating system. Do not proceed with coating application until unsatisfactory conditions have been corrected.

C. Apply coating system as specified in Section 09 91 00 - Painting.

3.7 GLAZING REPLACEMENT

A. Glazing:

1. General
 - a. Comply with written recommendations of manufacturers of glass, sealants, gaskets, and other glazing materials, and of GANA Glazing Manual.
 - b. Protect glass edges from damage during handling and installation. Remove damaged glass from Site and dispose of legally. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass or impair performance or appearance.
 - c. Do not exceed edge pressures stipulated by glass manufacturer.
2. Procedure
 - a. Clean glazing channels and other components receiving glass immediately before glazing. Remove and reapply coating not firmly bonded to substrate.
 - b. Bed glass lites in glazing putty.
 - c. Installation with glazing putty:
 - 1) Adequately support and secure glass panes with new stainless steel glazing points at locations and in quantity to match existing. Install additional points as necessary.
 - 2) Install new glazing putty bonded to window frame and glass, with sloped profile to shed water, and in profile and depth to match existing.
 - d. Coat glazing putty after putty has fully cured.
3. Protect glass from contact with contaminating substances resulting from construction operations. Remove substances immediately as recommended by glass manufacturer.

B. Hardware

1. Match existing.

C. Weather Stripping

1. Install new weather stripping to match existing.

D. Clean and prime surfaces and install perimeter sealant as specified in Section 07 92 00 – Joint Sealants.

3.8 FIELD QUALITY CONTROL

A. Wet-mil Thickness and Coating Coverage Rate:

1. At beginning of coating application, calibrate coverage rate and minimum specified dry-mil thickness with minimum measured wet-mil thickness.
2. Measure wet-mil thickness of each coat on every fifth window coated, minimum, in accordance with ASTM D1212. Adjust coverage rate to maintain minimum specified thickness.

- B. Document with photographs completed Work at representative locations throughout Project; take four photographs of completed repair of each window type, from same angles and perspectives utilized during pre-construction photo-documentation of existing conditions.
- C. Architect/Engineer will monitor progress and quality of window restoration Work, possibly including:
 - 1. Observing in-progress Work and completed Work and comparing to approved mock-ups.
 - 2. Measure coating system dry film thickness in accordance with ASTM D6132.
 - 3. Perform coating adhesion testing in accordance with ASTM D3359.
 - 4. Perform field adhesion testing of sealant as specified in Section 07 92 00 – Joint Sealants.
- D. Contactor Responsibilities
 - 1. Provide access to Work for Architect/Engineer, Owner's Representative, and other consultants hired by Owner.
 - 2. Notify Architect/Engineer at least 48 hours in advance of when lift devices or scaffolding will be relocated. Do not relocate lift devices or scaffolding until Architect/Engineer has observed completed Work.
- E. Remedy Work that does not satisfy requirements at no additional cost to Owner. Adjust installation materials and procedures as necessary to bring Work into conformance with requirements.

3.9 FINAL ADJUSTMENTS

- A. Adjust repaired windows to provide smooth operation over entire range of motion, with snug, weather-tight fit.
- B. Lubricate bearing surfaces of hinges, pulleys, and other moving parts. Wipe off excess lubrication material.
- C. Restore sash weights, ropes, and chains as necessary to return function.
- D. Check and readjust operating finish hardware items, leaving sash and frames undamaged and in complete and proper operating condition.

3.10 CLEANING

- A. At the end of each workday, clean Site and Work areas and place rubbish, empty cans, rags, and other discarded materials in appropriate containers.
- B. Clean coating, glazing materials, and sealant from adjacent surfaces as soon as possible after spillage. Exercise care to avoid scratching or damaging surfaces. Restore surfaces to pre-construction condition.
- C. Clean windows immediately after restoration.
 - 1. Avoid damaging protective coatings and finishes.
 - 2. Remove excess sealants, glazing materials, dirt, and other substances.

3.11 PROTECTION OF INSTALLED WORK

- A. Protect windows from damage prior to substantial completion. Repair damage at no cost to Owner.

1. Remove contaminants, such as dirt, scum, alkaline deposits, and stains, immediately.
 2. Remove and replace glass that is broken, chipped, cracked, abraded, or otherwise damaged during construction period.
 3. Repair damaged coating in accordance with coating manufacturer's instructions, subject to acceptance by Architect/Engineer. Where damage is extensive or repairs are unacceptable, remove and replace Work at no additional cost to Owner.
- B. After completing window restoration Work:
1. Clean spillage and soiling from adjacent surfaces using cleaning agents and procedures recommended by manufacturer of affected surface. Exercise care to avoid scratching or damage to surfaces.
 2. Repair surfaces stained, marred, or otherwise damaged during window replacement Work.
 3. Clean up debris and surplus materials and remove from Site.
- C. Waste Management:
1. Collect surplus window-replacement materials that cannot be reused and deliver to recycling or disposal facility.
 2. Treat materials that cannot be reused as hazardous waste and dispose of in an appropriate manner.
- D. Final Cleaning
1. Clean glass and coated surfaces within one week prior to substantial completion, exercising care to avoid damage to finishes. Remove excess glazing and sealant compounds, dirt, and other substances.

END OF SECTION

SECTION 09 91 00

PAINTING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Surface preparation and application of coating to exterior facade materials.
- B. Coating application to the following locations:
 - 1. Wood components: Cladding, trim, fascia, brackets, soffits, eaves, rakes, windows and doors.
 - 2. Metal components: Guardrail assembly at north facade.
 - 3. Concrete components: Cast-in-place concrete foundation.
- C. Color selection: Match existing color scheme.
- D. Hazardous Materials: Hazardous materials testing for asbestos-containing materials and lead-containing coatings has been completed for the materials anticipated to be disturbed as part of this project. No asbestos-containing materials were identified. Lead in each of the coatings applied to wood siding and trim was detected (at the light tan, red, and white coatings).
 - 1. Test report will be provided to contractor; contractor is responsible for determining if further hazardous materials testing is to be completed.

1.2 REFERENCES

- A. Reference Standards: Latest edition as of Specification date.
 - 1. ASTM International (ASTM)
 - a. ASTM D5064 - Standard Practice for Conducting a Patch Test to Assess Coating Compatibility.
 - b. ANSI/ASTM D16 - Definitions of terms relating to Paint, Varnish, Lacquer and related products.
 - c. ASTM D3359 - Standard Test Methods for Rating Adhesion by Tape Test.
 - d. ASTM D5324 - Standard Guide for Testing Water-Borne Architectural Coatings.
- B. Society for Protective Coatings (SSPC) – steel surface preparation, coating selection, coating application, environmental regulations, and health and safety

1.3 SUBMITTALS

- A. Product Data: Coating manufacturer's literature including written instructions for evaluating, preparing, and treating substrate; technical data including tested physical and performance properties; mixing and application instructions; safety precautions for handling, storing, applying, and disposing of materials; and instructions for protecting surrounding areas from overspray.
 - 1. For each paint system indicated, include:
 - a. Surfaces to which materials will be applied.
 - b. Crack fillers, block fillers, and primers.
 - c. Volatile Organic Compound (VOC) content of components.

- d. Safety Data Sheets (SDS) for each product for information only; safety restrictions are sole responsibility of Contractor.
- B. Sample Warranties:
 - 1. Copy of coating manufacturer's warranty stating obligations, remedies, limitations, and exclusions.
 - 2. Copy of Applicator's warranty stating obligations, remedies, limitations, and exclusions.
- C. Physical Samples: For each color and material to be applied, with texture and sheen to simulate actual conditions, on 8 inch by 10 inch portable wood sample board.
 - 1. Submit three Samples for the Architect/Engineer's review of color, sheen, and texture.
- D. Applicator Qualifications: Evidence that Applicator's existing company has minimum five years of continuous experience in similar coating Work; list of at least five representative, successfully completed projects of similar scope and size, including:
 - 1. Project name.
 - 2. Owner's name.
 - 3. Owner's Representative name, address, and telephone number.
 - 4. Description of work.
 - 5. Architectural coating used.
 - 6. Project supervisor.
 - 7. Total cost of coating work and total cost of project.
 - 8. Completion date.
- E. Close-Out Submittals:
 - 1. Following completion of Work, submit completed manufacturer's and Applicator's warranties.
 - 2. Furnish one gallon of each color of coating materials applied. Provide materials in unopened, factory-sealed containers for storage and identify with labels describing contents. Apply dab of color onto lid of each bucket.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications
 - 1. Firm or individual experienced in applying coatings similar in material, design, and extent to those indicated for this Project. Must have successful applications of specified materials in local area in use for minimum of five years.
 - 2. Employ foreman with minimum five years of experience as foreman on similar projects, to be on Site at all times during the Work. Do not change foreman during the course of the Project except for reasons beyond the control of the Applicator; inform Architect/Engineer in advance of any changes.
- B. Application
 - 1. Apply coatings in accordance with the manufacturer's written instructions, unless noted otherwise in these specifications. This includes film thickness, curing and recoating times, temperature and humidity, mixing and thinning (if permitted), pot life, and application methods and techniques. Follow procedures in ASTM D5324 to ensure quality of the paint.

- C. Finish
 - 1. Coatings to be visibly free from flowlines, streaks, blisters, or other surface imperfections in the dry-film state on exposed surfaces. Architect/Engineer will complete inspections per ASTM D3359.
- D. Compatibility
 - 1. New paint coating systems must be compatible with existing coatings. Test compatibility according to ASTM D5064.
- E. Mock-Up
 - 1. Provide a full-coat mock-up finish sample for each type of coating and substrate included in the Project. Leave portion of prepared surface and each coating layer exposed to view. Provide required color, sheen, and texture on each surface. Surface preparation to represent surface preparation specified for the substrate. Duplicate finish of approved sample Submittals.
 - a. Architect/Engineer and Owner will select locations to represent surfaces and conditions for application of each type of coating and substrate.
 - b. Architect to compare finished mock-up for selection and approval following the cure duration period required by manufacturer's written instructions.
 - c. Adhesion tests, at the discretion of the Architect/Engineer, may be completed according to ASTM D3359 on the mock-up samples after the coating has cured to evaluate adequate bonding to the substrate. Mock-ups shall be continued until bond has been accepted by the Architect/Engineer. Adhesion testing may continue to be performed during the course of the coating application.
 - d. Do not proceed with Work until mock-ups have been approved by Architect/Engineer.
 - e. Approved mock-ups may become part of completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:
 - 1. Product brand name and type.
 - 2. Manufacturer's batch number and date of manufacture.
 - 3. Thinning instructions (if permitted).
 - 4. Application instructions.
 - 5. Color name and number.
 - 6. VOC content.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at ambient temperatures between 45 to 95 degrees F. Maintain storage containers in a clean condition, free of foreign materials and residue.
- C. Dispose of waste created from Work legally and in accordance with OSHA, EPA, and other federal, state, and local regulations for the types of materials and VOC contents.
- D. Where coating recycling is available, collect waste paint by type and provide for delivery to recycling or disposal facility. Materials that cannot be reused must be disposed of according to requirements of local jurisdiction.

1.6 PROJECT CONDITIONS

- A. Comply with Owner's limitations and restrictions for Site use and accessibility. The building will be occupied during the Work. Take precautions to mitigate dust and other airborne debris.
- B. Environmental Limitations:
 - 1. Disturb existing siding in accordance with safety conditions or applicable rules and regulations of local, state, and federal authorities having jurisdiction.
 - 2. Apply coatings in accordance with safety and weather conditions required by the manufacturer's product literature, technical bulletins, or as applicable rules and regulations of local, state, and federal authorities having jurisdiction.
 - 3. Apply coating only when temperatures of surfaces to be painted and ambient air temperatures are between 50 and 90 degrees F and predicted to remain so for 24 hours before, during, and after application.
 - 4. Perform no painting in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 degrees F above the dew point; or to damp or wet surfaces.
 - 5. Perform no painting when the maximum moisture content of the substrate exceeds:
 - 6. 15 percent for wood.
 - 7. Apply paint only to dry, clean, properly cured, and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.

1.7 CHANGES IN WORK

- A. During rehabilitation work, existing conditions may be encountered which are not known or are at variance with the Contract Documents. Such conditions may interfere with the Work and may consist of damage or deterioration of the substrate or surrounding materials or components that could jeopardize the integrity or performance of the Work.
 - 1. Notify Architect/Engineer of conditions that may interfere with the proper execution of the Work or jeopardize the performance of the Work prior to proceeding with the Work.

1.8 WARRANTY

- A. Manufacturer's Warranty:
 - 1. Written warranty, signed by coating manufacturer, including:
 - a. Materials to replace coating that does not comply with requirements; that fails in adhesion, cohesion, or general durability; that cracks, checks, fades, or chalks; or that deteriorates in a manner not clearly specified by submitted coating manufacturer's data as an inherent quality of the material for the application indicated.
 - b. New coating to closely match color of existing coating. Extend new coating to reveals, surface edges, or other natural termination points to minimize differences in appearance between new and existing coating.
 - 2. Warranty Period: Five years after Substantial Completion date.

- B. Contractor's Warranty:
 - 1. Written warranty, signed by Contractor, including:
 - a. Repair or remove and replace coating that does not comply with requirements; that fails in adhesion, cohesion, or general durability; that does cracks, checks, fades, or chalks; or that deteriorates in a manner not clearly specified by submitted coating manufacturer's data as an inherent quality of the material for the application indicated.
 - 2. New coating to closely match color of existing coating. Extend new coating to reveals, surface edges, or other natural termination points to minimize differences in appearance between new and existing coating.
 - 3. Warranty includes:
 - a. Providing access to Work area.
 - b. Necessary surface preparation work.
 - 4. Warranty Period: Five years after Substantial Completion date.

PART 2 PRODUCTS

2.1 GENERAL PAINT MATERIALS

- A. Material Compatibility
 - 1. Provide materials for use within each coating system that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. Source Limitations: Obtain materials through one source from single coating manufacturer, or from sources approved by coating manufacturer.

2.2 MANUFACTURERS

- A. Elastomeric Coating: Factory-formulated; internally-plasticized, 100-percent-acrylic for wood and metal substrates and 100-percent silicone for concrete substrates.
 - 1. Smooth-finished Acrylic Coating: Use one of the following or approved equal.
 - a. CoverCoat by Rodda Paint.
 - b. AcryShield Exterior Paints by Kelly-Moore Paints
 - c. Ultra Spec EXT by Benjamin Moore.
 - 2. Silicone Coating: Use one of the following or approved equal.
 - a. AllGuard Silicone Elastomeric Coating manufactured by DOWSIL.
 - b. StoSilco Lastic manufactured by Sto Corp.
- B. Exterior Paint:
 - 1. Use one of the following or approved equal.
 - a. Rodda Paint.
 - b. Benjamin Moore & Co.
 - c. ICI Dulux Paint Centers.
 - d. Sherwin-Williams Co.

2.3 MATERIALS

- A. Wood Substrate Paint: Wood cladding, trim, fascia, brackets, soffits, eaves, rakes, windows, doors, and window and door frames, and other exterior wood components.
 - 1. Exterior Paint System

- a. Primer Coat:
 - 1) Type: Alkyd or latex wood primer
 - 2) Coats: one
 - 3) Dry Film Thickness: 1.0 mils
 - b. Finish Coat:
 - 1) Type: Acrylic-latex paint for exterior application
 - 2) Coats: two
 - 3) Total Dry Film Thickness: 5.0 mils
 - c. Finish Color: To be selected by Architect/Engineer
 - d. Sheen: To be selected by Architect/Engineer
- B. Ferrous Metal Substrate Paint – Downspouts (if not pre-finished), doors, and door frames.
- 1. Exterior Paint System
 - a. Primer Coat:
 - 1) Type: Rust-inhibitive metal primer
 - 2) Coats: one
 - 3) Dry Film Thickness: 1.0 mil
 - b. Finish Coat:
 - 1) Type: Waterborne acrylic-latex enamel for exterior application
 - 2) Coats: two
 - 3) Total Dry Film Thickness: 5 mils
 - c. Finish Color: To be selected by Architect/Engineer
 - d. Sheen: To be selected by Architect/Engineer
- C. Concrete Coating -Exposed cast-in-place concrete.
- 1. Use block fillers, crack fillers, and sealants, detail materials, and primers recommended by coating manufacturer.
 - 2. Exterior Paint System: Silicone coating system
 - a. Primer: as determined in mock-up
 - b. Finish coat:
 - 1) Coats: two

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for coating application.
 - 1. Ensure that Work by other trades is complete and ready for coating Work.
 - 2. Verify that areas and conditions under which repointing Work is to be performed permit proper and timely completion of Work.
 - 3. Notify Architect/Engineer of conditions that may adversely affect application or performance of coating Work and recommend corrections.
 - 4. Proceed with coating Work until adverse conditions have been corrected and surfaces receiving coating comply with requirements for maximum moisture content and other conditions affecting performance of the Work.
 - 5. Moisture content of wood substrates to be maximum 15 percent when measured with an electric moisture meter.
 - 6. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

3.2 PROTECTION

- A. Take precautions to ensure safety of people, including building users, passers-by, and workmen, and animals, and protection of property, including adjacent building elements, landscaping, and motor vehicles.
- B. Prevent construction debris, coatings, and other materials from coming into contact with pedestrians, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
- C. Protect adjacent building areas from mechanical damage due to scaffolding and other equipment.
- D. Limit access to Work areas.
- E. Erect temporary protective canopies, as necessary, over walkways and at points of pedestrian and vehicular access that must remain in service during Work.
- F. Comply with coating manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products.
- G. Masking and Preparation:
 - 1. Remove hardware, light fixtures, and other items that will not be coated. If removal is impractical because of size or weight of item, protect item during surface preparation and coating application. Reinstall items removed after completing coating Work.
 - 2. Comply with coating manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products.
 - 3. Cover adjacent surfaces with materials that are proven to resist coating system.
 - 4. Mask off or protect from spatter, overspray, or other damage surfaces not scheduled to receive coating.
 - 5. Remove masking and other protective measures at completion of coating Work.
- H. Assume responsibility for injury to persons or damage to property due to Work, and remedy at no cost to Owner.

3.3 PREPARATION

- A. Cleaning: Before applying coating or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning. Use manufacturer recommended products and procedures.
 - 1. Schedule preparation and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
 - 2. Barrier Coats: If recommended by coating manufacturer, provide barrier coats over incompatible primers or remove and re-prime.
 - 3. Existing Coatings:
 - a. Remove unsound areas of the existing coating as recommended by manufacturer.
 - b. Feather edges of existing coatings by techniques recommended by manufacturer and as specified for the specific substrate. The existing coating should not have raised or rough edges.
 - c. Do not use abrasive means that will create airborne particles for existing lead-containing coatings. Follow local and federal regulations for proper removal and containment of lead coatings.

4. Wood Substrates:
 - a. Clean surfaces of dirt, oil, and other foreign substances. Sand surfaces exposed to view smooth and remove dust.
 - b. Scrape and clean knots. Before applying primer, apply coat of knot sealer recommended in writing by topcoat manufacturer for exterior use in approved coating system. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
 - c. Sand edges of existing coatings to feather and have no rough edges.
 - d. Prime, stain, or seal wood to be painted. Prime edges, ends, faces, undersides, and back sides of replacement wood, including trim pieces.
5. Ferrous Metal Substrates:
 - a. Clean ungalvanized ferrous-metal surfaces; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC's recommendations.
 - b. Touch up bare areas and apply primer. Wire-brush, clean with solvents recommended by paint manufacturer.
6. Concrete Substrates:
 - a. Remove fins and projections, splatter, and other irregularities that would prevent monolithic, continuous application of coating.
 - b. Patch substrate defects, such as voids, honeycombing, and cracks.
 - c. Clean surfaces of dirt, oil, and other foreign substances. Pressure wash concrete to provide clean surface, free of laitance, dirt, and other loose or foreign material.
- B. Coating Material Preparation: Mix and prepare coating materials according to manufacturer's written instructions.
 1. Maintain containers used in mixing and applying coating in a clean condition, free of foreign materials and residue.
 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
 3. Do not thin or dilute unless permitted by coating manufacturer; use recommended thinners within recommended limits.

3.4 EXTERIOR COATING APPLICATION

- A. General: Apply coating according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
 1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable coating film.
 2. Provide finish coats that are compatible with primers used.
 3. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures are in place. Extend coatings in these areas to maintain system integrity and provide desired protection.
 4. Paint surfaces behind movable equipment the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment with prime coat only.
 5. Extent of coating application on doors and windows is limited to exterior surfaces only when in their closed position.

- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
 - 1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 - 2. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
 - 3. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it is firm to the touch, does not deform, or feel tacky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.
- C. Application Procedures: Apply coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
 - 1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
 - 2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
 - 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.
- D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as specified or recommended by manufacturer.
- E. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer and as directed in this specification, to material that is required to be painted or finished and that has not been prime coated. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
- F. Pigmented (Opaque) Finishes: Completely cover surfaces to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- G. Completed Work: Match approved samples and mock-up for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements at no expense to the Owner.

3.5 ELASTOMERIC COATING APPLICATION

- A. General: Prepare and apply materials according to coating manufacturer's written instructions, at recommended rates and coverages.
 - 1. Test prepared surfaces for alkalinity, moisture, and other conditions as recommended by coating manufacturer.
- B. Apply coating by roller, spray, or brush. Use applicator and technique best suited for substrate and type of material being applied.

1. Apply materials as soon as practicable after completion of surface preparation or full curing of previous material application.
 2. Do not coat over conditions detrimental to formation of durable coating film, such as dirt, rust, scale, grease, or moist or scuffed surfaces.
 3. Apply barrier coat over incompatible primers or remove and re-prime.
- C. Prime surfaces as necessary.
- D. Apply elastomeric coating in one or two coats to provide thickness of 10 to 15 dry mils (0.010 to 0.015 inch) or as recommended by coating manufacturer, whichever is greater. Do not apply second coat until first coat has fully cured. Select application method to avoid excessive coating thickness.
1. If undercoats or other conditions show through final coat, apply additional coats until coating film is of uniform finish, color, and appearance if approved by Architect/Engineer.
 2. Ensure that edges, corners, and crevices receive minimum dry film thickness.
 3. Brush Application: Work material into surfaces in even film. Eliminate cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Neatly draw lines at edges and color breaks.
 4. Roller Application: Keep cover wet; do not dry roll. Apply material in sections. Lay on required amount of material, working material into grooves and rough areas. Then level material, working it into surface.
 5. Spray Application: Use spray application only when permitted by manufacturer's written instructions and authorities having jurisdiction. Apply material to provide equivalent hiding of brush-applied coat. Do not double back; building up film thickness of two coats in one application.
 6. Do not coat over UL, FMG, or other labels.

3.6 FIELD QUALITY CONTROL

- A. Owner and Architect/Engineer may perform the following testing during the period when coating is being applied:
1. Owner may engage a qualified independent testing agency to sample coating material being used. Samples of material delivered to Project will be taken, identified, sealed, and certified in the presence of Contractor.
 2. Testing agency will perform appropriate tests for the following characteristics as required by Owner:
 - a. Adhesion
 - b. Dry film thickness
 - c. Chalking
 - d. Environmental conditions
 - e. pH level
 3. Owner or Architect/Engineer may direct Contractor to stop painting if test results show material being used does not comply with specified requirements. Contractor will remove noncomplying coating from Project site, pay for testing, and repaint surfaces painted with the noncomplying coating. If necessary, Contractor may be required to remove noncomplying coating from previously painted surfaces if, on repainting with specified paint, the two coatings are incompatible.

3.7 ELASTOMERIC COATING FIELD QUALITY CONTROL

- A. Material Coverage Rates.
 - 1. At beginning of application, calibrate material coverage rate with wet-mil thickness equivalent to minimum specified dry-mil thickness. Measure wet-mil thickness with thickness gauge.
 - 2. Measure wet-mil thickness at least once for every 200 square feet of surface coated. Adjust coverage rate to maintain minimum thickness.
- B. Owner may, at its expense, perform the following tests. Contractor shall provide access to test locations determined by Architect/Engineer.
 - 1. Measure dry-film thickness of coating. Coating thickness is acceptable if within specified range.
 - 2. Perform adhesion tests per ASTM D3359, Test Method A, after coating has cured. Coating adhesion is acceptable if no peeling or coating removal occurs (Rating 5A).
 - 3. Perform pull-off tests per ASTM D4541, after coating has cured. Coating application is acceptable if test results are at least 100 pounds per square inch.
 - 4. If coating application is acceptable, Owner will pay Contractor to repair substrate and coating as necessary at test locations.
 - 5. If coating application is unacceptable, Architect/Engineer will determine remedy. Contractor shall remove and replace unacceptable coating or perform other remedial actions at no cost to Owner. Contractor shall also repair substrate and coating at test locations with unacceptable results at no cost to Owner. Contractor may, at own expense, perform additional measurements and testing to determine limits of areas with unacceptable coating.
- C. Completed Work shall match approved mock-up for color, texture, and coverage, in opinion of Architect/Engineer, and shall be free from flowlines, streaks, blisters, and other surface imperfections. Remove, refinish, or recoat Work not complying with specified requirements.

3.8 CLEANING

- A. At the end of each workday, clean Site and Work areas and place rubbish, empty cans, rags, and other discarded materials in appropriate containers.
 - 1. Post “Wet Coating” signs to warn against freshly painted surfaces. Damage to clothing and personal property due to contact with un-posted, wet coating surfaces to be remedied with the individuals.
- B. After completing coating Work:
 - 1. Clean spillage, overspray, and splatter from adjacent surfaces using cleaning agents and procedures recommended by manufacturer of affected surface. Exercise care to avoid scratching or damage to surfaces.
 - 2. Repair surfaces stained, marred, or otherwise damaged during coating Work.
 - 3. Clean up debris and surplus materials and remove from Site.
- C. At End of Project: At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.
 - 1. Remove supplies from site.
 - 2. Collect surplus coating materials that cannot be reused and deliver to recycling or disposal facility. Materials that cannot be reused must be disposed of according to requirements of local jurisdiction.

END OF SECTION

REPORTS

- Limited Hazardous Materials Survey
- Hazardous Materials Technical Specifications
 - 01 11 10 Summary of Hazardous Materials Work
 - 02 83 00 Lead-Related Activities

Limited Hazardous Materials Survey Report

Electrical Maintenance Building

425 Tacoma Ave S
Tacoma, WA 98402

Prepared for:
City of Tacoma Public Work Department
Facilities Management Division
747 Market Street, Room 744
Tacoma, WA 98402

July 11, 2022
PBS Project No. 41286.021



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APPENDIX A: PLM Bulk Sampling Information

PLM Bulk Sample Inventories
PLM Bulk Sample Laboratory Data Sheets
PLM Bulk Sample Chain of Custody Documentation

APPENDIX B: AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Sample Inventories
AA Lead Paint Chip Laboratory Data Sheets
AA Lead Paint Chip Chain of Custody Documentation

APPENDIX C: Certifications

1 INTRODUCTION

1.1 Project Background

PBS Engineering and Environmental, Inc. (PBS) performed a limited hazardous materials survey of the exterior and roof of the Electrical Maintenance Building (EMB) located at 425 Tacoma Ave S in Tacoma, Washington, in conjunction with the planned renovations. The intent of this investigation is to ensure that the City of Tacoma is in compliance with applicable regulatory requirements that a "good faith inspection" for ACMs be performed prior to renovation activities.

At the request of the City of Tacoma Public Works Facilities Management, all accessible areas associated with the planned work were inspected for the presence of Asbestos-Containing Materials (ACMs) and Lead-Containing Paint (LCP).

1.2 Building Description

The exterior of the EMB is comprised of wood siding with wood framed doors and windows. The roof is pitched with composite shingles. Various vent pipes are located on the roof with no associated caulking observed.

Interior sections of the building were not inspected as part of this limited hazardous materials survey.

1.3 Survey Process

Accessible areas included in the project scope were inspected by AHERA Certified Building Inspector Ryan Hunter (Cert. No. IRO-22-7254B Exp. 2/10/2023) on November 6, 2019, and June 22, 2022. PBS endeavored to inspect all accessible areas of the scope of work. Inaccessible areas consist of those requiring selective demolition, fall protection, or confined space entry protocols in order to gain access.

When observed, suspect materials were sampled, or presumed to contain asbestos. Seven (7) bulk samples were collected of suspect asbestos-containing materials. All samples were assigned a unique identification number and transmitted for analysis to Seattle Asbestos Test (NVLAP #200768-0) under chain-of-custody protocols. Samples were analyzed according to EPA Method 600R-93/116 using Polarized Light Microscopy (PLM), which has a reliable limit of quantification of 1% asbestos by volume. Information regarding the type and location of sampled materials can be found on the attached PLM Sample Inventory.

Suspect ACMs may exist in inaccessible areas. PBS endeavored to determine the presence of suspect materials in all accessible areas included in the scope of work. While PBS has endeavored to identify ACM that may be found in concealed locations, additional unidentified ACM may exist.

2 FINDINGS

2.1 Asbestos-Containing Materials (ACMs)

The following materials were determined to contain greater than 1% asbestos:

- No asbestos-containing materials were identified as part of this investigation.

The following materials sampled in areas of planned work were found not to contain detectable concentrations of asbestos:

- Composite shingles and felt paper
- Exterior window frame caulk
- Exterior window frame putty

For a complete listing of representative bulk sampling and associated laboratory analysis refer to the attached PLM Asbestos Sample Inventories and associated laboratory reports.

2.2 Lead-Containing Paint (LCP)

PBS inspected representative paint coatings for lead. Three (3) samples of representative painted coatings were collected throughout for lead analysis as part of this investigation. The samples were assigned unique identification numbers and transmitted to NVL Laboratories, Inc. (AIHA-LAP #101861) under chain-of-custody protocols for analysis using Flame Atomic Absorption.

Lead was detected in the following painted coatings

- Light tan paint on wood siding of the EMB – 4.2% lead;
- Red paint on wood siding of the EMB – 2.5% lead;
- White paint on wood trim of the EMB – 11% lead;

Based on testing and the age of the building all exterior painted coatings are considered lead containing. As such, work impacting lead-containing paint will require compliance with WAC 296-155-176, Lead. Refer to the attached AA Lead Paint Sample Inventory for additional information on materials sampled as part of this investigation.

3 RECOMMENDATIONS

3.1 ACMs

No asbestos-containing materials were identified as part of this investigation. The possibility exists that suspect ACMs may be present at concealed locations in wall and ceiling cavities, within HVAC equipment, and potentially in other select concealed areas. These may include, but are not limited to waterproofing membrane, vapor barriers, internal gasketing, mastics, caulking, and sealants on HVAC equipment, construction adhesives, electrical insulators, below grade pipe covering and insulation.

The possibility exist that suspect ACM may be present in equipment, wall and ceiling cavities, and in select areas of the ceiling included in the scope of renovations. These may include but are not limited to ACM pipe insulation and hard-mudded fittings in wall cavities, chase areas and ceiling plenums, construction mastics and adhesives within wall/ceiling assemblies, mechanical insulation/components on ductwork and equipment, and/or weatherproofing/moisture barriers.

PBS recommends that any previously unidentified materials revealed during renovation activities be sampled for asbestos content prior to impact. In the event that suspect ACM is uncovered during construction, contractor should stop work immediately and inform the owner promptly for confirmation testing. All untested materials should be presumed asbestos-containing or tested for asbestos content prior to impact.

3.2 LCP

Representative painted coatings sampled as part of this investigation did contain lead detectable by laboratory analysis. Other painted coatings may exist in inaccessible areas of the work area or in secondary coatings. Any previously unidentified painted coatings should be considered lead containing until sampled and proven otherwise.

Impact of painted surfaces with detectable concentrations of lead requires construction activities to be performed according to Washington Labor and Industries regulations for Lead in Construction (WAC 296-62-155). Workers impacting LCP should be provided the proper personal protective equipment and use proper work methods to limit occupational and environmental exposure to lead until an initial exposure assessment has been conducted.

Report prepared by:

 Digitally
signed by
Ryan Hunter

Ryan Hunter
AHERA Building Inspector/Project Manager
Cert. # IRO-22-7254B, expiration 2/10/2023

Report reviewed by:

 Digitally
signed by
Tim Ogden

Tim Ogden
Principal/ Sr. Project Manager,
AHERA Building Inspector
Cert. #IR-22-2008A, exp. 3/23/2023

APPENDIX A

PLM Bulk Sampling Information

PLM Bulk Sample Inventory

PLM Bulk Sample Laboratory Data Sheets

PLM Bulk Sample Chain of Custody Documentation

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
41286.021 -001	Gray Window Putty	North Elevation - Lower Window	Layer 1: Gray/brittle material with paint Layer 2: Yellow mastic	NAD NAD	SAT
41286.021 -026	Composite Shingles Felt Paper	Roof North A-Frame	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic material wih fibrous material Layer 3: Black asphaltic fibrous material	NAD NAD NAD	SAT
41286.021 -035	Composite Shingles	North Roof	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic fibrous material	NAD NAD	SAT
41286.021 -036	Exterior Window Putty	South Elevation - 1st Floor Window	Layer 1: White brittle material with paint	NAD	SAT
41286.021 -037	Exterior Window Putty	West Elevation - 2nd Floor Window	Layer 1: White brittle material with paint	NAD	SAT
41286.021 -038	Exterior Window Frame Caulk	South Elevation - 1st Floor Window	Layer 1: White brittle material with paint	NAD	SAT
41286.021 -039	Exterior Window Frame Caulk	West Elevation - 2nd Floor Window	Layer 1: Tan brittle material with paint	NAD	SAT

SEATTLE ASBESTOS TEST, LLC

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA 98105, Tel: 206.633.1111, Fax: 206.633.4747, NVLAP Lab Code: 201057-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Mr. Tim Ogden, Mr. Ryan Hunter, Ms. Eman Jabali

Client: PBS Engineering and Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Tel: 206.233.9639

Date Analyzed: 11/8/2019

Client Job#: 41286.021

Project Location: FCC/EOC Roofs and Exteriors

Laboratory batch#: 201912933

Samples Received: 34

Enclosed please find the test results for the bulk samples submitted to our laboratory for asbestos analysis. Analysis was performed using polarized light microscopy (PLM) in accordance with Test Method US EPA/600/R-93/116.

Percentages for this report are done by visual estimate and relate to the suggested acceptable error ranges by the method. Since variation in data increases as the quantity of asbestos decreases toward the limit of detection, the EPA recommends point counting for samples containing between <1% and 10% asbestos (NESHAP, 40 CFR Part 61). Statistically, point counting is a more accurate method. If you feel a point count might be beneficial, please feel free to call and request one.

The test results refer only to the samples or items submitted and tested. The accuracy with which these samples represent the actual materials is totally dependent on the acuity of the person who took the samples. This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government. The test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory.

This report is highly confidential and will not be released without your consent. Samples are archived for 30 days after the analysis, and disposed of as hazardous waste thereafter.

Thank you for using our service and let us know if we can further assist you.

Sincerely



Steve (Fanyao) Zhang
President



201912933

LABORATORY CHAIN OF CUSTODY

Project: FCC/EOC Roofs and ExteriorsProject #: 41286.021Analysis requested: PLMDate: 11/07/2019Relinquished by/Signature: Ryan Hunter / *Ryan Hunter*Date/Time: 11/07/2019Received by/Signature: *Carolyne Yea* *Carolyne Yea*Date/Time: 11/7/19 15:02

E-mail results to:

- ☐ Brian Stanford
☐ Willem Mager
☐ Gregg Middaugh
☐ Mark Hiley
☒ Tim Ogden
☐ Prudy Stoudt-McRae

- ☐ Cel Alvarez
☐ Janet Murphy
☐ Kaitlin Soukup
☐ Martin Estira
☐ Justin Day
☐ Claire Tsai

- ☐ Mike Smith
☐ Ferman Fletcher
☐ Holly Tuttle
☒ Ryan Hunter
☒ Eman Jabali

TURN AROUND TIME:

- ☐ 1 Hour
☐ 2 Hours
☐ 4 Hours

- ☒ 24 Hours
☐ 48 Hours

- ☐ 3-5 Days
☐ Other _____

SAMPLE DATA FORM

Sample #	Material	Location	Lab
41286.021-001	Gray Window Putty	425 bldg – North Elevation Lower Window	SAT
41286.021-002	Grout A/w Block Windows	415 bldg – West Elevation South Window	
41286.021-003	Gray Window Caulk	415 bldg – West Elevation Stone and Metal Window Frames	
41286.021-004	Gray Window Caulk	415 bldg – East Elevation North Lower Windows	
41286.021-005	Gray Window Putty	415 bldg – East Elevation North Lower Windows	
41286.021-006	Gray Window Caulk	415 bldg – East Elevation North Upper Windows	
41286.021-007	Gray Window Putty	415 bldg – East Elevation North Upper Windows	
41286.021-008	Gray Window Caulk	415 bldg – East Elevation South Lower Windows	
41286.021-009	Gray Window Putty	415 bldg – East Elevation South Lower Windows	
41286.021-010	Gray Sealant	415 bldg – North Elevation Roof Duct and Window	
41286.021-011	Gray Door Frame Caulk	415 bldg – East Elevation Lower Door	
41286.021-012	Tan Caulk @ Stucco and Cement	415 Bldg – East Elevation	
41286.021-013	Light Gray Caulk	415 bldg – Vent Pipes on Generator Roof	
41286.021-014	Tan Caulk @ Roof Line and Brick	415 bldg – Generator Roof East Elevation	
41286.021-015	White Caulk @ Roof Line and Brick	415 bldg – Upper Roof and Top Roof North Elevation	
41286.021-016	Pink Caulk	415 bldg – Upper Parapet	
41286.021-017	Mortar A/w Brick	415 bldg – Top Roof South Elevation	
41286.021-018	Mortar A/w Brick	415 bldg – West Elevation	
41286.021-019	Mortar A/w Brick	415 bldg – East Elevation	



LABORATORY CHAIN OF CUSTODY

PAGE 2 OF 2

[illegible]

SEATTLE ASBESTOS TEST

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA 98105, Tel: 206.633.1111, Fax: 206.633.4747, NVLAP Lab Code: 201057-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT PLM by Method EPA/600/R-93/116

Mr. Tim Ogden, Mr.
Attn.: Ryan Hunter, Ms.
Eman Jabali

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 41286.021

Batch#: 201912933

Date Received: 11/7/2019

Samples Rec'd: 34

Date Analyzed: 11/8/2019

Samples Analyzed: 34

Project Loc.: FCC/EOC Roofs and Exteriors

Analyzed by: Carolyn Yeoh / Yajun Gao

Reviewed by: Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	41286.021-001	1	Gray/beige brittle material with paint		None detected	Binder, Filler, Paint	3	Cellulose
		2	Yellow mastic		None detected	Mastic/binder	2	Cellulose
2	41286.021-002	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
3	41286.021-003	1	Gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
		2	Trace gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
4	41286.021-004	1	Gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
		2	Gray brittle material with paint		None detected	Binder, Filler	3	Cellulose
5	41286.021-005	1	Dark gray soft material		None detected	Binder, Filler	2	Cellulose
6	41286.021-006	1	Dark gray soft/elastic material		None detected	Binder, Filler	2	Cellulose
7	41286.021-007	1	Trace gray/green brittle material		None detected	Binder, Filler	3	Cellulose
8	41286.021-008	1	Dark gray soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
9	41286.021-009	1	White soft material with paint		None detected	Binder, Filler, Paint	2	Cellulose
10	41286.021-010	1	Gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
11	41286.021-011	1	Dark gray soft/elastic material with paint		None detected	Binder, Filler, Paint	2	Cellulose
		2	Red sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
12	41286.021-012	1	Trace tan soft/elastic material		None detected	Binder, Filler	3	Cellulose
		2	Trace gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
13	41286.021-013	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
14	41286.021-014	1	Tan soft/elastic material		None detected	Binder, Filler	2	Cellulose
15	41286.021-015	1	Off-white soft/elastic material		None detected	Binder, Filler	2	Cellulose
16	41286.021-016	1	Pink soft/elastic material with trace paint		None detected	Binder, Filler, Paint	2	Cellulose

SEATTLE ASBESTOS TEST

Seattle Laboratory: 4500 9th Ave. NE, Suite 300, Seattle, WA 98105, Tel: 206.633.1111, Fax: 206.633.4747, NVLAP Lab Code: 201057-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT PLM by Method EPA/600/R-93/116

Mr. Tim Ogden, Mr.
Attn.: Ryan Hunter, Ms.
Eman Jabali
Job#: 41286.021
Samples Rec'd: 34
Project Loc.: FCC/EOC Roofs and Exteriors

Client: PBS Engineering and
Environmental, Seattle
Batch#: 201912933
Date Analyzed: 11/8/2019

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102
Date Received: 11/7/2019
Samples Analyzed: 34

Analyzed by: Carolyn Yeo / Yajun Gao

Reviewed by: Steve (Fanyao) Zhang, President

17	41286.021-017	1	Tan sandy/brittle material	None detected	Sand, Filler, Binder	3	Cellulose
18	41286.021-018	1	Tan sandy/brittle material	None detected	Sand, Filler, Binder	2	Cellulose
19	41286.021-019	1	Tan sandy/brittle material	None detected	Sand, Filler, Binder	3	Cellulose
20	41286.021-020	1	Gray sandy/brittle material	None detected	Sand, Filler, Binder	3	Cellulose
21	41286.021-021	1	Pink sandy/brittle material	None detected	Sand, Filler, Binder	2	Cellulose
22	41286.021-022	1	Dark gray paint	None detected	Paint/binder	2	Cellulose
		2	Metal piece	None detected	Metal		None detected
		3	Gray mastic with debris	None detected	Mastic/binder, Debris	3	Cellulose
23	41286.021-023	1	Gray soft/elastic material	None detected	Binder, Filler	4	Cellulose
24	41286.021-024	1	Gray brittle material with fibrous material	8 Chrysotile	Filler, Binder	3	Cellulose
		2	Black asphaltic material	None detected	Asphalt/binder	2	Cellulose
25	41286.021-025	1	Black asphaltic material	None detected	Asphalt/binder	3	Cellulose
26	41286.021-026	1	Black asphaltic material with sand	None detected	Asphalt/binder, Sand	5	Glass fibers
		2	Black asphaltic material with fibrous material	None detected	Asphalt/binder, Filler	30	Glass fibers, Cellulose
		3	Black asphaltic fibrous material	None detected	Filler, Asphalt, Binder	67	Cellulose
27	41286.021-027	1	Black asphaltic material with sand	None detected	Asphalt/binder, Sand	5	Glass fibers
		2	Black asphaltic material with fibrous material	None detected	Asphalt/binder, Filler	30	Glass fibers, Cellulose
		3	Black asphaltic material	None detected	Asphalt/binder	3	Cellulose
		4	Black asphaltic material with fibrous material	None detected	Asphalt/binder, Filler	28	Glass fibers, Cellulose
		5	Black asphaltic material	None detected	Asphalt/binder	3	Cellulose
		6	Black asphaltic material with fibrous material	None detected	Asphalt/binder, Filler	32	Glass fibers, Cellulose
		7	Black asphaltic material	None detected	Asphalt/binder	3	Cellulose

SEATTLE ASBESTOS TEST, LLC

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Tim Ogden	Date Analyzed: 6/24/2022
Client: PBS Engineering and Environmental, Seattle	Client Job#: 41286.021
Address: 214 E Galer Street, Suite 300, Seattle, WA 98102	Project Location: EMB Building - Exterior
Tel: 206.233.9639	Laboratory batch#: 202210379
Date Report Issued: 6/24/2022	Samples Received: 5

Enclosed please find the test results for the bulk samples submitted to our laboratory for asbestos analysis. Analysis was performed using polarized light microscopy (PLM) in accordance with Test Method US EPA - 40 CFR Appendix E of Part 763, Interim Method of Determination of Asbestos in Bulk Insulation Samples and Test Method US EPA/600/R-93/116.

Percentages for this report are done by visual estimate and relate to the suggested acceptable error ranges by the method. Since variation in data increases as the quantity of asbestos decreases toward the limit of detection, the EPA recommends point counting for samples containing between <1% and 10% asbestos (NESHAP, 40 CFR Part 61). Statistically, point counting is a more accurate method. If you feel a point count might be beneficial, please feel free to call and request one.

The test results refer only to the samples or items submitted and tested. The accuracy with which these samples represent the actual materials is totally dependent on the acuity of the person who took the samples. This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government. The test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory. If the sample is inhomogeneous the sub-samples of the components are analyzed separately as layers. This report in its entirety consists of this cover letter, the customer sampling COC or data sheet, and the analytical report which is page numbered.

This report is highly confidential and will not be released without your consent. Samples are archived for 30 days after the analysis, and disposed of as hazardous waste thereafter.

Thank you for using our service and let us know if we can further assist you.

Sincerely

SZhang

Steve (Fanyao) Zhang
Approved Signatory

[illegible]

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

Disclaimer: This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government.

ANALYTICAL LABORATORY REPORT

[PLM] EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;
EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

[PLM]

Attn.: Tim Ogden

Client: PBS Engineering and
Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 41286.021

Batch#: 202210379

Date Received: 6/23/2022


Samples Rec'd: 5

Date Analyzed: 6/24/2022

Samples Analyzed: 5

Project Loc.: EMB Building - Exterior

Analyzed by: Cici Xu

Approved Signatory:  Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	41286.021-035	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	25	Glass fibers
		2	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	67	Cellulose
2	41286.021-036	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
3	41286.021-037	1	White brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
4	41286.021-038	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
5	41286.021-039	1	Tan brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose

APPENDIX B

AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Sample Inventory

AA Lead Paint Chip Laboratory Data Sheets

AA Lead Paint Chip Chain of Custody Documentation

AA LEAD PAINT CHIP SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Paint Color / Component or Substrate</u>	<u>Sample Location</u>	<u>Results (mg/kg)</u>	<u>Results (%)</u>	<u>Lab</u>
41286.021 -Pb01	Light Tan / Wood / Siding	EMB Building West Elevation	42000	4.2000	NVL
41286.021 -Pb02	Red / Wood / Siding	EMB Building North Elevation	25000	2.5000	NVL
41286.021 -Pb03	White / Wood / Trim	EMB Building West Elevation Garage Door	110000	11.0000	NVL

November 8, 2019

Tim Ogden

PBS Environmental - Seattle

214 E Galer St. Suite. 300

Seattle, WA 98102



RE: Metals Analysis; NVL Batch # 1923734.00

Dear Mr. Ogden,

Enclosed please find the test results for samples submitted to our laboratory for analysis. Preparation of these samples was conducted following protocol outlined in EPA Method SW 846 -3051 unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with U.S. EPA, NIOSH, OSHA and other ASTM methods.

For matrix materials submitted as paint, dust wipe, soil or TCLP samples, analysis for the presence of total metals is conducted using published U.S. EPA Methods. Paint and soil results are usually expressed in mg/Kg which is equivalent to parts per million (ppm). Lead (Pb) in paint is usually expressed in mg/Kg (ppm), Percent (%) or mg/cm² by area. Dust wipe sample results are usually expressed in ug/wipe and ug/ft². TCLP samples are reported in mg/L (ppm). For air filter samples, analyses are conducted using NIOSH and OSHA Methods. Results are expressed in ug/filter and ug/m³. Other matrix materials are analyzed accordingly using published methods or specified by client. The reported test results pertain only to items tested and are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more details.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance please feel free to call us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

A handwritten signature in black ink that reads 'Yasuyuki Hida'.

Yasuyuki Hida, Laboratory Analyst

Enc.: Sample results



Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Analysis Report

Total Lead (Pb)



Client: PBS Environmental - Seattle
Address: 214 E Galer St. Suite. 300
Seattle, WA 98102

Batch #: 1923734.00

Matrix: Paint
Method: EPA 3051/7000B
Client Project #: 41286.021
Date Received: 11/7/2019
Samples Received: 8
Samples Analyzed: 8

Attention: Mr. Tim Ogden
Project Location: FCC/EOC Roofs and Exteriors

Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent
19129834	41286.021-Pb01	0.2328	43	42000	4.2
19129835	41286.021-Pb02	0.1779	56	25000	2.5
19129836	41286.021-Pb03	0.2285	44	110000	11
19129837	41286.021-Pb04	0.2040	40	< 40	< 0.0040
19129838	41286.021-Pb05	0.1901	53	26000	2.6
19129839	41286.021-Pb06	0.0000	110	2500	0.25
19129840	41286.021-Pb07	0.1895	53	79000	7.9
19129841	41286.021-Pb08	0.2154	40	280000	28

Sampled by: Client

Analyzed by: Shalini Patel

Reviewed by: Yasuyuki Hida

Date Analyzed: 11/08/2019

Date Issued: 11/08/2019

Yasuyuki Hida, Laboratory Analyst

mg/ Kg =Milligrams per kilogram

Percent = Milligrams per kilogram / 10000

Note : Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

RL = Reporting Limit

'<' = Below the reporting Limit

Bench Run No: 2019-1108-06

FAA-02

LEAD LABORATORY SERVICES



Company PBS Environmental - Seattle
Address 214 E Galer St. Suite. 300
 Seattle, WA 98102
Project Manager Mr. Tim Ogden
Phone (206) 233-9639
Office: (800) 628-9639

NVL Batch Number **1923734.00**
TAT 3 Days **AH** No
Rush TAT
Due Date 11/12/2019 **Time** 12:50 PM
Email tim.ogden@pbsusa.com
Fax (866) 727-0140

Project Name/Number: 41286.021 **Project Location:** FCC/EOC Roofs and Exteriors

Subcategory Flame AA (FAA)

Item Code FAA-02 EPA 7000B Lead by FAA <paint>

Total Number of Samples 8

Rush Samples

	Lab ID	Sample ID	Description	A/R
1	19129834	41286.021-Pb01		A
2	19129835	41286.021-Pb02		A
3	19129836	41286.021-Pb03		A
4	19129837	41286.021-Pb04		A
5	19129838	41286.021-Pb05		A
6	19129839	41286.021-Pb06		A
7	19129840	41286.021-Pb07		A
8	19129841	41286.021-Pb08		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	11/7/19	1250
Analyzed by	Shalini Patel		NVL	11/8/19	
Results Called by					
<input type="checkbox"/> Faxed <input type="checkbox"/> Emailed					

Special Instructions:

Date: 11/7/2019
 Time: 1:22 PM
 Entered By: Kelly AuVu

APPENDIX C

PBS Certifications

THIS IS TO CERTIFY THAT

RYAN HUNTER

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ONLINE AHERA ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 02/10/2022

Course Location: Online

Certificate: IRO-22-7254B



CCB #SRA0615 4-Hr Training

4-Hour Online AHERA Inspector Refresher Training; AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 02/10/2023

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, Oregon 97239
503.248.1939

A handwritten signature in black ink, which appears to read "Andy Fridley", is written over a horizontal line.

Andy Fridley, Instructor

THIS IS TO CERTIFY THAT

TIM OGDEN

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 03/23/2022

Course Location: Online,

Certificate: IR-22-2008A



CCB #SRA0615 4-Hr Training

4-Hour AHERA Inspector Refresher Training; AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 03/23/2023

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239

A handwritten signature in black ink, reading "Andy Fridley", is written over a horizontal line.

Andy Fridley, Instructor

SECTION 01 11 10

SUMMARY OF HAZARDOUS MATERIALS WORK

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

- A. Disturbance of asbestos-containing materials (ACMs) is not anticipated as part of the Project. See below for additional information and requirements.
- B. Lead-containing Items: The Owner has conducted a survey of lead-containing items in the areas to be impacted by the Work. Samples of representative paint coatings to be impacted by the project were found to contain detectable lead. Survey samples and results are included in the attached Limited Hazardous Materials Survey Report.

1.02 RELATE WORK

- A. Work performed under this specification section is governed by related specification sections, plans or drawings, including but not limited to, the following:
 - Division 00 - Procurement and Contracting Requirements;
 - Division 01 - General Requirements;
 - Division 02 - Existing Conditions;

1.03 ASBESTOS-CONTAINING MATERIALS

- A. Presence of Asbestos: The Owner has surveyed accessible portions of the building included in the Work with the objective of identifying the presence of asbestos-containing materials. The Contractor shall refer to the Hazardous Materials Survey Report attached to this Section, which lists suspect-ACMs sampled included in the Work and analysis for asbestos content. The Contractor shall ensure that a copy of this summary is made available to and retained on the project site by all subcontractors.
- B. Applicable Contractor shall be aware that suspect-ACMs may exist in inaccessible locations included in the Work. The Contractor shall proceed with caution during all phases of the Work. Should any suspect-ACMs not indicated in the Hazardous Materials Survey Report be encountered, the Contractor shall immediately notify the Owner and Environmental Consultant.
- C. The Contractor is advised that should additional ACMs not included in the Hazardous Materials Survey Reports be encountered, the Owner may elect to include such materials in the Work according to the terms of the General Conditions. Work impacting such materials is not to occur prior to the Contractor receiving explicit written authorization from the Owner, and any Work performed without such approval is performed at the Contractor's own risk and expense.

- D. Disturbance or impact of ACMs may cause asbestos fibers to be released into the atmosphere, thereby creating a potential health hazard. Contractor is to apprise all workers, supervisory personnel, subcontractors, and consultants who will be at the jobsite of the seriousness of this potential hazard and of proper Work procedures that must be followed, should it occur.
 - 1. Should the disturbance or impact of ACMs occur, or additional ACMs not included in the Hazardous Materials Survey Report be encountered, the Contractor shall immediately notify the Owner.

1.04 LEAD CONTAINING PAINT/COMPONENTS

- A. Lead-containing paint: The Owner has conducted a survey for lead-containing paint in the areas to be impacted by the Work. Refer to the Limited Hazardous Materials Survey Report for locations of lead-containing paint. Perform work impacting lead-containing paint in accordance with Section 02 83 00.
- B. Factory painted coatings exist on flashings, copings, equipment, etc. Consider factory painted coatings to contain low concentrations of lead. Consider any painted coatings that have not been tested to be lead-containing.

1.05 WORK COVERED BY CONTRACT DOCUMENTS

- A. Asbestos related impacts are not anticipated as part of the Work.
- B. The contractor shall comply with all applicable local, state and federal regulations, laws and ordinances concerning removal, remodeling, cutting, handling, storage, disposal, monitoring and protection against exposure or environmental pollution related to lead and regulated metals. Work related to lead-containing paint, lead-containing components and regulated metals within this contract is the responsibility of the Contractor and shall be performed in accordance with all applicable local, state and federal regulations and the Contract Documents.

1.06 EXISTING CONDITIONS

- A. The Environmental Consultant and Owner make no representation, warranty, or guarantee the conditions indicated by the test report or inspection summary are representative of those conditions existing throughout the area, or that unforeseen developments may not occur, or that materials other than, or in proportions different from those indicated, may not exist.
- B. Contractor advised that the locations of all suspect-ACMs may not be clearly known, and that care should be taken to prevent impact of ACMs located in concealed and inaccessible locations.

1.07 WORK NOT COVERED BY CONTRACT DOCUMENTS

- A. Not Used.

1.08 OWNER'S RULES

- A. Contractor shall abide by all facility rules and regulations.

1.09 CLEAN UP

- A. Ensure that all areas are free of all refuse and debris at completion of Work.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 02 83 00
LEAD-RELATED ACTIVITIES

PART 1 GENERAL

1.1 SUMMARY OF WORK

- A. General work items include, but are not limited to:
 - 1. Compliance: Activities requiring compliance with this Section include the impact of painted coatings or building components (such as lead vent pipes, lead gutters, or painted coatings) containing lead as defined in these Specifications. Impacts are anticipated to include, but are not limited to: manual demolition, mechanical demolition, cutting, sawing, drilling, sanding, surface prepping and scrapping, welding or torch-cutting and incidental impact to painted items. See Section 011110, Summary of Hazardous Materials Work, for information regarding lead items in areas of the Work.
 - 2. Handling: Conduct activities involving lead-containing paint and lead-containing components under Work of this Contract in accordance with this Section and current applicable state and federal regulations including WAC 296-62-07521: "Lead"; WAC 296-155-176: "Occupational Health and Environmental Control"; and 29 CFR 1926.62: "Lead Exposure in Construction - Interim Final Rule".
 - 3. Waste Disposal: Disposal of demolition debris as "dangerous" according WAC 173-303 is not included in the Work. It is anticipated that waste produced by demolition activities will not require disposal as "dangerous" related to lead.
 - 4. Monitoring: Monitoring of airborne concentrations of lead in accordance with WAC 296-155-176 and this Section. The intent of this Section is to reduce and maintain employee exposure to lead and surrounding environmental airborne concentrations at or below the permissible exposure limit.
- B. Related Sections
 - 1. Division 00 - Procurement and Contracting Requirements
 - 2. Section 01 11 10 - Summary of Hazardous Materials Work

1.2 SUBMITTALS

- A. The Work may not proceed until complete Pre-Work Submittal package has been reviewed and approved by the Environmental Consultant. Allow ten days for Owner review.
- B. Additional requirements for submittals are also described in other sections of these specifications. The requirements in this section pertain to lead-related activities.
 - 1. Lead Compliance Program: Submit a site-specific lead compliance program in accordance with WAC Chapter 296-155. The plan shall be developed and implemented to provide engineering, work practice and administrative controls to reduce and maintain employee exposure to lead at or below the permissible exposure limit. The plan will include at a minimum task-specific description of activities; controls; personnel; procedures; method of compliance; technology used to meet compliance; air monitoring plan; detailed schedule; work practice program; administrative controls and other relevant

- information. Implementation of work practices not described in the Lead Compliance Plan will not be permitted until an amendment to the submittal is reviewed by the Environmental Consultant and Owner.
2. Medical Program: Submit written proof medical exam program complies with OSHA Lead Regulations 29 CFR 1910.2 and 1926.62, and WAC Chapter 296-155. Initial medical surveillance consisting of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels shall be submitted for each employee occupationally exposed to lead at or above the action level.
 3. Worker Training Program: Submit written proof indicating that all employees impacting lead-containing materials have received training per 29 CFR 1926.62 and WAC Chapter 296-155. Proof shall include a signature from the Contractor's Principal indicating that all employees performing lead related activities have completed such a program.
 4. Respirator Program: Submit written proof indicating respirator program complies with all parts of OSHA Lead Regulations 29 CFR 1910.134 and 1926.62, and WAC Chapter 296-155.
 5. Waste Stream Calculations: Submit a detailed breakdown of waste stream constituents and associated volumetric calculations for review by the Environmental Consultant to determine the need for additional waste stream calculation or further waste characterization.
- C. Final Submittals
1. Project Record Documents: Provide record of lead control activities including disposition of each type of lead-containing item removed from the site.
 2. Air Monitoring: Submit copies of all air monitoring data (including sample data sheets), chain-of-custody documentation and calibration records related to the initial exposure assessment for workers impacting lead-containing materials.
 3. Disposal: Submit completed disposal manifests and bills-of-lading for any waste disposed of as "dangerous" per WAC 173-303, or any items recycled as lead.

1.3 AIR MONITORING

- A. Testing Laboratory: An Independent Testing Laboratory shall be retained by the Contractor for all lead air analysis. All exposure monitoring analysis shall be performed in accordance with 29 CFR Part 1926.62 and WAC Chapter 296-155. The laboratory must participate in the ELPAT Program and be a member of AIHA. Air sample collection may be performed by an Industrial Hygienist or the Contractor's trained supervisor at the Contractor's option.
- B. Sample Documentation: Documentation shall be kept for each filter sample procured as to worker sampled, social security number, activity, work area location, date and time taken, volume of air drawn through filter, pump identification number and calibration. Documentation shall indicate in what areas tests were taken and shall clearly indicate the specified maximum allowable levels for each area tested. Report all data. Complete laboratory chain of custody records.

- C. Analysis Procedures: The samples shall be collected on 37 mm filters and analyzed within 24 hours using NIOSH Analytical Method No. 7105 or 7082. The containers shall be clearly labeled with project name and Sample Number and shall become property of the Owner at work completion at the Owner's request.
- D. Contractor's Sampling During Lead-Related Activities:
 - 1. Initial exposure: Exposure monitoring shall be performed by the Contractor during impact of representative lead-painted building components and metals-containing masonry mortar as required by WISHA regulations. It is the responsibility of the Contractor to determine potential exposures during the Work and provide exposure monitoring as needed.
 - 2. Most Contaminated Worker: The Contractor shall determine which worker(s) in each work area is probably experiencing the most severe exposure. This is the "Most Contaminated Worker(s)". An 8 hour TWA samples shall be collected on this worker(s). Worker shall wear a personal sampling pump and the sample shall be drawn from the breathing zone of this worker.
 - 3. Number of samples: The number of air samples collected shall be as defined in the approved Metals Compliance Program. Historical measurements per WAC 296-155 may be used to satisfy continuing exposure assessment requirements.
- E. Work Area Monitoring
 - 1. Monitoring: The Owner reserves the right to monitor Contractor's performance via air, dust wipe and TCLP samples during lead related activities, in addition to the Contractor's exposure monitoring and testing. Sampling by the Owner will not be available for use as the Contractor's Initial Exposure Assessment.
 - 2. Quality Control
 - a. Maximum allowable airborne concentrations: Contractor shall ensure that at all times airborne concentrations of metals outside work areas are at or below the applicable employees' respiratory exposure limits for metals impacted by the Work as defined by WISHA and other applicable regulations.
 - b. Immediately upon being notified of concentrations exceeding the specified maximum allowable levels, the Contractor shall perform the following steps in the order presented, at no additional cost to the Owner: Stop lead/metals related activities work, identify source of high lead concentrations, develop plan with Environmental Consultant and Owner to complete lead related activities in a manner to prevent visible emissions and elevated lead levels.

1.4 SUBCONTRACTORS

- A. Subcontractors employed by the Contractor shall be bound to all the work and safety standards specified. Subcontractor's personnel shall meet requirements as specified and shall be supervised by the Contractor during performance of this work.

1.5 LAIBILITY

- A. The Contractor is an independent contractor and not an employee of the Owner, Architect or Environmental Consultant. The Owner and the Environmental Consultant shall have no liability to the Contractor or any third persons for Contractor's failure to faithfully perform and

follow the provisions of these Specifications and the requirements of the governing agencies. Notwithstanding the failure of the Owner or the Environmental Consultant to discover a violation by the Contractor of any of the provisions of these Specifications, or to require the Contractor to fully perform and follow any of them, such failure shall not constitute a waiver of any of the requirements of these Specifications which shall remain fully binding upon the Contractor.

PART 2 PRODUCTS

2.1 PROTECTIVE CLOTHING AND EQUIPMENT

- A. Personnel Protective Equipment and materials for metals-related activities shall be provided per WAC 296-155

PART 3 EXECUTION

3.1 WORK PRACTICES

- A. Activities with the potential for visible emissions, including, but not limited to: dry saw-cutting, roto-hammering, scraping, power sanding, grinding, sand-blasting, etc. shall be performed with all applicable worker protection and environmental controls in place pending review of the Contractor's Negative Exposure Assessment by the Environmental Consultant and the Owner. Negative Pressure Enclosures are not specifically required should general dust control measures prevent migration of debris from work areas.
- B. Housekeeping: Maintain all surfaces as free as practicable of accumulations of metals-containing debris, residue or slurry, and perform clean-up of work areas as necessary according to applicable regulations, including WAC 296-155-17617. Ensure prompt cleanup of any dust, debris or runoff from impacts to masonry mortar using wet-wiping and HEPA-vacuuming, or other method described in the "Pre-Work Submittals".
- C. Environmental Controls: It is the responsibility of the Contractor to prevent distribution of airborne or settled dust/debris beyond the immediate work zone.
- D. Methods to achieve compliance are to be implemented as described in the "Pre-Work Submittals" outlined under Item 1.3-A-1.
- E. Work Practices:
 - 1. Set-up Activities: Prior to impact of lead-containing painted coatings, lead components or masonry mortar, Contractor shall cover the ground below the work area with 6-mil plastic sheeting or equivalent. The drop-sheeting shall extend outward a minimum of 6 feet from the location of item(s) being removed/impacted. Any tears that occur in the drop-sheeting shall be immediately repaired with duct tape or other acceptable seal. Debris shall be collected with a wet/dry vacuum or by wet-wiping to avoid escape from the drop-sheeting.
 - 2. Perform work impacting lead-containing painted coatings or lead components in accordance with the methods outlined in the lead compliance plan. Use procedures and

equipment required to limit occupational and environmental exposure to lead when lead-containing paint is impacted. The procedures employed by the Contractor shall not create the potential for contaminating surrounding areas or materials with lead-containing dust. Dust generation shall be minimized at all times.

3. At completion of the above operations, HEPA vacuum drop-sheeting to remove any paint particles or debris. Wet-wipe or mop plastic sheeting to remove all dust.

F. Disposal Procedures

1. Waste characterization of the anticipated general waste stream will be performed by the Owner as necessary. Results of such characterization will be provided to the Contractor as appropriate. The Owner anticipates that disposal of demolition debris can be performed as general waste.

END OF SECTION