

REQUEST FOR BIDS (by EMAIL)

Date: 10/18/19	To: Potential Bidders for SHA Solicitation #5286 Roof Replacement at Green Lake Plaza				
The work described below is subject to the condition	ns described on Attachr	ment A,	version 1 🗌	version 2 🖂	
SHA Reference No.: 5286	(Federal Prevaili Wages) Federal Wage Dec No.: WA20190011	Ū	OR	(State Prevailing Wages) Date of State Prevailing Wage Schedule: N/A	
	For Questions Conta		Phone No.:	(206) 615-3394	
Complete Work: 36 days Greg Antoine E-mail: purchasing@seattlehousing.org Project Description / Scope of Work: See Scope of Work attached See Scope of Work below Cost Estimate Between: \$200,000 to \$220,000					
PRE-BID SITE VISIT: Friday, October 25, 20 DEADLINE FOR QUESTIONS is Thursday, Email your questions to: purchasing@seattlehe	October 31, 2019 no				
BID DUE DATE AND TIME: Thursday, Nove		:00 PN	1		
The bidder is responsible for ensuring that its E			-		
Bids received after the deadline will not be con	sidered.				
EMAIL YOUR BID TO: purchasing@seattlel					
Seattle Housing Authority, 190 Queen Anno	Ave N, Seattle WA	98109	at 5th Floor	Receptionist Desk	
BIDDEF	R ACKNOWLEDGES	REC	EIPT OF ADD	ENDA(S) NUMBER(S):	
BIDDER MUST COMPLETE THE INFORMA bidder being determined non-responsive.	TION BELOW. Failu	ire to s	submit the sig	gned bid by email form will result in the	
If bidder has never done business with SHA, it required Section 3 forms with its bid form.					
If checked, Bidder must complete the attac	hed Detailed Bid Prid	ce For	m and provide	the total bid price below.	
Basic Bid Price (without Sales Tax)	100	Sales Tax on Materials and Labor (see Attachment A)		Total Bid Price (with Sales Tax)	
Bidder's Business Name:	Telephone No.:			E-Mail Address:	
Address:			City, State, Zi		
Business Classification:		Contrac	ctor Registration	on No.:	
☐ WBE ☐ MBE ☐ MWBE ☐ Sec	tion 3				
Signature:	Date:			Printed Name and Title of Person Signing Bid:	
By signing above, the Bidder acknowledges re furnish all material and labor and to perform all following: to have personally and carefully eval understanding of the same, including the requi	work described here luated the Project De	ein for t scription	he Bid Price non / Scope of \	oted above. The Bidder also certifies the	



Attachment A, Version 2

(\$35,000 to \$250,000)

Invitation to Bid (by EMAIL)

The work described in the Invitation to Bid (by Email) is subject to the following terms and conditions:

<u>Bidder Responsibility</u>: The bidder must meet the mandatory bidder responsibility criteria described below and as specified in RCW 39.04 or 2 CFR 200 in order to be considered a responsible contractor and be eligible for award consideration:

- 1. At the time of bid submittal, have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of the bid submittal;
- Have a current Washington Unified Business Identifier (UBI) number;
- 3. If applicable:
 - Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - Have a Washington Employment Security Department number, as required in Title 50 RCW;
 - Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW:
 - Electrical Contractor License, if required by Chapter 19.28 RCW
 - 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 RCW 39.12.065(3).
- 5. Has not more than one violation of the off-site, prefabricated, non-standard, project specific items reporting requirements of RCW 39.04.370. (Applicable until December 31, 2013)
- 6. Has not been debarred, suspended, or otherwise ineligible to contract with SHA and is not included on the Excluded Parties List System (EPLS) on GSA's SAM (System for Award Management) https://www.sam.gov/portal/public/SAM/ or the Department of Housing and Urban Development's "Limited Denial of Participation" list. This requirement also applies to the Bidder's principals.
- 7. Have completed training requirements under RCW 39.04.350 and RCW 39.06.020 before bidding on public works projects as determined by the Washington State Department of Labor & Industries OR have been in business with an active Unified Business Identifier (UBI) number for 3 or more years AND have performed work on 3 or more public works projects.

<u>Prevailing Wages:</u> The Contractor must pay all workers at least the prevailing wage rate for the type of work performed in accordance with the applicable prevailing wage rate schedule referenced on the Purchase Order or Request for Bid (by Fax) form and included in these solicitation documents. The type of wage schedule attached i.e., HUD Determined, Davis-Bacon, or the State Prevailing Wage schedule determines the appropriate labor standards that apply to the work as outlined below and contained in the General Conditions for Construction:

- 1) Part 11.13 for projects subject to the HUD-Determined wage rate schedule.
- 2) Part 11.12 for projects subject to Davis-Bacon wage schedule.
- 3) Part 5 for projects subject to the State prevailing wage schedule.

As part of its compliance with the prevailing wage requirements, the Contractor and, if applicable, subcontractor(s) shall comply with the requirement to submit a Statement of Intent to Pay Prevailing Wages and Affidavit of Wages Paid forms approved by the State of Washington's Department of Labor and Industries. The Owner will notify the Contractor of any special filing instructions that may apply for these forms depending on the funding source(s) of the project.

<u>Bid Bond</u>: SHA does not require a bid guarantee for small works roster construction projects estimated to cost \$250,000 or less.

<u>Insurance:</u> Within seven calendar days of award, the Contractor shall submit to SHA, and maintain throughout the contract, at no expense to SHA, the following insurance coverage at the limits noted (refer to Part 2 of SHA's General Conditions for more details):

- 1. Commercial General Liability Insurance. \$1,000,000 each occurrence, and \$2,000,000 aggregate
- Additional Insured Endorsement Ongoing Operations: The Owner must be included as an Additional Insured on a primary and non-contributory basis on all Commercial General Liability policies of the Contractor. A policy endorsement form CG2010 or equivalent must be provided to Owner as evidence of additional insured coverage.
- 3. Additional Insured Endorsement Completed Operations: The Contractor's CGL insurance shall include the Owner as an additional insured for Contractors Completed Operations by providing additional insured status on the CG2037 endorsement, or by an equivalent policy or endorsement provision. The Contractors Completed Operations additional insured status for the Owner shall remain in effect for not less than three (3) years following the Final Acceptance of the Work by the Owner.
- 4. Employers Liability policy or Washington Stop Gap Liability insurance endorsement: \$1,000,000 each accident
- 5. Workers Compensation coverage.
- 6. Commercial Automobile Liability Insurance. \$1,000,000 combined single limit coverage

Performance & Payment Bond Requirements: Within seven calendar days of award, the Contractor shall submit to SHA, in accordance with Section 2.05 of the General Conditions, a Performance and Payment bond. Failure to furnish a Performance and Payment bond within the time specified may render the Contractor ineligible for the contract. The SHA may then either award the contract to the next lowest responsible bidder or solicit new bids.

<u>Retainage Requirements</u>: SHA requires retainage to be withheld for small works roster construction projects costing \$35,000 or more.

For this project, SHA is subject to sales tax for materials, labor and services rendered. The Contractor must pay sales tax on labor and materials purchased for this job.

<u>Protests:</u> Any protest of award shall be resolved in accordance with SHA's Procurement Policies, which may be reviewed at <u>SHA website.</u>

General Conditions: SHA's General Conditions are hereby incorporated by reference and made a part of this Request for Bid (by Fax) and any subsequent contract or purchase order executed for this work as if fully included herein. If the event of any discrepancy between the terms of this Attachment A and the General Conditions, the terms of the General Conditions shall apply, except that the types and amounts of insurance specified above, and the waiver of the Contract Bond and withholding of retainage specified above, shall take precedence over the General Conditions. The General Conditions may be viewed by accessing SHA website, or upon request, a copy of the General Conditions may be obtained by calling SHA at (206) 615-3379.

<u>Performance Evaluation:</u> The Contractor's performance on this project will be evaluated in accordance with SHA's Contractor Performance Evaluation Program. A copy of the Program may be obtained by accessing <u>SHA website</u>.

Section 3: Section 3 of the Housing and Urban Development Act of 1968 (hereinafter "Section 3") requires SHA to the greatest extent feasible to provide employment opportunities to Section 3 residents. Section 3 residents include residents of SHA communities and other low-income residents of the metropolitan statistical area (MSA) covering King, Snohomish, and Pierce counties. Each bidder is required to submit with its Bid a Section 3 Resident Employment Plan that will result in hiring Section 3 residents to perform the work contemplated by this solicitation, and a Section 3 Business Certification form. Failure to complete these forms may render a bid non-responsive.

A. <u>Selection Preference for Section 3 Businesses:</u> If a bidder claims to be a Section 3 business on the Section 3 Business Certification form required to be submitted with its Bid, and the Bid of the Section 3 business exceeds the low bid by no more than 10%, SHA will conduct an investigation whether the business qualifies as a Section 3 business, and SHA may award the contract to the Section 3 business at the price bid by the Section 3 business. In submitting a Bid, the bidder agrees to provide any

information required by SHA to determine whether the business qualifies as a Section 3 business. A business may qualify as a Section 3 business by meeting one of the following criteria:

- 1. At least 51% of the business is owned by Section 3 qualified persons who live in the metropolitan statistical area (MSA) covering King, Snohomish, and Pierce counties and meet the prescribed income limitations based on family size as shown on the Section 3 Business Certification form.
- 2. 30% or more of the business' permanent, full-time employees (core employees within the last 12 months) are Section 3 qualified persons who live in the metropolitan statistical area (MSA) covering King, Snohomish, and Pierce counties and meet the prescribed income limitations based on family size as shown on the Section 3 Business Certification form.
- 3. The business makes a commitment to subcontract with Section 3 businesses for more than 25% of the dollar amount of all subcontracts to be awarded by the business. Prior to award, such businesses must submit a plan and the necessary support documents describing how the subcontracting commitment will be met. SHA will evaluate the plan and documents submitted and determine whether it is likely the bidder will attain the subcontracting percentage. SHA will monitor the Section 3 business' compliance with their subcontracting commitment. The bidder's failure to fulfill the Section 3 subcontracting commitment shall be a material breach of contract which may result in SHA taking any or all of the following actions: (1) demanding specific performance of the subcontracting plan; (2) withholding from contract payments the dollar amount of any or all subcontracts that were to have been awarded to Section 3 businesses or such lesser amount as may be appropriate; (3) withholding any liquidated damages that SHA may incur as a result of the bidder's failure to comply with its Section 3 commitment and subcontracting plan; and (4) declaring the bidder ineligible to compete for, or participate in, any SHA contract for a period of five years from the acceptance date of the contract in which the Section 3 subcontracting commitment was made.
- B. <u>Section 3 Contract Language:</u> The following language regarding Section 3 will be included as part of the contract to be executed based on this solicitation.
 - 1. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, I 2 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
 - 2. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
 - 3. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers representative of the contractors commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
 - 4. The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontractor in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

- 5. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractors obligations under 24 CFR part 135.
- 6. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- 7. With respect to work performed in connection with Section 3-covered Indian Housing Assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this Contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this Contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).
- 8. If the Contractor is a Section 3 business and was awarded the contract by SHA based on the Section 3 business preference requirements of the invitation to bid for committing to subcontract more than 25% of the dollar amount of all subcontracts to Section 3 businesses, the Contractor agrees to meet the Section 3 subcontracting commitment. Failure of the Contractor to fulfill the Section 3 subcontracting commitment shall be deemed a material breach of contract, which may result in SHA taking any or all of the following actions: (1) demanding specific performance of the subcontracting plan; (2) withholding from contract payments the dollar amount of any or all subcontracts that were to have been awarded to Section 3 businesses or such lesser amount as may be appropriate, (3) withholding any liquidated damages that SHA may incur as a result of the Contractor's failure to comply with its Section 3 commitment and subcontracting plan; and (4) declaring the Contractor ineligible to compete for, or participate in, any SHA contract for a period of five years from the acceptance date of the contract in which the Section 3 subcontracting commitment was made.

Contract No. 5286

CONSTRUCTION AND MAINTENANCE SERVICES

for

Roof Replacement at Green Lake Plaza

This Contract is made and entered into as of the last signature date below between the Seattle Housing Authority, a public body corporate and politic, hereinafter referred to as "Owner," and , hereinafter referred to as the "Contractor." The Contractor and the Owner agree as follows:

SECTION 1: This Contract incorporates by reference and is subject to the following as though fully included herein, whether attached or not attached:

- The Contractor's response to the Request for Bids (by Fax) (attached)
- Attachment A, version 2 (attached)
- Technical scope of work included as part of the Request for Bids (by Fax)
- Owner's General Conditions
- Prevailing wage rates as established in Select One dated

(attached)

Federal Labor Standards Provisions (attached)

<u>SECTION 2:</u> The Contractor shall perform or cause to be performed all work and shall furnish or cause to be furnished all labor, materials, tools, and equipment necessary to complete the above-referenced project in strict accordance with the Contract Documents and documents described in Section 1 above for the following Contract Sum:

Base Bid		\$
Additive No.(s)		\$
Deductive No.(s)		\$
Subtotal		\$
Sales Tax	N W	\$
Contract Sum		\$

SECTION 3: The Contractor shall begin the work of the Contract immediately after receipt of a written Notice to Proceed issued by the Owner, and to perform the work regularly and without interruption thereafter (unless the Owner shall otherwise, in writing, specifically direct) with such forces as necessary to complete said work in a manner acceptable to the owner within consecutive calendar days from the date of the Notice to Proceed.

The parties have executed this Contract by having their authorized representatives sign below.

Seattle Housing Authority 190 Queen Anne Avenue North P.O. Box 19028 Seattle, WA 98109-1028

Bv:		Bv:			
J,	Date	-,	Date		
		Contracts & Procurement Ma			

SECTION 01 10 00 SUMMARY OF WORK

PART 1 – GENERAL

1.1 SUMMARY

- A. This section includes the following:
 - 1. Work covered by the Contract Documents.
 - 2. Work by Owner or under other contracts.
 - 3 Contractor design elements.
 - 4. Contractor's use of premises.
 - 5. Owner's occupancy requirements.
 - 6. Existing utilities.
 - 7. Contractor identification.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification:

The project consists of the demolition and replacement of existing roofing membrane and related work on the following building:

Green Lake Plaza 505 NE 70th St Seattle WA 98115

B. Owner: High Rise Rehabilitation Phase I LP

c/o Seattle Housing Authority General Partner

190 Queen Anne Avenue N

PO Box 19028

Seattle, WA 98109-1028

- C. The Work shall be providing all supplies, tools equipment, scaffolding, shoring, trasnsportation, utilities, services, superintendence, and labor, including architectural, structural, and electrical improvements, and the furnishing of all materials, items, and accessories needed for the total construction of the project in strict conformance with the Contract Documents.
- D. The intent of the Contract Documents is that the Contractor will produce a complete project with all materials and equipment in place and all systems operative.
- E. The Work at the low slope roof includes, but is not limited to:
 Roof replacement includes but is not limited to the following elements of roof
 replacement project: Removal and proper disposal of existing roofing membrane,
 deteriored roof sheathing (if applicable), batt insulation, cants, flashing details, perimeter
 metal and counter-flashing and the installation of new insulation and roof sheathing for a
 complete SBS Modified Bituminous Membrane roof system, to include but not be
 limited to new cants and premium base flashing; new perimeter nailers and built-up
 parapets; new perimeter coping metal and equipment counter-flashing, reglets, and all
 incidentals as specified to meet the low slope roof system specified system and
 Warranty/Guarantee requirements. Project will be constructed under a General
 Construction Contract.

1.3 WORK BY OWNER OR UNDER OTHER CONTRACTS

- A. General: Cooperate fully with separate contractors (if applicable), consultants (if applicable) and Owner's maintenance personnel so work on those contracts may be carrried out smoothly and as scheduled, without interferring with or delaying work under this Contract. Coordinate the Work of this Contract with work performed by the Owner or by others under separate contracts.
- B. Owner will coordinate between cellular phone providers and awarded roofing contractor for roofing at locations cellular phone equipment is mounted on roof.

1.4 CONTRACTOR DESIGN ELEMENTS

- A. Should any work under this Contract require Contractor design, Contractor shall comply with the following requirements:
 - 1. Submit Shop Drawings and Calculations to Owner for review.
 - 2. Submit Shop Drawings and Calculations to governing agency for approval and permits as required.

1.5 CONTRACTOR USE OF PREMISES

- A. Use of Site: Limit use of premises to areas approved by Owner. Do not disturb portions of project site beyond areas within which the Work is indicated to occur
 - 1. Owner Occupancy: Allow for Owner occupancy of Project site and use by residents and other users.
 - 2. Staging Areas: Site area is limited. Obtain approval from Owner, in writing and in advance, for use of areas for staging and other construction operations. Onsite parking is for residents and site SHA staff only. Contractor shall park offsite. Parking spaces may be made available with prior Owner approval when required for staging of equipment, material delivery and debris disposal.
 - 3. Driveways and Entrances: Keep driveways, entrances, and loading areas serving the premises clear and available to the Owner, the Owner's employees, residents, other users, and emergency vehicles at all times. Do not use these areas, at any time, for parking, storage of materials, or placement of containers used for collection of demolition debris.
 - 4. Deliveries: Schedule deliveries and debris pick-ups to minimize use of driveways and entrances, to minimize space and time requirements for storage of materials and equipment on-site, and to minimize construction traffic during high-volume bus drop-off and pick-up times. Deliveries to site shall not be permitted without prior approval by, and coordination with the Contractor.
- B. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair all damage to building interiors / exteriors of building and adjacent areas caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period. Protect all walkways, driveways and entries from dust and debris during the construction process. Contractor shall clean daily all dust and debris. Contractor shall cover and protect areas adjacent to work areas from dust and debris.

- C. Daily Clean-Up: Contractor shall be responsible for complete daily clean-up and legal disposal, off site, of all debris generated during and from the work. Owner will not provide personnel for providing routine housekeeping services. Contactor shall be responsible for providing portable outdoor toilets (self contained outhouse) in the number required to accommodate its workforce throughout the construction periord.
- D. The Owner will provide electricity and water for Contractor's construction operations, except as noted below.
- E. Normal working hours shall be 8:00 a.m. to 5:00 p.m., Monday through Friday, except holidays including the following: New Year's Day, Martin Luther King Jr.'s Birthday, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day following Thanksgiving, and Christmas Day. Work shall not be performed outside normal working hours without prior approval from Owner. Approval does not constitute authorization for payment of overtime pay rates by the Owner.

1.6 OCCUPANCY REQUIREMENTS

A. Owner Occupancy: Building will be fully occupied and shall be kept in normal operating conditions at all times. Contractor is responsible for providing temporary water and power during shutdowns required to accomplish the work.

Special Precautions:

During the Contractor's construction of the work, the building will continue to be occupied. Protect the health and safety of the occupants at all times, including maintaining use of exit stairways, corridors, and doors. Contractor shall take all necessary precautions to ensure minimal disturbance to residents. Interruption of building access and occupancy will not permitted without Owner's prior approval. Limit construction operation and methods to those that will not unduly affect the environment of the resident-occupied spaces, including noise, dust, odors, hazards and other undesirable effects and conditions. Schedule work activities to ensure that the Owner and/or Contractor is able to notify residents at least forty eight hours in advance of the day Contractor will be entering any residential units.

- B. The Owner will prepare a letter of Substantial Completion for the building.
- C. On Substantial Completion, Owner will assume responsibility for maintenance of newly installed systems.
- D. Resident Notification: Contractor shall be responsible for maintaining the resident notification process. Seattle Housing Authority's policy, and law, is that residents be notified 48 hours in advance of any entry into resident units to perform work. SHA's Project Manager will assist the Contractor in this process.
- E. Emergency Contact: Prior to the start of construction furnish the Owner, in writing, the names and telephone numbers of individuals to be contacted in the event of an out-of-hours emergency at the building site. Post a similar list readily visible from the outside of the field office or at a location acceptable to the Owner of the building.

1.7 EXISTING UTILITIES

Utilities of record are shown on the Drawings insofar as possible to do so. These, however, are shown for convenience only and the Owner and Design Team assume no responsibility for improper locations or failure to show utility locations on the Drawings. The Contractor is responsible for determining the location of all existing utilities (using due diligence including locate services, available drawings, and site observation) prior to commencing work.

SEATTLE HOUSING AUTHORITY GREEN LAKE PLAZA ROOF REPLACEMENT

Contractor shall immediately repair and restore operation of any utilities damaged during construction and conform to utility company's repair requirements.

1.8 CONTRACTOR IDENTIFICATION

Contractor and subcontractor personnel shall wear identification badges or company logo clothing and wear them in a visible location at all time while on SHA premises. Contractor and subcontractor personnel found not wearing a badge may be subject to being dismissed from the project premises and only being allowed to return when wearing the proper badge.

END OF SECTION 01 10 00

SECTION 01 11 20 - CONTRACT REQUIREMENTS

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of the contract, including General Conditions and other Division 1 Specification Sections, apply to this section.

1.1 PRE-CONSTRUCTION CONFERENCE

Prior to beginning the Work, the Contractor shall meet with the Owner to coordinate the Progress Schedule, to verify procedures and to discuss other requirements that may be of concern to any of the parties involved.

1.2 CONTRACT RESTRICTIONS

- A. Time of Completion: The work of this Contract shall commence immediately after the effective date of the Notice To Proceed and shall be Substantially Complete no later than 90-Calendar Days from Notice to Proceed Date. It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the contract of work to be done hereunder are ESSENTIAL CONDITIONS of this contract. It is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the Notice to Proceed. It is anticipated that the date of Final Completion be no later than 90-Calendar Days from Notice to Proceed Date. The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for completion of the same has taken into consideration the average climatic range and usual industrial conditions prevailing in this locality.
- B. Extensions of Time: Should an extension of time be granted to the Contractor, he/sheshall indemnify and save harmless the Owner for any loss to any other Contractor caused by such extension of time.

1.3 CHANGES IN THE WORK

Refer to Part 7 of the General Conditions.

1.4 INSTRUCTIONS

All instructions will be given to the Contractor, or his/her authorized agent, by the Owner's Representative for distribution to all subcontractors or tradesmen on the Work; in like manner all communication from subcontractors and tradesmen on the Work to the Owner will be given through the Contractor. No subcontractors or tradesmen shall contact the Owner to discuss the Work, except as the Contractor may arrange.

1.5 WASTE SITES

A. The Contractor shall select his/her own waste sites not upon the job site or any property contiguous thereto. The Contractor is solely and alone responsible for any and all damages done or regulations violated in the disposal of waste material, and for any other

SEATTLE HOUSING AUTHORITY GREEN LAKE PLAZA ROOF REPLACEMENT

actions which he/she performs. Contractor holds the Owner faultless and free from liability for any and all damages and costs incurred as a result of Contractor's actions.

- B. It shall be the responsibility of the Contractor to pay all fees and costs incurred in the testing, packaging, transportation and disposal of waste material.
- C. Dispose of all waste in a legal manner at appropriate, off site legal waste sites.

1.6 STORAGE OF TOOLS AND MATERIALS

Storage of tools and materials on the site shall always be subject to the satisfaction of the Owner. The Owner shall assume no responsibility or liability for materials and equipment stored on the site. Refer to Section 5.08 of the General Conditions.

1.6 SIGNS

Posting of any and all signs are subject to the satisfaction of the Owner.

1.7 WATER AND POWER

Contractor to supply temporary utilities unless other arrangements are approved by SHA Project Manager.

1.9 PROTECTION OF PUBLIC AND PRIVATE UTILITIES/PROPERTY

- A. The Contractor shall be responsible for any breakage of utilities or services resulting from his/her operations and shall hold the Owner and its agents harmless from any claims resulting from disruption of service or damage to utilities.
- B. The Contractor shall be responsible for any damage to improvements in the City right of way including, but not limited to, streets, sidewalks, curbs and the like and shall repair any damage prior to project's acceptance. Prior to the start of Work the Contractor shall document in writing and photographs any existing damage to adjacent streets, sidewalks, curbs etc. and submit to Owner's Representative for the Project record.

1.10 DUST CONTROL

Keep dust down at all times, including non-working hours, weekends and holidays.

1.11 AIR QUALITY

Comply with all applicable standards, order, or regulations issued pursuant to the Clean Air Act of 1970.

1.12 PROTECTION

See Section 5.11 of the General Conditions

END OF SECTION 01 11 20

SECTION 02 05 00 - DEMOLITION

PART 1 - GENERAL

- A. Work shall include all demolition work as required to complete reroofing work as described herein. Carefully remove the specified low-slope roofing assemblies, associated metal flashings, and plywood sheathing. Remove residue and prepare substrates to receive new roofing as required by roofing system manufacturer. All adjacent or other work in the building or on site damaged by the Contractor shall be repaired or replaced at Contractor's expense.
- B. Contractor is fully responsible to protect all adjacent surfaces from damage, including but not limited to the adjacent roof surfaces, exterior finishes, windows, and doors on the exterior walls. All damage to adjacent surfaces and materials shall be restored at the Contractor's expense back to pre-work conditions.
- C. Allow no debris to accumulate in or on building, on grounds, streets, or walks. Remove debris from site as demolition work progresses. Legally dispose of debris at Contractor's expense.
- D. Provide for public protection as required by law. Keep streets and walks clean and free from obstruction. Furnish, install, and maintain for the duration of work all required scaffolds, chutes, tarpaulins, barricades, canopies, warning signs, platforms, and any other temporary construction necessary for proper completion of the work in compliance with all pertinent safety and other regulations.
- E. Provide additional protection at interior ceiling penetrations to minimize dust and debris infiltration as required.

END OF SECTION 02 05 00

SECTION 06 10 00 – ROUGH CARPENTRY AND SHEATHING

GENERAL - PART 1

1.1 Summary:

- A. This Section includes but is not limited to the following:
 - 1. Furnish and install new plywood sheathing.
 - 2. Furnish and install new preservative treated (no ACQ treated wood will be accepted) wood blocking at parapet walls, mechanical curbs as necessary.
 - 3. Furnish and install new preservative treated (no ACO treated wood will be accepted) wood framing (to match new insulation and coverboard) to match dimension of flange of new draining edge metal at the perimeter edge.

B. Related Sections:

- 1. General Conditions and Division 01 apply to this Section.
- 2. Division 07 59 10 Preparation for Reroofing

PRODUCTS - PART 2

2.1 General:

- A. Plywood: Meet Requirements of PS 1-83/ANSI A199.1 except where APA Performance Rated units are specified. Every sheet shall bear appropriate APA grade stamp identifying species of plywood or by Certificate of Inspection issued by approved lumber grading or inspection bureau or agency listed above. Plywood shall not exceed 18% moisture content when fabricated nor more than 19% when installed. Waferboard, Composite board, and Oriented Strand Board WILL NOT be accepted as equals. In all cases, thickness shown is minimum regardless of span rating. Material used for same purpose shall be of same thickness.
- B. Miscellaneous Framing Lumber: Douglas-Fir, No. 2 and better, 19 percent maximum moisture content, size as required to accommodate conditions, pressure preservative treated where in contact with concrete substrates.

2.2 Nails and Fasteners:

- A. Up to 15/32" panel
- 8d common or box.
- B. 15/32" and thicker panel 10d common or galvanized box.
- C. Dimensional Lumber
- 16d common or galvanized box
- D. Concrete Fasteners
- Rawl Spike, minimum 1/4 inch diameter

2.3 Pressure Treated Wood:

- A. Treat wood in contact with concrete or masonry with Disodium Octaborate Tetrahydrate (DOT) Borate in accordance with AWPA UC2, C9 and dried after treatment.
 - 1. Lumber grade and species shall be as specified for the particular use.

- 2. Identify treated lumber as to name of treater, preservative used, and retention in lbs/cu ft.
- 3. Season after treatment to moisture content required for nontreated material.

EXECUTION - PART 3

3.1 INSTALLATION:

A. General

- 1. Conform to applicable requirements of the following:
 - a. AFPA National Design Specification for Wood Construction for timber connectors.
 - b. AITC Timber Construction Manual for heavy timber construction.
 - c. AFPA WCD-number 1, Manual for House Framing for nailing and framing unless specified otherwise.
 - d. APA for installation of plywood or structural use panels.
- 2. Nail heads shall be flush with, but not penetrate, wood surface.
- 3. All framing work to be constructed true, level, plumb and square with existing structure.
- B. Plywood Decking Replacement
 - 1. Where deteriorated plywood decking is identified, replace with full ½"x4 x 8-foot sheet of plywood only.
 - 2. Match fastener type and pattern to existing.

3.2 PROTECTION:

A. Protect wood carpentry from moisture until roofing is installed.

END OF SECTION 06 10 00

SECTION 07 55 20 - (SBS) MODIFIED BITUMINOUS MEMBRANE ROOFING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.
- B. This specification is a "Performance Specification' and is based on a defined manufacturer's system for establishment of the baseline standard only. The products listed are the minimum standard upon which a manufacturer's system will be approved as long as all other aspects of the specification are complied with. The installed system requires a manufacturer issued 20 year NDL warranty upon successful completion of the project.

1.02 SYSTEM DESCRIPTION

- A. Section Includes:
 - 1. Styrene-butadiene-styrene (SBS) 3-ply modified bituminous membrane roofing.
 - 2. SBS membrane flashing.
 - 3. Roof insulation.
 - 4. Vapor retarder.
- B. Roofing system shall conform to the following:
 - 1. Wind Uplift: Factory Mutual 1-90.
 - 2. Fire: Underwriter's Laboratory Class A, UL labeled materials required.
- C. Sheet metal flashings shall conform with the following:
 - 1. Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) publication titled "Architectural Sheet Metal Manual" current edition.
 - 2. Sheet metal flashings and related components shall include flashings necessary to direct water to the building exterior.
 - 3. Attachment of metal shall allow for thermal movement of materials without buckling, loosening and leakage.
 - 4. In no event shall fasteners be located within the laps of moving joints.
- D. Related Requirements:
 - 1. Section 07 60 00 "Flashing and Sheet Metal" for metal roof flashings and counter flashings.
 - 2. Section 07 59 10 "Preparation for re-roofing".

1.03 DESCRIPTION OF WORK

A. Extent of built-up roof system work is indicated by provisions of this section and aforementioned related sections, and is defined to include the installation of a new 3-ply SBS modified bitumen built-up roofing system with granular cap sheet, and the detailing of the membrane at all roof penetrations, edges, drains, and mechanical equipment. Identify and utilize the services of painting, electrical, mechanical, telecommunications or plumbing subcontractors as required for completion of the work.

1.04 DEFINITIONS

A. Roofing Terminology: Definitions in ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work of this Section.

1.05 REFERENCED STANDARDS

A. ASTM

- 1. C 728Specification for polyisocyanurate roof insulation
- 2. D 41 Specification for asphalt primer used in roofing, damproofing and water-proofing
- 3. D 312 Specification for asphalt used in roofing
- 4. D 3090 Specification for asphalt roofing (glass felt) surfaced with mineral granules
- 5. D 4586 Specification for asbestos-free roof cement
- 6. D 4601 Specification for glass fiber base sheet
- 7. E 108 Fire Tests of roof covering
- 8. D 5147 Test method for modified bitumen roofing sheets
- 9. CGSB 37-GB-56M
- 10. ASTM D 6162
- 11. ASTM D 6163, Grade G, Type II
- 12. ASTM D 6163, Grade S, Type I
- 13. ASTM D 6164, Grade G, Type II
- 14. ASTM D 6222
- 15. ASTM D 6223
- B. Manufacturer's Roofing Specification Catalog.

1.06 PRE-INSTALLATION MEETINGS

- A. Pre-installation Roofing Conference: Conduct conference at Project site located at: 505 NE 70th St, Seattle WA 98115
 - 1. Meet with Owner's representative, Owner's Consultants, Architect or Engineer (if applicable), and Owner's insurer (if applicable), testing and inspecting agency representative, roofing system manufacturer's representative, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
 - 2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
 - 3. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review deck substrate requirements for conditions and finishes, including flatness and fastening.
 - 5. Review structural loading limitations of roof deck during and after roofing.
 - 6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.
 - 7. Review governing regulations and requirements for insurance and certificates if applicable.
 - 8. Review temporary protection requirements for roofing system during and after installation.

- 9. Review roof observation and repair procedures after roofing installation.
- 10. Review and finalize construction schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
- 11. Review and finalize construction schedule related to roofing work and verify availability of materials, Installer's personnel, equipment and facilities needed to make progress and avoid delays.
- 12. Review weather and forecasted weather conditions, and staff and owner procedure for coping with unfavorable conditions.

1.07 ACTION SUBMITTALS

- A. Submittals are required to be reviewed and accepted by the Owner, prior to ordering materials and no less than 10 working days prior to the start of work. The contractor's ordering of material prior to the receipt of an accepted submittal does so at its own risk.
- B. Roof System Installation Specifications: Submit manufacturer's specifications for the roof systems proposed. Include special specifications to reflect special conditions at the deck, base flashing, flashing at existing equipment, pipe penetrations, equipment and piping supports, walkway pads, and roof drains.
- C. Product Data: At a minimum, submit manufacturers' product data for the following products to be used and installed.
 - 1. Asphalt primer. (as applicable)
 - 2. SBS modified flashing cement.
 - 3. Each type of roofing insulation, including cover board.
 - 4. Roofing interplay and cap sheets.
 - 5. Base flashing interplay and cap sheets.
 - 6. Termination bars and fasteners for base flashing.
 - 7. Roof walkway. (cap sheets)
 - 8. Pre-finished and stainless steel sheet metal. (as applicable)
 - 9. Sealants and associated primers.
 - 10. Solder.
 - 11. Fluid-Applied, Reinforced Resin.
 - 12. Splash Blocks.
 - 13. Rooftop equipment and piping supports.

D. Shop Drawings:

- 1. For the roofing system, submit plans, elevations, sections, and details showing attachment to other work. Submit alternate details when recommended by the manufacturer for completion of the roofing system.
- 2. Submit sheet metal layout drawings.
- 3. Flashing layout drawings shall indicate flashing materials, gauges, dimensions, profiles, jointing patterns, jointing details, fastening methods, and installation details for components including receivers, counter flashings, thru-wall scuppers, conductor heads, downspouts and associated hangers and sheet lead flashings at vent pipes and roof drains.
- 4. Base flashings and membrane terminations.
- 5. Crickets, saddles, and tapered edge strips, including slopes.
- 6. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.

- E. Material Safety Data Sheets (MSDS): Submit manufacturers MSDS sheets as part of the submittal package. A copy of MSDS sheets shall be available for review and located on-site at all times, during the roof replacement operation (either on the roof or in a designated staging/lay down area).
 - 1. Product Data: For adhesives and sealants used inside the weatherproofing system, documentation including printed statement of VOC content.
 - 2. Laboratory Test Reports: For adhesives and sealants used inside the weatherproofing system, documentation indicating that products comply with the testing and product requirements of California Department of Public Health's (formerly, the California Department of Health Services') "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- F. Samples for Verification: For the roof and insulation sheet products being utilized on this project:
 - 1. Two (2) 12X12 inch samples of each component of the roofing and flashing membranes and samples of fasteners.
 - 2. Sheet metal samples: Submit samples of finishes in the manufacturer's full line of standard colors for Owner selection.
- G. Qualification Data: For Installer, manufacturer, and testing agency;
 - 1. Installer: minimum 10 years experience. Contractor, Roofer, Installer shall provide a letter from the manufacturer stating that the contractor is approved to install the specified roofing system and related components, and provide the specified warranties.
 - 2. Manufacturer: minimum 15 years experience.
- H. Manufacturer Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article;
 - 1. Submit evidence of complying with performance requirements.
 - 2. All components must provide FM listing.
- I. Manufacturer's complete specifications.
- J.Sample Warranties: For manufacturer's special warranties.
- K. Fire Safety plan.

1.08 QUALITY ASSURANCE

A. Prior to the work, the Contractor, as an authorized applicator, shall ascertain to his satisfaction that all aspects of these Specifications are workable as specified and that none conflict with the manufacturer's requirements for a twenty (20) year warranty for built-up roofing system portion of work. Upon commencement of the work, it will be presumed that these Specifications are satisfactory to both the Contractor and the Manufacturer in their entirety.

- B. Dimensions, (if any) as contained in these Specifications shall be presumed to be approximate. In the event that site conditions uncovered during the work require modification to, or alteration of those dimensions to accomplish the work in accordance with the intent of these Specifications, the Contractor shall make the adjustments and indicate these revisions on project specific shop drawings as required to comply with that intent.
- C. Manufacturer Qualifications: Provide primary products, produced by a single manufacturer, which has produced that type product successfully. Provide secondary products only as recommended by manufacturer of primary products for use with roofing system specified.
- D. Manufacturer Field Quality Control: A technical representative of the materials manufacturer shall be available for consultation at site with a maximum of 24-hour notice.
- E. Installer Qualifications: A single Installer ("Roofer") shall perform the work of this section; and shall be a firm with successful experience in installation of built-up roofing systems similar to those required for this project and which is acceptable to or licensed by manufacturer of primary roofing materials. The installer should have a minimum of 5 years of experience with specified manufacturer.
- F. Installer shall provide all personnel trained in the application of the materials and systems and shall maintain supervision as specified elsewhere.
- G. Testing: The Owner reserves the right to perform any testing as may be required to determine compliance with these Contract Documents. Costs for such testing will be the Owner's responsibility unless testing indicated non-compliance. Costs for such testing indicating non-complying work shall be corrected and testing will be repeated until the work complies with the Contract Documents.
- H. Provide built-up roofing system and component materials which have been tested for application and slopes indicated and are for Class A external fire exposure over combustible or non-combustible decks.
- I. Provide roof covering materials bearing Classification Marking (UL) on bundle, package or container indicating that materials have been produced under UL's Classification and Follow-up Service.
- J. Wind Uplift Attachment Requirements: All components must bear a stamp showing FM listing. System as installed shall comply with FM requirements for I-90 uplift requirements and comply with recommendations from Factory Mutual Loss Prevention Data Sheets 1-28S and ANSI/SPRI ES-1, "Wind Design Standard for Edge Systems Used With Low Slope Roofing Systems" except where these Contract Documents indicate more restrictive requirements

1.09 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
 - 1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing materials, and place equipment in a manner to avoid permanent deflection of deck.

1.10 FIELD CONDITIONS

A. Weather Limitations:

- 1. Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.
- 2. Roofing materials shall not be applied when water in any form, i.e., rain, dew, ice, frost, snow, etc. is present on roof deck.
- B. Roof Loading Limitations: Contractor shall not load or permit any part of the work to be loaded so as to endanger its safety or damage the roof deck. Do not exceed the design loads.

1.11 PROTECTIONS

- A. Provide tarps or plastic sheeting, as required, to adequately protect opened roofs and flashings and to prevent entrance of moisture or rain water into the existing structure until new materials have been applied and roof is in a water tight condition.
- B. Do not open up any more roof surface at one time than can be adequately covered and protected in the event of sudden unexpected rainfall.
- C. Have necessary waterproof canvas or plastic sheeting on site in area of work in case of emergency. Contractor will be held liable for any damage to building interior due to his negligence.
- D. Deliver materials to job site in sealed, undamaged, original containers imprinted with manufacturer's name, product name, and pertinent identifying numbers or markings.
- E. Protect from damage all exterior lighting, landscaped, tenant vehicles, owner vehicles and paved areas in/around/adjacent to the structure to be re-roofed.
- F. All surfaces to receive new membrane or flashing shall be thoroughly dry. Should excessive surface moisture occur, the Contractor shall provide the necessary equipment to dry the surface prior to application.

- G. All new and temporary construction, including equipment and accessories, shall be secured against wind blow-off or damage.
- H. The Contractor shall provide all necessary protection and barriers to segregate the work area and to prevent damage to adjacent areas.
- I. Prior to and during application, all dirt, debris, and dust shall be removed from surfaces by vacuuming, sweeping, blowing with compressed air and/or similar methods.
- J. All roofing, insulation, flashings and metal work removed for construction shall be taken off the site to a legal dumping area for disposal daily.

K. Temporary Fire Protection:

- 1. Comply with all governing laws, codes and regulations to maintain required protection at all times. Conduct operations in manner that is fire-safe for the work area and adjacent areas. Proper fire extinguishers shall be provided, identified and maintained. The premise shall be maintained clear of rubbish, debris, or another materials constituting a potential fire hazard. A proper fire separation shall be maintained.
- 2. Due to the use of roofing torches for the application the roofing membrane, on a wood deck the following fire prevention procedures are required:
 - a. Fire watch after the completion of days torch work.
 - b. Provide two fire extinguishers in the work areas for each torch in use.
 - c. Maintain a charged 3/4" water hose at each work area.
- 3. Where significant or continued non-compliance with fire safety is noted, the Owner reserves the right to stop the work at no extra cost or extension of time pending remedial action. Furthermore, the Contractor shall be responsible for, and reimburse the Owner as appropriate, any fines or penalties levied by the Fire Department.

L. Test all drains and document status:

- 1. Contractor to verify all drain lines and downspouts are functional prior to the start of work.
- 2. Contractor to be responsible to assure drains are free draining upon completion of roofing work.
- 3. Contractor to provide written documentation of conditions of drains and down-spouts prior to start of work and completion of work.
- M. Roof must be in a weather tight and water tight condition at the end of each day, to include drain rings installed, downspouts connected and collectors in place.

1.12 SAFETY

A. Environmental Requirements

1. Apply roofing in dry weather. Do not apply roofing materials during precipitation, or commence work if precipitation is likely to occur during application. Deck/surfaces shall be dry to the touch during work.

- 2. Do not apply roofing when ambient temperature is below 40 degrees F. or manufacturer's recommendation if greater/higher.
- 3. Protect adjacent surfaces against marring, discoloration, asphat spatter and spillage, and similar damage, prior to commencing work. Use plywood or other appropriate sheet materials as follows:
 - a. Lap suitable protective materials at least 3 inches.
 - b. Secure protective coverings against wind.
 - c. Leave protective covering in place for the duration of roofing work.
- B. Fire Extinguishers: A minimum of 2 large fully charged and operational fire extinguishers are on the roof near each torch while in operation. Fire extinguishers shall be in compliance with applicable codes and requirements of local fire official.
- C. HVAC and roof-top fan units must be shut down completely when open flame is in use within 6 feet or up-wind of unit intakes, or greater if warranted by wind conditions. Arrangements must be coordinated with building maintenance staff to schedule these shut-downs. Roofing Contractor shall confirm that installation work has been stopped and/or completed and that conditions are acceptable prior to reactivation of HVAC equipment. A penalty of \$500.00, or the actual costs from Owner or City of Seattle Fire Departments etc, if greater, will be assessed to the roofing contractor in the event of a smoke/fire alarm, or interruption of building operations resulting from any smoke, fire or fume infiltration related to the roofing contractor's work.
- D. A safety, execution and notification plan must be on file with the SHA and maintenance staff in case of any fire, smoke or smell issues.
- E. The building will remain in operation and the public must be protected from the dangers of this work including delivery, storage and installation of materials. The building operations must not be affected by this work to the extent possible with the exception of temporary HVAC shut-downs. Any disruptions to normal building activities or access must be coordinated with building facility manager and Owner.

1.13 WARRANTY

- A. Contractor's Warranty Agreement: Submit two (2) executed copies of standard two-year "Roofing Guarantee" on form included at end of this section, covering work of this section including roofing membrane, flashings, roof insulation, sheet metal, and roofing accessories, signed and countersigned by Installer (Roofer) and Contractor.
- B. For a two year period from the date of completion and Owner's acceptance, Contractor agrees to inspect and make necessary repairs to defects or leaks in the roof and flashings. Emergency leaks will be attended to within twenty-four (24) hours from receipt of notice from Owner. As soon as weather permits, Contractor will restore affected areas to standards of this contract without voiding the manufacturer's Warranty and repair any damages from these leaks without cost to the Owner, except for leaks caused by abuse to roof by others or by abnormal weather conditions such as lightning, severe hail, or other unusual climactic phenomena. This Guarantee shall be submitted to the Owner in writing and approved before final payment is released for the project.
- C. Roof Membrane Manufacturer's Guarantee: The built-up roofing materials manufacturer shall provide a written fifteen-year warranty signed by a corporate officer for an unlim-

ited penal sum guarantee covering both materials and installation of the materials and systems including insulation. The roofing membrane system has been specified to accept ponding water. The warranty must not exclude standing or ponding water. The warranty shall be written to allow for minor roofing repairs by the Owner.

- D. Submit to the Owner a manufacturer's unlimited penal sum guarantee covering all repairs/replacements to keep the roof, including the field and flashing, watertight for period of twenty (20) years beginning at the time of the Owner's acceptance of substantial completion. Include the cost of this Guarantee in the contract price.
- E. The Guarantee shall be executed by manufacturer to cover all costs for repairs necessary to stop leaks which occur as a result of, but not limited to, the following:
 - 1. Deterioration of the roofing membrane or base flashing system resulting from ordinary wear and tear by the elements.
 - 2. Workmanship on the part of the Approved Roofing Contractor in application of the roofing membrane or base flashing system.
 - 3. Blisters, fishmouths, bare spots, ridges or wrinkles in the built-up roof.
 - 4. Splits or cracks in the built-up roofing not caused by structural movement.
 - 5. Slippage of the built-up roofing membrane or base flashing.
- F. If, within, 24 hours after notification of roof leakage Contractor has not responded, Owner shall have the right, without invalidating his Guarantees and at the expense of the Contractor, to make any emergency repairs that are required in order to protect the building and contents from damage due to roof leakage.
- G. Should roof samples be required by manufacturer, and if for any reason deficiencies are found within the samples, Contractor will at his expense, make repairs as necessary to correct deficiencies and satisfy manufacturer's requirements.

PART 2 - PRODUCTS

2.01 MATERIALS, GENERAL

- A. Provide materials complying with governing regulations, and which can be installed to comply with the following:
 - 1. Certified Laboratories and ICC approved for a Class "A" rating. Provide documentation.
- B. Warranty Requirements: Roof membrane manufacturer must approve the use of all accessory materials and include them in their Guarantee.
- C. General: These specifications and details are based on a roofing system from Soprema without further reference to "approved equal". Manufacturer listed is referenced for standard of quality, type and function. Provide products of this manufacturer or other manufacturers that are totally compatible and interchangeable, part for part with the specified system.

D. Approval of alternate systems is required prior to bid. To be approved as an "equal" system submit or respond to all items in "Quality Assurance" and "Submittal" sections of this specification. All submittals must be received in the Owner's office a minimum of ten (10) calendar days prior to bid / finalize purchase agreements/ finalizing work orders.

2.02 PERFORMANCE REQUIREMENTS

- A. General Performance: Installed roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Roofing and base flashings shall remain watertight.
 - 1. Accelerated Weathering: Roofing system shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
 - 2. Impact Resistance: Roofing system shall resist impact damage when tested according to ASTM D 3746 or ASTM D 4272.
- B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.
- C. FM Global Listing: Roofing, base flashings, and component materials shall comply with requirements in FM Global 4450 or FM Global 4470 as part of a roofing system, and shall be listed in FM Global's "RoofNav" for Class 1 or noncombustible construction, as applicable. Identify materials with FM Global markings.
 - 1. Fire/Windstorm Classification: Class 1A-90
 - 2. Hail-Resistance Rating: MH.
- D. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, Class A; for application and roof slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

2.03 BUILT UP ROOF SYSTEM

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Soprema System
 - 2. Or approved equal
- B. Source Limitations: Obtain components including roof insulation, fasteners for roofing system from same manufacturer as membrane roofing or manufacturer approved by membrane roofing manufacturer.
- C. SBS Cap Sheet:
 - 1. Soprema System Elastophene 250 Flam FR GRO (Basis of Design).
 - 2. Or approved equal.
 - 3. Granule color to be selected by Owner.

SEATTLE HOUSING AUTHORITY GREEN LAKE PLAZA ROOF REPLACEMENT

- D. Interply Sheet:
 - 1. Soprema System Sopralene Flam Stick.
 - 2. Or approved equal.
- E. Base Sheet:
 - 1. Soprema System Modified Sopra G.
 - 2. Or approved equal.
- F. Base Flashing Plys:
 - 1. Mechanically attached base sheet Soprema Modified Sopra G
 - 2. First Play Soprema Sopralene Flam Stick.
 - 3. Surfacing Ply Soprema Elastophene 250 Flam FR GR.
 - 4. Or approved equal.
- G. Reinforced Fluid Applied Flashing Membrane System, as specified in Section 07 53 00: Alsan RS, Kemporal AC, Siplast Parapro 123, or approved equal.
- H. Roof Cement: Cut-back flashing cement compound fortified with non-asbestos fibers, fillers, and solvents and manufactured per ASTM D 4586, Type III; or approved equal.
- I. Primer: Asphalt primer to comply with ASTM D-41; or approved equal.

2.04 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with roofing.
 - 1. Liquid-type auxiliary materials shall comply with VOC limits of authorities having jurisdiction.
 - 2. Adhesives and sealants that are not on the exterior side of weather barrier shall comply with the following limits for VOC content:
 - a. Plastic Foam Adhesives: 50 g/L.
 - b. Gypsum Board and Panel Adhesives: 50 g/L.
 - c. Multipurpose Construction Adhesives: 70 g/L.
 - d. Fiberglass Adhesives: 80 g/L.
 - e. Contact Adhesives: 80 g/L.
 - f. Other Adhesives: 250 g/L.
 - g. Non membrane Roof Sealants: 300 g/L.
 - h. Sealant Primers for Nonporous Substrates: 250 g/L.
 - i. Sealant Primers for Porous Substrates: 775 g/L.
- B. Adhesives and sealants that are not on the exterior side of weather barrier shall comply with the testing and product requirements of the California Department of Public Health's

(formerly, the California Department of Health Services') "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

2.05 MISCELLANEOUS MATERIALS

- A. Perlite Cant and Taper Edge: Manufacturer's standard bonded expanded perlite cant material 3 1/2 inches size except where smaller size required.
- B. Lead Flashing: ASTM B 749, Type L51121, copper-bearing sheet lead, minimum 4 lb/sq. ft (0.0625-inch thick) except not less than 6 LB/sq. ft (0.0937-inch thick) where welding is indicated. Unless recommended otherwise by the roofing manufacturer to meet guaranty requirements, install lead flashing prior to installation of cap sheet. Verify proper formation of drain sumps in insulation as detailed.
- C. Mineral Granules: Loose mineral granules same color as granular surfaced cap sheets.
- D. Continuous Termination Bar: Aluminum, 094" x 1/35" x 120".
- E. Drains, Drain Clamping rings and Drain Strainers: Cast Iron, model and size to match existing drain bowls.
- F. Roof Fastener Plate: OMG Standard Roofing Steel Plates for Fasteners 3" Galvalume Plate

PART 3 - EXECUTION

3.01 PREPARATION

- A. Notify the Owner for an inspection of substrates before covering.
- B. Substrate shall be clean and dry, smooth, free of fins, sharp edges, existing nails and loose foreign materials. Repair roof deck deficiencies, and prepare any deck defects prior to application of new roof system.
- C. Prepare all surfaces and details in accordance with manufacturer's printed instructions and Contract Documents.

3.02 GENERAL INSTALLATION REQUIREMENTS

- A. Cooperate with inspection agencies engaged or required to perform roofing application inspection services in connection with roofing system installation.
- B. Safety Precautions: Take all necessary safety precautions to protect Owner premises, tenants, public and workmen from any and all hazards related to this project. Safety precaution includes, but is not limited to, the proper type and number of fully charged fire extinguishers, trained personnel to operate extinguishers, safety barricades, safety fences such as "early warning lines", required safety meetings, and "Fall Protection Work Plan"
- C. Do not apply roofing unless correct adhesive application temperatures can be maintained.

SEATTLE HOUSING AUTHORITY GREEN LAKE PLAZA ROOF REPLACEMENT

D. To avoid displacement of asphalt and adhesive and interply voids, ensure that no heavy objects are placed on the membrane including walking on or over freshly laid plys. Work all plys from upslope or in front of the roll.

3.03 PRIMER

- A. Material may be applied by brush, spray or roller.
- B. Do not dilute material.
- C. Apply at a nominal rate of one gallon per 100 square feet. Allow to dry thoroughly prior to application of roofing materials.

3.04 ROOF CEMENT

- A. Material may be applied by either trowel or by hand.
- B. Do not dilute material.

3.05 SUBSTRATE PREPARATION

- A. Penetrations, General: Extend as required all soil pipe stacks and through roof penetrations to be 8" above finished roof surface. Extend curb height by raising rooftop equipment as detailed and extending curbs to provide 8 inches minimum base flashing height above finished roof surface.
- B. Remove existing built-up roofing, base sheet under Section 07 59 10 "Preparations for reroofing". Examine substrate for damage and, upon approval of the Architect, damaged and deteriorated surfaces shall be replaced. Examine joist insulation for moisture and, upon approval of the Architect or owners rep, insulation shall be replaced.

3.06 ROOF MEMBRANE INSTALLATION

- A. Install membrane materials and related systems in accordance with Manufacturer's current published application instructions for the method specified and these contract documents. Application of roofing shall immediately follow application of insulation assembly as a continuous process with no phased application unless by prior approval from the Architect and manufacturer. All valleys and transitional edges need to have an additional SBS reinforcing ply.
- B. Lay ply sheets so that the flow of water is in a direction with or parallel to, but never against the lap. Laps shall not buck water and shall be totally sealed.
- C. All plies shall be fully adhered and the cap sheet torched applied fully and continuously adhered. All plies shall be thoroughly adhered and completely bonded.
- D. Adhere the ply sheets per manufacturer's requirements. Install with minimum 4" end laps a minimum of 36" apart.
- E. Adhere the SBS granular cap sheet per manufacturer's requirements. Install with minimum 4" end laps and minimum of 3" side laps.

F. All exposed asphalt will be covered with mineral granules. Lap seams of the layers shall not be stacked and will be separated by a minimum of 12-inches. Stacked laps shall be sufficient cause for rejection of the roof.

3.07 BASE FLASHING INSTALLATION

A. Base Flashing:

- 1. Mechanically attached base sheet shall be installed prior to the placement of the cant strip and in conjunction with the base sheet installed in the field of the roof.
- 2. Adhere base sheet over the interply then mechanically attached base sheet installed at the parapet wall, extending at least eight inches up the curb or wall or down the exterior face of the wall below the nailer two inches. Extend this ply at least four inches beyond the base of the cant strip, onto the interplay.
- 3. Torch apply the surfacing ply over the interply of the base and wall flashing and over the surfacing ply of the field assembly. The flashing membrane shall be of sufficient length to extend from the top edge of the flashing surface or the face of the exterior wall to a minimum of six inches past the base of the cant strip or at least two inches further onto the roof than the preceding interply whichever is greatest.
- 4. Fasten the top edge of the base and wall flashing approximately every eight inches with appropriate fasteners through on inch diameter metal discs.
- 5. Seal the top edge of the base flashing, including all nail heads, as well as all inside and outside corners with roof cement and reinforcing fabric (Three Course). Under surface mounted counter-flashing, a three-course seal of asphalt roof cement and reinforcing fabric is required (woven glass fabric embedded into and covered with roof cement). Use granules to cover any exposed mastic.
- 6. Completely bond all flashings to the underlying surface without any looseness, bubbles, or voids. Remove and replace any loose flashing materials.

B. Roof Drain Flashing:

- 1. Before start of the job and after complete installation of the roofing system, inspect and test all roof drains to assure free flow of water and that no clogging of the drainage system is present.
- 2. At roof drains clean clamping surfaces of all cement and other material preventing continuous contact of clamping surfaces, provide new clamping rings and drain strainers. Clean drain bowl of all asphalt residue.
- 3. Remove drain rings prior to built-up roof application.
- 4. Pre-prime 4 lb sheet lead drain flashings with two (2) coats asphalt primer. Set lead in even 1/8" layer of asphalt roof cement. All field plies shall extend under clamping ring and shall be fully adhered.
- 5. Extend roof plies into the drain under the clamping ring.
- 6. Bolts at clamping ring are to be tightened daily in sequential fashion while membrane is still warm to evenly compress membrane. Install strainer dome over roof drains daily.

C. Flanged Sleeves and Accessories:

- 1. Set flanges into plastic roof cement over the installed roof plies and fasten securely to the underlying deck or wood nailers (fastening is not required for lead flanges).
- 2. Prime flanges, including pipe flashing sleeves, edge flashing (gravel-stop), flanged units, scuppers, etc., on both sides and flash on the roof with at least two (2) plies of ply sheet embedded into asphalt. The first ply shall extend a minimum of four inches beyond the flange onto the roof. The second ply shall extend a minimum of four inches further onto the roof than the first ply.

3.08 ACCESSORY INSTALLATION

- A. Roof Walkway: Torch-apply walkway cap sheet. Three rolls cut into three by four foot sections with a minimum one inch space between each piece, placement as approved by owner
- B. Roof Protection Board: Install protection board in manufacturer's SBS adhesive. Install in the configurations indicated, but in no case less than 2 inches beyond the sides of each item.

C. Lead Drain Flashings:

- 1. Install SBS polyester reinforced cap sheet sealed into roof drain clamping ring. Set clamp rings into place and tighten before leaving the Project each day.
- 2. Replace drain clamping ring bolts with new bolts and washers. All-thread is not acceptable for use at these locations. Length of bolts shall be as appropriate without the copious use of washers for shimming.
- 3. Unless recommended otherwise by the roofing manufacturer to meet guaranty requirements, install lead flashing prior to installation of cap sheet.
- 4. Verify proper formation of drain sumps in insulation as detailed. Prime lead flashing and allow to dry, and then set in flashing cement over interply; and turn into drains. Strip in with interply sheet, extended 6 inches and 10 inches beyond edge of lead flashing; turn into drains.

D. Conduit and Vent Penetrations:

- 1. Install Fluid-Applied, Reinforced Resin at all penetrations in accordance with manufacturer's requirements.
- 2. Ensure that reinforcing fabric extends a minimum of 4" up all penetrations.

E. Splash Blocks:

1. Install per manufacturer's requirement. Set splash blocks atop walkway material and set block in adhesive compatible with block and roofing membrane.

F. EQUIPMENT SUPPORTS

- 1. Roofing contractor shall provide and replace the existing wood supports with Dura-Blok manufactured by Cooper B-Line, Highland, IL (800) 851-7415. (or equal). Type as appropriate to replace existing rooftop conduit supports.
- 2. Wood supports to be replaced underneath cable trays with pressure treated lumber size to match existing rooftop supports.
- 3. All rooftop supports will have an extra piece of cap sheet installed underneath. This cap sheet will be secured to the roof and extend beyond the supports a minimum one inch in all directions.

3.09 PROTECTING AND CLEANING

- 1. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- 3. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.
- 4. Remove trash, debris, and equipment from job site and leave the job site in clean condition. All loose mineral granules shall be removed from the roof and disposed of.

END OF SECTION 07 55 20

SECTION 07 59 10 - PREPARATION FOR RE-ROOFING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Full tear-off of entire roof.
 - 2. Removal of base flashings.
 - 3. Removal of parapet cap and flashings.
 - 4. Removal of plywood sheathing and batt insulation (-if applicable).

B. Related Requirements:

1. Section 01 10 00 "Summary" for use of the premises and any phasing requirements.

1.03 UNIT PRICES

A. Per KDCA/Progressive Services, Inc. Master Contract.

1.04 DEFINITIONS

- A. Roofing Terminology: Definitions in ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work of this Section.
- B. Full Roof Tear-Off: Removal of existing roofing system from concrete or plywood deck (as applicable).

1.05 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, sections, and details.

1.06 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
 - 1. Include certificate that Installer is approved by warrantor of roofing system.
- B. Fastener pull-out test report.
- C. Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces that might be misconstrued as having been damaged by reroofing operations. Submit before Work begins.

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D. Landfill Records: Indicate receipt and acceptance of demolished roofing materials and hazardous wastes, such as asbestos-containing materials, by a landfill facility licensed to accept them.

1.07 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Reroofing Conference: Conduct conference at Project site.
 - 1. Meet with Owner; Architect; Owner's insurer if applicable; testing and inspecting agency representative; roofing system manufacturer's representative; roofing Installer, including project manager, superintendent, and foreman; and installers whose work interfaces with or affects reroofing, including installers of roof deck, roof accessories, and roof-mounted equipment.
 - 2. Review methods and procedures related to roofing system tear-off and replacement, including, but not limited to, the following:
 - a. Reroofing preparation, including roofing system manufacturer's written instructions.
 - b. Temporary protection requirements for existing roofing system components that are to remain.
 - c. Existing roof drains and roof drainage during each stage of reroofing, and roof-drain plugging and plug removal.
 - d. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to avoid delays.
 - e. Existing roof deck conditions requiring notification of Architect.
 - f. Existing roof deck removal procedures and Owner notifications.
 - g. Condition and acceptance of existing roof deck.
 - h. Structural loading limitations of roof deck during reroofing.
 - i. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that affect reroofing.
 - i. HVAC shutdown and sealing of air intakes.
 - k. Shutdown of fire-suppression, -protection, and -alarm and -detection systems.
 - 1. Governing regulations and requirements for insurance and certificates if applicable.
 - m. Existing conditions that may require notification of Architect before proceeding.

1.08 FIELD CONDITIONS

A. Existing Roofing System: Asphalt built-up, as indicated in the pre-bid inspection.

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- B. Owner will occupy portions of building immediately below and adjacent to reroofing area. Conduct reroofing so Owner's operations are not disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
 - 1. Coordinate work activities daily with Owner or Owner's Representative so that protective dust and water-leakage covers can be placed over equipment and furnishings, shut down HVAC and fire-alarm or detection equipment if needed, and evacuate occupants from below work area.
- C. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.
- D. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- E. Conditions existing at time of inspection for bidding are maintained by Owner as far as practical.
- F. Limit construction loads on roof and rooftop equipment wheel loads as not to damage existing structure.
- G. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.
 - 1. Remove only as much roofing in one day as can be made watertight in the same day.
- H. Hazardous Materials: It is not expected that hazardous materials, such as asbestoscontaining materials, will be encountered in the Work.
 - 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

1.09 RELATED REQUIREMENTS:

- 1. Section 07 60 00 "Flashing and Sheet Metal" for metal roof flashings and counter flashings.
- 2. Section 07 55 20 "(SBS) MODIFIED BITUMINOUS MEMBRANE ROOFING ".

PART 2 - PRODUCTS

2.01 TEMPORARY PROTECTION MATERIALS

- Λ. Plywood: DOC PS1, Grade CD Exposure 1.
- 2.02 INFILL AND REPLACEMENT MATERIALS AT LOW SLOPE ROOFS

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- A. Use infill materials matching existing roofing system materials unless otherwise indicated.
- B. Wood blocking, curbs, and nailers are specified in Section 06 10 00 "Rough Carpentry and Sheathing."

2.03 AUXILIARY REROOFING MATERIALS

A. General: Use auxiliary reroofing preparation materials recommended by roofing system manufacturer for intended use and compatible with components of new roofing system.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Shut off rooftop utilities and service piping in areas of work before beginning the Work.
- B. Test existing roof drains to verify that they are not blocked or restricted. Immediately notify Architect of any blockages or restrictions.
- C. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover air-intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
- D. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- E. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
 - 1. If roof drains are temporarily blocked or unserviceable due to roofing system removal or partial installation of new roofing system, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing roofing system components that are to remain.

3.02 ROOF TEAR-OFF

- A. General: Notify Owner each day of extent of roof tear-off proposed for that day.
- B. Full Roof Tear-Off: Remove existing roofing and other roofing system components down to the deck.

3.03 DECK PREPARATION

A. Full Sheathing Removal (if applicable): Remove the existing plywood sheathing and other components down to the structure.

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- B. Immediately after sheathing and old roof covering removal, inspect and repair structural components, if needed.
- C. Install new plywood sheathing to match existing and / or patch existing concrete decking (as applicable).

3.04 BASE FLASHING REMOVAL

- A. Remove existing base flashings. Clean substrates of contaminants, such as asphalt, sheet materials, dirt, and debris.
- B. Do not damage metal counter flashings that are to remain. Replace metal counterflashings damaged during removal with counter flashings of same metal, weight or thickness, and finish, or as specified in Section 07 60 00 "Flashing and Sheet Metal."
- C. Inspect parapet sheathing, wood blocking, curbs, and nailers for deterioration and damage. If parapet sheathing, wood blocking, curbs, or nailers have deteriorated, or are not present per drawings immediately notify Architect or Owner's representative.

3.05 FASTENER PULL-OUT TESTING

- A. Perform fastener pull-out tests according to SPRI FX-1, and submit test report to roofing manufacturer before installing new roofing system.
 - 1. Obtain roofing manufacturer's approval to proceed with specified fastening pattern.
 Roofing manufacturer may furnish revised fastening pattern commensurate with pullout test results.

3.06 DISPOSAL

- A. Collect demolished materials and place in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
 - 1. Storage or sale of demolished items or materials on-site is not permitted.
- B. Transport and legally dispose of demolished materials off Owner's property.

END OF SECTION 07 59 10

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SECTION 07 60 00 - FLASHING AND SHEET METAL

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included:

1. Provide Flashing and Sheet Metal not specifically described in other sections of these specifications and details, but is required to prevent penetration of water through the exterior shell of the building as it applies to the roof and parapet areas.

2. GENERAL REVIEW:

- a. The intent is to remove and replace all existing perimeter and counter-flashing metal with new.
 - (1) Coping at all perimeters Match existing design and color for exterior turn down, etc.
 - (a) Exterior turn down shall be at a minimum cover all perimeters to the current horizontal line.
 - (2) Counter-flashing at all equipment, hatches, penetrations, etc. and where it cannot be carefully salvaged at perimeter. (Galvanized metal is acceptable rather than prepainted for this item.)
 - (3) New metal on roofed in sleepers/curbs.
 - (4) Perimeter overflow scuppers.
 - (5) Additional as noted at pre-bid and noted via addenda and as defined within "Instructions to Bidders" and "General Description" portions of bid documents.

3. COPING METAL:

- a. New pre-painted coping metal required at all parapet and low parapet areas.
- b. New coping shall match existing design and color for including size, exterior turn down, while taking into consideration the increase in perimeter nailer heights, etc.
- c. To be reviewed at the pre-construction conference.

4. OTHER METAL:

- a. Remove and replace with new unless specifically identified within the specification documents or during the pre-job meeting as to be salvaged.
- b. Counter-flashing required at all perimeter and at all equipment.
 - (1) Exception: Not necessary at units that can be raised and roofed around and adequately re-installed over the base flashing membrane, where the existing flashing system will properly cover the new roofing installation. Where inadequate or damaged sheet metal flashing are present, the new system will require new metal.
- c. Drain leads, etc.

5. HVAC MODIFICATIONS:

- a. No modifications to existing HVAC equipment and/or duct system are required other than the modification of the length of the support/legs to meet height requirements above the newly installed roof system.
 - (1) Modification will be necessary to meet the new height requirements of the new roof system and contractor shall modify as a part of this project.

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- (2) Care is necessary so as not to damage the existing support/legs and the duct system during the roof project.
- 6. General Work Summary on this project shall include the following:
 - a. Installation of new standing seam coping metal at all roof area dividers.
 - b. Equipment counter-flashing/skirting.
 - c. Stainless steel scuppers to replace existing scuppers.
 - d. New leads (new at all drains as specified, re-build & applicable scupper modifications / replacement).
 - e. Miscellaneous details to meet the manufacturer's and "good roofing" practices for entire completed roof system.
- 7. Roofing accessories and incidentals as may be required during the project.
- 8. All painted metal surfaces which must be removed to properly complete the project, shall be carefully removed, examined, cleaned, primed, painted and replaced to match existing colors as applicable and discussed at pre-job meeting.
 - a. Color shall match the existing perimeter metal where replacement requires painted metal.
 - b. Color shall be standard manufacturer's color. No special order color required on this project.

1.02 SYSTEM DESCRIPTION

A. Work within this Section is to physically protect membrane roofing, base flashing, etc. from damage that would permit moisture entry into building interior.

1.03 QUALITY ASSURANCE

- A. In addition to complying with pertinent codes and regulations, all work shall comply with pertinent recommendations contained in current edition of "Architectural Sheet Metal Manual" published by the Sheet Metal and Air Conditioning Contractors National Association (SMACNA).
- B. Standard commercial items may be utilized for flashing trim, reglets and similar purposes provided such items meet or exceed the quality standards specified herein.
- C. All metal shall meet and/or exceed compliance with membrane manufacturer's warrantable system.
 - 1. Utilize membrane manufacturer's specific product with any specific application where the metal is considered a warrantable item under the manufacturer's warrantable system.

1.04 SUBMITTALS

- A. Submit shop drawings to describe all detail installations and compliance with scope of these Specifications and General Requirements where no detail drawing currently exists. This includes any proposed changes to detail drawings herein.
 - 1. The scope of the shop drawing details will be reviewed at the mandatory pre-job meeting.

1.05 REFERENCES

- A. American Society for Testing and Materials (ASTM) A525-Steel Sheet, Zinc Coated (Galvanized) by the Hot-Dip Process.
- B. SMACNA Architectural Sheet Metal Manual.
- C. Wall system manufacturer's installation instructions.

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1.06 PRODUCT HANDLING

- A. Store products under applicable provisions of Section 07520.
- B. Stack pre-formed material to prevent twisting, bending, or abrasion.
- C. Prevent contact with materials during storage, which may cause discoloration, staining or damage.
- D. Any material to be removed and replaced shall be marked for identification and carefully removed and stored until re-installation is completed.
 - 1. Items that cannot be removed and replaced without damage must be discussed and approved prior to the work at this area or the contractor shall be responsible for replacement of materials damaged during their operations.

1.07 PROTECTION

- A. Exercise care when working on or about roof surface to avoid damaging or puncturing membrane or other components.
- B. Immediately remove any screws, fasteners, trim, etc. from roof surface.
- C. All open roof areas exposed by the sheet metal removal shall be in a waterproof condition at the end of each day's work.
- D. Immediately notify Roofing Contractor (if sheet metal contractor is a sub-contractor) of any damage or punctures to newly installed or existing membrane waterproofing.

1.08 WARRANTY

A. Work of this section shall be covered under Contractor's Warranty as specified in Section 07 55 20.

PRODUCTS

1.09 MATERIALS AND GAUGE

- A. Where sheet metal is required, and no material or gauge is indicated on the drawings and details, provide the highest quality and gauge commensurate with the standards associated with this Specification with a minimum gauge of twenty-four (24).
- B. Utilize specified roofing system manufacturer's products as a first priority.
- C. Galvanized Steel: ASTM A-525, G-90; 24 gauge minimum.
- D. Pre-painted metal: Factory finish; 24 gauge minimum.
- E. Sheet Lead Flashing: Hard type conforming to Federal Specification QQ-L-201; 4 lbs per square foot for drain flashing and pipe sleeves requiring field soldering, 2 ½ lbs minimum per square foot for pre-fabricated pipe sleeves.
- F. Wall System: Match existing.

1.10 ACCESSORIES

- A. Fasteners: Galvanized steel with steel neoprene washers at exposed fasteners and other appropriate products in other unspecified locations.
- B. Metal Primer: ASTM D-41

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SEATTLE HOUSING AUTHORITY GREEN LAKE PLAZA ROOF REPLACEMENT

- C. Sealant: 1 part polyurethane (As approved by prime membrane manufacturer for use and compatibility with specified assembly.)
- D. Plastic Cement: ASTM D-4586, Type I
- E. Solder: FS QQ-S-571; ANST/ANTM B3; 50/50 type
- F. Flux: FS O-F-506
- G. Pitch Pan Sealant: ASTM C-920, Type S, Grade P, Class 25
 (As approved by prime membrane manufacturer for use and compatibility with specified assembly.)

1.11 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Form pieces in longest practical lengths.
- C. Hem exposed edges on underside ½"; miter and seam corners.
- D. Form material with flat lock seam, unless otherwise specified or detailed.
- E. Solder and seal metal joints. After soldering, remove flux. Wipe and wash solder joints clean.
- F. Fabricate corners from one piece with minimum 18" seam or solder for rigidity, seal with sealant.
- G. Fabricate vertical faces with bottom edge formed outward 1/4" (6mm) and hemmed to form drip.
- H. Fabricate flanged flashings (pitch pans) to allow flanges to extend at least four inches (4") (50mm) over roofing.
 - 1. Provide full soldered corners.
- I. All fabricated sheet metal work necessary to complete the project shall receive standing seams and shall employ double breaks with no exposed sharp edges.

1.12 FINISH

- A. Shop prepare and prime exposed ferrous metal surfaces.
- B. Back paint flashings with bituminous paint where expected to be in contact with cementatious materials or dissimilar metals.

EXECUTION

1.13 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- B. Refer to "Details" and drawings for specific direction on various types of equipment.
- C. Coordinate with Roofing Contractor (if sheet metal work is conducted as a sub-contractor to roofing contractor) so that sheet metal work is completed in a timely manner following installation of roof membrane waterproofing systems. Roof shall remain watertight at all times.
 - 1. Do not install sheet metal until all roofing work is completed to an acceptable level at the area where sheet metal work is to proceed.
- D. Verify roof openings, curbs pipes, sleeves, ducts, or vents through roof are solidly set, cant strips and reglets in place, and nailing strips located.

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- E. Verify membrane termination and base flashings are in place, sealed, and secure.
- F. Beginning of installation of flashing metals means acceptance of existing conditions by the Sheet Metal Contractor (if other than Roofing Contractor).

1.14 WORKMANSHIP

A. GENERAL METAL FABRICATION:

- 1. Shop-fabricate work to greatest extent possible.
- 2. Comply with details shown and with applicable requirement of SMACNA "Architectural Sheet Metal Manual" and other industry recognized practices.
- 3. Fabricate for waterproof and weather-resistant performance with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work.
- 4. Angle bottom edges of exposed vertical surfaces to form drips.
- 5. Fabricate to profiles and sizes as to match existing installations.
- 6. Form work to fit all substrates.
- 7. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and level indicated, with exposed edges folded back to form hems.
- B. Form, fabricate and install sheet metal so as to adequately provide for expansion and contraction in the finished work.
- C. Installation process and finished work shall be installed in a manner that will not damage the surrounding surfaces and or waterproofing.
 - 1. Contractor shall repair and/or correct the defective workmanship at no additional cost to Owner.

1.15 INSTALLATION

- A. Embed metal in contact with roof assembly in a solid bed of sealant, using materials and methods approved by the prime roofing system Manufacturer as applicable and compatible with specified and/or installed system.
- B. Conform to standard Prime Manufacturer's and/or SMACNA Architectural Sheet Metal Manual details as applicable for the successful completion of project.

C. Pipe Flashing:

1. Open vent stacks shall be sealed using lead sleeves with the tip edge crimped carefully back down into the pipe at least one inch. Replace existing damaged lead flashings with two-piece fabrication to prevent future damage from building settlement and/or movement.

(Prime Manufacturer's pre-formed sleeves are acceptable as approved for use within specified system and applicable to existing conditions.)

2. At electrical lines and pipes which cannot be disassembled, solder lead sleeve and flange together in the field, maintaining minimum six-inch (6") sleeve height and eight-inch (8") wherever possible.

(Prime Manufacturer's pre-formed sleeves are acceptable as approved for use within specified system and applicable to existing conditions).

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D. Install and seal new metal-flanged sleeve flashing and drain flashing in accordance with Section 07 55 20 and applicable details.

1.16 SOLDERING

A. GENERAL:

- 1. Thoroughly clean and tin the joint materials prior to soldering.
- 2. Perform soldering slowly, with a well-heated copper *(or applicable component material)*, in order to heat the seams thoroughly and to completely fill them with solder.
- 3. Perform soldering with a heavy soldering copper of blunt design, properly tinned for use.
- 4. Make exposed soldering on finished surfaces neat, full flowing and smooth.
- B. After soldering, thoroughly wash acid flux with a soda solution.

C. Safety:

1. Care shall be taken during any soldering work so as not to damage the roofing membrane system and/or components.

1.17 TESTS

A. Upon request of the Consultant and/or Owner, demonstrate by hose or running water that the system is completely watertight.

1.18 FINISH

- A. Finish to match existing style and color.
 - 1. Finish color shall be manufacturer's standard color.
 - 2. Color to be selected by Owner based on submittals provided by contractor after award of contract.
 - 3. Refer to specific instructions within specifications, addenda and/or drawings with regard to specific metal type and color requirements associated with various components.
- B. If painting is required, clean, prime and paint per Consultant's and/or Owner's recommendations to match existing color.

1.19 CLEAN UP

A. Contractor shall:

- 1. Remove all excess materials from finished surfaces and keep the roof and premises clean and free from accumulations of waste materials and rubbish at all times.
 - a. Remove all debris, scrap, and rubbish from the work area daily.
 - b. Surplus materials and all equipment shall be promptly removed from the site upon completion of the work.
- 2. Prior to final acceptance, the Contractor shall restore all areas affected by his work to their original state of cleanliness and repair all damage done to the premises, by his workmen and equipment.

END OF SECTION 07 60 00

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"General Decision Number: WA20190011 08/30/2019

Superseded General Decision Number: WA20180036

State: Washington

Construction Type: Building

County: King County in Washington.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the

federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Number	Publication	Date
	01/04/2019	
	01/11/2019	
	02/15/2019	
	03/01/2019	
	05/03/2019	
	06/14/2019	
	06/28/2019	
	07/26/2019	
	08/02/2019	
	08/09/2019	
	08/16/2019	
	08/30/2019	
	Number	01/04/2019 01/11/2019 02/15/2019 03/01/2019 05/03/2019 06/14/2019 06/28/2019 07/26/2019 08/02/2019 08/09/2019 08/16/2019

ASBE0007-002 06/01/2019

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST	\$ 26.62	16.59
BRWA0001-011 06/01/2017		
	Rates	Fringes
Bricklayers, Caulkers	\$ 39.46	16.15
CARP0030-008 06/01/2018		

F	Rates	Fringes
CARPENTER (Acoustical		
<pre>Installation)\$</pre>	43.92	16.12
CARPENTER (Including		
Formwork, Drywall Hanging,		
Cabinet Installation;		
Insulator-Batt and Metal Stud		
Installation)\$	43,92	16.12
MILLWRIGHT\$	45.42	16.12
PILEDRIVERMAN\$	44.17	16.12

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Cholan	Dt Townsend	

Chelan Pt. Townsend

Zone Pay:

0 -25 r	adius	miles	Free
26-35 r	adius	miles	\$1.00/hour
36-45 r	adius	miles	\$1.15/hour
46-55 r	adius	miles	\$1.35/hour
Over 55	radiı	ıs miles	\$1.55/hour

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center

Zone Pay:

0 -25 radius miles Free

26-45 radius miles

\$.70/hour

Over 45 radius miles \$1.50/hour

ELEC0046-006 02/04/2019

Rates Fringes

ELECTRICIAN.....\$ 53.49

ELEC0046-007 02/04/2019

Rates Fringes

ELECTRICIAN (Alarm

Installation Only).....\$ 31.67 3%+12.45

ELECTRICIAN (Low Voltage

Wiring Only).....\$ 36.28

3%+13.20

ELEV0019-001 01/01/2019

Rates Fringes

ELEVATOR MECHANIC.....\$ 54.09

33.705

a. Paid Holidays- New Year's Day, Memorial day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Day

ENGI0302-019 06/01/2018

	F	Rates	Fringes
Power equip	oment operators:		
* *	1A\$	44.44	19.97
Group	1AA\$	45.09	19.97
Group	1AAA\$	45.73	19.97
Group	1	43.79	19.97
Group	2\$	43.23	19.97
Group	3\$	42.74	19.97
Group	4\$	40.01	19.97

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons, or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes 200 to 300 tons, or 250 ft of boom (including jib with attachments); Excavator/Trackhoe: Over 90 metric tons

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Loaders-overhead, 8 yards and over; excavator/Trackhoe: over 50 metric tons to 90 metric tons

GROUP 1 - Cranes 45 tons thru 99 tons, under 150 ft of boom (including jib with attachments); Excavator/Trackhoe: over 30 metric tons to 50 metric tons; Loader- overhead 6 yards to, but not including 8 yards; Dozer D-10; Screedman; Scrapers: 45 yards and over; Grader/Blade

GROUP 2 - Cranes, 20 tons thru 44 tons with attachments; Drilling machine; Excavator/Trackhoe: 15 to 30 metric tons; Horizontal/directional drill operator; Loaders-overhead under 6 yards; Crane Oiler-100 Tons and Over; Compactor; Scraper: under 45 tons GROUP 3 - Cranes-thru 19 tons with attachments; Dozers-D-9 and under; Motor patrol grader-nonfinishing; Roller-Plant Mix; Crane Oiler under 100 tons; Excavator/Trackhoe: under 15 metric tons; Forklift: 3000 lbs and over with attachments; Service Oiler; Concrete Pump; Outside Hoist (Elevators and Manlifts); Pump Grout

GROUP 4 - Roller-other than plant mix; Forklift: under 3000 lbs with attachments; Bobcat; Rigger/Bellman

IRON0086-010 07/01/2018

	Rates	Fringes	
IRONWORKER (Reinforcing,			
Structural and Ornamental)	\$ 40.81	28.22	
LABO0242-002 06/01/2019			

ZONE 1:

ZONE 3 - \$1.30

	Rates	Fringes
LABORER		
GROUP 2A	.\$ 31.03	11.94
GROUP 3	.\$ 37.27	11.94
GROUP 4	.\$ 38.19	11.94
GROUP 5	.\$ 38.80	11.94
ZONE DIFFERENTIAL (ADD TO ZONE 1	RATES):	
ZONE 2 - \$1.00		

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

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ZONE 1 - Projects within 25 radius miles of the respective city hall
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ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall

LABORERS CLASSIFICATIONS

GROUP 2A: Flagman

GROUP 3: General Laborer; Chipping Gun (under 30 lbs.); Form Stripping; Roof Tearoff

GROUP 4: Chipping Gun (over 30 lbs.); Concrete Saw Operator; Gunite; Pipe Layer; Vibrating Plate

GROUP 5: Mason Tender-Brick; Mason Tender-Cement/Concrete; Grade Checker

* PAIN0005-029 07/01/2019

Rates Fringes

DRYWALL FINISHER/TAPER......\$ 43.03

PAIN0005-030 07/01/2019

Rates Fringes

Painters:

Parking Lot and Highway

Striping Only......\$ 31.61 16.07

PAIN0005-031 07/01/2019

	Rates	Fringes
PAINTER (Including Brush, Roller, Spray and Prep Work)		11.98
PAIN0188-005 07/01/2019		
	Rates	Fringes
GLAZIER		
PAIN1238-002 07/01/2019		
	Rates	Fringes
SOFT FLOOR LAYER (Including Vinyl and Carpet)		
PLAS0528-002 06/01/2019		
	Rates	Fringes
PLASTERER		17.59
PLAS0528-004 06/01/2019		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER.		18.04
PLUM0032-009 06/01/2019		
	Rates	Fringes
PIPEFITTER PLUMBER (Including HVAC Pipe	\$ 61.71	25.38

Installation)	\$ 61.71	25.38
REFRIGERATION MECHANIC		23.64
ROOF0054-008 02/01/2019		
	Rates	Fringes
ROOFER (Includes Roof Tear		
Off, Waterproofing, and		
Installation of Metal Roofs)	\$ 37.30	15.94
SFWA0699-006 01/01/2019		
	Rates	Fringes
SPRINKLER FITTER (Fire		
Sprinklers)	\$ 50.12	27.72
SHEE0066-023 06/01/2017		
	Rates	Fringes
	Races	FIIIIges
Sheet Metal Worker (Including		
HVAC Duct Work and		
Installation of HVAC Systems).	\$ 49.85	26.60
+ TD2M0174 005 06/01/2010		
* TEAM0174-005 06/01/2019		
	Rates	Fringes
Truck drivers:		
ZONE A:		
GROUP 2:	\$ 39.54	20.46
ZONE B (25-45 miles from cen	nter of listed	cities*): Add \$.70
per hour to Zone A rates.		
ZONE C (over 45 miles from c	centr of listed	cities*): Add

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\$1.00 per hour to Zone A rates.

*Zone pay will be calculated from the city center of the following listed cities:

BELLINGHAM	CENTRALIA	RAYMOND	OLYMPIA
EVERETT	SHELTON	ANACORTES	BELLEVUE
SEATTLE	PORT ANGELES	MT. VERNON	KENT
TACOMA	PORT TOWNSEND	ABERDEEN	BREMERTON

TRUCK DRIVERS CLASSIFICATIONS

GROUP 2 - Semi-Trailer Truck

HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C: +\$.25 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B: +\$.50 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical ""splash suit.""

LEVEL A: +\$.75 per hour - This level utilizes a fully-encapsulated suit with a self-contained breathing apparatus or a supplied air line.

SUWA2009-024 05/22/2009

		Kates	rringes
LABORER:	Driller\$	3 17.17	5.36
LABORER:	Irrigation\$	3 11.58	0.00

LABORER:	Landscape \$ 9.73	0.00
LABORER:	Overhead Door	
Installati	lon\$ 22.31	3.44
OPERATOR:	Backhoe\$ 29.95	7.20
OPERATOR:	Mechanic\$ 24.33	4.33
ROOFER: M	Metal Roof\$ 24.30	4.05
TILE SETTE	ER\$ 18.72	3.35
	/ER: Dump Truck\$ 27.43	0.00

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

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

is available at www.dol.gov/whd/govcontracts.

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

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

Union Rate Identifiers

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

Union prevailing wage rates are updated to reflect all rate

changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current

negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

2.) If the answer to the question in 1.) is yes, then an

interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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

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

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

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

4.)	All	decisions	by	the	Administrative	Review	Board	are	final.
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END OF GENERAL DECISION"

THE FOLLOWING FORMS WILL NEED TO BE COMPLETED AND RETURNED WITH YOUR REQUEST FOR BIDS (by EMAIL) FORM.

- Suspension and Debarment Compliance Certificate for Contractor and Subcontractors
- Section 3 Business Certification and Resident Employment Plan
- For-Profit Subgrantee and Contractor Certifications and Assurances
- Certification of Compliance with Wage Payment Statutes

SEATTLE HOUSING AUTHORITY

SUSPENSION AND DEBARMENT COMPLIANCE CERTIFICATE FOR CONTRACTOR

By signing below, the Contractor certifies that to the best of its knowledge and belief neither its firm nor any of its principals as named below are presently debarred, suspended, or have been declared ineligible or are excluded from participation in this transaction by any federal, state or local government.

	tractor's Firm Name:	
	r, State, Zip:	
	PRINCIPAL(S) Name(s)	Title(s)
1		
2		
3		

1

<u>NOTE:</u> This requirement applies to the Contractor's firm as well as its principals. Principal is defined in the regulation (2 CFR 180.995) as follows:

- An officer, director, owner, partner, principal investigator, or other person within a participant with management or supervisory responsibilities related to a covered transaction; or
- 2) A contractor or other person, whether or not employed by the participant or paid with Federal funds, who
 - a) Is in a position to handle Federal funds;

5

- b) Is in a position to influence or control the use of those funds; or,
- c) Occupies a technical or professional position capable of substantially influencing the development or outcome of an activity require to perform the covered transaction.

The federal websites to verify eligibility include: https://www.sam.gov/portal/public/SAM/ and https://portal.hud.gov/hudportal/HUD?src=/topics/limited_denials_of_participation.

SEATTLE HOUSING AUTHORITY

SUSPENSION AND DEBARMENT COMPLIANCE CERTIFICATE FOR SUB-CONTRACTORS

The Prime Contractor may use this form if the Prime can verify that their Sub-Contractors named below, nor any of their principals are debarred, suspended or ineligible from involvement by Federal, State or Local Government. If the Prime is unable to verify this information, the Prime must send the previous SUSPENSION AND DEBARMENT COMPLIANCE CERTIFICATE FOR CONTRACTOR form to each sub- contractor to be completed and returned.

Prime Contractor's Name: _____ certifies that neither any of the sub- contracting firms named below, nor any of its principals are debarred, suspended or ineligible from involvement by Federal, State or Local Government. I understand that the Seattle Housing Authority (SHA) relies on this certification and I understand that I am obligated to submit the following to SHA:

- A certification for any new sub- contractor hired after submission of this certification.
- A renewal certification for every sub- contractor on the anniversary of the Contract execution date if the Contract Time extends beyond one year.

(**Note:** In lieu of this certification, the Prime Contractor may elect to submit a separate certification signed by each sub- contracting firm to SHA as evidence of sub- contractor eligibility. It is the Prime Contractor's responsibility to initiate, obtain, and provide all such individual sub- contractor certifications to SHA.)

Prime Contractor's Signature	Printed Name	Title	Date

Sub- Contractor Firm Listing: (If sub- contractors are not involved in the project, please enter NONE.)
5 4

If additional pages are necessary, copy this form to ensure signed statement precedes any listing of sub- contractors. Please contact Greg Antoine at (206) 615-3394 or by e-mail at Gregory.Antoine@seattlehousing.org if you have any questions regarding compliance with this requirement.

Seattle Housing Authority

Section 3 Business Certification

The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed low-and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

<u>Section 3 Business Criteria:</u> Your business is eligible for Section 3 Certification if it meets any one of the following criteria. If your business meets one or more of these criteria, please circle the applicable criteria.

- Fifty-one percent or more of your business is owned and managed by a Section 3
 qualified person or persons. (See qualification guidelines below) A completed and signed
 Individual Certification form for each Section 3 qualified person or persons is required to
 be submitted.
- 2. Thirty percent or more of your permanent, full time employees are Section 3 qualified persons. (When seeking certification under this criteria, please submit a listing of all current, permanent, full-time employees, as well as a completed and signed Individual Certification form for each Section 3 qualified employee.)
- 3. You can provide evidence of a commitment to subcontract in excess of 25 percent of the amount of all subcontracts to Section 3 certified businesses. (When seeking certification under these criteria, please consult with the Section 3 Coordinator regarding the documentation to be submitted.)

Section 3 Person Criteria: A Section 3 qualified person must:

- 1) Be a City of Seattle Housing Authority public housing resident; or
- 2) Live in the metropolitan statistical area (MSA) covering King, Snohomish, and Pierce counties, and,
- 3) Earn no more than the following amounts for the respective MSA area:

Region/Area	1 Person	2 Persons	3 Persons	4 Persons	5 Persons	6 Persons	7 Persons	8 Persons
King and Snohomish Counties	\$ 56,200	\$64,200	\$ 72,250	\$ 80,250	\$ 86,700	\$ 93,100	\$ 99,550	\$ 105,950
Pierce County	\$ 41,800	\$ 47,800	\$ 53,750	\$ 59,700	\$ 64,500	\$ 69,300	\$74,050	\$ 78,850

Section 3 Statement: Please check the appropriate box below

My business is eligible to be certified as a Section 3 business in accordance with the criteria circled above under Section 3 Business Criteria.
My business is not a Section 3 business.

Signature:		Date Signed:
Name:	Title:	
Company Name:		
Address:		
Telephone Number:		

<u>Note:</u> If you certify above that your business is a Section 3 business, SHA will request documentation and additional information as may be reasonably required to certify whether your business qualifies as a Section 3 business.

Section 3 Resident Employment Plan

Section 3 of the Housing and Urban Development Act of 1968 (hereinafter "Section 3") requires SHA, to the greatest extent feasible, to provide employment opportunities to "Section 3 residents." Section 3 residents include residents of SHA communities and other low income residents of the metropolitan statistical area (hereinafter "MSA") covering King, Snohomish, and Pierce counties. SHA residents, preferably residents of the SHA community in which the work is to be done, are favored over other low-income residents of the MSA.

For construction contracts only:

- Each bidder is required to submit with their bid package a plan which will result in the hiring of Section 3 residents to perform the work contemplated by the bid. SHA has established a goal that 100% of all new hires be Section 3 Residents to the greatest extent feasible.
- At a minimum, the Contractor and its subcontractors shall advertise new positions created in order to perform the work called for herein and will post notices to the Contractor's commitments under Section 3 in conspicuous places at the work site. In addition, the Contractor must notify each labor organization with whom it or its subcontractors have a collective bargaining agreement or other understanding of these Section 3 commitments.

In order to fulfill its Section 3 obligations, the Contractor may work with service providers on site at various SHA communities including, but not limited to, Neighborhood House and the Employment Opportunities Center. The plan should specify the number of positions the Contractor expects will be created and what minimum qualifications and skills will be required in order to perform the positions. The plan, if applicable, should also address the Contractor's strategy for recruiting SHA residents for the available positions, which should include consultation with SHA's Section 3 Coordinator.

1. —	How many new positions do you expect this contract will require you to create?
	Describe each position and provide the name and provide the location of the person(s) ing applications for each such position.
3.	What minimum skills will be required for each position?
	Please describe any training opportunities which the contract may create and any eements concerning training you have.
5.	How will you advertise these positions to SHA residents?

If you have any questions about this form, please call Cary Calkins at (206) 588-4314.

For-Profit Subgrantee and Contractor Certifications and Assurances

The Department of Housing and Urban Development (HUD) requires that all for-profit Subgrantees and Contractors on HOPE VI projects sign this "Certifications and Assurances" form certifying that they will comply with the specific federal requirements described below. The parties who must sign a "Certifications and Assurances" form are defined below:

- <u>Subgrantees:</u> These are for-profit organizations to which the Housing Authority (Housing Authority or Grantee) has awarded a grant from the HOPE VI grant that the Housing Authority received from HUD. The subgrantee is accountable to the Housing Authority for the use of the funds provided, but the Housing Authority is ultimately accountable to HUD.
- <u>Contractors</u>: This includes any for-profit contractor, consultant, service provider, or supplier that the Housing Authority contracts with for goods or services on any HOPE VI project.

<u>Certification and Assurance</u>: The subgrantee or contractor executing this certification hereby assures and certifies that it will comply with all of the applicable requirements of the following, as the same may be amended from time to time, including adding appropriate provisions to all contracts between Grantee and for-profit Subgrantees or Contractors:

- (1) Administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. (Contracts more than the simplified acquisition threshold)
- (2) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)
- (3) Compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60). (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees)
- (4) Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR part 3). (All contracts and subgrants for construction or repair)
- (5) Compliance with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR part 5). (Construction contracts in excess of \$2000 awarded by grantees and subgrantees when required by Federal grant program legislation)
- (6) Compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR part 5). (Construction contracts awarded by grantees and subgrantees in excess of \$2000, and in excess of \$2500 for other contracts which involve the employment of mechanics or laborers)

- (7) Notice of awarding agency requirements and regulations pertaining to reporting.
- (8) Notice of awarding agency requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.
- (9) Awarding agency requirements and regulations pertaining to copyrights and rights in data.
- (10) Access by the grantee, the subgrantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.
- (11) Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.
- (12) Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000).
- (13) Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

The information contained in this certification is true and accurate, to the best of my knowledge.

Name of Subgrantee or Contractor	Name and Contract Number:	
Signature of Authorized Certifying Official:	Title:	Date:

<u>WARNING:</u> Section 1001 of the Title 18 of the United States Code (Criminal Code and Criminal Procedure, 72 Stat.967) applies to this certification. 18 U.S.C. 1001, among other things, provides that whoever knowingly and willfully makes or uses a document or writing knowing the same to contain any false, fictitious or fraudulent statement or entry, in any matter within jurisdiction of any department or agency of the United States, shall be fined no more than \$10,000 or imprisoned for not more than five years, or both.

Return this form to:

Seattle Housing Authority
Attn: Greg Antoine, Purchasing
P.O. Box 19028
Seattle, WA 98109-1028



true and correct.

Address 190 Queen Anne Ave N

PO Box 19028

Seattle, WA 98109

Telephone 206-615-3300

TTY 1-800-833-6388

Website www.seattlehousing.org

Certification of Compliance with Wage Payment Statutes

The undersigned hereby certifies that the bidder is now, and in the three-year period immediately preceding the date of this bid solicitation (10/18/19) has been, in compliance with the responsible bidder criteria requirement of RCW 39.04.350(1)(g) and has not been found to have willfully violated any provision of RCW Chapters 49.46, 49.48, or 49.52 in a final determination by the Department of Labor and Industries or any court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is

Bidder's Business Name

Signature of Authorized Official*

Printed Name

Title

Date City State

Check One:

Sole Proprietorship Partnership Joint Venture Corporation State of Incorporation, or if not a corporation, State where business entity was formed:

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.