Project Manual

Roseburg Urban Sanitary Authority

Office Building and Garage Reroof

June 19, 2023



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PROJECT TITLE AND INFORMATION PAGE

1. Project Identification

Owner Roseburg Urban Sanitary Authority

1297 NE Grandview Drive Roseburg, OR 97470

Owner's Contact Ryon Kershner

Project Name Office Building and Garage Reroof

Project Site Location 1297 NE Grandview Drive, Roseburg, OR 97470

2. Project Description

The project is located at the RUSA headquarters at the 1297 NE Grandview Drive and includes replacement roofing at the office building, approximately 5,460 sf and garage building, approximately 2,300 sf.

The Project consists of removing the existing roof member, expose the existing roof deck for review by the owner, new tapered insulation to improve roof drainage, new safety tie off system, new roofing membrane, and tapered insulation.

3. Project Consultants

Architect Wilson Architecture

Curt Wilson, AIA

curt@wilson-architecture.com

Structural Engineer i.e. Engineering

Rob Van Dyke, PE, SE

4. Procurement Timetable

Bid Documents Available June 19, 2023 at 10:00 am

Pre-Bid Meeting June 28, 2023 at 2:00 pm at Project Site

Additional Site Visits June 29, 2023 from 2:00-4:00 pm at Project Site

July 6, 2023 from 2:00-4:00 pm at Project Site

Date of Last Addendum July 6, 2023 at 5:00 p.m.

Bid Period Closing

July 11 at 2:00 p.m.

First-Tier Sub. Disclosure Due

July 11 at 4:00 p.m.

Construction Schedule Milestone See Section 01 1000 – Summary

Note: The Owner and Architect reserve the right to change the schedule or terminate the entire procurement process at their discretion. See Instructions to Bidders and Bid Form for more additional information.

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Not Used

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Not Used

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Not Used

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Not Used

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Not Used

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ADVERTISEMENT FOR BID

1. Invitation to Bid Notice

Notice is hereby given that bids for construction of the Roseburg Urban Sanitary Authority Office Building and Garage Reroof Project will be received at the date and time and location shown below.

Bid Submission Deadline (Closing)

- Date: Tuesday, July 11 at 2:00 pm local time.
- Location: RUSA offices at 1297 NE Grandview Drive, Roseburg OR 97470.

Bidders shall submit bids in a sealed, opaque envelope, plainly marked "Proposals for Construction Services – RUSA Office Building and Garage Reroofing Project". The Bid Opening time will be immediately after the deadline for submission of bids. Bids will be opened at the above location.

2. Project Description

The project is located at the RUSA headquarters at the 1297 NE Grandview Drive and includes replacement roofing at the office building, approximately 5,460 sf and garage building, approximately 2,300 sf.

The Project consists of removing the existing roof member, expose the existing roof deck for review by the owner, new tapered insulation to improve roof drainage, new safety tie off system, new roofing membrane, and tapered insulation.

3. Documents

Files containing the Bid Documents can be downloaded from Oregon Buys (https://oregonbuys.gov) on or after June 19, 2023 at 12:00 pm local time.

However, prime bidders must register with Wilson Architecture to be issued addenda. Addenda will be issued directly to registered prime bidders and posted on the site listed above.

To register your intent to bid the project as a primer bidder and to receive addenda, send an email to Curt Wilson, AIA, Wilson Architecture at curt@wilson-architecture.com. Include a contact name and email address.

Registered prime bidders will be listed in the addenda.

Plans and specifications may be viewed at local area plan centers. Documents will be sent to these plan centers.

- Contractor Plan Center, Clackamas.
- Daily Journal of Commerce, Portland.
- Douglas Plan Center, Roseburg.
- Eugene Builders Exchange, Eugene.
- McGraw Hill Construction Dodge, Portland.
- Medford Builders Exchange, Medford.
- Premier Builders Exchange, Bend.
- Salem Contractors Exchange, Salem.

4. Pre-Bid Meeting

A voluntary (non-mandatory) pre-bid meeting will be held at 2:00 p.m. local time on June 28, 2023 at the project site. Additional opportunities to review existing conditions will occur on June 29, 2023 from 2:00-4:00 pm and July 6, 2023 from 2:00-4:00 pm.

Statements made by RUSA representatives at that meeting are not binding on District unless confirmed by written addendum.

5. Bid Requirements

Bids must be accompanied by a certified check, cashier's check, irrevocable letter of credit or Bid Bond in an amount equal to not less than ten percent (10%) of the total amount of the bid.

Prevailing wage rates for public works contracts in Oregon are required for this project. No bid will be received or considered by the Owner unless the bid contains a statement that the Bidder will comply with the provisions of ORS 279C.800 to 279C.840 regarding the payment of prevailing rates of wage.

All bidders must be "Equal Opportunity Employers" and comply with the appropriate provisions of state and federal law. In regards to Worker's Compensation, all bidders shall be required to comply with ORS 656.017 or are exempt under ORS 656.126.

Each bid must include a statement by the bidder as to whether the bidder is a resident bidder under ORS 279A.120.

Unless exempt under ORS 279C.800 to 279C.870, the successful bidder must file a \$30,000 Public Works Bond with the Construction Contractors Board prior to beginning work on the project, and certify that all sub-contractors have also filed such bond.

The Owner may reject any bid that does not comply with all prescribed public bidding procedures and requirements, including the requirements to demonstrate the bidder's responsibility under ORS 279C.375(3)(b).

The Owner reserves the right to waive informalities, and for good cause to reject any and all bids after finding that doing so is in the public interest.

No bid will be received or considered unless the bidder is licensed by the Construction Contractors Board or the State Landscape Contractors Board for the work of the project.

Each bidder must submit a disclosure of first-tier subcontractors supplying labor or labor and materials within two hours after the date and time of the deadline when bids are due, in accordance with ORS 279C.370.

6. Questions and Clarifications

Questions to be directed to the project architect, Curt Wilson at Wilson Architecture at curt@wilson-architecture.com.

Questions will be received until 3 hours prior to the deadline for the last addenda as described in Section 00 0101 – Project Info and Title Page.

Addendums will be issued by the Architect and distributed through the same outlets as the distribution of the bid documents.

7. Published June 19, 2023. Roseburg Urban Sanitary Authority.

INSTRUCTIONS TO BIDDERS

1. Project Information

Agency: Roseburg Urban Sanitary Authority

Name of Project: Office Building and Garage Reroofing Project

2. Form of Bid

All bids must be made upon the blank Bid Form attached hereto and must give a a lump sum price as required in the Bid Form.

The Agency reserves the right to reject any or all bids or to accept the bid deemed in the best interest of the Agency. Without limiting the generality of the foregoing, the Agency may reject any bid which is incomplete, obscure or irregular; or which is accompanied by an insufficient or irregular Bid Bond.

The bidder shall sign the Bid Form in the blank space provided therefore. All bids must contain the bidder's tax identification number. Bids made by a corporation, general or limited partnership, or L.L.C., shall contain the name and address of such organization, together with names and addresses of officers, partners or managing members. If the bid is made by a corporation, it must be signed by one of the corporate officers with the authority to sign for the corporation; if made by a partnership, by one of the partners.

All bids must be submitted at the time and place, and in the manner prescribed in the Invitation to Bid.

3. Request for Change or Clarification

A bidder may request a change in items in the bid documents, including contract terms and conditions or specifications, by filing a written request with the Agency not less than five (5) calendar days prior to the bid submission deadline. Such written request for change must include a statement of the grounds for the request and a statement of the desired changes to the contract terms and conditions or specifications.

The Agency is not obligated to consider a bidder's request for change after the deadline for submitting such protest or request. If the Agency agrees with the bidder's request, in whole or in part, the Agency shall issue a written Addendum to the bid documents or specifications.

Prior to the deadline for submitting a written request for change, a bidder may request that the Agency clarify any provision of the bid documents. The Agency's clarification to a bidder, whether orally or in writing, shall not change the bid documents and is not binding on the Agency unless the Agency amends the bid documents by issuing a written addendum.

If a written addendum is issued by the Agency, all bidders must provide written acknowledgement, with their bids, of receipt of all issued addenda.

4. Definition of Documents

The Bidding Documents are comprised of the Advertisement for Bid, Instructions to Bidder, Available Project Information, Bid Form, Additional Bid Documents and Certificates, Agreement Form, Performance and Payment Bond, General Conditions, Insurance Requirements, Prevailing Wage Requirements, and Proposed Contract Documents.

The Proposed Contract Documents include Divisions 01-33 of the Project Manual, Addendas issued during Bid Period, and Drawings issued for bidding.

Any person contemplating the submission of a bid and being in doubt as to the meaning or intent of said Bidding Documents should request of the Agency, in writing, an interpretation thereof. Any interpretation of said Bidding Documents shall be made only in writing by the Agency or their representative(s).

5. Construction Contractors' Board - State Landscape Contractors' Board

All contractors bidding on public contracts must be licensed with the Construction Contractors' Board or the State Landscape Contractors Board as required by ORS 701.021 or 671.530. Bids must be identified with the Contractors' Board license number. No bids will be considered without this information.

Bidders to provide their CCB number on the front of the envelope containing their bid.

6. Disclosure of First-Tier Subcontractors

When a public improvement contract value is greater than \$100,000, all bidders are required to disclose information about first-tier subcontractors, providing labor or labor and materials, when the contract amount of such first-tier subcontractor is equal to or greater than:

- 1) 5% of the project bid, or \$15,000, whichever is greater; or
- 2) \$350,000 regardless of the percentage of the total bid.

Bidders must disclose the following information about such subcontracts, on the First-Tier Subcontractor Disclosure Form provided by the Agency and included herein, within two hours of the bid submission deadline:

- 1) The subcontractor's name;
- 2) The subcontract dollar value; and
- 3) The category of work to be performed by the subcontractor.

Any bidder not using subcontractors subject to the above disclosure form, must write "NONE" on the Disclosure Form and sign and submit the form. The Agency will reject a bid if the bidder fails to submit the Disclosure Form before the deadline.

7. Drug Testing Program

ORS 279C.505(2) requires public improvement contracts to include a provision requiring contractors to demonstrate that they have an employee drug and alcohol testing program in place. All bidders are required to certify, on the Drug Testing Program Certification Form provided by the Agency and included herein, that they have such program in place. This certification will become part of the Contract if awarded and contractor will be required to maintain such program throughout the performance of the Contract. Failure to maintain a program shall constitute a material breach of the Contract.

8. Prompt Pay Policy - Timely Progress Payments

ORS 279C.570 and 279C.580 require prompt payment to contractors and subcontractors and provides for settlement of compensation disputes between the parties. The Agency is required to automatically calculate and pay interest on invoices from the contractor when payments become overdue. The interest commences thirty (30) calendar days after receipt of the invoice from the contractor, or fifteen (15) calendar days after the payment is approved by the Agency, whichever is earlier. The rate of interest charged to the Agency on the amount due shall equal three times the discount rate on 90-day commercial paper, but shall not exceed 30 percent.

The Agency is also required to ensure that the contractor includes a clause in each subcontract that obligates the contractor to pay first-tier subcontractors for satisfactory performance under its contract.

Contractors must pay subcontractors within ten (10) calendar days of receiving payment from the Agency. Contracts between primary contractors and subcontractors must also contain an interest penalty clause that obligates the contractor, if payment is not made to the subcontractor within thirty (30) calendar days after receipt of payment from the Agency, to pay the first-tier subcontractor an interest penalty on amounts due in the case of each payment not made in accordance with the subcontract payment clause. The contractor is also required to ensure that first-tier subcontractors include these requirements in each of its subcontracts with lower-tier subcontractors or suppliers.

If requested in writing by a first-tier subcontractor, within ten (10) calendar days after receiving the request, the contractor must provide the first-tier subcontractor, a copy of that portion of any invoice or request for payment submitted to the Agency, or pay document provided by the Agency to the contractor, specifically related to any labor or materials supplied by the first-tier subcontractor.

9. Bid Bond, Public Works Bond, Payment Bond and Performance Bond

A Bid Bond, Public Works Bond Filing Certification, Payment Bond and Performance Bond shall be provided. No waivers, special requirements or emergency provisions have been established for this Contract.

10. Conditions of Work

Bidders must make their own determination of the nature of the work proposed under this Contract, the existing and current conditions which can be encountered in this area, and all other matters which can in any way affect the work proposed under this Contract. It shall also be the bidder's responsibility to be thoroughly familiar with the Bidding Documents. Failure to make the examination necessary for this determination or to examine any form, instrument or document of the Contract shall not release the bidder from the obligations of this Contract.

11. Review of Bids; Basis for Award; Notice of Intent to Award; And Right To Protest Award

In reviewing all bids received and determining the lowest responsible bidder, the Agency reserves the right to take into account and give reasonable weight to the extent of the bidder's experience on work of the nature involved, on the bidder's record as to dependability in carrying out of contracts, and evidence of present ability to perform the Contract in a satisfactory manner.

The Agency may make such investigations as deemed necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Agency all such information and data for this purpose as the Agency may request. The Agency reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Agency that such bidder is properly qualified to carry out the obligations of the Contract, to complete the work contemplated therein, and to do so in a timely manner. The Agency specifically reserves the right to reject a bid from a bidder who, at the time bids are opened, has failed to complete work in a timely manner under a contract previously awarded to the bidder by the Agency. Conditional bids will not be accepted.

In accordance with ORS 279A.120(2)(b), in determining the lowest responsible bidder, the Agency shall, for the purpose of awarding the Contract, add a percentage increase on the bid of a non resident bidder equal to the percent, if any, of the preference given to that bidder in the state in which the bidder resides.

Within forty-five (45) calendar days after the bid opening, the Agency will accept one of the bids or reject all of the bids received. If the Agency intends to accept one of the bids, it shall issue a Notice of Intent to Award the Contract to all bidders. The Agency's award will not be final until seven (7) calendar days after the date of the notice if no protest is filed; or if a protest is filed, until the Agency provides a written response to all timely-filed protests that denies the protest and affirms the award.

A bidder may submit a formal written protest to the Agency's Notice of Intent to Award the Contract within seven (7) calendar days of the date of the Agency's Notice of Intent. The written protest must specify the grounds upon which the protest is based and must show that the protesting party is an adversely affected or aggrieved bidder. A bidder is adversely affected or aggrieved only if the bidder is eligible for award of the Contract as the responsible bidder submitting the lowest responsible bid, is next in line for award and claims that all lower bidders are ineligible for award in accordance with law.

Such protest must be submitted to the Agency at 1297 NE Grandview Drive, Roseburg, OR 97470. Any protest received after the 7-day deadline will not be considered. The Agency General Manager who shall have the authority to settle or resolve the protest by written decision.

12. Commencement Date and Expiration Date of Contract

The bidder whose bid is accepted will be required to appear within ten (10) calendar days after notice that the Contract has been awarded to bidder and to execute the Contract with the Agency for the full and complete performance of all work specified, and as required by Subsection 5.4 of the General Conditions, deliver the Public Works Bond Filing Certification form, the Payment Bond to assure payment of the obligations incurred in the performance of the Contract and the Performance Bond and to ensure performance of the Contract.

Should the successful bidder fail or refuse to execute the Contract and furnish the Public Works Bond Filing Certification form, Payment Bond and/or Performance Bond when required, then the Bid Bond deposited by said bidder shall be retained by the Agency as liquidated damages.

13. Duration of Bids; Return of Bid Bonds

All bids will be binding until the later of:

- 1) the day the contract is executed; or
- 2) sixty (60) calendar days after the date of bid opening.

Bid bonds will be returned to unsuccessful bidders not later than the date on which the bids are no longer binding.

14. Public Records

These Contract Documents and each bid received in response to it, together with copies of documents pertaining to the award of a contract shall be kept on file as a public record by the Agency; provided however, such records shall not be disclosed until after the notice of intent to award the contract has been issued.

15. Records Review; Confidentiality

After notice of intent to award the resulting contract has been issued, all bids shall be available for public inspection except for those portions of a bid that the bidder designates in its bid as trade secrets or as confidential proprietary data in accordance with applicable state law. If the Agency determines such designation is not in accordance with applicable law, the Agency shall make those portions available for public inspection. The bidder shall separate information designated as confidential from other non-confidential information at the time of submitting its proposal. Prices, makes, models or catalog numbers of items offered, scheduled delivery dates and terms of payment are not confidential, and shall be publicly available regardless of a bidder's designation to the contrary.

16. Register Prime Bidders

Prime bidders must register with Wilson Architecture to be issued addenda. Addenda will be issued directly to registered prime bidders and posted on the site listed above. To register your intent to bid the project as a primer bidder and to receive addenda, send an email to Curt Wilson, AIA, Wilson Architecture at curt@wilson-architecture.com. Include a contact name and email address. Registered prime bidders will be listed in the addenda.

AVAILABLE PROJECT INFORMATION

- 1. EXISITING BUILDING DRAWINGS
 - A. Pdf version of some of the original drawings from the original building are available for viewing. These are not to be considered Record Drawings, nor "As Builts";.
 - B. Copies will be available at the pre-bid meeting for review.

BID FORM

1. Project Information

Owner: Roseburg Urban Sanitary Authority

Name of Project: Office Building and Garage Reroofing Project Location: 1297 Grandview Drive, Roseburg, OR 97470.

2. Acknowledgements

This bid is submitted to Roseburg Urban Sanitary Authority at 1297 Grandview Drive, Roseburg, OR 97470.

The undersigned bidder proposes and agrees, if this bid is accepted, to enter into a Construction Agreement with the Owner in the form included in the contract documents and to complete all work as specified or indicated in the contract documents for the contract price and within the contract time indicated in this bid and in accordance with the contract documents.

Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation, those dealing with disposition of bid security. This bid may not be amended or withdrawn and is subject to acceptance for forty (45) days after the date of bid opening. The successful bidder will sign the Construction Agreement and submit the security and other documents required by the contract documents within ten (10) days after the date of Owner's Notice of Award.

In submitting this bid, bidder represents as more fully set forth in the Construction Agreement, that:

Date:	Number:
Date:	Number:
Date:	Number:
Date:	Number:

Bidder has examined copies of the contract documents and the following addenda:

Bidder has examined the site and locality where the Work is to be performed, the applicable legal requirements (federal, state, and local, ordinances, rules, and regulations) and the conditions affecting cost, progress, or performance of work, and has made such independent investigation as bidder deems necessary;

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

The Owner is not obligated to award any contract based on the bids submitted. Any award which the Owner makes will be based on the lowest responsible bidder.

the	Payment Bond, Performance Bond and Public Works Bond (if required) will be:
 The	following documents are attached to and made a condition to the bid (check all that are attached):
	Required bid security in the form of a bid bond or certified check in the amount of 10% of the bid;
	Non-Collusion Affidavit;
	First Tier Subcontractor Disclosure Form (attached to the bid or submitted to the Owner within two (2) hours after bid closing).
	Employee Drug Testing Program Certification Form.
	following documents are to be executed after the Contract is awarded, prior to beginning work of project.
•	Construction Contract
•	Performance Bond and Payment Bond.
•	Public Works Wage Certification Form.
•	Certificate of Insurance.
•	Public Works Bond Filing Certification.
3.	Bid
Bas	e Bid
	Bidder will complete the entire Project for the following total price:
	Base Bid: \$
Bid	Alternates (See Section 01 2300 - Alternates for additional Information)
	Alternate No. 1: 80 mils Membrane
	Alt No. 1: \$
4.	Declarations
Bido	der acknowledges the Project Milestone Dates in Specification Section 01 1000 - Summary.
	Bidders Initials:
Bido	der agrees and certifies as follows:
	 The provisions of ORS 279C.800 et seq., relating to the prevailing wage rates, will be complied with;

If the bidder is awarded the Contract for this work, the name and address of the Surety who will provide

- 2. Declaration of Residency: I "am" or "am not" (circle one) a "resident bidder"* as defined by ORS 279A.120, a contractor that has paid unemployment taxes or income taxes in Oregon during the 12 calendar months immediately preceding submission of the bid, has a business address in this state and has stated in the bid whether the bidder is a "resident bidder" pursuant to ORS 279A.120.;
- 3. The provisions of ORS 305.385 relating to Oregon tax laws will be complied with;
- 4. Bidder has not and will not discriminate against minorities, women or emerging small business enterprises in obtaining any subcontracts required under this Contract, or against a business enterprise owner controlled by, or that employs, a disabled veteran as defined in ORS 408.225;
- 5. All employers, including bidder, that employ subject workers who work under the Construction Agreement shall comply with ORS 656.017 and provide the required Workers' Compensation coverage unless such employers are exempt under ORS
- 6. 656.126. Bidder shall ensure that each of its subcontractors complies with these requirements;
- 7. Bidder is registered and in good standing with the Construction Contractors Board in accordance with ORS 701.035 to 701.055;
- 8. All subcontractors performing work as described in ORS 701.005(2) will be registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 before the subcontractors commence work under the contract.

Bidders	Initials:		

5. Authority to Submit Bid

Name of company submitting bid and name of authorized representative:

Bidder:	Company Name:			
	Bidders CCB Numb	er:		
	Bidder Tax ID Numl	ber:		
	Representative:			
	Address:			
	City, State, Zip:			
	Email Address:			
If sole Proprie	etor or Partnership:			
In witness her	eto, the undersigned	as set his/her hand this	day of	, 2023.
Printed name	of bidder:			
Signature of b	idder:			
Title:				
If Corporation	n:			
In witness wh	ereof, the undersigne	ed corporation has caused t	his instrument to be execut	ed and its seal
affixed by its o	duly authorized office	ers this day of	, 2023.	
Name of Corp	oration:			
Printed name	of person signing:			
Signature:				
Title:				
Attest:				
		Secretary		

BID BOND

We,	, "as Prin	cipal,"	
(Name of Principal)			
and	, an	Coı	rporation,
(Name of Surety)			
authorized to transact Surety business ourselves, our respective heirs, executo Roseburg Urban Sanitary Authority ("O	ors, administrators, succe	essors and assigns to	o pay unto the
			dollars.
WHEREAS, the condition of the obligati to an agency of the Obligee in response for the project identified as:		nt document (No	
made a part of this bond by reference, equal to ten percent (10%) of the total ORS 279C.365(5) for competitive biddir	amount of the bid pursua	to furnish bid secui	nent document and
NOW, THEREFORE, if the proposal or be to the proposal or bid is awarded to Priwithin the time specified in the procure and sufficient performance bond, payn the time fixed by Obligee, then this obleffect. IN WITNESS WHEREOF, we have caused authorized legal representatives this	incipal, and if Principal er ement document and exe nent bond and public won igation shall be void; other d this instrument to be ex	nters into and executed and delivers rks bond as require erwise, it shall remarks the course and sealed	tes such contract to Obligee its good d by Obligee within ain in full force and
PRINCIPAL:	SURETY:		
By Signature	BY ATTORNEY-I	N-FACT:	
Official Capacity	Name		
Attest: Corporation Secretary	Signature		
	Address		
	City	State	Zip
	Phone	Email	

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

Owner:	Roseburg Urban S	anitary Authority	
Name of Project:	Office Building an	d Garage Reroofing Project	
BID CLOSING: Date:	July 11, 2023 at 2:00 pm local time.		
		on specified in the Invitation s after the advertised bid clo	n to Bid on the advertised bid osing time.
the subcontractor will	be performing and	•	osed, the category of work that ontract. Enter "NONE" if there are HEETS IF NEEDED.)
NAME		DOLLAR VALUE	CATEGORY OF WORK
1)		\$	
2)	_	\$	
3)		\$	
4)		\$	
5)		\$	
		ISCLOSURE DEADLINE WILL E CONSIDERED FOR AWARD	RESULT IN A NON-RESPONSIVE
Form submitted by (bi	ddername):		
Contact name:			
Phone no.:			

NON-COLLUSION AFFIDAVIT

State of)	Roseburg Urban Sanitary Authority (RUSA)
) ss.	
County of)	Office Building and Garage Reroof
	ake this affidavit o	of on behalf of my firm, and its owners, directors, and for the price(s) and the amount of this bid.
	with any other co	rrived at independently and without consultation, ntractor, bidder or potential bidder, except as
•	d, have been disc	bid, and neither the approximate price(s) nor ussed with any other contractor, bidder or potential endix.
-	d higher than this	nduce any firm or person to refrain from bidding on bid, or to submit any intentionally high or ntarybid.
		pursuant to any agreement or discussion with, or a complementary or other noncompetitive bid.
last four years been convicted	nder investigatior of or found liable cy or collusion wi	ffiliates, subsidiaries, officers, directors and by any governmental agency and have not in the for any act prohibited by state or federal law in any th respect to bidding on anypublic contract, except
above representations are maccontract(s) for which this bid is	terial and importa s submitted. I und s and shall be trea	understands and acknowledges that the ant, and will be relied on by RUSA in awarding the erstand and my firm understands that any sted as fraudulent concealment from RUSA of the true ontract.
Name of Company:		
Position:		
SIGNED and SWORN to before	me this	day of, 201_, by
Notary Public for		

EMPLOYEE DRUG TESTING PROGRAM

Owner: Roseburg Urban Sanitary Authority

Name of Project: Office Building and Garage Reroofing Project

ORS 279C.505 (2) provides that every public improvement contract contain a condition that the Contractor shall demonstrate that an employee drug testing program is in place. The Agency's award of the Contract for which this certificate is required is conditioned, in part, upon the Bidder's demonstration of compliance with the provisions of ORS 279C.505(2). If the Bidder named above is awarded the Contract, this certificate shall become a part of, and shall constitute a continuing representation and warranty under, the Contract.

To induce the Agency to award the Contract to the Bidder, the undersigned, as the duly authorized representative of the Bidder, hereby represents and warrants, on behalf of the above named Bidder:

- 1. That Bidder has and enforces, and at all times during the term of the Contract will have and enforce, a written employee drug testing policy that at a minimum, requires compliance with the Oregon Department of Transportation Commercial Drivers License drug testing regulations;
- 2. A copy of the Bidder's current written employee drug testing policy will be available for inspection by the Agency at any time upon the Agency's request; and
- 3. The Bidder understands and agrees that its representations and warranties herein will become a continuing part of the Contract and that breach of any of the foregoing will be sufficient grounds for disqualification under 279C.440(2)(d).

The Agency shall not be liable, either directly or indirectly, in any dispute arising out of the substance or procedure of Bidder/Contractor's drug testing program. Nothing in this drug testing provision shall be construed as requiring Bidder/Contractor to violate any legal, including constitutional rights of any employee, including but not limited to, selection of which employees to test and the manner of such testing. The Agency shall not be liable for Bidder/Contractor's negligence in establishing or implementing, or failure to establish or implement, a drug testing policy, or for any damage or injury caused by Bidder/Contractor's employees acting under the influence of drugs while performing work covered by the Contract. These are Bidder/Contractor's sole responsibilities.

In Witness whereof, the Bidder has caused this document to be executed by its duly authorized representative on the date shown below.

Signature:	-
Printed Name, Title:	-
Date:	

CONTRACTING FORMS AND SUPPLEMENTS

1. GENERAL

- A. The following AIA forms will be provided as needed.
- B. The most recent version of the AIA Document will be utilized.

2. AGREEMENT AND CONDITIONS OF THE CONTRACT

- A. See Section 00 5200 Agreement Form for the Agreement form to be executed.
- B. See Section 00 7200 General Conditions for the General Conditions.

3. FORMS

- A. The following AIA forms will be provided as needed.
- B. Bond Forms:
 - B1. Bid Bond Form: Section 00 4313
 - B2. Performance Bond: Section 00 6112.
 - B3. Payment Bond Form: Section 00 6114.
- C. Clarification and Modification Forms:
 - C1. Construction Change Directive Form: AIA G714.
 - C2. Change Order Form: AIA G701.
- D. Closeout Forms:
 - D1. Contractor's Affidavit of Payment of Debts and Claims: AIA G706
 - D2. Affidavit of Payment of Debts and Claims: AIA G706
 - D3. Contractor's Affidavit of Release of Liens: AIA G706A
 - D4. Consent of Surety to Final Payment: AIA G707
 - D5. Consent of Surety to Reduction in or Partial Release of Retainage: G707A

4. REFERENCE STANDARDS

- A1. AIA A201 General Conditions of the Contract for Construction.
- A2. AIA G701 Change Order.
- A3. AIA G702 Application and Certificate for Payment.
- A4. AIA G703 Continuation Sheet.
- A5. AIA G704 Certificate of Substantial Completion.
- A6. AIA G706 Contractor's Affidavit of Payment of Debts and Claims.
- A7. AIA G706A: Contractor's Affidavit of Release of Liens.
- A8. AIA G707: Consent of Surety to Final Payment.
- A9. AIA G707A: Consent of Surety to Reduction in or Partial Release of Retainage.
- A10. AIA G714 Construction Change Directive.

AGREEMENT

Owı	ner:	Roseburg Urban Sanitary Authority				
Nan	ne of Project:	Office Building and Garage Reroofing Project				
		ry Authority, hereinafter called Owner, and				
	enants hereinafter	hereinafter called Contractor, in consideration of mutual set forth, agree as follows:				
the		complete all work as specified in the contract documents and in accordance with wings provided for the Project known as Office Building and Garage Reroofing				
1.		ctor will furnish all materials, supplies, tools, equipment, labor and other services construction and completion of the Project described herein.				
2.	to Proceed and w Section 01 1000 -	e Work will commence within ten (10) calendar days after the date of the Notice II achieve substantial completion no later than the date stipulated in Specification Summary, unless the period for completion is extended otherwise by the contract written agreement of the parties. Other critical milestone dates are listed 01 1000				
3.	Contract Price. Owner shall pay Contractor for performance of the Work in accordance with the documents the sum of \$as shown in Contractor's bid.					
4.	application for pa progress payment values provided for will be an amount and equipment not the aggregate of pamount sufficient amounts as the O shall be upon final	s. Owner shall make progress payments on the basis of the Contractor's yment as approved by the Owner's representative as provided herein. All is shall be on the basis of progress of the Work measured by the schedule of or in the General Conditions. Prior to substantial completion, progress payments equal to not more than 95% of the Work completed and 95% of the materials of incorporated in the Work, but delivered and suitably stored, less in each case sayments previously made. Upon substantial completion, the Owner shall pay an to increase total payments to Contractor to 95% of the contract price, less such owner shall determine in accordance with the General Conditions. Final payment completion and acceptance of the Work. Partial payment estimates shall be used by Architect and forwarded to Owner for payment.				
5.	Contractor shall no blanket contracture single limit for bo	ice coverage shall be provided in accordance with the General Conditions. It is a liability insurance, including personal injury liability, all liability and broad form property damage liability with a minimum combined dily injury and property damage of not be less than \$2,000,000. Contractor shall y workers' compensation and employer's liability insurance as required by Oregon				
6.	Contract Docume	nts. The term "contract documents" means and includes the following:				
	Invitation to IInstructions t					

• Bid;

- Bid Bond;
- Construction Agreement;
- First-Tier Subcontractor Disclosure Form;
- Oregon Prevailing Wage Rates;
- General Conditions AIA A201-2017
- Payment Bond;
- Performance Bond;
- Notice of Intent to Award;
- Notice to Proceed;
- Drawings and Specifications attached;
- Change Orders;
- Addenda; Number: Dated:
- Addenda; Number: Dated:
- Addenda; Number: Dated:
- Addenda; Number: Dated:
- Proof of Insurance
- 7. Contractor's Representations. In order to induce Owner to enter into this agreement, Contractor makes the following representations:
 - a. Contractor has familiarized itself with the nature and extent of the contract documents, work, locality, and with all local conditions and any federal, state, and local laws, ordinances, rules, and regulations which, in any manner, may affect cost, progress, or performance of the Work;
 - b. Contractor has studied carefully all reports, investigations, and tests of subsurface and latent physical conditions at the site which may affect cost, progress, or performance of work and which were relied upon in the preparation of the drawings and specifications;
 - c. Contractor has made or has caused to be made examinations, investigations, tests and studies of reports and related data, in addition to those referred to in paragraph (b), which Contractor deems necessary for the performance of the Work, determination of the contract price, and completion of the Project within the contract time in accordance with the other terms and conditions of the contract documents. No additional examinations, investigations, tests, reports, or similar data are or will be required by Contractor for such purposes;
 - d. Contractor has reconciled the results of all such observations, examinations, investigations, tests, reports, and data with the terms and conditions of the contract documents;
 - e. Contractor has given the Owner's representative written notice of all conflicts, errors or discrepancies which he has discovered in the contract documents and the written resolution thereof by the Owner's representative is acceptable to the Contractor.
- 8. Oregon Public Contracting Required Terms. Section 00 5201 of the Contract Documents contains terms that are required for public improvement contracts in the State of Oregon. As applicable to the Project, Section 00 5201 of the Contract Documents is incorporated herein and made applicable to the Project.
- 9. Miscellaneous.

Jim Baird		
General Manager		
1297 NE Grandview Drive, Rose	eburg, OR 97470	
The Contractor's representative is:		
No assignment by a party hereto of an binding on another party to this contrabound; and specifically but without limare due may not be assigned without sestriction may be limited by law) and consent to an assignment, no assignment responsibility under the contract docu. This Agreement shall be binding upon successor, heirs, assigns, and legal repobligations contained in the Contract I	act without the written consent of nitation, monies which may become uch consent (except to the extent unless specifically stated to the content will release or discharge the asyments. all parties to the contract and the resentatives in respect to all cover	f the parties sought to be ne due and monies which that the effect of this ontrary in any written ssignor from any duty or ir respective partners,
THIS AGREEMENT is effective on the	day of	2021
OWNER:	CONTRACTOR:	
Ву:	Ву:	
Address for giving notices:	Address for giving notice	es:
ATTEST:	ATTEST:	
	Agent for Service of Proc License #	ress

END OF SECTION

The Owner's representative is:

PUBLIC CONTRACTING CODE

Contracting Agency: Roseburg Urban Sanitary Authority

Name of Project: Office Building and Garage Reroofing Project

(Note: The document required for Public Improvement Contractor Over \$50,000)

- Contractor shall pay promptly, as due, all persons supplying labor or materials for the prosecution
 of the work provided for in the contract, and shall be responsible for such payment of all persons
 supplying such labor or material to any Subcontractor.
 - a. ORS 279C.580(3)(a) requires the prime contractor to include a clause in each subcontract requiring contractor to pay the first-tier subcontractor for satisfactory performance under its subcontract within 10 days out of such amounts as are paid to the prime contractor by the public contracting agency; and
 - b. ORS 279C.580(3)(b) requires the prime contractor to include a clause in each subcontract requiring contractor to pay an interest penalty to the first-tier subcontractor if payment is not made within 30 days after receipt of payment from the public contracting agency.
 - c. ORS 279C.580(4) requires the prime contractor to include in every subcontract a requirement that the payment and interest penalty clauses required by ORS 279C.580(3)(a) and (b) be included in every contract between a subcontractor and a lower-tier subcontractor or supplier.
- 3. Contractor shall promptly pay all contributions or amounts due the Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the contract, and shall be responsible that all sums due the State Unemployment Compensation Fund from Contractor or any Subcontractor in connection with the performance of the contract shall promptly be paid.
- 4. Contractor shall not permit any lien or claim to be filed or prosecuted against the Contracting Agency on account of any labor or material furnished and agrees to assume responsibility for satisfaction of any such lien so filed or prosecuted.
- 5. A notice of claim on contractor's payment bond shall be submitted only in accordance with ORS 279C.600 and 279C.605.
- 6. Contractor and any Subcontractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
- 7. Contractor shall demonstrate to the Contracting Agency that an employee drug-testing program is in place within 10 days of receiving a Notice of Award.
- 8. Pursuant to ORS 279C.515, if Contractor fails, neglects or refuses to make prompt payment of any claim for labor or materials furnished to the Contractor or a Subcontractor by any person in connection with the contract as such claim becomes due, the Contracting Agency may pay such claim to the persons furnishing the labor or material and charge the amount of payment against funds due or to become due Contractor by reason of the contract. The payment of a claim in the manner authorized hereby shall not relieve the Contractor or his surety from his or its obligation with respect to any unpaid claim. If the Contracting Agency is unable to determine the validity of any claim for labor or material furnished, the Contracting Agency may withhold from any current payment due Contractor an amount equal to said claim until its validity is determined and the claim, if valid, is paid.

- 9. Pursuant to ORS 279C.515, if the Contractor or a first-tier Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public contract for a public improvement within 30 days after receipt of payment from the Contracting Agency or contractor, the contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10 day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to Contractor or first-tier
- 10. Subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve District that includes Oregon on the date that is 30 days after the date when payment was received from the public contracting agency or from the Contractor, but the rate of interest shall not exceed 30%. The amount of interest may not be waived.
- 11. As provided in ORS 279C.515, if the Contractor or a Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public contract, the person may file a complaint with the Construction Contractor's Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.
- 12. Pursuant to ORS 279C.530, Contractor shall promptly, as due, make payment to any person, copartnership, association, or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to employees of such Contractor, of all sums which the Contractor agrees to pay for such services and all monies and sums which the Contractor collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.
- 13. Contractor shall employ no person for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where public policy absolutely requires it, and in such cases, except in cases of contracts for personal services designated under ORS 279A.055, Contractor shall pay the employee at least time and one-half pay for all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work is five (5) consecutive days, Monday through Friday; or for all overtime in excess of 10 hours a day or 40 hours in any one week when the work week is 4 consecutive days, Monday through Friday; and for all work performed on Saturday and on any legal holidays as specified in ORS 279C.540.
- 14. Pursuant to ORS 279C.540(2), the Contractor must give notice to employees who work on this contract in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and the days per week that the employees may be required to work.
- 15. The provisions of ORS 279C.800 to ORS 279C.870 relating to the prevailing wage rates will be complied with. The hourly rate of wage to be paid by Contractor or any Subcontractor to workers in each trade or occupation required for the public works employed in the performance of this Contract shall not be less than the specified minimum rate of wage in accordance with ORS 279C.838 and ORS 279C.840.
 - a. The latest prevailing wage rates for public works contracts in Oregon are contained in the following publications: The January 2018 Prevailing Wage Rates for Public Works Projects in Oregon. Such publications can be reviewed electronically at: http://www.oregon.gov/boli/WHD/PWR/Pages/PWR-Rate-Publications---2023.aspx and are hereby incorporated as part of the contract documents.
 - b. Contractor and all Subcontractors shall keep the prevailing wage rates for this Project

- c. posted in a conspicuous and accessible place in or about the Project.
- d. The Owner shall pay a fee to the Commissioner of the Oregon Bureau of Labor and Industries as provided in ORS 279C.825. The fee shall be paid to the Commissioner as required by the administrative rules adopted by the Commissioner.
- e. If Contractor or any Subcontractor also provides for or contributes to a health and welfare plan or a pension plan, or both, for its employees on the Project, it shall post notice describing such plans in a conspicuous and accessible place in or about the Project. The notice shall contain information on how and where to make claims and where to obtain future information.
- 16. Unless exempt under ORS 279C.836(4), (7), (8) or (9), before starting work on this contract, or any subcontract hereunder, contractor and all subcontractors must have on file with the Construction Contractors Board a public works bond with a corporate surety authorized to do business in the state of Oregon in the amount of \$30,000. The bond must provide that the contractor or subcontractor will pay claims ordered by the Bureau of Labor and Industries to workers performing labor upon public works projects. The bond must be a continuing obligation, and the surety's liability for the aggregate of claims that may be payable from the bond may not exceed the penal sum of the bond. The bond must remain in effect continuously until depleted by claims paid under ORS 279C.836(2), unless the surety sooner cancels the bond. The surety may cancel the bond by giving 30 days' written notice to the contractor or subcontractor, to the board and to the Bureau of Labor and Industries. When the bond is canceled, the surety is relieved of further liability for work performed on contracts entered into after the cancellation. The cancellation does not limit the surety's liability for work performed on contracts entered into before the cancellation. Contractor further certifies that contractor will include in every subcontract or provision requiring a subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under ORS 279C.836(4), (7), (8), or (9).
 - a. Unless exempt under ORS 279C.836(4), (7), (8), or (9), before permitting a subcontractor to start work on this public works project, the contractor shall verify that the subcontractor has filed a public works bond as required under this section or has elected not to file a public works bond under ORS 279C.836(7).
 - b. Unless public contracting agency has been notified of any applicable exemptions under ORS 279C.836(4), (7), (8), or (9), the public works bond requirement above is in addition to any other bond contractors or subcontractors may be required to obtain under this contract.
- 17. As may be required by ORS 279C.845, Contractor or contractor's surety and every subcontractor or subcontractor's surety shall file certified payroll statements with the Contracting Agency in writing.
 - a. If a contractor is required to file certified statements under ORS 279C.845, the Contracting Agency shall retain 25% of any amount earned by the contractor on the public works project until the contractor has filed with the Contracting Agency statement as required by ORS 279C.845. The Contracting Agency shall pay the contractor the amount retained within 14 days after the contractor files the required certified statements, regardless of whether a subcontractor has failed to file certified statements required by statute. The Contracting Agency is not required to verify the truth of the contents of certified statements filed by the contractor under this section and ORS 279C.845.
 - b. The contractor shall retain 25% of any amount earned by a first-tier subcontractor on this public works contract until the subcontractor has filed with the Contracting Agency certified statements as required by ORS 279C.845. The contractor shall verify that the first-tier

subcontractor has filed the certified statements before the contractor may pay the subcontractor any amount retained. The contractor shall pay the first-tier subcontractor the amount retained within 14 days after the subcontractor files the certified statements as required by ORS 279C.845. Neither the Contracting Agency nor the contractor is required to verify the truth of the contents of certified statements filed by a first-tier subcontractor.

- 18. All employers, including Contractor, that employ subject workers who work under this contract shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its subcontractors complies with these requirements.
- 19. All sums due the State Unemployment Compensation Fund from the Contractor or any Subcontractor in connection with the performance of the contract shall be promptly so paid.
- 20. The contract may be canceled at the election of Contracting Agency for any willful failure on the part of Contractor to faithfully perform the contract according to its terms.
- 21. Contractor certifies that it has not discriminated against minorities, women or emerging small business enterprises or a business enterprise that is owned or controlled by or that employs a disabled veteran as defined in ORS 408.225 in obtaining any required subcontractors. ORS 279A.110.
- 22. Contractor certifies its compliance with the Oregon tax laws, in accordance with ORS 305.385.
- 23. In the performance of this contract, the Contractor shall use, to the maximum extent economically feasible, recycled paper, materials, and supplies, and shall compost or mulch yard waste material at an approved site, if feasible and cost effective.
- 24. As may be applicable, Contractor certifies that all subcontractors performing construction work under this contract will be registered with the Construction Contractors Board or licensed by the state Landscaping Contractors Board in accordance with ORS 701.035 to ORS 701.055 before the subcontractors commence work under this contract.
- 25. Pursuant to Contracting Agency Public Contracting Rule 137-049-0880, the Contracting Agency may, at reasonable times and places, have access to and an opportunity to inspect, examine, copy, and audit the records relating to the Contract.
- 26. In compliance with the provisions of ORS 279C.525, The Contractor and Subcontractor shall comply with all federal, state and local laws, rules, ordinances and regulations at all times and in the performance of the contract.

PERFORMANCE BONDS

KNOW ALL PERSONS BY THESE PRESENTS that (Name of Contractor) (Address of Contractor) hereinafter called "PRINCIPAL", and (Corporation, Partnership, or Individual) (Name of Surety) (Address of Surety) (Oregon representative for service of process for Surety) hereinafter called "SURETY", are held and firmly bound unto Roseburg Urban Sanitary Authority 1297 NE Grandview Drive, Roseburg, OR 97470 hereinafter called "OWNER", in the total amount of: _____ Dollars (\$ _____) (insert here a sum for the equal to the contract price) payment whereof PRINCIPAL and SURETY bind themselves, their heirs, executors, administrators, successors and assigns jointly and severally, firmly by these presents. WHEREAS, the PRINCIPAL has by written agreement entered into a certain contract with the OWNER, day of , 20 , a copy of which is hereto attached and made a part hereof and is hereinafter referred to as the Contract. Said Contract is for:

NOW, THEREFORE:

- 1. The condition of this obligation is such that, if PRINCIPAL shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.
 - a. The SURETY hereby waives notice of any alteration or extension of time made by the OWNER.
- 2. It is expressly agreed that the Bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment of the Contract not increasing the Contract price more than twenty percent (20%), so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the Contract as so amended. The term "Amendment", wherever used in this Bond, and whether referring to this Bond, the Contract, or the Loan Documents shall include any alteration, addition, extension or modification of any character whatsoever.
- 3. Whenever PRINCIPAL shall be, and declared by OWNER to be in default under the Contract, the OWNER having performed OWNER's obligations thereunder, the SURETY may promptly remedy the default, or shall promptly:
 - a. Arrange for the PRINCIPAL, with consent of the OWNER, to perform and complete the contract;
 - b. Complete the Contract in accordance with its terms and conditions, or
 - c. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by OWNER and the SURETY jointly of the lowest responsible bidder, arrange for a contract between such bidder and OWNER, and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the SURETY may be liable hereunder, the amount set forth above. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by OWNER to PRINCIPAL under the Contract and any amendments thereto, less the amount properly paid by OWNER to PRINCIPAL.
- 4. Any suit under this Bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.
- 5. If any provision of this Bond conflicts with state law, such portion will be deemed deleted therefrom and provisions conforming to such state law shall be deemed incorporated herein. The intent is that the bond shall be construed as a statutory bond and not as a common law bond.
- 6. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the OWNER named herein or the heirs, executors, administrators or successors of the OWNER.

IN WITNESS WHEREOF, this instrument is exec	counterparts, each one of	
which shall be deemed an original, this the $__$	day of	, 20
ATTEST:		
	PRINCIPAL	

PAYMENT BONDS

Roseburg Urban Sanitary Authority Owner: Name of Project: Office Building and Garage Reroofing Project Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable. CONTRACTOR (Name and Address): Name: Address: City, State, Zip: SURETY (Name and Address of Principal Place of Business): Name: Address: City, State, Zip: **CONTRACT** Effective Date of Agreement: Amount: Description (Name and Location): **BOND Bond Number:** Date:

Amount:

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

CONTRACT	OR AS PRINCIPAL
	Contractor's Name and Corporate Seal (Seal)
	Signature
	Print Name
	Title
Attest:	
	Signature
	Title
URETY	
	Contractor's Name and Corporate Seal (Seal)
	Signature
	Print Name
	Title
Attest:	
	Signature
	Title

1.01 AGREEMENT

- A. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.
- B. With respect to Owner, this obligation shall be null and void if Contractor:
 - 1. Promptly makes payment, directlyor indirectly, for all sums due Claimants, and
 - 2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.
- C. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.
- D. Surety shall have no obligation to Claimants under this Bond until:
 - Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
 - 2. Claimants who do not have a direct contract with Contractor:
 - a. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and
 - Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and
 - c. Not having been paid within the above 30 days, have sent a written notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.
- E. If a notice by a Claimant required by paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.
- F. Reserved.
- G. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.
- H. Amounts owed by Owner to Contractor under the Contract shall be used for the

- performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.
- I. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- J. Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders, and other obligations.
- K. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- L. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished shall be sufficient compliance as of the date received at the address shown on the signature page.
- M. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common lawbond.
- N. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

O. Definitions

- 1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

FOR INFORMATION ONLY:	
Name:	
Address:	
Phone:	
Surety Agency or Broker:	
Owner's Representative (Engineer or other):	

Owner Default: Failure of Owner, which has neither been remedied nor waived, to

pay Contractor as required by the Contract, or to perform and complete or

otherwise comply with the other terms thereof.

PUBLIC WORKS BOND

- 1. The Contractor and each subcontractor shall have a public works bond in the amount of \$30,000 before starting work, unless exempt under ORS 279C.836(4), (7), (8), or (9). The contractor is required to include in every subcontract a provision requiring the subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on the project, unless an exempt under ORS 279C.836(4),(7),(8) or (9). Before permitting a subcontractor to start work on a public works project, the contractor shall verify that the subcontractor has filed a public works bond or has elected not to file such bond under ORS 279.836 (7) or (8) or is exempt under ORS 279C.836(4) or (9). The Contractor shall provide a certification to County that Contractor and all subcontractors have filed the public works bond, unless exempt under ORS 279C.836(4), (7), (8), or (9).
 - a. [Effective Jan 1, 2008 Applies to business enterprises certified before, on or after January
 1, 2008 and to contracts for projects first advertised, or if not advertised then entered into, on or after January 1, 2008]
- This bond is in addition to any performance bond and payment bond requirements. The bond must meet all Bureau of Labor and Industries requirements and provide that the contractor and subcontractor will pay claims ordered by the Bureau of Labor and Industries to workers performing labor on public works projects.

GENERAL CONDITIONS

1. General Conditions applicable to this contract is AIA Document A201, General Conditions Of The Contract For Construction, Current Edition.

INSURANCE COVERAGE REQUIREMENTS

- A. Contractor shall not commence any work until contractor obtains, at contractor's own expense, all required insurance as specified below. Such insurance must have the approval of the owner as to limits, form and amount. The types of insurance contractor is required to obtain or maintain for the full period of the contract will be as specified below.
- B. Commercial General Liability insurance covering personal injury, bodily injury and property damage with limits as specified below. The insurance shall also include:
 - 1. Coverage's
 - a. Explosion & collapse
 - b. Underground hazard
 - c. Products/completed operations
 - d. Contractual liability
 - e. Broad form property damage
 - f. Owners' & contractors' protective
 - g. Personal and advertising injury.
 - 2. Limits
 - a. \$1 million per occurrence.
 - b. \$2 million aggregate.
 - 3. Form
 - a. All policies must be of the occurrence form with combined single limit for bodily injury and property damage. Any deviation from this must be reviewed by the risk manager. All claims-made forms must have the prior approval of risk manager. Submit a complete copy of claims-made policies and endorsements with the certificate of insurance
- C. Automobile liability insurance comprehensive form with limits as specified below. The coverage shall include owned, hired and non-owned automobiles.
 - 1. Limits
 - a. \$2 million per occurrence
- D. Contractual Liability insurance.
 - 1. Limits
 - a. Bodily Injury:

Each person \$1,000,000

Each Accident \$3,000,000

b. Property Damage:

Each Accident \$1,000,000

Annual Aggregate \$1,000,000

- E. Additional insured clause the liability insurance coverages required for performance of this contract shall be endorsed to name the owner and its divisions, its commissioners, officers, agents and employees as additional insureds on any insurance policies required herein with respect to provider's activities being performed under the contract. The additional insureds must be named as an additional insured by endorsement, and the policy must be endorsed to show cancellation extensions to additional insureds. Coverage shall be primary and Non-contributory with any other insurance and self-insurance.
 - 1. Provide additional insured endorsement form cg 2010.
- F. Workers' compensation and employer's liability as statutorily required for persons performing work under this contract. Any subcontractor hired by contractor shall also carry workers' compensation and employers' liability coverage.
 - 1. Employer's Liability
 - a. Limits of \$1,000,000
- G. Builder's risk insurance special form "all-risk" or equivalent policy form. Limits to be the value of the contract plus the value of subsequent contract modifications and costs of materials supplied or installed by others comprising the total value for the entire project at the site on a replacement cost basis without optional deductibles.

PREVAILING WAGE REQUIREMENTS FOR PUBLIC WORKS CONTRACTS

Prevailing Wage Rates are the minimum wages that must be paid to all workers employed in the construction, reconstruction, major renovation or painting of all public works, unless specifically exempted by state or federal law. Rather than including the entire State and/or Federal Prevailing Wage Rate publications in the bid specifications and contract, public entities may make reference to the specific prevailing wage rate publication where the prevailing wage rates are found or provide a link to the specific prevailing wage rate publication where the prevailing wage rates are found.

Oregon Bureau of Labor and Industries Prevailing Wage Rates applicable to the subject project/contract are available on BOLI's website at www.oregon.gov.boli. The prevailing wages to be applied throughout the duration of this project are those in effect for BOLI Prevailing Wage Rate Region 6, (Douglas County Oregon), upon the date the project is first advertised.

Federal Prevailing Wages Rates under the Davis Bacon Act (40 U.S.C. 3141 et seq.) may be found at www.wdol.gov. The prevailing wages to be applied throughout the duration of this project are those in effect for Federal Prevailing Wage Rates under the Davis Bacon Act (40 U.S.C. 3141 et seq.) at the time the initial specifications were first advertised for bid solicitations.

If the project is subject to both ORS 279C.800 to 279C.870 and to the Davis Bacon Act (40 U.S.C. 3414 et seq.), the contractor and every subcontractor shall pay the higher of the applicable state or federal prevailing rate of wage to all workers on the projects.

For specific information or questions regarding the Prevailing Wage Rate Law, you may log on to the above referenced websites or contact the nearest Oregon Bureau of Labor and Industries office listed below.

BOLI Office Locations

Eugene	1400 Executive Parkway, Eugene, OR 97401	541-686-7623
Medford	700 E. Main, Suite 105, Medford, OR 97504	541-776-6270
Portland	800 NE Oregon St., #32, Portland, OR 97232	503-731-4074
Salem	3865 Wolverine St. NE, Bldg. E-1, Salem, OR 97305	503-378-3292

THIS PROJECT IS SUBJECT TO THE OREGON BOLI PREVAILING WAGE RATES EFFECTIVE ON January 1st, 2023.

SECTION 01 1000

SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Project Information
- B. Definitions and declarations
- C. Work by Owner
- D. Contract Date Milestones
- E. Work Limits
- F. Owner Occupancy
- G. Contractor's Use of Site
- H. Products ordered in advance
- I. Protection of existing elements

1.2 RELATED SECTIONS

- A. Section 01 2000 Price and Payment Procedures: Pay application process, change procedures
- B. Section 01 3000 Administrative Requirements: Misc project requirements.
- C. Section 01 5000 Temporary Facilities and Controls: Dust control and barriers
- D. Section 01 7000 Execution and Closeout Requirements: Closeout procedures.
- E. Section 01 7419 Construction Waste Management and Disposal: Waste management requirements

1.3 PROJECT INFORMATION

A. Owner: Roseburg Urban Sanitary Authority
B. Project Name: Office Building and Garage Reroof

C. Architect's Name: Wilson Architecture

- D. The project is located at the RUSA headquarters at the 1297 NE Grandview Drive and includes replacement roofing at the office building, approximately 5,460 sf and garage building, approximately 2,300 sf.
- E. The Project consists of removing the existing roof member, expose the existing roof deck for review by the owner, new tapered insulation to improve roof drainage, new safety tie off system, new roofing membrane, and tapered insulation.
- 1.4 ADMINISTRATIVE REQUIREMENTS See Section 01 3000 Administrative Requirements

1.5 DEFINITIONS AND DECLARATIONS

1. Provide: Furnish and install, complete with all necessary accessories, ready for intended use. Pay for all related costs.

- Approved: Acceptance of item submitted for approval. Not a limitation or release for compliance with the Contract Documents or regulatory requirements. Refer to limitations of 'Approved' in General and Supplementary Conditions.
- 3. Match Existing: Match existing as acceptable to the Owner.
- B. Intent: Drawings and specifications are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonable implied or necessary for proper performance of the project shall be included.
- C. Writing Style: Specifications are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is the Contractor. For example, 'Provide tile' means 'Contractor shall provide tile.'

1.6 WORK BY OWNER

- A. Items noted **OFOI** (Owner-Furnished, Owner-Installed) will be supplied and installed by Owner before Substantial Completion. Some items include:
 - 1. None anticipated.
- B. Items noted **OFCI** (Owner-Furnished, Contractor-Installed) will be supplied by the Owner to the Contractor for installation before Substantial Completion. Contractor is responsible coordinated schedule with owner. Some items include:
 - 1. None anticipated
- C. Related Projects, Packages, or Contracts
 - 1. HVAC improvements at the office building.

1.7 CONTRACT DATE MILESTONES

A. Substantial completion by 12/1/2023.

1.8 WORK LIMITS

- A. The roof areas are the primary work areas. The owner will identify space at each building for roof access, loading materials, and removing debris.
- B. Coordinate extent of use with the Owner at the pre-construction meeting.

1.9 OWNER OCCUPANCY

- A. The Owner's staff will maintain normal business hours and use the campuses during construction.
- B. The vendors that support the Owner's operations and/or the public will continue to have access to the building during regular business hours during construction. Contractor to provide safe access within the construction work limits to facilitate the use.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations. Schedule the Work to accommodate Owner occupancy.

1.10 CONTRACTOR USE OF SITE AND PREMISES

A. Except as otherwise stipulated herein, Contractors will have use of the Premises within the boundaries of the work limits for the execution of the Work, except as noted in this Section and where elsewhere noted in the Contract Documents.

1.11 PRODUCTS ORDERED IN ADVANCE

A. Products Ordered in Advance: None

1.12 PROTECTING EXISTING ELEMENTS

A. Structures

- 1. Contractor shall protect against damage, existing building parts not scheduled for repair or remodel under this contract.
- 2. Where necessary to accomplish required protection, provide additional Temporary barricades, cushioning, or other approved Cover over material to be protected.

PART 2 PRODUCTS – Not Used

PART 3 EXECUTION – Not Used

SECTION 01 2000

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Schedule of Values
- B. Retainage
- C. Procedures for preparation and submittal of applications for progress payments
- D. Payments for products stored off site
- E. Change procedures
- F. Application for final payment

1.2 RELATED REQUIREMENTS

- A. Document 00 5200 Agreement Form: Contract Sum, retainages, payment period, monetary values of unit prices.
- B. Document 00 7200 General Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- C. Section 00 7343 Prevailing Wage Requirements

1.3 SCHEDULE OF VALUES

A. Format

- 1. Form to be used: AIA G703.
- Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- 3. Forms filled out by hand will not be accepted.

B. Content Organization

- 1. Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification Section. Identify the following.
- 2. Each major Work Item.
- 3. Each subcontracted Work Item. For each major Subcontract (i.e. mechanical, electrical and plumbing), list products and operations of that Subcontract as separate line items.
- 4. Any Products to be stored, for which separate payments will be requested.
- 5. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- 6. Revise schedule to list approved Change Orders, with each Application for Payment.
- 7. Round off values to nearest dollar.
- 8. Sum of values listed shall equal total Contract Sum.

9. Substantiating Data: When requested by Architect, submit justifying Substantiating Data and Line Item Amounts in question.

C. Retainage

1. See Document 00 5200 - Agreement Form for retainage amount and requirements.

1.4 APPLICATIONS FOR PROGRESS PAYMENTS

A. Format

- 1. Form to be used: AIA G702 and G703.
- 2. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- 3. Forms filled out by hand will not be accepted.
- 4. Execute certification by signature of authorized officer.
- B. Content Organization
- C. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- D. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work. Include individual line items for change orders involving multiple items.
- E. Calculate the required retainage amount.

F. Submittal

- 1. See below for schedule.
- 2. Submit one digital copy in PDF format of each Application for Payment.
- 3. Include the following with the application:
 - a. Required documents for requested payment of off-site stored products.

G. Additional information

- 1. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.
- H. When Architect finds Application properly completed and correct, Architect will transmit Certificate for Payment to Owner for approval of payment, with cc'ed copy to the Contractor.

1.5 PAYMENT FOR PRODUCTS STORED OFF THE PROJECT SITE

- A. When delay or added cost to Owner can be avoided by storing products off Site, Owner will make payment to Contractor for said products provided that
- B. Contractor shall:
 - 1. Locate storage facilities within 20 miles of the Architect's office or the project site.
 - 2. Make storage facilities available for Architect's visual inspection.
 - 3. Segregate and label stored products for specified Project.
 - Assume all risk for loss. Protect stored products and provide applicable Insurance
 against their damage, discoloration, and theft, listing the Owner and any mortgagee as
 Additional Named Insured.
 - a. Submit itemized inventory and schedule of values for stored products together with Certificate of Insurance.

- 5. Submit payment requests to Owner as part of Contractor's regular progress payment request.
- 6. Reimburse Owner for damages sustained if Stored Products are not delivered to Jobsite when needed.
- 7. When requested, submit to Owner, with copy to Architect, a written Waiver of Lien insuring Owner against claims for unpaid storage costs.
- 8. Upon receipt of payment from Owner, prepare and issue to Owner, with a copy for Architect, and any mortgagee, a Bill of Sale for stored products.

1.6 PREVAILING WAGE PAYMENT CERTIFICATION

A. Submit Prevailing Wage Payment Certification Forms.

1.7 APPLICATION PAYMENT SCHEDULE

- A. Initial application.
 - 1. Submit a preliminary draft to the Architect 3 weeks prior to the submittal for the first Application.
 - 2. The purpose preliminary draft is to confirm the level of detail required by the Design Team. The Contractor is to make adjusted requested by the Architect. The level of detail may include values as separate lines (entities) for each Specification Section.
 - 3. The Architect will not review any Application submitted until changes requested by the Architect to the preliminary draft have been incorporated.

B. Monthly

- 1. Frequency: Month.
- 2. Submit application no later than the 5th of the following month.
- 3. Assuming pay applications are consistent with work performed to date, payments will be approved on the second Wednesday of the month, and the payment will be available (in check form) by the end of the following day.
 - a. Until Substantial Completion, pay amount complete minus previous payments and retainage amount.

C. Post Substantial Completion

- 1. After execution of Certificate of Substantial Completion, and within 15 days, following Owner's approval of payment as described in the Certificate of Payment, the Owner will:
 - Pay balance due under Contract, excluding the retainage amount of at least \$1,000, or double the estimated value of uncompleted and/or unacceptable portions of Work, whichever is the greater amount.

D. Final

- 1. Thirty (30) days after final inspection and acceptance by Owner, and within 15 days following Owner's approval of payment as described in the Certificate of Payment, the Owner will:
 - a. Pay balance due under Contract, provided Work be then fully completed and Contract be then fully performed.

1.8 MODIFICATION PROCEDURES

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.
- B. For other required changes, Architect will issue a Construction Change Directive document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
 - 1. The document will describe or reference the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- C. For changes for which advance pricing is desired, Architect may issue a Proposal Request document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 7 calendar days.
- D. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors.
- E. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
 - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Owner.
 - 3. For pre-determined unit prices and quantities, the amount will based on the fixed unit prices.
 - 4. For change ordered by Architect without a quotation from Contractor, the amount will be determined by Architect for Owner approval based on the Contractor's substantiation of costs as specified for Time and Material work.
- F. Substantiation of Costs: Provide full information required for evaluation.
 - 1. On request, provide the following data:
 - a. Quantities of products, labor, and equipment.
 - b. Insurance, and bonds.
 - c. Overhead and profit.
 - d. Justification for any change in Contract Time.
 - e. Credit for deletions from Contract, similarly documented.
 - 2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.

- b. Dates and times work was performed, and by whom.
- c. Time records and wage rates paid.
- d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
- 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- G. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- H. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- I. Promptly revise progress schedules to reflect any change in Contract Time, revise subschedules to adjust times for other items of work affected by the change, and resubmit.
- J. Promptly enter changes in Project Record Documents.

1.9 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
 - 1. All closeout procedures specified in Section 01 7000 Execution and Closeout Requirements.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION – Not Used

SECTION 01 2300

ALTERNATES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Description of Alternates.
- B. Procedures for pricing Alternates.
- C. Documentation of changes to Contract Sum and Contract Time.

1.2 RELATED REQUIREMENTS

- A. Document 00 2113 Instructions to Bidders: Instructions for preparation of pricing for Alternates.
- B. Document 00 41000 Bid Form: List of Alternates.
- C. Document 00 5200 Agreement Form: Incorporating monetary value of accepted Alternates.

1.3 SUBMISSION REQUIREMENTS

- A. Submit Alternates as requested on Bid Form.
- B. Indicate variation of Bid Price for Alternates described below. The Bid Form requests a "difference" in Bid Price by adding to or deducting from the Base Bid Price.

1.4 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. The Owner reserves the right to accept any combinations of alternates plus the base bid.
- C. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.
- D. Bids will be evaluated on the Base Bid price plus any or all of the Alternates intended to be exercised by the Owner. The order of the Alternates listed here does not represent the order in which any of these Alternates will be exercised.

1.5 SCHEDULE OF ALTERNATES

- A. Alternate No. 1 80 mils Membrane
 - 1. Under the Base Bid:
 - a. Provide 60 mils membrane per specification Section 07 5400 Thermoplastic Membrane Roofing.
 - 2. Under the Alternate:
 - a. Provide 80 mils membrane per specification Section 07 5400 Thermoplastic Membrane Roofing.
 - 3. Alternate Type: Additive

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION – Not Used

SECTION 01 3000

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Coordination
- B. Permits and Fees
- C. Construction organization & start-up
- D. Submittals for review, information, and project closeout
- E. Project meetings

1.2 RELATED REQUIREMENTS

- A. Document 00 7200 General Conditions: Dates for applications for payment.
- B. Section 01 3216 Construction Progress Schedule: Form, content, and administration of schedules.
- C. Section 01 7000 Execution and Closeout Requirements: Additional coordination requirements, including closeout procedures.
- D. Section 01 7800 Closeout Submittals: Project record documents.

1.3 COORDINATION

- A. The Contractor is responsible for overall coordination of the Project.
- B. The Drawings and Specifications are arranged for convenience only and do not necessarily determine which trades perform the various portions of the Work.
- C. Coordinate sequence of work to accommodate agreed-upon Owner occupancy.
- D. Perform all necessary work to receive and/or join the work of all trades.
- E. Utilities
 - 1. Verify location of existing utilities and protect from damage.
 - 2. Notify affected utility companies and comply with their requirements.
 - Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- F. Prepare coordination drawings for areas above ceilings where close tolerances are required between building elements and mechanical and electrical work.
- G. Coordinate completion and clean-up of work of separate sections.
- H. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

- I. Dimensions: Verify dimensions indicated on drawings with field dimensions before fabrication or ordering of materials. Do not scale drawings.
- J. Existing Conditions: Notify Architect of existing conditions differing from those indicated on the drawings. Do not remove or alter structural components without prior written approval.
- K. Coordinating Subcontractors' Work
 - Coordinate the Work of all Subcontractors and make certain that, where the Work of
 one trade is dependent upon the Work of another trade, the Work first installed is
 properly placed, installed, aligned, and finished as specified or required to properly
 receive subsequent Materials applied or attached thereto.
 - Coordinate space requirements, supports, and installation of mechanical and electrical
 work that are indicated diagrammatically on Drawings. Follow routing shown for pipes,
 ducts, and conduit, as closely as practicable; place runs parallel with lines of building.
 Utilize spaces efficiently to maximize accessibility for other installations, for
 maintenance, and for repairs.
 - 3. Direct Subcontractors to correct defects in substrates they install when Subcontractors of subsequent materials have a reasonable and justifiable objection to such surfaces.
 - 4. Do not force Subcontractors to apply or install products to improperly placed or improperly finished substrates that would result in an unsatisfactory or unacceptable finished Product.
 - 5. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- L. Coordinating Work of Owner or other contracts
 - 1. See Section 01 1000 Summary for Work by Owner.
 - 2. Coordinate, and make certain that, where Work of either party is dependent upon the other party, the Work first performed is properly placed, installed, aligned, and finished as required to permit the proper installation of the Work following.
 - 3. If the Owner's Work in any way interferes with the Contractor's Work, so notify the Owner sufficiently in advance so that the Owner has reasonable time to make necessary adjustments.
 - 4. If the Contractor's Work in any way interferes with Owner's Work, so notify the Owner as soon as possible. If the Contractor's Work must be modified to accommodate the Owner's Work, except as described elsewhere in this Specification, the Contract Sum and/or the Contract Time will, when necessary be adjusted by a Change Order.

1.4 PERMITS AND FEES

- A. The Owner will be responsible for filing and paying for building permits and all fees associated with the building permit, system development charges, impact fees, etc.
- B. The Contractor will be responsible for picking up all Project permits and will have full responsibility for requirements of and payments for all trade permits (i.e. electrical, plumbing, mechanical).

1.5 CONSTRUCTION ORGANIZATION & START-UP

A. Responsible Parties:

- 1. Immediately following Contract execution, Owner will and Contractor shall identify who, within their respective organizations, will be responsible for Project Coordination.
- B. The Contractor shall establish on-site Lines of Authority and Communications including the following:
 - Schedule attendance at Preconstruction Meeting and schedule and conduct Progress Meetings.
 - 2. Establish procedures for Intra-project Communications including:
 - a. Submittals.
 - b. Reports & Records.
 - c. Recommendations.
 - d. Coordination Drawings.
 - e. Schedules.
 - f. Resolution of Conflicts.
 - 3. Technical Documents Interpretation:
 - a. Consult with Architect to obtain interpretation.
 - b. Assist in resolution of questions or conflicts which may arise.
 - c. Transmit written interpretations to Subcontractors and to other concerned parties.
 - 4. Permits & Approvals:
 - a. Verify that Subcontractors have obtained required Permits and Inspections for Work and for Temporary Facilities.
 - 5. Control use of Site:
 - a. Supervise Field Engineering and Project Layout.
 - Allocate sufficient field office space and work and storage areas to implement the project.
- 1.6 CONSTRUCTION PROGRESS SCHEDULE See Section 01 3216
- 1.7 SUBMITTALS
 - A. Submittals For Review
 - When the following are specified in individual sections, submit them for review:
 - a. Product data.
 - b. Shop drawings.
 - c. Samples for selection and/or verification.
 - d. Other information required in individual specification sections.
 - 2. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
 - 3. Product Data:
 - a. Clearly mark each copy to identify pertinent Products.

- b. Show performance characteristics and capacities.
- c. Show dimensions, field dimensions, and required clearances.
- d. Show wiring and piping diagrams, and controls.
- e. Show standard schematic drawings and diagrams as need to confirm extent of scope of work and application of product.
- 4. Samples will be reviewed only for aesthetic, color, or finish selection.
- After review, provide copies and distribute in accordance with Submittal Procedures article below and for record documents purposes described in Section 01 7800 -Closeout Submittals.

B. Submittals for Information

- 1. When the following are specified in individual sections, submit them for information:
 - a. Design data.
 - b. Certificates.
 - c. Test reports.
 - d. Inspection reports.
 - e. Manufacturer's instructions.
 - f. Manufacturer's field reports.
 - g. Other information required in individual specification sections.
 - h. Other types indicated.
- 2. Submit for Architect's knowledge as contract administrator or for Owner. No action will be taken.

C. Submittals for Project Closeout

- 1. When the following are specified in individual sections, submit them at project closeout:
 - a. Project record documents.
 - b. Operation and maintenance data.
 - c. Warranties.
 - d. Bonds.
 - e. Other information required in individual specification sections.
 - f. Other types as indicated.
- 2. Submit for Owner's benefit during and after project completion.

D. Number of Copies

- Electronic Documents: Submit one electronic copy in PDF format; an electronicallymarked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- 2. Samples: Submit the number specified in individual specification sections; two of which will be retained by Architect.

- a. After review, produce duplicates.
- b. Retained samples will not be returned to Contractor unless specifically so stated.
- c. Show full range of color, texture & pattern.

E. Submittal Procedures

- 1. Shop Drawing Procedures:
 - a. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
 - b. Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- 2. Transmit each submittal with an agreed upon transmittal or cover form that clearly describes submittal contents and the quantity of items delivered. Transmittal of cover form to include:
 - a. Sequentially number the transmittal form to align with project manual submittal numbers and sequence of submittals in a manner agreeable to the Owner.
 - b. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
 - c. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
 - d. When applicable, any deviations in Submittals from Contract Document requirements.
 - e. Provide space for Contractor and Architect review stamps.
 - f. When revised for resubmission, identify all changes made since previous submission.
- 3. Deliver submittals digitally in a system agreeable to the Owner and Architect.
- 4. Submittal schedule
 - a. Schedule submittals to expedite the Project, and coordinate submission of related items
 - b. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
 - c. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- Submit Shop Drawings, Product Data, and Samples only for those Items specifically required. The Architect will not be obligated to review Shop Drawings, Product Data, or Samples other than those required by the Contract Documents.
- 6. Submittals not requested will not be recognized or processed.
- 7. Perform no Work or Fabrication requiring Submittal until Architect approves Submittal.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 PRECONSTRUCTION MEETING

- A. Owner will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Owner.
 - 2. Architect.
 - 3. Contractor.
 - 4. Contractor's Superintendent.
 - 5. Major Subcontractors.

C. Agenda:

- 1. Introductions.
- 2. Status Owner-Contractor Agreement.
- 3. Status of post-bid submittals, including list of Subcontractors, list of Products, schedule of values, and progress schedule.
- 4. Description of Project
- 5. Distribution of Contract Documents.
- 6. Designation of personnel representing the parties to Contract, Owner and Architect.
- 7. Communication procedures, including field decisions
- 8. Submittal procedures, including substitutions
- 9. Payments procedures
- 10. Change management and approval procedure
- 11. Review of Contractor's scheduling, including key milestones
- 12. Building permit status.
- 13. Prevailing wage requirements.
- 14. Employee Security Screening and Identification Badging.
- 15. Erosion control procedures
- 16. Hazardous materials
- 17. Construction activities, working hours, use of site and building.
- 18. Waste management procedures, daily clean up and staging and parking areas.
- 19. Safety and Emergency Procedures.
- 20. Record drawings and Operations and Maintenance Manuals
- 21. Tour of Project by Owner's staff and guests (if applicable)

- 22. Schedule of weekly on-site progress meetings.
- D. Architect will record meeting summary and distribute digital copies to Owner, their subconsultants and Contractor.

3.2 PROGRESS MEETINGS

- A. Contractor shall schedule, host on site at appropriate setting, and administer meetings throughout progress of the Work at maximum weekly intervals.
- B. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. Architect.
 - 4. Contractor's Superintendent.
 - 5. Major Subcontractors.
- C. Agenda:
 - 1. Review summary of previous meetings
 - 2. Review of recently completed Work
 - 3. Review of current Work
 - 4. Review of schedule and upcoming Work
 - 5. Identify Work that is at risk of proceeding per schedule and remedies to stay on schedule.
 - 6. Review status of:
 - a. Required testing
 - b. Permit issues
 - 7. Submittals Procedure, including
 - a. Recently returned submittals
 - b. Submittals in review
 - c. Submittals with highest priority
 - d. Upcoming submittals
 - 8. Contract modifications
 - 9. Open and/or unresolved construction issues
 - 10. New items
 - 11. Items to discuss prior to review of site conditions
- D. Contractor shall record minutes and distribute copies within five days after meeting to participants, with digital copies to Architect, Owner, participants, and those affected by decisions made.
- 3.3 PRE-INSTALLATION CONFERENCES

- A. When required in individual specification sections, the Contractor shall convene a preinstallation meeting prior to commencing work of that section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect minimum seven days in advance of meeting date.
- D. The Contractor shall be responsible to prepare agenda and preside at meeting:
 - 1. Review conditions of installation, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. The Contractor shall be responsible to record minutes and distribute copies within four days after meeting to participants, with copies to Architect, Owner's Project Manager, participants, and those affected by decisions made.

CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Contractor's construction schedule
- B. Construction progress schedule, three weeks look ahead

1.2 RELATED REQUIREMENTS

- A. Section 01 2000 Price and Payment Procedures: Pay application process
- B. Section 01 3000 Administrative Requirements: Submittals and meetings

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.
- E. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.4 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file, where indicated.
 - 2. PDF electronic file.
- B. Startup construction schedule.
- C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
- D. Site Condition Reports: Provide if requested by Owner.

1.5 COORDINATION

- A. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

1.6 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice of Award to date of final completion. Manufacturer
 - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each building floor level or separate zones of work as a separate numbered activity for each main element of the Work. Comply with the following:
 - 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
 - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
- C. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.

1.7 THREE WEEK LOOK AHEAD SCHEDULE

- A. Each week during construction, provide companion schedule to master project schedule to look ahead three weeks. Provide increased detail as requested by the Owner or Architect to clearly show the work planned for the upcoming weeks.
- B. Distribute at the beginning of each weekly project meeting.

1.8 REPORTS

- A. Provide all in pdf format.
 - Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION – Not Used

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submittals
- B. References and standards
- C. Testing and inspection agencies and services
- D. Control of installation
- E. Tolerances
- F. Manufacturers' field services
- G. Defect Assessment

1.2 RELATED REQUIREMENTS

- A. Document 00 3100 Available Project Information: Soil investigation data.
- B. Document 00 7200 General Conditions: Inspections and approvals required by public authorities.
- C. Section 01 3000 Administrative Requirements: Submittal procedures.
- D. Section 01 6000 Product Requirements: Requirements for material and product quality.

1.3 REFERENCE STANDARDS

- A. ASTM C1021 Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2014).
- B. ASTM C1077 Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2014.
- C. ASTM C1093 Standard Practice for Accreditation of Testing Agencies for Masonry; 2015ae1.
- D. ASTM D3740 Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2012a.
- E. ASTM E329 Standard Specification for Agencies Engaged in Construction Inspection and/or Testing; 2014a.
- F. ASTM E543 Standard Specification for Agencies Performing Nondestructive Testing; 2015.
- G. OSSC Oregon Structural Specialty Code, current edition.

1.4 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Design Data:
 - Submit for Architect's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.

C. Test Reports:

1. After each test/inspection, promptly submit two copies of report to Architect and to Contractor.

D. Certificates:

- 1. When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
- 2. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- 3. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.

E. Manufacturer's Instructions:

1. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

F. Manufacturer's Field Reports:

- 1. Submit reports for Architect's benefit as contract administrator or for Owner.
- 2. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.5 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.

1.6 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. Owner will employ and pay for services of an independent testing agency to perform other specified testing.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step-in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed bypersons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

1.1 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.2 TESTING AND INSPECTION

- A. See individual specification sections and the current building code for testing and inspection required.
- B. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 4. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or products.
 - 5. Perform additional tests and inspections required by Architect.
 - 6. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.

4. Agency has no authority to stop the Work.

D. Contractor Responsibilities:

- 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
- 2. Cooperate with laboratory personnel and provide access to the Work and to manufacturers' facilities.
- 3. Provide incidental labor and facilities:
 - To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
- 4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
- 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect.
- F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor. Payment for re testing will be charged to the Contractor by deducting testing charges from the Contract Price.

1.3 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect 30 days in advance of required observations.
 - 1. Observer subject to approval of Architect.
 - 2. Observer subject to approval of Owner.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

1.4 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not conforming to specified requirements.

DEFINITIONS

PART 1 GENERAL

1.1 SUMMARY

- A. This section supplements the definitions contained in the General Conditions.
- B. Other definitions are included in individual specification sections.

1.2 SPECIFICATION EXPLANATION

- A. The definitions in this Section are not necessarily complete or exclusive but, generally, apply to all portions of the Work.
- B. The specifications are divided into Divisions and Sections for the convenience of writing and using. The titles of these are not intended to imply a particular meaning nor to fully describe the work of each division or section, and are not an integral part of the text which specifies the requirements. The Architect is not bound to define the limits of any subcontract, and will not enter into disputes between the Contractor and its employees, including subcontractors.
- C. These specifications are of the abbreviated, or "streamlined" type, and include incomplete sentences. Words and meanings shall be interpreted as appropriate. Words that are implied, but not stated, shall be interpolated as the sense requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.

1.3 DEFINITIONS

- A. Approve: Where used in conjunction with the Architect's or Engineer's response to submittals, requests, applications, inquiries, reports, and claims by the Contractor, the meaning of the term "approved" will be held to the limitations of the Architect's responsibilities and duties as specified in the General and Supplementary Conditions. In no case will "approval" by the Architect be interpreted as an assurance to the Contractor that the requirements of the Contract Documents have been fulfilled. The term "or approved" used in conjunction with specified materials means "properly submitted and approved substitution request."
- B. Coordinate: The term "coordinate" means satisfactorily combine the work of all trades for a complete and operating installation.
- C. Directed, Requested, etc.: Unless otherwise explained, terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by the Architect", "requested by the Architect", etc. However, no such implied meaning will be interpreted to extend the Architect's responsibility into the Contractor's area of construction supervision.
- D. Furnish: To supply, deliver to the project site, ready for unloading, unpacking, assembly, installation and similar operations, and inspect for damage.
- E. General Requirements: The provisions or requirements of Divisions 01 Sections apply to entire work of Contract and, where so indicated, to the other elements of work which are included in the Project.

- F. Guarantee and Warranty: "Warranty" is generally used in conjunction with products manufactured or fabricated away from the project site, and "guarantee" is generally used in conjunction with units of work which require both products and substantial amounts of labor at the project site. The resulting difference is that warranties are frequently issued by manufacturers and frequently supported (partially) by product guarantees from contractors and/or installers.
- G. Indicated: A cross reference to details, notes or schedules on the Drawings, to other paragraphs or schedules in the Specifications, and to similar means of recording requirements in the Contract Documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used in lieu of "indicated", it is for purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.
- H. Install: To unpack, assemble, erect, apply, place, anchor, work to dimension, finish, cure, protect, clean, start up, and make ready for use.
- I. Installer: The person or entity engaged by the Contractor or his Subcontractor or Subsubcontractor for the performance of a particular unit of work at the project site, including installation, erection, application and similar required operations.
- J. N.I.C. (Not in Contract): item or material in question will be furnished and installed by Owner. Contractor is to verify all requirements affecting this work.
- K. OFCI (Owner Furnished, Contractor Installed): item or material in question will be furnished by Owner and installed by Contractor.
- L. Product: Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products are required to be new, unless noted otherwise.
- M. Project Manual: The term "Project Manual" are the volumes which include the Bidding Requirements, Conditions of the Contract, and the Specifications, Divisions 01 through 41 inclusive, as applicable, and as listed in the Table of Contents bound therein.
- N. Provide: To furnish and install, complete and ready for the intended use.
- O. Selected: The term "selected" means "selected by the Architect and Owner".
- P. Site: Space available to the Contractor for performing the Work under this Contract, either exclusively or in conjunction with other contractors as part of the overall Project. The Site may be unimproved vacant land, an existing building or space within an existing building. The extent of the Site is shown on the Drawings.
- Q. Supply: Same as Furnish.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION – NOT USED

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Utilities and infrastructure
- B. Barriers and protection
- C. Construction facilities

1.2 RELATED REQUIREMENTS

- A. Section 01 1000 Summary: Use of site
- B. Section 01 3000 Administrative Requirements: Construction organization and start up
- C. Section 01 5713 Temporary Erosion and Sediment Control: Erosion control requirements
- D. Section 01 7419 Construction Waste Management and Disposal: Waste management requirements

1.3 REFERENCE STANDARDS

A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.

1.4 UTILITIES AND INFRASTRUCTURE

- A. Telecommunications Services
 - 1. Provide, maintain, and pay for telecommunications services to the project site when crews are working.
- B. Temporary Power
 - 1. Coordinate use of existing electrical service on site for construction with Owner.
- C. Temporary Water
 - 1. Coordinate use of existing water service on site for construction with Owner.
- D. Temporary Sanitary Facilities
 - 1. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
 - 2. Maintain daily in clean and sanitary condition.

1.5 BARRIERS AND PROTECTION

- A. Safety
 - 1. Visitor Personal Protection Equipment
 - a. Provide six sets of Personal Protection Equipment (PPE) for use by official visitors to the project site during construction. Visitor PPE shall include as a minimum, hard hat and protective eye goggles. Provide high visibility garments when moving vehicles are in use on the construction site. Store in Field Office and reserve for use by visitors to the project site.

b. Maintain in good condition through the course of the project and replace equipment that does not meet personal safety requirements.

2. Fire Protection

a. Provide and maintain necessary facilities and equipment to safeguard Project against Fire Damage.

B. Project Work Area Protection

- Physical barriers separating the roof area from the remainder of the site is not required, however Contractor to coordinate access to the roof area with the owner, and the Contractor is provide orange cones and caution tape along edge of roof at pavement below whenever roof work is within 6 ft of the edge of the roof.
- 2. Traffic Controls: Provide as required to maintain safe working environment for Owner and Contractor personnel using the site.

1.6 CONSTRUCTION FACILITIES

- A. Project Identification
 - 1. A project sign is not required for this project.
 - 2. No other signs are allowed without Owner permission except those required by law.
- B. Vehicle Access and Parking
 - 1. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
 - 2. The Owner will provide on site parking for up to 4 vehicles and a loading/unloading space for material deliveries and waste hauling.
 - 3. Coordinate access and haul routes with governing authorities and Owner.
 - 4. Provide and maintain access to fire hydrants, free of obstructions.
 - 5. Do not use Owner's parking Lots for overnight vehicle storage, equipment storage, nor crew parking without prior approval from the Owner.
 - 6. Repair existing facilities damaged by use, to original condition.
- 1.7 WASTE MANAGEMENT See Section 01 7419 Construction Waste Management and Disposal
 - A. Comply with applicable regulatory requirements.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Substitution limitations and procedures.
- B. General product requirements.
- C. Re-use of existing products.
- D. Procedures for Owner-supplied products.
- E. Transportation, handling, storage and protection.

1.2 RELATED REQUIREMENTS

- A. Document 00 2113 Instructions to Bidders: Product options and substitution procedures prior to bid date.
- B. Section 01 4000 Quality Requirements: Product quality monitoring.
- C. Section 01 6023 Substitution Request Form
- D. Section 01 7419 Construction Waste Management and Disposal: Waste disposal requirements potentially affecting packaging and substitutions.

1.3 SUBMITTALS

A. Proposed Products List

- 1. Submit list of major products that comply with the specifications and are proposed for use, with name of manufacturer, trade name, and model number of each product.
- 2. Submit within 15 days after date of Subcontract Award Notice.
- 3. For products specified only by reference standards, list applicable reference standards.

B. Product Data Submittals

Submit manufacturer's standard published data. Mark each copy to identify applicable
products, models, options, and other data. Supplement manufacturers' standard data to
provide information specific to this Project.

C. Shop Drawing Submittals

 Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

D. Sample Submittals

- 1. Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- 2. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

1.4 SUBSTITUTION REQUEST PROCEDURES - PROCUREMENT PERIOD

A. Considerations

- Substitutions will be considered when:
 - a. It benefits the Owner.
 - b. A product, through no fault of the Contractor, becomes unavailable or unsuitable due to regulatory change.

B. Process

1. Instructions to Bidders specifies process and time restrictions for submitting requests for substitutions during the bidding period. Comply with requirements specified in that section.

C. Format

- 1. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- 2. Each request for substitution approval shall include:
 - a. Identity of Product for which substitution is requested; include Specification Section.
 - b. Identity of substitution; include complete Product description, drawings, photographs, performance and test data, and any other information necessary for evaluation.
 - c. Quality comparison of proposed substitution with specified product.
 - d. Changes in other Work required because of substitution.
 - e. Effect on construction progress schedule.
 - f. Cost of proposed substitution compared with specified product.
 - g. Any required license fees or royalties.
 - h. Availability of maintenance service.
 - i. Source of replacement materials.

D. Declaration

- 1. A request for substitution constitutes a representation that the submitter:
 - a. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - b. Agrees to provide the same warranty for the substitution as for the specified product.
 - c. Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 - d. Waives claims for additional costs or time extension that may subsequently become apparent.

E. Criteria and Evaluation

1. The evaluation will be based on the suitability of the proposed product to meet the intent of the specified product based on submitted documentation.

2. Architect will be sole judge of acceptability of any proposed substitution.

1.5 SUBSTITUTION REQUEST PROCEDURES – AFTER CONTRACT AWARDS

- A. Approval will be granted only when:
 - 1. Specified Product cannot be delivered without Project delay, or
 - 2. Specified Product has been discontinued, or
 - 3. Specified Product has been replaced by superior Product, or
 - 4. Specified Product cannot be guaranteed as specified, or
 - 5. Specified Product will not perform properly, or
 - 6. Specified Product will not fit within designated space, or
 - 7. Specified Product does not comply with governing codes, or
 - 8. Substitution will be clearly in Owner's interest.
- B. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

1.6 CONTRACT COMPLIANCE

A. Substitution approval does not relieve Contractor from responsibility for proper execution of the Work and for compliance with other Contract requirements.

PART 2 PRODUCTS

2.1 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.

2.2 EXISTING PRODUCTS

A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.

2.3 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

PART 3 EXECUTION

3.1 TRANSPORTATION AND HANDLING

A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.

- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- F. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.

3.2 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on supports above ground to eliminate trapping, including ponding of water on and below the product.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Prevent contact with material that may cause corrosion, discoloration, or staining.
- I. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- J. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

SUBSTITUTION REQUEST FORM

Project: **RUSA Office Building and Garage Reroof** Reviewer Wilson Architecture curt@wilson-architecture.com Specified Item Spec Number: Name/Model: Spec Name: Line Item #: Component: **Proposed Substitution** Manufacturer: _____ Name/Model: _____ Description: Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identification of applicable data portions. Attached data also includes description of changes to Contract Documents the proposed substitution requires for proper installation. The Undersigned Certifies Following Items, Unless Modified By Attachments, Are Correct: Proposed substitution does not affect dimensions shown on the drawings. Undersigned pays for changes to building design, including engineering design, detailing, and construction costs caused by proposed substitution. 3 Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements. Maintenance and service parts are available locally or readily obtainable for proposed substitution. 4 5 Undersigned further certifies function, appearance, and quality of proposed substitution are equivalent or superior to specified item. 6 Undersigned further certifies that the manufacturer of the proposed substitution is aware of this substitution request and agrees to the statements noted above. Undersigned agrees that the terms and conditions for substitutions found in bidding documents apply to this proposed 7 substitution. **Proposer** Contact Name: _____ Firm/Company: _____ Address: Phone: City, St, Zip: Email: Signature: A/E's Review and Action Acceptable Not Acceptable Received too Late Acceptable as Noted:

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Project Conditions
- B. Patching materials
- C. Examination, preparation, and general installation procedures
- D. Requirements for forming openings in existing
- E. Cutting and patching
- F. Cleaning and protection.
- G. Demonstration and instruction of Owner personnel
- H. Closeout procedures
- I. General requirements for maintenance service

1.2 RELATED SECTIONS

- A. Section 01 1000 Summary: Owner occupancy requirements
- B. Section 01 3000 Administrative Requirements: Coordination, submittal procedures and meeting requirements
- C. Section 01 5000 Temporary Facilities and Controls: Dust protection and safety barriers
- D. Section 01 7419 Construction Waste Management and Disposal: Waste management requirements
- E. Section 01 7800 Closeout Submittals: Closeout submittals

1.3 PROJECT CONDITIONS

A. Dust Control

Execute work by methods to minimize raising dust from construction operations.
 Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.

B. Noise Control

- 1. Provide methods, means, and facilities to minimize noise produced by construction operations.
- 2. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.

C. Pollution Control

1. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

PART 2 PRODUCTS - Not Used

2.1 PATCHING MATERIALS

A. New Materials

- 1. As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products
 - 1. Determine by inspecting and testing products where necessary, referring to existing work as a standard.

C. Product Substitution

1. For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.3 PRE-INSTALLATION CONFERENCES

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. See Section 01 3000 Administrative Requirements for more information.
- 3.4 DUST PROTECTION AND SAFETY BARRIERS See Section 01 5000 Temporary Facilities and Controls
- 3.5 LAYING OUT THE WORK

A. Promptly notify Architect of any discrepancies discovered between existing conditions and information in the Drawings.

3.6 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.7 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of mechanical, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.
 - 5. Repair areas adjacent to cuts to required condition.
 - 6. Repair new work damaged by subsequent work.
 - 7. Remove samples of installed work for testing when requested.
 - 8. Remove and replace defective and non-conforming work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Restore work with new products in accordance with requirements of Contract Documents.
- F. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces, unless space is required to allow for movement. Fill residual space with sealant as required.
- G. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.

H. Sawcutting:

- 1. Employ experienced sawcutting contractor to make all holes, or slab and pavement cutting shown in drawings for architectural, structural, mechanical and electrical work.
- 2. Do not use water saws in occupied areas, unless otherwise approved.

- 3. Cut openings square and plumb with sharp edges. Minimize overcutting at corners.
- 4. Verify location of existing utilities in work area and make proper precautions to protect, disconnect and relocate, or terminate services as directed.

I. Patching:

- Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
- 2. Match color, texture, and appearance.
- Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
- J. Maintain adequate Temporary Support necessary to assure structural integrity of affected Work.
- K. Protect other portions of Project Work against damage and discoloration.
- L. Protect Work exposed by cutting against damage and discoloration.
- M. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
- N. Make neat transitions. Patch work to match adjacent work in texture and appearance. Where new work abuts or aligns with existing, perform a smooth and even transition.
- O. Patch or replace surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. Repair substrate prior to patching finish. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.
- 3.8 WASTE MANAGEMENT See Section 01 7419 Construction Waste Management and Disposal

3.9 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.10 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Prohibit traffic from landscaped areas.
- H. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.11 FINAL CLEANING

- A. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, drainage systems, and .
- B. Clean site; sweep paved areas, rake clean landscaped surfaces.
- C. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.12 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
- B. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- C. At completion of Work of each Subcontract, conduct inspection to assure that:
 - 1. Work is acceptable.
 - 2. Specified cleaning has been accomplished, and Temporary Facilities and Debris has been removed from Site.

D. Substantial Completion:

- 1. Conduct inspection and prepare list of Work to be completed or corrected.
- 2. Assist Architect in review of contractor's inspection list and generation of substantial completion punch list.
- 3. Supervise correction and completion of Work as established in Architect's Observation Reports and substantial completion punch list.
- 4. Apply for and receive Final Occupancy Permit from Building Department.
- 5. Complete submittal of Operations and Maintenance Manuals.
- 6. Complete submittal of Record Drawings.
- 7. Complete Owner Training.

E. Final Completion:

1. Assist Architect in checking that all identified deficiencies have been corrected.

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Waste management performance requirements

1.2 RELATED REQUIREMENTS

- A. Section 01 5000 Temporary Facilities and Controls: Staging and use of site
- B. Section 01 7000 Execution and Closeout Requirements: Cutting and patching
- C. Section 02 4000 Demo: Removal of existing material

1.3 PERFORMANCE REQUIREMENTS

- A. Owner requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Contractor shall provide when requested Waste Disposal Reports with source of disposal, including landfill and recycling. Record information in a consistent unit of measurement.
- E. Contractor shall develop and follow a Waste Management Plan designed to implement these requirements.
- F. Methods of trash/waste disposal that are not acceptable are:
 - 1. Burning on the project site.
 - 2. Burying on the project site.
 - 3. Dumping or burying on other property, public or private.
 - 4. Other illegal dumping or burying.
- G. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 COLLECTION

- A. Provide adequate space for pick-up and delivery and convenience to subcontractors.
- B. Provide all necessary containers, bins and storage areas to facilitate effective waste management in accordance with requirements outlined herein.

- C. Clearly identify containers, bins and storage areas so that recyclable materials are separated from trash and can be transported to respective recycling facility for processing.
- D. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- E. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- F. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

3.2 DISPOSAL

- A. Contractor shall be responsible for transporting and disposing of materials that cannot be delivered to a source-separated or mixed materials recycling facility to a transfer station or disposal facility that can accept the materials in accordance with state and federal regulations.
- B. Construction or demolition materials with no practical reuse or that cannot be salvaged or recycled shall be disposed of.

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Project Record Documents
- B. Operation and Maintenance data
- C. Warranties and bonds

1.2 SUBMITTALS

- A. General
 - 1. Provide searchable pdf format and one set of manuals in their final version.
- B. Project Record Documents:
 - 1. Submit documents to Architect prior to Substantial Completion.
- C. Operation and Maintenance Data:
 - Submit preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and provide comments.
 - For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 3. Submit completed documents 30 days prior to scheduled date of substantial completion for review and comments. Revise content of all document sets as required prior to final submission.
 - 4. Submit the revised final documents prior to date of Substantial Completion.
 - 5. Either the draft or final version of the O&M manuals must be on the project site during any of the operator training scheduled for the project.

D. Warranties and Bonds:

- 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
- 2. Provide all other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
- 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.
- 4. Submit final version prior to date of Substantial Completion.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
- B. Maintenance of documents and samples.
 - a. Store in Contractor's Field Office apart from Documents used for Construction.
 - b. Provide Files, Shelving and Cabinets necessary to safely and securely store Documents and Samples.
 - c. Maintain Documents in a clean, dry, legible, and good order.
 - d. Do not use Record Documents for Construction Purposes.
 - e. Make Documents available at all time for Architect's inspection
- C. Ensure entries are complete and accurate, enabling future reference by Owner.
- D. Store record documents separate from documents used for construction.
- E. Record information concurrent with construction progress.
- F. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- G. Record Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.

3.2 OPERATION AND MAINTENANCE DATA

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.

- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.3 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 - 1. Product data, with catalog number, size, composition, and color and texture designations.
 - 2. Information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.
- F. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data

3.4 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- D. Prepare data in the form of an instructional manual.
- E. Digital O&M Manuals: In addition to binders described below, prepare manuals as PDF documents organized like the printed manuals. Copy to one or more properly labeled CD or DVD discs.
 - 1. Digital copies of O&M Manuals must be organized by section.
- F. Paper & 3 Ring Binder O&M Manuals: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size.
 - 1. When multiple binders are used, correlate data into related consistent groupings.
- G. Cover; provide the following:
 - 1. Title each volume "WARRANTIES AND BONDS"

- 2. Owner and Project title as shown in Specification Section 01 1000 Summary
- 3. General Contractors name, address and telephone number
- 4. Volume Name and Number, per CSI Divisions.
- H. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- I. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- J. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

3.5 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's direction, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Retain warranties and bonds until time specified for submittal.
- C. Cover; provide the following:
 - 1. Title each volume "WARRANTIES AND BONDS"
 - 2. Owner and Project title as shown in Specification Section 01 1000 Summary
 - 3. General Contractors name, address and telephone number
 - 4. Subcontractor and equipment supplier; company name, address, telephone number and name of primary company contact.
- D. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- E. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing.
 - 1. Provide full information, using separate typed sheets as necessary.
 - 2. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of primary company contact.

3.6 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ARCHITECT

- A. Building Official's Certificate of Mechanical & Electrical Inspections.
- B. Building Official's Certificate of Occupancy.

SECTION 06 1000

ROUGH CARPENTRY

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Preservative treated wood materials.
- B. Miscellaneous framing and sheathing.
- C. Concealed wood blocking, nailers, and supports.

1.2 RELATED REQUIREMENTS

- A. Section 01 2000 Price and Payment Procedures: Pay application process, change procedures.
- B. Section 01 3000 Administrative Requirements: Submittal review procedures.
- C. Section 01 6000 Product Requirements: Substitution request procedures.
- D. Section 01 7000 Execution and Closeout Requirements: Closeout procedures.

1.3 REFERENCE STANDARDS

- A. AWC (WFCM) Wood Frame Construction Manual for One- and Two-Family Dwellings; 2015.
- B. AFPA (WFCM) Wood Frame Construction Manual for One- and Two-Family Dwellings; 2012.
- C. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.
- D. ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- E. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- F. AWPA U1 Use Category System: User Specification for Treated Wood; 2016.
- G. OSSC Oregon Structural Specialty Code; latest edition.
- H. PS 1 Structural Plywood; 2009.
- I. PS 20 American Softwood Lumber Standard; 2015.
- J. WWPA G-5 Western Lumber Grading Rules; 2011.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Storage

1. Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

PART 2 PRODUCTS

2.1 GENERAL REQUIREMENTS

A. Dimension Lumber

1. Comply with PS 20 and requirements of specified grading agencies.

B. Species

1. Douglas Fir-Larch, unless otherwise indicated.

C. Grading Agency

1. Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.2 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Dimension

1. Sizes: Nominal sizes as indicated on drawings, S4S.

B. Description

- 1. Grading Agency: Western Wood Products Association; WWPA G-5.
- 2. Moisture Content: S-dry or MC19.
- 3. Species: Any allowed under referenced grading rules.

C. Grade by Type and Location

- 1. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 - a. Lumber: S4S, No. 2 or Standard Grade.
 - b. Boards: Standard or No. 3.

2.3 CONSTRUCTION PANELS

A. Roof Sheathing

1. Span Rating: 40/20.

2. Dimension

- a. Thickness: See Structural Drawings; 5/8 inch, nominal.
- b. Panel Size: 48 x 96 inches.

3. Description

- a. APA PRP-108, Rated Sheathing, Exposure 1, and as follows:
- b. Species: Group 2 or better.
- c. Edges: Square.

2.4 ACCESSORIES

A. Fasteners and Anchors:

Metal and Finish

a. Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.

B. Framing Connectors

- Zinc-coated steel; Simpson, or approved. Connector model numbers shown on Drawings are taken from Simpson Catalog. If specific type is not shown on Drawings, use type recommended by Manufacturer for conditions of installation.
- 2. Joist Hangers: Hot dipped galvanized steel, sized to suit framing conditions.
- 3. For contact with preservative treated wood in exposed locations, provide minimum G185 galvanizing complying with ASTM A653/A653M.

C. Building Paper

1. Water resistant Kraft paper.

2.5 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
 - 1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.

B. Preservative Treatment:

- 1. Preservative Pressure Treatment of Lumber Above Grade: 1, Use Category UC3B, Commodity Specification A using waterborne preservative to 0.25 lb/cu ft retention.
- 2. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
- 3. Treat lumber in contact with roofing, flashing, or waterproofing.
- 4. Treat lumber in contact with masonry or concrete.
- 5. Treat lumber in other locations as indicated.

C. Fire Retardant Lumber

1. Lumber rated FS-S demonstrating a flame spread and smoke development rating of 25 or less when tested in accordance with ASTM E84 – Standard Test of Surface Burning Characteristics of Building Materials.

PART 3 EXECUTION

3.1 PREPARATION

- A. Install sill gasket under sill plate of framed walls bearing on foundations; puncture gasket cleanly to fit tightly around protruding anchor bolts.
- B. Coordinate installation of rough carpentry members specified in other sections.

3.2 INSTALLATION

- A. Installation General
 - 1. Select material sizes to minimize waste.
 - 2. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

- 3. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.
- 4. Provide preservative-treated wood nailers on roof deck as required by membrane roofing manufacturer.
 - a. Coordinate thickness of nailer with thickness of roof insulation.
- B. Installation Blocking, Nailers, and Supports
 - Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.
 - In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
 - 3. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.
 - 4. Provide the following specific non-structural framing and blocking:
 - a. Cabinets and shelf supports.
 - b. Wall brackets.
 - c. Handrails.
 - d. Grab bars.
 - e. Towel and bath accessories.
 - f. Wall-mounted door stops.
 - g. Visual display boards.
 - h. Wall paneling and trim.
 - i. Joints of rigid wall coverings that occur between studs.
- C. Installation Roof-Related Carpentry
 - 1. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.
- D. Installation Installation of Construction Panels
 - 1. Roof Sheathing
 - a. Secure panels with long dimension perpendicular to framing members, with ends staggered and over firm bearing.
 - b. At long edges provide solid edge blocking where joints occur between roof framing members.
 - c. Nail panels to framing; staples are not permitted.
 - 2. Install panels with a minimum 1/16 inch, maximum 1/8 inch gap between adjoining panels.

- E. Installation Accessories and Fastener Installation
 - 1. Provide Framing Connectors where indicated; secure with fasteners recommended by manufacturer to achieve maximum load capacity.
 - 2. Provide Washers under Nuts and Heads when making Bolted or Lag Screwed connections.
 - 3. Drive Nails perpendicular to Grain in lieu of toe-nailing where feasible.
 - 4. Lag Screws
 - a. Pre-drill to 70% of the shank diameter in supporting member, 1/32 to 1/16 inch larger than shank diameter in attached members. Use standard cut washer between bolt head and wood. Install Lag Screws by turning, do not drive with hammer.
 - 5. Nails and Screws
 - a. Fasten members per Table 2304.10.1 Fastener Schedule of the OSSC and as shown on the drawings.
 - b. Predrill holes as required to prevent splitting of members.
- F. Installation Site Applied Wood Treatment
 - 1. Apply preservative treatment compatible with factory applied treatment at site-sawn cuts, complying with manufacturer's instructions.
 - 2. Allow preservative to dry prior to erecting members.

3.3 FIELD QUALITY CONTROL

- A. Tolerances
 - 1. Framing Members: 1/4 inch from true position, maximum.
 - 2. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

SECTION 07 0150

PREPARATION FOR ROOF REPLACEMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Full tear-off of roof system at areas indicated on Drawings.

1.2 RELATED REQUIREMENTS

- A. Section 01 2000 Price and Payment Procedures: Pay application process, change procedures.
- B. Section 01 3000 Administrative Requirements: Submittal review procedures.
- C. Section 01 6000 Product Requirements: Substitution request procedures.
- D. Section 01 7000 Execution and Closeout Requirements: Closeout procedures.
- E. Section 07 5400 Thermoplastic Membrane Roofing

1.3 REFERENCE STANDARDS

A. OSSC - Oregon Structural Specialty Code, latest edition.

1.4 DEFINITIONS

- A. Full Roof Tear-off: Removal of existing roofing system down to existing composite roof insulation or concrete fill where occurs.
- B. Roofing Terminology: Definitions in ASTM D1079 and glossary of NRCA's "The NRCA Roofing Manual: Membrane Roof Systems" apply to work of this Section.

1.5 QUALITY ASSURANCE

A. Qualifications

- 1. Installer Qualifications: Company specializing in performing the work of this section with minimum three years of experience.
- B. Pre-Installation Meetings
 - 1. Attendance:
 - a. Owner
 - b. Architect
 - c. General Contractor
 - d. Roofing installer project manager and crew leader.
 - e. Roof manufacturer representative.
 - f. Sheet Metal installer
 - g. Other subcontractors impacted by the work.
 - 2. Convene one week before starting work of this section.
 - 3. Review methods and procedures related to roofing tear-off, 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 Architect notification.
- f. Existing roof deck removal procedures and Owner notifications.
- g. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
- h. Structural loading limitations of roof deck during reroofing.
- Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that affect reroofing.
- j. HVAC shutdown and sealing of air intakes.
- k. Governing regulations and requirements for insurance and certificates if applicable.
- I. Existing conditions that may require Architect notification before proceeding.

1.6 PROJECT/SITE CONDITIONS

- A. Existing Roofing System:
 - 1. The owner speculates there are the outer single-ply system is installed over the previous BUR system.
- B. Owner will occupy portions of building immediately below reroofing area.
 - 1. Conduct reroofing so Owner's operations are not disrupted.
 - 2. Provide Owner with not less than 24 hours written notice of activities that may affect Owner's operations.
 - Coordinate work activities daily with Owner so Owner has adequate advance notice to
 place protective dust and water-leakage covers over sensitive equipment and
 furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and
 evacuate occupants from below work area.
 - 4. Before working over structurally impaired areas of deck, notify Owner to evacuate occupants from below affected area.
 - a. Verify that occupants below work area have been evacuated before proceeding with work over impaired deck 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 will be maintained by Owner as far as practical.
 - Construction Drawings from original construction are available for Contractor's
 convenience and information, but they are not a warranty of existing conditions. They
 are intended to supplement rather than serve in lieu of Contractor's own investigations.
 Contractor is responsible for conclusions derived from existing documents.

1.7 Weather Limitations

- A. Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.
- B. Remove only as much roofing in one day as can be made watertight in the same day.
- 1.8 Hazardous Materials: It is not expected that hazardous materials, such as asbestos- containing materials, will be encountered in the Work.
 - A. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner.

PART 2 PRODUCTS

2.1 Section 07 5400 – Thermoplastic Membrane Roofing for product information.

PART 3 EXECUTION

3.1 PREPARATION

- A. Protection of In-Place Conditions:
 - 1. Limit traffic and material storage to areas of existing roofing that have been protected.
 - 2. Maintain temporary protection and leave in place until replacement roofing has been completed. Remove temporary protection on completion of reroofing.
 - 3. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- B. Protection of openings and air intakes.
 - Seal or isolate windows that may be exposed to airborne substances created in removal
 of existing materials.
 - 2. Shut off rooftop utilities and service piping before beginning the Work.
 - 3. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work.
 - a. Cover air-intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
- C. Protection of roof drains.
 - 1. Test existing roof drains to verify that they are not blocked or restricted.
 - a. Immediately notify Architect of any blockages or restrictions.
 - 2. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday.

- 3. Prevent debris from entering or blocking roof drains and conductors.
 - a. Use roof-drain plugs specifically designed for this purpose.
 - b. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
- 4. 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.
 - a. Do not permit water to enter into or under existing roofing system components that are to remain.
- 5. Existing roofing and flashings at scupper roof drains to be removed and existing wood framing to be exposed and prep for new scupper flashing assembly.

3.2 ROOF TEAR-OFF

- A. Notify Owner each day of extent of roof tear-off proposed for that day and obtain authorization to proceed.
- B. Lower removed roofing materials to ground and onto lower roof levels, using dust-tight chutes or other acceptable means of removing materials from roof areas.
- C. Full Roof Tear-off
 - 1. Where indicated on the drawings, remove existing roofing and other roofing system components down to the existing roof deck, concrete fill, or roof insulation.
 - a. Remove roof insulation.
 - b. Remove base flashings and counter flashings.
 - c. Remove perimeter edge flashing.
 - d. Remove copings.
 - e. Remove expansion-joint covers.
 - f. Remove flashings at pipes, curbs, mechanical equipment, and other penetrations.
 - g. Remove roof drains indicated on Drawings to be removed.
 - h. Remove wood blocking, curbs, and nailers.
 - i. Remove unadhered bitumen, unadhered felts, and wet felts.

3.3 DECK PREPARATION

- A. Notify owner or architect when existing deck, parapet sheathing, curbs, blocking, etc. is exposed after tear-off each day and coordination site verification review to confirm extent of materials to be repaired and/or replaced.
 - 1. Repair items as directed by the architect or owner.
 - 2. Deck repair will be paid for by adjusting the Contract Sum according to change procedures included in the Contract Documents.
- B. If deck surface is unsuitable for receiving new roofing or if structural integrity of deck is suspect, immediately notify Architect.
 - 1. Do not proceed with installation until directed by Architect.

2. Replace extent of plywood roof sheathing as directed by Architect.

3.4 INSTALLATION – INFILL MATERIALS

- A. Immediately after roof tear-off, and inspection and repair, if needed, of deck, fill in tear-off areas to match existing roofing system construction.
 - 1. Install new roofing patch over roof infill area.
 - a. If new roofing is installed the same day tear-off is made, roofing patch is not required.

3.5 BASE FLASHING REMOVAL

- A. Remove existing base flashings.
- B. Do not damage metal counterflashings that are to remain.
 - Replace metal counterflashings damaged during removal with counterflashings of same metal, weight or thickness, and finish as existing. Specified in Section 076200 "Sheet Metal Flashing and Trim."

3.6 DISPOSAL

- A. Collect demolished materials and place in containers.
 - 1. Promptly dispose of demolished materials.
 - 2. Do not allow demolished materials to accumulate on-site.
 - 3. 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.

SECTION 07 5400

THERMOPLASTIC MEMBRANE ROOFING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Mechanically attached system with thermoplastic roofing membrane.
- B. Roof fire classification.
- C. Insulation, flat and tapered.
- D. Flashings.
- E. Roofing stack boots and walkway pads.

1.2 RELATED REQUIREMENTS

- A. Section 01 2000 Price and Payment Procedures: Pay application process, change procedures.
- B. Section 01 2300 Alternates
- C. Section 01 3000 Administrative Requirements: Submittal review procedures.
- D. Section 01 6000 Product Requirements: Substitution request procedures.
- E. Section 01 7000 Execution and Closeout Requirements: Closeout procedures.
- F. Section 06 1000 Rough Carpentry: Misc framing and/or sheathing if necessary for repairs.
- G. Section 07 0150 Preparation for Roof Replacement: Existing roof tear off.
- H. Section 07 6200 Sheet Metal Flashing and Trim: Counterflashings, reglets.
- I. Section 07 7200 Roof Accessories. Components installed through or attached to the roofing system.
- J. Section 07 9200 Joint Sealers.

1.3 REFERENCE STANDARDS

- A. ASTM C1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2014.
- B. ASTM C1396/C1396M Standard Specification for Gypsum Board; 2014.
- C. ASTM D6878/D6878M Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing; 2013.
- D. ASTM E1980 Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces; 2011.
- E. FM DS 1-28 Wind Design; Factory Mutual Research Corporation; 2007.
- F. NRCA ML104 The NRCA Roofing and Waterproofing Manual; National Roofing Contractors Association; Fifth Edition, with interim updates.
- G. OSSC Oregon Structural Specialty Code, latest edition.

H. UL (RMSD) - Roofing Materials and Systems Directory; Underwriters Laboratories Inc.; current edition.

1.4 SYSTEM DESCRIPTION

- A. Roofing Assembly Requirements
 - 1. Solar Reflectance Index (SRI)
 - a. 78, minimum, calculated in accordance with ASTM E1980.
 - b. Field applied coating may not be used to achieve specified SRI.
 - 2. Factory Mutual Classification
 - a. Meet test requirements for FM Class IA fire and windstorm resistance of I-60, in accordance with FM DS 1-28.

1.5 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data
 - 1. Submit manufacturer's product data and installation instructions.
 - 2. Provide data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, fasteners, and accessories.
 - 3. Specimen Warranty: For approval.
- C. Shop Drawings
 - 1. Indicate joint or termination detail conditions, conditions of interface with other materials, setting plan for tapered insulation, and mechanical fastener layout.
- D. Quality Assurance Submittals
 - 1. Certificates
 - a. Demonstrate installer meets or exceeds the standards of this section.
- E. Manufacturer's Instructions
 - 1. Manufacturer's Installation Instructions: Indicate membrane seaming precautions, special procedures, and perimeter conditions requiring special attention.
- F. Closeout Submittals
 - 1. Warranty:
 - a. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
 - b. Submit installer's certification that installation complies with all warranty conditions for the waterproof membrane.

1.6 QUALITY ASSURANCE

- A. Quality Standards
 - Perform work in accordance with NRCA Roofing and Waterproofing Manual.
- B. Qualifications

1. Installer Qualifications

- a. Company specializing in performing the work of this section with minimum five years of experience.
- b. Approved by membrane manufacturer.
- Provide adequate number of experienced workers regularly engaged in this type of work who are skilled in the application techniques of the material specified.
 Provide at least one thoroughly factory trained and experienced subcontractor's foreman on the job at all times that roofing work is in progress.
- 2. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

C. Pre-Installation Meetings

- 1. Convene one week before starting work of this section.
- 2. Review special conditions of the project, preparation and installation procedures and coordinating and scheduling required with related work.
- 3. Minimum attendance
 - General Contractor Superintendent, Roofing Contractor Foreman, Roofing Manufacturer's Technical Representative, Sheet Metal Contractor's Foreman, Owner, Architect.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Acceptance at Site
 - 1. Deliver materials in original packages, containers or bundles bearing brand name and identification of manufacturer or supplier.

B. Storage

- 1. Store products in weather protected environment, clear of ground and moisture.
- 2. Protect foam insulation from direct exposure to sunlight.

1.8 WARRANTY

- A. See Section 01 7800 Closeout Submittals, for additional warranty requirements.
 - 1. System Warranty: Provide manufacturer's total system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
 - 2. Warranty Term: 20 years.
 - 3. For repair and replacement include costs of both material and labor in warranty.
 - 4. Warranty should be from the manufacturer of the membrane, not the marketer.
 - 5. Warranty should include the membrane, plates, fasteners, insulation, recover board, and other accessories specified in this Section.

PART 2 PRODUCTS

2.1 PRODUCT GENERAL REQUIREMENTS

A. System Description

- 1. One ply roofing membrane; mechanically fastened.
- 2. Separation layer to isolate membrane to meet required fire class.
- 3. Vapor barrier over wood deck.

2.2 THERMOPLASTIC MEMBRANE ROOFING AND ASSOCIATED MATERIALS

- A. Manufacturer Basis of Design
 - 1. Carlisle Syntec Systems
- B. Other Acceptable Manufacturers
 - 1. Firestone Building Products, LLC.
 - 2. GAF.
 - 3. GenFlex Roofing Systems, LLC.
 - 4. Johns-Manville
 - 5. Substitutions: See Section 01 6000 Product Requirements.
- C. Membrane
 - 1. Product Basis of Design
 - a. "Sure-Weld TPO".
 - 2. Material:
 - a. Thermoplastic polyolefin (TPO) complying with ASTM D 6878.
 - 3. Reinforcing:
 - a. Internal reinforcing scrim.
 - 4. Thickness, Min.
 - a. 60 mils (Base bid).
 - b. 80 mils (Alternate).
 - 5. Sheet Width
 - a. Factory fabricated into largest sheets possible.
 - 6. Color
 - a. White.
- D. Seaming and Flashing Materials
 - 1. As recommended by membrane manufacturer.
- E. Base Flashing
 - 1. Provide a waterproof, fully adhered base flashing system at all penetrations, plane transitions and terminations.
- F. Vapor Retarder/Barrier
 - 1. Product Basis of Design
 - a. "VapAir Seal 725TR" by Carlisle.

- b. Self-adhered membrane.
- Plastic complying with requirements of fire rating classification; compatible with roofing and insulation materials.
- 3. Fire-retardant adhesive.
- G. Flexible Flashing Material
 - 1. Same material as membrane.
- H. Edging and Terminations
 - 1. As recommended by membrane manufacturer.

2.3 SEPARATION LAYER

- A. Purpose
 - 1. As necessary to meet specified UL roof classification.
- B. Manufacturer
 - 1. Approved by membrane manufacturer for conditions of use.
- C. Products, Contractor's Choice
 - 1. Application: Slopes up to 2:12
 - a. "SecurShield HD Plus" polyiso cover board by Carlisle Syntex Systems; 1/2 in.
 - b. "InsulBase HD Polyiso" cover board by Carlisle Syntex Systems; 1/2 in.

2.4 ACCESSORIES

- A. Prefabricated Roofing Expansion Joint Flashing
 - 1. Sheet butyl over closed-cell foam backing seamed to stainless steel flanges.
- B. Stack Boots
 - 1. Prefabricated flexible boot and collar for pipe stacks through membrane; curb inside and outside corners, pitch pockets, curb wraps, same material as membrane.
- C. Roof Board Fasteners
 - 1. Appropriate for purpose intended and approved by roofing manufacturer.
 - 2. Length as required for thickness of roof board material and penetration of deck substrate, with metal washers.
- D. Air and Vapor Barrier Adhesive
 - 1. Primer recommended by membrane manufacturer.
- E. Membrane Adhesive
 - 1. Adhesive recommended by membrane manufacturer.
- F. Sealants
 - 1. As recommended by membrane manufacturer.
- G. Walkway Pads
 - 1. Membrane manufacturer's standard size and type, serrated or cross hatched.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.
- B. Verify deck is supported and secure.
- C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.
- D. Verify deck surfaces are dry and free of snow or ice.
- E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and nailing strips, and reglets are in place.

3.2 INSTALLATION - GENERAL

- A. Perform work in accordance with NRCA Roofing and Waterproofing Manual and manufacturer's instructions.
- B. Do not apply roofing membrane during unsuitable weather.
- C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.
- D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.
- F. Coordinate the work with installation of associated counterflashings installed by other sections as the work of this section proceeds.

3.3 INSTALLATION - VAPOR BARRIER

- A. Apply vapor retarder to deck sheathing surface with adhesive in accordance with manufacturer's instructions.
- B. Extend vapor retarder and terminate with flexible flashing to parapet wall system over insulation or coverboard layer as required by membrane manufacturer to allow for adequate adherence of membrane to substrate.
- C. Install flexible flashing from vapor retarder to air seal material of wall construction, lap and seal to provide continuity of the air barrier plane.
- D. Ensure vapor retarder is clean and dry, continuous, and ready for application of insulation.
- E. Separate vapor barrier from membrane as required by the manufacturer.

3.4 INSTALLATION - MEMBRANE

- A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.
- B. Shingle joints on sloped substrate in direction of drainage.
- C. Overlap edges and ends and seal seams by contact adhesive, minimum 3 inches. Seal permanently waterproof. Apply uniform bead of sealant to joint edge.
- D. Mechanical Attachment

- 1. Apply membrane and mechanical attachment devices in accordance with manufacturer's instructions.
- E. Around roof penetrations, seal flanges and flashings with flexible flashing.
- F. Coordinate installation of roof drains and sumps and related flashings.
- G. Wood Nailers.
 - 1. Perimeter of roof area.
 - 2. Around projections and penetrations.
 - 3. Other locations where required to meet roof membrane manufacturer's guarantee requirements.
 - 4. Securely anchor to deck to resist minimum force required by manufacturer.

3.5 INSTALLATION - WALKWAY

- A. Do not install over flashings or field seams until field inspection has been completed.
- B. Install roof walkway pad at:
 - 1. At and between HVAC units.
 - 2. At roof access point.
 - 3. Under downspout splash pans.
 - 4. And elsewhere as shown on the Drawings.

3.6 FIELD QUALITY CONTROL

A. Daily Seals

- 1. On phased roofing, when the completion of flashings and terminations is not achieved by the end of the work day, a daily seal must be performed to temporarily close the membrane to prevent water infiltration.
- Complete an acceptable membrane seal in accordance with the manufacturer's requirements.

B. Manufacturer's Field Service

- 1. Upon completion of the installation, the manufacturer's representative shall make an inspection to ascertain that the roofing membrane system has been installed according to manufacturer's approved specifications and details. The inspection shall determine if any corrective work will be required before the warranty will be issued.
- 2. Notify the architect 72 hours prior to manufacturer's representative visits.

3.7 CLEANING

- A. Remove markings from finished surfaces.
- B. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions.
- C. Repair or replace defaced or damaged finishes caused by work of this section.
- D. Prior to substantial completion broom clean entire roof surface to remove any and all accumulated dirt, construction debris, screws, nails, sheet metal snips, garbage, rags,

buckets, tools, roofing scraps, etc. Assure all roof drains and scuppers are clean and free draining.

3.8 PROTECTION

- A. Protect installed roofing and flashings from construction operations.
- B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

SECTION 07 6000

SHEET METAL

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fabricated sheet metal items, including flashings, counterflashings, gutters, downspouts, and other items indicated in Schedule.
- B. Sealants for joints within sheet metal fabrications.
- C. Removing and replacing existing flashing to facilitate reroofing work.

1.2 RELATED REQUIREMENTS

- A. Section 01 2000 Price and Payment Procedures: Pay application process, change procedures.
- B. Section 01 3000 Administrative Requirements: Submittal review procedures.
- C. Section 01 6000 Product Requirements: Substitution request procedures.
- D. Section 01 7000 Execution and Closeout Requirements: Closeout procedures.
- E. Section 07 0150 Preparation for Roof Replacement: Existing roof tear off.
- F. Section 07 5400 Thermoplastic Membrane Roofing: Flashings associated with roofing system.
- G. Section 07 9005 Joint Sealers.

1.3 REFERENCE STANDARDS

- A. AAMA 2605 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels; 2013.
- B. ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- C. ASTM B32 Standard Specification for Solder Metal; 2008 (Reapproved 2014).
- D. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- E. ASTM D226/D226M Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing; 2009.
- F. ASTM D4479/D4479M Standard Specification for Asphalt Roof Coatings Asbestos-Free; 2007 (Reapproved 2012).
- G. ASTM D4586/D4586M Standard Specification for Asphalt Roof Cement, Asbestos-Free; 2007 (Reapproved 2012).
- H. CDA A4050 Copper in Architecture Handbook; latest edition.
- I. SMACNA (ASMM) Architectural Sheet Metal Manual; latest edition.
- J. OSSC Oregon Structural Specialty Code, latest edition.

1.4 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings

1. Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.

C. Samples

1. Purpose: Color selection, and assembly of special conditions as listed below.

2. Quantity: (2)

3. Size: 4 in. by 4 in.

1.5 QUALITY ASSURANCE

A. Quality Standards

1. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.

B. Qualifications

1. Installer Qualifications: Company specializing in performing the work of this section with minimum 3 years of experience.

C. Pre-Installation Meetings

- 1. Convene one week prior to installation of flashing components.
- 2. Attendance to include sheet metal fabricator, sheet metal installers, General Contractor, Owner, and Architect.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Acceptance at Site

1. Deliver materials in original packages, containers or bundles bearing name and identification of supplier.

B. Storage

- 1. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- 2. Prevent contact with materials that could cause discoloration or staining.

PART 2 PRODUCTS

2.1 SHEET MATERIALS

A. Galvanized Steel

1. ASTM A653/A653M, with G90/Z275 zinc coating; minimum 24 gage, (0.0239 inch) thick base metal.

B. Pre-Finished Galvanized Steel

- 1. ASTM A653/A653M, with G90/Z275 zinc coating; minimum 24 gage, (0.0239) inch thick base metal, shop pre-coated with PVDF coating.
- 2. PVDF (Polyvinylidene Fluoride) Coating: Superior Performance Organic Finish, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system.

- 3. Color: As scheduled.
- C. Stainless Steel
 - 1. ASTM A666 Type 304, soft temper, minimum 0.015 inch (26 ga) thick; smooth No. 4 finish. Fully annealed.

2.2 ACCESSORIES

- A. Fasteners
 - 1. Stainless steel, with soft neoprene washers.
- B. Underlayment
 - 1. Organic roofing felt, Type I ("No. 15").
- C. Slip Sheet
 - 1. Rosin sized building paper.
- D. Primer
 - 1. Zinc chromate type.
- E. Protective Backing Paint
 - 1. Asphaltic mastic, ASTM D4479 Type I.
- F. Sealant to be Concealed in Completed Work
 - 1. Non-curing butyl sealant.
- G. Sealant to be Exposed in Completed Work
 - Elastomeric sealant, 100 percent silicone with minimum movement capability of plus/minus 25 percent and recommended by manufacturer for substrates to be sealed; clear.
- H. Sealant Other
 - 1. Type as specified in Section 07 9005.
- I. Plastic Cement
 - 1. Type I.
- J. Solder
 - 1. Sn50 (50/50) type.
- K. Flux
 - 1. Rosin, cut Muriatic Acid, or commercial preparation suitable for use.
- L. Strainers
 - 1. Same material as gutter. Provide within gutter at each downspout.
- 2.3 FABRICATION GENERAL
 - A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
 - B. Fabricate cleats of same material as sheet, minimum 2 in. wide, interlocking with sheet.
 - C. Form pieces in longest possible lengths.

- D. Hem exposed edges on underside 1/2 in.; miter and seam corners.
- E. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- F. Fabricate corners from one piece with minimum 18 in. long legs; seam for rigidity, seal with sealant.
- G. Fabricate vertical faces with bottom edge formed outward 1/4 in. and hemmed to form drip.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Site Verification of Conditions
 - 1. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
 - 2. Verify roofing termination and base flashings are in place, sealed, and secure.
 - 3. Verify that nailers and blocking are properly installed.

3.2 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil.

3.3 INSTALLATION – GENERAL

- A. Conform to drawing details.
- B. Install Work watertight, without waves, warps, buckles, tool marks, fastening stresses, distortion, or defects which impair strength of mar appearance.
- C. Secure flashings in place using concealed fasteners. Use exposed fasteners only where permitted.
- D. Apply plastic cement compound between metal flashings and felt flashings.
- E. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- F. Seal metal joints watertight.
- G. Install planes and lines in true alignment. Allow for sheet metal expansion and contraction.
- H. Secure elements in place using fasteners.

3.4 INSTALLATION – COPINGS

A. Install copings with continuous cleat on the exterior side, fastened at 16 inches on center.

Use exposed fasteners with neoprene washers through elongated holes on the roof side, at 24 inches on center.

3.5 SCHEDULES

- A. Coping, Cap, Parapet, and Ledge Flashings
 - 1. 24 gage precoated galvanized steel, unless otherwise indicated.

- B. Flashings Associated with Shingle Roofing, including Valley, Hip, Ridge, Eave, Gutter Edge, Gable Edge.
 - 1. 24 ga pre-coated sheet metal
- C. Roofing Penetration Flashings, for Pipes, Structural Steel, and Equipment Supports.
 - 1. 24 gage galvanized steel, unless otherwise indicated.
- D. Coping, Cap, Parapet, and Ledge Flashings
 - 1. 24 gage precoated galvanized steel, unless otherwise indicated.
- E. Counterflashings at Curb-Mounted Roof Items, including skylights and roof hatches, roofing Penetration Flashings, for Pipes, Structural Steel, and Equipment Supports.
 - 1. 24 gage galvanized steel, unless otherwise indicated.
- F. Other flashings as shown on Drawings.

SECTION 07 7000

ROOF ACCESSORIES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Roof Anchor.
- B. Roof Tie Off Components

1.2 RELATED REQUIREMENTS

- A. Section 01 2000 Price and Payment Procedures: Pay application process, change procedures.
- B. Section 01 3000 Administrative Requirements: Submittal review procedures.
- C. Section 01 6000 Product Requirements: Substitution request procedures.
- D. Section 01 7000 Execution and Closeout Requirements: Closeout procedures.
- E. Section 07 5400 Thermoplastic Membrane Roofing
- F. Section 07 6000 Sheet Metal: Roof accessory items fabricated from sheet metal.

1.3 REFERENCE STANDARDS

- A. 29 CFR 1910.23 Ladders.
- B. ASTM A36/A36M Standard Specification for Carbon Structural Steel.
- C. ASTM A513/A513M Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing.

1.4 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data
 - 1. Submit manufacturer's product data and installation instructions.
 - a. Preparation instructions and recommendations.
 - b. Storage and handling requirements and recommendations.
 - c. Installation methods.
 - d. Maintenance requirements.

1.5 QUALITY ASSURANCE

1. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Acceptance at Site
 - 1. Deliver materials in original packages, containers or bundles bearing brand name and identification of manufacturer or supplier.

B. Storage

- 1. Store products in manufacturer's unopened packaging until ready for installation.
- 2. Store products under cover and elevated above grade.

PART 2 PRODUCTS

- 2.1 ROOF ANCHOR ROOF DECK MOUNTED
 - A. Product and Manufacturer Basis of Design
 - 1. "CRA-W Loop Top Anchors" by Super Anchor.
 - 2. Other acceptable products and manufacturers
 - a. Frontline
 - b. Substitutions: See Section 01 6000 Product Requirements.
 - B. Dimensions
 - 1. Plate: 16 in. by 16 in. by 3/8 in. thick
 - 2. Tube: 3 in. diameter by 12 in. high
 - 3. Cast Loop: 5/8 in. diameter.
 - C. Description
 - 1. Fully welded steel galvanized anchorage device.
 - 2. Comply with OSHA 1926 Fall Protection Criteria.
 - 3. Tensile Strength: 5,000-lbf/22kN
 - 4. Maximum user capacity: 420 lbs.
 - D. Finishes
 - 1. Galvanized steel.
 - E. Extent
 - 1. Where safety tie off anchors noted on the drawings are secured to the roof deck.
- 2.2 ROOF ANCHOR WALL MOUNTED
 - A. Product and Manufacturer Basis of Design
 - 1. "No. 1307 D-Plate Anchors" by Super Anchor.
 - 2. Other acceptable products and manufacturers
 - a. Frontline
 - b. Substitutions: See Section 01 6000 Product Requirements.
 - B. Dimensions
 - 1. Plate: 6 in. by 6 in. by 3/8 in. thick
 - 2. Cast Loop: Min 1 1/4" inside diameter.
 - C. Description
 - 1. Fully welded steel galvanized anchorage device.

- 2. Comply with OSHA 1926 Fall Protection Criteria.
- 3. Tensile Strength: 5,000-lbf/22kN
- 4. Maximum user capacity: 420 lbs.
- D. Finishes
 - 1. Galvanized steel.
- E. Extent
 - 1. Where safety tie off anchors noted on the drawings are secured to the wall.

2.3 RIGGING SYSTEM

- A. Product and Manufacturer Basis of Design
 - 1. "No. 1050-G Galvanized Rigger Components" by Super Anchor.
 - 2. Other acceptable products and manufacturers
 - a. Substitutions: See Section 01 6000 Product Requirements.
- B. Description
 - Provide turnbuckle, cable clamp, cable, energy absorbers, couplers and other accessories as required for OSHA compliant system based on the locations shown on the Drawings.
- C. Finishes
 - Galvanized steel.

2.4 ACCESSORIES

- A. General for all components listed above.
 - 1. Provide fasteners recommended by the component manufacturer based on application, and other elements as required for complete installation.
- B. Sealant for Joints in Linear Components: As recommended by component manufacturer.

PART 3 EXECUTION

- 3.1 EXAMINATION
 - A. Do not begin installation until substrates have been properly prepared.
 - B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- 3.3 INSTALLATION GENERAL
 - A. Install in accordance with manufacturer's instructions and NRCA (RM) applicable requirements, in manner that maintains roofing weather integrity.
 - B. Coordinate installation of components of this section with installation of roofing membrane and base flashings.

C. Coordinate installation of sealants and roofing cement with work of this section to ensure water tightness.

3.4 CLEANING

A. Clean installed work to like-new condition.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

SECTION 07 9200

JOINT SEALANT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Sealant
- B. Joint backing

1.2 RELATED REQUIREMENTS

- A. Section 01 2000 Price and Payment Procedures: Pay application process, change procedures.
- B. Section 01 3000 Administrative Requirements: Submittal review procedures.
- C. Section 01 6000 Product Requirements: Substitution request procedures.
- D. Section 01 7000 Execution and Closeout Requirements: Closeout procedures.
- E. Section 07 7540 Thermoplastic Membrane Roofing: Sealants required in conjunction with roof membrane components.
- F. Section 07 6000 Sheet Metal: Sealants required in conjunction with roof membrane components.

1.3 REFERENCE STANDARDS

- A. ASTM C834 Standard Specification for Latex Sealants; 2010.
- B. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- C. ASTM C1193 Standard Guide for Use of Joint Sealants; 2013.
- D. SCAQMD 1168 South Coast Air Quality Management District Rule No.1168; current edition; www.aqmd.gov.

1.4 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data
 - 1. Submit manufacturer's product data and installation instructions.

1.5 QUALITY ASSURANCE

- A. Quality Standards
 - 1. Types
 - a. Type S Single Component.
 - b. Type M Multi-Component.
 - 2. Grades
 - a. Grade P Pourable (self-leveling).
 - b. Grade NS Nosag.

3. Classes

a. Amount listed is percentage relative to original joint width.

4. Uses

- a. Use T Traffic.
- b. Use NT Nontraffic.
- c. Use I Immersible.
- d. Use M in contact with mortar.
- e. Use G in contact with glass.
- f. Use A in contact with aluminum.
- g. Use 0 in contact with other materials than listed above.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Storage

 Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic and other causes.

1.7 PROJECT/SITE CONDITIONS

A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.8 WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. BASF Construction Chemicals-Building Systems.
- B. Bostik Inc.
- C. Dow Corning Corporation.
- D. Momentive Performance Materials, Inc (formerly GE Silicones).
- E. Pecora Corporation.
- F. Tremco Global Sealants.
- G. Substitutions: See Section 01 6000 Product Requirements. Products listed below are one acceptable product. Other products from the manufacturers listed above meeting the requirements below are acceptable.

2.2 SEALANTS

A. General

1. Provide only products having lower volatile organic compound (VOC) content than required by South Coast Air Quality Management District Rule No.1168.

- 2. Color: To be selected by Architect from manufacturer's standard range.
- B. General Purpose Exterior Sealant
 - 1. Description
 - a. Polyurethane; ASTM C920, Grade NS, Class 25 minimum; Uses M, G, and A; single component.
 - 2. Product
 - a. "NP2" by Soneborn.
 - 3. Applications: Use for:
 - a. Control, expansion, and soft joints in masonry.
 - b. Joints between concrete and other materials.
 - c. Joints between metal frames and other materials.
 - d. Other exterior joints for which no other sealant is indicated.

2.3 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant; ASTM D 1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.
- E. Masonry Sand: Mason's Sand and Silica Mix for use over still wet sealant at all masonry control or expansion joints. Sand to closely match color and texture of mortar joints.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Site Verification of Conditions
 - 1. Verify that substrate surfaces are ready to receive work.
 - 2. Verify that joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Protect elements surrounding the work of this section from damage or disfigurement.

3.3 INSTALLATION

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

- B. Perform installation in accordance with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
- D. Install bond breaker where joint backing is not used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- G. Tool joints concave. Remove and replace sealant in joints improperly tooled.
- H. Spread Mason's Sand and Silica Mix over still wet sealant at all control joints in masonry walls.

3.4 CLEANING

A. Clean adjacent soiled surfaces.

3.5 PROTECTION

A. Protect sealants until cured.