

**SPECIFICATIONS &  
CONTRACT DOCUMENTS**

**FOR**

**SHINGLE ROOF REPLACEMENTS 2022  
PARK SHELTERS**

CITY OF MORAINÉ, OHIO  
MONTGOMERY COUNTY

**JULY 2022**

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**END OF DOCUMENT**

# **BIDDING REQUIREMENTS**

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**LEGAL NOTICE**  
**ADVERTISEMENT FOR BIDS**

The City of Moraine will receive sealed bid proposals for **SHINGLE ROOF REPLACEMENT 2022 PROJECT FOR CITY OF MORAINE PARK SHELTERS** until **AUGUST 8, 2022** at **10:00 a.m.** local time, at the Moraine Municipal Building, 4200 Dryden, Moraine, Ohio, 45439 at which time and place they will be publicly opened and read aloud.

Copies of the specifications, proposal and contract forms are available on the City's website: [www.ci.moraine.oh.us](http://www.ci.moraine.oh.us), "About the City" tab, "Legal Notices" on dropdown menu. Bid documents MUST BE REQUESTED ON OR BEFORE 4:00 p.m. on Monday, 25 July, 2022, by calling Donna Darner, Maintenance Secretary, at 937-535-1050. Bid documents may be e-mailed upon request to [ddarner@moraineoh.org](mailto:ddarner@moraineoh.org).

***A mandatory pre-bid meeting and walk-through will be held on JULY 26, 2022, at 10:00 a.m. at City of Moraine Municipal Building, 4200 Dryden Road, Moraine, Ohio 45439.***

Each proposal shall be signed with the full name and business address of each interested company and shall be accompanied by a security bond issued by a bonding company authorized to do business in the State of Ohio, or by a certified check on a solvent bank in the amount of ten percent (10%) of the amount of the submitted main contract proposal. Bond or certified check must be payable to the City of Moraine as a guarantee that if the proposal is accepted, a contract will be executed and its performance secured by a satisfactory bond in the amount of one hundred percent (100%) of the contract price or irrevocable letter of credit.

The proposal must be made on the forms provided in the Contract Documents, or a copy thereof, with a price quoted for the proposed maintenance services.

City Council reserves the right to accept or reject any or all proposals, to waive any informalities or irregularities in the bids received, or to accept any proposal which is deemed most favorable to the City of Moraine.

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Mike Davis, City Manager

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## **BIDDING INFORMATION**

All bids must be submitted on forms provided in this packet. Bids must be regular in every respect and no changes, deletions, or special conditions shall be made or included in the bid form.

Bid documents shall be submitted in a sealed envelope, marked with the Bidder's return address, and be labeled "Bid Documents for Shingle Roof Replacements at City of Moraine Park Shelter Facilities" and addressed as follows:

To: Mike Davis  
City Manager  
City of Moraine  
4200 Dryden Road  
Moraine, OH 45439

**Bid Opening: August 8, 2022, at 10:00 a.m. local time.**

No Bidder may withdraw its bid after the specified time of the opening of the bids.

***A mandatory pre-bid meeting and walk through will be held July 26, 2022, at 10:00 a.m. at City of Moraine Municipal Building, 4200 Dryden Road. Moraine, Ohio 45439.***

**NO FURTHER INSPECTIONS OR QUESTIONS WILL BE PERMITTED AFTER THE PRE-BID MEETING AND WALK-THROUGH.**

**Project Estimated Amount: \$100,000.00**

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## **INSTRUCTIONS TO BIDDERS**

1. Bidding documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Legal Notice or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid for, and contract forms. The proposed Contract Documents consist of the form of agreement between the Owner and Contractor, Conditions of the Contract (General, Supplemental, and other Provisions), Specifications and all Addenda issued prior to the execution of this Contract.
2. The Bidder, by making a Bid, represents that:
  - A. The Bidder has read and understands the Bidding Documents and the Bid is made in accordance herewith.
  - B. The Bidder has read and understands the Bidding Documents or contract documents to the extent that such documentation relates to the work for which the Bid is submitted.
  - C. The Bidder has visited sites, become familiar with local conditions, become familiar with the equipment listed in the Contract Documents, and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents and shall report to the Superintendent errors, inconsistencies or ambiguities discovered.
  - D. The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.
3. Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.
4. Addenda
  - A. Addenda will be mailed or delivered to all who are known by the issuing office to have received a complete set of Bidding Documents.
  - B. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
  - C. No Addenda will be issued later than four (4) days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one that includes postponement of the date for receipt of Bids.

- D. Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and Bidder shall acknowledge receipt in the Bid.
5. Bidding Procedures – Form and Style of Bids
- A. Bids shall be submitted on forms identical to the form included with the Bidding Documents.
  - B. All blanks on the bid form shall be filled in by typewriter or manually in ink.
  - C. Where indicated by the makeup of the bid form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount written in words shall govern.
  - D. The signer of the Bid must initial alterations and erasures.
  - E. Each copy of the Bid shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, partnership, corporation, or other legal entity. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A bid by a corporation shall further give the State of incorporation and have the corporate seal affixed. A bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.
6. Bidding Procedures – Submission of Bids
- A. All copies of the Bid and other documents required for submission with the Bid shall be enclosed in a sealed envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the project name, and the Bidder's name and address. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.
  - B. Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.
  - C. Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.
  - D. Oral, telephonic or telegraphic Bids are invalid and will not receive consideration.

- E. A Bid must remain open for acceptance for a period of sixty (60) days from the date of bid opening. A bid may be extended thereafter upon mutual agreement of the Owner and the Bidder.
7. Bidding Procedures – Modification or Withdrawal of Bid
- A. A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.
  - B. Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of such Bids. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.
  - C. Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided they are then in full conformance with these Instructions to Bidders.
8. The Owner is soliciting Bids pursuant to the bid process. If the Owner awards a Contract, it shall be to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities or irregularities in a Bid. The Owner shall have the right to reject any or all Bids, reject a Bid not accompanied by any data required by the Bidding Documents, or reject a Bid that is in any way incomplete or irregular.
9. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the bidding Documents, and to determine the low Bidder on the basis of the sum of the base Bid and Alternates accepted.
10. Bidders to whom award of a Contract is under consideration shall submit a Contractor's Qualification Statement.
11. Persons and entities proposed by the Bidder and to whom the Owner and Superintendent have made no reasonable objection must be used on the work for which they were proposed and shall not be changed except with written consent of the Owner and Superintendent.
- 12. This is a prevailing wage job and the successful Bidder must comply with all applicable laws, rules and regulations applicable thereto.**

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## **Contractor's and Subcontractor's Insurance**

SECTION 11. The Contractor and/or subcontractor on this work will be required to take out and maintain during the life of this Contract, the comprehensive commercial insurance listed below, and approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder. The Contractor shall purchase the insurance listed below to protect the Owner and authorized representatives from all claims incurred by the action(s) of the Contractor and/or subcontractors in completion of this work.

- I. Compensation and Employees' General Liability Insurance  
The Contractor shall procure and shall during the life of this Contract hold Workers Compensation coverage for all of Contractor's employees to be engaged in work under this Contract; and in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Workers Compensation coverage for all of the latter's employees to be engaged in such work, unless such employees are covered by the protection afforded by the Contractor's Workers Compensation coverage. The Employees Liability limit shall be as provided by statutory requirements of the State. In case any class of employees is engaged in hazardous work protected under the Workers Compensation statute, the Contractor shall provide and shall cause each subcontractor to provide Employer's General Liability Insurance for the protection of such of his employees not otherwise protected.
  
- II. Public Liability and Owner's or Contractor's Protective Insurance  
The Contractor shall take out and maintain this type of insurance and shall require any of his subcontractors performing work covered by the Contract to do the same in order to protect themselves from claims for damage to property which may arise from operations under this Contract, whether such operations be by Contractor or by any Subcontractor or by anyone directly or indirectly employed by either of them.
  - A. (Comprehensive) Automobile Liability Coverage:
    - i. Bodily injury including wrongful death in an amount not less than Five Hundred Thousand Dollars (\$500,000.00) for each person and One Million Dollars (\$1,000,000.00) for each accident.
    - ii. Property damage in an amount not less than One Hundred Thousand Dollars (\$100,000.00) for each accident.
  
  - B. (Comprehensive) General Liability Coverage:
    - i. Bodily injury including wrongful death in an amount not less than Five Hundred Thousand Dollars (\$500,000.00) for

each person and One Million Dollars (\$1,000,000.00) for each accident, and

- ii. Property damage in an amount not less than One Hundred Thousand Dollars (\$100,000.00) for each accident, and an aggregate liability of Two Hundred Fifty Thousand Dollars (\$250,000.00).

III. Scope of Insurance and Special Hazards

The insurance required under paragraph II hereof shall be primary insurance and provide adequate protection for the Owner, its elected officials, employees, or volunteers, Contractor and subcontractor respectively, against damage claims which may arise from operations under this Contract, whether such operations are by the insured or by anyone directly or indirectly employed by Contractor, and also against any of the special hazards which may be encountered in the performance of the Contract. Each of the aforesaid policies shall include the Owner as named insured and will provide that such policy will not be canceled until after the Owner shall have been given twenty (20) business days written notice of the proposed cancellation. Contractor's insurance shall be the primary insurance, and any insurance maintained by Owner, its elected officials, employees, or volunteers shall be excess to the Contractor's insurance and shall not contribute to it.

Contractor agrees to hold Owner harmless and indemnify Owner, its elected officials, employees, and volunteers for any and all claims resulting from the actions of the Contractor, its officials, employees, volunteers, and any subcontractors.



## CONTRACTOR'S ALERT

### **REMINDER**

If you are the successful bidder for work on any state, county, township, municipal corporation, school district, or other political subdivision of the State of Ohio, please keep in mind that if after award of the contract you are required to perform additional work as a result of the enactment or amendment of any statutes, ordinances, and regulations, including but not limited to those dealing with prevention of environmental pollution, then you are entitled to a change order for the cost of said additional work plus reasonable profit. The owner must issue a change order describing said additional work to you. **NOTE: You are not entitled to payment until an approved change order has been issued.**

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**Bid Guaranty and Contract Bond**

(ORC 153.571)

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

\_\_\_\_\_, as Principal, and

\_\_\_\_\_, as Surety, are hereby

held and firmly bound unto the *City of Moraine* as Obligee in the penal sum of the dollar amount of the bid submitted by the Principal to the Obligee on

\_\_\_\_\_ to undertake the Project known as the

***SHINGLE ROOF REPLACEMENT 2022 – CITY OF MORAINES PARK SHELTERS***

The penal sum referred to herein shall be the dollar amount of the Principal's bid to the Obligee, incorporating any additive or deductive alternate proposals made by the Principal on the date referred to above to the Obligee, which are accepted by the Obligee. In no case shall the penal sum exceed the amount of

\_\_\_\_\_ dollars

(\$\_\_\_\_\_).

(If above line is left blank, the penal sum will be the full amount of the Principal's bid, including alternates. Alternatively, if completed, the amount stated must not be less than the full amount of the bid, including alternates, in dollars and cents. A percentage is not acceptable.)

For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas the above named Principal has submitted a bid for \_\_\_\_\_

---

NOW, THEREFORE, if the Obligee accepts the bid of the Principal and the Principal fails to enter into a proper contract in accordance with the bid and specifications; and in the event the Principal pays to the Obligee the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid and such larger amount for which the Obligee may in good faith contract with the next lowest bidder to perform the work covered by the bid; or in the event the Obligee does not award the contract to the next lowest bidder and resubmits the project for bidding, the Principal pays to the Obligee the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid, or the costs, in connection with resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect. If the Obligee accepts the bid of the Principal and the Principal within ten days after award of the contract enters into a proper contract in accordance with the bid and specifications, which said contract is made a part of this bond the same as though set forth herein; and

IF THE SAID \_\_\_\_\_ shall well and faithfully do and perform the things agreed by the *City of Moraine, Ohio* to be done and performed according to the terms of said contract; and shall pay all lawful claims of

subcontractors, materialmen, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said contract; we agreeing and assenting that this undertaking shall be for the benefit of any materialman or laborer having a just claim, as well as for the Obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions, or additions in or to the terms of said contract or in or to the plans or specifications therefore shall in any way affect the obligations of said Surety on its bond.

Principal:

Surety:

\_\_\_\_\_

\_\_\_\_\_

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

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

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

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

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**AFFIDAVIT**

Regarding payment of Montgomery County Personal Property Taxes (Bidder to complete and execute either Part A or Part B).

STATE OF \_\_\_\_\_ )

) SS:

COUNTY OF \_\_\_\_\_ )

**Part A.** That \_\_\_\_\_, being duly sworn, affirms that as of \_\_\_\_\_, 2022, \_\_\_\_\_ is not charged with any delinquent personal property taxes on the general tax list of personal property of Montgomery County, Ohio.

\_\_\_\_\_  
Bidder

**OR** \_\_\_\_\_

**Part B.** That \_\_\_\_\_, being duly sworn, affirms that \_\_\_\_\_ is currently charged with Montgomery County delinquent personal property taxes in the amount of \$\_\_\_\_\_ with interest in the amount of \_\_\_\_\_, and penalties in the amount of \$\_\_\_\_\_, due to said Montgomery County, Ohio.

\_\_\_\_\_  
Bidder

**SWORN TO** and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_ County, Ohio.

My commission expires: \_\_\_\_\_

**NOTE:** If this statement indicates that the taxpayer was charged with any such taxes, a copy of the statement shall be transmitted by the Director of Finance to the County Treasurer within thirty (30) days of the date it is submitted.

**NOTE:** A copy of this statement shall be incorporated into the contract, and no payment shall be made with respect to said contract unless such statement has been incorporated as a part thereof.



**Affidavit of Compliance**  
**NON-COLLUSION AFFIDAVIT**

STATE OF \_\_\_\_\_ )

) SS:

COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_, being first duly sworn, deposes and says that he/she is the

\_\_\_\_\_ (sole owner, partner, president, secretary, etc.) of

\_\_\_\_\_, the party making the foregoing proposal or bid; that such bid is genuine and not collusive or sham; and that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any other bidder or person, to put in a sham bid, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit, or cost element of said bid price, or of that of any other bidder, or to secure any advantage against any company, person or persons interested in the proposed contract; and that all statements contained in said proposal or bid are true. Further, that such bidder has not, directly or indirectly, submitted this bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

\_\_\_\_\_  
Affiant

**SWORN TO** and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_ County, \_\_\_\_\_

state

My commission expires: \_\_\_\_\_

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**AFFIDAVIT**

**(TO BE COMPLETED IF THE CONTRACTOR IS A CORPORATION)**

STATE OF \_\_\_\_\_ )

) SS:

COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_, being duly sworn, deposes and says that he/she is

\_\_\_\_\_ (president, secretary, etc.) of

\_\_\_\_\_, a corporation organized and existing under and by virtue of

the laws of the State of \_\_\_\_\_, and having its principal office at

\_\_\_\_\_

(number and street)

\_\_\_\_\_, \_\_\_\_\_

(city)

(state)

Affiant further states that he is familiar with the records, minute books and by-laws of

\_\_\_\_\_.

(name of corporation)

Affiant further states that \_\_\_\_\_,

(name)

(title)

of the corporation, is duly authorized to sign the contract for the provision of services for the **SHINGLE ROOF REPLACEMENT 2022 PROJECT – CITY OF MORAINÉ PARK SHELTERS** or said corporation by virtue of

\_\_\_\_\_

(State whether a provision of bylaws or a resolution of the Board of Directors. If by resolution, give date of adoption.)

\_\_\_\_\_  
Affiant

**SWORN TO** and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_ County, \_\_\_\_\_  
state

My commission expires: \_\_\_\_\_

**AFFIDAVIT**

**Drug and Alcohol Abuse Prevention and Testing Policy and Procedure**

This Affidavit is required when needed regarding existence of a program and compliance with the Omnibus Transportation Employee Testing Act of 1991 (the "Act"). The Act requires that any bidder who supplies operators of safety sensitive equipment provide a **Drug and Alcohol Abuse Prevention and Testing Policy and Procedure**. The program shall provide the minimal standards as stated in the Act and cover such issues as pre-employment, reasonable suspicion, random, post-accident, return-to-work, and follow-up testing of safety-sensitive employees.

The bidder is to complete and have notarized this Affidavit if successful in receiving the contract and may be required to provide a copy of the policy.

STATE OF \_\_\_\_\_ )

) SS:

COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_, being duly sworn, affirms that as of \_\_\_\_\_, 20\_\_\_\_,

\_\_\_\_\_ has developed and implemented a Drug and Alcohol Abuse Prevention and Testing Policy and Procedure in compliance with the Act.

\_\_\_\_\_  
Affiant

**SWORN TO** and subscribed before me this \_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_ County, \_\_\_\_\_

state

My commission expires: \_\_\_\_\_

**NOTE:** A copy of this statement shall be incorporated into the contract, and no payment shall be made with respect to said contract unless such statement has been incorporated as a part thereof.

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**AFFIDAVIT IN COMPLIANCE WITH SECTION 3517.13  
OF THE OHIO REVISED CODE**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_ SS:

Personally appeared before me the undersigned, as an individual or as a

representative of \_\_\_\_\_ for a  
(Name of Entity)

contract for **SHINGLE ROOF REPLACEMENT 2022 – CITY OF MORaine PARK SHELTER FACILITIES** to be let by the City of Moraine, who, being duly cautioned and sworn, make the following statement with respect to prohibited activities constituting a conflict of interest or other violations under Ohio Revised Code Section 3517.13, and further states that the undersigned has the authority to make the following representation on behalf of himself or herself or of the business entity:

- 1) That none of the following have **individually** made within the previous twenty-four months and that, if awarded a contract for the purchase of goods or services aggregating more than \$10,000 in a calendar year, none of the following Individually will make, beginning on the date the contract is awarded and extending until one year following the conclusion of the contract, as an individual, one or more campaign contributions totaling in excess of \$1,000, to any member of the City of Moraine Council or their individual campaign committees:
  - a) myself;
  - b) any partner or owner of the partnership or other unincorporated business (if applicable);
  - c) any shareholder of the professional association organized under Chapter 1785 of the Ohio Revised Code (if applicable);
  - d) any trustee of the trust (if applicable);
  - e) any administrator or executor of the estate (if applicable);
  - f) any owner of more than 20% of the corporation or business trust (if applicable);
  - g) each spouse of any person identified in (a) through (f) of this section;
  - h) each child seven years of age to seventeen years of age of any person identified in divisions (a) through (f) of this section;
- 2) That none of the following have **collectively** made within the previous twenty-four months, and that, if awarded a contract for the purchase of goods or services aggregating more than \$10,000 in a calendar year, none of the following **collectively** will make, beginning on the date the contract is awarded and extending until one year following the conclusion of the contract, one or more campaign contributions totaling in excess of \$2,000, to any member of the City of Moraine Council or their individual campaign committees:
  - a) myself;

- b) any partner or owner of the partnership or other unincorporated business (if applicable);
  - c) any shareholder of the professional association organized under Chapter 1785 of the Ohio Revised Code (if applicable);
  - d) any trustee of the trust (if applicable);
  - e) any administrator or executor of the estate (if applicable);
  - f) any owner of more than 20% of the corporation or business trust (if applicable);
  - g) each spouse of any person identified in (a) through (f) of this section;
  - h) each child seven years of age to seventeen years of age of any person identified in divisions (a) through (f) of this section;
  - i) any political action committee affiliated with the corporation, business trust, partnership or other unincorporated business, association, estate or trust identified in (a) through (f) of this section;
  - j) Any combination of persons identified in (a) through (i) of this section;
- 3) I do hereby acknowledge that to knowingly make any false statement herein may subject me and/or the above-named entity to the penalties set forth in Section 3517.992 of the Ohio Revised Code.

Further, Affiant sayeth naught.

Signature \_\_\_\_\_

Title \_\_\_\_\_

Sworn to before me and subscribed in my presence this \_\_\_\_\_ day of  
 \_\_\_\_\_, 2022.

\_\_\_\_\_  
 Notary Public

My Commission Expires: \_\_\_\_\_

The requirements of Ohio Revised Code Section 3517.13 are only applicable to contributions made **on or after April 4, 2007** (Section 631.05, Amended Substitute Ohio House Bill 119).



**Affidavit of Insurance**

STATE OF \_\_\_\_\_)

) KNOW ALL MEN BY THESE PRESENTS

COUNTY OF \_\_\_\_\_)

BEFORE ME, the undersigned authority, on this day, personally appeared

\_\_\_\_\_, who being duly sworn, stated that he/she is  
(Affiant)

\_\_\_\_\_, of \_\_\_\_\_,  
(Title) (Contractor's Company Name)

the Contractor named and referred to within the Contract Documents; that he/she is fully competent and authorized to give this affidavit and that the attached original insurance certificate truly and accurately reflects the insurance coverage that is now available and will be available during the term of the Contract.

\_\_\_\_\_  
Affiant

SWORN AND SUBSCRIBED before me on the \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public  
In and for the County of \_\_\_\_\_  
State of \_\_\_\_\_

My commission expires: \_\_\_\_\_

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**Department of Commerce**

Division of Industrial Compliance

Bureau of Wage and Hour Administration  
6606 Tussing Road - PO Box 4009  
Reynoldsburg, OH 43068-9009  
Phone 614-644-2239 | Fax 614-728-8639  
TTY/TDD 800-750-0750  
www.com.ohio.gov  
An Equal Opportunity Employer and Service Provider

John R. Kasich, Governor  
Andre T. Porter, Director

**Affidavit Of Compliance**

**PREVAILING WAGES**

I, \_\_\_\_\_  
(Name of person signing affidavit) (Title)

do hereby certify that the wages paid to all employees of

\_\_\_\_\_  
(Company Name)

for all hours worked on the

\_\_\_\_\_  
(Project name and location)

project, during the period from \_\_\_\_\_ to \_\_\_\_\_ are in  
(Project Dates)

compliance with prevailing wage requirements of Chapter 4115 of the Ohio Revised Code. I further certify that no rebates or deductions have been or will be made, directly or indirectly, from any wages paid in connection with this project, other than those provided by law.

\_\_\_\_\_  
(Signature of Officer or Agent)

Sworn to and subscribed in my presence this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_\_.

\_\_\_\_\_  
(Notary Public)

The above affidavit must be executed and sworn to by the officer or agent of the contractor or subcontractor who supervises the payment of employees. This affidavit must be submitted to the owner (public authority) before the surety is released or final payment due under the terms of the contract is made.

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**\*\*\*\*\*FOR INSTRUCTIONAL USE ONLY\*\*\*\*\***

READ BEFORE COMPLETING YOUR DMA FORM

Forms not conforming to the specifications listed below or not submitted to the appropriate agency or office will not be processed.

To complete this form, you will need a copy of the Terrorist Exclusion List for reference. The Terrorist Exclusion List can be found on the Ohio Homeland Security Web site at the following address:

<http://www.homelandsecurity.ohio.gov/dma/dma.asp>

Be sure you have the correct DMA form. If you are applying for a state issued license, permit, certification or registration, the "State Issued License" DMA form must be completed (HLS 0036). If you are applying for employment with a government entity, the "Public Employment" DMA form must be completed (HLS 0037). If you are obtaining a contract to conduct business with or receive funding from a government entity, the "Government Business and Funding Contracts" DMA form must be completed (HLS 0038).

Your DMA form is to be submitted to the issuing agency or entity. "Issuing agency or entity" means the government agency or office that has requested the form from you or the government agency or office to which you are applying for a license, employment or a business contract. For example, if you are seeking a business contract with the Ohio Department of Commerce's Division of Financial Institutions, then the form needs to be submitted to the Department of Commerce's Division of Financial Institutions. Do NOT send the form to the Ohio Department of Public Safety UNLESS you are seeking a license from or employment or business contract with one of its eight divisions listed below.

Department of Public Safety Divisions:

Administration

Ohio Bureau of Motor Vehicles

Ohio Emergency Management Agency

Ohio Emergency Medical Services Ohio Homeland Security\*

Ohio Investigative Unit

Ohio Criminal Justice Services

Ohio State Highway Patrol

\* DO NOT SEND THE FORM TO OHIO HOMELAND SECURITY UNLESS OTHERWISE DIRECTED.  
FORMS SENT TO THE WRONG AGENCY OR ENTITY WILL NOT BE PROCESSED.

**\*\*\*\*\*FOR INSTRUCTIONAL USE ONLY\*\*\*\*\***

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**GOVERNMENT BUSINESS AND FUNDING CONTRACTS**  
**In accordance with section 2909.33 of the Ohio Revised Code**

**DECLARATION REGARDING MATERIAL ASSISTANCE/NONASSISTANCE TO A TERRORIST ORGANIZATION**

This form serves as a declaration by an applicant for a government contract or funding of material assistance/non-assistance to an organization on the U.S. Department of State Terrorist Exclusion List ("TEL"). Please see the Ohio Homeland Security Division Web site for a copy of the TEL.

Any answer of "yes" to any question, or the failure to answer "no" to any question on this declaration shall serve as a disclosure that material assistance to an organization identified on the U.S. Department of State Terrorist Exclusion List has been provided. Failure to disclose the provision of material assistance to such an organization or knowingly making false statements regarding material assistance to such an organization is a felony of the fifth degree.

For the purposes of this declaration, "material support or resources" means currency, payment instruments, other financial securities, funds, transfer of funds, financial services, communications, lodging, training, safe houses, false documentation or identification, communications equipment, facilities, weapons, lethal substances, explosives, personnel, transportation, and other physical assets, except medicine or religious materials.

**COMPLETE THIS SECTION ONLY IF YOU ARE AN INDEPENDENT CONTRACTOR**

LAST NAME	FIRST NAME		
HOME ADDRESS			
CITY	STATE	ZIP	COUNTY
HOME PHONE ( )	WORK PHONE ( )		

**COMPLETE THIS SECTION ONLY IF YOU ARE A COMPANY, BUSINESS OR ORGANIZATION**

BUSINESS/ORGANIZATION NAME	PHONE ( )		
BUSINESS ADDRESS			
CITY	STATE	ZIP	COUNTY
BUSINESS/ORGANIZATION REPRESENTATIVE NAME			TITLE

**DECLARATION**

**In accordance with section 2909.32 (A)(2)(b) of the Ohio Revised Code**

For each question, indicate either "yes," or "no" in the space provided. Responses must be truthful to the best of your knowledge.

- |  |     |    |
|--|-----|----|
| 1. Are you a member of an organization on the U.S. Department of State Terrorist Exclusion List?   | Yes | No |
| 2. Have you used any position of prominence you have with any country to persuade others to support an organization on the U.S. Department of State Terrorist Exclusion List?  | Yes | No |
| 3. Have you knowingly solicited funds or other things of value for an organization on the U.S. Department of State Terrorist Exclusion List?   | Yes | No |
| 4. Have you solicited any individual for membership in an organization on the U.S. Department of State Terrorist Exclusion List?   | Yes | No |
| 5. Have you committed an act that you know, or reasonably should have known, affords "material support or resources" to an organization on the U.S. Department of State Terrorist Exclusion List?  | Yes | No |
| 6. Have you hired or compensated a person you knew to be a member of an organization on the U.S. Department of State Terrorist Exclusion List, or a person you knew to be engaged in planning, assisting, or carrying out an act of terrorism? | Yes | No |

If an applicant is prohibited from receiving a government contract or funding due to a positive indication on this form, the applicant may request the Ohio Department of Public Safety to review the prohibition. Please see the Ohio Homeland Security Web site for information on how to file a request for review.

### **CERTIFICATION**

I hereby certify that the answers I have made to all of the questions on this declaration are true to the best of my knowledge. I understand that if this declaration is not completed in its entirety, it will not be processed and I will be automatically disqualified. I understand that I am responsible for the correctness of this declaration. I understand that failure to disclose the provision of material assistance to an organization identified on the U.S. Department of State Terrorist Exclusion List, or knowingly making false statements regarding material assistance to such an organization is a felony of the fifth degree. I understand that any answer of "yes" to any question, or the failure to answer "no" to any question on this declaration shall serve as a disclosure that material assistance to an organization identified on the U.S. Department of State Terrorist Exclusion List has been provided by myself or my organization. If I am signing this on behalf of a company, business or organization, I hereby acknowledge that I have the authority to make this certification on behalf of the company, business or organization referenced on page 1 of this declaration.

APPLICANT SIGNATURE <b>X</b>	DATE
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**CERTIFICATE OF FISCAL OFFICER**

As Fiscal Officer for the City of Moraine, Montgomery County, Ohio, I hereby certify that funds in the amount of \_\_\_\_\_ Dollars have been lawfully appropriated for the purpose of meeting the obligations of this contract with \_\_\_\_\_ duly authorized by Resolution No. \_\_\_\_\_ approved by the City of Moraine Council, Montgomery County, Ohio, and that they are in the treasury or in the process of collection to the credit of the City of Moraine free from any previous encumbrances.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Fiscal Officer for the City of Moraine,  
County of Montgomery,  
State of Ohio

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**PROPOSAL for:**  
**Shingle Roof Replacement 2022**  
**City of Moraine Park Shelters**  
**City of Moraine**

The undersigned, \_\_\_\_\_, having carefully inspected the sites and locations of the work proposed to be performed, and also the premises at and adjacent to the location of the proposed work and specified equipment and conditions thereof, and having also carefully examined the "Notice to Contractor," "Instruction to Bidders," "Form of Contract," "General Provisions," and the detailed specifications which shall govern the work to be done, NOW PROPOSES to furnish any and all materials, tools, labor, transportation, machinery, appliances and/or necessary appurtenances, and to prosecute to full completion the work called for under the Contract Documents, all upon the terms and the conditions and provisions set forth in the "Instructions to Bidder," "Form of Contract," "Contract Bond," and "General Provisions," detailed specifications of this Proposal; and in consideration thereof to accept from the Owner as full payment for the completion of each specified item and any required maintenance thereof as hereinafter provided, the price quoted for each item for work completed, the price of labor and materials to be stated separately.

The undersigned \_\_\_\_\_ agrees that if this Proposal shall be accepted, he will be prepared to discuss with the Owner in detail any matters relating to special features and the methods he proposes to follow for the general conduct of the work; that he will within twenty (20) business days after notice of acceptance of bid, complete the Contract Form with the Owner for the performance of the work and furnish evidence of required insurance policies.

The undersigned \_\_\_\_\_ hereby certifies that no person interested in this Proposal is directly or indirectly interested in or connected with any other bid or proposal for the said work and no member of the City of Moraine or any other person in the employ of said City is directly or indirectly interested therein, or in any portion thereof, and he will, if required by the Owner, execute and submit from himself as Principal Contractor and from any subcontractor, the non-collusion affidavits as provided herein.

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**SUM PROPOSAL PRICE FOR:** Shingle Roof Replacements 2022 at City of Moraine Park Shelters

And having inspected the premises and all conditions affecting the work, the undersigned proposes to furnish all materials and perform all labor necessary for the performance and completion of the work indicated below, all in compliance with the documents named above, and further agrees that each separate item of trade or employment further agrees that, if any or all of said bids are accepted, he will enter into a Contract according to the form required by the Owner for the faithful performance of the labor and the furnishing of all materials included in such bid or bids so accepted.

Submitted by: \_\_\_\_\_  
Contracting Firm

Having read and examined the Contract Documents, prepared by the Associate for the above-referenced Project, and the following Addenda:

Addendum No.	Date of Receipt
_____	_____
_____	_____
_____	_____

The undersigned Bidder having full knowledge of the site and the requirements of the Project proposes to perform all Work in accordance with the Contract Documents for the Sums as indicated on this Bid Form:

**Base Bid Item 1** – Shingle Roof Replacements, ALL LABOR, MATERIALS, EQUIPMENT and PERMIT FEES for the total sum of

Wax Park – WP-2, WP-3, WP-4, WP-5	\$_____
George Taylor Park – GTP-1	\$_____
Riverview Park – RP-1	\$_____
Gerhart Park / Civic Center – GCC-1, GCC-2	\$_____
German Village Park – GV-1, GV-2	\$_____
Pinnacle Park – PP-1, PP-2, PP-3	\$_____
Pinnacle Park Tot Lot – PTL-1	\$_____
Dear Meadow Park – DM-1, DM-2, DM-3, DM-4	\$_____
Material Allowance #1 – Plywood Decking	\$_____
Material Allowance #2 – T&G Wood Decking	\$_____
Material Allowance #3 – Fascia / Rake	\$_____
Contingency Allowance –	\$10,000_____

Total Bid Amount including All Allowances

\$ \_\_\_\_\_ \$ \_\_\_\_\_  
[FIGURES] [WORDS]

**Add Alternate #1** – Shingle Roof Replacements, ALL LABOR, MATERIALS, EQUIPMENT and PERMIT FEES for the total sum of

Fire Station #30 – FS-1 \$ \_\_\_\_\_

**Add Alternate #2** – Shingle Roof Replacements, ALL LABOR, MATERIALS, EQUIPMENT and PERMIT FEES for the total sum of

Street Department Garage – SD-1, SD-2 \$ \_\_\_\_\_

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**Signed at** \_\_\_\_\_ **this** \_\_\_\_\_ **day of** \_\_\_\_\_, **2022.**

**Firm:** \_\_\_\_\_

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

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

(SEAL)

Official Address:

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(Telephone Number)

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## **PREVAILING WAGE REQUIREMENTS**

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# Prevailing Wage Rate Skilled Crafts

Name of Union: Asbestos Local 50 Zone 2

Change # : LCN-01 2022sksLoc50

Craft : Asbestos Worker Effective Date : 03/09/2022 Last Posted : 03/09/2022

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>												
Asbestos Insulation Mechanic	\$31.98		\$7.95	\$7.85	\$0.50	\$0.00	\$2.90	\$0.05	\$0.00	\$0.00	\$51.23	\$67.22
Firestop Technician	\$31.98		\$7.95	\$7.85	\$0.50	\$0.00	\$2.90	\$0.05	\$0.00	\$0.00	\$51.23	\$67.22
<b>Apprentice</b>	<b>Percent</b>											
1st year	57.73	\$18.46	\$7.71	\$0.00	\$0.44	\$0.00	\$0.25	\$0.05	\$0.00	\$0.00	\$26.91	\$36.14
2nd year	69.93	\$22.36	\$7.95	\$0.95	\$0.44	\$0.00	\$0.50	\$0.05	\$0.00	\$0.00	\$32.25	\$43.44
3rd year	81.35	\$26.02	\$7.95	\$2.38	\$0.44	\$0.00	\$0.75	\$0.05	\$0.00	\$0.00	\$37.59	\$50.59
4th year	89.70	\$28.69	\$7.95	\$2.38	\$0.44	\$0.00	\$0.75	\$0.05	\$0.00	\$0.00	\$40.26	\$54.60

**Special Calculation Note :** \*other is labor mgt training fund

**Ratio :**

1 Journeyman to 1 Apprentice  
4 Journeymen to 1 Apprentice thereafter

**Jurisdiction ( \* denotes special jurisdictional note ) :**

CHAMPAIGN, CLARK, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE

**Special Jurisdictional Note :** In Butler County the following townships are included: (Lemon Twp, Madison Twp) In Warren County the following townships are included: (Clear Creek Twp, Franklin Twp, Massie Twp, Turtle Creek Twp, Wayne Twp)

**Details :**

# Prevailing Wage Rate Skilled Crafts

Name of Union: Labor Local 1410 Building

Change # : LCN01-2022sksLoc1410

Craft : Laborer Effective Date : 04/20/2022 Last Posted : 04/20/2022

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Laborer Group 1	\$29.40		\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$41.55	\$56.25
Group 2	\$30.00		\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$42.15	\$57.15
Group 3	\$30.50		\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$42.65	\$57.90
Apprentice	Percent											
Building Laborer 1-1000 hrs	60.00	\$17.64	\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$29.79	\$38.61
1001-2000	70.02	\$20.59	\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$32.74	\$43.03
2001-3000	80.00	\$23.52	\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$35.67	\$47.43
3001-4000	90.03	\$26.47	\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.62	\$51.85
More than 4000 hrs	100.00	\$29.40	\$7.70	\$3.95	\$0.40	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$41.55	\$56.25

**Special Calculation Note :** \$0.10 LECET is for Labor Management.

**Ratio :**

1 Journeymen to 1 Apprentice  
4 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

CHAMPAIGN, CLARK, DARKE, GREENE, LOGAN, MIAMI, MONTGOMERY, PREBLE

**Special Jurisdictional Note :**

**Details :**

Group 1  
Building & Construction Laborer, Railroad Laborer, Asbestos & Hazardous Waste (Levels A,B,C, & D), Concrete Crew, Form Setter, Pipelayer, Bottom Man, Burner (Cutting Torch), Welder Helper, All Machine & Power Driven Tools, Sandblaster  
Yardman-Landscaping, Sewer Jet, Waterperson, Tool Cage Laborer, Unloading Furniture & Fixtures, Final Clean-Up  
Watchman, Residential Construction, Signal Men

Group 2  
Mason Tender For Bricklayers, Flexcore, Firebrick Tender (Blast Furnaces, Soaking Pits, Stoves & Stacks), Plasterer  
Tenders & Lathers

Group 3  
Tender Operator

Asbestos, Lead and Hazardous Material:

The removal, abatement or encapsulation of asbestos, lead and/or toxic and hazardous waste or materials is defined as all work included in the erection, moving servicing and dismantling of all enclosures, scaffolding, barricades, etc. and the operation of all tools and equipment (including generators, compressors and vacuums) normally used in the removal or abatement or asbestos, lead and toxic and hazardous waste or materials; the labeling, bagging, cartoning, crating or otherwise packaging of materials for disposal; as well as the clean-up of the work site and all other work incidental to the removal, abatement or encapsulation of asbestos, lead or toxic and hazardous waste materials.

Level A

Protective equipment is required when the area has been determined to contain extremely toxic contaminants or contaminants unknown but may be expected to be extremely toxic and/or immediately dangerous to life and health. This ensemble includes a fully encapsulated chemical suit, self contained breathing apparatus (SCBA) or airline fed respirator, and various types and numbers of boots and gloves.

Level B

Protective equipment includes a chemically resistant splash suit and a SCBA or airline respirator. This ensemble is required when the situation is very hazardous, such as oxygen deficient atmospheres, IDLH atmospheres, or confined space entries.

Level C

Protective equipment includes a protective suit and an air purifying respirator (APR) with the appropriate filter canisters.

Level D

To be worn only in established "safe zones" may consist of, from normal work clothes to normal skin protection such as gloves, face shields goggles, coveralls and occasionally respiratory protection.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Roofer Local 75

Change # : LCN01-2021fbLoc75

Craft : Roofer Effective Date : 06/09/2021 Last Posted : 06/09/2021

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
<b>Classification</b>												
Roofer	\$24.38		\$8.58	\$8.78	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$44.20	\$56.39
Slate and Tile	\$24.60		\$8.58	\$8.78	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$44.42	\$56.72
<b>Apprentice</b>												
	<b>Percent</b>											
1st term 1000 hrs	50.00	\$12.19	\$2.50	\$0.50	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$17.65	\$23.75
2nd term 1000 hrs	55.00	\$13.41	\$8.58	\$1.32	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$25.77	\$32.47
3rd term 1000 hrs	60.00	\$14.63	\$8.58	\$2.20	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$27.87	\$35.18
4th term 1000 hrs	70.00	\$17.07	\$8.58	\$3.07	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$31.18	\$39.71
5th term 1000 hrs	80.00	\$19.50	\$8.58	\$3.95	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$34.49	\$44.25
Tradesman	79.00	\$19.26	\$5.00	\$1.58	\$0.66	\$0.00	\$0.00	\$1.80	\$0.00	\$0.00	\$28.30	\$37.93

**Special Calculation Note :** Other is for National Roofing Industry Pension Plan.

**Ratio :**

3 Journeymen to 2 Apprentices

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ALLEN, AUGLAIZE, CLARK, CLINTON, DARKE, GREENE, MERCER, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT

**Special Jurisdictional Note :**

**Details :**

# Prevailing Wage Rate Skilled Crafts

Name of Union: Sheet Metal Local 24 (Dayton)

Change # : LCN01-2022sksLoc24(Day)

Craft : Sheet Metal Worker Effective Date : 06/08/2022 Last Posted : 06/08/2022

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
<b>Classification</b>												
Sheet Metal Worker	\$30.22		\$9.35	\$14.90	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55.52	\$70.63
<b>Apprentice</b>	<b>Percent</b>											
Apprentice												
5th Year B	85.00	\$25.69	\$9.11	\$11.34	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47.19	\$60.03
5th Year A	80.00	\$24.18	\$9.03	\$10.16	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.42	\$56.50
4th Year B	75.00	\$22.66	\$8.95	\$8.97	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.64	\$52.97
4th Year A	70.00	\$21.15	\$8.87	\$7.79	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.86	\$49.44
3rd year B	65.00	\$19.64	\$8.78	\$6.62	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.09	\$45.91
3rd Year A	60.00	\$18.13	\$8.70	\$5.43	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.31	\$42.38
2 Year B	57.52	\$17.38	\$8.66	\$4.83	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.92	\$40.61
2 Year A	55.00	\$16.62	\$8.62	\$4.25	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.54	\$38.85
Probationary 1 Year	52.50	\$15.87	\$8.58	\$3.65	\$1.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.15	\$37.08

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 Journeyman to 1 Apprentice then,  
1 Apprentice for every 2 Journeymen thereafter

**Jurisdiction ( \* denotes special jurisdictional note ):**

ALLEN, AUGLAIZE, BUTLER, CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HARDIN, LOGAN, MERCER, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT, WARREN, WYANDOT

**Special Jurisdictional Note :**

**Details :**

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# **CONTRACT**

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## FORM OF CONTRACT

THIS AGREEMENT, entered into this \_\_\_\_ day of \_\_\_\_\_, 2022, by  
and between the *City of Moraine, Ohio*, hereinafter called the "Owner" and  
\_\_\_\_\_ hereinafter called the "Contractor."

WITNESSETH: That the said Contractor has agreed and by these presents does agree with the said Owner for the consideration hereinafter named, to furnish all the materials and do all of the work of whatever kind necessary to complete, in a good, substantial, and workmanlike manner, ready for use, and in strict accordance with the specifications on file in the office of the Maintenance Superintendent, and subject to all the terms and conditions of said specifications, and to the approval of said Superintendent, for the provision of services for the

### **SHINGLE ROOF REPLACEMENTS 2022 – CITY OF MORAINES PARK SHELTERS CONTRACT FOR CITY OF MORAINES**

in accordance with the Contract Documents dated October 2022, and Addenda thereto numbered and dated\_\_\_\_, for

The sum of \_\_\_\_\_ **thousand Dollars, (\$ .000.00)** for Roofing Project.

The Owner agrees to pay, and the Contractor agrees to accept as full compensation, satisfaction, and discharge for all work done and material furnished, and also for all costs and expenses incurred and losses or damages sustained by reason of the action of the elements or because of the nature of the work or because of any unforeseen obstruction or difficulty encountered in the prosecution of the work, herein as specified and also for well and faithful completion of the work, and the whole thereof, in accordance with the terms, conditions and provisions of this contract and the instructions, orders, and directions of the Superintendent hereunder, and also for maintaining the work in good condition, except extra work which shall be paid for as provided in the General Conditions and except as in this Contract otherwise specifically provided, a sum of money equal to the amount of the actual work furnished, as determined by the Superintendent, as set forth in the Proposal attached hereto.

**WITNESSETH**, that in consideration of the sums of money herein specified to be paid by the

CONTRACTOR:

OWNER:

\_\_\_\_\_  
(name of company)

City of Moraine \_\_\_\_\_

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

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

\_\_\_\_\_  
(title)

\_\_\_\_\_  
(title)

Contract approved as to form \_\_\_\_\_

# **TECHNICAL SPECIFICATIONS**

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# **TECHNICAL SPECIFICATIONS**

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## SECTION 01 00 00 - GENERAL REQUIREMENTS

### PART 1 GENERAL

#### 1.1 DESCRIPTION OF THE PROJECT DOCUMENTS

- A. The work covered by these specifications consists of furnishing all labor, equipment and materials necessary in connection with a Shingle Roof Replacement Project for the City of Moraine Municipal Building at various facilities. Work includes items as shown, subject to the terms and conditions of the contract, specifications and the drawings as listed.

#### 1.2 CONTRACT DESCRIPTION

- A. Project Identification: **Shingle Roof Replacements 2022  
City of Moraine Park Shelters**
- B. Project Location: City of Moraine – various locations  
Moraine, OH 45439
- C. Owner: City of Moraine  
4200 Dryden Road  
Moraine, OH 45439
- D. Architect: RDA Group Architects, LLC  
7945 Washington Woods Drive  
Dayton, OH 45459  
937.610.3440 phone
- E. Perform Work of Contract under a stipulated sum contract with Owner in accordance with Conditions of Contract.

#### 1.3 CONTRACTOR'S USE OF PREMISES

- A. Contractor shall have full use of the premises as needed for the execution of the work.
- B. Relocate park equipment and furnishings as required to facilitate work.
- C. Work schedules:
  - 1. No limits on work hours, unless directed by the Owner.
  - 2. Additional weekend and overtime work, supplementation of the Crews, etc. may be required by the Owner at no additional cost if the Contractor fails to meet milestone dates as prescribed in the contract.
- D. Coordinate work of this contract with other work / events, etc. that may be occurring by the Owner. Coordinate work schedules to minimize impact to the extent possible.

#### 1.4 CONTRACT PERIOD

- A. Date of Commencement: as outlined in Supplementary Conditions.
- B. Date of Substantial Completion: Fall 2022, dates to be confirmed by Owner
- C. A contract will be issued in July / August 2022.
  - 1. The Contractor will be responsible to execute the project to allow shop drawings and product submittals to be prepared as quickly as possible such that the materials can be ordered with sufficient lead time to permit the work to be executed as scheduled prior to the date of substantial completion.
- D. Coordinate schedule / activities so as not to inconvenience the Owner unnecessarily.

## 1.5 PROJECT ALLOWANCES

- A. Material Allowances:
  - 1. **Include [15] sheets of 5/8-inch thick treated plywood decking replacement in the project.** Exact locations and quantities will be field confirmed by the Contractor during the course of the work. Also, refer to the unit cost sheet for add/deduct to this allowance.
  - 2. **Include 1,000 LF of T&G 2x6 wood decking replacement in the project.** Exact locations and quantities will be field confirmed by the Contractor during the course of the work. Also, refer to the unit cost sheet for add/deduct to this allowance.
  - 3. **Include 240 LF of 2x6 fascia / rake board replacement in the project.** Exact locations and quantities will be field confirmed by the Contractor during the course of the work. Also, refer to the unit cost sheet for add/deduct to this allowance.
- B. Contingency Allowance: include **\$10,000 [ten thousand dollars]** in the base bid amount of the project for use as a project contingency allowance.
- C. Contingency funds shall only be used at the approval of RDA and Owner.
- D. Actual expenditures shall be tracked over the duration of the project with any unused funds deducted from the contract at the end of the project.
- E. All expenditures shall be identified and documented as they occur, not afterward. Work commenced without the approval of the Owner shall be at the Contractor's risk.

## 1.6 INSTRUCTIONS/RESPONSIBILITIES OF THE CONTRACTOR

- A. Protect all finishes and equipment scheduled to remain.
- B. Contractor shall commence and complete work as noted in the Contract.
- C. Contractor shall furnish labor, materials, equipment, and management required to complete the project.
- D. Contractor shall furnish all required logistics required to accomplish the work – including lifts, scaffolding, ladders, trash chutes, safety equipment, etc.
  - 1. All Contractor staging areas and layout areas, etc. shall be coordinated and approved by the Owner prior to the start of the project.
  - 2. Provide protection of all existing pavement, turf, etc. from lifts, lulls, etc. which may be utilized on the project.
- E. Contractor shall visit the site to become thoroughly familiar with all working conditions, check and verify all dimensions, and site conditions. Any dimensions given or referred to in the specification or drawing is to be used purely as approximate and not as a basis for exact amounts for bidding. Contractor shall promptly advise the Architect of any discrepancies, errors with the specifications and drawings before bidding the work.
- F. Contractor to provide a valid Certificate of Insurance, follow all Workman's Compensation requirements and regulations, and conduct all work according to OSHA recognized safe work practices.
- G. All bonds, payment schedule, insurance shall be as noted in the contract documents.
- H. The plans and specifications are intended to depict the general scope, layout and quality of workmanship required, they are not intended to show or describe in detail every item necessary for the proper installation of the work.
- I. Special care shall be taken not to allow dust and debris to fall onto any equipment, material, personnel, or any room below the deck.
- J. The contractor shall provide Safety Data Sheets (SDS) on all products used.
  - 1. Submit directly to Owner. RDA does not review nor approve SDS.



- K. The term ‘Architect’ as referenced in these contract documents is RDA Group Architects.
- L. The term ‘Owner’ as referenced in this specification is City of Moraine.

**1.7 WORK BY THE OWNER**

- A. N/A

**1.8 APPLICABLE REFERENCES, CODES, AND PERMITS**

- A. References will be found in each section that applies to that section. In addition, Contractor shall comply with the Ohio Building Code requirements as they relate to the work.
- B. Contractor shall procure at his own expense all necessary permits from municipal or other agencies and give all notices required. Fines levied due to non-compliance shall be paid by the contractor.
  - 1. No permits are anticipated.

**1.9 WAGES**

- A. This project is subject to prevailing wage and/or reporting requirements. Contractor shall provide certified payroll reports for all labor provided as part of this project.

**1.10 TAXES**

- A. Any taxes paid by the contractor will be considered their expense for which no compensation will be made by the owner. [Tax Exempt Project]. Tax Exempt forms can be provided upon request.

**1.11 SMOKING**

- A. Smoking is not permitted on the property – inside or outside of any facility.

**1.12 CONTRACTOR / GENERAL REQUIREMENTS**

- A. Visit the project sites to verify general and pertinent conditions and take measurements necessary for bidding purposes.
- B. Failure to show or mention petty details shall not be warranted for the omission of anything necessary for the proper completion of the work.
- C. Contractor shall not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in plans, specifications, or details. Such errors, ambiguities and discrepancies shall be reported to the Architect immediately for clarification, revision, or correction prior to the submission of bids. If no notification is given, it shall be assumed that all specifications and conditions will be met.
- D. Remain in compliance with all OSHA STANDARD 1926 – REGULATIONS FOR CONSTRUCTION at all times during project. Comply with all applicable Safe Work Practices.
- E. Contract Period
  - 1. If an extension of time is necessary, a request in writing must be submitted to the Owner at least [14] days prior to the contract completion date.
  - 2. Notify the Architect, in writing, upon determination of any delay in material delivery.
- F. Security: Contractor’s Liability for Vandalism
  - 1. Contractor shall be responsible at the Contractor’s cost and expense, for the securing and protection of the project which is under the control of the Contractor, and for the repair and replacement of the work until that portion of the work is accepted as completed by the Owner. The Contractor shall take the measures necessary to provide such security.
- G. Qualifying Contractors and Sub-Contractors: The Owner may require the contractor/sub-contractor to provide references of similar projects, past performance, financial disclosures, etc. in the interest of selection of the lowest and best bidder for the project.

1. The Contractor is responsible for all work performed by Sub-Contractors.
2. The Owner has the final authority to request a particular sub-contract not be engaged in the project. If this occurs, The Owner and Contractor shall determine if there is an impact to the Contract amount, and negotiate, if necessary, to an adjustment in the Contract amount.
  - a. No change to the Contract amount will be permitted if there is a change to the sub-contractor due to them utilizing alternate manufacturers or products that were not approved substitution requests.

### **1.13 SPECIFICATION CONVENTIONS**

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words “shall be” are included by inference where a colon (:) is used within sentences or phrases.

### **1.14 APPLICATIONS FOR PAYMENT**

- A. Refer to Section 01 29 00.

### **1.15 CHANGE PROCEDURES**

- A. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation.
- B. Change Order Forms: AIA G701.
- C. Unit Price Change Order: For pre-determined unit prices and quantities, Change Order will be executed on fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- D. Maximum mark up for overhead and profit on change orders shall be 15%.**

### **1.16 UNIT PRICES**

- A. It is the Contractor's responsibility to document unit price quantities. Owner will confirm quantities as required. Provide and assist in taking of measurements. Contractor may not be paid for unit cost work without documentation of the work accomplished.
- B. Owner will take measurements and compute quantities accordingly. Provide and assist in taking of measurements.
- C. Unit Price Schedule:
  1. UP-1: Remove / Replace 5/8-inch thick plywood decking, per SF. Anticipate no less than ½ sheet replacement.
  2. UP-2: Remove / Replace T&G 2x6 wood decking, per LF. Anticipate 16 LF minimum replacement at any location.
  3. UP-3: Remove / Replace +/- 1/2-inch thick OSB decking, per SF. Anticipate no less than ½ sheet replacement.
  4. UP-4: Remove / Replace 1x6 wood fascia or rake trim.
  5. UP-5: Remove / Replace 2x6 wood fascia or rake trim.
- D. Unit Price includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services, and incidentals; erection, application or installation of item of the Work; overhead and profit.
- E. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect multiplied by unit price for Work incorporated in or made necessary by the Work.

### **1.17 ALTERNATES**

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option.
- B. Coordinate related Work and modify surrounding Work as required.
- C. Schedule of Alternates:
  - 1. Add Alternate #1: Add shingle roof replacement to Fire Station #30 to the project.
  - 2. Add Alternate #2: Add shingle roof replacement to Street Department Garage Buildings SD-1 and SD-2 to the project.

### **1.18 COORDINATION**

- A. Coordinate scheduling, submittals, and Work of various sections of specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.

### **1.19 QUALITY CONTROL**

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

### **1.20 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of installed Products over suppliers, manufacturers, Products, site conditions, and workmanship, to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply fully with manufacturer's tolerances.

### **1.21 REFERENCES**

- A. Conform to reference standards by date of issue current as of date of Contract Documents.
- B. When specified reference standard conflicts with Contract Documents, request clarification from Architect before proceeding.

### **1.22 LABELING**

- A. Attach label from agency approved by authority having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label.
  - 1. Model number.
  - 2. Serial number.
  - 3. Performance characteristics.

### **1.23 PRECONSTRUCTION MEETING**

- A. Owner/RDA will schedule preconstruction meeting after Notice of Award for affected parties.
- B. Owner, RDA, Contractor Project Manager, and Foreman shall be in attendance.
- C. Agenda:
  - 1. Scheduling of construction events, set-up, storage and etc.
  - 2. Project personnel with contact information.
  - 3. Sequence of construction, starting points, events and required resources.
  - 4. Subcontractors list with contact information.
  - 5. Temporary utilities.
  - 6. Inspection and acceptance of existing conditions.
  - 7. Owner's requirements.

### **1.24 PROGRESS MEETINGS / PERIODIC OBSERVATION**

- A. Owner / RDA will schedule and administer meetings throughout progress of the Work as applicable to the work at weekly intervals.
- B. Agenda:
  - 1. Review of work progress and Owner's Requirements.
  - 2. Field Observations of the completed work.
  - 3. Identification of any problems and associated solutions.
  - 4. Proposed changes.
  - 5. Administrative issues – payment applications, change orders, etc.
- C. RDA will record meeting minutes and will issue to the project team.

### **1.25 DAILY REPORTING REQUIREMENTS [BY CONTRACTOR]**

- A. Daily Reporting by the Contractor is required. Daily Reporting shall be submitted to the Owner summarizing the work of that day, including:
  - 1. General area of work accomplished.
  - 2. Any issues encountered.
  - 3. Workforce
  - 4. Weather conditions
  - 5. Any other items of concern
  - 6. Area of work for the next work day / look ahead.

### **1.26 CONTRACT ADMINISTRATION**

- A. RDA is providing contract administration services for this project to the Owner. However, it shall be the responsibility of the Contractor and Owner to coordinate the proposed work, schedules, installations, permits, inspections, etc. as RDA is not on-site every day.
- B. It is the Contractor's responsibility to contact the RDA for clarification should there be questions regarding the interpretation or intent of the documents, field discovery, etc. that would impact or affect the work as proposed. RDA shall not be liable for deviations, field changes, and Owner changes during construction.
- C. It is the Contractor's responsibility to field confirm all existing conditions, proposed installations and how they interface to ensure the systems can be installed per the intent of the documents and to meet applicable building and zoning codes, local requirements, Owner requirements, provide a watertight detail, meet aesthetic requirements, etc.
- D. It is the Contractor's responsibility to meet all applicable building and zoning codes requirements whether specifically noted herein or not. Building codes represent the minimum acceptable standard.

- E. It is the Contractor's responsibility to install all products, materials, installations, and the like in accordance with applicable industry standards, applicable manufacturer's details and instructions, in accordance with best practices, and building code provisions. The manufacturer details / requirements are the minimum acceptable standard, RDA drawings may require additional work.

### **1.27 CUTTING AND PATCHING**

- A. Employ skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.
- B. Execute cutting, fitting, and patching [including excavation and fill,] to complete Work, and to:
  - 1. Fit several parts together, to integrate with other Work.
  - 2. Uncover Work to install or correct ill-timed Work.
  - 3. Remove and replace defective and non-conforming Work.
  - 4. Remove samples of installed Work for testing.
  - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- C. Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.
- D. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- E. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- F. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to the nearest intersection; for assembly, refinish entire unit. For painted surfaces, paint entire wall from corner to corner, floor to ceiling.

### **1.28 CONSTRUCTION PROGRESS SCHEDULES**

- A. Submit initial progress schedule in duplicate within 5 days after date of Owner-Contractor Agreement for Architect/Engineer review.
- B. Prepare progress schedule using a bar chart of Critical Path chart to outline work and interrelated components.
- C. Submit revised schedules as appropriate throughout the duration of the project.

### **1.29 SUBMITTAL PROCEDURES**

- A. Refer to Section 01 33 00.

### **1.30 MOCK-UPS**

- A. Accomplish mockups as directed by the Owner / RDA.
- B. Accepted mock-ups are representative of quality required for the Work.
- C. Where mock-up has been accepted by Owner / RDA and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so.

### **1.31 TEMPORARY UTILITIES**

- A. Provide temporary power as needed to facilitate work.

### **1.32 TEMPORARY SANITARY FACILITIES**

- A. Contractor shall provide any and all necessary portable toilet facilities at the project site as applicable to the work. Do not use building facilities unless explicitly approved by the Owner.
  - 1. If located on the ground, provide all required protection from vandalism.

**1.33 TEMPORARY BARRICADES**

- A. Erect temporary barricades as applicable to the work to maintain security, dust control, etc.
- B. Provide all applicable signage to limit non-construction personnel from entering the construction area.

**1.34 STAGING AREA / MATERIAL STORAGE**

- A. Coordinate with Owner on acceptable location of project staging and material storage area.
- B. Owner will make reasonable effort to provide suitable space on the site for the Contractor to set up operations. Moving from this space may be necessary when instructed by the Owner and shall be accomplished without charge to the Owner. Cooperate with Owner to minimize conflict from Owner's operations.
- C. Exterior project staging area if provided shall be enclosed with a minimum of a 6' high chain link fence to the satisfaction of the Owner.

**1.35 PARKING**

- A. Park Contractor vehicles in areas designated by the Owner.

**1.36 PROGRESS CLEANING AND WASTE REMOVAL**

- A. Collect and maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition to the satisfaction of the Owner. Clean up shall occur on a daily basis.
- B. Failure to provide routine and daily cleanup may result in a back charge from the Owner to accomplish this work.

**1.37 FIRE PREVENTION FACILITIES**

- A. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- B. Portable Fire Extinguishers: NFPA 10; 10 pound capacity, 4A-60B: C UL rating.
  - 1. Provide one fire extinguisher at each project site during work operations.
  - 2. Supplement as necessary per the local fire department requirements for construction operations.

**1.38 PROTECTION OF INSTALLED WORK**

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Protect finished pavement, concrete, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- D. Prohibit traffic or storage upon waterproofed or roofed surfaces, finished surfaces, etc as is applicable to the work. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer and provide all required protection as determined necessary. Any damage caused shall be repaired to like new condition.
- E. Prohibit traffic from landscaped areas.

**1.39 DELIVERY, HANDLING, STORAGE, AND PROTECTION**

- A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.

- B. Contractor shall be responsible for storage and safekeeping of all materials, including company's personal property. All damaged materials shall be removed from the site.
- C. Coordinate material delivery to avoid Owner involvement.

#### **1.40 PROGRESS CLEANING**

- A. Contractor shall clean the work areas as well as the staging areas and grounds daily.
- B. Run magnet around the work areas to collect stray nails, etc. daily or multiple times daily as appropriate for the work.
- C. Do not leave excess materials, scraps, etc. on the grounds at any time.

#### **1.41 FINAL CLEANING**

- A. Execute final cleaning prior to final inspection.
- B. Clean all surfaces exposed to view as impacted from the work.
- C. Remove waste and surplus materials, rubbish, and construction facilities from site.

#### **1.42 PROTECTING INSTALLED CONSTRUCTION**

- A. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- B. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- C. Prohibit traffic from landscaped areas.

#### **1.43 CLOSE OUT PROCEDURES**

- A. Refer to Section 01 77 00

#### **1.44 PROJECT RECORD DOCUMENTS**

- A. Refer to Section 01 77 00

#### **1.45 OPERATION AND MAINTENANCE DATA**

- A. Refer to Section 01 77 00.

#### **1.46 WARRANTIES**

- A. Refer to Section 01 77 00.

### **PART 2 PRODUCTS**

#### **2.1 MANUFACTURED PRODUCTS**

- A. Where a particular system, product, or material is specified by name it shall be considered a standard and most satisfactory for its particular purpose. Any other product or material considered equal or better in all respects must be approved by the Architect prior to bidding.
- B. All products used on this project shall be new, unless otherwise noted on the drawings or as specified herein.

#### **2.2 PRODUCTS**

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.

- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by the Contract Documents.
- C. Provide interchangeable components of same manufacturer for components being replaced.

### **2.3 DELIVERY, HANDLING, STORAGE, AND PROTECTION**

- A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.
- B. Contractor shall be responsible for storage and safekeeping of all materials, including company's personal property. All damaged materials shall be removed from the site.
- C. Coordinate material delivery to avoid Owner involvement.
- D. Locations of ground level storage and waste dumpster must be approved by the Owner.
- E. All materials shall be properly secured to prevent blow off during weather, wind, etc.

### **2.4 PRODUCT OPTIONS**

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

### **2.5 SUBSTITUTIONS**

- A. Refer to Section 01 25 00.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. **Beginning new Work means acceptance of existing/job-site conditions.**
- B. Verify utility services are available, of correct characteristics, and in correct location.
- C. Contact OUPS a minimum of 48 hours prior to beginning work to verify location of existing utilities, coordinate requirements as applicable.
  - 1. Contact private utility locating services as required by the conditions. It is the Contractor's responsibility to locate all public and private utilities that may be impacted by the work.

### **3.2 FIELD VERIFICATION**

- A. Prior to ordering materials, Contractor shall verify the actual dimensions of existing conditions and assume responsibility for workable solutions for all new work. Verification that the new work and items are workable for existing conditions while providing adequate clearances is the responsibility of the Contractor.

### **3.3 PROTECTION**

- A. The work shall be accomplished in accordance with the provision of Federal, State American Standard Safety Code for Building Construction and OSHA safety requirements.
  - 1. Contractor shall be responsible for protective railings and guards, tie-offs, fall protection, and other safety measures as required by OSHA, even if not specified. Fall protection is required. RDA is not a safety consultant and as such does not direct the means and methods of compliance with safety regulations.



- B. The Contractor shall protect and maintain all building entrances, interior contents, building exterior and grounds.
  - 1. Return all surfaces to their original condition after all work is complete.
- C. In the event of damages of any kind caused by improper protection. The Contractor shall replace/repair the damages [including interior or exterior equipment] at no expense to the Owner.
- D. Contractor shall comply with all regulations of the Local Fire Department and the Owner's requirement regarding storage and handling of flammable materials, etc. It is the responsibility of the Contractor performing any hot /torch work to comply with the safety provisions of the National Fire Codes pertaining to such work and the contractor shall be responsible for all damage or fines resulting from failure to so comply.

### **3.4 PREPARATION**

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

### **3.5 JOB SUPERINTENDENT/EMPLOYEES**

- A. Each prime contractor shall have a qualified foreman on the project at all times when work is being accomplished.
- B. Employees shall refrain from fraternization with building occupants.
- C. The Contractor shall furnish the Owner with a list of personnel with phone numbers that will be working on the project and emergency contacts names and numbers that has the authority to handle emergencies on a 24 hour/seven days a week.

### **3.6 ROOF / PROJECT ACCESS**

- A. Access to the roof areas shall be from portable ladders, etc., provided, installed, and maintained by the Contractor for the duration of the work.
- B. Provide required tie-offs to the existing building structure as needed.

### **3.7 SAFETY PROGRAM**

- A. Contractor must have a written safety program for all operations/ work performed on this project. The documents must be at the job site and be made available to the Owner or RDA when requested.
- B. The Contractor assumes all responsibility for project safety, ways, and means and methods of constructing the project.
- C. In addition, the Owner may require special safety requirements to be performed by the Contractor, these requirements will be provided prior to commencement of work.

### **3.8 REMOVALS AND CLEANUP**

- A. Contractor shall be responsible for the removal, dismantling of items that are required for proper completion of the work as applicable in each section. All debris resulting from the work not designated for reuse becomes the property of the contractor unless stated otherwise.
- B. At the completion of each day, the general contractor shall maintain the work area clean of all debris to the satisfactory of the owner, including all the subcontractors work area.
- C. Provide dumpsters or trash containers needed for the proper removal of project materials, trash, or debris related to the work. Keep all work areas and project sites neat and free of trash and clutter at all times.
  - 1. No Debris, materials, etc. may be left unprotected on the grounds.

2. All exterior staging / dumpster areas shall be fenced / protected.

### 3.9 GENERAL PROJECT REQUIREMENTS

- A. Equipment delivery and equipment staging must be coordinated with Owner prior to start of project.
- B. Safety is paramount and all personnel on site must wear appropriate personal protection equipment [PPE]. The Contractor is responsible for means and methods to ensure that proper PPE is provided. Failure to comply may result in dismissal from site.
- C. Barricade work area with appropriate construction grade barriers to establish boundaries of work area and assure safety for all workers and general public. All work areas must be properly barricaded from the general public prior to starting any work.
- D. Job sites will be maintained in an orderly and neat fashion at all times.
- E. Contractor will pre-determine work phases with Owner to minimize disruption of business operations.
- F. **IMPORTANT: Failure to show or mention petty details shall not be warranted for the omission of anything necessary for the proper completion of the work.**
- G. **The plans and specifications are intended to depict the general scope, layout and quality of workmanship required. The documents are not an “instruction manual” to execute the work nor are they intended to show or describe in detail every item necessary for the proper installation of the work. The means and methods required to execute the work described is the sole responsibility of the Contractor. The Contractor shall include the ancillary work required, whether explicitly stated or not, for the proper completion of the work as intended. The Contractor is required to meet or exceed building code requirements, applicable industry standards, ASTM standards, and/or manufacturer installation requirements as they relate to the work.**
- H. **The plans and specifications represent a single complete design package indicating the intended scope of the project in its entirety. As such, the project is structured to be awarded to a single Prime Contractor. The documents do not delineate bid packages or assign responsibilities to any subsequent subcontractors, dictate construction sequencing, nor provide coordination between any “trades”. Such activities are the responsibility of the holder of the construction contract. In the event of a discrepancy within the drawings or between the drawings and the specifications, the more stringent requirement represented in the documents shall prevail.**
- I. Contractor shall not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in plans, specifications, or details. Such errors, ambiguities and discrepancies shall be reported to the Architect immediately for clarification, revision, or correction prior to the submission of bids. If no notification is given, it shall be assumed that all specifications and conditions will be met.

**END OF SECTION**

## SECTION 01 25 00 – SUBSTITUTION PROCEDURES

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Section 00 23 13, Instructions to Bidders shall apply to this section.

#### 1.2 WORK INCLUDES

- A. Includes administration and procedural requirement for Substitutions.
1. Substitutions' for Cause: Changes due to project conditions, such as unavailable of product.
  2. Substitutions' for Convenience: Changes that may offer advantages to the Owner.

#### 1.3 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions / Approved Equal: Submit request for substitution as outlined in this section for manufacturers not named.
1. RDA/Owner is the decision maker if the proposed “approved equal” is in fact equal and approved. Any decision rendered is final.
  2. Any Contractor, Sub-contractor, or Supplier who makes their own judgement as to “approved equal” and includes within their bid without a formal approval is doing so at their own risk.

#### 1.4 SUBSTITUTIONS PROCEDURES

- A. RDA will consider requests for Substitutions by the Bidder only [not materials suppliers, etc].
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. A request constitutes a representation that the Bidder:
1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
  2. Will provide same warranty for Substitution as for specified product.
  3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
  4. Waives claims for additional costs or time extension which may subsequently become apparent.
- D. Substitution Procedure
1. **Submit copy of request for Substitution for consideration to RDA no later than 7 days before bid opening date.**
  2. Submit shop drawings, product data, and applicable certified test results attesting to proposed product equivalence. Burden on proof is on proposer.
  3. RDA will notify Contractor in writing of decision to accept or reject request within 5 days of receipt of request or request additional information or documentation for evaluation.
- E. Substitutions will not be considered when they are indicated or implied on Submittals, without written request or when acceptance will require revision to the Contract Documents.

- F. If the Substitution will require modifications to the Contract / Bidding Documents, the cost for updating the documents shall be paid by the Contractor making the request.
- G. Substitutions will not be considered after award of the project without justification.
- H. Approved substitutions will be identified by Addenda.
  - 1. Bidders shall not rely upon approvals made in any other manner.

**END OF SECTION**

## SECTION 01 29 00 – PAYMENT PROCEDURES

### PART 1 GENERAL

#### 1.1 WORK INCLUDES

- A. Includes administration and procedural requirement for necessary to prepare and process Application for Payment.

#### 1.2 SCHEDULE OF VALUES

- A. Submit schedule on AIA Form G703.
  - 1. Provide line items for each applicable CSI division / defined work scope such that the Owner and RDA can review and determine/confirm progress.
  - 2. Include line items for each allowance, alternates [as applicable], and general conditions.
- B. Submit Schedule of Values in duplicate within 5 days after date of Owner-Contractor Agreement.

#### 1.3 APPLICATIONS FOR PAYMENT

- A. Use AIA form G702 and G703 for Application for payment or a form the Owner has requested.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
  - 1. Schedule of values shall be categorized into the major components of the work to allow review of the progress by the Owner.
  - 2. As there are multiple building / roof areas included in the project, sub-divide the schedule of values to illustrate costs per roof area.
  - 3. Include individual line items for general conditions, all identified allowances, closeout, warranty, etc.
- C. Complete every entry, notarize and execute by a person authorized to sign document on behalf of the contractor. Include amounts for work completed following previous Application for Payment whether or not payment has been received, include amounts of Change Orders issued before last day of construction period covered by application.
  - 1. Stored materials included in application must have supporting documentation that verifies amount required, do not include overhead and profit on stored material.
  - 2. Submit to RDA for review and processing.
    - a. E-mail submittal is acceptable unless otherwise directed by the Owner. Verify hard copies with Owner if required.
- D. Each application for payment following the initial Application for Payments shall be consistent for payment with previous applications.

#### 1.4 SUBMITTAL PROCEDURES

- A. Submit [1] copy of each payment application on AIA Form G702 and G703, in PDF format
  - 1. Pencil copy to RDA for review/acceptance. RDA will review and provide any comments or questions.
  - 2. Submit final payment application in PDF format to RDA for processing.
  - 3. RDA will certify and process the payment application and will forward to Owner for payment.
- B. Submit all required waivers of lien / partial release of lien [including vendors and subcontractors as requested by Owner], payroll reports, etc. as required by the Owner. Failure to submit required paperwork can delay processing of Application for Payment.

#### 1.5 FINAL APPLICATION FOR PAYMENT

- A. Refer to provisions in Section 01 77 00 for Application for Payment at Substantial Completion.

**END OF SECTION**

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## SECTION 01 33 00 – SUBMITTALS

### PART 1 GENERAL

#### 1.1 WORK INCLUDES

- A. Review of shop drawings and product data by RDA / Owner.

#### 1.2 SUBMITTAL PROCEDURES

- A. Contractor to submit product data and shop drawings for all applicable components of the project. Refer to individual sections for additional requirements.
  - 1. Contractor to provide a submittal log at the beginning of the project for review by RDA / Owner. Submittal log shall identify proposed submittals by Spec Section.
  - 2. RDA review of the submittals will be general in nature and does not relieve the Contractor in any way of the responsibility in compliance with the contract requirements, manufacturer requirements, and/or applicable codes.
- B. Submittals shall be accomplished in a digital [PDF format].
  - 1. Any hard copies received will be scanned and returned electronically.
  - 2. Provide those submittals required to maintain orderly progress of the work and those required for early lead time for manufacturer fabrication.
  - 3. Mark each component to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this project. Non-identified submittals will be rejected.
- C. Submittals shall have a Submittal form / cover sheet to identify Project, Contractor, subcontractor or supplier; and pertinent Contract Document references.
- D. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- E. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of completed Work.
- F. Revise and resubmit submittals as required; identify changes made since previous submittal.
- G. All submittals shall be accomplished at the beginning of the project to allow the proper ordering of materials for the project.
  - 1. Failure by the Contractor to provide submittals in a timely fashion does not change the project start date nor contract period.
- H. Any materials on the job site that have not been reviewed as part of the submittal process are subject to rejection / removal from the job-site. Any work undertaken without review of the submittal data is at the Contractor's risk and subject to rejection or replacement at no cost to the Owner if submittals are not in conformance with the project documents.
- I. Allow 7 days for review of submittal items.

#### 1.3 SUBMITTALS / PRODUCT DATA / SHOP DRAWINGS

- A. Product Data / Shop Drawings
  - 1. Submitted to Owner for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
    - a. Roof Products: Data Sheets - shingles, flashing components, fasteners, underlayment and other related components accessories.
    - b. Sheet Metal Items: Specialty items [edge metal].
    - c. Any Additional Details to comply with manufacturer's details or changes to the details as shown on the drawings.

2. All shop drawings shall be to scale, submit drawings on sheets no larger than 24-inch x 36 inch, all other product data can be on 8 ½ X 11-inch sheets.
- B. Samples for Review:
1. Submitted to Owner for review and selection for aesthetic, color, or finish.
    - a. Color chart for all metal items.
  2. Submit samples of finishes from full range of manufacturer's standard colors, textures, and patterns for Owners selection.
  3. Submit samples to illustrate functional and aesthetic characteristics of Product.
- C. Eligible Applicator
1. Submit a letter from the roofing material manufacturer with the following items addressed.
    - a. The applicator is approved to use the products as specified and the manufacturer accepts the roofing system requirements and details as shown or with changes as provided.
    - b. The applicator has been manufacturer approved for over 5 years and is capable of obtaining the warranty as outlined in the specifications.
- D. Personnel/Other Contractors
1. Submit a list of all subcontractors and on-site personnel with the list of lead contact and associated phone numbers.
  2. Submit emergency contact sheet with contacts for an emergency – 24/7 call list.
- E. Contract Items:
1. Submit Certificate of Insurance, Worker's Comp Certificates as required by Owner.
  2. Submit bonds if applicable to the contract.
  3. Submit a written Construction Schedule / Implementation and Sequencing Plan outlining starting points and length of time to complete work in each section.
- F. Safety Data Sheets: Submit Safety Data Sheets [SDS] on all products to the Owner.
1. Owner shall be responsible to provide to employees as applicable.
  2. Owner's representative /RDA does not review / approve any SDS sheets.
- G. Site Specific Safety Plan
1. Provide to Owner for their Review.
- H. Site Logistics Plan
1. Provide to Owner for their Review.

#### **1.4 MANUFACTURER'S INSTRUCTIONS**

- A. When specified in individual specification sections, submit manufacturer printed instructions for delivery, storage, assembly, installation, [start-up,] adjusting, and finishing, in quantities specified for Product Data.

#### **1.5 MANUFACTURER'S CERTIFICATES**

- A. When specified in individual specification sections, submit certifications by manufacturer to Owner, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

**END OF SECTION**



## SECTION 01 77 00 - CLOSEOUT REQUIREMENTS

### PART 1 GENERAL

#### 1.1 WORK INCLUDES

- A. Close-out of the actual work, including warranties, maintenance manuals and final cleaning.  
Close-out of all contract obligations.

#### 1.2 CLOSE-OUT PROCEDURES

- A. Contractor shall notify Owner 5 days prior to the work being complete to establish the desired inspection date. Owner / RDA will either proceed with the inspection or notify Contractor of unfulfilled requirements.
- B. Owner / RDA shall inspect the completed project and notify the Contractor of any deficiencies. Deficiencies will form 'punch list' for final acceptance.

#### 1.3 PUNCHLIST REQUIREMENTS

- A. The Contractor shall review and inspect all work prior to notifying the Owner for a Punchlist inspection of the work. Provide written documentation certifying review along with documentation of Contractor generated Punchlist.
- B. If work is clearly not complete, the Punchlist will be suspended until such time that it is evident that the Contractor has completed and reviewed/inspected their own work.**
  - 1. RDA anticipates [1] punchlist inspection and [1] back-punch / final inspection as part of our services to the Owner.
  - 2. Failures by the Contractor to complete the work, complete punchlists, etc. may result in a backcharge to the Contractor for the additional time to closeout the project.
- C. The Contractor shall review and provide the noted repairs and corrective work necessary at each of the Punchlist inspections to allow project close out.
  - 1. Back-punch walk through may result in additional punchlist items which need to be addressed by the Contractor.
- D. The Contractor shall provide adequate time in the construction schedule to accomplish punchout work within the overall contract period indicated within the bid documents.
- E. The failure to identify any punchlist item during a walk through / inspection does not release the Contractor from contractual responsibility to address any item during the warranty period.

#### 1.4 SUBSTANTIAL COMPLETION

- A. If Requested by the owner, a Certificate of Substantial Completion will be issued upon completion of all the work as required.

#### 1.5 PREREQUISITIES TO FINAL ACCEPTANCE AND PAYMENT

- A. Prior to acceptance and final payment, all claims or disputes must have been resolved and the Contractor must have provided the following items to the Owner:
  - 1. Notarized affidavit of waiver of liens [contractor of record], sub-contractors and material suppliers
  - 2. Certificates of release from authorities having jurisdiction over permitting.
  - 3. Final statement of charges [100% application for payment].
    - a. Submit a final Application for Payment according to Section 01 29 00, Payment Procedures.
  - 4. Documented evidence of completing 'punch list' as applicable.
  - 5. Manufacturer's original warranties, including contractor maintenance agreements and warranties as applicable.
  - 6. Evidence that claims have been settled.

7. O+M Manuals
8. Manufacturer's roof maintenance and repair instructions.
9. Final cleaning of all work areas, including cleaning roof of debris, cleaning of grounds, run magnet, etc.
10. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

#### **1.6 PHOTOGRAPHIC DOCUMENTATION**

- A. When requested by the Owner, photos of the completed punch list along with any supporting documentation can be submitted, in lieu of a final walkthrough.

#### **1.7 PROJECT RECORD DOCUMENTS**

- A. Maintain on site one set of Contract Documents to be utilized for record documents.
- B. Record actual revisions to the Work. Record information concurrent with construction progress.
- C. Specifications: Legibly mark and record at each Product section description of actual Products installed.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.
- E. Submit documents to Owner.

#### **1.8 PROJECT WARRANTIES**

- A. All work undertaken as part of the project shall be warranted for a period of not less than [1] year. Individual sections / products may have specific additional warranty requirements.
- B. Provide notarized copies of warranty documents to the Owner.
  1. Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- C. Original warranties are required to be provided to the Owner prior to final payment.

#### **1.9 MAINTENANCE DATA**

- A. Submit two sets prior to or at the final inspection, bound in 8-1/2 x 11-inch text pages, binder covers.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.
- C. Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles legibly printed under reinforced laminated plastic tabs.
- D. Contents:
  1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, subcontractors, and major equipment suppliers.
  2. Part 2: Project submittals, organized by CSI division
    - a. Include applicable product warranties with individual sections / submittals
  3. Part 3: Operation and maintenance instructions, arranged by system / CSI division.
  4. Part 4: Project documents and certificates.
  5. Part 5: Colors / finishes / samples

#### **1.10 FINAL CLEANING AND SITE REPAIR**

- A. Final cleaning of all work areas: clean roof of debris, soil and stains from building surfaces, roads, sidewalks, etc.

- B. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

**END OF SECTION**

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## **SECTION 02 41 16 - SELECTIVE DEMOLITION**

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Demolishing designated construction.
  - 2. Cutting and alterations for completion of the Work.
  - 3. Protecting items designated to remain.
  - 4. Removing demolished materials.

#### **1.2 CLOSEOUT SUBMITTALS**

- A. Project Record Documents: Record actual locations of capped utilities, concealed utilities discovered during demolition and any subsurface obstructions or conditions that require noting.

#### **1.3 QUALITY ASSURANCE**

- A. Conform to applicable code for demolition work, dust control, protection, products requiring electrical disconnection and re-connection

#### **1.4 SCHEDULING**

- A. Schedule Work to coincide with improvements of the building.
- B. Coordinate utility and building service interruptions with Owner.

#### **1.5 PROJECT CONDITIONS**

- A. Cease operations immediately if structure appears to be in danger and notify Architect. Do not resume operations until directed.

### **PART 2 PRODUCTS**

NOT APPLICABLE

### **PART 3 EXECUTION**

#### **3.1 PREPARATION**

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Call Local Utility Line Information service not less than three working days before performing Work.
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- C. Mark location and termination of utilities.
- D. Erect, and maintain temporary barriers and security devices including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.
- E. Do not disable or disrupt building fire or life safety systems without 3 days prior written notice to Owner.
- F. Do not close or obstruct building egress path.
- G. Protect existing structure / items to remain.

### **3.2 SALVAGE REQUIREMENTS**

- A. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.
- B. Tag components and equipment Owner designates for salvage.
- C. Protect designated salvage items from demolition operations until items can be removed.
- D. Carefully remove building components and equipment indicated to be salvaged.
- E. Disassemble as required to permit removal from building.
- F. Package small and loose parts to avoid loss.
- G. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.
- H. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.

### **3.3 DEMOLITION**

- A. Provide all demolition and removals necessary for the proposed work. Work includes abandoned equipment, building components that are required to be removed accomplish work.
- B. Conduct demolition to minimize interference with occupied buildings/units.
- C. Maintain protected egress from and access to adjacent existing buildings/units at all times.
- D. Do not close or obstruct roadways or sidewalks without permits.
- E. Demolish in orderly and careful manner. Protect existing improvements.
- F. Carefully remove building components indicated to be reused.
- G. Confirm with Owner prior to demolition to verify any items to be salvaged and turned over to Owner.
- H. Disassemble components as required to permit removal.
- I. Box and label contents for all items scheduled to salvage. Obtain sign off.
- J. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- K. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- L. Remove temporary Work.

### **3.4 CLEAN UP**

- A. Remove demolished materials from site as work progresses.
- B. Leave areas of work in clean condition.

**END OF SECTION**

## SECTION 06 10 53 - MISCELLANEOUS ROUGH CARPENTRY FOR ROOFING

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and General provisions of the contract and Division 1 Specification Sections apply to this section.

#### 1.2 WORK INCLUDES, BUT NOT LIMITED TO:

- A. Miscellaneous sized new wood nailers/blocking, curbs, fascia/trim boards, plywood and associated fasteners, bolts, adhesives as required for installation of the roofing system and sheet metal.
- B. Well secured wood members that meet the requirements of Section 07 01 50 can remain in place as per conditions/guidelines and attachment as specified herein. RDA must approve all nailers that will remain in place.
- C. Repair or replacement of deteriorated decking.

#### 1.3 APPLICABLE REFERENCES

- A. The following references form a part of this specification.
  - 1. NFPA - National Forest Products design specifications.
  - 2. Factory Mutual Research Corporation, Loss Prevention Data Sheet 1-49, Perimeter Flashings
  - 3. APA - American Plywood Association.
  - 4. Lumber Grading Agency.
  - 5. American Wood Preservers Association
  - 6. State Building Code
  - 7. ANSI/SPRI/FM 4435 ES-1 Edge Systems.
  - 8. WWPA - Western Wood Products Association
  - 9. SPIB - Southern Pine Inspection Bureau
- B. Perform work in accordance with Local Building Code.

### PART 2 PRODUCTS

#### 2.1 DIMENSIONAL LUMBER *[Some items below may not be required for this project, but are outlined herein if required during course of work due to changing conditions or changes in scope].*

- A. Board Stock: graded in accordance with NFPA and Lumber Grading Agency, board class number 2, structural grade, kiln-dried Douglas fir or Southern yellow pine. Moisture content for all lumber shall not exceed 19% by weight at time of installation, including any lumber that can remain in place. Lumber will be removed if moisture exceed 19%. Sizes as shown are standard nominal sizes. Provide dressed lumber, S4S, unless otherwise noted.
  - 1. Any lumber intended to be left exposed shall be appearance grade, suitable for a painted finish or finish as specified.
- B. Preservative treated: asphaltic, creosote or copper additive [CCA, CA-B & ACQ] or any other type treated lumber not acceptable for use on this project unless for used as nailers on top of concrete or masonry wall surface, then use salt pressure treated lumber. Use treatment that does not promote corrosion of metal fasteners.
- C. Plywood: 48/24 APA rated sheathing, 5/8 and 3/4 inch thickness as noted and to match existing building / framing conditions.
- D. Tongue & Groove decking: treated 1x and 2x thickness x width as noted and to match existing building / framing conditions.

- E. Fascia and Rake Boards: treated 1x and 2x thickness x width as noted and to match existing building / framing conditions.

## 2.2 FASTENERS

- A. General: Contractor to determine the required length for each application in accordance with manufacturer data and Factory Mutual recommendations,
  - 1. Minimum embedment:
    - a. Wood-1 1/4 inch unless otherwise noted
  - 2. Comply with the fastening requirements of the International Building Code, Local Building Code and State requirements, whichever is more stringent.
  - 3. All fasteners to anchor wood members shall be corrosion-resistant steel unless exposed to weather, pressure preservatives or in high humidity areas, provide fasteners of Type 304 Stainless steel, compatible for the conditions or other requirements stated herein [as noted].
  - 4. See roofing section for additional fasteners data.
  - 5. Contractor shall notify the owner if deteriorated substrate conditions exists.
- B. Lag Bolts: ANSI/ASME B18.2.1
- C. Steel Bolts: ASTM A 307, Grade A
- D. Nails: ASTM F 1667 [2015], 8d, 11-12-gauge, .113-inch diameter, ring-shank, corrosion resistance by coating or galvanization
- E. Wood Screws: ANSI/ASME B 18.6.1 [2016], corrosion resistance by coating, galvanization or stainless steel.
- F. Expansion Anchors: Steel, corrosion resistance, 3/8-inch diameter.

## 2.3 ADHESIVES

- A. Standard wood adhesive, caulk grade.
- B. ITW Red Head, A7 acrylic adhesive.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Inspect fastening of existing wood members left in place for conformance to requirements specified herein, upgrade as necessary to meet performance criteria outlined.
- B. Examine surfaces for satisfactory conditions and do not use materials that are warped, bowed, twisted or unsound.

### 3.2 INSTALLATION

General: Installation shall be in accordance with Factory Mutual Loss Prevention Data Sheet 1-49 perimeter flashing recommendations and details, Local Building Code, ANSI/SPRI/FM 4435 ES-1, other standard industry framing methods and as shown. Attachment withdraw resistance criteria for nailers/wood blocking is 200 P/F for perimeter, 300 P/F for corners *onto substrate with margins of safety applied from printed values, as follows: Steel, Wood, Structural Steel 2:1, No power actuated fasteners or pin drive fasteners allowed. **Fastener spacing as outlined below is the maximin allowable, unless otherwise shown on the plans.***

- A. Install members true, plumb and level, secure in place. Provide all required shoring and temporary bracing required.
  - 1. Use members of continuous possible lengths. Do not use materials with defects or pieces that are too small [optimum joint arrangement].



2. Fasteners or nails used to secure fascia and top nailers [stacked] to other wood members shall penetrate 1-1/4 inch, apply in two rows at 12 inches on center at perimeters and 6 inches in corners, staggered if feasible.
  3. Wood nailers/blocking shall have a 1/4 inch space between boards.
- B. Plywood. Install plywood full sheet onto existing rafters/joists/trusses. End joints should be directly over center of rafters/joists/trusses and be attached with nails spaced 6 inches on center at each rafter/joist/truss [min. nail penetration into rafters/joists/trusses, 1 1/4 inch]. Joints in the next sheathing board should not occur in the same structural member space. No sheathing/decking boards shall be used that are not long enough to span over two structural members, if applicable. Steep Sloped plywood Application: Allow a two-inch space each side at the ridges for proper ventilation to occur from the ridge vents, if ridge vents are required. In addition, provide expansion clips between plywood sheets.
- C. OSB Board. Install OSB board full sheet onto existing rafters/joists/trusses. End joints should be directly over center of rafters/joists/trusses and be attached with nails spaced 6 inches on center at each rafter/joist/truss [min. nail penetration into rafters/joists/trusses, 1 1/4 inch]. Joints in the next sheathing board should not occur in the same structural member space. No sheathing/decking boards shall be used that are not long enough to span over two structural members, if applicable. Steep Sloped OSB Application: Allow a two-inch space each side at the ridges for proper ventilation to occur from the ridge vents, if ridge vents are required. In addition, provide expansion clips between OSB sheets.
- D. T&G Decking. Install tongue & groove decking onto existing rafters/joists/trusses. End joints should be directly over center of rafters/joists/trusses, unless existing conditions dictate otherwise and be attached with a minimum of 3 nails at each rafter/joist/truss [min. nail penetration into rafters/joists/trusses, 1 1/4 inch]. Joints in the next sheathing board should not occur in the same structural member space. No sheathing/decking boards shall be used that are not long enough to span over two structural members, if applicable.
- E. Fascia / Rake Boards. Install fascia / rake boards onto the ends of existing rafters/joists/trusses. End joints should be directly over center of rafters/joists/trusses, unless existing conditions dictate otherwise and be attached with a minimum of 2 nails at each rafter/joist/truss tail [min. nail penetration into rafters/joists/trusses, 1 1/4 inch].

### 3.3 SURFACE TREATMENT

- A. All exposed to view newly installed wood members shall be primed and painted to match surrounding surfaces colors unless otherwise noted.

**END OF SECTION**

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## SECTION 07 01 50 – PREPARATION FOR REROOFING

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and General provisions of the contract and Division 1 Specification Sections apply to this section.

#### 1.2 WORKS INCLUDES, BUT IS NOT LIMITED TO:

- A. Roof Membrane Removals, Other Removal Summary and Re-Cover/Reroof Preparation:
  - 1. Remove existing shingle roof systems, flashing, complete to the deck.
  - 2. Remove existing flashing, penetration boots, etc.
  - 3. Removal and replace all damaged or deteriorated wood decking / fascia / rake.
- B. Removal of existing perimeter base flashing [metal, membrane, composite, coatings and single ply as applicable] and associated equipment supports and related items.
- C. Removal of wood nailers, fascia and blocking as applicable to the work. Wood members that are securely bolted or adequately fastened or can be adequately fastened to the structure per specs and are in a dry good condition can remain in place. Remove deteriorated and damaged wood members. [See section 06 10 53 for anchoring requirements].
- D. Removal of sheet metal items such as flashings, edges, bib flashings, copings, counter-flashings, pitch pans, fascia/rake, corrugated panels and like components necessary for application of new membrane.
- E. Removal of existing unused curbs, deteriorated or rotted/weak decking, abandon equipment as noted on the drawings.
- F. Other removals necessary to accomplish the new work.

#### 1.3 QUALITY ASSURANCE

- A. Work shall be performed in strict accordance with the terms and conditions of all municipal and state regulation and local codes.
- B. Demolition shall comply with the requirements of ANSI - American National Standard Safety Requirements for Demolition.
- C. Conduct demolition work in a manner that will minimize disruption of owner's normal operations. Coordinate work activities daily with Owner.
- D. Properly protect all facility surfaces and associated landscaping from damages due to normal demolition operation. Return all areas to their original condition at no charge to the Owner.
- E. Do not remove existing roofing membrane or components when weather conditions threaten integrity of building contents.

#### 1.4 COORDINATION

- A. All utilities and mechanical rooftop equipment will remain active during normal work hours, unless approved otherwise by the Owner.
- B. All removals shall be legally disposed, except those indicated to be reinstalled, salvaged or to remain Owner's property. Comply with hauling and disposal regulations of authorities having jurisdiction and EPA notification regulations.

## 1.5 FIELD CONDITIONS

- A. Do not overload structure with storage of materials, verify roof deck weight capacity and location of structural supports, only items needed that day shall be stored on the roof. Limit loads on roof to 25 pounds per square foot for uniformly distributed loads for metal/gypsum decks, 75 pounds per square for concrete decks. **Provide temporary securement of existing membrane to prevent membrane blow off while installing new roof system, if applicable.**
- B. Do not apply roofing system during inclement weather or when the chance is 40% or greater, percentage as listed on www.weather.com for the local area, percentage as listed when read at 7 AM local time or at time of work commencement. Proceed with roofing and associated work when weather conditions will permit unrestricted use of materials and quality control of the work being installed.
- C. Building space underneath roof work is utilized by on-going operations. Coordinate all work with owner including, material storage and contractor parking. Owner's approval required before proceeding with the work.
- D. **Contractor must provide overhead protection for Owner's workers, public, visitors, etc from falling materials/debris at building entry points where applicable.**

## PART 2 PRODUCTS

### 2.1 INFILL MATERIALS

- A. N/A

## PART 3 EXECUTION

### 3.1 DECK PREPARTION/REPAIRS

- A. Wood Deck: Replace any rotted or loose decking, fasten in place as outlined in rough carpentry section.
  - 1. Existing thickness of wood decks is not known / confirmed. Field verify and match existing thickness as applicable.

### 3.2 DUST / FUME CONTROL

- A. Contractor to take measures to avoid dust, dirt and debris from entering the building. Throwing material off the roof is prohibited; provide an enclosed chute, crane or raised dump truck to remove roofing materials. Contractor shall provide a tarp or other protection of walls where material is being removed.
- B. Contractor must take special precautions around deck penetrations, including but not limited to installation and removal of reinforced visqueen below the roof deck to protect property below.

### 3.3 TRAFFIC

- A. Conduct demolition operations and the removals of debris to ensure minimum interference with streets, walks and other adjacent facilities. Do not close or obstruct streets or walks, without permission from owner and authorities having jurisdiction.

### 3.4 DISPOSAL OF MATERIALS

- A. Remove from the site, all debris, rubbish and other materials resulting from the demolition operations, are not being reused as soon as possible. The landfill used for disposal shall be approved for type of materials being disposed. Comply with local laws, EPA regulations when transporting materials from the site.

- B. All materials that are to be reused in the new work shall be removed, cleaned and stored in a safe place until reinstallation, as applicable.

### **3.5 ASBESTOS REMOVAL / NOTIFICATION**

- A. If asbestos is found during course of work, all removals shall be in accordance with written guidelines provided by OSHA Asbestos Construction Standard [29 CFR 1926.1101], and State, County and EPA guidelines as applicable. Contractor must be OSHA trained meeting the requirements of 29 CFR 1926.1101 for the removal, handling and monitoring of removed material.
- B. Indicate receipt and acceptance of hazardous wastes, such as asbestos containing materials, by a landfill licensed to accept such materials. Notify and provide all documentation to the Owner for disposal of asbestos. All costs for asbestos removal, permitting and handling will be included in the bid if noted herein. No suspect ASBESTOS containing materials have been found.
- C. All asbestos removals shall be in a manner not to cause the roofing fibers to become crumbed, pulverized or airborne, these materials shall be handled as Category I and II non-friable asbestos. Should asbestos be encountered noted or not, that has become friable due to the actions of the Contractor or the condition of the material, the Contractor shall secure the services of an abatement contractor to remove the material and an independent firm to monitor removal activities and procedures [removal plan required]. Contractor shall pay for this abatement contractor if asbestos became friable due to their removal procedures. Notify Owners rep if asbestos has been encountered that was not noted, prior to removal.

### **3.6 UTILITIES / EQUIPMENT**

- A. Where electrical lines, refrigerant line sets, equipment, controls, etc. interface with the performance of the work, they shall be temporarily removed, replaced and made fully operational as soon as possible, a 48-hour notice and approval from Owner is required before any removals can take place. The Contractor has the responsibility to verify the operational status of all equipment before removals take place.
- B. The Contractor must notify the Owner of any non-operational items prior to removal, commencement of work constitutes acceptance of equipment and any costs to make operational shall be borne by the Contractor.

**END OF SECTION**

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## SECTIONS 07 31 13 - SHINGLES AND ACCESSORIES

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and General provisions of the contract and Division 1 Specification Sections apply to this section.

#### 1.2 RELATED SECTION

- A. Section 07 62 00 – Sheet Metal, Flashing, Trim and Specialties Items

#### 1.3 WORK INCLUDES, BUT NOT LIMITED TO:

General: Intent of roof replacement project is to provide a functional 50-year new water resistance shingle system, resisting wind uplift pressures, thermally induced movement and exposure to weather without failure. Roof system must have been tested and approved [industry standard test] and have field experience by the manufacturer.

- A. Removal of existing shingles/underlayment and related items.
- B. Installation of shingles and underlayment.
- C. Installation of associated ice and water shield membrane and synthetic underlayment.
- D. Installation of vents, pipe boots and accessories.

#### 1.4 APPLICABLE REFERENCES

- A. The following references form a part of this specification.
  1. ASTM D3462 Asphalt Shingles, Fiberglass, Class A, Mineral surfaced
  2. ASTM D1970 Rubberized Asphalt Membrane.
  3. ASTM B209 Aluminum.
  4. ASTM E 108 Fire Test of Roof Coverings
  5. [SMACNA] Sheet Metal and Air Conditioning Contractors Association- 6<sup>th</sup> Edition or Current Manual
  6. [OSHA] Occupational Safety and Health Administration, Guidelines
  7. ANSI/SPRI WD-1 Wind Design Standards
  8. CertainTeed, Shingle Applicators Manual [Current Edition].
  9. ASTM D3161 Wind Testing for Steep Sloped Roofing.
  10. ASTM D226/D4869 Underlayment.
  11. ASTM D7158 H, Wind Rating for Asphalt Shingles

#### 1.5 PRECAUTIONS

- A. Do not install shingles or roofing when the temperature is below 45 degrees F or when rain or snow is falling.
- B. Do not overload the structure with storage of materials or equipment.

#### 1.6 SEQUENCING/SCHEDULING and PROTECTION

- A. Building space underneath roof work is utilized by on-going operations. Coordinate all work with Owner including, material storage and contractor parking. Owner's approval required before proceeding with the work. **Contractor must provide overhead protection for Owners / Residents / Visitors, etc from falling materials/debris at building entry points and other hazard locations.**
- B. Coordinate the work of installing all associated items in such sequence that will not necessitate movement of workers and equipment over completed roof areas.

- C. Sequence work so that all underlayment, flashing, etc. is installed to produce a watertight condition as work progresses.
- D. Protect building surfaces/interior spaces against damage from roofing work. It is the Contractor's responsibility to take any necessary actions to prevent construction-related leaks, to include but not limited to repairing watertight existing surrounding roofing scheduled to be replaced or overlaid. Surround roofing areas include roof top material storage areas, workers roof top access to from roofing work site areas and any drainage system [roof drain-scuppers] leak issues located in work area. Contractor must include the cost to deal with these existing leak sources into the overall project unless the Owner is made aware of these leak sources prior to commencement of the project.
- E. Provide, erect barricades, guardrails as required by applicable regulatory advisory to protect occupants of building and workers.

#### **1.7 MANUFACTURER'S WARRANTY [Shingles/Protective Membrane]**

- A. Provide a manufacturer's warranty for both repairs/replacements due to any faults in the material and workmanship [Total System Responsibility]. Any leak repairs/replacement due to normal wear and tear, membrane defects, workmanship defects, damage due to wind speeds as noted [10 meters above ground], shall be performed at no charge to the owner through the period of the warranty.
  - 1. Shingles: Furnish a 15 year, 110 miles per hour wind warranty, 15-year algae resistance warranty, [50] fifty-year manufacturer's defects warranty with a prorated 10-year labor and material replacement warranty.
  - 2. Protective Membrane: Furnish a [30] thirty year prorated waterproof warranty.
  - 3. Vents: Lifetime warranty.

#### **1.8 MEETINGS/COORDINATION**

- A. A pre-installation conference one week prior to commencing work of this section will be mandatory. All parties responsible for work in this section are required to attend.
- B. Progress meetings will be held during construction. Memos resulting from these meetings will be provided to the Owner and Contractor by owner's rep.
- C. Daily reporting by the Contractor is required.
  - 1. Contractor to email project team daily with outline summary of work accomplished, any problems encountered such as bad deck, etc.
  - 2. Contractor to email project team on days when weather prohibits work to indicate a 'weather day'

### **PART 2 PRODUCTS**

#### **2.1 ASPHALT SHINGLES**

- A. ASTM D 3462, CertainTeed SAINT-GOBAIN, Landmark PRO, Dimensional, two-piece laminated fiber glass construction, UL class A rating, 240 -267 pounds per square, self-sealing type, class F, algae resistance, wind rated and a manufactures defects and replacement warranty. Color to be selected by Owner from full range of colors.
  - 1. All shingles shall be from the same dye lot.

#### **2.2 FASTENERS**

- A. General: Fasteners/Anchors: strength, type and configuration must meet the required pull test resistance for each attachment application. Fasteners rate and pattern must be FMG or local code approved to meet the intent of the wind uplift rating specified. The contractor shall determine fastener lengths, minimum embedment: wood blocking 1 1/4 inch and decking 3/4 inch. All fasteners shall be corrosion resistant steel in accordance with meeting ASTM F1667 [2015].



## 2.3 ACCESSORIES

- A. Cap Nails for Underlayment: Simplex, Plex-Cap, length as required to penetration wood decking  $\frac{3}{4}$  inch.
- B. Nails for shingles: Round wire type, corrosion resistant, 3/8-inch minimum diameter head, 11- or 12-gauge shank, length as required to penetration wood decking  $\frac{3}{4}$  inch [use longer nails for attachment of ridge vent, when required].
- C. Ridge Vents: Certain Teed filtered ridge vent, shingle-over vent, 9 Inches or 12 inches wide, polypropylene construction, internal baffles to deflect wind and drainage system, weep holes, 9 square inches of net free venting per linear foot, color black.
- D. Roof [static vents]: Lomanco, 750 series, slant back, weather tight seamed collar, pre-finished aluminum, size as required. Color to closely match shingle color.
- E. Pipe Boots: Manning Building Products 'Perma-boot or Protech Specialty Products , pipe boot.
- F. Plastic Cement: ASTM D4586, Asphalt type with mineral fiber components, free of toxic solvents, capable of setting within 24 hours at temperatures of 75 degrees F and 50 percent RH.
- G. Lap Cement: Fibrated cutback asphalt type, recommended for use in application of underlayment, free of toxic solvents.
- H. Flashing Materials:
  - 1. Sheet Flashings: As specified in Section 07 62 00.
  - 2. Gutters and Downspouts: As specified on Section 07 71 23.
- I. Base Flashing: 24 gauge galvanized steel, 4 inch roof / vertical flange, 7 inch long.

## 2.4 SHINGLE UNDERLAYMENT/RUBBERIZED ASPHALT PROTECTIVE MEMBRANE

- A. Ice and Water Shield: ASTM D 1970, CertainTeed WinterGuard or Equal, 40 mil thick self-adhering membrane with strippable release paper, homogeneous rubberized asphalt waterproofing compound, fiberglass reinforced, skid resistant sand / granular surface, self sealing
- B. Synthetic Underlayment: ASTM D-828; Synthetic high strength woven roof underlayment; 100% polypropylene fabrication; CertainTeed WinterGuard or Equal.
  - 1. Install and secure using the pre-printed nailing pattern for increased wind resistance.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify all existing and newly replaced wood decks are level and smooth after existing roof system, underlayment, and deteriorated decking is removed. Verify deck surfaces are dry, free of ridges, warps, or voids.
- B. Remove and replace deteriorated wood decking [deteriorated framing/conditions allowance].
- C. Verify roof penetrations and plumbing stacks are in place and flashed to deck surface.
- D. Verify roof openings are correctly framed.

### 3.2 PREPARATION

- A. Fill knot holes and surface cracks with latex filler at areas of eave and valley protection membrane. Cover knot holes with sheet metal.
- B. Broom clean deck surfaces under ice dam membrane and underlayment.

- C. Ensure penetrations are correctly framed.
- D. Fill all holes in areas where eave/valley protection membrane is being installed.
- E. Replace any deteriorated wood decking.

### 3.3 SHINGLE UNDERLAYMENT AND ICE AND WATER SHIELD MEMBRANE

- A. Ice and Water Shield Membrane Installation [Fire Station #30 only]:
  - 1. Install ice and water shield membrane parallel with eave edge, flush with face of eave edge flashing with edges lapped shingle style and ends lapped and staggered between rows. Unroll underlayment parallel to the eave. Install over the drip edge at the eave flashing and under the rake edge flashing. Install underlayment in accordance with manufacturer's instructions without distortions capable of preventing shingles from sealing.
  - 2. Weather lap joints minimum 2 inches at side laps and 6 inches at end laps.
  - 3. Secure underlayment in place with fasteners at the perimeter of the roll and in field of roll per manufacturer installation instructions.
  - 4. Install self-adhered protective ice and water shield membrane / underlayment at entire roof area, carefully detailing eave conditions, intersections of roof-wall [1 full sheet], rake / roof edges [1 full sheet], and valleys [1 full sheet centered in valley].
- B. Synthetic Underlayment Installation:
  - 1. Install synthetic underlayment parallel to the eave edge with edges lapped shingle style and ends lapped and staggered between rows. Install underlayment in accordance with manufacturer's instructions without distortions capable of preventing shingles from sealing.
  - 2. Weather lap joints a minimum of 3 inches at side laps and 6 inches at end laps.
  - 3. Weather lap and seal items projecting through or mounted on roof watertight with plastic cement.
  - 4. Secure underlayment in place with fasteners at the perimeter of the roll and in field of roll per manufacturer installation instructions.
  - 5. Install synthetic roof underlayment at all roof areas which do not receive ice and water shield.
- C. Synthetic Underlayment Installation for roof slopes between 2:12 and 4:12
  - 1. Install [2] layer application in accordance with the manufacturer's installation instructions for low slope applications.

### 3.4 ACCESSORIES INSTALLATION

General, all accessories shall be installed in accordance with manufacturer's written guidelines with installation summary as outlined herein.

- A. Ridge Vents shall be installed on ridges as where shown. After the underlayment is installed. Cut roof deck on both sides of the ridge. Center ridge vent over opening and nail in place. Install ridge shingles with nails long enough to penetrate the deck 1 inch.
- B. Intake Vents shall be installed on the lower section of the roof just above the eaves as shown. After the underlayment is installed, cut a slot thru the decking to allow for the venting. Center the vent over the opening and nail in place. Install new underlayment over the vent, over the underlayment install the starter shingles. Nail pattern may be deviated to avoid nailing into the slot.
- C. Static Box Vents to be located as shown and evenly spaced. Center the vent between rafters and approx. 24 inches down from the ridge. Saw out the deck where the vent is being installed. If the shingles have been installed, remove the nails so the flashing flange of the vent will slide under the shingles with the embossed arrow pointing up centered over opening. Once the throat of the vent is aligned, apply roof cement to the

bottom of the vent. Seven nails are required to fasten the vent keeping the nail heads under shingles where possible or applying roof cement to exposed nail heads in accordance with manufacturer's recommendations.

- D. Metal Flashing and Accessories Installation:
1. Flashings shall be provided at the intersection of the roofs, adjoining walls, or projections through the deck.
  2. Shingle base flashing shall be installed in accordance with SMACNA Fig. 4-22A recommendations.
  3. Counter-flashing shall be surface mounted attached with wood fasteners as applicable fitted with EPDM washer at 12 inches on center with minimum of 1 inch embedment. Apply bead of sealant on the top of the flashing. Counter flashing shall overlap base flashing sheet metal a minimum of 3 inches and shall terminate no lower than 4 inches above the finished roof surface, unless approved by the manufacturer.
  4. Weather lap joints minimum 2 inches and seal weather tight with plastic cement.
  5. Secure in place with nails. Conceal fastenings.
  6. Flash and seal Work weather tight, projecting through or mounted on roofing with plastic cement.

### 3.5 SHINGLE APPLICATION

General, all shingles shall be installed in accordance with manufactures written guidelines.

- A. Apply starter strips at eaves. Starter strips shall consist of one layer of strip shingles laid with cutouts reversed. Project strip 1/2 inch beyond eaves line to form a drip overlap. Fasten strip in place within row of nails 1 inch above lower edge and spaced 3 inches on center. Lay first course of shingles directly on top of starter strip, flush with drip edge. Succeeding courses shall have chalk lines snapped as required for proper alignment. Nail 1 inch from each end of the shingle and 12 inches from each end, **6 nails per shingle**. All 6 nails must be placed on a white line 5-5/8 above the butt edge of the shingle. A cutout must never overlap another cutout in the below course. Firmly press each tab into the factory applied sealant. If the sealant appears not to be adhering the shingle apply new sealant.
- B. Ridges shall be 3-tab shingles cut in three sections or ridge shingles. Bend shingle at center, nail in place using 2 nails each located 4-1/2 inches from the exposed butt end and 1 inch from the side edge. Place to avoid exposed nails, all exposed nails shall have roof cement applied over nail heads. Use nails long enough to penetrate thru both layers of shingles and into wood 3/4 inch. Shingles installed over ridge vents shall have nails long enough to penetrate shingle all layers and into decking 1 inch.
- C. Valleys shall be the closed cut type [no metal], Install full length [course] shingles 12 inches beyond the valley center, nail shingles in place avoiding nails 6 inches from the center of valley. Chalk a line in the valley center, then cut shingles along chalk line using a sheet metal under shingles avoiding cut thru shingles below. Trim corners of each shingles at a 45-degree angle and apply sealant under shingles on both sides of the valley and any other area requiring sealant. Follow printed manufacturers installation instructions.

### 3.6 CLEAN UP

- A. Clean up all debris resulting from each day's work.

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## **SECTIONS 07 62 00/07 71 00 - SHEET METAL, FLASHING, TRIM and SPECIALTY ITEMS**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and General provision of the contract and Division 1 Specification Sections apply to this section.

#### **1.2 WORK INCLUDES BUT NOT LIMITED TO:**

General: Intent of project is to provide new sheet metal components for the new roof systems and related fascia / rake components.

- A. Removal of existing sheet metal items as noted and in the preparation of reroofing section.
- B. Installation of new sheet metal items:
  - 1. Drip edges [face less than 3 ½ inches, non-wind rated]
  - 2. Fasteners.

#### **1.3 RELATED SECTIONS**

- A. Section 06 10 53 – Miscellaneous Rough Carpentry for Roofing
- B. Section 07 01 50 – Preparation for Reroofing

#### **1.4 APPLICABLE REFERENCES**

- A. General: The following references form a part of this specification.
  - 1. ASTM A653 Metallic Coated, Sheet Steel [Galvanized], Grade A, Hot Dipped, Zinc Coated, Coating Class G90.
  - 2. ASTM A792, Metallic Coated, Sheet Steel [Galvalume and Galvalume plus], Grade 40, Coating Class A250 [galvalume] or AZ55 [galvalume plus], 55 % Aluminum-45 % Zinc Alloy.
  - 3. ASTM A755, Pre-Finished, Sheet Steel [Galvanized/galvalume], Grade 40, Coating Class A250 or G90, Pre-painted by the coil coating process.
  - 4. ASTM B209, Aluminum.
  - 5. ASTM E108 Fire Test of Roof Coverings.
  - 6. [FMG] Factory Mutual Global - Current Approval System [NAV assembly numbers], Loss Prevention Data Sheets for Roof Deck Securement for Above Deck Roof Components, Perimeter Flashings, Wind Design-ANSI/FM 4474, Approval Standard FM 4470 and Roof Loads for Construction
  - 7. [UL] Underwriters Laboratories - Roofing Materials and Systems Directory, Fire Resistance Directory, Current Edition.
  - 8. [NRCA] National Roofing Contractors Association - Current Roofing and Waterproofing Manual, including shop-fabricated edge metal testing data.
  - 9. [AISC] Manual of Steel Construction
  - 10. [SMACNA] Sheet Metal and Air Conditioning Contractors Association-Current Manual
  - 11. [OSHA] Occupational Safety and Health Administration, Guidelines
  - 12. [ASCE] 7-10 Minimum Design Loads for Buildings
  - 13. [ANSI/SPRI/FM] 4435 standard ES-1-17 Wind Design for Edge Systems
  - 14. [NFPA] National Fire Protection Association, 58 Liquefied Petroleum Gas Code
  - 15. [ANSI/SPRI] WD-1 Wind Design Standards

#### **1.5 SUBSTITUTIONS/EQUALS**

- A. When a particular make or trade name is specified, it shall indicate the standard quality required. Bidders proposing substitutions shall submit the following seven [7] days prior to bid date to the Owner's Consultant.

1. Manufacturer's literature and samples of requested substitutions.
2. Only substitutes approved by the owner prior to scheduled bid date will be considered.

#### **1.6 QUALITY ASSURANCE**

- A. Fabricator/Installer: Company specializing with skilled workers in sheet metal with minimum 5 years documented experience, never been terminated by a manufacturer for workmanship problems and be capable of providing the warranties as specified.
- B. Sheet Metal items and installation shall comply with SMACNA's [Architectural Sheet Metal] and NRCA [Roofing] current manuals.

#### **1.7 COORDINATION**

- A. Coordinate sheet metal flashing, trim layout installation with adjoining roofing to provide a leakproof, secure, non-corrosive installation.

#### **1.8 PERFORMANCE REQUIREMENTS**

- A. Fire Hazard Classification: Underwriters Laboratories [UL], Use only Class A fire-rated materials as tested in accordance with ASTM E 108 or UL 790 for exterior fire.
- B. Install sheet metal items to withstand wind loads, structural movement, by preventing buckling, opening of joints, hole elongation, failure of joint sealant, failure of connections and other detrimental effects.
- C. All perimeter metal items [copings and edges] must have been tested to resist equal or greater wind design load.

#### **1.9 DELIVERY, STORAGE and HANDLING**

- A. Do not overload structure with storage of materials; verify roof deck weight capacity and location of structural supports, only items needed that day shall be stored on the roof. Limit loads on roof to 25 pounds per square foot for uniformly distributed loads for metal or gypsum decks, 75 pounds per square foot for uniformly distributed loads for concrete decks. Store and protect products in accordance with manufacturer's instructions.
- B. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact. Protect sheet metal items during transportation and handling.
- C. Store products in weather-protected environment [manufacturer's plastic wrap is accepted for proper protection, unless wrap is broken, torn, removed], clear of ground 4 inches minimum and exposure from direct sunlight. Use breathable tarps for moisture protection as needed. Damaged materials will be marked 'rejected' by the contractor/owner or Owner's rep. and removed from the site.
- D. Storage of flammable liquids in buildings is prohibited. All combustible debris shall be removed from the site daily.

#### **1.10 WEATHER CONDITIONS**

- A. Do not apply materials during inclement weather, high winds or when the chance of rain is 60% or greater, percentage as listed on [www: weather.com](http://www.weather.com) for the local area, percentage as listed when read at 7 AM local time or at time of work commencement.

#### **1.11 SEQUENCING and SCHEDULING**

- A. Building space underneath roof work is utilized by on-going operations. Coordinate all work with owner including, material storage, scaffolding [as required] and contractor parking. Owner's approval required before proceeding with the work. **Contractor must provide overhead protection for owner's workers from falling materials/debris at building entry points.**

## 1.12 MANUFACTURERS WARRANTIES

- A. Provide a manufacturer's warranty for both repairs/replacements due to any faults in the material and workmanship. Any repairs/replacement due to normal wear and tear, material finish defects and workmanship defects. Warranty shall cover finish fading, chalking, cracking, peeling or failure of paint to adhere to base metal.
  - 1. Sheet metal items shall be warranted watertight for [20] twenty years by the roof membrane manufacturer.
  - 2. Sheet metal manufacturer of record must provide a [20] twenty-year finish warranty for the metal fascia, coping and edge as outlined herein, covering, finish and base metal. Warranty shall be a lifetime warranty for defects of material or failure to resist wind speeds.
- B. In the event of a default by the contractor, the manufacturer will provide a new contractor to fulfill the warranty obligation.

## 1.13 PORTABLE FIRE EXTINGUISHERS

- A. Two standard listed multipurpose dry chemical fire extinguisher, NFPA 10, with 10-pound capacity, 4A-60B:C UL rating shall be provided and located near the work area. Additional fire extinguishers shall be provided for different roof levels/work sites.
  - 1. Contractor to ensure all personnel are trained to use fire extinguishers.

## 1.14 DEFINITIONS

- A. Shop fabricated includes items that will be formed at the fabricators shop predominately by press brake. Prefabricated or manufactured items will be plant manufactured ready for installation. Both items must be wind rated in compliance with ANSI/SPRI/FM ES-1-17

## PART 2 PRODUCTS

General: All products shall be state approved and Building Code approved as applicable. Some items below may not be required for this project, but are outlined herein if required during course of work due to changing conditions or changes in scope.

### 2.1 FABRICATION

- A. Fabricate sheet metal items to comply with recommendations in SMACNA [architectural Sheet metal manual] and NRCA's [the NRCA roofing manual]. Conceal fasteners and expansion provisions where possible on exposed to view items. Provide expansion provisions as recommended where lapped or bayonet type expansion cannot be used.

### 2.2 FASTENERS/SPECIALTY ITEMS

General: Fasteners/Anchors: strength, type and configuration must meet the required pull test resistance for each attachment application. Fasteners rate and pattern must be FMG or local code approved to meet the intent of the wind uplift rating specified. The contractor shall determine fastener lengths, minimum embedment: steel 3/4-inch, concrete/concrete block-1 1/4 inch, gypsum 2- inch, tectum 2-inch and wood-1 1/4 inch. Fastener manufacturers listed are ITW Buildex, IWT Red Head and Tru-Fast or equal. All fasteners shall be corrosion resistant steel in accordance with meeting ASTM F1667 or type 304 -316 stainless. *Wind rated copings and edges required - see details for selection of item.*

#### A. Summary of fasteners and requirements are as follows:

- 1. Metal Counterflashing and other LG metal sheets to Wood, ITW Buildex, 'Scots Tek's' [AB point] stainless steel-hex head, 1/4 inch, corrosion resistance steel shank with EPDM washer.
- 2. Metal Counterflashing and Other LG Sheet Metal [exposed] to Masonry, ITW Red Head, 1/4 inch, 'Scots Tapcon', stainless steel-hex head, HL treads, corrosion resistant steel shank, with EPDM washer.

3. General Purpose Stainless Steel: Series 304 fasteners, with or w/out EPDM washers.

**B. Summary of specialty items and requirements as follows:**

1. Counter-flashing: Pre-finished, 24 gauge metal, fabricated in lengths maximum 12 feet, designed to be removable. CF to be notched and lapped at inside corners and joints. Flashings shall be provided at the intersection of the roofs, adjoining walls or projections through the deck [chimney/ vent stacks etc.].
2. Drip Edge at Shingle Roof Systems: .024 inch thick prefinished aluminum
3. Step Flashing, Sheet Metal: 24 gauge pre-finished galvanized metal as shown.

**2.3 SHEET METAL**

General: Roof membrane manufacturer supplied and approved components [copings/fascia edges - if required/shown] must be used, these sheet metal components must be pre-manufactured and be tested and approved in accordance with ANSI/SPRI/FM ES-1 test method, FM Class Number 4435 approved standard and must be included into the roof warranty. Fabricated by Metal Panel System, Architectural Products, Metal Era, Pac-Clad Peterson, Una-Clad, Drexel Metals or Dimensional Metals, etc., *[Drip edge/gravel stop edge - roof penetrating flange type, may be pre-manufactured or shop fabricated, the metal manufacturer may allow the contractor to use their metal/materials/installation methods and shop fabricate and install the items in accordance with their wind rated ES-1 and FM 4435 standard approved tested drip/gravel stop edge rated requirements, only will be accepted if the metal manufacturer and/or the contractor is a certified ES-1 sheet metal shop and will provide/support the wind and finish warranties as outline herein and meet RDA design requirements].*

All other metal shall be shop fabricated in accordance with SMACNA 6th Edition or other details or pre-manufactured as shown. All pre-finished metal shall be fabricated using aluminum unless not available. All metal components not incorporated into the roof system and is not outlined herein or shown on the drawings shall be fabricated with .032 prefinished aluminum otherwise directed by RDA.

- A. Pre-Finished Sheet Steel [Galvalume]: ASTM A792, grade 40, class A250, 24 or 22 gauge [as noted], primed and preprinted by coil coating, finished exposed to view side with a fluoropolymer Kynar 500 PVDF resin coating and a wash coat .5 mil thick applied to the reverse side, 20-year warranty covering fade, chalking and film integrity. Colors as selected by owner.
- B. Sheet Steel [Galvalume Plus]: ASTM A792, grade 40, 24 or 22 gauge [as noted], coating class AZ55, coated with an organic resin .012 to .090 inches thick, thermally cured. Finished on both sides with a fine sparkle appearance. 20-year warranty covering fade, chalking and film integrity. Colors as selected by owner.
- C. Pre-Finished Sheet Steel [Galvanized]: ASTM A755/A653, G90, 24 or 22 gauge [as noted], primed and preprinted by coil coating, finished exposed to view side with a fluoropolymer Kynar 500 PVDF resin coating and a wash coat .5 mil thick applied to the reverse side, 20-year warranty covering fade, chalking and film integrity. Colors as selected by owner.
- D. Pre-Finished Aluminum: ASTM B209, 3105 H15 alloy, thickness .032, .040 or .050 [or as noted], primed and repainted by the coil coating, finished exposed to view side with a fluoropolymer kynar 500 PVDF resin coating and a wash coat .5 mil thick applied to the reverse side, 20-year warranty covering fade, chalking and film integrity. Colors as selected by the owner.
- E. Galvanized Sheet Steel: ASTM A653, hot dipped, zinc-coated, G90, gauges as shown.



## 2.4 SEALANTS/TAPES

General: Provide joint sealants, backings and other materials as required to seal joint that are compatible with each other based on test and field experience.

- A. ASTM C920, Type S, Grade NS, Class 25 as required for each joint condition, single component, elastomeric silicone polymer, non-staining, non-shrinking, non-sagging and ultra-violet resistance, clear or to match surrounding existing color.
  - 1. Provide where sealant is exposed or movement exceeds butyl sealant capability.
- B. Gutter: GE Silicone II or equal, Clear in color.
- C. Butyl Sealant: ASTM C1311, single component, solvent released butyl rubber sealant, polyisobutylene plasticized.
- D. Sealing Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealing tape with release paper.

## PART 3 EXECUTION

### 3.1 EXAMINATION AND CONDITIONS

- A. Verify that surfaces and site conditions are ready to receive work.

### 3.2 PROTECTION

- A. Protect building surfaces/interior spaces against damage from work.
- B. Provide, erect barricades, guardrails as required by applicable regulatory advisory to protect occupants of building and workers.

### 3.3 INSTALLATION OF SHEET METAL AND SPECIALTY ITEMS

General: Sheet metal items shall be installed in accordance with manufacturers and NRCA's/SMACNA recommendations and details from their current manual. Anchor sheet metal items securely in place with provisions for expansion. Use items as required to complete the sheet metal or drainage system. Where dissimilar metals contact each other, protect against galvanic action by coating material as recommended by the fabricator. Seal joints with sealant as required for a watertight condition.

- A. Counter-flashing [CF] shall be surfaced mounted [SM] or in existing or new riglets/receivers with lap joints 4 inches. Attach SM with concrete self-tapping [tapcon] or wood fasteners, as applicable fitted with an EPDM washer at 12 inches on center, 1-inch minimum embedment. Attach riglets installed CF with components recommended by the manufacturer, including metal wedges and edge crimping. Apply a bead of sealant on the top of 45% angle lip of the metal flashing, if SM type. CF shall overlap base flashing a minimum of three inches, fit tightly to base flashing and shall terminate no lower than 4 inch above finished roof surface, unless approved by the manufacturer.

### 3.4 INSTALLATION

- A. Comply with SMACNA's "Architectural Sheet Metal Manual." Allow for thermal expansion; set true to line and level. Install Work with laps, joints, and seams permanently watertight and weatherproof; conceal fasteners where possible.
  - 1. Roof-Edge Flashings: Secure metal flashings at roof edges according to FM Loss Prevention Data Sheet 1-49 for specified wind zone.
- B. Sealed Joints: Form non-expansion, but movable, joints in metal to accommodate elastomeric sealant to comply with SMACNA standards.
- C. Fabricate nonmoving seams in sheet metal with flat-lock seams. For metals other than aluminum, tin edges to be seamed, form seams, and solder.

- D. Separations: Separate non-compatible metals or corrosive substrates with a coating of asphalt mastic or other permanent separation.
- E. Sheet Metal: Join lengths with formed seams sealed watertight. Flash and seal gutters to downspouts and accessories.

**3.5 CLEANING**

- A. In areas where finished surfaces are soiled by any other source of soiling caused by work of this section, consult manufacturer for cleaning advice.

**END OF SECTION**

## SECTION 07 90 00 - JOINT PROTECTION

### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Section includes sealants and joint backing.

#### 1.2 SUBMITTALS

- A. Product Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.

#### 1.3 ENVIRONMENTAL REQUIREMENTS

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

#### 1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
- B. Applicator: Company specializing in performing Work of this section with minimum three years documented experience.
- C. **Joint Sealant shall be installed by a qualified sealant applicator. Owner shall have the right to approve or reject the sealant installation.**

#### 1.5 QUALITY ASSURANCE/ MOCKUP

- A. Coordinate all applicable specifications with the manufacturer. Obtain confirmation from manufacturer for the use of the sealant for each condition to receive new sealant.
- B. Provide a mock-up of each type/installation of sealant.
- C. Preconstruction Field-Adhesion Testing: Prior to installing joint sealants, field test adhesion to joint substrates using applicable ASTM standards or method recommended by manufacturer. Verify adhesion is adequate. Modify joint preparation recommendations for failed joints and re-test. Submit written report to Architect.

### PART 2 PRODUCTS

#### 2.1 JOINT SEALERS

- A. Manufacturers:
  - 1. Tremco Corp. [basis of design]
  - 2. SIKA
  - 3. Pecora

#### 2.2 POLYURETHANE SEALANT [Type P-1]:

- A. Tremco Dymeric 240 FC [or Equal]; ASTM C 920, Type M, Grade NS, Class 50; high performance, medium modulus, solvent free, UV stable, non-sag, multi-component sealant. Color as selected to match existing adjacent surfaces/finishes and approved by Owner.
  - 1. Applications:
    - a. Masonry joints
    - b. Masonry to concrete joints
    - c. EFIS to metal joints
    - d. Joints around windows
    - e. Joints between EIFS panels

### **2.3 POLYURETHANE HYBRID SEALANT [Type P-2]**

- A. Tremco Dymonic FC [or Equal]; Single Component high performance exterior: ASTM C920, Type S, Grade NS, Class 100/50, moisture curing, non staining. Color as selected to match existing adjacent surfaces/finishes and approved by Owner.
  - 1. Applications:
    - a. Masonry joints
    - b. Masonry to concrete joints
    - c. EFIS to masonry joints
    - d. Joints around windows
    - e. Joints between EIFS panels
    - f. Metal joints

### **2.4 SILICONE SEALANT [Type S-1]**

- A. Tremco Spectrem 2 [or Equal]; ASTM C920, Type S, Grade NS, Class 100/50, Use NT, N, G, A, and O, ASTM C-1382; medium-modulus, high-performance, one-part neutral-curing silicone joint sealant.

### **2.5 BUTYL SEALANT [B-1]**

- A. ASTM C1311, single component, solvent released butyl rubber sealant, polyisobutylene plasticized.

### **2.6 ACCESSORIES**

- A. Primer Sealer: Formulated to consolidate surface fibers and dust.
- B. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- C. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- D. Joint Backing: Round foam rod compatible with sealant; ASTM D1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.
- E. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Verify substrate surfaces and joint openings are ready to receive work.
- B. Verify joint backing and release tapes are compatible with sealant.

### **3.2 PREPARATION**

- A. Remove loose materials and foreign matter impairing adhesion of sealant.
- B. Clean and prime joints.
- C. Perform preparation in accordance with ASTM C1193.

### **3.3 INSTALLATION**

- A. Perform installation in accordance with ASTM C1193.
- B. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- C. Install bond breaker where joint backing is not used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.

- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- F. Tool joints concave.

**3.4 SCHEDULE**

- A. Coordinate sealant type with conditions and per manufacturer requirements. Type P-2 unless noted otherwise.

**END OF SECTION**

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