CITY OF SPRINGFIELD

Special Provisions

for

P21072
Springfield Depot Reroofing

Engineering Concurrence

The Managing Engineer for the City of Springfield concurs with the preparation of the plans and specifications, and further concurs with advertising this project for bids.

Jeffrey A. Paschall, P.E.
Managing Civil Engineer
City of Springfield

9/12/2013
Date

Solicitation No. 861

SPECIAL PROVISIONS
REGARDING CONTRACTS NOT TO EXCEED $50,000

References to number of Divisions, Section, Sub-Section and the like shall mean the 1994 Edition of the Standard Construction Specifications, including all Addenda, Standard Drawings, and other Contractual Documents of the City of Springfield, Lane County, Oregon.

These Special Provisions supplement and amplify certain sections of the City of Springfield, Oregon, Standard Construction Specifications. The Standard Construction Specifications shall apply except as modified herein. These Special Provisions and additional technical specifications may contain occasional requirements not pertinent to the project. However, these specifications shall apply in all particulars insofar as they are applicable to this project.

SECTION A – General Requirements
SECTION A

P21072 Springfield Depot Reroofing

A1.1 Applicable Standard Specifications

The 1994 Edition of the Standard Construction Specifications of the City of Springfield, Oregon, Standard Construction Specifications (including all revisions at date of Quote submittal), shall apply to this quote submittal and construction contract except as may be modified herein. In the case of discrepancy, unless noted otherwise herein, the more restrictive provisions shall apply.

PLEASE NOTE: FOR ALL REQUEST FOR COMPETITIVE PRICE QUOTE PUBLIC IMPROVEMENT CONTRACTS NOT TO EXCEED $50,000 THE DESCRIPTION SUBSTITUTIONS INDICATED BELOW SHOULD BE USED:

a) **Bid** should be replaced with **Quote**
b) **Bidder** should be replaced with **Prospective Contractor**
c) **Bid Proposal** should be replaced with **Quote Submittal**
d) **Department of Public Works** should be replaced with **Development and Public Works Department**
e) **Instruction to Bidders** should be replaced with **Instruction to Prospective Contractor**
f) **Invitation to Bid** should be replaced with **Request for Competitive Price Quote**
g) **Proposal** should be replaced with **Quote**
h) **Proposal Package** should be replaced with **Request for Competitive Quote Package**

A1.2 Form of Proposal

REPLACE SECTION 102.02 "FORM OF PROPOSAL" OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

"The Proposal and the proposal guarantee in the form of a bid bond, certified check, or cashier's check, shall be enclosed in a sealed, labeled and addressed envelope, as required in the Instructions to Bidders and filed as required therein. The outside of the envelope shall plainly identify: (1) The project name and (2) The bid opening date.

All Proposals must be clearly and distinctly typed or written with ink or indelible pencil.

All Proposals shall be on the form furnished by Owner, and in addition to necessary unit price items and total prices in the column of totals to make a complete Bid, all applicable blanks giving general information must be filled in and the Bids signed by an officer or duly authorized representative of the Bidder. Any statement accompanying and tending to qualify a Bid may cause rejection of such Bid, unless such statement is required, in a Proposal embracing alternate Bids. All bid documents except plans must be returned with the Bid.

Unless otherwise specified, Bidders shall bid on all Bid items included in the Proposal, and the low Bidder shall be determined as noted in Subsection 103.01 AWARD OF CONTRACT. Except as provided herein Proposals which are incomplete or fail to comply to all items required in the Proposal may be rejected."

INSERT IN ITS PLACE THE FOLLOWING:

"For your quote to be considered responsive by the City of Springfield the following documents must be included with your submission. A complete submittal package will consist of the following documents:

- ✓ Quote Submittal
- ✓ Financial Responsibility Form
- ✓ Minority, Women and Emerging Small Business/Disadvantaged Business Enterprise Form (MWESB)

All quotes shall be on the forms furnished by the City. All applicable blanks giving general information must be filled in and the quote signed by an officer or duly authorized representative of the Contractor. The only exceptions to this requirement are the MWESB and Contract documents. Completion of the MWESB form is voluntary, however it must be submitted with your Quote whether you complete the information or not. If you are awarded the Contract, you will be required to submit a fully executed copy of the Contract upon request. Any statement accompanying and tending to qualify a quote may cause rejection of such quote, unless such statement is required in a quote embracing alternate quotes.

Competitive Price Quotes should be clearly labeled with the project number, project title and the statement *Request for Competitive Price Quote* and submitted to the person and in the manner specified in the Request for Competitive Price Quote document.

All quotes must be clearly and distinctly typed or written with ink or indelible pencil. If, in the opinion of the City, the prices in any quote appear to be unbalanced, incomplete, or fail to comply with all the terms required, the quote may be rejected."

A1.3 Proposal Guaranty and Organization

REPLACE SECTION 102.05 "PROPOSAL GUARANTY AND ORGANIZATION" OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

"Each Bid must be accompanied by a Bid Bond, cash or a certified or cashier's check upon a bank in good standing, payable to the Finance Director of the City of Springfield, Oregon, in an amount equal to at least 10% of the total amount of the bid. Such Proposal guaranty shall be forfeited and become the property of the City in case the Bidder shall fail or neglect to furnish a satisfactory Performance Bond and Payment Bond and to execute the Contract within 10 days (Saturday, Sunday and holidays excepted) after receiving said Contract from the City for execution. Bid bonds submitted shall be on the form provided by the City in the Bid document."

INSERT IN ITS PLACE THE FOLLOWING:

"A Bid Bond will not be required with this Contract."

A1.4 Addenda to Contract Documents

REPLACE SECTION 102.08 "ADDENDA TO CONTRACT DOCUMENTS" OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

"Any addenda issued by the Owner, which may include changes, corrections, additions, interpretations, or information, and issued 48 hours or more before the scheduled closing time for filing the Bids, Saturday, Sunday and legal holidays not included, shall be binding upon the Bidder. Owner shall supply copies of such addenda to all Contractors who have obtained copies of the Contract Documents for the purposes of bidding thereon. Failure of the Contractor to receive or obtain such addenda shall not excuse him from compliance therewith, if he is awarded the Contract."

INSERT IN ITS PLACE THE FOLLOWING:

"Any addenda issued by the City, which may include changes, corrections, additions, interpretations, or information issued 72 hours or more before the scheduled closing time for submitting the quotes shall be binding upon the Contractor. Addenda will be posted to the City's website at http://www. springfield-or.gov/dpw/CompetitiveQuotes.htm. The Contractor should check the website frequently for new postings during the open quote period. The City shall make a reasonable effort to notify all individuals, firms, and corporations that were included in the initial solicitation and to those individuals that attended a Pre-Quote Informational meeting and provided contact information on the sign-in sheet when addenda are issued. Failure of the Contractor to receive or obtain such addenda shall not excuse them from compliance, if they are awarded the Contract."

A1.5 Award of Contract

REPLACE THE 1ST PARAGRAPH OF SECTION 103.01 "AWARD OF CONTRACT" OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

"The award will be made by Owner to the Bidder submitting the lowest acceptable Bid. In determining the lowest acceptable Bid, Owner may take into account, among other factors, the prices bid, discounts if any, time of completion and delivery proposed, as between equal Bids, the relative merits and performance of any items specifically proposed by the Bidder, any variation in maintenance and guarantee periods specifically proposed by the Bidder in excess of any minimum specified, the realistic balance of prices in the Proposals for various parts or units of work, and the experience and ability of Bidder to perform the work."

INSERT IN ITS PLACE THE FOLLOWING:

"The Contract will be awarded to the Contractor whose quote, in the opinion of the City, will best serve the City's interests. Consideration will be given to price as well as other applicable factors such as, but not limited to, experience, specific expertise, availability, project understanding, contractor capacity and responsibility as specified in ORS 279C.412(2)."

A1.6 Performance Bond and Payment Bond

REPLACE SECTION 103.06 "PERFORMANCE BOND AND PAYMENT BOND" OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

"At the time of execution of the Contract, Contractor shall furnish both a Performance Bond and Payment Bond, each in the amount equal to 100 percent of the Contract price. The bonds will be in a form and from a company acceptable to Owner's Risk Manager. If the Contract is an estimate or if there are change orders, the bonds will be adjusted to equal 100 percent of the

final Contract price. The bonds will guarantee compliance with and fulfillment of all terms and provisions of the Contract including maintenance, repair and replacement, and all applicable laws, and prompt payment as due, to all persons supplying labor and/or material for prosecution of the work and in accordance with subsection 108.14."

INSERT IN ITS PLACE THE FOLLOWING:

"Performance and Payment Bonds will not be required with this Contract."

A1.7 Insurance

REPLACE SECTION 107.06 "INSURANCE" OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

The Contractor shall provide and maintain general liability, auto liability, property, and workers' compensation insurance for life of this Contract.

General Liability Insurance
The Contractor shall maintain an ISO Commercial General Liability insurance policy (or an equivalent policy approved by Owner) with combined single limits of at least $1,000,000 per occurrence for bodily injury, personal injury, and property damage and an aggregate limit of a least $2,000,000. The policy shall include coverage for contractual liabilities.

Comprehensive Automobile Liability Insurance
The Contractor shall maintain an automobile liability insurance policy with combined single limits of at least $1,000,000 per occurrence for bodily injury, personal injury, and property damage.

Additional Insured Endorsement
The general and automobile insurance policies specified above shall include endorsements naming as an additional insured "the City of Springfield, its agents, employees and officials all while acting within their official capacity as such."

Property Insurance
Depending on the nature of the construction contemplated under this contract, Owner may require Contractor to provide property insurance. Refer to Special Provisions section of this Contract.

Workers' Compensation Insurance
Contractor, its subcontractors, if any, and all employers working under this agreement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide workers' compensation coverage for all their subject workers.

Contractor is responsible for maintaining workers' compensation insurance for his employees and assuring that his subcontractors, if any, also maintain workers' compensation insurance. Contractor shall defend, indemnify, and hold Owner harmless from any liability for any workers' compensation claims costs, fines, or costs whatsoever arising from Contractor's or his subcontractors' failure to comply with ORS 656.017.

Additional Policies and Special Coverages
Refer to the Special Provisions section of this Contract for additional coverages that may be required.

Certificates of Insurance

Certificates of insurance evidencing all policies required by this Contract shall be delivered to the Owner prior to the commencement of any work. All certificates shall include a 30-day notice of cancellation clause and required additional insured endorsements. The Owner has the right to reject any certificate for unacceptable coverage and/or companies.

INSERT IN ITS PLACE THE FOLLOWING:

"INSURANCE

All insurance shall be approved by the City as to terms, conditions and form prior to beginning work.

Public Liability and Property Damage

The Contractor shall maintain in force for the duration of this Contract a Commercial General Liability insurance policy written on an occurrence basis with limits not less than $2,000,000 per occurrence and $3,000,000 in the aggregate. The policy will be endorsed with a "per project" aggregate endorsement. The City, its employees, officials and agents will be named as Additional Insured's where operations are being conducted related to this Contract, on the General Liability policy as respects to work or services performed under this agreement to the extent that the death or bodily injury to persons or damage to property arises out of the fault of the Contractor or the fault of the Contractor's agents, representatives or subcontractors. The following statement will appear on the face of the certificate; "The City, its employees, officials and agents are all named as additional insured while acting in their capacity as such." The City's additional insured status for Products and Completed Operations hazards shall extend for at least one year beyond the completion of the project. Automobile Liability (owned, non-owned, and hired) insurance with limits not less than $1,000,000 per occurrence shall be maintained. This insurance will be primary over any insurance the City may carry on its own.

Workers' Compensation

The Contractor shall provide and maintain Workers' Compensation coverage with limits no less than $500,000 for it employees, officers, agents, or partners, as required by applicable Workers' Compensation laws. If the Contractor is exempt from this coverage a written statement, signed by the Contractor, explaining the reason for the exemption will be provided to the City prior to commencement of any work.

Course of Construction and/or Installation Floater

The Contractor shall maintain in full force for the duration of this contract an All Risk insurance policy approved by the City as to terms, conditions and form covering the replacement cost of the work during the course of construction. The policy shall include the interests of the City and Architect/Engineer, as applicable, and the first two layers of Subcontractors. The amount of insurance shall equal the completed value of the Contract. The City, at its option, may elect to supply this coverage.

Asbestos Abatement (only applicable to Asbestos Specific Contracts)

If applicable to this Contract, the Contractor shall maintain in full force a Commercial General Liability policy approved by the City as to terms, conditions and form that is Asbestos Specific with a minimum limit of $2,000,000 per occurrence and $3,000,000 in the aggregate written on a form that meets the following criteria as follows:

a. A full occurrence form, or
b. A limited occurrence form with at least a three-year (3) tail, or
c. A claims made form with a three-year (3) tail.

Pollution Liability Coverage (only applicable to Pollution Specific Contracts)

If applicable to this Contract, the Contractor shall maintain in full force a Commercial General Liability policy approved by the City as to terms, conditions and form that is Pollution Specific with a minimum limit of $2,000,000 per occurrence and $3,000,000 in the aggregate written on a form that meets the following criteria as follows:

a. A full occurrence form, or
b. A limited occurrence form with at least a three-year (3) tail, or
c. A claims made form with a three-year (3) tail.

Professional Liability Coverage (only applicable to Contracts if specified)

If Professional Liability insurance is required, the City must approve the terms, conditions and limits prior to commencement of any work.

Railroad Protective Liability Coverage

If work being performed under this Contract is near railroad tracks or a railroad right of way and the Railroad requires special insurance (for example: Railroad Protective Liability Coverage) Contractor will be responsible for meeting the Railroad insurance requirements before any work commences. Any insurance required to be purchased by the Railroad is in addition to the insurance required by the City.

Subcontractors

The Contractor shall require all Subcontractors to provide and maintain General Liability, Auto Liability and Workers' Compensation insurance and, as applicable, Professional, Asbestos and Pollution Liability with coverage's equivalent to those required of the General Contractor in this Contract. The Contractor shall require certificates of insurance from all Subcontractors as evidence of coverage.

Additional Insured Endorsement

All certificates of insurance, with the exception of Professional Liability and Railroad Protective Liability, must include an endorsement which lists the City of Springfield as a named additional insured. The following statement will appear on the face of the certificate; "The City, its employees, officials and agents are all named as additional insured while acting in their capacity as such."

Evidence of Coverage and Notice of Cancellation or Material Change in Coverage

Evidence of the required coverages issued by a company satisfactory of the City shall be provided to the City by way of a certificate of insurance before any work or services commence. A 30-day notice of cancellation or material change in coverage clause shall be included.

If the approved insurance company will not provide this 30 day notice, it shall be the responsibility of the Contractor to provide written notice to the City within two (2) days of the Contractor becoming aware that their coverage has been cancelled or materially changed. The Contractor shall e-mail notification directly to Bob Duey, Finance Director at rduey@springfield-

or.gov . Regardless of the circumstances causing the Contractor's insurance coverage to cease or be modified, it is the Contractor's responsibility to notify the City as described above.

Failure to maintain the proper insurance or provide notice of cancellation or material change shall, at the City's option, be grounds for immediate termination of this Contract.

_____
(Contractor initials)

Equipment and Material

The Contractor shall be responsible for any loss, damage, or destruction of its own property, equipment, and materials used in conjunction with the work."

A1.8 Wage Rates

REPLACE THE 1ST PARAGRAPH OF SECTION 107.09 "WAGE RATES" OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

"Each worker in each trade or occupation employed in the performance of the Contract either by the Contractor, Subcontractor or other person doing or contracting to do or contracting for the whole or any part of the work on the Contract, shall be paid not less than the applicable prevailing rate of wage, the existing prevailing rate of wage in effect at the time the specifications are first advertised for bid solicitations, and which schedule is a part of the Contract Document. (Reference: ORS 279.352)"

INSERT IN ITS PLACE THE FOLLOWING:

"The City has estimated that the likely cost to complete this project will be under $50,000 therefore, this project is NOT subject to the Prevailing Wage Rate requirements as specified in ORS 279C.800 through 279C.870."

A1.9 Progress Payment

REPLACE THE 6TH PARAGRAPH OF SECTION 109.07 OF THE STANDARD CONSTRUCTION SPECIFICATIONS:

Progress payment will be made by the Owner on a monthly basis no later than the 20th day of the subsequent month of work performed, except that, additional days may be required when a payment is accompanied by one or more of the following: an extension of completion time, change order or extra bill. Payment may be made via use of checks or warrants at the option of the Owner for the amount of the approved estimate, less retainage.

INSERT IN ITS PLACE THE FOLLOWING:

"Progress payment will be made by the City on a monthly basis in the month subsequent to the work being performed, except that additional days may be required when the Contractor fails to submit complete and accurate certified payroll reports which are in compliance with ORS279C.845 when due, or a payment is accompanied by one or more of the following: an extension of completion time, change order or bill. If the Contractor fails to submit acceptable certified payroll reports when due, or one or more of the previously stated exceptions apply, the progress payment may be made up to fourteen (14) days after the date the certified payroll or other required information in question is received by the City.

The scheduled release of payment will depend upon the method of payment selected by the Contractor. If the Contractor elects to receive payment by check, payment will be released no

later than the 20th day of the month. If the Contractor elects to receive payment by electronic Automated Clearing House (ACH) transfer, the funds will be transferred no later than the fourth Friday of the month. City will endeavor to honor Contractor's election to receive payment by ACH transfer, however, City reserves the right to make payment via use of check at the sole discretion of the City."

A1.10 Oregon Products

Contractor's attention is directed to the provisions of Oregon Law, ORS 279A.120 regarding the preference for products that have been manufactured or produced in Oregon. Contractor shall use Oregon-produced or manufactured materials with respect to common building materials such as cement, sand, crushed rock, gravel, plaster, etc., and Oregon-manufactured products in all cases where price, fitness, availability and quality are otherwise equal.

A1.11 Salvage and Debris

Unless otherwise indicated on the drawings or in the specifications, all castings, pipe, equipment, demolition debris, fences, trees, shrubs, spoil or any other discarded material or equipment shall become the property of the Contractor and shall be salvaged or disposed of in a manner compliant with applicable Federal, State and local laws and regulations governing disposal of such waste products. No burning of debris or any other discarded material will be permitted. The Contractor shall perform any demolition for the completion of this project and shall salvage and recycle all construction and demolition debris as is feasible and cost effective, in accordance with ORS 279C.510.

A1.12 Brand Name or Equal Specification

Brand Name or Equal Specification means a specification that uses one or more manufacturers' names, makes, catalog numbers or similar identifying characteristics to describe the standard of quality, performance, functionality or other characteristics needed to meet the contracting agency's requirements. Such specification authorizes Contractors to offer goods or services that are equivalent or superior to those brands named or described in the specification.

END OF SECTION

SPECIAL PROVISIONS
REGARDING CONTRACTS NOT TO EXCEED $50,000

SECTION B – Scope of Work

P21072 Springfield Depot Reroofing

B.1 - GENERAL

1.1 Project Overview

The removal and replacement of wood shingle roof at the historic Springfield Depot located at 101 South A Street, Springfield, OR 97477. The project includes removal and disposal of the existing shingles and roofing felt, repair or replacement of any deteriorated decking (none expected), installation of new tar felt, roof ventilation underlayment and new cedar shingles. The project also includes the removal of the existing finial and cresting detail and replacing in-kind with new construction. Contractor shall provide all preparation, installation, supplies, equipment, materials and cleanup necessary to complete project.

1.2 Overall Project Description and Scope of Work

1. Operations include but are not limited to the work described above and in the attached plans and specifications, protection of the public from operations, and protection of materials and features within the work area that remain. All work shall be done in accordance with highest standard of practice in the industry.

2. Codes and Standards: All work shall be furnished in conformance with all applicable codes, statutes or standards that apply to this work including but not limited to:

   a. 2010 Oregon Structural Specialty code or current edition thereof.
   b. Any applicable Federal, State, or City of Springfield Codes, Standards and Ordinances, including these contract documents and City of Springfield Standard Construction Specifications (current edition and most recent revision)
   c. Any items of work required by the above codes and standards but not specifically shown or mentioned shall be provided without additional cost.
   d. Contractor is responsible for acquiring and paying for all permits, as well as, scheduling and passing any necessary inspections

3. General Project Information:

   a. Site Access and Care: The Contractor shall be given such access to the site as necessary to complete the project. City will also allow the Contractor to stage at certain project sites to be negotiated with successful proposer. Staging areas shall be fenced and out of the way of pedestrian and vehicle traffic. Final staging locations must be approved by the Project Manager. Contractor shall protect existing features that stay during project, and will be responsible for any damage caused by project. Contractor shall repair any damage at his sole expense.

Contractor shall perform to the highest standard of practice in the industry.

b. Contractor shall make necessary arrangements to protect the public in the project area. Such precautions may include, but are not limited to traffic control, cleanup, locking up of equipment and materials, fencing storage and construction areas or installing barricades for pedestrians or traffic. All materials shall be new, unused and free of defects and imperfections. Also, any and all traffic closures or interruptions shall be coordinated and approved through the City's Traffic Engineering Section. Work done on Main Street will require coordination with and approval of the Oregon Department of Transportation.

c. Work shall be accomplished as described in these specifications and on the attached plans, taking all necessary precautions as required by law or best practice.

d. Unless otherwise directed by the Project Manager, normal right-of-way construction work zones with active project operations are to be conducted between the hours of **8:15 am to 4:15 pm daily**. Any deviation of these work zone hours must be approved by the Project Manager prior to construction.

e. Contractor shall take reasonable steps to provide public access to the Depot during constriction. The Contractor shall provide adequate traffic control and signs to clarify the alternate or existing access available to the business. Measurement and payment of traffic control devices for temporary business access shall be cost incidental to Temporary Traffic Control.

4. The Contractor shall review the information provided by the City and visit site to verify conditions and make calculations and determinations of how to best provide the required service. Base estimates on amount and types of areas to be worked.

5. The Contractor shall determine tools and equipment necessary for execution of project. The Contractor shall determine the materials and labor necessary to furnish adequate protection for surfaces and objects inside and outside the work area and for adjoining work that could be damaged by preparation and/or work activities. Care shall be taken not to damage any surrounding work. Any damage shall be repaired at the Contractor's sole expense.

6. All work performed shall carry a minimum 1-year warranty from date of acceptance by City Council on materials and workmanship.

7. Contractor is responsible for leaving the site in a neat and workman-like appearance during and after the project. This will include clean up of all debris, safe and sanitary disposal of all material, containers, etc. generated during completion of the project. Further, Contractor shall remove waste and trash generated by their work. This shall be done at the end of each work day. Contractor shall take all standard professional precautions to avoid contamination of the environment as required by law and to protect the public from operations. Contractor shall prepare and submit for approval a plan for containment that outlines how contractor will keep contaminates, waste and debris out of the City's Stormwater system. This shall include such items as barriers, catch basin

liners, damns, vacuuming, etc. to keep debris and contaminants out of the stormwater system.

8. Prior to starting work, Contractor shall submit a detailed Schedule of Values that the City can use for verification of payment applications.

9. Work on Saturdays and/or Sundays may be required to avoid crowd conflicts between contractors and business patrons/staff. Contractors shall work with the City to adjust the schedule to accommodate the work and special events or activities being held while the work is being completed.

B.2 - SPECIFICS

2.1 DESCRIPTION

1. This section specifies fire retardant treated wood cedar shingles.

2.2 DESIGN CRITERIA

1. Assure wall and roof surfaces are sound, reasonably smooth and free from defects which would interfere with shingle installation.

2. Assume vent pipes and other projections through roof are in place and install roof flashing before laying shingles.

2.3 SUBMITTALS

1. Submit PRODUCT DATA, AND SAMPLES.
   a. Product Data: Submit manufacturer's product data and installation instructions.
   b. Samples: Submit selection and verification samples.
   c. Installer Qualifications: Installer shall have demonstrated experience on projects of similar size and complexity.

2. Closeout Submittals: Submit the following:
   a. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
   b. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.
   c. Warranty Period: 50 years, beginning with date of substantial completion.

2.3 DELIVERY AND STORAGE

1. Deliver materials in manufacturer's unopened bundles or containers with the manufacturer's brand and name clearly marked thereon. Shingle bundle wrapping shall bear the label of Underwriters Laboratories, Inc.

2. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

2.4 APPLICABLE PUBLICATIONS

1. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

2. American Society for Testing And Materials (ASTM):

a.	A167-99(R2009)	Stainless and Heat-resisting Chromium-Nickel Steel plate, Sheet and Strip
b.	A480-11	Flat-Rolled Stainless Steel Plate, Sheet and Strip
c.	D226-09	Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
d.	F1667-11	Driver Fasteners: Nails, Spikes and Staples

B.3 PRODUCTS

3.1 SHINGLES

1. Shingles shall be Pressure Treated Number 1 grade fire-retardant-treated western red cedar shingle complying with IBC Section 10507.9.5.

2. Class C: Pressure treated and fire retardant treated cedar square butt, smooth shingles, maximum exposure of 175 mm (seven inches,) 460 mm (18 inches) long in random widths, but not less than 100 mm (4 inches) wide. Class C shingles shall weigh approximately 9.3 Kg/m^2 (185 lbs/100 sft).

3. Warrantee: Manufacturer warrants the product against decay for a period of fifty (50) years from the date of purchase.

3.2 NAILS

1. Roofing Nails: ASTM F1667: Type I, Style 20, galvanized steel, smooth shanks, with heads 9.5 mm to 11 mm (3/8-inch to 7/16-inch) diameter. Use nails 19 mm (3/4-inch) long for fastening felt.

2. Shingle Nails: ASTM F1667, Type I, Style 21, galvanized steel, 6d size.

3.3 STAPLES

1. ASTM F1667, Type IV, Style 5 zinc coated; flat top, 13 mm (1/2-inch) long legs, 13 mm (1/2-inch) wide for felt.

3.4 ROOFING FELT

1. ASTM D226, Type II, 13.5 Kg per 9m^2 (30 pound/100 square feet).

3.5 STAINLESS STEEL

1. ASTM A480, dead soft temper.

3.6 UNDERLAYMENT

1. Manufacturer: Benjamin Obdyke Incorporated.
   a. Contact: 400 Babylon Road, Suite A, Horsham, PA 19044; Telephone: (800) 523-5261; Fax: (215) 672-3731; E-mail: info@benjaminobdyke.com; website: www.benjaminobdyke.com.)

2. Proprietary Products/Systems: Rainscreen, including the following:
   a. Cedar Breather®:
      i. Description: Three-dimensional matrix in roll form.
      ii. Color: Black
      iii. Material: Nylon
      iv. Width: 39.37 inches (1 m).
      v. Length: 46 1/2 feet (14.2 m).
      vi. Coverage Area: 200 ft^2 (18.58 m^2)
      vii. Thickness: 0.277 inches (7.04 mm).
      viii. Weight: 9.7 lbs/roll
      ix. Fire Rating: A

B.4 - EXECUTION

4.1 LAYING FELT

1. Install 13.5 Kg (30 pound) felt underlayment, lapping a minimum of 102 mm (four inches) at ends 50 mm 13 mm (two inches) at head and 305 mm (12 inches) over ridge or around corners. Extend felt 13 mm (1/2-inch) beyond edges of roof.

2. Staple or nail felt 127 mm (five inches) on centers along laps. Lay felt under shingles over entire roof and wall area.

4.2 INSTALLING CEDAR BREATHER

1. Comply with the instructions and recommendations of the underlayment manufacturer.

2. EXAMINATION
   a. Site Verification of Conditions:
      i. Verify that site conditions are acceptable for installation of the underlayment.
      ii. Do not proceed with installation of rainscreen until unacceptable conditions are corrected.

3. INSTALLATION
   a. Maintain plywood deck and replace any deteriorated sections.
   b. Install 30lb roofing felt over entire roof deck as described above.
   c. Tack down underlayment with 1 tack (or nail) approximately every 3 square feet.
   d. Install underlayment with dimples down to present the flat side as the nailing surface.
   e. Butt each course of underlayment against previous course. Do not overlap layers of underlayment.

f. Work from fascia to ridge while installing shingles to avoid walking directly on underlayment.
g. Install cedar shingles per manufacturer's instructions. Use a nail of sufficient length to allow for ¾" (19.1mm) penetration into sheathing. Allow 1/4" (6.4mm) for underlayment thickness.

4. PROTECTION
   a. Protect installed work from damage due to subsequent construction activity on the site.

4.3 METAL DRIP EDGES

1. At eaves and rakes, install metal drip edges made of stainless steel 0.38 mm (0.015-inch) thick, 2400 mm (8 foot) lengths maximum. Apply the metal drip edge directly over the underlayment along the eaves and rakes. Lap joints 50 mm (two inches).

2. Secure metal drip edges with compatible nails spaced not more than 254 mm (10 inches) on center along the inner edges.

4.4 LAYING SHINGLES

1. At eaves, install starter course of roof shingles with overhang. Both courses shall overhang eaves edge of roof 13 mm (1/2-inch). At rake, overhang edge of roof 6 mm (1/4-inch.) Lay shingles with maximum exposure of 178 mm (seven inches).

2. Nail shingles in accordance with manufacturer's published directions. Use a nail of sufficient length to allow for ¾" (19.1mm) penetration into sheathing. Allow 1/4" (6.4mm) for underlayment thickness.

3. Install panel shingles in accordance with manufacturer's published directions.

4. Corners, interior and exterior, shall be woven type.

5. Valleys shall be closed type.

4.5 FLASHINGS

1. Provide 0.38 mm (0.015-inch) thick stainless steel flashings at the intersections of roofs, adjoining walls or changes in slope, under ridges, hips, and valleys.

2. Use shingle type flashing for all slopes at joints with vertical surfaces, vertical leg not less than 203 mm (eight inches) high, horizontal leg not less than 152 mm (six inches) wide; length of shingle plus 50 mm (two inches).

3. Valley flashing 305 mm (12 inches) wide on each side of valley, shingle type, length of shingles plus 50 mm (2 inches).
4. Ridge and hip flashing; length of shingle plus two inches, width to extend within 13 mm (1/2-inch) of edge of shingle on each side of hip or ridge, shingle type.

5. Install shingle type flashing as each course of wood shingles are applied. Extend upper edge of flashing two inches minimum above each course of shingles and the

lower edge 13 mm (1/2-inch) above the butt of the shingle forming the neat course and the edges on hips and ridge shingles.

6. Give careful attention to the installation of all flashings.

4.6 HIPS AND RIDGES

1. Install shingles lengthwise down center to provide equal exposure on each side of hip or ridge alternating butt laps along longitudinal edges for woven joints.

2. Beginning at one end of ridge, apply shingles with maximum 127 mm (five inch) exposure.

3. At hips, start at bottom, apply shingles with maximum of 178 mm (seven inch) exposure.

4. Secure each shingle with two nails on each side.

5. All shingles shall be same width, but not less than 152 (six inches).

END OF SECTION