

PROJECT MANUAL

ROOF REPLACEMENT

WESTON PUBLIC LIBRARY

WESTON, CONNECTICUT

ROOF CONSULTANT:

H. B. FISHMAN & CO., INC.
300 Pleasant Valley Road
South Windsor, Connecticut
(860) 282-9036 – Phone

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CN 21028977

20 July 2018

(Revised 16 February 2021)

CLIENT:

TOWN OF WESTON
56 Norfield Road
P.O. Box 1007
Weston, CT 06883

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END OF SECTION

00 11 16 INVITATION TO BID - ROOF PROJECT

Sealed bids for a partial Roof Replacement of the Weston Public Library, Weston, Connecticut, will be received by Mr. Jonathan Luiz, Town Administrator, Town of Weston, 56 Norfield Road, Weston, Connecticut 06883, until 1:00 pm EST on Friday, 19 March 2021 with public opening at 1:05 p.m. at the Weston Town Hall Conference Room.

Bids must be submitted on an exact duplicate of the Bid Form indicated and shall be completely filled out as requested. Bid proposals are to be sealed in double envelopes, conspicuously identified with the name of the project and bid due date.

After opening of Bids, all Bids shall stand available for acceptance for a period of *ninety (90) days*.

Selected candidates shall make themselves available to meet with the Weston Building Committee, Weston Town Hall, 56 Norfield Road at a date and time to be determined.

Plans and Specs are available for purchase from Joseph Merritt & Company, 4 Christopher Columbus Avenue, Unit C, Danbury, CT 06810.

There will be a mandatory Pre-Bid meeting on Friday, 5 March 2021 at 10:00 a.m. Contractors are to meet at The Weston Public Library Community Room, 56 Norfield Road.

Bid security in the form of a certified check or bid surety bond, issued by a bonding company licensed to do business in the State of Connecticut, is required in the amount of 10% of base bid. Bid security shall be made payable to Town of Weston, Connecticut.

A completed Statement of Bidders Qualifications (Section 00 45 13) and sample roofing systems guarantee/warranty (Sections 01 78 36 and 07 53 23.01) shall accompany the bid.

The successful Bidder shall furnish to the Owner on the form specified, prior to the execution of the Contract, a performance and labor and material payment bond in an amount not less than one hundred percent (100%) of the Contract sum.

The Owner reserves the right to reject or accept any or all Bids and to waive any informalities, omissions, excess verbiage or technical defects in the bidding if, in the opinion of H. B. Fishman & Co., Inc. and The Town of Weston, Connecticut it would be in the best interest to do so.

END OF SECTION

00 22 13 SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

SITE EXAMINATION

- A. The Bidder shall be held to have examined the site and to have compared it with the drawings and specifications and to have satisfied himself of the conditions existing, the storage and handling of materials, and all other matters that may be incidental to the work under the contract, before submitting his proposal.
- B. Submission of a proposal will be considered as evidence that an examination has been made. No allowance will subsequently be made to the Contractor by reason of any error on his part, due to his neglect to comply with the requirements of this clause.
- C. Submission of bid will be considered presumptive evidence that the Bidder is conversant with local facilities and difficulties, the requirements of the documents and of pertinent local and state codes, state labor and material markets, and has made due allowance in his bid for all contingencies.
- D. No compensation will be allowed by reason of any difficulties which the Bidder could have discovered or reasonably anticipated prior to bidding.
- E. The Bidder shall make his own measurements to determine the size of the roof. The dimensions given in the drawings are offered only for convenience and are not warranted to be correct.
- F. Other construction work may be in progress. This contractor shall coordinate its work with all others.
- G. The work must be done without interfering with the operations of the building in any way.
 - 1. Contractor shall verify hours of building operation and coordinate hours of scheduled works with owner's representative.
 - 2. Conditions may dictate restrictions of hours to which site is available to the contractor.
- H. Bid security in the form of a certified check or bid surety bond, issued by a bonding company licensed to do business in the State of Connecticut, is required in the amount of 10% of base bid. Bid security shall be made payable to Town of Weston.

- I. A completed Statement of Bidders Qualifications (Section 00 45 13) and sample roofing systems guarantee/warranty (Sections 01 78 36, and 07 53 23.01) shall accompany the bid.
- J. The bidder shall provide, a letter with his bid proposal, from the membrane manufacturer stating that they will provide said warranty with no exclusions upon completion of installation.
- K. The successful Bidder shall furnish to the Owner on the form specified, prior to the execution of the Contract, a performance and labor and material payment bond in an amount not less than one hundred percent (100%) of the Contract sum.
- L. The Owner reserves the right to reject or accept any or all Bids and to waive any informalities, omissions, excess verbiage or technical defects in the bidding if, in the opinion of H. B. Fishman & Co., Inc. and Town of Weston it would be in the best interest to do so.
- M. GUARANTEE/WARRANTEE APPROVAL

The roofing systems guarantee/warrantee provisions are of the essence to this contract. Submit the guarantee/warrantee requirements specified in Section 07 53 23.01 Ethylene-Propylene-Diene-Monomer (EPDM) Roofing – Fully Adhered, attached to the bid proposal form for pre-approval in the format specified in Section 01 78 36.

END OF SECTION

00 25 13 PRE-BID MEETINGS, SITE VISITATION/OWNER'S REPRESENTATION

1. PRE-BID CONFERENCE

A mandatory pre-bid conference shall be held at the site, Friday, 5 March 2021 at 10:00 a.m. Bidders to meet *outside* at the Weston Public Library, 56 Norfield Road.

2. SITE VISITATION/OWNER'S REPRESENTATIVE

Bidders shall make appointments at the Owner's convenience to visit the Site and the existing facility with the Owner's Representative listed below or his designee:

Jonathan Luiz
Town Administrator
Town of Weston
56 Norfield Road
Weston, CT 06883

Telephone: (203) 222-2677

END OF SECTION

00 41 00 BID FORM

(To be typed on Letterhead of Bidder. Submit in duplicate; fill in all blanks.)

To: Mr. Jonathan Luiz
Town Administrator
Town of Weston
56 Norfield Road
P.O. Box 1007
Weston, CT 06883

Re: Partial Reroofing of Weston Public Library
Weston, CT

Dear Mr. Luiz:

The signer of this Bid as Bidder declares that he has visited and carefully examined the site, the Drawings and Specifications and other bidding documents for the proposed work, dated 20 July 2018 (*revised 16 February 2021*), and all Addenda received before the bid opening date; that he, or his representative, has made such investigation as is necessary to determine the character and extent of the work; and he hereby agrees that, if this Bid be accepted, he will contract with the Owner to provide all labor, materials, and equipment required by the Project Manual in strict accordance with all the requirements of the said Project Manual within ten (10) calendar days, after notification of the award of the Contract.

If awarded the Contract, we, the undersigned, shall pursue the work continuously and shall complete the work specified for each unit within _____ calendar days from the start of work. Workdays shall be as negotiated with the Town of Weston.

1. BASE BID – Reroofing of Areas S-1 through S-14 and R-1 through R-2 for the Sum of: _____
(\$ _____) Dollars.

2. UNIT PRICES (The Base Bid quote includes):
 - A. Replace rotted wood blocking. Include 100 ln. ft. in Base Bid for the Sum of \$ _____.
If more is required, add _____ per ln. ft.
If less is required, deduct _____ per ln. ft.

 - B. Repair deteriorated plywood decking. Per detail drawing S1
Include 64 sq. ft. in Base Bid for the sum of \$ _____.
If more is required, add _____ per sq. ft.
If less is required, deduct _____ per sq. ft.

- C. Remove and replace deteriorated wood fascia at eaves to match existing. Include 100 ln. ft. in Base Bid for the sum of \$ _____.
If more is required, add _____ per ln. ft.
If less is required, deduct _____ per ln. ft.
- D. Remove and replace deteriorated wood fascia at rake edge to match existing. Include 100 ln. ft. in Base Bid for the sum of \$ _____.
If more is required, add \$ _____ per ln. ft.
If less is required, deduct \$ _____ per ln. ft.
- E. Remove and repair damaged stressed skin panel per detail drawing S1. Include replacement of 2 panels in base bid for this sum of \$ _____.
If more is required, add \$ _____ per panel.
If less is required, deduct \$ _____ per panel.

11. Base Bid includes \$ _____ for performance and labor and material payment bonds.

12. Contractor start date shall be _____, _____, 20____.
(day) (date) (month)

The above Bid and Unit Prices given are the final price to the Owner and include all taxes, overhead and profit to the Contractor, and is not subject to extras or escalator clauses.

Performance and Labor and Material Payment Bonds

By signing and submitting this Bid, the Bidder certifies that he will furnish Performance and Labor and Material Payment Bonds in amounts sufficient to cover the total proposed cost of the Work. The bonds will be amended and maintained current with all additions to the contract work.

Initial receipt of Addenda as listed below:

Addenda No. 1 Addenda No. 2 Addenda No. 3

Contractor shall charge for additional or changed work authorized by Change Order:

A. For Overhead and Profit: 15%

This proposal shall remain valid for acceptance by the _____ for a period of one hundred and twenty days from bid due date.

Signed and sealed this _____ day of _____, 20__

(Legal Name of Bidder)

*by _____
(Signature of Bidder)

(Seal where required) _____
(Title)

(Business Address)

*Note: If signed by an agent of the Bidder, attach current power of attorney certifying agent's authority.

END OF SECTION

00 43 13 BID SECURITY FORM

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

_____ as Principal; and _____ as Surety, are hereby held and firmly bound unto _____, in the penal sum of _____ Dollars (\$ _____), for the payment of which, well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____, 20_____.

The condition of the above obligation is such that whereas the Principal has submitted to _____ a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing, for the Partial Reroofing of Weston Public Library.

NOW, THEREFORE,

- a) If said Bid shall be rejected, or, on the other hand,
- b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached thereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said Contract, and shall in all other respects perform the agreement created by the acceptance of said Bid.

Then this obligation shall be void; otherwise the same shall remain in 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 Surety, for value received, hereby stipulates and agrees that the obligations of the said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____ Principal (Seal)
_____ Surety

By _____

END OF SECTION

00 45 13 BIDDERS QUALIFICATIONS

Submitted by:

Name

Address

A Corporation _____ A Co-Partnership _____ An Individual _____

How many years has your organization been in business:

As a general contractor? _____ As a sub-contractor? _____

How many years has it been in business under its present name?

Does your firm conform to the EEO requirements? Yes _____ No _____

If a Corporation: Date of Incorporation: _____ State of Incorporation _____

Name, Title and Address of all principal officers:

If a Co-Partnership: Date of Organization: _____

Date, Title and Address of all Partners:

BONDING COMPANY _____

Have you ever defaulted on a contract?: _____ If so, attach separate statement listing location, owner and circumstances.

Bidder may be required to submit financial information at Owner's request.

Remarks:

List projects of similar size, specification (Wood Shingle and Fully Adhered EPDM) and character your organization has completed within the past 5 years for Owner's references:

Project (Name & Address)	Owner (Name & Address)	Architect	Contract Amount	Date of Completion	on Time (Yes or No)	% of Work	Own Force Trades
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Attach separate statement if necessary to fully describe qualifications for this work.)

Name and experience of key personnel to be associated with this project.

Person in Charge	Superintendent	Foreman (men)
Name	Name	Name
Experience	Experience	Experience

State of: _____)
) ss:
)
 County of: _____ being duly sworn deposes and says that his
 is
 of

and that answers to the foregoing questions and all statements therein contained are true and correct.

Sworn to before me this _____ day of _____ 20__
 Notary Public:
 My Commission Expires:

00 52 00 AGREEMENT FORMS

PART 1 **GENERAL:** Standard AIA Document Forms to be used for this Contract are as follows:

- A101 Standard Form of Agreement Between Owner and Contractor (1997 Edition)
- A201 General Conditions of the Contract for Construction (1997 Edition)
- A311 Performance Bond and Labor and Material Payment Bond (1970 Edition)
- B352 Duties, Responsibilities and Limitations of Authority of the Consultant's Project Representative (1979 Edition)
- G701 Change Order (1987 Edition)
- G702 Application &
G703 Certificate for Payment (1983 Edition)
- G704 Certificate of Substantial Completion (1978 Edition)
- G705 Certificate of Insurance (1978 Edition)
- G706 Contractor Affidavit of Payment of Debts and Claims (1970 Edition)
- G706A Contractor's Affidavit of Release of Liens (1970 Edition)
- G707 Consent of Surety Company to Final Payment (1970 Edition)

Copies of the above forms are available for inspection at the office of the Consultant and may be purchased from the office of The Connecticut Society of Architects, 85 Willow Street, New Haven, Connecticut 06511, telephone (203) 865-2195. The Consultant will furnish copies of all documents to the successful bidder.

END OF SECTION

00 73 01 SUPPLEMENTARY GENERAL CONDITIONS

PART 1 GENERAL

1.01 General Conditions:

- (a) The General Conditions of the Contract shall be the American Institute of Architects (AIA) Document A201, "General Conditions of the Contract for Construction" fifteenth edition, 1997, herein referred to as the General Conditions.

1.02 Supplementary Conditions:

- (a) The following items consist of changes and additions to the General Conditions as if bound therein. Where any part of an article of the General Conditions is modified or deleted, the remaining unaltered portion shall remain in effect.
- (b) The contractor shall be an Equal Employment Opportunity employer.

PART 2 AMENDMENTS TO THE GENERAL CONDITIONS

ARTICLE 1 - GENERAL PROVISIONS

1.1 Basic Definitions

ADD: "1.1.8, ARCHITECT – The term "Architect" shall mean the H. B. Fishman & Co., Inc. for the purpose of this Contract and all documents pertaining to the roof project. The term "Architect" includes and means the H. B. Fishman & Co., Inc. or its authorized representative(s)."

1.2 Correlation and Intent of the Contract Documents

ADD: "1.2.4, Following is a listing of the Contract Documents and, in the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:

- .1 The Agreement.
- .2 Addenda, with those of a later date having precedence over those of an earlier date.
- .3 The General Conditions of the Contract for Construction.
- .4 Drawings and Specifications. Stated dimensions shall take precedence over implied dimensions (DO NOT SCALE DRAWINGS). Large scale drawings shall take precedence over smaller scale drawings.

.5 Contractor's Bid and required Supplemental information.

In case of an inconsistency between or within Drawings and/or Specifications, which is not clarified by addendum or other written interpretation by the Architect, the better quality or greater quantity of Work shall be provided in accordance with the Architect's interpretation.

ADD: "1.2.5, If any item, material, product or equipment is found to be specified in more than one division, section or article of the Specifications, or Contract Documents, the Contractor shall be responsible for determining which subcontractor or supplier shall provide the item.

ADD: "1.2.5.1, When applied to materials and equipment, the words 'furnish', 'install', and 'provide' shall mean the following:

The word 'provide' shall mean to furnish, pay for, deliver, install, adjust, clean and otherwise make materials and equipment fit for their intended use, as specified in Section 4.4.1 of the General Conditions.

The word 'furnish' shall mean to secure, pay for, deliver to site, unload, uncrate and store materials.

The word 'install' shall mean to place in position, incorporate in the work, adjust, clean, make fit for use, and perform all services specified in General Conditions Section 4.4.1 except those included under the definition of the word 'furnish' above."

1.6 Ownership and Use of Drawings, Specifications and Other Instruments of Service

1.6.1 ADD: "Reproduction or use of the Contract Documents without the written consent of the Architect is strictly prohibited."

1.7 ADD the following Section 1.7: "Any provisions, requirements, or clauses required by applicable law to be included in these contract documents shall be deemed to be so included, whether or not set forth herein. Upon notice to the other party, the contract documents may be physically modified by either party to reflect any such provisions."

ARTICLE 2 – OWNER

2.1 General

2.1.2 DELETE in its entirety.

2.2 Information and Services Required of the Owner

2.2.1 DELETE in its entirety.

2.2.5 DELETE and SUBSTITUTE: "The Owner shall furnish to the Contractor up to five (5) sets of Contract Documents. The Contractor may purchase additional sets of Contract Documents as he desires."

ARTICLE 3 – CONTRACTOR

3.2 Review of Contract Documents and Field Conditions by Contractor

3.2.1 ADD: "Notice of any discrepancy, inconsistency, error or omission shall be forwarded in writing to the Architect within twenty-four (24) hours. After reporting to the Architect any error, inconsistency, or omission which he may discover in the Contract Documents, the Contractor is not to proceed with any work so affected without the Architect's written modifications to the drawings and/or Specifications. If the Contractor proceeds with any such Work prior to receiving clarification from the Architect, the Contractor will be responsible for the cost of said Work. The Contractor is responsible for measuring the work. Dimensions on the drawings are offered as a guide only."

ADD: "3.2.4 After reporting to the Architect any error, inconsistency or omission in the Contract Documents that it may discover, the Contractor shall not proceed with any Work so affected without the Architect's written authorization. If the Contractor proceeds with any such Work prior to the Architect's response, the cost of such Work shall be the responsibility of the Contractor."

3.4 Labor and Materials

3.4.2 Line 2, Delete: "a change order" and substitute: "the contract documents".

3.5 Warranty

ADD: "3.5.2 The Contractor shall provide manufacturer's warranties on products incorporated into the Work. Notwithstanding the duration of any such warranties, the Contractor shall guarantee all materials and workmanship for a period of two (2) years from the date of substantial completion of the building(s). The manufacturer's warranty shall be in addition to the Contractor's guarantee."

ADD: "3.5.3 The Contractor shall repair, restore, or remove and replace Work found to be defective or deficient during the warranty period with Work complying with the requirements of the contract documents."

3.7 Permits, Fees and Notices

ADD: "3.7.2.1, Before beginning the Work, the Contractor must submit proof in writing that all the required permits have been obtained."

ADD: "3.7.3.1, The requirements of paragraph 3.7.3 do not waive the Contractor's responsibility of complying with the requirements of the Contract Documents when such requirements exceed those of any laws, ordinances, rules, regulations, and orders of any public authority bearing on that Work."

3.8 Allowances

3.8.2.3 ADD: "except when installation is specified as part of the allowance in the General Requirements (Division 1 of the Specifications)."

3.12 Shop Drawings, Product Data and Samples

3.12.7 Line 3, DELETE: "approved" and SUBSTITUTE: "reviewed and returned to the Contractor stamped "No Exceptions Taken".

3.15 Cleaning Up

ADD: "3.15.3, If the Owner finds, in his opinion, that waste materials or debris are adversely affecting the function of the facility, he shall give the Contractor written notice to remove same. If the Contractor fails to remove same within forty-eight (48) hours of receipt of notice, the Owner shall do so and the cost thereof shall be charged to the Contractor. The area shall be inspected and cleaned at the end of each work day."

3.18 Indemnification

3.18.1 MODIFY as follows:

In the 1st, 2d and 3d lines, DELETE: "and to the extent claims, damages, losses or expenses are not covered by Project Management Protective Liability Insurance purchased by the contractor in accordance with Section 11.3,";

In the 3d line, INSERT "defend", before "indemnify";

In the 7th line, DELETE “negligent”;

ARTICLE 4 – ADMINISTRATION OF THE CONTRACT

4.2 Architect’s Administration of the Contract

4.2.7 line 1, CHANGE TO READ: “The Architect will review and take appropriate action upon Contractor’s submittals...”

4.2.7 line 12, DELETE: “approval” and SUBSTITUTE: “review and stamping “no exceptions taken”

4.2.9 ADD: “The undertaking of any inspections by the Architect is not to be construed as supervision of actual construction, nor to make him responsible for providing a safe place for the performance of work by the Contractor of the Contractor’s employees, or those of suppliers of subcontractors for access, visits, work, travel, or occupancy by any person.”

4.2.10 line 1, CHANGE TO READ: “The Owner may at its discretion provide a full-time Project Representative to...”

4.3 Claims and Disputes

4.3.2 MODIFY to read: “Time Limit on Claims by either party must be initiated within the time periods prescribed in Section 13.7.1, Statute of Limitations.”

4.3.4 Claims for Concealed or Unknown Conditions, MODIFY : line 6 to read, “. . . disturbed and within a reasonable time after discovery after first . . .”. CHANGE: line 12 to read, “. . . within a reasonable time after . . .”.

4.3.10 DELETE in its entirety.

4.4 Resolutions of Claims and Disputes

4.4.6 Lines 1 and 2: MODIFY to read: “the decision is final. A demand for...”.

4.4.8 line 3 MODIFY to read: “Prior to resolution of the claim by the Architect.”

ARTICLE 5 – SUBCONTRACTORS

5.2 Award of Subcontracts and Other Contracts for Portions of the Work

5.2.1 lines 1, 2 DELETE: “as soon as practicable” and SUBSTITUTE: “Not later than fifteen (15) calendar days.”

5.3 Subcontractual Relations

5.3.1 line 1 DELETE and SUBSTITUTE: “By an appropriate written agreement, a copy of which shall be forwarded to the Architect under the provisions of Article 5.2.1, above, the Contractor shall require each...”

ARTICLE 6 – CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.2 Mutual Responsibility

6.2.2 ADD: “If any part of a Contractor’s work depends for proper and timely execution or results upon the interfacing or coordinating of the work of any other separate Contractor, or the Owner, the Contractor shall allow for this interrelationship in the planning and performance of his work, without interference to any other Contractor.”

ARTICLE 7 – CHANGES IN THE WORK

7.3 Construction Change Directives

7.3.3 Section .2, DELETE and SUBSTITUTE: “unit prices applicable to this Project shall be Contractor’s total unit price and shall include overhead and profit as stated in the Contract Documents or subsequently agreed upon;”

7.3.3 ADD the following as Section .5:

“.5 A ‘reasonable allowance for overhead and profit’ for work solely performed by the Contractor as indicated above and utilized in the compilation of cost and credit figures in Article 7.3.3, shall not exceed fifteen percent (15%) of the net cost of the work.”

7.3.3. ADD the following as Section .6:

“.6 For work performed by subcontractors, cost to Owner may include an allowance for subcontractor’s overhead and profit not

to exceed fifteen percent (15%) of subcontractor's net cost, plus an allowance for General Contractor's overhead and profit not to exceed five (5%) of the subcontractor's net cost."

ARTICLE 8 – TIME

8.3.1 line 5, DELETE: "pending mediation and arbitration".

ARTICLE 9 – PAYMENTS AND COMPLETION

9.3 Applications for Payment

9.3.1 ADD: "Application for Payment shall be on AIA Document G702, Application and Certificate for Payment, and AIA Document G703, Continuation Sheet."

9.4 Certificates for Payment

9.4.1 lines 2 and 3, DELETE: "a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due," and SUBSTITUTE: "with a copy to the Contractor, the Contractor's Application for Payment (AIA Document G702) properly certified for payment, in triplicate, for such amount as the Architect determines is properly due,"

9.6 Progress Payments

9.6.1 ADD: "The Owner shall forward one (1) copy of both the standard requisition form and the Application and Certificate for Payment, properly signed, to the Architect and to the Contractor for record."

9.7 Failure of Payment

9.7.1 CHANGE lines 2, 3 and 4 to read: "within 30 days after the date established in the contract documents the amount certified by the Architect, than the Contractor may, upon ten additional days."

9.8 Substantial Completion

9.8.2 ADD: "Certificate of Substantial Completion shall be standard AIA Document G704; three (3) copies of document shall be circulated for signature and distributed for record."

9.10 Final Completion and Final Payment

9.10.4 DELETE in its entirety.

ARTICLE 10 – PROTECTION OF PERSONS AND PROPERTY

10.2 Safety of Persons and Property

10.2.1 CHANGE Section .1 to read “Owner’s employees, the general public, and employees ...”

10.2.1 ADD: Section .4, “The Contractor shall provide and pay for whatever security measures he deems necessary to protect his work until acceptance by the Owner.”

10.2.5 CHANGE: lines 2, 3 and 4 to read, “to any property referred to in clauses 10.2.1.2 and 10.2.1.3 and indemnify and save the Owner harmless for all damage or injury to referenced persons and property caused in.”

10.2.8 ADD: “The Contractor shall comply with the requirements of the Occupational Safety and Health Act of 1970 (OSHA) and the Construction Safety Act of 1969, including all standards and regulations issued by governmental authorities that administer those Acts, which requirements, standards and regulations are incorporated herein by reference.

10.3 Hazardous Materials

10.3.1 CHANGE to read: “Abatement of hazardous materials, including but not limited to asbestos, lead based paint, PCB or other toxic substances, unless the existence of these materials is specified, contemplated, or reasonably inferable from the requirements of the contract documents shall be removed under separate Contract. The Contractor shall notify the Owner immediately if hazardous materials are encountered. Should the Contractor’s work depend upon removal of such hazardous materials, the Owner will then make arrangements to have the hazardous materials removed in a timely fashion. However, the Contractor shall be responsible for compliance with the State and Federal Regulations if any construction activity triggers the requirements for such compliance including but not limited to protecting the workers and other occupants of the Building. The Owner may grant an extension of time, if reasons exist for such an extension.”

10.3.3 DELETE in its entirety.

ARTICLE 11 – INSURANCE AND BONDS

11.1 Contractors' Liability Insurance

11.1.2 CHANGE to read: "The insurance required by Section 11.1.1 shall have the coverages and limits as specified below, or required by law, whichever is greater:

- .1 Commercial General Liability: With limits no less than \$1,000,000 each occurrence/\$2,000,000 aggregate Bodily Injury and Property Damage and including coverage for:
 - a) Products/Completed Operations
 - b) Personal Injury
- .2 Worker's Compensation & Employers Liability Policy: covering operations in the State of Connecticut.
- .3 Contractor's Equipment: The contractor should insure all equipment, tools, vehicles owned, leased, or used by them and shall evidence coverage with a certificate of insurance. The contractor shall hold The Town of Weston, 56 Norfield Road, P.O. Box 1007, Weston, Connecticut 06883 harmless for any loss or damage to such equipment, tools, etc.
- .4 Comprehensive Automobile Policy: with limits of no less than \$1,000,000 Bodily Injury and Property Damage (Combined Single Limit) Liability including coverage for owned, non owned, and hired private passenger and commercial vehicles.
- .5 Excess Liability: with limits not less than \$5,000,000 each occurrence.
- .6 **Town of Weston, 56 Norfield Road, P.O. Box 1007, Weston, Connecticut 06883, H. B. Fishman & Co., Inc., 300 Pleasant Valley Road, South Windsor, Connecticut 06074 and The Di Salvo Ericson Group, 63 Copps Hill Road, Ridgefield, CT 06877 must be named as "Additional Insured" on all policies and Certificates of Insurance should show this.**
- .7 Certificates shall provide that 30 days written notice prior to cancellation be given to Town of Weston. Policies that lapse and/or expire during the term of occupancy shall be re-

certified and received by The Town of Weston no less than 30 days prior to renewal.

- .8 Copies of all Certificates of Insurance should be sent to The Town of Weston, 56 Norfield Road, P.O. Box 1007, Weston, Connecticut 06883.

11.1.3 ADD:

- “.1 Submit three (3) copies of AIA Document G705, Certificate of Insurance, properly executed, including the title and signature of the authorized representative and the following statement: copy of this certificate is on file in the office of the insurance company which underwrites the policies.
- .2 All Certificates shall name the Owner, and the Architect and its representatives, as additional named insureds on any liability coverage and/or policies identified therein.
- .3 On the back of all copies of insurance certificates type Section 3.18 (Indemnification) of the AIA General Conditions in full, as amended.
- .4 Submit three (3) copies of any endorsements that are subsequently issued amending coverage or limits.”

11.2 Owner’s Liability Insurance

- 11.2.1 DELETE and SUBSTITUTE: “The Contractor shall procure, pay for and maintain, and provide a Certificate of Insurance reflecting Owner’s Protective Liability Insurance naming the Owner and Architect as additional named insureds to protect the Owner and Architect from any liability which might be incurred against them as a result of any operation of the Contractor or his subcontractors or their employees. Such insurance shall be written for the same limits as the Contactor’s Liability Insurance, and shall include the same coverage.”

11.4 Property Insurance

11.4.1 ADD the following conditions:

- “.1 Names and addresses of all subcontractors shall be recorded with the Owner at the time of award or contract

so that policies being effected by the Owner may be filled out properly.

- .2 The above property insurance maintained by Owner shall include materials and supplies on site whether installed or intended for use in the alteration or repair of the building.
- .3 The Contractor shall purchase and maintain any insurance they deem necessary for protection against loss to equipment or tools of Contractor, Sub-Contractor, or Sub-Sub-Contractor on site. In no way shall the Owner become responsible for deductibles for any loss. These are the sole responsibility of the Contractor.”

11.4.3 Loss of Use of Insurance DELETE and SUBSTITUTE: “The Contractor shall provide the Owner with insurance against loss of use of his property, including consequential losses due to fire or other hazards however caused, in an amount not less than two hundred fifty thousand dollars (\$250,000) for the construction period unless equivalent protection is provided under the ‘premises and operations’ clause of the Comprehensive General Liability Insurance specified in Article 11, Section 11.1 above.”

11.4.4 CHANGE to read: “The Owner shall make available for inspection by the Contractor all policies of property insurance as provided in Article 11.3.1.”

11.4.6 CHANGE line 1 to read: “The Owner shall file ...”.

11.4.7 DELETE in its entirety.

11.4.9 DELETE in its entirety.

11.4.10 DELETE in its entirety.

ARTICLE 12 – UNCOVERING AND CORRECTION OF WORK - No Change

ARTICLE 13 – MISCELLANEOUS PROVISIONS

13.4 Rights and Remedies

13.4.1 ADD: “or specified herein.”

13.5 Tests and Inspections

13.5.1 CHANGE the third sentence to read: "The Contractor shall schedule the above and shall notify the Architect not later than forty-eight (48) hours prior to the inspection so that the Architect may observe such inspection, testing, or approval. The Contractor shall bear all costs of such inspection, tests, or approvals required by public authorities or specified herein." The Owner shall bear costs ...

13.6 Interest

13.6.1 DELETE in its entirety.

ARTICLE 14 – TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 Termination by the Contractor

14.1.3 lines 3 through 5, CHANGE to read: "payment for all work executed in accordance with the Contract Documents."

14.2.1 ADD the following as 14.2.1.5: "fails to perform in accordance with the contract schedule, or causes the Architect to reasonably believe that the Contractor will not complete the Work by the date or duration specified in the contract documents."

END OF SECTION

00 73 02 GENERAL CONDITIONS – TOWN OF WESTON

1. See Schedule "A" attached.

Schedule A

The contract hereto is supplemented hereby as follows:

(a) Performance. Contractor will use Contractor's best skill, judgment and efforts to (i) timely perform the Services in a manner satisfactory to the Town, and (ii) timely perform Contractor's other obligations under this Agreement. Further, Contractor does hereby warrant that all the work to be performed hereunder shall be done in workmanlike manner and that all of the materials to be used pursuant to this agreement shall be of the quality and grade as represented. In addition to all other warranties and guarantees set out in this Agreement, if after substantial completion of the Project, the Town discovers that there are defects resulting either from the quality of the workmanship or from the materials used, the Contractor, for a period set out elsewhere in this agreement, but under no circumstances less than 24 months after substantial completion, shall promptly return to the construction site and, at its cost and expense, correct said defects.

(b) Compliance With Laws. Contractor agrees, represents and warrants that all of Contractor's Services will be rendered in full compliance with all applicable federal, state and local laws, regulations, ordinances, codes, orders and requirements. Contractor shall promptly notify the Town if Contractor's Services fail in any way to comply with the agreement, representation and warranty set forth herein, or if it is alleged that Contractor's Services fail to comply with such agreement, representation and warranty.

(c) Delegation. Without the express prior written approval of the Town, Contractor may not delegate to any other person or entity the performance of any of Contractor's duties and responsibilities under this Agreement.

(d) The parties hereto acknowledge and agree, and Contractor hereby represents and warrants, that Contractor is an independent contractor and not an employee or agent of the Town; that Contractor shall have the sole obligation and responsibility to pay any and all federal, state and local taxes, including wage withholding, payroll, unemployment insurance, Social Security, and sales and income taxes, associated with any payments or other compensation Contractor directly or indirectly receives from the Town; and that neither Contractor nor any employees or other personnel of Contractor are entitled to receive or are eligible for any benefits which accrue to employees of the Town, including without limitation such benefits as health insurance and retirement benefits. Without the express prior written approval of the Town, neither Contractor nor any employees or other personnel of Contractor will do or perform any act or make any representation, promise or commitment which purports in any way to bind the Town.

(e) Termination by the Town. The Town may at any time and for any reason terminate the engagement of Contractor to provide Services under this Agreement. The Town shall give written notice to Contractor of any such termination specifying the effective date of the termination. In the event of such termination of Contractor's engagement to provide Services

under this Agreement, (i) Contractor shall continue to render Services as provided in this Agreement until the effective date of the termination; (ii) Contractor shall be paid by the Town, in accordance with the payment provisions of this Agreement, for all Services properly completed by Contractor as of the effective date of the termination; and (iii) upon payment of the amount specified, the Town shall have no further liability to Contractor under this Agreement.

(f) If the engagement of Contractor to provide Services as set forth in this Agreement is terminated earlier than the end date, Contractor shall cooperate with the Town to arrange the termination in such manner as may reasonably be requested by the Town so as to minimize any disruption or adverse impact to the Town.

(g) Contractor agrees that any breach by Contractor of Contractor's obligations under this Agreement would cause great, immediate and irreparable harm to the Town and could not be reasonably and fully compensated solely by monetary damages. Accordingly, in the event of any breach or threatened breach by Contractor of the provisions of this Agreement, the Town shall be entitled to immediately obtain an injunction, without bond or other security, prohibiting any further breach or threatened breach of this Agreement by Contractor, and such injunctive relief shall be in addition to, and not in lieu of, any other relief (such as monetary damages) to which the Town may be entitled as a result of Contractor's breach or threatened breach of any of the provisions of this Agreement. In the event of any breach or threatened breach of this Agreement by Contractor, the Town shall also be entitled to recover from Contractor the reasonable attorneys' fees and other expenses incurred by the Town in any action or proceeding relating to this Agreement or its enforcement.

(h) In addition to and not in lieu of any other obligation contained in this Agreement, Contractor agrees to and shall indemnify the Town and hold the Town harmless with respect to any and all claims, losses, costs and expenses (including but not limited to attorneys' fees and costs of litigation), damages, fines, penalties and/or liabilities of any nature whatsoever arising in connection with or relating in any way to (i) any breach or violation by Contractor of any provision of this Agreement, including any representation or warranty contained herein; (ii) the performance of Contractor's Services under this Agreement, including any assertion or claim that Contractor's Services fail to comply in any way with the provisions of this Agreement; and (iv) any negligence, intentional acts, misrepresentations or omissions by Contractor.

(i) The provisions of (g) and (h) above shall survive any termination or expiration of this Agreement regardless of how such termination or expiration may occur.

(j) This Agreement and the rights and obligations of the parties hereunder shall in all respects be governed by and construed and enforced in accordance with the laws of the State of Connecticut. Contractor and the Town consent to the jurisdiction and exclusive venue of the State and/or Federal courts in Connecticut in any litigation concerning this Agreement or its enforcement.

(k) Contractor represents and warrants that Contractor shall maintain its existence in good standing in its state of incorporation or formation (if applicable), and that Contractor shall maintain in full force and effect any and all licenses or authorizations required for Contractor to do business in each jurisdiction where Services are to be rendered under this Agreement.

01 11 01 SUMMARY OF GENERAL PROVISIONS

PART 1 GENERAL

1.01 WORK INCLUDED

This Division applies to and forms a part of each Section of this Specification.

1.02 DIVISION OF WORK

- A. These Specifications are divided for convenience into Sections as set forth in the Table of Contents.
- B. Any mention in these Sections or indication on Drawings of articles, materials, products, operations or methods, requires that Contractor furnish each item mentioned or indicated, of kind, type of design and quality specified or shown on Drawings; and that Contractor furnish all labor, equipment, incidentals and superintendence necessary to complete work in accordance with Drawings and true meaning and intent of these Specifications, even though such mention of articles, materials, operations, methods, quality, qualifications or conditions is not completely expressed.
- C. Where devices, items or parts thereof, are referred to in singular, it is intended that such reference applies to as many such devices, items or parts as are required to properly complete the work.
- D. Description of work included in each Section is given for convenience and is not to be considered as a comprehensive list of items necessary to complete the work of any Section.
 - 1. The drawings and plans provided may not show all piping, conduit, equipment and fixtures that may require rerouting or temporary relocation to complete the necessary work.
- E. Coordinate the work covered in each Section with work of other Sections. Deliver necessary information and items, accessories, anchors, connections, patterns, templates, etc., when required in order to prevent any delay in progress and completion of the Work.

1.03 SAFETY PROVISIONS

Provide a safe work environment including deactivation of all utilities and/or services in work area during any time work is in progress and complying with all

Safety Orders of all legally constituted public authorities having jurisdiction. Approval of Shop Drawings by Consultant does not in any way relieve Contractor of his responsibilities.

1.04 PROTECTION OF EXISTING IMPROVEMENTS

Protect buildings, active utilities, etc., which are to remain from damage during construction. Repair any damage to existing facilities at no cost to Owner.

1.05 GUARANTEES

- A. Furnish and install all new material under this Contract free from defects, and provide a contractor's guarantee, for a period of **two (2) years** and manufacturer's 20 year warranty and as specified elsewhere from date of acceptance of the Work. Should any trouble develop during this period, due to defective material or faulty workmanship, furnish all necessary materials and labor to correct the trouble without any cost to Owner.
- B. Submit in writing all special guarantees required by this Specification, in form required and delivered to Architect before final payment is made.

1.06 WATCHMAN SERVICE

Provide such watchman's services as are necessary to properly safeguard all materials, tools and appliances on job site. Owner will not assume any responsibility for loss of or damage to materials, tools, appliances or work arising from acts of theft, vandalism, malicious mischief or other causes.

1.07 SURVEY OF EXISTING CONDITIONS

- A. Before submitting Bid, examine premises and ascertain conditions under which Work will be scheduled and performed. Be informed of any and all peculiarities and limitations of spaces available for the Work.
- B. Before commencement of Work, make a thorough survey of the building site and approaches thereto.
- C. Locate all drainage lines, water, gas, communications and other utility service lines or piping in work and provide protection as required.
- D. Make certain that all subcontractors, prior to starting their work, carefully inspect the work of other trades and verify that all such work is complete to the point where work may commence.

END OF SECTION

01 11 13 SUMMARY OF WORK

PART 1 GENERAL

1.01 Description: The Base Bid work consists of the removal and replacement of the Weston Public Library, Roofs #R-1 and R-2, S-11 through S-14. It should be noted that due to structural limitations of the building, no storage of materials (either new or removed existing) will be allowed on the roof levels.

A. Schedules for work shall be as negotiated with the Town of Weston.

NOTE: The work described in the summary of work is not intended to be a final and/or specific list of work to be performed or materials to be provided, but rather it is to be used as a guide. The roofing contractor is admonished to examine and review the drawings and these specifications in order to properly assess those items of work which are obviously requisite whether they are specifically noted or not. It is implicit in the intent of the plans and specifications that a complete, watertight, expertly fabricated system of work be delivered to the owner.

B. Reroof

1. Completely remove and depose of existing wood shingles and wood lath from Roofs S1 through S-14.
2. Completely remove and dispose of the existing roof ballast, membranes, base flashings and perimeter base flashings on Roofs R-1 and R-2.
3. Completely remove and dispose of existing metal edges and gutters, valley flashings and step flashings.
4. Completely remove and dispose of existing roof insulations, and substrates to the structural wood deck surfaces.
5. Repair/replace deteriorated wood blocking per Unit Price "A".
6. Repair/replace deteriorated plywood wood decking per Unit Price "B".
7. Repair deteriorated wood fascia at eaves per Unit Price "C".
8. Repair deteriorated wood fascia at rake edge per Unit Price "D".
9. Provide and install mechanically fastened flat and tapered isocyanurate insulation as shown on Drawings on Roof #1 and #2.
10. *Provide and install 1/2" high density overlayment board set in foam adhesion over installed mechanically fastened insulation.*

11. Provide and install fully adhered .060", reinforced, FR EPDM single ply membrane with associated flashings and strippings on Roofs R1 and R-2.
12. Provide and install new copper edge metal on Roofs R-1 and R-2.
13. Provide and install new copper gutters, base, step, and valley flashings on Roofs S-1 through S-14.
14. Provide and install new stainless steel and copper counterflashings as shown on detail drawings.
15. Provide and install new copper caps at stack flashings as shown on detail drawings.
16. Provide and install new stainless steel and copper closures, transitions and saddles.
17. Provide and installed new expansion joints as shown in detail drawings.
18. Provide and install new wood shingle roofing to match existing in size and exposure on Roofs S-1 through S-14.
19. Provide and install new copper ridge venting on Roofs S-1 through S-14.

1.02 Building: Weston Public Library, Weston, Connecticut.

1.03 Specification: The specifications are arranged in Section and Division according to the Uniform System of Construction.

1.04 Occupancy: It is intended that the building owner will maintain normal occupancy during the reroofing operations. The contractor shall provide protection for his materials, tools, equipment and the building openings in his care, custody or control. Contractor to coordinate and cooperate with the building owner.

END OF SECTION

01 12 16 WORK SEQUENCE

PART 1 EQUIPMENT

- 1.01 Various items of equipment may not be closed down. Each item to be flashed, moved, or raised, remounted, etc., must be checked prior to work.
- 1.02 The scheduling of all work, including but not limited to, any temporary utility outages, rerouting of piping, conduit or other fixtures, disruption of use of facilities and/or points of entry/egress shall be coordinated with the owners representative.

END OF SECTION

01 22 13 UNIT PRICE MEASUREMENT

PART 1 GENERAL

1.01 Definition:

- A. Amount the Contractor acknowledges in the Bid Proposal Form as a price per unit of measurement for materials and/or services as described in the project specification.

1.02 Unit price work shall be approved by the Owner's Representative prior to execution of work.

1.03 Final contract amount will be adjusted for all approved unit price work.

1.04 Related work specified elsewhere:

- A. Section 01 32 33 Photographic Documentation

1.05 Unit Price Schedule

<u>Designation</u>	<u>Section</u>	<u>Item</u>	<u>Quantity Included</u>	<u>Unit</u>
A.	06 10 53 1.03	Replace deteriorated wood blocking	100 ln. ft.	ln. ft.
B.	06 10 53 1.03	Repair and replace damaged/deteriorated plywood decking	64 sq. ft.	sq. ft.
C.	06 10 53 1.03	Repair and replace damaged/deteriorated wood fascia at eaves	100 ln. ft.	ln. ft.
D.	06 10 53 1.03	Repair and replace damaged/deteriorated wood fascia at rake edge	100 ln. ft.	ln. ft.
E.	Disalvo Ericson Group Drawing S-1	Remove and repair damaged stressed skin panel	2 panels	

END OF SECTION

01 23 00.01 SCHEDULE OF ALTERNATES

PART 1 GENERAL

1.01 All materials and workmanship shall be in strict accordance with the original specifications and drawings.

A. There are no Alternates.

END OF SECTION

01 25 13 PRODUCT SUBSTITUTION PROCEDURES

PART 1 GENERAL

- 1.01 After the award of the contract, substitutions for materials or proprietary items specified will be considered only if the following procedures are adhered to:
- 1.02 Whenever the Contractor proposes a substitute, he will compile and submit brochures to the Consultant consisting of the following:
- A. A request for approval of the substitute materials in the form of a proposed credit which must be supported by the following:
1. A statement of the reason for the substitution and that its approval will not extend the contract time.
 2. A statement that the substitution will not change the function or any part of the work of the contract.
 3. The manufacturer's specifications and brochures and the Contractor's original quotation, including delivery dates, for the materials specified in the contract.
 4. The manufacturer's specifications and brochures and the Contractor's original quotation, including delivery dates, for the proposed substitution.
- 1.03 Where Contractor proposes to use an item of equipment which differs from that upon which design was based and which requires a redesign of the structural, mechanical, or architectural layout, all such redesign, new drawings, etc., required shall be prepared by the Contractor at his own expense for approval by the Consultant.
- 1.04 Where approved substitutions or deviations require a different quantity, size or arrangement of structural support, wiring, conduit, piping, ductwork and equipment from that upon which design was based, all additional items required by the system shall, with approval of the Consultant, be furnished by Contractor at no additional cost to Owner.

END OF SECTION

01 29 73 SCHEDULE OF VALUES

PART 1 GENERAL

1.01 GENERAL

- A. Submit to Consultant a Schedule of Values allocated to various portions of the Work, within ten days after award of contract.
- B. Upon request of Consultant, support values with data which will substantiate their correctness.
- C. Use Schedules of Values, unless objected to by Consultant, only as basis for Contractor's Applications for Payment.

1.02 RELATED WORK SPECIFIED ELSEWHERE

00 73 01 Supplementary General Conditions

1.03 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Type schedule on 8-1/2 in. x 11 in. white paper; Contractors' standard forms and automated printout will be considered for approval by Consultant upon Contractor's request. Identify schedule with:
 - 1. Title of Project and location.
 - 2. Consultant and Project number.
 - 3. Name and Address of Contractor.
 - 4. Date of submission.
- B. Schedule to list installed value of component parts of Work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Follow Table of Contents of Project Manual as format for listing component items. Identify each line item with number and title of respective major section of Specifications.
- D. For each major line item list sub-values of major products or operations under item. Consult Consultant for sub-item listings after Contract award.

- E. For various portions of the Work:
 - 1. Each item to include a directly proportional amount of contractor's overhead and profit.

- F. Sum of all values listed in schedule to equal total Contract Sum.

- G. The Town of Weston does not pay for "stored materials" either on site or at contractor's yard.

END OF SECTION

01 31 19 PROJECT MEETINGS

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Schedule and administer pre-construction conference with Owner, Contractor, subcontractors, testing laboratory personnel, membrane manufacturer's representative and Consultant before beginning any work.
- B. Schedule and administer progress meetings.
 - 1. Progress meetings shall be held weekly.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A.

01 31 19.13	Pre Construction Meeting
01 33 23	Shop Drawings, Product Data and Samples
01 45 29	Testing Laboratory Services
01 77 19	Close Out Requirements
01 78 39	Project Record Documents
- B. Individual Specification Sections: Pre-installation conferences.

1.03 DESCRIPTION

- A. Schedule and administer pre-construction conference, and weekly construction progress meetings, called meetings, and pre-installation conferences, throughout progress of Work.
- B. Make physical arrangements, prepare agenda, and distribute notice of each meeting to participants, Owner and Consultant, four days in advance of meeting date.
- C. Preside at meetings, record minutes, and distribute copies within two days after meeting to participants, to entities affected by decisions at meetings, with one copy each to Owner and Consultant.
- D. Location of meetings to be as directed by the building owner.
- E. Attendance: Contractor, job superintendent, subcontractors, testing laboratory personnel and suppliers as appropriate to agenda; Owner, Consultant, and professional consultants, may attend as appropriate.

F. Minimum Agenda:

1. Approval of minutes of previous meetings.
2. Review of Work progress.
3. Field observations, problems and decisions.
4. Identification of problems which impede planned progress.
5. Review of submittal schedule and status of submittal.
6. Review of off-site fabrication and delivery schedules.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of project progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

END OF SECTION

01 31 19.13 PRE-CONSTRUCTION MEETINGS

PART 1 GENERAL:

- 1.01 Prior to the start of roofing and associated work, meet at project site with suppliers, installer and/or manufacturer of each component of associated work, roofing work, installer of roof-top units and other work in and around which must precede or follow roofing work (including mechanical work if any), and other representatives directly concerned with performance of the work including (where applicable) Owner's insurers, test agencies, product manufacturers, Consultant and Owner. The Contractor shall record discussions of conference and decisions and agreements (or disagreements) reached, and furnish copy of record to each party attending. Review foreseeable methods and procedures related to roofing work including, but not necessarily limited to, the following:
- A. Review inspection to be performed to detect deficiencies in existing deck materials.
 - B. Review roofing system requirements (drawings, specifications, and other contract documents).
 - C. Review required submittals, both completed and yet to be completed.
 - D. Review status of substrate work (not by roofing installer), including drying, structural loading limitations, and similar considerations.
 - E. Review availability of materials, tradesmen, equipment and facilities needed to make progress and avoid delays.
 - F. Review required inspection, testing, certifying and material usage accounting procedures.
 - G. Review weather and forecasted weather conditions, and procedures for coping with unfavorable conditions, including possibility of temporary roofing.
 - H. Review regulations concerning code compliance, storm water retention, environmental protection, health, safety, fire and similar considerations.
 - I. Review use of on-site pollution and odor control devices.
 - J. Review removal and disposal of existing roofing materials.

- J. Review procedures needed for protection of roofing during remainder of construction period.
- K. Consider each party's expert advice and judgment as expressed in the interest of successful completion of the work.
- L. Contractor shall provide and distribute a bar chart showing the projected schedule of work for the project. This chart shall be discussed at the meeting.
- M. Contractor shall provide a list of emergency telephone numbers and contact names to the building owner's representative.

END OF SECTION

01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 General:

- A. Within 14 days after award of Contract, prepare and submit to Owner/Consultant estimated construction progress schedules for the Work, with subschedules of related activities which are essential to progress.
- B. Submit revised progress schedules periodically.
- C. Submit plan for temporary protections to be employed during construction, including but not limited to; points of entry and egress, surface mounted equipment, windows, air intake, vents, etc.

1.02 Related Work Specified Elsewhere Includes:

- 01 11 13 Summary of Work
- 01 31 19 Project Meetings
- 01 31 19.13 Pre-Construction Meetings

1.03 Form of Schedules:

- A. Prepare schedules in form of a horizontal bar chart.
 - 1. Provide separate horizontal bar for each trade or operation.
 - 2. Horizontal Time Scale: Identify first work day of each week.
 - 3. Scale and Spacing: To allow space for notations and future revisions.
 - 4. Minimum Sheet Size: 11" x 17".
- B. Format of Listings: Chronological order of start of each item of work.

1.04 Content of Schedules:

- A. Construction Progress Schedule:
 - 1. Show complete sequence of construction by activity.

2. Show dates for beginning, and completion of, each major trade or operation.
- B. Submittal Schedule for Shop Drawings, Product Data and Samples. Show:
1. Dates for Contractor's submittal.
 2. Dates approved submittal will be required from Consultant.
- C. Products Delivery Schedule.
- D. Prepare and submit subschedules for each separate stage of work specified in Section 01 11 13.
- E. Provide subschedules to define critical portions of prime schedules.

1.05 Progress Revisions:

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:
1. Major changes in scope.
 2. Activity modified since previous submission.
 3. Revised projections of progress and completion.
 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
1. Problem areas, anticipated delays and impact on schedule.
 2. Corrective action recommended and its effect.
 3. Temporary protections and their implementation.

1.06 Submissions:

- A. Submit initial schedule within 7 days after award of Contract.

1. Consultant will review schedules and return review copy within 7 days after receipt.
 2. If required, resubmit within 7 days after return of review copy.
- B. Submit one reproducible transparency and one opaque reproduction.
- C. Submit revised progress schedules with each application for payment.

1.07 Distribution

- A. Distribute copies of reviewed schedules to Owner, job site file, subcontractors and other concerned parties.
- B. Instruct recipients to report promptly to Contractor, in writing, any problems anticipated by projections shown in schedules.

END OF SECTION

01 32 33 PHOTOGRAPHIC DOCUMENTATION

PART 1 GENERAL

1.01 Take 35 mm or digital color prints for documentation of installation of unit price items. Note on each print the date the picture was taken, the project number, the unit item and quantity installed as shown in the photograph. Photographs shall be keyed into the roof plan showing extent of unit price repair. Deliver 3 sets of dated and labeled prints and roof plan to the designated building owner's representative.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

01 22 13 Unit Price Measurement

END OF SECTION

01 33 23 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 SHOP DRAWINGS

- 1.01 Contractor shall submit in one (1) package with all material submittals and shop drawings for review and approval by the consultant.
- A. Should additional submittal packages be provided to the consultant for review by the contractor the rate of \$150.00 per hour shall be charged by The Town of Weston against the contractor's contract for additional submittal reviews.
- 1.02 Shop Drawing submittals shall consist of one (1) reproducible transparency and two (2) prints.
- A. Sepia transparency shall be capable of producing legible prints without excessive background as determined by the Consultant. Transparencies of poor quality shall be returned, marked, "resubmit."
- B. Allow a 3" margin on the right side of all drawings for processing stamp.
- 1.03 Each drawing shall be properly identified with the following:
- A. Subcontractor's and Contractor's name, address, and telephone number.
- B. Project title and number.
- C. Identification of drawing content.
- D. Date prepared.
- 1.04 At the time of submission, the contractor shall inform the Consultant in writing of any deviation in the shop drawings from the requirements of the Contract Documents.
- A. If deviations between shop drawing submittals and the Contract Documents are discovered either prior to or after shop drawing submittals are processed, the Contract Documents shall control and shall be followed.
- 1.05 The Contractor shall field verify all dimensions on shop drawings relating to existing or new construction and shall record them on drawings.

- 1.06 Drawings submitted directly to the Consultant by subcontractors or vendors shall not be accepted.
- 1.07 The Consultant will review shop drawings with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the Project and with the information given in the Contract Documents.
- 1.08 The Contractor shall make any corrections required by the Consultant and shall resubmit the specified number of corrected copies.

PART 2 PRODUCT DATA

- 2.01 Product Data submittals shall consist of four (4) sets of original documents, identified and processed in accordance with the provisions for shop drawings above, edited to delete all information not applicable to the Project.
 - A. Original documents shall be Manufacturer's published specifications, installation directions and recommendations, and standard details.
- 2.02 For all items specified to be installed in accordance with manufacturer's directions, indicate that the Installer has been forwarded a data submittal.

PART 3 SAMPLES

- 3.01 Sample submittals shall consist of four (4) sets, identified and processed in accordance with the provisions for shop drawings above.
- 3.02 Submit samples of size sufficient to show quality, type, range of color, finish, or texture. Submit product data describing items or materials submitted. Samples will be reviewed for appearance and finish only. Compliance with other requirements is the exclusive responsibility of the Contractor. The Consultant's unqualified determination shall be final. Materials furnished at the Site shall be equal in all respects to submitted samples.

END OF SECTION

01 35 23 OWNER SAFETY REQUIREMENTS

PART 1 GENERAL

- 1.01 Take all precautions to insure that the Owner's existing operations and facilities are not adversely affected by pollutants (i.e. dust, noise, vibration, water, odors, etc.) generated directly or indirectly by the work.
- 1.02 If so directed by the Owner, cease work immediately and until the cause of the pollution is detected and eliminated.
- 1.03 Schedule all work known to generate pollutants detrimental to the Owner's operation, after consultation with the Owner, for non-critical periods of time.
- 1.04 *Contractor shall follow all PPE protocol as directed by Building Owner.*
- 1.05 Related Work Specified Elsewhere:

01 12 16	Work Sequence
01 57 30	Pollution Control
01 73 29	Cutting and Patching
02 41 19.01	Selective Structure Demolition (Roofing)
06 10 53	Miscellaneous Rough Carpentry

END OF SECTION

01 35 29 HEALTH, SAFETY AND EMERGENCY RESPONSE PROCEDURES

PART 1 GENERAL

- 1.01 The Contractor shall exercise proper precautions and effect all applicable safety measures required for the protection of persons and/or property and shall be responsible for all injuries and/or damage to all persons and/or property, either on or off the Site, which occur as a result of his prosecution of the work under this Contract. The safety provisions of all applicable local/state/federal/OSHA laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Owner may determine to be reasonable and necessary.
- 1.02 The Contractor shall maintain accurate records of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on the work under this Contract in accordance with the requirements of the applicable state/local/federal regulations. The Contractor shall promptly furnish the Owner with copies of the above records if so requested.
- 1.03 The Contractor shall indemnify and save harmless the Owner and from any and all claims for damages resulting from personal injury, death and/or property damage, suffered or alleged to have been suffered, by any person as a result of any work conducted under this Contract.
- 1.04 The work described in these bid documents may involve hazardous material, operations, and equipment. These specifications do not purport to address all of the safety problems associated with the installation of this work. It is the responsibility of the Contractor to establish appropriate safety and health practices and to maintain compliance with regulations.
- 1.05 The Contractor shall provide fire extinguishers as required by state/local/federal requirements, but not less than one extinguisher within easy access to each area where power tools, roofing kettles, and/or torches are being used.
 - A. Contractor shall obtain written confirmation from the local fire marshal concerning type and size of fire extinguishers required.

END OF SECTION

01 35 53 SECURITY PROCEDURES

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Provide a project security program to:
 - 1. Protect Work, stored products and construction equipment from theft and vandalism.
 - 2. Protect premises from entry by unauthorized persons from Contract Areas.
- B. Protect Owner's operations at Site from theft, vandalism or damage from Contractor's work or employees.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- 01 50 00 Temporary Facilities and Controls
- 01 51 00 Temporary Utilities
- 01 51 33 Temporary Telecommunications
- 01 56 33 Temporary Security Barriers
- 01 61 00 Common Product Requirements
- 01 66 00 Product Storage and Handling Requirements

1.03 MAINTENANCE OF SECURITY

- A. Initiate security program promptly after job mobilization, when enclosure fence and gates are installed.
- B. Maintain security program throughout construction period, until Owner acceptance precludes need for Contractor security.

1.04 GENERAL

- A. Provide to the Owner and its representatives names and telephone numbers of at least two workers to respond to emergency leak situations.
- B. The contractor shall be solely responsible for damage, loss or liability due to theft or vandalism.

END OF SECTION

01 42 13 ABBREVIATIONS AND ACRONYMS

PART 1 GENERAL

1.01 Abbreviations and symbols used on the drawings are from the following master list:

BLKG	Blocking
EPDM	Ethylene-Propylene-Diene-Monomer
EX.	Existing
HT.	Height
MIN	Minimum
O.C.	On Center
Oz	Ounces
P.T.	Pressure Treated
RD	Roof Drain
S.S.	Stainless Steel
Sq. Ft.	Square Foot
T.C.	Test Cut
V.S.	Vent Stack
W/	With
WD	Wood

END OF SECTION

01 45 13 SOURCE QUALITY CONTROL PROCEDURES

PART 1 GENERAL

- 1.01 All manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer, unless indicated otherwise.
- 1.02 If printed instructions are not available or do not apply to Project conditions, consult the manufacturer's technical representative for specific recommendations before proceeding with the work.
- 1.03 Indicate on Product Data Submittal, Section 01 33 23(2.02) that the Installer has been forwarded a copy of the manufacturer's directions for installation.

END OF SECTION

01 45 16.13 CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

- 1.01 The Installer of materials or specified products shall examine the substrate and the conditions under which the work is to be performed, and notify the Contractor and Building Owner's Representative in writing of conditions detrimental to the proper and timely completion of the work.
- 1.02 Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer. To proceed constitutes acceptance of the substrata and the inherent risks therein.
- 1.03 Employ competent persons. The Contractor shall employ only competent persons on the Work and shall not employ persons or means which may cause strikes, work stoppages or any disturbances by workmen employed by the Contractor, any Sub-Contractor, the Owner, the Consultant or any other Contractor. Whenever the Owner or Consultant notifies the Contractor in writing that in his opinion any person on the Work is incompetent, unfaithful, disorderly, or otherwise unsatisfactory, or not employed in accordance with the provisions of the Contract, such person shall be discharged from the Work and shall not again be employed on it, except with the written consent of the Owner.
- 1.04 Intoxicating liquors. The Contractor shall not sell and shall neither permit nor suffer the introduction or use of intoxicating liquors or controlled substances upon or about the Work.

END OF SECTION

01 45 29 TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 GENERAL

- A. Owner may employ and pay for services on an Independent Testing Laboratory and/or Independent Inspection Service to perform specified testing and inspection.
 - 1. Cooperate with laboratory and/or inspection service to facilitate execution of its required services.
 - 2. Employment of laboratory and/or inspection service does not relieve Contractor's obligations to perform the Work of the Contract.
- B. Consultant reserves right to demand tests or special examination of any material or part thereof to insure compliance with Specifications, and may reject for satisfactory replacement, any material or part judged defective as a result thereof. Applies also to materials or sources of same substituted for those previously approved. Such tests or examinations, even though not specified, to be performed as and when required.
- C. Costs of tests or inspection ordered especially by authorized persons for purposes of proving existence of faulty material or workmanship, and prove to be faulty, to be borne by Contractor. If faulty standards are not discovered, costs of tests or inspections to be borne by Owner.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Certification of products: Respective sections of Specifications.
- B. Laboratory tests required, and standards for testing: Each Specification section listed.

1.03 CODE COMPLIANCE TESTING

Inspections and tests required by codes, or ordinances or by a plan approval authority, and made by a legally constituted authority to be responsibility of and to be paid for by Contractor, unless otherwise provided in Contract Documents.

1.04 CONTRACTOR'S CONVENIENCE TESTING

Inspection or testing performed exclusively for Contractor's convenience to be sole responsibility of Contractor.

1.05 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel and/or inspectors, provide access to work to manufacturer's operations.
- B. Secure and deliver to laboratory adequate quantities of representational samples of materials proposed to be used and which require testing.
- C. Furnish copies of Products test reports as required.
- D. Furnish incidental labor and facilities:
 - 1. To provide access to Work to be tested.
 - 2. To obtain and handle samples at Project site or at source of product to be tested.
 - 3. To facilitate inspections and tests.
 - 4. For storage and curing of test samples.
- E. Notify laboratory and/or inspection service sufficiently in advance of operations, minimum 24 hours, to allow for laboratory and/or inspection assignment of personnel and scheduling of tests.
 - 1. When tests or inspections cannot be performed after such notice, reimburse Owner for laboratory personnel and travel expenses incurred due to Contractor's negligence.

1.06 PAYMENT FOR TESTING SERVICES REQUIRED BY OWNER

- A. Owner will pay for initial testing and inspection services requested by Owner, as outlined in Article 1.09.
- B. Retesting: When initial tests indicate non-compliance with Contract Documents, subsequent retesting occasioned by Non-compliance to be performed by same testing laboratory and costs thereof will be deducted by Owner from Contract Sum.

1.07 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY OR INSPECTION SERVICE

- A. Laboratory or inspector is not authorized to:
 - 1. Release, revoke, alter or enlarge on requirements of Contract Documents.

2. Approve or accept any portion of the work.
3. Perform any duties of the Contractor.

1.08 LABORATORY AND INSPECTOR DUTIES

- A. Promptly submit written report on each test and inspection; one copy each to Architect, Structural Engineer, Owner, Contractor and governing Building Department, as required. Each report to include:
 1. Date issued.
 2. Project title and number.
 3. Testing laboratory name, address and telephone number.
- B. Perform additional tests and inspections as required by Engineer or Owner.

1.09 OWNER'S TESTING REQUIREMENTS

- A. Roofing Systems: Refer to Board Insulation, Ethylene-Propylene-Diene-Monomer (EPDM) Roofing – Fully Adhered, and Joint Sealants: Section 07 21 13, 07 53 23.01, and 07 92 00.

END OF SECTION

01 50 00 TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnish, install and maintain required construction aids, and interior protection, remove on completion of work.
- B. Comply with Federal, OSHA, State and local codes and regulations.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

01 35 23	Owner Safety Requirements
01 35 29	Health, Safety and Emergency Response Procedures
01 35 53	Security Procedures
01 45 13	Source Quality Control Procedures
01 45 29	Testing Laboratory Services
01 51 00	Temporary Utilities
01 51 33	Temporary Telecommunications
01 52 19	Sanitary Facilities
01 55 00	Vehicle Access and Parking
01 57 30	Pollution Control
01 61 00	Common Product Requirements
01 74 13	Progress Cleaning

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

Materials may be new or used, suitable for the intended purpose, but must not violate requirements of applicable codes and standards.

2.02 CONSTRUCTION AIDS

- A. Provide construction aids and equipment required by personnel and to facilitate execution of work; ladders, fall protection, stairs, ramps, runways, interior protection and equipment. Refer to respective sections for particular requirements for each trade.
- B. Maintain all facilities and equipment in a first-class condition.

PART 3 EXECUTION

3.01 PREPARATION

Consult with Consultant, review site conditions and factors which affect construction procedures and construction aids, including adjacent properties which may be affected by execution of work.

3.02 GENERAL

- A. Comply with applicable requirements specified in technical sections.
- B. Relocate construction aids as required by progress of construction, by storage or work requirements, and to accommodate legitimate requirements of Owner.

3.03 REMOVAL

- A. Completely remove temporary materials, equipment and services.
 - 1. When construction needs can be met by use of permanent construction.
 - 2. At completion of project.
- B. Clean, repair damage caused by installation or by use of temporary facilities.
 - 1. Remove foundations and underground installations for construction aids.
 - 2. Grade areas of site affected by temporary installations to required elevations and slopes, restore surfaces and clean the area.
- C. Restore existing facilities used for temporary purposes to original condition.

END OF SECTION

01 51 00 TEMPORARY UTILITIES

PART 1 GENERAL

1.01 WORK INCLUDED

Furnish, install and maintain temporary utilities required for construction, remove on completion of work.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

01 51 33	Temporary Telecommunications
01 52 13	Field Office and Shed
01 52 19	Sanitary Facilities

1.03 REQUIREMENTS OF REGULATORY AGENCIES

- A. Comply with National Electric Code.
- B. Comply with Federal, State and local codes and regulations and with utility company requirements.

PART 2 PRODUCTS

2.01 MATERIALS

Materials may be new or used, as specified, but must be adequate in capacity for required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

2.02 TEMPORARY ELECTRICITY AND LIGHTING

- A. Power is available on the Site. Owner will provide point of connection for temporary power during construction period and pay costs for power used. Contractor shall provide connections to existing facilities, size to provide service required for power and lighting.
- B. Install circuit and branch wiring, with area distribution boxes located so that power and lighting is available throughout construction without too much use of construction-type power cords.
- C. Provide adequate artificial lighting for all areas of work when natural light is not adequate for work, and for areas accessible to public.

2.03 TEMPORARY HEAT AND VENTILATION

- A. Provide temporary heat and ventilation as required to maintain adequate environmental conditions to facilitate progress of work, to meet specified minimum conditions for installation of materials, and to protect materials and finishes from damage due to temperature or humidity.
- B. Provide adequate forced ventilation of enclosed areas for curing of installed materials, to disperse humidity, and to prevent hazardous accumulations of dusts, fumes, vapors or gases.
- C. Portable heaters to be standard approved units complete with controls.
- D. Pay all costs of installation maintenance, operation and removal, and for fuel consumed.

2.04 TEMPORARY WATER

- A. Make connections to existing facilities, provide water for construction purposes; Owner will pay costs of water used.
- B. Install branch piping with taps located so that water is available throughout construction by use of hoses. Protect piping and fittings against freezing.

2.05 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain at all times the number of chemical toilet facilities required by governing code, including suitable enclosures. Temporary toilet facilities shall be kept in sanitary condition and shall be removed when no longer required; all damage to surroundings caused thereby shall be repaired. These facilities shall be kept padlocked whenever there is no work in progress. Use of toilet facilities within the building is prohibited to construction personnel. Location of temporary toilets to be acceptable to the Owner.

PART 3 EXECUTION

3.01 GENERAL

- A. Maintain and operate systems to assure continuous service. Modify and extend systems as work progress requires.

3.02 REMOVAL

- A. Completely remove temporary materials and equipment when their use is no longer required.
- B. Clean and repair damage caused by temporary installations or use of temporary facilities.
- C. Restore existing facilities used for temporary services to original condition.

END OF SECTION

01 51 33 TEMPORARY TELECOMMUNICATIONS

PART 1 GENERAL

- 1.01 Provide and maintain at all times a working cellular telephone on the roof.
- 1.02 Provide to the Owner and its representatives names and telephone numbers of at least two workers to respond to emergency situations.
- 1.03 Related Work Specified Elsewhere:
 - 01 51 00 Temporary Utilities

END OF SECTION

01 52 13 FIELD OFFICE AND SHEDS

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnish, install and maintain storage facilities as needed for construction.
- B. At completion of work, remove storage facilities.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- 01 51 00 Temporary Utilities
- 01 61 00 Common Product Requirements

1.03 REQUIREMENTS OF REGULATORY AGENCIES

Comply with requirements of Federal, OSHA, State and local codes and regulations.

1.04 OTHER REQUIREMENTS

Prior to installation of office and storage facilities, consult with Consultant/Building Owner on location, access and related facilities.

1.05 REQUIREMENTS FOR FACILITIES

- A. Portable or mobile buildings may be used. Location and size of mobile buildings to be approved by Owner.
- B. Storage Facilities:
 - 1. To requirements of various trades.
 - 2. Dimensions: Adequate for storage and handling of products.
 - 3. Ventilation: Comply with specified and code requirements for products stored.
 - 4. Heating: Adequate to maintain temperatures specified in the respective sections for products stored.

PART 2 PRODUCTS

2.01 MATERIALS, EQUIPMENT, FURNISHINGS

- A. May be new or used, but must be serviceable, adequate for the required purpose and must not violate applicable codes or regulations.

PART 3 EXECUTION

3.01 PREPARATION

- A. Fill and grade sites for temporary structures to provide surface drainage.

3.02 INSTALLATION

- A. Secure portable or mobile buildings when used.
- B. Provide steps and landings at entrance doors.

3.03 MAINTENANCE AND CLEANING.

Provide periodic maintenance and cleaning for temporary structures, furnishings, equipment and services.

3.04 REMOVAL

- A. Remove temporary storage facilities, contents and services at a time they are no longer needed.
- B. Remove foundations and debris; grade Site to required elevations and restore storage area to former condition.

END OF SECTION

01 52 19 SANITARY FACILITIES

PART 1 GENERAL

- 1.01 Provide and maintain at all times the number of chemical toilet facilities required by governing code, including suitable enclosures. Temporary toilet facilities shall be kept in sanitary condition and shall be removed when no longer required; all damage to surroundings caused thereby shall be repaired. These facilities shall be kept padlocked whenever there is no work in progress. Use of toilet facilities within the building is prohibited to construction personnel.
- 1.02 If women are employed in the work, provide separate, designated facilities for them of the same kind. Provide an adequate number of each kind of facility for each gender.
- 1.03 Related Work Specified Elsewhere:
- 01510 Temporary Utilities

END OF SECTION

01 55 00 VEHICULAR ACCESS AND PARKING

PART 1 ACCESS ROADS

- 1.01 The Contractor shall have use of the existing access roads but shall bear the responsibility for, and shall restore them to, their original condition.
- 1.02 No parking or storage of equipment shall be allowed on existing roadways, nor shall they be blocked by standing trucks or construction operations.
- a. Parking in the front of building will not be allowed so as to impede the flow of traffic or the ability of the public to drop off or pick up passengers.
 - b. No dumpster or storage related equipment will be allowed at the front of the building, including driveways, sidewalks and lawns.
- 1.03 Repair all related site constructions damaged during the course of the work.

PART 2 PARKING AREAS

- 2.01 The Contractor shall consult with the Owner's Representative and shall confine his use of the site for parking, storage, and related functions to the area(s) agreed upon.
- 2.02 At the completion of his operations, the Contractor shall remove all rubbish and debris.

END OF SECTION

01 56 33 TEMPORARY SECURITY BARRIERS

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Provide suitable barriers as required to prevent public entry, and to protect Work. Remove them after completion of Work.
- B. Comply with Federal, OSHA, State and local codes and regulations.
- C. Do not block egress from occupied building unless necessary to further the work of the contract in this case, secure the building owner's approval of an alternate egress plan.

1.02 RELATED WORK SPECIFIED ELSEWHERE

01 11 13	Summary of Work
01 35 53	Security Procedures
01 50 00	Temporary Facilities and Controls
01 74 13	Progress Cleaning

PART 2 PRODUCTS

2.01 MATERIALS

Materials may be new or used, suitable for intended purpose, but must not violate requirements for applicable codes and standards.

2.03 BARRIERS

Materials to be Contractor's option, appropriate to serve required purpose.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install facilities of a neat and reasonable uniform appearance, structurally adequate for required purposes.
- B. Maintain barriers during entire construction period.
- C. Relocate barriers as required by progress of construction.

3.02 REMOVAL

- A. Completely remove barricades, including foundations, when construction has progressed to point that they are no longer needed, and when approved by Consultant.
- B. Clean and repair damage caused by installation, fill and grade areas of Site to required elevations and slopes, restore surface and clean area.

END OF SECTION

01 57 30 POLLUTION CONTROL

PART 1 GENERAL

- 1.01 Take all precautions to insure that the Owner's existing operations and facilities are not adversely affected by pollutants (i.e. dust, noise, vibration, water, odors, etc.) generated directly or indirectly by the work.
- 1.02 If so directed by the Owner, cease work immediately and until the cause of the pollution is detected and eliminated.
- 1.03 Schedule all work known to generate pollutants detrimental to the Owner's operation, after consultation with the Owner, for non-critical periods of time.
- 1.04 Related Work Specified Elsewhere:
 - 01 73 29 Cutting and Patching
 - 02 41 19.01 Selective Structural Demolition (Roofing)
 - 06 10 53 Miscellaneous Rough Carpentry

END OF SECTION

01 61 00 COMMON PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE:

- 01 11 13 Summary of Work
- 01 33 23 Shop Drawings, Product Data and Samples
- 01 66 00 Product Storage and Handling Requirements
- 01 74 13 Progress Cleaning

1.02 STANDARDS AND REGULATIONS

- A. Industry Standards: Applicable standards of construction industry have same force and effect on performance of the work as if copied directly into contract document or bound therewith. Standards referenced in contract documents or in governing regulations have precedence over non-referenced standards, insofar as different standards may contain overlapping or conflicting requirements. Comply with standards in effect as of the date of contract documents, unless otherwise indicated. References shall include their addenda, if any, and shall be considered a part of this specification as if they were printed herein in full.

1.03 PRODUCTS, MATERIALS AND EQUIPMENT

- A. General Limitations: Where possible, provide entire required quantity of each generic product, material or equipment from a single source. In selection process provide compatible products, materials and equipment. In complying with requirements provide standard products which have been used previously and successfully in similar applications, and which are recommended by the manufacturer for the application indicated.
- B. Product selection: Comply with the following for selection of products, materials and equipment.
 - 1. Conform to applicable Specifications and standards.
 - 2. Comply with size, make, type and quality specified, or as specifically approved in writing by Consultant.
 - 3. Manufactured and Fabricated Products:
 - a. Design, fabricate and assemble in accord with best engineering and shop practices.

- b. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Two or more items of same kind to be identical, by same manufacturer.
 - d. Products to be suitable for service conditions.
 - e. Equipment capacities, sizes and dimensions shown or specified to be adhered to, unless variations are specifically approved in writing.
4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.
 5. Do not use material or equipment in an approved system that is not compatible, approved or recommended by manufacturer of system.
 6. Single Product Named: Provide only that product, unless determined to be unavailable, non-compatible with the work, or non-complying with requirements or governing regulations.
 7. Two or More Products Named: Contractor shall submit product for approval which complies with requirements, including applicable standards.
 8. Compliance with Standards: Contractor shall submit product for approval which complies with requirements, including applicable standards.
 9. Performance Requirements: Contractor shall submit product for approval which has been tested to show compliance with requirements, including indicated performances.
 10. Prescriptive Requirements: Contractor shall submit products for approval which have been certified by manufacturer to comply with requirements, including prescriptive requirements.
 11. Visual Requirements: Where indicated to be selected from manufacturer's standard options, selection will be made by Roofing Consultant/Engineer, subsequent to selection of manufacturer by Contractor. Where indicated to be selected from among standard

options available within industry, selection will be made by Roofing Consultant/Engineer prior to Contractor's selection of manufacturer.

C. Manufacturer's Instructions

1. When Contract Documents require that installation of work comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in installation, including two copies to Consultant. Maintain one set of complete instructions at job site during installation and until completion.
2. Handle, install, connect, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements.
 - a. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Consultant for further instructions.
 - b. Do not proceed with work without clear instructions.
3. Perform work in accord with manufacturer's instructions using approved or recommended components. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

D. Installation shall comply with manufacturer's instructions and recommendations. Anchor securely in place, accurately located and aligned with other work. Clean and protect to ensure that products, materials and equipment will be free from damage and deterioration at time of acceptance.

1.04 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of products in accord with construction schedules, coordinate to avoid conflict with work and conditions at Site.
1. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and undamaged.

- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.

1.05 STORAGE AND PROTECTION

- A. Store products in accord with manufacturer's instructions, with seals and labels intact and legible.
 - 1. Store products subject to damage by elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within ranges required by manufacturer's instructions.
 - 3. Store materials a minimum of 6 inches (150 MM) above ground on framework or blocking and cover with protective waterproof covering providing of adequate air circulation or ventilation.
 - 4. Use means necessary to protect materials before, during and after installation and to protect installed work and materials of all other trades.
 - 5. Protect sheet materials from corners breaking and damaging surfaces, while unloading.
 - 6. Protect fire-retardant materials against high humidity and moisture during storage and erection.
 - 7. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- B. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.
- C. Packages, materials, and equipment showing evidence of damage shall, at the discretion of the Consultant , be removed from the site.
 - 1. Salvageable items shall be repaired and/or refinished at the contractor's risk, and presented for the Owner's written approval. If rejected, they shall be removed from the site at no cost or penalty to the Owner.

- D. In event of damage, immediately make repairs and replacements necessary to approval of Consultant at no additional cost to Owner.
- E. Protection after Installation: Provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. Remove when no longer needed.

1.06 SUBSTITUTIONS

- A. Conditions: Requests by Contractor will be considered when reasonable, timely, fully documented and qualifying under one or more of the following circumstances:
 - 1. Required product cannot be supplied in time for compliance with Contract time requirements.
 - 2. Required product is not acceptable to governing authority, or determined to be non-compatible, or cannot be properly coordinated, warranted or insured, or has other recognized disability as certified by Contractor.
 - 3. Substantial advantage is offered Owner after deducting offsetting disadvantages including delays, additional compensation to Consultant/Engineer for redesign, investigation, evaluation and other necessary services and similar considerations.
- B. Submittals: Include full documentation, including product data, samples where appropriate, detailed performance comparisons and evaluation, testing laboratory reports where applicable, coordination information for effect on other work and time schedule, warranties and bonds, cost information for proposed change order, Contractor's general certification of recommended substitution, and similar information germane to circumstance.
- C. Consultant to be sole judge of acceptability of proposed substitution.
- D. Contractor is cautioned that unauthorized substitutions will not be acceptable at any time.
- E. Substitutions will not be considered if they are indicated or implied on shop drawing submissions.

END OF SECTION

01 66 00 PRODUCT STORAGE AND HANDLING REQUIREMENTS

PART 1 GENERAL

- 1.01 All materials and equipment shall be delivered, handled, and stored as required to prevent intrusion of foreign matter, damage by weather, breakage, or theft.
- A. All lumber, metals, and similar materials shall be stored on platforms under weathertight covers.
 - B. Store all rolled sheet products (i.e. roofing sheets, building paper) and insulation materials on platforms, under weathertight covers.
 - C. Do not store adhesives, solvents, or insulation within existing structures. Protect from ignition and fire.
- 1.02 Packages, materials, equipment showing evidence of damage shall, at the discretion of the Consultant , be removed from the site.
- A. Salvageable items shall be repaired and/or refinished at the contractor's risk, and presented for the Owner's written approval. If rejected, they shall be removed from the site at no cost or penalty to the Owner.
- 1.03 Do not overload the existing structure.

END OF SECTION

01 73 29 CUTTING AND PATCHING

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Be responsible for all cutting, fitting and patching required to complete the Work or to:
1. Make its several parts fit together properly.
 2. Uncover portions of Work to provide for installation of ill-timed work.
 3. Remove and replace defective work.
 4. Remove and replace work not conforming to requirements of Contract Documents.
 5. Remove samples of installed work as specified for testing.
 6. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

1.02 RELATED WORK SPECIFIED ELSEWHERE

01 11 13	Summary of Work
01 61 00	Common Product Requirements
02 41 19.01	Selective Structure Demolition (Roofing)
06 10 53	Miscellaneous Rough Carpentry
Drawing S-1	Di Salvo Ericson Group. Stressed Skin Panel Repairs

1.03 SUBMITTALS

- A. Submit a written request to Consultant one (1) week in advance of executing any cutting or alteration which affects:
1. Structural value or integrity of any element of Project.
 2. Integrity of effectiveness of weather-exposed or moisture-resistant elements or systems.
 3. Efficiency, operational life, maintenance or safety of operational elements.
 4. Visual quality of sight-exposed elements.

- B. Request to include:
 - 1. Description of the affected work.
 - 2. Necessity for cutting, alteration or excavation.
 - 3. Effect on work of Owner, any separate contractor, on structural or weatherproof integrity of Project.
 - 4. Description of the proposed work:
 - (a) Scope of cutting, patching, alteration or excavation.
 - (b) Trades who will execute work.
 - (c) Products proposed to be used.
 - (d) Extent of refinishing to be done.
 - 5. Alternatives to cutting and patching.
 - 6. Cost proposal, when applicable.
- C. Should conditions of work schedule indicate a change of products from original installation, submit a request for substitution as specified in Section 01 25 13.
- D. Submit a written notice to Consultant designating date and time work will be uncovered.

PART 2 PRODUCTS

2.01 MATERIALS

Comply with Specifications and standards for each specific product involved.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect existing conditions of Project, including elements subject to damage or to movement during cutting and patching.
- B. After uncovering work, inspect conditions, affecting installation of Products or performance of work.

- C. Discrepancies shall be submitted to the building owner's representative prior to proceeding with work.
- D. Report unsatisfactory or questionable conditions to Consultant in writing; do not proceed with work until the Consultant has provided further instructions.

3.02 PREPARATION

- A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of Work.
- B. Provide devices and methods to protect other portions of Project from damage.
- C. Provide protection from elements for that portion of Project which may be exposed by cutting and patching work, and maintain free from water.
- D. Verify dimensions for built in work and/or with adjoining that of other trades before ordering any materials or doing any work.

3.03 PERFORMANCE

- A. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs.
 -
- B. Employ original installer or fabricator to perform cutting and patching for:
 - 1. Weather-exposed or moisture-resistant elements.
 - 2. Sight-exposed finished surfaces.
- C. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- D. Restore work which has been cut or removed; install new products to provide completed Work in accord with requirements of Contract Documents.
- E. Fit work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- F. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:

1. For continuous surfaces, refinish to nearest intersection.
2. For an assembly, refinish entire unit.

END OF SECTION

01 74 13 PROGRESS CLEANING

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Execute cleaning, during process of Work, and at completion of Work, as required by General Conditions.
- B. Contractor shall be responsible for providing and installing interior protection and cleaning associated with infiltration of roofing related debris to interior spaces.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. 01 11 13 Summary of Work
01 35 23 Owner Safety Requirements
01 35 29 Health, Safety and Emergency Response Procedures

1.03 DISPOSAL REQUIREMENTS

Conduct cleaning and disposal operations to comply with codes, ordinances, regulations and anti-pollution laws.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by manufacturer of surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 EXECUTION

3.01 DURING CONSTRUCTION

- A. **Execute daily cleaning to keep work, site and adjacent properties free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.**

- B. Provide on-site containers for collection of waste materials, debris and rubbish. Location as directed by owners representative.
- C. Remove waste materials, debris and rubbish from site periodically and dispose of at legal disposal areas away from site.

3.02 DUST CONTROL

- A. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly coated surfaces.

3.03 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels and other foreign materials from sight-exposed interior and exterior surfaces.
- C. Wash and shine glazing.
- D. Polish glossy surfaces to a clear shine.
- E. Broom clean exterior paved surfaces; rake clean other surfaces of grounds.
- F. **Grounds around the specified roof area will be magnetically swept for a distance of 30'.**
- G. Prior to final completion, or Owner occupancy, Contractor to conduct an inspection of sight-exposed interior and exterior surfaces, and all work areas, to verify that entire work is clean.

END OF SECTION

01 76 00 PROTECTING INSTALLED CONSTRUCTION

PART 1 COMPLETED WORK

1.01 Unless indicated otherwise, the Installers of specialized assemblies and the Applicators of specialized coatings shall advise the Contractor of the proper procedures required for the protection of their work from damage or deterioration until the acceptance of the Project.

- A. Inform the contractor of all cleaning agents that may be detrimental to finish surfaces.

PART 2 FIRE PROTECTION

2.01 The Contractor shall, during the progress of construction, assume all responsibility for loss or damage by fire to the Work included in his contract until the date of transfer of insurance coverage.

- A. All fire used within the structure for working purposes shall be extinguished when not in use.
- B. No flammable materials shall be stored in the structure in excess of amounts allowed by the governing authorities. No gasoline or other liquid with a vapor flash point lower than gasoline shall be stored in or close to the building at any time, and none shall be left in the structure outside of working hours.
- C. Contractor shall provide adequate portable fire extinguishers (fully charged and properly serviced) in the work areas.
- D. **No smoking at the job site shall be allowed during any phase of this reroofing project.**

PART 3 VANDALISM AND/OR THEFT

3.01 The Contractor shall be solely responsible for damage, loss or liability due to theft or vandalism to the Work included in his contract 24 hours per day, every calendar day from the date of contract signing to the date of transfer of insurance coverage. The Contractor may, if he chooses, employ a watchman during said periods at no additional cost to the Owner.

END OF SECTION

01 77 19 CLOSE OUT REQUIREMENTS

PART 1 GENERAL

1.01 DESCRIPTION

- A. Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the Work.
- B. Fiscal provisions, legal submittals and additional administrative requirements in Conditions of the Contract.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A.

01 74 13	Progress Cleaning
01 78 37	Warranties and Bonds
01 78 39	Project Record Documents
- B. Close-out submittals required of trades: Respective Sections of Specifications.

1.03 SUBSTANTIAL COMPLETION

- A. When Contractor considers Work is substantially complete, submit to Consultant:
 - 1. A written notice that Work, or designated portion thereof, is substantially complete.
 - 2. A list of items to be completed or corrected.
- B. Within a reasonable time after receipt of such notice, Consultant will make an inspection to determine status of completion.
- C. Should Consultant determine that work is not substantially complete:
 - 1. Consultant will promptly notify Contractor in writing, giving reasons therefore.
 - 2. Contractor to remedy deficiencies in Work and send a second written notice of substantial completion to Consultant.
 - 3. Consultant will reinspect Work.

- D. When Consultant concurs that Work is Substantially complete, he will:
 - 1. Prepare a Certificate of Substantial Completion on AIA Form G704, accompanied by Contractor's list of items to be completed or corrected, as verified and amended by Consultant.
 - 2. Submit Certificate to Owner and Contractor for their written acceptance.

1.04 FINAL INSPECTION

- A. When Contractor considers Work is complete, submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents.
 - 4. Equipment and system have been tested in the presence of Owner's representative and are operational.
 - 5. Work is completed and ready for final inspection.
- B. Consultant will make one (1) final inspection to verify status of completion with reasonable promptness after receipt of such certification.
- C. Should Consultant consider that Work is incomplete or defective:
 - 1. Consultant will promptly notify Contractor in writing, listing incomplete or defective work.
 - 2. Contractor to take immediate steps to remedy stated deficiencies, and send a second written certificate to Consultant that Work is complete.
 - 3. The contractor shall be responsible for the cost of additional site visits beyond the one (1) field inspection allotted for verification of work completed. The Town of Weston shall charge the sum of \$1,400 per additional site visit against the contractors contract.
- D. When Consultant finds that Work is acceptable under Contract Documents, he will request Contractor to make close-out submittals.

1.05 REINSPECTION FEES

- A. Owner will compensate Consultant for such additional services, should Consultant perform reinspection due to failure of Work to comply with claims of status of completion made by Contractor.
- B. Owner will deduct amount of such compensation from final payment to Contractor.

1.06 CONTRACTOR'S CLOSEOUT SUBMITTALS TO CONSULTANT

- A. Evidence of compliance with requirements of governing authorities:
 - 1. Certificates of Inspection for various trades.
- B. Project Record Documents: To requirements of Section 01 78 39.
- C. Warranties and Bonds: To requirements of Section 01 78 37.
- D. Evidence of Payment and Release of Liens: To requirements of General and Supplementary Conditions.
- E. Certificate of Insurance for Products and Completed Operations.

1.07 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit a final statement of accounting to Consultant.
- B. Statement to reflect all adjustments to Contract Sum:
 - 1. Original Contract Sum.
 - 2. Additions and deductions resulting from:
 - a. Previous Change Orders.
 - b. Deductions for uncorrected Work.
 - c. Deductions for reinspection payments.
 - d. Other adjustments.
 - 3. Total Contract Sum, as adjusted.
 - 4. Previous payments.

5. Sum remaining due.

C. Consultant will prepare a final Change Order, reflecting approved adjustments to Contract Sum which were not previously made by Change Orders.

1.08 FINAL APPLICATION FOR PAYMENT

Contractor to submit final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

END OF SECTION

01 78 36 WARRANTIES

PART 1 GENERAL

1.01 Submit Guarantees or Warranties in triplicate on firm's letterhead, properly executed and enacted. Submit in the following form, unless specified otherwise.

Weston Public Library
56 Norfield Road
Weston, Connecticut

We, _____ (firm name) _____, hereby guarantee (or warrant) all _____ (description of work or product) _____ for a period of _____ years after the substantial completion date of (date) the Project indicated above, against (description of the specific types of failures of materials and/or workmanship), in accordance with the requirements of Section (number) , (section title, page (number)), Article (number), of the Contract Documents.

Signed _____ (Subcontractor)

by _____ (Authorized Agent)

Title _____

Business Address

Signed _____ (Contractor)

by _____ (Authorized Agent)

Title _____

Business Address

1.02 All Guarantees or Warranties supplied by suppliers or manufacturers shall be countersigned by the Subcontractor and the General Contractor.

1.03 All signatures and seals (if required) shall be originals. No copies shall be accepted.

1.04 Schedule of Guarantees/Warranties:

A. Section 07 53 23.01 Ethylene-Propylene-Diene-Monomer (EPDM) Roofing
– Fully Adhered

1. Contractor 2 Year Roofing Guarantee

2. Manufacturer's 20 Year NDL Warranty including premanufactured metal edging
- B. Section 07 31 29.17 Wood Shingle Roofing
 1. Contractor 2 year warranty
 - D. Section 07 60 00, Flashing and Sheet Metal
 1. Contractor 2 Year Warranty
 - E. Section 07 92 00, Joint Sealants
 1. Contractor 2 Year Guarantee

END OF SECTION

01 78 37 WARRANTIES AND BONDS

PART 1 GENERAL

1.01 DESCRIPTION

- A. Compile specified warranties and bonds.
- B. Review submittals to verify compliance with Contract documents.
- C. Submit to Consultant for review and transmittal to Owner.

1.02 RELATED REQUIREMENTS IN OTHER PARTS OF PROJECT MANUAL

- A. Bid or Proposal Bonds: Instructions to Bidders.
- B. Performance Bond and Labor and Material Payment Bond: Conditions of the Contract.
- C. General Warranty of Construction: Conditions of the Contract.

1.03 RELATED ITEMS SPECIFIED ELSEWHERE

- A. 01 77 19 Close Out Requirements
01 78 36 Warranties
- B. Warranties and Bonds Required for Specific Products: Each respective Section of Specifications.
- C. Provisions of Warranties and Bonds, Duration: Each respective Section of Specifications which specifies product.

1.04 SUBMITTAL REQUIREMENTS

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of respective manufacturers, suppliers and subcontractors.
- B. Number of original signed copies required: One each.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
 - 1. Product or work item

2. Firm, with name of responsible principal, address and telephone number
3. Scope
4. Date of beginning of warranty, bond or service and maintenance contract
5. Duration of warranty, bond or service maintenance contract
6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure
 - b. Instances which might affect the validity of warranty or bond

1.05 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
 1. Size 8-1/2 inch x 11 inch, punch sheets for 3-ring binder
 - a. Fold larger sheets to fit into binders
 2. Cover: Identify each packet with typed or printed title, "WARRANTIES AND BONDS." List
 - a. Title of Project
 - b. Name of Contractor
- C. Binders: Commercial quality, 3-ring, with durable and cleanable plastic covers.

1.06 TIME OF SUBMITTALS

- A. Otherwise make submittals within ten days after Date of Substantial Completion, prior to final request for payment.
- B. For items of work, where acceptance is delayed materially beyond Date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

1.07 SUBMITTALS REQUIRED

Submit warranties, bonds, service and maintenance contracts as specified in respective sections of Specifications.

END OF SECTION

01 78 39 PROJECT RECORD DOCUMENTS

PART 1 GENERAL

- A. Maintain at project site for owner one record copy of:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda
 - 4. Change orders and other modifications to Contract.
 - 5. Consultant field orders or written instructions.
 - 6. Approved shop drawings, product data and samples.
 - 7. Field test records.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Conditions of the Contract.
- B. 01 33 23 Shop Drawings, Product Data and Samples

1.03 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples apart from documents used for construction.
- B. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- C. Make documents and samples available at all times for inspection by Consultant.

1.04 MARKING DEVICES

Provide felt-tip marking pens for recording information in color code designated by Consultant.

1.05 RECORDING

- A. Label each document 'PROJECT RECORD' in neat large printed letters.
- B. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.

- C. Drawings: Legibly mark to record actual construction:
1. Location of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of structure.
 2. Field changes of dimension and detail.
 3. Changes made by Field Order or by Approved Change Order.
 4. Details not shown in original Contract Drawings.
 5. All access doors.
 6. Any approved substitutions.
- D. Specifications and Addenda: Legibly mark each section to record:
1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
 2. Changes made by Field Order or by Change Order.
- E. Prior to submitting Project Record Drawings to Consultant for Owner, Contractor to record on each sheet, Contractor's name and address, statement attesting that the recorded information are the actual conditions with his or his authorized representative's signature.

1.05 SUBMITTAL

- A. At Contract closeout, deliver Record Documents to Consultant for Owner.
- B. Accompany submittal with transmittal letter in duplicate containing:
1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. Title and number of each Record Document.
 5. Signature of Contractor or his authorized representative.

END OF SECTION

02 25 29.23 ROOFING INVESTIGATIONS

PART I GENERAL

- 1.01 The contractor is advised that information provided is for convenience only and not warranted for accuracy.
- 1.02 Contractor shall investigate existing conditions such that compliance with all local, state and federal regulations and guidelines are observed and followed.
- 1.03 Roof #1 Test cuts:
 - A. Test Cut #1 – Ballasted EPDM, 3.0” rigid insulation, plywood deck.
 - B. Test Cut #2 – Ballasted EPDM, 3.0” rigid insulation, plywood deck.
 - C. Test Cut #3 – Ballasted EPDM 3.0” rigid insulation, plywood deck.
 - D. Test Cut #4 – Ballasted EPDM, 3.0” rigid insulation, plywood deck.
 - E. Test Cut #5 – Ballasted EPDM, 3.0” rigid insulation, plywood deck.
- 1.04 Existing wood shingles are installed over wood lath and underlayment felt installed over pre-engineered plywood deck panels.

END OF SECTION

02 41 19.01 SELECTIVE STRUCTURE DEMOLITION (ROOFING)

PART 1 GENERAL

1.01 Related Documents:

The General Conditions, the Supplementary General Conditions and any Special Requirements are hereby made a part of this section.

1.02 This Contractor shall provide all labor, equipment and materials required to perform the work called for in this Section. This Contractor shall coordinate his work with other trades and work in other sections.

1.03 Work of this Section includes but is not limited to the following:

- A. Removal and disposal of all wood shingles, lath, underlayments, membranes, insulation, flashings, bituminous roofing materials, single ply roofing materials, base flashings, edging, vent stacks, flashing, etc., down to surface of wood deck substrate.
- B. Removal and disposal of deteriorated plywood decking per unit price.
- C. Removal and disposal of deteriorated wood blocking, eave and rake edges per unit price costs.
- D. Removal and resetting of roof drains.

1.04 Related work specified elsewhere includes:

01 74 13	Progress Cleaning
06 10 53	Miscellaneous Rough Carpentry
Drawing S-1	Di Salvo Ericson Group. Stressed Skin Panel Repair

1.05 Quality Assurance:

All work of this Section shall be carried out in accordance with the State Demolition Code.

PART 2 MATERIAL

2.01 Poly tarps.

PART 3 EXECUTION

- 3.01 Prior to commencing any work called for in this Section, carefully examine the substrata and conditions under which the work is to be performed and notify the Architect/Consultant in writing of any unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected. Start of work shall indicate acceptance of conditions.
- 3.02 Contractor at no time shall uncover more roof area than can be covered with new roofing and made watertight by the end of the working day or in case of a sudden storm. Contractor shall have on hand sufficient quantities of temporary covers in case of a sudden rain storm to dry-in the area. At the end of each day, install a temporary patch between new roofing and existing roofing to completely seal against moisture penetration.
- 3.03 Remove bituminous and elastomeric roofing, insulation, vapor retarders, base sheets and miscellaneous flashings from roof area, taking care not to damage existing roof deck.
- 3.04 Contractor shall not drop materials from the roof or remove materials or equipment in such a manner as to cause unnecessary noise or dust. All debris to be trash chuted into covered containers. No debris shall be visible on the grounds at the end of each work day.
- 3.05 All debris resulting from the work performed under this Section shall be cleaned up daily, loaded in proper containers, and removed from the site and disposed of by the Contractor.
- 3.06 Deck surface shall be left clean, dry, and dust free, ready for application of new roofing materials.
- 3.07 Temporarily remove with care roof mounted mechanical equipment and all other roof accessories as required for the proper execution of the work called for in other sections of the specifications. Notify the Owner at least two (2) days prior to temporary removal of equipment.
- 3.08 Reinstall all items which were disturbed after other work is complete. Restore to original condition.
- 3.09 Those items which are not to be incorporated into the new roofing are to be removed and properly disposed of.

END OF SECTION

06 10 53 MISCELLANEOUS ROUGH CARPENTRY

PART 1 GENERAL

- 1.01 The General Conditions, the Supplementary General Conditions and any Special Requirements are hereby made a part of this Section.
- 1.02 This Contractor shall provide all labor, equipment and materials to perform the work called for in this Section. This Contractor shall coordinate his work with other trades and work in other sections.
- 1.03 Work includes but is not limited to the following:
- A. All items required to complete rough carpentry including plywood decking, curbs, wood blocking, nailing strips, furring, anchoring, shoring, bracing, rough bucks, cant strips, shims and nailers, and miscellaneous closures for all work, including electrical, mechanical work requiring such work as described elsewhere in the specifications and plans.
 - B. All rough hardware required for fabrication and installation of the work, including bolts, spikes, anchors, nails, braces, insulation and similar items.
 - C. Temporary enclosures as required for protection of work, equipment and materials and at building entrances.
 - D. Replacement of deteriorated blocking per Unit Price "A".
 - E. Replacement of deteriorated wood plywood decking per Unit Price "B".
 - F. Replacement of deteriorated wood fascia at eaves per Unit Price "C".
 - G. Replacement of deteriorated wood fascia at rake edge per Unit Price "D".
 - H. Resecurement of existing blocking which is to remain in place.
 - I. Installation of wood lath over prepared structural plywood deck on Roofs S-1 through S-14.
 - J. Removal and reinstallation of wood trim for installation of new step and base flashings as required.
 - L. Preparation and installation of vented ridges.
- 1.04 Special Unit Prices
- A. Special unit prices are required for certain work of this section. The actual quantity used will be verified by the contractor and construction coordinator/specialist.

- B. Include 100 In. ft. of rotted wood blocking within Base Bid.
- C. Include 32 sq. ft. of rotted plywood decking within Base Bid.
- E. Include 100 In. ft. of rotted wood fascia at building eave in Base Bid. Match existing in dimension and configuration.
- F. Include 100 In. ft. of rotted wood trim at building rake edge in Base Bid. Match existing in dimension and configuration.

1.05 Related Work Specified Elsewhere

- 01 32 33 Photographic Documentation
- 02 41 19.01 Selective Structural Demolition (Roofing)
- Drawing S-1 Di Salvo Ericson Group- Stressed Skin Panel Repair
- 07 21 13 Board Insulation
- 07 31 29.7 Wood Shingles
- 07 53 23.01 Ethylene-Propylene-Diene-Monomer Roofing (Fully Adhered EPDM)
- 07 60 00 Flashing and Sheet Metal
- 09 91 13 Exterior Painting

1.06 Submittals

- A. Submit sample of new wood blocking.
- B. Submit certification of pressure treatment and kiln drying.
- C. Sample of fasteners.
- D. Certification of fastener corrosion resistance.

1.07 Quality Assurance

- A. *American Wood Council (AWC):
"National Design Specification for Wood Construction" 2018 Edition*
- B. *Southern Forest Products Association (SFPA):
"Grading Rules and Standards" 2018 Edition*
- C. *Western Wood Products Association (WWPA):
"Western Lumber Grading Rules" 2017 Edition*
- D. *National Lumber Grades Authority (NLGA):
"Standard Grading Rules for Canadian Lumber" 2017 Edition*
- E. *American Wood Protection Association (AWPA):*

UC3B "Exterior Construction, above ground, *uncoated or poor water run-off*"

- F. American Plywood Association (APA):
"Engineered Wood Construction Guide: Roof Construction" 2019 Edition
- G. Keep materials dry during delivery and storage. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber and plywood, and provide air circulation within the stacks.
- H. Factory-mark each piece of lumber and plywood with type, grade, mill and grading agency identification and submit mill certificate that material has been inspected and graded in accordance with requirements.

PART 2 PRODUCTS

- 2.01 Lumber for blocking, nailing and similar concealed work shall be graded and marked by the Manufacturer's Association recognized as responsible for the grading rules of the species involved. All rough lumber shall be air-seasoned or kiln dried to a moisture content not to exceed 19%.
- 2.02 All lumber shall be surfaced four sides and dressed to mill sizes.
- 2.03 Lumber species for blocking, nailing strips, wood cants and the like shall be Douglas Fir-Larch or Southern Pine No. 2 or better.
- 2.04 All lumber including plywood shall be pressure treated with water-borne, salt-treated preservative in accordance with American Wood Preservers Association (AWPA) Standards LP-2 and shall also bear American Wood Preservers Association (AWPA) quality mark designation. Wood preservative shall be Celcure, Wolman Salts, Chemonite, or approved equal. Oil based preservatives, such as creosote, will not be used. Cuprinol coatings are not acceptable. All pressure treated materials shall be kiln dried after treatment. Treater shall stamp KDAT on all pieces.
 - A. Plywood for pressure treatment shall be marked V-600 Series
- 2.05 **When removing and replacing with new wood trim, fascia, soffits, molding etc. shall be of the same species to match existing unless otherwise specified or shown in detail drawings.**
- 2.06 Fasteners shall be corrosion resistant and suitable for the intended use, unless shown otherwise.
 - A. Wood to wood, use hot dip galvanized nails. ASTM A153 and NER 272.
 - B. Screw fasteners shall be stainless steel #12 or larger. They shall meet the requirements of FM document 4470 as it relates to corrosion, as

manufactured by Olympic, Buildex, Dekfast or membrane manufacturer's approved equal for securement into pressure treated wood.

C. Concrete or masonry fasteners shall be stainless steel such as Rawl "Drive" or Tapper", Gripcon, or fluorocarbon coated such as Tapcon, or approved equal.

D. Nails for trim shall be "Splitless Siding 3304 Stainless Steel".

2.07 Ridge vents: Continuous, black, Model:V-600CS Size: 4-1/4"x1", having a net free area of 20 sq. in. per ft. as manufactured by Cor-A-Vent Inc.

2.08 Eave and rake vents: Continuous, black, Model: S-400 Size: 1"x1-1/2"x4,' having a net free area of 9 sq. in. per ft. as manufactured by Cor-a-vent, Inc.

PART 3 EXECUTION

3.01 Inspection:

A. Contractor shall investigate underside of metal and wood decks for items which may become penetrated by mechanical fasteners. Contractor shall exercise caution to avoid damaging items below the deck. Contractor shall repair at his cost any items damaged by mechanical fasteners.

3.02 Workmanship:

A. Measurements required to insure proper fitting of all work will be obtained or verified at the building.

1. Fastening shall be as recommended by State Building Code Anchor and Nail schedule.

B. Crooked, warped, bowed, or cracked materials shall not be employed. Where found they shall be replaced.

3.03 Blocking, etc.

A. All necessary underlayment for various roofs, nailing strips, cant strips, and blocking, shall be installed to fulfill the purposes for which they are to be used and as detailed. Top of blocking shall finish flush with top of insulation.

1. Wood blocking at perimeter parapets shall be fastened 12" o.c. maximum, staggered.

B. Fasten *plywood 6"* on center at the 4' ends. Fasten 12" on center in 3 rows 24" on center in the field.

1. Plywood at perimeter parapets shall be fastened maximum 6" o.c. at end joints and 12" o.c. in field spaced 24" o.c. maximum.
- C. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown.
- D. Replace deteriorated existing blocking per Unit Price "A". Fasten replacement blocking with proper fasteners for substrate, spaced 24" on center, staggered maximum.
- E. Refasten existing blocking which is to remain in place as required.
- F. Replace deteriorated existing exterior wood fascia at roof eave per Unit Price "C". Fasten replacement trim with proper fasteners for substrate, spaced maximum 24" o.c.
- G. Repair deteriorated existing exterior wood rake edge per Unit Price "D". Fasten replacement trim with proper fasteners for substrate spaced approximately 24" o.c.
- H. Provide and installed plywood deck extension at transition of S-20 and R-1 knee wall/parapet. Include installation of fascia extension and repair/replacement of soffit.
- J. Cut and prepare existing deck at ridge locations to allow for installation of ridge vents.

3.04 Rough Hardware:

- A. All rough hardware and metal fastenings specified herein, or required for proper installation of carpentry shall be provided and installed. Nails, screws, bolts, anchors and similar items shall be stainless steel or hot dipped galvanized, sized, and of types shown or of approved size and types required to secure members rigidly in place.

3.05 Furnish and install pressure treated lumber for all roof nailers, stripping, fillers, blocking and nailing for all sheet metal work. Coat or paint all cuts and holes required with a concentrated solution of the preservative, in accordance with AWPA Standard M-4.

3.06 Temporary Protection

- A. Provide temporary protection such as wood doors, wood railings, protection on stairs, at floor openings and the like; maintain in good condition and satisfactory repair during life of contract.

3.07 Job Conditions

- A. Prior to commencing any work called for in this Section, carefully examine the substrata and conditions under which the work is to be performed and notify the owner's representative in writing of any unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected. Start of work shall indicate acceptance of conditions.

3.08 Method of measurement and payment.

- A. The Project Representative shall be notified of all areas to be repaired.
- B. The quantities of each Unit Price (A-D) item shall be noted and signed for by both the contractor's representative and the Project Representative.

END OF SECTION

07 21 13 BOARD INSULATION

PART 1 GENERAL

- 1.01 The General Conditions, the Supplementary General Conditions and any Special Requirements are hereby made a part of this Section.
- 1.02 This Contractor shall provide all labor, equipment and materials to perform the work called for in this Section. This Contractor shall coordinate his work with other trades and work in other sections.
- 1.03 Work includes but is not limited to the following:
- A. Multiple layers of tapered and flat roof insulation with 1/2" *high density* overlayment board under fully adhered EPDM membrane as manufactured by Firestone or membrane manufacturers approved equal.
 - B. Roofs R-1 and R-2
- 1.04 *Manufacturers*
- A. *Specification is based on use of Firestone building products, other acceptable manufacturers include Carlisle and Johns Manville.*
- 1.05 Related work specified elsewhere includes:
- | | |
|-------------|---|
| 01 57 30 | Pollution Control |
| 01 73 29 | Cutting and Patching |
| 06 10 53 | Miscellaneous Rough Carpentry |
| 07 53 23.01 | Ethylene-Propylene-Diene-Monomer Roofing (Fully Adhered EPDM) |
| 07 60 00 | Flashing and Sheet Metal |
- 1.06 Reference Standards:
- A. FM 1-75 Fastening Pattern
 - B. FS-HH-I-1972/Gen Foam Plastic Insulation
 - C. FS-HH-I-1972/2 Foam Plastic Insulation.
- 1.07 Submittals: Submit product data and samples of all materials. Submit certification of corrosion resistance of fasteners.

- 1.08 Product Handling: Deliver materials in manufacturer's original containers, in sufficient quantity to allow continuity of work. Store on clean, raised platforms with approved weather protection when stored outdoors. Insulation shall be completely protected while in storage and during application to keep it dry at all times.
- 1.09 Job Conditions: Proceed with work only when weather conditions are in compliance with manufacturer's recommendations. Do not work in wet weather.

PART 2 PRODUCTS

2.01 Insulation

- A. Polyisocyanurate insulation, "ISO 95+GL" as manufactured by Firestone, size 4'x8', thickness 1.0", 2.0" and tapered, aged R-5.0 (1.0"), compressive strength of 25 psi. Tapered insulation 1/4" per foot, size 4'x4', aged R=5.0 (1.0") as provided by membrane manufacturer or approved equal.

1. Reference Standards

- a. ASTM D2126 Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging.
- b. ASTM D1621 Test Method for Compressive Properties of Rigid Cellular Plastics
- c. ASTM C209 Test Method for Cellular Fiber Insulating Board
- d. ASTM E96 Test Method for Water Vapor Transmission of Materials
- e. ASTM D1622 Test Method for Apparent Density of Rigid Cellular Plastics
- f. ASTM E84 Test Method for Surface Burning Characteristics of Building Materials

2.02 Overlayment board,

- A. High density, closed cell, polyisocyanurate foam core with coated glass facer, "ISOGARD HD Cover Board" as manufactured by Firestone. Size: 4'x4', Thickness: ".5," R-Value: 2.5, Compressive Strength: 120psi

2.03 High performance fasteners for securement of insulation to metal deck, with minimum 3" washers as manufactured by membrane manufacturer or membrane

manufacturers approved equal. Fasteners shall be FM approved. Fasteners shall be sized to penetrate through metal deck minimum of 1".

1. Fastening in field of roof shall be a minimum of *eight (8) fasteners per 4' x 8'*.
 2. Fastening at perimeter edges for a distance of 12' shall be a minimum of *sixteen (16) fasteners per 4' x 8'*.
 3. Fastening at corners for a distance of 12' in each direction shall be *thirty-two (32) fasteners per 4' x 8'*.
 4. *Fastener patterns specified may be more stringent than manufacturer's recommendation; the more stringent shall apply.*
- 2.04 Two component, construction grade, insulating, low-rise polyurethane adhesive for securement of overlayment board to insulation. Adhesive shall be as manufactured by roof membrane manufacturer. Adhesive shall be mechanically applied in 1/2" wet bead ribbons in rows 6" on center in field of roof and 4" on center at perimeters and corners.
- 2.05 Cant and Edge Strips: Preformed meeting ASTM C728. Edge strips 18" wide, as manufactured by Johns Manville or manufacturer's approved equal.
- 2.06 Asphalt Primer: ASTM D41

PART 3 EXECUTION

- 3.01 Inspection: Verify that substrate is clean, dry, and proper for application of insulation. All work of other trades penetrating the roof deck must be complete. Verify that all wood blocking is installed. Do not proceed until all defects are corrected.
- A. Contractor shall investigate underside of deck. Contractor shall exercise caution to avoid damaging items below the deck. Contractor shall repair at his cost any items damaged.
- 3.02 Insulation Installation: Roofs R-1 and R-2
- A. *Mechanically fasten polyisocyanurate insulation pack directly to the plywood deck with a minimum of 16 fastener per 4x8 board with enhanced fastening at perimeter edges and outside corners. Fasteners shall be sized to penetrate through the deck a minimum of 1". Install with staggered end joints. Lay with long dimension joints continuous. Cut boards neatly to fit all penetrations and projections. Fill all voids.*

3.03 *Insulation overlayment and tapered edge strips:*

A. *Install one (1) layer of ½" high density overlayment and edge strips set in ½" ribbon of adhesive spaced 12" on center with additional enhancements at perimeter edges and corners.*

1. *Application of foam adhesive in field of the roof should be at the rate of 12" on center.*
2. *Application of foam adhesive at perimeter edges shall be at the rate of 8" on center for distances shown in Detail Drawings.*
3. *Application of foam adhesive at outside corners shall be at the rate of 6" on center for distances shown in Detail Drawings.*

3.04 Form drain sumps using tapered insulation as shown on Drawings.

3.06 Protection: Do not install more insulation at one time than will be protected from wetting or other damage by installation of roofing membrane on the same day or prior to rain or dew. Remove installed insulation that has become wet and replace with dry material. Protect installed insulation at all times against damage by roof traffic.

3.07 Insulation shall be staggered and protected at the end of each day.

3.08 Leave surface ready to receive fully adhered EPDM membrane.

END OF SECTION

07 31 29.17 WOOD SHINGLES

PART 1 GENERAL

1.01 The General Condition, the Supplementary General Conditions and any Special Requirements as they apply to this project.

1.02 The Contractor shall provide all materials, labor, equipment, and services necessary to furnish, deliver and install all work of this Section as shown on the drawings, as specified herein, and/or as required by job conditions.

1.03 Related work specified elsewhere includes:

06 10 53 Miscellaneous Rough Carpentry

07 60 00 Flashing and Sheet Metal

1.04 Work Included

A. Reference to "Shingles" for this project on drawings or specs shall mean; "Number 1 Blue Label" with "Certi-Last" preservative treatment.

B. Cedar shingle roofing, complete with moisture shedding underlayment, ice dam protection, copper valleys, drip edges, gutters, base and step flashings, ridge caps and scuppers.

1.05 References

A. Cedar Shake & Shingle Bureau

B. N – 30 ASTM D – 4869 – Asphalt – Saturated Roofing Felt.

C. FS SS – C – 153 – Cement, Bituminous, Plastic.

D. ASTM B – 101, B – 370 – 20 oz. Lead Coated Copper Roofing Sheets

E. W. R. Grace Ice and Water Shield

F. Revere Copper and Common Sense

G. NRCA Steep Roofing Manual

1.06 Shop Drawings

- A. Submit shop drawings of metal flashings, as related to the shingle roofing.
- B. Clearly indicate general construction, configurations, jointing methods and locations, fastening methods and locations and installation details.

1.07 Submittals

- A. Submit physical samples with certifications of pressure treated lumber to be used as space sheathing, samples of nails for the fastening of shingles, physical sample of two pieces of wood cedar shingles minimum 6" width by proper length.
- B. Provide mock-up of shakes including valley flashing as directed by Consultant for review prior to installation of new cedar shake roofing.

PART 2 PRODUCTS

2.01 Roofing Materials

- A. Red Cedar Shingles: Premium grade, Number 1, Blue Label, Red Cedar Shingles, with Certi-Last .40 CCA preservative treatment. Shingles shall be 24" length x 5/8" butt thickness with a minus tolerance of 1/16" in 10% of the bundle. Exposure shall be 5-1/2".
- B. Underlayment: Cellulose fiber building paper, water repellent breather type; Type 30 ASTM D – 4869 unperforated asphalt felt.
- C. Fasteners: Nails shall be *non-metallic* 4D 316 Stainless steel ring shank nails. Length of nails shall penetrate a minimum of 3/4" into lath.
- D. Plastic Cement: FS SS –C- 153, cut back asphaltic type with mineral fiber components.
- E. *Roof Deck Joint Stripping: 4" wide strip of self-adhering polymer-modified bitumen membrane complying with ASTM D 1970.*
- F. Self adhered modified membrane underlayment shall be W. R. Grace Ice and Water Shield or equal and approved.
- G. *1"x1"x4'0" pressure treated wood lath spaced 5-1/2" o.c. with 2" gap at end joints.*

1. Nails used to fasten wood lath shall be *non-metallic* 4D 613 stainless steel ring shank nails. Length of shanks shall penetrate a minimum of 3/4" into sheathing.
- H. Ridge vents shall be Cobra Exhaust Vent for roof ridge or equal and approved. Install with stainless steel 316 nails.
- I. Eave and Rake vent shall be heat resistant polypropylene S-400 strip vent with SS Staples as manufactured by Coravent or equal and approved. Color selection by owner representative.

2.02 Flashing Materials

- A. See Section 07 60 00 - Sheet Metal Work
- B. Nails: Annular threaded stainless steel fastener ASTM 316 with a minimum 19/64 inch head diameter and 1.104 inch shank diameter; of sufficient length to penetrate through or 3/4" into roof sheathing.

2.03 Flashing Fabrication

- A. Form flashing to properly protect roof assembly and shed water. Form sections square, true and accurate to size, in maximum possible lengths and free from distortion and other defects detrimental to appearance or performance.
- B. Hem exposed edges of all flashings 1/2" minimum to the underside.

PART 3 EXECUTION

3.01 Workmanship

- A. Install wood shake roofing over surfaces which are dry, free of ridges, warps and voids.
- B. Coordinate installation of roofing with installation of roof mounted components, or items projecting through. Ensure roof openings are properly sized and located prior to roofing installation.
- C. Complete roof installation to provide weather tight service.

3.02 Ice Dam Protection Installation

- A. Provide ice dam protection on existing plywood for 36" on each side of valley prior to installation of spaced sheathing. No. 30 underlayment felt shall lap onto the ice dam protection a minimum of 12".
- B. Provide ice dam protection from edge of roof at eaves to a minimum of 36" inside exterior walls.
- C. At hip, wrap ice dam protection minimum 18" on each side.

3.03 Protective Underlayment Installation

- A. *Install 4" wide strip of self-adhering modified bituminous membrane over all joints in decking beneath shingle roofs where not covered by ice dam protection.*
- B. Over entire area not covered by ice dam protection, place one ply of underlayment, with ends and edges weather lapped a minimum of 6 inches. Stagger end joints of each consecutive layer. Nail protective underlayment sufficiently to hold in place.
- C. Install protective underlayment perpendicular to slope of roof.
- D. Weather lap underlayment felt a minimum of 6 inches onto the ice dam protection.
- E. Weather lap and seal with Ice and Water Shield, items projecting through or mounted on roof.

3.04 General Shingle Installation

- A. The contractor shall cover all roof surfaces with pressure treated Number 1 Blue Label shingles bearing the Cedar Shake and Shingle Bureau's official grade mark label.
- B. Roof shingles shall be laid with an exposure of 5-1/2" to the weather.
- C. Lath shall be as shown with spacing equal to the shingle exposure and fastened to the substrate at the rate of 2 fasteners per 12" o.c.
 - 1. Lath shall be installed in maximum lengths of 4'.
 - 2. Lath shall be spaced with 2" gap at end joints with additional wood blocking as required to support shingle side laps at lath end joints.

- D. Install shingles along all eaves as a double layer *with additional lath support as required.*
- E. Butts of the shingles in the first course on roof shall project 1-1/2" min from the edge of roof eaves to insure proper spill into gutters and approximately 1" at gable and rake edges.
- F. Shingles shall be spaced apart 1/4" min, not more than 3/8" max.
- G. Nails shall be set flush to face of shingles. They shall be placed approximately 3/4" to 1" from the side edges and approximately 1-1/2" above butt line of the following course.

3.05 Hip and Ridges

- A. Install vent strip at each ridge location. Overlay vent strip with (1) layer No. 30 felt.
- B. All shingles, hips, and ridges shall be of alternating overlays and installed at the same exposure as the field of the roof.
- C. Nails shall be long enough to penetrate through shingle and vent material into the sheathing a minimum of 3/4".

3.07 Guarantee

- A. Furnish written guarantee stating that the Contractor at his own expense will repair or replace all cedar shake work which becomes defective due to faulty materials or workmanship within a period of two (2) years from date of acceptance of the work. Submit two (2) copies.

END OF SECTION

**07 53 23.01 ETHYLENE-PROPYLENE-DIENE-MONOMER ROOFING (FULLY
ADHERED EPDM)**

PART 1 GENERAL

1.01 Related Documents:

The General Conditions, the Supplementary General Conditions and any Special Requirements are hereby made a part of this Section.

1.02 This Contractor shall provide all labor, equipment and materials required to perform the work called for in this Section. This Contractor shall coordinate his work with other trades and work in other sections.

1.03 Work of this section includes but is not limited to the following:

- A. Install new fully adhered FR EPDM membrane and flashings on Roof R1 and R2.
- B. Fully adhered, .060", reinforced FR EPDM membrane as manufactured by Firestone or Carlisle.
- C. Fully adhered .060" FR EPDM flashings and strippings.
- E. Install solid rubber walkway pads at locations as shown on Drawings.

NOTE: The work described herein is not intended to be a final and/or specific list of work to be performed or materials to be provided, but rather it is to be used as a guide. The roofing contractor is admonished to examine and review the drawings and these specifications in order to properly assess those items of work which are obviously requisite whether they are specifically noted or not. It is implicit in the intent of the plans and specifications that a complete, watertight, expertly fabricated system of work be delivered to the Owners.

1.04 Related work specified elsewhere includes:

- 02 41 19.01 Selective Structure Demolition (Roofing)
- 06 10 53 Miscellaneous Rough Carpentry
- 07 21 13 Board Insulation
- 07 60 00 Flashing and Sheet Metal
- 07 92 00 Joint Sealant
- Drawing S-1 Di Salvo Ericson Group- Stressed Skin Panel Repair

1.05 Quality Assurance

- A. Installer shall be thoroughly trained and experienced in the materials and methods required for application of the EPDM Roof Membrane System and shall be by an applicator approved by the EPDM product manufacturer. Applicator shall have a minimum of 5 years experience in this type of roofing.
- B. All materials and workmanship shall comply with the recommendations of the National Roofing Contractors Association and S.P.R.I.
- C. Manufacturer materials shall meet the latest standards for individual components of the roofing system of the American Society for testing and materials (ASTM).
- D. Owner may retain the services of a roof consultant to observe the roof construction.
- E. See section 01 31 19.13 Pre-Construction Meetings.
- F. Fully adhered .060", reinforced, FR, EPDM roof membrane, equal to Firestone.
- G. System shall carry FM 1-90 wind storm rating.
 - 1. Roof System Design: Tested by qualified testing agency to resist the following uplift pressures:
 - a. Corner Uplift Pressure: 89.0 lbs/sf
 - b. Perimeter Uplift Pressure: 65.3 lbs/sf
 - c. Field of Roof Uplift Pressure: 49.6 lbs/sf

1.06 Submittals

- A. Approved Applicator: Submit evidence of contractor's status as an approved applicator of the E. P. D. M. Roof Membrane System.
- B. Manufacturer's Warranty: The manufacturer shall provide the Owner with a twenty (20) year NDL (20 year details) written labor and material warranty for the system including 72 mph wind warranty. **This must be submitted prior to award of contract with letter from manufacturer stating that they will provide said warranty with no exclusions upon completion of installation.** The original copy of this warranty shall be delivered to the Owner when the job is completed and the terms of the

warranty are satisfied. See Section 01 78 36 for details of warranties and guarantees.

- C. Shop Drawings: Proposed sheet layout, 20 year details at edges, curbs and all penetrations, shall be submitted to and approved by the Architect/Consultant prior to start of work.
- D. Certification of corrosion resistance of fastener assemblies.

1.07 Product delivery, storage and handling

- A. Use all means necessary to protect roofing materials before, during and after installation and to protect the work of all other trades. In the event of damage, immediately make all repairs and replacements necessary to the approval of the Consultant and at no additional cost to the Owner.
- B. All materials shall be delivered to the site in the original unopened packaging with legible manufacturer's identification and shall be stored in a fashion to provide continuous protection from damage and the weather.
- C. Carefully inspect all materials from suppliers when unloading and reject immediately any damaged or unsuitable materials.
- D. Adhesives shall be stored between 60°F and 80°F. If subject to lower or higher temperatures they shall be returned to room temperature for 3 days before use. Do not use materials damaged in handling or storage.
- E. All materials determined to have been damaged shall be removed from this job site and replaced with new materials.

PART 2 MATERIALS

2.01 All materials used in the EPDM Roof system shall be furnished by the system manufacturer, or its distributor except as noted herein.

- A. Roof Membrane: Membrane shall be an average .060" ± 10% thick, fire retardant, reinforced EPDM rubber sheet. No location may be less than .055" thick.
 - 1. EPDM shall conform to ASTM D-4637, Type II, Class U.
 - 2. EPDM shall be fire rated and carry a Class A rating.
- B. Base Flashing: Flashing shall be .060" minimum cured fire retardant EPDM sheet for straight run applications, and .060" minimum uncured EPDM sheet for corners and metal flange applications.

- C. EPDM Reinforced Termination Strip: Termination strip shall be .045" reinforced EPDM membrane. Width of termination strip shall be as recommended by the membrane manufacturer.
- D. Membrane Cover Strip: Cover strip shall be cured EPDM laminated to cured pre-applied pressure sensitive tape. Width, 6". (*This requirement supersedes manufacturer's recommendations.*)
- E. Bonding Adhesive: Shall be a contact adhesive as furnished by the system manufacturer. It shall be compatible to all materials to which the EPDM Roof Membrane, or flashing, is to be bonded. Not to be used to bond EPDM to EPDM.
- F. Primer: Shall be as furnished by the manufacturer of the system.
- G. External lap sealant as supplied by the membrane manufacturer.
- H. Water Cut-off Mastic: Shall be furnished by the manufacturer of EPDM system.
- I. 30"x30" Fully adhered, heavy-duty, solid rubber, walkway pads as provided and manufactured by the membrane manufacturer.
- J. Termination Bars: Shall be as furnished by the manufacturer of the system or fabricated from 1/8" x 1" stainless steel strip. Corners shall be rounded and free of burrs.
- K. Internal seam tape shall be 3" or as supplied by the membrane manufacturer.
- L. Screws, Washers, Nailing Strips, and Accessories: Shall be as furnished by the manufacturer of the system, and as shown in the drawings. Fasteners and washers shall be treated so that they are corrosion resistant. Fasteners which penetrate pressure treated lumber shall be stainless steel. Fasteners shall pass the requirements of Factory Mutual Document 4470 as it relates to corrosion.

PART 3 EXECUTION

3.01 Preparation of Surfaces

- A. Prior to commencing any work called for in this Section, carefully examine the substrate and conditions under which the work is to be performed, and notify the Consultant in writing of any unsatisfactory substrate or conditions. Do not proceed with the work until unsatisfactory conditions

and substrate have been corrected. Start of work shall indicate acceptance of conditions.

- B. Surfaces on which the EPDM Roof Membrane is to be applied shall be clean, smooth, free of fins, sharp edges, loose and foreign material, oil, grease, roof cement and solvents.
- C. Before laying insulation substrate and insulation board, the wood deck surfaces shall be inspected, cleaned, and repaired if unsatisfactory conditions are noted. (See Section 05 31 23.01, 06 10 53 and 07 21 13).
- D. Provide pressure treated wood blocking as shown in Drawings. (See Section 06 10 53)

3.02 Installation

- A. General: Comply with manufacturer's instruction for installation of all materials. EPDM Roof Membrane shall be installed in the maximum sizes possible. Where there is a difference between the manufacturer's recommendation and the Project Manual, the more stringent mode will be chosen. The Consultant shall decide.
- B. EPDM Membrane
 - 1. Inspect each sheet of membrane on both sides before installation. Sheets which are defective will be returned to manufacturer.
 - 2. Position the EPDM roof membrane over the insulation substrate without stretching. Allow membrane to relax approximately 1/2 hour prior to bonding.
 - 3. Exercise care to locate all field splices away from low spots and out of drain sumps, all field splices shall be shingled to prevent bucking of water.
 - 4. Fold sheet back such that half of the underside of the sheet is exposed. Sheet fold shall be smooth without wrinkles or buckles.
 - 5. Apply bonding adhesive evenly, without gobs or puddles in accordance with membrane manufacturer's published instructions. DO NOT APPLY BONDING ADHESIVE TO THE SPLICE AREA.
 - 6. Allow adhesive to dry until it is tacky but will not string or stick to a dry finger touch.

7. Roll the coated membrane into the coated substrate while avoiding wrinkles.
8. Brush down the bonded half of the sheet immediately after rolling the sheet into the adhesive, with a soft bristle push broom to achieve maximum contact.
9. Fold back the unbonded half of the sheet and repeat the bonding procedure.
10. Install adjoining sheets in the same manner, overlap edges a **minimum of 6"**.

D. Splicing procedure

1. Remove dirt and excess dust from the mating surfaces of both sheets by wiping with a clean rag. If necessary scrub the sheet with splice cleaner or primer as recommended by the membrane manufacturer. Extra cleaning is required where a factory seam intersects a field seam.
2. Fold back the top sheet and clean both mating surfaces with primer as recommended by the membrane manufacturer. Change rags frequently; soiled/contaminated rags to be discarded. Allow surface to dry. Where splice tape is not pre-applied, contractor shall apply 3" splice tape to bottom sheet in accordance with manufacturer's published literature. Press tape onto sheet using hand pressure. Overlap tape roll ends a minimum of 1". Remove release film and press top sheet of membrane onto tape. Roll seam with 2" wide steel roller. **Provide and install pressure sensitive membrane cover strip over all field seams and intersections.** Seal edges of flashings with lap sealant.

E. EPDM Attachment:

1. Fully adhered membrane system
 - a. EPDM to be fastened 6" on center through nailing strips to perimeter walls, adjoining vertical walls, penetrations and curbs as shown on Drawings.

3.03 Flashing

- A. Flash all perimeters, curb flashings, and flashings around roof projections (vent pipes, etc.). Straight runs of base flashing shall be done with cured .060" EPDM material. All other flashing (including gravel stop flanges)

shall be done with uncured .060" flashing sheet. The Flashing shall be fully spliced to the main sheet as per splicing procedure including in-seam sealant. Bonding adhesive shall be applied to the flashing and the surface to which it is to be bonded, and when dry to the touch, roll the Flashing onto the surface.

1. No membrane field seam shall be installed so as to buck water.
 2. All flashing shall have a minimum 8" height.
 3. Provide additional 6"x6" reinforcement pad (.060") over uncured EPDM stripping material at joints in metal edging.
- B. Flashing shall be done in accordance with details by the manufacturer of the system or as detailed herein, whichever is more stringent.
- C. Termination Bars: The perimeter of the roof and top edge of all projections shall be sealed as shown in the detail drawing or with termination bar fastened 6" on center, lap sealant, and water cut-off mastic, whichever is more stringent.

3.04 Repair of Deficiencies in Roof Membrane System

- A. Correction of splices, fishmouths, tears, etc., may be accomplished by splicing a membrane section over the affected area.
1. Select repair membrane which is the same material as that to be repaired.
 - a. Inseam sealant to be used with cured sheet.
 2. Extend the repair membrane section at least 6" in every direction from the splice, tear, etc. to be corrected.
 3. Remove field dirt by scrubbing the splice area with warm soapy water; rinse with clean water, and dry.
 4. Follow the splicing procedure found in Paragraph 3.02, d, above.

Note: Surface splices at drains shall extend 8" onto the horizontal surface of the roof membrane.

3.05 Performance Requirements

- A. It is required that the roofing and associated work be watertight and not deteriorate excessively or at rates more rapid than indicated by

manufacturer's published literature. Any failure of the work to comply with these requirements will be considered a failure of materials and workmanship under the guarantee.

- B. It is intended that the whole system of roofing and associated work, under normal conditions and with normal maintenance, will perform without failure, including any necessity for excessive maintenance, for at least 20 years after the time of final acceptance.
- C. Wind blow-off of roofing or associated work, when independent of structural failure, will be considered a failure of materials and workmanship, unless there is reasonable evidence that blow-off occurred at a time when wind velocities exceed the uplift requirements of FM1-75.

3.06 Inspection and Warranty

- A. Inspection: Upon completion of installation of the Membrane and Flashing, the manufacturer of the system, or its representatives shall inspect the installation to ascertain if the EPDM Roof Membrane System is installed in accordance with specifications and details. The issuance of the manufacturer's Warranty shall indicate the manufacturer's approval of the installation.
- B. Shop Drawings: Shop drawings are required for final inspection. They may be provided by the manufacturer of the system, its representative, as built" drawings by the approved applicator. Shop drawings shall include:
 - 1. Outline and size of the roof.
 - 2. Location and type of penetrations.
 - 3. Perimeter and penetration details.
- C. The contractor and manufacturer shall issue the pre-approved guarantees and warranties each countersigned by all parties as follows:
 - 1. Manufacturer's twenty (20) year NDL guarantee including all materials (insulation, factory metal edging) and workmanship.
 - 2. Roofing contractor's two (2) year warranty including materials and workmanship.

END OF SECTION

07 60 00 FLASHING AND SHEET METAL

PART 1 GENERAL

1.01 Related Documents:

The General Conditions, the Supplementary General Conditions and any Special Requirements are hereby made a part of this Section.

1.02 This Contractor shall provide all labor, equipment and materials to perform the work called for in this Section. This Contractor shall coordinate his work with other trades and work in other sections.

1.03 Work includes but is not limited to the following:

- A. Provide .018" stainless steel counterflashings, receivers, storm collars, pipe flashings, closures, transitions, overflow scuppers and saddles.
- B. Provide and install 20 oz. red copper gutters with associated closures, expansion joints and securement brackets on shingle roofs at existing and designated locations.
- C. Provide and install new 20 oz. copper edge metal and hook strip on Roofs R-1 and R-2.
- D. Provide and install 24 oz. copper valley flashings and 20 oz. copper counterflashings and step flashings.
- E. Provide and installed 20 oz red copper ridge cap on Roofs S-1 through S-14.
- F. Provide and install 20 oz. red copper gutter to match existing.
- G. Provide and install new "expand-o-flash expansion joint on Roof R-2.

1.04 Related Work Specified Elsewhere

- 01 73 29 Cutting and Patching
- 02 41 19.01 Selective Structure Demolition (Roofing)
- 06 10 53 Miscellaneous Rough Carpentry
- 07 21 13 Board Insulation
- 07 31 29.17 Wood Shingles
- 07 53 23.01 Ethylene-Propylene-Drene-Monomer Roofing (Fully Adhered EPDM)
- 07 92 00 Joint Sealants

1.05 Quality Assurance

- A. Preconstruction Conference: Review all proposed materials and procedures with the Owner and Consultant prior to starting work. All work may be inspected by the Roofing Consultant and complete approval must be obtained before final acceptance by the Owner.
- B. Comply with all applicable codes and regulations and all pertinent recommendations contained in "Architectural Sheet Metal Manual", latest edition, published by the Sheet Metal and Air Conditioning Contractors Association.
- C. Comply with all pertinent recommendations of the National Roofing Contractors Association as contained in the Association Manual of Roofing Practice.

1.06 Reference Standards

- A. American Society for Testing & Materials (ASTM):
 - 1. B32-76 Solder Metals
 - 2. A167-63 Stainless Steel
- B. ANSI/SPRI ES-1
- C. Copper and Common Sense, Revere Copper Products, Inc., latest edition.
- D. "SMACNA", sixth edition, September 2003.

1.07 Submittals

- A. Submit samples and product data on all materials. Submit shop drawings of flashing details as may be requested by the Consultant. Submit two copies of warrantee to the Owner.

1.08 Delivery, Storage and Handling

- A. Deliver, store and handle materials in manner to prevent damage and deterioration. Provide packaging as required for protection. Schedule delivery of materials to coincide with use on job. Store materials indoors protected from weather until installed.

1.09 Job Conditions

- A. Install materials in dry weather on dry, smooth surfaces only.

1. If when installing roofing, waterproofing, insulation, flashings, etc., it is disclosed that repairs must be made to the structure before roofing work may continue, it shall be immediately called to the attention of the Consultant for their examination, documentation and solution. A price for such repairs or replacement as may be deemed necessary shall be presented to the Owners for their approval and authorization to issue a change order. Unless otherwise ordered the roofing contractor shall employ such tradesmen as may be required to perform corrective work.
2. The waterproofing contractor shall during his operations and at all times protect workmen of all trades, building personnel, general public and the structure against injury or damage. Provide roof top/edge protection for workmen as required by O.S.H.A.

1.10 Warranty

- A. Membrane manufacturers 20 NDL warranty.
- B. Prior to start of work, furnish sample of Contractor's written warranty for two (2) years for the Owners approval. See Section 01 78 36.

PART 2 PRODUCTS

- 2.01 Solder: ASTM B32, 50% tin and 50% lead composition.
- 2.02 Flux: Rosin, stainless acid for stainless steel, ASTM B813.
- 2.03 Fasteners: Stainless steel equal to Rawl Zamac Nailin for sheet metal.
- 2.04 Screws, Bolts and Rivets: Rivets shall be 1/8" diameter, stainless steel pop-type for stainless steel and copper work.
- 2.05 Expansion Inserts: Lead, bronze, nylon or plastic as approved.
- 2.06 Nails for fastening: stainless steel of stonghold type with a large flat head. Not smaller than #12 gauge with length sufficient to penetrate roof deck/blocking not less than 7/8".
- 2.07 Termination bars shall be 6061 stainless steel 1"x1/8" prepunched 6" on center.
- 2.08 Roofing Felt: Asphalt saturated felt weighing #43 per 100 SF.
- 2.09 Sealant: Approved type of silicone meeting requirements of FS-TT-S- 00230C, Type II, Class A.

- 2.10 Stainless steel ASTM A 167-63 Type 302, 304, .015", .018" thickness.
- 2.11 "Expand-o-Flashing" expansion joint flashing with stainless steel flanges as manufactured by Johns Manville or manufacturers approved equal.

PART 3 EXECUTION

- 3.01 Sheet metal work of every description shall be performed by expert tradesmen thoroughly familiar with and normally engaged in this type of roofing. Execute all work in accordance with standards of "Architectural Sheet Metal Manual, Latest Edition" unless otherwise indicated.
- 3.02 The contractor shall have been engaged in the type of work required of this specification for not less than five (5) years. He shall upon demand (prior to executing a contract) show evidence of work he has performed of similar scope of this caliber and magnitude.
- 3.03 Inspection: Verify that all surfaces to which sheet metal is to be applied is smooth, clean, dry and free of defects that will adversely affect application. Check that all wood blocking is properly installed. Do not proceed with work until defects are corrected.
- 3.04 Surfaces: Surfaces to be covered with sheet metal shall be smooth and free from defects of every description. All such surfaces shall be cleaned of dirt, rubbish and other foreign materials before sheet metal work is started. All projecting nails shall be driven flush with roof boarding.
 - A. Protect all work against breakage, staining or damage of any character. All such damage shall be repaired or replaced as ordered by the Owner/Consultant to his complete satisfaction and at the roofers full expense.
 - B. The roofing contractor shall remove by mechanical or other means (including hand chipping) all products found on the structure which will interfere with the proper installation of new work or in its performance after installation. Solvents will not be permitted except for unusual conditions and then only at the express approval of the Owner.
- 3.05 Rivet and continuously solder all fabricated stainless steel. All fabrications to be watertight.
- 3.06 Cleaning: Remove all printing and marks on exposed metal and leave in clean, watertight condition.
- 3.07 Tinning: Edges of all sheets to be soldered shall be pre-tinned with solder on both sides for a width of not less than 2 inches.

- A. The contractor shall protect pre-tinned copper from becoming soiled.
- 3.08 Soldering: All soldering shall be done slowly with well heated coppers to heat sheet thoroughly and to sweat solder completely through full width of seam. Ample solder shall be used and seam shall show at least one full inch of evenly flowed solder. Wherever possible, all soldering shall be done in flat position. Seams on slope steeper than 45 degrees shall be soldered second time. When soldering lead coated copper, liberal amount of flux shall be brushed into seams. Solder all seams in copper. All soldering shall be done within the tinned area.
- A. Open flame equipment shall be carefully placed and utilized to protect against promotion of accidental fire. Fire extinguishers and fireproof blankets shall be employed and/or be readily available for use. Extinguishers shall be within "arm's reach" of any workmen employing an open-flame device.
- 3.09 Counterflashing: Counterflashing shall be 20 oz copper or .018" ss as shown in Detail Drawings with sealed and riveted seams. Counterflashing shall be installed as shown on Drawings to provide minimum 8" flashing height. Fasten receiver into reglet with lead wedges 1' on center maximum. Provide a bead of water cut off mastic in reglet prior to installing counterflashing.
- 3.10 Rivets where employed for soldered lap joints shall generally be staggered at 3" intervals (1-1/2" between rivets). Where staggering of rivets is not possible they shall be installed at 1" intervals. All rivet heads shall be soldered.
- 3.11 If a particular piece of work has been inadvertently omitted from these specifications or not shown on the drawings, the design principle and techniques carried in "The Application of Copper and Common Sense" as published by Revere shall govern.
- 3.12 Provide .018" stainless steel accessory counterflashing at curb mounted equipment. Counterflashing to have 4" face with hemmed edge. Solder/weld all corners and lap joints.
- 3.13 Provide accessory counterflashings at curb mounted equipment as shown in detail drawings. Counterflashings to have a 4" face with hemmed edge. All corners shall be shop fabricated with riveted and soldered seams.
- 3.14 All counterflashings, closures, transitions, terminations, sleeves, storm collars, inside and outside corners shall be shop fabricated.

3.15 Coordination

- A. The contractor shall be responsible for directing and coordinating all trades engaged in performing work in each section of specifications, properly schedule their operations to keep the overall work flowing smoothly with minimum intrusion.
- B. If in the judgment of the consultant, the contractor and/or his subcontractor can better serve the progress and general quality of the project as a whole by redirecting their efforts they shall comply with such directive forthwith, said compliance shall be without recourse.
- C. The roofing contractor in his absence shall delegate a job superintendent to attend all job meetings and make all manner of decisions in his behalf which shall, once made, be as binding as though they were made by the Principal of the company.
- D. The Contractor shall be required to fully cooperate with and coordinate his and his subcontractors work with the contracting persons or project managers selected and designated by the owners.

END OF SECTION

07 92 00 JOINT SEALANTS

PART 1 GENERAL

- 1.01 The General Conditions, the Supplementary General Conditions and any Special Requirements are hereby made a part of this Section.
- 1.02 This Contractor shall provide all labor, equipment and materials to perform the work called for in this Section. This Contractor shall coordinate his work with other trades and work in other sections.
- 1.03 Work includes but is not limited to caulking of exterior expansion joints, masonry and metal, metal and metal, and joints between dissimilar materials.
- 1.04 Related work specified elsewhere includes:
- 07 60 00 Flashing and Sheet Metal
- 1.05 Submittals: Submit product data and samples of all materials. Submit warranties at completion of work.

PART 2 PRODUCTS

- 2.01 General: Sealants equal to products listed by Pecora Corporation and Dow Corning.
- 2.02 Sealants: colors as selected by the Owners.
- A. Horizontal Joints; One-part Silicone, (Non-Sag): TT-S-230C, Class A, Type II: #890 Architectural Silicone Sealant.
- B. Vertical Expansion Joints; One – part (Non – Bleed) silicone, ASTM C920, Type S, Grade NS, Class 50, ASTM C719 ± 50% equal to Dow Corning 991.
- 2.03 Foam Back-up: Closed cell Polyethylene rod equal to Denverfoam by Pecora.
- 2.04 Surface Primers: As recommended by sealant manufacturer.

PART 3 EXECUTION

- 3.01 Inspection: Verify that joints to receive sealants are proper depth, clean, dry, frost-free, and appropriate for application of sealants.
- 3.02 Preparation: Prime required surfaces with proper materials in accordance with manufacturer's instructions.

3.03 Application: For joints up to 1/2" width, sealant depth shall equal width. Sealant joints over 1/2" width shall have depth equal one-half width. Fill excessive depth with back-up material. Fill joint with sealant to required depth using filler to obtain concave shape. Do not caulk when temperature is below 40°F. Leave surfaces neat, smooth, clean and watertight. Exterior joints to have foam back-up material as indicated. Apply sealant with hand gun, tooling if necessary to obtain concave surface within ten minutes. Remove any masking tape immediately. Clean any excess sealant on surfaces. Exterior joints will not be painted.

3.04 Guarantee

A. Furnish written guarantee stating that the Contractor at his own expense will repair or replace all caulking work which becomes defective due to faulty materials or workmanship within a period of two (2) years from the date of acceptance of the work.

END OF SECTION

09 91 13 EXTERIOR PAINTING

PART 1 GENERAL

1.01 Related Documents:

The General Conditions, the Supplementary Conditions and any Special Requirements are hereby made a part of this Section.

1.02 This contractor shall provide all materials, labor, equipment and services necessary to furnish, deliver and for work of this section as shown on the drawings, specified herein and/or required by job conditions.

1.03 Work of this Section includes but is not limited to the following:

- A. Scrape, prepare, prime and paint with two finish coats all eave and rake fascias and soffits.

1.04 Related work specified elsewhere:

06 10 53 Miscellaneous Rough Carpentry
07 60 00 Flashing and Sheet Metal

1.05 Quality Assurance

- A. The following manufacturers are approved.

Benjamin Moore
Pratt and Lambert
Sherwin Williams

1.06 Submittals

- A. Submit complete list of proposed materials and, for each, copies of the manufacturer's product literature. For each surface, list materials by manufacturer and name, and list number of coats. List thinners if other than water or mineral spirits. For each painting system list manufacturer's recommended surface preparation and recommended environmental conditions during application.
- B. Submit samples of selected colors to Consultant. Samples shall be approximately 12" square or 8"x16".
- C. Submit selected paint manufacturer's master specifications and product description, if requested by Consultant.

1.07 Product Handling

- A. Store products so as to minimize danger of fire and so as to protect building surfaces and equipment from spills. Do not store flammable materials in building.

1.08 Environmental Conditions

- A. Areas requiring painting preparation shall be based on existing painted surfaces containing lead based products. Provide barriers and protection as required by State and Local requirements.
- B. Do not paint when temperature of air or surfaces being painted is below 40°F. Do not paint when atmosphere is damp. Do not paint when the temperature is lower than 5° above the dew point. Do not paint damp surfaces. Paint only when the environmental conditions are as recommended in the paint manufacturer's product literature.
- C. Do not paint unless temporary lighting is adequate.
- D. Provide ventilation during painting and drying periods.

1.09 Definition

- A. The verb "to paint" and the noun "paint", as used in these Contract Documents, mean the application of liquid coatings which cure to a durable film. Both clear and opaque coatings are included under the definition.

PART 2 PRODUCTS

2.01 Materials

- A. Paint for Wood and Metal:
 - 1. Primer: Acrylic primer 023 by Benjamin Moore.
 - 2. Top Coat: Acrylic Latex Semi Gloss 096 by Benjamin Moore, color as selected by building owner's representative from list of manufacturer's standard colors.
- C. Ship materials in unopened manufacturer's containers.
- D. Use thinners recommended by paint manufacturers.

PART 3 EXECUTION

3.01 Preparation

- A. Provide protection for areas and materials adjacent to work area.
- B. Sand surfaces and remove surface dust and light debris with tack cloth.

3.02 Application

- A. Follow manufacturer's direction for application and rate of coverage.
- B. Apply paint evenly to produce a uniform surface. Avoid runs, sags or brush marks. Spray application is not acceptable.
- C. All items to be painted shall have 1 coat primer and 2 coats finish paint. Color selection shall be by owner.
- D. All new lumber shall be fully primed, back, front and edges.
- E. Clean adjacent areas to new or preexisting conditions.

END OF SECTION

22 14 26.14 ROOF DRAINAGE AND SUPPLEMENTARY

PART 1 GENERAL

1.01 Related Documents

The General Conditions, the Supplementary General Conditions and any Special Requirements are hereby made a part of this Section.

1.02 This Contractor shall provide all labor, equipment and materials required to perform the work called for in this Section. This Contractor shall coordinate his work with other trades and work in other sections.

1.03 Work in this Section includes but is not limited to the following:

A. Remove roof drain baskets and clamping rings. Provide and install new cast iron *drain baskets and membrane clamping ring*.

1. *Provide new stainless steel bolts and washers.*

B. Mechanically clean existing roof drain and drain line to basement level clean out.

1.04 Related work specified elsewhere includes:

02 41 19.01 Selective Structure Demolition (Roofing)

07 21 13 Board Insulation

07 53 23.01 Ethylene-Propylene-Diene-Monomer Roofing (Fully Adhered EPDM)

1.05 Quality assurance:

Coordinate, remove and installing of roof drain components with all trades.

PART 2 MATERIAL

2.01 Provide all equipment and materials for refurbishing of existing roof drains.

2.02 Provide new s.s. bolts, cast iron clamping rings, and cast iron strainers.

PART 3 EXECUTION

- 3.01 Prior to commencing any work called for in this Section, carefully examine the substrata and conditions under which the work is to be performed and notify the Architect/Consultant in writing of any unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected. Start of work shall indicate acceptance of conditions.
- 3.02 Existing drains and drain lines are functional and are not clogged.
- 3.03 Maintain clean roof drains during the demolition of existing roof system and the installation of the new roof system.
- 3.04 At the completion of the roof system installation, mechanically clean all roof drains from the roof level to basement level clean out location.
- 3.05 Provide water test for drainage at each roof drain location. Notify owner's representative two (2) days prior to performing water test.

END OF SECTION