ADDENDUM #5 - AUGUST 18, 2015

RE: **CITY OF NEWPORT, OREGON**
FBO BUILDING 2015 REPAIR PROJECT
PROJECT #2014-021
541-574-3377

FROM: **DCI ENGINEERS**
400 SW 4TH AVE., SUITE 605
PORTLAND, OREGON 97204
503-242-2448

TO: **PROSPECTIVE BIDDERS**

This Addendum forms a part of the Contract Documents and modifies the original documents dated August 2014, as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

This Addendum consists of **2** pages together with **the following** attachments:

- Section 01010 Summary of Work
- Section 01113 Advertisement to Bidders
- Section 01330 Submittal Procedures
- Section 05500 Metal Fabrications
- Section 06100 Rough Carpentry
- Section 07311.3 Asphalt Shingles
- Section 07723.6 Siding and Trim
- Section 07920 Sealants and Caulking
- Section 07130 Sheet Waterproofing
- Appendix A: Building Photos
- Appendix B: Building Permit Application
- Revised Drawing Sheets:
    - S1.1
    - S2.1
    - S3.1
    - S4.1

CHANGES TO PROJECT MANUAL:

1. Project Number #14.17: REPLACE with #2014-021.

2. Point of Contact, HGE, INC: REPLACE with CITY OF NEWPORT.

3. Section 00-4100, Bid Form: REPLACE with attached revised Bid Form.

4. Section 01010, Summary of Work: Bid Items Number 1 through 13 changed.

5. Section 01113, Advertisement to Bidders: REPLACE with attached Advertisement to Bidders.

6. Section 05500 Metal Fabrications: New Section added.

7. Section 06100 Rough Carpentry: New Section added.

8. Sheet S2.1:
   a. Blocking per 11/S4.1 was added to SW corner of roof @ grid D-6
   b. Note for new sheathing revised adding 1" insulation and top layer of sheathing.

9. Sheet S4.1:
   a. Stitch plate added to angle brace on details 6 and 8/S4.1
   b. Gutter and finish added to detail 8/S4.1
   c. Detail 9/S4.1 was added, showing stiffener plate location.
   d. Section A-A was add to detail 10/S4.1, showing stiffener plate welding.

Melissa Román, PMP
Project Manager, City of Newport

8/18/15
Date

SECTION 01010 SUMMARY OF WORK

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section includes the following:

1. Proposed Work covered by the Contract Documents.
2. Type of Contract.
3. Work phases.
4. Use of premises.
5. Owner's occupancy requirements.
6. Work restrictions.
7. Specification formats and conventions.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. EXISTING CONDITIONS

1. The City of Newport is soliciting Proposals from qualified contractors for the replacement of the Newport Municipal Airport Fixed Base Operation (FBO) roof, replacement of the gutter system, south wall siding and internal sheetrock repairs. The FBO is located at 135 SE 84th ST., South Beach 9736. *A site map, general layouts, drawings, and details are attached.*

2. The current FBO roof was installed in 1998 and consists of:

    a. Metal Roofing
    b. Type 15 Felt Underlayment
    c. Roof Substrate/roof assembly
        1) 1/2” OSB sheathing
        2) 2x8 Purlins 24” O.C.
        3) R19 Batt Insulation

B. PROPOSED WORK

BASE BID. Bids will be evaluated on base bid total with alternates added as budget allows.

1. BID ITEM NO 1 INSTALL CROSS BRACING AND FRAME STABILIZATION (LUMP SUM).

    a. All materials and labor to reinforce structure. All other materials and labor shall be incidental to this bid item so as to provide complete reinforcement.

2. BID ITEM NO.2 REMOVE EXISTING ROOFING SYSTEM; REPLACE ROOF SYSTEM (LUMP SUM).

    a. All materials and labor to remove and dispose of the existing roofing system and underlayment; and all materials and labor to install a new complete roofing system. All underlayment, flashing, fasteners and other materials and labor shall be incidental to this bid item so as to provide a complete roofing system.

3. BID ITEM NO. 3 ROOF SUBSTRATE: REMOVE AND REPLACE DAMAGED 1/2" OSB SHEATHING AND 1" INSULATION (200 SF).

    a. All materials and labor to remove and replace one (1) layer of metal roofing, moisture damaged 1/2” OSB sheathing and Insulation. Disposal, fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item. Removal areas of damaged sheathing shall be determined by engineer after substrate has been exposed.

4. BID ITEM NO. 4 ROOF SUBSTRATE: INSTALL ADDITIONAL ½” SHEATHING (LUMP SUM).

    a. All materials and labor to install the top layer of roofing substrate consisting of 1/2” OSB or plywood sheathing. Fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item.

5. BID ITEM NO. 5 FACIA BOARD ADJUSTMENT/ REPLACEMENT (LUMP SUM)

    a. All materials and labor to take down and replace gutters and associated downspouts, and replace the cedar fascia boards. Disposal, fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item.

6. BID ITEM NO. 6 REMOVE AND REINSTALL SKY LIGHTS (LS)

    a. All materials and labor to take down and reinstall five sky lights. Disposal, underlayment, flashing, fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item.

7. BID ITEM NO. 7 REMOVAL AND REPLACEMENT OF GUTTER SYSTEM (LUMP SUM)

    a. All materials and labor to remove existing gutter and install new gutter system. Disposal, flashing, fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item.

ADDITIVE ALTERNATE A: EXTERIOR REPAIRS

8. BID ITEM No. 8 REMOVE AND REINSTALL OF SOUTH WALL WINDOWS (LUMP SUM)

    a. All materials and labor to remove and reinstall window. Disposal, underlayment, flashing, fasteners, trim and all other materials and labor required to complete this work shall be incidental to the bid item.

9. BID ITEM NO 9 REMOVE AND REPLACE GLAZING (2 EACH)

    a. All materials and labor to remove install glazing. Disposal, fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item.

10. BID ITEM NO. 10 REMOVE AND REPLACE SOUTH SIDE SIDING (LUMP SUM)

    a. All materials and labor to remove existing siding and install new siding. Disposal, underlayment, flashing, fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item.

11. BID ITEM NO. 11 REMOVE AND REPLACE DAMAGED BUILDING FRAME (40 LF)

    a. All materials and labor to remove damaged structure and replace framing. Disposal, damaged framing, fasteners, and all other materials and labor required to complete this work shall be incidental to the bid item. Removal areas shall be determined by engineer after substrate has been exposed.

ADDITIVE ALTERNATE B: INTERIOR REPAIRS

12. BID ITEM NO. 12 REMOVE AND REPLACE SHEETROCK (LUMP SUM)

    a. All materials and labor to remove install sheet rock. Disposal, fasteners, tape, texture, paint, and all other materials and labor required to complete this work shall be incidental to the bid item.

13. BID ITEM NO. 13 REMOVE AND REPLACE TRIM WORK (LUMP SUM)

    a. All materials and labor to remove damaged window trim, floor molding, and mezzanine trim. Disposal, fasteners, paint, and all other materials and labor required to complete this work shall be incidental to the bid item. Removal areas shall be determined by engineer.

C. UNIT PRICES

1. Quantities included in the bid schedule are estimated quantities only. Actual quantities may vary depending upon construction conditions and the conditions of the existing roof substrate and fascia. Actual quantities will be determined in the field based upon inspection by the Contractor and the Engineer. The Owner reserves the right to vary quantities of the contract as needed.

D. OWNER: City of Newport

1. Owner's Representative:
   Melissa Román, PMP
   Project Manager
   City of Newport
   169 SW Coast Highway

Newport, OR 97365
P: 541 574 3377
m.roman@newportoregon.gov

2. USE OF PREMISES

    a. Use of Site: Limit use of premises to work in areas indicated on the drawings. Do not disturb portions of Project site beyond areas in which the Work is indicated.

        1) Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.

            a) Schedule deliveries to minimize use of driveways and entrances.
            b) Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 DEMOLITION AND WASTE REMOVAL

A. The Contractor shall make provisions to separate the concrete shingles from the underlayment, substrate materials, and other debris.

B. The Contractor shall be responsible for hauling the concrete shingles. The Owner will provide a dumping location for the concrete shingles within the City limits.

C. The Contractor shall be responsible for safe removal of the remainder of the waste materials in accordance with the General Conditions of the Contract.

D. The City has a franchise agreement with a hauler for waste removal within the City for debris removal by Contractors in excess of 12 cubic yards. Provisions for construction dumpsters and debris removal can be coordinated with:

    1. Thompson's Sanitary
    7450 Northeast Avery Street
    Newport, OR 97365
    (541) 265 7249

3.2 PERMITS

A. The Contractor shall obtain all necessary building permits in accordance with the General Conditions of the Contract and the Supplementary Conditions.

B. Building permit application is attached to this section. Building permits may be submitted to the following address:

1. City of Newport Building Department
   169 SW Coast Highway
   Newport, OR 97365
   541 574 0629

END OF SECTION 01010

SECTION 01113 ADVERTISEMENT TO BIDDERS

Notice is hereby given that sealed bids for the **Airport FBO Building 2015 Repair Project**, will be received by Melissa Román, PMP, City of Newport Engineering Technician, at the Newport City Hall Public Works Department, 169 SW Coast Highway, Newport, Oregon 97365 until bid closing time of **2:00 P.M. Pacific Time, Thursday, September 17, 2015**. A two-hour period shall follow in which all bidders shall submit to the City of Newport a Subcontractor Disclosure Form, identifying any first-tier subcontractor that will be furnishing labor or material on the Contract. Refer to Disclosure Form and Instructions to Bidders within the Project Manual. Bids received after the deadline will not be considered. Bids must be complete and clearly labeled: "**Airport FBO Building 2015 Repair Project."** The actual **bid opening** shall be conducted in the City Hall Conference Room A, immediately following the bid closing time at 2:00 P.M. at which time the bids will be publicly opened and read.

The overall project consists of removal and replacement of roofing system with some sub-roof repairs/upgrades, selective removal and replacement of siding, windows, and other work on the Airport FBO Building as shown in the Contract Documents (Project Manual, Addenda and Drawings).

The Project Manual for this work, including Instruction to Bidders, and Bid Form, may be examined at the Public Works Office at City Hall, Newport, Oregon, phone: 541- 574-3377, email: m.roman@newportoregon.gov, and at the following locations: various plan centers, city web site and https://orpin.oregon.gov.

One set of drawings, specifications, and contract documents may be obtained by prime bidders from the City of Newport for a fee of $50.00. General Contractors are encouraged to contact Melissa Román by phone or email, and register their interest in submitting a bid and to be included on the plan holders list. Addendums and other critical information will be posted to the ORPIN and City web sites.

No **Prebid Conference will be held for this project.** Interested bidders are encouraged to call the project manager for an appointment to review the FBO and ask questions about the proposed work.

No bid will be received or considered by the Owner unless the bid contains a statement that Bidder will comply with the provisions of ORS 279C.800 through 279C.870 relating to Prevailing Wages.

No bids will be considered unless fully completed in the manner provided in the Instructions to Bidders upon the official bid form provided within the Project Manual, and accompanied by an unconditional certified check or a bid bond executed in favor of the City of Newport in an amount not less than ten percent (10%) of the total amount of the bid per ORS 279C.385, to be forfeited as fixed and liquidated damages should the bidder fail or neglect to enter into a contract and provide suitable bond for the faithful performance of the work in the event the contract is awarded.

Each bid will contain a statement as to whether or not the bidder is a resident bidder as defined in ORS 279A.120. No bid will be considered unless the bidder is registered with the Construction Contractors Board as required by ORS 701.035 to 701.055. The Owner reserves the right to reject any and all bids, and to waive any technicalities or informalities in connection therewith. No bidder may withdraw his bid after the hour set for the opening thereof until the lapse of thirty (30) days from the bid opening.

By: Melissa Román, PMP, Engineering Technician
Department of Public Works, City of Newport

Published:
Daily Journal of Commerce
Portland, Oregon
Date: August 19, 2015

Newport News Times
Newport, Oregon
Date: August 21, 2015

SECTION 01330 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

A. The Contractor shall submit three (3) copies of all required submittals and sample items as noted below. The Engineer will review them with reasonable promptness. The Contractor shall make all required corrections and file with the Engineer three (3) corrected sets for final review. If the Contractor requires more than two (2) reviewed copies, the Contractor shall submit additional sets.

B. The responsibility for completeness of submittals lies with the Contractor. If the Engineer and/or Owner signs the submittal with no exception taken, such action shall not absolve the responsibilities of the Contractor in any way.

C. Review individual sections for specific submittal requirements and timeframes.

1.2 ITEMS TO BE SUBMITTED PRIOR TO CONSTRUCTION

A. List of subcontractors and major material suppliers.

B. A detailed Construction Progress Schedule to be reviewed at the Preconstruction Conference.

C. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

D. Copies of required permits.

E. Product samples and submittals per applicable Sections.

1.3 RECORD DRAWINGS

A. The Contractor shall maintain at the construction site one complete set of drawings suitably marked to show all deviations from the original set of drawings and other information as specified.

   Supplementary sketches shall be included, if necessary, to clearly indicate all work as constructed. All manholes and valves shall be located with tie off dimensions to known items on the plans or in the field to enable the Contractor or City personnel to locate these structures for adjustment.

B. All work shall be clearly shown and the record drawings shall be satisfactory to the Engineer in order to ensure that adequate information is indicated to show the actual construction. The complete set of record drawings shall be submitted to the Engineer.

1.4 MATERIAL SAFETY DATA SHEETS

A. The Contractor shall submit two copies of the material safety data sheets for each material on site to the Owner.

B. The Contractor shall maintain an orderly file of material safety data sheets at the job site.

PART 2 PRODUCTS (Not used)

PART 3 EXECUTION

3.1 SUBMITTAL ROUTING

A. All submittals shall be submitted to the Contractor for review and approval prior to submission to the Engineer.

B. All submittals shall be accompanied by a letter of transmittal that identifies the submitted item and review action required.

3.2 RESPONSIBILITY

A. The Engineer's review of a submittal shall not relieve the Contractor from the responsibility for deviation from the drawings and specifications unless the Contractor has, in writing, called the Engineer's attention to the deviations at the time of submission; nor shall it relieve the Contractor from the responsibility of errors in the submittals.

B. All submittals shall be reviewed by the Engineer prior to their incorporation into the project. If materials are installed without prior review, they will be subject to removal, at the Contractors expense, if the material is found to be non-conforming to the Specifications.

END OF SECTION 01330

SECTION 00 4100 BID FORM

THE PROJECT AND THE PARTIES

1.1 TO: Owner: CITY OF NEWPORT
C/C Public Works Office
169 SW Coast Highway
Newport, Oregon 97365

1.2 FOR: AIRPORT FBO BUILDING EXTERIOR REPAIR 2015 PROJECT

1.3 DATE: _____ (BIDDER TO ENTER DATE)

1.4 SUBMITTED BY:
NAME OF FIRM (PLEASE PRINT): _____

1.5 GENERAL

A. The Bidder declares that they have carefully examined the Contract Documents for the construction of the proposed improvements; that the Bidder has personally inspected the contemplated construction area, that the Bidder has satisfied themselves as to the quantities of materials, items of equipment, possible difficulties, and conditions of work involved.

B. By signing this Proposal, the Bidder certifies that the provisions required by ORS 279C.800 to 279C.870 relating to prevailing wage rates shall be included in this Contract, are understood by the Bidder, and will be complied with during the Work.

C. The bidder further declares that they are registered with the Construction Contractor's Board as required by ORS 701.35 to 701.55, and possess such additional licenses and certifications as required by law for the performance of the work proposed herein.

D. The subcontractor(s) performing work as described in ORS 701.005(2) will be registered and in good standing with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 and City Rule 137-049-0200(1)(a)(K) before the subcontractor(s) commence work under the Contract.

E. Pursuant to ORS 279A.120, Bidder hereby certifies the Bidder _____is / _____is not (check one) a Resident Bidder as defined by ORS 279A.120.

F. Bidder certifies that the provisions required by ORS 279C.836, unless exempt under Sections (4), (7), (8), or (9), before starting work on this Contract, or any subcontract hereunder, Contractor and all subcontractors shall have on file with the Construction Contractor's Board a public works bond with corporate surety authorized to do business in the State of Oregon in the amount of $30,000.

G. The Bidder agrees that if this Proposal is accepted, the Bidder will, within ten (10) calendar days after receiving contract forms, execute the Agreement between Owner and Contractor as specified, and deliver to the Owner the Performance and Labor and Payment Bonds required

herein.

1.6 BIDS:

A. The undersigned bidder, in submitting his bid, authorizes the Owner to evaluate the bid and make a single award per Bid Schedule, on the basis of the bid.

B. After having examined all of the contract documents as prepared by HGE INC., Architects, Engineers, Surveyors & Planners, DCI Engineers, and the City of Newport we do hereby propose to furnish labor and materials to complete the work required by said documents for the following fixed sum (fill in lump sum amount for each bid unit, in written words in space provided, and in numerals within parenthesis):

C. BASIC BID - SCHEDULE A: Airport FBO Building Work as shown in the Contract Documents (Project Manual, Addenda, and Drawings). Low Bid will be determined on Base Bid total.

ITEM NO	ITEM DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL
ROOF REPLACEMENT					
1	INSTALL CROSS BRACING & FRAME STABILIZATION	LS	1		
2	REMOVE EXISTING ROOFING SYSTEM; REPLACE ROOF SYSTEM				
3	ROOF SUBSTRATE: REMOVE AND REPLACE DAMAGED 1/2" OSB SHEATHING AND 1" INSULATION	SF	200		
4	ROOF SUBSTRATE: INSTALL ADDITIONAL ½" SHEATHING.	LS	1		
5	FACIA BOARD ADJUSTMENT/ REPLACEMENT	LS	1		
6	REMOVE AND REINSTALL SKY LIGHTS	LS	1		
7	REMOVAL AND REPLACEMENT OF GUTTER SYSTEM	LS	1		
				BASE BID TOTAL:	

ADDITIVE ALTERNATE A: EXTERNAL REPAIRS

8	REMOVE AND REINSTALL OF SOUTH WALL WINDOWS	LS	1		
9	REMOVE AND REPLACE GLAZING	EACH	2		
10	REMOVE AND REPLACE SOUTH SIDE SIDING	LS	1		
11	REMOVE AND REPLACE DAMAGED BUILDING FRAME	LF	40		
				ADDITIVE ALTERNATE A TOTAL:	

ADDITIVE ALTERNATE B: INTERIOR REPAIRS

12	REMOVE AND REPLACE SHEETROCK	LS	1		
13	REMOVE AND REPLACE TRIM WORK	LS	1		
				ADDITIVE ALTERNATE B BID TOTAL:	

Bidder further agrees to be bound by the entire Contract Documents, including:

Advertisement to Bidders
Information to Bidders
Issued Addenda
Instructions to Bidders - AIA A701 (as modified) and Supplemental Instructions
Bid Form (this document)
Bid Bond
First-Tier Subcontractor Disclosure Form
Oregon Prevailing Wagee Rates
General Conditions - AIA 201 (as modified) and Supplementary Conditions
Contract for Construction: Owner-Contractor Agreement - AIA 101
Performance and Payment Bonds
Proof of Insurance
Notice of Award
Notice to Proceed
Technical Specifications
Plans/Drawings
Issued Change Orders and Architects Supplemental Instructions
All Applicable State and Federal Laws

1.7 BID SECURITY

A. Bid security in the form of a certified check of Bid Bond in the amount of 10% of the bid amount is enclosed per ORS 279C.385. The undersigned agrees that Bid Security will be left in escrow with the Owner and that the amount thereof is the measure of liquidated damages which Owner will sustain by failure of the undersigned to deliver and execute the Contract or provide Performance and Payment Bonds and may become the property of the Owner at Owner's option. If this bid is not accepted within thirty (30) days of the time set for the opening of bids or if the undersigned executes and timely delivers said contract and the Performance and Payment Bonds, the Bid Security will be returned.

1.8 COMPLETION DATE AND LIQUIDATED DAMAGES

A. It is understood that time is of the essence in the execution of this Contract in order to avoid undue hardship upon the Owner. It is the desire of the Owner to issue a Notice to Proceed upon successful review of the lower qualified bidder and have the project completed within Sixty (60) days.

B. The Undersigned agrees that he will have the work Substantially Complete on or before _____ calendar days after Notice to Proceed (Contractor to fill in number of days he/she will require to perform the Work and this will be the agreed upon construction time period).

C. Owner and Contractor acknowledge that if substantial and final completion of the work is not achieved by the Contract times for such completion, the amount of Owner's actual loss of use damages will be difficult, and impractical or impossible to determine. Accordingly, the parties agree that if substantial and final completion is not achieved by the agreed dates of substantial completion and/or final completion, as adjusted pursuant to the Contract Documents, the

Contractor shall pay to Owner as liquidated damages for the loss of use of the project the following amounts:

1. The sum of FIVE HUNDRED dollars ($500) for each partial or full day of delay beyond the deadline for substantial completion; and
2. The sum of THREE HUNDRED dollars ($300) for each partial or full day of delay beyond the deadline for final completion.

D. The parties further acknowledge and agree that the daily sums and liquidated damages to be paid as set forth above are reasonable and that the payment of such liquidated damages is not intended nor constitutes a penalty or forfeiture. The parties further acknowledge that these liquidated damages are meant to reimburse the Owner only for loss of use delay damages and that Owner reserves the right to claim other types of damages against Contractor including but not limited to actual delay damages.

1.9 OWNER RIGHTS

A. The Owner reserves the right to reject any or all bids and to waive all informalities.

1.10 ADDENDA

A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

1. Addendum # _____ Dated _____.
2. Addendum # _____ Dated _____.
3. Addendum # _____ Dated _____.
4. Addendum # _____ Dated _____.
5. Addendum # _____ Dated _____.

1.11 BIDDER DATA AND SIGNATURE(S)

A. Name of Firm (please print):_____

B. Mailing Address:_____

C. Physical Address (if different):_____

D. Construction Contractor Board Registration Number:_____

E. Telephone Number:_____

F. Fax Number:_____

G. Email Address:_____

H. Signature (if bid is by a partnership, one of the partners must sign):

_____

I. Name and Official Capacity of Signatory (please print):

_____

J. If Corporation, Attest (Secretary of Corporation):

_____

K. SEAL (if Corporation):

END OF BID FORM

SECTION 05500 METAL FABRICATIONS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Shop fabricated steel items.

1.2 RELATED SECTIONS

1.3 REFERENCES

A. ASTM A 36/A 36M - Standard Specification for Carbon Structural Steel; 2005.

B. ASTM A 53/A 53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; 2006a.

C. ASTM A 123/A 123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2002.

D. ASTM A 153/A 153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2005.

E. ASTM A 283/A 283M - Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates; 2003.

F. ASTM A 325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength; 2006.

G. ASTM A 325M - Standard Specification for Structural Bolts, Steel, Heat Treated 830 MPa Tensile Strength (Metric); 2005.

H. ASTM A 500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2003a.

I. AWS D1.1/D1.1M - Structural Welding Code - Steel; American Welding Society; 2006.

J. SSPC-Paint 15 - Steel Joist Shop Primer; Society for Protective Coatings; 1999 (Ed. 2004).

K. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); Society for Protective Coatings; 2002 (Ed. 2004).

L. SSPC-SP 2 - Hand Tool Cleaning; Society for Protective Coatings; 1982 (Ed. 2004).

1.4 SUBMITTALS

A. See Section 01300 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.

C. Welders' Certificates: Submit certification for welders employed on the project, verifying AWS qualification within the previous 12 months.

1.5 QUALITY ASSURANCE

A. Design metal stairs, and screens under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in Oregon.

PART 2 PRODUCTS

2.1 MATERIALS - STEEL

A. Steel Sections: ASTM A 36/A 36M.

B. Steel Tubing: ASTM A 500, Grade B cold-formed structural tubing.

C. Plates: ASTM A 283.

D. Pipe: ASTM A 53/A 53M, Grade B Schedule 40, black finish.

E. Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, galvanized to ASTM A 153/A 153M where connecting galvanized components.

F. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.

G. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.

H. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

2.2 FABRICATION

A. Fit and shop assemble items in largest practical sections, for delivery to site.

B. Fabricate items with joints tightly fitted and secured.

C. Continuously seal joined members by intermittent welds and plastic filler.

D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

E. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.

F. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.3 FABRICATED ITEMS

A. Metal stairs, privacy screens and other items indicated on Drawings.
   1. Privacy screens and metal stairs to be design-build items as indicated on Drawings.

2.4 FINISHES - STEEL

A. Prime paint all steel items.
   1. Exceptions: Galvanize items as indicated on Drawings.
   2. Exceptions: Do not prime surfaces in direct contact with concrete, where field welding is required, and items to be covered with sprayed fireproofing.

B. Prepare surfaces to be primed in accordance with SSPC-SP2.

C. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.

D. Prime Painting: One coat.

E. Galvanizing of Structural Steel Members: Galvanize after fabrication to ASTM A 123/A 123M requirements.

F. Galvanizing of Non-structural Items: Galvanize after fabrication to ASTM A 123/A 123M requirements.

2.5 FABRICATION TOLERANCES

A. Squareness: 1/8 inch maximum difference in diagonal measurements.

B. Maximum Offset Between Faces: 1/16 inch.

C. Maximum Misalignment of Adjacent Members: 1/16 inch.

D. Maximum Bow: 1/8 inch in 48 inches.

E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

3.2 INSTALLATION

A. Install items plumb and level, accurately fitted, free from distortion or defects.

B. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.

C. Obtain approval prior to site cutting or making adjustments not scheduled.

D. After erection, prime welds, abrasions, and surfaces not shop primed or galvanized, except surfaces to be in contact with concrete.

3.3 ERECTION TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch.

C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION 05500

SECTION 06100 ROUGH CARPENTRY

PART 1 GENERAL

1.1 SUMMARY

A. Section includes structural floor, wall, and roof framing; wall and roof sheathing; subfloor sheathing; preservative and fire retardant treatment; sill gaskets; flashings; roof curbs and cants, blocking in wall, and roof openings; wood furring and grounds; electrical panel back boards, concealed wood blocking.

1.2 SUBMITTALS

A. Shop Drawings: Indicate framing system, loads and cambers, bearing details, framed openings.

1.3 QUALITY ASSURANCE

A. Perform Work in accordance with the following:
   1. Lumber Grading Agency: Certified by DOC PS 20.
   2. Wood Structural Panel Grading Agency: Certified by EWA - The Engineered Wood Association.
   3. Lumber: DOC PS 20.

B. Fire Rated Wall, Floor, and Roof Construction: Rating as indicated on Drawings.
   1. Tested Rating: Determined in accordance with ASTM E119.

C. Maintain one copy of each document on site.

PART 2 PRODUCTS

2.1 LUMBER MATERIALS

A. Lumber Grading Rules: WCLIB or WWPA G-5.

B. Beam Framing: See Structural Notes. 19 percent maximum moisture content.

C. Joist Framing: See Structural Notes. 19 percent maximum moisture content.

D. Rafter Framing: See Structural Notes. 19 percent maximum moisture content.

E. Studding: See Structural Notes. 19 percent maximum moisture content.

F. Sill Plate: See Structural Notes. See Structural Notes. 19 percent maximum moisture content. Pressure preservative treated.

2.2 SHEATHING MATERIALS

A. Plywood Roof Sheathing: Rated Sheathing Structural I, plywood or oriented strand board. Span

Rating 32/16 Exposure Durability 1; unsanded.]

B. Gypsum Wall Sheathing: ASTM C1396/C1396M; Type X fire resistant, 5/8 inch thick, with paper faces.

2.3 ACCESSORIES

A. Fasteners and Anchors:
   1. Fasteners: 316 Stainless steel or Hot dipped galvanized steel.
   2. Nails and Staples: ASTM F1667.

B. Structural Framing Connectors: Joist Hangers: 316 Stainless steel or Hot dipped galvanized steel.

C. Sill Gasket on Top of Foundation Wall: Plate width, closed cell foam strip.

D. Building Paper: ASTM D226; Type I, No. 15 unperforated asphalt felt.

2.4 WOOD TREATMENT

A. Wood Preservative (Pressure Treatment): AWPA Treatment C1 using water borne CCA preservative with 0.25 pcf retention.

PART 3 EXECUTION

3.1 FRAMING

A. Set structural members level and plumb, in correct position.

B. Fasten framing in accordance with IBC Section 1704.6 & 1707.3 code.

C. Place horizontal members crown side up.

D. Place sill gasket directly on foundation.

E. Frame double joist headers at floor and ceiling openings. Frame rigidly into joists. Frame double joists under wall studding.

F. Curb roof openings except where curbs are provided. Construct curb members of single pieces for each side.

3.2 SHEATHING

A. Install gypsum sheathing in accordance with ASTM C1280.

B. Fasten sheathing in accordance with OSSC code.

C. Install top sheathing to two span continuous. Cantilevered pieces not allowed.

D. Secure wall sheathing with ends staggered, over framing.

E. Place building paper over wall sheathing, weather lap joints and end laps, staple in place. Coordinate flashing installation to ensure continuous water resistant barrier.

3.3 FIREBLOCKING AND DRAFTSTOPPING

A. Install fireblocking to cut off concealed draft openings.
   1. Concealed Framed Wall and Furred Spaces: Install fireblocking vertically at floor and ceiling levels and horizontally at maximum 10 feet on center.

END OF SECTION 06100

SECTION 07311.3 ASPHALT SHINGLES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Asphalt shingles.

B. Felt underlayment.

C. Self-adhering sheet underlayment.

D. Roof substrate

1.2 RELATED SECTIONS:

A. Section 07723.6 – Siding and Trim

B. Section 07920 – Sealants and Caulking

1.3 REFERENCES

A. ASTM International:

1. ASTM D 226; Standard Specification for Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
2. ASTM D 1970; Standard specification for Self Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
3. ASTM D 3161; Standard Test Method for Wind Resistance of Asphalt Shingles (Fan Induced Method)
4. ASTM D 3462; Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules
5. ASTM D 4586; Standard Specification for Asphalt Roof Cement, Asbestos Free
6. ASTM D 4869; Standard Specification for Asphalt Saturated Organic Felt Underlayment Used in Steel Slope Roofing
7. ASTM D 6757; Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep Slope Roofing
8. ASTM F 1667; Standard Specification for Driven Fasteners; Nails, Spikes, and Staples.

B. Underwriters Laboratories, Inc.:

1. UL 790 – Tests for Fire Resistance of Roof Covering Materials
2. CAN/ULC (Underwriters Laboratories of Canada) S107 – Methods of Fire Tests of Roof Coverings

C. National Roofing Contractors Association:

1. The NRCA Roofing and Waterproofing Manual 5th Ed., 2001 (2003 Update)

1.4 SUBMITTALS

A. Product Data: Submit manufacturer current technical literature for each component.

B. Samples for Verification: For the following products, of sizes indicated and to verify color selected:

1. Asphalt Shingle: Full size asphalt shingle strip.
2. Ridge and Hip Cap Shingles: Full size ridge and hip cap asphalt shingle.
3. Self-Adhering Underlayment: 12 inches square.

C. Maintenance data: For asphalt shingles to include in maintenance manuals.

D. Warranties: Sample of special warranties specified in this Section.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. Installer shall have successful installation experience with installation of similar roofing products under similar conditions.

2. Installation shall be in accordance with asphalt shingle manufacturer's installation guidelines and recommendations.

B. Source Limitations: Provide ridge and hip cap shingles through one source as recommended by the asphalt shingle manufacturer.

C. Fire Test Response Characteristics:

1. Exterior Fire Test Exposure: Class A; UL 790 and CAN/ULC S 107 for application and roof slopes indicated. Identify materials with appropriate markings of applicable testing and inspecting agency.

D. Pre-installation Meeting:

1. Hold a pre installation conference, prior to start of asphalt shingle installation at Project site to review all related project requirements and submittals, status of substrate work and preparation, areas of potential conflict and interface, availability of asphalt shingle assembly materials and components, installer's training requirements, equipment, facilities and scaffolding, and coordinate methods, procedures and sequencing requirements for full and proper installation, integration and protection.

a. Attendees shall include Contractor, Engineer, installer, Owner's Representative, and asphalt shingle manufacturer's designated representative.

1.6 DELIVERY, STORAGE AND HANDLING

B. Deliver asphalt shingle materials and components in manufacturer's original, unopened, undamaged packages with identification labels intact.

C. Store asphalt shingle materials as recommended by asphalt shingle manufacturer.

1.7 WARRANTY

A. Provide Warranty for asphalt shingles for a period of 50 years from date of Substantial Completion.

B. Provide Warranty that shingles will remain free from algae growth for 20 years.

PART 2 PRODUCTS

2.1 GLASS FIBER REINFORCED ASPHALT SHINGLES

A. Laminated Asphalt Shingles: ASTM D 3462, laminated, multi ply construction, glass fiber reinforced, mineral granule surfaced, and self-sealing.

B. MANUFACTURER

1. Basis of Design Manufacturer: Subject to compliance with requirements, the design for glass fiber reinforced asphalt shingles is based on PABCO® Roofing Products, Tacoma, WA 98421; Phone: (253) 272.0374; www.pabcoroofing.com or approved equal.

2. Basis of Design Product: The design for glass fiber reinforced asphalt shingles is based on Paramount Advantage® as follows:

a. Paramount Advantage®:
1) Heavy Weight Signature Cut Shingles
2) Algae Resistant
3) Limited Lifetime Warranty/50 year transferable warranty
4) Color: Driftwood
5) Performance Characteristics:
a) Size: 15 1/2 inches by 40 inches.
b) Exposure: 4 1/2 inches.
c) Offset: 5 3/4 inches.
d) Approx. Lbs. per Square: 495.

b. Hip and Ridge Shingles: Manufacturer's standard units to match asphalt shingles.

2.2 ROOF SUBSTRATE

A. Roof substrate shall be comprised of:

1. Bottom: Existing 1/2" plywood sub sheathing. (Sub sheathing thickness is estimated. Verify thickness in the field before installation)

2. Middle: 1” rigid foam insulation.

3. Top: 5/8” plywood or OSB structural roof decking/sheathing.

B. Replacement sub sheathing shall be 1/2” plywood structural sheets conforming to the exposure standards and specifications of the APA – The Engineered Wood Association and the Oregon Building Code. (The existing sub sheathing thickness is estimated. Verify thickness in the field to match existing before installation)

C. Roof decking/sheathing shall be 5/8” plywood or OSB type structural sheets conforming to the exposure standards and specifications of the APA – The Engineered Wood Association and the Oregon Building Code.

D. Rigid foam roof insulation shall be Owens Corning FOAMULAR 250 rigid foam insulation or pre-approved equal.

1. Performance Characteristics

a. Thickness/R value: 1.0”/R 5
b. ASTM C578 Type IV
c. 25 psi (172 kPa) Compressive resistance, minimum.

2.3 ACCESSORIES

A. Starter Strip:
1. Paramount Starter:
a. Size: 13 1/4 inches by 40 inches.
b. Coverage: 73.3 linear feet.

2. Universal Starter:
a. Size: 7 5/8 inches by 39 3/8 inches.
b. Coverage: 101.7 linear feet.

3. Fastener: Drill-Tec™ XHD #12 screw fasteners with CD-10 corrosion resistant coating
a Each screw will have a Plate washers

4. Drill-Tec™ 2-3/8” XHD Barbed Seam Plate washers shall be 316 stainless steel or hot-dipped galvanized

B. Shadow Cap

1. Size: 13 1/4 inches by 39 3/8 inches, perforated to 4 pieces.
2. Coverage: 41 1/4 linear feet.

C. Felt Underlayment: Felt underlayment to comply with Oregon Building Code and ASTM D 226, ASTM D 4869, or ASTM D 6757, installed per manufacturer’s instructions.

D. Self-Adhering Sheet Underlayment: ASTM D 1970.

E. Asphalt Roofing Cement: ASTM D 4586, asbestos free.

F. Fasteners:

1. Roofing Nails: ASTM F 1667, SS 316 wire shingle nails, minimum 0.120 inch diameter, ring shank, sharp pointed, with a minimum 3/8 inch diameter flat head and of sufficient length to penetrate 3/4 inch into solid wood decking or through OSB or plywood sheathing.

    a. Where nails are in contact with metal flashing, use nails made from same metal as flashing.

2. Replacement Sheathing Fasteners: ASTM F 1667, SS 316 10d, minimum 0.148 inch diameter, 3” length common nails.

3. Top Sheathing Fasteners: Drill-Tec™ XHD #12 screw fasteners and Drill-Tec™ 2-3/8” XHD Barbed Seam Plate washers attach new top plywood and insulation to the substrate framing. See Structural drawings for size and spacing.

4. Felt Underlayment Fasteners: SS 316, A 11 staples; and ASTM F 1667, SS 316, 1” or 1 ¼” plasticap nails, 1 inch minimum cap diameter.

G. METAL FLASHING AND TRIM

1. Sheet Metal Flashing and Trim: 26 gauge, SS 316 marine grade. Fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item.

2. Drip Edges: Fabricate in lengths not exceeding 10 feet with a minimum 2 inch roof deck flange and a minimum 1 1/2 inch fascia flange with 3/8 inch drip at lower edge.

PART 3 EXECUTION

3.1 TEAR OFF

A. Tear off must be done in sections to maintain the buildings waterproof integrity.

B. Roofing material removal should be staged so that damaged substrate can be replaced and all exposed sheathing covered by underlayment and fastened in accordance with the provisions of this section at the end of each working day.

3.2 EXAMINATION

A. Remove J-metal along rakes and sidewalls and inspect for rot within the roof substrate.

B. Verify roof substrate and surface conditions are in accordance with asphalt shingle manufacturer recommended tolerances prior to installation of asphalt shingle and accessories.

C. Coordinate with ENGINEER inspection of roof substrate to identify areas where replacement may be necessary.

3.3 REPLACEMENT OF ROOF SUBSTRATE

A. Remove unacceptable roof substrate as identified during the inspection with the ENGINEER, and replace substrate layers as necessary in accordance with Oregon Building Code.

B. Nailing Instructions

1. Replacement roof sheathing shall be secured with specified nails, 6" O.C at sheathing edges and 12" O.C. at all intermediate framing members.
2. Top Sheathing panels joints shall be staggered with the bottom sheathing and shall be secured to the framing members with.

3.4 GENERAL INSTALLATION OF SHINGLES

A. General: Install in accordance with manufacturer's written instructions and in compliance with Oregon Building Code. To qualify for warranty protection and to obtain stated coverage, manufacturer's written instructions must be followed.

B. Manufacturer's standard application instructions apply to slope/inclines between 4 inches per foot and 21 inches per foot. Refer to manufacturer's additional requirements for use on slopes between 2:12 and 4:12, or greater than 20:12.

C. From shingle course to shingle course upwards on roof deck, end joints must be maintained with the specified horizontal offset of 5 3/4 inches or in accordance with manufacturer's installation instructions. Installer must assure end joints are covered.

D. Nailing Instructions:

1. Use six (6) nails per shingle for normal application, positioned in the nail zone as recommended by shingle manufacturer. Nails shall be at least 1 1/2 inches long and driven flush with shingle surface. Nails must not be overdriven to cut into shingles. NAILING SHALL BE DONE BY HAND. Shingles must be applied with 6 nails and sealed to qualify for wind damage warranty coverage.

3.5 UNDERLAYMENT

A. Apply a single layer of 30# felt underlayment complying with ASTM D 226, D 4869 or D 6757 and Oregon Building Code.

1. Single Layer Felt Underlayment: Apply underlayment with 2 inch wide top laps and 4 inch wide end laps. Lap felt underlayment a minimum of 6 inches from both sides over all hips, ridges and valleys.

2. Fasten underlayment with A 11 type staples at 2 inch +/ intervals, and with 1" minimum

length plasti cap nails at the seams at 1 foot +/ intervals.

B. Apply a single layer of Self Adhering Sheet Underlayment (ice and water shield) at all rakes and sidewalls, and two layers on the eaves.

3.6 GUTTERS AND FASCIA

A. Remove gutters and trim fascia to fit flush with the roof sheathing, or replace with appropriate sized cedar fascia. Inspect fascia and replace if rotten or deficient.

1. Paint fascia boards at cut areas.

B. Coordinate with ENGINEER inspection of fascia to identify areas where replacement may be necessary.

C. Install gutters after fascia adjustment/replacement.

3.7 RAKES, EAVES AND SIDEWALL FLASHING

A. Install self-adhering underlayment parallel to all rakes, eaves and sidewalls. Eave flashing overhangs drip edge 1/4 inch to 3/8 inch and extends up the roof to at least 24 inches inside the interior wall line. Horizontal (top) overlaps (when needed), should be located over the overhang area. Top laps are at least 4 inches, end laps are at least 6 inches.

B. Eave Drip Edges: Install eave drip edge flashings below underlayment and fasten to roof sheathing.

3.8 VALLEYS

A. Open Valleys: Valley starts with 36 inches self-adhered, bottom layer underlayment centered down the valley. Extend felt underlayment over this and trim overlap 6 inches. A second layer of felt is applied over this, centered down the valley. Apply metal valley flashing, minimum 26 gauge SS 316 marine grade flashing; minimum 24 inches wide, formed with a "W" shape and center rib and avoid puncturing. Center metal flashing in valley over second layer of felt underlayment, extending beyond drip edge 1/4 inch to 3/8 inch. If more than one piece of flashing metal is needed, the lower piece is nailed at the top. The upper piece laps over the lower piece nails by at least 8 inches and the lap is cemented together with asphalt roof cement complying with ASTM D 4586.

B. Snap two chalk lines down valley, starting 3 inches on either side of valley center line, at top of valley and diverging from each other 1/8 inch per foot down valley. Apply shingles into valley in the typical sequence of application on balance of roof. Trim shingles to the chalk line; avoid pieces less than 12 inches wide. If necessary, trim the preceding shingle on the course. Apply the shingles into the valley so that no nails pass through the valley metal. Clip the upper shingle corner (in the valley) 1 inch at 45°. Embed each shingle end in a 3 inches wide strip of asphalt roof cement.

3.9 APPLICATION DIAGONAL OFFSET PATTERN

A. First Starter Course: Use a self-sealing three tab shingle with the tabs cut off and the adhesive at the eave. Remove 7 ½ inches from the end of the first piece and apply it at the lower left hand corner of the roof, overhanging the drip edge 1/4 inch to 3/8 inch. Nail in place with 4 nails about 2 inches up from the eave, spaced evenly across the shingle. Continue the Starter across the deck with full shingles.

B. Second Starter Course: Use PABCO® Paramount Starter to assure matching shingle colors. Cut 5 ¾ inches off the length of the first slab of Starter and apply at the lower left hand corner of the roof. This Starter is applied, flush with the first starter course at the rake and eave drip edge. Continue the Starter across the deck with full shingles. See Paramount® Getting Started Technical Bulletin at www.pabcoroofing.com for more information and details.

C. Base and Cap (Counter) Flashing:

1. Install the metal base flashing for the front of a chimney, skylight, vent or adjoining wall, over the headlap of the last course of shingles below the chimney, and extending up the chimney. Set both the roof and chimney overlaps in asphalt roof cement. Where the roof abuts the chimney or vertical wall, the shingles must be flashed with metal flashing shingles applied over the end of each course of shingles. The flashing shingles are 8 inches by 6 1/2 inches, bent to extend 4 inches out over the shingles on the roof deck and 4 inches up the vertical surface. Each flashing shingle is placed so that its bottom edge is just back from the exposed edge of the shingle which will overlap it. It is secured to the deck with one nail near the top corner. The base flashing must be flashed with cap flashing of sheet metal. The cap flashing must extend at least 1 inch into the masonry mortar joints and be caulked with asphalt roof cement to insure a water tight connection. Base flashing should be cut to cover the entire cricket and extend 6 inches up the brickwork on the chimney. See ARMA Residential Asphalt Roofing Manual for additional details.

D. Hips and Ridges:

1. Trim shingles to be even with the ridge and cap with Shadow Cap shingles exposed 5 5/8 inches to the weather. Nail 6 5/8 inches back from the exposed edge and 1 inch up from the bottom edge with galvanized roofing nails long enough to penetrate deck 3/4 inch. Applying PABCO® Shadow Cap as a double layer piece is recommended to accent the hip and ridge lines.

2. In cold weather (40°F or below) store shingles for hip & ridge in heated location 24 hours prior to application.

END OF SECTION 07311.3

SECTION 07723.6 SIDING AND TRIM

PART 1 GENERAL

1.1 SUMMARY

A. Section includes:

1. HaridPlank Lap Siding and HardiTrim boards indicated on Drawings and specified herein. Includes related hardware and attachments. Does not include mechanical or structural items.

1.2 SUBMITTALS

A. CEDARMILL HardiPlank Lap Siding will be provided and installed by the Contractor. Submittals by the Contractor will be required for this item of work. Contractor will comply with all installation instructions and manufacturer requirements as defined within the following documentation and attached to this Section:

1. Product Data: Manufacturer’s technical data for each type of vent assembly, including setting drawings, templates, fire resistive characteristics, finish requirements, and details of anchorage devices.

a. Include complete schedule, types, locations, construction details, finishes, window flashing, latching or locking provisions, and other pertinent data.

2. Manufacturer's Installation Instructions: Indicate installation requirements and rough in dimensions.

B. 5/4 RUSTIC HardiTrim will be provided and installed by the Contractor. Submittals by the Contractor will be required for this item of work. Contractor will comply with all installation instructions and manufacturer requirements as defined within the following documentation and attached to this Section:

1. Product Data: Manufacturer’s technical data for each type of assembly, including setting drawings, templates, fire resistive characteristics, finish requirements, and details of anchorage devices.

a. Include complete schedule, types, locations, construction details, finishes, window flashing, latching or locking provisions, and other pertinent data.

2. Manufacturer's Installation Instructions: Indicate installation requirements and rough in dimensions.

1.3 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer/Installer: Company specializing in manufacturing and installation of components specified in this Section with minimum of 5 years documented experience.

B. Fire Resistance Ratings: Where fire resistance classification is indicated, provide fire rated units listed by Underwriters Laboratories, Inc., Factory Mutual Research Corporation (FMRC), or both.

C. Regulatory Requirements:

1.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Contact the owner to coordinate delivery of units to site.

B. Exercise proper care in handling of Work so as not to injure finished surfaces. Protect Work from damage after it is in place.

C. Store materials under cover in a dry and clean location off the ground. Remove materials that are damaged or otherwise not suitable for installation from Project site and replace with acceptable materials at no additional cost to Owner.

1.5 WARRANTY

A. Warrant materials and workmanship against defects after completion and final acceptance of Work.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. James Hardie

2.2 MANUFACTURED UNITS

A. HARDIPLANK© LAP SIDING: http://www.jameshardie.com/Design-Ideas/Live-Colorfully

1. Siding Color: COUNTRY LANE RED
   a. HardiPlank© Lap Siding Select Cedarmill
      1) THICKNESS: 0.312"
      2) LENGTH: 144" boards
   b. WIDTH 8.25”
      1) EXPOSURE: 7”

2. Trim Color: AUTUMN TAN
   a. HardiTrim© Boards 5/4 RUSTIC
      1) THICKNESS: 1"
      2) LENGTH: 144" boards
   b. WIDTH 5.5”

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper or timely completion.

B. Verify that items affecting Work of this Section are in place and positioned correctly.

C. Verify tolerances and correct improper conditions.

D. Do not proceed until unsatisfactory conditions have been corrected.

3.2 SIDING INSTALLATION

A. Install siding per current manufacturer’s installation guide.

3.3 WINDOW TRIM

A. Install trim per current manufacturer’s installation guide.

3.4 CLEANING

A. Clean exposed surfaces per manufacturer's written instructions. Touch up damaged metal coatings.

PART 4 PRODUCT DATA SHEETS

END OF SECTION 07723.6

SECTION 07920 SEALANTS AND CAULKING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. This Specification is intended to be general in scope as to locations of caulking and sealants. Contractor shall examine all Drawings and Details thoroughly and familiarize himself with the extent of the caulking and sealing involved. Only a complete and absolutely watertight and weather tight job will be accepted.

1.3 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Samples and Technical Data

1. Submit technical data by all manufacturers of proposed materials.

C. Submit material manufacturers' printed preparation and application instructions to District and furnish copies to all trades concerned.

1.4 WARRANTY

A. Contractor shall fully guarantee all materials and workmanship under this Section for a period of three (3) years from the date of final acceptance of the structure against all defects in both workmanship and materials and he shall promptly correct and/or replace such faulty work if so notified, at no additional cost to the City.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Henkel Corporation
Avon, OH 44011
Phone 1 800 624 7767
Fax (440) 937 7067
www.osipro.com

B. Substitutions: Not permitted.

2.2 MATERIALS

A. Product: OSI QUAD, Window, Door & Siding Advanced Formula Sealant

1. Color: White.

B. Delivery. Deliver sealant and caulking compounds in unopened factory labeled containers; labels

bearing statement of conformance to standards specified for each material; and bearing manufacturer's name and product designation.

C. Primer, where required, shall be used as recommended in writing by the sealant manufacturer. Primer shall have been tested for non-staining characteristics and durability on samples of actual surfaces to be sealed.

D. Back up Materials and Preformed Joint Fillers. Use non staining material, compatible with sealant and primer, and of a resilient nature, such as closed cell polyethylene rod, or elastomeric tubing or rod (neoprene, butyl, or EDPM). Materials impregnated with oil, bitumen, or similar shall not be used. Size and shape shall be as indicated by joint details in Drawings and shall be as recommended by sealant manufacturer in writing. Sealant shall not adhere to back up material.

E. Bond Breakers, where required, shall be polyethylene tape, aluminum foil or other material as recommended by sealant manufacturer in writing.

PART 3 EXECUTION

3.1 GENERAL

A. Perform work of this Section by material manufacturer's approved applicator in strict conformance with manufacturer's printed instructions, or perform such operations under direct supervision of qualified representative of material manufacturer.

B Applicator shall examine all surfaces and report to the General Contractor all conditions not acceptable.

3.2 PREPARATION

A. Thoroughly clean all joints, removing all foreign matter such as dust, oil, grease, water, surface dirt, frost and old caulking materials. Sealant must be applied to the base surface. Previously applied paint or primer must be entirely removed.

B. Porous materials such as concrete masonry or stone should be cleaned where necessary by grinding, blast cleaning, mechanical abrading, acid washing or combination of these methods to provide a clean, sound base surface for sealant adhesion.

1. Laitance shall be removed by acid washing, grinding, or mechanical abrading.

2. Form oils shall be removed by blast cleaning.

3. Loose particles present or resulting from grinding, abrading or blast cleaning shall be removed by blowing out joints with oil free compressed air (or vacuuming) prior to application of primer or sealant.

C. Non-porous surfaces, such as metal and glass, shall be cleaned either mechanically or chemically. Protective coatings such as methacrylate lacquer on metallic surfaces shall be removed by a solvent that leaves no residue. Solvent shall be used with clean cloths or lint-less

paper towels. Do not allow solvent to air dry without wiping. Wipe dry with clean, dry cloth, or lint-less paper towels.

D. Joint areas to be protected with masking tape or strippable films shall be cleaned before application of tape or film.

E. All joints to receive sealant shall be as indicated on shop or Project Drawings. Do not seal joints until they are in compliance with drawings or are acceptable to the Engineer.

1. Joints to receive sealant shall be a minimum of 1/4 inch wide by 1/4 inch deep, unless otherwise approved.

2. For joints in concrete, masonry, or stone: depth of the sealant may be equal to the width of joints up to 1/2 inch wide. For joints 1/2 inch to 1 inch wide: depth shall be 1/2 inch. For expansion and other joints, 1 to 2 inches wide: depth shall be no greater than 1/2 the applied sealant width. For joints exceeding 2 inches (5 cm) in width: depth shall be as directed by sealant manufacturer.

3. For joints in metal, glass, and other non-porous surfaces: sealant depth shall be a minimum of 1/2 the applied sealant width, and shall in no case exceed the applied sealant width.

F. Joints to receive sealant, back up material or pre formed joint filler shall be cleaned out, raked to full width and depth as required by Applicator.

G. Joints shall be of sufficient width and depth to accommodate specified back up material or pre formed joint filler and sealant.

3.3 APPLICATION

A. Install back up material or joint filler, of type and size specified, at proper depth to provide sealant dimensions as detailed. Back up material shall be of suitable size and shape; and compressed 25 50 percent to fit joints as required. Sealant shall not be applied without back up material and/or bond breaker strip. When using back up tubes avoid lengthwise stretching. Tube or rod shall not be twisted or braided.

B. Apply masking tape, where required, in continuous strips in alignment with joint edge.

C. Prime surfaces, where required, with primer as recommended by sealant manufacturer.

D. Follow sealant manufacturer's instruction regarding mixing (if required), surface preparation, priming, and application procedure.

E. Apply sealant under pressure with hand or power actuated gun or other appropriate means. Gun shall have nozzle of proper size and provide sufficient pressure to completely fill joints as designed. All joint surfaces shall be tooled to provide the contour as indicated on Drawings. When tooling joints, use tooling solution recommended by manufacturer. Remove masking tape immediately after joints have been tooled.

1. For sealant application when air temperature is below forty degrees (40) Fahrenheit (four degrees (4) Centigrade), consult sealant manufacturer for recommendations.

3.4 CLEAN UP AND PROTECTION

A. Clean adjacent surfaces of sealant as work progresses. Use solvent or cleaning agent as recommended by sealant manufacturer. All finished work shall be left in a neat, clean condition.

3.5 QUALITY CONTROL

A. The sealant joints shall be uniformly smooth, free of wrinkles, flush with adjacent surfaces and absolutely watertight. Adjacent surfaces which have been soiled by the application of the sealing compound shall be wiped clean and be left neat. The work will be judged defective due to the sealant's hardening, cracking, crumbling, melting, shrinking, leaking, or running.

END OF SECTION 07920

SECTION 071300 SHEET WATERPROOFING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Sheet membrane waterproofing.

B. Drainage panels.

1.2 RELATED REQUIREMENTS

A. Section 07 92 00 - Joint Sealants: Sealing moving joints in waterproofed surfaces that are not required to be treated in this section.

1.3 REFERENCE STANDARDS

A. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension; 2006a (Reapproved 2013).

B. ASTM D570 - Standard Test Method for Water Absorption of Plastics; 1998 (Reapproved 2010).

C. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting; 2012.

D. ASTM D903 - Standard Test Method for Peel or Stripping Strength of Adhesive Bonds; 1998 (Reapproved 2010).

E. ASTM D1876 - Standard Test Method for Peel Resistance of Adhesives (T-Peel Test); 2008.

F. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection; 2013.

G. ASTM D5295/D5295M - Standard Guide for Preparation of Concrete Surfaces for Adhered (Bonded) Membrane Waterproofing Systems; 2014.

H. ASTM D5385/D5385M - Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes; 1993 (Reapproved 2014).

I. ASTM E96/E96M - Standard Test Methods For Water Vapor Transmission of Materials; 2013.

J. ASTM E154/E154M - Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover; 2008a (Reapproved 2013).

1.4 SUBMITTALS

A. See Section 01330 - SUBMITTAL PROCEDURES.

B. Product Data: Provide data for membrane, surface conditioner, flexible flashings, joint cover

sheet, and joint and crack sealants.

C. Shop Drawings: Indicate special joint or termination conditions and conditions of interface with other materials.

D. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention, and acceptable installation temperatures.

E. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.5 QUALITY ASSURANCE

A. Membrane Manufacturer Qualifications: Company

B. Installer Qualifications: Company specializing in performing the work of this section with minimum three years' experience.

1.6 FIELD CONDITIONS

A. Maintain ambient temperatures above 40 degrees F for 24 hours before and during application and until liquid or mastic accessories have cured.

1.7 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Provide five year manufacturer warranty for waterproofing failing to resist penetration of water, except where such failures are the result of structural failures of building. Hairline cracking of concrete due to temperature change or shrinkage is not considered a structural failure.

PART 2 PRODUCTS

2.1 MEMBRANE MATERIALS

A. Self-Adhered Modified Bituminous Membrane:

1. Thickness: 60 mil (0.060 inch).

2. Sheet Width: 36 inches.

3. Tensile Strength:

a. Film: 5000 pounds per square inch, minimum, measured according to ASTM 0882 and at grip-separation rate of 2 inches per minute.
b. Membrane: 325 pounds per square inch, minimum, measured according to ASTM 0412 Method A, using die C and at spindle-separation rate of 2 inches per minute.

4. Elongation at Break: 300 percent, minimum, measured according to ASTM 0412.

5. Water Vapor Permeance: 0.05 perm, maximum, measured in accordance with ASTM E96/E96M.

6. Low Temperature Flexibility: Unaffected when tested according to ASTM 01970 at minus 20 degrees F, 180 degree bend on 1 inch mandrel.

7. Peel Strength: 7 pounds per inch, minimum, when tested according to ASTM 0903.

8. Lap Adhesion Strength: 5 pounds per inch, minimum, when tested according to ASTM 01876.

9. Puncture Resistance: 50 pounds, minimum, measured in accordance with ASTM E154/E154M.

10. Water Absorption: 0.1 percent increase in weight, maximum, measured in accordance with ASTM 0570, 24 hour immersion.

11. Hydrostatic Resistance: Resists the weight of 200 feet when tested according to ASTM 05385/05385M.

12. Adhesives, Sealants, Tapes, and Accessories: As recommended by membrane manufacturer.

13. Manufacturers:

    a. Carlisle Coatings & Waterproofing Incorporated; MiraORI 860/861: www.carlisle-ccw.com.
    b. Grace Construction Products; Bituthane 3000: www.na.graceconstruction.com.
    c. Henry Company; Blueskin WP 200: www.henry.com.
    d. Polyguard No. 650 by Polyguard Products, Inc: www.polyguardproducts.com.
    e. Jiffy Seal 140/60 by Protecto Wrap Company: www.protectowrap.com.
    f. Substitutions: See Section 01 60 00 - Product Requirements.

B. Seaming Materials: As recommended by membrane manufacturer.

C. Membrane Sealant: As recommended by membrane manufacturer.

D. Termination Bars: Aluminum; compatible with membrane and adhesives.

E. Thinner and Cleaner: As recommended by adhesive manufacturer, compatible with sheet membrane.

2.2 ACCESSORIES

A. Sealant for Cracks and Joints in Substrates: Resilient elastomeric joint sealant compatible with substrates and waterproofing materials.

B. Drainage Panel: 0.40 inch thick formed plastic, hollowed sandwich with fabric and film faces.
   1. Hydroduct 220 Drainage Composite by W. R. Grace: www.na.graceconstruction.com.
   2. Polyflow 10P by Polyguard Products, Inc: www.polyguardproducts.com.
   3. Protecto Drain 2000-V by Protecto Wrap Company: www.protectowrap.com.
   4. Miradrain 9000 by Carlisle Coatings and Waterproofing: www.carlisle-ccw.com.
   5. Substitutions: See Section 01 60 00 - Product Requirements.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify substrate surfaces are durable; free of matter detrimental to adhesion or application of waterproofing system.

C. Verify that items that penetrate surfaces to receive waterproofing are securely installed.

3.2 PREPARATION

A. Protect adjacent surfaces not designated to receive waterproofing.

B. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions.

C. Do not apply waterproofing to surfaces unacceptable to membrane manufacturer.

D. Fill non-moving joints and cracks with a filler compatible with waterproofing materials.

E. Seal moving cracks with sealant, not rigid filler, using procedures recommended by sealant and waterproofing manufacturers.

F. Prepare building expansion joints as indicated on drawings.

G. Concrete Surfaces for Adhesive Bonding: Prepare concrete substrate according to ASTM D5295/D5295M.

   1. Remove substances that inhibit adhesion including form release agents, curing compounds admixtures, laitance, moisture, dust, dirt, grease and oil.
   2. Repair surface defects including honeycombs, fins, tie holes, bug holes, sharp offsets, rutted cracks, ragged corners, deviations in surface plane, spalling and delaminations, as described in the reference standard.
   3. Remove and replace areas of defective concrete as specified in Section 03 30 00.
   4. Prepare concrete for adhesive bonded waterproofing using mechanical or chemical methods described in the referenced standard.
   5. Test concrete surfaces as described in the referenced standards. Verify surfaces are ready to receive adhesive bonded waterproofing membrane system.

3.3 INSTALLATION - MEMBRANE

A. Install membrane waterproofing in accordance with manufacturer's instructions.

B. Roll out membrane. Minimize wrinkles and bubbles.

C. Self-Adhering Membrane: Remove release paper layer. Roll out on substrate with a mechanical roller to encourage full contact bond.

D. Overlap edges and ends and seal by method recommended by manufacturer, minimum 3 inches. Seal permanently waterproof. Apply uniform bead of sealant to joint edge.

E. Reinforce membrane with multiple thickness of membrane material over joints, whether joints are static or dynamic.

F. Weather lap joints on sloped substrate in direction of drainage. Seal joints and seams.

G. Install flexible flashings. Seal items penetrating through membrane with flexible flashings. Seal watertight to membrane.

H. Seal membrane and flashings to adjoining surfaces. Install termination bar at all edges.

3.4 INSTALLATION - DRAINAGE PANEL

A. Place drainage panel directly against membrane, butt joints, place to encourage drainage downward. Scribe and cut boards around projections, penetrations, and interruptions.

B. Place protection board directly against drainage panel; butt joints. Scribe and cut boards around projections, penetrations, and interruptions.

3.5 PROTECTION

A. Do not permit traffic over unprotected or uncovered membrane.

END OF SECTION 071300

APPENDIX A: BUILDING PHOTOS


Contractor
Clean-Up Bags
TOUGHER
TRUE TIE
FLAPS
HEAVY DUTY
3 MIL
32 BAGS

APPENDIX B

CITY OF NEWPORT
BUILDING PERMIT APPLICATION

(This is NOT a Permit)

Date: _____

Building Address: _____

Construction Value (Include Labor & Materials): $_____

EXCAVATION & FILL

Excavation Cubic Yds: _____ Fill Cubic Yds: _____

OWNER: **Owner's Signature:** _____

by signature, owner authorizes this work *(or by separate authorization attached)*

Name: _____

Address: _____

Phone: _____ E-mail: _____

BUILDER:

Name: _____

Address: _____

Phone: _____ E-mail: _____

Builder's Registration No.: _____

ARCHITECT:

Name: _____

Address: _____

Phone: _____ E-mail: _____

GEOLOGIST:

Name: _____

Address: _____

Phone: _____ E-mail: _____

DESCRIPTION OF WORK:

Return this application along with 2 sets of plans to the Building/Planning Department located at City Hall, 169 SW Coast Hwy, Newport, OR 97365.

(See reverse side for Plan Requirements)

PLAN REQUIREMENTS

1 Plot Plan showing the proposed building and/or additions, dimensioned location of the property lines, and the location of any existing buildings on the property. Show locations of all street frontages and dimensions of property lines.

2 Floor Plan of each floor, including basement and foundations. Show the use of all rooms or areas, as well as the size and locations of all wall openings and stairs.

3 Exterior wall elevations of three views, showing all pertinent vertical dimensions.

4 Cross Section showing the covering materials for all surfaces (i.e., roofing, ceilings, interior and exterior walls, and projections such as eaves.)

5 Specifications on the drawings or separate covering materials and methods of construction, wall finishing, and all pertinent equipment.

STRUCTURAL - GENERAL NOTES

GENERAL REQUIREMENTS

GOVERNING CODE: The design and construction of this project is governed by the **"Oregon Structural Specialty Code (OSSC)", 2010 Edition**, hereafter referred to as the OSSC, as adopted and modified by the City of **Newport, OR** understood to be the Authority Having Jurisdiction (AHJ).

NARRATIVE OF WORK: Evaluation of strengthening of structure for 110 mph winds. The 110 mph wind speed is at the request of the City of Newport which exceeds the code required wind speed of 95 mph.

REFERENCE STANDARDS: Refer to Chapter 35 of 2010 OSSC. Where other Standards are noted in the drawings, use the latest edition of the standard unless a specific date is indicated. Reference to a specific section in a code does not relieve the contractor from compliance with the entire standard.

DEFINITIONS: The following definitions cover the meanings of certain terms used in these notes:

"**Architect/Engineer**" – The Architect of Record and the Structural Engineer of Record.

- "**Structural Engineer of Record" (SER)** – The structural engineer who is licensed to stamp & sign the structural documents for the project. The SER is responsible for the design of the Primary Structural System.
- "**Submit for review**" - Submit to the Architect/Engineer for review prior to fabrication or construction.
- "**Per Plan**" – Indicates references to the structural plans, elevations and structural general notes.

SPECIFICATIONS: Refer to the project specifications issued as part of the contract documents for information supplemental to these drawings.

OTHER DRAWINGS: Refer to the architectural, electrical, civil and drawings for additional information including but not limited to: dimensions, elevations, slopes, non-bearing walls, stairs, finishes, drains, waterproofing, railings, curbs, depressions, and other nonstructural items.

STRUCTURAL DETAILS: The structural drawings are intended to show the general character and extent of the project and are not intended to show all details of the work. Use details marked "typical" wherever they apply.

STRUCTURAL RESPONSIBILITIES: The structural engineer (SER) is responsible for the strength and stability of the primary structure in its completed form.

COORDINATION: The Contractor is responsible for coordinating details and accuracy of the work; for confirming and correlating all quantities and dimensions; for selecting fabrication processes; for techniques of assembly; and for performing work in a safe and secure manner.

MEANS, METHODS and SAFETY REQUIREMENTS: The contractor is responsible for the means and methods of construction and all job related safety standards such as OSHA and DOSH (Department of Occupational Safety and Health). Contractor is responsible to adhere to OSHA regulations regarding steel erection items specifically addressed in the latest OSHA regulations. Bolting and field welding at all member connections is to be completed prior to the release of the member from the hoisting mechanism unless reviewed and approved by the General Contractor's temporary bracing and shoring design engineer.

TEMPORARY SHORING, BRACING: The contractor is responsible for the strength and stability of the structure during construction and shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is complete. It is the contractor's responsibility to be familiar with the work required in the construction documents and the requirements for executing it properly.

CONSTRUCTION LOADS: Loads on the structure during construction shall not exceed the design loads as noted in DESIGN CRITERIA & LOADS below or the capacity of partially completed construction as determined by the Contractor's SSE for Bracing/Shoring.

CHANGES IN LOADING: The contractor has the responsibility to notify the SER of any architectural, mechanical, electrical, or plumbing load imposed onto the structure that differs from, or that is not documented on the original Contract Documents (architectural / structural / mechanical / electrical or plumbing drawings). Provide documentation of location, load, size and anchorage of all undocumented loads in excess of **400** pounds. Provide marked-up structural plan indicating locations of any new equipment or loads. Submit plans to the Architect/Engineer for review prior to installation.

NOTE PRIORITIES: Plan and detail notes and specific loading data provided on individual plans and detail drawings supplements information in the Structural General Notes.

DISCREPANCIES: In case of discrepancies between the General Notes, Specifications Plan/details or Reference Standards, the Architect/Engineer shall determine which shall govern. Discrepancies shall be brought to the attention of the Architect/Engineer before proceeding with the work.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site. Conflicts between the drawings and actual site conditions shall be brought to the attention of the Architect/Engineer before proceeding with the work.

ADJACENT UTILITIES: The contractor shall determine the location of all adjacent underground utilities prior to earthwork, foundations, shoring, and excavation. Any utility information shown on the drawings and details is approximate and not necessarily complete.

ALTERNATES: Alternate products of similar strength, nature and form for specified items may be submitted with adequate technical documentation to the Architect/Engineer for review. Alternate materials that are submitted without adequate technical documentation or that significantly deviate from the design intent of materials specified may be returned without review. Alternates that require substantial effort to review will not be reviewed unless authorized by the Owner.

DESIGN CRITERIA AND LOADS

OCCUPANCY:	Occupancy Category of Building per 2010 OSSC Table 1604.5 =	II

WIND DESIGN:	**MAIN WIND FORCE RESISTING SYSTEM**		
	Basic Wind Speed	**MPH**	**110 at request of City**
	Exposure Category		**D**
	Wind Importance	I_w =	**1.15**
	Internal Pressure Coefficient	**Cpi =**	**+/- 0.18**
	Topographic Factor	**Kzt =**	**1.0**
	Wind Analysis procedure used:		Method **2 - Analytical**
	COMPONENT & CLADDING PRESSURES for DESIGN (Atrib = 10 sq.ft)		**PSF**
	Wall Cladding, Typical Zone		**42**
	Wall Cladding, Edge Zone within 12 feet of corners		**48**
	Roof Cladding, Middle Zone		**36**
	Roof Cladding, Edge Zone within 12 feet of edge		**54**
	Roof Cladding, Corner Zone within 12 feet of corners		**84**

SEISMIC DESIGN:	**Seismic Design Category:**	**SDC =**	D
	Basic Structural System		**Moment Resisting Frame**
	Seismic Force Resisting System		**Ordinary Moment Frame**
	Response Modification Factor:	**R =**	**3.5**
	System Over strength Factor	**Omega =**	**3**
	Deflection Amplification Factor	**Cd =**	**3**
	Site Classification per OSSC Table 1613.5.2	**Site Class =**	**D**
	Seismic Importance Factor per ASCE 7-05 Table 11.5-1	**Ie =**	**1.25**
	Spectral Response Acceleration (Short Period)	S_s =	**1.548**
	Spectral Response Acceleration (1-Second Period)	S_1 =	**0.690**
	Spectral Design Response Coefficient (Short Period)	S_{DS} =	**1.032**
	Spectral Design Response Coefficient (1-Second Period)	S_{DI} =	**0.690**
	Seismic response coefficient(s)	**Cs =**	**0.34**
	Redundancy Factor (North/South Direction)	**N/S rho=**	**1.0**
	Redundancy Factor (East / West Direction)	**E/W rho=**	**1.0**
	Base shear governed by:		**Wind**
	Seismic Analysis procedure used:		**Equivalent Lateral Force (ELF)**

SNOW LOAD: (1)	Snow Load, (PSF)	p_f =	**20** (2)
	Snow Drift Loading required by Authority Having Jurisdiction?		**No**
	Snow Load Importance Factor	I_s =	**1.1** (3)
	Ground Snow Load, (PSF)	p_g =	**10**
	Snow Exposure Factor	C_e =	**C**
	Thermal Factor	C_t =	**1.0**

1) Snow Load is un-reducible and flat roofs includes 5 psf rain-on-snow surcharge where ground snow load is greater than zero and 20 psf or less per ASCE 7-05 Chap 7.
2) Snow Load based on **ASCE Fig 7-1.**
3) Snow Load Importance Factor per ASCE 7-05 Table 7-4.

DESIGN LOADS	**BIDDER DESIGN COMPONENT**	DEAD LOADS (PSF) UNO	REMARKS & FOOTNOTES
	Roof Dead Load, Total Top Chord Bottom Chord	**17** PSF **10** PSF **7** PSF	For pre-fabricated wood roof truss design

SUBMITTALS

SUBMIT FOR REVIEW: SUBMITTALS of shop drawings, product data and mill tests are required for items noted in the individual materials sections and for *bidder designed* elements.

SUBMITTAL REVIEW PERIOD: Submittals shall be made in time to provide a minimum of TWO WEEKS for review by the Architect/Engineer prior to the onset of fabrication.

GENERAL CONTRACTOR'S PRIOR REVIEW: Prior to submission to the Architect/Engineer, the Contractor shall review the submittal for completeness. Dimensions and quantities are not reviewed by the SER, and therefore, must be verified by the General Contractor. Contractor shall provide any necessary dimensional details requested by the Detailer and provide the Contractor's review stamp and signature before forwarding to the Architect/Engineer.

SHOP DRAWING REVIEW: Once the contractor has completed his review, the SER will review the submittal for general conformance with the design concept and the contract documents of the building and will stamp the submittal accordingly. Markings or comments shall not be construed as relieving the contractor from compliance with the project plans and specifications, nor departures there from.

SHOP DRAWING DEVIATIONS: When shop drawings (component design drawings) differ from or add to the requirements of the structural drawings they shall be designed and stamped by the responsible SSE.

DEFERRED SUBMITTALS

GENERAL CONTRACTOR'S PRIOR REVIEW: Once the contractor has completed his review of the SSE component drawings, the SER will review the submittal for general conformance with the design of the building and will stamp the submittal accordingly. Review of the Specialty Structural Engineer's (SSE) shop drawings (component design drawings) is for compliance with design criteria and compatibility with the design of the primary structure and does not relieve the SSE of responsibility for that design. All necessary bracing, ties, anchorage, proprietary products shall be furnished and installed per manufacturer's instructions or the SSE's design drawings and calculations. These elements include but are not limited to:

- Structural Steel Framing

TESTS AND INSPECTIONS

INSPECTIONS: Special Inspections and Testing shall be done in accordance the STATEMENT OF SPECIAL INSPECTIONS per OSSC Sections 1704, 1705,, 1707 (for Special Seismic Inspections) and 1708 (for Seismic Special Testing)] as applicable. Foundations, footings, under slab systems and framing are subject to inspection by the Building Official in accordance with OSSC 110.3. Contractor shall coordinate all required inspections with the Building Official.

SPECIAL INSPECTORS: Special Inspectors shall be employed by the **Owner** to provide Special Inspections for the project. Special Inspectors shall be qualified persons who demonstrate competence to the satisfaction of the Authority Having Jurisdiction per 1704.1.

STATEMENT OF SPECIAL INSPECTIONS per 1704 and 1705. Special Inspections and Testing are required by 1704, 1706, 1707 and 1708 for the following:

STRUCTURAL STEEL per OSSC Section 1704.3 and Table 1704.3 at the site and the fabrication Shop, shall be done in accordance with the following requirements:

- **Periodic** inspection required:
  - During welding of Single-pass Fillet Welds NOT exceeding 5/16" size as noted in OSSC Table 1704.3.
  - During the welding operations - Verification of welder qualifications
  - During the welding operations - Verification of valid weld procedure specifications per AWS D1.1.
  - Prior to the start of Erection - Verification of framing requirements and *bolting procedures* per AISC.
  - Prior to the start of Erection - Verification of framing requirements and *bolting procedures* per AISC.

POST-INSTALLED ANCHORS TO CONCRETE: shall comply with OSSC Section 1703. Inspections shall be in accordance with the requirements set forth in the approved ICC Evaluation Report and as indicated by the design requirements specified on the drawings. Refer to the POST INSTALLED ANCHORS section of these notes for anchors that are the basis of the design. Special inspector shall verify anchors are as specified in the POST INSTALLED ANCHORS section of these notes or as otherwise specified on the drawings. Substitutions require approval by the SER and require substantiating calculations and current 2010 OSSC recognized ICC Evaluation Services (ES) Report. Special Inspector shall document in their Special Inspection Report compliance with each of the elements required within the applicable ICC Evaluation Services (ES) Report.

INSPECTION SUBMITTALS: Special inspection reports shall be provided on a weekly basis. Final special inspection reports will be required by each special inspection firm per OSSC 1704.1.2. Submit copies of all inspection reports to the Architect/Engineer and the Authority Having Jurisdiction for review.

STRUCTURAL OBSERVATION: Structural Observation shall be provided for structures classified as Seismic Design Category D, E and F in accordance with OSSC Section 1710 and Section 107.3.4.1. Structural observation site visits will be as follows:

- **After frame assembly is complete and before work is covered.**

Contractor shall notify the SER in a timely manner to allow scheduled Observations to occur. Field Observation Reports will be distributed to the Architect, the Contractor, Special Inspector and the Authority Having Jurisdiction.

SOILS AND FOUNDATIONS

REFERENCE STANDARDS: Conform to OSSC Chapter 18 "Soils and Foundations."

Assumed values shall be field verified by the Building Official or the Geotechnical Engineer prior to placing concrete.

DESIGN SOIL VALUES:
Allowable Foundation Bearing Pressure .... **2500** PSF – Assume from original documents

FOUNDATIONS and FOOTINGS: Foundations shall bear on either competent native soil or compacted structural fill as required. Exterior perimeter footings shall bear not less than **18** inches below finish grade, unless otherwise specified by the building official.

STRUCTURAL STEEL

DESIGN STANDARDS:
Structural Steel for this project is designed in accordance with American Institute of Steel Construction (AISC) Specifications.

Structural Steel for this project is designed per:
- AISC – "Manual of Steel Construction, Thirteenth Edition (2005).

REFERENCE STANDARDS:
1) OSSC 2010, Chapter 22 – Steel, hereafter referenced as OSSC.
2) ANSI/AISC 303-05 – Code of Standard Practice for Steel Buildings & Bridges, hereafter referenced as AISC 303.
3) ANSI/AISC 360-05 – Specification for Structural Steel Buildings, hereafter referenced as AISC 360.
4) AISC348-04/RCSC – Specification for Structural Joints using ASTM A325 or A490 Bolts, prepared by "Research Council on Structural Connections (RCSC), hereafter referenced as RCSC.
5) AWS D1.1 -04 – Structural Welding Code - Steel, hereafter referenced as AWS D1.1.

SUBMITTALS:
(1) *Shop drawings* shall be prepared in accordance with AISC 360 Section M.1 and AISC 303 Section 4.
(2) Submit welder's certificates verifying qualification within past 12 months.
(3) *Affidavit* stating the steel provided meets the requirements of the grade(s) specified.
(4) *Manufacturer's engineering and installation information* for post-installed Adhesive Anchors *including* applicable ICC Engineering Research (ER-xxxx) Report.
(5) QA Plan and Procedures of Fabrication Shop.

MATERIALS:
Structural Bars & Plates (PL)................................ ASTM A36, Fy = 36 ksi
Hollow Structural Section – Square/Rect (HSS) . ASTM A500, Grade B Fy = 46 ksi
Washers (flat or beveled)...................................... ASTM F436–required @ slotted & oversize holes
Anchor Rods (Anchor Bolts) .... ASTM F1554, Gr. 36
Mild Threaded Rods .... ASTM A36, Fy = 36 ksi
Threaded Rods (Anchor Bolts)............................ ASTM A307, Fy = 35 ksi
Welding Electrodes.. E70XX, E71TXX unless noted otherwise with a minimum toughness of 20 ft-lbs at 40 degrees Fahrenheit.

WELDING:
1) Welding shall conform to AWS D1.1 and visually conform to AWS Section 6 and Table 6.1. Fabrication/erection inspections by the Contractor per AWS D1.1 Section 6, shall be by associate/ certified inspectors (AWI/CWI) per AWS QC1 or AWS B5.1. Special Inspections (verification inspections) shall be by a certified Welding Inspector (WI) or Senior Welding Inspector (SWI) per AWS B5.1.
2) Welders shall be qualified for the specific prequalified joints required by the design and certified in accordance with AWS requirements.
3) Welding shall be done in accordance with appropriate Weld Procedure Specifications (WPS's). Welders shall be familiar with the applicable WPS's.
4) Welding shall be done with AWS Prequalified Welding Processes unless otherwise approved.
5) Welder qualifications and WPS's shall be maintained at the site of the work and shall be readily available for inspection upon request, both in the shop and in the field.
6) Use E70 or E71T, 70 ksi strength electrodes appropriate for the process selected.
7) Prior to the start of work, Special Inspectior or, if "AISC Certified" or otherwise "Approved" Shop, a shop Certified Weld Inspector (CWI) certified in accordance with provisions of AWS QC1, shall inspect and document compliance with the following:
   - Confirm welder qualifications prior to the start of work.
   - Review all WPS prior to the start of work.
   - Confirm materials in fabrications conform to the specifications.
   - Periodically observe joint preparation, fit-up and welder techniques.
   - Identify on plans all multi-pass fillet welds, single pass fillet welds greater than 5/16", and Complete- and Partial- Joint Penetration (CJP or PJP) groove welded butt joints that require Continuous (Special) Inspection.
   - Visually inspect all welds per Special Inspection Requirements for Steel and AWS Section 6.5 and Table 6.1.

FABRICATION:
- Conform to AISC 303, Section 8 and AISC 360 Section M2 and M5.
- Structural Welding and qualifications shall conform to the AWS D1.1.
- The fabricator shall maintain detailed fabrication & erection quality control procedures per OSSC Section 1704.2.1 that provides the basis for inspection control of the workmanship and ensures that the work is performed in accordance with Code of Standard Practice, the AISC Specification, and the Contract Documents. Fabricators certified by the AISC Quality Certification Program with the following level of certification: Sbd – Conventional Steel Building Structures are deemed to comply with this provision.

VERIFICATION INSPECTION:
- Structural Welding inspections and qualifications shall conform to the AWS D1.1. See WELDING notes and SPECIAL INSPECTIONS for Structural Steel.
- Special Inspector shall review the procedures for completeness and adequacy relative the Code and the Work. Further shop Special Inspections may be waived if the Fabricator is "AISC Certified" or otherwise "Approved" by the Authority Having Jurisdiction per OSSC Section 1704.2.2. See SPECIAL INSPECTIONS for Structural Steel.
- **Periodic Inspections shall include the initial quality verification inspection**, an inspection **during** the fabrication of the steel and a final inspection at the completion of framing.

ERECTION:
1) Conform to AISC 303, Section 7 "Erection", Section 8 "Quality Assurance." and AISC 360, Section M4.
2) The Erector shall maintain detailed fabrication & erection quality control procedures that ensure that the work is performed in accordance with AISC 360 Section M, AISC 303, and the Contract Documents.
3) Steel work shall be carried up true and plumb within the limits defined in AISC 303 Section 7.13.
4) Structural Welding to conform to the AWS D1.1 and applicable WELDING notes above.
5) Special Inspector shall inspect the steel framing to verify compliance with the details shown on the Contract Documents including member size, location, bracing and the application of proper joint details at each connection.
6) High strength bolting shall be periodically inspected by the Special Inspector per OSSC Section 1704.3.3.

BRACING and SAFETY PROTECTION: The contractor shall provide temporary bracing and safety protection required by AISC 360 Section M4.2 and AISC 303 Section 7.10 and 7.11.

PROTECTIVE COATING REQUIREMENTS:
1) SHOP PAINTING: Conform to AISC 360 Section M3 and AISC 303 Section 6.5 unless a multi-coat system is required per the project specifications.
2) EXTERIOR STEEL: Exposed exterior steel shall be protected by either:
   a. Galvanizing: Unless protected with a paint system, exposed steel (outside the building envelope) shall be hot-dipped galvanized, where noted on the plans or otherwise indicated by the finishes specified by the Architect. Apply field touch-ups per project specifications.

WOOD FRAMING

REFERENCE STANDARDS: Conform to:
(1) OSSC Chapter 23 "WOOD"
(2) NDS - "2005 National Design Specification (NDS) for Wood Construction"
(3) APA PDS—97 Plywood Design Specification (revised 1998)
(4) APA Report TT-045B "Minimum Nail Penetration for Wood Structural Panel Connections Subject to Lateral Loads"

SUBMITTALS: Submit shop drawings to the Architect/Engineer for review. Shop drawings shall include member size, spacing, camber, material type, grade, shop and field assembly details and connections, types and location of bolts and other fasteners. Supply shop drawings for the following:
(1) Glued laminated members

IDENTIFICATION: All sawn lumber and pre-manufactured wood products shall be identified by the grade mark or a certificate of inspection issued by the certifying agency.

MATERIALS:
- Sawn Lumber: Conform to grading rules of WWPA, WCLIB or NLGA and Table below. Finger jointed studs acceptable at interior walls only.

TABLE of SOLID SAWN LUMBER

Member Use	Size	Species	Grade
Wall Stud	2x8, 3x4, 2x6, 3x6	Doug Fir Larch	No. 2
Sill Plate	2x4, 3x4, 2x6, 2x8, 3x6	PT Doug Fir Larch	No. 2

- Wood Structural Sheathing (Plywood): Wood APA-rated structural sheathing includes: all veneer plywood, oriented strand board, and wood based material with T&G joint. Conform to "Construction and Industrial Plywood" based on Product Standard PS 1-07 by the U.S. Dept. of Commerce, and "Performance Standard for Wood-Based Structural-Use Panels" based on Product Standard PS 2-04 by the U.S. Dept. of Commerce and "Plywood Design Specification (revised 1998)" based on APA PDS—97 by the American Plywood Association. Unless noted otherwise, sheathing shall comply with the following table:

TABLE of SHEATHING - Use, Minimum Thickness and Minimum APA Rating

Location	Thickness	Span Rating	Plywood Grade	Exposure
Walls	15/32"	32/16	C-D	1
Roof	19/32"	40/20	C-D	1

Unless noted otherwise on drawings, install roof and floor panels with long dimension across supports and with panel continuous over two or more spans. End joints shall occur over supports.

- Timber Connectors: Shall be "Strong Tie" by Simpson Company as specified in their latest catalog. Alternate connectors by other manufacturers may be substituted provided they have current ICC approval for equivalent or greater load capacities and are reviewed and approved by the SER prior to ordering. Connectors shall be installed per the manufacturer's instructions. Where connector straps connect two members, place one-half of the nails or bolts in each member. Where straps are used as hold-downs, nail straps to wood framing just prior to drywall application, as late as possible in the framing process to allow the wood to shrink and the building to settle. Premature nailing of the strap may lead to strap buckling and potential finish damage.

  Where connectors are in exposed exterior applications in contact with preservative treated wood (PT) other than CCA, connectors shall be either batch hot-dipped galvanized (HDG), mechanically galvanized (ASTM B695, Class 40 or greater) stainless steel, or provided with 1.85 oz/sf of zinc galvanizing equal to or better than Simpson ZMAX finish.

- Fasteners (nails, bolts, screws, etc) attaching timber connectors (joist hangers, post caps and bases, etc) to PT wood shall have similar corrosion resistance properties (matching protective treatments) as the protected connector. Fasteners (nails, bolts, screws, etc) attaching sawn timber members or sheathing (shear walls) to PT wood be corrosion resistant; nails and lag bolts shall be either HDG (ASTM A153) or stainless steel. Verify the suitability of the fastener protection/coating with the wood treatment chemical manufacturer/supplier.

  Provide washers under the heads and nuts of all bolts and lag screws bearing on wood. All nails 12d and smaller shall be full length common unless noted otherwise. 16d nails may be 16d sinkers unless noted otherwise. Nail straps to wood framing as late as possible in the framing process to allow the wood to shrink and the building to settle. Premature nailing of the strap may lead to strap buckling and potential finish damage.

- Fasteners: Conform to OSSC Section 2304.9 "Connections and fasteners." Unless noted on plans, nail per Table 2304.9.1. Unless noted otherwise all nails shall be common. Alternate nails may be used but are subject to review and approval by the Structural Engineer. Substitution of staples for the nailing of rated sheathing is subject to review by the structural engineer prior to construction.
- Lag Bolts/Bolts: Conform to ASTM A307 and OSSC Section 2304.9.

NAILING REQUIREMENTS: Provide minimum nailing in accordance with OSSC Table 2304.9.1. "Fastening Schedule" except as noted on the drawings. Nailing for roof/floor diaphragms/shear walls shall be per drawings. Nails shall be driven flush and shall not fracture the surface of sheathing.

NAILERS ON STEEL COLUMNS and BEAMS: Wood 3x nailers are generally required on all HSS columns and steel beams abutting or embedded within wood framing. Unless noted otherwise, attach with 5/8" diameter bolts or welded studs at 16" on centers. Wood nailers on beams supporting joist hangers shall not overhang the beam flange by more than ¼".

MOISTURE CONTENT: Wood material used for this project shall have maximum moisture content of 19% except for the pressure-treated wood sill plate. Refer to TESTING & INSPECTIONS for the verification of these limits. The maximum moisture content required may be less than 19% when based on a particular cladding/insulation system. Refer to the Architect's drawings, and project specifications, or with cladding installer for maximum recommended moisture content.

CLADDING COMPATIBILTY: The Architect/Owner shall review the cladding and insulation systems proposed for the project with respect to their performance over wood studs with moisture contents greater than 19%. EIFS systems should be avoided on wood-framed projects due to problems with moisture proofing.

PRESERVATIVE TREATMENT (PT): Wood materials are required to be "treated wood" in accordance with OSSC Section 2304.11. "Decay and Termite Protection" shall conform to the appropriate standards of the American Wood-Preservers Association (AWPA) for sawn lumber, glued laminated timber, round poles, wood piles and marine piles. Follow American Lumber Standards Committee (ALSC) quality assurance procedures. Products shall bear the appropriate mark. Fasteners or anchors in treated wood shall be of stainless steel or hot-dipped galvanized or as per OSSC 2304.9.5. HUD UM48a Pressure-Treated Lumber and Plywood Certification is required.

DCI ENGINEERS
400 SW 6TH AVENUE • SUITE 605
PORTLAND, OREGON 97204
PHONE: (503) 242-2448 • FAX: (503) 242-2449
WEBSITE: www.dci-engineers.com
CIVIL / STRUCTURAL

HGE INC
ARCHITECTS, ENGINEERS, SURVEYORS & PLANNERS
375 PARK AVE, COOS BAY, OREGON 97420
P: 541.269.1166 F: 541.269.1833 www.hge1.com

PROJECT:
AIRPORT FBO BUILDING
EXTERIOR REPAIR PROJECT
City of Newport 110 S.E. 84TH,
NEWPORT, OR. 6 MILES SOUTH OF YAQUINA RIVER

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 12219 OREGON JULY 18, 1983 WADE W. YOUNIE
EXPIRES: 6-30-16

DCI PROJECT NO.: 14091–0017
DATE: AUGUST. 17, 2015
REVISIONS:

DATE	BY

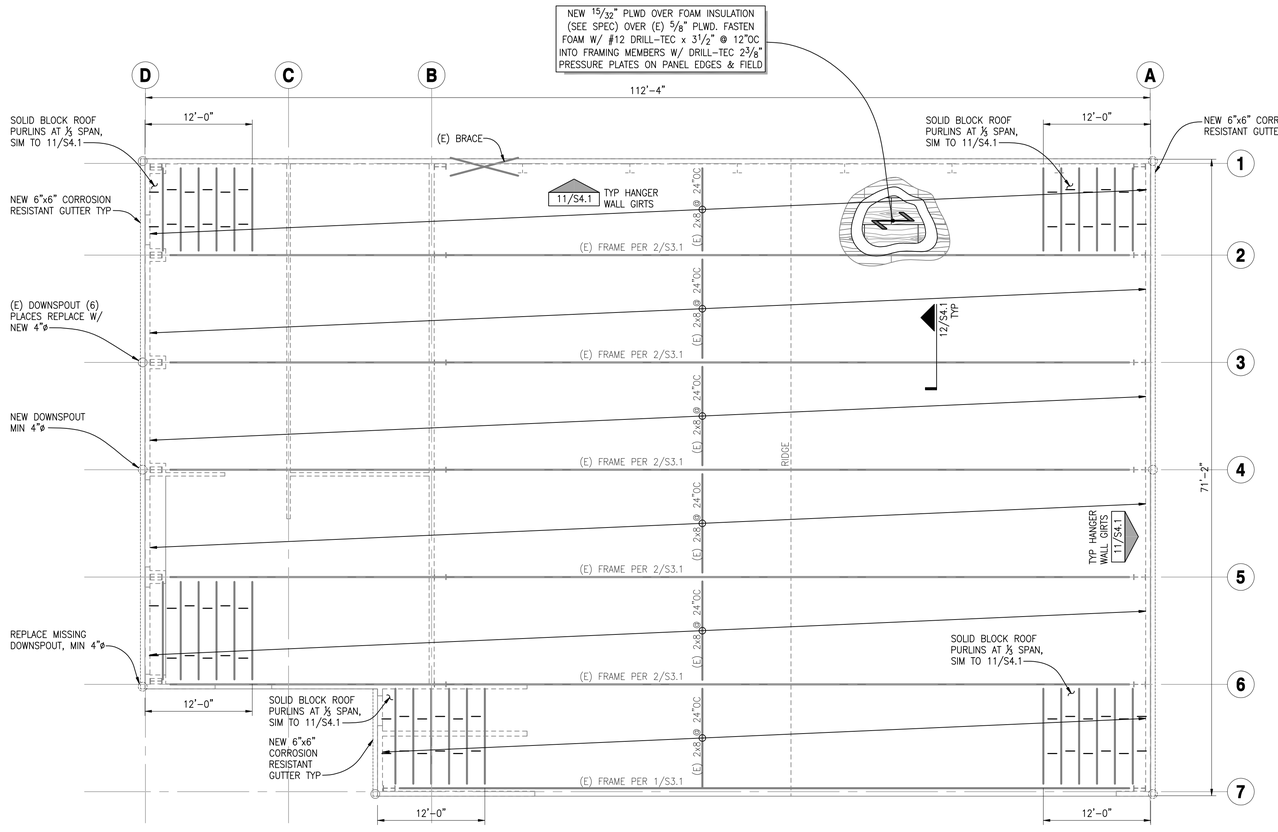
DRAWN BY: JA
SHEET NO.
S1.1

DRAWING LEGEND

MARK	DESCRIPTION	MARK	DESCRIPTION
F2.0	FOOTING SYMBOL (REFER TO SPREAD FOOTING SCHEDULE)		INDICATES WIDE FLANGE COLUMN
P1	PILE CAP SYMBOL (REFER TO PILE CAP SCHEDULE)		INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR TUBE STEEL (TS) COLUMN
A	TILT-UP/PRECAST CONCRETE WALL CONNECTION SYMBOL (REFER TO CONNECTION DETAIL)		INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR STEEL PIPE COLUMN
W6	SHEAR WALL SYMBOL (REFER TO SHEAR WALL SCHEDULE)		INDICATES WOOD POST
1	REVISION TRIANGLE		INDICATES BUNDLED STUDS
1	TILT-UP/PRECAST CONCRETE WALL PANEL NUMBER (REFER TO TILT-UP/PRECAST CONCRETE WALL ELEVATIONS)		INDICATES CONCRETE COLUMN
1	CMU WALL REINFORCING SYMBOL (REFER TO CMU WALL REINFORCING SCHEDULE)		INDICATES PRECAST CONCRETE COLUMN
8"	CONTINUITY PLATE LENGTH (REFER TO TYPICAL DETAIL)		INDICATES MOMENT FRAME CONNECTION
DS	INDICATES DOUBLE SHEAR CONNECTION (REFER TO THE DOUBLE SHEAR PLATE CONNECTIONS DETAIL)		INDICATES DRAG CONNECTION
SR	INDICATES NUMBER OF STUD RAIL REQUIRED AT COLUMN (REFER TO STUD RAIL DETAILS)		INDICATES WOOD OR STEEL STUD WALL
1	ROOF/FLOOR DIAPHRAGM NAILING SYMBOL (REFER TO DIAPHRAGM NAILING SCHEDULE)		INDICATES MASONRY/CMU WALL
C1	STEEL COLUMN SYMBOL (REFER TO STEEL COLUMN SCHEDULE)		INDICATES CONCRETE/TILT-UP CONCRETE WALL
T/SLAB X'-X"	ELEVATION SYMBOL (T/ REFERS TO COMPONENT THAT THE ELEVATION REFERENCES)		INDICATES WOOD OR STEEL STUD SHEAR WALL
3	STUD BUBBLE (INDICATES NUMBER OF STUDS REQUIRED IF EXCEEDS NUMBER SPECIFIED IN PLAN NOTE)		INDICATES BEARING WALL BELOW
STP	INDICATES STEP IN FOOTING (REFER TO TYPICAL STEP IN FOOTING DETAIL)		INDICATES EXISTING WALL
X/SX.X	DETAILS OR SECTION CUT (DETAIL NUMBER/SHEET NUMBER)		POST-TENSION DEAD END (PLAN)
X SX.X	DETAILS OR SECTION CUT IN PLAN VIEW (DETAIL NUMBER/SHEET NUMBER)		POST-TENSION STRESSING END (PLAN)
X/SX.X	INDICATES LOCATION OF CONCRETE WALLS, SHEAR WALLS OR BRACED FRAME ELEVATIONS	3	POST-TENSION PROFILE (PLAN) (IN INCHES)
	SPAN INDICATOR (INDICATES EXTENTS OF FRAMING MEMBERS OR OTHER STRUCTURAL COMPONENTS)		INTERMEDIATE STRESSING (PLAN)
	INDICATES DIRECTION OF DECK SPAN		

ABBREVIATIONS

∠	Angle	FIN	Finish	PSI	Pounds Per Square Inch
AB	Anchor Bolt	FLR	Floor	PSL	Parallel Strand Lumber
ADDL	Additional	FRP	Fiberglass Reinforced Plastic	P-T	Post-Tensioned
ALT	Alternate	FTG	Footing	PT	Pressure Treated
ARCH	Architectural	F/	Face of	R	Radius
B or BOT	Bottom	GA	Gage	RD	Roof Drain
B/	Bottom Of	GALV	Galvanized	REF	Refer/Reference
BLDG	Building	GEOTECH	Geotechnical	REINF	Reinforcing
BLKG	Blocking	GL	Glue Laminated	REQD	Required
BMU	Brick Masonry Unit	GWB	Gypsum Wall Board	RET	Retaining
BP	Baseplate	HDR	Header	SCB	Special Concentric Braced
BRB	Buckling Resisting Braced	HF	Hem-Fir	SCHED	Schedule
BRG	Bearing	HGR	Hanger	SHTHG	Sheathing
BTWN	Between	HD	Hold-down	SIM	Similar
℄	Centerline	HORIZ	Horizontal	SMF	Special Moment Frame
C	Camber	HP	High Point	SOG	Slab on Grade
CB	Castellated Beam	HSS	= TS (Hollow Structural Section)	SPEC	Specification
CIP	Cast in Place	IBC	International Building Code	SQ	Square
CJ	Construction or Control Joint	ID	Inside Diameter	SR	Studrail
CJP	Complete Joint Penetration	IE	Invert Elevation	SF	Square Foot
CLR	Clear	IF	Inside Face	SST	Stainless Steel
CMU	Concrete Masonry Unit	INT	Interior	STAGG	Stagger/Staggered
COL	Column	k	Kips	STD	Standard
CONC	Concrete	KSF	Kips Per Square Foot	STIFF	Stiffener
CONN	Connection	LF	Lineal Foot	STL	Steel
CONST	Construction	LL	Live Load	STRUCT	Structural
CONT	Continuous	LLH	Long Leg Horizontal	SWMJ	Solid Web Wood Joist
C'SINK	Countersink	LLV	Long Leg Vertical	SYM	Symmetrical
CTRD	Centered	LP	Low Point	T	Top
ø	Diameter	LONGIT	Longitudinal	T/	Top Of
DB	Drop Beam	LSL	Laminated Strand Lumber	T&B	Top & Bottom
DBA	Deformed Bar Anchor	LVL	Laminated Veneer Lumber	TC AX LD	Top Chord Axial Load
DBL	Double	MAS	Masonry	TCX	Top Chord Extension
DEMO	Demolish	MAX	Maximum	TDS	Tie Down System
DEV	Development	MECH	Mechanical	T&G	Tongue & Groove
DF	Douglas Fir	MEZZ	Mezzanine	THKND	Thickened
DIAG	Diagonal	MFR	Manufacturer	THRD	Threaded
DIST	Distributed	MIN	Minimum	THRU	Through
DL	Dead Load	MISC	Miscellaneous	TRANSV	Transverse
DN	Down	NIC	Not In Contract	TYP	Typical
DO	Ditto	NTS	Not To Scale	UBC	Uniform Building Code
DP	Depth/Deep	OC	On Center	UNO	Unless Noted Otherwise
DWG	Drawing	OCB	Ordinary Concentric Braced	URM	Unreinforced Masonry Unit
(E)	Existing	OD	Outside Diameter	VERT	Vertical
EA	Each	OF	Outside Face	W	Wide
EF	Each Face	OPNG	Opening	W/	With
EL	Elevation	OPP	Opposite	W/O	Without
ELEC	Electrical	OWSJ	Open Web Steel Joist	WHS	Welded Headed Stud
ELEV	Elevator	OWWJ	Open Web Wood Joist	WP	Working Point
EMBED	Embedment	℄	Plate	WWF	Welded Wire Fabric
EQ	Equal	PAF	Powder Actuated Fastener	±	Plus or Minus
EQUIP	Equipment	PC	Precast		
EW	Each Way	PERP	Perpendicular		
EXP	Expansion	PLWD	Plywood		
EXP JT	Expansion Joint	PP	Partial Penetration		
EXT	Exterior	PREFAB	Prefabricated		
FD	Floor Drain	PSF	Pounds per Square Foot		
FDN	Foundation				



FBO BLDG ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"

N

DCI ENGINEERS®
400 SW 6TH AVENUE • SUITE 605
PORTLAND, OREGON 97204
PHONE: 503.243.3500 FAX: 503.243.2449
WEBSITE: www.dci-engineers.com
CIVIL / STRUCTURAL

HGE INC
ARCHITECTS, ENGINEERS, SURVEYORS & PLANNERS
375 PARK AVE, COOS BAY, OREGON 97420
P: 541.269.1166 F: 541.269.1833 www.hge1.com

PROJECT:
AIRPORT FBO BUILDING
EXTERIOR REPAIR PROJECT
City of Newport 110 S.E. 84TH,
NEWPORT, OR. 6 MILES SOUTH OF YAQUINA RIVER

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 12219 OREGON JULY 15, 1987 WADE W. YOUNIE
EXPIRES: 6-30-16

DCI PROJECT NO.: 14091-0017

DATE: AUGUST. 17, 2015

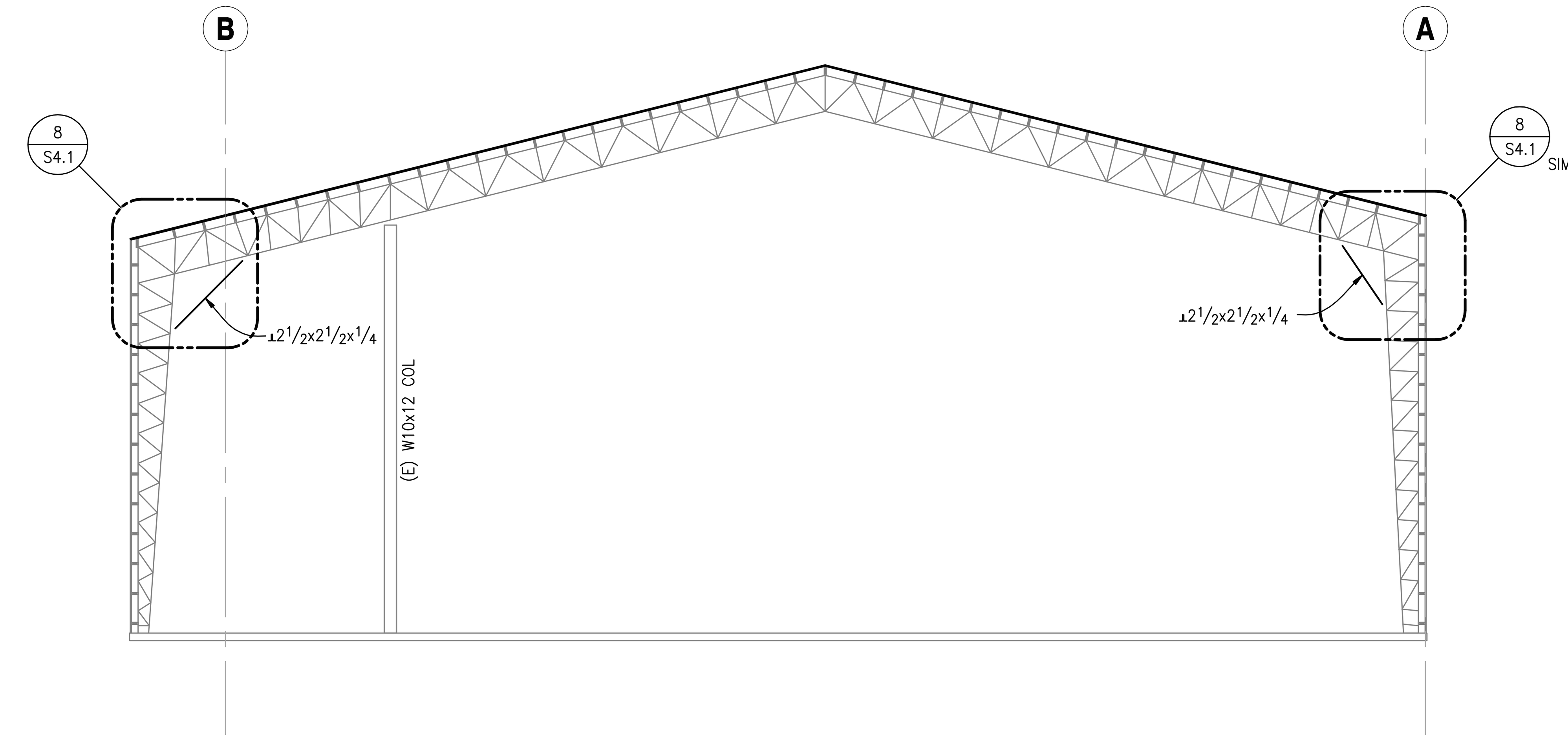
REVISIONS:

DATE	BY

DRAWN BY: JA

SHEET NO.
S2.1

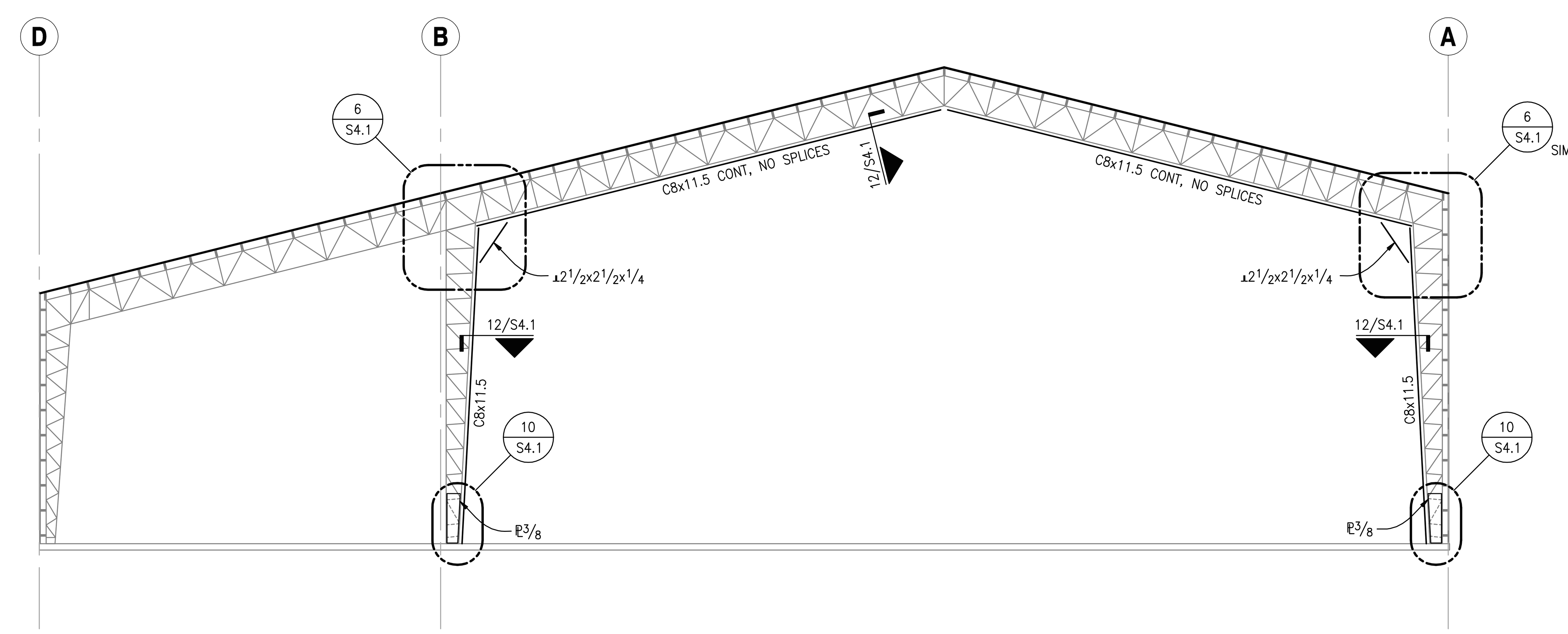
14091-0017 S21.dwg 14-Aug-15 3:24 PM awolcott



FRAME ELEVATION AT GRID 7

1

SCALE: 1/8"=1'-0"



FRAME ELEVATION

2

SCALE: 1/8"=1'-0"

DCI ENGINEERS
400 SW 6TH AVENUE • SUITE 605
PORTLAND, OREGON 97204
PHONE: (503) 242-2448 • FAX: (503) 242-2449
WEBSITE: www.dci-engineers.com
CIVIL / STRUCTURAL

HGE INC
ARCHITECTS, ENGINEERS, SURVEYORS & PLANNERS
375 PARK AVE., COOS BAY, OREGON 97420
P: 541.269.1166 F: 541.269.1833 www.hge1.com

PROJECT:
AIRPORT FBO BUILDING
EXTERIOR REPAIR PROJECT
City of Newport 110 S.E. 84TH,
NEWPORT, OR. 6 MILES SOUTH OF YAQUINA RIVER

STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER
12219
OREGON
JULY 16, 1993
WADE W. YOUNIE
EXPIRES: 6-30-16

DCI PROJECT NO.: 14091-0017

DATE: AUGUST. 17, 2015

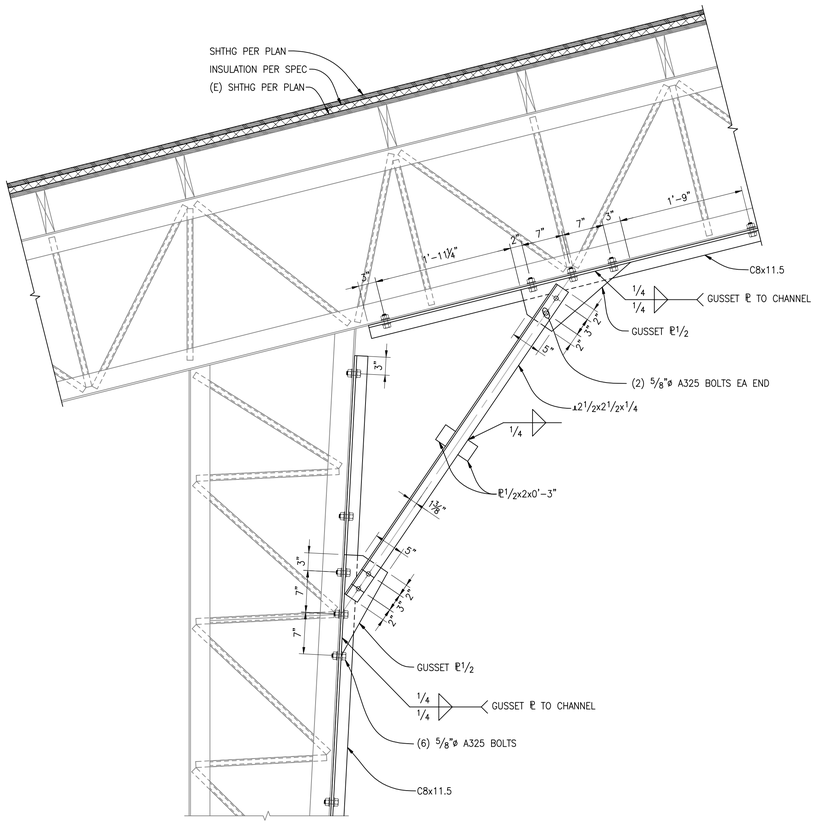
REVISIONS:

DATE	BY

DRAWN BY: JA

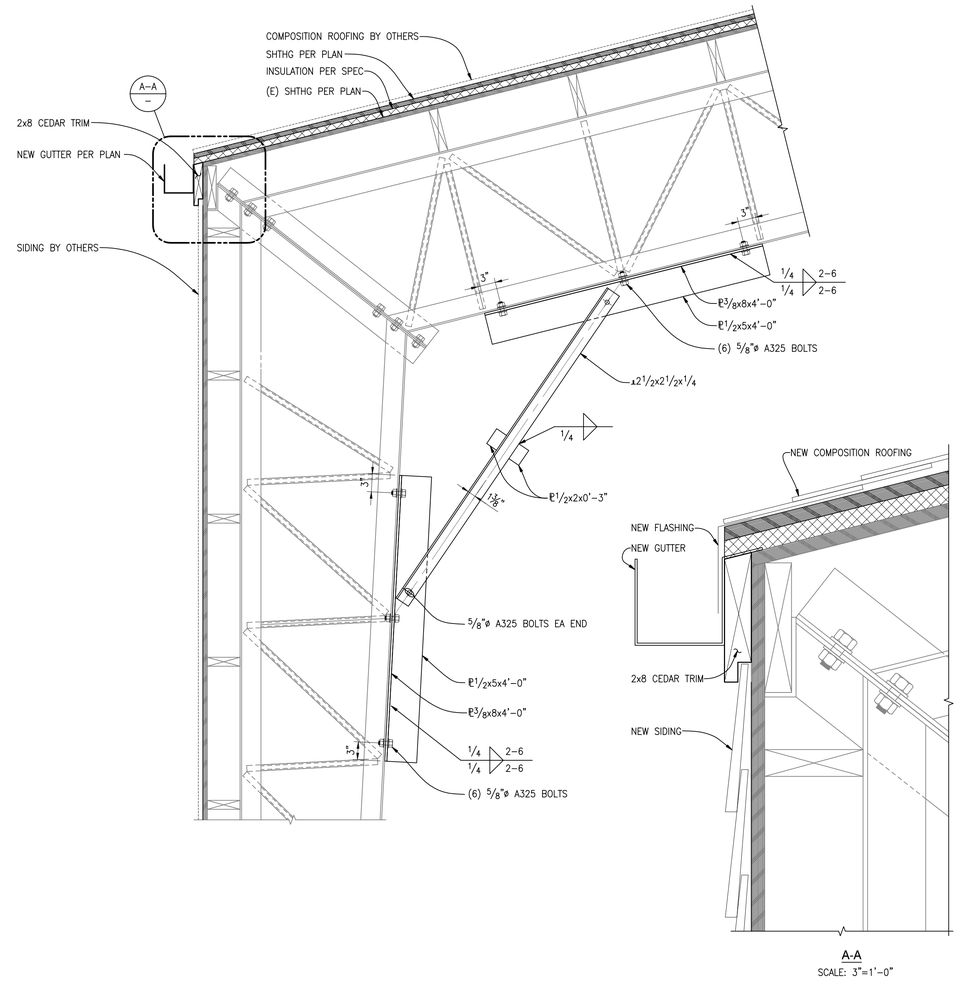
SHEET NO.
S3.1

14091-0017 S3.1.dwg 14-Aug-15 3:24 PM



BRACE CONNECTION

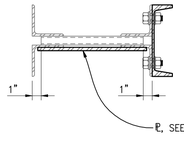
SCALE: 1"=1'-0" — 6



A-A
SCALE: 3"=1'-0"

BRACE CONNECTION

SCALE: 1"=1'-0" — 8

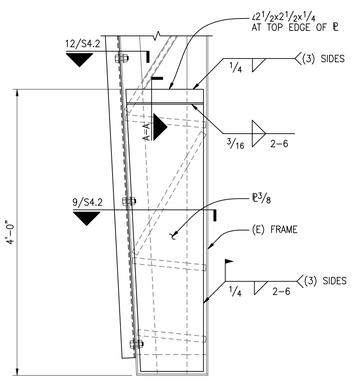


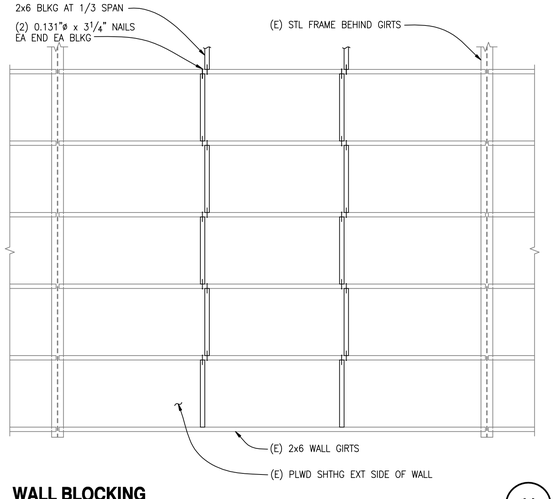
SECTION AT STIFFENING (E) FRAME BASE

SCALE: 1 1/2"=1'-0" — 9

STIFFENING (E) FRAME BASE

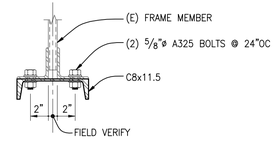
SCALE: 1"=1'-0" — 10





WALL BLOCKING

SCALE: 1/2"=1'-0" — 11



FRAME STIFFENER

SCALE: 1 1/2"=1'-0" — 12

DCI ENGINEERS®
400 SW 6TH AVENUE • SUITE 605
PORTLAND, OREGON 97204
PHONE: (503)243-3500 FAX: (503)243-2449
WEBSITE: www.dci-engineers.com
CIVIL / STRUCTURAL

HGE INC
ARCHITECTS, ENGINEERS, SURVEYORS & PLANNERS
375 PARK AVE., COOS BAY, OREGON 97420
P: 541.269.1166 F: 541.269.1833 www.hge1.com

PROJECT:
AIRPORT FBO BUILDING
EXTERIOR REPAIR PROJECT
City of Newport 110 S.E. 84TH,
NEWPORT, OR. 6 MILES SOUTH OF YAQUINA RIVER

STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER
12219
OREGON
JULY 15, 1983
WADE W. YOUNIE
EXPIRES: 6-30-16

DCI PROJECT NO.:
14091-0017

DATE:
AUGUST. 17, 2015

REVISIONS:

DATE	BY

DRAWN BY: JA

SHEET NO.
S4.1

14091-0017 S4.1.dwg 14-Aug-15 3:24 PM cwatkins