



**Request for Proposal  
Pre-Engineered Timber Column Structure  
at  
Rockville High School-ASTE Dept.**

**Vernon Public Schools, Connecticut  
BID #VPS-FY19-004**

**Inquiries:** Raymond B. Engle  
Director, Business and Finance Office  
[rengle@vernon-ct.gov](mailto:rengle@vernon-ct.gov)

**Proposals Due:** Friday, May 17<sup>th</sup>, 2019  
1:30 PM EDT

<b>1. General Provisions</b>	<b>4</b>
1.1 Introduction	4
1.2 Product and/or Service Specifications	4
1.3 Qualification of Bidders	4
1.4 Mandatory Site Visit	4
1.5 Anticipated Timeline and Work Hours	4
<b>2. Response Instructions</b>	<b>5</b>
2.1 Delivery of Proposals	5
2.2 Questions and Communications	5
2.3 Public Opening of Bids	5
2.4 Pricing	5
2.5 Proposal Format	6
2.6 Tax Exemption	6
<b>3. Terms and Conditions</b>	<b>7</b>
3.1 Proposal Withdrawal	7
3.2 Collusion Among Bidders	7
3.3 Irregular Proposals	7
3.4 Laws and Regulations	7
3.5 Non-Conflict of Interest Statement	7
3.6 Non-Discrimination of Employment	8
3.7 Confidentiality	8

3.8 Proprietary Information	9
3.9 Contingent Upon Availability of Funds	9
3.10 Independent Contractor	9
3.11 Insurance Requirements	9
3.12 Fidelity Bond	11
3.13 Indemnification/Hold Harmless	11
3.14 Waiver of Subrogation	11
3.15 Award	12
3.16 Reserved Rights	12

## 1. General Provisions

### 1.1 Introduction

Vernon Public Schools (VPS) is now accepting bids for the purchase and installation of a pre-engineered timber column structure at the Rockville High School - ASTE Dept., 70 Loveland Hill Road, Vernon, CT. **Before submitting a proposal, bidders shall examine the specifications located at the end of this document.**

### 1.2 Product and/or Service Specifications

#### a. Technical Requirements

Bidders are to supply all equipment, scaffolding, labor and materials to complete the following at Rockville High School, 70 Loveland Hill Road, Vernon, CT:

- Purchase and installation of a pre-engineered timber column structure.
  - 30'W X 12'H X 56'L
  - Truss Spacing – 8'
  - Roof Pitch – 8/12
  - Lower Chord – 0/12
  - Peak Height – 23', 6.5"
  - Soffit Height – 12', 5"
  - 1680 Sq. Ft.

#### b. Approved Manufacturers

- Morton Buildings, Inc. (or equal)

### 1.3 Qualifications of Bidders

VPS is seeking well-qualified and experienced bidders for this project. As part of the bid proposal, please include the following information:

- a. Please provide three (3) current or former client references that are applicable to projects of this scope.
- b. List the number of currently employed full-time and part-time employees.
- c. Briefly describe the project management process.

### 1.4 Mandatory Site Visit

All bidders who are interested in submitting a proposal on this project are **required to attend a mandatory site visit** to be held on **Tuesday, May 14th, 1:30 PM EDT** in front of the ASTE Facility (left side of the High School complex) at Rockville High School located at 70 Loveland Hill Road in Vernon, Connecticut.

### 1.5 Anticipated Timeline and Work Hours

Bidder must provide implementation plan and timeline as part of the RFP. All work shall be done at such times as the VPS shall deem appropriate. **Work must be finished by MIDNIGHT on Wednesday, July 31<sup>st</sup>, 2019.**

## 2. Response Instructions

The submitted proposal must follow the rules and format established within this RFP. Adherence to these rules will ensure a fair and objective analysis of all proposals. Five (5) printed copies of the proposal and one (1) electronic copy on a USB drive or CD Rom must be provided. Each bidder shall be responsible for all costs incurred in order to prepare and submit their response to this RFP. All submitted materials become the property of VPS. Failure to respond to any of the RFP instructions will eliminate your proposal from any further consideration.

### 2.1 Delivery of Proposals

RFPs must be submitted in a sealed envelope labeled with “**Bid #VPS-FY19-004**”, “**Rockville High School ASTE Dept. – Pre-Engineered Timber Column Structure**” and clearly marked “**BID – DO NOT OPEN**” on the outside of the envelope to: Mr. Raymond Engle, Director of Business and Finance, 30 Park Street, Vernon, Connecticut 06066 by **Friday, May 17th, 2019, 1:30 PM EDT**. It is the sole responsibility of the bidder to see that their RFP is received in the proper time. Any proposal received after the proposal due date and time shall be eliminated from consideration.

### 2.2 Questions and Communications

Bidders are hereby notified not to contact any member of the Evaluation Committee, or any member of the VPS staff and its’ elected officials, except as provided herein regarding this proposal until such time as a contract has been awarded. All questions about the proposals should be directed to Mr. Raymond Engle, Director of Business and Finance, by email at [rengle@vernon-ct.gov](mailto:rengle@vernon-ct.gov) no later than **Wednesday, May 15th, 2019 by NOON**. Answers to all received questions will be posted on the VPS website at <http://www.vernonpublicschools.org/bid-requests> with the Bid # VPS-FY19-003.

### 2.3 Public Opening of Bids

VPS will hold a Public Bid Opening for all proposals submitted. All bids will be opened, read aloud publicly and recorded by the VPS Business Office on **Friday, May 17th, 2019 at 1:30 PM EDT** after which all bids will be available for public inspection.

### 2.4 Pricing

The proposal price should be inclusive. If the price excludes certain fees or charges, either recurring or nonrecurring, the proposal must provide a detailed list of excluded fees with a complete explanation of the nature of those fees. Bidders may submit, at their discretion, alternate design options with accompanying prices. Alternate designs will give the VPS the opportunity to consider the best solution for our needs and compare those options with budget

considerations.

All bidder proposals are required to be offered for a term not less than 180 calendar days in duration. A proposal may not be modified, withdrawn or cancelled by the bidder during the 180 day time period following the time and date designated for the receipt of proposals.

In the event that information or pricing submitted by the bidders is unclear, the VPS may request further explanation and/or pricing breakdowns from the bidder for the purpose of evaluation and decisions. The bidders shall answer requests for additional information or clarification in writing, and these responses will become part of the bidder's proposal. Bidders failing to provide adequate information on any issue in a timely manner to allow a comprehensive evaluation by the VPS shall be considered unresponsive, and their proposal may be subject to rejection.

## **2.5 Proposal Format**

All proposals shall be prepared in strict compliance with the Proposal Format outlined below. Failure to comply with the provisions of this RFP may result in the proposal being disqualified.

- All proposals must be securely bound.
- Title Page. The title page must include the subject of the proposal, the proposing company's name and address, the name, address, and telephone number of a contact person and the date of the proposal.
- Table of Contents.
- Executive Summary. This summary, limited to five (5) single-spaced typewritten pages, should provide a high-level description of the bidder's ability to meet the requirements of the RFP and a statement describing why the bidder believes it is the best qualified to provide the specified services. The summary must also include the names, titles and background of the officers and operating personnel who will work with VPS/VRABE.
- Please provide three (3) current or former client references with which the bidder has completed projects of this scope.
- Warranty. Bidders shall include with the RFP response a detailed overview of all applicable warranties, including exclusions. Bidders must detail the responsibilities the VPS will assume and describe any bidder services provided during the warranty period. Complete warranties applying to any system purchased must be clearly specified. The location or agent responsible for servicing this account must be clearly stated. The bidder's policy on software upgrades, enhancements, and on-going software support shall also be addressed, as applicable. Warranty and maintenance terms and costs will be taken into consideration in the award.
- Oral presentation may be required.

## **2.6 Tax Exemption**

The VPS is tax exempt and will provide appropriate documentation as needed.

## 3. Terms and Conditions

### RFP Terms and Conditions

#### 3.1 Proposal Withdrawal

No proposal can be withdrawn after it is filed unless the bidder makes a request in writing to Mr. Raymond Engle, Director of Business and Finance, prior to the time set for the opening of proposals.

#### 3.2 Collusion among Bidders

Multiple proposals from an individual, firm, partnership, corporation or association under the same or different names are subject to rejection by the Procurement Administrator. Reasonable grounds for believing that a bidder is interested in more than one proposal for the work contemplated may result in rejection of all bids in which the bidder is interested. Any or all proposals will be rejected if there is any reason for believing that collusion exists among the bidders. Participants in such collusion may not be considered in future solicitations for the same work. Each bidder, by submitting a bid, certifies that it is not a party to any collusive action.

#### 3.3 Irregular Proposals

Proposals may be rejected if they show omissions or irregularities of any kind. Proposals taking or noting exception to any element requested may be rejected in their entirety.

#### 3.4 Laws and Regulations

It shall be understood and agreed that any and all articles and/or equipment furnished or contract awarded on this proposal shall comply fully with all Local, State, and Federal laws and regulations.

#### 3.5 Non-Conflict of Interest Statement

It is unlawful for any officer, employee or agent of VPS to participate personally in his/her official capacity through decision, approval, disapproval, recommendation, advice or investigation in any contract or other matter in which he/she, his/her spouse, parent, minor child, brother or sister, has a financial interest, or to which any firm, corporation, association, or other organization in which he/she has a financial interest, or in which he/she is serving as an officer, director, trustee, partner, or employee, or agent. The successful bidder agrees that during the term of the Contract and for twenty four (24) months following the exit conference, the successful bidder, its employees, agents, and representatives, shall not, with or without compensation, on behalf of the successful bidder, or another person, entity, or corporation, take any action in connection or receive any benefit with any specific matter, finding or recommendation associated in any way with this project, except with the express written consent of VPS.

### **3.6 Non-Discrimination of Employment**

VPS actively subscribes to a policy of equal employment opportunity and will not discriminate against any employee or applicant because of race, sex, age, color, physical or mental handicap, marital status, sexual affiliation, religion, nation origin or political affiliation. Bidders shall not discriminate in any manner against any employee because of race, sex, age, color, physical or mental handicap, marital status, sexual affiliation, religion, national origin or political affiliation.

### **3.7 Confidentiality**

In performing consulting services under this Agreement, Contractor may be exposed to and will be required to use certain "Confidential Information" (as hereinafter defined) of VPS. "Confidential Information" means all information which Contractor acquires or becomes acquainted with during the period of this Agreement, whether developed by Contractor or by others, which Contractor has a reasonable basis to believe to be Confidential Information, or which is treated by VPS as being Confidential Information, shall be presumed to be Confidential Information. Contractor agrees that Contractor will not and Contractor's employees, agents, or representatives will not use, directly or indirectly, such Confidential Information for the benefit of any person, entity, or organization other than VPS, or disclose such Confidential Information without the written authorization of the Superintendent of Schools (or designee), either during or after the term of this Agreement, for as long as such information retains the characteristics of Confidential Information. Student records, student information, and student-generated content (collectively, "student data") are not the property of the service contractor. Contractor shall not use student information, student records, or student-generated content for any purposes other than those authorized pursuant to the contract. Students, parents, or guardians may: (a) review personally identifiable information in student records, student information, or student-generated content and (b) correct erroneous information as needed. Contractor shall ensure the security and confidentiality of student information, student records, and student-generated content. Contractor shall immediately notifying VPS of any unauthorized release, disclosure, or acquisition of student information, student records, or student-generated content. Student information, student records, or student-generated content shall not be retained or available to the contractor upon completion of the contracted services unless a student, or parent or legal guardian of a student, chooses to establish or maintain an electronic account with the contractor for the purpose of storing student-generated content. Contractor and VPS shall comply with the federal Family Educational Rights and Privacy Act of 1974 (FERPA) and Connecticut Public Act 16-189.

**Governing Law:** This Agreement shall be governed by and construed in accordance with the internal laws (and not the laws of conflicts) of the State of Connecticut. If any provision of this Agreement is held unenforceable by a court of competent jurisdiction, that provision shall be severed and shall not affect the validity or enforceability of the remaining provisions.

**Student privacy Pledge:** Contractor will fully review and comply with the law's requirements

through one or more standard contract vehicles (e.g., terms of service, data-processing agreement, etc.) that they enter into with each of our Connecticut public school customers in accordance with all applicable aspects of the state's student data privacy law, as defined in Connecticut General Statutes §§ 10-234aa through 10-234dd. This Student Privacy Pledge will be signed at the time of award of the contract.

### **3.8 Proprietary Information**

VPS recognize that in responding to this request for proposal, bidders may submit proprietary information. To the extent submitted by law, VPS will keep confidential such proprietary information provided that the conditions as described in the following paragraph are met.

Proprietary information is submitted separately and must be clearly identified as containing proprietary information. Reference to the proprietary information must be clearly made in the detailed response, and conversely the section in the proprietary information packet shall be clearly labeled as to the location in the detailed response it references. Labeling a complete proposal proprietary, that is general in nature, may be cause for rejection of the proposal.

### **3.9 Contingent upon Availability of Funds**

Vernon Public Schools (VPS) obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of VPS for any payment may arise until funds are made available and approved by the Board of Education for this contract and until a Purchase Order has been issued.

### **3.10 Independent Contractor**

Contractor, in performing the Services, is acting in the capacity of an independent contractor, and is not an agent, servant, partner, or employee of the School. Contractor will have control over the performance of the Services and shall be solely responsible for payment of its federal and local taxes, salary for its employees, social security payments, subject to the School's indemnification obligation set forth herein. However, the School shall be responsible for reimbursing Contractor for mileage expenses at the then existing IRS standard business mileage rate, where Contractor is obligated to travel and present, at an off-site location due to construction or other events on the main campus. None of the benefits provided by the School to its employees, including, but not limited to, worker's compensation insurance, disability insurance, medical insurance, and employment insurance shall be provided by the School to any of Contractor's employees. Contractor has no authority hereunder to assume or create any obligation or responsibility, express or implied, on behalf or in the name of the School or to bind the School in any way whatsoever. Contractor is not authorized to speak for, represent, or obligate School in any manner without the prior expressed written authorization of School.

### **3.11 Insurance Requirements**

Contractor shall procure and maintain insurance against claims for injuries or losses to persons or property that are alleged to have arisen in connection with activities of the contractor and any agents, representatives, subcontractors or employees. Insurance companies must be licensed by the State of Connecticut or otherwise acceptable to VPS. The cost of such insurance, including

required endorsements or amendments, shall be the sole responsibility of the contractor. Full disclosure of any nonstandard exclusion is required for all required coverage. It is further agreed that the contractor shall provide VPS with a thirty (30) day notice of cancellation.

**Certificates of Insurance:** All policies will be evidenced by an original certificate of insurance on an ACORD-25 form authorized by and executed with the original signature or original stamp of the insurer or a properly-authorized agent or representative reflecting all coverage required and delivered to VPS prior to any work or other activity commencing under this agreement.

**Additional Insured:** The bidder shall ensure that the bidder and its contractors and subcontractors will arrange with their respective insurance agents or brokers to name the VPS and the Town of Vernon (TOV), all of its respective officers, employees, agents, elected officials, servants and volunteers, on all policies of primary and excess insurance coverage as additional insured parties except for any errors and omissions insurance coverage or workers' compensation coverage, and shall name the VPS as loss payee with respect to any damage to property of the VPS, as its interests may appear. The undersigned shall submit to the VPS upon commencement of this agreement and periodically thereafter, but in no event less than once during each year of this agreement, evidence of the existence of such insurance coverage in the form of original Certificates of Insurance issued by reputable insurance companies licensed to do business in the State of Connecticut and having Best's A/VIII financial ratings, or coverage otherwise acceptable to the VPS. Such certificates shall designate the VPS name, address, purchasing agent or official designee.

**Cancellation Notice.** VPS shall be entitled to receive from the insurance carriers not less than 30 days' written notice of cancellation or nonrenewal.

**Coverage.** The coverage afforded to VPS and TOV shall be primary and noncontributory insurance. The amount of the bidder's liability under any insurance shall not be reduced by the existence of such other insurance.

**Commercial General Liability (Vernon Public Schools added as additional insured):**

Each Occurrence:	\$1,000,000
Personal/Advertising Injury per Occurrence:	\$1,000,000
General Aggregate:	\$2,000,000
Product/Completed Operations Aggregate:	\$2,000,000
Fire Damage Legal Liability	\$ 100,000

**Automobile Liability (Vernon Public Schools added as additional insured):**

Each Accident:	\$1,000,000
Hired/Non-owned Auto Liability:	\$1,000,000



maintained by the Contractor to include clauses stating each carrier will waive all rights of recovery, under subrogation and otherwise, against School and the Town of Vernon, and its respective officers, employees, agents, servants, elected officials, and volunteers. Contractor shall require of subcontractors, by appropriate written agreements, similar waivers each in favor of School and the Town of Vernon.

### **3.15 Award**

The project will be awarded based on a best value solution approach. We will be evaluating both quality of the solution and its cost.

### **3.16 Reserved Rights**

VPS reserves the right to:

- Reject any or all of the proposals.
- Issue subsequent requests for proposals.
- Cancel the entire request for proposal.
- Remedy technical errors in the request for proposal process.
- Appoint evaluation committees to review proposals.
- Seek the assistance of outside technical experts in proposal evaluation.
- Require modifications to initial proposals.
- Excuse technical defects in a proposal when, in its sole discretion, such excuse is beneficial to the VPS.
- Investigate the qualifications of any bidder under consideration.
- Require confirmation of information furnished by bidders.
- Require additional evidence of qualifications to perform the services described in this RFP.
- Approve or disapprove the use of particular subcontractors.
- Negotiate with any, all, or none of the bidders.
- Solicit best and final offers from all or some of the bidders.
- Award a contract to one or more bidders.
- Accept other than the lowest priced bid.
- Waive informalities and irregularities in proposals.

Failure to include in the proposal all information outlined herein may be cause for rejection of the proposal. Information and/or factors gathered during interviews, negotiations and any reference checks, and any other information or factors deemed relevant by VPS, shall be utilized in the final award.

**DIVISION 13 - SPECIAL CONSTRUCTION**  
**SECTION 13121 - Pre-Engineered Timber Column Structure**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Pre-Engineered factory and field fabricated Timber Column Structure
- B. Prefinished metal roofing and siding panels
- C. Prefinished metal trim items
- D. Prefinished soffits

**1.02 PRODUCTS FURNISHED BUT NOT INSTALLED UNDER THIS SECTION**

- A. None

**1.03 RELATED SECTIONS**

**1.04 REFERENCE STANDARDS**

- A. Preservative Treated Lumber
  - 1. American Wood Protection Association (AWPA)
    - a. Commodity Specification C2 (2001), Preservative Treatment By Pressure Processes
    - b. Use Category System UI, User Specification for Treated Wood
    - c. UC4A (Important Structural - Ground Contact)
    - d. UC4B (Structural Support - Ground Contact)
    - e. Items treated under AWPA standards shall bear the quality mark of an independent testing agency or service
  - 2. International Code Council Evaluation Service (ICC-ES)
    - a. Items treated under ICC-ES reports shall meet or exceed the applicable standard and shall bear the quality mark of an independent testing agency or service
  - 3. Federal Specification TT-W-571-J.
- B. Framing Lumber
  - 1. Lumber Grading Rules and Wood Species
    - a. National Design Specification for Wood Construction, current edition
    - b. Northeastern Lumber Manufacturer 's Association, Inc. (NELMA)
    - c. Southern Pine Inspection Bureau (SPIB)
    - d. West Coast Lumber Inspection Bureau (WCLIB)
    - e. Western Wood Products Association (WWPA)
- C. Wood Trusses
  - 1. All lumber used in the design of wood trusses shall be kiln dried to maximum 19% moisture content and graded in accordance with the current grading rules. Design stresses allowed are those listed in the current editions of the respective Lumber Association's grading rules.
  - 2. The design of wood members shall be in accordance with the formulas published in the 2001 edition of the National Design Specification for Wood Construction.
  - 3. Light metal toothed connector plates and joint design shall conform to specifications as set forth in the 2002 edition of Truss Plate Institute 's Design Specification for Metal Plate Connected Wood Trusses (TPI-2002).
    - a. Connector plates shall be fabricated in accordance with applicable ICC-ES standards.

## **DIVISION 13 - SPECIAL CONSTRUCTION**

### **SECTION 13121 - Pre-Engineered Timber Column Structure**

4. Truss members and joints shall be designed in accordance with TPI-2002. All truss designs shall be accompanied by complete and accurate shop drawings and contain the following information:
  - a. Slope or depth, span and spacing of the truss
  - b. Heel bearing height
  - c. Design loading to include:
    1. Top chord live load
    2. Top chord dead load
    3. Bottom chord dead load
    4. Concentrated loads and their points
  - d. Adjustments to lumber and plate design values for conditions of use
  - e. Plate type, thickness of gauge and size
  - f. Lumber size, species and grade for each member

#### **1.05 SYSTEM DESCRIPTION**

- A. Clear span
- B. Bay spacing of
- C. Primary framing
  1. Columns
  2. Trusses
  3. Wind bracing
- D. Secondary framing
  1. Perimeter baseboards and preservative treatment
  2. Wall girts
  3. Purlins
  4. Overhang rafters and fascia
  5. Ancillary blocking or furring as required
- E. Roof Covering
  1. Prefinished ribbed metal panels
  2. Other roof coverings as required
- F. Wall Covering
  1. Prefinished ribbed metal panels
  2. Other wall coverings as required
- G. Insulation and Liner package
  1. Wall insulation
  2. Ceiling insulation
  3. Air deflectors
  4. Vapor retarder
  5. Wall stripping
  6. Prefinished ribbed metal panels

#### **1.06 DESIGN REQUIREMENTS**

- A. Roof Design Loads
  1. Top Chord Live Load:
  2. Top Chord Dead Load:
  3. Bottom Chord Dead Load:

**DIVISION 13 - SPECIAL CONSTRUCTION**  
**SECTION 13121 - Pre-Engineered Timber Column Structure**

- 4. Bottom Chord Point Loads
- B. Unbalanced Snow Loads
- C. Wind Speed
- D. Roof and wall system shall be able to withstand the imposed loads with maximum allowable deflection of L/180.
- E. Assembly shall permit its movement of components without buckling, failure of joint seals, undue stress on fasteners or other detrimental effects.
- F. Size and fabrication of wall and roof systems to be free of distortion or defects that would be detrimental to appearance or performance.

**1.07 SUBMITTALS**

- A. Submit under provisions of Section 01340
- B. Provide four (4) sets of the following bearing the seal of a Professional Engineer, registered in the State of Connecticut
  - 1. Complete and detailed shop and erection drawings showing size and location of each part and component, certifying that the building design meets specified roof and wind loading requirements
  - 2. Truss engineering analysis and design data, including the following:
    - a. Axial forces and bending moments for each member
    - b. Basic plate design value
    - c. Design analysis of each joint showing that proper plates have been applied
  - 3. Manufacturer's standard color chart

**1.08 PROJECT RECORD DOCUMENTS**

- A. Submit under provisions of Section 01700

**1.09 QUALITY ASSURANCE**

- A. Fabricate members in accordance with standard industry practice

**1.10 QUALIFICATIONS**

- A. Contractor shall have a minimum of forty years documented experience in the manufacture and erection of this type of structure.
- B. Design structural components under direct supervision of a Professional Engineer experienced in design of this work and licensed in the State (insert requirement).
- C. Employ adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed for proper and safe performance of the work.
- D. Contractor shall be responsible for all materials, whether furnished by himself or a subcontractor, and proper storage of the same.

**1.11 REGULATORY REQUIREMENTS**

## **DIVISION 13 - SPECIAL CONSTRUCTION**

### **SECTION 13121 - Pre-Engineered Timber Column Structure**

- A. Contractor shall be responsible for compliance with all applicable building codes and ordinances covering the work.
- B. Contractor shall cooperate with regulatory agencies or authorities to provide data as requested.

#### **1.12 PRE-CONSTRUCTION MEETING**

- A. The meeting will convene no later than one week prior to commencing work under provisions of Section 01201

#### **1.13 FIELD MEASUREMENTS**

- A. Field measurements shall be taken to verify that components match shop drawings.

#### **1.14 DELIVERY, STORAGE AND HANDLING**

- A. Deliver and store prefabricated components (trusses, columns, steel panels and other items) so that they will not be damaged or deformed.
- B. Stack materials on platforms, pallets or other structures covered with tarpaulins or other suitable weather-tight ventilated covering. Handle and store structural parts in a manner that will avoid deforming members or subjecting parts to excessive stresses.
- C. Store roofing and siding panels to allow water to drain freely.
- D. Panels shall not be stored in contact with other materials that may cause staining or discoloration.

#### **1.15 PROJECT CONDITIONS**

- A. Coordination
- B. Fit carpentry work to other work. Scribe and cope as required for accurate fitting.
- C. Correlate location of furring, nailers, blocking and supports to allow for attachment of other work.

#### **1.16 CERTIFICATIONS**

- A. In order for the bidder's proposal to be considered, the following certifications shall be tendered with the bid forms:
  - 1. Certification of the sheet steel supplier stating:
    - a. Minimum thickness of metallic coating steel in decimal inch
    - b. Identification of all metallic coatings
    - c. Coating weight range
    - d. Verification that material supplied is in conformance with applicable ASTM standard as stated in the technical specification
  - 2. Certification of paint supplier stating:
    - a. Generic chemistry of exterior side topcoat
    - b. Percentage of polyvinylidene difluoride (PVDF) in resin
  - 3. Certification of sheet steel coater stating:
    - a. Nominal paint film thickness in mils (one mil equals one thousandth of an inch)
  - 4. Certification of treated lumber stating:
    - a. Preservative type
    - b. Preservative retention in the wood (pounds per cubic foot of wood)
    - c. Depth of assay zone
    - d. Compliance of preservative and its retention in wood with AWPA or ICC-ES standards

**DIVISION 13 - SPECIAL CONSTRUCTION**

**SECTION 13121-Pre-Engineered Timber Column Structure**

- 5. Warranty
  - a. Sample copy of warranty to be issued at completion of project
  - b. Verification that warranty meets or exceeds the requirements stated in the technical specification
- B. Failure to supply the required submittals will result in the bidder's proposal being rejected as non-responsive.

**1.17 WARRANTY**

- A. The building manufacturer shall supply a warranty to the Owner which shall provide that the manufacturer will:
  - 1. For a period of fifty (50) years:
    - a. Absorb repair or replacement costs, including materials and labor, if any preservative treated lumber fails due to decay or insect attack
    - b. Repair, or at its discretion, replace free of charge the building framework, including roofing and/or siding panels, if directly damaged by snow loads.
  - 2. For a period of thirty-five (35) years:
    - a. Repaint any roofing or siding panel on which, under conditions of normal weather, the paint has separated from the panels due to flaking or peeling.
    - b. Repaint any roofing or siding panels on which, under conditions of normal weathering, chalking greater than a rating of 8 (ASTM 04212 Method 'A') or color change greater than five (5) units (ASTM 02244) has occurred.
  - 3. For a period of ten (10) years:
    - a. Repaint any roofing or siding panel on which, under conditions of normal weather, exhibit corrosion resulting in red rust greater than 1/2 inch from any sheared edge which is clearly visible in casual observation.
  - 4. For a period of five (5) years:
    - a. Repair, or at its discretion, replace free of charge the building framework, including roofing and/or siding panels, if directly damaged by wind loads, unless damage is caused by flying or falling objects.
    - b. Repair any roof leaks due to defects in materials or workmanship.
  - 5. For a period of one (1) year:
    - a. Repair other building parts that prove to be defective in materials or workmanship.
  - 6. The manufacturer shall not be liable for damage due to deterioration caused by interior chemical vapors and/or dust, deterioration from proximity to salt water body or aggressive exterior atmosphere, damage by flying or falling objects, or collateral damage to interior walls, ceiling, partitions, equipment and/or contents, or cost of preparation of the site.

**PART2 PRODUCTS**

**2.01 MANUFACTURERS-BUILDING SYSTEM**

- A. Manufacturers offering similar systems
  - 1. As approved by project Architect
  - 2. Certification as approved by Architect

## DIVISION 13 - SPECIAL CONSTRUCTION

### SECTION 13121-Pre-Engineered Timber Column Structure

#### B. Substitutions to or deviations from these specifications:

1. None.

#### 2.02 2 MATERIALS- FRAMING

##### A. Columns (Columns in ground)

###### 1. Lower portion

- a. Factory fabricated from minimum 3-ply No. 1 SYP
- b. The area in contact with the ground shall be pressure treated with a wood preservative to a net retention of 0.8 pounds per cubic foot of wood and kiln dried after treating to 19% maximum moisture content.
- c. The wood preservative shall be Chromated Copper Arsenate Type "C" (Oxide type) as listed in Federal specification TT-W-571J and compliant with USEPA Guidelines.
- d. The preservative shall penetrate 100% of the sapwood.
- e. The treated portion of the column shall be laminated with stainless steel nails.

###### 2. Upper portion

- a. Factory fabricated from minimum 3-ply No. 1 SYP
- b. Attach upper column to lower column with appropriate number and size of pneumatically driven fasteners.
- c. Provide factory or field installed blocking on outside face of column between nailers.

##### B. Wood Trusses

###### 1. Lumber

- a. Top Chord: Southern Yellow Pine of size and grade to meet design requirements
- b. Bottom Chord: Southern Yellow Pine of size and grade to meet design requirements
- c. Webs: Southern Yellow Pine of size and grade to meet design requirements

###### 2. Trusses shall be constructed of surfaced lumber (S4S) and compliant with SPIB visual and structural grade requirements

###### 3. Plates: Connector plates shall meet design requirements and shall be compliant with applicable ICC-ES standards and specifications

###### 4. Design and fabricate trusses and connections to withstand snow, wind and all dead loads.

###### 5. Fabricate trusses in plant, using mechanical or hydraulic fixtures as required to bring members into contact. Install plates in accordance with manufacturer's instructions.

##### C. Baseboards

###### 1. 2" x 8" No. 1 Southern Yellow Pine with 1/2" x 7/ 16" notch

###### 2. Pressure treated with wood preservative to a retention in compliance with applicable AWPA or ICC-ES standards and specifications and kiln dried after treatment to 19% maximum moisture content

###### 3. Preservative shall penetrate 100% of sapwood.

##### D. Wall girts

###### 1. First nailer (girt) above baseboard: 2" x 6" No. 2 or better Spruce-Pine-Fir (SPF) with 1/2" x 3/ 4" notch in bottom.

###### 2. Balance of nailers: 2" x 4" 2100 MSR (minimum) SPF.

###### 3. Overhang top nailer: 2" x 6" No. 2 or better SPF.

##### E. Base re-inforcement

## **DIVISION 13 - SPECIAL CONSTRUCTION**

### **SECTION 13121-Pre-Engineered Timber Column Structure**

1. 7/16" x 32" OSB panels installed between the baseboard and first nailer and located in notches.
- F. Purlins and truss ties
  1. 2" x 4" No. 2 or better SPF
- G. Overhang framing
  1. Provide factory fabricated rafter frames.
  2. Provide 2" x 6" No. 2 or better SPF factory beveled fascia boards.
- H. Wind bracing
  1. 2" x 6" No. 2 or better SPF from endwall column to first truss back.
- I. Framing around openings
  1. 2" x 4" No. 2 or better SPF around personnel doors.
  2. 2" x 6" No. 2 or better SPF around overhead door openings
- J. Headers
  1. Provide built-up headers as required for proper installation.
- K. Incidental Framing
  1. 2" x 4" and/or 2" x 6" No. 2 or better SPF
- L. Interior framing
  1. 2" x 4" No. 2 or better SPF

#### **2.03 MATERIALS - PREFINISHED METALS**

- A. Roofing panels (Fluoroflex 1000®)
  1. Panel substrate shall be 0.019" minimum thickness commercial steel sheet with G90 (zinc) coating per ASTM A653 or AZSS (aluminum/zinc) coating per ASTM A792.
  2. The weather side of the panel shall receive a nominal two tenths mil polyurethane primer and a nominal eight tenths mil topcoat of 70\$ polyvinylidene difluoride (PVDF) resin to achieve a total nominal paint film thickness of one mil.
  3. Color selection of siding panels shall be from the manufacturer's standard color chart.
  4. The non-weather side paint system shall consist of a two coat finish with a total nominal thickness of one-half mil.
- B. Siding Panels (Fluoroflex™ 1000)
  1. Panel substrate shall be 0.019" minimum thickness commercial steel sheet with G90 (zinc) coating per ASTM A653 or AZSS (aluminum/zinc) coating per ASTM A792.
  2. The weather side of the panel shall receive a nominal two tenths mil polyurethane primer and a nominal eight tenths mil topcoat of 70\$ polyvinylidene difluoride (PVDF) resin to achieve a total nominal paint film thickness of one mil.
  3. Color selection of siding panels shall be from the manufacturer's standard color chart.
  4. The non-weather side paint system shall consist of a two coat finish with a total nominal thickness of one-half mil.
- C. Wainscot Panels {Fluoroflex™ 1000)
  1. Panel substrate shall be 0.019" minimum thickness commercial steel sheet with G90 (zinc) coating per ASTM A653 or AZSS (aluminum/zinc) coating per ASTM A792.
  2. The weather side of the panel shall receive a nominal two tenths mil polyurethane primer and a nominal eight tenths mil topcoat of 70\$ polyvinylidene difluoride (PVDF) resin to achieve a total nominal paint film thickness of one mil.
  3. Color selection of siding panels shall be from the manufacturer's standard color chart.

## **DIVISION 13 - SPECIAL CONSTRUCTION**

### **SECTION 13121-Pre-Engineered Timber Column Structure**

4. The non-weather side paint system shall consist of a two coat finish with a total nominal thickness of one-half mil.
- D. Metal Trim Items {Fluoroflex™ 1000}
  1. Die-formed steel from the same quality material as the siding panels

#### **2.04 MATERIALS-OTHER**

- A. Corner bracing
  1. Provide 1-1/4" wide high tensile steel strapping in all unobstructed corners in an "X" configuration.
- B. Roofing and siding fasteners
  1. EPDM washed, painted, center drive stainless steel screws for ribbed steel panels, or
  2. EPDM washed, galvanized ring-shank nails for ribbed steel panels
- C. Closure strips
  1. Closed cell foam.
- D. Sealant
  1. 100% neutral curing silicone sealant , and
  2. paintable sealant where required

## **PART3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify site conditions under provisions of Section 01015.

### **3.02 ERECTION - FRAMING - GENERAL**

- A. Erect framing in accordance with Manufacturer's established construction procedures.
- B. Make all components and building plumb, square, straight and true to lines, according to industry standards (See 3.08).
- C. Provide adequate temporary bracing to assure structure remains plumb and square until permanent bracing is installed.
- D. Altering of structural members will not be permitted.

### **3.03 ERECTION - FRAMING**

- A. Lower Column (Columns in Ground)
  1. Auger a hole to depth (48" minimum) with diameter as required by the building manufacturer.
  2. Install 1-1/4" x 1-1/4" galvanized support stilts on base of lower column using the specified number of 2" stainless steel positive placement gun nails, per corner.
  3. Accurate position lower column in the hole, embedding stilts 3/4" into soil.
  4. Place ready -mix concrete in hole to footing size and thickness indicated on plans.
  5. Backfill with dry soil, compacted in 8" lifts.
  6. Remove excess portions of lower column to provide 18" staggers beginning 18" above grade.
- B. Upper Column
  1. Set upper column to positive interlock with lower column.
  2. Install manufacturer's recommend quantity and size pneumatically driven fasteners.

## **DIVISION 13 - SPECIAL CONSTRUCTION**

### **SECTION 13121-Pre-Engineered Timber Column Structure**

- C. Baseboards (Columns in Ground)
  - 3. Install 2" x 8" treated plank, at grade, using builder's recommended fasteners.
- D. Wall girts
  - 1. Install 2" x 6" notched nailer to receive OSB panel.
  - 2. Install 2" x 4" nailers with on-center spacing as shown on building plans.
  - 3. Install 2" x 6" overhang nailer at the top.
- E. Trusses
  - 1. Set trusses in plane with the center member of the upper column using lifting methods as approved by the manufacturer.
  - 4. When properly positioned, install two ½" diameter machine bolts and manufacturer-recommended 20d ringshank nails through two of the upper column laminates and the truss heel.
  - 5. Brace trusses as recommended by the Manufacturer.
- F. Purlins
  - 1. Install 2" x 4" purlins at 24" on-center (maximum) and attached to trusses with 60d ring shank nails.
- G. Wind bracing
  - 1. Install 2" x 6" angled bracing at locations recommended by the Manufacturer.
- H. Incidental framing
  - 1. Install 2" x 4" or 2" x 6" blocking as required according to building Manufacturer's recommendations.

### **3.04 ERECTION - PREFINISHED MATERIALS - GENERAL**

- A. Roofing Panels
  - 1. Install panels perpendicular to supports, aligned straight with end fascia
  - 2. Fasten panels to purlins with screw fasteners.
- B. Siding and wainscot panels
  - 1. Install panels perpendicular to supports, aligned level and plumb to industry standards (See 3.08).
  - 2. Fasten panels to wall girts with screw fasteners.
- C. Trim items
  - 1. Install trim items at the base, wainscot transition, corners, top of steel siding, fascia, gables and ridge using appropriate fasteners.
- D. Vent-A-Ridge
  - 1. Install over ridge trim using screw fasteners.
  - 2. Insure that a minimum of 2" clear throat opening is maintained.
- E. Soffits
  - 1. Install soffits to interlock with trim items at top of steel siding and at fascia.
  - 2. Use solid soffit at end overhang.
  - 3. Use a combination of solid and perforated soffits to provide balanced ventilation at side overhangs.
- F. Gutter and downspouts
  - 1. Install gutters with spikes and ferrules (with washers) spaced 24" on-center.
  - 2. Silicone sealant and silicone rubber gaskets shall be used at laps to maintain leak prevention and to relieve stress due to thermal movement.

## **DIVISION 13 - SPECIAL CONSTRUCTION**

### **SECTION 13121 - Pre-Engineered Timber Column Structure**

#### G. Filler strips

1. Provide closed cell foam filler strips at the top and bottom of the roofing panels. F. Gutter and downspouts

### **3.08 TOLERANCES**

#### A. Framing Members

1. 1/4" from level.
2. 1/8" from plumb

#### B. Siding and roofing

1. 1/8" from true position