



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**Solicitation**

NUMBER
GSD146431

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
GUY NISBET
304-558-2596

RFQ COPY

TYPE NAME/ADDRESS HERE

VENDOR

SHIP TO

DEPARTMENT OF ADMINISTRATION  
 VARIOUS LOCALES AS INDICATED  
 BY ORDER

DATE PRINTED
06/09/2014

BID OPENING DATE: 06/19/2014

BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				ADDENDUM NO.02		
				ADDENDUM ISSUED TO PUBLISH AND DISTRIBUTE THE ATTACHED INFORMATION TO THE VENDOR COMMUNITY.		
0001	1	LS	968-96	REPAIR PIPES AND REPLACE VALVES IN BLD. 5 & 6		
***** THIS IS THE END OF RFQ GSD146431 ***** TOTAL:						

SIGNATURE		TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE	

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

SOLICITATION NUMBER: GSD146431  
 Addendum Number: No. 02

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The purpose of this addendum is to modify the solicitation identified as (“Solicitation”) to reflect the change(s) identified and described below.

**Applicable Addendum Category:**

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

**Description of Modification to Solicitation:**

Addendum issued to publish and distribute the attached information to the vendor community.

1. Vendor submitted Questions and Agency responses.
2. ZMM Addendum No 02 document.
3. Specification 123623.13
4. Specification 72100
5. Specification 061053
6. No other changes.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

**Terms and Conditions:**

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

# ATTACHMENT A

**GSD146431**  
**Building 5 & 6 Riser Valve Replacement**  
**Questions**  
**6/09/14**

1. Can the completion date be extended to 150 days?  
A.1. NO
2. Is the GSD responsible to re-insulate all new/existing valves/piping?  
A.2. See Specification section 230719 "Interior Insulation Application Schedule." Applies to all new work included in this contract.
3. Can Progress billing be accepted?  
A.3. YES
4. When draining the CW/HW loop and re-filling it, there will be air in the lines that will need to be relieved and equipment will need to be re-started. Who is responsible to re-start and service the equipment?  
A.4. GSD will stop and start HW/CHW systems. Contractor to relieve air/refill HW/CHW systems.
5. Is the GSD responsible for to re-paint all new and existing sheetrock?  
A.5. The general Contractor will be responsible for painting all new gypsum board walls and ceilings.
6. How far above the ceilings is the 2" rigid insulation to be installed?  
A.6. The extent of new 2" rigid insulation will be covered by specified unit quantities on the new Bid Form.
7. Can the Architect provide a spec on the 2" rigid insulation? (Are we looking for an (R) Value?)  
A.7. Rigid insulation specifications are attached.
8. Will the Owner be detaching and reinstalling the window trim in the windows when they perform the abatement/demolition?  
A.8. The window trim will remain in place during demolition by owner.
9. Will the Owner be removing the ceiling tiles and reinstalling them? Note: The plaster ceilings above may contain asbestos and the dust will generally settle on top of the ceiling tile?  
A.9. Basement Level – The owner will remove and reinstall the ceiling tile.

Floor levels 1 and 2 – The owner will not remove the suspended ceiling grid and tile (only the gypsum board ceiling above the window pockets). The general contractor will be responsible for installing a new ceiling trim edge piece at new walls. Some removal and reinstallation will be required for installation of new walls and gypsum board ceiling.

10. Does the Owner have any additional stock of the ceiling tile? (The tiles appear to be an odd size.)
- A.10. General contractor is not responsible for new ceiling tile.
11. Will the Owner be detaching and resetting the window blinds?
- A.11. The owner will detach and reset window blinds.
12. Will the Owner be providing the dust protection during asbestos/demolition and will the Owner leave this protection in place during the renovations?
- A.12. The Owner will be installing and removing dust protection during demolition, the general contractor will be responsible for their own dust protection.
13. Who will be responsible for the over-all clean up of each area of work? Will the Owner's Contractor completely clean-up the area after asbestos removal and general demolition and then the Owner turn over the responsibility to the General Contractor performing the valve work and new finishes?
- A.13 The general contractor will receive the site in a clean state and return the site to a clean state at the end of construction.
14. Are the louvers to be repainted?
- A.14. Yes the metal louvers in the counter tops will be spray painted to match the existing color.
15. The Owner/Architect will need to provide specifications for the laminate countertops. Please provide these. Can the existing countertops be reused?
- A.15. Specifications for countertops and framing and included in this addendum.
16. During the demolition, will the demolition contractor be removing all the rough framing above the ceilings and around the bases?
- A.16 YES

June 9, 2014

**ADDENDUM NO. 1**

RE: Valve Project For  
West Virginia State Office Building Nos. 5 and 6  
West Virginia State Capitol Complex  
For The West Virginia Department of Administration  
Owner's Project No. GSD146431  
Charleston, West Virginia  
Architect's Project No. 1405

TO: Prospective Bidders

FROM: ZMM, Inc. Architects and Engineers

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents.

**ATTACH THIS ADDENDUM TO THE FRONT COVER OF THE PROJECT MANUAL AND ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM.**

**PART 1 - CHANGES TO SPECIFICATIONS**

1. ADD Section 061053 – Miscellaneous Rough Carpentry as attached to this Addendum.
2. ADD Section 072100 – Thermal Insulation as attached to this Addendum.
3. ADD Section 123623.13 – Plastic-Laminate Countertops as attached to this Addendum.

**PART 2 - INFORMATION FOR BIDDERS:**

1. Refer to list of bidder's questions and responses as attached to this Addendum.

END OF ADDENDUM

Attachments: Section 061053 – Miscellaneous Rough Carpentry ..... 8 pages  
Section 072100 – Thermal Insulation ..... 3pages  
Section 123623.13 – Plastic-Laminate Countertops ..... 5 pages  
Bidders' Questions and Responses ..... 2 pages

## SECTION 123623.13 – PLASTIC-LAMINATE COUNTERTOPS

## PART 1 - GENERAL

## 1.1 - RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes:

- 1. Plastic-laminate countertops.

- B. Related Sections:

- 1. Section 061053 "Miscellaneous Carpentry" for wood blocking for anchoring manufactured wood casework.

## 1.3 DEFINITIONS

- A. Definitions: Identification of casework components and related products by surface visibility.

- 1. Exposed Ends: Any storage unit exterior side surface that is visible after installation.
  - 2. Concealed Surfaces: Any surface not visible after installation.
  - 3. MDF: Medium-density fiberboard.

## 1.4 SUBMITTALS

- A. Product Data: For each type of product specified.

- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

- 1. Indicate locations of blocking and other supports required for installing casework.
  - 2. Indicate locations and types of service fittings, together with associated service supply connection required.
  - 3. Show adjacent walls, doors, windows, other building components, and other equipment. Indicate clearances from above items.
  - 4. Coordinate shop drawings with other work involved.

- C. Samples for Initial Selection: Manufacturer's color charts consisting of actual units or sections of units showing the full range of colors, textures, and patterns available for cabinets and each type of top material indicated.

- 1. Include premium patterns, such as wood grains, in Architect's choices for plastic laminate.

D. Samples for Verification: 8-by-10-inch Samples for each type of finish and material, including top material and the following:

1. Section of countertop showing top, front edge, and backsplash construction.
2. Maintain full-size Samples at Project site during construction in an undisturbed condition as a standard for judging the completed Work. Unless otherwise indicated, approved sample units may become part of the completed Work if in undisturbed condition at time of Substantial Completion. Notify Architect of their exact locations.

E. Qualification Data: For qualified Installer.

#### 1.5 QUALITY ASSURANCE

A. Source Limitations: Obtain casework, including tops and accessories, through one source from a single manufacturer.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver casework until painting, utility rough-in, and similar operations that could damage, soil, or deteriorate casework have been completed in installation areas. If casework must be stored in other than installation areas, store only in areas whose environmental conditions meet requirements specified in "Project Conditions" Article below.
- B. Protect finished surfaces from soiling and damage during handling and installation. Keep covered with polyethylene film or other protective covering.
- C. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet-work is completed, and humidity levels are maintained within a range of 20 to 50 percent.

#### 1.7 WARRANTY

- A. Casework Warranty: Submit a written warranty, executed by Contractor, agreeing to repair or replace casework components that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:
  1. Failure of laminate in finish or adhesion to countertop substrate.
- B. Warranty Period: Five years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS, GENERAL

A. Low-Emitting Materials: Provide manufactured wood casework, including countertops, made with adhesives and composite wood products containing no urea formaldehyde.



- B. Particleboard: ANSI A208.1, Grade M-2.
- C. MDF: ANSI A208.2, Grade 130.
- D. Hardboard: AHA A135.4, Class 1 Tempered.
- E. Plastic Laminate: High-pressure decorative laminate complying with NEMA LD 3.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Formica Corporation.
    - b. Nevamar Company, LLC; Decorative Products Div. (Basis-of-Design)
    - c. Wilsonart International; Div. of Premark International, Inc.
- F. Edgebanding for Plastic Laminate: Rigid PVC extrusions, through color with satin finish, 3 mm thick at doors and drawer fronts, 1 mm thick elsewhere.

## 2.2 MATERIALS

### A. Core Materials:

- 1. Particleboard: Medium density 45-50 pound industrial grade particleboard of fir or pine meeting or exceeding ANSI A 208.1-1993, M-3 requirements.
- 2. Moisture Resistant (MR) Particleboard: Use where indicated in Article "Fabrication."
- 3. Hardboard: Prefinished hardboard in ¼-inch thickness, meeting or exceeding commercial standards CS-251.

### B. Decorative Laminates:

- 1. High-pressure decorative laminate GP28 (VGS .028), NEMA Test LD-3.
- 2. High-pressure decorative laminate GP50 (HGS .050), NEMA Test LD-3.
- 3. High-pressure cabinet liner CL20 (.020), NEMA Test LD-3.
- 4. Thermally Fused Melamine laminate tested to meet NEMA Test LD-3.
- 5. High-pressure backer BK20 (.020).

### C. Laminate Color Selection:

- 1. Selections for cabinet surfaces, grade GP28, from the current year Wilsonart, Nevamar, or Formica series. A maximum of one color to be selected per unit face and five colors per project.
- 2. Selections for countertop grades, GP50, from the current year Wilsonart, Nevamar or Formica standard solid and pattern offering. A maximum of five colors per project.
- 3. Basic cabinet body color to include surfaces of all components, including drawer boxes, to be covered with thermally fused melamine laminate as a minimum requirement; drawer boxes not matching basic color will be rejected.

D. Metal Parts:

1. Countertop support brackets, undercounter support frames, legs and miscellaneous metal parts shall be furniture steel, welded, degreased, cleaned, treated and epoxy powder coated.

2.3 COUNTERTOPS

A. Laminate Clad Countertops: Provide laminate sheet, complying with NEMA LD 3, shop bonded with fully waterproof glue to both sides of 1-inch- thick subtop.

1. Countertop Core: Medium density 45-50 pound industrial grade particleboard of fir or pine meeting or exceeding ANSI A 208.1-1993, M-3 requirements.
2. Surface Material: High-pressure decorative laminate GP50 (HGS .050) with underside properly balanced backer sheeting.
3. Edges: All exposed 1 inch edges, including edges of applied backsplash shall have 3mm PVC banding, machine applied with waterproof hot melt adhesive. Provide external edges and outside corners machine profiled to 1/8-inch radius.
4. Construction: Self-edge with field-applied backsplash.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of reinforcement, and other conditions affecting performance of casework installation.
1. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Condition countertops to average prevailing humidity conditions in installation areas prior to installing.

3.2 INSTALLATION OF COUNTERTOPS

- A. Field Jointing: Where possible, make in the same manner as shop jointing using dowels, splines, adhesives, and fasteners recommended by manufacturer. Prepare edges to be joined in shop so Project site processing of top and edge surfaces is not required. Locate field joints where shown on approved Shop Drawings.
- B. Abut top and edge surfaces in one true plane, with internal supports placed to prevent deflection. Provide flush hairline joints in tops using clamping devices.
- C. Where countertops are installed with angled bracing, and not on base cabinets, provide continuous blocking or additional metal studs along the entire vertical line for fastening countertop and bracing.
- D. Provide required holes and cutouts for service fittings.

3.3 CLEANING AND PROTECTING

- A. Repair or remove and replace defective work as directed on completion of installation.
- B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.

END OF SECTION

## SECTION 072100 - THERMAL INSULATION

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Extruded polystyrene foam-plastic board.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Low-emitting product certification.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: For each product, for tests performed by a qualified testing agency.
- B. Evaluation Reports: For foam-plastic insulation, from ICC-ES.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.
- B. Protect foam-plastic board insulation as follows:
  - 1. Do not expose to sunlight except to necessary extent for period of installation and concealment.
  - 2. Protect against ignition at all times. Do not deliver foam-plastic board materials to Project site until just before installation time.
  - 3. Quickly complete installation and concealment of foam-plastic board insulation in each area of construction.

## PART 2 - PRODUCTS

### 2.1 EXTRUDED POLYSTYRENE FOAM-PLASTIC BOARD

- A. Extruded polystyrene boards in this article are also called "XPS boards." Roman numeral designators in ASTM C 578 are assigned in a fixed random sequence, and their numeric order does not reflect increasing strength or other characteristics.
- B. Extruded Polystyrene Board, Type IV : ASTM C 578, Type IV, 25-psi (173-kPa) minimum compressive strength; unfaced; maximum flame-spread and smoke-developed indexes of 25 and 450, respectively, per ASTM E 84.
  - 1. Manufacturers – Subject to specified requirements, provide products by one of the following:
    - a. Dow Chemical
    - b. Owens Corning
    - c. Diversifoam Products
    - d. Pactiv Corporation

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Clean substrates of substances that are harmful to insulation, including removing projections capable of puncturing insulation or vapor retarders, or that interfere with insulation attachment.

### 3.2 INSTALLATION, GENERAL

- A. Comply with insulation manufacturer's written instructions applicable to products and applications.
- B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain, or snow at any time.
- C. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.
- D. Provide sizes to fit applications and selected from manufacturer's standard thicknesses, widths, and lengths. Apply single layer of insulation units unless multiple layers are otherwise shown or required to make up total thickness or to achieve R-value.

### 3.3 INSTALLATION OF WALL INSULATION

- A. Prepare concrete panel surfaces to receive insulation adhesive. Grind away any surface imperfections.

- B. Install insulation where indicated on Drawings. Butt panels together for tight fit.
- C. Adhesive Installation: Install with adhesive or press into tacky waterproofing or dampproofing according to manufacturer's written instructions.

#### 3.4 PROTECTION

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

END OF SECTION

## SECTION 061053 – MISCELLANEOUS ROUGH CARPENTRY

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

## A. Section Includes:

1. Miscellaneous framing with dimension lumber.
2. Wood blocking and nailers.
3. Plywood sheathing and backing panels.

## B. Related Requirements:

1. Section 313116 "Termite Control" for site application of borate treatment to wood framing.

## 1.3 DEFINITIONS

- A. Dimension Lumber: Lumber of 2 inches nominal (38 mm actual) or greater but less than 5 inches nominal (114 mm actual) in least dimension.

## B. Lumber grading agencies, and the abbreviations used to reference them, include the following:

1. NeLMA: Northeastern Lumber Manufacturers' Association.
2. NHLA: National Hardwood Lumber Association.
3. NLGA: National Lumber Grades Authority.
4. SPIB: The Southern Pine Inspection Bureau.
5. WCLIB: West Coast Lumber Inspection Bureau.
6. WWPA: Western Wood Products Association.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.

1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

3. Include copies of warranties from chemical treatment manufacturers for each type of treatment.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Evaluation Reports: For the following, from ICC-ES:

1. Preservative-treated wood.
2. Fire-retardant-treated wood.
3. Power-driven fasteners.
4. Powder-actuated fasteners.
5. Expansion anchors.
6. Metal framing anchors.

#### 1.6 QUALITY ASSURANCE

- A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber flat with spacers beneath and between each bundle to provide air circulation. Protect lumber from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

### PART 2 - PRODUCTS

#### 2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
  1. Factory mark each piece of lumber with grade stamp of grading agency.
  2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece.
  3. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
  4. Provide dressed lumber, S4S, unless otherwise indicated.
- B. Maximum Moisture Content of Lumber: 15 percent for 2-inch nominal (38-mm actual) thickness or less, 19 percent for more than 2-inch nominal (38-mm actual) thickness unless otherwise indicated.



## 2.2 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC2 for interior construction not in contact with the ground, Use Category UC3b for exterior construction not in contact with the ground, and Use Category UC4a for items in contact with the ground.
  - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium. Do not use inorganic boron (SBX) for sill plates.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application: Treat items indicated on Drawings, and the following:
  - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
  - 2. Wood sills, blocking, and similar concealed members in contact with masonry or concrete.
  - 3. Wood framing and furring attached directly to the interior of below-grade exterior masonry or concrete walls.
  - 4. Wood framing members that are less than 18 inches (460 mm) above the ground in crawl spaces or unexcavated areas.
  - 5. Wood floor plates that are installed over concrete slabs-on-grade.

## 2.3 FIRE-RETARDANT-TREATED MATERIALS

- A. General: All interior miscellaneous rough carpentry is to be constructed of fire-retardant-treated materials complying with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
- B. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet (3.2 m) beyond the centerline of the burners at any time during the test.
  - 1. Use treatment that does not promote corrosion of metal fasteners.
  - 2. Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201 at 92 percent relative humidity. Use where exterior type is not indicated.
  - 3. Design Value Adjustment Factors: Treated lumber shall be tested according to ASTM D 5664, and design value adjustment factors shall be calculated according to ASTM D 6841.
- C. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Kiln-dry plywood after treatment to a maximum moisture content of 15 percent.

- D. Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.
1. For exposed lumber indicated to receive a stained or natural finish, mark end or back of each piece.

#### 2.4 DIMENSION LUMBER FRAMING

- A. Load-Bearing and Non-Load-Bearing framing including wood joists, rafters, soffit framing, and wall studs: Construction or No. 2 grade, and any of the following species:
1. Hem-fir (north); NLGA.
  2. Mixed southern pine; SPIB.
  3. Spruce-pine-fir; NLGA.
  4. Hem-fir; WCLIB or WWPA.
  5. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.
  6. Northern species; NLGA.
  7. Eastern softwoods; NeLMA.
  8. Western woods; WCLIB or WWPA.
- B. All framing is to possess minimum yield strength and other structural properties as indicated on Drawings.

#### 2.5 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
1. Blocking.
  2. Nailers.
  3. Rooftop equipment bases and support curbs.
  4. Cants.
  5. Furring.
  6. Grounds.
- B. For concealed boards, provide lumber with 15 percent maximum moisture content and any of the following species and grades:
1. Mixed southern pine, No. 2 grade; SPIB.
  2. Hem-fir or hem-fir (north), Construction or No. 2 Common grade; NLGA, WCLIB, or WWPA.
  3. Spruce-pine-fir (south) or spruce-pine-fir, Construction or No. 2 Common grade; NeLMA, NLGA, WCLIB, or WWPA.
  4. Eastern softwoods, No. 2 Common grade; NELMA.
  5. Northern species, No. 2 Common grade; NLGA.
  6. Western woods, Construction or No. 2 Common grade; WCLIB or WWPA.

- C. For blocking not used for attachment of other construction, Utility, Stud, or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.
- D. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.
- E. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

## 2.6 PLYWOOD

- A. Emissions: Products shall meet the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- B. Plywood: DOC PS 1 Exposure 1, C-D Plugged.
- C. Thickness: As needed to comply with requirements specified, but not less than thickness indicated.
- D. Factory mark panels to indicate compliance with applicable standard.
- E. Interior plywood is to be fire-retardant treated as specified in this Section.
- F. Preservative Treatment by Pressure Process: Use Category UC3b for exterior construction not in contact with the ground, and Use Category UC4a for items in contact with the ground.
  - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- G. Mark plywood with appropriate classification marking of an inspection agency acceptable to authorities having jurisdiction.
- H. Equipment Backing Panels: DOC PS 1, Exposure 1, C-D Plugged, in thickness indicated or, if not indicated, not less than 3/4-inch (19-mm) nominal thickness.
  - 1. Plywood shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

## 2.7 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
  - 1. Where carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M or of Type 304 stainless steel.

- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Lag Bolts: ASME B18.2.1 (ASME B18.2.3.8M).
- F. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.
- G. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.
  - 1. Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.
  - 2. Material: Stainless steel with bolts and nuts complying with ASTM F 593 and ASTM F 594, Alloy Group 1 or 2 (ASTM F 738M and ASTM F 836M, Grade A1 or A4).

## 2.8 METAL FRAMING ANCHORS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Cleveland Steel Specialty Co.
  - 2. Simpson Strong-Tie Co., Inc.
- B. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.
- C. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.
  - 1. Use for interior locations unless otherwise indicated.
- D. Hot-Dip Heavy-Galvanized Steel Sheet: ASTM A 653/A 653M; Structural Steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 (Z550) coating designation; and not less than 0.036 inch (0.9 mm) thick.
  - 1. Use for wood-preservative and fire-retardant treated lumber.

## 2.9 MISCELLANEOUS MATERIALS

- A. Sill-Sealer Gaskets: Closed-cell neoprene foam, 1/4 inch (6.4 mm) thick, selected from manufacturer's standard widths to suit width of sill members indicated.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Where wood-preserved-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.
- C. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- D. Install plywood backing panels by fastening to studs; coordinate locations with utilities requiring backing panels.
- E. Metal Framing Anchors: Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
- F. Do not splice structural members between supports unless otherwise indicated.
- G. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.
  - 1. Provide metal clips for fastening gypsum board or lath at corners and intersections where framing or blocking does not provide a surface for fastening edges of panels. Space clips not more than 16 inches (406 mm) o.c.
- H. Provide fire blocking in furred spaces, stud spaces, and other concealed cavities as indicated and as follows:
  - 1. Fire block concealed spaces behind combustible cornices and exterior trim at not more than 20 feet (6 m) o.c.
- I. Sort and select lumber so that natural characteristics will not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- J. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
  - 1. Use inorganic boron for items that are continuously protected from liquid water.
  - 2. Use copper naphthenate for items not continuously protected from liquid water.

- K. Securely attach carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
1. NES NER-272 for power-driven fasteners.
  2. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.
  3. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.
- L. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.
- 3.2 PROTECTION
- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect miscellaneous rough carpentry from weather. If, despite protection, miscellaneous rough carpentry becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: GSD146431**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |   |  |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

\_\_\_\_\_  
Company

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.  
Revised 6/8/2012