

Addendum #1

DATE: October 19, 2023
SUBJECT: Truro Cottage Relocation and Upgrades Project
W&S PROJECT #: ENG22-1122

To be considered as part of the contract drawings and specifications and all other contract documents for the project referenced above; superseding previously issued Drawings, Specifications, Bidding Requirements, Contract Documents and Addenda, to the extent modified by this Addendum. Bidders are advised that this Addendum must be acknowledged in the appropriate space provided on the Form of General Bid.

The following items are listed in this Addendum:

- I. Bidder Questions and Architects Responses
 - II. Specification Updates
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I. Bidder Questions and Architects Responses

- 1. Question: Is General Contractor responsible for asbestos or any other hazardous materials that may be found?

Response: Yes- See SECTION 02 82 33 Asbestos Abatement and SECTION 02 83 19 LEAD BASED COATINGS REMOVAL

- 2. Question: Is General Contractor responsible for a Builders Risk policy?

Response: No

- 3. Question: Is General Contractor responsible for setting houses on the foundations or is this the responsibility of the house mover?

Response: The contractor should carry an estimate for placing the houses, and this should be a part of the bid amount. This item may result in savings to the Town if the foundations are completed prior to the move being done.

- 4. Question: Who is responsible for the water and electric hook up to each house?

Response: The General Contractor.

5. Question: Is there a landscape plan?

Response: Landscaping; final grading, driveways, seeding and plantings will be performed by the town.

II. SPECIFICATIONS UPDATES:

1. Add Section 08 14 33 – “STILE AND RAIL WOOD DOORS (Add #1)”
2. Add Section 08 31 23 – “FLOOR DOORS (Add #1)”
3. Add Section 09 64 00- “FACTORY FINISHED ENGINEERED WOOD FLOORING (Add #1)”
4. Add Section 12 35 30 – “RESIDENTIAL CASEWORK- (Add #1)”
5. Replace Section 07 25 00 “WEATHERBARRIERS” with Section 07 25 00 “WEATHER BARRIERS (Add #1)”
6. Specification Table of Contents
 - a. Delete Section 08 31 00 “ACCESS DOORS AND PANELS”
 - b. Delete Section 10 28 00 “TOILET, BATH, AND LAUNDRY ACCESSORIES”

END OF ADDENDUM #1

SECTION 07 25 00

WEATHER BARRIERS (ADDENDUM #1)

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Drainage wrap.

1.2 ACTION SUBMITTALS

- A. Product Data:
 - 1. For each type of product.
- B. Product Data Submittals: For drainage wrap, include data on air and water-vapor permeance based on testing in accordance with referenced standards.
- C. Shop Drawings: Show details of drainage wrap at terminations, openings, and penetrations. Show details of flexible flashing applications.
- D. Sustainable Design Submittals:
 - 1. Third-Party Certifications: For each product.
 - 2. Third-Party Certified Life Cycle Assessment: For each product.

1.3 INFORMATIONAL SUBMITTALS

- A. Evaluation Reports: For water-resistive barrier from ICC-ES.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified firm that is approved, authorized, certified, or licensed by the weather barrier system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's warranty.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

1.6 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed in accordance with manufacturer's written installation instructions and warranty requirements.

1.7 WARRANTY

- A. Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 WEATHER BARRIERS

- A. Drainage Wrap: Dimensional water-resistive barrier that also creates a drainage plane; with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, when tested in accordance with ASTM E84; and acceptable to authorities having jurisdiction.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Alpha ProTech
 - b. Barricade Building Products
 - c. Kingspan Insulation LLC
 - 2. Drainage Wrap Type: Type I, ASTM E2556/E2556M.
 - 3. Composition Type: Nonwoven polyolefin with nondirectional drainage pattern.
 - 4. Water-Vapor Permeance: Minimum 15 perms in accordance with ASTM E96/E96M, Desiccant Method (Procedure A).
 - 5. Air Permeance: Maximum 0.004 cfm/sq. ft. at 0.3 inch wg when tested in accordance with ASTM E2178.
 - 6. Allowable UV Exposure Time: Not more than 120 days.

2.2 ACCESSORY MATERIALS

- A. Requirement: Provide primers, fasteners, seam tapes, flashing, transition strips, termination strips, joint sealants, counterflashing strips, flashing sheets and metal termination bars, termination mastic, substrate patching materials, adhesives, tapes, foam sealants, lap sealants, and other accessory materials that are recommended in writing by weather barrier manufacturer to produce a complete weather barrier assembly and that are compatible with primary weather barrier material and adjacent construction to which they may seal.

PART 3 - EXECUTION

3.1 INSTALLATION OF WEATHER BARRIERS

- A. Weather Barriers:
 - 1. Building Wrap or Drainage Wrap: Comply with manufacturer's written instructions and warranty requirements.
- B. Install weather barrier accessories for a complete installation with weather barriers in accordance with manufacturers written instructions.

END OF SECTION 07 25 00

SECTION 08 14 33

STILE AND RAIL WOOD DOORS (ADDENDUM #1)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Exterior stile and rail wood doors.
2. Interior stile and rail wood doors.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Exterior stile and rail wood doors.
2. Interior stile and rail wood doors.

B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each type of door; construction details not covered in Product Data, including those for stiles, rails, panels, and moldings (sticking); and other pertinent data, including the following:

1. Door schedule indicating door and frame location, type, size, fire protection rating, and swing.
2. Door elevations, dimensions and location of hardware, lite locations, and glazing thickness.
3. Details of frame for each frame type, including dimensions and profile.
4. Details of electrical raceway and preparation for electrified hardware, access control systems, and security systems.
5. Dimensions and locations of mortises and holes for hardware.
6. Clearances and undercuts.
7. Requirements for veneer matching.
8. Doors to be factory primed and application requirements.
9. Apply AWI Quality Certification Program label to Shop Drawings.

C. Samples for Initial Selection: For factory-finished doors.

D. Samples for Verification:

1. Factory finishes applied to actual door face materials, approximately **8 by 10 inches**, for each material and finish. For each wood species and transparent finish, provide set of three Samples showing typical range of color and grain to be expected in finished Work.
2. Corner sections of doors, approximately **8 by 10 inches**, with door faces and edges representing actual materials to be used.

1.3 INFORMATIONAL SUBMITTALS

- A. Field quality control reports.
- B. Sample Warranty: For special warranty.

1.4 CLOSEOUT SUBMITTALS.

- A. Special warranties.
- B. Quality Standard Compliance Certificates: AWI Quality Certification Program certificates.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Certification: Licensed participant in AWI's Quality Certification Program.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Comply with requirements of referenced standard and manufacturer's written instructions.
- B. Package doors individually in opaque plastic bags or cardboard cartons.
- C. Mark each door on bottom rail with opening number used on Shop Drawings.

1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace doors and frames that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Delamination of veneer.
 - b. Warping (bow, cup, or twist) more than **1/4 inch** in a **36-by-80i nch** section.
 - c. Telegraphing of core construction in face veneers exceeding **0.01 inch in a 3-inch** span.
 - 2. Warranty Period for Exterior Doors: Five years.
 - 3. Warranty Period for Interior Doors: Five years.
 - 4. Insulating Glass Vision Panels: Five years.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain stile and rail wood doors from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

- A. Exterior Door Thermal Transmittance: Maximum whole fenestration product U-factor of 0.30 in accordance with AAMA 1503, ASTM E1423, or NFRC 100.

2.3 MATERIALS

- A. Use only materials that comply with referenced standards and other requirements specified.
 - 1. Assemble exterior doors, including components, with wet-use adhesives complying with ASTM D5572 for finger joints and with ASTM D5751 for joints other than finger joints.
 - 2. Assemble interior doors, including components, with either dry-use or wet-use adhesives complying with ASTM D5572 for finger joints and with ASTM D5751 for joints other than finger joints.
- B. Panel Products: Any of the following unless otherwise indicated:
 - 1. Particleboard: ANSI A208.1, Grade M-2.
 - 2. Medium-density fiberboard (MDF), complying with ANSI A208.2, Grade 130.
 - 3. Hardboard complying with ANSI A135.4.
 - 4. Veneer-core plywood.
- C. Safety Glass: Provide products complying with testing requirements in 16 CFR 1201, for Category II materials, unless those of Category I are expressly indicated and permitted.

2.4 EXTERIOR STILE AND RAIL WOOD DOORS

- A. Exterior Stile and Rail Wood Doors: Exterior custom doors complying with the AWI, AWMAC, and WI's Architectural Woodwork Standards, and with other requirements specified.
 - 1. Performance Grade: ANSI/WDMA I.S. 1A Heavy Duty.
 - 2. Architectural Woodwork Standards Quality Grade: Custom.
 - 3. Panel Designs: As indicated on Drawings.
 - a. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval.
 - b. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
 - 4. Finish: Opaque.
 - 5. Door Construction for Opaque Finish:
 - a. Stile and Rail Construction:
 - 1) Veneered, structural composite lumber or veneered edge- and end-glued lumber.
 - b. Raised-Panel Construction: Veneered, wood-based panel product.
 - 6. Stile and Rail Widths: Manufacturer's standard, but not less than the following:
 - a. Stiles, Top and Intermediate Rails: 5-3/8 inches.
 - b. Bottom Rails: 11-3/8 inches.
 - 7. Raised-Panel Thickness: 1-3/4 inches.
 - 8. Molding Profile (Sticking): Bead and cove.

9. Glass: Uncoated, clear, insulating-glass units made from two lites of 3.0-mm-thick, fully tempered glass with 1/4-inch interspace.
10. Mark, label, or otherwise identify stile and rail wood doors as complying with WDMA I.S. 6A and grade specified.

2.5 INTERIOR STILE AND RAIL WOOD DOORS

A. Interior Stile and Rail Wood Doors: Interior custom doors complying with AWI, AWMAC, and WI's Architectural Woodwork Standards and with other requirements specified.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. VT Industries, Inc.
 - b. Mastercraft
 - c. Masonite Architectural
2. Performance Grade: ANSI/WDMA I.S. 1A Heavy Duty.
3. Architectural Woodwork Standards Quality Grade: Custom.
4. Finish: Opaque.
5. Door Construction for Opaque Finish:
 - a. Stile and Rail Construction:
 - 1) Veneered, structural composite lumber or veneered edge- and end-glued lumber.
 - b. Flat-Panel Construction: Veneered, wood-based panel product.
6. Stile and Rail Widths: Manufacturer's standard, but not less than the following:
 - a. Stiles, Top and Intermediate Rails: 4-1/2 inches.
 - b. Bottom Rails: 9 inches.
7. Raised-Panel Thickness: 1-3/8 inches.
8. Flat-Panel Thickness: 1/2 inch.
9. Molding Profile (Sticking): Bead and cove.
10. Mark, label, or otherwise identify stile and rail wood doors as complying with WDMA I.S. 6A and grade specified.

2.6 STILE AND RAIL WOOD DOOR FABRICATION

A. Factory fit doors to suit frame-opening sizes indicated, with the following uniform clearances and bevels unless otherwise indicated:

1. Clearances:
 - a. Provide 1/8 inch at heads, jambs, and between pairs of doors.
 - b. Provide 1/2 inch from bottom of door to top of decorative floor finish or covering.
 - c. Where threshold is shown on Drawings or scheduled, provide not more than

- 3/8 inch from bottom of door to top of threshold.
 - d. Comply with NFPA 80 requirements for fire-rated doors.
- 2. Bevel non-fire-rated doors 1/8 inch in 2 inches at lock and hinge edges.
- B. Fabricate stile and rail wood doors in sizes indicated for field fitting.
- C. Factory machine doors for hardware that is not surface applied.
 - 1. Locate hardware to comply with DHI-WDHS-3.
 - 2. Comply with final hardware schedules, door frame Shop Drawings, BHMA-156.115-W, and hardware templates.
 - 3. For doors scheduled to receive electrified locksets, provide factory-installed raceway and wiring to accommodate specified hardware.
 - 4. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before factory machining.
- D. Glazed Openings:
 - 1. Trim openings indicated for glazing with solid-wood moldings, with one side removable. Miter wood moldings at corner joints.
 - 2. Factory install glazing in doors, Install glass using manufacturer's standard elastomeric glazing sealant complying with ASTM C920. Secure glass in place with removable wood moldings. Miter wood moldings at corner joints.
- E. Exterior Doors: Factory treat exterior doors with water-repellent preservative after fabrication has been completed but before shop priming.
 - 1. Comply with WDMA I.S. 4.
 - 2. Flash top of outswinging doors with manufacturer's standard metal flashing.

2.7 FACTORY PRIMING

- A. Doors for Opaque Finish: Shop prime faces, all four edges, edges of cutouts, and mortises with one coat of wood primer specified in Section 09 90 00 "Painting."
- B. Opaque Finish:
 - 1. Color: Match Architect's sample
 - 2. Sheen: Semigloss.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors and installed door frames, with Installer present, before hanging doors.
 - 1. Verify that installed frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.

2. Reject doors with defects.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Hardware: For installation, see Section 08 71 00 "Door Hardware."
- B. Install doors and frames to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- C. Job-Fitted Doors:
1. Align and fit doors in frames with uniform clearances and bevels as indicated below.
 - a. Do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors.
 2. Machine doors for hardware.
 3. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
 4. Clearances:
 - a. Provide 1/8 inch at heads, jambs, and between pairs of doors.
 - b. Provide 1/4 inch from bottom of door to top of decorative floor finish or covering unless otherwise indicated on Drawings.
 - c. Where threshold is shown on Drawings or scheduled, provide 1/4 inch from bottom of door to top of threshold unless otherwise indicated.
 5. Bevel non-fire-rated doors 1/8 inch in 2 inches at lock and hinge edges.
- D. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.
- E. Factory- Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

3.3 FIELD QUALITY CONTROL

- A. Inspections:
1. Provide inspection of installed Work through AWI's Quality Certification Program, certifying that woodwork, including installation, complies with requirements of the Architectural Woodwork Standards for the specified grade.
- B. Repair or remove and replace installations where inspections indicate that they do not comply with specified requirements.
- C. Reinspect repaired or replaced installations to determine if replaced or repaired door installations comply with specified requirements.

3.4 ADJUSTING

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Replace doors that are damaged or do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 08 14 33

SECTION 08 31 23

FLOOR DOORS (ADDENDUM #1)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Aluminum floor doors.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction detail, materials, individual components and profiles, and finishes.

1.3 CLOSEOUT SUBMITTALS

A. Record Documents: For fire-rated floor doors, list of applicable room name and number in which floor door is located.

PART 2 - PRODUCTS

2.1 ALUMINUM FLOOR DOORS

A. Recessed Cover Aluminum Floor Door:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. ACUDOR Products, Inc
 - b. BILCO Company (The)
 - c. J. L. Industries, Inc.; Activar Construction Products Group, Inc.
 - d. Nystrom, Inc.
2. Frame: Mill finish aluminum, angle profile.
3. Door: Single leaf; 1/4-inch-thick aluminum plate with 1/8-inch-deep recess for application of finish materials.
4. Loading Capacity: 150 lbf/sq. ft. pedestrian live load.
5. Options: Odor gasket.
6. Hardware:
 - a. Material and Finish: Type 316 stainless steel, including latch and lifting mechanism assemblies, hold-open arms, and brackets, hinges, pins, and fasteners.
 - b. Hinges: Heavy-duty butt hinges with stainless steel pins.

- c. Operating Mechanism: Adjustable counterbalancing springs, heavy-duty hold-open arm that automatically locks door open at 90 degrees, release handle with vinyl grip that allows for one-handed closure, and recessed lift handle.
 - d. Latch: Stainless steel slam latch.
 - e. Lock: Latch with removable handle.
- B. Safety Accessories: Safety net.

2.2 MATERIALS

- A. Aluminum Extrusions: ASTM B221, Alloy 6063-T6.
- B. Aluminum-Alloy Rolled Tread Plate: ASTM B632/B632M, Alloy 6061-T6.
- C. Aluminum Sheet: ASTM B209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.
- D. Frame Anchors: Same material as door face.
- E. Inserts, Bolts, and Anchor Fasteners: Hot-dip galvanized steel according to ASTM A153/A153M or ASTM F2329.

2.3 FABRICATION

- A. General: Provide floor doors manufactured as integral units ready for installation.
- B. Metal Surfaces: For metal surfaces exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.
- C. Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure floor doors to types of supports indicated.
- D. Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed.
 - 1. For cylinder locks, furnish two keys per lock and key all locks alike.
 - 2. For recessed panel doors, provide access sleeves for each locking device. Furnish plastic grommets and install in holes cut through finish.
- E. Aluminum: After fabrication, apply manufacturer's standard protective coating on aluminum that comes in contact with concrete.

2.4 FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable,

temporary protective covering before shipping.

- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. Stainless Steel Finish: Bright, cold-rolled, unpolished ASTM A480/A480M No. 2B finish.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Comply with manufacturer's written instructions for installing floor doors.

3.3 FIELD QUALITY CONTROL

- A. Repair or remove and replace installations where inspections indicate that they do not comply with specified requirements.
- B. Reinspect repaired or replaced installations to determine if replaced or repaired door assembly installations comply with specified requirements.

3.4 ADJUSTING

- A. Adjust doors and hardware, after installation, for proper operation.

END OF SECTION 08 31 23

SECTION 12 35 30

RESIDENTIAL CASEWORK (ADDENDUM #1)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Residential stock cabinets.

B. Related Requirements:

1. Section 06 10 00 "Rough Carpentry" for wood blocking for anchoring casework.
2. Section 12 36 61.16 "Solid Surfacing Countertops."

1.2 DEFINITIONS

- A. Concealed Surfaces of Casework: Surfaces not usually visible after installation, including sleepers, web frames, dust panels, bottoms of drawers, and ends of casework installed directly against and completely concealed by walls or other casework, and tops of wall cabinets and utility cabinets.
- B. Exposed Surfaces of Casework: Surfaces visible when doors and drawers are closed, including visible surfaces in open cabinets or behind glass doors.
- C. Semiexposed Surfaces of Casework: Surfaces behind opaque doors or drawer fronts, including interior faces of doors, interiors and sides of drawers, and bottoms of wall cabinets.

1.3 COORDINATION

- A. Coordinate layout and installation of blocking and reinforcement in partitions for support of casework.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components, and profiles and finishes for casework.
2. Include rated capacities, operating characteristics, profiles, and finishes for hardware.

B. Shop Drawings:

1. Include plans, elevations, details, and attachments to other work.
2. Show materials, finishes, filler panels, and hardware.

3. Indicate manufacturer's catalog numbers for casework.
- C. Samples: For casework and hardware finishes.
- D. Samples for Initial Selection: For casework and hardware finishes.
- E. Samples for Verification: For the following:
 1. Casework Finishes: 8-by-10-inch Samples for each type of casework finish.
 2. Hardware: One full-size Sample of each type of exposed hardware in each finish required.
 3. Wall Cabinet: One full-size, 12-inch-wide, finished wall cabinet complete with hardware, doors, and adjustable shelves.
 4. Full-Size Samples: Maintain 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.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
- B. Product Certificates: For casework.

1.6 QUALITY ASSURANCE

1.7 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet-work is complete, and HVAC system is operating and maintaining temperature and relative humidity at levels planned for building occupants during the remainder of the construction period.
- B. Field Measurements: Where casework is indicated to fit to other construction, verify dimensions of existing construction by field measurements before fabrication and indicate measurements on Shop Drawings. Provide fillers and scribes to allow for trimming and fitting.
 1. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before being enclosed/concealed by construction, and indicate measurements on Shop Drawings.

PART 2 - PRODUCTS

2.1 RESIDENTIAL STOCK CABINETS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 1. American Woodmark Corp.

2. KraftMaid; Cabinetworks Group
 3. MasterBrand Cabinets, Inc.
- B. Quality Standard: Provide cabinets that comply with KCMA A161.1.
1. KCMA Certification: Provide cabinets with KCMA's "Certified Cabinet" seal affixed in a semiexposed location of each unit and showing compliance with KCMA A161.1.
- C. Regional Materials: Wood products shall be manufactured within **500 miles** of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within **500 miles** of Project site.
- D. Regional Materials: Wood products shall be manufactured within **500 miles** of Project site.
- E. Regional Materials: Wood products shall be manufactured within **100 miles** of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within **100 miles** of Project site.
- F. Indigenous Materials: Wood products shall be manufactured within **500 miles** of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within **500 miles** of Project site. If materials are transported by rail or water, the distance transported by rail or water shall be multiplied by 0.25 to determine the distance to Project site.
- G. Regional Materials: Wood products shall be manufactured within **500 miles** of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within **500 miles** of Project site. If materials are transported by rail or water, the distance transported by rail or water shall be multiplied by 0.25 to determine the distance to Project site.
- H. Certified Wood: Wood products shall be certified as "FSC Pure"[or "**FSC Mixed Credit**"] according to FSC STD-01-001 and FSC STD-40-004.
- I. Certified Wood: Wood products shall be certified as "FSC Pure"[or "**FSC Mixed Credit**"] according to FSC STD-01-001 and FSC STD-40-004.
- J. Certified Wood: Wood products shall be labeled according to the AF&PA's Sustainable Forestry Initiative, be certified as "FSC Pure" according to FSC STD-01-001 and FSC STD-40-004, or be certified and labeled according to the standards of the Programme for Endorsement of Forest Certification.
- K. Certified Wood: Wood products shall [**contain not less than 60 percent**] [**be made from**] certified wood tracked through a chain-of-custody process. Certified wood documentation shall be provided by sources certified through a forest certification system with principles, criteria, and standards developed using ISO/IEC Guide 59 or the World Trade Organization's "WTO Agreement on Technical Barriers to Trade."
- L. Certified Wood: Wood products shall be certified according to the American Tree Farm System's "AFF Standard," the AF&PA's Sustainable Forestry Initiative, FSC STD-01-001 and FSC STD-40-004, or the standards of the Programme for Endorsement of Forest Certification.
- M. Door and Drawer Face Style: [**Flush overlay; faces cover cabinet fronts**] [**Reveal overlay; faces partially cover cabinet fronts**] [**Lipped overlay; faces rabbeted and partially inset**]

within cabinet fronts, lips of rabbets overlap cabinet fronts] [Flush inset; faces set within and flush with cabinet fronts].

1. Door and Drawer Fronts:
 - a. Solid-wood stiles and rails, **5/8 inch** thick, with **3/4-inch-** thick, solid-wood center panels.
 - b. Solid-wood stiles and rails, **3/4 inch** thick, with **1/4-inch-** thick, veneer-faced plywood center panels.
 - c. **1/2-inch-** thick, veneer-faced plywood.
 - d. **1/2-inch-** thick, plastic-laminate-faced particleboard[, **with continuous solid-wood pulls on one edge**][, **with PVC edgebanding**].
 - e. **1/2-inch-** thick, thermally fused laminate panels[, **with continuous solid-wood pulls on one edge**].
 - f. **1/2-inch-** thick, thermoformed-vinyl-faced panels with vinyl overlay on [**faces and edges and with thermally fused laminate panel backs**] [**faces, backs, and edges**].
- N. Cabinet Style: Frameless.
- O. Exposed Cabinet End Finish: Wood veneer.
- P. Cabinet End Construction: 5/8-inch- thick particleboard or 1/2-inch- thick plywood.
- Q. Cabinet Tops and Bottoms: 5/8-inch- thick particleboard or 1/2-inch- thick plywood.
 1. Fully support in rabbets in and secure to end panels[, **front frame,**] and back rail.
- R. Back, Top, and Bottom Rails: 3/4-by-2-1/2-inch solid wood, interlocking with end panels and rabbeted to receive top and bottom panels. Back rails secured under pressure with glue and with mechanical fasteners.
- S. Wall-Hung-Unit Back Panels: 3/16-inch- thick plywood fastened to rear edge of end panels and to top and bottom rails.
- T. Base-Unit Back Panels: 3/16-inch- thick plywood fastened to rear edge of end panels and to top and bottom rails.
- U. Front Frame Drawer Rails: 3/4-by-1-1/4-inch solid wood mortised and fastened into face frame.
- V. Drawers: Fabricate with exposed fronts fastened to subfront with mounting screws from interior of body.
 1. Join subfronts, backs, and sides with glued rabbeted joints supplemented by mechanical fasteners.
 2. Subfronts, Backs, and Sides: 1/2-inch- thick solid wood or 3/8-inch- thick plywood.
 3. Bottoms: 1/4-inch- thick plywood.
- W. Shelves: 3/4-inch- thick particleboard or 5/8-inch- thick plywood.
- X. Joinery: Rabbet backs flush into end panels and secure with concealed mechanical fasteners.

Connect tops and bottoms of wall cabinets and bottoms and stretchers of base cabinets to ends and dividers with mechanical fasteners. Rabbet tops, bottoms, and backs into end panels.

- Y. Factory Finishing: Finish cabinets at factory.

2.2 CABINET MATERIALS

- A. Hardwood Lumber: Kiln dried to 7 percent moisture content.
- B. Composite Wood Products: Formaldehyde emission rates shall not be greater than the following when tested according to ASTM D 6007 or ASTM E 1333:
 - 1. Hardwood Plywood: 0.05 ppm.
- C. Hardwood Plywood: HPVA HP-1.
- D. Exposed Materials:
 - 1. Exposed Wood Species: Maple.
 - a. Select materials for compatible color and grain. Do not use two adjacent exposed surfaces that are noticeably dissimilar in color, grain, figure, or natural character markings.
 - b. Staining and Finish: As selected by Architect from manufacturer's full range.
 - 2. Solid Wood: Clear hardwood lumber of species indicated, free of defects.
 - 3. Plywood: Hardwood plywood with face veneer of species indicated, with Grade A faces and Grade C backs of same species as faces.
 - a. Edge band exposed edges with a minimum of 1/8-inch- thick, solid-wood veneer edging of same species as face veneer.
- E. Semiexposed Materials: Unless otherwise indicated, provide the following:
 - 1. Solid Wood: Sound hardwood lumber, selected to eliminate appearance defects. Same species as exposed surfaces.
 - 2. Plywood: Hardwood plywood with Grade C faces and not less than Grade 3 backs of same species as faces. Face veneers of same species as exposed surfaces.
- F. Concealed Materials: Solid wood or plywood, of any hardwood or softwood species, with no defects affecting strength or utility; particleboard; MDF; or hardboard.

2.3 CABINET HARDWARE

- A. General: Manufacturer's standard units complying with BHMA A156.9, of type, size, style, material, and finish as selected by Architect from manufacturer's full range.
- B. Pulls: Surface-mounted decorative pulls.
- C. Hinges: Concealed European-style, self-closing hinges.

- D. Drawer Guides: Epoxy-coated-metal, self-closing drawer guides; designed to prevent rebound when drawers are closed; with nylon-tired, ball-bearing rollers; and complying with BHMA A156.9, Type B05011 or Type B05091.
- E. Door and Drawer Bumpers: Self-adhering, clear silicone rubber.
 - 1. Doors: Provide one bumper at top and bottom of closing edge of each swinging door.
 - 2. Drawers: Provide one bumper on back side of drawer front at each corner.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of framing and reinforcements, and other conditions affecting performance of casework.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF RESIDENTIAL CASEWORK

- A. Install casework with no variations in adjoining surfaces; use concealed shims. Where casework abuts other finished work, scribe and cut for accurate fit. Provide filler strips, scribe strips, and moldings in finish to match casework.
- B. Install casework without distortion so doors and drawers fit the openings, are aligned, and are uniformly spaced. Complete installation of hardware and accessories as indicated.
- C. Install casework level and plumb to a tolerance of **1/8 inch in 8 feet**.
- D. Fasten casework to adjacent units and to backing.
 - 1. Fasten wall cabinets through back, near top and bottom, and at ends not more than **16 inches o.c.**
 - a. Fasteners: No. 10 wafer-head screws sized for not less than 1-1/2-inch penetration into wood framing, blocking, or hanging strips.

3.3 ADJUSTING AND CLEANING

- A. Adjust hardware so doors and drawers are centered in openings and operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.
- B. Clean casework on exposed and semiexposed surfaces. Touch up as required to restore damaged or soiled areas to match original factory finish, as approved by Architect.

END OF SECTION 12 35 30