SECTION 09640 - WOOD FLOORING

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
- A. Site drawings produced by Pinkham and Greer Consulting Engineers, foundation/basement plan drawings produced by TFH Architects PA and Structural Design Consulting, building drawings produced by TFH Architects, mechanical drawings produced by Whitney Engineering, electrical and lighting drawings produced by Bennett Engineers. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections apply to all sections.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Engineered-wood strip or plank flooring.
- B. Related Sections include the following:
 - 1. Division 6 Section "Rough Carpentry" for wood substrates, including sleepers and subflooring.
 - 2. Division 6 Section "Wood Decking" for wood decking.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show installation details including location and layout of each type of wood flooring and accessory.
- C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors and finishes available for wood flooring.
- D. Samples for Verification: For each type of wood flooring and accessory, with stain color and finish required, approximately 12 inches (300 mm) long and of same thickness and material indicated for the Work. Include sample sets showing the full range of normal color and texture variations expected.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed wood flooring similar in material, design, and extent to that indicated for this Project and whose work has resulted in wood flooring installations with a record of successful in-service performance.
- B. Source Limitations: Obtain each type of material and product from one source with resources to provide materials and products of consistent quality in appearance and physical properties.
- C. Engineered-Wood Flooring: Comply with ANSI/HPVA LF.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Deliver wood flooring materials in unopened cartons or bundles.

- B. Protect wood flooring from exposure to moisture. Do not deliver wood flooring until after concrete, masonry, plaster, ceramic tile, and similar wet-work is complete and dry.
- C. Store wood flooring materials in a dry, warm, well-ventilated, weathertight location.
- D. Move wood flooring into spaces where it will be installed, at least seven days before installation.

1.6 PROJECT CONDITIONS

- A. Conditioning: Maintain relative humidity planned for building occupants and an ambient temperature between 65 and 75 deg F (18 and 24 deg C) in spaces to receive wood flooring for at least seven days before installation, during installation, and for at least seven days after installation. After post-installation period, maintain relative humidity and ambient temperature planned for building occupants.
 - 1. For unfinished products, open sealed packages to allow wood flooring to acclimatize.
 - 2. Do not install flooring until it adjusts to the relative humidity of and is at the same temperature as the space where it is to be installed.
 - 3. Close spaces to traffic during flooring installation and for time period after installation recommended in writing by flooring and finish manufacturers.
- B. Install factory-finished wood flooring after other finishing operations, including painting, have been completed.

1.7 WARRANTY

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Engineered-Wood Flooring Warranty: Written warranty, signed by manufacturer agreeing to repair or replace engineered-wood flooring that fails in materials or workmanship. Failures include, but are not limited to, buckling, cupping, warping, and delamination.

1.8 EXTRA MATERIALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Wood Flooring: Equal to 1 percent of amount installed for each type and finish indicated.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the products indicated in the Wood Flooring Schedule at the end of Part 3.
- B. Products: Subject to compliance with requirements, provide one of the products indicated for each designation in the Wood Flooring Schedule at the end of Part 3.

2.2 ACCESSORY MATERIALS

- A. Vapor Retarder: ASTM D 4397, polyethylene sheet not less than 6.0 mils (0.15 mm) thick.
- B. Felt Underlayment: ASTM D 226, Type I, No. 15, asphalt-saturated felt.
- C. Wood Flooring Adhesive: Mastic recommended by flooring and adhesive manufacturers for application indicated.
- D. Fasteners: As recommended by manufacturer, but not less than that recommended in NOFMA's "Installing Hardwood Flooring."
- E. Cork Expansion Strip: Composition cork strip complying with FS HH-C-576, Type I-B, Class 2.
- F. Wood Feature Strips: 2-inch- (51-mm-) wide, square-edged walnut strips furnished in lengths as long as practical and in thickness to match wood flooring.
- G. Wood Trim: In same species and grade as wood flooring, unless otherwise indicated.
 - 1. Wood Base: 5/8 inch (16 mm) thick by 4 inches (100 mm) high.
 - 2. Base Shoe Molding: 1/2 by 3/4 inch (13 by 19 mm).
 - 3. Threshold: Tapered on each side and routed at bottom of one side to accommodate wood flooring.
 - 4. Reducer Strip: 2 inches (51 mm) wide, tapered on one side, and in thickness matching flooring.
- H. Wood air vents and grilles of same species and grade as wood flooring.
- I. Metal Feature Strip: 1/8-by-1/8-inch (3-by-3-mm) solid brass strip, designed for inlaying into routed reveal in wood flooring surface.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements, installation tolerances, and other conditions affecting performance of wood flooring. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Concrete Slabs: Verify that concrete slabs comply with requirements specified Division 3 Section "Cast-in-Place Concrete."
 - 1. Verify that slabs are dry according to test methods recommended by flooring manufacturer or, if none, by test methods in NOFMA's "Installing Hardwood Flooring."
 - 2. Where wood flooring is installed directly over concrete slabs, grind high spots and fill low spots to provide a maximum 1/4-inch (6-mm) deviation in any direction when checked with a 10-foot (3-m) straight edge.
 - 3. Where wood flooring is adhesively attached to concrete slabs, verify that slabs are free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.

3.2 INSTALLATION

- A. General: Comply with flooring manufacturer's written instructions, but not less than recommendations in NOFMA's "Installing Hardwood Flooring," as applicable to flooring type.
- B. Pattern: Lay wood flooring in pattern indicated on Drawings or, if not indicated, as directed by Architect.
- C. Expansion Space: Provide expansion space at walls and other obstructions and terminations of flooring of not less than 3/4 inch (19 mm), unless otherwise indicated on Drawings.
 - 1. Unless fully concealed by trim, fill expansion space with flush cork expansion strip.
- D. Felt Underlayment: Where strip or plank flooring is nailed to solid-wood subfloor, install flooring over a layer of asphalt-saturated felt.
- E. Engineered-Wood Flooring: Install floating floor according to manufacturer's written instructions.
- F. Accessories: Nail baseboard to wall and nail shoe molding or other trim to baseboard; do not nail to flooring.

3.3 PROTECTION

- A. Cover installed wood flooring to protect it from damage or deterioration, before and after finishing, during remainder of construction period. Use heavy kraft-paper or other suitable covering. Do not use plastic sheet or film that could cause condensation.
 - 1. Do not cover site-finished floors with kraft paper, or any other material, until finish reaches full cure, but not less than seven days after applying last coat.

3.5 WOOD FLOORING SCHEDULE

- A. Engineered-Wood Strip: Where indicated, provide wood flooring complying with the following:
 - 1. Products:
 - a. Basis of design is Green Mountain "Red Oak".
 - 2. Species: Quarter sawn or vertical grain oak; rotary sawn not allowed.
 - 3. Grade: As indicated by product designation above.
 - 4. Thickness: 7/16 inch.
 - 5. Construction: Five ply.
 - 6. Width: 3 inch.
 - 7. Length: Manufacturer's standard.
 - 8. Edges: Beveled.
 - 9. Finish: Manufacturer's standard acrylic-impregnated finish in color selected by Architect from full range.

END OF SECTION 09640