PART 0 A/E INSTRUCTIONS

0.01 GENERAL DESIGN REQUIREMENTS

A. Architect shall coordinate the location of wood flooring with DPS Project Manager

B. Avoid use in areas with exposure to high heat, wet areas, and chemicals.

C. Coordinate transitions to adjacent flooring surfaces, paying close attention to ADA requirements for thresholds.

PART 1 GENERAL

1.01 QUALITY ASSURANCE

A. Installer Qualifications: an experienced installer, with not less than five (5) years experience, acceptable to the manufacturer of the flooring system, who has completed wood flooring installations similar in material, design, and extent to that indicated for this Project and whose work has resulted in wood installations with a record of successful in-service performance.

B. Installer's Responsibilities: installation of flooring assembly, including the following.

1. Asphalt primer and mastic.
2. Subfloor.
3. Wood finish flooring.
4. Game lines and markers.
5. Finish.
6. Accessories.

C. Maple Flooring: comply with MFMA grading rules for grade and cut.

D. Certification: provide flooring that carries MFMA Certification Mark on each piece.

1.02 SUBMITTALS

A. Product Data: for each type of product indicated.

B. O & M Information

C. Shop Drawings: show installation details including location and layout and direction of each type of woodand accessories. Include the following.

1. Expansion provisions and trim details.

D. Samples for Selection: manufacturer's color charts showing colors and glosses available for the following.

1. Floor finish.

E. Installer's qualifications

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. General: wood flooring is restricted to products/systems with at least five (5) years of successful history in institutional applications in Colorado.

B. Available Manufacturers: subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following.

1. Wood flooring assemblies
   a) All City Floor Co.
   b) MacDonald Hardwoods

c) Arvada Hardwood Floor Co.

d) T&G Flooring

2.02 MAPLE FLOORING

A. Strip flooring: northern hard maple (*Acer saccharum*), kiln dried.

1. Grade: First, unless otherwise indicated and approved by DPS Project Manager.
2. 7% maximum moisture content.
3. Cut: edge grain.
4. Lengths: nominal 15” to 96” (381 to 2440 mm) complying with MFMA grading rules, unless otherwise required for patterns indicated.
5. Matching: tongue and groove, and end matched.
6. Backs: channeled (kerfed) for stress relief.
7. Thickness: 25/32” (20mm).
8. Face width: 2-¼“ (57mm).

B. Preservation Treatment: clear, penetrating, water-repellent wood preservative that protects against mold, mildew, staining, and decay fungi; complying with MFMA’s written recommendations and applied by immersion.

2.03 WOOD SUBFLOOR SYSTEM

A. Sleepers: 2" x 4" fir or pine, KD, preservative dip treated with Woodlife preservative.

B. Provide red rosin paper as an underlayment.

C. Provide subfloor sheathing at stage areas: 1" x 6" Sound and Better Gym Grade Hemlock furnished by floor system manufacturer.

D. Fasteners and Accessories: as recommended by system manufacturer.

2.04 FINISHING MATERIALS

A. Floor-Finish System: MFMA-listed system of compatible components recommended by flooring and finish manufacturers for application indicated.

1. Floor Sealer: pliable, penetrating type. Wood hardening finish sealer, Bona Kemi Sport Sealer, or equivalent sealer as recommended by flooring manufacturer.
2. Polurethane Finish: Bona Kemi Sport Polyurethane, or equivalent as recommended by flooring manufacturer. (no water based unless approved by DPS Project Manager).

2.05 ACCESSORY MATERIALS

A. Asphalt Primer and Mastic: low temperature, dead level asphalt mastic with compatible substrate.

B. Building Paper: 15 lb. red rosin paper.

C. Fasteners: type and size recommended by manufacturer, but not less than those recommended by MFMA for application indicated.

D. Vented base.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas and conditions, with Installer present for compliance with requirements, installation tolerances, moisture, and other conditions affecting performance of wood flooring assembly. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Concrete Slabs: verify that concrete slabs comply with requirements specified in Section 03300, "Cast-in-Place Concrete."

1. Grind high spots and fill low spots to provide a maximum 1/8" (3-mm) deviation in any direction when checked with a 10' (3-m) straight edge. Coordinate with concrete specification.

2. Verify that slabs are dry according to test methods recommended in writing by flooring manufacturer. (installer is to to the testing).

3.02 PROJECT CONDITIONS

A. Concrete Curing: do not install wood floor until concrete slab has cured for a minimum of 60 days.

B. Conditioning: permanent heat shall be installed and operating during and after installation. Maintain ambient temperature between 55°F and 80°F prior to, during, and after flooring installation.

1. Open sealed packages to allow wood flooring to acclimatize (7 days).

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 installations and for the time period after installation recommended in writing by flooring and finish manufacturer, but not less than 10 days.

3.03 INSTALLATION

A. General: comply with flooring-assembly manufacturer's written instructions, but not less than recommendations of MFMA applicable to flooring type indicated.

B. Prime concrete slab with asphalt primer, minimum coverage of 250 sq.ft. per gallon.

C. Install sleepers across the short dimension of room (or at right angles to the main playing court) 16" on center with ends futted and joints staggered. Provide 2" expansion voids at the perimeter and all vertical obstructions. Accurately level and shim sleepers firmly at each anchor point 24" on center. Drivepin head to be flush with top surface of sleepers.

D. After the sleepers are properly shimmed, leveled and anchored, pour a layer of asphalt mastic to cover all shims and 1/8" up the side of the sleepers.

E. Diagonally to sleepers, install 1" x 6" subflooring. Break all joints over sleepers with ends butted and sides spaced approximately 1". Securely nail or staple to sleepers.

F. Cover entire subfloor with building felt paper lapping 4" at all joints.

G. Deliver wood flooring materials in unopened cartons or bundles.

H. 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.

I. Store wood flooring materials in a dry, warm, well-ventilated, weathertight location.

J. Move wood flooring into space where it will be installed at least several days before installation.

K. Install flooring by power nailing or stapling approximately 12" on center. Provide 1" expansion voids at the perimeter and all vertical obstructions. Stagger end joints at least 6".

L. No short boards are permitted at doorways.

3.04 SANDING AND FINISHING

A. Allow installed flooring to acclimate to ambient conditions for at least 10 days before sanding.

B. Machine sand with coarse, medium, and fine grades (100 grit) of sandpaper to achieve a level, smooth, uniform surface without ridges or cups. Remove sanding dust by tack or vacuum and immediately apply finish.

C. Finish: apply seal and finish coats of finish system according to manufacturer's written instructions. Provide not less than four (4) coats total and not less than two (2) finish coats.

1. Apply floor sealer in two (2) coats in accordance with manufacturer's instructions, including machine buffing with steel wool, in-the-wet where recommended by manufacturer. Apply floor finish in two (2) coats minimum in accordance with manufacturer's instructions, buffing after each coat.
2. Install base molding and other cover trim indicated for expansion spaces at edges and interruptions of flooring.

3.05 PROTECTION

A. Protect wood flooring during remainder of construction period to allow finish to cure and to ensure that flooring and finish are without damage or deterioration at time of Substantial Completion.

END OF SECTION 09644