Part 1 GENERAL

1.1 SECTION INCLUDES

1. Structural floor, wall, and roof framing.
2. Built-up structural beams and columns.
3. Floor, wall, and roof sheathing.
4. Sill gaskets and flashings.
5. Preservative treatment of wood.
6. Concealed wood blocking for support of toilet and bath accessories, wall cabinets, wood trim, etc.

1.2 RELATED SECTIONS

1. Division 01 of this Specification.
2. Section 03 30 00 - Cast-in-Place Concrete: Setting anchors in concrete.
3. Section 04 26 19 - Reinforced Unit Masonry: Setting anchors in masonry.
4. Section 05 12 00 - Structural Steel: Prefabricated steel structural supports.
5. Section 08 11 00 – Hollow Metal Doors, Frames & Screens: Door openings to receive wood blocking.
6. Section 08 42 13 - Aluminum Windows and Entrances: Window openings to receive wood blocking.

1.3 REFERENCES

1. CAN/CGSB-11.3-M87 - Hardboard.
2. CANPLY (Canadian Plywood Association) - Grading and certification.
3. CSA-O80 Series-08 - Wood Preservation.
4. CSA-O121-08 - Douglas Fir Plywood.
5. CSA-O151-09 - Canadian Softwood Plywood.
6. CSA-O153-M1980 (R2008) – Poplar Plywood.
7. CSA-O325-07 - Construction Sheathing.
8. CSA-O437-93(R2006) - OSB and Waferboard.
9. NPA A208.1-2009 - Particleboard.

10. APA (American Plywood Association) - Grades and Specifications.

11. NLGA (National Lumber Grades Authority) - Standard Grading Rules for Canadian Lumber, 2007 Edition.

1.4 SUBMITTALS

1. Shop Drawings: Submit shop drawings of PVC Composite Decking in accordance with the General Conditions of the Contract. Clearly indicate material being supplied and show all connections, attachments, reinforcing, anchorage and location of exposed fastenings.

2. Samples: Before proceeding with work, submit 5 ½" x 1" composite decking for Square-Shoulder and Grooved samples in colours Boardwalk, French White Oak, American Walnut, and Castle Gate, for review as specified in Section 01330, Submittals.

3. Mock-up: Before proceeding with work, submit 3-900 mm x 900 mm (36"x36") mock-ups of PVC Composite Decking for review on site demonstrating details of edging, forming and construction, concealed fastening system, and substrate wood framing of ramp/deck transition locations (top of ramps, bottom of ramps, fascia or side of ramps abutting different materials).

1.5 QUALITY ASSURANCE

1. Perform Work in accordance with the following agencies:

   1. Lumber Grading Agency: Certified by NLGA.
   2. Plywood Grading Agency: Certified by CANPLY.

1.5 DELIVERY, STORAGE, AND PROTECTION

2. Deliver and store Products under waterproof cover.

3. Protect materials from warping or other distortion by stacking in vertical position.

Part 2 PRODUCTS

2.1 MATERIALS

1. Lumber: SPF species to CSA O141, S4S; 19 percent maximum moisture content (S-Dry); pressure treated for exterior applications where noted on Drawings, sizes as indicated on Drawings; NLGA Light Framing classification, grade No.1/2 or better.

2. Plywood – Exterior Applications: DFP to CSA O121, SHG Grade; veneer core, butt edge unsanded faces; pressure treated, thicknesses as indicated on Drawings.

3. Plywood – Interior Applications: CSP to CSA O151, SHG Grade; veneer core, butt edge, unsanded faces; thicknesses as indicated on Drawings.

4. Furring, blocking, nailing strips, grounds, rough bucks, curbs, fascia backing and sleepers:

1. S2S is acceptable.
2. Board sizes: "Standard" or better grade.
3. Dimension sizes: "Standard" light framing or better grade.
4. Post and timbers sizes: "Standard" or better grade.

5. Pressure Treated Materials:

   1. Pressure Preservative Treated Lumber (PPTL): SPF softwood, NLGA No. 2 Grade or better, S4S, kiln-dried with moisture content 19% or less in accordance with CAN/CSA-O141; pressure preservative treated with water-borne, Copper Azole (CA) or Alkaline Copper Quaternary (ACQ), to CSA-O80.2.
   2. Pressure Preservative Treated Plywood (PPTP): Canadian softwood plywood (CSP) to CSA-O151, standard construction; pressure preservative treated with water-borne, Copper Azole (CA) or Alkaline Coppery Quaternary (ACQ), to CSA-O080.9 and kiln-dried to a moisture content of 15% or less. Thickness as indicated on Drawings.

6. Laminated veneer lumber (LVL):

   1. Size: as indicated on Structural Drawings.
   2. Acceptable Manufacturer:
      1. Nordic Structures
      2. Weyerhaeuser.
      3. Substitution: as approved by Engineer.

7. PVC Composite Decking (CD):

   1. 5 ½" x 1" decking by TimberTech, Landmark Collection. Texture: Crosscut Hardwoods. Colour: Boardwalk. Installed with concealed fastening system. Profile: Square-Shoulder in 16' and 20' lengths or Grooved 12', 16' and 20' lengths

2.2 ACCESSORIES

1. Nails: to CSA B111, common wire type for general use and spiral type of structural connections; types as follows:

   1. For use with preservative treated members: Type 304 or 316 stainless steel or hot dip galvanized steel.
   2. For use with plain members: Common nails.

2. Screws: bugle head, power driven type, lengths as required; types as follows:

   1. For use with preservative treated members: Type 304 or 316 stainless steel.
   2. For use with plain members: Steel.

3. Stainless Steel Bolts: to ASTM F593, Group 1.

4. Stainless Steel Nuts: to ASTM F594, Group 1.

5. Anchors: as indicated on structural drawings. If not indicated on structural drawings, toggle bolt type for anchorage to hollow masonry, expansion shield

and lag bolt type for anchorage to solid masonry or concrete, or bolts or ballistic fasteners for anchorages to steel.

6. Touch-Up Wood Preservative: to CAN/CSA-O80, brush-applied.

7. Polyethylene film: to CAN/CGSB-51.34, 0.15mm thick.

8. Roll roofing: to CAN-A123.2, Type S.

9. Sealants: in accordance with 07 90 00.

10. Bolts, Nuts and Washers: to ASTM-A325.

11. Anchor bolts: to ASTM A307.

12. Other proprietary fasteners: as recommended for purpose by manufacturer.

13. Structural Framing Connectors, Joist Hangers: as indicated on drawings, manufactured by Simpson Strong-Tie®.

14. Sill Gasket: 6mm thick x width to suit wall plate, polyethylene foam.

Part 3 EXECUTION

3.1 EXAMINATION

1. Prior to commencing the Work of this Section, carefully inspect installed Work of other trades and verify that such Work is complete to the point where Work of this Section may properly commence. Provide Notice in Writing to the Consultant and Contractor of conditions detrimental to the proper and timely completion of the Work of this Section.

2. Do not begin installation until all unsatisfactory conditions are resolved. Beginning Work of this Section constitutes acceptance of site conditions and responsibility for defective installation caused by prior observable conditions.

3.2 FRAMING

1. Comply with requirements of OBC Part 9 and structural drawings, supplemented by the following:

    1. Install members true to line, levels and elevations, square and plumb.
    2. Construct continuous members from pieces of longest practical length, without splices.
    3. Install spanning members with “crown-edge” up.
    4. Select exposed framing for appearance. Install lumber and panel materials so that grade-marks and other defacing marks are concealed or are removed by sanding where materials are left exposed.
    5. Install sub-flooring and underlay with panel end-joints located on solid bearing, staggered at least 800mm (32”).

6. Install wall sheathing in accordance with manufacturer's printed instructions and CSA-O325.
7. Install roof sheathing in accordance with requirements of OBC and CSA-O325.
8. Install furring and blocking as required to space-out and support casework, cabinets, wall and ceiling finishes, fascia, soffit, siding, electrical equipment mounting boards, and other Work as required.
9. Align and plumb faces of furring and blocking to tolerance of 1:600.
10. Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
11. Install wood fascia backing, nailers, curbs and other wood roof supports as required and secure using galvanized steel fasteners.
12. Install sleepers and curbs with top set level as indicated.
13. Secure sheathing and decking perpendicular to framing members with ends staggered.
14. Secure sheet edges over firm bearing.
15. Form corners by lapping side members alternately.
16. Coordinate work with installation of decking and support of decking at openings.
17. Scribe work at irregular surfaces.

2. Set structural members level and plumb, in correct position.

3. Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.

4. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists. Frame rigidly into joists.

5. Place full width continuous sill flashings under framed walls on bearing on concrete. Lap flashing joint minimum 100 mm (4").

6. Place sill gasket directly on concrete or sill flashing. Puncture gasket clean and fit tight to protruding foundation anchor bolts.

End of Section 06 11 00