PART 1 - GENERAL

1.1 General Requirements

.1 All conditions of the contract and Division 1, General Requirements apply to this section.

.2 All materials and equipment must be set up in a position satisfactory to the Owner's representative.

.3 All materials shall be new and free from defects which may impair strength, durability or appearance.

.4 Scheduling of the work shall be discussed with, and be subject to, the approval of the Owner.

1.2 References

.1 Comply with requirements of the following documents, latest edition:

.1 ASTM A307, Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength

.2 ASTM D1761, Standard Test Methods for Mechanical Fasteners in Wood

.3 ASTM D5456, Evaluation of Structural Composite Lumber Products

.4 CGSB-11.3, Hardboard

.5 CGSB-71.26, Adhesive for Field-Gluing Plywood to Lumber Framing for Floor Systems

.6 CSA B111, Wire Nails, Spikes and Staples

.7 CSA O112, Wood Adhesives

.8 CSA O121, Douglas Fir Plywood

.9 CAN/CSA O122, Structural Glued-Laminated Timber

.10 CSA O141, Softwood Lumber

.11 CSA O151, Canadian Softwood Plywood

.12 CSA O153, Poplar Plywood

.13 CSA O325, Construction Sheathing

.14 CSA O437, OSB and Waferboard.

.15 FSC-STD-01-001, FSC Principle and Criteria for Forest Stewardship

.16 FSC-STD-20-002, Structure and Content of Forest Stewardship Standards V2-1

.17 FSC Accredited Certified Bodies

.18 National Building Code

.19 NLGA Standard Grading Rules for Canadian Lumber

.20 NRCA (National Roofing Contractors Association), Roofing and Waterproofing Manual

.21 Ontario Building Code

1.3 Quality Assurance

.1 All carpentry work to comply with best practices of trade and by skilled carpenters.

.2 Provide carpentry alterations and comply with best practices of the trade.

.3 Make adjustments to specified procedures caused by weather and site conditions only with the Owner's approval.

1.4 Delivery, Storage and Handling

.1 All materials shall be delivered and stored in their original packaging bearing the manufacturers label, grade and product weight, including all other related standards, specifications, and the like.

.2 All materials shall be adequately protected from inclement weather conditions and stored in a dry, well ventilated and weather protected location.

.3 All materials shall be stored to protect bottom surface from moisture.

.4 Handle and store products in a manner to prevent damage and deterioration.

.5 Remove and replace damaged materials at own expense and to the satisfaction of the Consultant.

1.5 Waste Management and Disposal

.1 Separate and recycle waste materials in accordance with applicable local, provincial and national regulations. Include for tipping fees associated with landfills and recycling depots.

1.6 Environmental Requirements

.1 Weather dry.

.2 Imminent weather forecast, dry.

.3 Use only dry materials and apply only during weather that will not introduce moisture into the system.

.4 All new and temporary construction at higher elevations, including equipment and accessories, shall be secured in such a manner as to preclude wind blow-off.

PART 2 - PRODUCTS

2.1 Materials

.1 Lumber to be identified by grade stamp of an agency certified by the Canadian Lumber Standards Administration Board (N.L.G.A.).

.2 Blocking and Rough Framing:

.1 Grade No. 2, Northern Softwood in accordance with the "Standard Grading Rules for Canadian Lumber" as issued by the National Lumber Grades Authority (NLGA).

.2 Spruce, #1 Softwood, conforming to CSA 0141.

.3 Wood Cants: 89 x 89mm (4 x 4").

.3 Plywood Sheathing:

.1 Exterior, Spruce #1, conforming to CSA O121 or 0151, exterior grade, G1S.

.2 Thickness to be 13mm (1/2") or 19mm (3/4") as noted on drawings.

.4 Nails:

.1 Ardox spiral, to CSA Standard B111, length to give 38mm (1½") minimum penetration into materials being fastened.

.5 Fasteners:

.1 Fasteners for wood: Galvanized steel wood screws with countersunk heads of size and length to provide minimum 38mm (1½") penetration into underlying member.

.2 Fasteners for steel substrates: Flat head, self-tapping steel screw with galvanized finish as supplied by Fastening House or approved equivalent. Screw to be of sufficient length to provide minimum 19mm (3/4") penetration through member.

.3 Fasteners for masonry and concrete substrates: Tapcon fasteners with "Climaseal" corrosion resistant finish, as manufactured by Buildex/Red Head or approved equivalent. Screw to be of sufficient length to penetrate into substrate a minimum of 38mm (1½").

.4 Bolts, Washers and Nuts: To ASTM A307. Size as indicated on Drawings. Hot dipped galvanized or approved equivalent corrosion resistant finish.

PART 3 - EXECUTION

3.1 Examination

.1 Examine the drawings and specifications to determine the extent of the work involved, together with other data affecting the work, as under no circumstances will any claims against the Owner be allowed resulting from failure to ascertain the extent of such work shown, herein described or implied.

.2 Inform Consultant of unacceptable conditions immediately upon discovery.

.3 Proceed with installation only after unacceptable conditions have been remedied.

.4 Remove all sharp edges that would otherwise damage materials that come in contact.

3.2 General Carpentry

.1 Cut, align, plumb, and secure wood to conform to the full intent of the details. Shim new wood assembly where required in order to obtain true to line levels.

.2 Construct continuous members from pieces of longest practical length. Treat all saw cuts with wood preservative.

.3 All fasteners to be flush or slightly countersunk where possible.

.4 Countersink bolts where necessary to provide clearance for other work.

.5 Replace all damaged material and reseal masonry anchors as required to conform to design intent herein described.

.6 Install spanning members with "crown-edge" up.

.7 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.

.8 Install sheathing in accordance with requirements of NBC.

.9 Use nailing disks for soft sheathing as recommended by sheathing manufacturer.

.10 Fasten plywood along supported edges at a minimum of 150mm (6″) on centre and within the field of the plywood at a minimum of 450mm (16″) on centre. Fasten plywood to framing and existing substrate with appropriate fasteners. Place plywood so that the surface grain is perpendicular to the framing members. Provide minimum 2mm wide gaps between edges of plywood to allow for material expansion.

.11 Coordinate work to keep cutting and remedial work to a minimum. Fasteners shall be of size and spacing required to assure secure anchorage. The fastener spacing of wood blocking to the substrate and to each other shall not exceed 300mm (12″) o.c. unless otherwise accepted in writing by the Consultant.

.12 Protect installed products and components from damage during construction.

.13 Repair damage to adjacent materials caused by rough carpentry installation.

3.3 Roofing Carpentry

.1 Install cant strips and blocking as indicated on drawings, secured permanently to structure trimmed and levelled to accommodate chamfers and slopes. Install to accommodate insulation, roofing and flashing materials.

.2 Add new wood blocking as necessary to maintain minimum heights at perimeters and curbs. The minimum height above the finished roof at curb locations and at wall bases is to be 200mm (8"). The minimum height at parapets is to be 150mm (6") above the finished roof or see drawings.

.3 Replace any seriously damaged or deteriorated wood at perimeters and projections with new construction grade spruce wood blocking or exterior grade, good one side plywood to match existing. Determination of the suitability to re-use or replace existing wood to be at the sole discretion of the Consultant.

.4 Ensure existing wood blocking remaining at perimeters and curbs is securely fastened to existing substrate before installing any new blocking.

.5 Install continuous plywood sheathing, wood blockings, cants, studs, nailers and continuous shims where required and as shown on the drawings. Shims to be of sufficient height to ensure a minimum two percent (2%) positive slope on all parapet, perimeter and dividing walls.

.6 Install furring and blocking as required to space-out and support facings, fascia, soffit, siding, and other work as required.

.7 Install furring to support siding applied vertically where sheathing is not suitable for direct nailing.

.8 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.

.9 Securely anchor wood blocking, cant strips, nailers and shims in place at 300mm (12″) on centre in a staggered pattern. Fasten studs to top and bottom plates with two screw fasteners. Fasten wood blocking, wood cant strips, nailers and shims to the existing substrate with the appropriate screw fasteners. Splitting of wood members shall be minimized by staggering the fasteners in the direction of the grain and by keeping fasteners in from edges.

.10 Re-fasten loose existing wood blocking, cants, shims and plywood with screws where permitted to remain as part of the finished work and to the satisfaction of the Consultant.

.11 All wood blocking and plywood is to be considered part of the roof, and to be made watertight by the end of each working day to eliminate moisture infiltration into the roof system.

3.4 Cleaning

.1 Maintain project free of accumulated waste and rubbish and remove from the Owner's premises on a daily basis.

.2 As the work progresses remove smears and droppings resulting from work of this section before it has time to set. Use recommended cleaners, as required.

END OF SECTION – 06 10 53