## **SPECIFICATIONS**

## 2019-T-11 CLASSROOM RENOVATIONS TO ST. JOHN PAUL II CATHOLIC ELEMENTARY SCHOOL LINDSAY

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CAT 18051/Specifications

Peterborough Victoria Northumberland Clarington Catholic District School Board 2019-T-11 Classroom Renovations to St John Paul II CES

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Peterborough Victoria Northumberland Clarington Catholic District School Board 2019-T-11 Classroom Renovations to St John Paul II CES <u>APPENDIX</u>

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## DIVISION 1GENERAL REQUIREMENTSSECTION 01010SUMMARY OF WORKApril 2019

## 1. GENERAL

- 1.1. The owner is Peterborough Victoria Northumberland & Clarington Catholic District School Board.
- 1.2. Construction will be reviewed periodically by the Owner and the Architect. The Architect will be the administrator of the contract.

## 2. WORK UNDER THIS CONTRACT

- 2.1. Generally includes for the following work:
  - Removal/replacement of existing flooring, cabinetry, acoustic tile ceilings and lighting in three existing classrooms. New hollow doors, partitioning, flooring, and cabinetry as per layout. New mechanical grilles and minor ductwork revisions.
  - Removal/replacement of existing light fixtures to LED type for all renovated areas along with acoustic tile ceilings.
  - New universal washroom and washroom for new JK room as well as new laundry.

### DIVISION 2 SITE WORK SECTION 02000 DEMOLITION

## 1. **GENERAL**

- 1.1. Demolition and/or removal means the complete removal of all items and associated work from the site and the making good of all disturbed surfaces affected to acceptable finishes.
- 1.2. Electrical and mechanical demolition for installation of heating, ventilation, and electrical lighting including light fixtures and associated systems is the responsibility of the respective trade under supervision of the general contractor.
- 1.3. Remove existing components as required for installation of new work as noted. Confirm locations of all existing services on site prior to demolition activities.

#### 1.4 Remove existing:

- o flooring/base
- o cabinetry/millwork
- o doors/frames
- o fitments
- o acoustic tile ceilings/lighting
- o interior drywall and bulkheads
- o partitions and new openings

as per demolition plan

Note: items that will be retained for reinstallation.

## DIVISION 2 SITE WORK SECTION 02000 DEMOLITION

## 2. EXECUTION

- 2.1. Note that work is being performed within an existing building and the contractor is to provide protection of the work and property in accordance with Part 9 of CCDC 2.
- 2.2. Keep access areas to work reasonably clean during work and on completion perform final cleaning as specified.

## 1. **GENERAL**

- 1.1. Comply with General Requirements Division 01.
- 1.2. Submit samples of block and brick before delivery to site.
- 1.3. Building in all miscellaneous inserts, anchors, blocking sleeves, lintels, conduit and other accessories as required.

#### 2. MATERIALS

- 2.1. Concrete Block: All hollow concrete block shall be autoclave block having a minimum compressive strength of 7.5 MPa on the gross area, standard metric to sizes as indicated on the drawings and details. Concrete block to be 8" or 6" thick in locations noted to Atlas Block Co. Ltd. or equal.
- 2.2. Mortar shall be type N grey colour conforming to CSA CAN 3-5304-M78 and type S for load bearing walls to CSA standard A179, mortar and grout for unit masonry.
- 2.3. Non Shrink Grout: M-bed by Sternson Ltd.
- 2.4. Joint Reinforcement: Heavy Duty ladder type reinforcing for all single wythe masonry walls and extra heavy duty ladder type Blok-Lok for all walls with 2 wythes.
- 2.5. Provide masonry units for interior partitions to height and locations in thicknesses as indicated on the drawings.

## 3. EXECUTION

- 3.1. Give other trades notice of intention to proceed and incorporate anchors and other components to ensure proper installation of later work.
- 3.2. Lay block in running bond (half-bond) pattern. Select units randomly from cubes so as not to create a defined pattern.
- 3.3. Provide and maintain protection for masonry walls at all times when work is interrupted or temporarily ceased to prevent moisture from entering unfinished walls.
- 3.4. Comply with CSA A371-94 and use CSA A224 for cold weather requirements.
- 3.5. Joints shall be neatly tooled to produce concave joints. All interior surfaces ready for paint finishes.
- 3.6. Masonry shall be carried up solid between joints and built tight around beams and lintels with all voids full. Provide minimum 6" bearing for steel lintels bearing on masonry. Bearing shall be on solid masonry 8" deep and projecting 8" on each side of beam or base plate.
- 3.7. Install reinforcing continuously at every second course securely fastened to substrate unless noted otherwise.
- 3.8. Brace and support work as required during operation until final set is achieved.
- 3.9. Install masonry reinforcing in 2 consecutive courses above and below all openings in walls, extending not less than 600 mm (2') on each side of opening. Install metal angles for all door and window opening perimeters as per details and fasten securely to block for support of door/window framing.

- 3.10. Build in hollow metal frames and ensure that anchors are solidly bedded. Fill hollow metal frames completely with grout.
- 3.11. Set lintels and other members that lay on masonry. Group them accurately in place and fill voids solid under joist and beam bearings, vertical reinforcing, and as noted on the drawings.
- 3.12. Remove sections of existing masonry carefully and tooth back repair work matching existing.
- 3.13 Provide reinforcing to connect new partitions to existing walls. Run all walls to underside of metal deck or concrete slab and secure to maintain acoustic/fire separations.
- 3.14. Clean masonry surfaces with water, detergent or proprietary masonry cleaner and brushes. Do not use muriatic acid.

#### 1. **GENERAL**

- 1.1 Conform to General Instructions as applicable.
- 1.2 Millwork includes for new cabinetry as noted on the drawings. Co-ordinate mechanical & electrical service installation with Division 15 & 16
- 1.3 All millwork to A.W. MAC standards.
- 1.4 Site measure to confirm all existing conditions. Submit shop drawings and samples of laminates, door panels, edging & all hardware to Architect for selection prior to ordering.
- 1.5 Warranty all work against manufacturing defects, including warpage or delamination, for a period of five (5) years from substantial performance date. Make good or replace work showing defects in this period, as requested, at no cost to the owner.
- 1.6 Install hollow metal doors and finished hardware as called for on drawings.

#### 2. MATERIALS

- 2.1 Finishing Work: Materials used for finish work shall be sound, free from defects that would mar finished appearance, well seasoned and air dried and of good quality for intended purposes. Wood laminates pressure bonded
- 2.2 Birch Veneer Plywood: Select Plain Sliced White Birch Premium Grade 'A' No. 1 Face grade as in compliance with C.S.A. 0115-M1982 with a minimum 5 ply plywood veneer waterproof core, laminate with waterproof adhesive. Plywood shall be good both sides except where concealed by construction. Exposed faces to natural grade per AWMAC. Interior of doors to be classified as exposed. Use <sup>3</sup>/<sub>4</sub>" for all shelving, door/drawer fronts, and gables. Use <sup>1</sup>/<sub>2</sub>" for drawer bottoms & cabinet backs. All exposed edges to have 3/8" thick bull nosed hardwood nosings. All surfaces to be ready for 1 coat stain and 2 coats urethane finish.

# DIVISION 6WOOD & PLASTICSApril 2019SECTION 06400FINISHED CARPENTRY

- 2.3 All counter tops and counter edges/splashes & window sills covers to be faced with plastic laminate type 1 general purpose. Post form tops with 4" splash as indicated, and laminate all exposed surfaces. Use <sup>3</sup>/<sub>4</sub>" plywood cores typical all locations.
- 2.4 All cabinetry to be frameless type complete with metal drawer slides (both sides) with ball bearings, 120<sup>0</sup> self closing hinges, and metal d pulls brushed chrome finish. Use recessed chrome pilasters for shelf support (2 per side typical). Specific list as follows:

| PULLS           | СВН #255 - С15  |
|-----------------|---|
| HINGES          | Blum #95 M5580 full overlay 125°, with appropriate #195 series mounting plate |
| DOOR BUMPER     | Blum #TP1950 adhesive type (2 per door)                                       |
| ELBOW CATCH     | Amerock #3675   |
| SURFACE BOLT    | Hafele #252.02.0644 or Stanley 79-3021  |
|                 | with appropriate keeper/strike plate  |
| PILASTER        | K & V #255 ZC   |
| PILASTER CLIP   | K & V #256 ZC   |
| COATROD         | K & V #770 – 5 CHR  |
| COATROD FLANGES | K & V #764 CHR  |
| COATROD SUPPORT | K & V #1195   |
| COAT HOOKS      | 940P X 626 Hager or Equal   |

2.5 Door for Teacher cabinets and vertical storage closets to be hollow core with face veneer sliced yellow birch select grade. Prep and install hardware of 3 hinges FBB168 and locksets as above for each.

#### 3. **EXECUTION**

- 3.1 Include for all finishing work indicated on drawings.
- 3.2 Edge all doors, shelves, drawer fronts etc. in matching bull nosed hardwood trims minimum 3/8" thick. Fasten all work blind using screws and secure to solid blocking/substrate. Finish all exposed cabinetry and doors etc. with minimum 1 coat light stain & 2 coats of urethane, i.e.: natural finish

- 3.3 Co-ordinate work with other finishing trades/ mechanical and electrical trades for installation of services. Note all kicks to receive vinyl base supplied/installed by Division 9.
- 3.4 Installation and assembly work on job shall be executed by skilled trades. Install all work level, plumb, & true in all respects.
- 3.5 Provide smooth surfaces with fastenings sunk and filled over to receive finish. Use draw bolts in counter top joints.
- 3.6 Install all hardware and adjust for smooth operation.

## DIVISION 8DOORS & WINDOWSSECTION 08100HOLLOW METAL DOORS & FRAMESApril 2019

#### 1. **GENERAL**

- 1.1. Comply with General Requirements Division 01.
- 1.2. Submit shop drawings in accordance with Division 01.
- 1.3. Verify door sizes by site measures to suit existing openings.
- 1.4. Tag frames and doors and deliver to site with identification marks indicating proper locations.
- 1.5. Co-ordinate work of this section with other sections.
- 1.6. Prepare for all hardware installation by Finished Carpentry Section 06400.

## 2. MATERIALS

- 2.1. Hollow metal door frames shall be fabricated of 18 ga. wipe coat galvanized steel reinforced and welded as manufactured by S.W. Fleming or equal fully insulated at locations called for. Minimum 6 anchors per frame.
- 2.2. Hollow metal doors shall be Type D-18 series as manufactured by S.W. Flemming Ltd., or equivalent, fabricated of 18 ga. wipe coat galvanized steel with no visible seams complete with 16 ga. end channels welded to top and bottom door insulated for exterior doors.
  - Shall be shop primed paste filled and sanded smooth, stiffened, insulation and sound deadened.
  - Shall be mortised, reinforced, drilled and tapped for hardware as scheduled.

- 2.3 Rated assemblies and sizes as per Door Schedule on drawings.
- 2.4. Rated glazing to be Fire Lite.

#### 3. EXECUTION

- 3.1. Installation of frames and hardware Doors and Hardware by Division 6/Frames by Division 9 and 4.
- 3.2. Locate and anchor frames in alignment with other work. Anchor frames to retain position and clearance during construction of walls and partitions.
- 3.3. Brace frames solidly in position while being built in. Install temporary wood spreader at mid-height of frame to maintain width until adjacent wall work is completed.
- 3.4. Generally, anchorage of frames shall be by means of standard anchors. Where standard anchors cannot be used, provide suitable anchors to ensure proper installation. Method of anchorage shall not be visible when frames are installed.
- 3.5. Install glazing in strict conformance with the manufacturer's recommendations.
- 3.6. Clean up and remove excess material from site.

## 1. **GENERAL**

- 1.1. Comply with General Requirements Division 01.
- 1.2. Submit shop drawings, schedule, and samples in accordance with Division 01 for review prior to ordering materials.
- 1.3. Co-ordinate rough in of Doors & Frames with Section 08100.
- 1.4. Supply all hardware called for to Section 06400 Finished Carpentry for installation. Pack securely and label all material by door location.
- 1.5. Provide 10 year warranty for door closers and 1 year warranty for all other products from date of Substantial Performance.
- 1.6. Note positions indicated for reuse of existing hardware to replacement door positions.

## 2. MATERIALS

See Attached List

## 3. EXECUTION

- 3.1. See attached schedule for mounting heights and locations for rough in. Confirm existing frame hardware locations/sizes prior to ordering to ensure compatibility.
- 3.2. Take inventory of all materials and confirm locations, door swing, and rough in for all points prior to start of installation.
- 3.3. Installation of hardware by Section 06400 Finished Carpentry.

#### 1. **GENERAL**

- 1.1. Comply with Requirements of Division 01.
- 1.2. Install work within 1/8" of dimension location and flat within 1/8" maximum in 1/8" and 1/16" maximum in any running 12".
- 1.3. Proceed with work only in areas protected and closed from the elements with temperature above 10 deg. C.
- 1.4. Co-ordinate installation of grilles and light fixtures.

#### 2. MATERIALS

- 2.1. Gypsum board: CSA A82.27-M1977 in thickness shown, rated drywall for rated assemblies.
- 2.2. Resilient channels, steel galvanized.
- 2.3. Corner beads steel galvanized, <sup>1</sup>/<sub>2</sub> bead.
- 2.4. Screws: self drilling Phillips head, drywall screws #6 x 1" for single thickness.
- 2.5. Bracing channels: cold rolled steel, galvanized.
- 2.6. Furring clips: minimum 1/8" thick, galvanized.
- 2.7. Tie wire: 1/8" thick, soft annealed and galvanized steel wire.
- 2.8. Hangers: galvanized annealed steel wire, 3/32" diameter to support a maximum weight of 150 lbs., 2/16" diameter of 308 ½ lbs., 3/16" diameter galvanized annealed steel rod to support a maximum weight of 550 lbs.

## DIVISION 9FINISHESSECTION 09250GYPSUM WALLBOARD

- 2.9. Joint cement, tape, topping compound: as recommended by wallboard manufacturer.
- 2.10. Metal access panels 2' x 2' hinged, tamper proof non-rated metal access panels with frames.
- 2.11. Metal studs (non load bearing): Galvanized sheet steel, minimum 0.59 mm overall thickness zinc coating Z275 (25 gsg) (0.247") screwable with crimped web and returned flange and tabs for security batt insulation in place. Provide knockout openings in web at 6" o.c. to accommodate (if required), horizontal mechanical and electrical service lines, and bracing. Width as shown on drawings.
- 2.12. Floor & Ceiling Partition Track: Galvanized sheet steel minimum 0.59 mm overall thickness zinc coating Z275 (25 gsg) (0.0247") pre-punched with square holes along center line and with minimum  $1 1 \frac{1}{4}$ " legs, top track having longer legs where required to compensate for deflection of structure above. Width to suit metal studs.
- 2.13. Sound insulation  $-3\frac{1}{2}$ " thick mineral wool by Roxul or equal.

#### 3. EXECUTION

- 3.1. Install gypsum board as recommended by Gypsum Association Specification No. GA-216-82 regarding temperature, finishing and methods of installation.
- 3.2. Frame openings and built in equipment with furring, furr in ducts, pipes and dropped beams occurring in finished areas.
- 3.3. Provide for integration of supports of equipment and components, and installation of flush mounted recessed components included in work of other sections only after consultation and verification with them of their requirements.

# DIVISION 9FINISHESApril 2019SECTION 09250GYPSUM WALLBOARDApril 2019

- 3.4. Framing and furring shown on drawings is indicative, but do not consider it as exact or complete. Construct work to withstand stresses imposed by use without either distortion or dimensional changes. Install wall framing to heights called for and brace all walls with diagonal supports to suit, full height to underside of roof deck for rated assemblies.
- 3.5. Make good drywall at cutouts for services and other work, and where defective. Fill in defective joints, holes and other depressions with joint compound, and ensure that surfaces are smooth and evenly textured to receive finish treatments.
- 3.6. Remove droppings and excessive joint compound from work of this and other sections before it sets.
- 3.7. Clean off beads and other metal trim, and leave all surfaces ready for specified finishes.
- 3.8. Construct framing for suspended drywall ceilings.
- 3.9. Clean up and remove excess material from site.

#### 1. **GENERAL**

1.1. Comply with Requirements of Division 01.

Suggested Installer:

| • | Specified Flooring Contractors | Telephone: | (905) 726-3373 |
|---|--------------------------------|------------|----------------|
|   | 4 Vota Court, Unit 28          | Contact:   | Fred Zona      |
|   | Aurora, Ontario                |            |                |

#### 1.2. Description

- 1.2.1. <u>Related Work Specified Elsewhere</u>
  - Concrete Sections 3A & 3B
  - Precast Concrete Section 3C
  - Steel Stairs #1 and #2 Section 5D
  - o Rubber Cove Base Section 9B

#### 1.3. Submittals

1.3.1 <u>Sample</u>

Submit labeled samples of terrazzo based on colours as chosen by consultant from standard available ranges indicated in Terrazzo, Tile and Marble Association (TTMAC) manual to match existing terrazzo flooring as close as possible. (Note: there are 2 colours.)

#### 1.4. Test Area For Approval

- 1.4.1 Note that the First Floor level of Test Area to be in the existing corridor adjacent the classroom renovation and shall be the Test Area for Approval for terrazzo work on this project. Perform in-situ terrazzo for this Test Area as specified herein and receive consultant's approval of same prior to commencement of any other terrazzo work on this project.
- 1.4.2 The Test Area, once approved shall become the acceptable minimum standard upon which all other terrazzo work shall be judged and approved.
- 1.4.3. If the initial installation of terrazzo in the Test Area is not approved by the consultant, this contractor shall remove the cast terrazzo and start Test Area over

Peterborough Victoria Northumberland Clarington Catholic District School Board 2019-T-11 Classroom Renovations to St John Paul II CES again at no additional cost to the owner.

DIVISION 9FINISHESSECTION 09400TERRAZZO

#### 1.5. Delivery, Storage & Handling

1.5.1 Deliver products to site in proper containers. Store in protected area.

#### 1.6. Job Conditions

- 1.6.1 Protection
  - Prohibit all traffic in areas where terrazzo is being installed. Prohibit all traffic on terrazzo for 72 hours at installation.

#### 1.6.2 <u>Temporary Services</u>

 General contractor shall provide adequate heat, proper ventilation, and good lighting in areas where work of this Section is being carried out. Temperature shall not be less than 10° Celsius.

#### 2. MATERIALS

- 2.1. <u>Marble Chip</u> to CSA A194.1-1967 grades commercially known as No. 1, 2, and 3, crushed from sound marble with dusted screened out.
- 2.2. <u>Cement</u> to CAN/CSA-A5-M88.
- 2.3. <u>Colour Pigment</u> shall be lime-proofed and non-fading.
- 2.4. <u>Sand</u> to CAN/CSA A23.1-M90.
- 2.5. <u>Slip Sheet</u> 4 mil polyethylene film to CAN/CGSB 51.34-M86.
- 2.6. <u>Divider & Edging Strips</u> shall be white metal, 3 mm wide x 32 mm deep, with proper anchoring features.
- 2.7. Floor Cleaner to TTMAC #1000 series
- 2.8. Floor Sealer to TTMAC #2000 series for base sealer and #3000 series for finish sealer.

## 3. EXECUTION

#### 3.1. Preparation

- 3.1.1. Ensure that concrete floor slabs-on-grade to receive terrazzo are depressed <sup>3</sup>/<sub>4</sub>" from finished floor elevations detailed. Commencement of work shall signify acceptance of sub-surface.
- 3.1.2. Remove any debris or foreign substances.

#### 3.2. Installation

- 3.2.1. Installation shall be in accordance with TTMAC manual Standard Details.
- 3.2.2. Apply single layer poly slip sheet lapping at least 100 mm at all joints.
- 3.2.3. Place divider strips in pattern to match existing layout with tops perfectly aligned and level. Form borders and insert strip at all junctions with other flooring materials.
- 3.2.4. Install <sup>3</sup>/<sub>4</sub>" thick topping consisting of one (1) part cement to two (2) parts of marble chips by weight, mixed dry to a uniform mixture. Hydrate for 1.5 to 2 hours. Re-mix to proper plastic consistency. Use mix within 2.5 hours. Place in spaces formed by dividing strips and roll with minimum 91 KG roller until all superfluous cement and water have been removed.
- 3.2.5. Note that finished terrazzo showing less than 85% marble aggregate will not be acceptable on this project. Add more marble chips as required to get proper mass, and steel trowel surface, discing lines of dividers to true, even surface.
- 3.2.6. When topping is sufficiently hard, rub with machine using coarse carborundum grit stones to smooth, event surface. Clean off all loose materials and grout surface with white cement grout, filling all holes and crevices. Leave grout on surface until final polishing. General contractor shall at this time coordinate completion of other trades before final polishing. Complete integral cove base to match existing size and profile.

## DIVISION 9 FINISHES SECTION 09400 TERRAZZO

- 3.2.7. Not less than 72 hours after grout is applied and when notified by general contractor that all rough trades are finished, remove grout by machines using fine, smooth finish.
- 3.2.8. Internal corners and perimeter edges shall be ground to same extent and finished as remainder of terrazzo.

#### 3.2.9. Absolutely no dry grinding will be allowed on this project.

#### 3.3. <u>Cleaning & Sealing</u>

- 3.3.1. Clean all terrazzo surfaces using #1001 or #1003 liquid cleaner as described in TTMAC "Maintenance Guide".
- 3.3.2. Apply one coat solvent base sealer #2001, and two coats polymer floor finish #3001, all in strict accordance with "Maintenance Guide" instructions.
- 3.3.3. After sealing of terrazzo, cover floors with protective soap emulsion and let dry.
- 3.3.4. Shortly before takeover of building by owner remove soap emulsion thoroughly, clean floor and check for any defects. Make any necessary repairs to consultant's satisfaction.

#### 3.4. <u>Clean Up</u>

3.4.1. Clean up in accordance with Section 1A, General Instructions.

#### END OF SECTION 09400

## DIVISION 9FINISHESSECTION 09510ACOUSTICAL CEILINGS

April 2019

## 1. **GENERAL**

- 1.1. Conform to the General Conditions as applicable.
- 1.2. Provide an additional 5% quantity of each acoustic board installed, in sealed and labeled cartons, for owners use, and deliver as directed.
- 1.3. Submit samples of acoustical tile to Architect for approval, prior to ordering.
- 1.4. Deliver materials in their original wrappings or containers with manufacturer's labels and seals intact and store in a dry area under cover and clear ground.
- 1.5. Ship grid members and moulding in rigid crates and avoid damage. Bent or deformed materials will be rejected.

## 2. MATERIALS

- 2.1. Suspension systems: equivalent to C.G.C. ceiling system for 2' x 2' grid assembly.
- 2.2. Basic Steel Material & Finish: Commercial quality cold rolled steel (0.179") (26 ga.) (0.455 mm) thick, galvanized zinc coating designation (G90) Z275. Exposed surface of metal products shall be factory finished with satin white enamel.
- 2.3. Hangers: Minimum .1084" (12 gsg.) overall thickness galvanized to zinc coating designation G90 (Z275).
- 2.4. Main Tees: 12'-0" long, zinc-coated steel, double web design, 1-<sup>1</sup>/<sub>2</sub>" web height, 15/16" face width.
- 2.5. Main Tee Splices: Designed to lock lengths of main tees together so that joined lengths of tee function structurally as a single unit tee faces at joint perfectly aligned and presenting a tight seam.

- 2.6. Cross Tees: 2'-0" and 4'-0" long at 2'-0" o.c., 1" web height structural cross-section design same as main tees, designed to connect at main tees forming positive lock without play, loss or gain in grid dimensions with offset over-ride of face flange over main tee flange to provide flush joint.
- 2.7. Edge Moulding: M7 wall moulding.
- 2.8. Tile:
- 2' x 2' x 5/8" medium textured non-directional panels 763 Georgian lay in
- All tiles NRC Range .5 .55 as manufactured by C.G.C. Ceiling Systems or equal. Frame spread 25, colour white (match existing)
- 2.9. Tire Wire: 1.20 mm (18 gs.) nominal diameter galvanized soft annealed steel.
- 2.10. Inserts and Fasteners: Galvanized and of size suited for loading conditions.

#### 3. EXECUTION

- 1.1. Install acoustic ceilings using tradesmen skilled in this class of work, in strict accordance with manufacturer's instructions and as specified herein.
- 1.2. Neatly and symmetrically fit and run suspended ceiling to true lines, evenly balance in all areas to pattern shown on the Drawings or as directed.
- 1.3. Centre ceiling system on room axis leaving equal full border tiles. Co-ordinate drywall bulkhead size to allow for full ceiling tiles as per reflected ceiling plan layout.
- 1.4. Recessed items shall replace or be centred on acoustical panels; except where indicated otherwise. Consult with Mechanical and Electrical Divisions to co-ordinate work. Provide additional supports where required.

- 1.5. Space hangers for suspended ceilings to support the grillage independent of walls, columns, pipes and ducts at maximum 4'-0" centres along the support grillage and not more than 6" from ends. Attach hangers to the overhead structure by hanger clips. Bend top of hangers at right angles, turn down and securely fasten. Turn bottom of hangers upwards and securely wrap three times.
- 1.6. Provide written conformations to Divisions 15 and 16, when requested by the Architect, that the suspended ceiling is capable to supporting the additional weight of mechanical and electrical fixtures required by Divisions 15 and 16.
- 1.7. Run main tees right angles to length of light fixtures.
- 1.8. Space main tees 4'-0" in one direction and securely tie to hangers.
- 1.9. Space cross tees 2'-0" o.c. at right angles to the main tees and properly lock at intersections.
- 1.10. Level the suspended systems with a maximum tolerance of 0.18" over 12'-0".
- 1.11. Use the longest practical lengths of tees, furring and running channels to minimize joints. Make joints square, tight, flush and reinforced with concealed splines. Assemble framework to form a rigid interlocking system.
- 1.12. Design suspension system to accommodate movement caused by thermal expansion or contraction.
- 1.13. Design and space hangers and carrying members to support the entire ceiling system, including lighting fixtures, diffusers and equipment openings in locations shown on drawings.
- 1.14. Use edge moulding where ceiling abuts vertical surface and bulkheads.

#### END OF SECTION 09510

## 1. **GENERAL**

- 1.1. Comply with requirements of Division 01.
- 1.2. Submit full size sample tiles.
- 1.3. At completion of work deliver to Owner 2% of the quantity installed of each flooring material, in each colour and pattern and in labelled packages.
- 1.4. Maintenance Instructions: Submit cleaning, waxing and finishing instructions for each installed material to Contractor for his information in final cleaning and waxing and later submission to Owner.
- 1.5. Proceed with floor laying only when surfaces, materials and air temperatures have been maintained between 21 and 32 deg. C. for 72 hours preceding installation, and will be so maintained during installation for 7 days following.
- 1.6. Barricade areas where flooring is completed and otherwise protect newly installed flooring until adhesive has set.
- 1.7. After flooring has set, and until project completion, co-ordinate work to ensure that floors are not damaged by traffic. Ensure that flooring is not subjected to any static loading during the week following installation.

#### 2. MATERIALS

- 2.1. Flooring (MCT): To be 2.0 mm thick 13.1" x 13.1" Forbo or equivalent. Colour(s) to be chosen later from manufacturer's standard line. Provide material from same production run for one area, and from same manufacturer for entire project.
- 2.2. Resilient Base: Coved bottom, <sup>1</sup>/<sub>4</sub>" thick, 6" high, by Johnsonite Industries Limited or as approved by Architect, in colours selected by Architect from manufacturer's standard range.

- 2.3 Transition strips metal with colour matched vinyl strip.
- 2.4 Primer and Adhesive: As recommended by flooring manufacturer for each subfloor condition.
- 2.5 Cleaner: Neutral chemical compound that will not damage tile or affect its colour.

## 3. EXECUTION

- 3.1. Remove existing flooring/base and examine subfloor to ensure that moisture content is not in excess of maximum limit specified by adhesive manufacturer, and that surfaces and environmental conditions are satisfactory. Defective work resulting from unsatisfactory surfaces or conditions will be considered the responsibility of those performing the work of this section.
- 3.2. Determine types of curing agents and sealers applied in finishing concrete slabs, and their compatibility with flooring adhesives intended for use. Adopt methods required, including complete removal if necessary, to ensure that bond of adhesive is not impaired.
- 3.3. Remove dusting and caulking from concrete subfloors with wire brushes, and prime.
- 3.4. Clean subfloor to remove soil and deposits which would lessen adhesive bonding, and foreign materials which would telegraph through flooring. Fill joints, cracks and holes, and level irregularities with filler.
- 3.5. Prime subfloor as recommended by adhesive manufacturer and allow to dry..
- 3.6. Apply adhesive in an even coat over entire subfloor area with notched trowels, and lay tile before it sets. Do not lay flooring over hardened adhesive.

- 3.7. Install tile laid out with continuous joints parallel to minor axis of rooms and joints parallel to major axis half staggered, with grain of adjacent tile parallel, and with no tiles less than half size unless minor room irregularities make this impossible. Distribute tiles of varying pattern, colour and texture over floor areas to ensure an evenly blended appearance. Do not lay tile having pattern, colour or texture in marked contrast with other tile, form tapers by sanding backs of tiles at junctions with thinner finish flooring to flush up surfaces. User waterproof adhesive on slabs on grade and in washrooms, janitor rooms, and similar areas subjected to frequent floor scrubbing.
- 3.8. Butt joints closely and cut and fit flooring around door frames, openings in floor and at heavy equipment bases.
- 3.9. Install bases in lengths as long as possible, not in runs made up of short lengths. Cut and mitre internal corners and provide preformed external corners, and accurately scribe around door frames, openings and similar wall breaks. In areas where bases are indicated, install them also on columns and fitments within the area.
- 3.10. Clean off excess adhesive before it sets. Clean flooring no sooner than 48 hours following installation. Use floor cleaner where required. Sealing and waxing will be done by others.

## 1. **GENERAL**

- 1.1. Comply with General Requirements Division 01.
- 1.2. Meet standards specified in Architectural Painting Specification Manual, Ontario Edition published by the Canadian Painters Contractor's Association.
- 1.3. Submit samples of each specified paint, colour and wood finish.
- 1.4. Submit list of all materials, manufacturer catalogue numbers, etc.
- 1.5. Deliver to Owner on completion of work, one quart of each colour, clearly labeled.
- 1.6. Cover or make surfaces adjacent to those being finished and protect work of others from damage and/or paint spills.
- 1.7. Repainting of existing repaired surfaces shall extend to closest edge(s) if proper match not obtainable.

#### 2. MATERIALS

- 2.1. Manufacturers approved for supply of materials are:
  - Canadian Industries Ltd. (CIL)
  - Dulux
  - Pratt & Lambert Inc.
  - Canadian Pittsburgh Industries Ltd.
  - Benjamin Moore
  - Glidden

#### DIVISION 9 FINISHES SECTION 09900 PAINTING

- 2.2. Supply only the best quality material for each specified line.
- 2.3. Materials used shall meet or exceed CGSB Specifications.

## 3. EXECUTION

- 3.1. Examine surfaces prior to application for moisture content and acid alkali balance. Acceptance of surfaces signifies responsibility for finished products.
- 3.2. Clean all surfaces and remove foreign materials, fill cracks, holes and depression and smooth for finish.
- 3.3. Paint piping, conduit, grilles, duct work exposed to view to match background colour.
- 3.4. Patch, repair and paint all new duct penetrations. Paint all new and existing concrete block, metal deck/joists, ductwork, doors and frames.
- 3.5. Colours will be provided by Architect upon award of contract.
- 3.6. Finishes:

Interior Metal Work

- 1 coat primer
- 2 coats of acrylic latex semi-gloss finish

#### Interior New Painted Drywall

- 1 coat of latex sealer
- 2 coats of acrylic latex eggshell finish (corridor drywall Bulkhead)

#### Interior Existing Painted Drywall

• 2 coats of acrylic latex eggshell finish

Interior New Painted Concrete Block

- 1 coat of Moorcraft block filler or equal
- 2 coats of acrylic latex eggshell finish

Interior Existing Concrete Block

- 1 coat of X-per 250 Gripper
- 2 coats of acrylic latex eggshell finish
- 3.7. Clean-Up
  - 3.7.1. Clean up daily. All paint rags, empty cans shall be removed from the site upon completion of each day's work. Upon Total Completion provide total clean up.

#### DIVISION 10 SPECIALTIES SECTION 10100 WHITEBOARDS, TACKBOARDS & EQUIPMENT

#### 1. **GENERAL**

- 1.1 Conform to General Instructions as applicable.
- 1.2 Submit shop drawings for review prior to fabrication.
- 1.3 Supply to Division 6 for installation.

#### 2. <u>MATERIALS</u>

2.1 Whiteboards & Tackboards - based on Architectural School Products or equal - to sizes noted on drawings.

<u>Whiteboards:</u> shall be ASP Porcelain writing surface e3 ceramicsteel 11 mm thick impregnated sound absorbing fibreboard core with 28 gauge zinc coated steel back sheet. Sandwich panel shall be factory laminated under pressure using waterproof adhesive. Use 14 gauge x 25 mm wide steel splines and extruded PVC slotted inserts at joints to ensure closely aligned seams.

<u>Tackboards:</u> shall be 6mm natural cork, tan in colour, factory laminated under heat and pressure to 6mm particleboard.

#### 3. **EXECUTION**

3.1 Install all equipment as above in locations as noted on drawings level and securely to substrates strictly in accordance with the manufacturer's recommendations.

#### **END OF SECTION 10100**

# DIVISION 10SPECIALTIESSECTION 10800WASHROOM ACCESSORIESApril 2019

## 1. **GENERAL**

- 1.1. Comply with requirements of Division 01.
- 1.2. Submit shop drawings for review and comment.
- 1.3. Supply products for installation under Section 06200.
- 1.4. Provide warranty on all products for 2 years.

## 2. MATERIALS

#### 2.1. Washroom Accessories

- 2.1.1 The following items will be purchased and installed by this contract:
  - Mirrors 1 per sink
    - Model 600T, 16" x 30" tilting mirror for each sink location. Watrous or equal.
  - Grab Bars for each handicap stall
    - 1" O.D. 18 ga. chrome plated with mandrel ends fully knurled to 4" from bends secured with 2-1/2" non-corrosive screws to solid backing capable of supporting 500 lbs. pull including:
      - a) 2' long at 6" above toilet tank
      - b) 2'-6" horizontal/vertical components with vertical mounted 6" off front end of toilet seat
- 2.1.2 The following items will be supplied by the owner to be installed by this contract:
  - One surface mounted soap dispenser 1 per washroom
  - One surface mounted toilet tissue dispenser 1 per washroom
  - One surface mounted towel waste container 1 per washroom

# DIVISION 10SPECIALTIESSECTION 10800WASHROOM ACCESSORIES

April 2019

## 3. EXECUTION

3.1. Install washroom accessories securely with the concealed fasteners supplied by the respective accessory manufacturer in accordance with recommendations of the manufacturers and to the satisfaction of the Architect.

## **RENOVATIONS TO ST. JOHN PAUL II CES, LINDSAY**

April 2019 Page 1 of 2

#### HARDWARE LIST

## **Door #1 – Existing Corridor to New Universal Washroom**

| 1<br>3<br>1<br>1 | Lever Privacy Set<br>Hinges<br>Electric Strike Fail Safe<br>Power Operator   | 28 X 10U65 X LL X 626<br>FBB168 114 X 101 C15<br>1006 X FS X CLB X 630<br>SW 200i X SINGLE HSG X628 plus SW200 i add for inswing arm<br>Operator to be installed by a factory trained installer. All wiring to be<br>run by the electrical subtrade. |
|------------------|--|--|
| 1                | Occupied & Emergency<br>Kit Recess   | #OCC - 1 - EMR - R  KIT<br>To be installed to control the privacy of the occupant, in conjunction<br>with the auto door operator as well as provide emergency response<br>capabilities, including alarms inside and outside of washroom.             |
| Kit in           | cludes:  |  |
| 2                | Ea Button CM45/4 X 630<br>(Recessed Boxes By Others)                         | 1 Ea Push to Lock Button CM45/8 X 630 (Recessed by Others)   |
| 1                | Ea occupied sign 4 <sup>3</sup> / <sub>4</sub> " x 9"<br>White Surface Mount | 1 Ea Door Contact CX-MDC   |
| 1                | Ea Controller CX-33  | 1 Ea Push for Emergency Button CM-450/R12 (Recessed by Others)   |
| 2                | Ea Assistance Requested<br>CM-AF501SO (Recessed<br>Boxes by Others)          | 1 Ea Transformer 24Vac   |
| 1                | Ea Power Controller<br>CX-PS13 V3  | 1 Ea Sign CM-SE21A   |
| 1                | Floor Stop   | 6 SH 218   |
| 1                | Kick Plate   | 232 W X 626  |

#### **RENOVATIONS TO ST. JOHN PAUL II CES, LINDSAY**

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#### HARDWARE LIST

#### **Door #2 – New Kindergarten to New Washroom**

| 1 | Lever Privacy Set | 28 X 10U65 x 626 |           |     |
|---|-------------------|------------------|-----------|-----|
| 3 | Hinges            | FBB168           | 114 X 101 | C15 |
| 1 | Floor Stop        | 6 SH 218         |           |     |

#### **Door #3 – Existing Vestibule to Exterior**

| 2 | Panic             | 12-8813 G – 713 ETL X 630    |
|---|-------------------|------------------------------|
| 2 | Closers           | 4041 X 689                   |
| 6 | Hinges            | FBB168 114 X 101 C15         |
| 2 | Threshholds       | CT 11                        |
| 2 | ASA Cylinders     | 6673 x 626                   |
| 2 | Weather Stripping | W17 X/ 1 sweep W135 – 18' 0" |

Supply locksets with LA construction cylinders to be installed by the contractor. Supply ASSA cylinders to owner directly keyed to owner's master key system for installation later by owners.

| APPENDIX  |  | Wilcox Architects Inc.  |  |
|---|--|---|--|
| LIST OF ABBREVIATIONS   |  | Page 1 of 4   |  |
| A   | ARC  | ADJ   | Adjustable   |
| AB  | Air Barrier  | AL, ALUM  | Aluminum   |
| ABV   | Above  | ARCH  | Architectural  |
| A.C.  | Air Condition  | A.T.  | Acoustic Tile  |
| BL, BLK.<br>BLDG<br>BLKHD.<br>BLW<br>BM.                              | Block<br>Building<br>Bulkhead<br>Below<br>Beam, Beams  | BR ANOD<br>B/S<br>BTM, B/<br>B.U.R.                             | Bronze Anodized<br>Both Sides<br>Bottom Of<br>Built-Up Roof  |
| CAB.<br>CABS<br>CAR<br>C.B.<br>CB<br>CCS<br>CLF<br>CLG<br>CLOS<br>CNR | Cabinet<br>Cabinets<br>Carpet<br>Catch Basin<br>Concrete Block<br>Clear Concrete Sealer<br>Chain Link Fence<br>Ceiling<br>Closet<br>Corner | COL<br>CONC.<br>CONT.<br>CRS<br>CS<br>CT<br>CTNG<br>CTOP<br>C/W | Column<br>Concrete<br>Continuous<br>Course<br>Concrete Slab<br>Ceramic Tile<br>Coating<br>Counter Top<br>Complete With |
| D.C.  | Display Case   | DN  | Down   |
| DIA   | Diameter   | DR  | Door   |
| D/G   | Double Glazed  | DW  | Drywall  |
| E<br>EL<br>elec,elec'l<br>ELEV<br>ENCL                                | East<br>Elevation<br>Electrical<br>Elevator<br>Enclosed  | EQ<br>E/S<br>EX., EXIST<br>EXT.                                 | Equal<br>Each Side<br>Existing<br>Exterior   |

Peterborough Victoria Northumberland Clarington Catholic District School Board 2019-T-11 Classroom Renovations to St John Paul II CES

Peterborough Victoria Northumberland Clarington Catholic District School Board 2019-T-11 Classroom Renovations to St John Paul II CES

## **APPENDIX** LIST OF ABBREVIATIONS

LWR

Lower

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| F<br>FD<br>FND<br>F.E.<br>FFL<br>F/G<br>F.H. | Female<br>Floor Drain<br>Foundation<br>Fire Extinguisher<br>Finish Floor Level<br>Fixed Glazing<br>Fire Hydrant | FIN<br>FL<br>FLS<br>F.P.<br>FR.<br>F.R.<br>FTG. | Finish<br>Floor<br>Flood Lights<br>Fire Protection<br>Frame<br>Fire Rated; Fire Rating<br>Footing |
|--|---|---|---|
| GALV.<br>GL                                  | Galvanized<br>Glazing   | GR<br>GWG                                       | Grade<br>Georgian Wired Glass   |
| H.C.<br>HD<br>HDWRE<br>H.M.<br>H.O.          | Handicap<br>Head<br>Hardware<br>Hollow Metal<br>Hold Open   | HORIZ<br>H.P.<br>HR<br>HT, HGT.<br>HTR.         | Horizontal<br>Hydro Pole<br>Hour<br>Height<br>Heater  |
| ID<br>INC/<br>IND<br>INFO                    | Inside Diameter<br>Including<br>Indicates<br>Information  | INSUL<br>INT.<br>I/S                            | Insulation<br>Interior<br>Inside  |
| J  | Joist   |   |   |
| LBL<br>LOC                                   | Label<br>Location   |   |   |

Μ Male MIR Mirror MANF Micro-Lam-Beam Manufacture M.L.B. MAT. Material MT Minute MAX MTD Maximum Mounted MTL Metal MECH, MECH'L Mechanical M.H. Manhole M.U.A. Make-Up-Air Minimum Mechanical Unit MIN N. N.I.C. North Not In Contract OA OH Overhead Overall OPNG O.B.C. Ontario Building Code Opening O/H Overhang O.S. Over Size PART'N Partition POL. Polethylene P.C. Pair Prefinished Pre-Cast PR PL Preformed Plate PREFORM P.LAM Plastic Laminate P.T. **Pressure Treated** PT PLY, PLYWD Plywood Paint Reference R Radius REF. R.D. Roof Drain REV Reversed REF Refrigerator R.S.O. Rough Stud Opening Required Rod and Shelf REQ'D R & S RES Resistance R.W.L. Rain Water Leader

Peterborough Victoria Northumberland Clarington Catholic District School Board 2019-T-11 Classroom Renovations to St John Paul II CES

APPENDIX

LIST OF ABBREVIATIONS

## CLASSROOM RENOVATIONS TO ST. JOHN PAUL II CES, LINDSAY PETERBOROUGH VICTORIA NORTHUMBERLAND & CLARINGTON

CATHOLIC DISTRICT SCHOOL BOARD

Wilcox Architects Inc.

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S S.P. South Splash Pad S.A.B. Sound Attenuation Blanket Single Ply Membrane S.P.M. SAN. Sanitary S.S. Stop Sink SC Solid Core ST Stain SCR Screen STD Standard STL SEP Separation Steel Single Glazing Stringers S/G STR SHLVS Shelves STRUCT`L Structural SHTG Sheating ST.S Storm Sewer Slab On Grade S.O.G. Τ/ Top Of T.T. Terrazo Tile T.B. Thermal Broken T. & WD Towel & T. & B. Top And Bottom Waste Disposal TEX Textured Typical TYP T. & G. Tongue & Groove U/C Under Counter UPR Upper U.O.N. Unless Otherwise Noted U/S Underside V. Vinyl VERT Vertical VAL Valance V.T. Vinyl Tile VAN Vanity V.W.C. Vinyl Vapour Barrier Wallcovering V.B. W/ With WIN Window W.C. Water Closet W.F. Wood Fibre WD Wood W.V. Water Valve

Peterborough Victoria Northumberland Clarington Catholic District School Board 2019-T-11 Classroom Renovations to St John Paul II CES

APPENDIX

LIST OF ABBREVIATIONS

## CLASSROOM RENOVATIONS TO ST. JOHN PAUL II CES, LINDSAY PETERBOROUGH VICTORIA NORTHUMBERLAND & CLARINGTON CATHOLIC DISTRICT SCHOOL BOARD

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