

SPECIFICATIONS

**RENOVATIONS TO
ST. JOSEPH CATHOLIC ELEMENTARY SCHOOL,
DOURO**

FOR

**PETERBOROUGH VICTORIA NORTHUMBERLAND
& CLARINGTON
CATHOLIC DISTRICT SCHOOL BOARD**

ARCHITECT:

**WILCOX ARCHITECTS INCORPORATED
74 LINDSAY STREET SOUTH
LINDSAY, ONTARIO, K9V 2M2
PHONE: (705) 328-0175
FAX: (705) 328-1587**

CAT 18002/Specifications

**RENOVATIONS TO ST. JOSEPH CES, DOURO
PETERBOROUGH VICTORIA NORTHUMBERLAND & CLARINGTON
CATHOLIC DISTRICT SCHOOL BOARD**

TABLE OF CONTENTS

**RENOVATIONS TO
ST. JOSEPH CATHOLIC ELEMENTARY SCHOOL,
DOURO**

FOR

**PETERBOROUGH VICTORIA NORTHUMBERLAND
& CLARINGTON
CATHOLIC DISTRICT SCHOOL BOARD**

		<u>Page No.</u>
DIVISION 1	GENERAL REQUIREMENTS	
	01010 SUMMARY OF WORK	4
DIVISION 2	SITE WORK	
	02000 DEMOLITION	5
DIVISION 4	MASONRY	
	04200 UNIT MASONRY	7
DIVISION 6	WOOD AND PLASTICS	
	06400 FINISHED CARPENTRY	10
DIVISION 8	DOORS & WINDOWS	
	08100 HOLLOW METAL DOORS & FRAMES	13
	08700 FINISH HARDWARE	15
DIVISION 9	FINISHES	
	09250 GYPSUM WALLBOARD	16
	09510 ACOUSTICAL CEILINGS	19
	09660 RESILIENT FLOORING	22
	09900 PAINTING	25

TABLE OF CONTENTS

**RENOVATIONS TO
ST. JOSEPH CATHOLIC ELEMENTARY SCHOOL,
DOURO**

FOR

**PETERBOROUGH VICTORIA NORTHUMBERLAND
& CLARINGTON
CATHOLIC DISTRICT SCHOOL BOARD**

	<u>Page No.</u>
DIVISION 10	
SPECIALITIES	
10100 CHALKBOARDS, TACKBOARDS & EQUIPMENT	28
10800 WASHROOM ACCESSORIES	29
DIVISION 15	
MECHANICAL	
15400 PLUMBING/EXHAUST	31
DIVISION 16	
ELECTRICAL	
Electrical Notes	36
<u>APPENDIX</u>	
• Room Finish Schedule	38
• Door & Frame Types	42
• Door Schedule	43
• Hardware Schedule	44
• List of Abbreviations	47

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:

- New finishes, cabinetry, and accessories for 6 classrooms including new acoustic tile ceilings/lighting for 2 classrooms.
- New universal washroom in the office area.
- New washroom off the JK classroom and cabinetry revisions for the Staff Room.
- Reduce Gym Change Room sizes to create 2 new Resource Rooms.

END OF SECTION 01010

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:
 - flooring/base
 - cabinetry/millwork
 - doors/frames
 - fitments
 - acoustic tile ceilings/lighting
 - interior drywall and bulkheads
 - cutting of floor slabs for new plumbing servicesas per demolition plan

Note: items that will be retained for reinstallation. Existing smart boards/projectors will be removed and reinstalled by owner's forces.

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.

END OF SECTION 02000

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.

END OF SECTION 04200

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 ¾" for all shelving, door/drawer fronts, and gables. Use ½" 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.

- 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 ¾” plywood cores typical all locations.
- 2.4 All cabinetry to be frameless type complete with metal drawer slides (both sides) with ball bearings, 120° 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	CBH #255 - C15
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
DOOR	93K7R-14D Best Lockset
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 Doors 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 coat hooks and accessories in all locations noted and supplied by Division 10.
- 3.7 Install all door hardware and adjust for smooth operation.

END OF SECTION 06400

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.

3.2. Clean up and remove excess material from site.

END OF SECTION 08100

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.

END OF SECTION 08700

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, ½ 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.

2.9. Joint cement, tape, topping compound: as recommended by wallboard manufacturer.

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.

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 bulkheads around ductwork and drywall.
- 3.9. Clean up and remove excess material from site.

END OF SECTION 09250

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 4' 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, 1-½" 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 4' 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 conformation 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 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, ¼" 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. Use 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.

END OF SECTION 09660

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

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.

END OF SECTION 09900

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. **MATERIALS**

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

Whiteboards: 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.

Tackboards: 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

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

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.

END OF SECTION 10800

1. **GENERAL**

- 1.1. Conform to General Conditions as applicable.
- 1.2. Submit shop drawings to Architect for review prior to ordering.
- 1.3. Warranty all work for a period of 1 year.

2. **MATERIALS**

- 2.1. Sanitary drainage and vent piping above floor shall be PVC DWV certified to CSAB181.2 or type DWV hard drawn copper tube with cast brass solder fittings (use 95/5 solder) up to 63mm (2-1/2") copper overcast iron. For plenum spaces use tested and listed in accordance with CAN/ULC S102.2/flame spread rating no more than 25. Smoke developed classification not exceeding 50 to IPEX system XFR 15-50 DWV. Sanitary piping below slab floor shall be ABS DWV with solvent weld joints for sizes up to 2½". For 3" and over use ring tight couplings.
- 2.2. Hot and cold water piping to be ½" type L hard drawn copper tube with wrought copper solder fittings (use 915/5solder). Insulate all hot and cold water supply piping with 1" thick glass fibre dual temperature insulation with factory applied fire resistant glass fibre reinforced kraft paper and aluminum foil vapour barrier with all service jackets. Use pressure sensitive lap sealing system – John Manville microlok or equal.
- 2.3. **Type A**
Toilet to be American Standard "Cadet Pro" 215 CA 154, high efficiency, elongated front, 1.07 GPF, 2 1/8" glazed trap way, lined tank. Centoco 820 STS open front solid plastic seat with white cover and stainless steel hinges complete with rigid supplies and escutcheons ½" cold water, 3" drain, and 1 ½" vent. All or equal.

2.4. **Type B**

Sink to be American Standard “Lucerne” 0355-012 wall hung, vitreous china, rear overflow, self draining deck, 4” centers complete with Delta 523 LF single handle deck mounted 4” centers, 5” long spout, lever handle, ceramic cartridge, metal drain with open grid strainer. Provide thermostatic mixing valve under sink set at 109⁰F, rigid supplies and escutcheons, offset “P” waste trap with cleanout, ½” hot and cold water, 1 ¼” drain, and 1 ¼” vent. All or equal.

2.5. **Type C**

Barrier free toilet to be American Standard “Cadet Pro” 215AA154 “Right Height” high efficiency, elongated front, 1.07 GPF, 2 1/8” glazed trapway, lined tank. Contoco 820STS Open Front Solid plastic seat with white cover and stainless steel hinges complete with rigid supplies and escutcheons. ½” cold water, 3” drain and 1 ½” vent. All or equal.

2.6. **Type D**

Barrier free sink to be “Murro” no. 0954 004EC wall hung, vitreous china, rear overflow, self draining deck, 4” centers complete with Delta 523LF single handle deck mounted 4” centers, 5” long spout, lever handle, ceramic cartridge, metal drain with open grid strainer. Provide thermostatic mixing valve under sink set at 109⁰F, rigid supplies and escutcheons, offset “P” waste trap with cleanout, ½” hot and cold water, 1 ¼” drain, and 1 ¼” vent. All or equal.

2.7. **Type E**

Staffroom sink to be Franke LBS680 8P-1, 18 gauge, single bowl, type 30418-10SS, 8” center set, satin finish on exposed surfaces, 3 ½” crumb cup strainer complete with Delta 100 LF-HDF 8” centers deck mount, 8 11/16” long spout, single handle chrome finish, ceramic structures counter mounted complete with flexible supplies and escutcheons. ½” hot and cold water, 1 ½” drain, and 1 ¼” vent. All or equal.

2.8. **Washroom Exhaust**

To be Greenheck direct drive ceiling exhaust SP-B80 or equal 70 c.f.m. ceiling mounted, operated by wall switch, with flexible metal exhaust ductwork to new exterior metal wall box and prefinished metal grille. Anchor ductwork securely. Insulate last 6' of ductwork with Johns Manville Microlite fiberglass duct wrap with oil, scrim, kraft facing.

3. **EXECUTION**

- 3.1. Provide all equipment, materials, labour and services, etc. necessary to complete the work. All materials and equipment used are to be new and are to have C.S.A. approval. Materials and equipment are specified by name to establish a standard of quality and workmanship. Use only specified equipment or alternates noted.
- 3.2. Visit and examine the site and become familiar with all existing conditions affecting the work, prior to submitting tender. Now allowances in cost will be made by the owner for any difficulties encountered in the work arising out of conditions existing at the time of tendering.
- 3.3. Obey all applicable codes and regulations of all governing authorities having jurisdiction over the work.
- 3.4. Where the supply of an item is specified generally only without extensive detail, this implies the item and/or work shall conform with the requirements of the governing authority and/or manufacturer's recommendations.
- 3.5. Conform to the best practices applicable to this type of work. Install all equipment and systems in accordance with the manufacturer's recommendation but consistent with the general requirements of this specification.

- 3.6. Arrange and pay for all permits, inspection fees, certificates, etc. connected with the work.
- 3.7. Perform all tests required by the authorities having jurisdiction, supply therefore all necessary equipment and labour.
- 3.8. Provide hangers for all pipes and avoid any direct contact of dissimilar metals. Space hangers to prevent sagging or loading joists.
- 3.9. Hangers shall only be suspended from structural bearings such as steel beams or top chord of joists. Where such bearings do not exist, use necessary bridging steel.
- 3.10 Provide supports for equipment installed in this contract, including hanger rods and spring vibration isolators.
- 3.11 Verify exact location and elevation of all existing services prior to commencing any work.
- 3.12 Do all necessary required cutting and patching as may be required to perform the works of this contract. Cuttings shall be kept to a minimum, and shall be performed with clean cut straight edges. Patching shall be neat and clean and restore to original finish conditions using similar types to materials. Use only trades personnel skilled in the various types of work required (i.e. masons, roofers, etc.).
- 3.13 Upon completion, remove all wastes, material, etc. and leave site in clean condition.

3.14 System Flushing & Cleaning

- 3.14.1 Flush and clean fluid-carrying systems after completion with clear water at highest obtainable pressure and velocity. Discharge flushing water through strainers and out through system drains with hose end. Clean strainers. Repeat flushing operation to satisfaction of consultant until no foreign matter collects in strainers. Drain and clean tanks and inspect tubing and passageways in major equipment and clean as necessary.
- 3.14.2 Ensure that valves including control valves are fully open during flushing.
- 3.14.3 Prior to starting fans and air handling equipment inspect and clean the outside and inside of the air handling systems including fans, ducts, coils, and terminal units to ensure that they are completely free from dust and debris. Install clean filters in systems requiring filters.
- 3.14.4 Clean polished, painted and plated work. Clean all fixtures. Remove debris, surplus material and all tools from site.

END OF SECTION 15400

ELECTRICAL NOTES**1. WIRING**

- Use materials and methods approved by the Ontario Electrical Code for use in non-combustible construction.
- All building wire to be copper type RW90-XLPE.
- Use minimum of #12 AWG for branch circuit wiring.
- Use armoured cable type AC90 (BX) in concealed wall and ceiling cavities.

2. PERMITS

- Submit to ESA necessary drawings/specifications for examination prior to start of work and pay associated fees.

3. SHOP DRAWINGS

- Provide 6 copies of data sheets for all products for review prior to ordering.

4. OCCUPANCY SENSORS & POWER PACKS

- All sensors to be capable of operating normally with LED lighting as specified.
- Coverage of sensors shall remain constant after sensitivity has been set and be mounted to minimize coverage in unwanted areas.
- All sensors shall have readily accessible user adjustable settings for time/delay sensitivity and be located on the sensor (recessed) with LED indicating movement is detected.
- Use both passive infrared and ultrasonic technologies for detection.
- Provide line voltage bypass switch in ceiling space directly above each sensor.

5. SYSTEMS DEMONSTRATION

- Provide demonstration of each system to owner after final inspection.
- Instruct personnel in operation adjustment and maintenance of equipment systems.

See drawings for fixture information.

6. MANUALS & AS-BUILT DRAWINGS

- Provide 2 copies of warranties, certificates of ESA inspection, fire alarm verification report, and all product information along with 2 copies of as-built drawings marked up in red. See drawings for fixture types.

APPENDIX

RENOVATIONS TO ST. JOSEPH CES, DOURO											Wilcox Architects Inc. March 2018		
<u>ROOM FINISH SCHEDULE</u>											Page 1 of 4		
		WALLS					FLOOR & BASE			CEILING			
Rm. No.	Room Name	North	East	South	West	Comments	Floor	Base	Comments	Type	Fin.	Comments	
							MT = Marmoleum Tile ALL FLOOR NEW UON			ALL CEILING NEW UON			
105	CLASSRM	EX CB/ PT	EX CB/ PT	EX CB/ PT	EX CB/ PT	PT CONVECTOR	MT	V	-----	EX AT	---	9'-4"	
106	CLASSRM	EX CB/ PT	EX CB/ PT	EX CB/ PT	EX CB/ PT	PT CONVECTOR	MT	V	-----	EX AT	---	9'-4"	
107	CLASSRM	EX CB/ PT	EX CB/ PT	EX CB/ PT	EX CB/ PT	PT DW BLKHD & CONVECTOR	MT	V	-----	EX AT	---	9'-4"	
108	CLASSRM	EX CB/ PT	EX CB/ PT	EX CB/ PT	EX CB/ PT	PT CONVECTOR	MT	V	-----	EX AT	---	9'-4"	

APPENDIX

RENOVATIONS TO ST. JOSEPH CES, DOURO											Wilcox Architects Inc. March 2018		
<u>ROOM FINISH SCHEDULE</u>											Page 2 of 4		
		WALLS					FLOOR & BASE			CEILING			
Rm. No.	Room Name	North	East	South	West	Comments	Floor	Base	Comments	Type	Fin.	Comments	
109	CLASSRM	EX CB/ PT	EX CB/ PT	EX CB/ PT	EX CB/ PT	PT CONVECTOR	MT	V	-----	AT	---	9'-4" PT DW BLKHD	
110	CLASSRM	EX CB/ PT	EX CB/ PT	EX CB/ PT	EX CB/ PT	PT CONVECTOR	MT	V	-----	AT	---	9'-4"	
1	PRINCIPAL OFF/WC	EX CB/ PT	EX CB/ PT	EX CB/ PT	EX CB/ PT	PT DOORS/ FRAMES	MT	V	-----	AT	---	8'-6"	
2	GEN OFF	EX CB/ PT	EX CB/ PT	EX & NEW CB/PT	EX CB/ PT	IT HM SCREEN/ DOOR	MT	V	-----	AT	---	8'-6"	

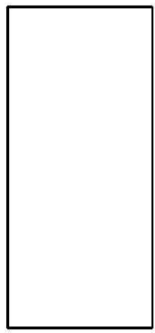
APPENDIX

RENOVATIONS TO ST. JOSEPH CES, DOURO											Wilcox Architects Inc. March 2018		
<u>ROOM FINISH SCHEDULE</u>											Page 3 of 4		
		WALLS					FLOOR & BASE			CEILING			
		North	East	South	West	Comments	Floor	Base	Comments	Type	Fin.	Comments	
Rm. No.	Room Name												
3	NEW MTG RM	EX CB/PT	NEW CB/PT	EX CB/PT	EX CB/PT	-----	MT	V	-----	AT	---	8'-6"	
4	NEW B.F. W/C	NEW CB/PT	EX CB/PT	EX CB/PT	NEW CB/PT	-----	MT	V	-----	AT	---	8'-6"	
5	EX. STAFF ROOM	EX & NEW CB/PT	EX & NEW CB/PT	EX CB/PT	NEW CB/PT	PT DOOR/FRAME	MT	V	-----	AT	---	8'-6"	
5A	EX W/C	EX CB/PT	EX CB/PT	EX CB/PT	EX CB/PT	-----	MT	V	-----	AT	---	8'-6"	
5B	EX W/C	EX CP/PT	EX CB/PT	EX CB/PT	EX CB/OT	-----	MT	V	-----	AT	---	8'-6"	

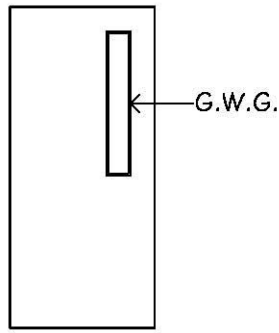
APPENDIX

RENOVATIONS TO ST. JOSEPH CES, DOURO											Wilcox Architects Inc. March 2018		
<u>ROOM FINISH SCHEDULE</u>											Page 4 of 4		
		WALLS					FLOOR & BASE			CEILING			
		North	East	South	West	Comments	Floor	Base	Comments	Type	Fin.	Comments	
Rm. No.	Room Name												
6	NEW W/C	EX CB/PT	EX & NEW CB/PT	NEW CB/PT	NEW CB/PT	-----	MT	V	-----	AT	---	8'-6"	
7	NEW SENSOR RM 1	EX CB/PT	EX CB/PT	EX CB/PT	NEW CB/PT	-----	MT	V	-----	AT	---	8'-6"	
8	EX CHANGE RM 1	EX CB/PT	NEW CB/PT	EX CB/PT	EX CB/PT	-----	MT	V	-----	AT	---	8'-6"	
9	NEW SENSOR RM 2	EX CB/PT	EX CB/PT	NEW & EX CB/PT	NEW CB/PT	-----	MT	V	-----	AT	---	7'-6"	
10	EX CHANGE RM 2	EX CB/PT	NEW CB/PT	EX CB/PT	EX CB/PT	-----	MT	V	-----	EX CONC	PT	7'-10"	

DOOR TYPES

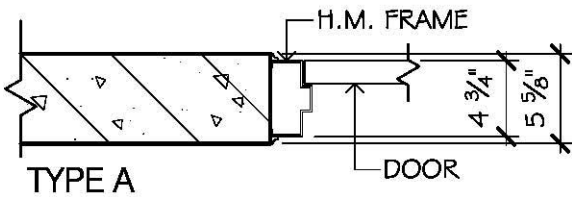


TYPE A

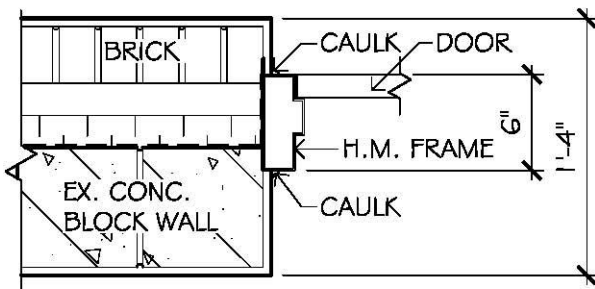


TYPE B

FRAME TYPES



TYPE A



TYPE B

APPENDIX

<p>RENOVATIONS TO ST. JOSEPH CES, DOURO</p>	<p>Wilcox Architects Inc. March 2018</p>
<p>Page 1 of 1</p>	
<p><u>DOOR SCHEDULE</u></p>	

DOOR					FRAME			COMMENTS
No.		Type	Mat.	Fin.	Type	Mat.	Fin.	
1	3'-2" X 7'-0"	A	HM	PT	A	HM	PT	POWER OPERATOR ¾ HR RATED
2	3'-2" X 7'-0"	B	HM	PT	A	HM	PT	-----
3	2'-6" X 7'-0"	A	HM	PT	A	HM	PT	-----
4	2'-8" X 7'-0"	B	HM	PT	EX	HM	PT	¾ HR – CONFIRM SIZE
5	2'-8" X 7'-0"	B	HM	PT	EX	HM	PT	¾ HR – CONFIRM SIZE
6	3'-0" X 7'-0"	A	HM	PT	B	HM	PT	CONFIRM SIZE

HARDWARE LIST

Door #1 – New B.F. Washroom to Existing Corridor

1	Lever Privacy Set	28 X 10U65 X LL X 626
3	Hinges	FBB168 114 X 101 C15
1	Electric Strike Fail Safe	1006 X FS X CLB X 630
1	Power Operator	SW 200i X SINGLE HSG X628 plus SW200 i add for inswing arm Operator to be installed by a factory trained installer. All wiring to be run by the electrical subtrade.
1	Occupied & Emergency Kit Recess	#OCC – 1 – EMR – R KIT To be installed to control the privacy of the occupant, in conjunction with the auto door operator as well as provide emergency response capabilities, including alarms inside and outside of washroom.

Kit includes:

2	Ea Button CM45/4 X 630 (Recessed Boxes By Others)	1 Ea Push to Lock Button CM45/8 X 630 (Recessed by Others)
1	Ea occupied sign 4 3/4" x 9" 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 CM-AF501SO (Recessed Boxes by Others)	1 Ea Transformer 24Vac
1	Ea Power Controller CX-PS13 V3	1 Ea Sign CM-SE21A
1	Floor Stop	6 SH 218
1	Kick Plate	232 W X 626

HARDWARE LIST

Door #2 – Existing General Office to New Meeting Room

1	Lever Latchset	28 X 10U15 X LL X 626	
3	Hinges	FBB168 114 X 101	C15
1	Floor Stop	6 SH 218	

Door #3 – Existing Classroom to New W/C

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

Door #4 – New Sensor Room 1 to Existing Corridor

1	Lever Classroom Lockset	28 X 10G37 X LL X 626	
3	Hinges	FBB168 114 X 101	C15
1	Closer	4041 X 689	
1	Floor Stop	6 SH 218	
1	ASA Cylinder	6673 x 626	

HARDWARE LIST

Door #5 – New Sensor Room 2 to Existing Corridor

1	Lever Classroom Lockset	28 X 10G37 X LL X 626		
3	Hinges	FBB168	114 X 101	C15
1	Closer	4041 X 689		
1	Floor Stop	6 SH 218		
1	ASA Cylinder	6673 X 626		

Door #6 – Existing JK Room to Exterior

1	Panic Device	8804 X LESS TRIM X 630		
1	Pull	12L X 630		
3	Hinges	FBB168	114 X 101	C15
1	Closer	4041 X 689		
	Weatherstripping	W17 X 18'-0" / 1 sweep W135		
1	ASA Cylinder	6673 X 626		
1	Threshold	CT11		

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
LIST OF ABBREVIATIONS

Wilcox Architects Inc.
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.	Block	BR ANOD	Bronze Anodized
BLDG	Building	B/S	Both Sides
BLKHD.	Bulkhead	BTM, B/	Bottom Of
BLW	Below	B.U.R.	Built-Up Roof
BM.	Beam, Beams		
CAB.	Cabinet	COL	Column
CABS	Cabinets	CONC.	Concrete
CAR	Carpet	CONT.	Continuous
C.B.	Catch Basin	CRS	Course
CB	Concrete Block	CS	Concrete Slab
CCS	Clear Concrete Sealer	CT	Ceramic Tile
CLF	Chain Link Fence	CTNG	Coating
CLG	Ceiling	CTOP	Counter Top
CLOS	Closet	C/W	Complete With
CNR	Corner		
D.C.	Display Case	DN	Down
DIA	Diameter	DR	Door
D/G	Double Glazed	DW	Drywall
E	East	EQ	Equal
EL	Elevation	E/S	Each Side
ELEC,ELEC'L	Electrical	EX., EXIST	Existing
ELEV	Elevator	EXT.	Exterior
ENCL	Enclosed		

APPENDIX
LIST OF ABBREVIATIONS

Wilcox Architects Inc.
Page 2 of 4

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

APPENDIX LIST OF ABBREVIATIONS

Wilcox Architects Inc.
Page 3 of 4

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

APPENDIX LIST OF ABBREVIATIONS

Wilcox Architects Inc.
Page 4 of 4

S	South	S.P.	Splash Pad
S.A.B.	Sound Attenuation Blanket	S.P.M.	Single Ply Membrane
SAN.	Sanitary	S.S.	Stop Sink
SC	Solid Core	ST	Stain
SCR	Screen	STD	Standard
SEP	Separation	STL	Steel
S/G	Single Glazing	STR	Stringers
SHLVS	Shelves	STRUCT'L	Structural
SHTG	Sheating	ST.S	Storm Sewer
S.O.G.	Slab On Grade		
T/	Top Of	T.T.	Terrazo Tile
T.B.	Thermal Broken	T. & WD	Towel & Waste Disposal
T. & B.	Top And Bottom		
TEX	Textured	TYP	Typical
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 Wallcovering
V.B.	Vapour Barrier		
W/	With	WIN	Window
W.C.	Water Closet	W.F.	Wood Fibre
WD	Wood	W.V.	Water Valve

CAT 18002/Specifications