SPECIFICATIONS

NEW UNIVERSAL WASHROOM/LOBBY RENOVATIONS
MONSIGNOR LEO CLEARY ELEMENTARY SCHOOL
COURTICE
FOR
PETERBOROUGH VICTORIA NORTHUMBERLAND & CLARINGTON CATHOLIC DISTRICT SCHOOL BOARD

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CAT 24055/Specifications

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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 Architect. The Architect will be the administrator of the contract.

1.3. Space will be vacant during the work.

2. **WORK UNDER THIS CONTRACT**

2.1. Work includes for:

Construction of new universal washrooms in existing lobby/main entry to school. Involves removal of all ceiling, bulkheads, and section of existing terrazzo/concrete slab. New steel stud/drywall partitions, section of concrete slab, ceramic tile, doors/frames, and ceiling/lighting all connected to existing services.

END OF SECTION 01010

1. Cash allowances shall be expended only on the Architect's/owner's written instructions.

2. The Contractor's charges for overhead and profit on account of Cash Allowance shall be included in the Contract Amount in accordance with G.C. 4.1 of the General Conditions of the Contract as amended.

3. Credit the Owner with any unused portion of Cash Allowances in the statement for final payment.

4. If a test made under payment by a specified allowance proves that the material tested is unacceptable, then the subsequent testing and replacement materials shall be at Contractor's expenses.

5. Include in the stipulated sum quoted a single Cash Allowance in the amount of $5,000.00.
    - computer and telephone wiring
    - P.A. system

    Return any surplus equipment to the owners.

TOTAL $5,000.00

END OF SECTION 01020

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, doors/frames, fixtures, fitments, acoustic tile ceilings/lighting, and partitions as per the demolition plans.

1.5 Confirm locations for bins for removals in advance of work.

1.6 Remove section of existing concrete slab in washroom area as per the Demolition Plan to revise plumbing to suit new layout.

1.7 Provide new opening and lintel for new corridor door. Provide adequate temporary support.

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 including neighbouring structures and parking lots 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 requirements of Division 01.

1.2. Work of this section includes supply and placing of concrete at slab removals.

1.3. All workmanship to be performed by skilled and experienced workmen with a competent supervisor to be on site continuously throughout each work day.

1.4. Protect existing and new construction. Be responsible for repair and/or replacement of items damaged in the construction of this work.

2. **MATERIALS**

2.1. The ultimate 28 day compressive strength of concrete unless noted otherwise, shall be 25 Mpa with air entrainment content of 5.9% to 7% and maximum water/cement ratio by mass of 0.55.

2.2. The concrete supplier shall be responsible for concrete mix design - conform to CSA A23.

2.3. Only read mix concrete is permitted on this job.

2.4. Vapor barrier to be 6 mil polyethylene

2.5. Joint filler to be non-extruded pre-moulded fibre type saturated in bituminous binder, if needed.

3. **EXECUTION**

3.1. Supply and install concrete, including placing, finishing and curing as shown in accordance with CSA A23 and CSAG30.

3.2. Install pre-moulded joint filler at all junctions of slab with foundation wall.

3.3. Provide new concrete slab as noted on the drawings, over vapour barrier – steel trowel finish.

3.4. Provide two coats of clear sealer.

END OF SECTION 03300

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 All cabinetry to have plastic laminate Hard Rock Maple finish over particle board. All exposed edges to have 3mm PVC edge banding. All interiors of doors to be classified as exposed. Use ¾" for all shelving, door/drawer fronts and gables. Use ½" for drawer bottoms and cabinet backs.

2.3 All cabinetry to be frameless type complete with 120^0 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	4" long stainless steel functional pull 3311 BP221170 Richelieu complete with screws
DOOR HINGES	125 Degree Clip top BLUMOTION Soft Close Hinges with Dowel 71B7580D180 and adjustable Cam Mounting Plates 173H710180 and Hinge Cover Plates
DOOR BUMPER	Clear soft adhesive type (2 per door)
RECESSED PILASTER	K & V #255 ZC
PILASTER CLIP	K & V #256 ZC

3. EXECUTION

3.1 Include for all finishing work indicated on drawings.

3.2 Edge all doors, shelves, PVC banding with adhesive. Fasten all work blind using screws and secure to solid blocking/substrate.

3.3 Co-ordinate work with other finishing trades/ mechanical and electrical trades for installation of services.

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 received finish.

3.6 Install all 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. – section 08200 Wood Doors.

1.6. Prepare and co-ordinate 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 18gs. Wipe coat galvanized steel with no visible seams complete with 16 ga. end channels weld 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. Firelite glazing in rated doors.

3. EXECUTION

3.1. Installation of frames and doors by Division 9.

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. 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 06200 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. All hardware will be master keyed to owners existing system.

2. **MATERIALS**

2.1. See Hardware Schedule.

3. **EXECUTION**

3.1. Conform to schedule for mounting heights and locations for rough in to be later provided.

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 Division 9.

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.

2.10. Metal access panels – 2' x 2' hinged, tamper proof non-rated metal access panels with frames.

2.11 Metal studs 6" wide for walls/2" thick for bulkhead framing (non load bearing): Galvanized sheet, minimum 0.59 mm overall thickness zinc coating Z275 (25gsg) (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 Flooring and Ceiling Partition Track: Galvanized sheet steel minimum 0.05 mm overall thickness zinc coating Z275 (25gsg) (0.247") pre-punched with square holes along center line and with minimum 1 -1 ¼" 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 ½ " thick mineral wool by Roxul or equal.

2.14 Cement board – ½" thick for ceramic tile areas – see drawings for locations and heights.

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. Frame bulkheads as per details.

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 sound insulation in all wall cavities.

3.5 Make good drywall at cutouts for services and other work, and defective. Fill in defective joints, holes and other depressions with joint compound, 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 breads and other metal trim, leave all surfaces ready for specified finishes.

3.8 Install cement board for locations as per drawings.

3.9 Clean up and remove excess material from site.

END OF SECTION 09250

1. GENERAL

1.1 Comply with requirements of Division 01.

1.2 Fully protect the work of others from damage arising out of the execution of the work.

1.3 Cover floors with heavy kraft paper and remove just before final cleaning.

1.4 Provide 1 calcium chloride test for each washroom to confirm moisture content is acceptable to install new flooring.

2. MATERIALS

2.1 Ceramic Tile: Wall tile to be Snow White matte finishes 4” x 12” Ontario Series and floor tile to be 2" x 2” Mottled Grey FS Quebec Series with integral cove base by Olympia or equal.

2.2 Adhesive:
- Primer, grout, cements, self levelling, and waterproof products to Kiesel system distributed by Halton Imports or approved equal.

2.3 Grout shall be made with Flextile Polymer modified wall grout admixture, or approved alternate to manufacturer’s printed instructions, (waterproof, self-curing, non-dusting, dry-set cement type, non absorbent, capable of being colours, suitable “thin-set” method of tile installation. Colour to be selected later from standard colour list for suites.

2.4 Resilient Base: Cove bottom, ¼” thick, 4” high by Johnsonite Industries Limited or equal as approved by Architect in colours as selected by Architect from manufacturer’s standard range. See drawings for locations in Lobby area new partitions.

3. EXECUTION

3.1 Prepare surfaces and install tile in strict accordance with the manufacturer's directions. Remove paints and other impurities. Apply primer and self levelling products and waterproofing system for all floors and all walls/shower floor strictly in accordance with the manufacturer's recommendations.

3.2 Perform work neatly and carefully by persons skilled in this trade.

3.3 Note that backing surface shall be sound, well-cured and dry and surface variation shall not exceed 6mm in 2.4M (1/4" in 8-0"). Wall substrates to be concrete block or cement board installed by other Divisions.

3.4 Apply adhesive in accordance with manufacturer's instructions.

3.5 Layout tile so that fields or patterns are centred and so that no tile is less than one half size. Joints to run through. Faces and joints shall be plumb and true. Form intersections, corners and returns accurately. Butt internal vertical intersections.
Note: slope to drain at shower area.

3.6 Sound tiles after setting and replace hollow-sounding units to obtain full bond.

3.7 Clean with cloths dampened with mineral spirits and allow to dry overnight before grouting and grout with dry-set cement forcing grout well in joints and remove excess and polish with clean cloths.

3.8 Do not permit any foot traffic for 48 hours following installation.

3.9 Provide full maintenance and cleaning instructions for inclusion in maintenance manuals.

Cleaning

3.10 Clean tile immediately after grouting. Stainless steel wool may be used to remove spots of grout which have set on surface.

3.11 If acid cleaning is deemed necessary, obtain written permission from Architect before proceeding.

END OF SECTION 09300

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 centered 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. Extend and match to existing ceilings as noted.

END OF SECTION 09510

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 surfaces fully.

1.8. Concrete block to be painted to be allowed to cure for 30-60 days depending on drying conditions.

2. **MATERIALS**

2.1. Manufacturers approved for supply of materials are:

- Canadian Industries Ltd. (CIL)
- Color Your World
- 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 New Metal Door Frames

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

Interior New Painted Drywall

- 1 coat of latex sealer
- 2 coats of acrylic latex eggshell finish (bulkheads)

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. 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 – all locations
  - 610 x 1220mm fixed mirror in stainless steel frame for each sink location. American Specialties or equal.
- Universal Washroom

  - Grab Bars for each toilet
    - 30 – 40mm O.D. 18 ga. chrome plated with mandrel ends fully knurled to 100mm from bends secured with 64mm non-corrosive screws to solid backing capable of supporting 500 lbs. pull including:
      a) 600mm long at 150mm above toilet tank
      b) 760mm horizontal/vertical components with vertical mounted 150mm off front end of toilet seat
      c) 1000mm vertical and L shaped 1000 x 760mm for shower
  - Chrome L shaped shower rod and curtain with ceiling support at bend
  - Stainless steel shelf 100 wide x 400mm long
  - Recessed stainless steel soapdish
  - Folding shower seat to be B-5191 by Boberick or equal. Seat to be 460 wide x 400 deep.
  - Safety coat hook (single) 1150 Frost or equal. All stainless steel.

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

Electric hand dryer by Division 16.

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. Modify and connect to existing plumbing.

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. Modify and connect to existing plumbing.

2.3. **Type A**
Barrier free toilet to be American "Cadet Pro" 215CA.154 floor mounted elongated from, 6 1 (1.6 gal) flush 2 1/8" glazed trapway, lined tank, chrome finished handle, and tank cover locking device. Contoco 820STS open front solid heavy duty plastic seat (no cover) and stainless steel hinges complete with rigid supplies and escutcheons. ½" cold water, 3" drain and 1½" vent. All or equal.

2.4. **Type B**
Barrier free sink to be "Murro" no. 0954 004EC wall hung, vitreous china, rear overflow, self draining deck, 4" centers complete with electronic hand washing faucet – Sloan Options systems ETF – 80 or equal plus trimplate, transformer and mixing valve, metal drain with open grid strainer. Provide thermostatic mixing valve under sink set at 109^0F, rigid supplies and escutcheons, offset "P" waste trap with cleanout, ½" hot and cold water, 1 ¼" drain, and 1 ¼" vent. Provide metal carrier for metal stud wall support of sink. Comes with shroud. All or equal.

2.5. Floor drain to be cast iron body, trap primer ½" thick, 3" diameter nickel bronze strainer and grate Zurn or equal.

2.6. Barrier free shower to be Delta T13H152, C/W rough in valve body R10000 series pressure balancing valve, integral checks, metal lever handle, hand shower with 36" stainless steel grab bar. Max flow 4.3 L/min.

2.7. **Exhaust & Duct Work/Grilles**
Provide ductwork to dimensions and locate as per drawings. Connect to existing central exhaust ductwork. Provide new ductwork for make up air transfer to lobby with fire damper. Provide grilles to locations and sizes as called for to E.H. Price or equal.

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 confirm 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 thorough 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.

3.15 Install ceiling grilles in locations as per drawings and connect to existing ductwork.

END OF SECTION 15400

ELECTRICAL

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.
- Provide wiring and connections for all new lighting, exhaust fans, hand dryers, and automatic controls for plumbing fixtures as per Division 15. Circuit accordingly and tie into existing electrical panel/feeds.

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. **SYSTEMS DEMONSTRATION**

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

5. **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.

6. **OTHER**

- Wall sensor switch to be Eaton VNW-D – 1001 – MV –W or equal
- Provide 120V power to power operator/electric strike for universal washroom lobby corridor door and future lift device in box in ceiling space – confirm requirements and co-ordinate with owner's subtrade.

- Acoustic tile light fixture type A to be 2 x 4 recessed LED troffer 3257 lumens (29.8 W) with standard shielding 12 OVDC, 5W, MR16 LED. Connect to existing wiring.
- Pot lights to be 6" round LED downlight, 670 lumens, 90CH, 40K, 120V 13W, white, Lithonia or equal.
- Emergency lighting to be dual head complete with battery 12E SL by Emerglite or equal wall mounted.
- Hand dryer to be XLERATOR XL-W-FLO or equal and provide power to suit.
- Fire alarm/strobe to be FS-400-RR by Mircom or equal, colour white, and confirm compatible with the existing fire alarm system.
- Exit Sign – to be self powered running, single face, wall or ceiling mount with arrows as indicated, LED lamps for 120 VAC, CSA certified, Emergilite or equal, EA series.
- Relocate existing detection devices as indicated on the drawings.

NEW UNIVERSAL WASHROOM/LOBBY RENOVATIONS
MONSIGNOR LEO CLEARY ELEMENTARY SCHOOL
COURTICE
FOR
PETERBOROUGH VICTORIA NOTHUMBERLAND
& CLARINGTON
CATHOLIC DISTRICT SCHOOL BOARD

HARDWARE LIST

Door #1 – Existing Lobby to New Universal Washroom

1	Lever Storeroom Lockset	28 X 10G04 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 ¾" 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)

NEW UNIVERSAL WASHROOM/LOBBY RENOVATIONS
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HARDWARE LIST

2	Ea Assistance Requested CM-AF501SO (Recessed Boxes by Others)	Ea Transformer 24Vac
1	Ea Power Controller CX-PS13 V3	Ea Sign CM-SE21A
1	Wall Stop	232 N
1	Kick Plate	32 W X 626
1	Low Profile Aluminum Threshold/Transition Strip	

Door #2 – Existing Lobby to Existing Custodian Room 102

1	Lever Storeroom Lockset	8 X 10G04 X LLX 626
3	Hinges	BB168 114 X C15
1	Closer	040 X PXX 689
1	Floor Stop	6 SH 219
1	Kick Plate	232 W x 626

Door #3 – Existing Lobby to Existing General Office
Reuse all existing hardware for new door in existing frame/screen.

APPENDIX

NEW UNIVERSAL WASHROOM/LOBBY RENOVATIONS **February 2025**
MONSIGNOR LEO CLEARY ELEMENTARY SCHOOL, COURTICE **Page 1 of 1**
FOR PETERBOROUGH VICTORIA NORTHUMBERLAND & CLARINGTON
CATHOLIC DISTRICT SCHOOL BOARD

Room Finish Schedule

		WALLS					FLOOR & BASE			CEILING/HT		
		North	East	South	West	Comments	Floor	Base	Comment	Type	Fin.	Comments
Rm. No.	Room Name	NEW U.O.N.					NEW U.O.N.			NEW U.O.N.		
101	EX VEST	EX CB/ PT	-----	EX CB/ PT	-----	PT EX HM SCREENS/ DOORS	EX TERR	EX V	----------	EX DW	PT	HT 2400
103	EX CUST	EX CB/ PT	EX CB/ PT	EX CB/ PT	NEW DW/ PT	----------	EX CONC/ EX TERR	EX + NEW V	NEW BASE TO SUIT	EX AT/ NEW DW	PT	HT 2500
104	EX LOBBY	EX CB/ PT	CT	EX CB/ PT + CT	EX CB/ PT	----------	EX TERR	EX + NEW V	NEW BASE TO SUIT	AT/ DW BLKHD	----	PT BLKHD 2400 + AT 2900
103 A	NEW UNIV. W/C	CT	CT	CT	CT	CT	CT	-----	----------	AT	----	HT 2500

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		

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		

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 Mechanical Unit
MIN	Minimum		
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	Preformed
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

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