

This Addendum forms part of the Tender Documents and amends the Tender Documents as described below.

1. ARCHITECTURAL SPECIFICATIONS

1.1 DIVISION 01 - GENERAL REQUIREMENTS

.1 Section 01 10 00 - GENERAL INSTRUCTIONS

.1 Refer to 1.33 CASH ALLOWANCES

- .1 Under Sentence 1.33.1, revise the amount of Stipulated Cash Allowance to \$45,000.00.

.2 Refer to 1.34 INSPECTION AND TESTING ALLOWANCE

- .1 Under sentence 1.34.3, add the following new Cash Allowance items:

- "- Fibre Optic Link to Main IT Room
- UPS Replacement"

- .2 Under sentence 1.34.3, delete the following Cash Allowance item:

- "- Structural Steel Support for Ceiling Fan (supply and installation)."

1.2 DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

.1 Section 06 41 13- ARCHITECTURAL CASEWORK

- .1 Delete all references to "resilient base" and replace with "wood base".

.2 Delete Section 06 41 19 - COUNTERTOPS

.3 Section 06 10 00 - ROUGH CARPENTRY

- .1 Refer to 3.3 - INSTALLATION - ROUGH CARPENTRY

- .1 Add the following new sentence:

".6 Removal and Reinstallation of Existing Wood Siding:

- .1 Carefully remove existing wood siding where required for the work.
- .2 Store existing wood siding for reinstallation.
- .3 Modify existing wood siding where required for the work and treat exposed edges.
- .4 Reinstall wood siding.

- .2 Add the following new paragraph:

"3.4 INSTALLATION - ELECTRIC AND TELEPHONE BACKBOARDS

- .1 Supply and install 19mm thick backboards for fir plywood, fire retardant, pressure treated, solid, good 2 sides, sanded both sides, in electrical and telephone rooms to sizes required by equipment.
- .2 Before installation, all backboards are to be prime painted, both sides. Painting to be in conformance to Specification Section 09 90 00.
- .3 Fasten to wall using fasteners and spacing suitable to wall type to provide secure, sturdy installation which will carry equipment load without damaging wall. Confirm heights and locations required with electrical Subcontractor."

.4 Section 06 20 00 - FINISH CARPENTRY

- .1 Refer to 1.1 WORK INCLUDED

- .1 Add the following new sentence:

"1.1 All finished wood items and trim, other than custom cabinetry, shown on drawings or in Architectural details."

1.3 DIVISION 09 - FINISHES

.1 Section 09 51 00 - ACOUSTIC CEILINGS

- .1 Add new Specifications Section 09 51 00 - ACOUSTIC CEILINGS attached to this Addendum.

.2 Section 09 68 13 - CARPET TILE

- .1 Revise Subsection 2.1.1 Carpet Plank to read as follows:

"1.1 Carpet Plank: loop construction with comprising universal fibers polyester applied pattern polyester felt cushion backing. Kinetix Timber selection by JJ Flooring , 100% solution dyed, type 6.6 nylon yarn with "Protekt" stain protection"

1.4 DIVISION 10 - SPECIALTIES

.1 Section 10 24 00 - METAL MESH AND SCREENS

- .1 Refer to 2.2 Materials

- .1 Add the following new sentence:

"4 Powder Coated Logo and Lettering

- .1 Apply powder coated lettering and logo to Architectural Mesh in factory prior to shipping material to site. Logo and lettering shall be to design indicated in drawings and colours shall be selected from manufacturer's standard range of powder coat colours to suite Owner's corporate colours (allow for 2 colours for lettering and logo)."

1.5 DIVISION 32 - EXTERIOR IMPROVEMENTS

- .1 Replace Section 32 13 13 - CONCRETE PAVING with the attached new Section 32 13 13 - CONCRETE PAVING AND CURBS:
- .2 Add the following new Section 32 17 23 - PAVEMENT MARKINGS.

2. ARCHITECTURAL DRAWINGS

- 2.1 Revise Project address on cover page and titleblocks to read " 1910 Simcoe St N, Oshawa, Ontario"

2.2 Drawing A1.0 SITE PLAN, CANOPY PLAN AND ELEVATION

- .1 Revise grading, culvert retaining stones and asphalt walkway on 2/A1.0 as per ADD-1.
- .2 Revise scupper and sloped roofing on top of canopy on 4/A1.0 as per ADD-2.
- .3 Revise height of canopy on 6/A1.0 as per ADD-3.
- .4 Revise guardrail on 6/A1.0 as per ADD-3.
- .5 Replace drawings 1/A1.0 as per ADD-20.

2.3 Drawing A1.1 CANOPY SECTION, DETAILS

- .1 Revise 1/A1.1 to show insulation and non-compacted fill at new ramp landing as per ADD-4.
- .2 Revise ramp, walkway, guardrail and handrail on 1/A1.1 as per ADD-4.
- .3 Revise 3/A1.1 as per ADD-5.
- .4 Revise 4/A1.1 as per ADD-6.
- .5 Add 5/A1.1 as per ADD-6.

2.4 Drawing A2.1 KEY PLANS, BASEMENT AND FIRST FLOOR DEMO AND RENOVATION PLANS

- .1 Revise 1/A2.1 as per ADD-7 and ADD-8 to show location of new Mechanical and Electrical work in IT Room 0096 and Mech Room 0101.
- .2 Revise 3/A2.1 as per ADD-9 to show new electrical chase, new condensing unit and new wall-mounted phone.

2.5 Drawing A2.2 SECOND FLOOR DEMOLITION AND RENOVATION PLANS

- .1 Revise Reference Demolition Note 104 to read:
"REMOVE TEXTURED WALL COVERING IN SUITES. REMOVE ALL ADHESIVES AND RESIDUE AND PREPARE EXISTING DRYWALL TO RECEIVE NEW PAINTED FINISH AS PER RFS. COORDINATE WITH ELECTRICAL CONTRACTOR REMOVAL OF EXISTING GYPSUM BOARD TO ACCOMMODATE NEW WIRING AND CONDUIT. INSTALL NEW GYPSUM BOARD TO MATCH EXISTING WHERE REMOVED"
- .2 Delete Reference Demolition Note 113.
- .3 Revise 1/A2.2 to remove existing door between Lobby 2000 and Corridor A as per ADD-10.
- .4 Add Reference Renovation Note 106 to read:
"INSTALL NEW 6MM WOOD UNDERLAYMENT BOARD OVER EXISTING SUBFLOOR IN ALL CORRIDORS AND ROOMS RECEIVING NEW LVT FLOORING."

- .5 Revise 2/A2.2 Second Floor Renovation Plan to show Reference Renovation Note 106 in rooms/corridor receiving LVT as per ADD-11 and -12.
- .6 Revise partition tags on 2/A2.2 where noted on ADD-11.
- .7 Revise 2/A2.2 Second Floor Renovation Plan to show chase wall in room 2094 as per ADD-12.
- .8 Revise 2/A2.2 Second Floor Renovation Plan to show new door between lobby and corridor as per ADD-12.

2.6 Drawing A3.0 Door and Frame Schedule, Room Finish Schedule, Door and Frame Types

- .1 Revise Door Schedule as per ADD-13.
- .2 Add Partition Types as per ADD-14.

2.7 Drawing A4.0 SECOND FLOOR DEMOLITION AND RENOVATION REFLECTED CEILING PLANS

- .1 Revise 1/A4.0 as per ADD-15 to show existing camera, wiremold and speakers to remain.
- .2 Revise 2/A4.0 as per ADD-16 to show new ACT ceiling and revised light fixtures in storage rooms 2097 and 2097A, chase wall in 2094B, Conduit in 2094A and revised bulkhead in 2096.
- .3 Add section reference at canopy to 2/A4.0.
- .4 Revise bulkhead in Office 2102, Testing Room 2104 and Office 2108 as per ADD-17.

2.8 Drawing A5.0 WASHROOM DETAILS, INTERIOR DETAILS, MILLWORK DETAILS

- .1 Delete references to "solid surface countertop" and replace with "quartz countertop".
- .2 Revise Meeting room 2095 kitchenette as per ADD-18.
- .3 Add detail 17/A5.0 as per ADD-19.
- .4 Revise 16/A5.0 Bulkhead in offices as per ADD-21.

Attach.

- Section 08 14 00 - Wood Doors
- Section 09 51 00 - Acoustic Ceilings
- Section 09 65 00 - Resilient Flooring
- Section 10 11 00 - Visual Display Boards
- Section 12 36 62 - Quartz Surfacing Countertops
- Section 32 13 13 - Concrete Paving & Curbs
- Section 32 17 23 - Pavement Markings

- ADD-1 to ADD-21

END OF ARCHITECTURAL ADDENDUM NO. 1

PART 1 - GENERAL

1.1 SECTION INCLUDES

- .1 Ultra Heavy Duty Flush Wood Interior Doors:
 - .1 NAUF particleboard core for intensive use wood doors.
 - .2 Finishing of interior wood doors.

1.2 RELATED WORK

- | | | |
|----|------------------------|------------------|
| .1 | Steel Doors and Frames | Section 08 11 13 |
| .2 | Door Hardware | Section 08 71 00 |
| .3 | Glass and Glazing | Section 08 81 00 |
| .4 | Painting | Section 09 90 00 |

1.3 REFERENCES

- .1 All Work to conform to minimum standard for Premium Grade Work as specified in Quality Standards for Architectural Woodwork prepared by Architectural Woodwork Manufacturers Association of Canada (AWMAC) and the Architectural Woodwork Institute (AWI).
- .2 ULC
 - .1 CAN/ULC-S104 Standard Method for Fire Tests of Door Assemblies
 - .2 CAN/ULC-S113 Standard Specification for Wood Core Doors Meeting the Performance Required by CAN/ULC-S104 for Twenty Minute Fire Rated Closure Assemblies

1.4 SUBMITTALS

- .1 Prepare and submit shop Drawings in accordance with Section 01 33 23, and show the following:
 - .1 Product data sheets for each type of door and frame
 - .2 Door and frame schedules.
 - .1 Provide columns for Stock Code Numbers for both doors and frames.
 - .3 Materials and finishes.
 - .4 Hardware preparation.
 - .5 Installation instructions and details
 - .1 Typical and special details.
 - .2 Frame anchorage details.
 - .3 Method and location of exposed fastenings.
 - .6 Storage and handling requirements
 - .7 Other pertinent information.

SECTION 08 14 00 - WOOD DOORS

- .8 Include confirmation that materials, including adhesives, do not contain added urea formaldehyde.

- .2 Samples:

- .1 Submit corner sample of wood door, 300mm x 300mm, cut away to show stile, rail, crossbanding, core, and face veneer, accompanied by written description.
 - .2 Submit duplicate 200 x 250 mm samples of each colour of plastic laminate finish and pattern required.

1.5 PRODUCT HANDLING

- .1 Matchmark doors, panels, frames and windows with Stock Code Numbers as shown on the Door Schedule. If Stock Code Numbers are not shown on the Schedule, matchmark with Door Numbers.
- .2 Deliver, store and handle components so as to prevent damage. Store components off the ground and under cover in a dry, protected area.

1.6 WARRANTY

- .1 Provide an extended warranty of **three (3) years** from date of Substantial Performance against defects of workmanship including core ghosting, warping and delamination of veneer. Work showing defects during this period shall be repaired or replaced without cost to the Owner.
- .2 Warranty to include hanging and finishing of any replacements that may be necessary.

PART 2 - MATERIALS**2.1 PRODUCTS**

- .1 Provide premium grade, ultra-heavy duty, 5-ply, 45mm flush slab doors, NAUF/FSC, finished with plastic laminate.
- .2 Plastic laminate finish from Arborite, Formica, Wilsonart or Pionite. Colour shall be selected by Consultant at a later date.
- .3 Doors, including cores, adhesives, and finishes shall be low VOC, with no added urea-formaldehyde (NAUF), and FSC Certified Wood.
- .4 Wood Doors shall be from one of the following manufacturers:
 - .1 Baillargeon by Masonite Architectural
 - .2 JWS Manufacturing Inc.
 - .3 Lambton Doors
 - .4 Marshfield Wood Doors
 - .5 Mohawk by Masonite Architectural
 - .6 VT Industries
- .5 Provide all wood doors and frames from a single manufacturer, to ensure uniformity in quality of appearance, finish and construction.

- .6 Solid Wood Doors:
 - .1 Stiles and rails shall be bonded to core.
 - .2 Stiles: minimum 85mm wide structural composite lumber
 - .3 Rails: minimum 85mm wide structural composite lumber
 - .1 Anti-warp rail: provide central rail of 133mm wide structural composite lumber at doors wider than 914mm
 - .4 Edges: 11mm min. solid hardwood (Compatible colour edge)
 - .5 Core: NAUF/FSC solid mat formed particle board, density 513 - 577kg/m³, conforming to CSA-O188. No added urea-formaldehyde resins.
 - .6 Adhesive: Type 1, Waterproof, no urea formaldehyde, VOC < 0.683 g/L.
 - .7 Face: Plastic Laminate bonded to 2mm min. hardwood veneer Crossband, NAUF.
- .7 Seal top and bottom of all doors.
- .8 Prepare doors for installation of glass where indicated on door schedule.
 - .1 Provide glazing stops of solid oak, square design.
 - .2 Finish stops using finishing nails - no staples.
 - .3 Provide U.L.C. approved glazing stops for glazing in fire rated doors. Use metal stops where required rating cannot be obtained with wood stops.
 - .4 Stops to be colour matched to door finish.
- .9 Manufacture doors in accordance with CSA-O132.2.
- .10 Provide rated doors where indicated or required, with U.L.C. or Warnock Hersey labels attached. Openings must conform to limits noted in Ontario Building Code.

2.2 FINISHING

- .1 Carefully prepare all work to receive finish. Thoroughly sand all wood surfaces to remove machine marks and make dust-free before finishing.
- .2 Finish all surfaces with one coat of selected stain, one coat of sealer, sanded smooth, and two coats of finish as specified. Apply finish in accordance with best practice and the resultant finish must be of highest quality for furniture use.
- .3 Finish unexposed edges with two coats of tinted sealer.
- .4 The colour of stain shall be selected by the Consultant. Before proceeding submit prepared 300mm x 300mm finished samples of materials for approval.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Fit all wood doors accurately in their frames. Doors must swing easily and close tightly without movement when latched.
- .2 Site verify dimensions of all existing door frames and openings prior to manufacturing doors.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED WORK SPECIFIED ELSEWHERE

- .1 Insulation Section 07 21 00
- .2 Gypsum Board Section 09 29 00

1.2 SCOPE OF WORK

- .1 In Storage and Utility Rooms supply and install new ceiling grid and tiles.

1.3 CEILING SYSTEMS

- .1 This Specification includes the ceiling systems noted below.
- .2 Ceiling systems shall be 600mm x 1200mm lay in exposed Tee system, rated.

1.4 REFERENCE STANDARDS

- .1 ASTM C635 Specifications for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings
- .2 ASTM C636 Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.

1.5 DESIGN

- .1 N.R.C. Range: Unless otherwise noted under description of ceiling system the N.R.C. Range shall be 60-65 (Table 1 of CAN/CGSB 92.1).
- .2 Ceiling S.T.C.: Unless otherwise noted under description of ceiling system the S.T.C. rating shall be 35 or better.
- .3 Light Reflectance: Unless otherwise noted under description of ceiling system, panels shall have a light reflectance co-efficient designation of L.R.1 (0.75 minimum). Table 3 of CAN/CGSB 92.1 refers.

1.6 SAMPLES

- .1 Upon award of the Contract submit full size sample panels proposed for installation. All panels subsequently used on the job shall match the approved sample.
- .2 Submit samples of suspension system members for approval prior to commencement of installation.

1.7 DELIVERY AND STORAGE

- .1 Transport, handle and store material in manner to prevent warp, twist and damage to tile and board edges and surfaces in accordance with the manufacturer's recommendations.

09 51 00 - ACOUSTIC CEILINGS

- .2 Any warped and/or damaged boards, tile and trim shall be rejected and be replaced by new, straight, undamaged and acceptable materials at no cost to the Owner.
- .3 Store material in warm, dry place away from water and the elements. Protect against undue loading stresses and shock.
- .4 All packaged material shall be delivered in original manufacturers' wrappers and containers with labels and seals intact.

1.8 PROTECTION

- .1 Exercise care in the execution of work under this Section to prevent damage to finished surfaces and adjacent work, and mechanical and electrical installations.

1.9 EXTRA PANELS

- .1 Provide 4 typical acoustic panels for use in maintenance work. Obtain receipt from the Consultant or Owner's representative on site.
- .2 Do not use panels supplied to Owner for maintenance work to make good any damaged or removed tile required by Contract.

1.10 SPECIAL CLEANING

- .1 Clean, repair or replace dirty, discoloured or defective units or exposed suspension members to Consultant's satisfaction.

1.11 ENVIRONMENT

- .1 Commence installation after building enclosed and dust- generating activities completed.
- .2 Permit wet work to dry prior to commencement of installation.
- .3 Maintain uniform minimum temperature of 15 deg. C. and humidity of 20% to 40% prior to, during and after installation.

1.12 WARRANTY

- .1 The Warranty stipulated in the General Conditions of the Contract shall be deemed to include the following definition in reference to Work specified in this Section. The following will be considered defects without being limited thereto:
 - .1 Failure of the suspended ceiling to remain water level.
 - .2 Lifting or sagging of tile and board between supports.
 - .3 Staining and discolouration of factory finishes.
 - .4 Development of corrosion of galvanized ferrous metal.
 - .5 Development of cracks, splits and other surface deterioration in acoustic panels.

- .6 Failure of hanging wire anchorage.
- .2 The warranty period shall be **two (2) years**, commencing on the date of Substantial Performance of the Work.

PART 2 - PRODUCTS

2.1 MATERIALS - LAY-IN SYSTEM

.1 Acoustic Ceiling Panels

LAT 1. Armstrong "Minaboard", 600 x 1200 x 23.8mm.

- .1 Equivalent ceiling tiles by Certainteed will also be accepted.

.2 Suspension

- .1 Suspension system to be "DX" 24mm wide faced T-bar by CGC. Equivalent grid by Donn Canada Ltd, or Armstrong will be accepted, contingent on its compatibility with the specified ceiling tiles.
- .2 Exposed interlocking tee grid system, formed out of cold rolled zinc-bond steel 0.54mm thick. Provide fire rated grid where fire ratings noted.
- .3 Main Tees: 38mm x 25.4mm double web rectangular bulb top with capping plate in precoat baked-on white paint finish and incorporating holes for hangers and slots for connecting pieces, and capable of supporting 12.5 kg per 1200mm. for continuous spans and 6.5 kg per 1200mm span for single span without exceeding a deflection fo 1/360 of the span.
- .4 Standard Cross-Tees: 25.4 x 25.4mm double web, bulb top, capping plate in precoated white baked-on finish, capable of supporting 11.3 kg per 600mm span without exceeding a deflection of 1/360 of span, and with positive interlock with main tees.
- .5 Structural Cross-Tees as main tees, but with crimped ends for lapping bottom flange of main tees and interlocking tack ends to engage slots in main tees.
- .6 Accessories: Splice plate, clips, screws, etc. as required to complete the installation. All galvanized finish.
- .7 Concealed flat spline: 0.71mm flat steel spline.
- .8 Edge Trim: 0.635mm zinc bonded steel, cold rolled, reveal recess type mould.
- .9 Carrying Channels: 38mm x 19mm cold rolled galv. weighing 1.042 kg per metre.
- .10 Tie Wire: 1.6mm galvanized soft annealed steel.
- .11 Hangers: 2.6mm galvanized steel wire.

09 51 00 - ACOUSTIC CEILINGS

- .12 Screws: Corrosion resistant, self-tapping Philips truss head, of length and gauge to suit installation.
- .13 Ceiling Hanger Pins (for fixing to metal): capacitor discharge ceiling hanger pins, by Continental Studwelding Ltd., or approved equivalent, of type approved by Consultant.

PART 3 - EXECUTION**3.1 INSTALLATION - GENERAL**

- .1 Employ mechanics skilled in this Trade and install work in strict accordance with the system manufacturer's printed directions to produce a first class, true finish, free from dropping, warpage, soiled or damaged tile.
- .2 Make provisions for thermal movement.
- .3 Install hanger inserts in a manner approved by Consultant.
- .4 Locate hangers directly over Main Tees and as close to intersections as possible. Secure hangers firmly to concrete inserts, steel joists and beams, bracing, etc. Do not install hangers to metal deck, provide separate grid off joists if required.
- .5 Erect ceiling grid plumb and square with accurately fitted locked-in joints in true alignment, secure and rigid and with provision for thermal movement. Water level ceiling to tolerance of 1mm in 1m and maximum deviation of 4mm. from mean level.
- .6 Frame around recesses fixtures, diffusers, grilles and the like and provide heavier section hangers and supports as necessary to support same. Provide hanger within 150mm. of each fixture corner.
- .7 Ensure that all hangers and carrying members are designed and spaced to support entire ceiling system including recessed lighting fixtures. Note, weight of fixtures is approximately 9-13.5 kg.
- .8 Install panels only after all mechanical and electrical equipment, conduits, piping, telephone distribution, etc. are in place.

3.2 INSTALLATION OF LAY-IN SUSPENSION SYSTEM

- .1 Generally hangers shall be spaced at not more than 1200mm o.c. directly above main runner tees, except at fixtures, where they shall be 600mm o.c. or closer as required to adequately support fixtures. Locate hangers as close as possible to tee junctions. Locate first hanger within 300mm of perimeter wall.
- .2 Install main tee runners continuous at 1200mm o.c. with interlocking structural cross-tees each side of fixtures at right angles to main tees. Install standard cross-tees generally at 90 degrees to main tees and as required to achieve pattern shown on reflected ceiling plans. Secure joints by web of tees; snaplock into place forming rigid connections. Main tees shall be as long as possible with butt ends joined by means of splice plates locked into webs.

- .3 Frame up around light fixtures, grilles, diffusers, speakers, openings, etc. as required.
- .4 Secure edge mouldings to walls, bulkheads and other vertical surfaces at perimeter edges of acoustic ceilings.
- .5 Securely fix hangers to tees by bending ends 90 degrees at the correct height and inserting through holes in top of main tees, then wiring around open side at least 3 turns twisting ends together. Flats shall be bolted to tees. Secure to concrete inserts in similar manner.

3.3 LAY-IN PANEL INSTALLATION

- .1 End panels shall not be less than half full size and installation in each area shall be symmetrical, with end tiles and abutting opposite vertical wall surface to be of the same width. Do all necessary cutting and fitting neatly and accurately to suit grid openings and accommodate fixtures, grilles, detectors, speakers and the like located on the ceiling panels.
- .2 Lay directionally patterned acoustic panels in one direction, parallel to the longest direction of the grid concerned.
- .3 Place panels between tees so that edges bear evenly on flanges. Where valves occur above, panels shall be suitably and inconspicuously marked by the use of small coloured pins.
- .4 Conform with existing ceiling layout.

3.4 CLEANING

- .1 Upon completion, clean acoustic tile of all finger marks and other defacements.
- .2 Remove all accumulated rubbish and excess materials from the site.
- .3 Clean acoustic tile and replace any damaged tiles immediately before occupation of building by Owner.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED WORK SPECIFIED ELSEWHERE

.1	Concrete Floors	Section 03 30 00
.2	Porcelain tile	Section 09 30 16
.3	Resilient Sheet Flooring	Section 09 65 16
.4	Sports Flooring	Section 09 65 66
.5	Elevator	Section 14 24 00

1.2 REFERENCE STANDARDS

- .1 ASTM Standards
 - .1 F 141 Resilient Floor Coverings
 - .2 F 386 Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces
 - .3 F 511 Quality of Cut (Joint Tightness) of Resilient Floor Tile
 - .4 F 1482 Standard Guide to Wood Underlayment Products Available for Use Under Resilient Flooring
 - .5 F 1700 Specification for Solid Vinyl Tile.
 - .6 F 1304 Deflection of Resilient Floor Tile
 - .7 F 1344 Specification for Rubber Floor Tile
 - .8 F 1861 Specification for Resilient Wall Base
 - .9 F 2055 Size and Squareness of Resilient Floor Tile by Dial Gage Method
 - .10 F 2195 Specification for Linoleum Floor Tile
 - .11 E 662 Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
 - .12 E 1907 Methods of Evaluating Moisture Conditions of Concrete Floors to Receive Resilient Floor Coverings
 - .13 F 970 Standard Test Method for Static Load Limit
- .2 ULC
 - .1 CAN/ULC-S102.2 Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering and Miscellaneous Materials and Assemblies
- .3 Resilient Floor Covering Institute (RFCI)
 - .1 IP #2 Recommended Installation Practice for Vinyl Composition Tile (VCT)

1.3 SUBMITTALS

- .1 Submit samples as per Section 01 33 23. Submit manufacturer's samples of actual sections of tile and accessories; include manufacturer's full range of colour and patterns available.
- .2 Samples for Verification Prior to Installation: Submit full size samples of all types, colours, and patterns selected, indicating full range of patterning and colour variations.
- .3 Coordinate with supplier of custom marbleized rubber flooring and stair tread/risers and Consultant to arrange for colour selections and provision of "strike-off" sample well in advance of material order date (8-10 weeks before materials are required).

SECTION 09 65 00 - RESILIENT FLOORING

- .4 Submit manufacturer's printed installation instructions and maintenance manuals for each material specified.

1.4 EXTRA MATERIALS

- .1 At completion of this Work hand over to Owner minimum 2% of each type and colour of flooring installed.
- .2 Material to be in wrapped packages or fully labelled as to produce and colour.

1.5 WARRANTY

- .1 Submit manufacturer's warranty warranting material and performance for a period of **five (5) years** following the date of Substantial Performance of the Work.

PART 2 - PRODUCTS**2.1 MATERIALS**

- .1 Adhesives:
 - .1 Solvent-free white acrylic, as recommended by manufacturers of vinyl composite tile, rubber flooring, and base.
 - .2 LVT adhesive: Mapei Ultrabond G19 or equal recommended by the flooring manufacturer.
 - .3 Rubber base adhesive: Mapei Ultrabond ECO 575 or equal. Adhesive must produce good and permanent waterproof bond between wall surfaces and cove base.
- .2 Luxury Vinyl Tile (LVT):
 - .1 Flexible PVC plank flooring, min. 2.5 mm thick with minimum 0.7mm clear PVC wear layer, no-wax finish, wood pattern; I.D. Inspiration 70 Solid Vinyl Tile by Johnsonite , 200 mm x 1220mm planks, or Allura Wood Authentic LVT HQ by Forbo, 152 x 1000mm planks, or Mirra Luxury Vinyl Tile flooring by AmericanBiltrite, 152x915mm planks.
- .3 Base at new tub wall in existing washroom:
 - .1 102mm x 3mm thick "Traditional" rubber cove base by Johnsonite or equivalent rubber base by Armstrong. Colour as selected at a later date by the Consultant.
- .4 Sealer: Type approved by flooring manufacturer.
- .5 Edge Trim: Aluminum or brass alloy with lip of edge strip extending under and with shoulder finishing flush with top of resilient floor.
- .6 Transitions at ceramic floor tile: Schluter Systems transitions, as specified in Section 09 30 00.
- .7 Edge Trim:
 - .1 Johnsonite Slim Line Transitions; metallic colours

- .2 SLT-XX-A for LVT to carpet tile
- .8 Trowelable Levelling Agent:
 - .1 K60 Arditec Rapid Setting Latex Smoothing and Levelling Compound by Ardex; Portland cement based, self-smoothing, trowelable, latex levelling compound.
 - .2 For transitioning between finish floor levels.

PART 3 - EXECUTION

3.1 EXAMINATION AND TESTING

- .1 Check floor surfaces for evidence of carbonation, dusting, excessive moisture or other defects affecting bond of adhesive. Ascertain nature of curing and/or sealing compound used on concrete and its compatibility with flooring adhesive. Take all required remedial measures. Remove compounds if necessary to ensure that adhesive bonds to concrete.
- .2 Test concrete slab, using anhydrous calcium chloride test, in conformance with ASTM F1869. Do not proceed until moisture vapour emission rate is equal or less than 2.44kg/100m²/24hours (3lbs/1000sq.ft./24hours).
- .3 Confirm pH level of concrete is acceptable to manufacturers of adhesive and tile. Generally, pH level is to be 9 or less.
- .4 Perform bond testing to confirm compatibility between concrete slab and adhesives.
- .5 Take readings of room temperature and relative humidity (RH) before, during, and after installation. Environmental conditions shall conform to these specifications and the requirements of the material manufacturers.
- .6 Provide test results to manufacturers of products proposed for use, and obtain approval of conditions before commencing installation.

3.2 INSTALLATION - GENERAL

- .1 Do not start installation of resilient flooring until all other trades have completed their work and just prior to completion of building.
- .2 The permanent HVAC system must be in operation before installing VCT.
- .3 Keep all tile and accessories at the job site at room temperature (min.18°C. and max. 29°C.) for at least 48 hours before installation, during the work, and for minimum 48 hours after completion of installation.
- .4 Ensure that interior air relative humidity (RH) is within limits recommended by the product manufacturers, as excessively high or low RH will affect curing of floor patching and levelling materials.
- .5 Obtain approval from manufacturers for all adhesives, caulking, patching and levelling agents, installation methods, and environmental conditions, before proceeding with the work of this section.

- .6 Ensure flooring materials are clean of any contaminants which would interfere with proper bonding.

3.3 PREPARATION

- .1 Install new wood underlayment board over existing plywood substrate. Underlayment boards shall be group 1, exterior grade plywood, CC plugged or better conforming to APA classification for underlayment grade subfloor.
- .2 Installation of wood underlayment shall comply with ASTM F499-84 standard.
- .3 Underlayment board shall be new and acclimated for at least 24 hours to the job site condition prior to installation.
- .4 Where required, fill and patch wood underlayment to fill and level seams, cracks, indentations and other subfloor irregularities. Use fast setting cement-based polymer modified patching compound and Acrylic latex additive, as recommended by flooring manufacturer. Do not use calcium sulfate, plaster, or gypsum based compounds.
- .5 Close off areas where tile work is in progress to prevent deposit of dust or grit on slabs where tile is being laid.
- .6 Where resilient abuts high floor finishes, such as porcelain tile, build up edge of lower flooring with trowellable smoothing and levelling compound; feather over 1800mm to eliminate ridges.

3.4 APPLICATION - LVT

- .1 Apply adhesive uniformly with an approved notch-tooth spreader at the recommended rate. Do not spread more adhesive than can be covered before initial set takes place. Use waterproof adhesive throughout. Wipe up excess adhesive as work progresses.
- .2 Install flooring in conform to floor patterns on drawings, where applicable.
- .3 Unless otherwise indicated on drawings, lay out each area to be tiled symmetrically from its axis. Adjust starting line so width of border tile shall be at least one half tile. Distribute tiles having varying tones or texture evenly over entire floor area to avoid patches or streaks, and to produce homogeneous blend. Reject tiles having undue variations in colour, shade and texture. Make tile joints flush, uniform, in straight lines and as inconspicuous as possible.
- .4 Lay out tiles so that joints are parallel to axis of room are continuous. All joints to be staggered.
- .5 Layout plank flooring in a similar manner to tile flooring. Establish centre of room and adjust layout to ensure that no plank sections at perimeter of room will be less than 150mm in length. Stagger planks for a random appearance, while ensuring joints are offset at least 150mm from adjacent joints.
- .6 Cut flooring around excessively heavy or fixed objects. Lay tile so that it is flush with adjacent floor surfaces.

- .7 Roll tile with 68 kg roller immediately after laying. In areas inaccessible to large roller, use a small hand roller.
- .8 Install metal edge strips at unprotected edges of resilient flooring.

3.5 **APPLICATION - COVE BASE**

- .1 Fill cracks and level irregularities of surfaces to which base is to be applied with filler approved by adhesive manufacturer so as to provide solid backing over entire area behind base.
- .2 Cement cove base to vertical surfaces so that gaps do not occur behind base, so that front lip of base cove bears firmly and uniformly on floor surface, and so that good and permanent bond is produced between base and surface to which it is applied.
- .3 For right angled external corners use preformed matching cove corner units. Make end joints flush with gap.
- .4 At wall ends and openings where ends of preformed corners come close together or touch or overlap, cut each corner unit equally so that a neat, inconspicuous joint is formed in middle of wall end or opening or so that filled gap, if gap is necessary, is not less than 38mm wide and located in middle of wall or end of opening.

3.6 **CLEANING**

- .1 Remove surplus adhesive from face of tiles as work progresses.
- .2 Upon completion of work remove all markings and heel scuffs. Broom clean.
- .3 Prior to occupation by Owner, broom clean all resilient floors and remove all noticeable stains and marks.
- .4 All wet mopping and waxing will be done by the school custodial staff.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED WORK SPECIFIED ELSEWHERE

- | | | |
|----|--------------------|------------------|
| .1 | Rough Carpentry | Section 06 10 00 |
| .2 | Custom Cabinets | Section 06 41 00 |
| .3 | Projection screens | Section 10 95 00 |

1.2 SUBMITTALS

- .1 Submit Shop Drawings in accordance with Section 01 33 23. Indicate field dimensions on shop drawings.
- .2 Shop drawings to show sizes, types, layouts, and installation details.
- .3 Submit samples of visual display boards as requested by the Consultant.
- .4 Include copies of trade literature, outlining the care and maintenance of the installation, in Maintenance Manual.

1.3 STORAGE

- .1 Deliver units fully assembled to the maximum extent practical.
- .2 Store all materials within the building in clean, dry area, and in accordance with manufacturer's recommendations.
- .3 Store material in manner which will not damage, mark or cause other defects detrimental to the finished appearance. Provide such protection as necessary to guard against damage and marring from this and other trades. Maintain such protection until ordered removed by the Consultant.

1.4 WARRANTY

- .1 Extend the Warranty period stipulated in the General Conditions of the Contract to two (2) years.
- .2 Writing boards shall carry a 25 year warranty against defects appearing under regular classroom usage and wear. All Warranties to be given in writing.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Materials listed herein are as manufactured by Architectural School Products. Equivalent products as supplied by Global School Products Inc. are acceptable.
- .2 Markerboards are to be of sizes indicated on drawings.

10 11 00 - VISUAL DISPLAY BOARDS

- .3 Standard Aluminum Trim to be Series 200, as follows:
 - .1 Perimeter Trim: No.205
 - .2 Dividerstrip: No.207
 - .3 Marker tray: No. 212, complete with end pieces
- .4 All exposed aluminum to have clear anodized satin finish.
- .5 Markerboards:
 - .1 White porcelain enamel writing board for markers. 12mm thickness composed of porcelain enamel surface fused under high heat to a high quality enamelling steel surface face sheet with 11mm impregnated tentest core with balancing zinc coated steel back-up sheet.
- .6 Joints to be absolutely flush and level, plumb and true with edges finished square and fitted as closely as possible. Use concealed joint fasteners.
- .7 Mounting heights of marker boards, marker/chalk rail and tackboards shall be as directed by Consultant, or as indicated on drawings.

PART 3 - EXECUTION**3.1 INSTALLATION**

- .1 Supply all labour, materials, anchors, fasteners necessary to complete the installation of markerboards (writing boards) throughout the project. All installations to be done by tradesmen experienced in this type of work.
- .2 Erect all units plumb, level and accurately in locations shown on the Drawings or as directed by Consultant. Securely and permanently fix to the wall surfaces with concealed fasteners.
- .3 Include for extended aluminum jambs, trim, track and marker/chalk trays and accommodate all other special conditions as required.
- .4 Accurately cut, machine and fit to form tight flush hairline connections all joints in trim and rails. Corners of trim to be square and true and mitre cut. Cap ends of rails with cast aluminum end fittings.
- .5 Joints in markerboards to be tight hairline flush butt joints properly aligned by means of a continuous 14 ga galvanized steel spline let into edges.
- .6 Adjust all operation hardware for smooth, trouble free operation.
- .7 Do not install finished materials until overhead work such as acoustic ceiling, electrical, mechanical and painting have been completed.

3.2 CLEANING

- .1 Leave trim and board surfaces clean and free of stains or marks and completely cover all markerboards with "Pliofilm" immediately after installation. Remove cover at time of occupancy.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDED

- .1 Supply and install quartz counters in Meeting Room 2095 at kitchen counter and Washrooms 2099 at counter.
- .2 Countertops shall be quartz agglomerate finish, complete with the following :
 - .1 Adhesives and sealants.

1.2 RELATED WORK

- | | | |
|-----|---------------------------|------------------|
| .1 | Rough Carpentry | Section 06 10 00 |
| .2 | Finish Carpentry | Section 06 20 00 |
| .3 | Custom Cabinets | Section 06 41 13 |
| .4 | Plastic Laminate Work | Section 06 41 19 |
| .5 | Door Hardware | Section 08 71 00 |
| .6 | Ceramic Tiling | Section 09 30 16 |
| .7 | Metal Countertops | Section 12 36 16 |
| .8 | Laboratory Work Surfaces | Section 12 36 53 |
| .9 | Solid Surface Countertops | Section 12 36 60 |
| .10 | Plumbing Fixtures | Division 22 |

1.3 REFERENCES

- .1 ASTM International:
 - .1 ASTM C 97 Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone
 - .2 ASTM C 170 Standard Test Method for Compressive Strength of Dimension Stone
 - .3 ASTM C 501 Standard Test Method for Relative Resistance to Wear of Unglazed Ceramic tile by the Taber Abraser
 - .4 ASTM C 834 Standard Specification for Latex Sealants
 - .5 ASTM C 920 Standard Specification for Elastomeric Joint Sealants
 - .6 ASTM D 790 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- .2 NEMA LD-3: High Pressure Decorative Laminates.
- .3 American National Standards Institute (ANSI):
 - .1 NSF/ANSI Standard 51: Food Equipment Materials
- .4 International Organization for Standardization
 - .1 ISO 9001: Quality Management Systems
- .5 South Coast Air Quality Management District (SCAQMD)
 - .1 Rule 1168: Adhesive and Sealant Applications.
- .6 UL Environmental:
 - .1 UL 2818 GREENGUARD Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings.

1.4 QUALITY ASSURANCE

- .1 Quartz agglomerate materials shall be manufactured by one of the manufacturers listed in Subsection 2.1, below.
- .2 Fabricator shall have minimum five years of experience in the fabrication of quartz surfacing countertops similar in scope and complexity to this project and shall have water-cooled cutting tools. Fabricator shall be acceptable to the material manufacturer; provide letter, or certificate, from the manufacturer confirming acceptability of fabricator.
- .3 Installer shall have minimum of five years of documented installation experience for projects similar in scope and complexity to this Project, and be currently certified by the manufacturer as an acceptable installer. If installer is not the fabricator, provide letter, or certificate, from the manufacturer confirming acceptability of installer.

1.5 SUBMITTALS

- .1 Refer to Section 01 33 23.
- .2 Submit samples of quartz surfacing materials to the Consultant for colour selection.
 - .1 After colour selection, submit samples of selected colours/patterns in triplicate.
 - .2 The materials used in the building shall correspond to the approved samples.
- .3 Shop Drawings:
 - .1 Submit fully dimensioned shop drawings for all quartz counters and accessories.
 - .2 Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components. All dimensions must be site measured.
 - .3 Show full-size details, edge details, attachments, etc.
 - .4 Show locations and sizes of furring, blocking, including concealed blocking and reinforcement required.
 - .5 Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers and other items installed in quartz surface.
- .4 Product Data
 - .1 Submit manufacturer's product data sheets, technical data sheets and installation instructions for quartz agglomerate products.
 - .2 Submit technical data sheets and Material Safety Data Sheets (MSDS) for adhesives and sealants.
- .5 Maintenance Data and Materials:
 - .1 Submit manufacturer's care and maintenance data, including repair and cleaning instructions. Include in project closeout documents.

1.6 DELIVERY, HANDLING, AND STORAGE

- .1 Delivery and Handling:
 - .1 Conform to manufacturer's recommendations for shipping and handling of quartz surfacing materials to avoid breakage or damage.
 - .2 Brace quartz surfacing units during transport, in near-vertical position with finished face towards finished face. Do not allow finished surfaces to rub during shipping and handling.

- .2 Storage:
 - .1 Store materials indoors, protected from exposure to sunlight and weather, at temperature and humidity conditions recommended by the material manufacturer.
 - .2 Store quartz surfacing sheet materials on racks in near-vertical position, to prevent warpage. Store with finished faces together.

1.7 WARRANTY

- .1 Quartz surface countertops work shall be warranted against warpage or manufacturing defects for a period of **ten (10) years** from the date of Substantial Performance of the Work. Work showing defects during this period shall be replaced or made good without delay and at no expense to the Owner.

PART 2 - MATERIALS

2.1 MATERIALS

- .1 Quartz agglomerate sheet material shall be cast, nonporous with through-body colours, Greenguard certified, as manufactured Wilsonart, Caesarstone, or Cambria.
 - .1 Composition: 93% quartz aggregate combined with polyester resin binders and proprietary pigments that are fabricated into slabs using vacuum vibrocompaction technology.
 - .2 Thickness: 20mm
 - .3 Weight: 48.8 kg/m² (10 lbs/ft²)
 - .4 Slab Sizes: use maximum sizes available to suit specific application, to minimize the number of joints in the installation
 - .5 Finish: Polished
 - .6 Edge: 1/4" Bevel
 - .7 Colour: to be selected by Consultant from manufacturer's range of standard patterned colours, not solid colours, equal to Wilsonart price groups 0, 1, or 2. One colour only will be used.
 - .8 Backsplash: applied
 - .9 Sidesplash: applied
 - .10 Physical Characteristics:
 - .1 Flexural Strength: Greater than 4,500 psi; ASTM D 790.
 - .2 Flexural Strain: Less than 0.375 percent; ASTM D 790
 - .3 Flexural Modulus: Greater than 3.75 MPsi; ASTM D 790
 - .4 Stain Resistance (24 Hr): No effect to moderate effect; NEMA LD-3
 - .5 Abrasion Resistance: Greater than 100 in.-lbs.; ASTM C 501
 - .6 Density: Greater than 2.1 g/cm³; ASTM C 97
 - .7 Compressive Strength (One Axis - Dry): Greater than 20,000 psi; ASTM C 170
 - .8 Moisture Absorption: Maximum 0.022 percent; ASTM C 97.
- .2 Joint adhesive:
 - .1 Methacrylate-based adhesive for chemically bonding quartz surfacing seams.
 - .2 UL 2818 GREENGUARD Gold certified and complies with SCAQMD Rule 1168.
 - .3 Colour to coordinate with quartz surfacing sheet material to create inconspicuous, nonporous joints.
 - .4 Wilsonart Hard Surface Adhesive, or equal by quartz slab manufacturer.

- .5 Pigmented knife grade adhesives suitable for use with quartz surfacing are also acceptable.
- .3 Sealants:
 - .1 Mildew-resistant silicone sealant for filling gaps between countertops and terminating substrates in wet environment applications, acceptable to countertop manufacturer
 - .2 Complying with ASTM C 920, Type S (single component), Grade NS (nonsag).
 - .3 Colour to be complementary to quartz surfacing colour.
- .4 Construction Adhesive:
 - .1 Silicone-based construction adhesive recommended by countertop manufacturer for backsplashes, endsplashes, and other applications according to manufacturer's printed fabrication instructions.
- .5 Sink/lavatory mounting hardware: Coordinate with plumbing subtrade for required hardware

2.2 FABRICATION

- .1 Fabricate components in shop to greatest extent practical, to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer's printed instructions and technical bulletins. Provide products in the largest pieces available.
- .2 Quartz sheet materials used shall be from the same batch. Confirm that sheets bear labels with the same batch numbers. Visually inspect materials and ensure colour match between adjacent pieces.
- .3 Cut and polish quartz sheet material with water-cooled power tools.
- .4 Form joints between components using manufacturer's approved joint adhesive without conspicuous joints.
- .5 Provide factory cutouts for plumbing fittings and accessories as indicated on the drawings.
 - .1 Cutouts shall have 10 mm inside corner radius.
 - .2 Inside corners shall be reinforced in an acceptable manner to prevent cracking.
 - .3 If the remaining material outside a cutout is less than 76 mm wide, reinforce area by laminating it with a strip of quartz surfacing.
- .6 Install standard bowl clips, panel inserts and fasteners for attachment of under-mount sinks/lavatories.
- .7 Laminate layers of quartz surfacing as required to create built-up edges, or where reinforcing is required.
- .8 Polish edges where they will be exposed in finished work

PART 3 - EXECUTION

3.1 EXAMINATION OF SURFACES AND CONDITIONS

- .1 Refer to "Examination of Work in Place" in Section 01 10 00, General Instructions.

- .2 Examine substrates and work in place and confirm that existing conditions are adequate to receive the Work of this Section.
 - .1 Ensure substrates supporting quartz surfaces are plumb, level, and flat to within 1.6 mm in 3000 mm, and that all supports and blocking are in place.
 - .2 Base cabinets shall be securely fixed to adjoining units and back wall.
 - .3 Advise the Consultant of any conditions that could adversely affect the Work. Commencement of Work will constitute acceptance of substrates and existing conditions.
- .3 Surface and ambient temperatures shall be minimum of 20°C at a relative humidity between 20 to 80%, for a minimum of 72 hours prior to installation and continually following installation.

3.2 INSTALLATION - GENERAL

- .1 Install work in accordance with reviewed shop drawings and manufacturer's printed installation instructions.
- .2 Install work plumb, level, true, and square, neatly scribed to adjoining surfaces.
- .3 Make allowances around periphery and where fixed objects pass through or project into countertops to permit normal movement without restriction.
- .4 Align adjacent countertops and form seams to comply with manufacturer's written recommendations.
- .5 Form field joints using manufacturer's recommended adhesive, with joints inconspicuous in finished work.
 - .1 Promptly remove excess adhesive.
 - .2 Clamp or brace quartz surfaces in position until adhesive sets.
- .6 Anchor countertops and fascia securely to base cabinets or other supports.
- .7 Fill gaps between countertops and terminating substrates with silicone sealant.
- .8 Install backsplashes and endsplashes where indicated on Drawings. Adhere to countertops with construction adhesive.
- .9 At junction of counter back and side splashes and adjacent wall finishes, apply small bead of silicone sealant.
- .10 Upon completion of installation remove identification marks and clean all surfaces. Protect as specified above.

3.3 CLEANING, PROTECTION, AND REPAIR

- .1 Clean quartz surfacing components in accordance with manufacturer's printed maintenance instructions. Completely remove excess adhesives and sealants from finished surfaces.
- .2 Protection:
 - .1 Protect completed work from damage during remainder of construction period.

- .2 Protect installed countertops with heavy kraft paper secured in position with masking tape.
- .3 Comply with the printed directions, issued by surface manufacturers.
- .3 Remove protective coverings immediately prior to occupancy of the building by the Owner.
- .4 Clean surfaces and inspect for damage immediately prior to building occupancy. Repair any minor surface marring of quartz surfacing components in accordance with manufacturer's printed instructions, to the satisfaction of the Consultant.
- .5 Remove and replace quartz surfacing components that are damaged and cannot be satisfactorily repaired.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED WORK

- | | | |
|----|------------------------|------------------|
| .1 | Cast-in-place concrete | Section 03 30 00 |
| .2 | Grading | Section 31 22 00 |
| .3 | Excavation and Fill | Section 31 23 00 |
| .4 | Sub-drainage | Section 33 46 00 |

1.2 SCOPE OF WORK

- .1 Work includes all new and replacement concrete paving, curbs, and walkways in areas indicated on drawings.
- .2 Provide tactile warning indicators as indicated and as required by the Ontario Building Code and the Accessibility for Ontarians with Disabilities Act.

1.3 QUALIFICATIONS

- .1 Concrete supplier to be a member of the Ready-Mixed Concrete Association of Ontario.
- .2 Cement finisher to have at least five (5) years of specialized experience.

1.4 REFERENCES

- .1 Canadian Standards Association
 - .1 CAN/CSA A5 Portland Cement
 - .2 CSA A23.1 Concrete Materials and Methods of Concrete Construction
 - .3 CSA A23.2 Methods of Test for Concrete.
 - .4 CAN3 A266.1 Air-Entraining Admixtures for Concrete.
 - .5 CSA G30.18 Carbon Steel Bars for Concrete Reinforcement
 - .6 CSA A283 Qualification code for Concrete Testing Laboratories
- .2 Ontario Provincial Standard Specifications
 - .1 OPSS.MUNI 1303 Material Specification for Admixtures for Concrete
 - .2 OPSS.MUNI 1305 Material Specification for Concrete - Materials and Production
 - .3 OPSS 353 Construction Specification for Concrete Curb and Gutter Systems
- .3 ASTM International:
 - .1 ASTM A185/ A185M Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete.
 - .2 ASTM C295 Standard Guide for Petrographic Examination of Aggregates for Concrete.
 - .3 ASTM C309 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
 - .4 ASTM D1751 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types)
 - .5 ASTM D3963/D3963M Standard Specification for Fabrication and Jobsite Handling of Epoxy-Coated Steel Reinforcing Bars.

32 13 13 - CONCRETE PAVING & CURBS**1.5 SUBMITTALS**

- .1 Submit shop drawing showing layout of tactile warning indicators, particularly where different sizes are required.
- .1 Provide product data sheets and installation instructions. Provide colour charts for colour selection by the Consultant.

1.6 TESTING

- .1 Contractor will be responsible for the coordination and payment for all required testing services.
- .2 During the construction process, compaction testing on the subgrade and granular base will be carried out by an approved testing firm. Any delays caused by failing tests and subsequent remediation work will be the responsibility of the contractor.
- .3 Inspection and testing of concrete and concrete materials will be carried out in accordance with CSA A23.1 by a Testing Agency designated by the Consultant. Testing agency shall be certified under CSA A283 with category to suit testing provided.

PART 2 - MATERIALS**2.1 MATERIALS**

- .1 Concrete mixes and materials:
 - .1 to Section 03 30 00 - Cast-in-Place Concrete.
 - .2 Concrete for all concrete paving and curbs shall be 32 MPa, Class C-2.
- .2 Granular base: Fill Type F1, as identified in Section 31 23 00, Excavation and Fill.
- .3 Epoxy-coated Reinforcement:
 - .1 #10M epoxy coated continuous bars, placed as indicated on drawings.
 - .2 Epoxy coated reinforcement shall conform to specifications of section 03 20 00.
- .4 Welded Wire Mesh: grade 400 conforming to ASTM A1064; unless indicated otherwise. Mesh shall be supplied in flat sheets only.
- .5 Reinforcement and welded wire mesh are to be free from loose or flaking rust, mud, oil, etc.
- .6 Chairs, bolsters, bar supports, spacers: adequate for strength and support of reinforcing construction conditions. Supports shall be of a non-corroding type.
- .7 Splice devices shall develop 125% of the yield strength of the bar being spliced.
- .8 Reinforcing steel for curbs: three #10M epoxy coated continuous bars, placed as indicated on drawings.

- .9 Clear Curing Compound: W.R. Meadows 1300 clear water-base wax base curing compound.
- .10 Pigmented Curing Compound: W.R. Meadows 1220-White, for curbs and walkways which will not be sealed, painted, tiled, or otherwise covered.
- .11 Form release agent: Non-staining mineral type, chemically active release agents containing compounds that react with free lime to provide water soluble soap. W.R. Meadows "Duogard 11" water - emulsion form release agent.
- .12 Form lumber: 38mm x 184mm (2 x 8), free of warp.
- .13 Premoulded expansion joint filler: W.R. Meadows "Fibre Expansion Joint" asphalt saturated expansion-contraction joint filler, 10mm thick x depth of slab.
- .14 Joint Sealant: cold applied rubber-asphalt sealer. W.R. Meadows #158 cold applied sealer
- .15 Use only those chemical admixtures and air entraining agents currently approved for use by the Ministry of Transportation, Ontario, in accordance with OPSS.MUNI 1303, Material Specifications for Admixtures for Concrete.
- .16 All concrete for walks and curbs shall have "pozzolith" plus M.B.V.R. added, used in strict accordance with the manufacturer's instructions. Entrained air content shall not be less than 4% and not more than 6%.
- .17 Concrete curbs shall be completed in accordance with OPSS353, except as amended herein.
- .18 Tactile Warning Indicators:
 - .1 AODA and OBC compliant indicators, with raised profiles and high colour contrast to adjacent surfaces. Conforming to ISO 23599, "Assistive Products for Blind and Vision-Impaired Persons - Tactile Walking Surface Indicators".
 - .2 Cast iron, cast-in-place, detectable/tactile warning surface tile, 610 x 610mm; Wet Set Cast Iron Tiles by TufTile Inc., as distributed by Lecol Inc. or Advantage Cast Iron Plates as manufactured by Advantage Tactile Systems Inc., distributed by Kinesik Engineered Products. Tiles to be painted with zinc-rich epoxy primer and powder coat colour finish. Colour to be TufTile Colonial Red; subject to later confirmation by Consultant.
 - .3 Provide additional tile sizes, in manufacture's standard sizes, as may be required for a specific installation; all tiles in a location shall be of the same size unless otherwise accepted by the Consultant.
 - .4 Provide stainless steel fasteners and concrete anchors.

32 13 13 - CONCRETE PAVING & CURBS**PART 3 - EXECUTION****3.1 FIELD REVIEW OF GRADING**

- .1 After installation and compaction of granular base at concrete paving, call for field review by Consultant. Arrange for geotechnical inspector to attend site at the time of the field review.
 - .1 Coordinate with the Consultant in identifying any areas which could potentially drain poorly, or result in ponding areas. If grading cannot be rectified to resolve the problems, additional area drains will be required. Final number and locations of additional area drains, based on observation of as-built conditions, will be confirmed by the Consultant.
 - .2 Coordinate with forces installing additional area drains; refer to Section 33 46 00, Sub-drainage. Include all costs incurred, including remobilization of equipment and labour forces, as may be required to accommodate this work.

3.2 GENERAL

- .1 Conform to the specifications of Division 03, Concrete, for the work of this Section, and the additional requirements herein. In the event of a perceived inconsistency, the more stringent requirements shall be applied.
- .2 Provide slip resistant, colour contrasting sections of concrete at ramps, stairs, and curb ramps, as required by the OBC and the AODA.
- .3 Coordinate with forces installing equipment over concrete slabs. Receive and cast in anchors and accessories where such items are indicated on drawings.

3.3 LINES AND LEVELS

- .1 Employ a competent surveyor to establish and maintain all required lines and levels. Report field dimensions which do not agree with drawing dimensions to the Consultant immediately.
- .2 After installation and compaction of granular base, call for field review by Consultant. Arrange for geotechnical inspector to attend site at the time of the field review.
 - .1 Coordinate with the Consultant in identifying any areas which could potentially drain poorly, or result in ponding areas. If grading cannot be rectified to resolve the problems, additional area drains will be required. Final number and locations of additional area drains, based on observation of as-built conditions, will be confirmed by the Consultant.
 - .2 Coordinate with forces installing additional area drains; refer to Section 33 46 00, Sub-drainage. Include all costs incurred, including remobilization of equipment and labour forces, as may be required to accommodate this work.

3.4 GRANULAR BASE

- .1 Obtain Consultant's approval of subgrade before placing granular base.
- .2 Place granular base material to lines and widths as indicated on drawings, and to depths as specified in Section 31 23 00, Excavation and Fill,.
- .3 Compact granular base to 98% of its SPMD.

3.5 FORMWORK

- .1 Before proceeding with formwork, verify all lines and levels and ensure dimensions agree with drawings.
- .2 Construct forms to produce finished concrete conforming to the shape, dimensions, locations and levels shown on the drawings.
- .3 Keep form joints to a minimum.
- .4 Clean formwork in accordance with CSA CAN3-A23.1.
- .5 Obtain Consultant's approval of formwork, granular base and reinforcing steel prior to placing concrete. The proper time for form removal shall be approved by the Landscape Architect.
- .6 Remove forms in accordance with CSA Standard CAN3-A23.1.

3.6 REINFORCEMENT

- .1 Clean reinforcement of loose rust and mill scale.
- .2 Place reinforcement as indicated on drawings. Place reinforcing steel to CAN3-A23.1
- .3 Place 10M tie bars at maximum 600 mm spacing and extend 300 mm into both sides of construction joints. Set half of tie bar lengths in capped sleeves to allow longitudinal movement.
- .4 Clean reinforcing before placing concrete.

3.7 CONCRETE MIXING

- .1 Control concrete mix and source of materials to ensure batch to batch uniformity. Do not change cement type or manufacturer or source or type of aggregate or sand.
- .2 Do not mix less than 3 cu.m. in any one batch. Where possible mix, deliver and place concrete in sequential pour on the same day. Finish at same time duration after placing.
- .3 Do not pump concrete.
- .4 Ensure minimum 130 revolutions of concrete batch before depositing.

32 13 13 - CONCRETE PAVING & CURBS**3.8 PLACEMENT OF CONCRETE**

- .1 Place concrete in accordance with CAN3-A23-1.
- .2 Protect adjacent surfaces when placing and finishing concrete and when applying curing compound.
- .3 Ensure reinforcement and inserts are not disturbed during concrete placement.
- .4 Obtain Consultant's approval of proposed method for protection of concrete during placing and curing in adverse weather, prior to placing of concrete.

3.9 CONCRETE PAVEMENT

- .1 Obtain Consultant's approval of formwork, granular base and reinforcing steel prior to placing concrete.
- .2 Do concrete work in accordance with Section 03 30 00 - Cast-in-Place Concrete and as specified herein.
- .3 The granular base below the concrete pavements shall be well watered and compacted to at least 98% of maximum density to ASTM D698. Obtain testing agencies approval of subgrade before placing granular base. Place granular base material to lines, widths, and depths as indicated.
- .4 Place wooden forms at sides, straight and true and securely braced.
- .5 Where walks on grade butt up against adjacent construction (curbs) to which they are not bonded, provide 13mm premoulded joint filler for the full depth of the shallower member, less one inch and continuing for the full length of the contact. Seal the space over flush with hardsetting mastic.
- .6 Pour 150mm of 32 MPa concrete with 4% to 6% air entrainment sloped slightly to the curb.
- .7 Coloured Concrete:
 - .1 For coloured concrete pavements order and place sufficient concrete to complete continuous slabs in one pour.
 - .2 Provide contrasting bands at all exterior ramps, at top and bottom of each section of ramp, and where indicated on drawings.
 - .3 Provide contrasting coloured paving at all curb ramps. Coordinate installation of tactile warning indicators, as indicated below.
- .8 Immediately after floating, give pavements a uniform broom finish to produce regular corrugations not exceeding 2 mm deep, by drawing broom across the direction of travel.
- .9 Apply concrete curing compound with airless sprayer at a rate to cover 7-10 sq.m. per litre.
- .10 Place 10M rebar dowel into section of freshly poured concrete, where additional concrete abuts pour. Dowels to be embedded 300mm into fresh concrete and extend 300mm beyond face into proposed abutting concrete. Locate min. 50mm below surface and at 750mm O.C.

3.10 CURBS AND EDGES

- .1 Excavate trenches for curbs as shown on the drawings, to lines and grades required, and remove surplus material from the Site.
- .2 Carefully consolidate curb grade; erect formwork to obtain the curb section by a single lift to line and grade and of sufficient strength and rigidity to maintain line and grade when concrete is in place.
- .3 Curbs shall be placed on stone fill, as for concrete pavement. Fill under the curb area shall be specified granular material, brought to sub-grade level in maximum 150mm loose depth layers.
- .4 Construct forms to produce finished concrete conforming to shape, dimensions, locations and levels indicated and within tolerances required by CAN/CSA-A23.1.
- .5 Side forms shall be of nominal 50mm thick lumber, free of warp, and properly supported to maintain alignment and grade, except on curved sections where nominal 25mm lumber may be used. Treat all form lumber with a non-staining mineral oil prior to concrete placement. Construct form to prevent honeycombing.
- .6 Keep form joints to minimum.
- .7 Obtain approval of forms from Consultant before pouring concrete.
- .8 Clean formwork in accordance with CAN/CSA-A23.1 before placing concrete.
- .9 Place three continuous reinforcing bars, 10M, epoxy coated, one near the top and two near the bottom of the curb. Where curb is adjacent to a sidewalk or other concrete surface, tie in curb to sidewalk with an additional reinforcing bar and construct curb and sidewalk as a monolithic structure.
- .10 Cut expansion joint material to the full cross-sectional shape of the curb and place at generally 5m intervals (not more than 6m) and at the beginning and end of all curved sections. Place before pouring concrete; do not force into freshly poured concrete.
- .11 Pour concrete in accordance with Section 03 30 00.
- .12 Do not deposit concrete on frozen ground. When deposited in forms concrete shall have a temperature between 10°C and 30°C and these limits shall be maintained for 72 hours.
- .13 Fill forms with an excess of concrete and, after compacting strike to the required level in such a manner as to force the course aggregate below the mortar surface; finish top surface with a wood float to an even, smooth, dense surface.
- .14 Concrete edges to receive steel trowel final finish. Finish top edges of curb with tool to produce a rounded edge of 6mm to 12mm radius.
- .15 Do not strip forms for 24 hours after pouring. After finishing and after stripping the forms, treat top curb surfaces with approved curing compound.

32 13 13 - CONCRETE PAVING & CURBS

- .16 Construct ramps for barrier-free access as shown and detailed.
- .17 Construct poured concrete curbs for planters as detailed on Landscape drawings.

3.11 TACTILE WARNING INDICATORS

- .1 Provide tactile warning indicators where required by the barrier-free provisions of the OBC and the AODA Integrated Accessibility Standards, and where indicated on drawings.
- .2 Install cast-in-place tactile surface tile system at barrier-free curb ramps, at the top of exterior stairs (one stair tread back), at the top and bottom of ramps, and elsewhere as indicated on drawings. Length of warning indicator installation shall be full width of ramp or stair; width of warning indicator band shall be minimum 610mm.
- .3 Installation shall be in accordance with manufacturer's installation instructions for cold weather climates.
- .4 Retain factory-installed plastic sheeting in place during installation to protect the tile surface. Do not remove concrete from the area where the tiles are to be installed; avoid any air voids below the tile.
- .5 Place tactile tiles in wet concrete, immediately after finishing concrete, using a rubber mallet and checking the slope electronic level. Tamp tiles into the concrete. Tiles be set with the top of domes level to the adjacent concrete on the top and sides of ramp, to prevent damage by snow plows, with centre portion of the base/field level with concrete at the bottom of the ramp to allow water drainage. Ensure installation does not present a tripping hazard.
- .6 While concrete is still workable, use an edging tool to create a finished edge, then a steel trowel to finish the concrete around the tile perimeter. After concrete has cured, remove protective plastic wrap from the tile.
- .7 Protect installed tactile warning indicator tiles from damage during construction by covering with plywood.

3.12 TOLERANCES

- .1 Finish surfaces to within 3 mm in 3 m as measured with straightedge placed on surface.

3.13 EXPANSION AND CONTRACTION JOINTS

- .1 Saw cut contraction joints in locations as shown on plan after concrete has set; spaced at 2000mm maximum.
- .2 Place expansion joints before pouring concrete; do not force into freshly poured concrete. Provide expansion joints as indicated on drawings L.1 and L.2 or every 6000mm maximum, complete with premoulded expansion joint filler.
- .3 Install expansion joints around manholes and catch basins and along length adjacent to concrete curbs, catch basins, buildings, or permanent structures.

- .4 Install joint filler in expansion joints in accordance with Section 03 30 00 - Cast-in-Place Concrete.
- .5 Seal expansion joints with sealant approved by Consultant, finished flush with top surface of concrete.
- .6 Do not radius edges at expansion joints.
- .7 Align curb, gutter and sidewalk joints.

3.14 FINISHING

- .1 Fill and rub all exposed concrete, except sidewalk, with carborundum.
- .2 Rub all exposed sharp edges with carborundum to produce 3mm radiused corners.
- .3 Finish to be straight broom finish.

3.15 CURING

- .1 Curing of concrete slabs shall be effected by using well-lapped sheets, tarpaulins or heavy quality building paper laid down on the wetted surface of the slab which shall be continuously wet for a minimum of ten (10) days.
- .2 All concrete pavings and curbs to be sprayed with Pete-Cure M.T.C. specified grade or two (2) coats of linseed oil thinned with napha, mineral spirits, or turpentine applied in accordance with the procedures set out in Portland Cement Association brochure "Protection of Concrete Pavements from Salt and Calcium chloride".
- .3 Apply curing compound evenly to form continuous film. Follow manufacturer's instructions.
- .4 By means acceptable to the Consultant and Authorities Having Jurisdiction, protect concrete from harmful effects of sunshine, drying winds and cold running of surface water for a minimum period of five days.

3.16 CLEAN UP

- .1 Upon completion of any portion of the concrete work, remove all debris and excess materials from the site and leave in a neat and tidy condition to the satisfaction of the Consultant.
- .2 Clean tactile tiles immediately prior to occupancy of the building, using method recommended by the manufacturer.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED WORK

- | | | |
|----|----------------------|------------------|
| .1 | Concrete Curbs | Section 32 13 13 |
| .2 | Painting and Coating | Section 09 90 00 |

1.2 REFERENCES

- | | | |
|----|-----------|--|
| .1 | OPSS 710 | Construction Specification for Pavement Marking |
| .2 | OPSS 1716 | Material Specifications for Water-Bourne Traffic Paint |

1.3 SAMPLES

- .1 Submit samples in accordance with Section 01 33 23.
- .2 Clearly mark samples with name of project and its location, paint manufacturer's name and address, name of paint, CGSB specification number and formulation number and batch number.
- .3 Submit a Certificate of Compliance from the paint manufacturer indicating that the physical properties and chemical composition of the coatings conforms to the Ontario Provincial Standard Specification listed below.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 All pavement marking materials shall conform to OPSS 1716, Material Specifications for Water-Bourne Traffic Paint.
- .2 Colour
 - .1 Yellow
- .3 Upon request, Consultant will supply a product list of paints applicable to work. Qualified paints may be used but Consultant reserves the right to perform further testing.

PART 3 - EXECUTION

3.1 EQUIPMENT REQUIREMENTS

- .1 Paint applicator to be approved pressure type, mobile distributor capable of applying paint in double and dashed lines and that will ensure uniform application and having a positive shut-off.

32 17 23 - PAVEMENT MARKINGS**3.2 CONDITION OF SURFACES**

- .1 Pavement surface to be free from surface water, frost, ice, dust, oil, grease and other foreign materials.

3.3 APPLICATION

- .1 Apply pavement markings in accordance with OPSS 710, Construction Specification for Pavement Marking.
- .2 Application of traffic paints shall conform to OPSS 710, Construction Specification for Pavement Marking, for permanent pavement markings.
- .3 Unless otherwise approved by Consultant, apply paint only when air temperature is above 10°C. and no rain is forecast.
- .4 Apply 2 coats traffic paint evenly. First coat to be 10 mils wet. Second coat to be 15 mils. wet, applied after minimum 20 days.
- .5 Do not thin paint unless approved by Consultant.
- .6 Symbols and letters to conform to dimensions indicated.
- .7 Apply other specified marking materials as directed by Consultant.
- .8 Paint lines to be of uniform colour and density with sharp edges.
- .9 Thoroughly clean distributor tank before refilling with paint of different colour.
- .10 Apply paint using specified equipment only.

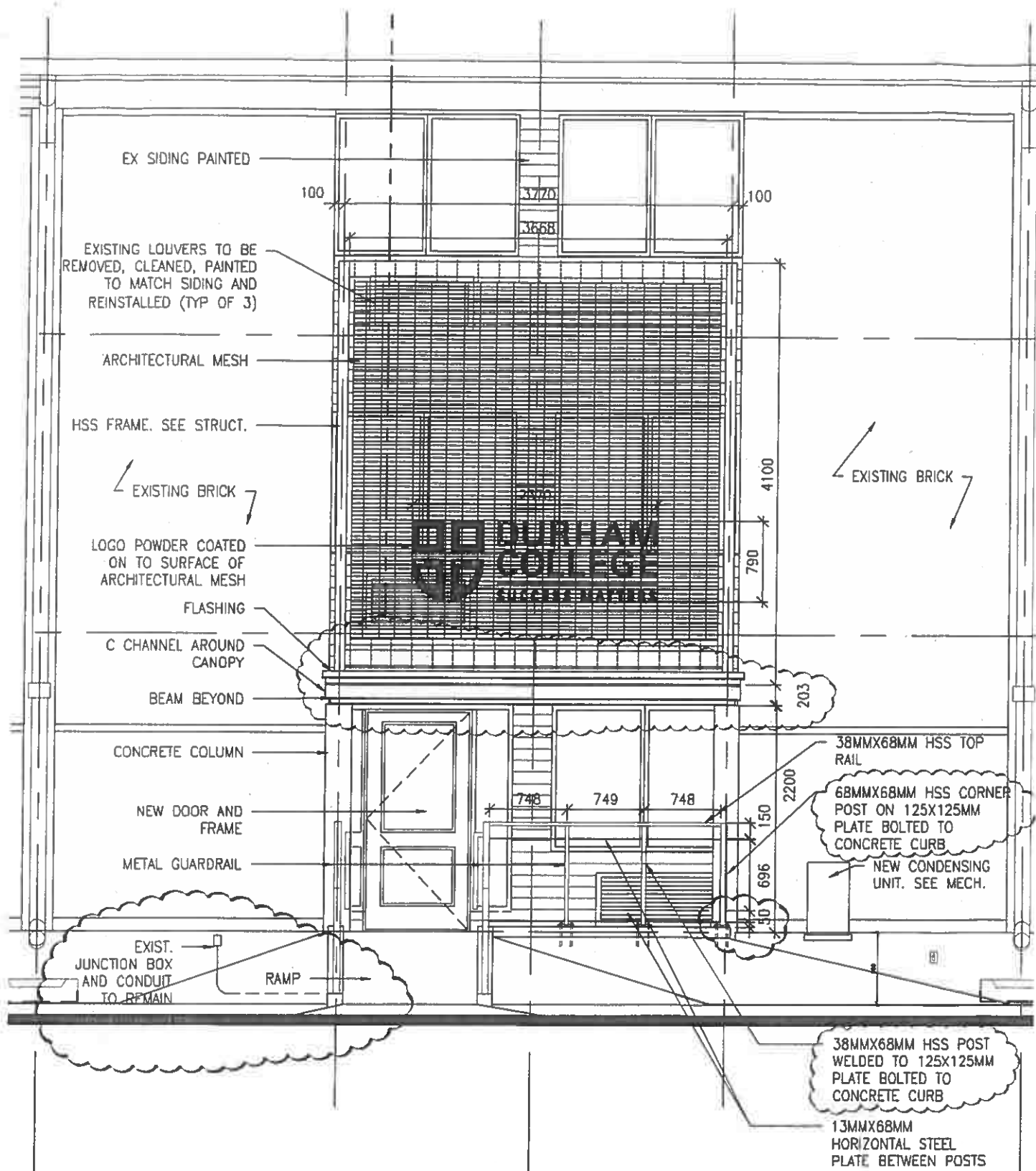
3.4 TOLERANCE

- .1 Paint markings to be within plus or minus 10mm of dimensions specified.

3.5 PROTECTION OF COMPLETED WORK

- .1 Protect pavement markings until dry to no pick up.

END OF SECTION



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

6/A1.0 PART EAST ELEVATION AT NEW
ENTRANCE/CANOPY

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

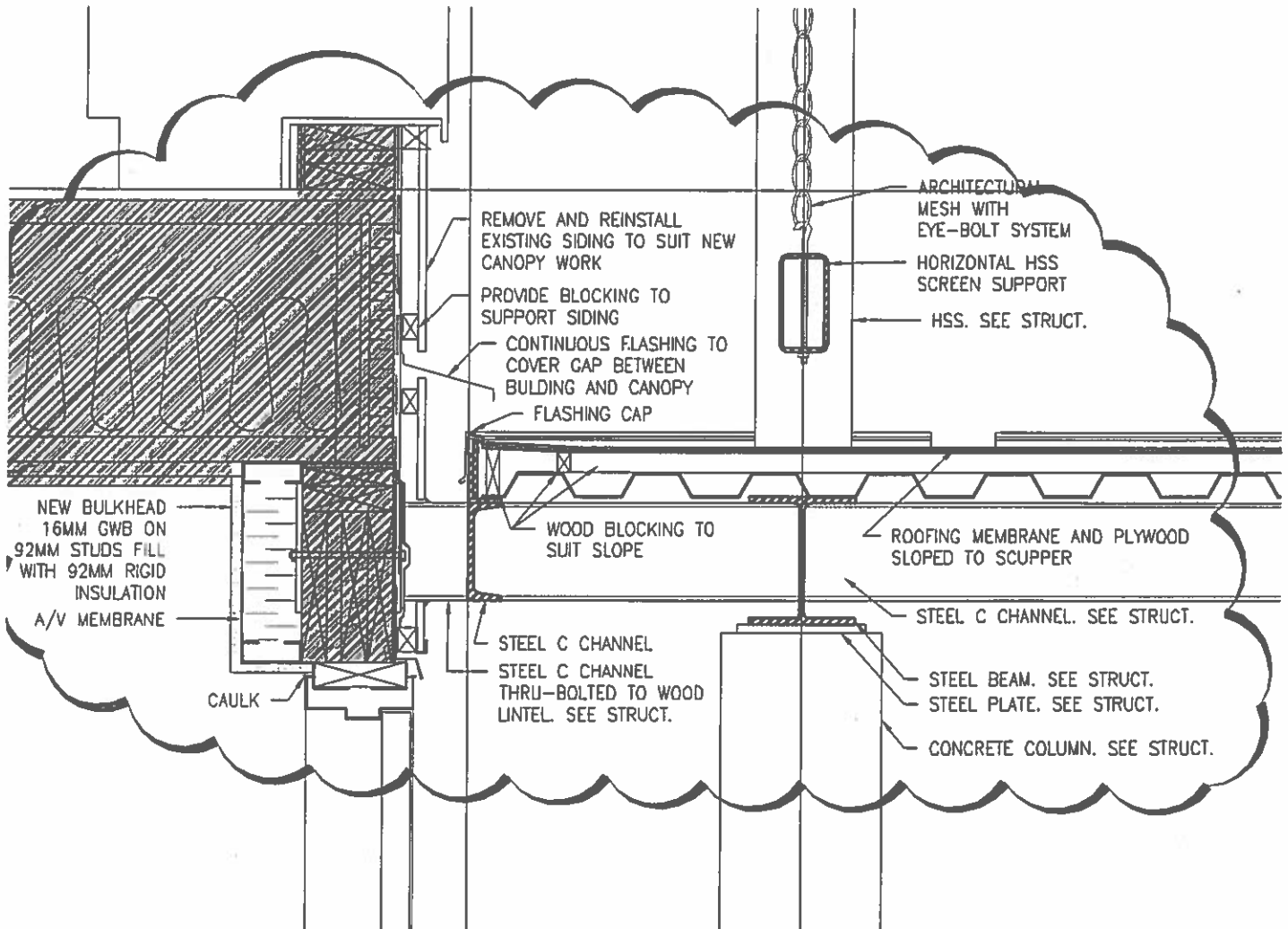
1:50

JOB #

1910

DWG. NO.

ADD-3



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

3/A1.1 DETAIL AT CANOPY

SCALE

1:10

DWG. NO.

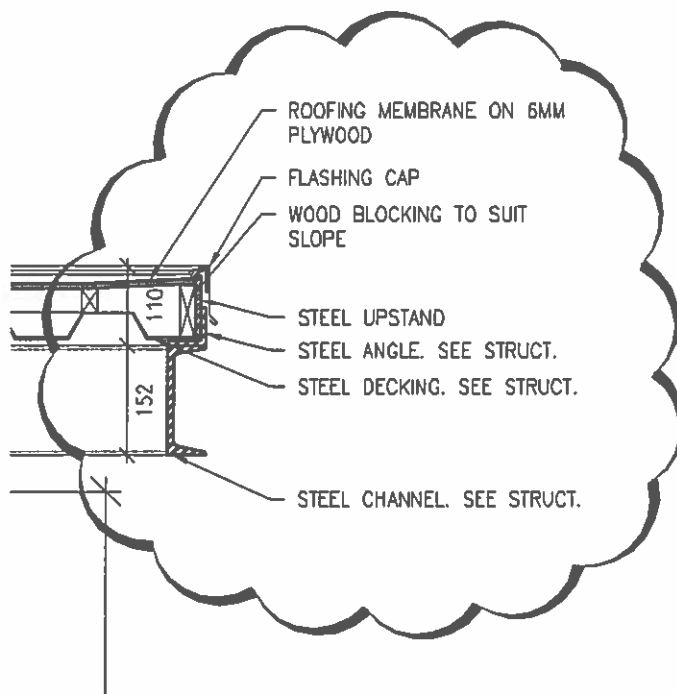
ADD-5

MOFFET & DUNCAN ARCHITECTS INC.

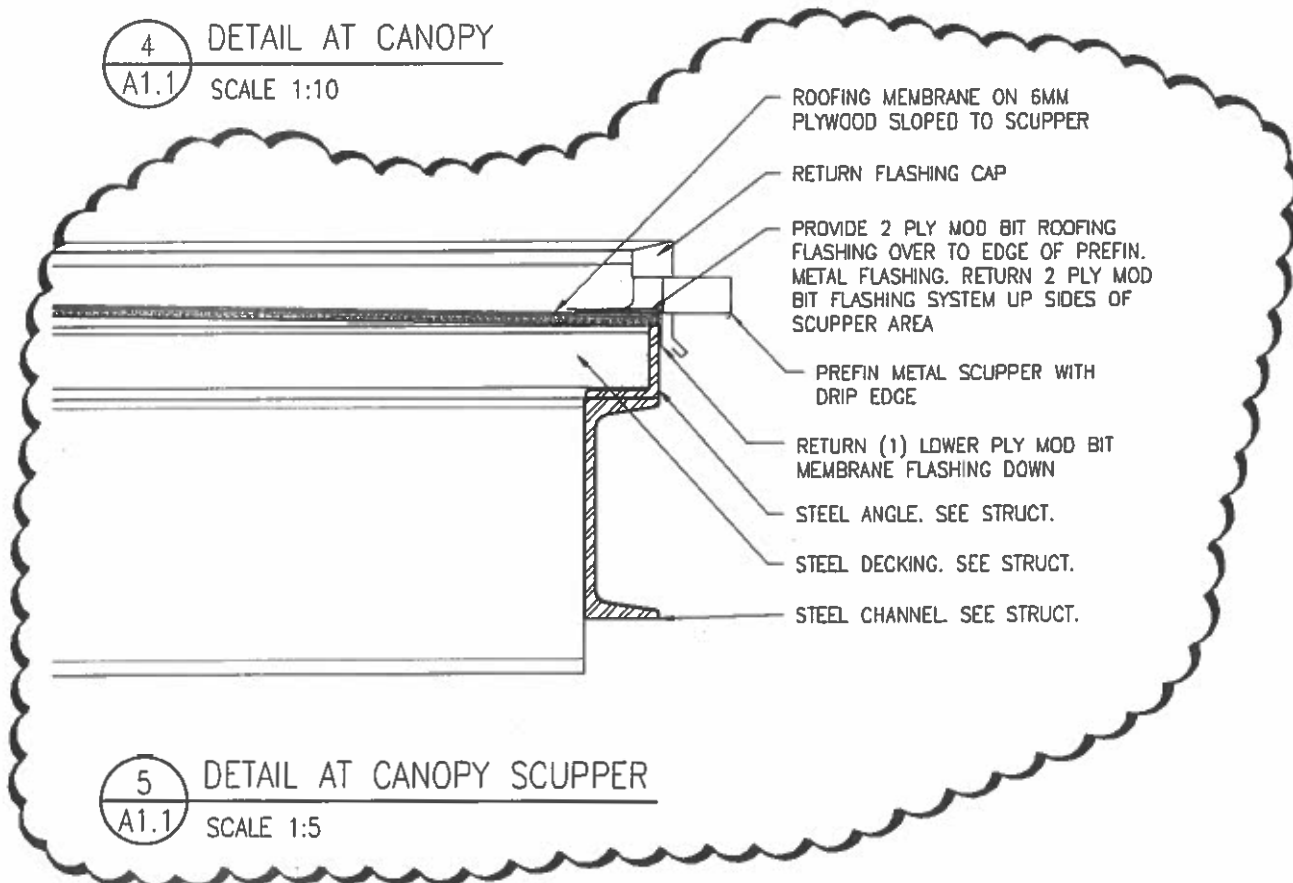
5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

JOB #

1910

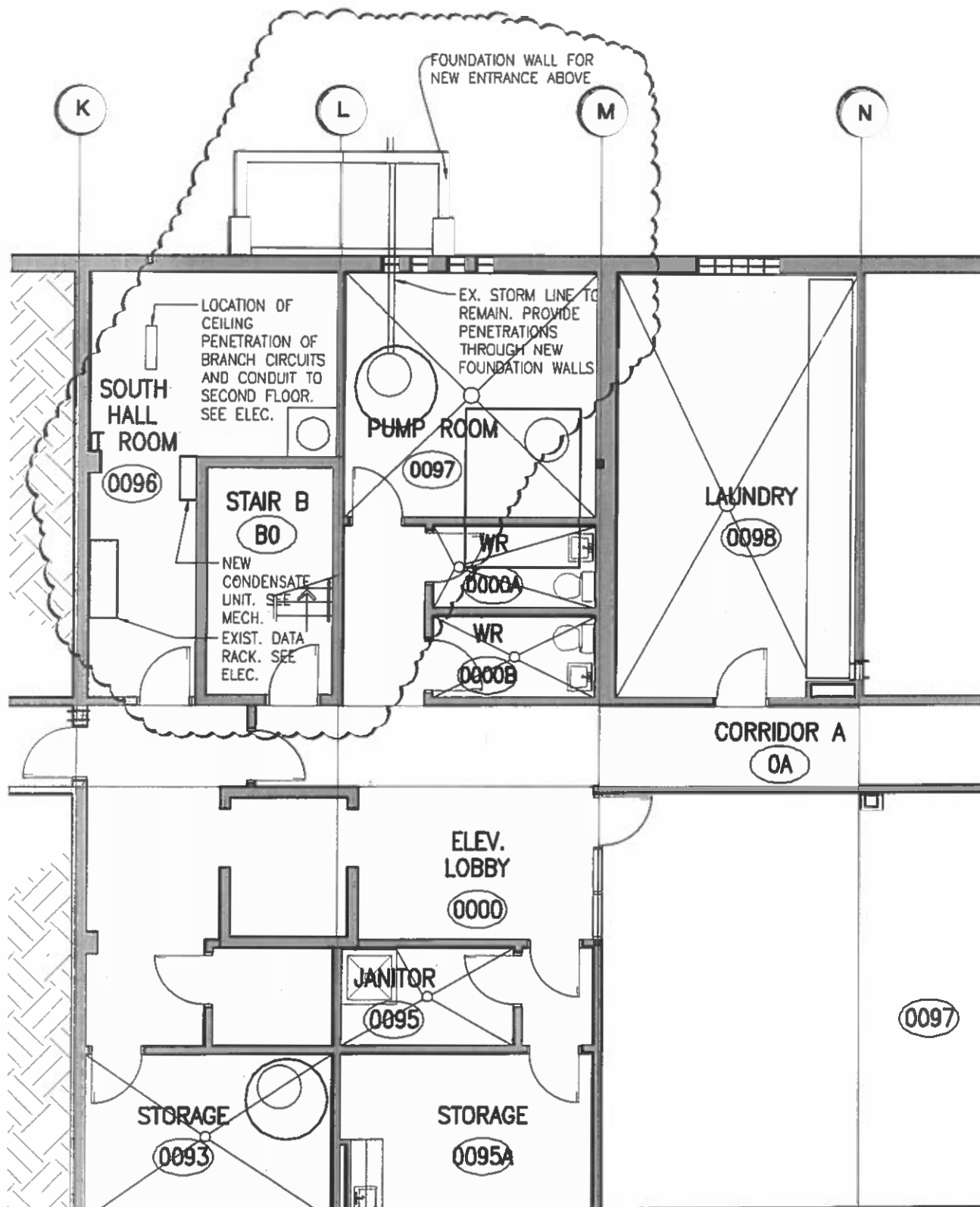


4
A1.1
DETAIL AT CANOPY
SCALE 1:10



5
A1.1
DETAIL AT CANOPY SCUPPER
SCALE 1:5

SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019 DURHAM COLLEGE	SCALE	DWG. NO.
CANOPY DETAILS REF DWG A1.1 CANOPY SECTION, DETAILS	AS NOTED	ADD-6
MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775	JOB # 1910	



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

PART OF 1/A2.1 PARTIAL BASEMENT PLAN
AT IT ROOM

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

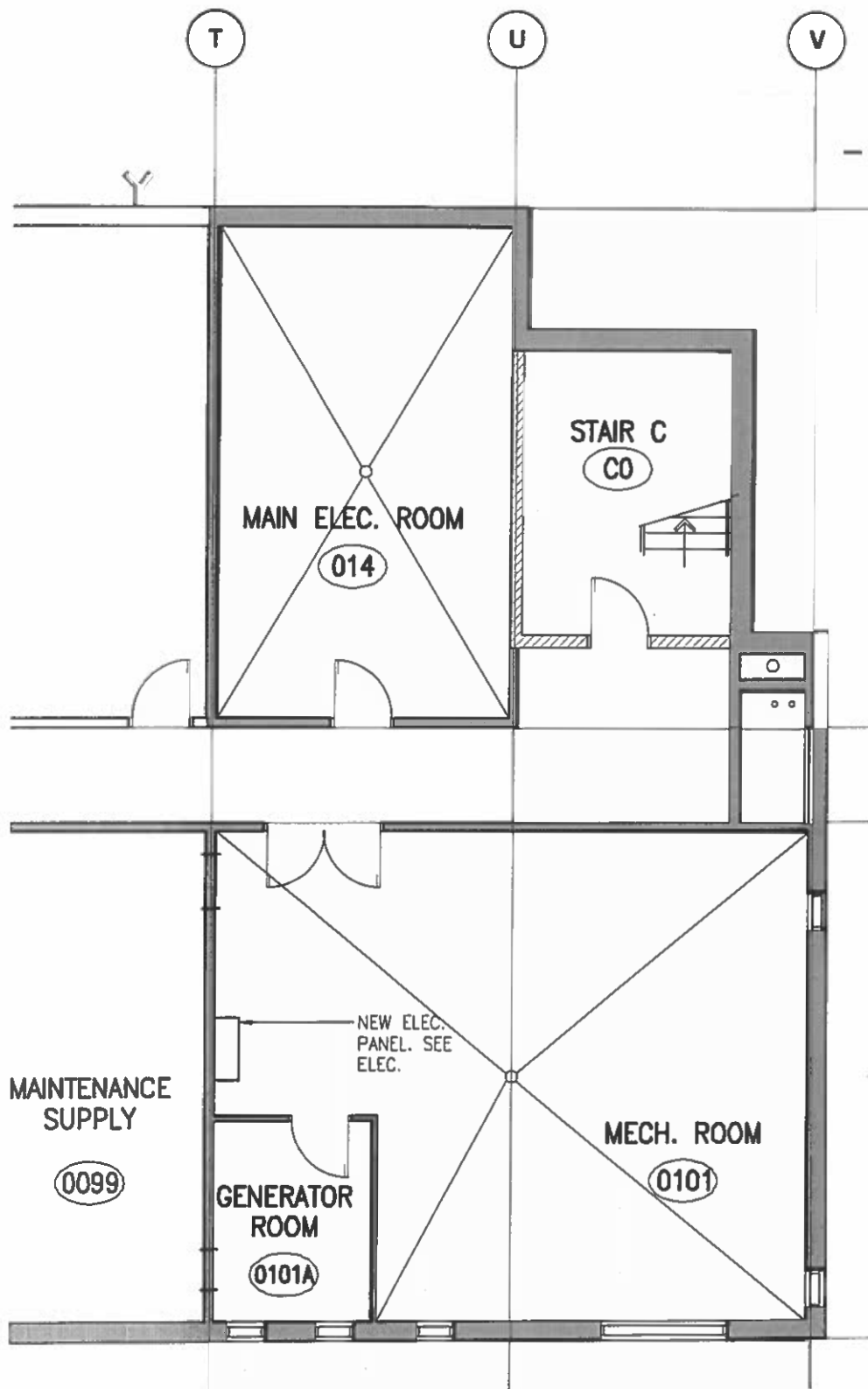
1:100

DWG. NO.

ADD-7

JOB #

1910



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

**PART OF 1/A2.1 PARTIAL BASEMENT PLAN
AT MECH ROOM**

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

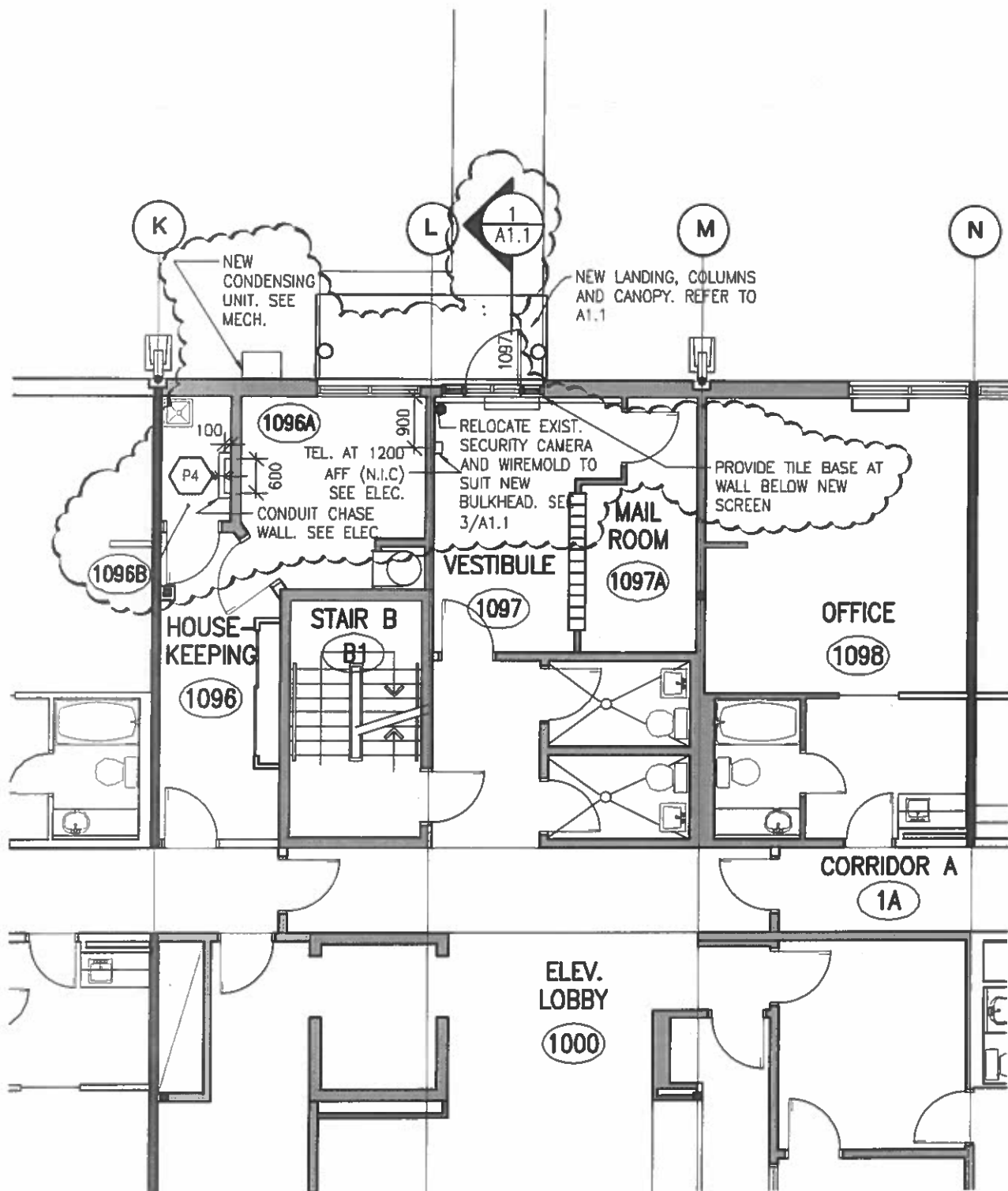
1:100

JOB #

1910

DWG. NO.

ADD-8



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

3/A2.1 PARTIAL FIRST FLOOR RENOVATION PLAN

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

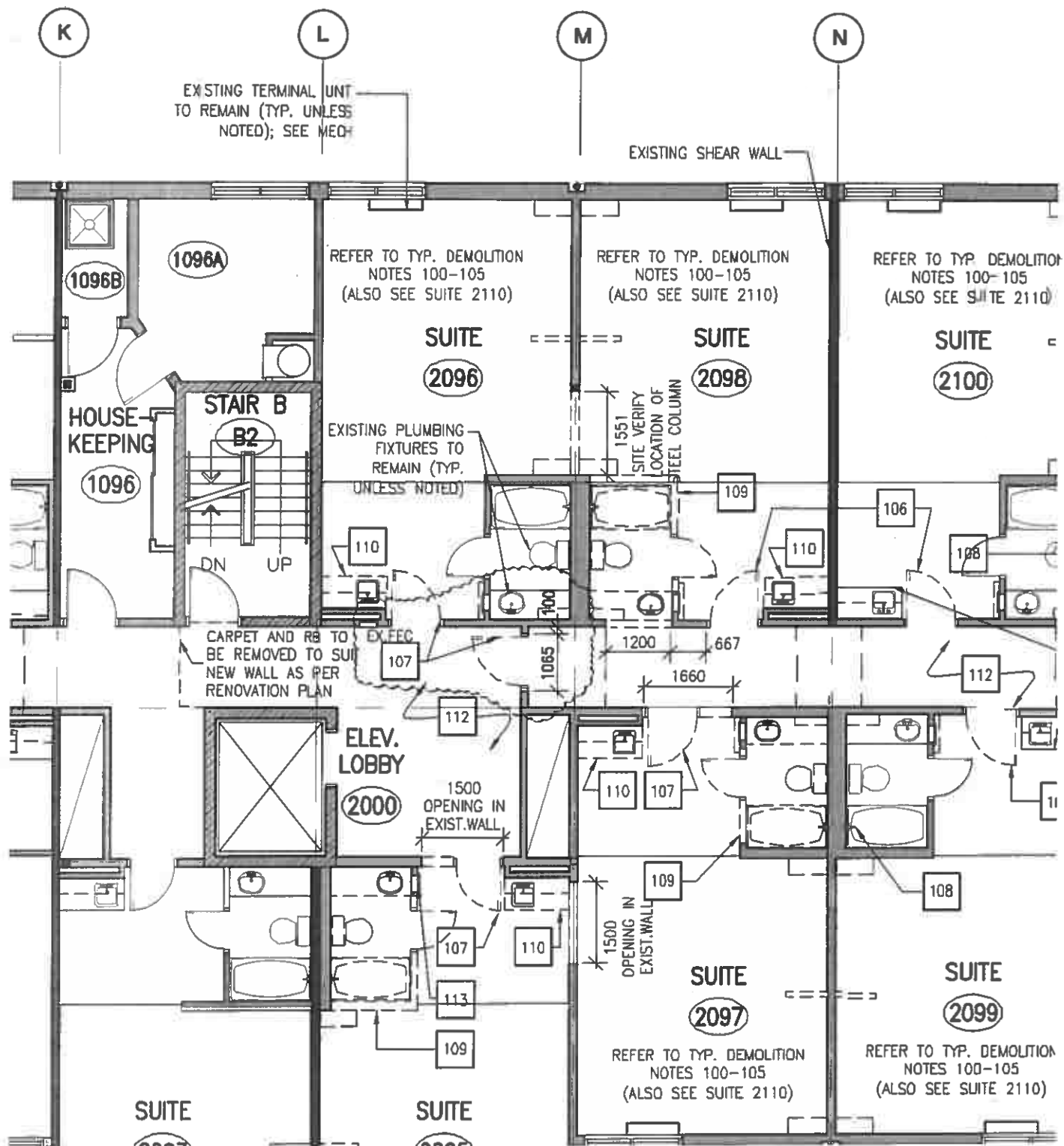
1:100

DWG. NO.

ADD-9

JOB #

1910



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

1/A2.2 PARTIAL SECOND FLOOR DEMOLITION PLAN

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

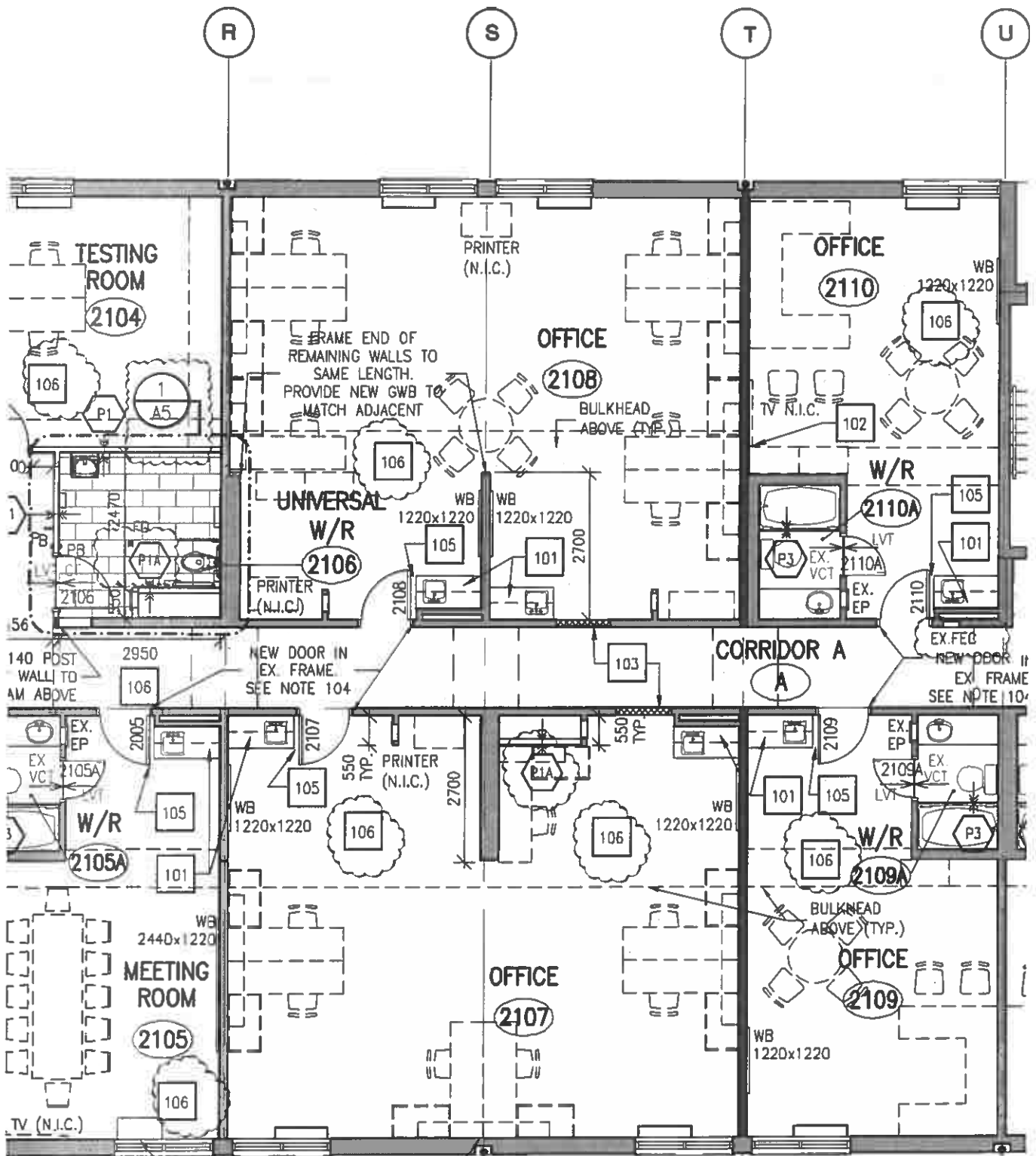
1:100

DWG. NO.

ADD-10

JOB #

1910



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

2/A2.2 PARTIAL SECOND FLOOR RENOVATION PLAN

MOFFET & DUNCAN ARCHITECTS INC.
5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

1:100

JOB #

1910

DWG. NO.

ADD-11

ADD-12

DOOR AND FRAME SCHEDULE

ROOM NAME	DOOR NO.	DOOR				FRAME				REQUIRED F.R.R.	REMARKS
		WIDTH	HEIGHT/THICKNESS	TYPE	MATERIAL	FINISH	GLASS	TYPE	HEAD / JAMB	MATERIAL	FINISH
VESTIBULE	1097	965	2050 45	E	HM	PAINT	TEMP	F5	J1, J1A	H.M.	PAINT
LOBBY	2000A	965	2050 45	B	HM	PAINT	FRELITE	F1	H1A	H.M.	PAINT
LOBBY	2000B	965	2050 45	C	HM	PAINT	FRELITE	F1	H1A	H.M.	PAINT
MEETING ROOM	2005	965	2050 45	D	WD	PLAM	TEMP	F2	H1 SM	H.M.	PAINT
MEETING ROOM	2005						FRELITE	F4	H2/SIA	H.M.	PAINT
OFFICE	2006	965	2050 45	D	WD	PLAM	TEMP	F2	H1 SM	H.M.	PAINT
W/R	2006A	EXIST.	EXIST. 45	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
STORAGE	2007	915	2050 45	A	WD	PLAM	-	F1	H1	H.M.	PAINT
STORAGE	2007A	915	2050 45	A	WD	PLAM	-	F1	H1	H.M.	PAINT
OFFICE	2008	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	H.M.	PAINT
OFFICE	2008						TEMP	F3	H2/SI	H.M.	PAINT
W/R	2008	915	2050 45	A	WD	PLAM	-	F1	H2	H.M.	PAINT
OFFICE	2100	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
W/R	2100A	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
OFFICE	2101	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
W/R	2101A	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
OFFICE	2102	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
W/R	2102A	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
OFFICE	2103	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
W/R	2103A	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
TESTING ROOM	2104	915	2050 45	D	WD	PLAM	TEMP	F1	H1	H.M.	PAINT
MEETING ROOM	2105	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
UNIVERSAL W/R	2106	965	2050 45	A	WD	PLAM	-	F1	H2	H.M.	PAINT
OFFICE	2107	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
OFFICE	2108	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
OFFICE	2109	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
W/R	2108A	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
OFFICE	2110	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
W/R	2110A	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
OFFICE	2111	915	2050 45	D	WD	PLAM	TEMP	EXIST.	-	EXIST.	PAINT
W/R	2111A	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
STAIR B	B2	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT
STAIR C	C2	EXIST.	EXIST. EXIST.	EXIST.	EXIST.	PAINT	-	EXIST.	-	EXIST.	PAINT

NOTES:

(A) PAINT ALL EXISTING H.M. DOORS AND FRAMES (C) PROVIDE DOOR CLOSER (E) PROVIDE DOOR OPERATOR INSTALL SOUND SEAL HARDWARE
(B) WEATHERSTRIP (D) SITE VERIFY DIMENSIONS OF EX. FRAMES (F) INSTALL DOOR SWEEP (H) INSTALL LOCKSET FROM EXISTING REMOVED DOOR ON NEW DOOR

SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

A3.0 DOOR SCHEDULE

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

1:100

DWG. NO.

ADD-13

JOB #

1910

PARTITION TYPES

P1

16 MM GYP. BD OVER
92MM METAL STUDS @ 400 O.C.
16 MM GYP. BD



P1A

SIM. GYP. BD ON ONE SIDE ONLY

P2

16 MM TYPE "X" GYP. BD OVER
92MM METAL STUDS @ 400 O.C.
16 MM TYPE "X" GYP. BD
1HR F.R.R.
ULC ASSEMBLY # W407



P3

EXISTING BATHTUB
41 MM METAL STUDS @ 400 O.C.
13 MM GYP. BD



P4

CHASE WALL
64 MM METAL STUDS @ 400 O.C.
2 LAYERS 16 MM GYP. BD ON ONE
SIDE



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

PARTITION TYPES
REF DWG A3.0 DOOR & FRAME SCHED...

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

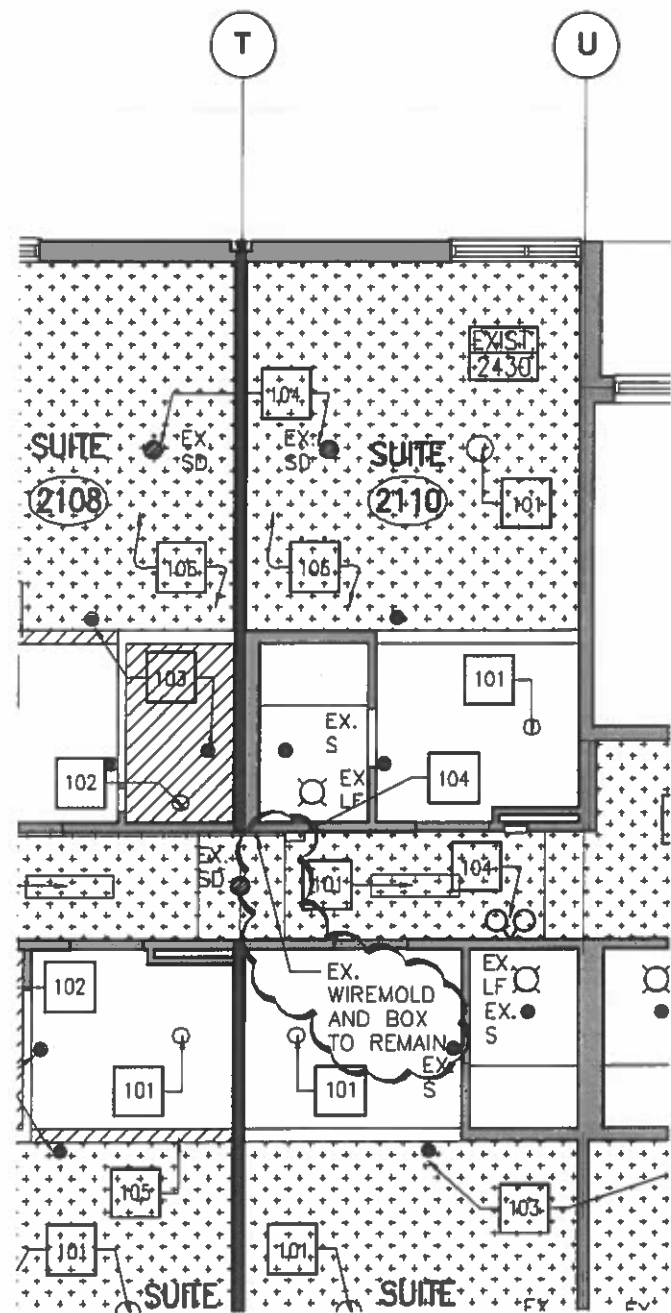
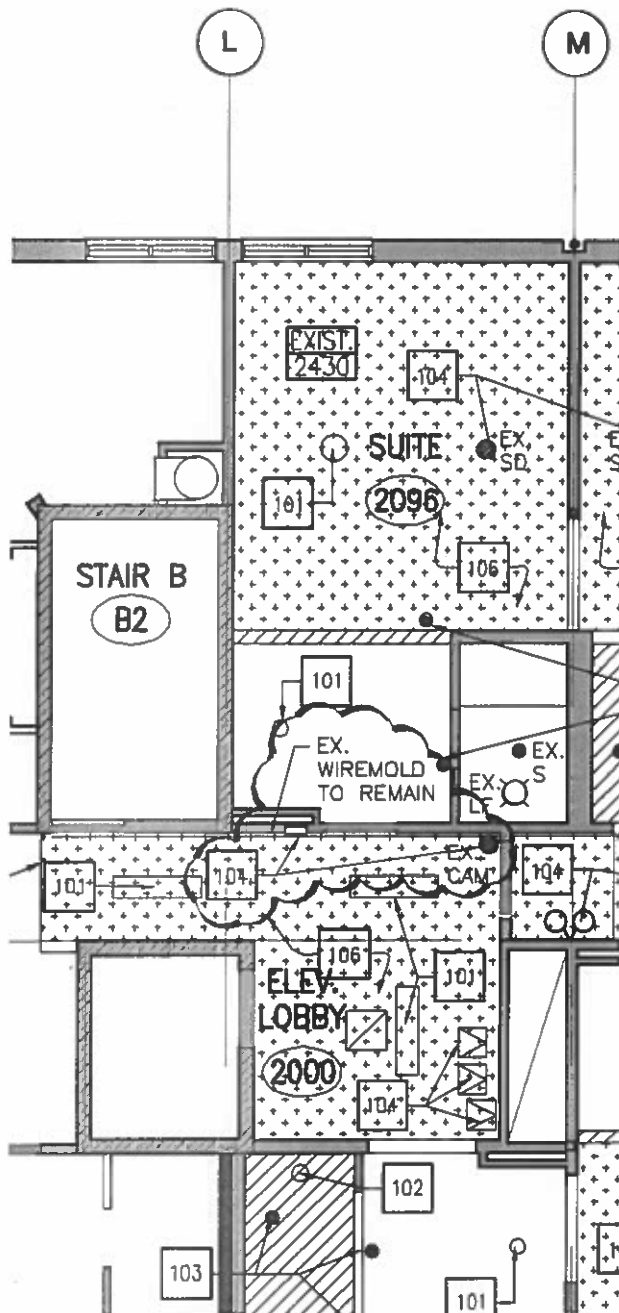
NTS

JOB #

1910

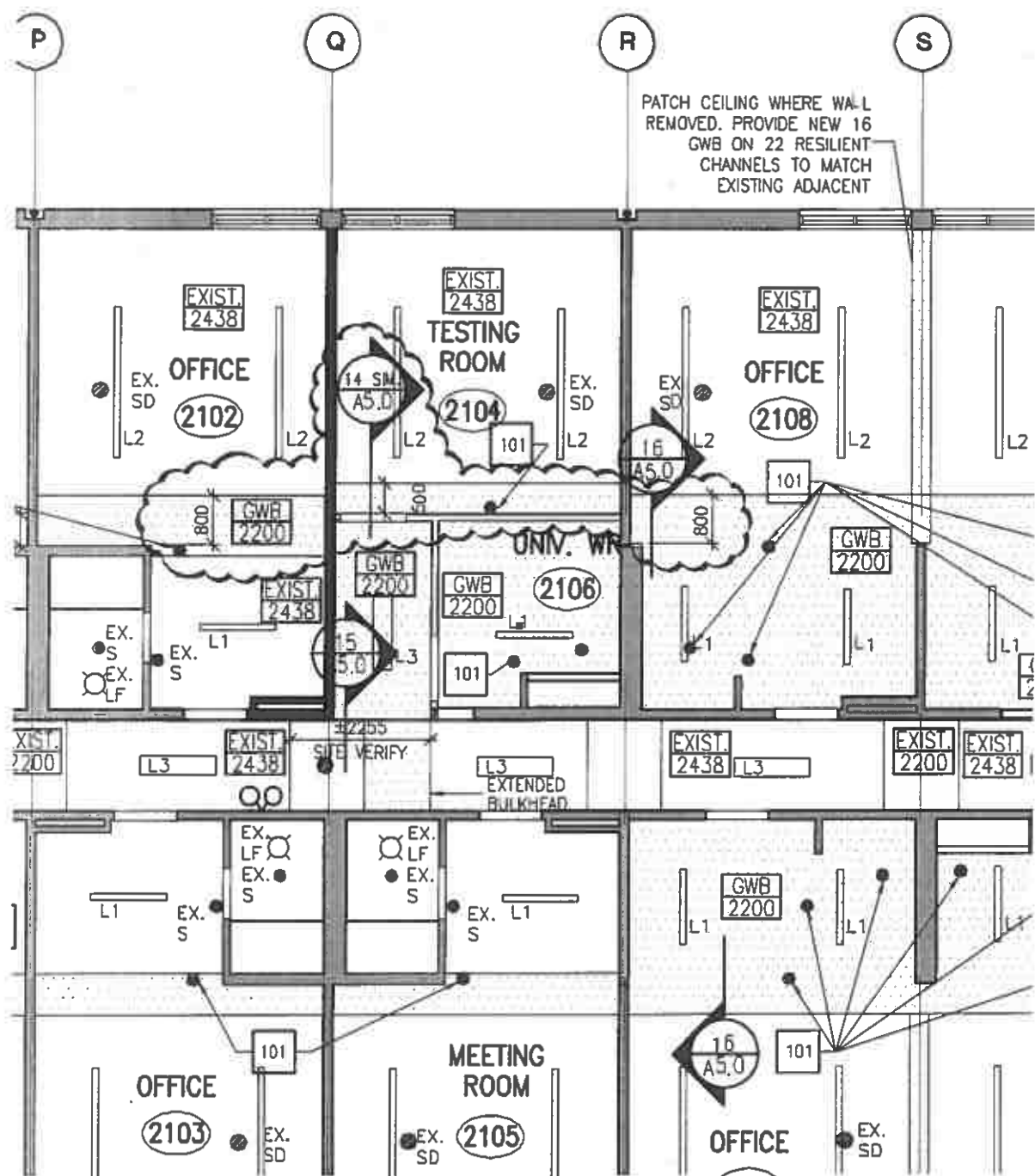
DWG. NO.

ADD-14



<p>SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019 DURHAM COLLEGE</p>	<p>SCALE</p>	<p>DWG. NO.</p>
<p>PART OF 1/A4.0 SECOND FLOOR DEMOLITION RCP</p>	<p>1:100</p>	<p>ADD-15</p>
<p>MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775</p>	<p>JOB # 1910</p>	

ADD-16



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

PART OF 2/A4.0 SECOND FLOOR RENOVATION RCP

MOFFET & DUNCAN ARCHITECTS INC.

5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

SCALE

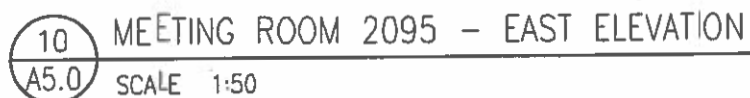
1:100

DWG. NO.

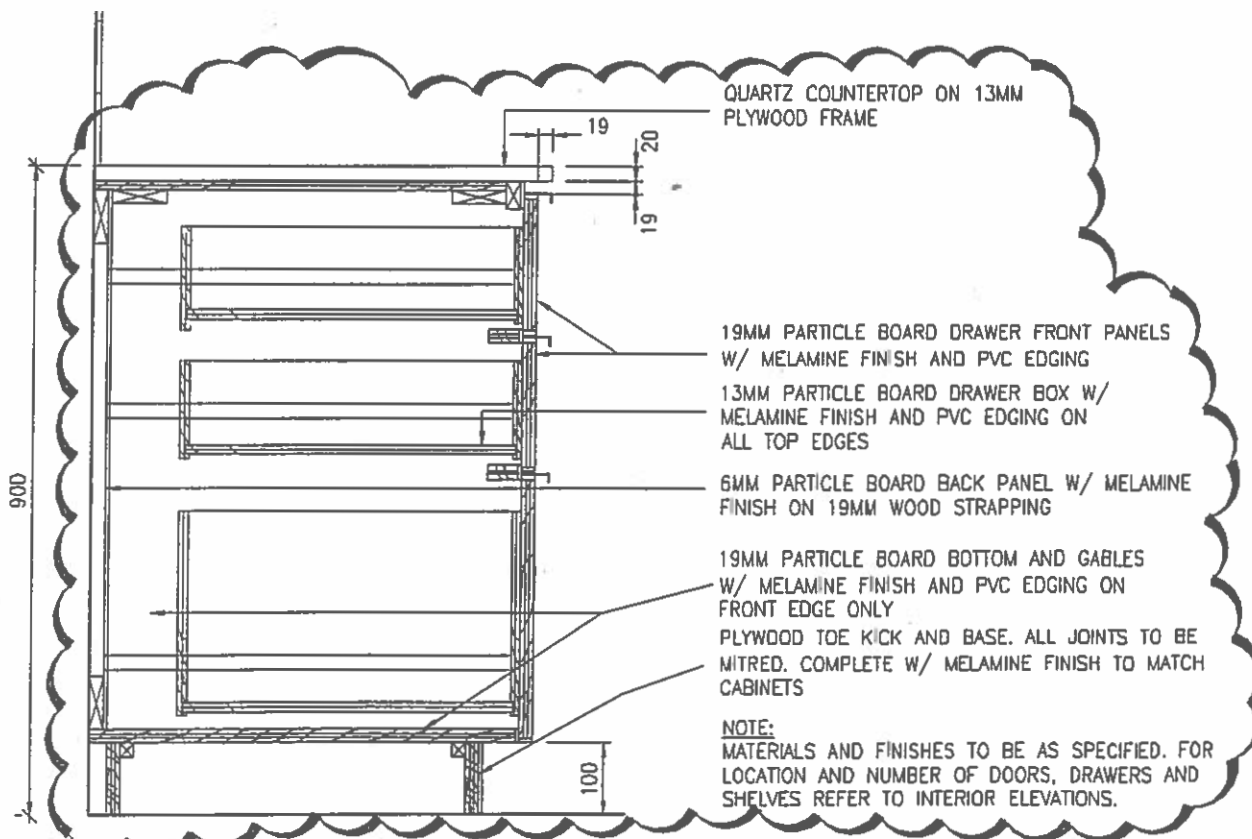
ADD-17

JOB #

1910

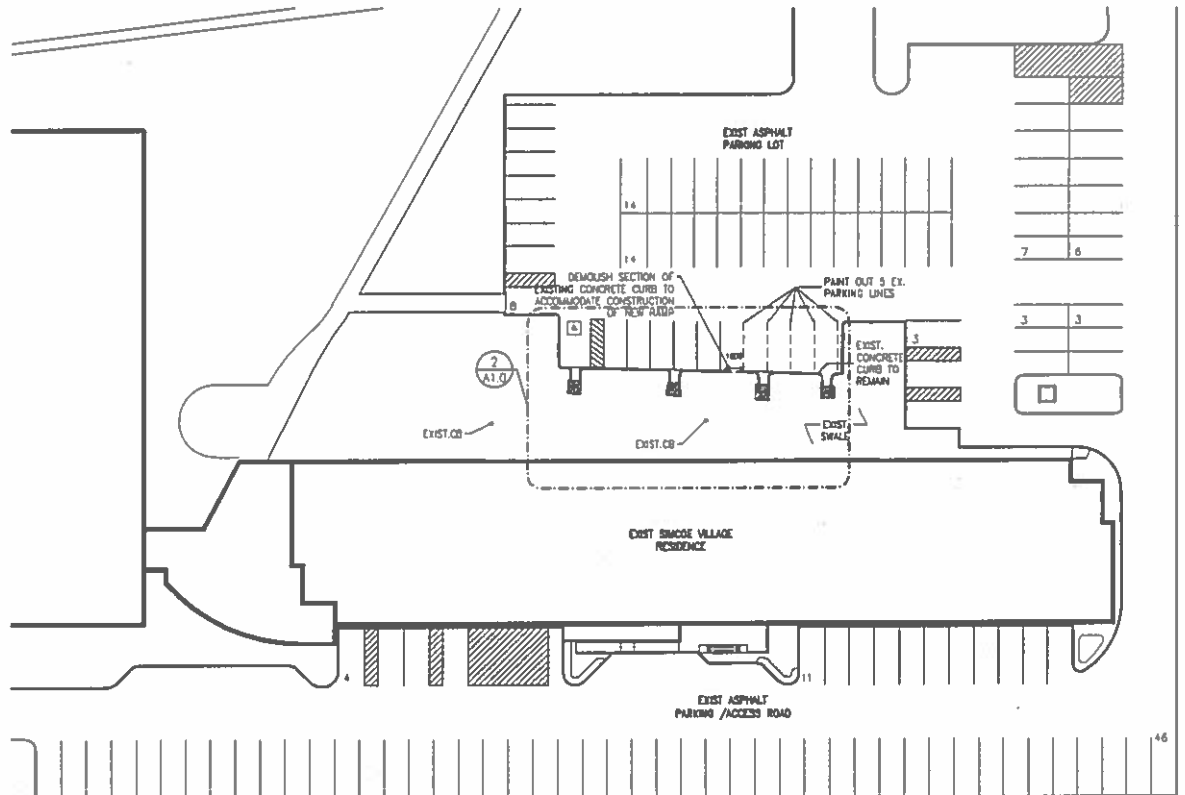


SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019 DURHAM COLLEGE MILLWORK AT MEETING ROOM 2095 REF DWG A5.0 WASHROOM DET, MILLWORK...	SCALE AS NOTED	DWG. NO. ADD-18
MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775	JOB # 1910	



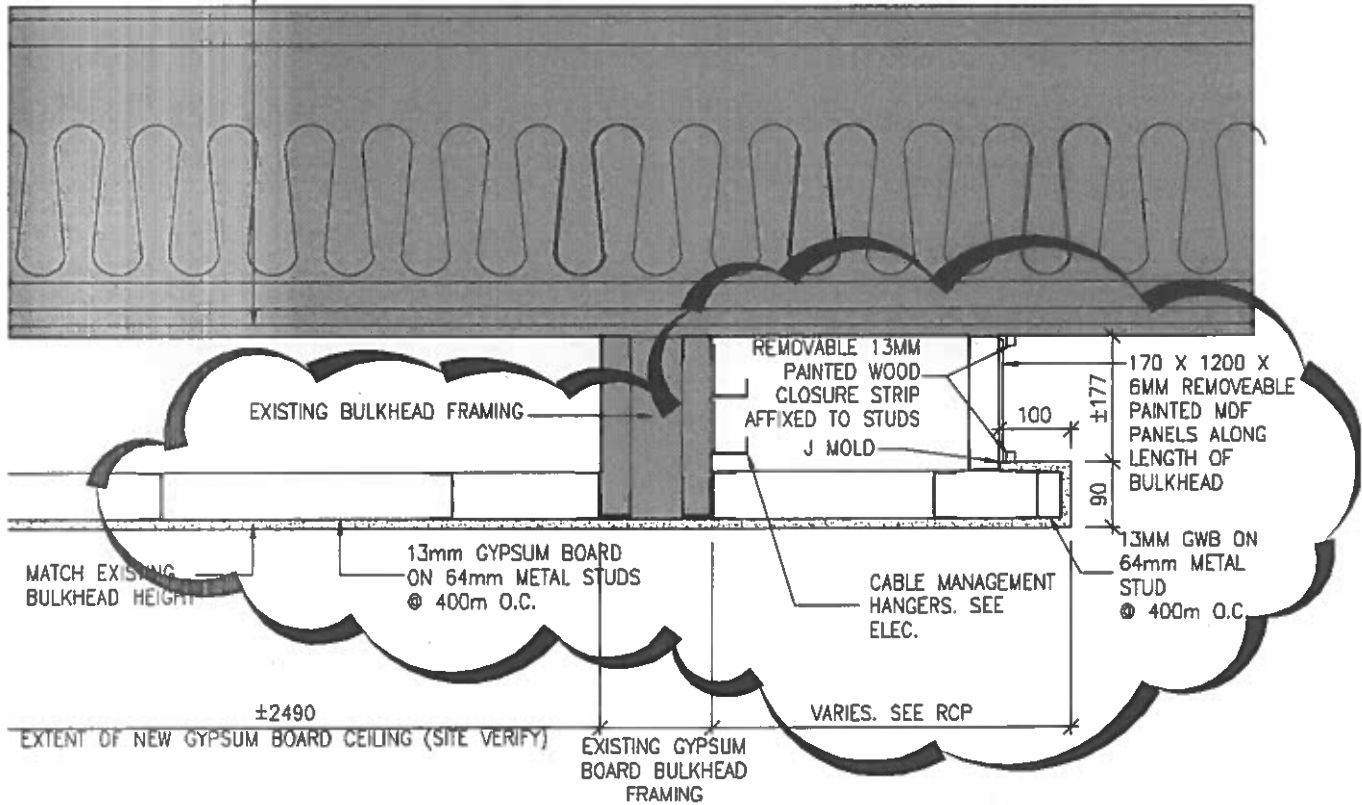
17 SECTION @ COUNTER MEETING ROOM 2095
A5.0 SCALE 1:10

SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019 DURHAM COLLEGE	SCALE	DWG. NO.
MILLWORK AT MEETING ROOM 2095 REF DWG A5.0 WASHROOM DET, MILLWORK...	AS NOTED	ADD-19
MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775	JOB # 1910	



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019 DURHAM COLLEGE	SCALE 1:100	DWC. NO.
1/A1.0 EXISTING SITE PLAN		ADD-20
MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST TORONTO ONT. M6A 1B9 TELEPHONE (416)-238-2775	JOB # 1910	

EXISTING SUITE
FLOOR
CONSTRUCTION



SIMCOE VILLAGE RENOVATIONS PHASE 2 - 2019
DURHAM COLLEGE

16/A5.0 EXTENDED BULKHEAD @ OFFICE

SCALE

1:10

DWG- NO.

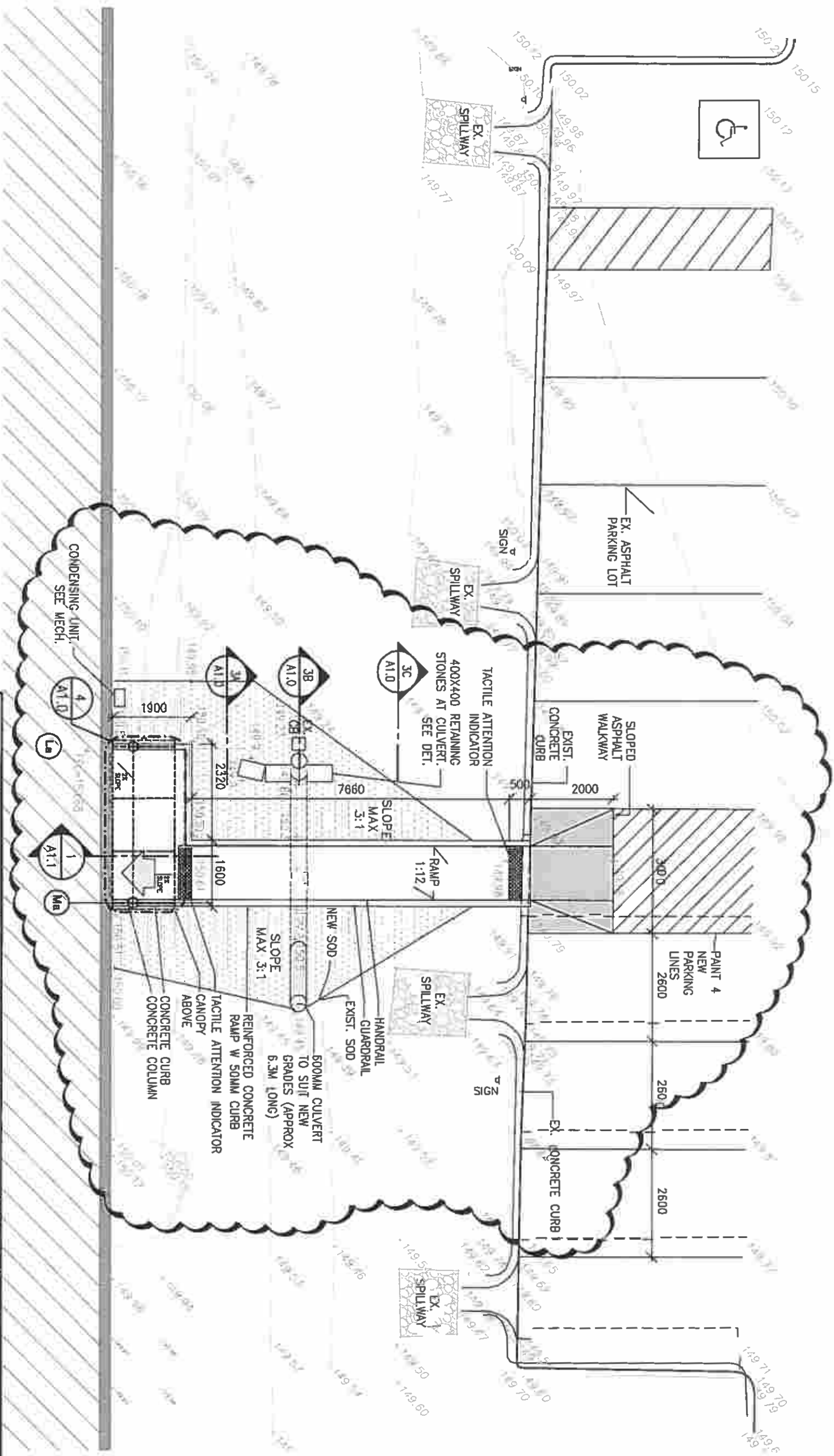
ADD-21

MOFFET & DUNCAN ARCHITECTS INC.

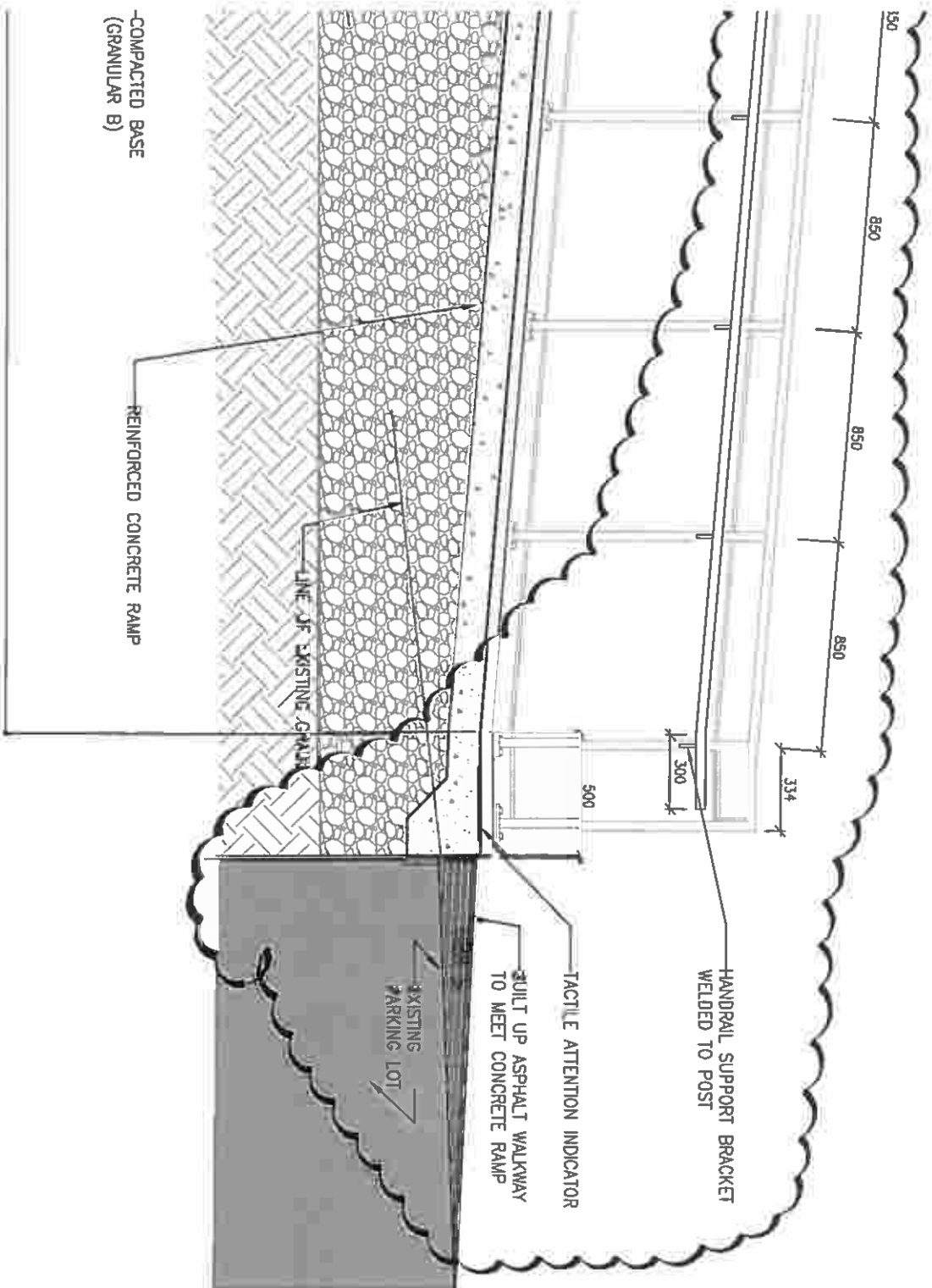
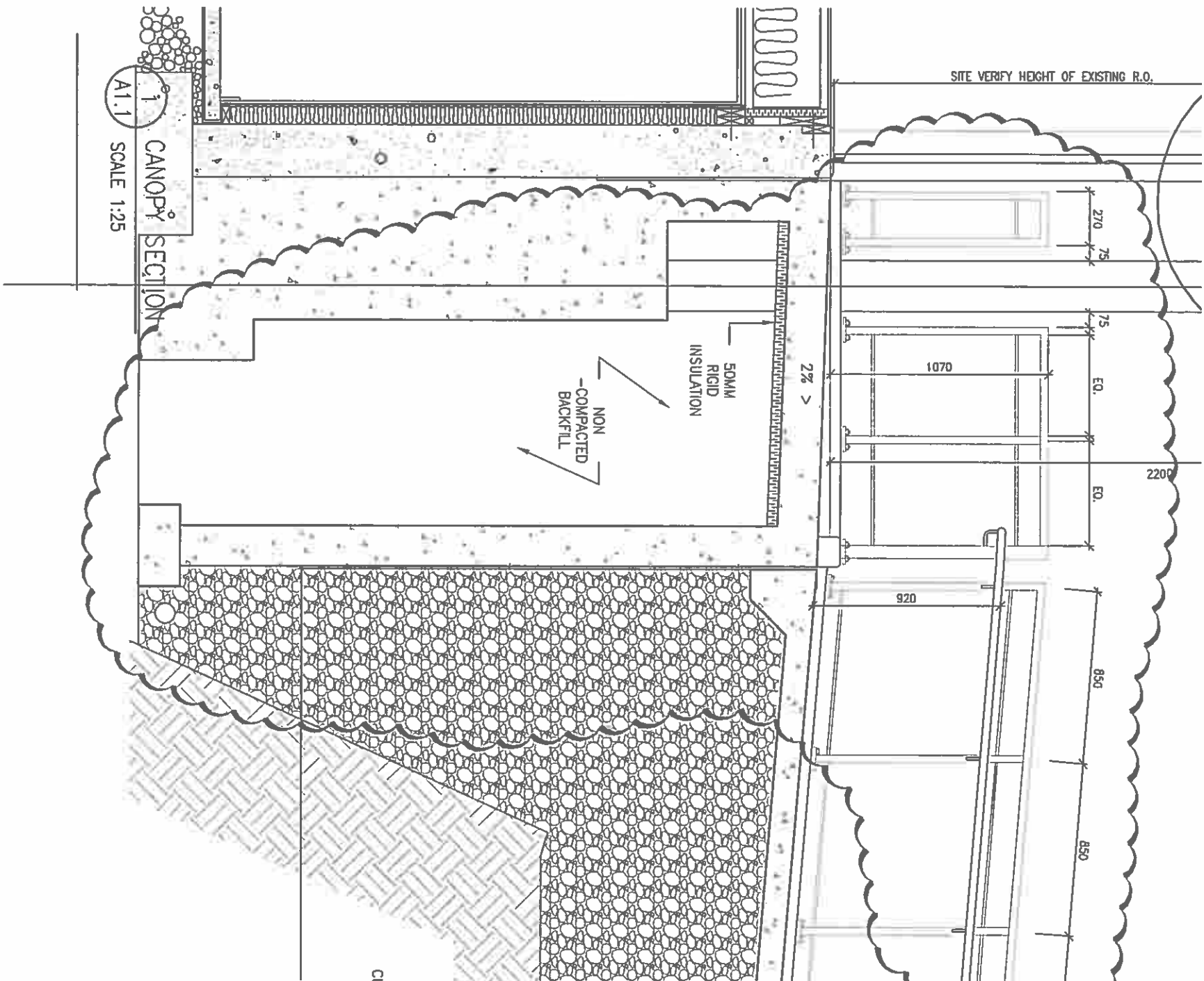
5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775

JOB #

1910



SIMCOE VILLAGE RENOVATIONS PHASE 2 – 2019 DURHAM COLLEGE		SCALE	DWG. NO.
2/A1.0 SITE PLAN AT NEW ENTRANCE		1:100	
MOFFET & DUNCAN ARCHITECTS INC.		JOB #	ADD-1
5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416) 239-2775		1910	



SIMCOE VILLAGE RENOVATIONS PHASE 2 – 2019 DURHAM COLLEGE	SCALE	DWG. NO.
PARTIAL 1/A1.1 CANOPY SECTION	1:10	ADD-4
MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST TORONTO ONT. M9A 1B9 TELEPHONE (416)-239-2775	JOB # 1910	