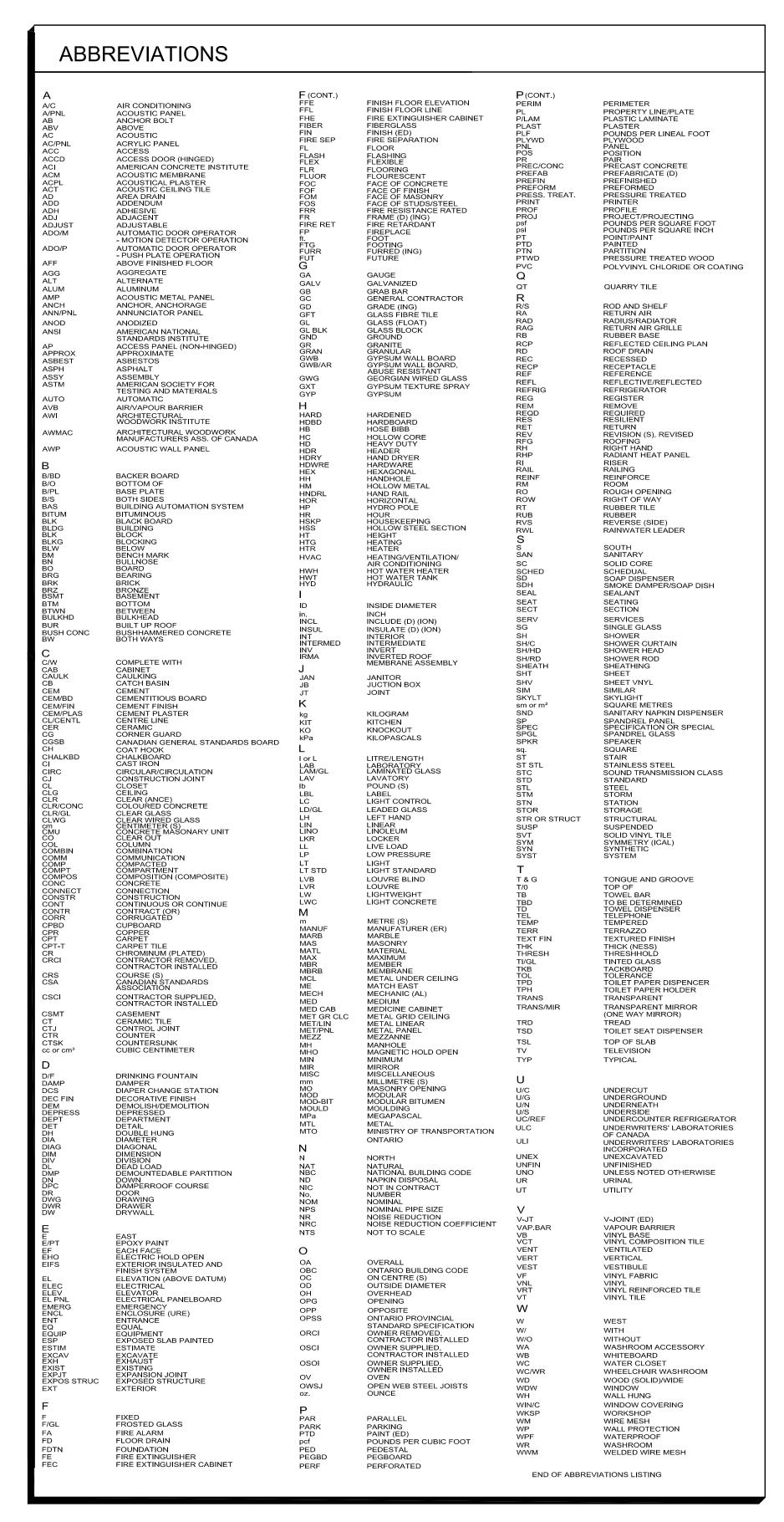
Corridor Ceiling & Accessibility Renovation at

HWDSB Orchard Park Secondary School

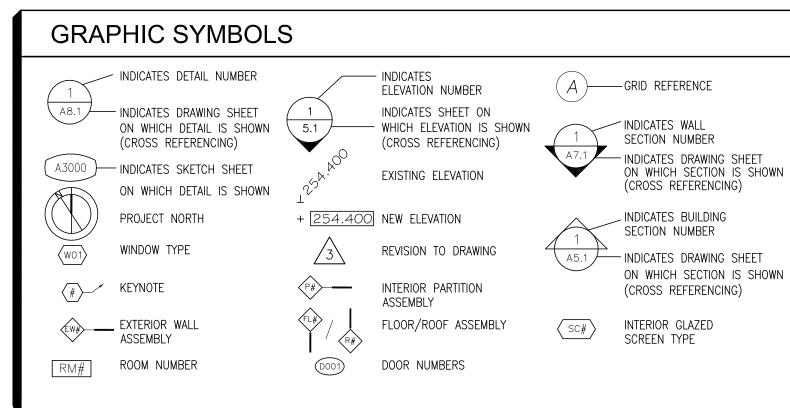
200 Dewitt Road, Stoney Creek, ON

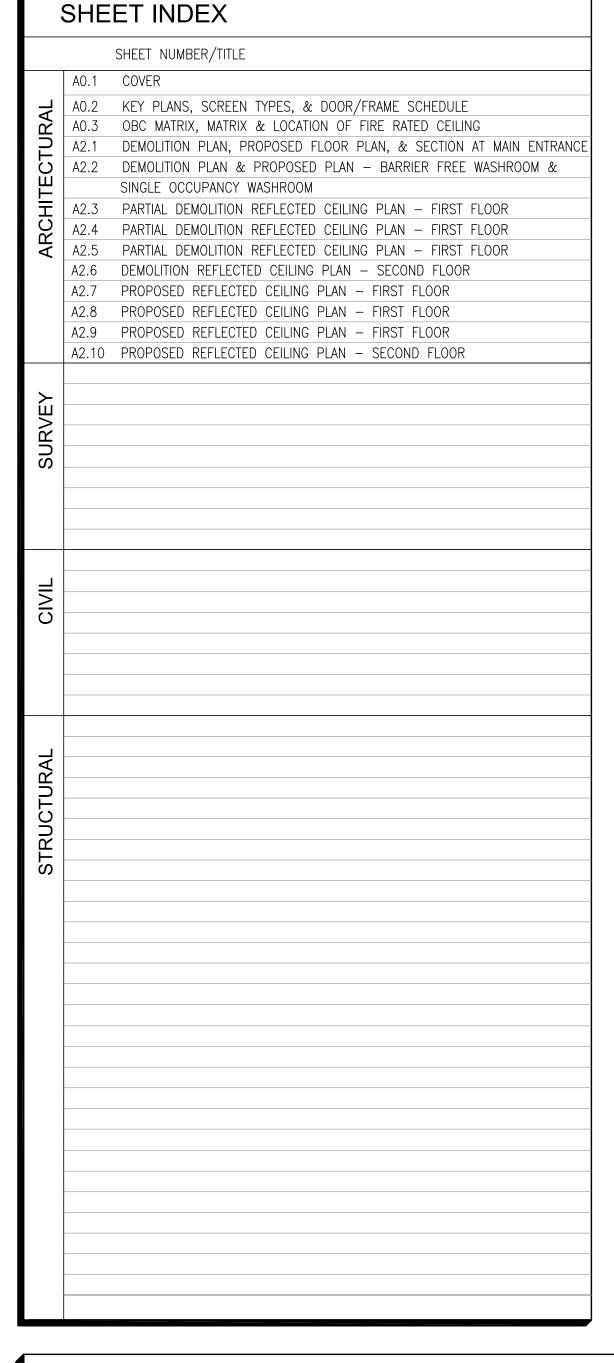
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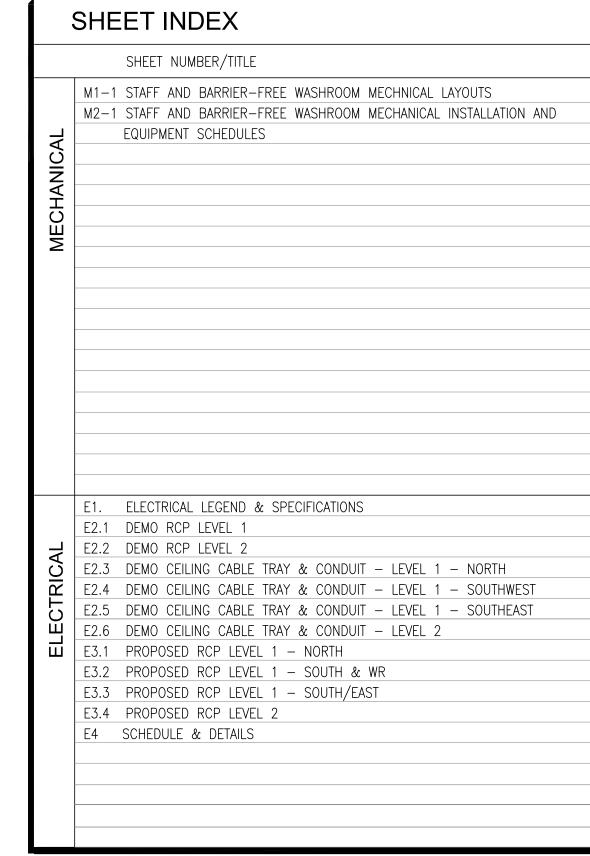


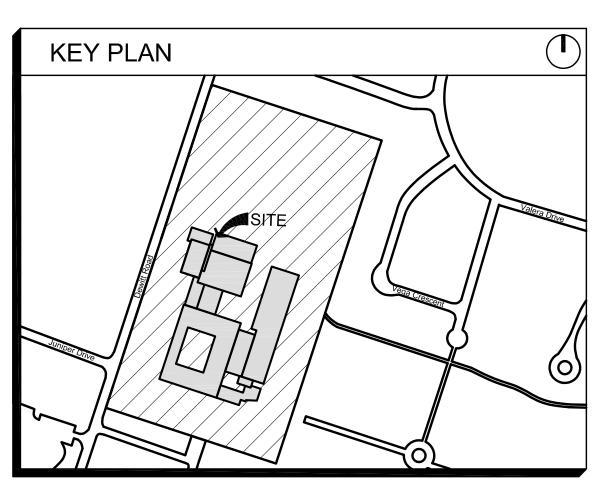


CONTACT LIST								
HAMILTON- WENTWORTH DISTRICT SCHOOL BOARD	Client	Hamilton Wentworth District School Board 20 Education Court, P.O. Box 2558 Hamilton, Ontario T: 905-527-5092x2477 C: 365-336-9791 E: nfisher@hwdsb.on.ca	Nate Fisher Project Supervisor, Capital Projects					
CGS CERMI CACE A SACRITURE TO	Architect	CGS CURRAN GACESA SLOTE ARCHITECTS 118 James Street North, Suite 301 Hamilton, Ontario, L8R 2K7 T: 905-297-0863 E: bill.curran@cgsarch.ca	William Curran, OAA, LEED AP					
	Electrical	Root3 Engineering Ltd. 1920 Young St, Suite 200, Toronto, ON M4S 3E2 T: 437-562-6772 E: sholditch@root3.ca	Steve Holditch, P. Eng.					
COPA ENGINEERING LTD.	Mechanical	CoPa Engineering Ltd. 29 Rolling Acres Drive Kitchener, ON N2A 3W5 T: 519-894-0022 F: 519-894-4548 E: copa.eng@sympatico.ca	Costas Pashartis, P. Eng.					
AILMAR ENGINEERING STRUCTURAL ENGINEERS	Structural	AILMAR ENGINEERING INC. 94 Curran Road, Ancaster, Ontario, L9K 0H4 T: 905-966-4797 E: ssomo@ailmar.com	Samuel Somo, P.Eng.					









GENERAL	NOTES

- 1. ALL CONSTRUCTION TO MEET ALL ONTARIO BUILDING CODE 2012 REQUIREMENTS.
- 2. ENSURE THAT ALL CONSTRUCTION, MATERIALS, METHODS OF INSTALLATION AND TEMPORARY FACILITIES COMPLY WITH REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION.
- 3. INSPECT SITE CONDITIONS PRIOR TO COMMENCING ON NEW WORK AND REPORT ANY DISCREPANCIES.
- 4. REPORT ALL CONTEMPLATED DEVIATIONS FROM THE DRAWINGS PRIOR TO MAKING CHANGES.
- SITE VERIFY ALL DIMENSIONS AND MAKE MODIFICATIONS TO SUIT EXISTING SITE CONDITIONS.
 MAKE GOOD ALL AREAS DISTURBED OR DAMAGED DURING CONSTRUCTION WHETHER SHOWN ON DRAWINGS OR NOT.
- 7. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ANY AND ALL STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL AND LANDSCAPE DRAWINGS. COORDINATE STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL &
- LANDSCAPE WORK TO ENSURE THE PARTS OF THE WORK COME TOGETHER PROPERLY.
- 8. PROVIDE CUTTING, PATCHING, AND REMEDIAL WORK IN ORDER TO ENSURE PARTS OF THE WORK COME TOGETHER PROPERLY.

 9. ARRANGE FOR INSPECTIONS REQUIRED BY LOCAL BUILDING, PLUMBING, HYDRO, GAS, ETC., AUTHORITIES DURING CONSTRUCTION AND FOR OCCUPANCY.
- 10. THE PLANS SHOWN HERE DO NOT REPRESENT THE FULL LIMIT OF THE SCOPE OF WORK. PROVIDE ALL WORK IN ORDER TO ENSURE PARTS OF THE WORK COME TOGETHER PROPERLY.

CGS | CURRAN | GACESA | SLOTE
A R C H I T E C T S

TEL 905-297-0863
118 JAMES ST. NORTH, SUITE 301, HAMILTON, ONTARIO L8R 2K7

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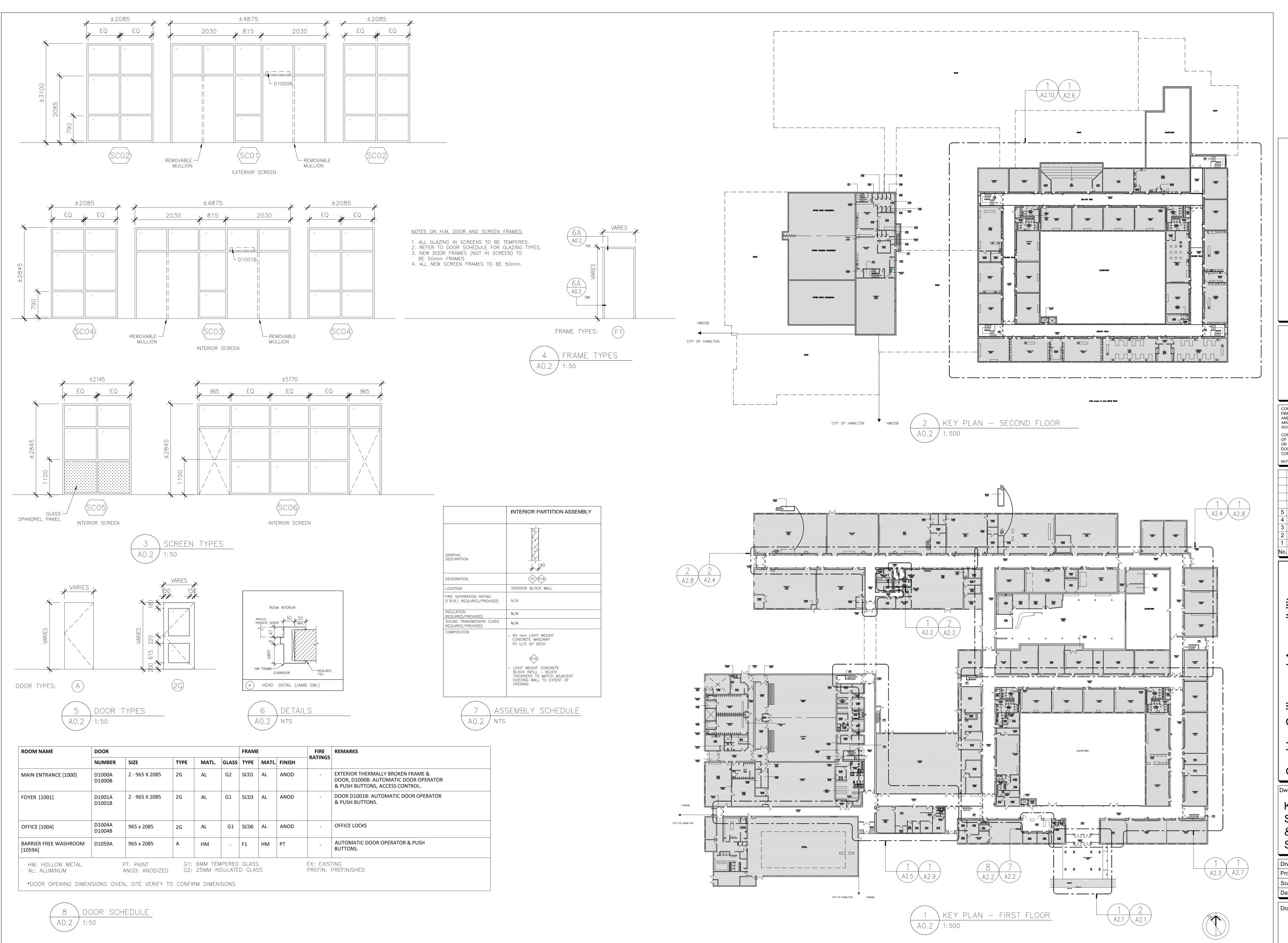
s at Orchard Park SS toad,

Renovations at
HWDSB Orc

Cover

Drwn: Chkd: WJC
Proj. No.: 24014
Scale: As noted
Date: 09/17/2024

Drawing No.:
A0.1



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No. Date Remarks

S S Accessibility Orchard

Corridor Ceiling and A Renovations at HWDSB Orcha 200 Dewitt Roa Stoney Creek, (

Dwg. Title: Key Plans, Screen Types, & Door/Frame Schedule

Chkd: WJC Proj. No.: 24014 Scale: As noted 09/17/2024

Drawing No.:

Washroom Soap Dispenser & Toilet Paper Dispenser: supplied by Owner and Accessories installed by contractor. Sanitary Napkin Disposal: 22 gauge stainless steel wall mounted sanitary napkin receptacle (6 litre capacity) - Code 622 by Frost Products Ltd. or approved equivalent. Grab Bars: Equal to ASI 3700 Series, 1-1/4" diameter, snap-on flange concealed mounting, peened finish.

Suspended

Ceiling Grid:

Ceramic Wall Tiles

at washroom CT-B

Tile Edge Trim:

Type GB-01 24" long bar above each toilet. Type GB-02 32x16" L-shaped bar beside the toilet. Vandal Resistant Mirror M1 (Small): ASI 0600-C2436 tempered glass and Type 304 stainless steel frame 24"x36"

Coat Hook: Equal to Frost 1150 Safety Hook. Provide 1 on rear of each door at 1200mm AFF in Barrier Free Washroom 1059A and at 1500mm AFF in Single Occupancy Washroom 1059B.

Millwork:

capable of receiving a high quality transparent finish.

finish; thicknesses as indicated on Drawings.

Plywood: To ANSI/HPVA HP-1, Architectural G2S; hardwood veneer core comprised

of minimum 9 plies; White Birch veneers, Face Grade A; Plain-Sliced (flat cut); of clear

Book match grain capable of receiving a high quality transparent finish; thicknesses as

Medium Density Fiberboard (MDF): To ANSI A208.2, Grade MD; minimum 740

kg/m³ density and moisture content between 4.5 - 8.0 percent; with clear Natural

Melamine Panels: melamine resin impregnated decorative paper, thermally fused to

both sides of a premium grade medium density fiberboard (MDF). Performance to

Decorative Laminate: High pressure decorative laminate to ANSI/NEMA LD3; as

meet or exceed NEMA LD3-2005-VGS minimum requirements.

.1 General Purpose Type: Grade HGS, 1.2 mm thick.

4 Manufacturers: Arborite, Formica, Nevamar or Wilsonart.

2 Postforming Type: Grade HGP, 1.0 mm thick.

Cabinet/Drawer Fronts/Doors & Cabinet Interiors:

Bodies, Shelves, Aprons, Skirts: 19mm thick.

Roppe Corporation or Tarkett Johnsonite.

.3 Backer Type: Grade BKM, 1.0 mm thick.

Cabinets:

All countertops:

Backs: 6mm thick.

Rubber Floor Base:

Transition Strip:

apply small bead of sealant.

Colours to be selected from full manufacturer's standard colour range.

Postformed plastic laminate with 180 degree wrapped bullnose edge.

At junction of counter/counter backsplash & adjacent wall finish,

Melamine or plastic laminate on plywood, on all exposed surfaces.

To ASTM F1861, Type TP, Group 1, Style B - Cove; 3.17mm thick

Industries, Flexco, Roppe Corporation or Tarkett Johnsonite

If wall finish around countertop is tiled, no integral backsplash is required.

All cabinet interiors to be off-white colour (gray or beige) melamine or plastic

thermoplastic rubber, 152mm high; top set; complete with pre-moulded end stops

Thermoset vulcanized rubber, smooth, purpose made to accommodate wheeled

traffic and prevent tripping; tapered designs to suit nature of transition; colours as

selected by Consultant; as manufactured by Armstrong World Industries, Flexco,

and external corners; Charcoal colour; as manufactured by Armstrong World

Wall Mounted Garbage Bin(GRB): Type 304 Stainless Steel Regular Capacity (50 litres) Code 326 Wall Mount Receptacle by Frost Products Ltd. or approved equivalent.

To ASTM E1264, Type III, Form 1, Pattern C E: 24" x 48" size, 7/8" thick Acoustic Lay-in wet-formed mineral fiber non-sagging lay-in tile, complete with factory-applied Ceiling Tile ACT: latex paint, White colour; Fine Fissured High NRC - 1755 by Armstrong World Industries or similar by CertainTeed Canada, Inc. or CGC Inc.

> To ASTM C635/C635M, Class HD; commercial quality, cold rolled steel, non-fire rated; main tees, cross tees and grid adapters with exposed 15/16" T-shape, 1-11/16" high; die cut and interlocking components; White baked enamel finish; Prelude XL by Armstrong World Industries or similar by CertainTeed Canada, Inc. or CGC Inc.

Install suspended ceiling grid to ASTM C636/C636M and CISCA installation standards. Include for all stabilizer bars, clips, splices, transitional mouldings, edge mouldings, hanger wire, tie wire and all other accessories to make a complete installation.

Ceramic Wall Tiles Acceptable Materials: Size 1000mm x 3.00mm x 3.5mm; "Laminam Filo" by on exterior entrance Stone Tile International, matte finish. Allow for two (2) field colours from manufacturer's columns CT-A full line. Install with coloured epoxy grout to match.

Acceptable Materials: Size 73mm x300mm; "Shadebick Series" by

line. Install with coloured epoxy grout to match. Epoxy grout to conform to ANSI 118.3. Grout to be two-component, 100% solids

Olympia Tile, matte finish. Allow for two (2) field colours from manufacturer's full

epoxy grout, water cleanable and non-sagging: Mapei Kerapoxy CQ or equivalent.

Install tile to TTMAC Tile Installation Manual 2019-2021. Provide metal edge trim at all exposed tile edges. Equal to Schluter Jolly, anodized aluminum.

Tile Grout & Adhesive: Manufacturers of grout and adhesive having Product considered acceptable for use: Flextile. Laticrete, Mapei, Proma Adhesives, Inc., TEC. Grout colour selected by Consultant from manufacturer's full colour range.

Fabricate and install casework to AWMAC NAAWS 4.0, Custom Grade. Fire Stopping & Smoke Seals: Hardwood Lumber: White Birch, NHLA Select and Better Grade, with vertical grain

Firestop Sealant: To CAN/ULC-S115; ULC labelled; non-sagging type for vertical applications; types as listed in tested assemblies.

Firestop Insulation: To CAN/ULC-S702.1, Type 2; manufactured from only rock or slag fibers, as listed in tested assemblies.

Firestop Accessories: Firestop foams, boards, blocks, collars, wraps, puttys and plugs; to CAN/ULC-S115; ULC labelled; types as listed in tested assemblies.

Manufacturers: 3M Canada Inc. or Hilti Canada Corporation or A/D Fire Protection or Tremco.

Inspect penetration firestop systems to ASTM E2174 and fire-resistant joint systems to ASTM E2393.

Concrete Specification:

All concrete shall be designed to comply with the latest edition of CAN/CSA A23.3. The construction of concrete shall comply with the latest edition of CAN/CSA A23.1 and A23.2. Provide a minimum of 75mm of concrete cover for rebars placed in concrete cast against earth. 28 day concrete compressive strength, f'c, shall be 32MPa.

Exposure class: C-2 Slump at delivery: 75mm (+/-) 25mm

Sealed Insulating Glass Unit specifications: To CAN/CGSB-12.8; double pane with warm edge seal; comprised as follows: Outer Pane: 1/4" (6mm) thick tinted tempered glass. Interpane Space: filled with minimum 90% Argon gas. Inner Pane: ¼" (6mm) thick clear tempered glass, sputtered low-E coating on #3

Overall thickness: 1" (25mm) Manufacturer's name and product: eg. Solargray + Solarban 60 (3) Clear by Vitro

Sealed Insulating Glass Units to have the following tested physical properties: 1. Visible Light Transmittance (VLT): 35% 2. Visible Light Reflectance: 7% exterior, 9% interior 3. Coefficient of Heat Transmission, Winter Argon-filled (U-value): 1.36 W/m² 4. Solar Heat Gain Coefficient (SHGC): 0.29 5. Light to Solar Gain Ratio (LSG): 1.21

<u>Spandrel Glazing</u>: single pane; comprised as follows:

Outer Pane: 6mm thick single pane, tinted and tempered glass with a coloured opaque coating applied to #2 surface, eg. Opaci-Coat 300 by ICD High Performance Coatings, colour to match anodized aluminum window framing.

Inner Liner: 1.5 mm thick anodized aluminum panel, sealed at all edges.

Joint Sealants:

General Purpose, Acoustical Sealant: To CAN/CGSB-19.17-M; one-part, siliconized acrylic latex, mildew-resistant, accommodating joint movement of plus or minus 12-1/2 percent; colours as selected by Consultant; Tremflex 834 by Tremco or similar by Dow, General Electric or Master Builders Solutions Canada, Inc. Mildew-Resistant Sealant: To ASTM C920, Type S, Grade NS, Class 25, Use NT, G, A,

and O; one-part, acetoxy silicone sealant, complete with integral fungicide; colours as selected by Consultant; Tremsil 200 by Tremco or similar by Dow, General Electric or Master Builders Solutions Canada, Inc. Install joint sealants to ASTM C1193.

Install acoustical sealants to ASTM C919. Inspect completed sealant joints for adhesion and cohesion to ASTM C1521. Exterior Weatherseal Sealant: To ASTM C920, Type S, Grade NS, Class 35, Use NT, M, A and O; one-part, moisture curing, low modulus polyurethane sealant;

accommodating joint movement of plus or minus 35 percent, with a 30- to 90-minute skin time; eg. Dymonic FC by Tremco. Colour: To be selected from full standard range by consultants. Acceptable manufacturers: Tremco, GE, Dow, or 3M. Glazing Sealant: To CAN/CGSB-19.13-M, Type MG-2-25-A-L; one-part, moisture

curing, acetoxy silicone sealant; eg. Proglaze by Tremco, Clear colour.

Conform to MPI Architectural Painting Specification Manual, using only Products from the following manufacturers as listed in MPI Approved Products List for each scheduled paint system. Provide primers and undercoats produced by same manufacturer as finish coats. Manufacturers: Benjamin Moore & Co. Ltd., ICI (Dulux) Paints, MF Paints Inc.

(Innovation Plus), Para Paints Canada Inc., PPG Canada Inc. (Pittsburgh Paints), Pratt & Lambert Co., Sherwin-Williams Canada, and Sico Coatings, Inc. Conform to MPI Maintenance Repainting Manual for refinishing existing previously finished surfaces.

Paint System Schedule

1. Concrete - Opaque Painted Finish: INT. 3.1M - Institutional low odor/voc, Premium Grade; Gloss Level G5 - Semi-Gloss.

2. Concrete Masonry Units - Opaque Painted Finish: INT. 4.2E - Institutional low odor/voc (over latex block filler), Premium Grade; Gloss Level G5 - Semi-gloss. Provide block filler primer on all new concrete block masonry before applying paint.

3. Brick - Opaque Painted Finish: INT. 4.1M - Institutional low odor/voc (over latex primer/sealer), Premium Grade; Gloss Level G5 - Semi-gloss 4. Gypsum Board Walls - Opaque Painted Finish; INT, 9,2M - Institutional low odor/voc (over latex primer/sealer), Premium Grade; Gloss Level G4 - Satin.

5. Gypsum Board Ceilings - Opaque Painted Finish: INT. 9.2M - Institutional low odor/voc (over latex primer/sealer), Premium Grade; Gloss Level G1 - Flat. 6. Galvanized and Galvannealed Metal - INT.5.3N - Institutional low odor/voc (over w.b. galvanized primer), Premium Grade; Gloss Level G5.

NOTE: All exterior metal to be hot-dipped galvanized.

Colours: Up to 4 colours as selected by Consultant.

Extra Stock Provide 3% additional extra stock materials for all wall and floor finishing **Materials:** materials. Contractor to provide new, unopened cartons of finish materials to Owner c/w intact original labels. Deliver to and store extra stock materials at location directed by Owner at Place of the Work.

devices. All glazing in Doors and Screens to be 1/4" Tempered glass. STORAGE TORAGE MECHANICAL ROOM 1083 ELECTRICAL ROOM IOSBE CLASSROOM 1103 HWDSB CITY OF HAMILTON MAIN_ENTRANCE CITY OF HAMILTON

PROVIDE 16mm TYPE 'X' UNPAINTED GYPSUM BOARD CEILING C/W METAL TRACK TIGHT TO U/S OF LOWEST FIXED ITEMS SUCH AS STRUCTURAL STEEL OR PIPE WORK. GYPSUM CEILING TO PROVIDE 50 MINUTES FIRE-RESISTANCE AS PER SB-2 TABLE 2.3.4.B. AND TABLE 2.3.4.F. TAPE ALL JOINTS AND APPLY COMPOUND TO ALL

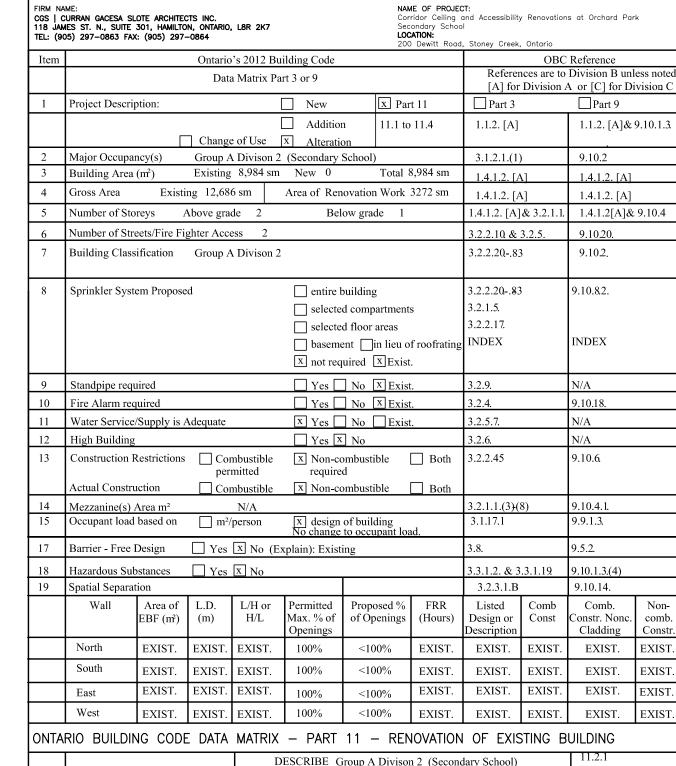
EXPOSED FASTENERS. GYPSUM BOARD CEILING TO EXTEND ABOVE LOCKERS TO TERMINATE AT

CORRIDOR WALLS.

GWB-2

PROVIDE 16mm TYPE 'X' PAINTED GYPSUM BOARD CEILING C/W METAL TRACK. HEIGHT TO MATCH EX. REMOVED CEILING FINISH. GYPSUM CEILING TO PROVIDE 50 MINUTES FIRE-RESISTANCE AS PER SB-2 TABLE 2.3.4.B AND TABLE 2.3.4.F. TAPE & SAND ALL JOINTS AND APPLY COMPOUND TO ALL EXPOSED FASTENERS AND PREPARE SURFACE FOR PAINT





EXISTING BUILDING EXISTING USE: CLASSIFICATION CONSTRUCTION n/a Т 11.2.1.1А INDEX: HAZARD INDEX: n/a T 11.2.1.1K ■ NOT APPLICABLE (NO CHANGE OF MAJOR OCCUPANCY ALTERATION TO EXISTING SASIC RENOVATION ■ BUILDING IS: EXTENSIVE D RENOVATION STRUCTURAL: "YES "NO 11.4.2.1 BY INCREASE IN REDUCTION IN OCCUPANT LOAD: □YES ■NO 11.4.2.2 PERFORMANCE LEVEL 11.4.2.3 BY CHANGE IN 11.4.2.4 MAJOR OCCUPANCY: □YES ■ NO 11.4.2.5 PLUMBING: □YES ■ NO SEWERAGE-SYSTEM: □YES ■NO 11.4 COMPENSATING STRUCTURAL: ■ NO □ YES (EXPLAIN) 11.4.3.2 CONSTRUCTION INCREASE IN OCCUPANT LOAD: NO YES (EXPLAIN) 11.4.3.3 CHANGE OF MAJOR OCCUPANCY: NO PYES (EXPLAIN 11.4.3.4 ■ NO □ YES (EXPLAIN) 11.4.3.5 SEWERAGE -SYSTEM ■ NO □ YES (EXPLAIN) ALTERNATIVES PROPOSED YES (GIVE NUMBERS)

OBC MATRIX

D Ac and Ceiling

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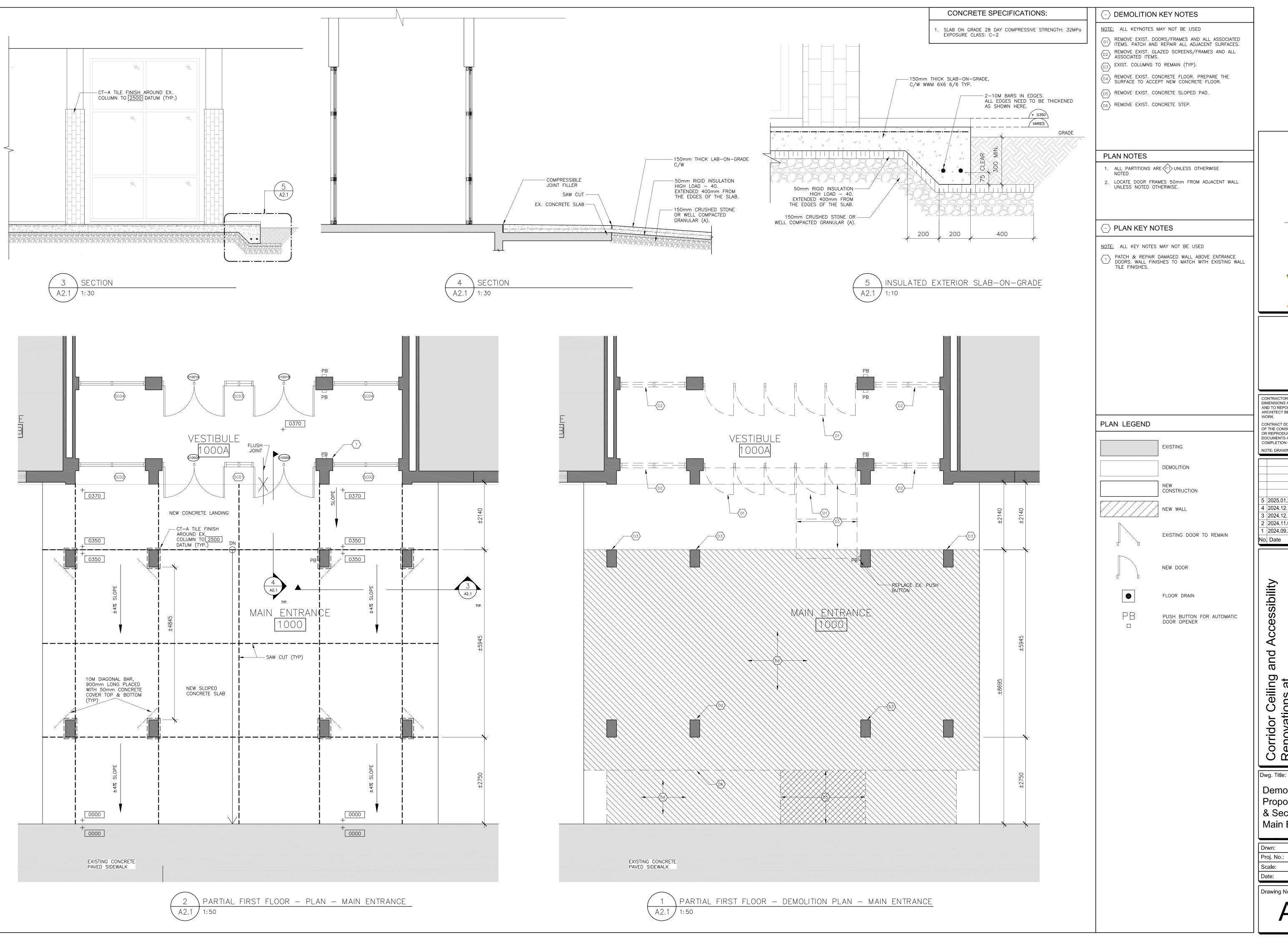
Dwg. Title:

OBC Matrix. Specification & Location of Fire Rated Ceiling

Chkd: WJC Drwn Proj. No.: 24014 Date: 09/17/2024

Drawing No.:

OCATION OF FIRE RATED GYPSUM BOARD CEILING A0.3



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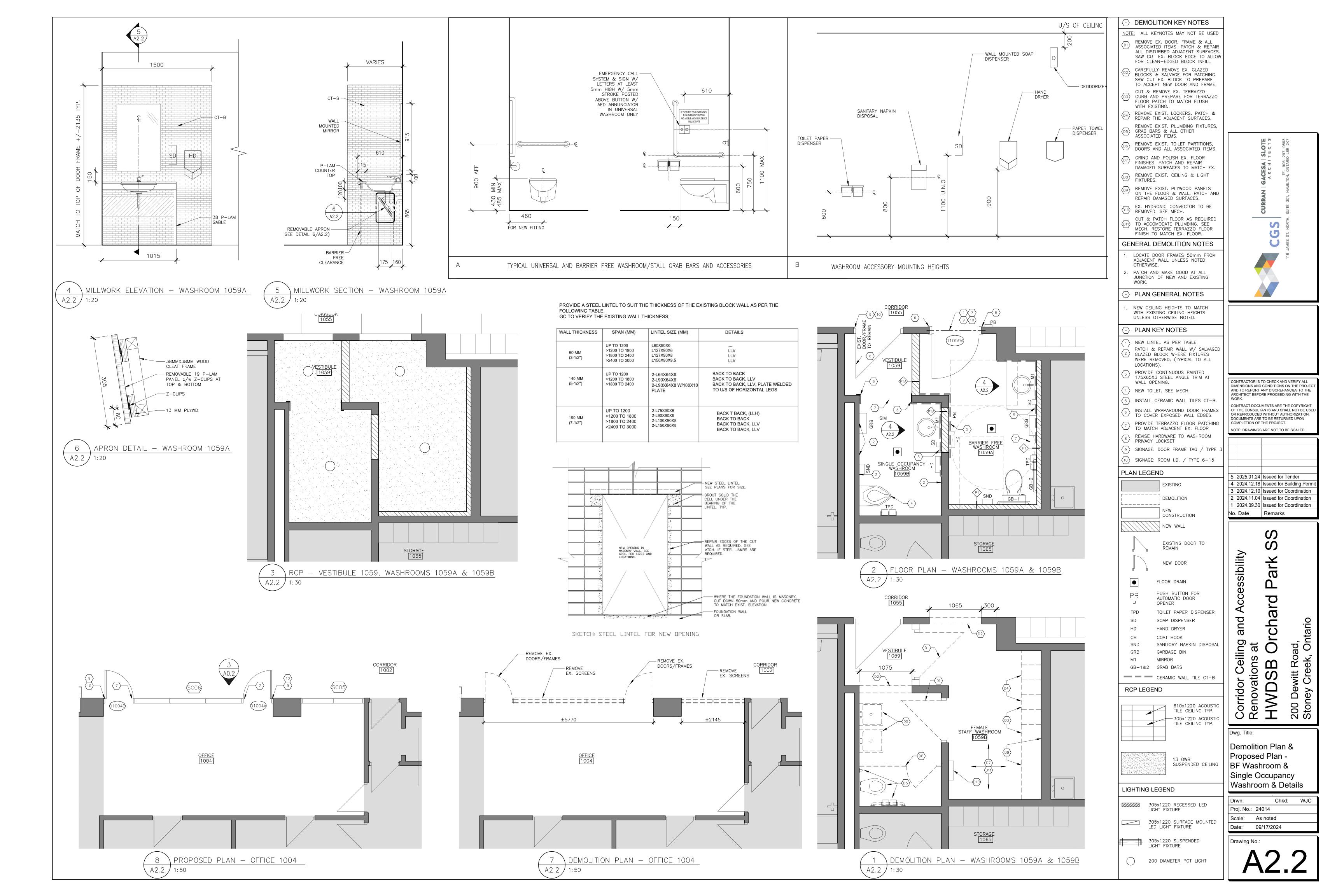
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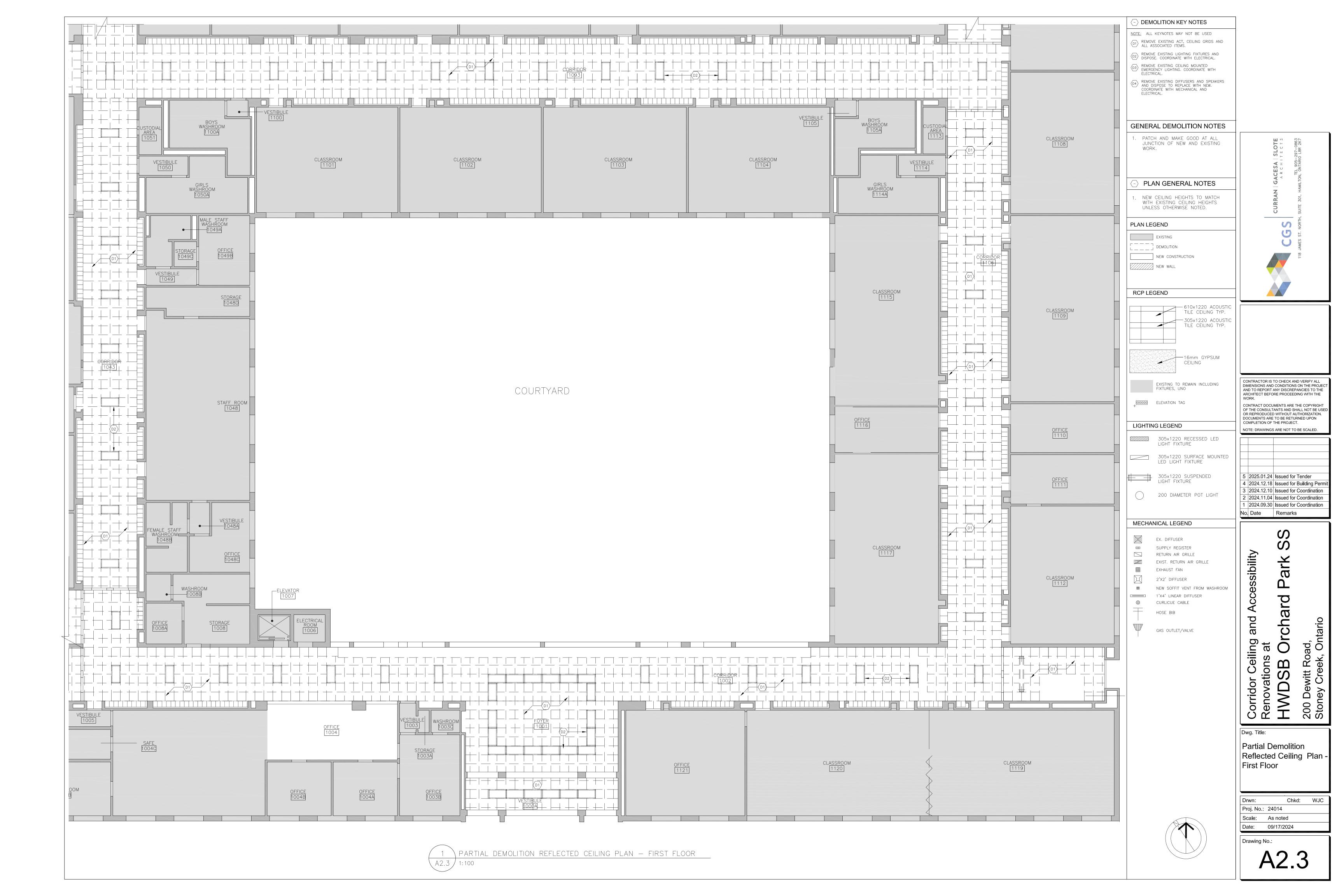
ard Orch ad, , Ontario Corridor Ceiling a Renovations at HWDSB Ord 200 Dewitt Roa Stoney Creek, (

Demolition Plan, Proposed Floor Plan & Section at Main Entrance

Chkd: WJC Proj. No.: 24014

Date: 09/17/2024







DEMOLITION KEY NOTES

NOTE: ALL KEYNOTES MAY NOT BE USED PREMOVE EXISTING ACT, CEILING GRIDS AND ALL ASSOCIATED ITEMS.

PREMOVE EXISTING LIGHTING FIXTURES AND DISPOSE. COORDINATE WITH ELECTRICAL.

D3 REMOVE EXISTING CEILING MOUNTED EMERGENCY LIGHTING. COORDINATE WITH

PREMOVE EXISTING DIFFUSERS AND SPEAKERS AND DISPOSE TO REPLACE WITH NEW. COORDINATE WITH MECHANICAL AND ELECTRICAL.

GENERAL DEMOLITION NOTES

1. PATCH AND MAKE GOOD AT ALL JUNCTION OF NEW AND EXISTING WORK.

PLAN GENERAL NOTES

NEW CEILING HEIGHTS TO MATCH WITH EXISTING CEILING HEIGHTS UNLESS OTHERWISE NOTED.

PLAN LEGEND

EXISTING DEMOLITION NEW CONSTRUCTION

NEW WALL

RCP LEGEND

--- 610×1220 ACOUSTIC TILE CEILING TYP. -305×1220 ACOUSTIC TILE CEILING TYP.

-16mm GYPSUM CEILING

EXISTING TO REMAIN INCLUDING FIXTURES, UNO

305×1220 RECESSED LED LIGHT FIXTURE

305×1220 SURFACE MOUNTED LED LIGHT FIXTURE

305×1220 SUSPENDED LIGHT FIXTURE

200 DIAMETER POT LIGHT

MECHANICAL LEGEND

EX. DIFFUSER SUPPLY REGISTER RETURN AIR GRILLE EXIST. RETURN AIR GRILLE EXHAUST FAN

2'X2' DIFFUSER NEW SOFFIT VENT FROM WASHROOM 1'X4' LINEAR DIFFUSER

CURLICUE CABLE HOSE BIB



GAS OUTLET/VALVE

Partial Demolition Reflected Ceiling Plan First Floor

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Orchard

HWDSB

200 Dewitt Road, Stoney Creek, Ontario

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Proj. No. 24014 Scale: As noted Date: 09/17/2024

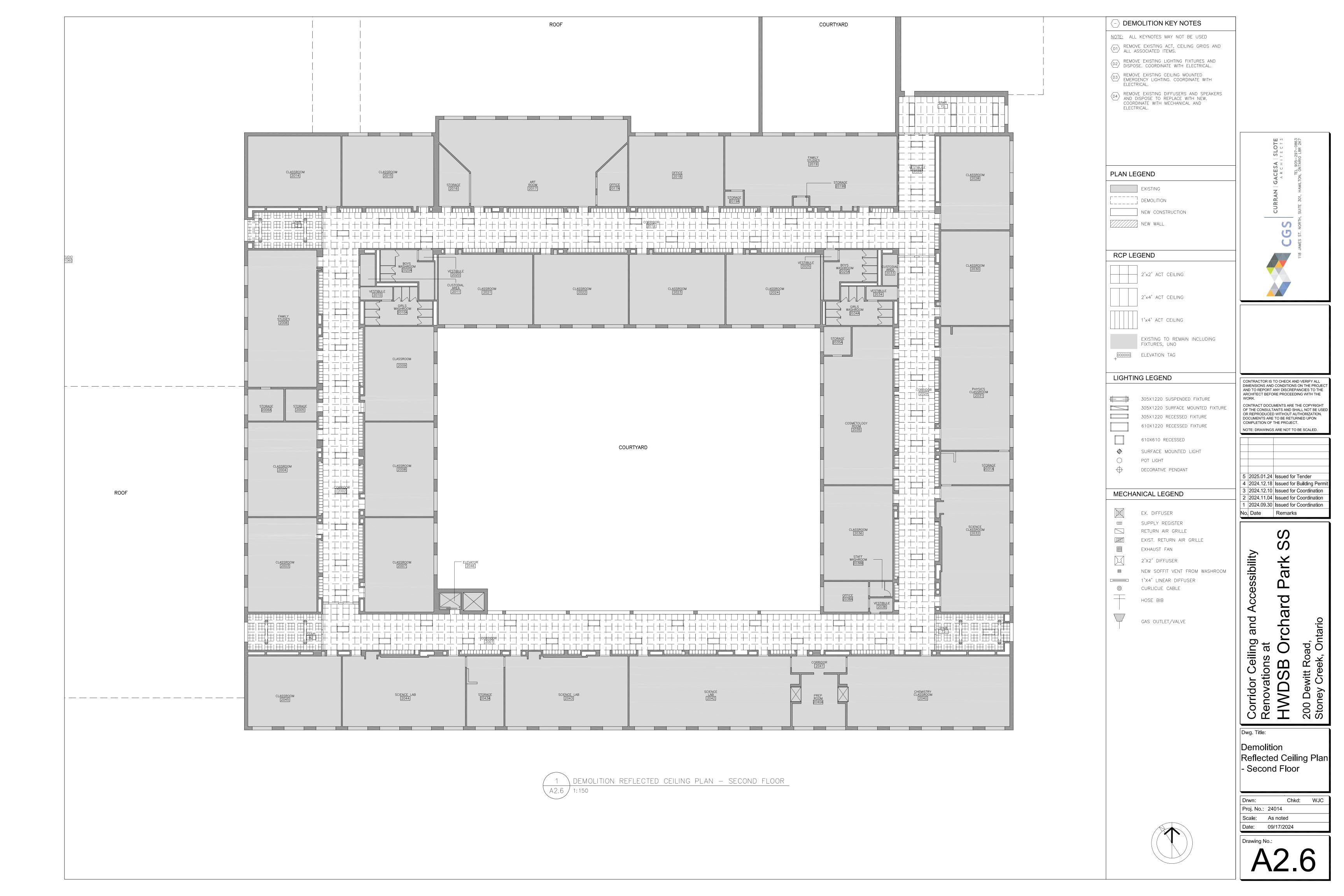
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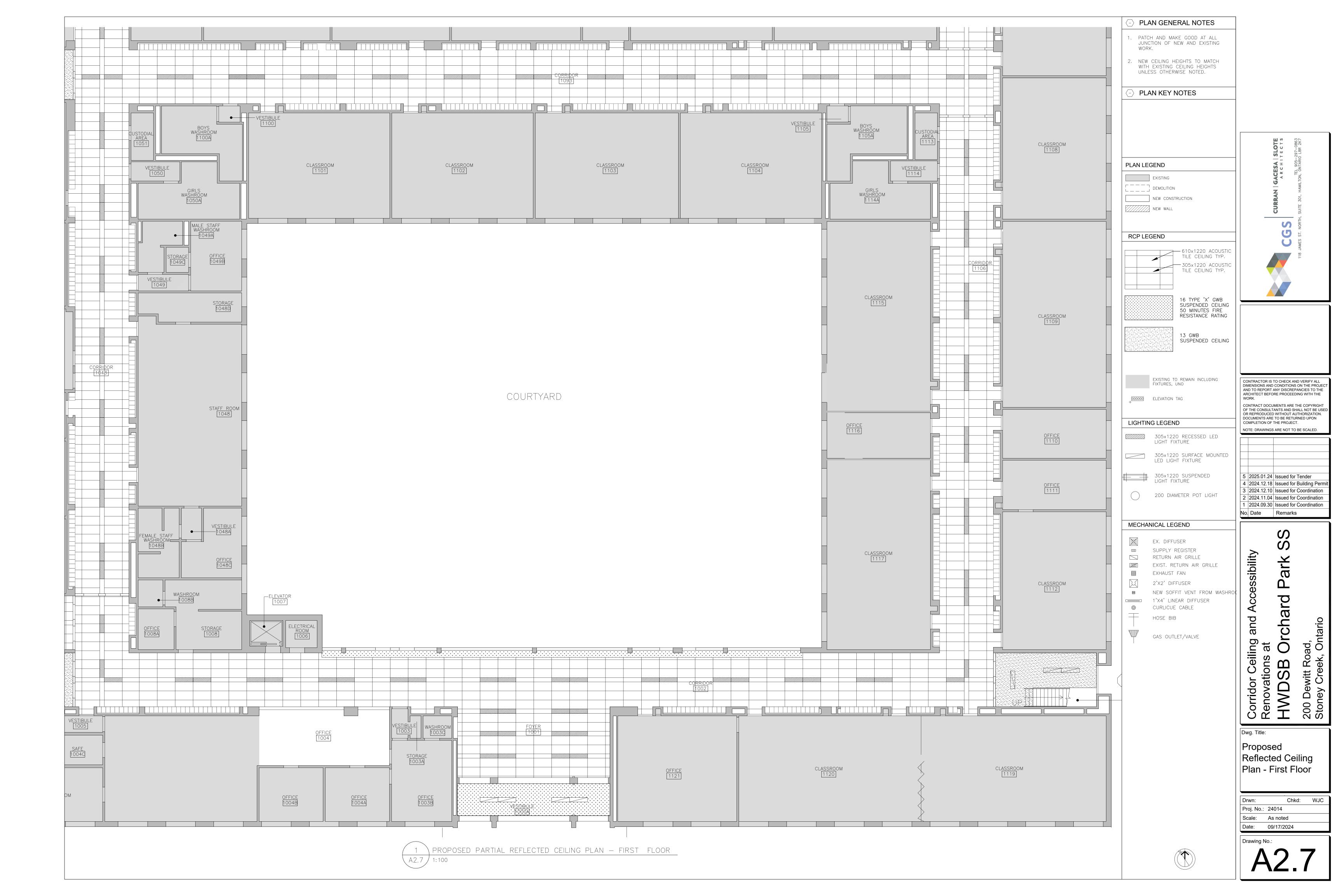
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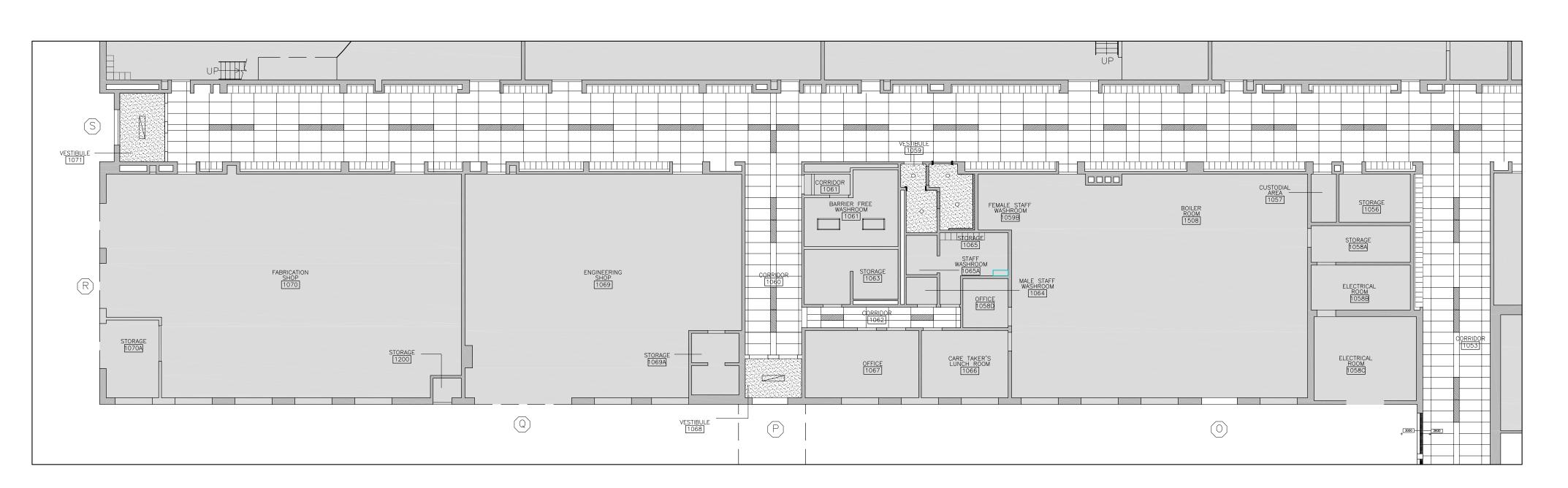
Drawing No.:

Chkd: WJC





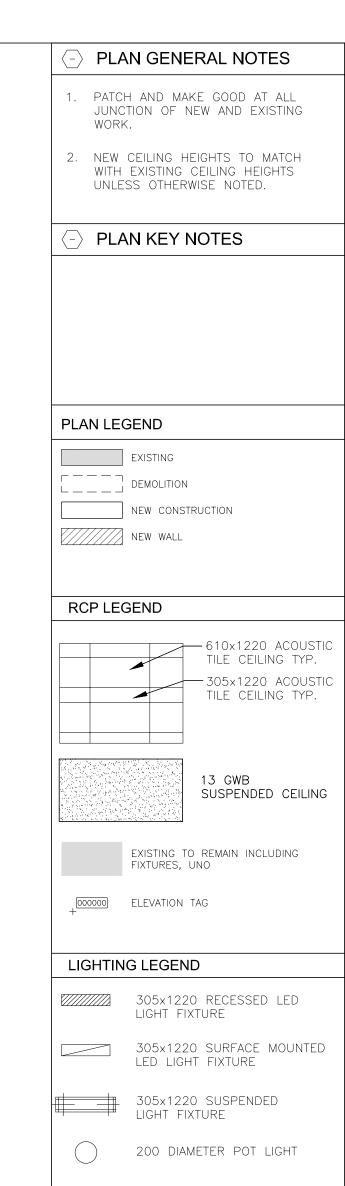




PROPOSED PARTIAL REFLECTED CEILING PLAN — FIRST FLOOR $\langle A2.8 / 1:150 \rangle$



PROPOSED PARTIAL REFLECTED CEILING PLAN — FIRST FLOOR A2.8 / 1:150



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5 2025.01.24 Issued for Tender MECHANICAL LEGEND 4 2024.12.18 Issued for Building Permi 3 2024.12.10 Issued for Coordination EX. DIFFUSER 2 2024.11.04 Issued for Coordination SUPPLY REGISTER 1 2024.09.30 Issued for Coordination

EXIST. RETURN AIR GRILLE EXHAUST FAN 2'X2' DIFFUSER NEW SOFFIT VENT FROM WASHROOM 1'X4' LINEAR DIFFUSER CURLICUE CABLE HOSE BIB

GAS OUTLET/VALVE

RETURN AIR GRILLE

S S ark <u>Д</u>

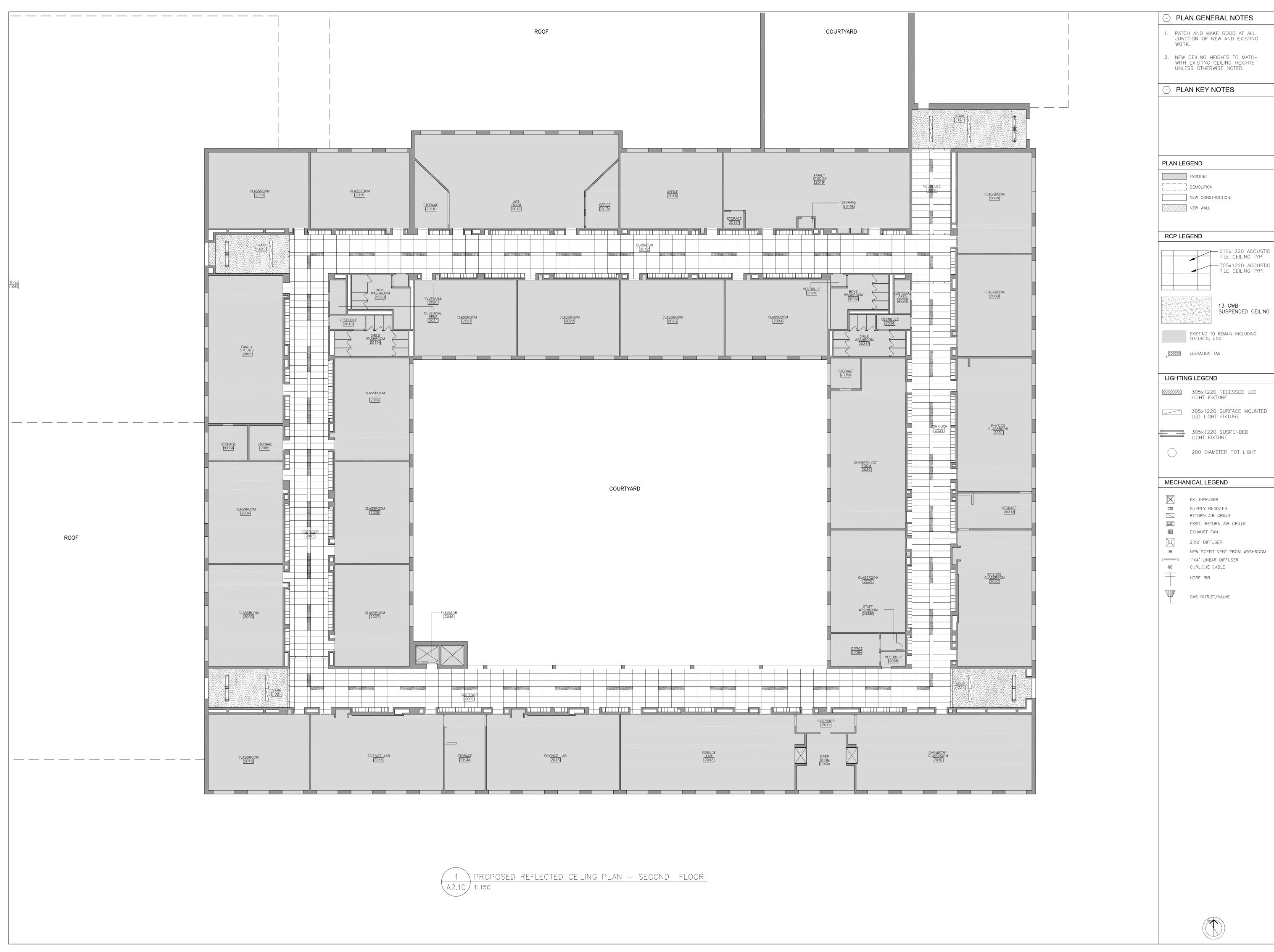
No. Date Remarks

Corridor Ceiling and Accessi Renovations at HWDSB Orchard Pa 200 Dewitt Road, Stoney Creek, Ontario

Dwg. Title: Proposed Reflected Ceiling Plan -First Floor

Chkd: WJC Proj. No.: 24014 Scale: As noted Date: 09/17/2024





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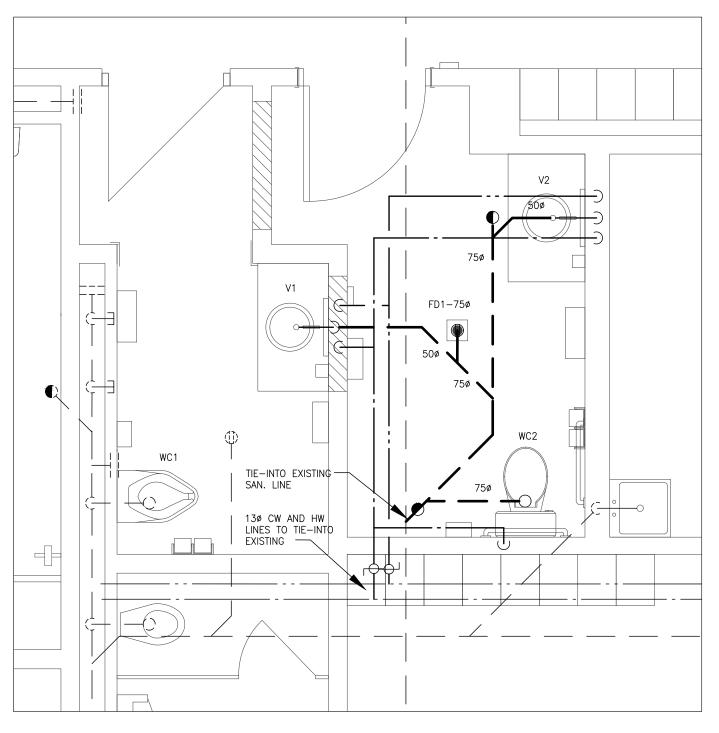
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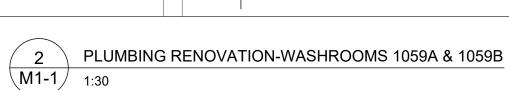
S S Corridor Ceiling and Accessibility
Renovations at
HWDSB Orchard Park

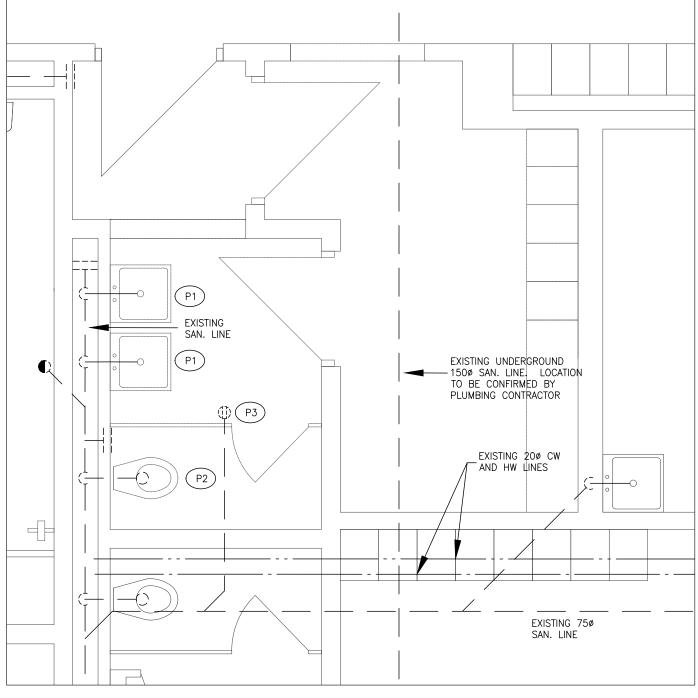
200 Dewitt Road, Stoney Creek, Ontario Proposed Reflected Ceiling Plan-Second Floor

Chkd: WJC

Proj. No.: 24014 Scale: As noted Date: 09/17/2024



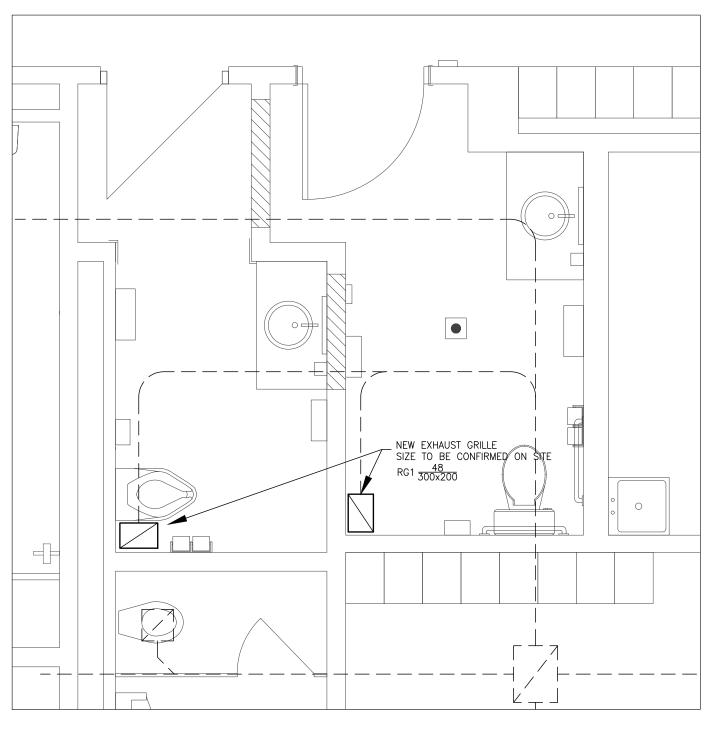




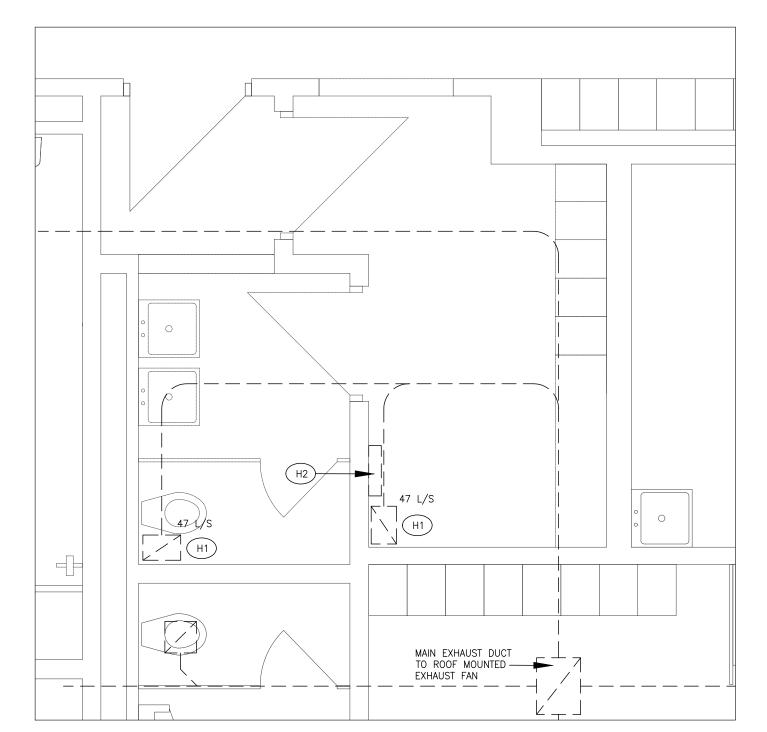
1 PLUMBING DEMOLITION-WASHROOMS 1059A & 1059B M1-1 1:30

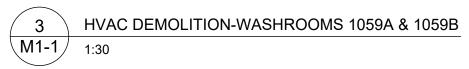
WASHROOM - PLUMBING DEMOLITION NOTES

- 1 REMOVE WALL MOUNTED LAVATORIES. OBSOLETE PLUMBING LINES SHALL BE CUTBACK AND CAPPED IN WALL.
- 2 REMOVE WALL MOUNTED WATER CLOSET AND EXPOSED FLUSH VALVE. REWORK PLUMBING LINES TO FACILITATE THE INSTALLATION OF A NEW WATER CLOSET AND FLUSH VALVE.
- 3 REMOVE FLOOR DRAIN STRAINER AND INSTALL NEW NICKEL BRONZE TYPE TO SUIT FLOOR DRAIN. READJUST STRAINER AS REQUIRED.



4	HVAC RENOVATION-WASHROOMS 1059A & 1059B
M1-1/	1:30



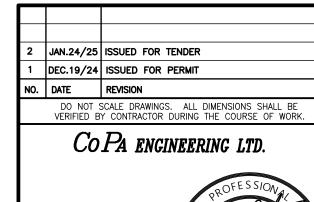


WASHROOM - HVAC DEMOLITION NOTES (H#)

- 1 REMOVE CEILING MOUNTED EXHAUST GRILLE AND REPLACE WITH NEW. REWORK DUCTING TO ACCOMMODATE INSTALLATION OF NEW GRILLE.
- 2 REMOVE HYDRONIC HEATING CONVECTOR. CUTBACK AND CAP HYDRONIC SUPPLY AND RETURN LINES IN WALL.

NEW EQUIPMENT EQUIPMENT TO REMAIN EQUIPMENT TO REMAIN EQUIPMENT TO BE REMOVED EQUIPMENT TO BE REMOVED EQUIPMENT TO BE REMOVED DUCTING TO BE CAPPED SUPPLY DUCT EXHAUST/RETURN DUCT SUPPLY DIFFUSER SUPPLY REGISTER (WALL/SIDE DUCT MOUNTED) CEILING/FLOOR SUPPLY REGISTER ROUND DIFFUSER EXHAUST/RETURN GRILLE A 2/3 DIFFUSER/GRILLE DATA: A-REF, 2-L/S, 3-MM FLEXIBLE DUCT VOLUME CONTROL DAMPER SPLITTER DAMPER FIRE DAMPER SFD SMOKE FIRE DAMPER EXHAUST FAN THERMOSTAT THERMOSTAT THERMOSTAT COVER VARIABLE SPEED CONTROLLER OPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION		HVAC LEGEND
EQUIPMENT TO REMAIN EQUIPMENT TO BE REMOVED EQUIPMENT TO BE REMOVED EQUIPMENT TO BE REMOVED DUCTING TO BE CAPPED SUPPLY DUCT EXHAUST/RETURN DUCT SUPPLY DIFFUSER SUPPLY REGISTER (WALL/SIDE DUCT MOUNTED) CEILING/FLOOR SUPPLY REGISTER ROUND DIFFUSER EXHAUST/RETURN GRILLE A 2/3 DIFFUSER/GRILLE DATA: A-REF, 2-L/S, 3-MM FLEXIBLE DUCT VOLUME CONTROL DAMPER SPLITTER DAMPER SPLITTER DAMPER SHAUST FAN THERMOSTAT THERMOSTAT THERMOSTAT COPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION	SYMBOL	DESCRIPTION
SUPPLY REGISTER (WALL/SIDE DUCT MOUNTED) CEILING/FLOOR SUPPLY REGISTER ROUND DIFFUSER EXHAUST/RETURN GRILLE A \(\frac{2}{3}\) DIFFUSER/GRILLE DATA: A-REF, 2-L/S, 3-MM FLEXIBLE DUCT VOLUME CONTROL DAMPER SPLITTER DAMPER SPLITTER DAMPER SFD SMOKE FIRE DAMPER EXHAUST FAN THERMOSTAT THERMOSTAT THERMOSTAT COVER VARIABLE SPEED CONTROLLER OPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION	RL RV	EQUIPMENT TO REMAIN EQUIPMENT TO BE REMOVED EQUIPMENT TO BE RELOCATED EQUIPMENT TO BE REMOVED DUCTING TO BE CAPPED SUPPLY DUCT EXHAUST/RETURN DUCT
CEILING/FLOOR SUPPLY REGISTER ROUND DIFFUSER EXHAUST/RETURN GRILLE A 2/3 DIFFUSER/GRILLE DATA: A-REF, 2-L/S, 3-MM FLEXIBLE DUCT VOLUME CONTROL DAMPER SPLITTER DAMPER FIRE DAMPER SFD SMOKE FIRE DAMPER EXHAUST FAN THERMOSTAT THERMOSTAT THERMOSTAT COVER VARIABLE SPEED CONTROLLER OPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION		SUPPLY DIFFUSER WITH BLANK SIDE
FLEXIBLE DUCT VOLUME CONTROL DAMPER SPLITTER DAMPER FIRE DAMPER SFD SMOKE FIRE DAMPER EXHAUST FAN THERMOSTAT THERMOSTAT THERMOSTAT COVER VARIABLE SPEED CONTROLLER OPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION		CEILING/FLOOR SUPPLY REGISTER ROUND DIFFUSER
SFD SMOKE FIRE DAMPER EXHAUST FAN THERMOSTAT THERMOSTAT COVER VARIABLE SPEED CONTROLLER OPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION	\ \ \ \ \ \ \SD	FLEXIBLE DUCT VOLUME CONTROL DAMPER SPLITTER DAMPER
EXHAUST FAN THERMOSTAT THERMOSTAT COVER VARIABLE SPEED CONTROLLER OPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION		
FFH ELECTRIC FAN FORCED HEATER-BY MECHAN. DIV	TAD FFH	THERMOSTAT THERMOSTAT COVER VARIABLE SPEED CONTROLLER OPPOSED BLADE MOTORIZED DAMPER ACOUSTIC LINING FLEXIBLE CONNECTION TRANSFER AIR ELBOW ACOUSTICALLY LINED ELECTRIC FAN FORCED HEATER—BY MECHAN. DIV.

PLUMBING LEGEND						
SYMBOL	DESCRIPTION					
——————————————————————————————————————	NEW LINES EXISTING LINES (THIN LINE) EQUIPMENT TO BE REMOVED EQUIPMENT TO BE RELOCATED					
	EQUIPMENT TO BE REMOVED CAPPED LINE PIPE RISE					
	PIPE RISE PIPE DROP SANITARY LINE BELOW GRADE SANITARY LINE ABOVE GRADE STORM LINE BELOW GRADE STORM LINE ABOVE GRADE					
	COLD WATER CW HOT WATER HW HOT WATER RECIRCULATION HWR TEMPERED HOT WATER					
——CD—— HWS—— HWR——	CONDENSATE LINE HEATING WATER SUPPLY HEATING WATER RETURN					
⊕ FD ⊙ HD	FLOOR DRAIN HUB DRAIN					
	FLOOR CLEANOUT LINE CLEANOUT GATE VALVE BALL VALVE					
 ⊠ MBFP	BUTTERLFY VALVE GLOBE VALVE CHECK VALVE BACKFLOW PREVENTOR					



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PROJECT

ORCHARD PARK
SECONDARY SCHOOL
Corridor Ceiling and Accessibility Renovations
200 DEWITT ROAD
STONEY CREEK ONTARIO

JAN.24/25

STAFF AND BARRIER-FREE WASHROOM

MECHANICAL LAYOUTS

DRAWN BY: C. P.	SCALE: 1:30
CHECKED BY: C. PASHARTIS	DATE: DECEMBER 19, 2024
PROJECT NO. 24CP059	DRAWING NO. M1-1

ANY COMBUSTIBLE MATERIALS INSTALLED IN THE CEILING SPACE USED AS A RETURN AIR PLENUM, SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50. PLUMBING AND HVAC CONTRACTORS SHALL COORDINATE WITH ALL OTHER TRADES. WHERE CEILING SPACE IS TO BE USED AS A RETURN AIR PLENUM, ALL WIRING FOR CONTROL, TELEPHONE, DATA, SECURITY, SPEAKER WIRE ETC., SHALL BE FT6, CMP, MPP OR PLENUM VERIFIED. THE SPECIFIED MANUFACTURERS MEANS THAT THE ITEM NAMED AND SPECIFIED, FORMS PART OF SPECIFICATION AND SETS STANDARD REGARDING PERFORMANCE, QUALITY OF MATERIAL AND WORKMANSHIP. ALTERNATE MANUFACTURERS WILL BE CONSIDERED AND ACCEPTED AS EQUAL PROVIDED THEY MEET THE STANDARD SPECIFIED. MECHANICAL GENERAL REQUIREMENTS THE MECHANICAL CONTRACTOR SHALL FURNISH ALL LABOUR, MATERIAL, TOOLS, EQUIPMENT, SUPERVISION AND OTHER SERVICES AS MAY BE REQUIRED TO EXECUTE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS. SITE EXAMINATION .1 BEFORE SUBMITTING TENDERS, CAREFULLY EXAMINE THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS HAVING A BEARING ON THE WORK. VISIT THE EXISTING BUILDING AND THOROUGHLY ASCERTAIN THE EXTENT AND NATURE OF ALL CONDITIONS AFFECTING THE PERFORMANCE OF WORK. THE INSTALLATION SHALL COMPLY WITH THE LATEST EDITIONS AND ALL AMENDMENTS OF THE FOLLOWING CODES AND STANDARDS. WHERE CONFLICTS IN REQUIREMENTS OCCUR, THE HIGHER STANDARDS WILL APPLY: ONTARIO BUILDING CODE, ONTARIO FIRE CODE, N.F.P.A., ASHRAE, NATURAL GAS INSTALLATION STANDARD CSA-B149.1 AND LOCAL CODES, STANDARDS AND BY-LAWS. 4. REGULATIONS, PERMITS, FEES, CONNECTION CHARGES AND CERTIFICATES ALL MATERIALS AND WORKMANSHIP SHALL MEET ALL PROVINCIAL BUILDING, MUNICIPAL, N.F.P.A., AND FIRE MARSHALL REGULATIONS, CODES AND BYLAWS IN FORCE IN THE AREA OF THE PROJECT. EACH CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PAY FOR ALL FEES AND CONNECTION CHARGES FOR ALL SERVICES PROVIDED BY THIS DIVISION. COOPERATION OF TRADES READ SPECIFICATIONS AND DRAWINGS OF OTHER TRADES AND CONFORM WITH THEIR REQUIREMENTS BEFORE PROCEEDING WITH ANY WORK SPECIFIED IN THIS DIVISION RELATED TO OTHER TRADES. 6. DRAWINGS CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF THE MECHANICAL SYSTEMS AND WORK INCLUDED IN THE CONTRACT. WHERE THE EXACT LOCATIONS OF FIXTURES AND EQUIPMENT ARE NOT DEFINITELY ESTABLISHED, THE CONTRACTOR SHALL OBTAIN THIS INFORMATION FROM THE OWNER AND ENGINEER. REMOVAL OF EXISTING EQUIPMENT .1 EXAMINE THE EXISTING BUILDING AND INCLUDE IN TENDER PRICE ALL NECESSARY ALLOWANCES TO REMOVE EXISTING EQUIPMENT AS DETAILED ON DRAWINGS AND AS DIRECTED BY THE GENERAL CONTRACTOR. .2 MATERIALS REMOVED BY THIS DIVISION SHALL BECOME CONTRACTOR'S PROPERTY AND BE REMOVED FROM WORK SITE, PROVIDED: THE ITEMS HAVE BEEN INSPECTED BY THE OWNER AND GENERAL CONTRACTOR AND RELEASED FOR REMOVAL. ITEMS HAVE NOT BEEN DESIGNATED FOR REUSE IN OTHER SECTIONS OF SPECIFICATIONS OR DRAWINGS. PRIOR TO REMOVAL AND ALTERATION OF THE EXISTING SYSTEMS, THE CONTRACTOR SHALL IDENTIFY TO THE ENGINEER AT WHICH SECTIONS OF THE EXISTING MECHANICAL EQUIPMENT, PIPING AND DUCTWORK SHALL BE CUT BACK AND REMOVED. RELOCATE EXISTING MECHANICAL EQUIPMENT AND APPURTENANCES AS SPECIFICALLY INDICATED ON DRAWINGS OR SPECIFIED AND AS REQUIRED TO SUIT ALTERATION WORK. CLEAN RELOCATED EQUIPMENT AND INSTALL IN NEW LOCATION, IN A NEAT ORDERLY MANNER WITH SAME ATTENTION AS GIVEN TO NEW EQUIPMENT. WHERE EXISTING MATERIAL OR EQUIPMENT IS NO LONGER REQUIRED SHALL BE CUT BACK AND MAKE GOOD TO SATISFACTION OF THE ENGINEER. WHEN EXISTING MATERIAL OR EQUIPMENT IS DISCONNECTED OR DISASSEMBLED TO FACILITATE RELOCATION, REINSTALL AS ORIGINAL, INCLUDING AUXILIARY WORK, INSULATION, ELECTRICAL WORK ETC. WHERE EXISTING MATERIAL OR EQUIPMENT IS DAMAGED, MAKE GOOD TO THE SATISFACTION OF ENGINEER. IF IT IS FOUND IN AN UNSUITABLE CONDITION, NOTIFY ENGINEER FOR INSTRUCTIONS. OBTAIN WRITTEN AUTHORIZATION FROM ENGINEER FOR ALTERATION WORK THAT IS NOT SPECIFICALLY CALLED FOR OR CLEARLY INDICATED ON DRAWINGS. PROTECT EQUIPMENT AND SYSTEMS OPENINGS FROM DIRT, DUST, AND OTHER FOREIGN MATERIALS. THIS CONTRACTOR SHALL PROTECT FINISHED AND UNFINISHED WORK OF HIS OWN AND OTHER SUBCONTRACTORS FROM DAMAGE DUE TO CARRYING OUT HIS WORK. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF ALL MATERIALS AND EQUIPMENT SUPPLIED UNDER THIS CONTRACT OR REMOVED FROM EXISTING BUILDING FOR REUSE AND SHALL PROVIDE ALL NECESSARY PROTECTION FOR SAME. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF THE WORK OF THIS SECTION, UNTIL THE BUILDING HAS BEEN COMPLETED AND 10. CUTTING AND PATCHING .1 RESPONSIBILITY FOR CUTTING OF OPENINGS TO WALLS, FLOORS, ROOF AND ANY OTHER SURFACES IN THE STRUCTURE SHALL BE COORDINATED WITH GENERAL CONTRACTOR. IN ADDITION, RESPONSIBILITY FOR THE PATCHING AND FINISHING OF THESE SURFACES AND ASSEMBLIES SHALL ALSO BE COORDINATED WITH GENERAL CONTRACTOR. WORK SHALL BE PERFORMED BY THE EXPERT TRADE WHO SPECIALIZE IN THEIR WORK. IN THE EVENT THE GENERAL CONTRACTOR WILL NOT BE RESPONSIBLE FOR THIS WORK, THIS SCOPE OF WORK SHALL BE INCLUDED UNDER THE MECHANICAL .2 BEFORE CUTTING OF OPENINGS IN THE STRUCTURE, THE CONTRACTOR SHALL IDENTIFY TO THE STRUCTURAL ENGINEER AND THE OWNER'S REPRESENTATIVE AT WHICH SECTIONS OF THE BUILDING STRUCTURE ARE TO BE CUT BACK. THE CUTTING, PATCHING AND FINISHING OF THE ASSEMBLIES RESTRICTED BY THE WORK OF THIS DIVISION SHALL BE PERFORMED BY THE AFFECTED/EXPERT TRADE. UNDER NO CIRCUMSTANCES SHALL ANY CUTTING OR BURNING OF THE STRUCTURAL PARTS OF THE BUILDING BE UNDERTAKEN WITHOUT THE WRITTEN AUTHORITY OF THE ENGINEER. 11. EXCAVATING, BACKFILLING, COMPACTING AND FLOOR CEMENTING .1 RESPONSIBILITY FOR EXCAVATING, BACKFILLING AND COMPACTING FOR PLUMBING PIPES AND DRAINS PROVIDED BY THIS DIVISION SHALL BE COORDINATED WITH GENERAL CONTRACTOR. ALL BACKFILLING SHALL BE NEW CLEAN GRANULAR FILL BROUGHT IN SPECIFICALLY FOR THE PURPOSE OF BACKFILLING. ALL BACKFILLING SHALL BE COMPACTED AT INTERVALS OF NOT MORE THAN 6" LAYERS TO THE SATISFACTION OF THE ENGINEER. RESPONSIBILITY FOR FLOOR CEMENTING SHALL BE COORDINATED WITH GENERAL CONTRACTOR. IN THE EVENT THE GENERAL CONTRACTOR WILL NOT BE RESPONSIBLE FOR THIS WORK, THIS SCOPE OF WORK SHALL BE INCLUDED UNDER THE MECHANICAL CONTRACTOR. 12. EQUIPMENT INSTALLATION ALL EQUIPMENT, FIXTURES, PIPES, INSULATION AND ASSOCIATED APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SPACE FOR SERVICING, DISASSEMBLY AND REMOVAL OF EQUIPMENT AND COMPONENTS: PROVIDE AS RECOMMENDED BY MANUFACTURER OR AS INDICATED. CONTROL PANELS, ELECTRICAL PANELS AND WIRING TERMINATION POINTS PROVIDE MINIMUM 40" CLEARANCE. EQUIPMENT DRAINS: PIPE TO FLOOR DRAINS. 13. ROOF CONES AND FLASHING ROOF CONES FOR PIPES AND ROUND DUCTS PENETRATING ROOF SHALL BE SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO SEE THAT ACCEPTABLE FLASHING ARE INSTALLED WHERE NECESSARY FOR THE WORK OF HIS TRADE. COUNTER FLASHING IS BY ROOFING CONTRACTOR AT THE EXPENSE OF THE MECHANICAL CONTRACTOR. THIS CONTRACTOR SHALL SUPPLY AND INSTALL SUITABLE SLEEVES FOR PIPING AND DUCTWORK PENETRATIONS TO THE BUILDING STRUCTURE. PIPE SLEEVES: INSTALL AT POINTS WHERE PIPES PASS THROUGH MASONRY, CONCRETE OR U.L.C. FIRE RATED ASSEMBLIES AND AS INDICATED. SLEEVES WITH ANNULAR FIN CONTINUOUSLY WELDED AT MIDPOINT: SIZES: 1/4" CLEARANCE ALL AROUND, BETWEEN SLEEVE AND NON-INSULATED PIPE OR BETWEEN SLEEVE AND INSULATION. TERMINATE SLEEVES FLUSH WITH SURFACE OF CONCRETE AND MASONRY WALLS AND CONCRETE FLOORS ON GRADE IN FINISHED AREAS. WHERE SLEEVES PASS THROUGH WALLS, PROVIDE SPACE FOR FIRE STOPPING. WHERE PIPES PASS THROUGH FIRE RATED WALLS AND PARTITIONS, MAINTAIN FIRE RATING INTEGRITY. ENSURE NO CONTACT BETWEEN COPPER TUBE OR PIPE AND FFRROUS SIFFVF. FILL FUTURE-USE SLEEVES WITH LIME PLASTER OR OTHER EASILY REMOVABLE FILLER COAT EXPOSED EXTERIOR SURFACES OF FERROUS SLEEVES WITH HEAVY APPLICATION OF ZINC RICH PAINT FIRE STOPPING MATERIALS AND INSTALLATION WITHIN ANNULAR SPACE BETWEEN PIPES, DUCTS, INSULATION AND ADJACENT FIRE SEPARATION: TO THE APPROVAL OF THE ENGINEER. UNINSULATED UNHEATED PIPES NOT SUBJECT TO MOVEMENT: NO SPECIAL PREPARATION. UNINSULATED HEATED PIPES SUBJECT TO MOVEMENT: WRAP WITH NON-COMBUSTIBLE SMOOTH MATERIAL TO PERMIT PIPE TO MOVE WITHOUT DAMAGING FIRE STOPPING INSULATED PIPES AND DUCTS: ENSURE INTEGRITY OF INSULATION AND VAPOUR BARRIER AT FIRE SEPARATION. PROVIDE ON EXPOSED PIPES PASSING THROUGH WALLS, PARTITIONS, FLOORS AND CEILINGS ON FINISHED AREAS. CHROME OR NICKEL PLATED BRASS OR TYPE 302 STAINLESS STEEL, SPLIT PIECE TYPE WITH SET SCREWS. OUTSIDE DIAMETER TO COVER OPENING OR SLEEVE. INSIDE DIAMETER TO FIT AROUND FINISHED PIPE SECURE TO PIPE OR FINISHED SURFACE BUT NOT INSULATION INSULATE OR CONCEAL WORK ONLY AFTER TESTING AND APPROVAL BY ENGINEER. BEAR ALL COSTS IN CONNECTION WITH ALL TESTS. INCLUDING REPAIRING LEAKS RETESTING AND MAKING GOOD. PRIOR TO TESTS, ISOLATE ALL EQUIPMENT AND OTHER PARTS WHICH ARE NOT DESIGNED TO WITHSTAND TEST PRESSURES OR TEST MEDIUM. PROVIDE CERTIFICATES INDICATING RESULTS OF ALL TESTS INCLUDING TEST LOGS. PLUMBING LINES SHALL BE TESTED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE. 18. PIPE FLUSHING AND CLEANING AFTER PRESSURE TESTS ARE COMPLETED AND APPROVED, PRIOR TO START-UP AND PLACING INTO OPERATION, FLUSH AND CLEAN OUT ALL PIPING SYSTEMS. FOR DOMESTIC WATER SYSTEM, CLEAN AS PER ONTARIO BUILDING CODE AND LOCAL REQUIREMENTS. 19. ACCESS DOORS SUPPLY ACCESS DOORS TO CONCEALED MECHANICAL EQUIPMENT FOR OPERATING, INSPECTING, ADJUSTING AND SERVICING. ACCESS DOORS REQUIRED IN LISTED FIRE SEPARATION SHALL BEAR A ULC LABEL TO MATCH WALL CLASSIFICATION. 20. DIELECTRIC COUPLINGS PROVIDE WHERE PIPES OF DISSIMILAR METALS ARE JOINED. SHALL BE COMPATIBLE WITH AND TO SUIT PRESSURE RATING OF PIPING SYSTEM. PIPES NPS 2 AND UNDER SHALL BE WITH ISOLATING UNIONS. PIPES NPS 2 1/2 AND OVER SHALL BE ISOLATING FLANGES. PROVIDE FELT OR RUBBER GASKET TO PREVENT DISSIMILAR METALS CONTACT. 21. DRAIN VALVES LOCATE AT LOW POINTS AND AT SECTION ISOLATING VALVES UNLESS OTHERWISE SPECIFIED. MINIMUM NPS 3/4 UNLESS OTHERWISE SPECIFIED: BRONZE, WITH HOSE END MALE THREAD. 22. EQUIPMENT SUPPORTS EQUIPMENT SUPPORTS NOT SUPPLIED BY EQUIPMENT MANUFACTURER SHALL BE FABRICATED FROM STRUCTURAL GRADE STEEL. RESPONSIBILITY FOR ROOFING AND REINFORCING OF ROOF FOR MECHANICAL EQUIPMENT SUPPORT SHALL BE COORDINATED WITH GENERAL CONTRACTOR. IN THE EVENT THE GENERAL CONTRACTOR WILL NOT BE RESPONSIBLE FOR THIS WORK, THIS SCOPE OF WORK SHALL BE INCLUDED UNDER THE MECHANICAL CONTRACTOR. 23. PIPE HANGERS AND SUPPORTS .1 PROVIDE UPPER ATTACHMENTS, MIDDLE ATTACHMENT ROD, PIPE ATTACHMENT, RISER CLAMPS, SADDLES, SHIELDS AND OTHER DEVICES. RIGID, SWING OR ANY OTHER HANGER SYSTEM SHALL BE SUITABLE FOR THE APPLICATION AND TAKE INTO ACCOUNT ATTACHMENT IN AREAS MADE OF CONCRETE SLAB, STEEL BEAM, WOOD JOISTS AND STEEL JOISTS AND FOR EXPANSION OF PIPING. HANGER SPACING AND MIDDLE ATTACHMENT (ROD) DIAMETER AS PER REGULATORY AUTHORITIES AND MANUFACTURER'S RECOMMENDATIONS. INSTALL HANGER SO THAT ROD IS VERTICAL UNDER OPERATING CONDITIONS. ADJUST HANGERS TO EQUALIZE LOAD. SUPPORT FROM STRUCTURAL MEMBERS. WHERE STRUCTURAL BEARING DOES NOT EXIST OR INSERTS ARE NOT IN SUITABLE LOCATIONS, PROVIDE SUPPLEMENTARY STRUCTURAL STEEL MEMBERS. .4 WHERE SUPPORTING COPPER PIPE, IT SHALL BE ISOLATED FROM ANY NON-COPPER HANGER WITH ELECTROLYTIC ACTION TAPE OR EQUIVALENT. 24. SHOP DRAWINGS AND PRODUCT DATA EQUIPMENT SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. .2 SHOP DRAWINGS AND PRODUCT DATA SHALL SHOW: MOUNTING ARRANGEMENTS. OPERATING AND MAINTENANCE CLEARANCES. EG. ACCESS DOOR, SWING SPACES. TYPE, NAME, CATALOGUE NUMBERS, TECHNICAL PERFORMANCE DATA, WIRING DIAGRAMS ETC 25. PAINTING APPLY AT LEAST ONE COAT OF CORROSION RESISTANT PRIMER PAINT TO FERROUS SUPPORTS AND SITE FABRICATED WORK. PRIME AND TOUCH UP MARRED FINISHED PAINT WORK TO MATCH ORIGINAL RESTORE TO NEW CONDITION, FINISHES WHICH HAVE BEEN DAMAGED TO EXTENSIVELY TO BE MERELY PRIMED AND TOUCHED UP. .4 AT AREAS WHERE CUTTING AND PATCHING HAS TAKEN PLACE, PAINTING OF THESE AREAS SHALL BE UNDERTAKEN BY THE AFFECTED (EXPERT) TRADE AT THE EXPENSE OF THE MECHANICAL CONTRACTOR. 26. IDENTIFICATION IDENTIFY AND LABEL EQUIPMENT AND PIPEWORK SERVICES ON COMPLETION OF THE PROJECT. DOMESTIC WATER LINES SHALL SHOW SERVICE AND DIRECTION OF FLOW. EQUIPMENT, PANELS AND CABINETS, SYSTEM NAMEPLATES SHALL BE 1/8"THICK LAMINATED PLASTIC WITH LETTERS AND NUMBERS MACHINE ENGRAVED INTO CORE. ALL WIRING AND CONDUIT FOR POWER AND CONTROL SHALL BE BY ELECTRICAL DIVISION, EXCEPT FOR WIRING, CONDUIT AND CONNECTIONS BELOW 50V WHICH ARE RELATED TO AUTOMATIC CONTROL SYSTEMS SHALL BE BY MECHANICAL CONTRACTOR. 2 COORDINATE WITH ELECTRICAL CONTRACTOR FOR WRING AND TESTING OF ALL MECHANICAL EQUIPMENT. UPON COMPLETION AND IN PREPARATION FOR FINAL ACCEPTANCE, CONTRACTOR SHALL REMOVE PROTECTIVE COVERINGS, CLEAN AND REFURBISH ALL EQUIPMENT, FREE ALL OBSTRUCTIONS, REPLACE FILTERS, CLEAN STRAINERS AND LEAVE IN OPERATING CONDITION. ALL SURPLUS AND WASTE MATERIAL SHALL BE PROMPTLY REMOVED FROM THE PREMISES. 29. TRIAL USAGE OBTAIN WRITTEN PERMISSION FROM ENGINEER TO START AND TEST PERMANENT EQUIPMENT AND SYSTEMS TO ACCEPTANCE BY OWNER. ENGINEER AND OWNER MAY USE EQUIPMENT AND SYSTEMS FOR TEST PURPOSES PRIOR TO ACCEPTANCE. SUPPLY LABOUR, MATERIAL AND INSTRUMENTS REQUIRED FOR TESTING. 30. TESTING, ADJUSTING AND BALANCING (TAB) THIS OPERATION SHALL BE UNDERTAKEN BY A CONTRACTOR WHOSE PRINCIPAL BUSINESS IS THAT OF TESTING, ADJUSTING AND BALANCING. THIS CONTRACTOR IS TO CONDUCT ACCEPTANCE TESTS TO DEMONSTRATE THAT THE EQUIPMENT AND SYSTEMS ACTUALLY MEET THE SPECIFIED REQUIREMENTS. TESTS MAY BE CONDUCTED AS SOON AS CONDITIONS PERMIT. SUBMIT TAB REPORT TO ENGINEER FOR REVIEW THE BALANCING CONTRACTOR SHALL BE AFFILIATED WITH AABC OR NEBB. THIS CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL "TAB" DEVICES, EQUIPMENT, ACCESSORIES, MEASUREMENT PORT AND FITTINGS. ALL NECESSARY TEST PORTS FOR HYDRONIC SYSTEM SHALL BE PROVIDED TO THE MECHANICAL CONTRACTOR FOR INSTALLATION. OPERATE SYSTEMS FOR LENGTH OF TIME REQUIRED FOR TAB. SUBMIT "TAB" REPORT TO ENGINEER FOR VERIFICATION. "TAB" SHALL BE CARRIED OUT FOR THE FOLLOWING SYSTEMS: ALL AIRFLOWS WHERE INDICATED. 31. DEMONSTRATION, OPERATION AND MAINTENANCE INSTRUCTIONS .1 SUPPLY TOOLS, EQUIPMENT AND PERSONNEL TO DEMONSTRATE AND INSTRUCT CLIENT'S REPRESENTATIVE DURING REGULAR WORK HOURS AND PRIOR TO ACCEPTANCE IN OPERATING, CONTROLLING, AND ADJUSTING OF ALL SYSTEMS AND EQUIPMENT. 32. OPERATION AND MAINTENANCE MANUAL PROVIDE OPERATION AND MAINTENANCE DATA FOR INCORPORATION INTO MANUAL. OPERATION AND MAINTENANCE MANUAL TO BE APPROVED BY AND FINAL COPIES DEPOSITED WITH ENGINEER BEFORE FINAL INSPECTION. RECORD DRAWINGS .1 SITE RECORDS ON ONE SET OF AUTOCAD MECHANICAL DRAWINGS, MARK ALL CHANGES AS WORK PROGRESSES AND AS CHANGES OCCUR. MAKE AVAILABLE FOR REFERENCE PURPOSES AND INSPECTION AT ALL TIMES. AS-BUILT DRAWINGS: .1 IDENTIFY EACH DRAWING IN LOWER RIGHT HAND CORNER IN LETTERS AT LEAST 1/2" HIGH AS FOLLOWS: "AS BUILT DRAWINGS: THIS DRAWING HAS BEEN REVISED TO SHOW MECHANICAL SYSTEMS AS INSTALLED" (SIGNATURE OF CONTRACTOR) (DATE).

PROVIDE A WRITTEN GUARANTEE TO COVER ALL MATERIALS AND INSTALLATION OF THE COMPLETE MECHANICAL SYSTEMS. THIS GUARANTEE SHALL EXTEND FOR A PERIOD OF ONE YEAR FROM THE DATE

SPECIFIC GUARANTEE OF MANUFACTURERS WHOSE WARRANTY NORMALLY EXTENDS OVER LONGER OR SHORTER PERIODS THAN ONE YEAR, SHALL IN NO WAY LIMIT THE GUARANTEE OF THE MECHANICAL

.4 WHERE PERMANENT EQUIPMENT IS USED TO PROVIDE TEMPORARY SERVICES, THE WARRANTY SHALL BE EXTENDED SO THAT THE WARRANTY PERIOD DOES NOT COMMENCE UNTIL THE CERTIFICATE OF

SUBMIT TO ENGINEER FOR APPROVAL AND MAKE CORRECTIONS AS DIRECTED.

SUBSTANTIAL COMPLETION IS ISSUED.

SUBMIT COMPLETED REPRODUCIBLE AS-BUILT DRAWINGS WITH OPERATING AND MAINTENANCE MANUALS.

ANY DEFECTS OCCURRING WITHIN THE GUARANTEE PERIOD SHALL BE REPAIRED/REPLACED AT NO COST TO THE OWNER.

PLUMBING GENERAL NOTES FOR INSTALLATION

- ABOVE GROUND SHALL BE SEAMLESS COPPER WATER TUBE, TYPE L WITH SOLDERED JOINTS.
- 2. GRAVITY SANITARY, STORM AND VENT PIPE AND FITTINGS: 1 BELOW GRADE SHALL BE PVC-SDR35 (8 IN. AND LARGER), PVC-SDR28 (6 IN. AND SMALLER), ABS-DWV OR PVC-DWV WITH SOLVENT WELD FITTINGS.
- ABOVE GROUND UP TO 2-1/2" DIA. SHALL BE PVC-DWV ULC APPROVED WITH SOLVENT WELD FITTINGS OR COPPER DWV WITH WROUGHT COPPER FITTINGS.
 - ABOVE GROUND FOR 3" AND OVER SHALL BE PVC-DWV, ULC APPROVED WITH SOLVENT WELD FITTINGS OR CAST IRON WITH MECHANICAL JOINTS, NEOPRENE OR BUTYL RUBBER COMPRESSION GASKETS .4 IN A RETURN AIR PLENUM USE FULLY CERTIFIED FIRE-RESISTANT PVC-DWV PIPE SUCH AS IPEX SYSTEM XFR 15-50. COORDINATE WITH ARCHITECTURAL AND HVAC DRAWINGS TO CLARIFY AREAS WITH
- RETURN AIR PLENUM. COMBUSTIBLE PIPE SHALL NOT BE INSTALLED IN A VERTICAL SERVICE SHAFT WHERE PLASTIC PIPE CROSSES A FIRE SEPARATION IT SHALL BE FITTED WITH APPROVED FIRE STOP DEVICES.
- INSTALL PLUMBING VENT LINES AS PER OBC PART 7. DISTRIBUTION AND SIZING SHALL BE BY PLUMBING CONTRACTOR.
- FOR ALL PIPE PENETRATIONS, VOIDS AROUND PIPES SHALL BE SEALED AND CAULKED TO KEEP REQUIRED INTEGRITY. INSTALL PIPE CLEANOUTS FOR SANITARY DRAINAGE LINES.
- PIPING INSULATION .1 PREFORMED SECTIONAL RIGID FIBREGLASS PIPE INSULATION WITH VAPOUR BARRIER JACKET AND FACING MATERIAL 0-850 DEG.F. SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A
- DOMESTIC COLD AND HOT WATER, HOT WATER RECIRCULATION LINE SHALL BE INSULATED THROUGHOUT IN ALL LOCATIONS.

WHERE SUPPORTING COPPER PIPE, IT SHALL BE ISOLATED FROM ANY NON-COPPER HANGER WITH ELECTROLYTIC ACTION TAPE OR EQUIVALENT.

- THICKNESS AND THERMAL CONDUCTIVITY AS PER FOLLOWING: RUNOUTS REFERS TO INDIVIDUAL PLUMBING FIXTURES OR TERMINAL UNITS NOT EXCEEDING 12FT.
- DOMESTIC COLD AND HOT WATER AND HOT WATER RECIRCULATION LINES: INSULATION THERMAL CONDUCTIVITY 0.24-0.28 BTU.IN/(H.FT2'F) AT 100 DEG. F MEAN TEMP. RATING. NOMINAL PIPE DIAMETER UP TO 2 IN., INSULATION THICKNESS SHALL BE 1 IN. RUNOUTS UP TO 2 IN. NOMINAL PIPE SIZE, THICKNESS SHALL BE 1/2 IN.
- SELF ADHESIVE ALUMINUM TAPE ULC LABELLED. LAP SEAL ADHESIVE, QUICK SETTING FOR JOINTS AND LAP SEALING OF VAPOUR BARRIERS.
- LAGGING ADHESIVE FIRE RETARDANT COATING. 8. ALL INSULATED EXPOSED PLUMBING PIPES RUNNING INSIDE THE BUILDING SHALL SHALL BE ENTIRELY INSTALLED WITH WHITE PVC JACKETING, UV-RESISTANT WITH MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50
- INSTALL VALVED SUPPLIES AT ALL PLUMBING FIXTURES 11. INSTALL TRAP SEAL PRIMER FOR FLOOR DRAINS AND HUB DRAINS ON COLD WATER SUPPLY TO NEAREST FREQUENTLY USED PLUMBING FIXTURE OR TO A TRAP SEAL PRIMER. INSTALL SOFT COPPER
- TUBING OR PEX PIPE TO FLOOR DRAIN AND HUB DRAIN. 12. FOR ACCESSIBLE LAVATORY INSULATE SANITARY AND HOT WATER PIPE WITH 1 IN. THICKNESS OF INSULATION. NOT REQUIRED IF KNEE CONTACT GUARD IS INSTALLED.
- 5. INSTALL WATER HAMMER ARRESTORS ON BRANCH LINES TO EACH FIXTURE OR GROUP OF FIXTURES HAVING A QUICK CLOSING DEVICE OR SOLENOID OR HOSE BIB. 14. INSTALL BACK FLOW PREVENTER WHERE THERE IS A HEALTH HAZARD POTENTIAL FOR POTABLE WATER SYSTEM AND AS REQUIRED BY THE LOCAL BUILDING DEPARTMEN'
- 15. FOR THE REMOVAL AND REWORKING OF EXISTING DOMESTIC WATER LINES AND HYDRONIC HEATING LINES, THIS SHALL BE CARRIED OUT BY FREEZING EXISTING RESPECTIVE LINES.

HVAC GENERAL NOTES FOR INSTALLATION UNLESS OTHERWISE NOTED ALL DUCTWORK AND DUCTWORK ACCESSORIES SHALL BE GALVANIZED STEEL LOW PRESSURE. DUCTWORK CONSTRUCTION AND INSTALLATION SHALL BE AS PER THE REQUIREMENTS

- ALL DUCTWORK TRANSVERSE JOINTS AND CONNECTIONS SHALL BE SEALED. FLEXIBLE DUCT LENGTH SHALL BE LIMITED TO 8FT. MAXIMUM AND SHALL BE FACTORY FABRICATED TO CAN/ULC S110 SHALL BE ALUMINUM FOIL REINFORCED FILM LAMINATE, PERMANENTLY BONDED TO A
- CORROSION RESISTANT COATED SPRING STEEL WIRE HELIX. WHERE IT IS REQUIRED TO BE INSULATED, IT SHALL BE INSULATED AS PER R-VALUE SPECIFIED BELOW. 4. DUCTWORK SHALL BE INSULATED AS FOLLOWS. ALL INSULATION SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50.
- .1 SUPPLY AIR DUCTS LOCATED INSIDE THE BUILDING ENVELOPE IN CEILING SPACES AND BULKHEADS NOT USED AS RETURN AIR PLENUM OR IN UNHEATED OR NOT AIRCONDITIONED SPACES SHALL BE INSULATED WITH 1-1/2 IN. THICKNESS OF FLEXIBLE DUCTWRAP INSULATION WITH REINFORCED FOIL/KRAFT VAPOUR BARRIER RETARDER FACING, DENSITY 0.75 PCF AND NOMINAL R-VALUE OF 5.0 .2 FASTENINGS:
- SELF ADHESIVE ALUMINUM TAPE ULC LABELLED. LAP SEAL ADHESIVE, QUICK SETTING FOR JOINTS AND LAP SEALING OF VAPOUR BARRIERS.
- CONTACT ADHESIVE QUICK SETTING. 5. FOR DUCT PENETRATIONS AT WALL, VOIDS AROUND DUCT SHALL BE SEALED AND CAULKED TO MAINTAIN REQUIRED INTEGRITY.

PLUMBING FIXTURES AND EQUIPMENT SCHEDULE

- WC1 WATER CLOSET, WALL MOUNTED, FLUSH VALVE TYPE, TOP SPUD, LOW CONSUMPTION 1.3 IMP. G (6 LPF), ELONGATED BOWL WHITE FINISH, AMERICAN STANDARD 3351101 AFWALL, EVERCLEAN TYPE. TOILET SEAT OPEN FRONT TYPE LESS COVER CENTOCO 500CCSSS, WHITE FINISH. FLUSH VALVE FACTORY SET FOR 1.3 I.G., DELTA 81T201 TOP INLET (11.5" OUTLET TUBE).
- WC2 WATER CLOSET, BARRIER-FREE, WALL MOUNTED, FLUSH VALVE TYPE, TOP SPUD, LOW CONSUMPTION 1.3 IMP. G (6 LPF), ELONGATED BOWL WHITE FINISH, AMERICAN STANDARD 3351101 AFWALL, EVERCLEAN TYPE. TOILET SEAT OPEN FRONT TYPE WITH COVER CENTOCO 820ST, WHITE FINISH. FLUSH VALVE FACTORY SET FOR 1.3 I.G., DELTA 81T201 TOP INLET (11.5" OUTLET TUBE). TOILET SEAT BE LOCATED NOT LESS THAN 430 MM AND NOT MORE THAN 485MM ABOVE THE FLOOR. SHALL BE INSTALLED WITH A SUITABLE FIXTURE CARRIER.
- V1 VANITY COUNTERTOP BASIN. OVAL TYPE, AMERICAN STANDARD 0419 444EC CADET EVERCLEAN, FAUCET HOLES ON 4" CENTRES, WHITE FINISH. TWO HANDLE FAUCET SET DELTA 21T133 WITH OPEN GRID STRAINER. COMPLETE WITH CHROME PLATED P-TRAP AND FLEX SUPPLIES WITH SCREWDRIVER LOCKSHIELD STRUCTURE.
- V2 VANITY COUNTERTOP BASIN, BARRIER-FREE, VITREOUS CHINA, AMERICAN STANDARD 9494 001 CADET UNIVERSAL ACCESS, FAUCET HOLES ON 4" CENTRES, WHITE FINISH. TWO HANDLE METERING FAUCET SET DELTA 86T1093 WITH OPEN GRID STRAINER. OFFSET P.O. PLUG, CHROME PLATED P-TRAP AND FLEX SUPPLIES WITH SCREWDRIVER LOCKSHIELD STRUCTURE. MOUNTING HEIGHT AND CLEARANCES BELOW THE BASIN SHALL COMPLY AS PER O.B.C. 3.8.3.11. INSTALL WITH MECHANICAL MIXING VALVE.
- FD1 FLOOR DRAIN FOR NON-MEMBRANE FINISHED FLOOR, WATTS FD-200-7, C/W TRAP PRIMER TAPPING, 1/2 IN. THK. x 5 IN. DIA. NICKEL BRONZE STRAINER.

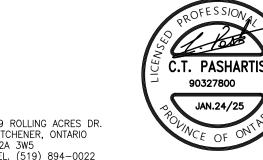
HVAC EQUIPMENT SCHEDULE

OF SMACNA.

DIFFUSERS, GRILLES AND REGISTERS BY E.H. PRICE UNLESS OTHERWISE INDICATED. COLOUR TO BE FINALIZED ON SITE WITH ARCHITECT REF. EG1: EXHAUST GRILLE, 510Z/F/A WITH VOLUME DAMPER

> JAN.24/25 ISSUED FOR TENDER DEC.19/24 ISSUED FOR PERMIT D. DATE REVISION

DO NOT SCALE DRAWINGS. ALL DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR DURING THE COURSE OF WORK. CoPa engineering ltd.



ITCHENER, ONTARIO L. (519) 894-0022

PROJECT

ORCHARD PARK SECONDARY SCHOOL

Corridor Ceiling and Accessibility Renovations 200 DEWITT ROAD STONEY CREEK ONTARIO

DRAWING STAFF AND BARRIER-FREE WASHROOM MECHANICAL INSTALLATION AND EQUIPMENT SCHEDULES

SCALE: AS NOTED CHECKED BY: C. PASHARTIS DATE: DECEMBER 19, 2024 PROJECT NO. 24CP059 DRAWING NO. M2-1

ELECTRICAL SPECIFICATION

GENERAL CONDITIONS

- THE CANADIAN STANDARD FORM OF CONSTRUCTION CONTRACT AND GENERAL CONDITIONS GOVERNING THE SAME CCDC PARTS 1 TO 12 INCLUSIVE ARE HEREBY MADE PART OF THIS SPECIFICATION. ALL WORK SHALL BE IN FULL ACCORDANCE WITH THE REQUIREMENTS OF THE 2021 ONTARIO ELECTRICAL
- SAFETY CODE, ELECTRICAL SAFETY AUTHORITY (ESA), AND THE LOCAL BUILDING INSPECTION DEPARTMENT REQUIREMENTS.
- ELECTRICAL CONTRACTOR SHALL INCLUDE FOR ESA INSPECTION FEES.
- THIS CONTRACTOR SHALL MAINTAIN LIABILITY INSURANCE AS REQUIRED. ALL WORKMANSHIP SHALL BE EXECUTED TO A STANDARD DETERMINED BY GOOD PRACTICE. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE THE EQUIPMENT & INSTALLATION FOR ONE YEAR FROM SUBSTANTIAL COMPLETION.
- THE ELECTRICAL CONTRACTOR SHALL SUBMIT ONE SET OF ELECTRONIC PDF SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW. SHOP DRAWINGS TO INCLUDE ALL ELECTRICAL EQUIPMENT, DEVICES & ULC LISTED FIRE STOPPING DETAILS. MATERIALS **SHALL NOT BE ORDERED** UNTIL REVIEW HAS BEEN COMPLETED. APPROVAL IS FOR GENERAL DESIGN COMPLIANCE ONLY.
- THE OWNERS RESERVE THE RIGHT TO ALTER THE LOCATION OF ANY ITEM UP TO TEN FEET (3m) WITHOUT INCURRING EXTRA COSTS, PROVIDED THE REQUEST IS MADE PRIOR TO INSTALLATION. ALL MATERIAL AND EQUIPMENT USED ON THIS PROJECT SHALL BE C.S.A. APPROVED, ESA FIELD EVALUATED,
- OR MUST BEAR AN ESA RECOGNIZED CERTIFICATION MARK.
- CUTTING AND PATCHING FOR ELECTRICAL WORK SHALL BE DONE BY THE GENERAL CONTRACTOR AT THE ELECTRICAL CONTRACTOR'S EXPENSE.
- . THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE EXISTING CONDITIONS AND THEN MAKE NECESSARY ALLOWANCES IN THEIR TENDER PRICE FOR REMOVAL, RELOCATION, REROUTING AND/OR RECONNECTION OF EXISTING ELECTRICAL EQUIPMENT AND WIRING, AS MAY BE NECESSARY FOR THE EXECUTION AND COMPLETION OF THIS PROJECT. EXTRA CHARGES FOR PREMIUM TIME LABOUR SHALL BE INCLUDED IN THE TENDER PRICE, ALLOWING FOR AFTER HOURS, WEEKEND AND HOLIDAY LABOUR REQUIREMENTS.
- THE DRAWINGS AND SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCIES OR CONTRADICTIONS SHALL BE BROUGHT TO THE CONSULTANT'S ATTENTION.
- 2. THE ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT IS TO BE CONFIRMED WITH MECHANICAL DRAWINGS & SCHEDULES PRIOR TO RELATED WORK.
- L3. ALL TEMPORARY LIGHTING AND POWER DURING CONSTRUCTION SHALL BE BY THE GENERAL CONTRACTOR AFTER AGREEMENT WITH THE ELECTRICAL CONTRACTOR. POWER SHALL BE PROVIDED FROM PANELS WITH REQUIRED SUPPLY AND CAPACITY.
- 4. TENDER SHALL BE BASED UPON THE SPECIFIED EQUIPMENT AND MATERIAL. REQUESTS FOR CONSIDERATION OF ALTERNATES TO THE SPECIFIED MATERIALS SHALL BE MADE TO THE CONSULTANT ONE WEEK PRIOR TO TENDER CLOSING AND SHALL INCLUDE MANUFACTURER, MODEL, AND COST MODIFICATION. COSTS OF ANY CHANGE REQUIRED TO OTHER TRADES AS A RESULT OF USING ALTERNATE EQUIPMENT ARE TO BE INCURRED BY THE ELECTRICAL CONTRACTOR.
- ALL CLAIMS FOR EXTRA WORK NOT COVERED IN THE CONTRACT TO BE SUBMITTED WITH A COMPLETE
- BREAKDOWN OF MATERIALS AND LABOUR. . DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS ARE TO BE TAKEN FROM THE ARCHITECTURAL DRAWINGS AND CONFIRMED ON SITE.
- 7. PROVIDE FIRE STOPPING PROTECTION FOR OPENINGS THROUGH ALL FIRE RATED ASSEMBLIES. ULC LISTED ASSEMBLY NUMBERS ARE TO BE USED.

2300mm

2300mm

1150mm

1700mm

18. LOW VOLTAGE CABLES (IE: NETWORK, SECURITY, CONTROL, ETC...) ROUTED WITHIN PLENUM SPACES SHALL BE FT6, CMP OR PLENUM RATED WHEN ROUTING THROUGH MECHANICAL CEILING PLENUMS.

MOUNTING HEIGHTS

- DEVICE MOUNTING HEIGHT TO CENTRE OF DEVICE IS AS FOLLOWS:
- LIGHT SWITCHES 1090mm (or 1200mm IN SERVICE ROOMS) 400mm
- RECEPTACLE
- 1400mm (or 1200mm BARRIER FREE PATH OF TRAVEL) THERMOSTATS POWER DOOR OPERATORS 1000mm
- FIRE ALARM BELL/HORN
- FIRE ALARM HORN/STROBE
- FIRE ALARM MANUAL PULL STATION
- FIRE ALARM END OF LINE RESISTORS
- UNIVERSAL WASHROOM CONTROL 1000mm UNIVERSAL WASHROOM AUDIBLE/VISUAL 2300mm
- OTHER BUILDING CONTROLS 1000mm NOTE: AUDIBLE FIRE ALARM DEVICES TO BE AT LEAST 150mm BELOW CEILING.
- **COMMUNICATION SYSTEM**

THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A COMPLETE EMPTY CONDUIT SYSTEM FOR COMMUNICATION OUTLETS AS SHOWN ON THE PLANS.

- PROVIDE CONDUIT AS PER LOW-VOLTAGE DEVICE SCHEDULE. CONDUIT TO BE METALLIC CONDUIT & FIRE STOPPPED WHEN PENETRATING FIRE SEPARATIONS.
- PROVIDE NYLON PULL STRING IN ALL EMPTY CONDUITS.

LIGHTING

- SUPPLY AND INSTALL LIGHTING FIXTURES AND DEVICES AS NOTED ON THE PLANS AS PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
- INSTALL ALL FIXTURES PARALLEL WITH BUILDING LINES UNLESS INDICATED OTHERWISE.
- FOR RECESSED FIXTURES (LED PUCK LIGHTS EXEMPTED) WITHIN SUSPENDED CEILINGS, PROVIDE EITHER: A. SAFETY 'JACK CHAIN' TO BUILDING STRUCTURE, OR
- B. MANUFACTURER APPROVED FASTENING DEVICES OR 'EARTHQUAKE CLIPS' FASTENED TO T-BAR. INSTALL A SEPARATE NEUTRAL CONDUCTOR FOR EACH LIGHTING BRANCH CIRCUIT.
- LIGHTING CONTROL WIRING NOT RUN WITHIN CONDUIT SHALL BE PLENUM RATED (FT6).

FIRE ALARM

GENERAL:

- FIRE ALARM WIRING SHALL BE MINIMUM #18 AWG 300V FAS CABLE (WIRING TO BE SIZED BY FIRE ALARM VENDOR FOR VOLTAGE DROP) RUN AS FOLLOWS:
- A. EXPOSED WALL: SURFACE WALL WIRING SHALL BE FAS WIRING IN SURFACE METAL WIREMOLD
- PAINTED TO MATCH WALL WHERE WIRING AND CONDUIT CANNOT BE RECESSED. B. ACCESSIBLE CEILING SPACES, CONCEALED SPACES, FINAL DEVICE CONNECTIONS: ARMOURED FAS
- C. EXPOSED CEILING, RISER CLOSETS, SERVICE ROOMS: FAS WIRING IN EMT CONDUIT.
- D. BELOW GRADE: FAS WIRING IN CONCRETE ENCASED PVC CONDUIT. COMMISSIONING OF LIFE SAFETY SYSTEMS SHALL BE INCLUDED IN ELECTRICAL CONTRACTORS PRICE.
- FIRE ALARM SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH CAN/ULC-S524-14, "INSTALLATION OF
- FIRE ALARM SYSTEM SHALL BE VERIFIED IN CONFORMANCE WITH CAN/ULC-S537-13, "VERIFICATION OF FIRE
- ALARM SYSTEMS" BY A THIRD PARTY (ARMS LENGTH). IF A FIRE ALARM OR VOICE COMMUNICATION SYSTEM OR ANY PART THEREOF IS SHUT DOWN:
- A. THE **FIRE DEPARTMENT AND BUILDING OCCUPANTS** SHALL BE NOTIFIED, AND
- B. IF APPLICABLE THE SUPERVISORY STAFF SHALL BE NOTIFIED, AND C. POST NOTICES ON ALL FLOORS BY ELEVATORS AND AT ENTRANCES, STATING THE SCOPE OF WORK
- AND WHEN IT IS EXPECTED TO BE COMPLETED.
- D. HAVE STAFF OR OTHER RELIABLE PERSON(S) PATROL THE AFFECTED AREA(S) AT LEAST ONCE EVERY HOUR. REFER TO CAN/ULC-S537-13(18) APPENDIX B - ALTERNATE MEASURES FOR OCCUPANT FIRE
- WHERE EXISTING, UNLESS NOTED OTHERWISE, FIRE ALARM TO BE KEPT. THE ELECTRICAL CONTRACTOR TO INCLUDE ALL COSTS ASSOCIATED WITH RELOCATION OF ANY DEVICES OR EQUIPMENT.
- EXISTING FIRE ALARM DEVICES TO REMAIN AND IN SOME CASES BE RELOCATED TO NEW CEILING IN SAME LOCATION.

EXISTING CONDITIONS

- ELECTRICAL WORK AFFECTING OTHER TENANTS SHALL BE PERFORMED AFTER BUSINESS HOURS (EVENINGS AND WEEKENDS), COORDINATE WITH LANDLORD.
- SERVICE AND DISTRIBUTION SYSTEM POWER INTERRUPTIONS SHALL BE KEPT TO A MINIMUM. POWER INTERRUPTIONS MUST BE COORDINATED WITH THE OWNER AND ALL OTHER TRADES BY THIS CONTRACTOR. WRITTEN APPROVAL FOR ELECTRICAL INTERRUPTIONS MUST BE RECEIVED FROM THE OWNER INDICATING THE DATE, TIME AND ESTIMATED DURATION OF THE INTERRUPTION. APPLICATION FOR
- APPROVAL OF THE POWER INTERRUPTIONS MUST BE SUBMITTED TO THE OWNERS AND/OR ARCHITECTS AT LEAST TWO WEEKS PRIOR TO THE REQUESTED SHUTDOWN DATE. EXISTING ELECTRICAL EQUIPMENT, REMOVED AND INDICATED FOR REUSE, SHALL BE CLEANED BEFORE RE-
- WIRING LOCATED IN AREAS BEING ALTERED OR DEMOLISHED, BUT FEEDING OUTLETS OR EQUIPMENT REQUIRED TO REMAIN IN SERVICE, MUST BE REWORKED IN ORDER TO MAINTAIN THE CONTINUITY OF THE
- REPAIRS TO EXISTING WALLS, FLOORS, AND CEILINGS ARE TO BE PERFORMED BY THE GENERAL
- SEQUENCE OF REMOVAL AND RELOCATION OF EXISTING EQUIPMENT AND WIRING SHALL BE COORDINATED WITH THE OTHER TRADES AND SHALL CONFORM TO THE REQUIREMENTS AND CONDITIONS OUTLINED. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION TO EXISTING WIRING AND EQUIPMENT

THROUGHOUT THE PROJECT, PARTICULARLY WHERE WIRING AND ELECTRICAL EQUIPMENT HAVE BECOME

NEW OUTLETS AND EQUIPMENT SHOWN IN THE SAME LOCATION AS EXISTING OUTLETS MAY BE FED THROUGH THE EXISTING CONDUITS/WIRING, PROVIDED THAT THEY ARE IN GOOD CONDITION AND ARE ACCEPTABLE TO THE ESA INSPECTION DEPARTMENT.

EXPOSED TO MECHANICAL DAMAGE OR MOISTURE IN THE COURSE OF ALTERATIONS OR NEW

DEMOLITION

- ALL EXISTING ELECTRICAL EQUIPMENT, WIRING, AND ROUGH-IN DEVICES ARE TO BE REMOVED COMPLETE TO SUIT THE DEMOLITION AND RENOVATION OF THE SPACES. ALL EXISTING ELECTRICAL EQUIPMENT, NOT BEING REUSED, SHALL BECOME THE PROPERTY OF THE OWNER. ELECTRICAL CONTRACTOR SHALL PROPERLY DISPOSE OF EQUIPMENT NOT DESIRED BY OWNER.
- ALL DEVICES & EQUIPMENT MADE OBSOLETE SHALL BE REMOVED FROM THE CONSTRUCTION SITE.
- THE DEMOLITION PLANS SHOW THE MAJORITY OF DEMOLITION WORK INVOLVED. SOME DEVICES MAY HAVE INADVERTENLY BEEN MISSED. OR WERE HIDDEN DURING THE SURVEY. CONTRACTOR TO ALSO INCLUDE THE FOLLOWING:
 - A. THREE (3) EXIT COMBINATION SIGNS
- B. FIVE (5) LIGHTING FIXTURES
- C. THREE (3) WALL LIGHTING CONTROLS
- D. FIVE (5) NETWORK/SECURITY ITEMS, THAT WILL BE REWORKED ONTO NEW CEILING

GENERAL CLOSE OUT PROCEDURES

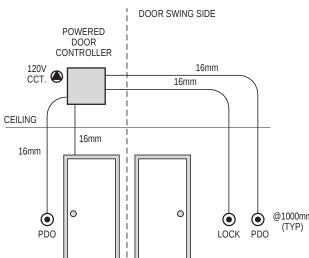
CONTRACTOR TO MEET THE EXISTING CONDITIONS.

- **DOCUMENTS:** ELECTRICAL CONTRACTOR TO SUBMIT:
- FIRE ALARM SYSTEM ULC-S537-13 VERIFICATION REPORT (INCLUDING DEVICE & AUDIBILITY REPORT). ESA CERTIFICATE OF INSPECTIONS;
- SIGNED COPY OF EMERGENCY LIGHTING TEST REPORT. EMERGENCY LIGHTING TEST REPORT TO
- INDICATE TOTAL RUNTIME OF EMERGENCY LIGHTING ONCE NORMAL POWER IS LOST FOR EACH BATTERY SYSTEM. (MINIMUM 30MIN AS PER OBC:3.2.7.4(1b))
- TRAINING: ELECTRICAL CONTRACTOR SHALL PROVIDE TRAINING SESSIONS TO THE OWNER ON ALL MAJOR
- **COMMISSIONING:** ALL MAJOR SYSTEMS ARE TO BE COMMISSIONED BY THE MANUFACTURERS
- REPRESENTATIVE INCLUDING FIRE ALARM, LIGHTING CONTROL SYSTEMS. **FUNCTIONAL TESTING** (AT CONTRACTORS EXPENSE):
- A. LIGHTING CONTROL SYSTEM TESTING SHALL INCLUDE OCCUPANCY SENSOR PLACEMENT, SENSITIVITY, AND CONTROL SETTING CALIBRATION. PROPERLY OPERATING OCCUPANCY SENSORS ARE TO TURN OF LIGHTS WITHIN A REASONABLE PERIOD OF TIME IN UNOCCUPIED SPACES AND SHALL NOT ALLOW LIGHTS TO TURN ON UNLESS SPACE IS OCCUPIED. CONFIRM ALL TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF. COORDINATE WITH MECHANICAL, HVAC SYSTEM TO BE ON DURING TESTING.
- RECORD DRAWINGS: ELECTRICAL CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF ACTUAL INSTALLATION TO OWNERS WITHIN 30 DAYS OF SYSTEM ACCEPTANCE. DRAWINGS ARE TO INCLUDE SINGLE LINE DIAGRAM OF DISTRIBUTION SYSTEM; FLOOR PLANS SHOWING THE LOCATION OF DISTRIBUTION EQUIPMENT AND THE AREAS SERVED BY THAT EQUIPMENT; CHANGES TO LIGHTING, LIGHTING CONTROLS & CIRCUITING.

INSPECTIONS BY CONSULTANT

- CONTRACTOR SHALL NOTIFY CONSULTANTS WHEN INSPECTIONS ARE REQUIRED. ALLOW FOR MINIMUM OF THREE BUSINESS DAYS OF NOTICE PRIOR TO INSPECTION.
- INSPECTIONS ARE REQUIRED AT THE FOLLOWING MILESTONES:

A. FINAL INSPECTION



PROVIDE BACKING BOX & 16mm EMT FROM EACH DEVICE TO POWER DOOR CONTROLLER. COORDINATE WITH

- ELECTRIC STRIKE.
- PDO BUTTON ON DOOR SWING SIDE, BETWEEN
- PULL STRING IN ALL CONDUITS
- LIGHTING CONTROL MOTION SENSOR MOUNTED AT

Conduit Detail - PDO

CONTROLLER PROVIDER.

- 16mm EMT TO DOOR HEADER, PULL STRING TO
- PDO BUTTON OUTSIDE DOOR SWING AS SHOWN ON
- 600mm & 1500mm FROM DOOR SWING

1050mm TO CENTRE

Electrical Sheet List Electrical Legend & Specification Demo RCP Level 1 Demo RCP Level 2 Demo Ceiling Cable tray & Conduit - Level 1 - North Demo Ceiling Cable tray & Conduit - Level 1 - Southwest Demo Ceiling Cable tray & Conduit - Level 1 - Southeast Demo Ceiling Cable tray & Conduit - Level 2 Proposed RCP Level 1 - North Proposed RCP Level 1 - South & WR E3.3 Proposed RCP Level 1 - South/East E3.4 Proposed RCP Level 2 Schedules & Details

DEVICE/EQUIPMENT OPTIONS & TAGS

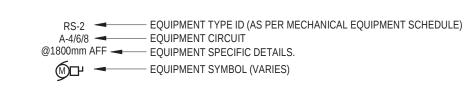
All Sheet Notes

NOTE

?	SHEET NOTE LABEL - REFER TO SHEET NOTES
CL	CEILING MOUNT
FL	FLOOR MOUNT
GFI	DEVICE WIRED TO LOAD SIDE OF GFCI RECEPTACLE/BREAKER
RP	REPLACE EXISTING DEVICE WITH NEW DEVICE IN SAME LOCATION.
REL	RELOCATED DEVICE/EQUIPMENT. REWORK WIRING AS NEEDED. IF APPLICABLE PROVIDE NEW DEVICE BOX & CONNECTORS.

NEW DEVICE/EQUIPMENT TO BE REMOVED EXISTING TO REMAIN

TYPICAL SYMBOL LINETYPE FOR DEVICES or EQUIPMENT New, Removed, Existing





27S DEVICE TYPE ID (AS PER LOW VOLTAGE DEVICE SCHEDULE) TV@1800mm — DEVICE SPECIFIC MOUNTING INSTRUCTIONS DEVICE SYMBOL (VARIES)

DEVICES WITH UNIQUE SYMBOL & TYPE MAY NOT HAVE A TYPE ID. DEVICES MOUNTED BESIDE COUNTER HEIGHT ELECTRICAL DEVICES ARE TO ALSO BE MOUNTED AT COUNTER HEIGHT.

Tags - Low Voltage Devices RS-2 DEVICE TYPE ID (AS PER ELECTRICAL DEVICE SCHEDULE)



A-4 DEVICE CIRCUIT TV@1800mm — DEVICE SPECIFIC DETAILS

DEVICE TYPE ID (AS PER LIGHTING CONTROL DEVICE SCHEDULE) (Z1.1) LIGHTING CONTROL ZONE ID 0-10V O-10V WIRING REQUIRED BETWEEN CONTROL DEVICE AND ALL LIGHTING FIXTURES WITHIN THE SAME CONTROL ZONE. CIRCUIT # USED FOR ZONE DEVICE SYMBOL (VARIES)

Tags - Lighting Devices

ELECTRICAL LEGEND

MECHANICAL ELECTRICAL LIGHTING LIGHTING STREEDULES SCHEDULES SCHED	\$ \$ \$ \$	# 4 (8)	\$ _x	LIGHT SWITCH DIMMER SWITCH
ELECTRICAL LIGHTING EQUIPMENT FIXTURE SCHEDULES SCHEDULES	MS PP	\$	Φx	DIMMER SWITCH
ELECTRICAL LIGHTING EQUIPMENT FIXTURE SCHEDULES SCHEDULES	MS PP			== =
ELECTRICAL LIGHTING EQUIPMENT FIXTURE SCHEDULES SCHEDULES	PP		∭S _x	LIGHTING MOTION SENSOR
ELECTRICAL LIGHTING EQUIPMENT FIXTURE SCHEDULES SCHEDULES		PP	PP _x	LIGHTING POWER PACK
ELECTRICAL EQUIPMENT SCHEDULES	TC	тс	TC _x	LIGHTING TIME CLOCK
ELECTRICAL EQUIPMENT SCHEDULES	(CNT)	(CNT)	CNT _X	LIGHTING CONTACTOR
ELECTRICAL EQUIPMENT SCHEDULES	(<u></u>	▼ x	EXIT SIGN, CEILING MOUNT, HATCH = SIGN, ARROW = DIRECTION
ELECTRICAL EQUIPMENT SCHEDULES	\$	<u></u>	∑x	EXIT SIGN, WALL MOUNT, HATCH = SIGN, ARROW=DIRECTION
ELECTRICAL EQUIPMENT SCHEDULES	3,3 € 3,1 €		5 × ×	EXIT / EMERG COMBO, WALL MOUNT, HATCH=SIGN, ARROW=DIRECTION
ELECTRICAL EQUIPMENT SCHEDULES	<u>₹</u> 	**** ****	হৈ ×	EMERGENCY LIGHT, BATTERY UNIT
ELECTRICAL EQUIPMENT SCHEDULES	보, 캠	¥,35	료 '좌 ×	EMERGENCY LIGHT, REMOTE HEAD
	Ó	70) O(x	LIGHTING FIXTURE
)))	1-0	⊢O,×	WALL MOUNTED LIGHTING FIXTURE
				LIGHTING FIXTURE
				NIGHT LIGHTING FIXTURE
		V////	(<u></u>)x	ELECTRICAL POWER PANEL
				ELECTRICAL DISCONNECT (FUSED OR UNFUSED)
MECHANICAL EQUIPMENT SCHEDULES				ELECTRICAL EQUIPMENT - MISCELLANEOUS
MECHANICAL EQUIPMENT SCHEDULES	(M)	(M)		MECHANICAL EQUIPMENT CONTROL
MECHAN EQUIPN SCHEDL	<u>(M)</u>	(M)		MECHANICAL EQUIPMENT - HARDWIRE CONNECTION
ME EQ		(M).T.P	Ø₽x	MECHANICAL EQUIPMENT c/w LOCAL DISCONNECT
		IE::::II	x x	MECHANICAL EQUIPMENT - CONTRACTOR SUPPLIED ELECTRIC HEATER
	<u> </u>	:	—— x	#6 AWG CU TO BUILDING GROUND
l	(a)	(A)	● _X	HARDWIRE CONNECTION
S S	<u> </u>	(#:	⊕ _x	DUPLEX RECEPTACLE 15A
ELECTRICAL DEVICE SCHEDULES		# :	⊕ x	DUPLEX RECEPTACLE 15A - COUNTER (100mm ABOVE BACKSPLASH)
ELEC DE SCHE	=		⊕ x	DUPLEX RECEPTACLE 20A
		():	⊕- _X	DUPLEX RECEPTACLE 20A - COUNTER (100mm ABOVE BACKSPLASH)
	0-	() -	— х	SPECIAL RECEPTACLE
	V	W	V _X	DATA OUTLET
	•	· •	•	PUSHBUTTON (BOX & 16mm EMT TO ACCESSIBLE CEILING SPACE)
GE S	X	ĭ.	X	UNIVERSAL WASHROOM: ASSISTANCE REQUESTED AUDIBLE VISUAL SIG
LOW VOLTAGE DEVICE SCHEDULES	÷	<u>-</u>	<u>-</u>	COMMUNICATION BACKBOARD - PLYWOOD GOOD ONE SIDE
OW V DE SCHE	CR	CR	CR	CARD READER/FOB
_	ES	ES	ES	ELECTRIC STRIKE
	\$	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>	SOUND SPEAKER
			· ·	FIRE ALARM MANUAL PULL STATION
		[2 4 4]		FIRE ALARM HORN
	□ \$-	[28]E	Z ↓ zz	FIRE ALARM HORN STROBE (zz = CANDELA, 15cd DEFAULT)
	□ ‡-	(3 45-	□ +- _{zz}	FIRE ALARM STROBE (zz = CANDELA, 15cd DEFAULT)
Σ. S:	(SD)	(SD)	SD x	FIRE ALARM SMOKE DETECTOR
FIRE ALARM DEVICE SCHEDULES	<u> </u>	(Ĥ)	<u></u>	FIRE ALARM HEAT DETECTOR
FIRE DE SCHE		(SD) _R	(SD) _R	FIRE ALARM SMOKE DETECTOR c/w FORM 'C' RELAY SUB-BASE
	(SD)_	I R		FIRE ALARM HEAT DETECTOR c/w FORM 'C' RELAY SUB-BASE
	SD _R	(ĤD)_	(HD)_	TIME ABAMMATIE AT BETECTOR OF WITOMM C REBAT 30B BASE
	SD _R HD _R	ŵ _r	(H) _R	FIRE ALARM BELL
	HDR	⊕` _R		

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DISCREPANCIES TO THE ENGINEER, BEFORE PROCEEDING WITH THE WORK.

S. HOLDITCH

Feb 11, 2025

Relssued For Tender Feb 11, 2025 Relssued For Tender Feb 03, 2025 Issued For Tender Jan 24, 2025 Issued For Permit Dec 20, 2024

REVISION SCHEDULE

DATE

DESCRIPTION

PROJECT NAME

TORONTO, ON, M4S 3E2

Orchard Park **Secondary School**

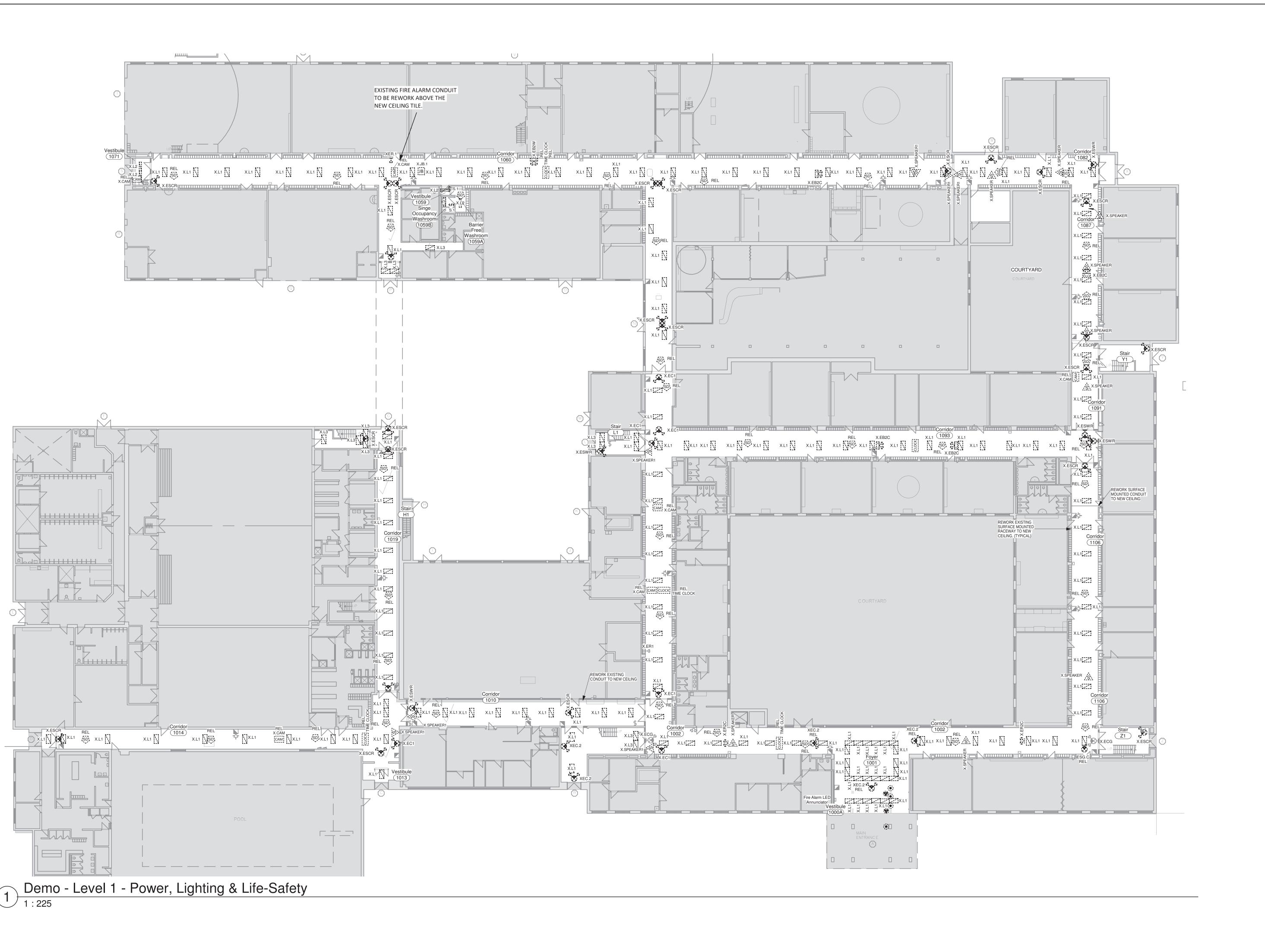
200 Dewitt Rd,

Stoney Creek City, ON

Electrical Legend & Specification

1:1 HEET SIZE 24"x36" PROJECT NUMBER

RAWING NUMBER



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PROJECT NORTH





4	Relssued For Tender	Feb 11, 2025
3	Relssued For Tender	Feb 03, 2025
2	Issued For Tender	Jan 24, 2025
1	Issued For Permit	Dec 20, 2024

DESCRIPTION DATE REVISION SCHEDULE



Orchard Park

Secondary School

200 Dewitt Rd, Stoney Creek City, ON

Demo RCP Level 1

DRAWING NUMBER 1:225 SHEET SIZE

E2.1

24"x36" PROJECT NUMBER



			CURRE	NT SCHEDULE PH	HASE: Tender		SHOWING	PHASE ITEMS: None			
Qty	Image	Туре	Relocated	Mfg.	Model#	Mounting	Height	Description	Remarks	Phase Added	Phase Re
1			No	TBD	TBD			TBD	TBD	EXISTING	Tend
1		ESG.C	Yes		Existing	Ceiling	Ceiling	Emergency Exit Sign - Ceiling Mount; Green Pictogram		EXISTING	Tend
5		X.EB2C	No		Existing	Wall	2300mm	Emergency Battery Light - 2 Head;	Assumed 9W Incandescent	EXISTING	Tend
2		X.EB2W	No		Existing	Wall	2300mm	Emergency Battery Light - 2 Head;	Assumed 9W Incandescent	EXISTING	Tend
6		X.EC1	No		Existing	Ceiling	Ceiling	Exit/Emergency combination sign - Ceiling Mount; 2-Head Emerg Light; Red Letters. MAY BE RECESSED EMERGENCY CEILING BATTERY UNIT, WITH TWO EMERGENCY LIGHTS & EXIT SIGN.	Assumed 9W Incandescent	EXISTING	Tend
1		X.ER2	No		Existing	Wall	2300mm	Emergency Remote - 2 Head;	Assumed 9W Incandescent	EXISTING	Tend
4		X.ER2C	No		Existing	Wall	2300mm	Emergency Remote - 2 Head;	Assumed 9W Incandescent	EXISTING	Tend
33		X.ESCR	No		Existing	Ceiling	Ceiling	Emergency Exit/Combo Sign - Ceiling Mount; 2-Head Emerg Light; Red Letters	Assumed 9W Incandescent	EXISTING	Tend
7		X.ESWR	No		Existing	Wall	2300	Emergency Exit/Combo Sign -	Assumed 9W Incandescent	EXISTING	Tend
223		X.L1	No	TBD	TBD			Existing Lighting Fixture	TBD	EXISTING	Tend
4		X.L1E	No	TBD	TBD			TBD	TBD	EXISTING	Tend
4		X.L2	No	TBD	TBD			TBD	TBD	EXISTING	Tend
23		X.L3	No	TBD	TBD			Existing 2x4 Surfaced Mount	TBD	EXISTING	Tend
5		XEC.2			Existing	Ceiling	Ceiling	Emergency Exit/Combo Sign - Ceiling Mount; 2-Head Emerg Light; Green Pictogram	Assumed 9W Incandescent	EXISTING	Tend
1		XER.1	No		Existing	Wall	2300mm	Emergency Remote - 1 Head;	Assumed 9W Incandescent	EXISTING	Tend

CURRENT SCHEDULE PHASE: Tender SHOWING PHASE ITEMS: None							
Qty	Type ID	Relocated	Description	Type Comments	Phase Added	Phase Removed	
2	DC	Yes	Direct Hardwire Connection	Powered Door Controller; Wired to line side of local lighting circuit. Estimated ~300W non-continuous load.	EXISTING	Tender	
1	X.JB.1	No	Junction Box	Existing junction box and emt conduit, to be rework above the new ceiling tile.	EXISTING	Tender	

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PROJECT NORTH



Feb 11, 2025

	NO.	DESCRIPTION	DATE
	1	Issued For Permit	Dec 20, 2024
	2	Issued For Tender	Jan 24, 2025
П	3	Relssued For Tender	Feb 03, 2025
	4	Relssued For Tender	Feb 11, 2025

Engineering

1920 YONGE ST, SUITE 200
TORONTO, ON, M4S 3E2

REVISION SCHEDULE

Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

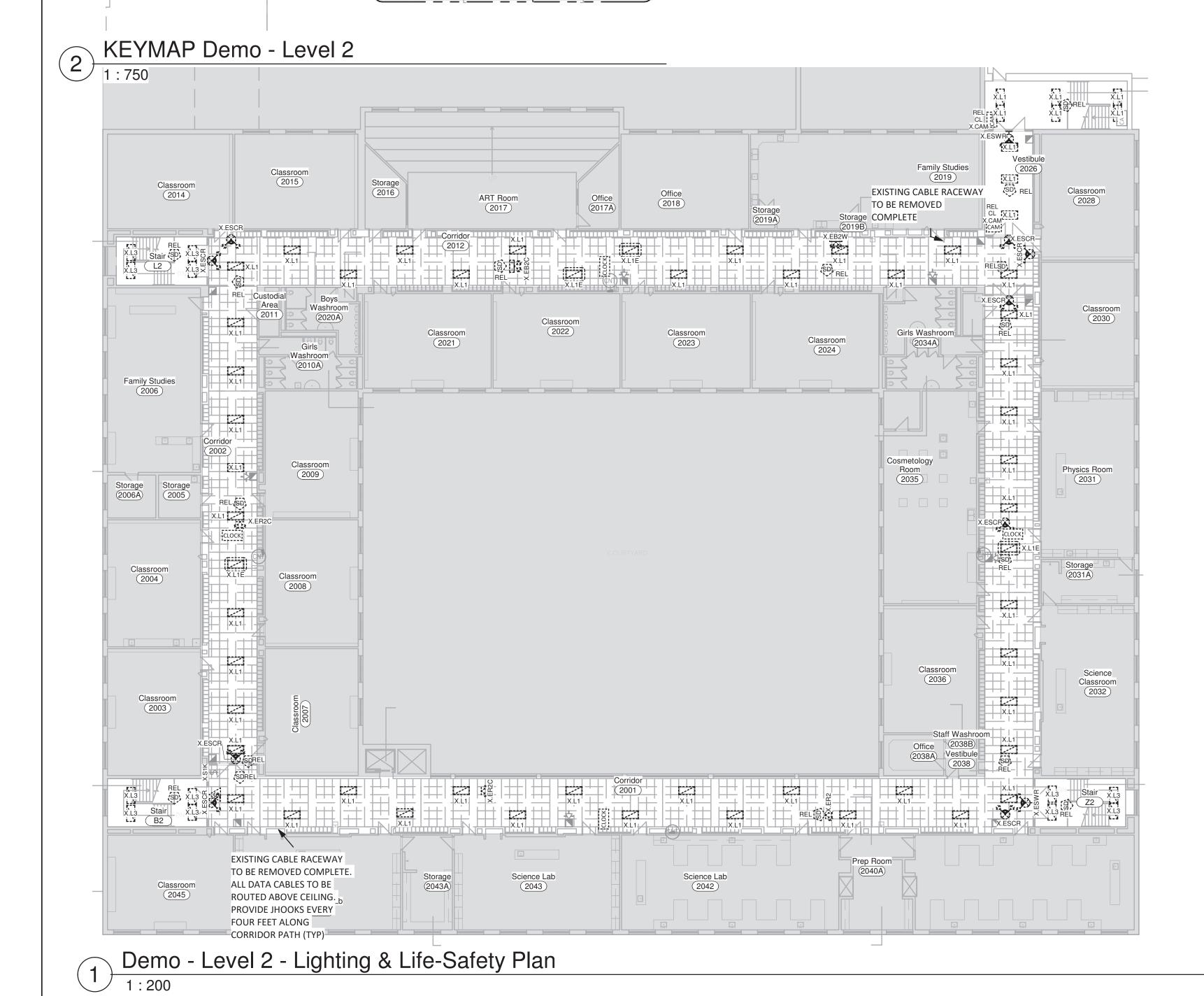
24"x36"

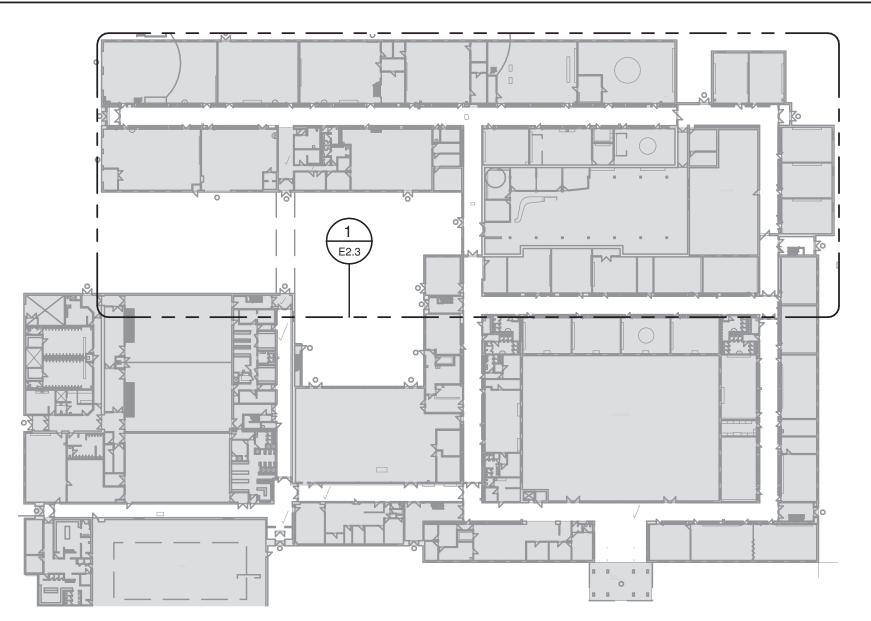
PROJECT NUMBER

Demo RCP Level 2

RAWING NUMBER As indicated SHEET SIZE

E2.2

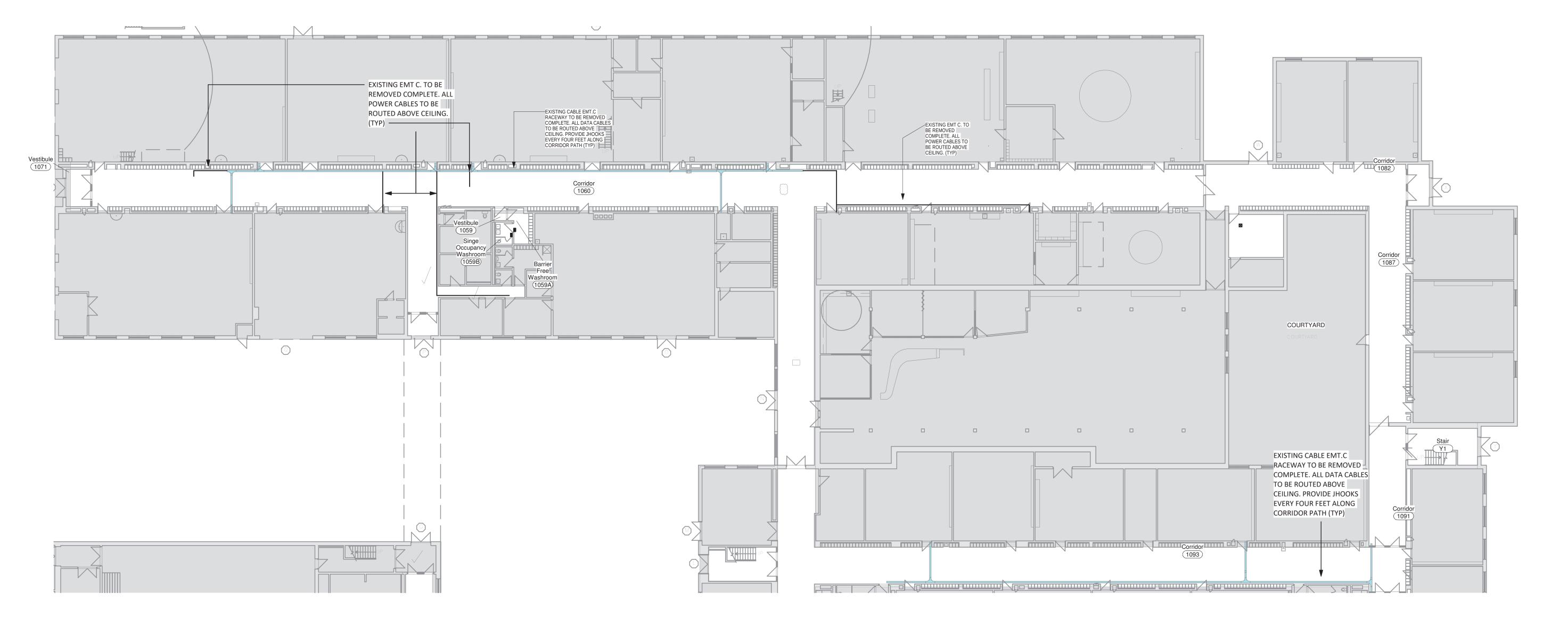




(3) Typical Raceway

2 KEYMAP Demo - Level 1 North

 AT LOCATIONS WHERE EXISTING RACEWAYS PENETRATE WALL BELOW CEILING LEVEL, PROVIDE SMALL PLASTIC RACEWAY COVER TO INTERFACE BETWEEN CEILING AN EXISTING PENETRATION. THE MAJORITY OF WALL PENTRATIONS AND DATA CABLE/EMT RACEWAYS ARE SHOWN. IT IS THE INTENT THAT ALL DATA RACEWAYS/CONDUIT ARE RELOCATED ABOVE CEILING TILE EXCEPT FOR SHORT SECTION RIGHT AT EXISTING WALL PENETRATIONS. CURRENTLY NOT SHOWN: ASSUME THERE 30FT OF DATA RACEWAY AND 8 WALL PENTRATIONS ON THIS PROJECT BUT ARE TO BE REWORKED AS NOTED ABOVE. CURRENTLY NOT SHOWN, ASSUME THAT THERE ARE 40FT OF 1/2" EMT C. WITH 8#12 AWG POWER CABLES/WIRING, THAT NEED TO BE REWORKED/REROUTED ABOVE CEILING.



Demo - Level 1 - Power & Data Ceiling Conduit - North

1:200

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PROJECT NORTH





Relssued For Tender Relssued For Tender Feb 03, 2025 Issued For Tender

DESCRIPTION **REVISION SCHEDULE**

1920 YONGE ST, SUITE 200 TORONTO, ON, M4S 3E2

Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

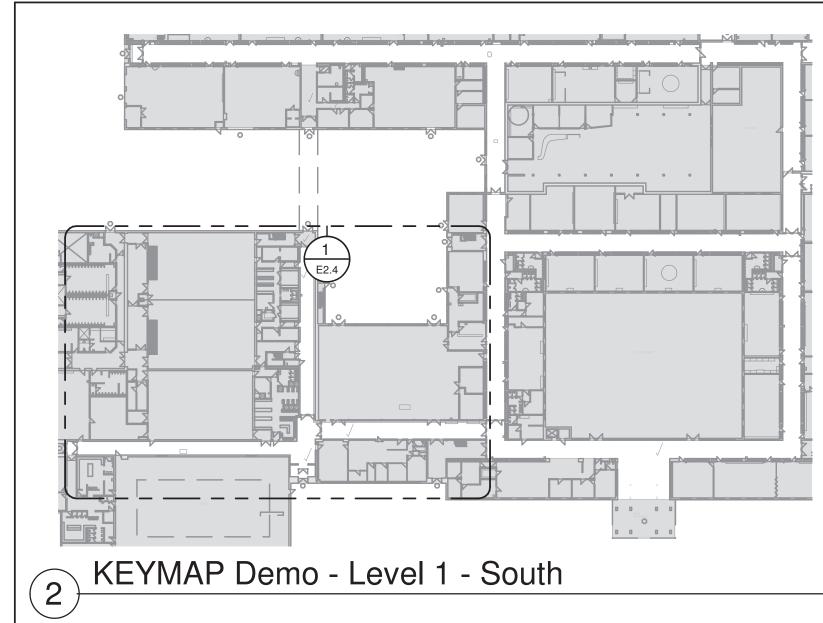
Demo Ceiling Cable tray & Conduit -Level 1 - North

As indicated SHEET SIZE

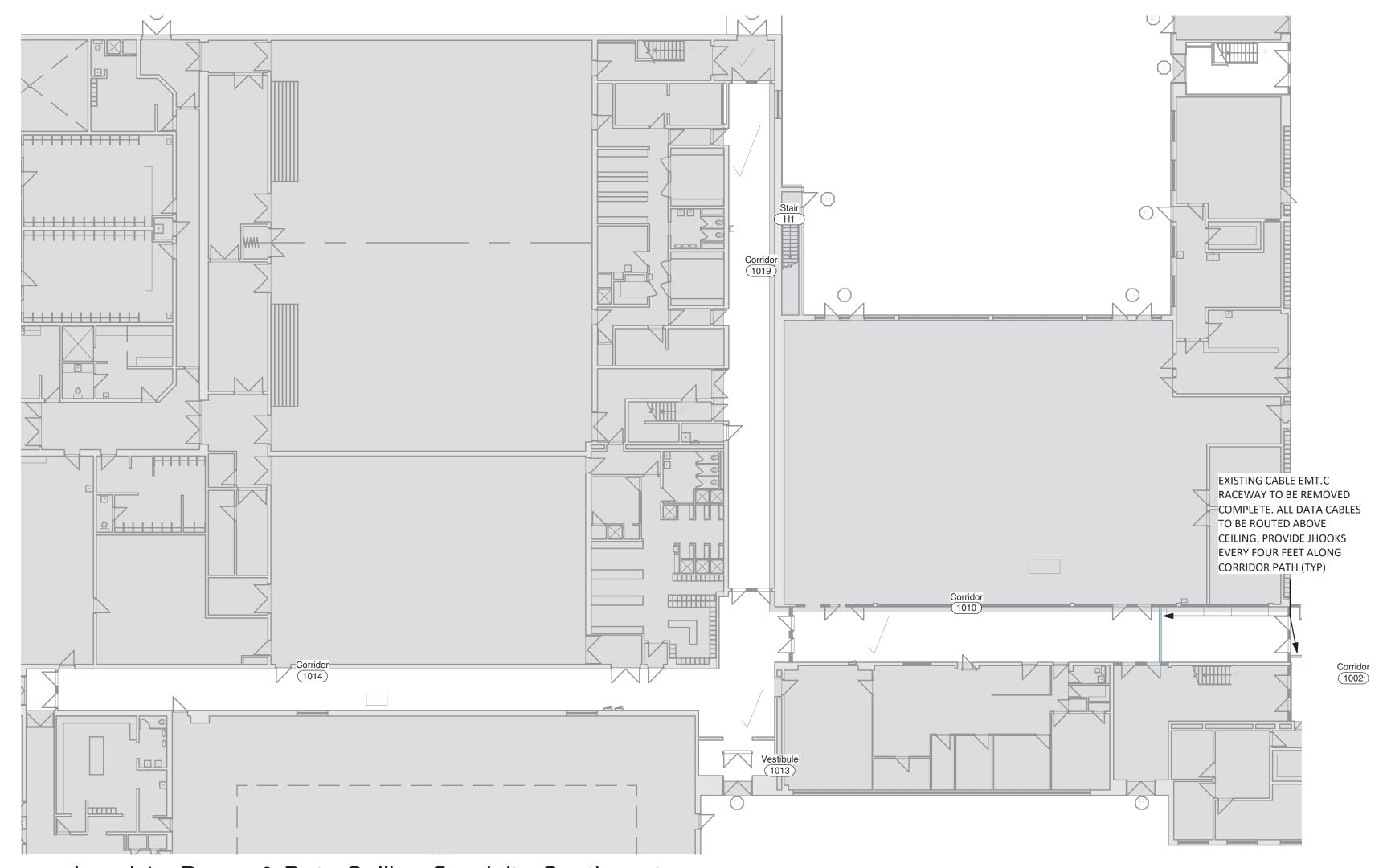
PROJECT NUMBER

DRAWING NUMBER 24"x36"

E2.3



 AT LOCATIONS WHERE EXISTING RACEWAYS PENETRATE WALL BELOW CEILING LEVEL, PROVIDE SMALL PLASTIC RACEWAY COVER TO INTERFACE BETWEEN CEILING AN EXISTING PENETRATION. THE MAJORITY OF WALL PENTRATIONS AND DATA CABLE/EMT RACEWAYS ARE SHOWN. IT IS THE INTENT THAT ALL DATA RACEWAYS/CONDUIT ARE RELOCATED ABOVE CEILING TILE EXCEPT FOR SHORT SECTION RIGHT AT EXISTING WALL PENETRATIONS. CURRENTLY NOT SHOWN: ASSUME THERE 30FT OF DATA RACEWAY AND 8 WALL PENTRATIONS ON THIS PROJECT BUT ARE TO BE REWORKED AS NOTED ABOVE. CURRENTLY NOT SHOWN, ASSUME THAT THERE ARE 40FT OF 1/2" EMT C. WITH 8#12 AWG POWER CABLES/WIRING, THAT NEED TO BE REWORKED/REROUTED ABOVE CEILING.



Demo - Level 1 - Power & Data Ceiling Conduit - Southwest

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PROJECT NORTH





REVISION SCHEDULE							
NO.	DESCRIPTION	DATE					
2	Issued For Tender	Jan 24, 2025					
3	Relssued For Tender	Feb 03, 2025					
4	Relssued For Tender	Feb 11, 2025					

Engineering

1920 YONGE ST, SUITE 200
TORONTO, ON, M4S 3E2

Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

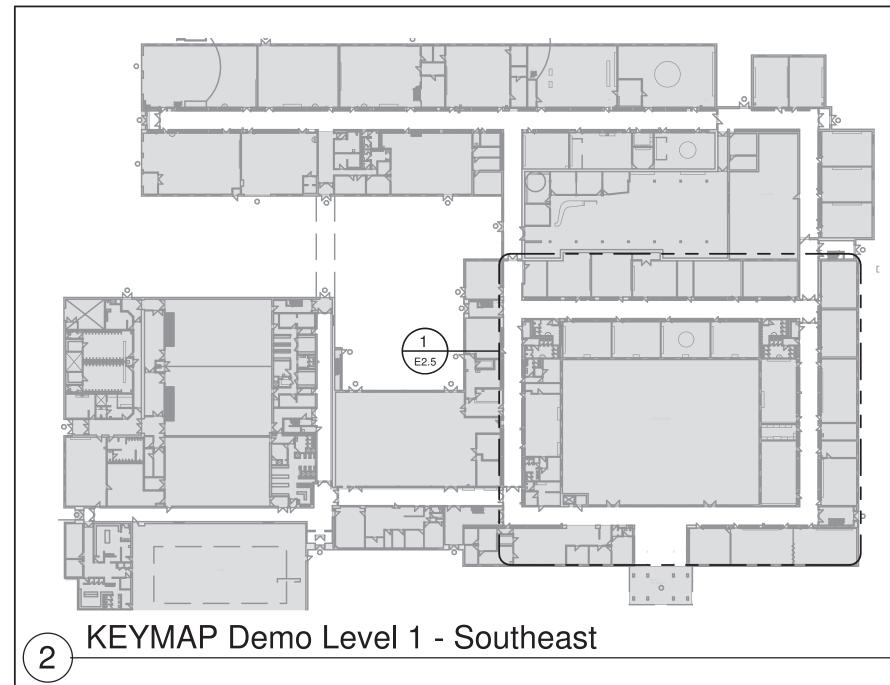
Demo Ceiling Cable tray & Conduit -Level 1 - Southwest

As indicated

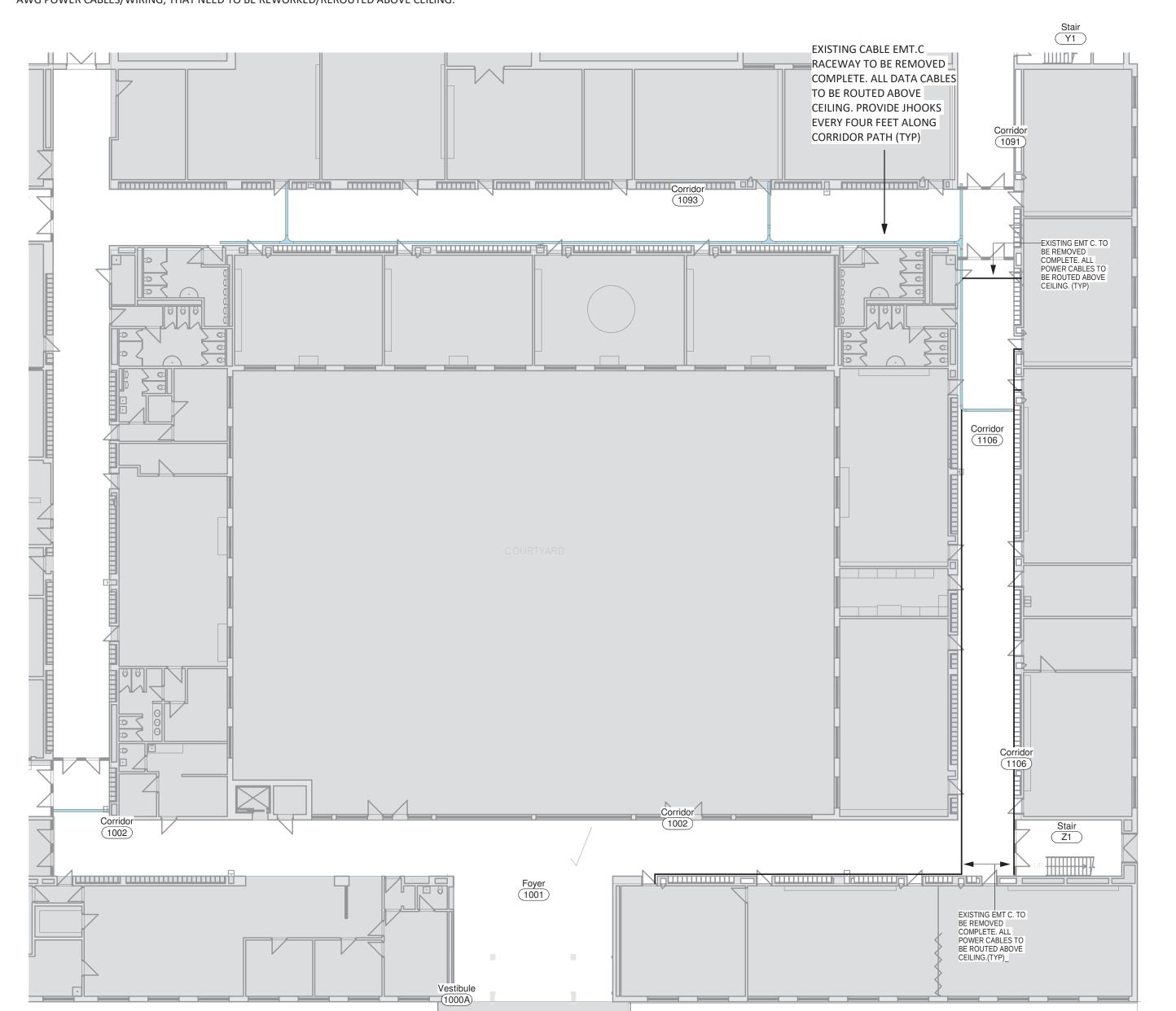
DRAWING NUMBER

E2.4 SHEET SIZE 24"x36"

PROJECT NUMBER



 AT LOCATIONS WHERE EXISTING RACEWAYS PENETRATE WALL BELOW CEILING LEVEL, PROVIDE SMALL PLASTIC RACEWAY COVER TO INTERFACE BETWEEN CEILING AN EXISTING PENETRATION. THE MAJORITY OF WALL PENTRATIONS AND DATA CABLE/EMT RACEWAYS ARE SHOWN. IT IS THE INTENT THAT ALL DATA RACEWAYS/CONDUIT ARE RELOCATED ABOVE CEILING TILE EXCEPT FOR SHORT SECTION RIGHT AT EXISTING WALL PENETRATIONS. CURRENTLY NOT SHOWN: ASSUME THERE 30FT OF DATA RACEWAY AND 8 WALL PENTRATIONS ON THIS PROJECT BUT ARE TO BE REWORKED AS NOTED ABOVE. CURRENTLY NOT SHOWN, ASSUME THAT THERE ARE 40FT OF 1/2" EMT C. WITH 8#12 AWG POWER CABLES/WIRING, THAT NEED TO BE REWORKED/REROUTED ABOVE CEILING.



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PROJECT NORTH





NO.	DESCRIPTION	DATE
2	Issued For Tender	Jan 24, 2025
3	Relssued For Tender	Feb 03, 2025
4	Relssued For Tender	Feb 11, 2025



Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

Demo Ceiling Cable tray & Conduit -Level 1 - Southeast

As indicated

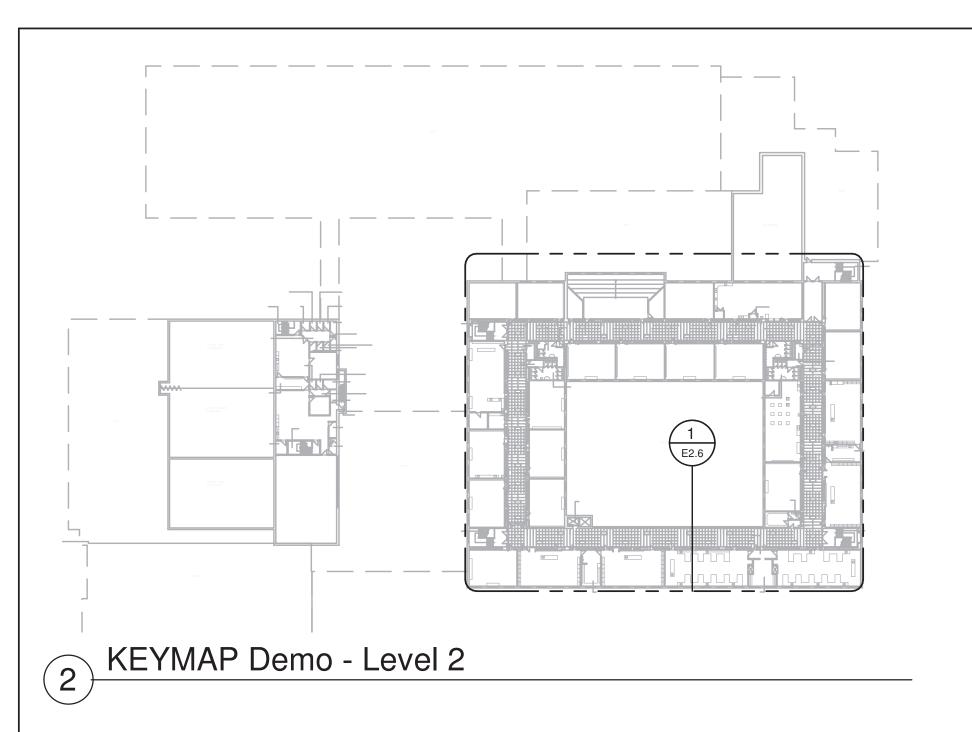
24"x36"

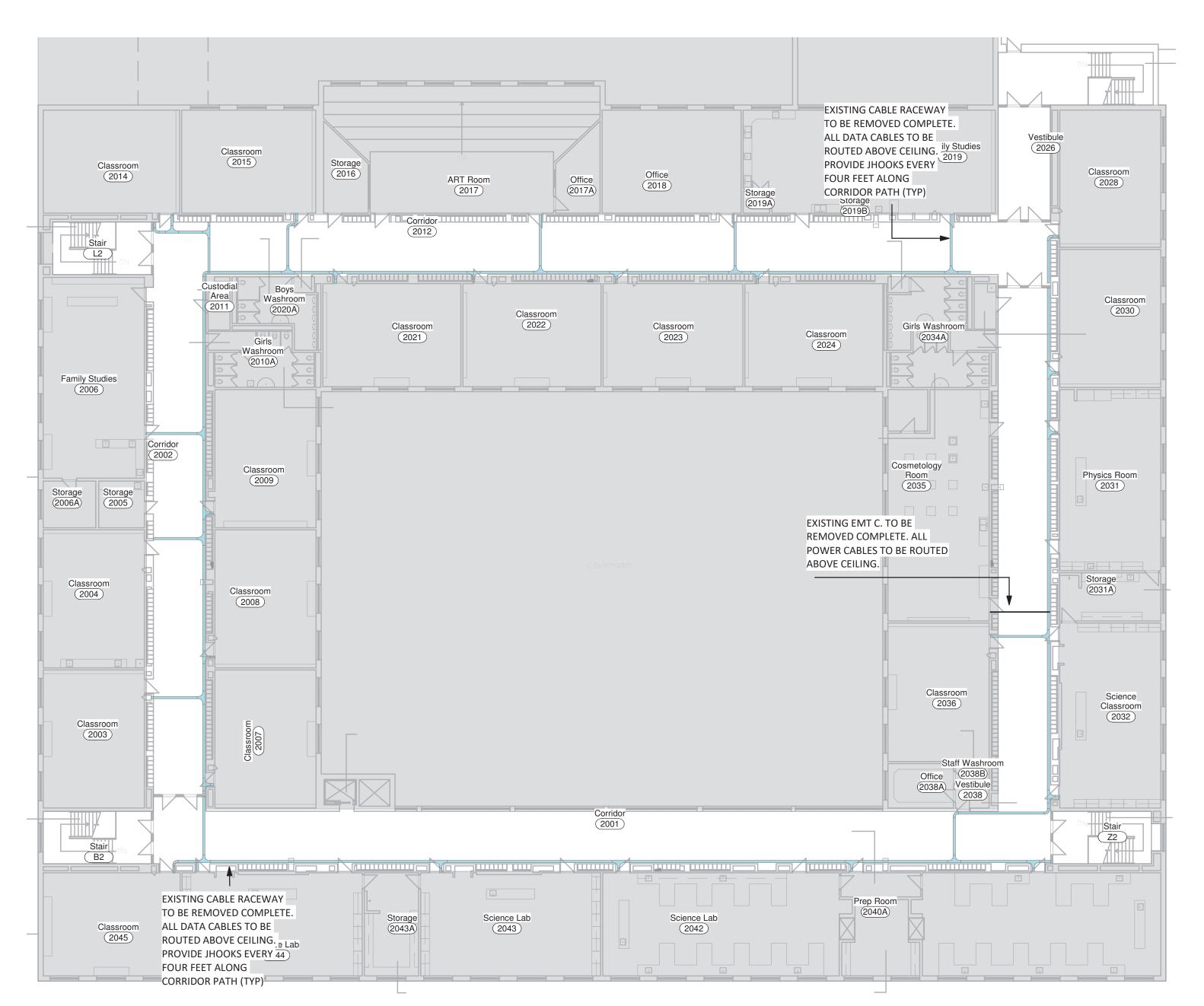
PROJECT NUMBER

DRAWING NUMBER

E2.5

Demo - Level 1 - Power & Data Ceiling Conduit - Southeast





• AT LOCATIONS WHERE EXISTING RACEWAYS PENETRATE WALL BELOW CEILING LEVEL, PROVIDE SMALL PLASTIC RACEWAY COVER TO INTERFACE BETWEEN CEILING AN EXISTING PENETRATION. THE MAJORITY OF WALL PENTRATIONS AND DATA CABLE/EMT RACEWAYS ARE SHOWN. IT IS THE INTENT THAT ALL DATA RACEWAYS/CONDUIT ARE RELOCATED ABOVE CEILING TILE EXCEPT FOR SHORT SECTION RIGHT AT EXISTING WALL PENETRATIONS. CURRENTLY NOT SHOWN: ASSUME THERE 30FT OF DATA RACEWAY AND 8 WALL PENTRATIONS ON THIS PROJECT BUT ARE TO BE REWORKED AS NOTED ABOVE. CURRENTLY NOT SHOWN, ASSUME THAT THERE ARE 40FT OF 1/2" EMT C. WITH 8#12 AWG POWER CABLES/WIRING, THAT NEED TO BE REWORKED/REROUTED ABOVE CEILING.

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PROJECT NORTH





1	Relssued For Tender	Feb 11, 2025
3	Relssued For Tender	Feb 03, 2025
2	Issued For Tender	Jan 24, 2025
NO.	DESCRIPTION	DATE

REVISION SCHEDULE



Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

Demo Ceiling Cable tray & Conduit -Level 2

As indicated

SHEET SIZE

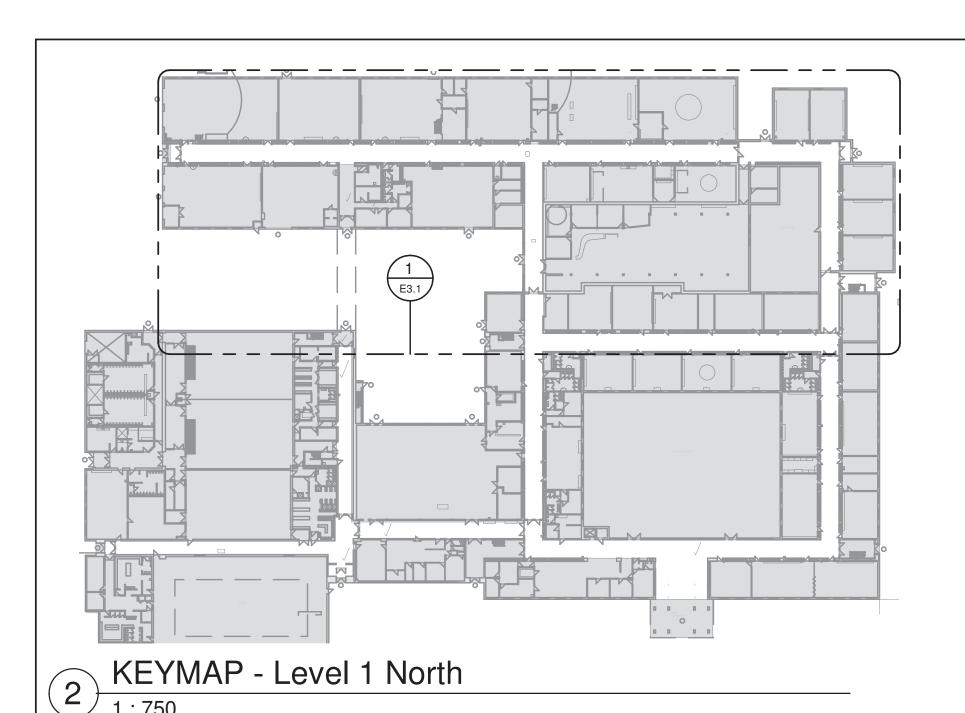
24"x36"

PROJECT NUMBER

DRAWING NUMBER

E2.6

Demo - Level 2 - Power & Data Ceiling Conduit



EXISTING FIRE ALARM CONDUIT Automotive Shop 1072 TO BE REWORK ABOVE THE NEW CEILING TILE. Wood Fabrication Shop 1076 Manufacturing [Shop 1077 1084 Fabrication Shop 1070 Computer Lab 1081 Classroom 1078 Electrical Room 1058C COURTYARD NOTES:

REWORK NEW LIGHTING FIXTURES TO PANEL LP-B1 IN CORRIDOR 1060 NEAR CORRIDOR 1061A, RE-USE EIXSTING CIRCUIT BREAKER, AVAILABLE THREE 1P-15A LIGHTING CIRCUIT #45, #1, (NIGHT LIGHT) & #42 (NIGHT LIGHT).

REWORK NEW LIGHTING FIXTURES TO PANEL LP-B IN CORRIDOR 1055 OUTSIDE OF SPECIAL EDUCATION 1079, RE-USE EXISTING CIRCUIT BREAKER, AVAILABLE FOUR 1P-15A LIGHTING CIRCUIT # 47, #49, #61, & #4 (NIGHT LIGHT).

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PROJECT NORTH





Relssued For Tender Relssued For Tender Feb 03, 2025 Issued For Tender Jan 24, 2025 Issued For Permit Dec 20, 2024 DESCRIPTION

REVISION SCHEDULE

1920 YONGE ST, SUITE 200 TORONTO, ON, M4S 3E2

PROJECT NAME

Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

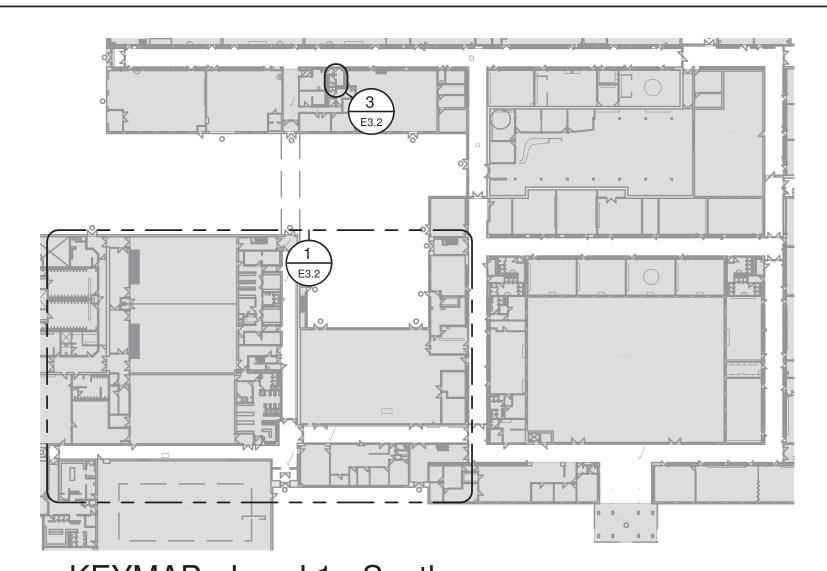
Proposed RCP Level 1 - North

As indicated SHEET SIZE

24"x36"

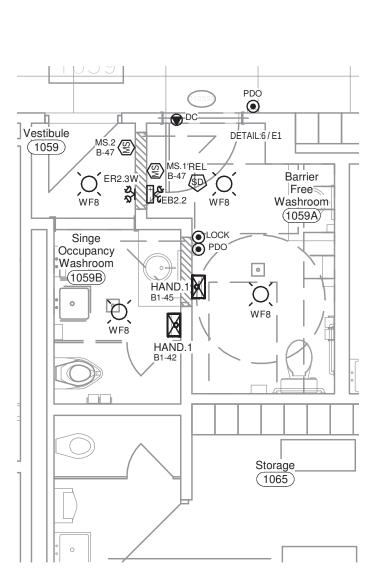
RAWING NUMBER E3.1 PROJECT NUMBER

Proposed - Level 1 - Power, Lighting & Life-Safety - North



2 KEYMAP - Level 1 - South

, IIIIIIIIII STORAGE 1045 Kitchen 1044A Servery 1044 Cafeteria 1042 REWORK NEW LIGHTING FIXTURES TO EXISTING PANEL LP-R IN CORRIDOR 1014 OUTSIDE OF VESTIBULE 1017A & RE-USE EXISTING CIRCUIT BKREAER, AVAILABLE FIVE 1P-15A LIGHTING CIRCUIT #2, #4, #6, #8, & # Storage 1042B 10.
REWORK NEW LIGHTING FIXTURES TO EXISTING PANEL LP-U1 IN CUSTODIAL 1020 & RE-USE EXISTING CIRCUIT BREAKER. AVAILABLE TWO 1P-15A LIGHTING CIRCUIT #2, & #6.
REWORK NEW LIGHTING FIXTURES TO EXISTING PANEL LP-G IN CORRIDOR 1010 OUTSIDE OF CONFERENCE ROOM 1012, RE-USE EXISTING CIRCUIT BREAKER, AVAILABLE TWO 1P-15A LIGHTING CIRCUIT #29 & #11 (NIGHT LIGHT). Gymnasium 1017 Fitness Room (1016A) CAM L1 L1 R-2 R-2 Conference Room 1012



Proposed Barrier Free Washroom

1:50

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NO	DESCRIPTION	DATE
1	Issued For Permit	Dec 20, 2024
2	Issued For Tender	Jan 24, 2025
3	Relssued For Tender	Feb 03, 2025
4	Relssued For Tender	Feb 11, 2025

REVISION SCHEDULE



Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

24"x36"

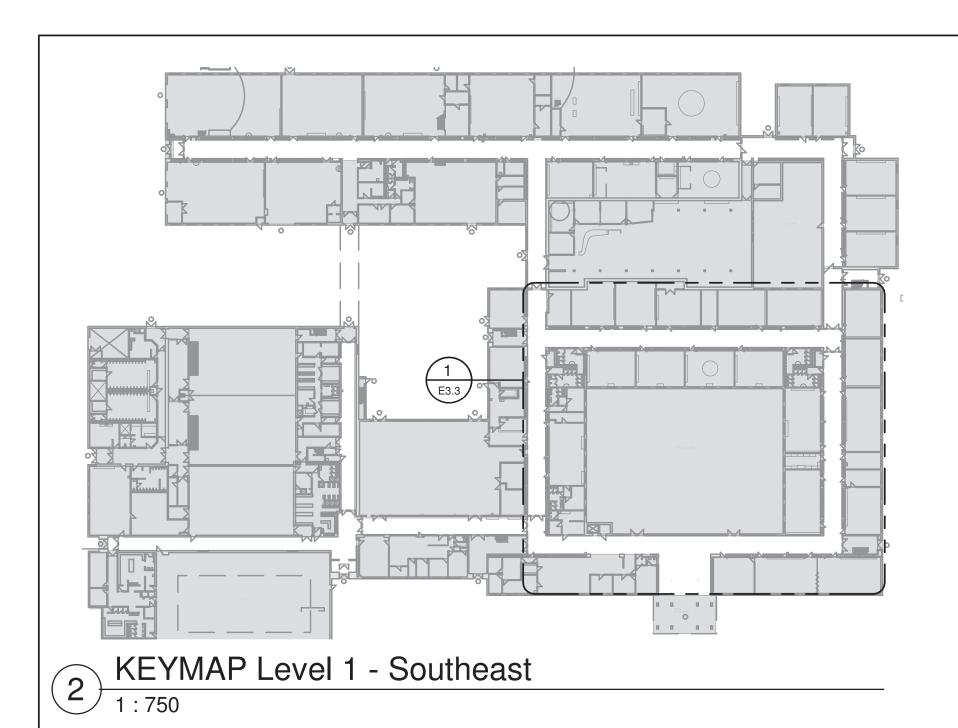
PROJECT NUMBER

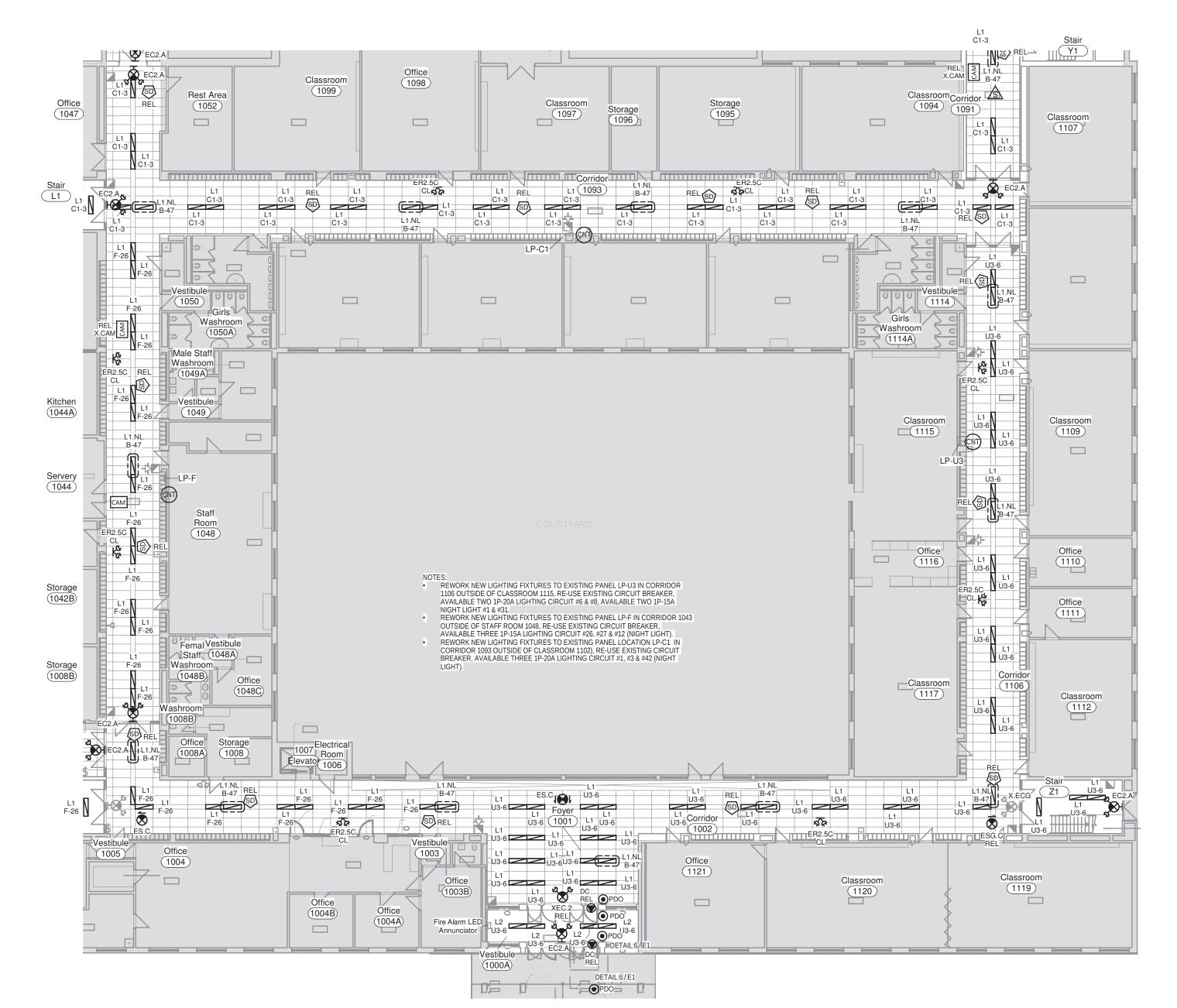
Proposed RCP Level 1 - South & WR

DRAWING NUMBER As indicated SHEET SIZE

E3.2

Proposed - Level 1 - Power, Lighting & Life-Safety - Southwest





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PROJECT NORTH





NO.	DESCRIPTION	DATE
1	Issued For Permit	Dec 20, 20
2	Issued For Tender	Jan 24, 20
3	Relssued For Tender	Feb 03, 20
4	Relssued For Tender	Feb 11, 20

REVISION SCHEDULE



Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

Proposed RCP Level 1 - South/East

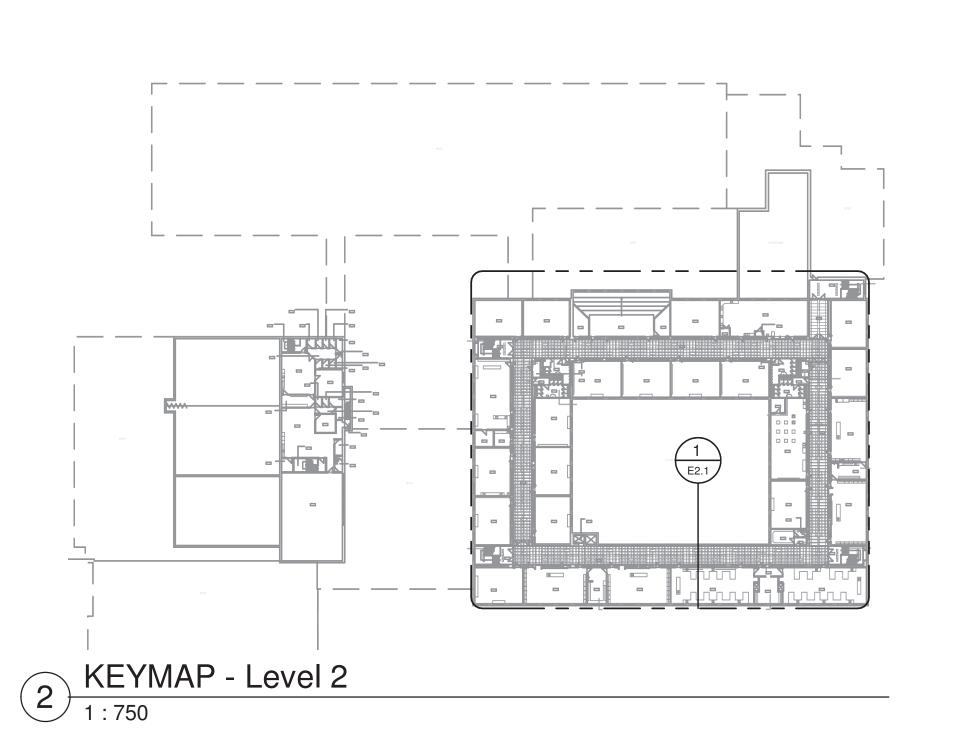
RAWING NUMBER As indicated SHEET SIZE

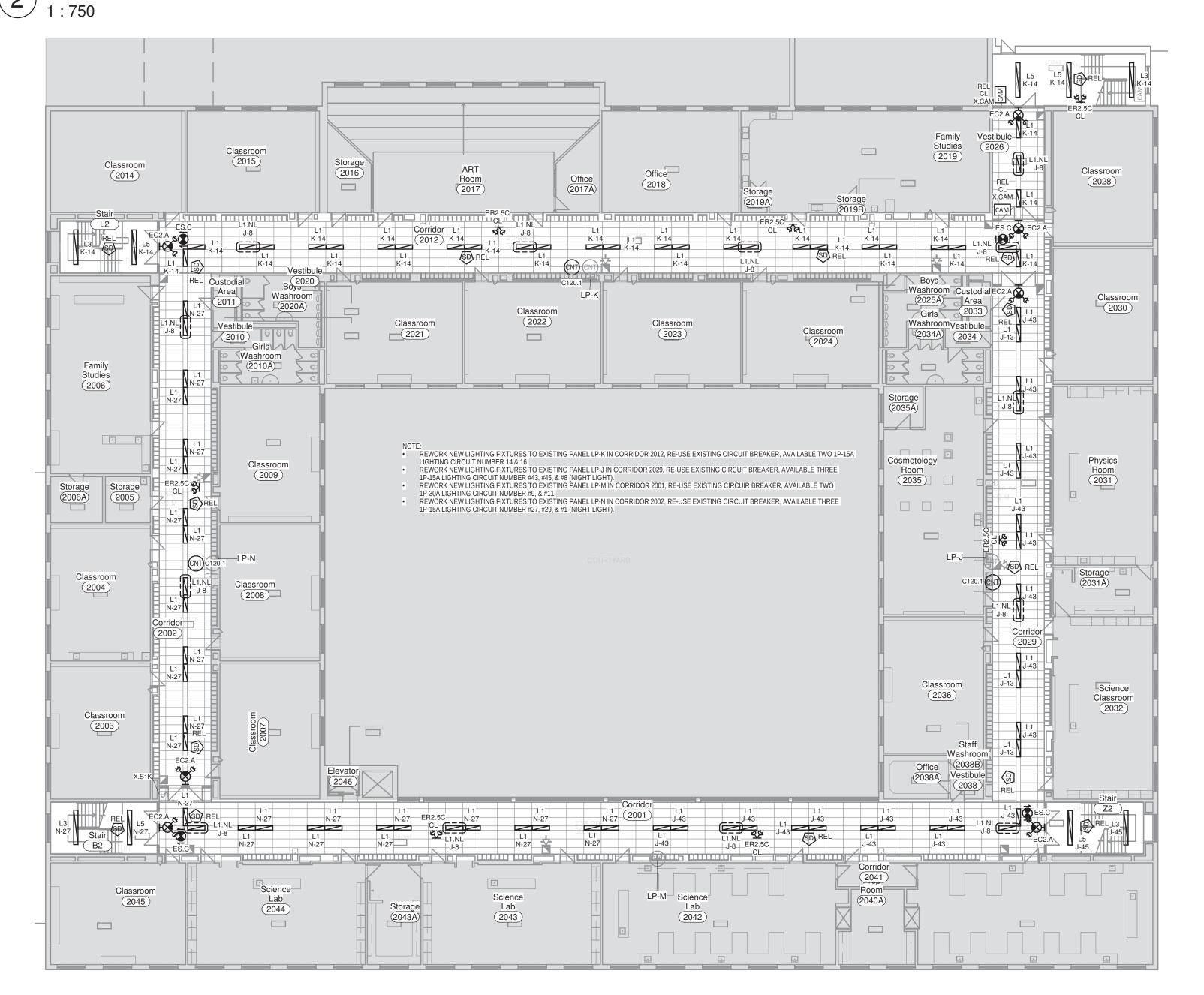
24"x36"

PROJECT NUMBER

E3.3

Proposed - Level 1 - Power, Lighting & Life-Safety - Southeast





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PROCEEDING WITH THE WORK.

DRAWINGS ARE NOT TO BE SCALED.

PROJECT NORTH





Relssued For Tender Relssued For Tender Feb 03, 2025 2 Issued For Tender Jan 24, 2025 Issued For Permit DESCRIPTION

REVISION SCHEDULE

1920 YONGE ST, SUITE 200 TORONTO, ON, M4S 3E2

Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek City, ON

Proposed RCP Level

As indicated

SHEET SIZE

RAWING NUMBER

E3.4 24"x36" PROJECT NUMBER

	1 - Total New/Relocated - Low Voltage Device Schedule							
	CURRENT SCHEDULE PHASE: Tender SHOWING PHASE ITEMS: Show Previous + New							
QTY	Relocated	Туре	Conduit	Description	Phase Added			
1	No	LOCK	16mm EMT	Universal Washroom Lock Button. Device box & conduit to Door controller.	Tender			
6	No	PDO	16mm EMT	Power Door Operator; Device box & conduit to Door controller.	Tender			
6	Yes	SPEAKER	21mm EMT	Surface Mount Device Box & EMT, Daisy Chain between devices; Home Run EMT to Main Communication Backboard.	Tender			
1	No	TIME CLOCK	Unknown Conduit, relocated to new ceiling tile.	Existing ceiling mounted Digital Time Clock	Tender			
8	Yes	X.CAM	Unknown Conduit	Existing Security Camera.	Tender			
2	No	X.SPEAKER 1	Unknown Conduit	Existing surface mounted speaker at high level.	Tender			
Tota	l: 24							

	2 - Total New/Relocated - Electrical Equipment Schedule							
	CURRENT SCHEDULE PHASE: Tender SHOWING PHASE ITEMS: Show Previous + New							
Qty	Equip ID	Description	Type Comments	Enclosure	Mounting	Phase Added		
2	HAND.1	Hand Dryer	120V, 12.2A 1450W; White Thermoset Resin; 8 second PCR guideline drytime; 62-75dbA, 34-64 CFM; 32C to 67C; 322mm H x 170mm D x 290mm W; Mounted at 1140mm Mens, 1090mm Womens Washroom.	Type 1	Surface	Tender		
1	TX.24	BAS Transformer	Provide 120V:24V 40VA (Doorbell style) Transformer for BAS Control system use, confirm location on site. Connect to nearest lighting circuit.	Type 1	Surface	Tender		
Total: 3								

	3 - Total New/Relocated - Electrical Device Schedule							
	CURRENT SCHEDULE PHASE: Tender SHOWING PHASE ITEMS: Show Previous + New							
Qty	Qty Type ID Description Type Comments							
3 DC Direct Hardwire Connection Powered Door Controller; Wired to line side of local lighting circuit. Estimated ~300W non-continuous load.								
Total:	3							

	4 - Total New/Relocated - Fire Alarm Device Schedule							
	CURRENT SCHEDULE PHASE: Tender SHOWING PHASE ITEMS: Show Previous + New							
QTY	Relocated	Model	Description	Type Comments	Phase Added			
53	Yes		Fire Alarm Initiating	Smoke Detector	Tender			
Total	Total: 53							

5 - Total New/Relocated - Lighting Control Device Schedule CURRENT SCHEDULE PHASE: Tender SHOWING PHASE ITEMS: Show Previous + New							
Qty	Туре	Mfg.	Model	Description	Type Comments	Phase Added	
9	C120.1	TBD	TBD	Electrically Held Lighting Contactor, 2-Pole Normally Open	120V Control; 30A 120V Contacts for 15A lighting circuits; Provide Steel junction box in ceiling space, confirm location on site.	Tender	
1	C.24	TBD	TBD	Electrically Held Lighting Contactor, 2-Pole Normally Open	24V Control; 30A 120V Contacts for 15A lighting circuits; Provide Steel junction box in ceiling space, confirm location on site.		
1	HOA.1	TBD	TBD	Hand-Off Auto	120V; Master On/Off/Auto control of lighting contactor. Surface Mounted equipment. Coordinate Location on site. PROVIDE 2#14AWG WIRE + BOND BETWEEN BAS SYSTEM LOCATED WITH MECHNICAL ROOM AND 24V CONTACTOR AND 24V CONTROL TRANSFORMER. 24V CONTACTOR MAY BE INTEGRATED WITHIN HOA CONTROL SWITCH, AS A COMPLETE PACKAGE.	Tender	
1	MS.1	Sensor Switch	WSX SA WH	PIR Wall Switch Occ Sensor, Manual On	120V; Vacancy; White		
1	MS.2	Sensor Switch	WSX WH	PIR Wall Switch Occ Sensor, Auto On/Off	120V; Auto-On; White	Tender	

TYP LIGHTING CIRCUIT

TYP LIGHTING CIRCUIT

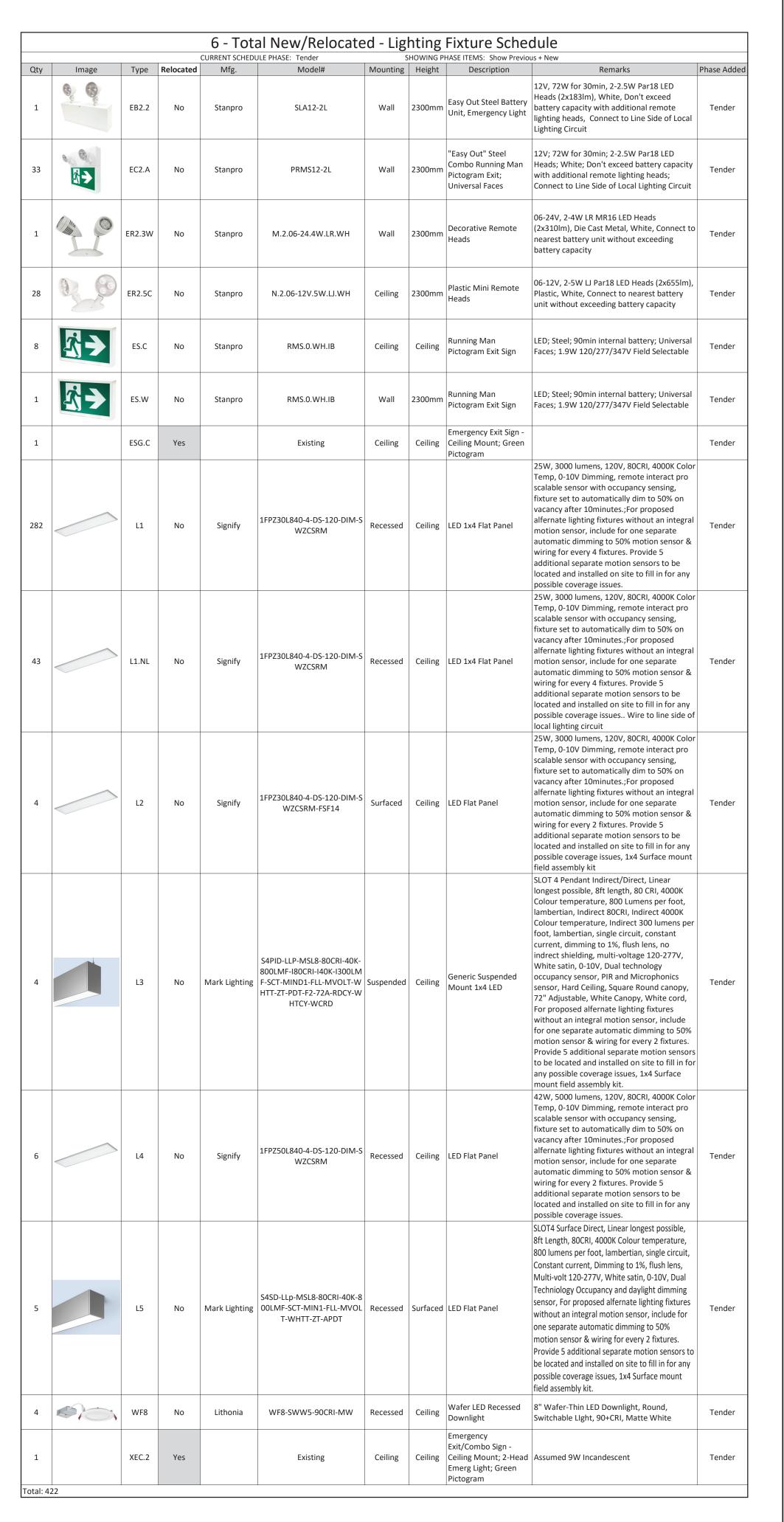
PANEL

	PANEL	EXISTING LIGHTING CCT	REUSED CCTS
	PANEL LP-B	B-47, B-49, B-61, B-4	B-47, B-49
	PANEL PP-B1	B1-1, B1-42, B1-45	
	PANEL PP-R	R- 2, R-4, R-6, R-8, R-10	R-2, R-4
FIRST	PANEL PP-U1	U1-2, U1-6	U1-2
FLOOR	PANEL LP-G	G-11, G-29	
	PANEL LP-U3	U3-6, U3-8, U3-1	U3-6
	PANEL PP-F	F-12, F-25, F-27	F-26
	PANEL LP-C1	C1-1, C1-3, C1-42	C1-3
	PANEL LP-K	K-14, K-16	K-14
SECOND FLOOR	PANEL LP-J	J-43, J-45, J-8	J-43
LOOK	PANEL LP-M	M-9, M-11	
	PANEL LP-N	N-27, N-29, N-1	N-27

- 1. EXISTING LIGHTING CIRCUIT TO BE REWIRED TO REDUCE THE NUMBER OF CIRCUITS USED AS
- NOTED. UNUSED CIRCUITS TO BE LABELED IN PANEL SCHEDULE AS SPARE. 2. EXISTING EXIT SIGNS NOTED (6 TOTAL) ON 2ND FLOOR CORRIDORS ON CIRCUIT J-22 TO REMAIN.
- RELABEL PANEL SCHEDULE EXIT SIGNS.
- 3. EXISTING CIRCUITING HAS BEEN DOCUMENTED AS BEST AS PRACTICABLE. CONTRACTOR TO VERIFY ACTUAL CIRCUITING ON SITE PRIOR TO RELATED WORK.
- 4. EXISTING CIRCUIT B1-42 & B1-45 TO DISCONNECT ON EXISTING LIGHTING CONTACTOR. THIS CIRCUITS TO BE RE-USED IN HANDRYER.

Panel Schedule - Lighting Circuits

		CORRIDOR 2012	CORRIDOR 2029	CORRIDOR 2022
	120V CONTROL	PANEL PP-K 208V 100A 1Ø 3W	PANEL PP-J 208V 100A 1Ø 3W	PANEL LP-N 208V 225A 1Ø 3W
		15A 1P C120.2	15A 1P C120.2	15A 1P C120.2
BAS SYSTEM CONNECTION AND PROGRAMMING TO CONTACTOR CARRIED AS A CASH ALLOWANCE.				TYP LIGHTING CIRCUIT
FLOOR		TYP LIGHTING CIRCUIT	TYP LIGHTING CIRCUIT	THE EIGHTING CINCOTT
LER ROOM	CORRIDOR 1060 120V CONTROL CORRIDOR 1055	CORRIDOR 1014 CUSTODIAL 1020		
24V CONTROL WIRING FROM BAS BAS NEL PP-EL D8V 100A 100 3W NEW 15A AUTO OFF	208V 100A 1Ø 3W 15A 1P C120.1 208V 100A 1Ø 3W	NEL LP-R 08V 100A 1Ø 3W PANEL LP-U1 208V 100A 1Ø 3W 15A 1P C120.1	PANEL LP-U3 208V 100A 1Ø 3W 15A 1P C120.1	PANEL LP-F 208V 100A 1Ø 3W
FLOOR	TYP LIGHTING CIRCUIT TYP LIGHTING CIRCUIT	TYP LIGHTING CIRCUIT TYP LIGHTING CIRC	UIT TYP LIGHTING CIRCUIT	TYP LIGHTING CIRCUIT
IF SYSTEM IS ARMED THEN CORRIDOR LIG SENSORS ON CORRIDOR LIGHTS DIM TO SENSORS ON CORRIDOR LIGHTS DIM TO SENSORS ON ALARM SIGNAL FROM SECURITY SYSTEM IS DISARMED. HAND MODE - CORRIDOR LIGHTS ARE OF REPORT OF THE SYSTEM IS DISARMED. OFF MODE - CORRIDOR LIGHT ARE OFF REPORT OF THE SYSTEM IS DISARMED.	EM. BAS SYSTEM IS TO TURN ON ALL CORRIDOR LIGHTS UNTIL ALARM IS CLEARED OR I REGARDLESS OF BAS COMMAND.		PANEL LP-C1 208V 100A 1Ø 3W	PANEL LP-G 208V 100A 1Ø 3W



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THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ENGINEER, BEFORE PROCEEDING WITH THE WORK.

DRAWINGS ARE NOT TO BE SCALED.



Relssued For Tender Feb 11, 2025 Relssued For Tender Feb 03, 2025 Issued For Tender Jan 24, 2025 Issued For Permit Dec 20, 2024 DESCRIPTION DATE

REVISION SCHEDULE

1920 YONGE ST, SUITE 200

TORONTO, ON, M4S 3E2 PROJECT NAME

> **Orchard Park Secondary School**

200 Dewitt Rd, Stoney Creek City, ON

Schedules & Details

RAWING NUMBER 1:1

BAS System

SEQUENCE.

SHEET SIZE 24"x36" PROJECT NUMBER