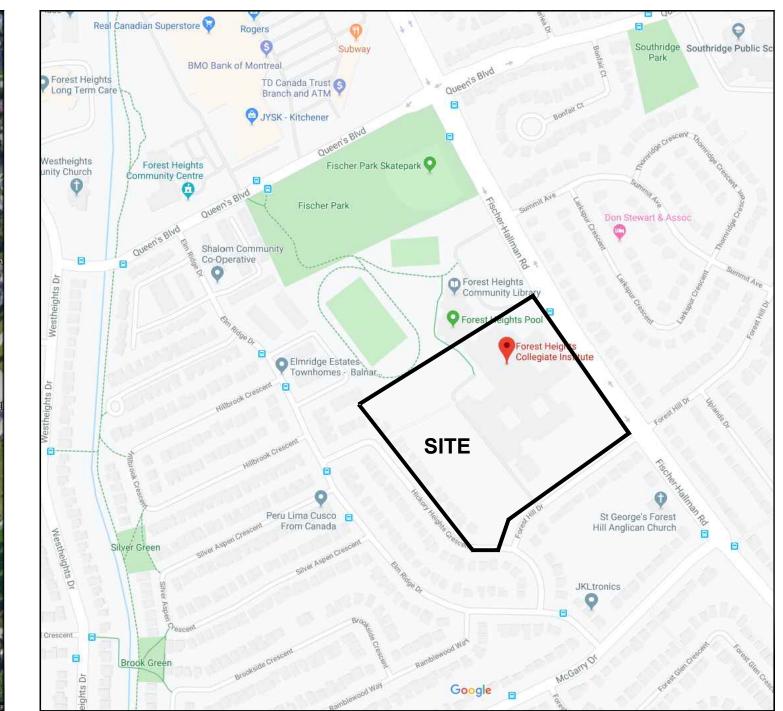


FOREST HEIGHTS COLLEGIATE INSTITUTE TECH. SHOP REVITALIZATION AND WINDOW REPLACEMENT

TENDER # 25-7636-RFT 255 Fischer-Hallman Rd, Kitchener, ON N2M 4X8



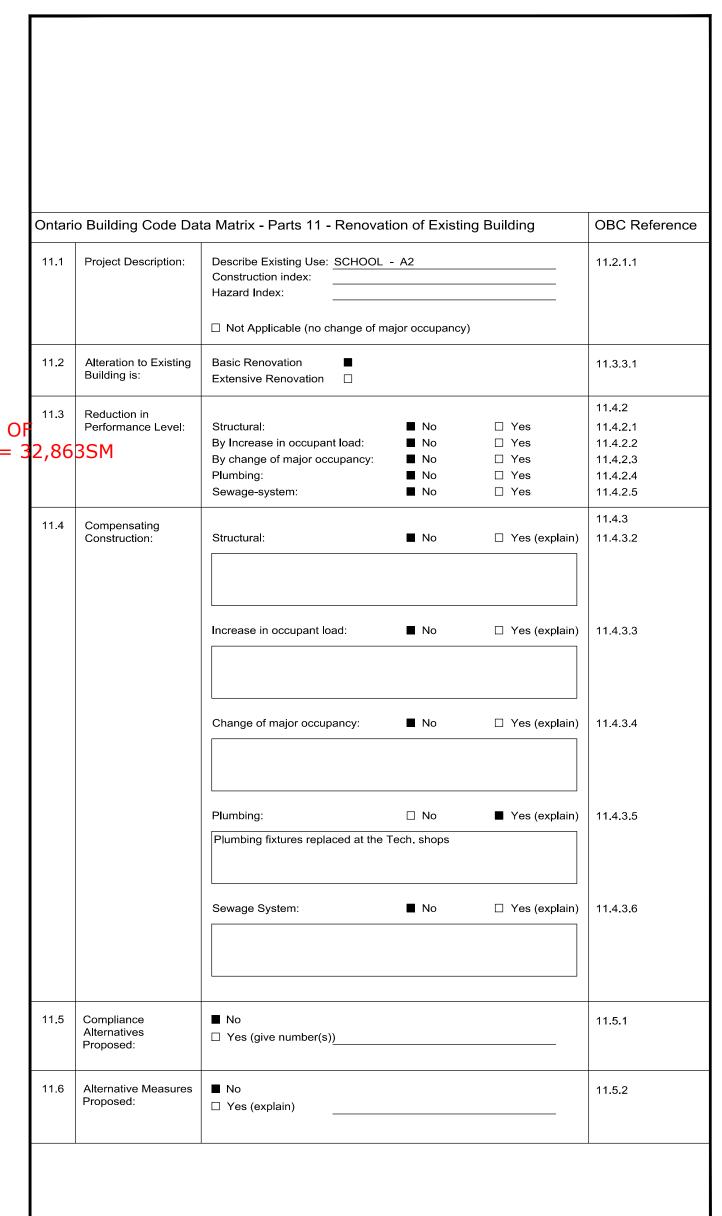


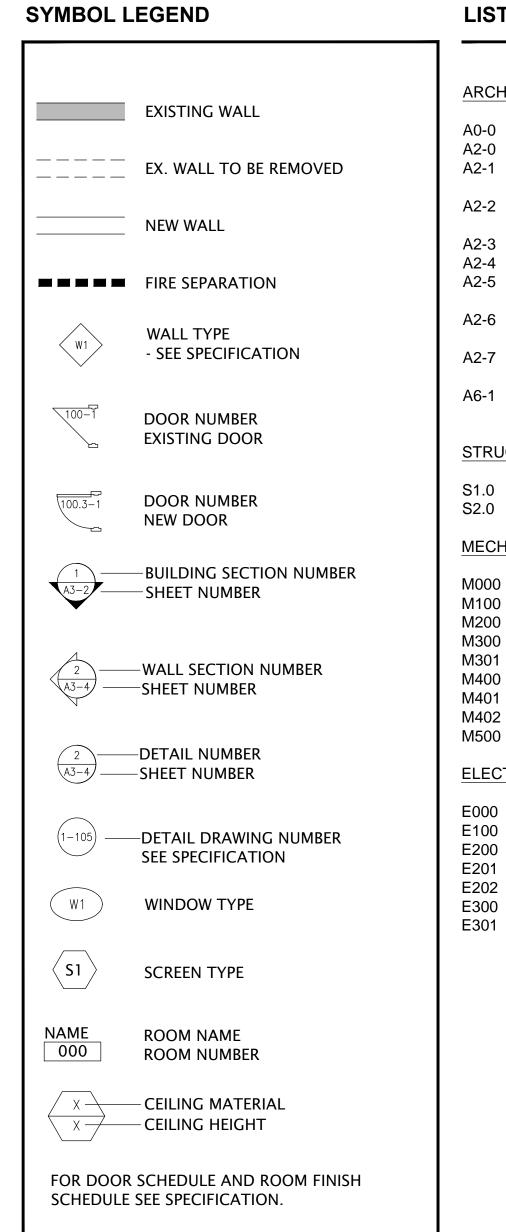


KEY PLAN

ONTARIO RI III DING CODE DATA MATRIX

Firm Name:	Kingsland + Archited	cts Inc.				
Certificate of Practice Number: The Certificate of Practice Number of the older is the holder's BCDN.	4549					
nformation:	Colin J. Kingsland Partner, B.E.S., B.A O.A.A., LEED AP 219 Dufferin Street, Toronto, Ontario M6 Telephone: 416-203-Email: C.Kingsland@	Suite 308b K 3J1 3-7799 x 1 7763	05			
,	FOREST HEIGHTS TECH. SHOP REVIT REPLACEMENT 255 Fischer-Hallman Rd, Kitchener, ON N2M 4X8			exe with The	architect noted reised respons espect to desi architect's sea the architect's	ible contro l gn activities. Il number is
Ontario Building Code D	ata Matrix - Part	s 3 & 9			OBC Refere	ence
Project Description:	□ New	tion	■ Part 11	■ Part		Part 9
☐ Chang	ge of Use ■ Alter A2'	ation		3.1.2.1.	(1)	
	15,893.00 New: -	Т	otal: 15,893.00	1.4.1.2.		
	32,942.50 New: -		otal: 32,942.50	1.4.1.2		US 79SN
Number of Storeys: Above G		Below G			1,1714	ZANINE
Number of Streets/Fire Fighter Ac	cess: EXISTING	_			0 & 3.2 6 FA	27 (141142
Building Classification: ASSEME	LY OCCUPANCY, GROUP	P A2		3.2.2.		
Sprinkler System Proposed:	□ sele □ sele □ base	e building cted compa cted floor a ement ☐ in equired		3.2.2.20 3.2.1.5. 3.2.2.17 INDEX		
Standpipe required:	□ Yes	•	0	3.2.9.1		
Fire Alarm required:	■ Yes	□ N	0	3.2.4.1		
Water Service/Supply is adequate	: ■ Yes		3.2.5.7			
High Building:	☐ Yes	■ N	0	3.2.6.1		
	Comb. Permitted		•	3.2.2.20 EXISTI		
	Combustible DEMO ARE	Non-comb		3.2.1.1		
Occupant Load based:	person ■ desi	gn of buildi		3.1.17.	` , , ,	
Barrier-free Design: ■ Yes	□ No			3.8		
Hazardous Substances: Yes	■ No			3.3.1.2	& 3.3.1.19.	
Required Fire Resistance Rating (FRR) Resistance Rating (FRR) Floors: Supporting Me FRR (Hours) Floors: Roof:		sted Designescription (SB-3)	3.2.2.20 EXISTII		
Mezzanine:	n/a Min					
Spatial Separation - Construction Wall Area of L.D. L/H or F	of Exterior Walls	FRR	Listed Design	3.2.3.1 Comb.	Comb. Const	. Non-comb.
EBF(m²) (m) H/L M	Max. % of % of Openings	(Hours)	or Description	Comb. Const.	Nonc. Claddi	
	XISTING —	-	_	<u> </u>		
	XISTING —	-	-		_	
	XISTING — XISTING —	-		_		
West - - F						· 1





LIST OF DRAWINGS

ARCHITECTURAL

OVERALL FIRST AND SECOND FLOOR PLAN OVERALL ROOF FLOOR PLAN

PARTIAL SECOND FLOOR AND ROOF PLANS PARTIAL FIRST FLOOR PLAN

TECH WING DEMOLITION & PROPOSED TECH WING CLASSROOM INTERIOR ELEVATIONS TECH WING CLASSROOM INTERIOR ELEVATIONS

TECH WING CLASSROOM INTERIOR ELEVATIONS ENLARGEMENT PLAN AT NEW DOORS OPENING

STAFF ROOM - DEMO & NEW AND INTERIOR ELEVATIONS BARRIER FREE - ADO

PARTIAL FIRST FLOOR PLAN TECH WING WINDOW REPLACEMENT PARTIAL DEMO AND NEW CEILING PLANS

STRUCTURAL

ROOF FRAMING PLAN, DETAILS, GENERAL NOTES S2.0 STEEL STUD DETAILS

MECHANICAL

MECHANICAL TITLE SHEET

PARTIAL FLOOR PLAN - SANITARY DEMOLITION & NEW SANITARY PARTIAL FLOOR PLAN - DEMOLITION & NEW DOMESTIC

M300 PARTIAL PLAN - HEATING DEMOLITION M301 PARTIAL FLOOR PLAN - NEW HEATING

PARTIAL FLOOR & ROOF PLANS - HVAC DEMOLITION PARTIAL FLOOR & ROOF PLANS - NEW HVAC

SECTIONS & DETAILS - NEW HVAC M500 MECHANICAL SCHEDULES & DETAILS

ELECTRICAL

ELECTRICAL TITLE SHEET

PARTIAL FLOOR PLAN - DEMOLITION & NEW LIGHTING PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER

E201 PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER ELECTRICAL RISER DIAGRAM

ELECTRICAL SCHEDULES AND DETAILS

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL CONSTRUCTION CONFORMS TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE. NOTATIONS MADE ON THESE DRAWINGS ARE FOR YOUR INFORMATION AND ASSISTANCE ONLY AND DO NOT NECESSARILY COMMENT ON ALL AREAS OF CONSTRUCTION.

> THE ONTARIO BUILDING CODE REQUIRES THAT A COPY OF THE DRAWINGS AND SPECIFICATIONS THAT HAVE BEEN REVIEWED BY OUR DEPARTMENT BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES.

PORTABLE FIRE EXTINGUISHERS TO BE INSTALLED IN CONFORMANCE WITH O.F.C. 6.2. SEE ATTACHED HANDOUT AND REVIEW PLACEMENT WITH BUILDING INSPECTOR ON SITE.

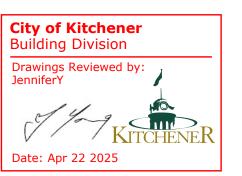
FIRE ALARM SYSTEM TO BE DESIGNED, INSTALLED AND TESTED AS PER CAN/ULC-S524, CAN/ULC S537 AND APPLICABLE O.B.C. REQUIREMENTS

EXISTING. RE-VERIFICATION REQUIRED.

DURING THE REMOVAL PROCESS AIRBORNE CONCENTRATIONS OF DESIGNATED SUBSTANCES ARE REQUIRED TO BE MEASURED AND MONITORED, WITH THE RESULTS POSTED ON SITE IN ACCORDANCE WITH ONTARIO HEALTH & SAFETY ACT SEC 24 & 25 OF O.REG. 490/09 - DESIGNATED SUBSTANCES.

> **SEE ATTACHED GUIDELINES FOR** MAINTAINING FIRE SAFETY DURING CONSTRUCTION IN EXISTING BUILDINGS.

> > SEE ADDITIONAL NOTES/COMMENTS ON BUILDING CODE REVIEW LETTER ATTACHED





25 109869 255 FISCHER HALLMAN RD

Government / Institutional Interior Demolition

25 102581 255 FISCHER HALLMAN RD Non-Residential Alteration Government / Institutional Interior Finish

ONTARIO BUILDING CODE, LATEST EDITION, AND ALL OTHER ACTS ADMINISTERED BY ALL AUTHORITIES HAVING

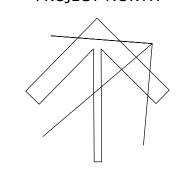
CONJUNCTION WITH ALL OTHER CONTRAC DOCUMENTS, AND SPECIFICATIONS

EXCEEDED DURING CONSTRUCTION.

DRAWINGS, SHALL BE CHECKED BY THE CONTRACTOR BEFORE PROCEEDING WITH

GENERAL CONTRACTOR SHALL PROVIDE AL NECESSARY TEMPORARY BRACING DURING

. ALL DIMENSIONS GIVEN ARE IN METRIC.



Kingsland — ARCHITECTS INC.

KINGSLAND + ARCHITECTS INC 219 Dufferin Street, Suite 308b Toronto, Ontario M6K 3J1 ph 416.203.7799

fax 416.203.7763





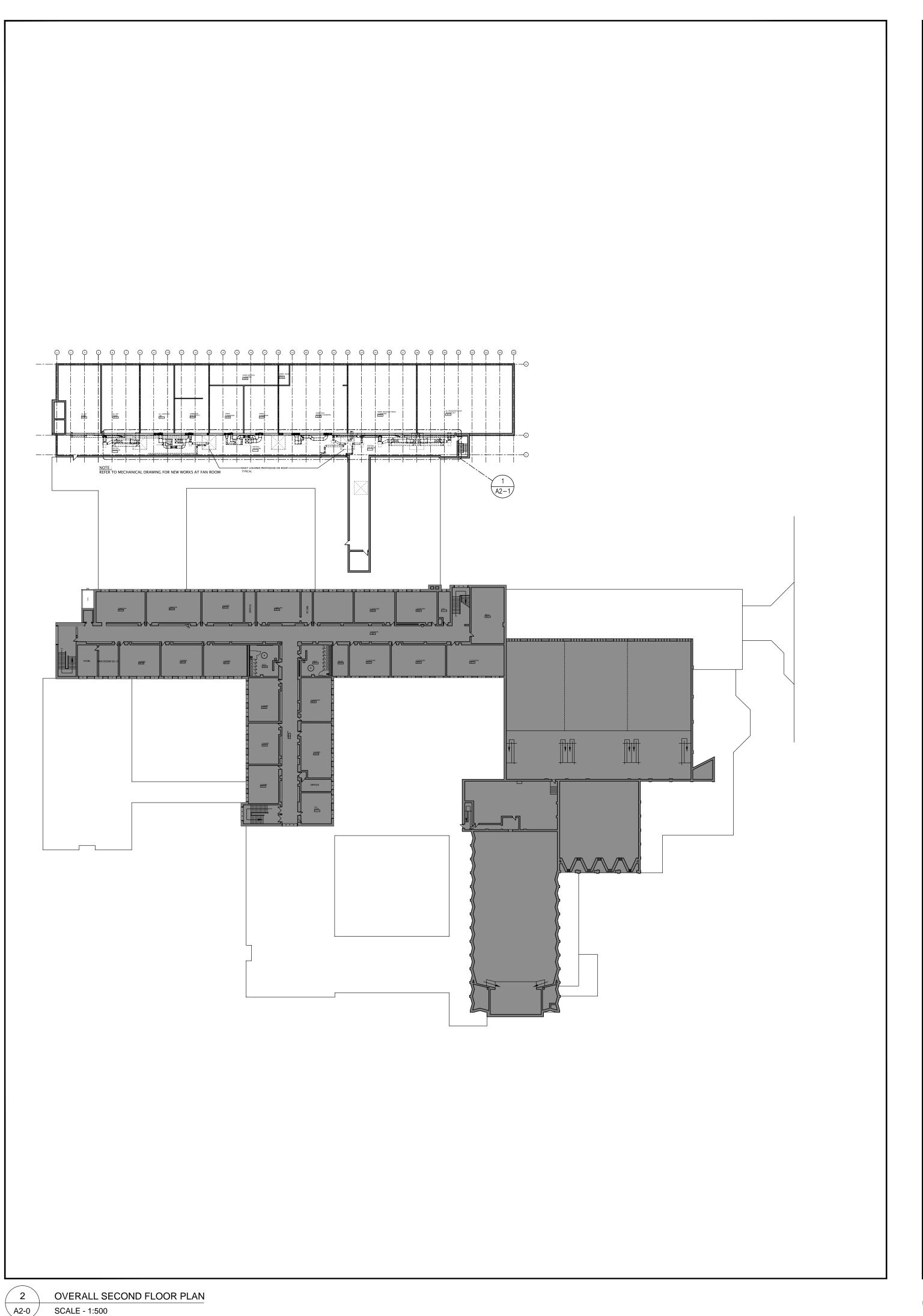
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION WINDOW REPLACEMENT

255 Fischer-Hallman Rd,

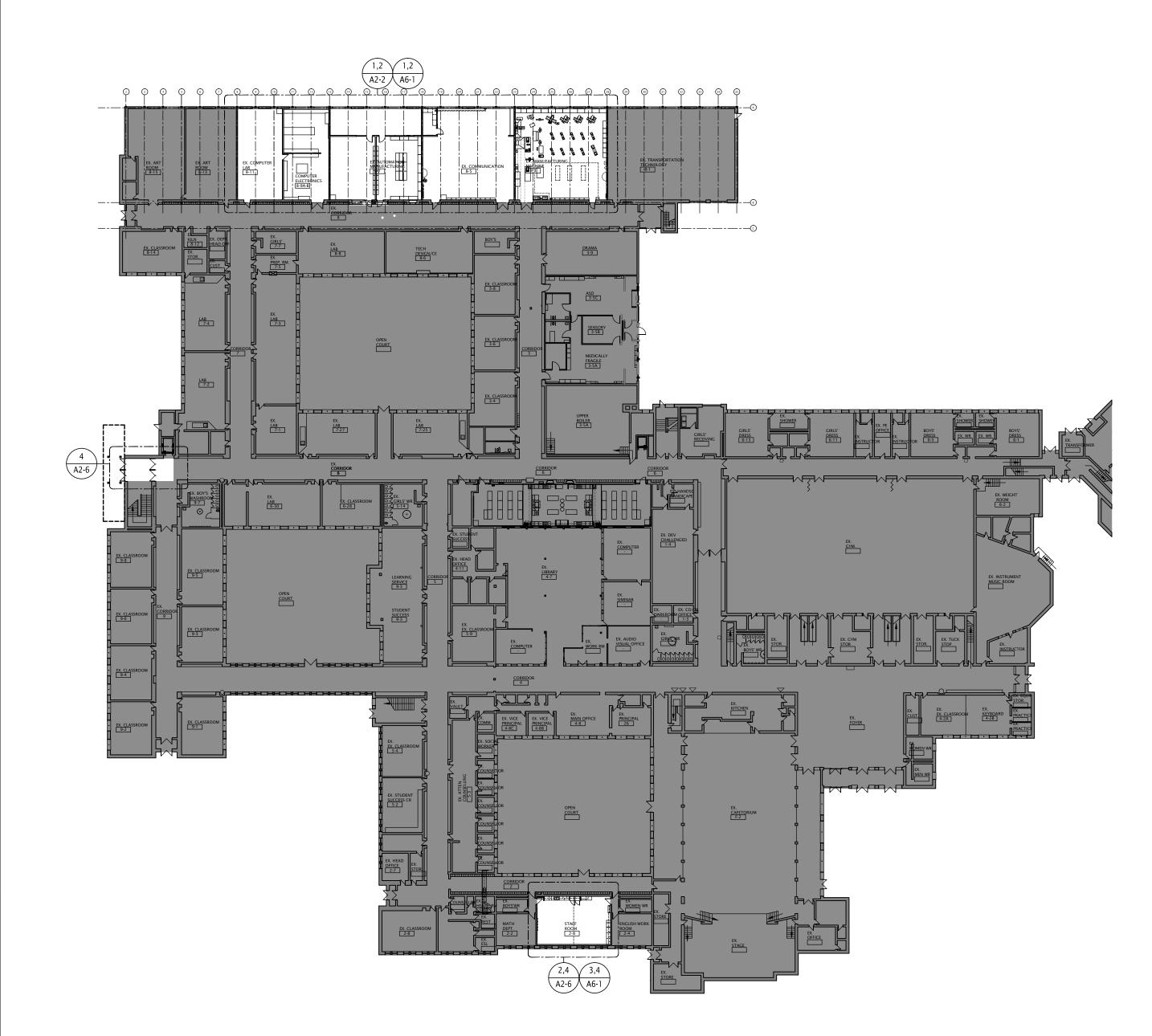
COVER & OBC MATRIX

PROJECT NO: A23018 AS NOTED DRAWING NO: REV.

JAN/24 FILES: A23018- A0-0 COVER.DWG



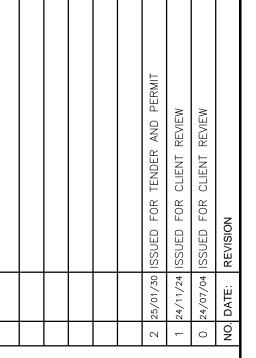
DURING THE REMOVAL PROCESS AIRBORNE CONCENTRATIONS OF DESIGNATED SUBSTANCES ARE REQUIRED TO BE MEASURED AND MONITORED, WITH THE RESULTS POSTED ON SITE IN ACCORDANCE WITH ONTARIO HEALTH & SAFETY ACT SEC 24 & 25 OF O.REG. 490/09 - DESIGNATED SUBSTANCES.



THIS AREA OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

A2-0 SCALE - 1:500

OVERALL FIRST FLOOR PLAN



DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON THE JOB. ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECTS.

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, LATEST EDITION, AND ALL OTHER ACTS
ADMINISTERED BY ALL AUTHORITIES HAVING JURISDICTION.

. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, AND SPECIFICATIONS.

3. THE DESIGN LOADS SHALL NOT BE EXCEEDED DURING CONSTRUCTION.

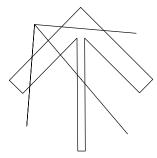
4. ALL DIMENSIONS, SHOWN ON THE DRAWINGS, SHALL BE CHECKED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK.

. THE STABILITY OF THE STRUCTURAL FRAME IS DEPENDENT ON THE FULL INTERACTION OF ALL STRUCTURAL COMPONENTS. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY BRACING DURING CONSTRUCTION.

6. ALL DIMENSIONS GIVEN ARE IN METRIC.



PROJECT NORTH



Kingsland +

KINGSLAND + ARCHITECTS INC 219 Dufferin Street, Suite 308b Toronto, Ontario M6K 3J1 ph 416.203.7799 fax 416 203 7763





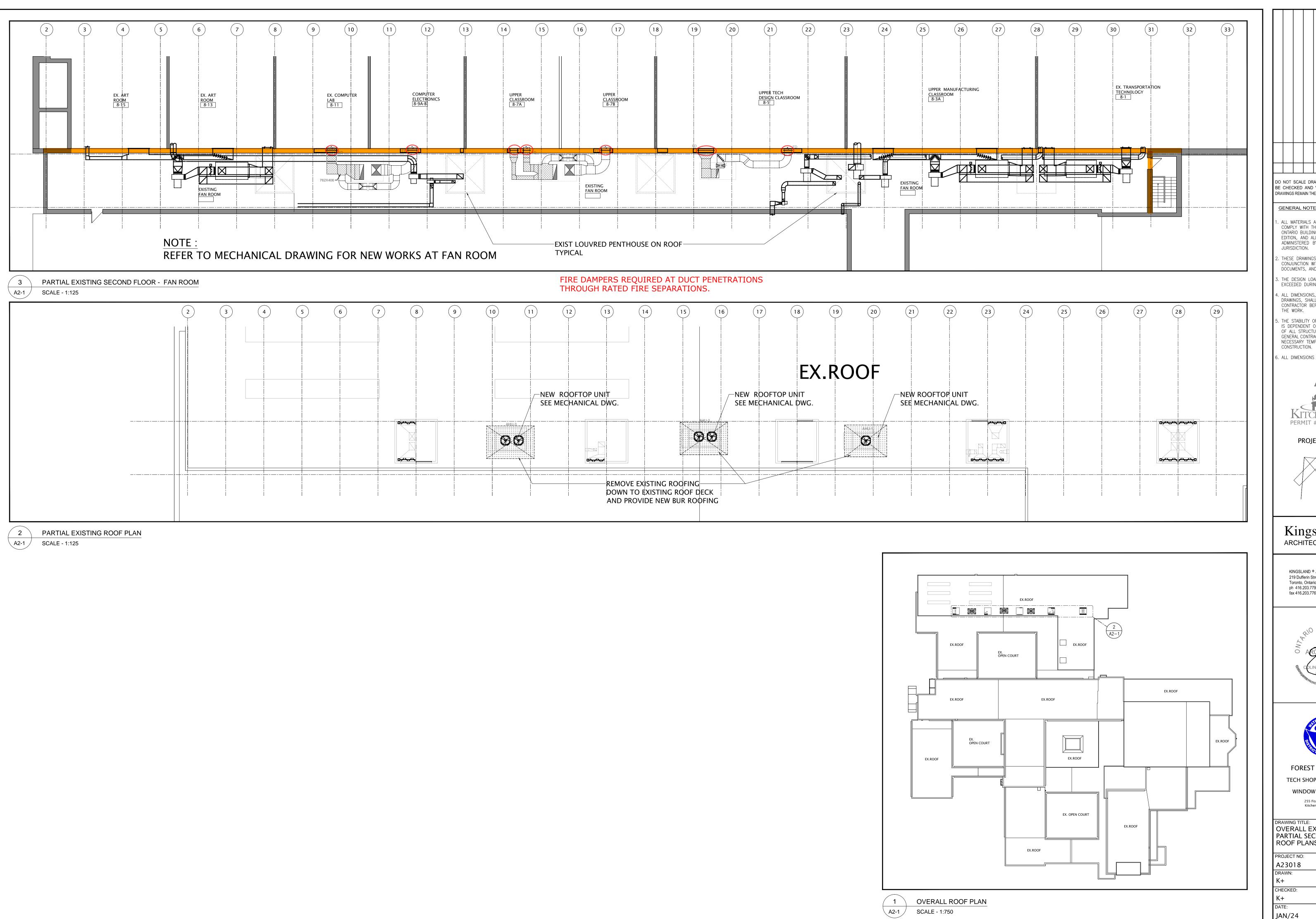
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION WINDOW REPLACEMENT

255 Fischer-Hallman Rd, Kitchener, ON N2M 4X8

DRAWING TITLE: OVERALL FIRST & SECOND FLOOR PLANS

PROJECT NO:	SCALE:	
A23018	1:500	
DRAWN:	DRAWING NO:	
K+		
CHECKED:		
K+	A2-0	

JAN/24 O A23018 – A2-0 OVERALL PLAN.DWG



DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON THE JOB. ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECTS.

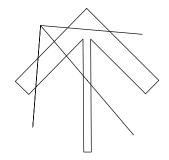
GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL
COMPLY WITH THE REQUIREMENTS OF THE
ONTARIO BUILDING CODE, LATEST
EDITION, AND ALL OTHER ACTS
ADMINISTERED BY ALL AUTHORITIES HAVING

- 2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, AND SPECIFICATIONS.
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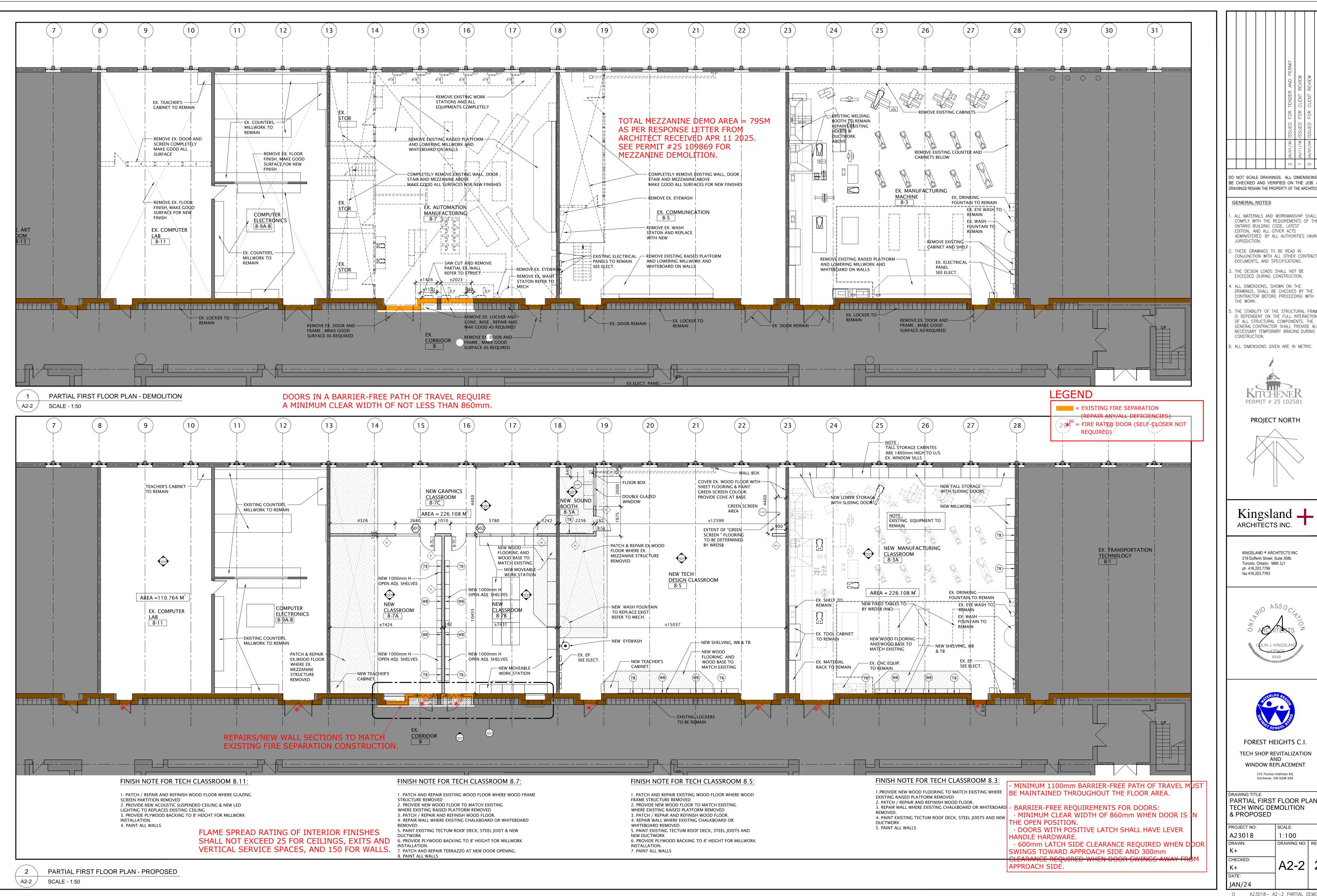
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT

255 Fischer-Hallman Rd,

DRAWING TITLE: OVERALL EXISTING ROOF PLN. PARTIAL SECOND FLOOR AND ROOF PLANS

PROJECT NO: SCALE: A23018 NOTED DRAWING NO: REV.

O A23018- A2-1 OVERALL ROOF & PA



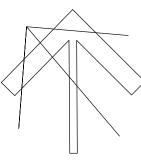
DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON THE JOB. ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECT

GENERAL NOTES

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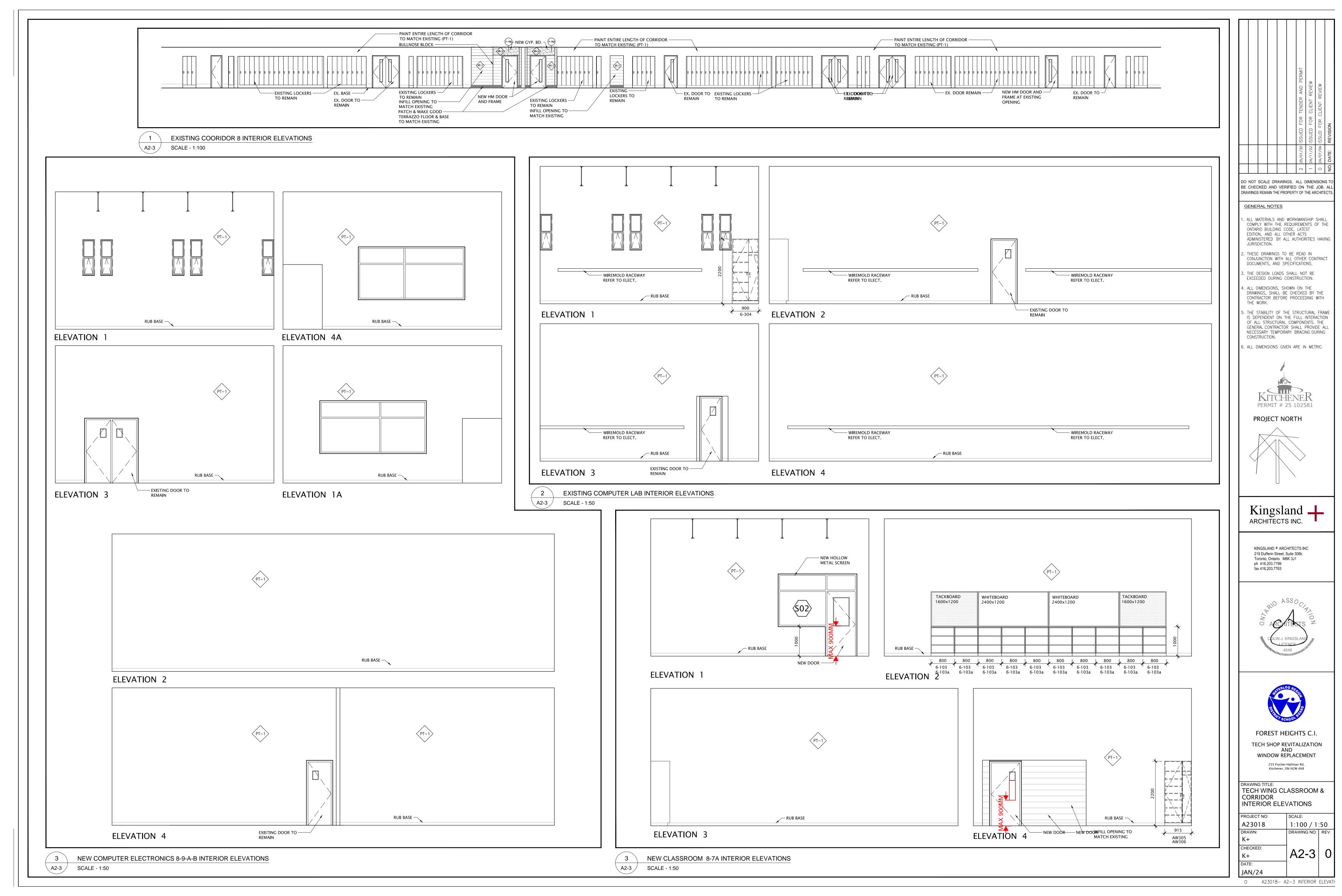
FOREST HEIGHTS C.I. **TECH SHOP REVITALIZATION** WINDOW REPLACEMENT

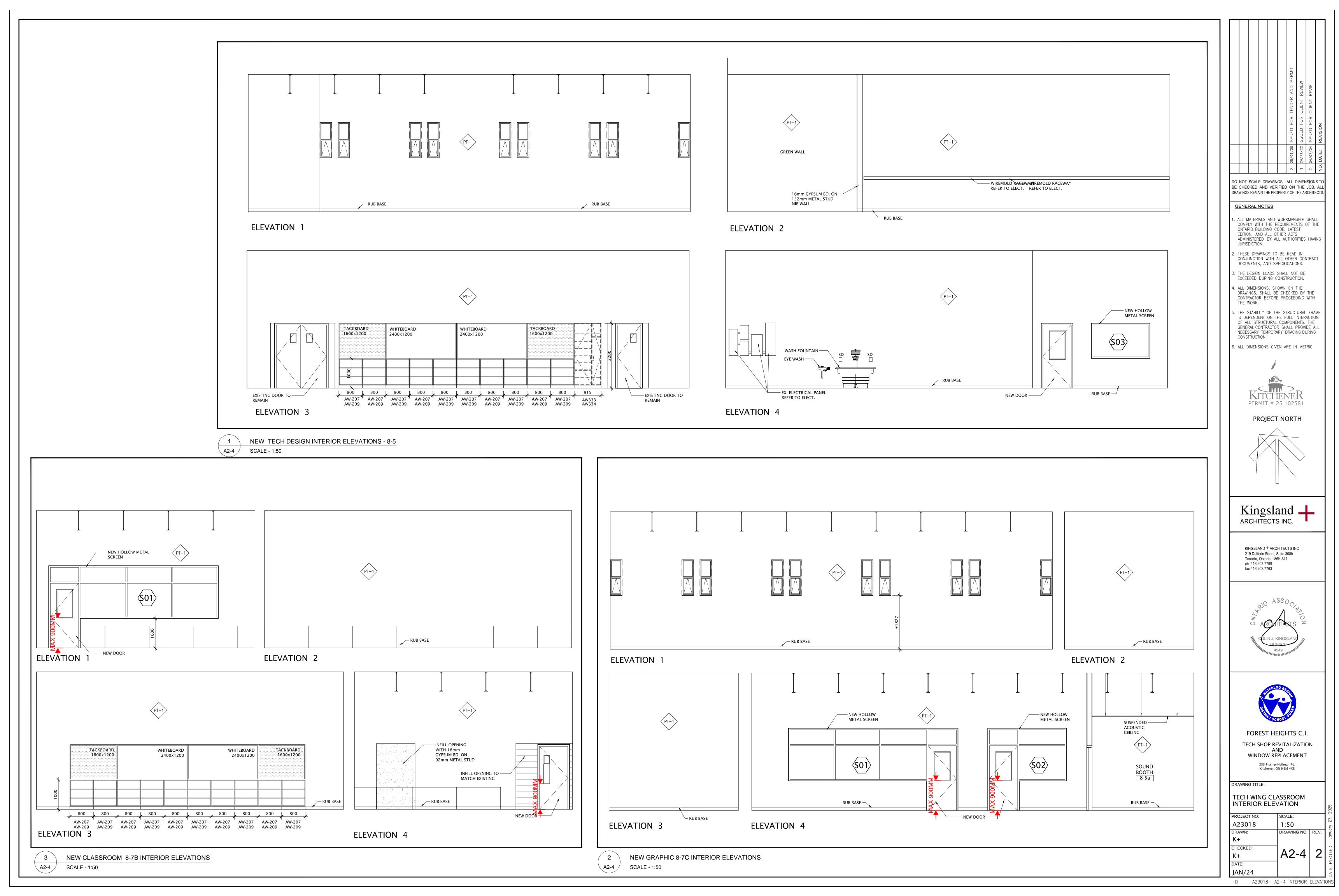
255 Fischer-Hallman Rd, Kitchener, ON N2M 4X8

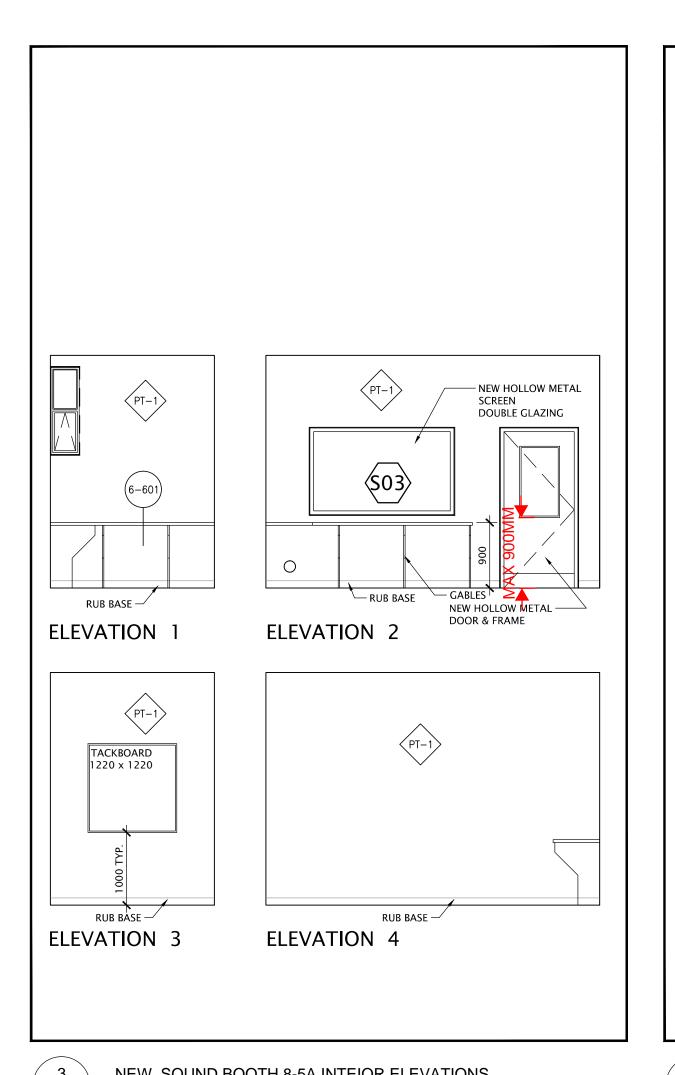
RAWING TITLE: PARTIAL FIRST FLOOR PLAN TECH WING DEMOLITION

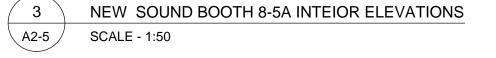
PROJECT NO: SCALE: A23018 1:100 DRAWING NO: REV CHECKED:

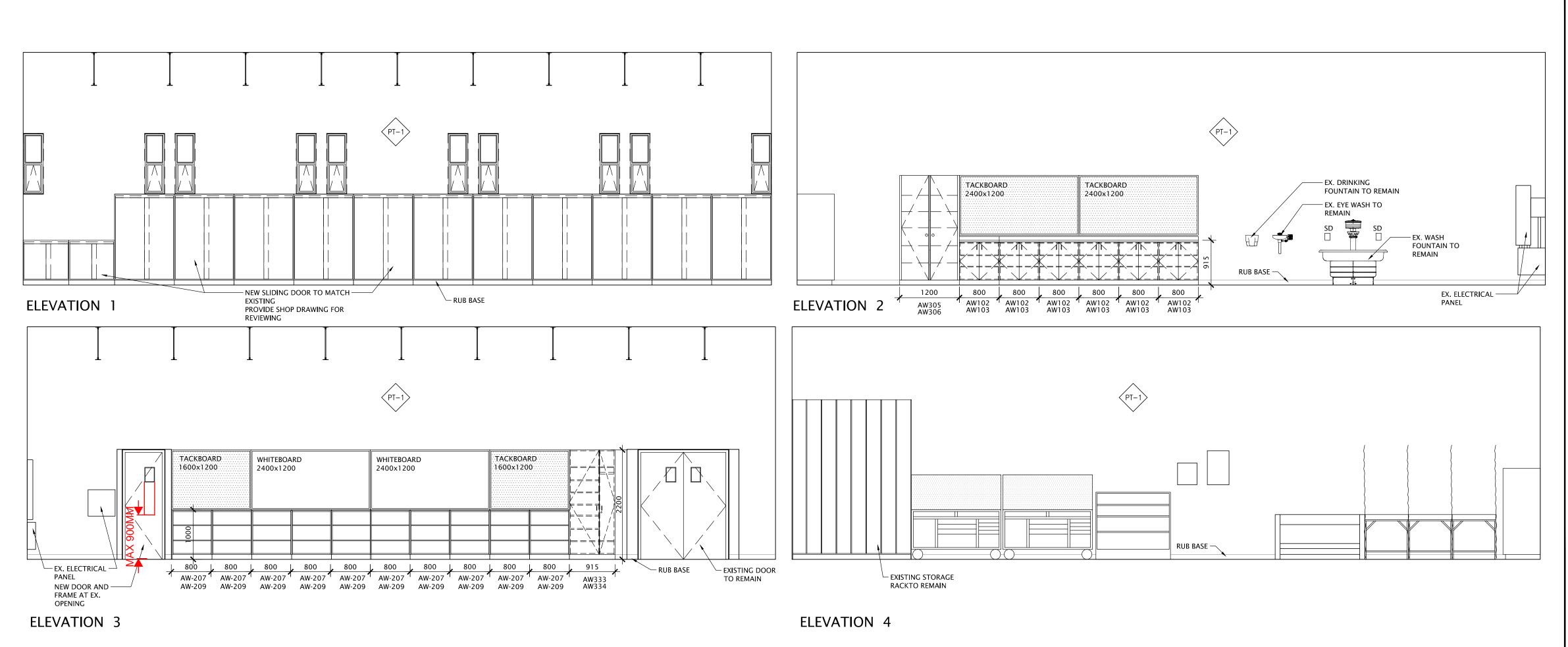
O A23018- A2-2 PARTIAL DEMO & NEV

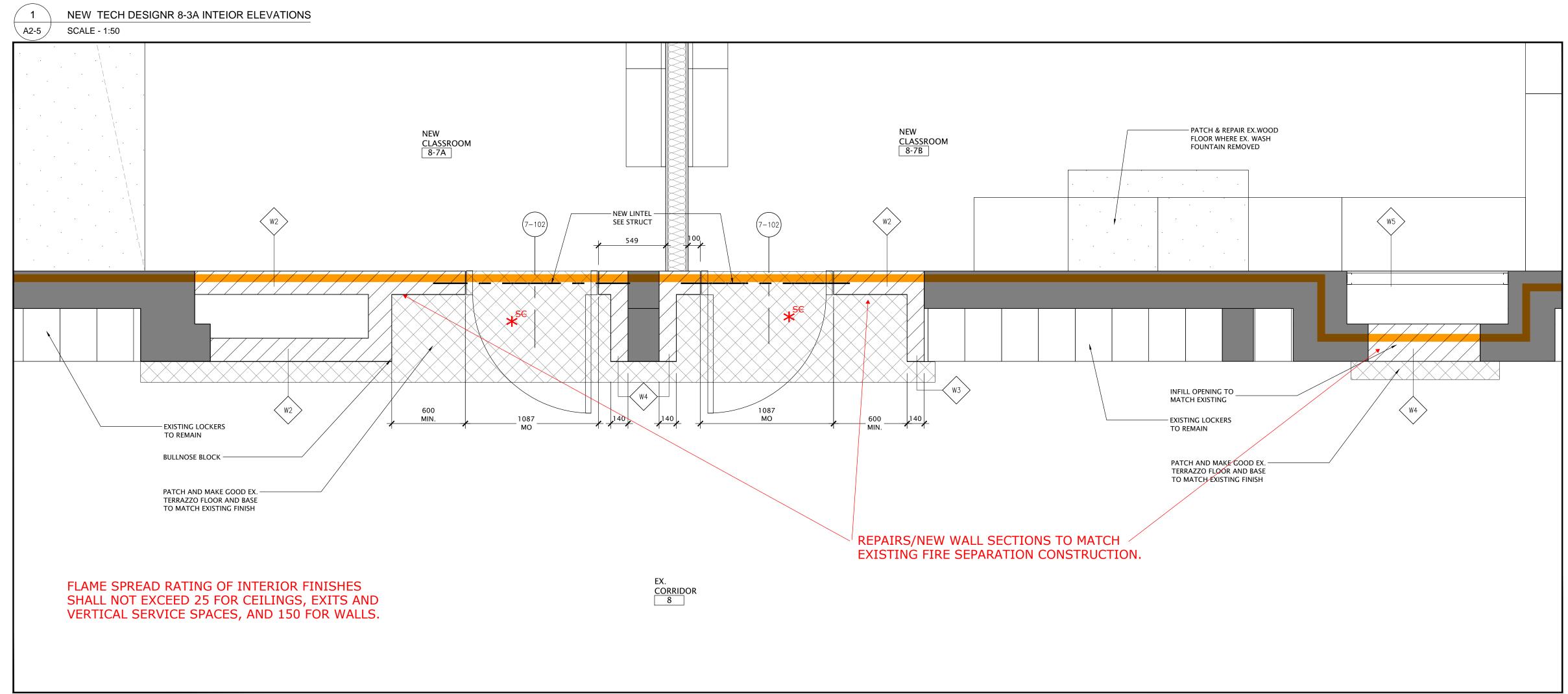


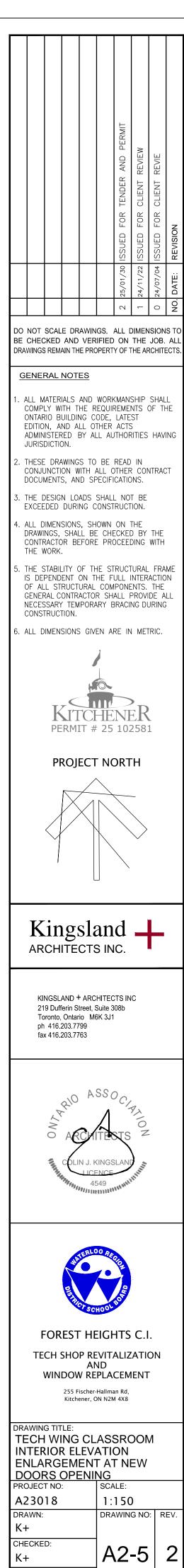




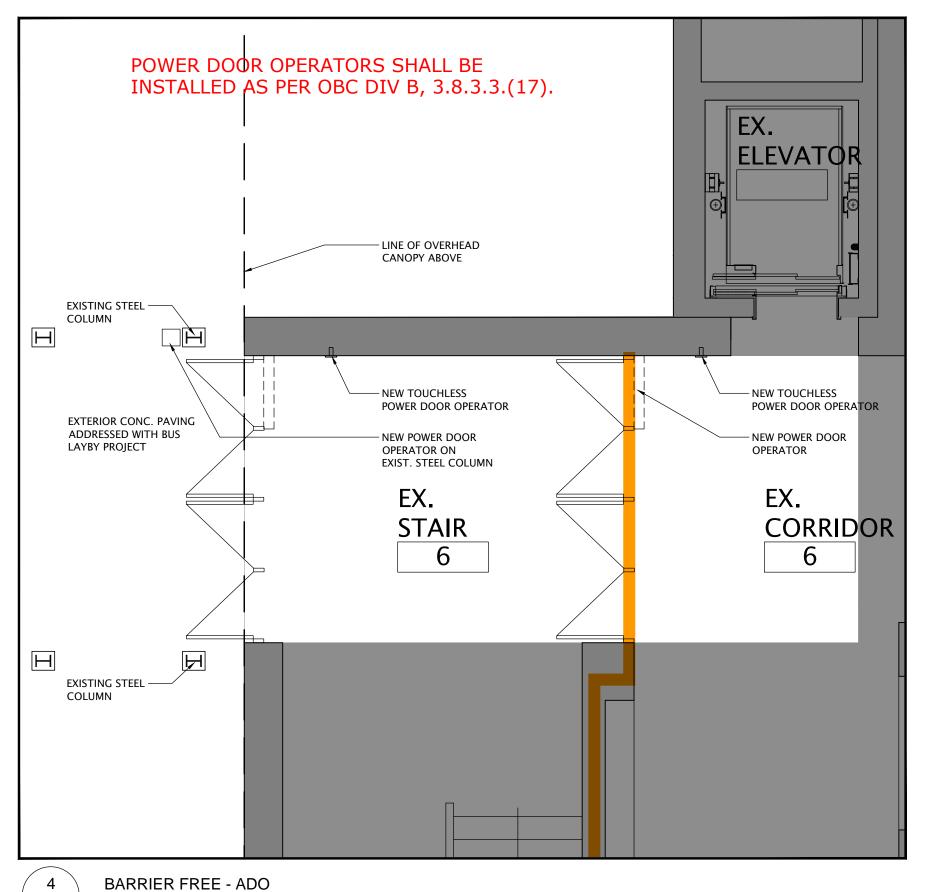








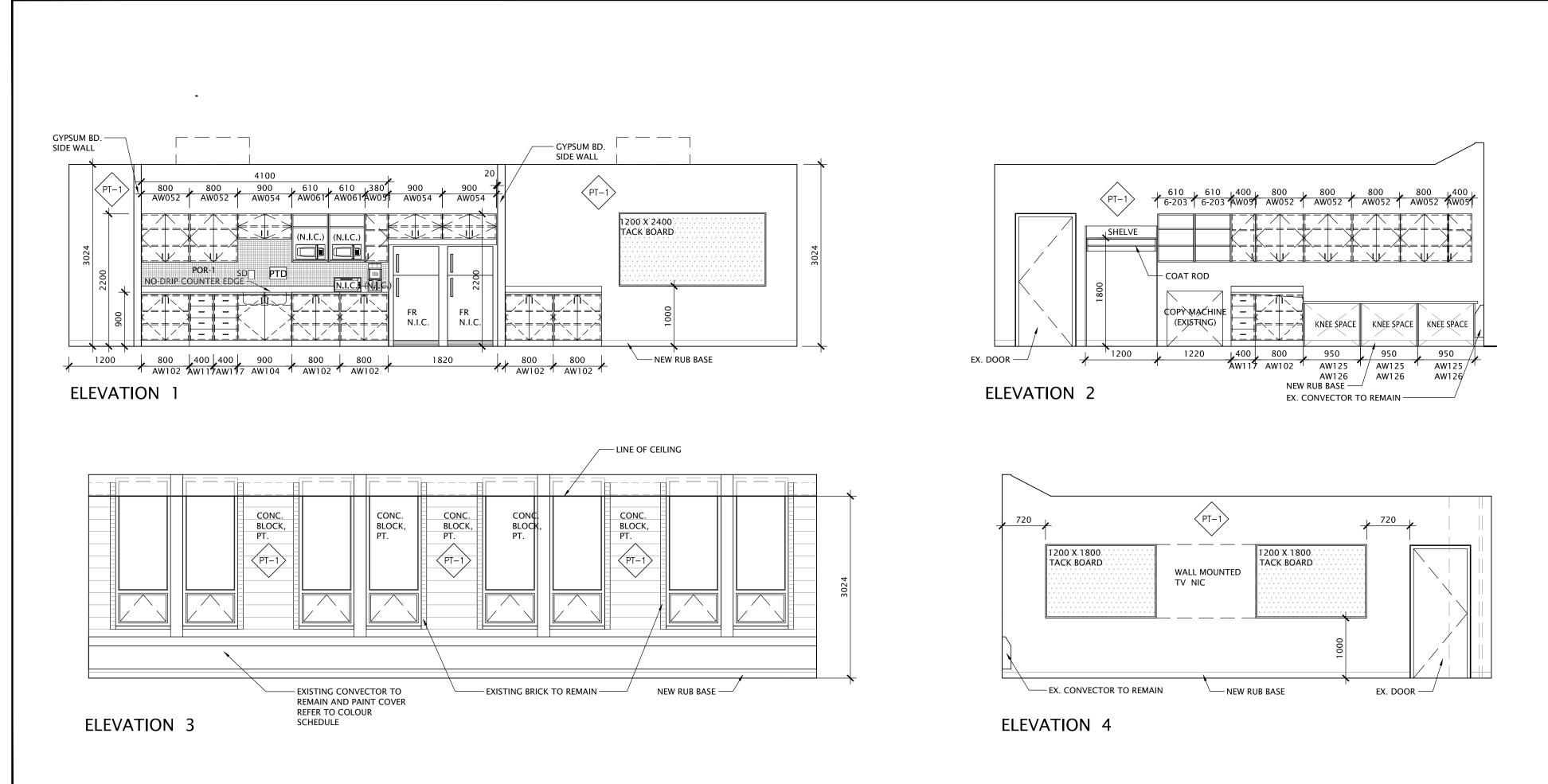
2 ENLARGEMENT AT NEW DOORS OPENING
A2-5 SCALE - 1:20



A2-6 /

SCALE - 1:50

POWER DOOR OPERATOR PUSH BUTTONS SHALL BE LOCATED NOT LESS THAN 600mm AND NOT MORE THAN 1500mm BEYOND THE DOOR SWING WHERE THE DOOR OPENS TOWARDS THE CONTROL AS PER OBC DIV B, 3.8.3.3.(17)(d).



STAFF ROOM INTERIOR ELEVATIONS SCALE - 1:50

____ EX. LOCKERS

-/16mm/GYPSUM/BD/. FKNISH/

TRANSITION STRIP -

ÉXKSTKNG/CØPY/—

Ŋŧw.coat/rack/-

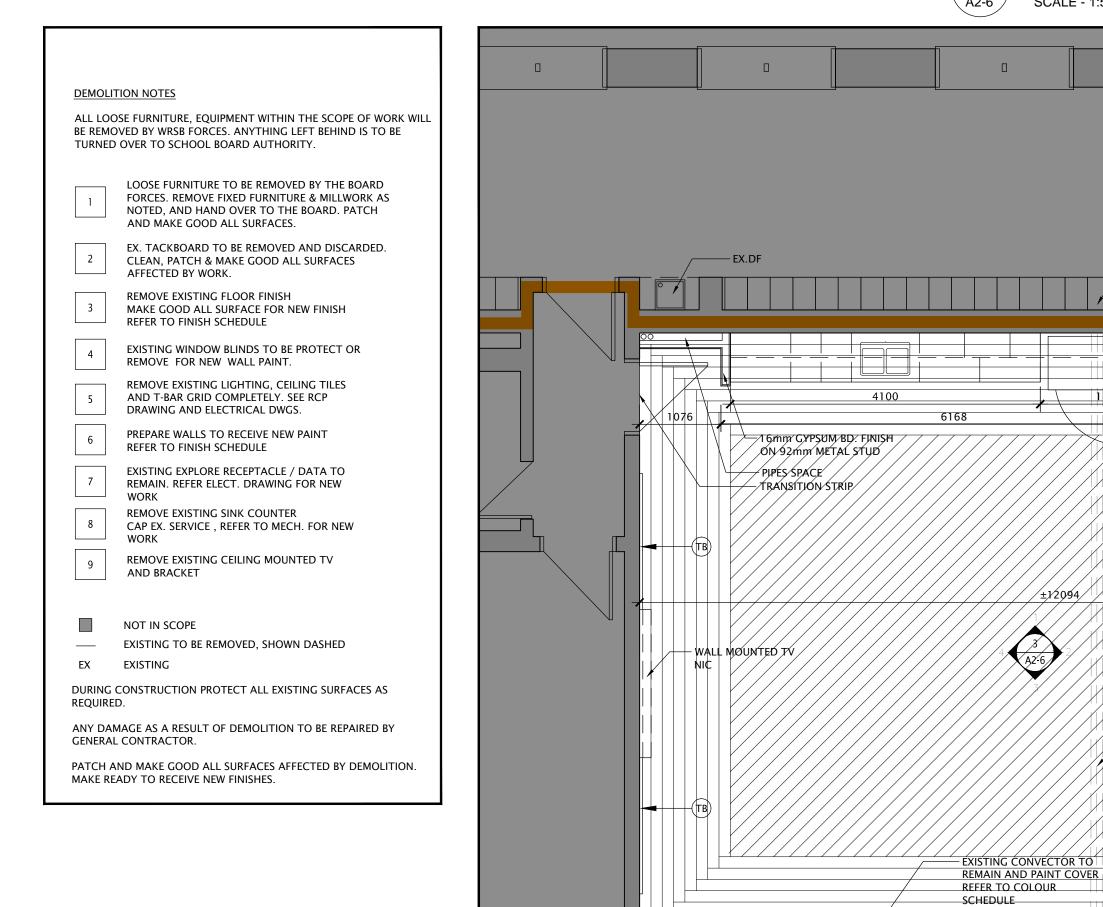
/and/shelye /

ON 92mm METAL STUD/

JØINT COVER TO REMAIN

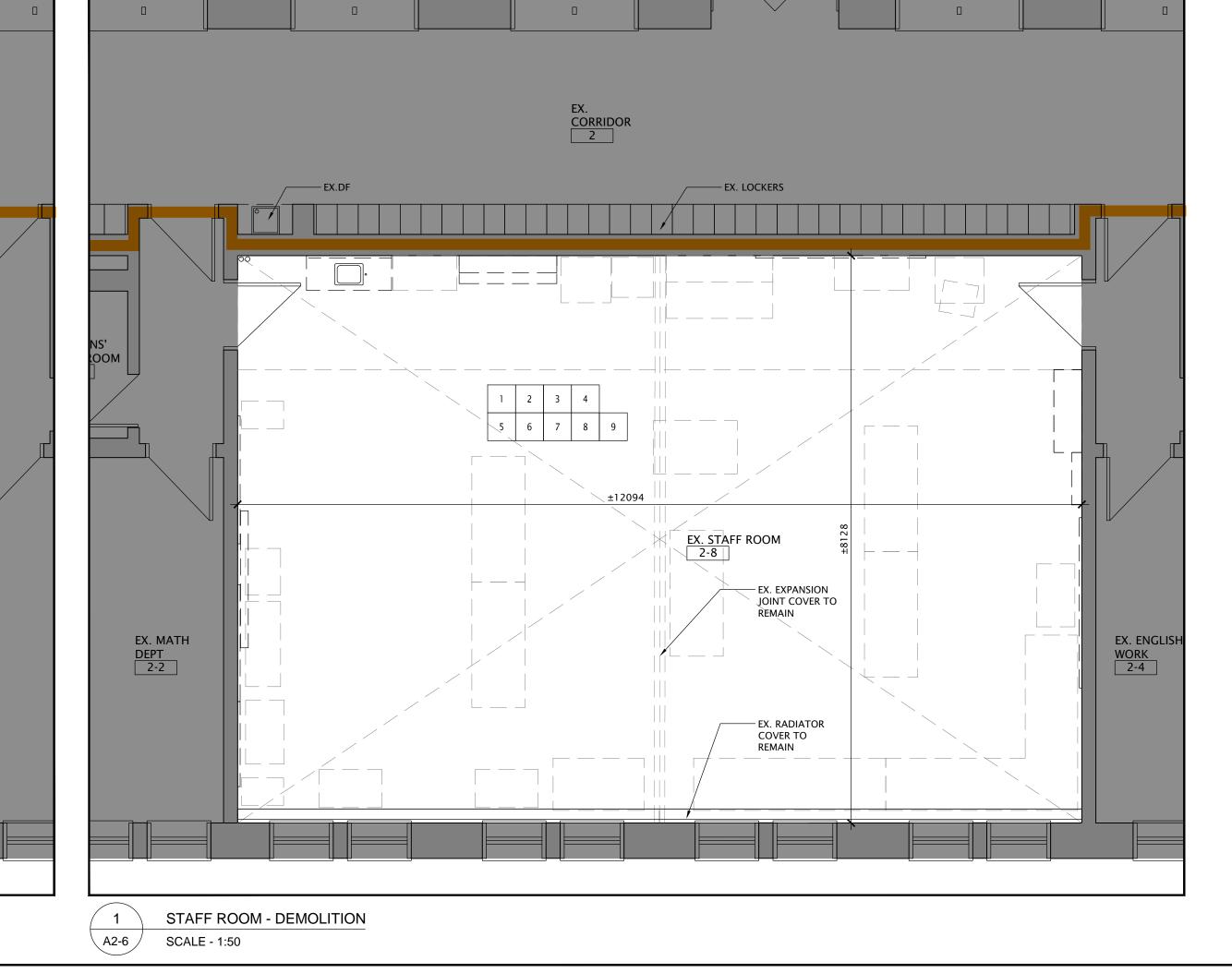
∠ex.,radiator

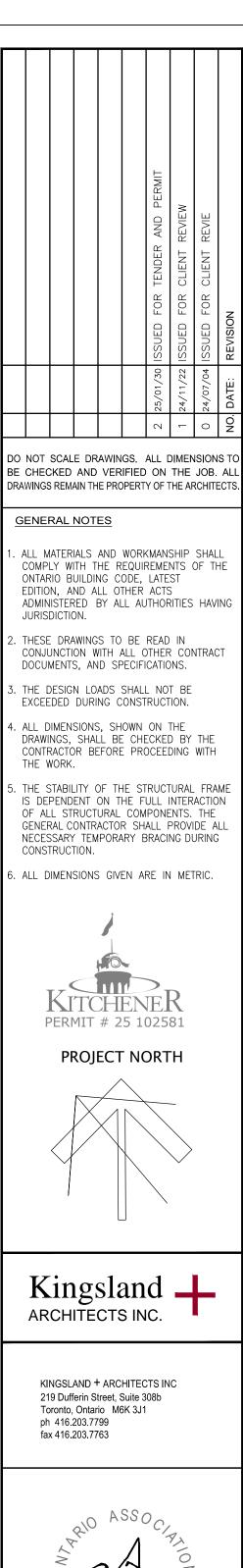
/cóvér/to/



STAFF ROOM - NEW LAYOUT

SCALE - 1:50











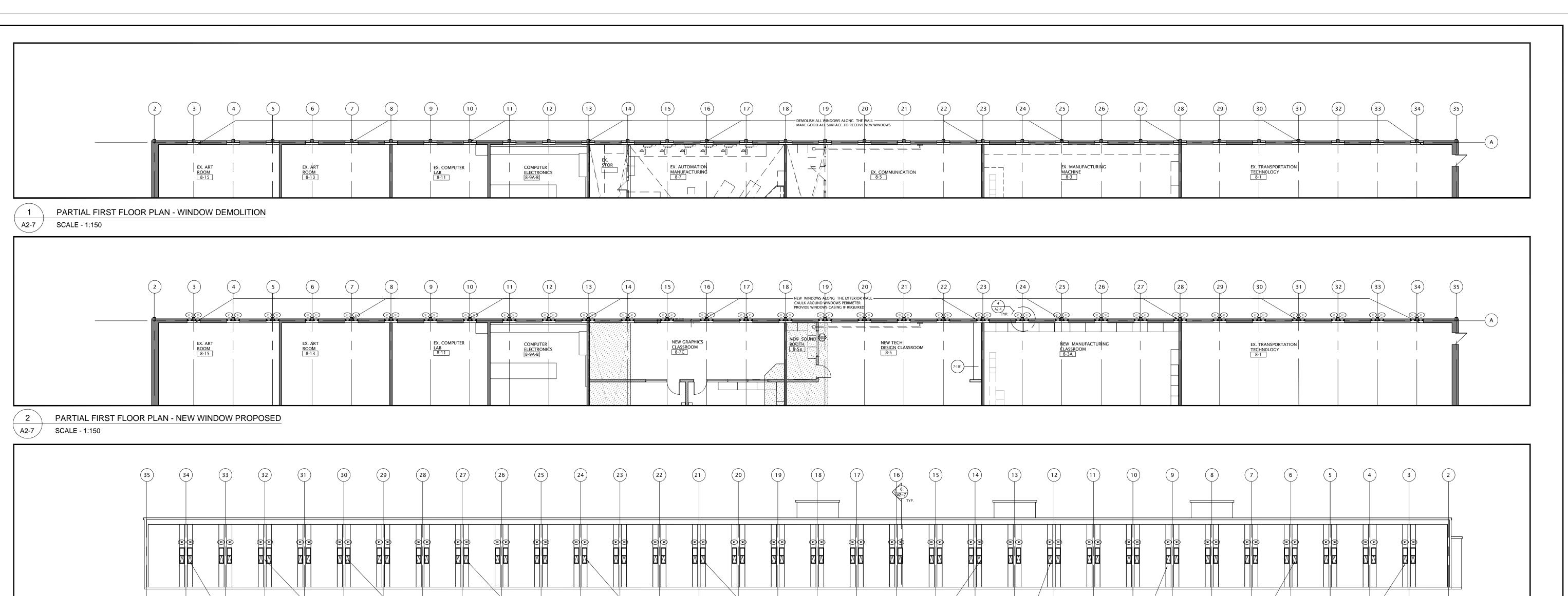
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION WINDOW REPLACEMENT

255 Fischer-Hallman Rd, Kitchener, ON N2M 4X8

DRAWING TITLE: STAFF ROOM - DEMO. & NEW INTERIOR ELEVATIONS AND BARRIER FREE ADO

	CHECKED:	^2 6	
	DRAWN: K +	DRAWING NO:	RE
	A23018	1:50	
	PROJECT NO:	SCALE:	

JAN/24 O A23018- A2-6 INTERIOR ELEVATIONS.

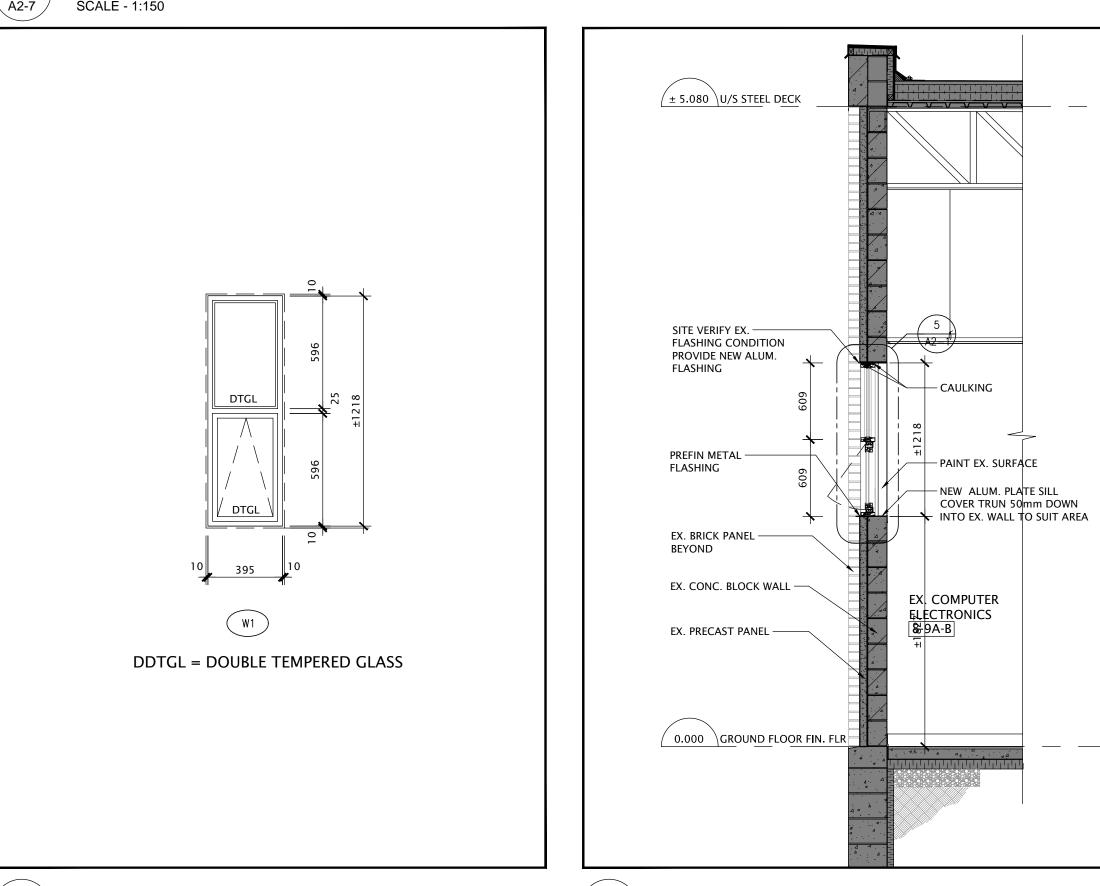


PARTIAL FIRST FLOOR PLAN - NEW WINDOW ELEVATION

∖ A2-7 / SCALE - 1:150

WINDOW DETAIL

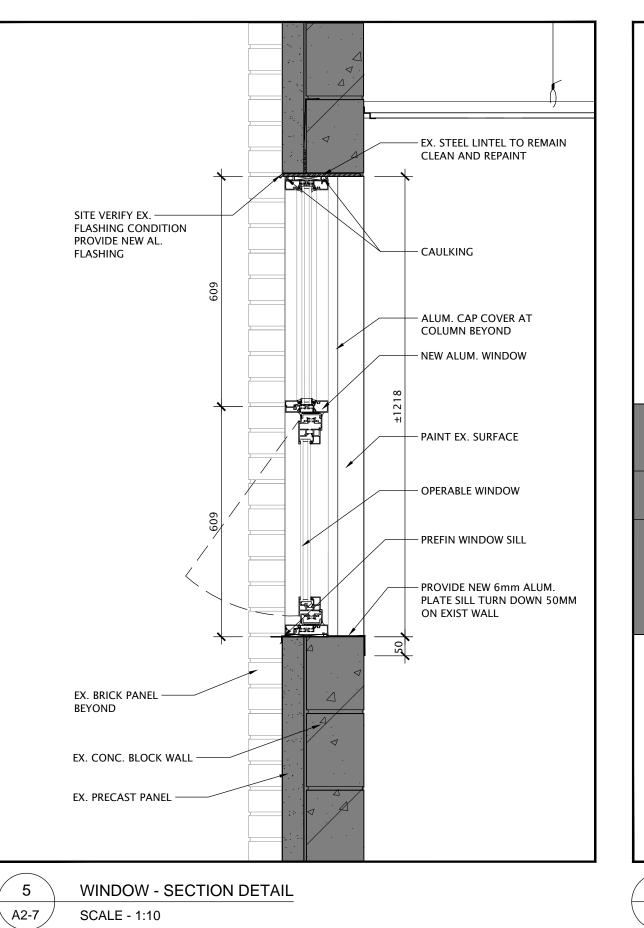
SCALE - 120



BUILDING SECTION

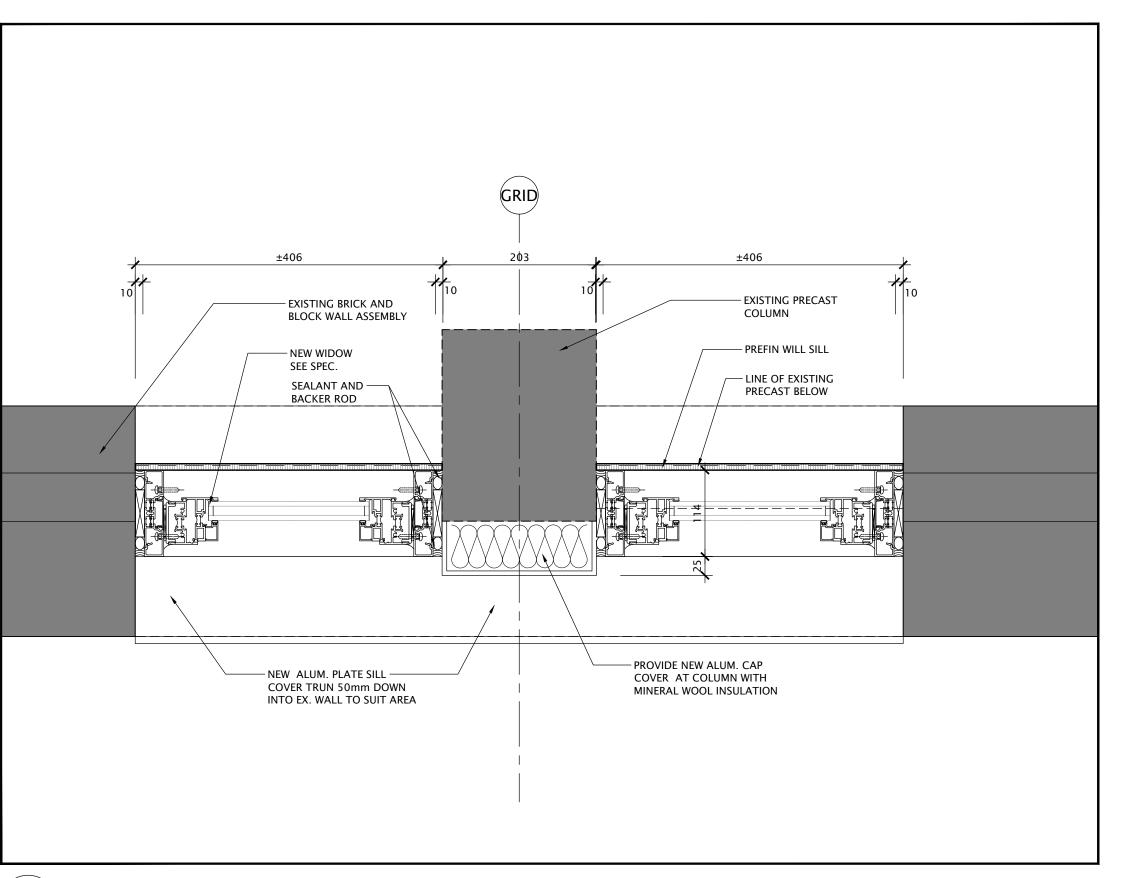
SCALE - 1:30

\ A2-7



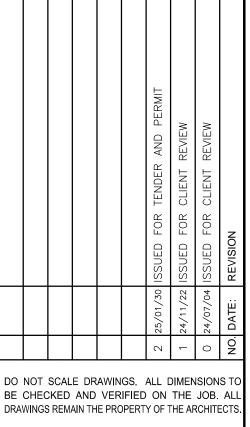
— NEW WINDOWS ALONG THE EXTERIOR WALL —

CAULK AROUND WINDOWS PERIMETER
PROVIDE WINDOWS CASING IF REQUIRED



WINDOW - PLAN DETAIL

SCALE - 1:5



GENERAL NOTES

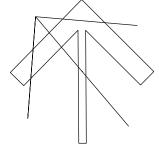
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PROJECT NORTH



Kingsland +

KINGSLAND + ARCHITECTS INC 219 Dufferin Street, Suite 308b Toronto, Ontario M6K 3J1 ph 416.203.7799 fax 416 203 7763





FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION WINDOW REPLACEMENT

255 Fischer-Hallman Rd, Kitchener, ON N2M 4X8

DRAWING TITLE: PARTIAL FIRST FLOOR PLAN TECH WING WINDOW REPLACEMENT AND DETAILS PROJECT NO: SCALE: A23018 NOTED

DRAWN: DRAWING NO: REV. K+ CHECKED:

JAN/24 O A23018- A2-7 WINDOW REPLACEMEN



DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON THE JOB. ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECTS

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PROJECT NORTH



Kingsland —

KINGSLAND + ARCHITECTS INC 219 Dufferin Street, Suite 308b Toronto, Ontario M6K 3J1





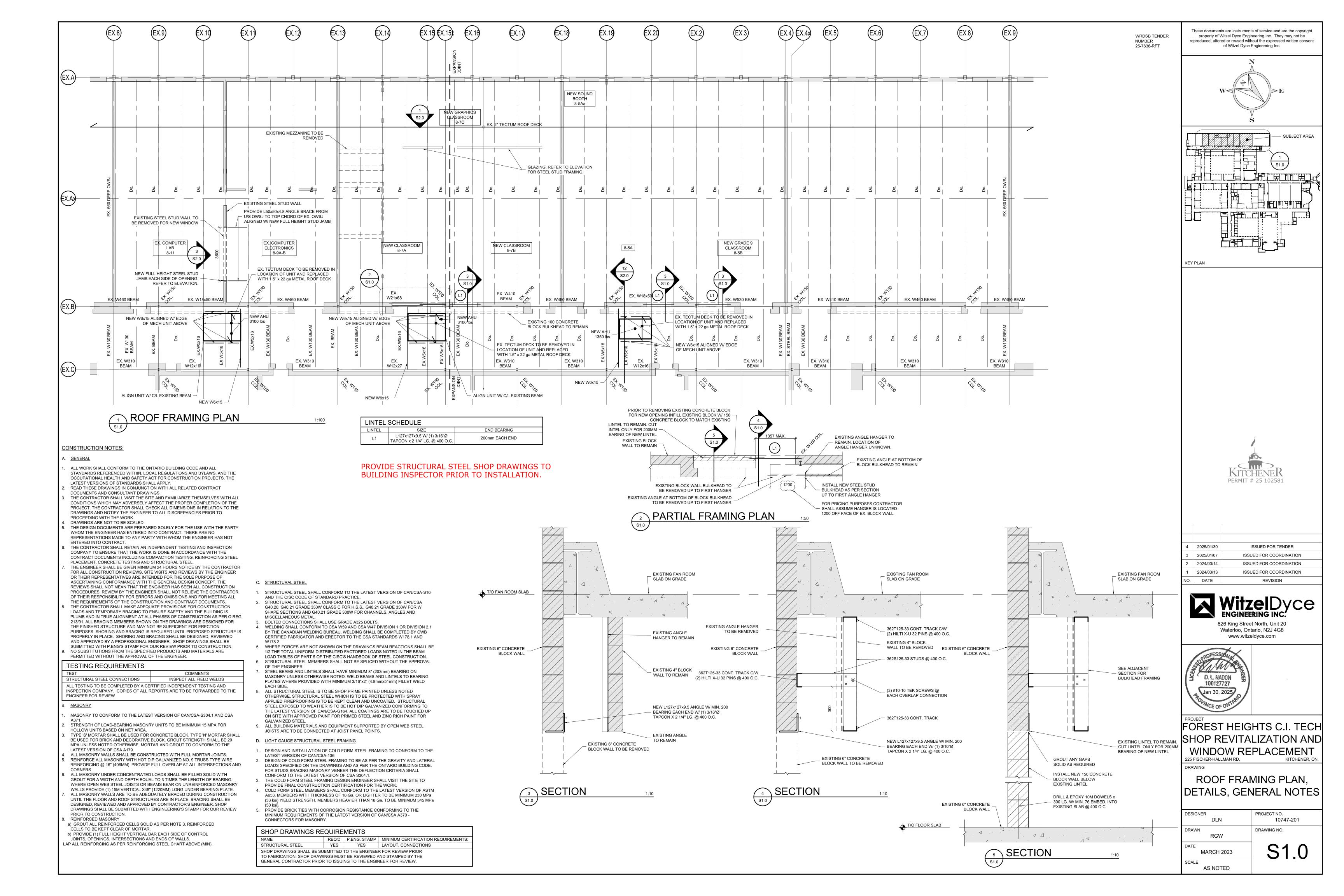
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT

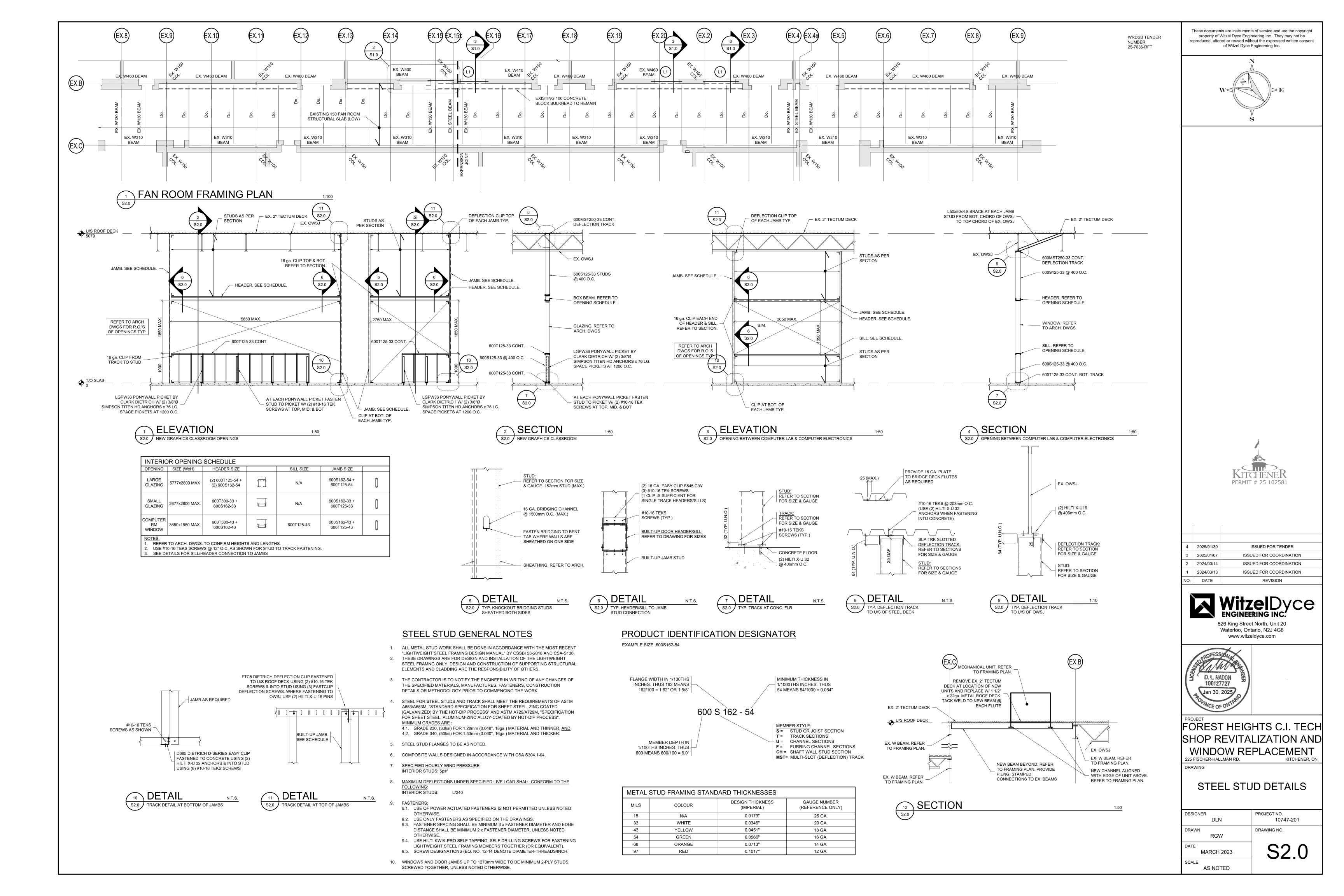
255 Fischer-Hallman Rd, Kitchener, ON N2M 4X8

PARTIAL FIRST FLOOR PLAN **TECH WING DEMOLITION CEILING & PROPOSED**

SCALE: A23018 1:100 DRAWING NO: REV. A6-1 | 2 |

O A23018- A6-1 PARTIAL DEMO & NEV





FOREST HEIGHTS COLLEGIATE INSTITUTE (TENDER #25-7636-RFT)

TECH SHOP REVITALIZATION & PARTIAL WINDOW REPLACEMENT

KITCHENER, ONTARIO

WRDSB PROJECT NO. A23018

EXP PROJECT NO. LON-24003082-A0

MECHANICAL DRAWING LIST:

M000 MECHANICAL TITLE SHEET

M100 PARTIAL FLOOR PLAN - DEMOLITION & NEW SANITARY M101 PARTIAL FLOOR PLAN - DEMOLITION & NEW SANITARY

M200 PARTIAL FLOOR PLAN - DEMOLITION & NEW DOMESTIC PARTIAL FLOOR PLAN - DEMOLITION & NEW DOMESTIC

M300 PARTIAL FLOOR PLAN - HEATING DEMOLITION

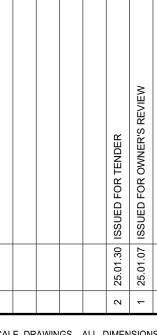
M301 PARTIAL FLOOR PLAN - NEW HEATING

M400 PARTIAL FLOOR & ROOF PLAN - HVAC DEMOLITION M401 PARTIAL FLOOR & ROOF PLAN - NEW HVAC

1402 SECTIONS AND DETAILS - NEW HVAC

M500 MECHANICAL SCHEDULES & DETAILS

SYMBOL	DESCRIPTION	SYMBOL	ICAL LEGEND DESCRIPTION	MOUNTING HEIGHT
SYMBOL PIPING	DESCRIPTION	VALVES	DESCRIPTION	MOUNTING HEIGHT
	EXISTING SANITARY PIPING	VALVES	CHECK MALVE	
EX.S			CHECK VALVE & BALL DRIP	
s	SANITARY PIPING		CHECK VALVE & BALL DRIP	
EX.ST	EXISTING STORM PIPING	DCVA	DOUBLE CHECK VALVE ASSEMBLY BACKFLOW PREVENT	ER MIN. 12" (300mm) AFF per CSA B64.1
ST	STORM PIPING	THE RPPV	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTE	R MIN. 12" (300mm) AFF per CSA B64.10
	EXISTING COLD WATER PIPING		BALL VALVE	
	COLD WATER PIPING		GATE VALVE	
	EXISTING DOMESTIC HOT WATER PIPING		THERMOSTATIC MIXING VALVE	
	DOMESTIC HOT WATER PIPING		GLOBE VALVE	
	EXISTING DOMESTIC HOT WATER RECIRCULATING PIPING			
	DOMESTIC HOT WATER RECIRCULATING PIPING	\$	ELECTRICALLY SUPERVISED O,S & Y VALVE	
	EXISTING TEMPERED WATER PIPING		TWO-WAY CONTROL VALVE	
	TEMPERED WATER PIPING		RADIATION CONTROL VALVE	
v	EXISTING VENT PIPING		MIXING VALVE	
v	VENT PIPING	BFP	BACKFLOW VALVE	
EX.SP	EXISTING SPRINKLER PIPING	PRV PRV	PRESSURE REDUCING VALVE	
SP	SPRINKLER PIPING	—	CIRCUIT BALANCE VALVE	
EX.F	EXISTING FIRE PROTECTION PIPING		THREE-WAY CONTROL VALVE	
— F ——	FIRE PROTECTION PIPING	\$	TEMPERATURE & PRESSURE RELIEF VALVE	
		PAAV	AUTOMATIC AIR VENT	
EX.G	EXISTING GAS PIPING	<u> </u>	GAS COCK (SHUT OFF VALVE)	
G	GAS PIPING		GAS METER	
—EX.STM—	EXISTING STEAM PIPING	FS FS	FLOW SWITCH	
—— STM ——	STEAM PIPING	M—————————————————————————————————————	DOMESTIC WATER METER	
	EXISTING CONDENSATE PIPING			
c	CONDENSATE PIPING		IN-LINE PUMP	
—— EX.D——	EXISTING DRAIN PIPING		STRAINER	
D	DRAIN PIPING		UNION	
—EX.HS—	EXISTING HEATING SUPPLY PIPING	μτ ρτ	THERMOMETER	
——нѕ ——	HEATING SUPPLY PIPING	Ϋ́ PG	PRESSURE GAUGE	
EX.HR	EXISTING HEATING RETURN PIPING	♥ P&T	PRESSURE AND TEMPERATURE GAUGE	
HR	HEATING RETURN PIPING	─ ─ # FPWH	FROST PROOF WALL HYDRANT	
— EX.HPS —	EXISTING HEAT PUMP SUPPLY PIPING	→ HB	HOSE BIBB	
— HPS —	HEAT PUMP SUPPLY PIPING	CLEAN OUTS ANI	D DRAINS	·
			FLEXIBLE CONNECTION	
EX.HPR	EXISTING HEAT PUMP RETURN PIPING	о со	CLEAN OUT (FLOOR MOUNTED)	
—— HPR ——	HEAT PUMP RETURN PIPING	——————————————————————————————————————	CLEAN OUT (CEILING MOUNTED)	
	EXISTING GLYCOL HEATING SUPPLY PIPING	FD ®	FLOOR DRAIN	
—GLY.HS—	GLYCOL HEATING SUPPLY PIPING	HD (0)	HUB DRAIN	
-EX.GLY.HR	EXISTING GLYCOL HEATING RETURN PIPING			
GLY.HR	GLYCOL HEATING RETURN PIPING	FFD Q	FUNNEL FLOOR DRAIN	
—EX.LIQ—	EXISTING LIQUID REFRIGERATION LINE	FD	FLOOR DRAIN	
— LIQ —	LIQUID REFRIGERATION LINE		HUB DRAIN	
— EX.SUC —	EXISTING SUCTION REFRIGERATION LINE	FFD II	FUNNEL FLOOR DRAIN	
— SUC —	SUCTION REFRIGERATION LINE	——(•) RD	ROOF DRAIN	
- EX.CHWS-	EXISTING CHILLED WATER SUPPLY	SPRINKLER		
— CHWS ——	CHILLED WATER SUPPLY		UPRIGHT SPRINKLER	
-EX.CHWR	CHILLED WATER RETURN		PENDENT SPRINKLER	
CHWR	CHILLED WATER RETURN	———	SEMI RECESSED SPRINKLER	
	INDICATES PIPING BELOW FLOOR		SIDEWALL SPRINKLER	
OXY	OXYGEN PIPING	_	EXTENDED COVERAGE SIDEWALL SPRINKLER	
		-	CONCEALED SPRINKLER	
— ACET ——	ACETYLENE PIPING	HVAC	•	•
		FD	FIRE DAMPER	
			COMBINATION SMOKE / FIRE DAMPER	
LEGEND NOTES	<u>:</u>	+ + + + MD	MOTORIZED DAMPER	
1. THIS IS A	STANDARD LEGEND. ALL SYMBOLS MAY NOT		BALANCING DAMPER	
	RILY BE USED ON DRAWINGS.	BD		
2	D MOUNTING HEIGHTS SHOWN ON LEGEND SHALL BE	——— BDD	BACK DRAFT DAMPER	
USED, UN	LESS NOTED OTHERWISE. ALL TRADES TO COORDINATE	SPD	SPLITTER DAMPER	400/4222
THESE HE	EIGHTS PRIOR TO INSTALLATION.	(T)	THERMOSTAT	48" (1200mm) AFF per 3.8.1.5, O.B.C
		H	HUMIDISTAT	48" (1200mm) AFF per 3.8.1.5, O.B.C
		<u> </u>	SENSOR	48" (1200mm) AFF per 3.8.1.5, O.B.C
		S	SENSOR	
		Ē	FAN SPEED CONTROLLER	48" (1200mm) AFF per 3.8.1.5, O.B.C
		+	NEW CONNECTION TO EXIST. PIPES/HVAC	
		FIRE PROTECTIO	N	
		∪- <mark>⊠IIIIIIIII</mark> FHC	FIRE HOSE CABINET	
		▼ FEX C	FIRE EXTINGUISHER CABINET	
		▼ FEX	FIRE EXTINGUISHER	40 lbs (18 kg) OR LESS, NOT MORE THAN 60" (1500mm) AFF AS PER 6.2.4, O.F.C. GREATER TO 40 lbs (18 kg) NOT MORE FHAN 44" (1100mm) AFF AS PER 6.2.4,
		→	FIRE DEPARTMENT PUMPER CONNECTION	D.F.C. NOT LESS THAN 12" (300mm) AND NOT MORE THAN 36" (900mm) ABOVE GROUN



BE CHECKED AND VERIFIED ON THE JOB. ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECTS.

GENERAL NOTES

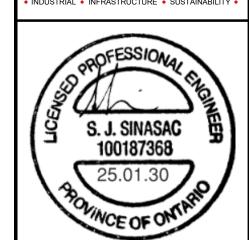
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- 6. ALL DIMENSIONS GIVEN ARE IN



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Project # LON-23003 | 63-A0

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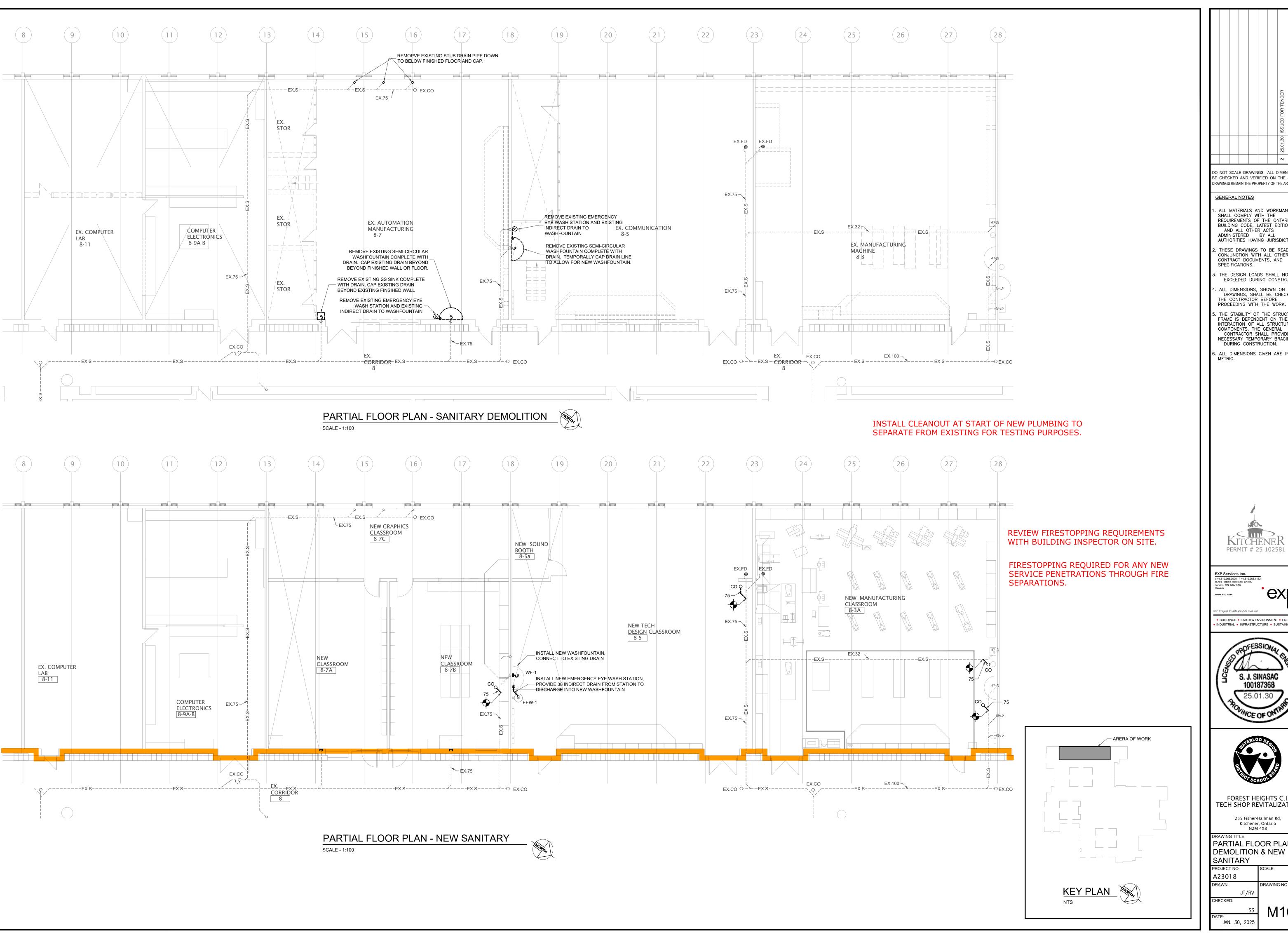


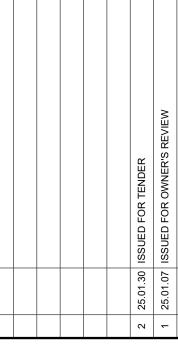
FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION

255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

MECHANICAL -TITLE SHEET

PROJECT NO:	SCALE:
A23018	
DRAWN:	DRAWING NO:
JT/RV	
CHECKED:	
SS	M00
DATE: JAN. 30, 2025	IVIOO





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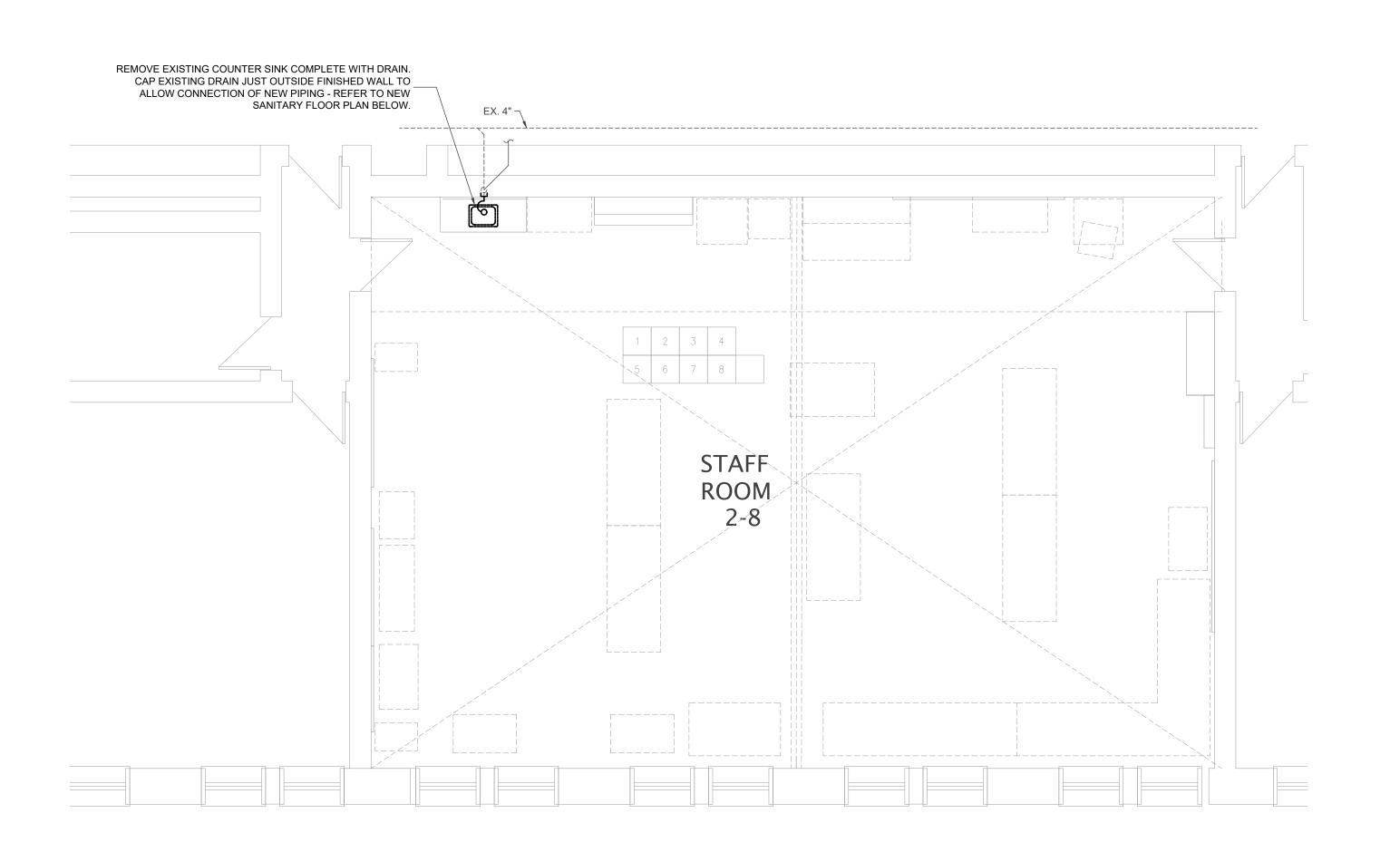


FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION

255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

PARTIAL FLOOR PLAN -**DEMOLITION & NEW** SANITARY

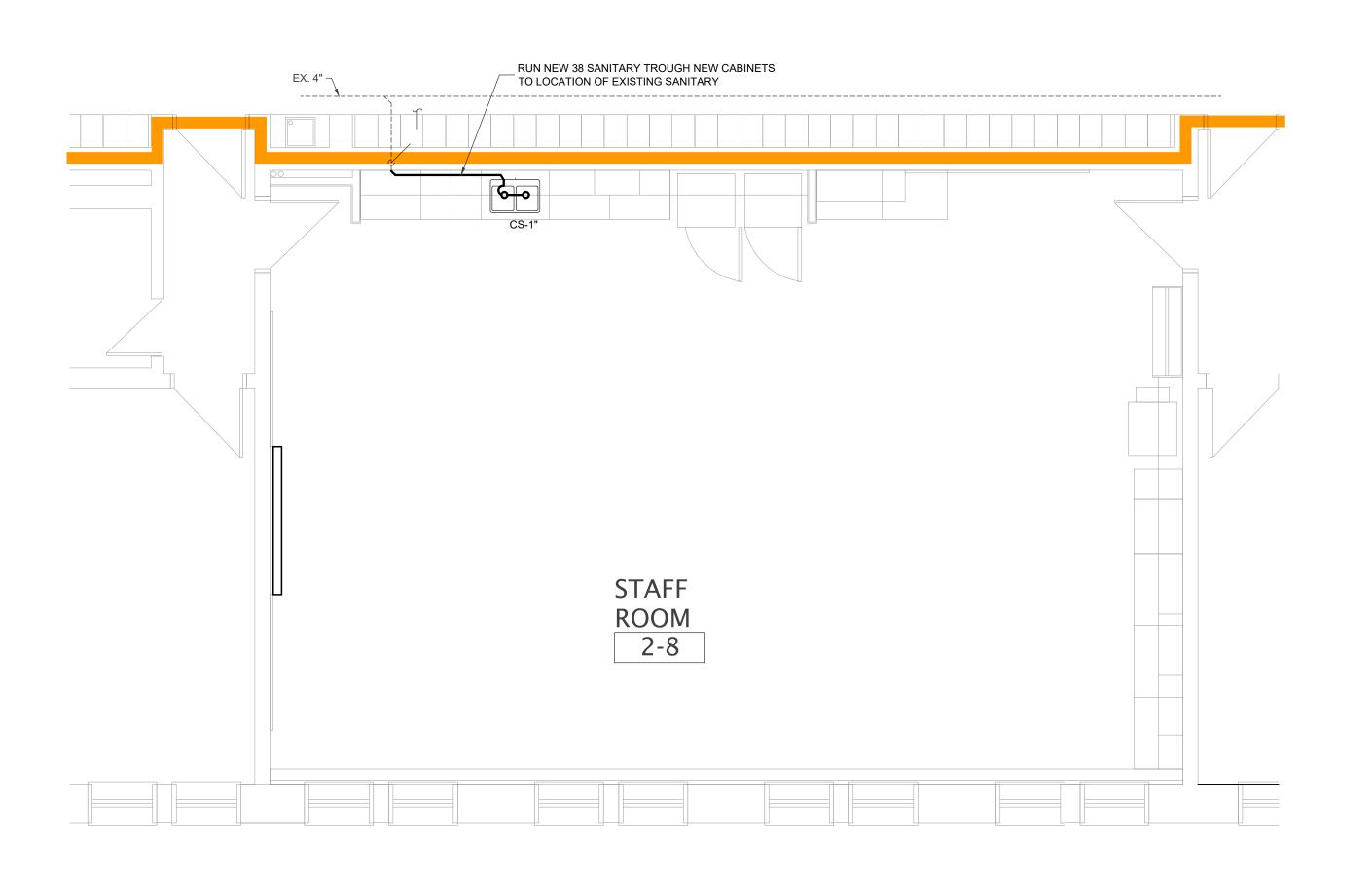
A23018 CHECKED:



PARTIAL FLOOR PLAN - SANITARY DEMOLITION

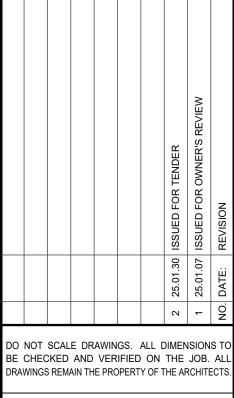
SCALE - 1:50





PARTIAL FLOOR PLAN - NEW SANITARY SCALE - 1:50





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FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION

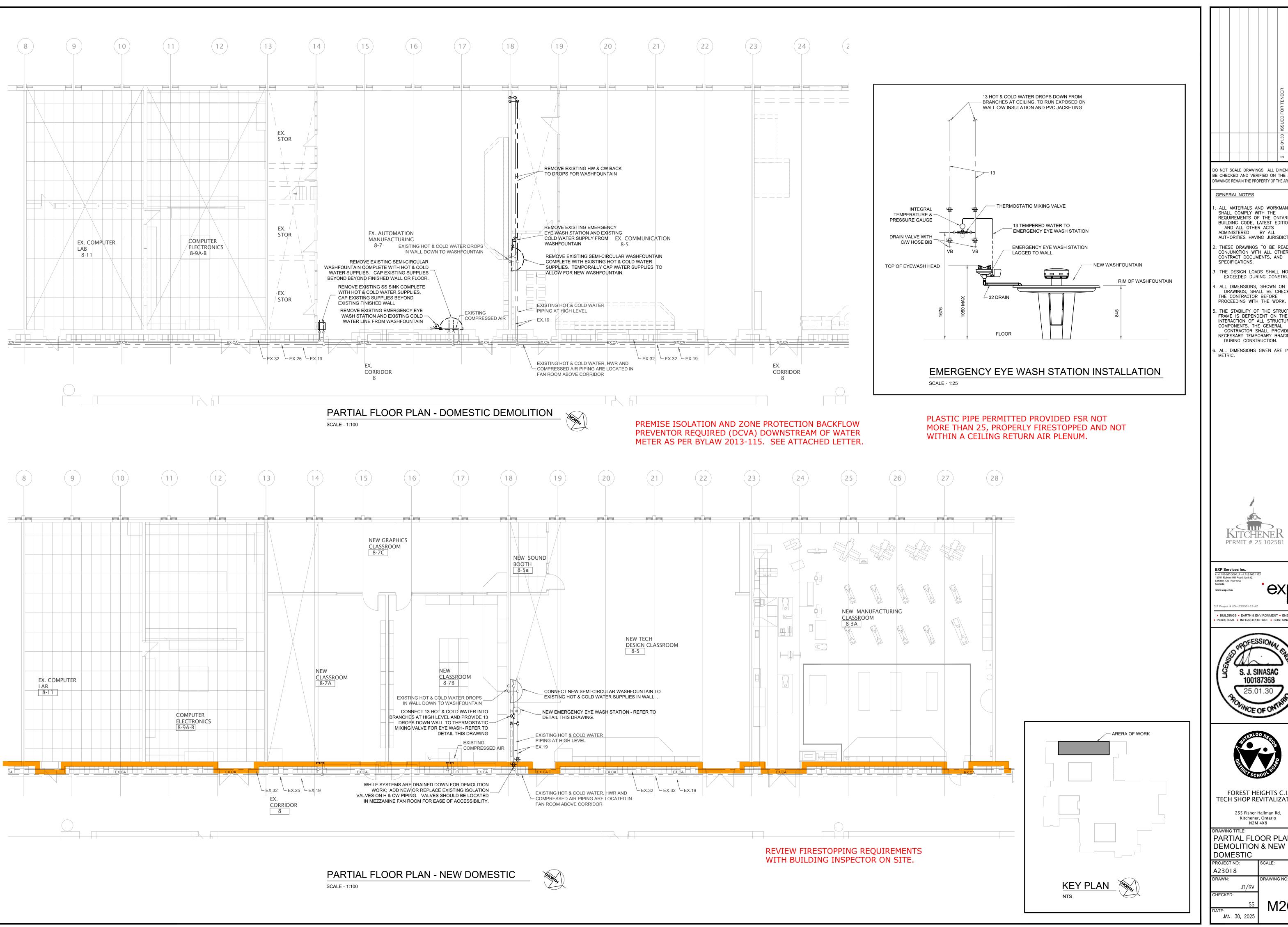
255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

PARTIAL FLOOR PLAN -DEMOLITION & NEW SANITARY

A23018

ARERA OF WORK

DATE: JAN. 30, 2025



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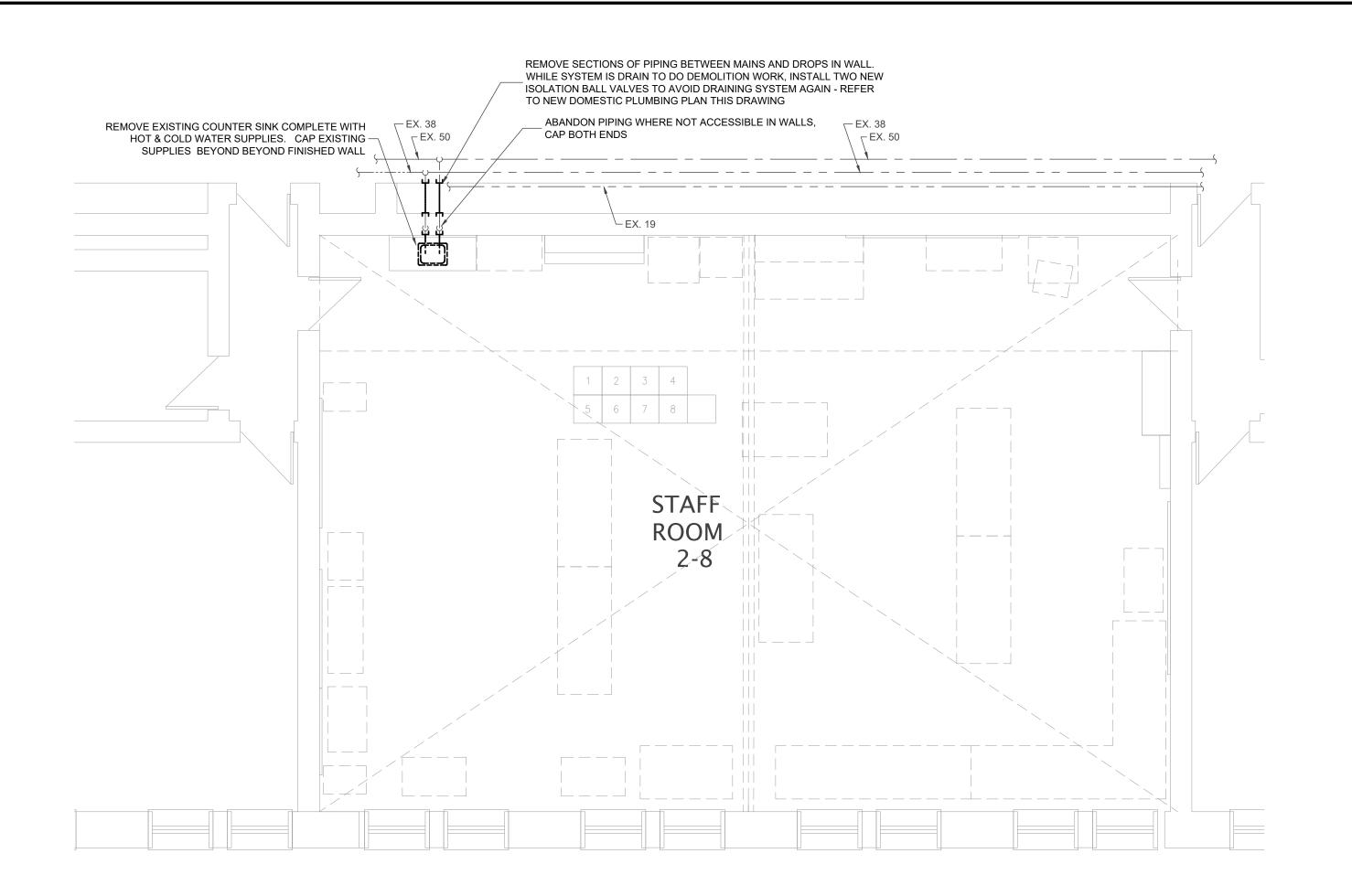


FOREST HEIGHTS C.I. **TECH SHOP REVITALIZATION**

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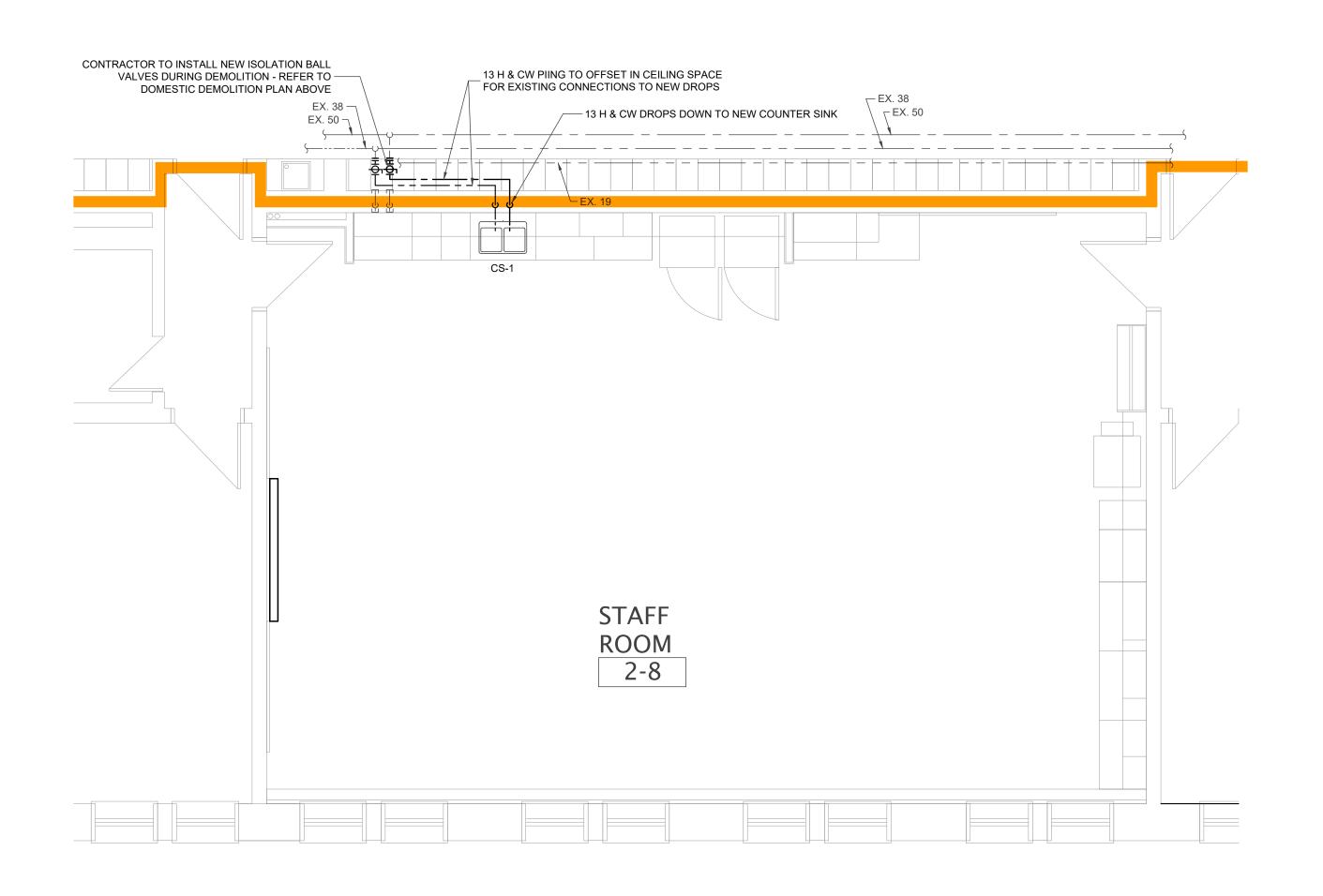
PARTIAL FLOOR PLAN -**DEMOLITION & NEW** DOMESTIC

A23018



PARTIAL FLOOR PLAN - DOMESTIC DEMOLITION SCALE - 1:50

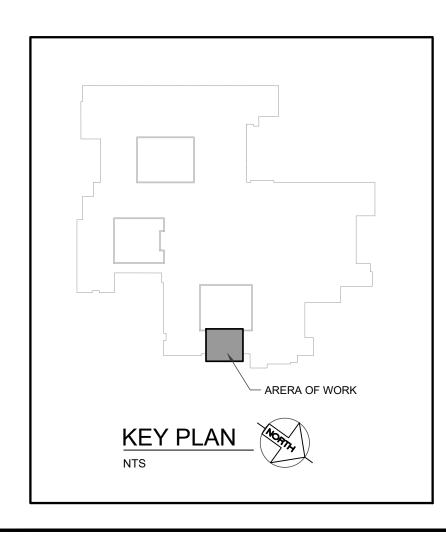


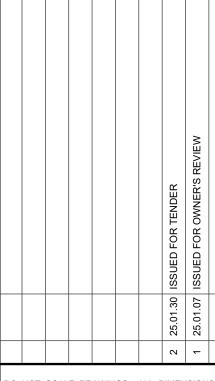


PARTIAL FLOOR PLAN - NEW DOMESTIC

SCALE - 1:50







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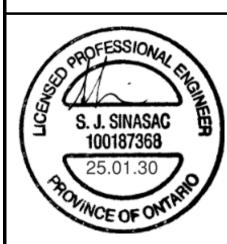
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FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION

255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

PARTIAL FLOOR PLAN DEMOLITION & NEW
DOMESTIC

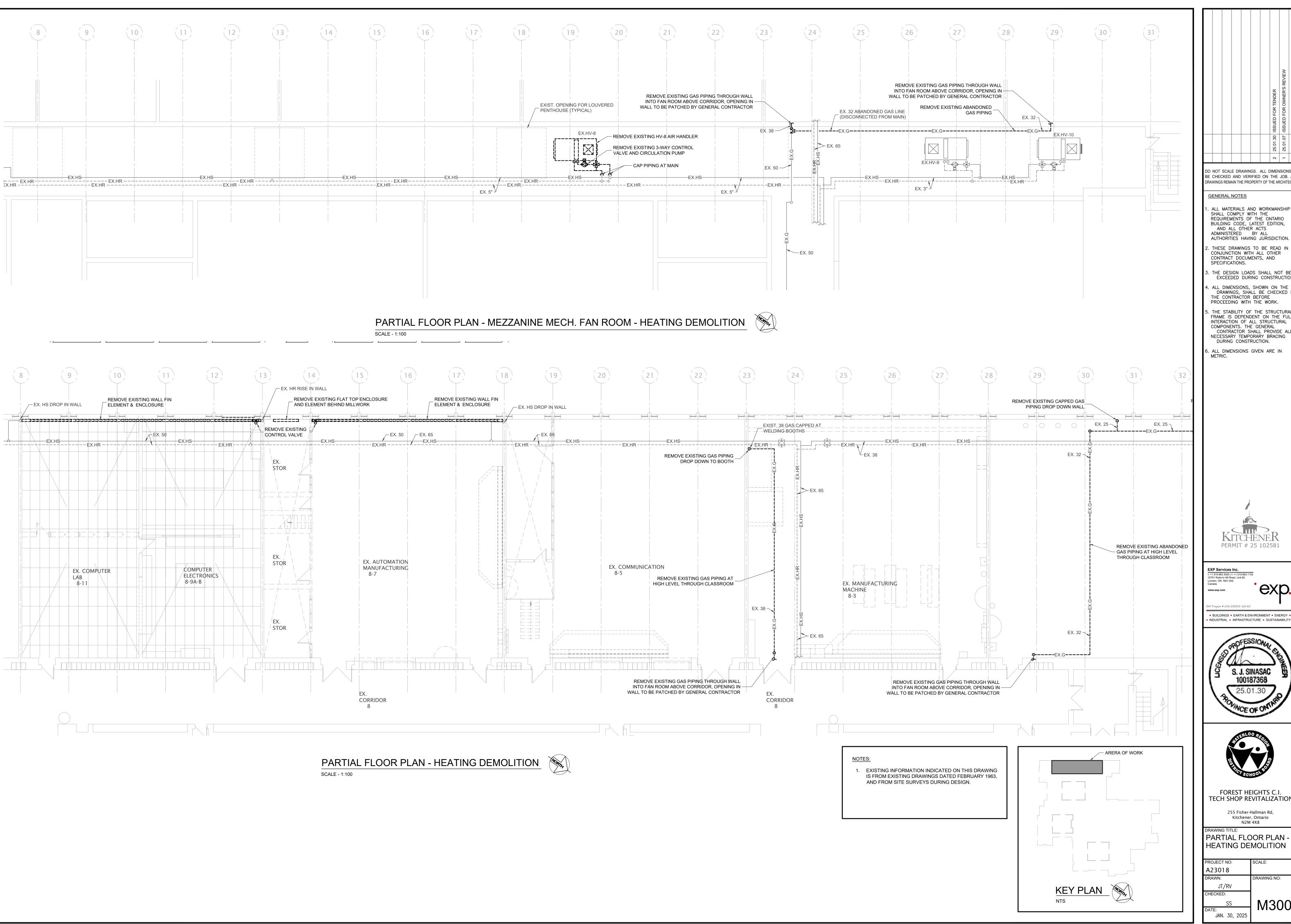
A23018

DRAWN: DRAWN: JT/RV

CHECKED:

SS STEE:

JAN. 30, 2025



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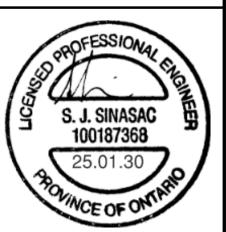
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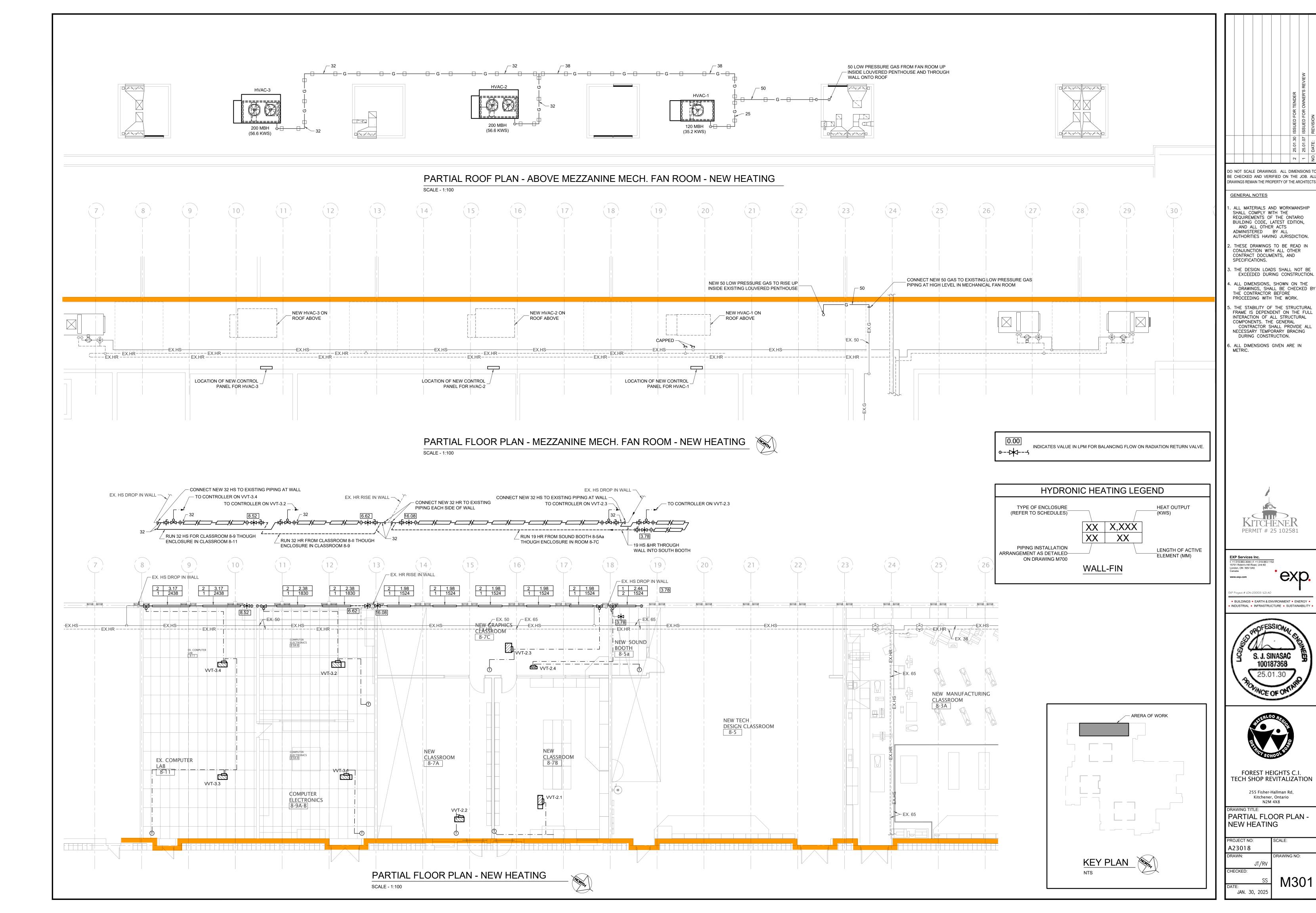


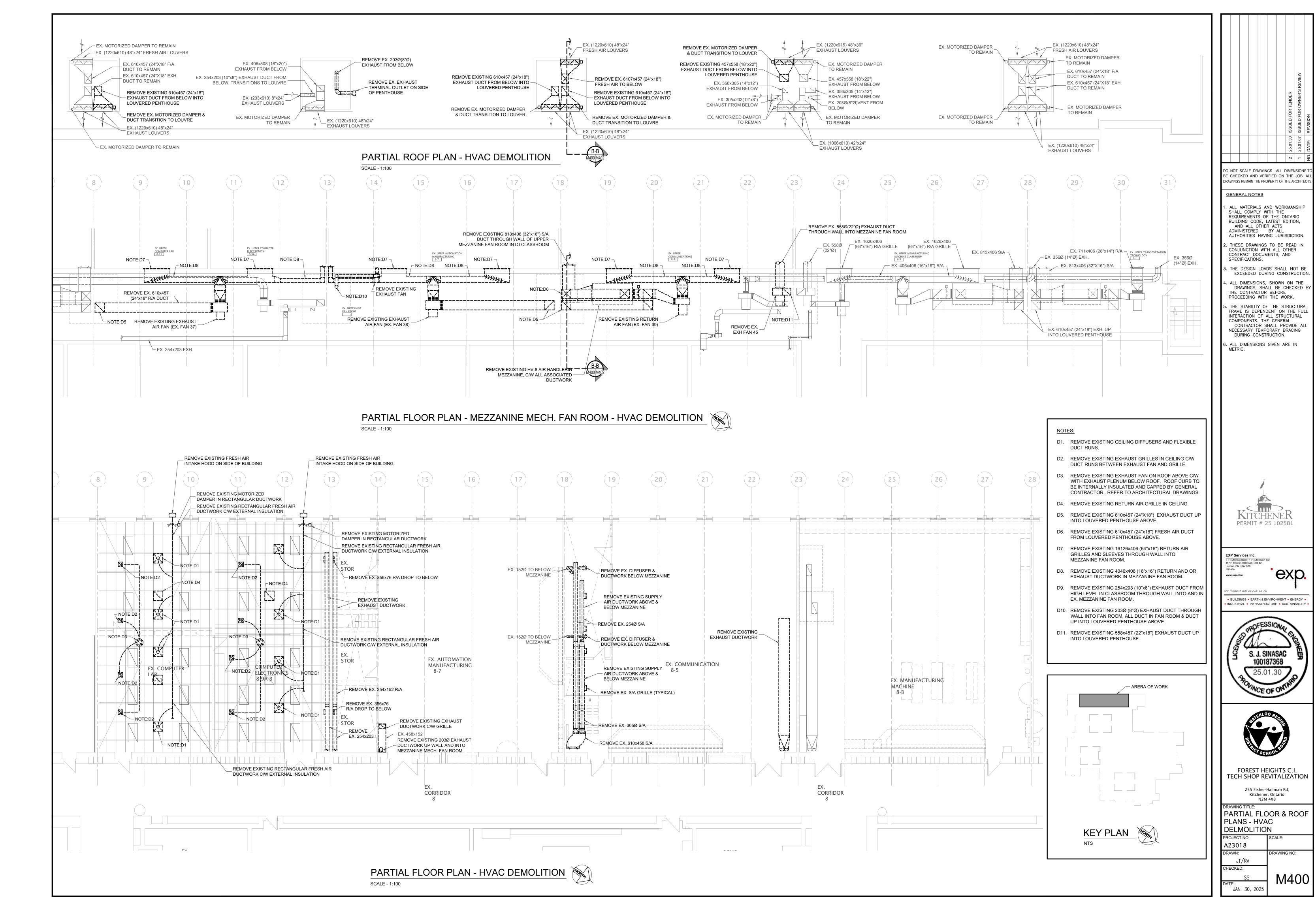
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION

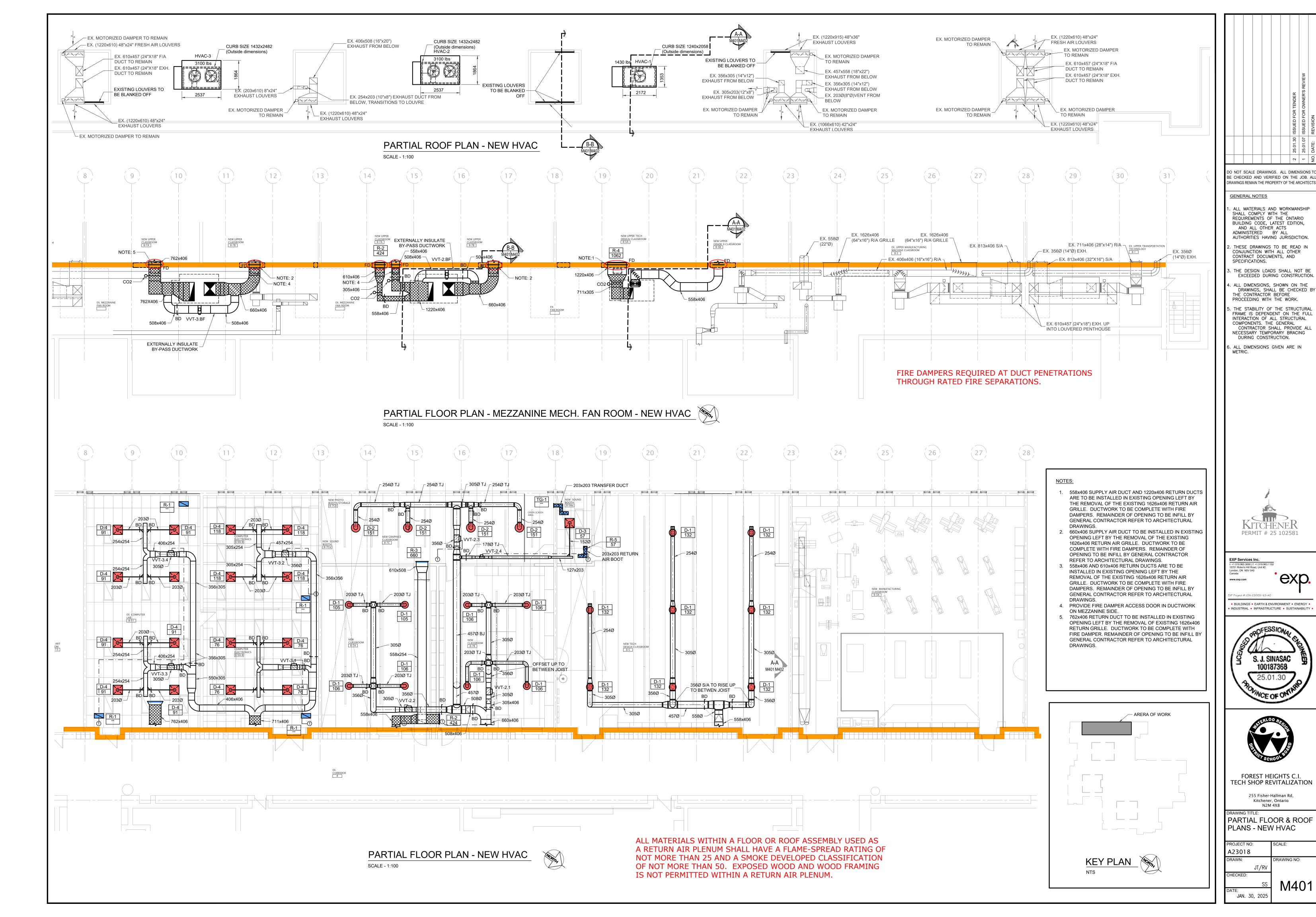
255 Fisher-Hallman Rd,

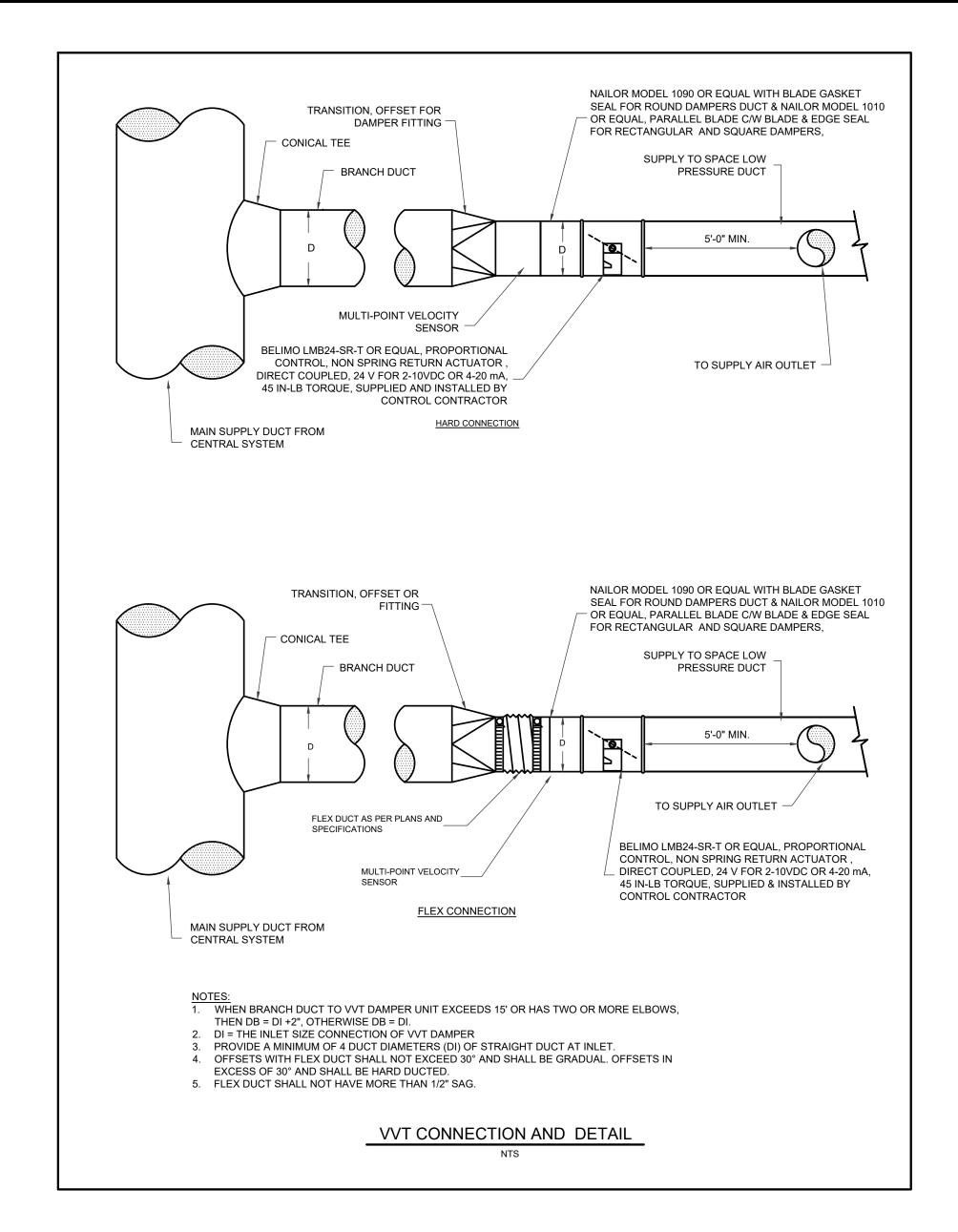
PARTIAL FLOOR PLAN -HEATING DEMOLITION

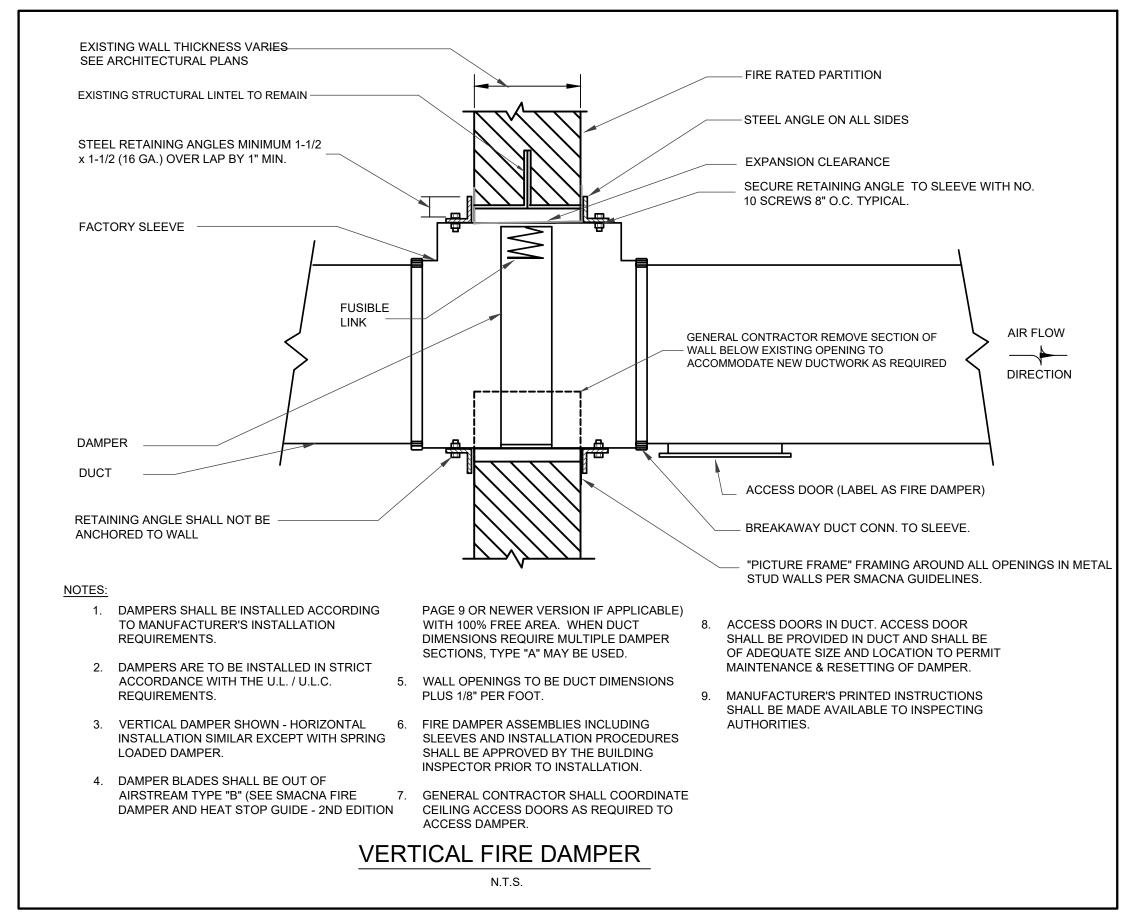
PROJECT NO:	SCALE:
A23018	
DRAWN:	DRAWING NO:
JT/RV	
CHECKED:	
SS	M30
DATE:	

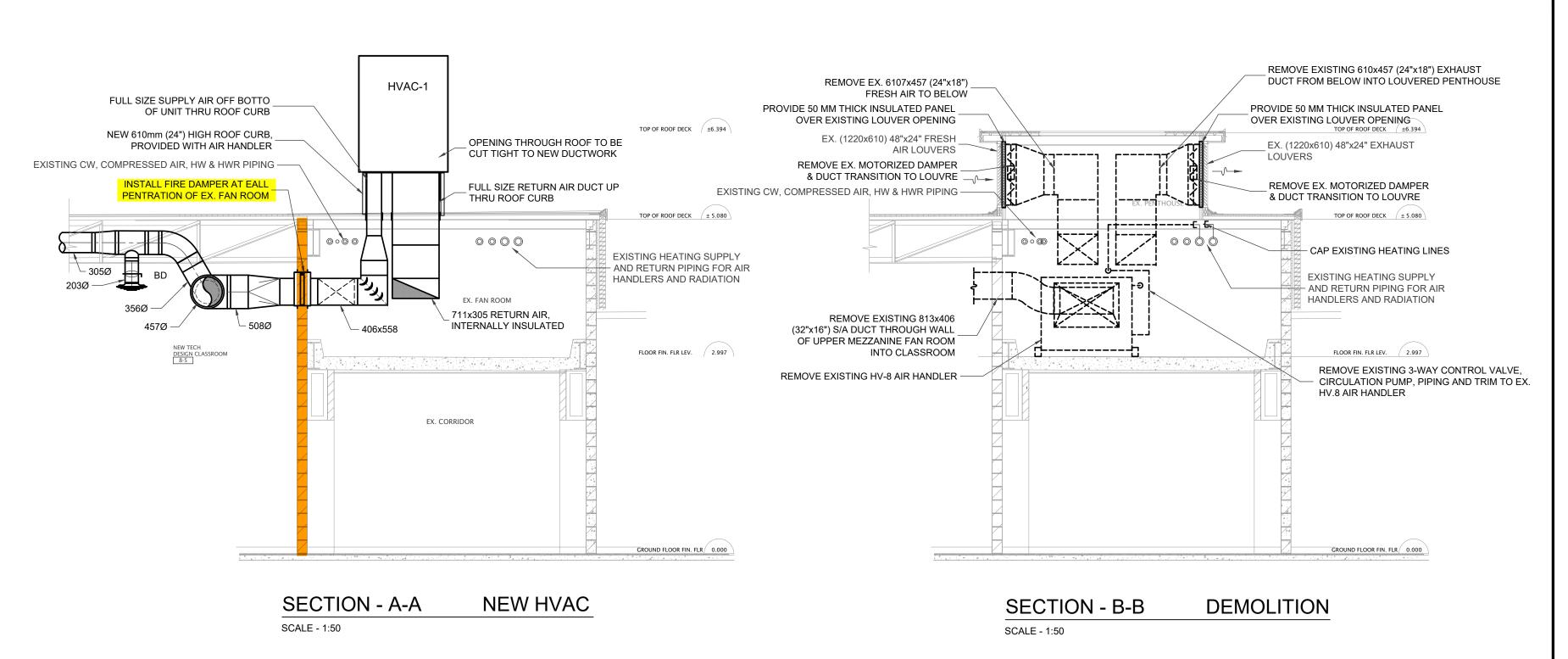


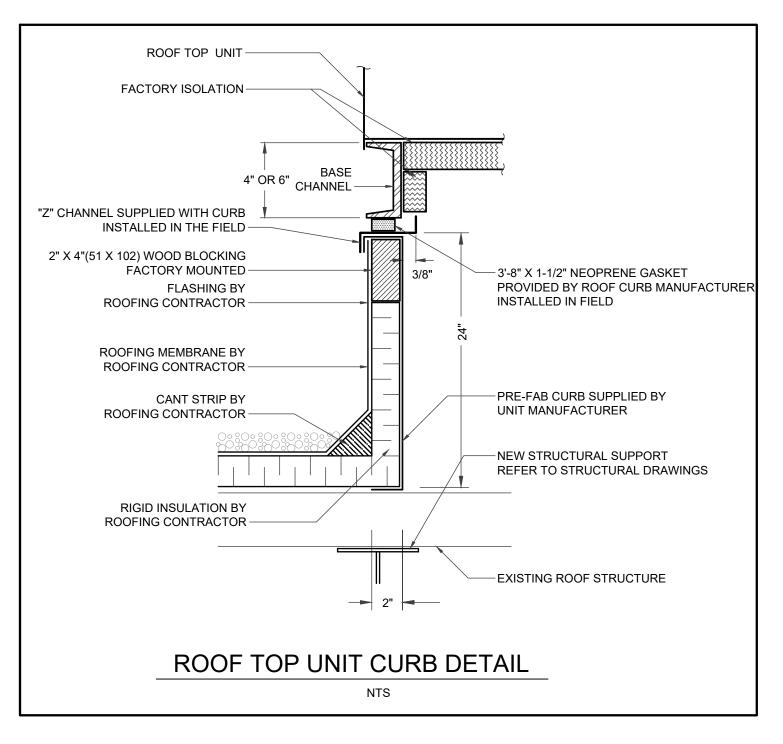


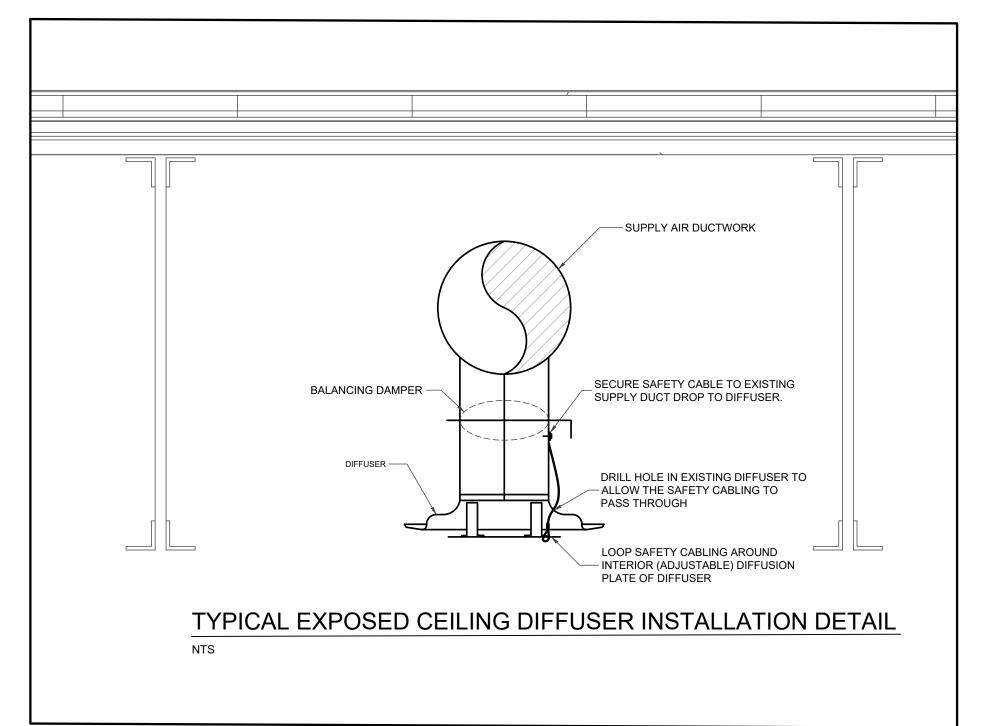


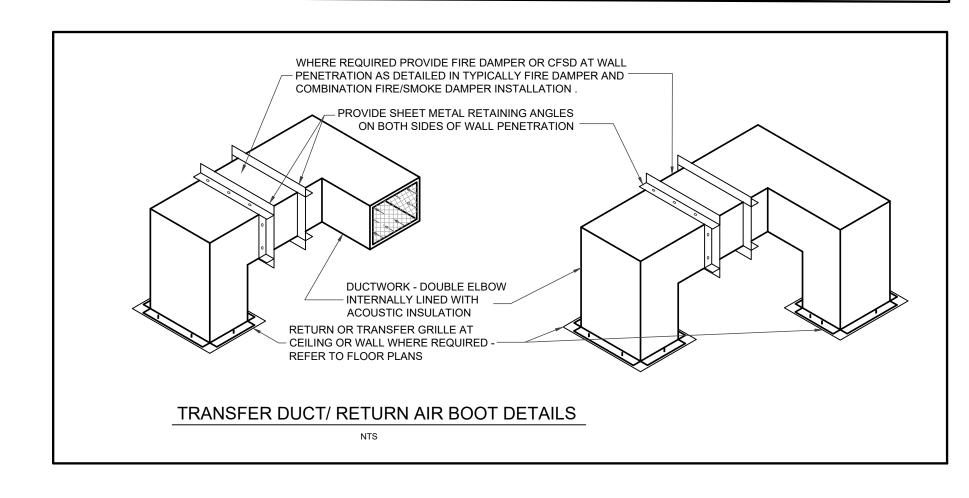














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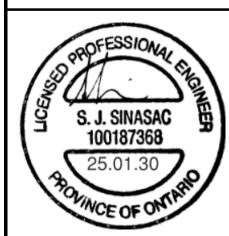
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DURING CONSTRUCTION.



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FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION

ECH SHOP REVITALIZAT

255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

SECTIONS & DETAILS
- NEW HVAC

PROJECT NO:	SCALE:
A23018	
DRAWN:	DRAWING NO:
JT/RV	
CHECKED:	
SS	M402
DATE: JAN. 30, 2025	

OR EC	UAL - TRANE, YOR	AIR HANDLING UNIT SCHEDULE																													
					SUPPLY FAN	١		MOTOR		RETURN FAN			MOTOR			COOLING COIL	_						GAS HEA	ΑT		ELECTRIC	AL	AHRI 210/24	40 STANDARD E	FFICIENCY	WEIGHT
UNIT NO.	MANUFACTURER	MODEL NO.	LOCATION	AIR FLOW [CFM (L/S)]	E.S.P. [IN.WG.(Pa)]	T.S.P. [IN.WG.(Pa)]	POWER [HP (KW)]	VOLTAGE	RPM AIR FLOW [CFM (L/S)]	E.S.P. [IN.WG.(Pa)]	T.S.P. [IN.WG.(Pa)]	POWER [HP (KW)]	VOLTAGE R		D. ENT. AIF Pa)] [DB/WB °F(LVG. AIR (C)] [DB/WB °F(°C)	ROWS F	PI SENSIBLE [BTUH (KW	TOTAL)] [BTUH (KW)]	REFRIGERANT TYPE	EAT DB °F (°C)	LAT LDB (°F)	INPUT BTUH (KWS)	OUTPUT BTUH (KWS)	TURNDOWN RATIO	VOLTAGE MCA	МОСР	EER	IEER (SEER2)	HSPF2	LBS (KMS)
HVAC-1	DAIKIN	DPSH05B	CLASSROOM 8-5	2250 (1062)	1.00 (249)	4.05 (1008)	3.0 (2.24)	208/3/60	ECM 2,250 (1,062)	0.50 (124.42)	1.00 (249)	1.7 (1.268)	208/3/60 E	O.30 (74.65	76.8/64.4) (24.9/18.0		4	50,096 (14.68)	59,415 (17.41)	R32	60.3 (15.7)	100.2 (37.9)	120,000 (35.16)	97,200 (28.48)	5:1	208/3/60 42.7	60	12.3	(19.5)	7.9	1,430 (648)
HVAC-2	DAIKIN	DPSH10B	CLASSROOMS 8-7A, 8-7B 8-7C & BOOTH 8-5Aa	3,200 (1,510)	1.00 (249)	3.67 (913)	4.3 (3.21)	208/3/60	ECM 3,200 (1,510)	0.75 (186.63)	1.25 (311.05)	3.0 (2.24)	208/3/60 E	O.33 (82.11	75.8/63.0 (24.3/17.2	48.6/48.6) (9.2/9.2)	4	91,670 (26.86)	118,527 (34.72)	R32	65.4 (18.5)	112.1 (44.5)	200,000 (58.6)	162,000 (47.47)	10:1	208/3/60 76.3	3 110	11.5	19.0	N/A	3,104 (1,408)
HVAC-3	DAIKIN	DPSH10B	ELECTRONICS 8-9A & B, COMPUTERS 8-11	3,200 (1,510)	1.00 (249)	3.67 (913)	4.3 (3.21)	208/3/60	ECM 3,200 (1,510)	0.75 (186.63)	1.25 (311.05)	3.0 (2.24)	208/3/60 E	O.33 (82.11	75.5/62.6) (24.1/17.0		4	91,858 (26.91)	117,735 (34.49)	R32	67.5 (19.7)	114.1 (45.6)	200,000 (58.6)	162,000 (47.47)	10:1	208/3/60 76.3	3 110	11.5	19.0	N/A	3,104 (1,408)

	AIR HANDLING UNIT SCHEDULE CONTINUED															
	OUTDOOR	AIR FLOW				Е	NERGY RECOVERY (EN	ΓHALPY WHEEL)				HEAT PUMP				
UNIT NO.	MINIMUM CFM (L/S)	DESIGN CFM (L/S)	TYPE	ENT. S/A (O/A) DB/WB °F (°C)	LVG. S/A DB/WB °F (°C)	ENT. R/A DB/WB °F (°C)	MIXED AIR DB/WB °F (°C)	ENERGY RECOVERED BTUH (KWS)		S/A P.D. IN.WG.(Pa)	E/A P.D. IN.WG.(Pa)	EAT DB °F (°C)	LAT DB °F (°C)	TOTAL CAPACITY BTUH (KWS)	AMBIENT DB °F (°C)	
HVAC-1	450	1000	WINTER	-4.0 / -5.0 (-20.0 /-20.5)	48.9 / 39.7 (9.39 / 4.28)	70.0 /53.0 (21.1 / 11.7)	60.3 / 47.5 (15.7 / 8.61)	67,437 (19.76)	69.0	0.37	0.37			N/A	47 (8.3)	
HVAC-1	(212)	(472)	SUMMER	90.0 / 75.0 (32.2 / 23.8)	79.0 / 66.7 (26.1 / 19.3)	75.0 /62.5 (23.8 / 16.9)	76.8 / 64.4 (24.9 / 18.0)	30,327 (8.89)	70.0	(92.07)	(92.07)	60.3 (15.7)	81.7 (27.6)	52,572 (15.4)	41 (5.0)	
HVAC-2	400	1220	WINTER	-4.0 / -5.0 (-20.0 /-20.5)	58.0 / 46.0 (14.4 / 7.77)	70.0 /53.0 (21.1 / 11.7)	65.4 / 50.4 (18.6 /10.2)	100,766 (29.5)	82.0	0.05	0.05			109,719 (32.15)	47 (8.3)	
HVAC-2	(189)	(576)	SUMMER	90.0 / 75.0 (32.2 / 23.8)	77.2 / 64.6 (25.1 / 18.1)	75.0 /62.5 (23.8 / 16.9)	75.8 / 63.0 (24.3 / 17.2)	45,957 (13.46)	80.0	(12.44)	(12.44)	65.4 (18.5)	95.1 (35.05)	102,429 (30.01)	41 (5.0)	
HVAC-3	410	875	WINTER	-4.0 / -5.0 (-20.0 /-20.5)	60.7 / 47.5 (15.9 / 8.61)	70.0 /53.0 (21.1 / 11.7)	67.5 / 51.6 (19.7 / 10.9)	74,831 (21.93)	84.0	0.03	0.03			109,719 (32.15)	47 (8.3)	
HVAC-3	(194)	(413)	SUMMER	90.0 / 75.0 (32.2 / 23.8)	76.7 /64.2 (24.4 / 17.8)	75.0 /62.5 (23.8 / 16.9)	75.5 / 62.6 (24.1 / 17.0)	34,079 (9.98)	82.0	(7.46)	(7.46)	67.5 (19.7)	97.2 (36.2)	102,568 (30.05)	41 (5.0)	

CONFINED CEILING SPACE

DIFFUSER & DUCT CONNECTION

OR EQUAL	R EQUAL - ENGINEERED AIR, BEACON MORRIS, ZEHNDER-RITTLING AND TRANE RADIANT WALL FIN SCHEDULE													
UNIT TYPE	LOCATION	MANUFACTURER	MODEL NO.	OUTPUT BTU/HR/F (KWS/M)	USGPM PER FT (LPM/M)	E.W.T. [°F (°C)]	L.W.T. [°F (°C)]	ROWS	LENGTH IN.(mm)	HEIGHT IN.(mm)	WIDTH	REMARKS		
1	REFER TO FLOOR PLANS	SIGMA CORPORATION	SWE-24S-44C075	1670 (1.60)	0.168 (2.04)	180 (82.2)	160 (71.1)	2	REFER TO FLOOR PLANS	24" (610)	5.25" (133)	SLOPE TOP WALL FIN W/ 2 ROWS OF 19 mm (3/4") COPPER TUBE, 101mmx101mm (4"x4") ALUMINUM FINS, 144 FINS/METER (44 FINS/FOOT)		
2	REFER TO FLOOR PLANS	SIGMA CORPORATION	SWE-24S-44C125	1355 (1.30)	0.135 (1.68)	180 (82.2)	160 (71.1)	1	REFER TO FLOOR PLANS	24" (610)	5.25" (133)	SLOPE TOP WALL FIN W/ 32 mm (1 1/4") COPPER TUBE, 101mmx101mm (4"x4") ALUMINUM FIN, 144 FINS/METER (44 FINS/FOOT)		

3" TO 4" - HORIZONTAL

NOTE: THE SUPPORT SPACING SHALL COMPLY WITH THIS TABLE AND ADDITIONAL

ELEVATION AND CHANGE IN DIRECTION

 $\mathsf{CLAMP} \, {oldsymbol{ o}}$

GAS LINE SUPPORT DETAIL

REFER TO SPECIFICATION FOR DETAILS

ON RADIATION VALVES.

SUPPORT SHALL BE PROVIDED FOR EVERY THREADED FITTING, CHANGE IN

GAS LINE -

QUICK BLOCK GAS LINE

SUPPORT

PAVING STONE

-STYROFOAM

ROOF MEMBRANE

					D-3 CFM	0 - 160 (0 -76)	6"Ø / 24" x 24" (152Ø / 610 x 610)	6"Ø/24"x24"/SCD/31/3C/B12	FIXED SQ WHITE ST	UARE CONE, T-BAR M TEEL	OUNT, 3 CONES,	
					D-4 CFM	160 - 315 (76 -149)	8"Ø / 24" x 24" (203Ø / 610 x 610)	8"Ø/24"x24"/SCD/31/3C/B12	FIXED SQ WHITE ST	UARE CONE, T-BAR M	OUNT, 3 CONES,	
LOSURE												
HEIGHT IN.(mm)	WIDTH IN.(mm)		REMARKS		R-1 CFM	VARIES	24" x 12" (610 x 305)	24"x12"/80/TB/B12		TE FACE RETURN Y-IN, WHITE		
24" (610)	5.25" (133)	SLOPE TOP WALL FIN W/ 2 F ALUMINUM FINS, 144 FINS/M	ROWS OF 19 mm (3/4") COPPER TUBE, 101mmx101mm IETER (44 FINS/FOOT)	(4"x4")	R-2 CFM	900 (424)	24" x 16" (610 x 406)	24"x16"/530/F/L/A/B12		ED RETURN GRILLE, 45 TERSINK SCREW HALE		
24" (610)	5.25" (133)	SLOPE TOP WALL FIN W/ 32 144 FINS/METER (44 FINS/FO	mm (1 1/4") COPPER TUBE, 101mmx101mm (4"x4") ALU DOT)	MINUM FIN,	R-3 CFM	1400 (660)	24" x 20" (610 x 508)	24"x20"/530/F/L/A/B12		ED RETURN GRILLE, 45 TERSINK SCREW HALE		
					R-4 CFM	2250 (1062)	48" x 16" (1220 x 406)	48"x16"/530/F/L/A/B12		ED RETURN GRILLE, 45 TERSINK SCREW HALE	•	
					R-5 CFM	VARIES	8" x 8" (203 x 203)	8"x8"/80/F/A/B12		TE FACE RETURN RDER W/ COUNTERSIN	IK SCREW HOLES, WH	ITE
					TG-1 CFM	VARIES	8" x 8" (203 x 203)	8"x8"/530/F/L/A/B12		ED RETURN GRILLE, 45 TERSINK SCREW HALE	,	-
					* MANUFACTUF	RER: E.H. PRICE						
		PIPING SUPPO	RT SPACING				•	V.V.T. CONTRO	L DAM	PER SCHE	DULE	
1/2" 3/4'	' TO 1" - HO	- HORIZONTAL ORIZONTAL	MAXIMUM SPACING OF SUPPORTS ft(m) 6 (2) 8 (2.5)			VVT#	SERVING	M	ODEL	INLET DIA. INCH (mm)	RANGE CFM (L/S)	DESIG
	4" TO 2-1/2	2" - HORIZONTAL RIZONTAI	10 (3) 15 (5)			2.1	NEW CLASSBOOM 9.7B	NAIL	OP 1000	12" (205)	630 050 (207 449)	000 (

AIR FLOW

RANGE

[CFM (L/S)]

140 - 280

(66 - 132)

280 - 435

(132 - 205)

SYMBOL

	V.V.T. CO	NTROL DAMI	PER SCHED	ULE	
VVT#	SERVING	MODEL	INLET DIA. INCH (mm)	RANGE CFM (L/S)	DESIGN CFM (L/S)
2.1	NEW CLASSROOM 8-7B	NAILOR 1090	12" (305)	630-950 (297-448)	900 (424)
2.2	NEW CLASSROOM 8-7A	NAILOR 1090	12" (305)	630-950 (297-448)	900 (424)
2.3	NEW GRAPHICS CLASSROOM 8-7C	NAILOR 1090	14" (356)	1125- 1575 (530-743)	1280 (604)
2.4	NEW CLASSROOM 8-7A	NAILOR 1090	6" (150)	160-240 (76-113)	120 (57)
2.BP	BY-PASS	NAILOR 1010	20"x18" (508x457)	1125- 1575 (530-743)	
3.1	COMPUTER ELECTRONICS 8-9A	NAILOR 1090	12" (305)	630-950 (297-448)	640 (302)
3.2	COMPUTER ELECTRONICS 8-9B	NAILOR 1090	14" (356)	850-1275 (401-601)	1000 (472)
3.3	EX. COMPUTER LAB 8-11	NAILOR 1090	12" (305)	630-950 (297-448)	775 (365)
3.4	EX. COMPUTER LAB 8-11	NAILOR 1090	12" (305)	630-950 (297-448)	775 (365)
3.BP	BY-PASS	NAILOR 1010	20"x18" (508x457)	1125- 1575 (530-743)	

LOUVER, GRILLE AND DIFFUSER SCHEDULE

MODEL NUMBER

8"Ø/RCDA/B12

10"Ø/RCDA/B12

DESCRIPTION

WHITE STEEL,

WHITE STEEL,

FULLY ADJUSTABLE ROUND CONE, 4 CONES,

FULLY ADJUSTABLE ROUND CONE, 4 CONES,

NECK SIZE/

FACE SIZE

[INCH. (MM)]

8"Ø / 18"Ø

(203Ø / 457Ø)

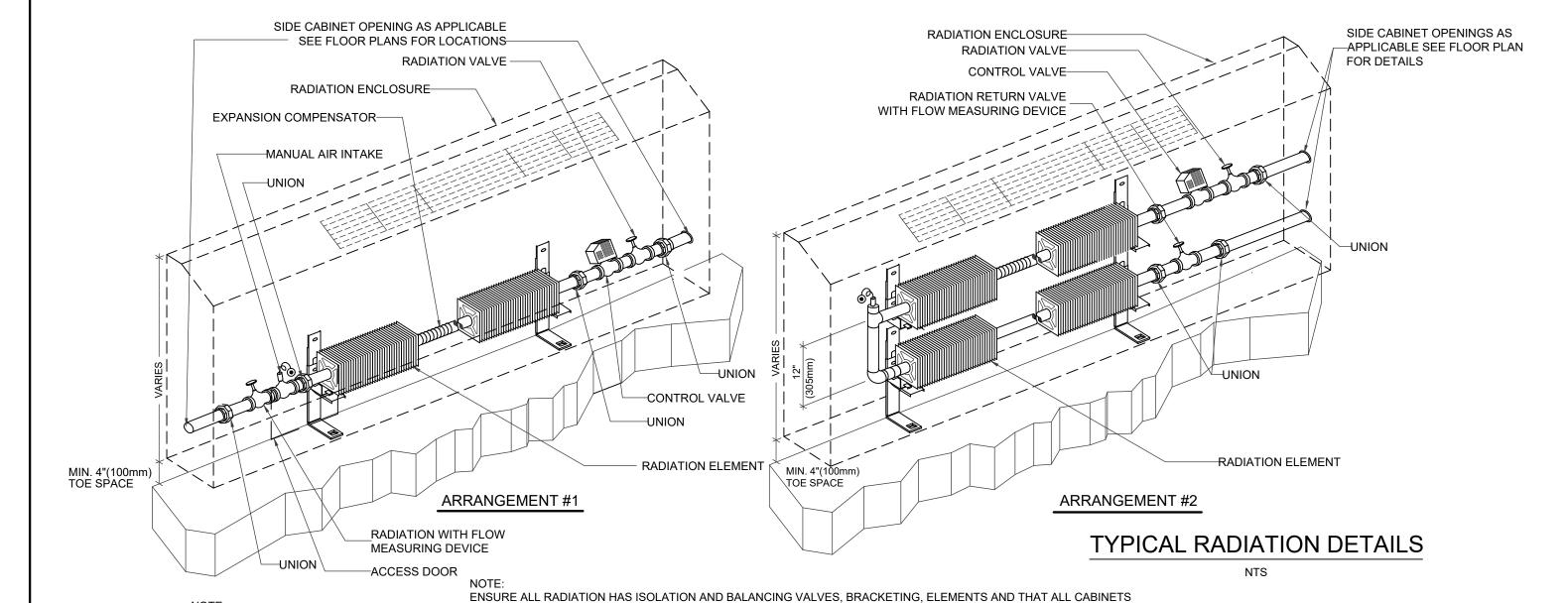
10"Ø / 22.5"Ø

(254Ø / 572Ø)

ROOF/FLOOR STRUCTURE 1"(25mm) WIDE BAND AS PER SMACNA	ROOF/FLOOR STRUCTURE 1"(25mm) WIDE BAND AS PER SMACNA
FLEXIBLE DUCT CONNECTION, MAX. 3' EQUAL TO THERMAFLEX S-TL NOTE: 1 ALL SUPPLY AIR DIFFUSERS TO BE PROVIDED WITH E.H. PRICE MODEL VCR-7 RADIAL OPPOSED BLADE DAMPER DIFFUSER TO BE BALANCED SO THAT AIR LEAVES ALL SIDES EQUALLY	NOTE: 1 *(Eugon) ALL SUPPLY AIR DIFFUSERS TO BE PROVIDED WITH E.H. PRICE MODEL VCR-7 RADIAL OPPOSED BLADE DAMPER DIFFUSER TO BE BALANCED SO THAT AIR LEAVES ALL SIDES EQUALLY
NOTES: 1. MINIMUM DIMENSION REQUIRED, NOT CANNOT BE INSTALLED DUE TO REDU OTHER OBSTRUCTIONS CONTRACTOR DETAILED IN CONFINED CEILING SPACE TYPICAL DIFFUSER &	ICED CEILING SPACE AND/OR R TO INSTALL DIFFUSERS AS
DUCT CONNECTION W/ FLEXIBLE DUCT NTS	TYPICAL DIFFUSER & DUCT CONNECTION NTS
T"(25mm) WIDE BAND AS PER SMACNA (TYPICAL)	
FLEXIBLE DUCT CONNECTION, MAX. 3' EQUAL TO THERMAFLEX S-TL	ROOF/FLOOR STRUCTURE 1"(25mm) WIDE BAND AS PER SMACNA
DIFFUSER TO BE BALANCED SO THAT AIR LEAVES ALL SIDES EQUALLY ALL SUPPLY AIR DIFFUSERS TO BE PROVIDED WITH E.H. PRICE MODEL VCR-7 RADIAL OPPOSED BLADE DAMPER.	DIFFUSER TO BE BALANCED SO THAT AIR LEAVES ALL SIDES EQUALLY ALL SUPPLY AIR DIFFUSERS TO BE PROVIDED WITH E.H. PRICE MODEL VCR-7 RADIAL OPPOSED BLADE DAMPER.

CONFINED CEILING SPACE DIFFUSER

& DUCT CONNECTION W/ FLEXIBLE DUCT

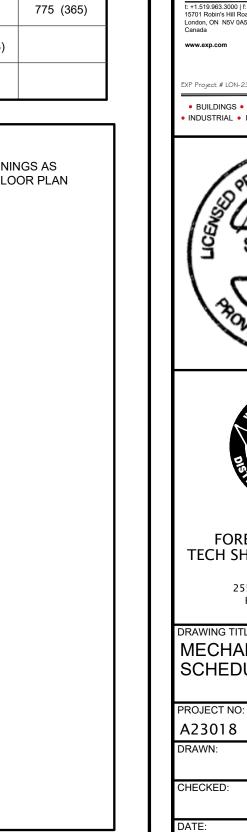


ARE OF SUFFICIENT SIZE TO CONCEAL ALL VALVES. ENSURE A MINIMUM OF 1 FLEXIBLE CONNECTION FOR EVERY

ELEMENT AND A MINIMUM OF 1 FLEXIBLE CONNECTION PER MAX. 8'-0" (2.4M) ELEMENT LENGTH. ALTHOUGH NOT

INDICATED PROVIDE DRAIN VALVE FOR EACH RADIATION C/W HOSE CONNECTION WITH CAP & CHAIN. PROVIDE

MINIMUM 24" SECTION OF REMOVAL ENCLOSURES FOR ACCESS TO VALVES AND TRIM.



2 25.01.30 ISSUED FOR TENDER
1 25.01.07 ISSUED FOR OWNER'S REVIEW
NO. DATE: REVISION

BE CHECKED AND VERIFIED ON THE JOB. ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECTS.

GENERAL NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, LATEST EDITION, AND ALL OTHER ACTS ADMINISTERED BY ALL AUTHORITIES HAVING JURISDICTION.
- 2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, AND SPECIFICATIONS.
- 3. THE DESIGN LOADS SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
 4. ALL DIMENSIONS, SHOWN ON THE DRAWINGS, SHALL BE CHECKED BY THE CONTRACTOR BEFORE

PROCEEDING WITH THE WORK.

- 5. THE STABILITY OF THE STRUCTURAL FRAME IS DEPENDENT ON THE FULL INTERACTION OF ALL STRUCTURAL COMPONENTS. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY BRACING
- DURING CONSTRUCTION.

 5. ALL DIMENSIONS GIVEN ARE IN



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'exp.

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FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION

255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

MECHANICAL SCHEDULES & DETAILS
PROJECT NO: SCALE:

	A23018
DRAWING NO:	DRAWN:
	JT/RV
	CHECKED:
M500	SS
IVIOC	DATE: JAN. 30, 2025

FOREST HEIGHTS COLLEGIATE INSTITUTE (TENDER #25-7636-RFT)

TECH SHOP REVITALIZATION & PARTIAL WINDOW REPLACEMENT

KITCHENER, ONTARIO

WRDSB PROJECT NO. A23018

EXP PROJECT NO. LON-24003082-A0

ELECTRICAL DRAWING LIST:

E000 ELECTRICAL TITLE SHEET

E100 PARTIAL FLOOR PLAN - DEMOLITION & NEW LIGHTING

E200 PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER
E201 PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER
E202 PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER

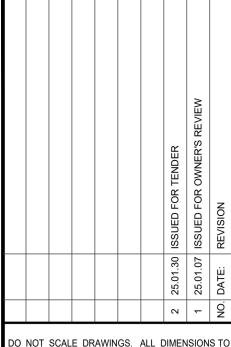
E300 ELECTRICAL RISER DIAGRAM

E301 ELECTRICAL SCHEDULES AND DETAILS

GENERAL NOTES:

- 1. ELECTRICAL DOCUMENTS ARE BASED ON AVAILABLE INFORMATION, AND SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, INTERIOR DESIGN, KITCHEN, MECHANICAL, ELEVATORS, AND LANDSCAPE CONSULTANT DOCUMENTS.
- 2. THE ROUTING OF SERVIES SHOWN ARE DIAGRAMMATIC TO SHOW DESIGN INTENT.
- 3. PROVIDE COMPLETE FIRE ALARM SYSTEM AS REQUIRED BY APPLICABLE CODES AND AUTHORITY HAVING JURISDICTION.
- 4. PROVIDE ELECTRICAL COORDINATION WITH MECHANICAL EQUIPMENT SELECTION AND LOCATION. REFER TO MECHANICAL EQUIPMENT SCHEDULES FOR DETAILS. PROVIDE CONNECTION TO VFD's, STARTERS, SWITCHES, AND CONTROL BASED ON MECHANICAL DOCUMENTS. VERIFY THE FINAL LOCATION OF MECHANICAL EQUIPMENT PRIOR INSTALLATION.
- 5. THE ELECTRICAL DRAWINGS INCLUDE INDICATIVE LAYOUTS FOR SMALL POWER AND SYSTEM DEVICES. THE FINAL LOCATION AND ELEVATION OF ALL ELECTRICAL AND SYSTEM DEVICES TO BE COORDINATED WITH INTERIOR DESIGNER'S/ARCHITECT PACKAGE.
- THE ELECTRICAL DRAWINGS INCLUDE LIGHTING LAYOUTS AND LIGHTNING CONTROL. FINAL LOCATION OF LIGHTING FIXTURES AND CONTROL DEVICES SHALL BE COORDINATED WITH ARCHITECT REFLECTED CEILING PLAN AND MECHANICAL LAYOUT.
- 7. REFER TO FF&E DOCUMENTS FOR ELECTRICAL AND SYSTEM REQUIREMENTS.
- 8. WIRELESS ACCESS POINTS (WAP) SHOWN HEREIN ARE ILLUSTRATIVE ONLY. FINAL QUANTITIES AND LAYOUTS SHALL ACCOUNT FOR ACTUAL FIELD CONDITIONS AND EQUIPMENT SELECTED. FULL COVERAGE IS REQUIRED.
- 9. DOOR HARDWARE SCHEDULE BY DOOR HARDWARE CONSULTANT. REFER TO ARCHITECTURAL FLOOR PLANS FOR DOOR HOLD OPEN DEVICE LOCATIONS AND OTHER DOOR HARDWARE INFORMATION.
- 10. CONTRACTOR SHALL IDENTIFY AND LABEL CLEARLY ALL CIRCUITS, WIRING, SERVICES, JUNCTION BOXES, PULL BOXES, DEVICES AND EQUIPMENT INSTALLED AND CONNECTED UNDER THE SCOPE OF WORK OF THIS PROJECT. IDENTIFICATION SHALL BE OF AS PER OWNER REQUIREMENTS AND ALL MARKING SHALL BE OF NON-ERASABLE LAMACOID TYPE. COORDINATE ALL LABELING WITH THE OWNER AND CONSULTANTS.
- 11. CONTRACTOR TO INCLUDE FOR PAYMENT OF REQUIRED PERMITS, FEE, LICENSE, CERTIFICATES OF INSPECTION ETC.. IF REQUIRED.
- 12. WIRING AND CABLES EXPOSED WITHIN THE CEILING SPACES SHALL CONFORM TO THE PLENUM REQUIREMENTS OF ONTARIO BUILDING CODE SENTENCE 3.6.4.3(1).
- 13. CABLE SIZES INDICATED ON DRAWINGS ARE THE MINIMUM SIZES AND SHALL BE INCREASED BASED ON ACTUAL ROUTING AND VOLTAGE DROP.
- 14. PROVIDE POWER AND DATA CONNECTIONS FOR ALL BAS PANELS REQUIRED ON PROJECT.
 COORDINATE WITH MECHANICAL CONTRACTOR AND BAS SUPPLIER FOR EXACT LOCATION AND
 REQUIREMENTS

		ELECTRIC	AL LEG	END	
SYMBOL	DESCRIPTION	MOUNTING / HEIGHT	SYMBOL	DESCRIPTION	MOUNTING / HEIGHT
LIGHTING			CONTROLS		
	2'-0" x 4'-0" LIGHT FIXTURE	CEILING	K	KEY PAD	900mm TO 1100mm AS PER OBC 3.8.1.5
	2'-0" x 2'-0" LIGHT FIXTURE	CEILING	C	DOOR CONTACT - SECURITY	T/O DOOR FRAME
	1'-0" x 4'-0" LIGHT FIXTURE	CEILING	ES	ELECTRICAL STRIKE	DOOR LATCH
	STRIP LIGHT FIXTURE	CEILING	CR	CARD READER	900mm TO 1100mm AS PER OBC 3.8.1.5
0	RECESSED DOWNLIGHT FIXTURE	CEILING	TC	TIME CLOCK	AS NOTED
0•	LIGHT FIXTURE	POLE AS NOTED		MOTION SENSOR - SECURITY	2440mm AFF
O [†]	LIGHT FIXTURE	WALL		PUSH BUTTON	AS NOTED
$\overline{\circ}$	TRACK LIGHTING	CEILING		SECURITY CAMERA	AS NOTED
 \$	1 POLE, LIGHT SWITCH	900mm TO 1100mm	(T)	THERMOSTAT	1200mm AFF
—— <u>±</u>	GANGED LIGHT SWITCHES	AS PER OBC 3.8.1.5 900mm TO 1100mm	\mathbb{H}	HUMIDISTAT	AS PER OBC 3.8.1.5 1200mm AFF
ш	DIMMER SWITCH	AS PER OBC 3.8.1.5 900mm TO 1100mm	(F)	FAN SPEED CONTROLLER	AS PER OBC 3.8.1.5 1200mm AFF
¥	347V SINGLE POLE SWITCH	AS PER OBC 3.8.1.5 900mm TO 1100mm		FLOW SWITCH	AS PER OBC 3.8.1.5 AS NOTED
		AS PER OBC 3.8.1.5 900mm TO 1100mm	 		
<u> </u>	LOW VOLTAGE SWITCH	AS PER OBC 3.8.1.5 WALL /	S	SUPERVISORY VALVE	AS NOTED
<u>M</u>	OCCUPANCY SENSOR - LIGHTING	3050mm AFF		END OF LINE RESISTOR	2286mm AFF
<u>M</u>	OCCUPANCY SENSOR - LIGHTING	CEILING	MD MD	MOTORIZED DAMPER	AS NOTED
$\stackrel{\mathbb{M}}{\rightarrow}$	OCCUPANCY SENSOR - LIGHTING (AIMING AS NOTED)	WALL / 3050mm AFF		ELECTRIC HEATER	AS NOTED
$\stackrel{\text{(M)}}{\rightarrow}$	OCCUPANCY SENSOR - LIGHTING (AIMING AS NOTED)	CEILING	-11-	ELECTRIC HEAT TRACING (PIPE OR AREA)	AS NOTED
PC	PHOTO CELL	AS NOTED	FIRE ALARI	M	
EMERGEN	CY LIGHTING			FIRE ALARM MANUAL PULL STATION	1200mm AFF AS PER OBC 3.8.1.5
® ⊠	EMERGENCY BATTERY UNIT AND RECEPTACLE	2286mm AFF		FIRE ALARM SIGNAL APPLIANCE 6" OR 10" GONG	2300mm AFF TO TOP CAN/ULC-ULC-S524 - 5.4
44	REMOTE EMERGENCY LIGHTING HEADS	2286mm AFF	7	FIRE ALARM HORN/STROBE	2300mm AFF TO TOP CAN/ULC-ULC-S524 - 5.4
▼	REMOTE EMERGENCY LIGHTING HEAD	2286mm AFF		FIRE ALARM HORN/SPEAKER	2300mm AFF TO TOP CAN/ULC-ULC-S524 - 5.4
<u>-</u>	REMOTE EMERGENCY LIGHTING HEADS	CEILING		FIRE ALARM STROBE	2000mm AFF TO 2400mm
y	REMOTE EMERGENCY LIGHTING HEAD	CEILING	₩	SMOKE DETECTOR	CAN/ULC-ULC-S524 - 5.4 CEILING
	RECESSED EMERGENCY LIGHTING HEAD	CEILING	₩=	SMOKE DUCT DETECTOR	IN DUCT
		CEILING			
EXIT LIGHT		WALL OR	8	SMOKE ALARM	CEILING
EXIT	EXIT LIGHT FIXTURE	CEILING	Φ	HEAT DETECTOR 194° FIXED TEMPERATURE	CEILING
EXIT	EXIT RIGHT ARROW LIGHT FIXTURE	WALL OR CEILING	•	HEAT DETECTOR 135° RATE OF RISE	CEILING
EXIT	EXIT LEFT ARROW LIGHT FIXTURE	WALL OR CEILING	D	ELECTRO-MAGNETIC DOOR HOLD OPEN DEVICE	WALL OR FLOOR
EXIT	EXIT DUAL FACE RIGHT ARROW LIGHT FIXTURE	WALL OR CEILING	сомминіс	ATIONS	
EXIT	EXIT DUAL FACE LEFT ARROW LIGHT FIXTURE	WALL OR CEILING	Фу	TELEPHONE OUTLET (y INDICATES # OF OUTLETS AT THIS LOCATION)	457mm AFF
POWER		CELENTO	Д у	TELEPHONE OUTLET (y INDICATES # OF OUTLETS AT THIS LOCATION)	FLOOR
	ELECTRICAL LIGHTING OR POWER PANEL	1980 mmAFF	■×	DATA OUTLET	457mm AFF
	ELECTRICAL EQUIPMENT PANEL AS NOTED	TO TOP AS NOTED	■ ×	(x INDICATES # OF OUTLETS AT THIS LOCATION) DATA OUTLET	FLOOR
		-		(x INDICATES # OF OUTLETS AT THIS LOCATION) COMBINATION DATA AND TELEPHONE OUTLET	
<u> </u>	DUPLEX RECEPTACLE	457mm AFF OVER	⋈ x,y	(x = # OF DATA DROPS, y = # OF PHONE DROPS) COMBINATION DATA AND TELEPHONE OUTLET	457mm AFF
₩	SPLIT DUPLEX RECEPTACLE	COUNTER	 X ,y	(x = # OF DATA DROPS, y = # OF PHONE DROPS)	FLOOR
<u> </u>	GFI RECEPTACLE	457mm AFF	₩	TELEVISION (CABLE) OUTLET	457mm AFF
ф	DUPLEX RECEPTACLE	FLOOR	H	HDMI OUTLET	AS NOTED
\bigcirc	DIRECT CONNECTION TO AN ELECTRICAL DEVICE	AS NOTED	\$	SOUND SYSTEM SPEAKER OUTLET	CEILING
	DIRECT CONNECTION TO A DATA DEVICE	AS NOTED	ŀŜ₩	P/A SPEAKER C/W SWITCH	900mm TO 1100mm AS PER OBC 3.8.1.5
	QUAD-PLEX RECEPTACLE	457mm AFF	S	P/A HORN	2286mm AFF
	SWITCHED RECEPTACLE	AS NOTED		PROGRAM BELL	2286mm AFF
50A	RANGE OUTLET	104mm AFF	\bigcirc	SOUND SYSTEM VOLUME CONTROL	900mm TO 1100mm
₩ 30A	DRYER OUTLET	104mm AFF	<u>P</u>	NURSE CALL PATIENT STATION	AS PER OBC 3.8.1.5 900mm TO 1100mm
		-	L		AS PER OBC 3.8.1.5 900mm TO 1100mm
	HALF-SWITCHED DUPLEX RECEPTACLE	457mm AFF	▼ S	NURSE CALL CTAFF STATION CONSOLE	AS PER OBC 3.8.1.5
	DUPLEX RECEPTACLE	CEILING	▼ T	NURSE CALL STAFF STATION CONSOLE	- 000 TO 1100
0	JUNCTION BOX	AS NOTED	\ \\ \rightarrow \left\[\frac{\frac{1}{3}}{3} \]	NURSE CALL TUB/SHOWER STATION	900mm TO 1100mm AS PER OBC 3.8.1.5
Ф	CLOCK	2286mm AFF	N	NURSE CALL DOME LIGHT	AS NOTED
마	MOTOR DISCONNECT SWITCH	1524mm AFF	ABBREVIA	TIONS	
ď	COMBINATION MANUAL STARTER	1524mm AFF	AFF	ABOVE FINISHED FLOOR	
⊠ı	COMBINATION MAGNETIC STARTER	1524mm AFF	AFG	ABOVE FINISHED GRADE	
 	MAGNETIC STARTER	1524mm AFF	НОА	HAND OFF AUTO	
 	MANUAL MOTOR STARTER OR CONTACTOR	1524mm AFF	PL	PILOT LIGHT	
			1		
\sim	ELECTRICAL MOTOR OR MOTORIZED EQUIPMENT	_	HD	HAND DRYER	
	ELECTRICAL EQUIPMENT OR DEVICE AS NOTED	-	WG	WIRE GUARD	
\square	VFD	-	С	DENOTES MOUNTED ABOVE COUNTER	
\sim	CIRCUITING	-	m	DENOTES MOUNTED IN MILLWORK	
	CONDUIT	-	WM	WALL MOUNTED	
			WP	WEATHERPROOF	
LEGEND N	NOTES:		EM	DENOTES CONNECTED TO EMERGENCY SUPPLY	
	S IS A STANDARD LEGEND. ALL SYMBOLS MAY NOT NECE	ESSARILY BE USED	TL	TWIST LOCK	
	DRAWINGS.		RA	REVERSE ACTING	
	ANDARD MOUNTING HEIGHTS SHOWN ON LEGEND SHALL TED OTHERWISE. ALL TRADES TO COORDINATE THESE H	•	-		DINET
	TED OTHERWISE. ALL TRADES TO COORDINATE THESE F TALLATION	ILIUHI O PRIUK IU	FH	MANUAL PULL STATION MOUNTED IN FIRE HOSE CAI	SINE I
	R HEIGHTS THAT ARE NOT DICTATED THROUGH A CODE (MD	MOTORIZED DAMPER	
COC	ORDINATE WITH ARCHITECTURAL ELEVATIONS. WHERE A ICATED, COORDINATE WITH THE ARCHITECTURAL DRAW	A RANGE IS	E	EXISTING TO REMAIN	
	E SAME HEIGHT THROUGHOUT THE PROJECT.		R	EXISTING TO BE REMOVED	
			E/R	EXISTING TO BE RELOCATED	
			RP	REPLACE EXISTING HEAD END DEVICE WITH NEW	
			CLG	CEILING MOUNTED	



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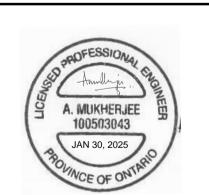
 6. ALL DIMENSIONS GIVEN ARE IN



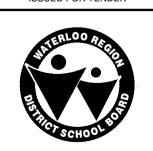
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FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION

255 Fisher-Hallman Rd,

Kitchener, Ontario N2M 4X8 /ING TITLE:

ELECTRICAL -TITLE SHEET

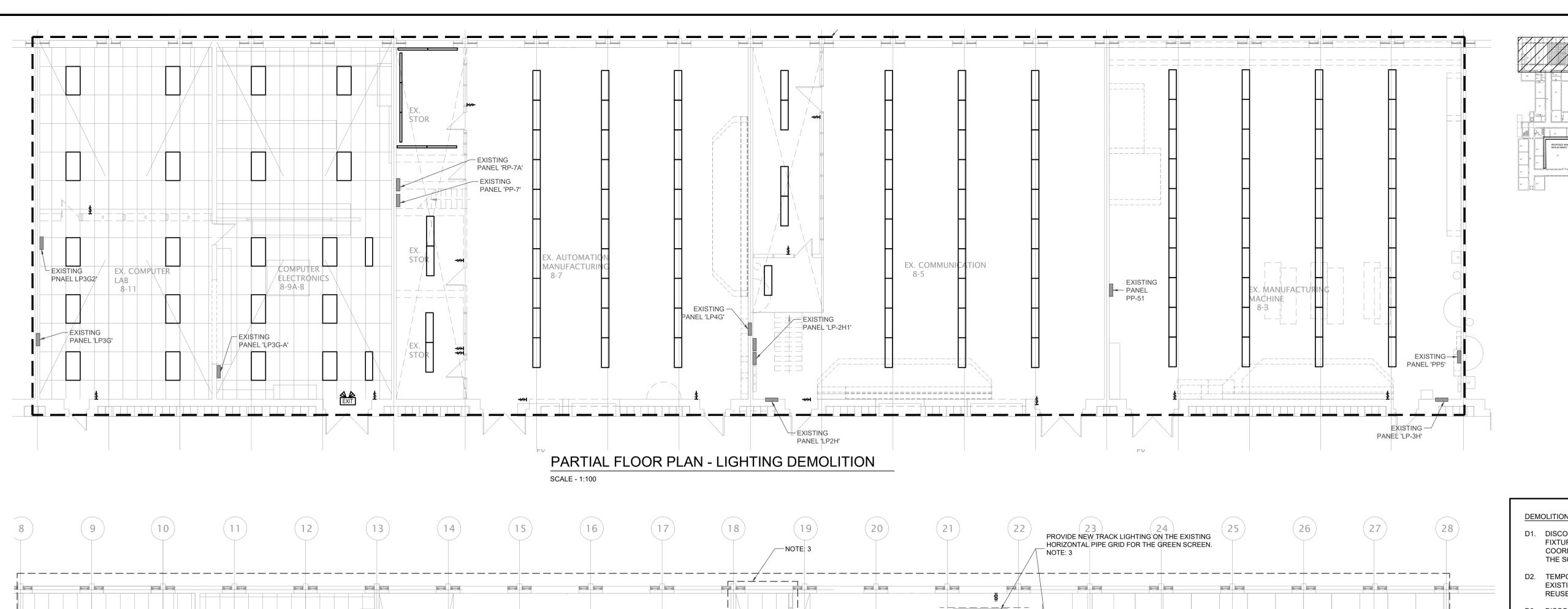
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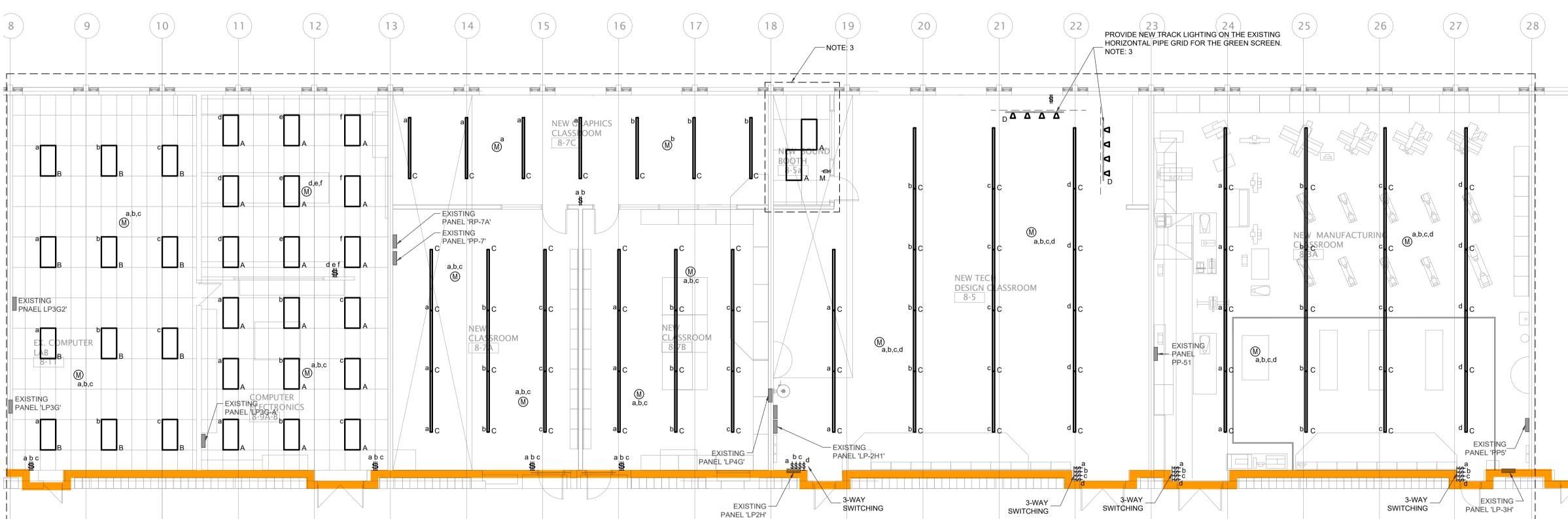
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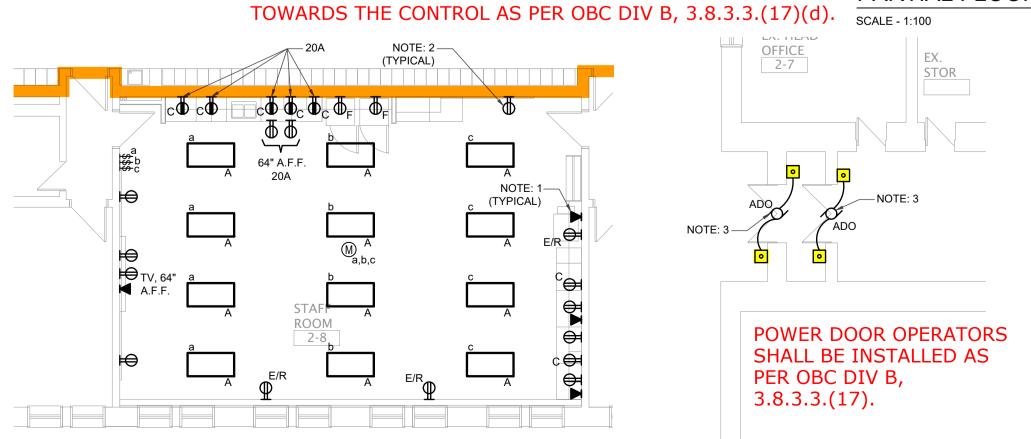
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POWER DOOR OPERATOR PUSH BUTTONS SHALL BE LOCATED NOT LESS THAN 600mm AND NOT MORE THAN 1500mm BEYOND THE DOOR SWING WHERE THE DOOR OPENS

PARTIAL FLOOR PLAN - NEW LIGHTING



EXIT #6 - ELECTRICAL LAYOUT

SCALE - 1:100

STAFF ROOM - ELECTRICAL LAYOUT

SCALE - 1:100

POWER & SYSTEMS GENERAL NOTES:

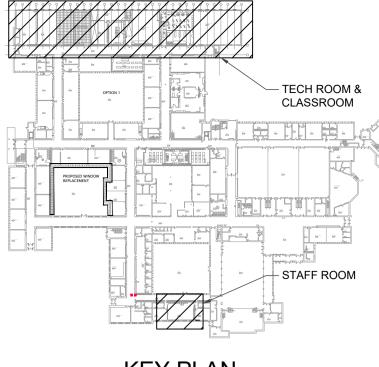
1. INSTALL NEW RECEPTACLES SURFACE MOUNTED ON THE EXISTING WALL. CONDUIT FOR RECEPTACLE CAN BE SURFACE MOUNTED ON THE CONCRETE BLOCK WALLS, UP TO THE CEILING SPACE WITHIN THE CLASSROOMS. OTHERWISE CONDUITS SHALL BE RUN CONCEALED IN THE WALL OR CEILING SPACE. COORDINATE EXACT REQUIREMENTS WITH THE OWNER AND ARCHITECT.

- NOTE: 1,2 & 4

POWER & SYSTEMS DRAWING NOTES

- 1. PROVIDE PATHWAY, OUTLET BOX AND ALL REQUIRED ACCESSORIES FOR THE NEW DATA OUTLETS. PROVIDE A 3/4" CONDUIT FROM OUTLET BOX UP TO THE CEILING SPACE. PROVIDE NEW J-HOOKS AND PROVIDE ADEQUATE SUPPORT FOR THE HORIZONTAL CABLING IN THE CEILING SPACE. J-HOOK SPACING SHALL BE A MAXIMUM OF 5'. DATA CABLING TO BE PROVIDED UNDER CASH ALLOWANCE. COORDINATE EXACT REQUIREMENTS WITH THE OWNER AND GC.
- PROVIDE POWER TO THE NEW RECEPTACLES FROM THE EXISTING LOCAL RECEPTACLES CIRCUITS IN THE EXISTING PANELS. PROVIDE 120V, 15A RATED, 1PH CIRCUITS TO THE NEW RECEPTACLES. A MAXIMUM OF FOUR RECEPTACLES SHALL BE ALLOWED FOR EACH CIRCUIT, PROVIDE NEW 120V. 15A, 1P BREAKERS AS REQUIRED. NEW BREAKER KAIC RATING TO MATCH THE EXISTING PANEL
- 3. PROVIDE 120V. 20A. 1P ELECTRICAL CIRCUIT FOR THE NEW DOOR OPERATOR FROM THE NEAREST PANEL. PROVIDE NEW 120V, 15A, 1P BREAKERS IN THE EXISTING PANEL. NEW BREAKER KAIC RATING TO MATCH THE EXISTING PANEL RATING.

LIGHTING FIXTURE SCHEDULE													
TYPE	DESCRIPTION	MOUNTING	INPUT WATTS	MANUFACTURER									
A	2'-0" x 4'-0" FLAT PANEL LED TROFFER WITH EXTRUDED ALUMINUM HOUSING, ACRYLIC DIFFUSER, FLAT OPAL LENS & 0-10V, 1% DIMMING - 5038LM - 3500K, 80 CRI - 120V	RECESSED	40W	LITHONIA #CPX 2 x 4 SERIES SIGNIFY #2SBP SERIES CURRENT LIGHTING #CBT24 SERIES COOPER #CGTX SERIES OR APPROVED EQUAL									
В	2'-0" x 4'-0" FLAT PANEL LED TROFFER WITH EXTRUDED ALUMINUM HOUSING, ACRYLIC DIFFUSER & FLAT OPAL LENS - 5873LM - 3500K, 80 CRI - 120V	RECESSED	44W	LITHONIA #CPX 2 x 4 SERIES SIGNIFY #2SBP SERIES CURRENT LIGHTING #CBT24 SERIES COOPER #CGTX SERIES OR APPROVED EQUAL									
С	2" x 8'-0" LED LENSED STRIP FIXTURE WITH STEEL HOUSING, FROSTED ACRYLIC DIFFUSER & WHITE BAKED ENAMEL FINISH - 7500LM - 3500K, 80 CRI - 120V	SUSPENDED AT 12' A.F.F.	60W	LITHONIA #TZL1D SERIES OR APPROVED EQUAL									
D	4'-0" LINEAR ARCHITECTURAL LED TRACK LIGHTING FIXTURE C/W PHASE DIMMING AND WIDE DISTRIBUTION - 3800LM/HEAD - 3500K, 80 CRI - 120V	WALL MOUNTED	43W	JUNO #T286L SERIES OR APPROVED EQUAL									



KEY PLAN SCALE - NTS

DEMOLITION NOTES:

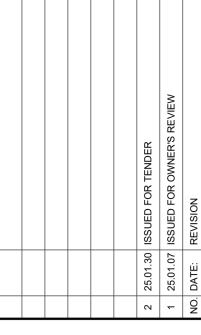
- D1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES AS SHOWN AND REMOVE FROM SITE. COORDINATE LIGHTING FIXTURE DISPOSAL WITH THE SCHOOL BOARD.
- D2. TEMPORARILY DISCONNECT AND MAINTAIN THE EXISTING LIGHTING BRANCH CIRCUIT WIRING FOR REUSE IN EACH AREA.
- D3. DISCONNECT AND REMOVE ALL LIGHT SWITCHING.

GENERAL NOTES:

- 1. PROVIDE NEW LED LIGHT FIXTURES IN LOCATIONS SHOWN ON THIS DRAWING. REFER TO LIGHT FIXTURE SCHEDULE FOR DETAILS.
- PROVIDE ALL THE REQUIRED ACCESSORIES, ADDITIONAL WIRING AND CONDUIT, BACK BOXES FOR A COMPLETE INSTALLATION OF LIGHTING FIXTURES. REFER TO THE LIGHTING FIXTURE SCHEDULE FOR MORE DETIALS.
- 3. COORDINATE ALL LIGHT FIXTURE LOCATIONS WITH NEW HVAC LAYOUT, OTHER TRADES AND ANY BULKHEADS. COORDINATE WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. PROVIDE DRY-WALL SURFACE, OR T-BAR MOUNTING KIT AS REQUIRED TO SUIT THE CEILING GAP AND MAINTAIN ADEQUATE CLEARANCE FOR FIXTURE VENTILATION.
- 4. ALL LIGHTING FIXTURES SHALL BE SUPPORTED BY APPROVED CHAINS WHICH SHALL ALLOW THE FIXTURES TO BE SUPPORTED INDEPENDENT OF THE CEILING SYSTEM.

DRAWING NOTES:

- 1. ELECTRICAL CONTRACTOR TO CONFIRM EXISTING LIGHTING VOLTAGE AND EXISTING CONTROL SYSTEM PRIOR TO STARTING ANY WORK. PROVIDE NEW LINE VOLTAGE CONTROLS, AND LIGHTING ZONING AS INDICATED ON THE DRAWINGS. CONFIRM LIGHTING ZONING WITH THE SCHOOL BOARD'S FACILITY MANAGEMENT TEAM PRIOR TO ANY INSTALLATIONS.
- 2. REUSE THE EXISTING LOCAL CIRCUITS IN THE AREA TO PROVIDE POWER TO THE NEW LIGHTING FIXTURES. MODIFY AND EXTEND THE EXISTING CIRCUITS AS REQUIRED TO SUIT THE NEW LIGHTING LAYOUT.
- 3. NEW LIGHTING REQUIRED FOR THE SOUND BOOTH AND GREEN SCREEN AREA SHALL BE CARRIED UNDER CASH ALLOWANCE. COORDINATE EXACT REQUIREMENTS WITH THE OWNER AND ARCHITECT. REFER TO DIVISION 1 SPECIFICATION REGARDING CASH ALLOWANCE.
- 4. EXISTING EMERGENCY LIGHTING AND EXIT SIGNAGE TO REMAIN.



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- 6. ALL DIMENSIONS GIVEN ARE IN

DURING CONSTRUCTION.



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FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION

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PARTIAL FLOOR PLAN DEMOLITION & NEW

A23018

JAN. 30, 2025

LIGHTING

E100

THE EXISTING PUBLIC ADDRESS SYSTEM CONTROL OUTLETS. PROVIDE A 3/4" CONDUIT FROM OUTLET CIRCUIT. PROVIDE NEW 120V, 15A, 1P BREAKERS AS **GENERAL NOTES:** CLASSROOMS, WASHROOMS, CORRIDORS, STORAGE **DEMOLITION NOTES** REQUIRED. NEW BREAKER KAIC RATING TO MATCH AND OFFICE AREAS SHALL BE TAMPER-RESISTANT PANEL. ANY WORK RELATED TO THE PA SYSTEM BOX UP TO THE CEILING SPACE. PROVIDE NEW FIRE ALARM DEVICES TO BE INSTALLED PER J-HOOKS AND PROVIDE ADEQUATE SUPPORT FOR AS PER OESC 26-706. SHALL BE UNDER CASH ALLOWANCE. REFER TO THE EXISTING PANEL RATING. D1. DISCONNECT AND REMOVE THE EXISTING CAN/ULC-S524, "INSTALLATION OF FIRE ALARM DIVISION 1 SPECIFICATIONS FOR MORE DETAILS. THE HORIZONTAL CABLING IN THE CEILING SPACE. POWER, SYSTEM DEVICES AND EQUIPMENT UNLESS 5. INSTALL NEW RECEPTACLES SURFACE MOUNTED ON 8. NEW ELECTRICAL AND SYSTEMS PROVISIONS SYSTEMS". J-HOOK SPACING SHALL BE A MAXIMUM OF 5'. DATA INDICATED OTHERWISE. CONFIRM THE EXTENT OF THE EXISTING WALL. CONDUIT FOR RECEPTACLE 3. PROVIDE 120V ELECTRICAL CONNECTIONS, CABLING TO BE PROVIDED UNDER CASH REQUIRED FOR THE SOUND BOOTH AND GREEN ELECTRICAL DEVICE DEMOLITION WITH THE 2. PROVIDE FIRE ALARM VERIFICATION FOR ALL NEW CAN BE SURFACE MOUNTED ON THE CONCRETE RACEWAY, JUNCTION BOXES AND ALL REQUIRED ALLOWANCE. COORDINATE EXACT REQUIREMENTS SCREEN AREA SHALL BE CARRIED UNDER CASH ARCHITECT AND OWNER PRIOR TO ANY WORK. OR EXISTING MODIFIED FIRE ALARM DEVICES. BLOCK WALLS, UP TO THE CEILING SPACE WITHIN ACCESSORIES FOR THE CONTROLS WIRING TO THE WITH THE OWNER AND GC. ALLOWANCE. COORDINATE EXACT REQUIREMENTS REMOVE ALL CONDUCTOR AND ACCESSIBLE VERIFICATION OF FIRE ALARM DEVICES IS TO BE THE CLASSROOMS. OTHERWISE CONDUITS SHALL BE MECHANICAL EQUIPMENT. WIRING TO BE PROVIDED WITH THE OWNER AND ARCHITECT. REFER TO CONDUIT ALL THE WAY BACK TO THE SOURCE. BY CONTROLS CONTRACTOR. COORDINATE EXACT PERFORMED PER CAN/ULC-S537, "VERIFICATION OF RUN CONCEALED IN THE WALL OR CEILING SPACE. PROVIDE A WALL MOUNTED, 2-CHANNEL, DIVISION 1 SPECIFICATION REGARDING CASH DISCONNECT CIRCUIT BREAKERS/SWITCHES FOR FIRE ALARM SYSTEMS." COORDINATE EXACT REQUIREMENTS WITH THE REQUIREMENTS WITH THE CONTROLS AND NON-METALLIC RACEWAY SYSTEM FOR THE NEW ALLOWANCE. REMOVED EQUIPMENT AND MARK AS "SPARE". POWER AND DATA PROVISIONS. PROVIDE NEW OWNER AND ARCHITECT. MECHANICAL TRADE CONTRACTORS. 3. CONTROLLED RECEPTACLES WITHIN THE RECEPTACLES AND DATA OUTLETS AS SHOWN, IN CLASSROOMS SHALL BE CONTROLLED THROUGH **DRAWING NOTES:** 4. RELOCATE THE EXISTING PA SPEAKERS AS SHOWN THE NEW WALL MOUNTED RACEWAY. RACEWAY LIGHTING OCCUPANCY SENSOR, CONTROLLED ON THE DRAWING. MODIFY AND EXTEND THE SHALL BE WIREMOLD 5500 SERIES OR APPROVED EQUAL. COORDINATE COLOUR AND FINISH WITH THE RECEPTACLES SHALL BE PERMANENTLY MARKED 1. PROVIDE NEW FIRE ALARM ZONES, CIRCUITS AND EXISTING WIRING AND ALL REQUIRED PROVISIONS RECEPTACLES FOR AUTOMATIC OUTLET CONTROL, ALL REQUIRED PROVISIONS FOR THE NEW OR TO THE RELOCATED DEVICES. ANY WORK RELATED ARCHITECT AND OWNER. LABELED "CONTROLLED". RECEPTACLES SHALL BE MODIFIED FIRE ALARM DEVICES FROM THE EXISTING TO THE PA SYSTEM SHALL BE UNDER CASH DECORA STYLE, GREEN IN COLOUR WITH BOTH FIRE ALARM CONTROL PANEL INDICATED ON THE ALLOWANCE. REFER TO DIVISION 1 SPECIFICATIONS PROVIDE POWER TO THE NEW RECEPTACLES FROM KEY PLAN. COORDINATE EXACT REQUIREMENTS THE EXISTING LOCAL RECEPTACLES CIRCUITS IN FACES CONTROLLED; HUBBELL #DR15C2GN OR FOR MORE DETAILS. APPROVED EQUAL. WITH THE SUPPLIER. THE EXISTING PANELS INDICATED IN EACH ROOM. PROVIDE PATHWAY, OUTLET BOX AND ALL PROVIDE 120V, 15A RATED, 1PH CIRCUITS TO THE 4. RECEPTACLES RATED 15A OR 20A AND LOCATED 2. PROVIDE NEW PA SPEAKERS, WIRING AND ALL REQUIRED ACCESSORIES FOR THE NEW DATA NEW RECEPTACLES. A MAXIMUM OF FOUR LOWER THAN 6'-6" FROM THE FINISHED FLOOR IN ALL RECEPTACLES SHALL BE ALLOWED FOR EACH REQUIRED PROVISIONS TO THE NEW DEVICES FROM **KEY PLAN** SCALE - NTS 13 25 26 24 28 REMOVE EXISTING MOTORIZED DAMPER IN RECTANGULAR DUCTWORK -FEEDS THROUGH FLOOR TO DESKS. Φ - FXISTING ٧W PANEL 'RP-7A' —DATA PROJECTOR PANEL 'PP-7' DATA-DATA — PROJECTOR **PROJECTOR** EX. AUTOMATION EX. COMMUNICATION MANUFACTURING PNAEL LP3G2 EX. MANUFACTURING EXISTING PANEL MACHINE ₩ EXISTING -PANEL 'LP-2H1' -EXISTING PANEL 'LP4G' PANEL/'LP3G' EX. EXISTING EXISTING⊥ PANEL 'LP3G-A' — EXISTING PANEL 'PP5' RELAY PANEL EXISTING PULL BOXES EXISTING EXHAUST — EXISTING -FAN CONTROL NOTE: D1-CONTACTOR PANEL FAN CONTROL PANEL 'LP2H' EXISTING EX. PANEL 'LP-3H' CORRIDOR CORRIDOR PARTIAL FLOOR PLAN - POWER DEMOLITION SCALE - 1:100 10 (12) (13) (22) (24) (26) (11) 14 18 (19) 20 21 23 25 (27) (28) (15) **A**0 **NEW GRAPHICS** NOTE: 5— CLASSROOM (TYPICAL) 8-7C NOTE: 7-(TYPICAL) • E/R **─**VVT-2.4 $\P \setminus \P$ VVT-3.4 ≖₩ AB. EXISTING NOTE: 8— Θ NEW MANUFACTURING PANEL 'RP-7A' (TYPICAL) CLASSROOM **NEW TECH** DESIGN CLASSROOM PANEL 'PP-7' 8-5 PROVIDE NEW CEILING-MOUNTED DEVICES FOR **PROJECTOR** NEW EXISTING -CLASSROOM PNAEL LP3G2' NOTE: 1 (TYPICAL) NOTE: 3 EXISTING -(TYPICAL) EXISTING -PANEL 'LP4G' VVT-3.3 PANEL 'LP3G' EXISTING COMPUTER - EXISTING PANEL 'PP5' NOTE: 4 -LECTRONICS PANEL 'LP-2H1' EXISTING PULL (TYPICAL) BOXES - EXISTING VVT-2.2 RELAY PANEL -EXISTING EXHAUST NOTE: 6 -- EXISTING NOTE: 1-EXISTING EXHAUST -EXISTING EXISTING -FAN CONTROL CONTACTOR PANEL (TYPICAL) FAN CONTROL PANEL 'LP2H' (TYPICAL) PANEL 'LP3G-A' EXISTING PANEL 'LP-3H' NO EAR PROTECTION AS THERE ARE NO STROBES AS PER OBC 3.2.4.20.(7)(B)(i). PARTIAL FLOOR PLAN - NEW POWER

- TECH ROOM & CLASSROOM | 2 | -

29

(29)

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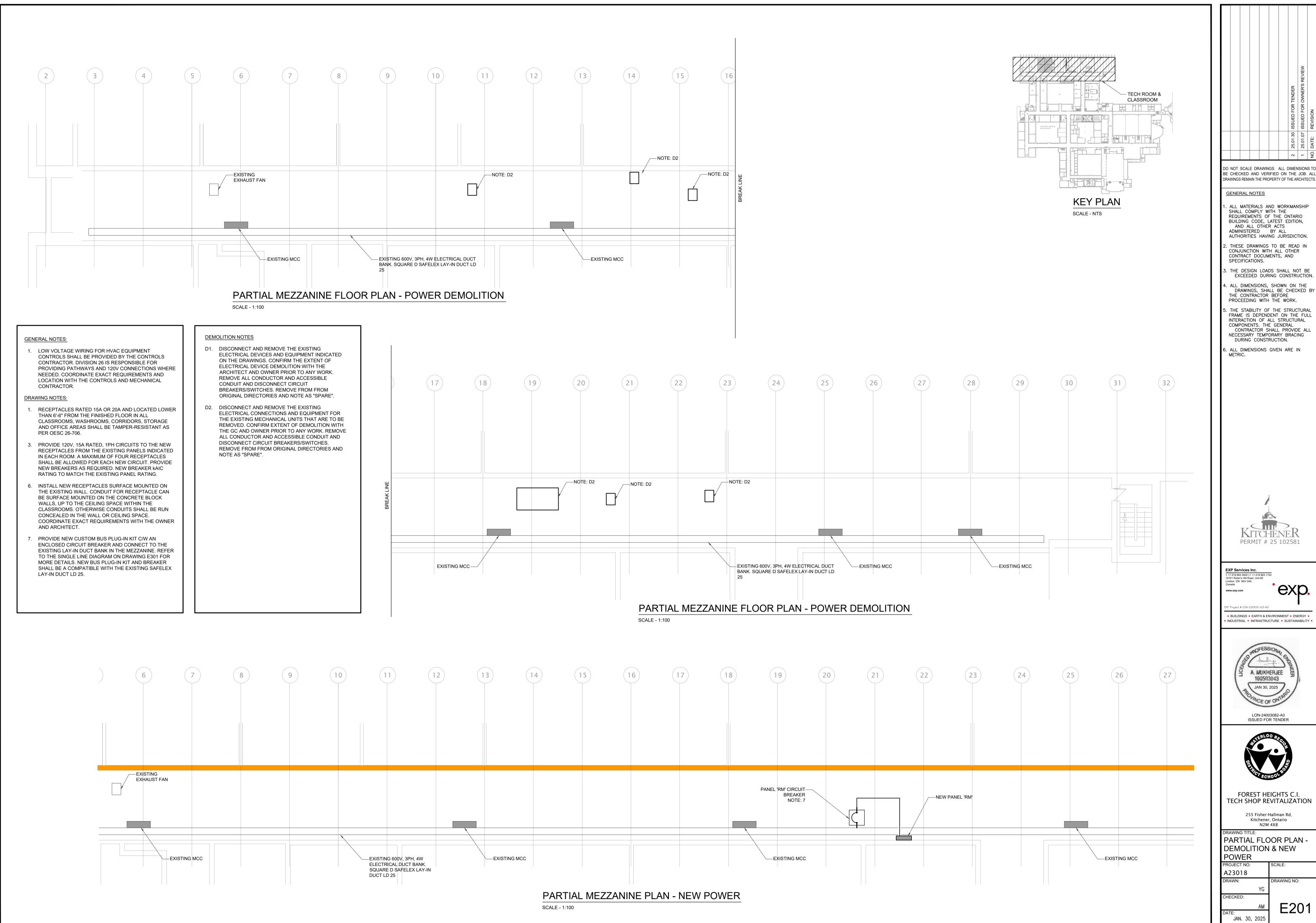
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PARTIAL FLOOR PLAN DEMOLITION & NEW

POWER A23018 E200

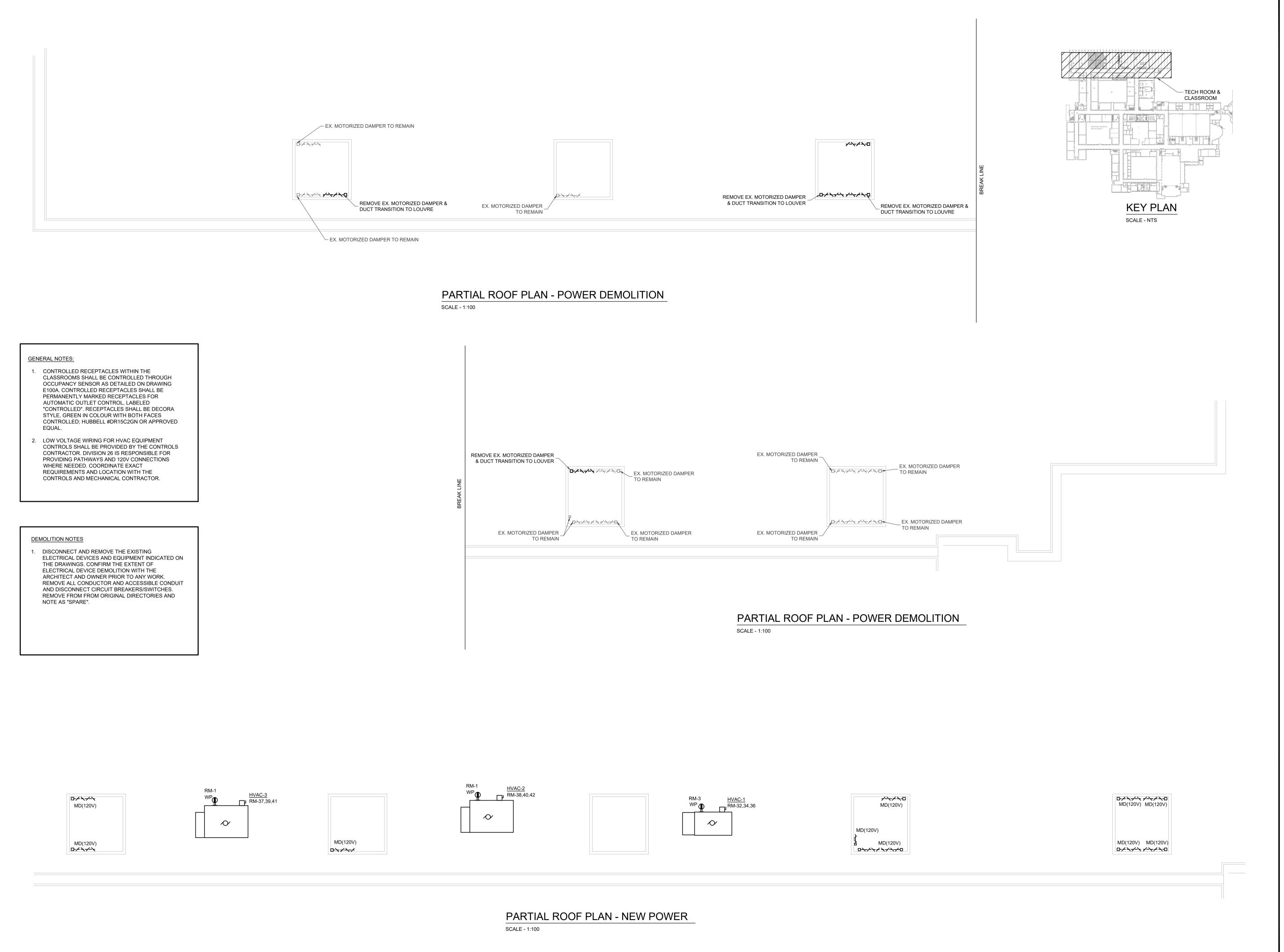
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SCALE - 1:100



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| 2 | - |



2 25.01.30 ISSUED FOR TENDER
1 25.01.07 ISSUED FOR OWNER'S REVIEW
NO. DATE: REVISION

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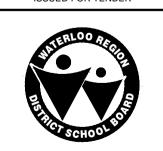
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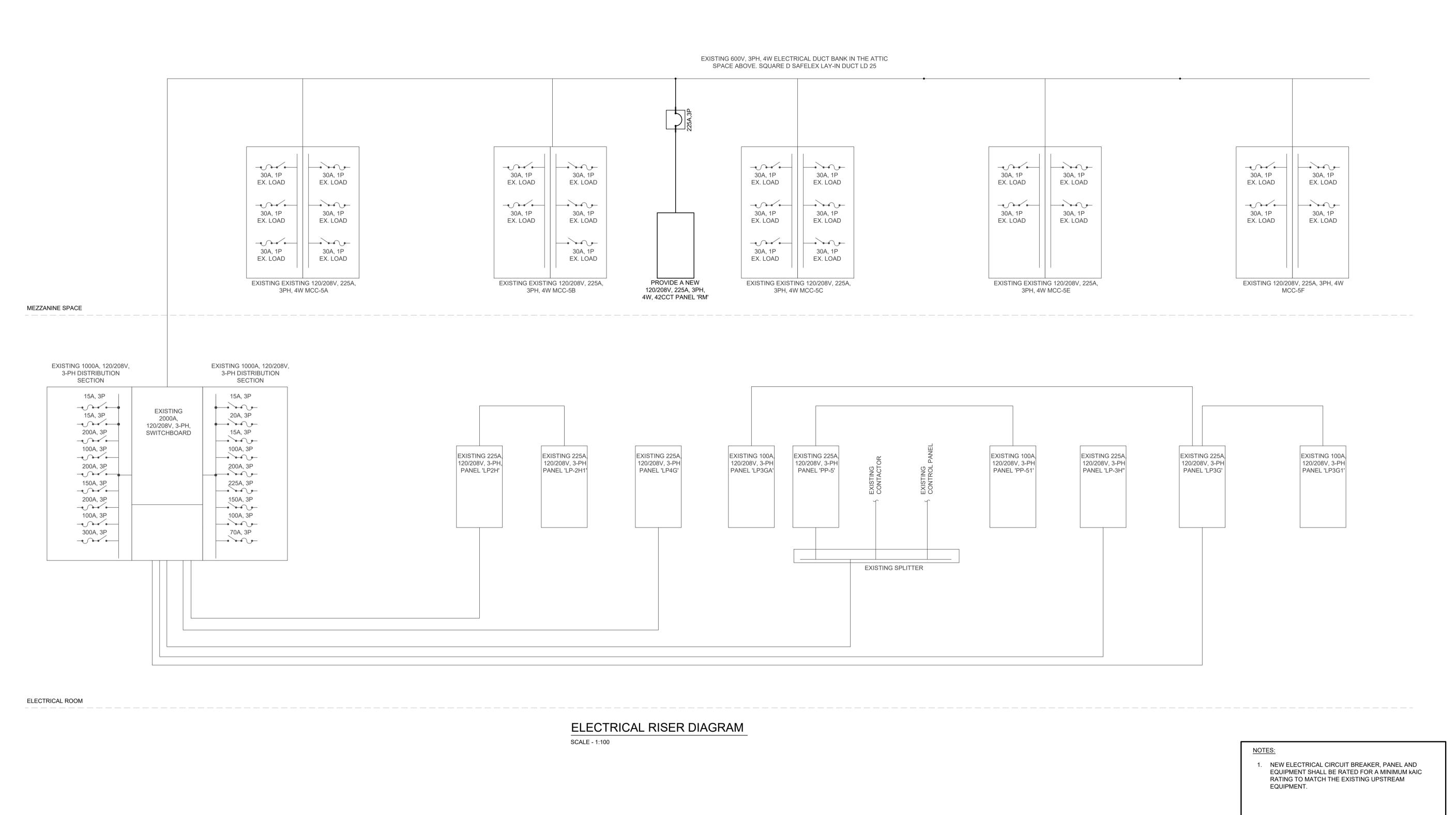
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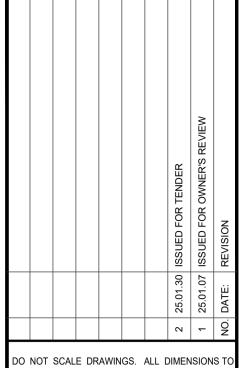
DRAWING TITLE:
PARTIAL FLOOR PLAN
DEMOLITION & NEW

POWER
PROJECT NO: SCALE:
A23018

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TE: JAN. 30, 2025





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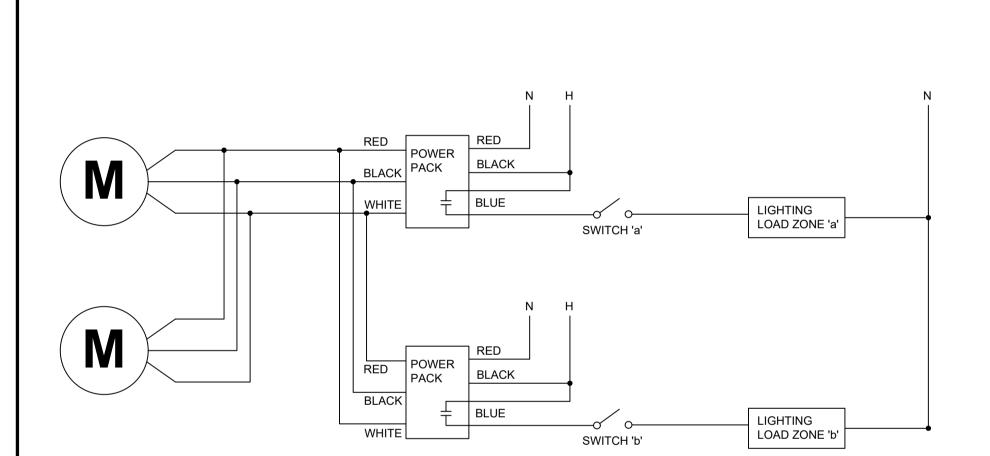
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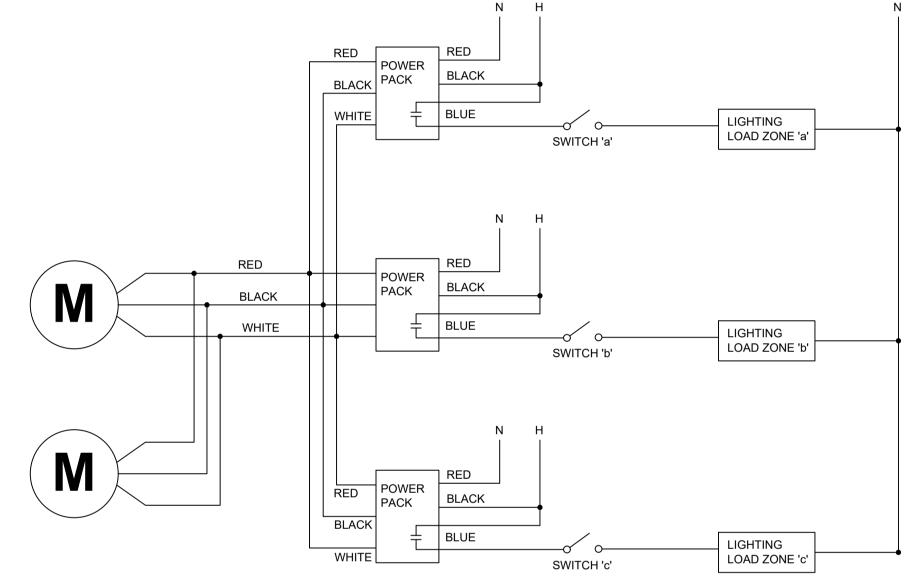
ELECTRICAL RISER DIAGRAM

A23018

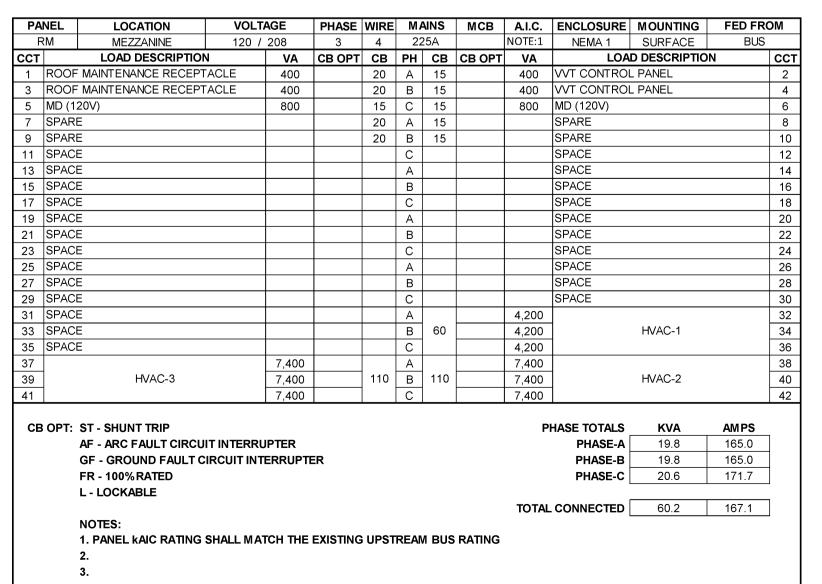
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	EQUIPMENT		LOCATION			LOAD)			STARTERS PROTECTION & FEEDER DISCONN												ONNECT	CONTROL						INTERLOCK	CODES									
EQUIPMENT NUMBER	NAME OR DESCRIPTION	SUPPLIER CODE		HORSEPOWER	KW	AMPS (MCA)	VOLTAGE	PHASE	PACKAGED WITH EQUIPMENT	ОТНЕК	SIZE	MANUAL	MAGNETIC	COMBINATION	H-O-A SELECTOR SWITCH	OFF-LOW-HIGH SELECTOR SWITCH	START - STOP PUSH BUTTON	PILOT LIGHT(S)	CONTROL VOLTAGE	AUXILIARY CONTACTS (NO.)	AUXILIARY CONTACTS (N.C.)	SUPPLIER CODE	O.C. PROTECTION TYPE (B- BREAKER, F- FUSE)	AMP RATING	NUMBER OF POLES	CIRCUIT NUMBER	ALL WIRE SIZES BASED ON R90 XLPE COPPER UNLESS NOTED OTHERWISE.	RACEWAY	SUPPLIER CODE	AMP RATING	NUMBER OF POLES	SUPPLIER CODE LOCAL SWITCH	THERMOSTAT (REVERSE ACTING WHERE NOTED)	VARIABLE SPEED CONTROLLER	BUILDING AUTOMATION SYSTEM 120/1/60 15A-1P, 24VAC COIL MAGNETIC CONTACTOR	FIRE ALARM SHUTDOWN	SUPPLIER CODE	INTERLOCK WITH SUPPLIER CODE	1 SUPPLIED, INSTALLED, AND WIRED BY DIV. 25. 2 SUPPLIED AND INSTALLED BY DIV. 25 AND WIRED BY DIV. 26. 3 SUPPLIED BY DIV. 25 INSTALLED AND WIRED BY DIV. 26. 4 SUPPLIED, INSTALLED AND WIRED BY DIV. 26. 5 SUPPLIED BY OTHERS INSTALLED AND WIRED BY DIV. 25. 6 SUPPLIED BY OTHERS INSTALLED BY DIV. 25 WIRED BY DIV. 26. 7 SUPPLIED BY OTHERS INSTALLED AND WIRED BY DIV. 26.
HVAC-1	AIR HANDLING UNIT	2	ROOF	-	-	42.7	208	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	В	60	3	PANEL RM	3-#6 CU. + 1-#10 GND	1" CONDUIT	4	60	3 4	4 -	-	-) -	-	-		-
IVAC-2	AIR HANDLING UNIT	2	ROOF	-	-	76.3	208	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	В	110	3	PANEL RM	3-#2 CU. + 1-#6 GND	1 1/2" CONDUIT	4	200	3 4	4 -	-	- (• ·	-	-		-
HVAC-3	AIR HANDLING UNIT	2	ROOF	-	-	76.3	208	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	В	110	3	PANEL RM	3-#2 CU. + 1-#6 GND	1 1/2" CONDUIT	4	200	3 4	4 -	-	- (.	-	-		-
/ID(120V)	MOTORIZED DAMPER	2	REFER TO DWGS	FHP	-	-	120	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	В	15	1	PANEL RM	2-#12 CU. + 1-#12 GND	3/4" CONDUIT	4	-	-	- -	-	-	-	-	-		-
/VT-2.#	VVT BOX	2	REFER TO DWGS	FHP	-	-	120	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	В	15	1	PANEL RM	2-#12 CU. + 1-#12 GND	3/4" CONDUIT	4	-	-		-	-	-	-	-		-

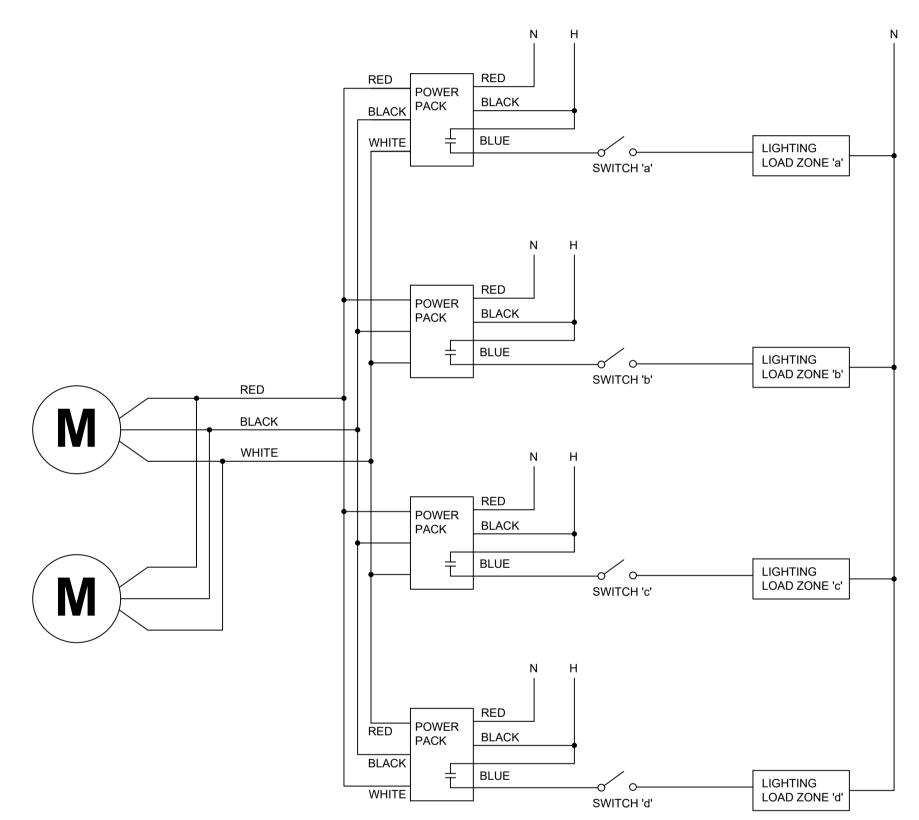






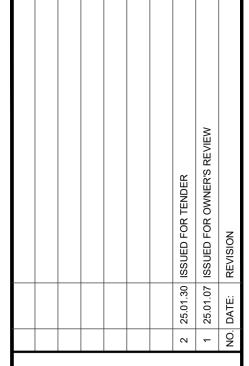
3 ZONE LIGHTING CONTROL SCHEMATIC
SCALE - NTS





4 ZONE LIGHTING CONTROL SCHEMATIC

SCALE - NTS



DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON THE JOB. ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECTS.

GENERAL NOTES

- 1. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, LATEST EDITION, AND ALL OTHER ACTS ADMINISTERED BY ALL AUTHORITIES HAVING JURISDICTION.
- 2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, AND SPECIFICATIONS.
- 3. THE DESIGN LOADS SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
- 4. ALL DIMENSIONS, SHOWN ON THE DRAWINGS, SHALL BE CHECKED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK.
- 5. THE STABILITY OF THE STRUCTURAL FRAME IS DEPENDENT ON THE FULL INTERACTION OF ALL STRUCTURAL COMPONENTS. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY BRACING DURING CONSTRUCTION.
- 6. ALL DIMENSIONS GIVEN ARE IN METRIC.



EXP Services Inc. t:+1.519.963.3000 | f:+1.519.963.1152 15701 Robin's Hill Road, Unit #2 London, ON NSV 0A5

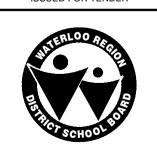
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ELECTRICAL
SCHEDULES AND
DETAILS

PROJECT NO: SCALE:
A23018
DRAWN: DRAWING NO:

YG CHECKED:

AM TE:
JAN. 30, 2025

E301