DRAWING LIST

ARCHITECTURAL DRAWINGS

A01 KEY PLANS, FIRE SEPARATIONS, OBC MATRIX AND SCHEDULES

A02 DEMO AND PROP PARTIAL RCP PLAN SECTION A A03 DEMO AND PROP ROOF PLAN - SECTION A

A04 DEMO AND PROP FLOOR PLAN AND ELEVATIONS SECTION B A05 DEMO AND PROP RCP PLAN SECTION B

A06 DEMO AND PROP PARTIAL RCP PLAN SECTION C A07 DEMO AND PROP ROOF PLAN - SECTION C A08 PROPOSED PAVERS LAYOUT ROOF PLAN

STRUCTURAL DRAWINGS

S1.1 STRUCTURAL DATA S2.1 ROOF FRAMING PLAN

S3.1 ELEVATION AND DETAILS

MECHANICAL DRAWINGS
M100 LEGEND, SCHEDULES & DETAILS

M100 LEGEND, SCHEDULES & DETAILS
M201 GROUND FLOOR PLAN DEMOLITION
M202 ROOF PLAN DEMOLITION

M301 GROUND FLOOR PLAN RENOVATION M302 ROOF PLAN RENOVATION

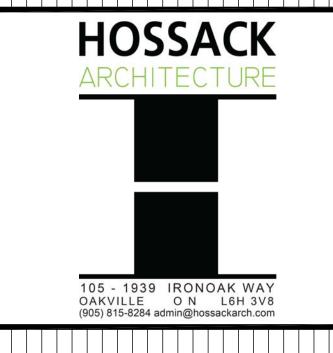
ELECTRICAL DRAWINGS

E101 LEGEND, SITE PLAN AND DETAILS

E201 OVERALL LIGHTING PLAN
E301 OVERALL POWER AND SYSTEMS PLAN

E302 OVERALL ROOF PLAN - DEMOLITION

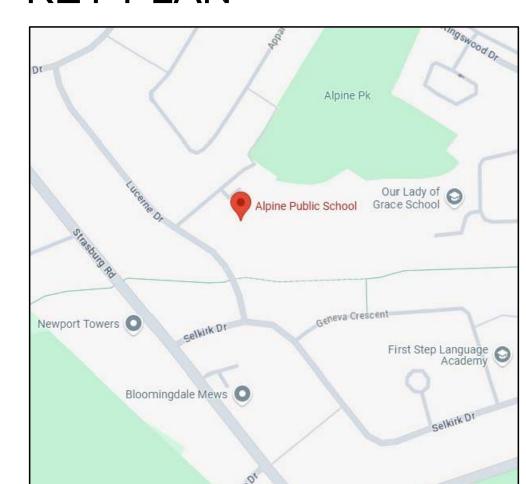
E303 OVERALL ROOF PLAN - RENOVATION
E401 DISTRIBUTION RISER DIAGRAM DEMOLITION AND RENOVATION

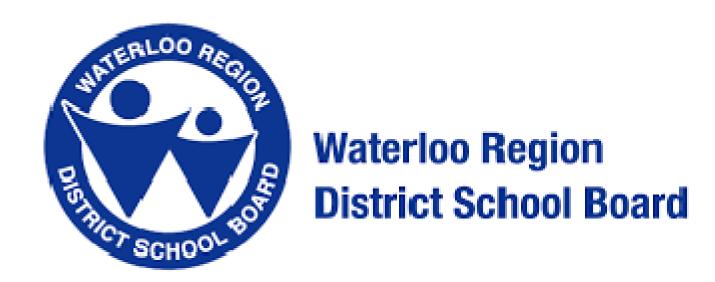






KEY PLAN





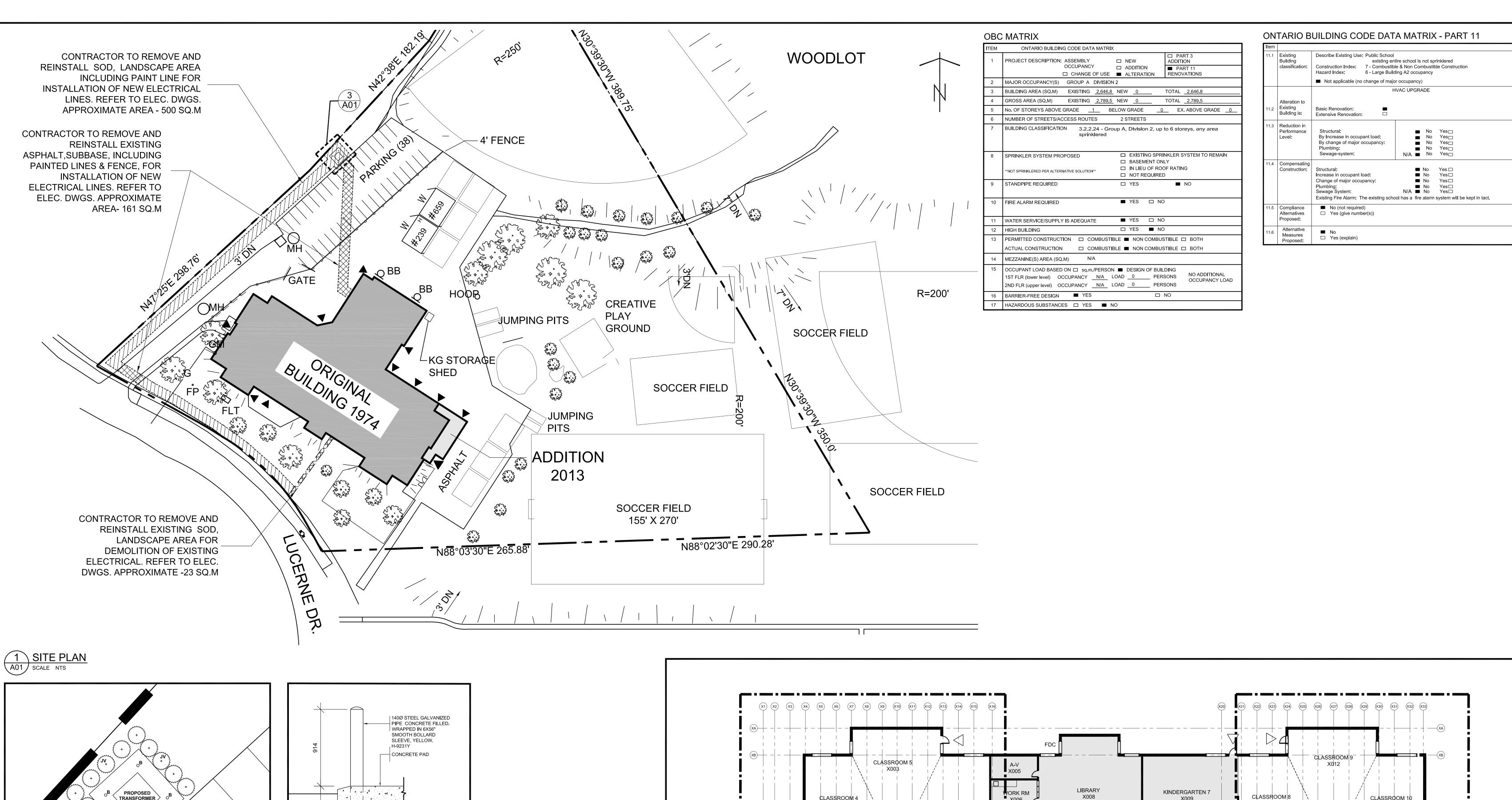
Tender No. 25-7639-RFT
ALPINE PUBLIC SCHOOL:
HVAC UPGRADE

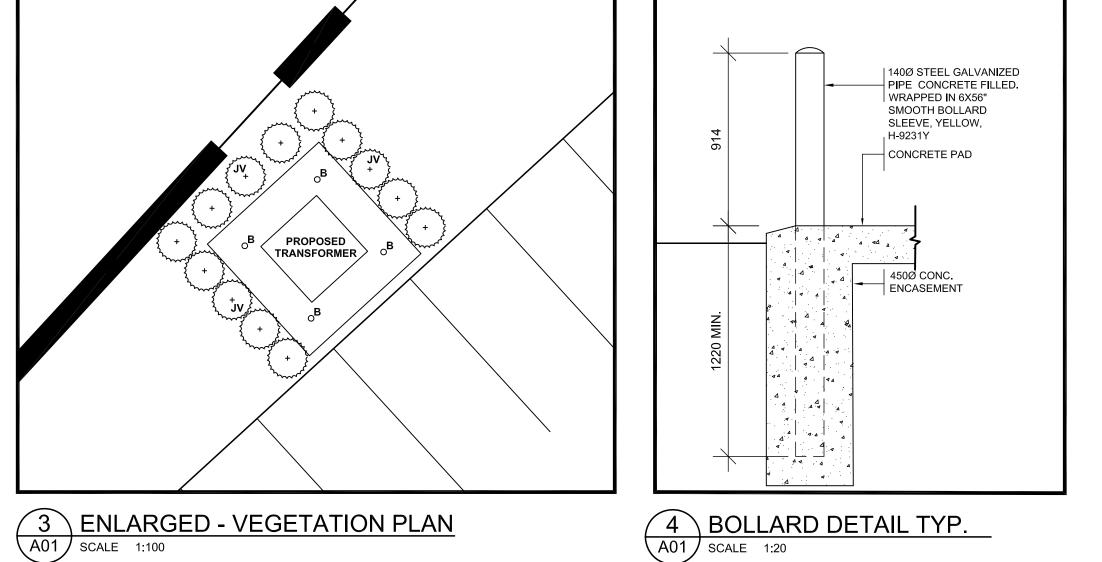
75 Lucerne Drive. Kitchener, ON N2E 1B4 MARCH 2025

SET No.

PROJECT NUMBER

24138





PLANT LIST

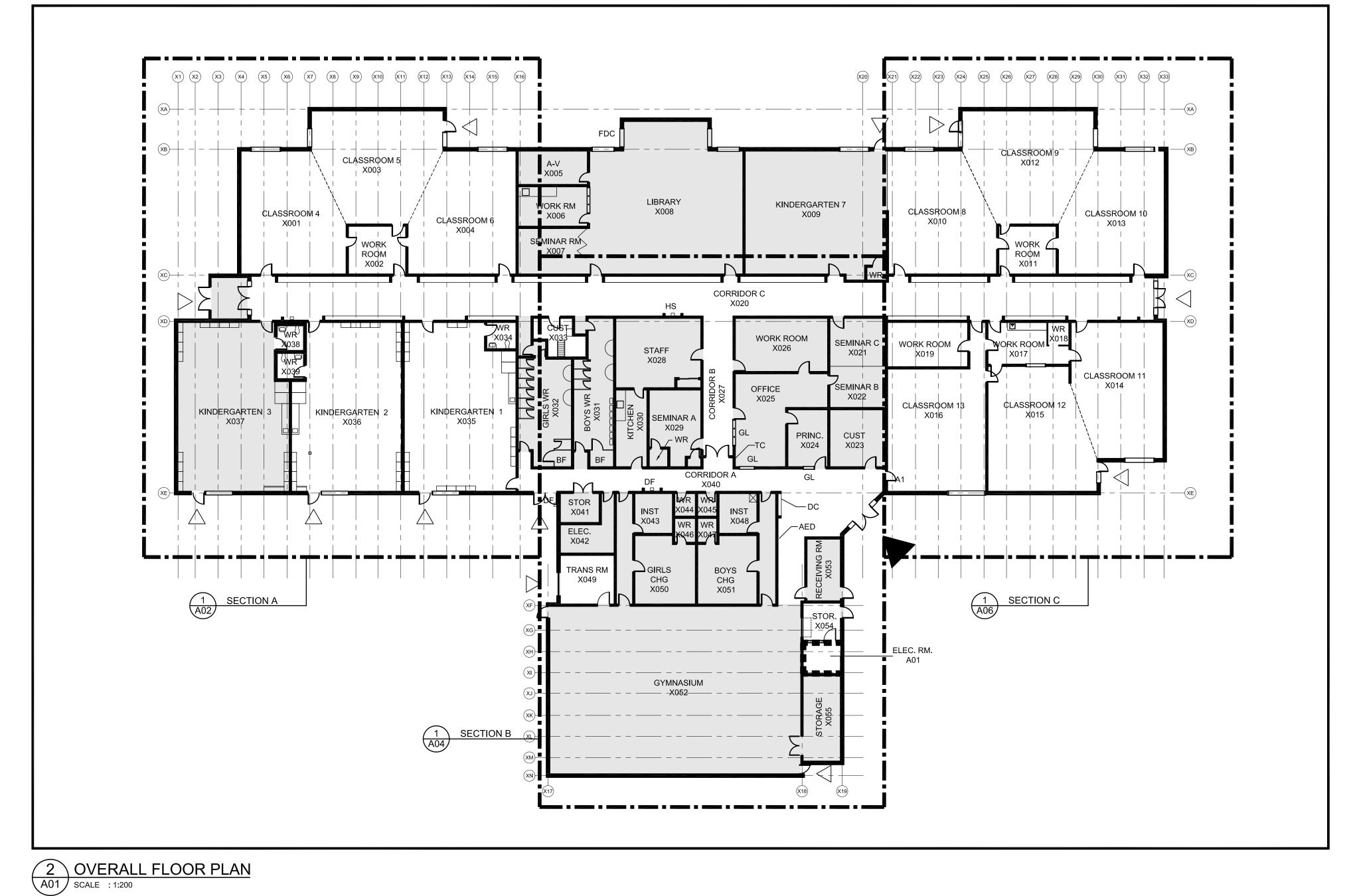
SYMBOL	BOTANICAL NAME	QUANTITY	COMMON NAME	SIZE	CONDITION
Jv	Juniperus virginiana	13	Red Cedar	70 mm	B.B.

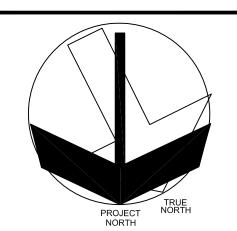
PLANTING NOTES

- 1. ALL PLANT MATERIAL IS TO MEET THE STANDARDS AS OUTLINED IN THE CANADIAN STANDARDS FOR NURSERY STOCK, CURRENT EDITION.
- FOR ALL CONTRACTOR PURCHASED MATERIALS PLANT SIZES WILL BE AS MEASURED ON SITE. NURSERY WAYBILLS WILL NOT ACCEPTABLE FOR DETERMINATION OF PLANT SIZES.
- PROTECT PLANT MATERIAL FROM FROST, EXCESSIVE HEAT, WIND AND SUN DURING TRANSPORTATION. ALL WILTED OR WIND DAMAGED PLANT
- CONTRACTOR TO LAYOUT ALL PLANT MATERIAL AS PER PLANTING PLANS PRIOR TO INSTALLATION FOR LANDSCAPE ARCHITECT REVIEW AND
- WARRANTY PERIOD FOR ALL PLANTING IS TWO FULL GROWTH SEASONS. WARRANTY REPLACEMENTS OF ALL PLANT MATERIAL WILL BE UNDERTAKEN BY THE CONTRACTOR AS REQUESTED BY THE LANDSCAPE ARCHITECT AT ANY TIME DURING THE WARRANTY PERIOD.
- 6. FOR BURLAPPED ROOT BALLS, CUT AWAY TOP ONE THIRD OF WRAPPING AND WIRE BASKET WITHOUT DAMAGING ROOT BALL. DO NOT PULL BURLAP OR ROPE FROM UNDER ROOT BALL. FOR POTTED PLANTS REMOVE ENTIRE CONTAINER.
- BACKFILL SOIL IN 150mm LIFTS. TAMP EACH LIFT TO ELIMINATE AIR POCKETS. WHEN TWO THIRDS OF DEPTH OF PLANTING PIT HAS BEEN BACKFILLED, FILL REMAINING SPACE WITH WATER. AFTER WATER HAS PENETRATED INTO SOIL, BACKFILL TO FINISH GRADE.
- PLANT MATERIAL INSTALLED FOLLOWING LEAF DROP IN THE FALL WILL BE ACCEPTED AFTER THE START OF THE NEXT GROWING SEASON
- PROVIDED THAT ACCEPTANCE CONDITIONS ARE FULFILLED. 10. ANY PLANTING OR LANDSCAPING WORK THAT IS REJECTED AT THE FINAL INSPECTION WILL BE CORRECTED IN A TIMELY MANNER AT
- CONTRACTOR'S EXPENSE. 11. WATER TREES ONCE A WEEK FOR FIRST 4 WEEKS AND THEN SUFFICIENTLY THERE AFTER TO MAINTAIN OPTIMUM GROWING WITHIN THE
- FIRST 2 YEARS AFTER PLANTING. APPLY SUFFICIENT WATER PER APPLICATION TO OBTAIN MOISTURE PENETRATION OF 75-100MM. ENSURE ADEQUATE MOISTURE IN ROOT ZONE AT FREEZE-UP. 12. REJECTED PLANT MATERIAL MUST BE REMOVED FROM THE SITE WITHIN ONE WORKING DAY.

8. PLANTS SHOWN IN GROUPS ARE TO BE PLANTED IN CONTINUOUS PLANT BEDS.

- 13. ALL TOPSOIL TO BE NEW. TOPSOIL TO BE FRIABLE, SOIL TEXTURE TO CONSIST OF 45% SAND, 35% SILT, AND 20% CLAY AND CONTAIN A MAXIMUM OF 5% ORGANIC MATTER. TOPSOIL MUST BE FREE FROM SUBSOIL, ROOTS, GRASS, WEEDS, TOXIC MATERIALS, STONES, FOREIGN OBJECTS AND WITH AN ACIDITY RANGE (PH) OF 5.5 TO 7.5.
- 14. SOIL MIXTURE FOR PLANTING TO BE BLENDED MIX OF FRIABLE SHREDDED TRIPLE MIX TOPSOIL CONSISTING OF 1/3 PEAT MOSS, 1/3 SANDY LOAM, AND 1/3 COMPOST.
- 15. CONTRACTOR TO CHECK QUANTITIES AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY. PLANT QUANTITIES INDICATED ON THE PLAN SUPERCEDE THE TOTALS IN THE PLANT LIST.





EXISTING TO NEW CONSTRUCTION OR RENOVATION

11.4.2.2 11.4.2.3 11.4.2.4 11.4.2.5

11.4.3.2 11.4.3.3

FIRE SEPARATION LEGEND

ISSUED FOR TENDER & PERMIT

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MU CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS THE PROJECT; AND MUST REPORT ANY DISCREPANCIES TO THE CONSULTANTS BEFORE PROCEEDING WITH THE WORK. THE USE OF THIS DRAWING OR PART THEREOF FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE

PRISCILLA LADOUCEUR LICENCE 6053 Certificate of Practice: 4292

WRDSB ALPINE PS HVAC UPGRADE

> 75 LUCERNE DRIVE KITCHENER, ON

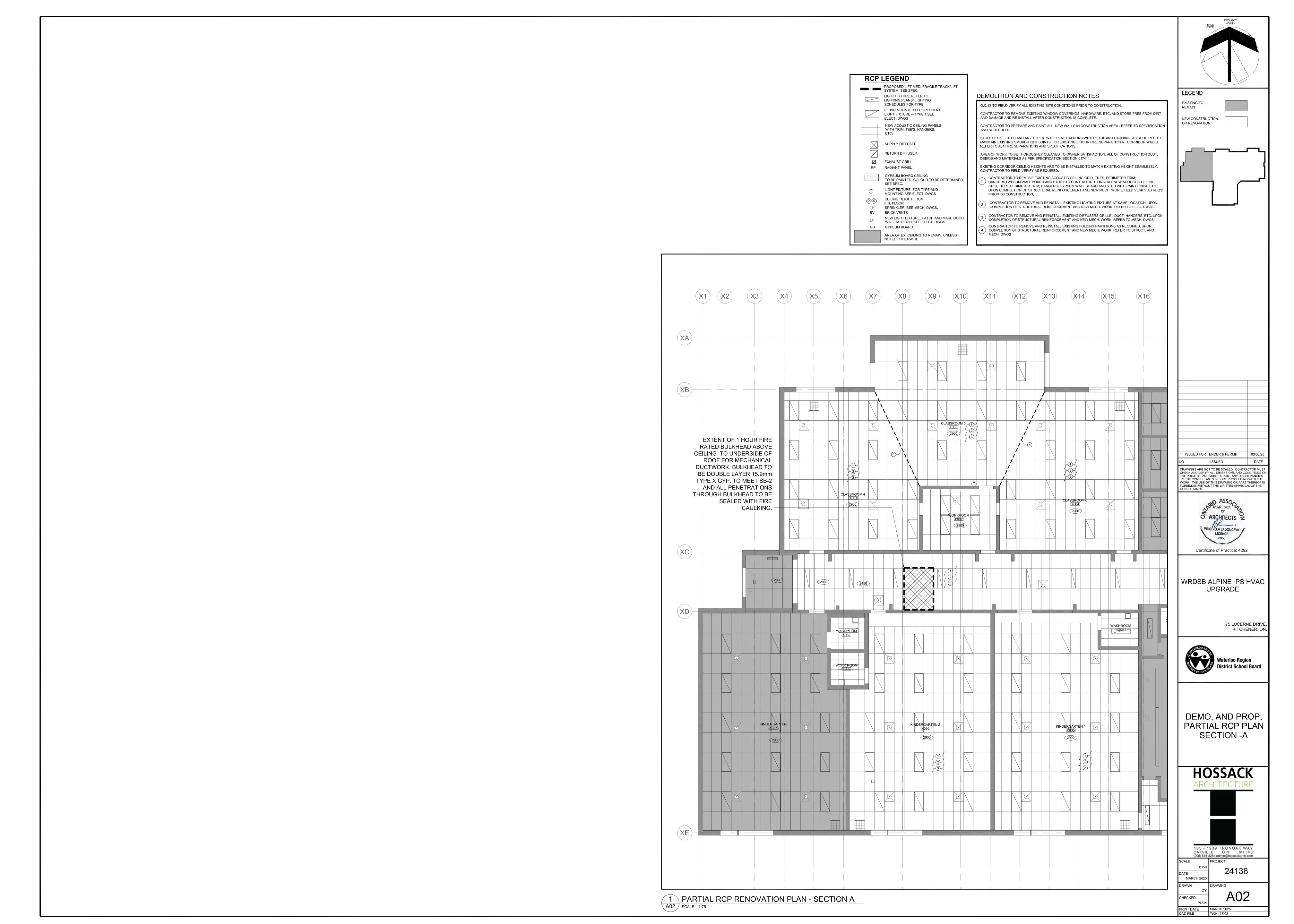


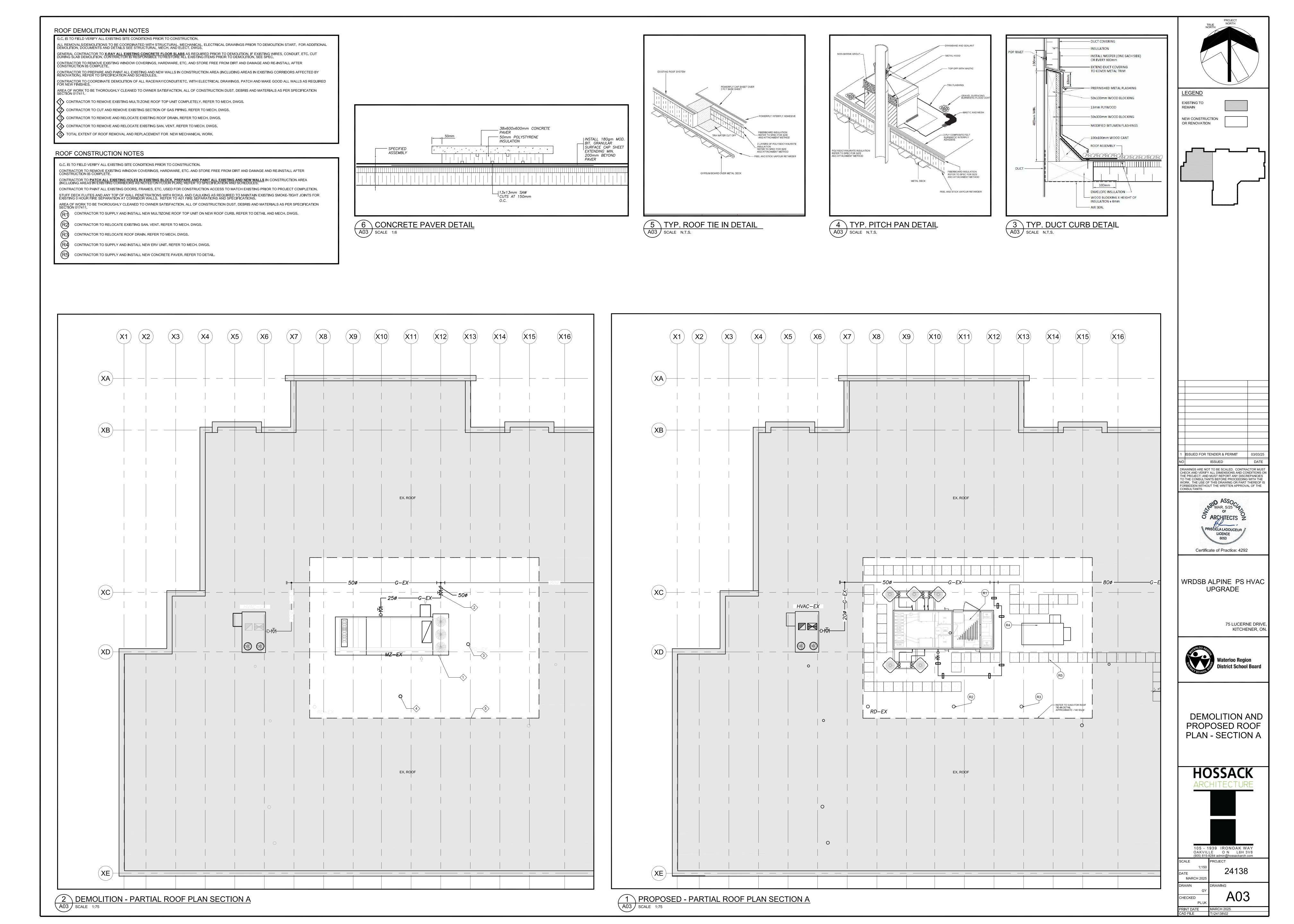
KEY PLANS, FIRE SEPARATIONS **OBC MATRIX AND** SCHEDULES

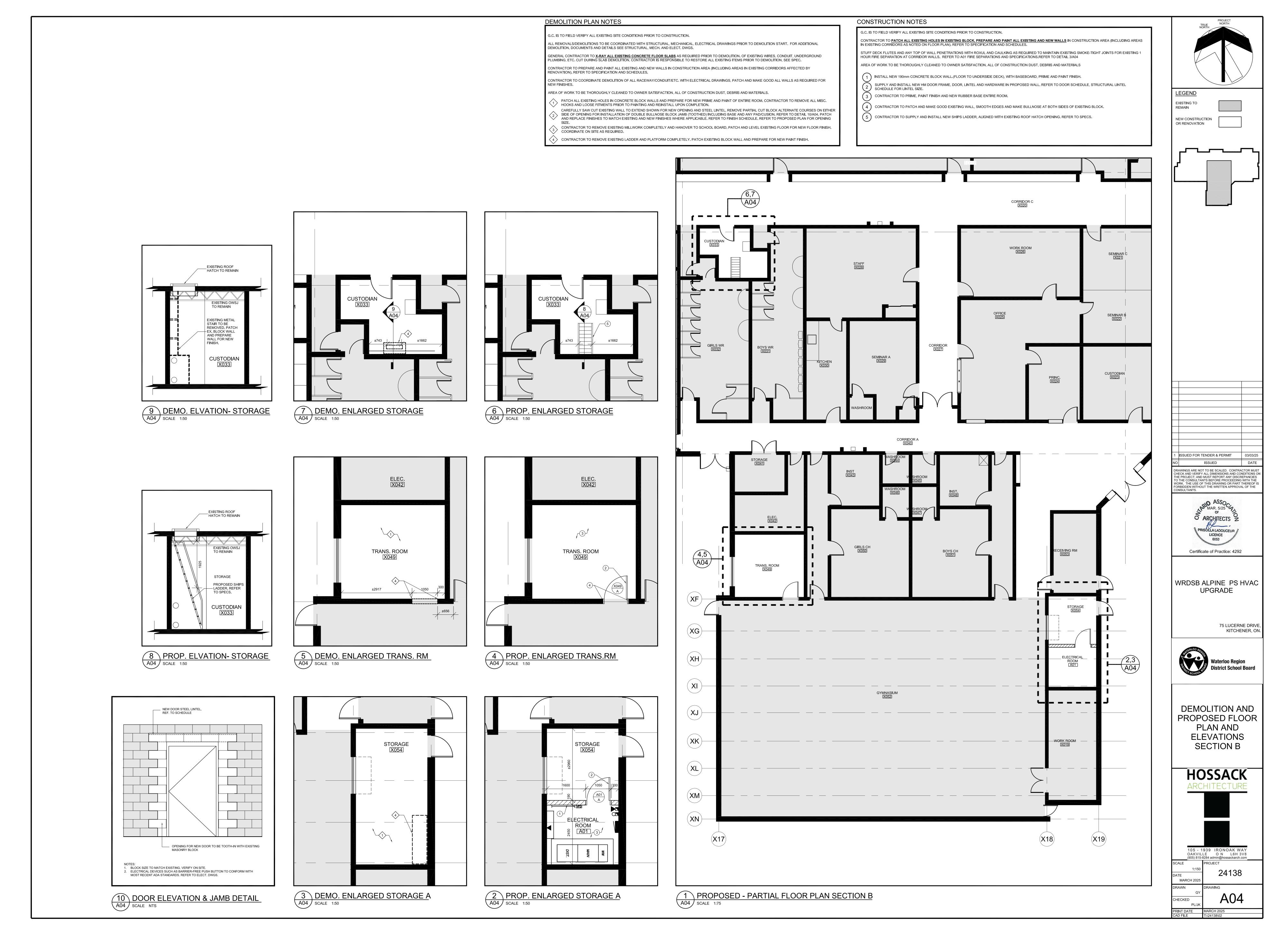
LIOCCACI HOSSACK 105 - 1939 IRONOAK WAY OAKVILLE ON L6H 3V8

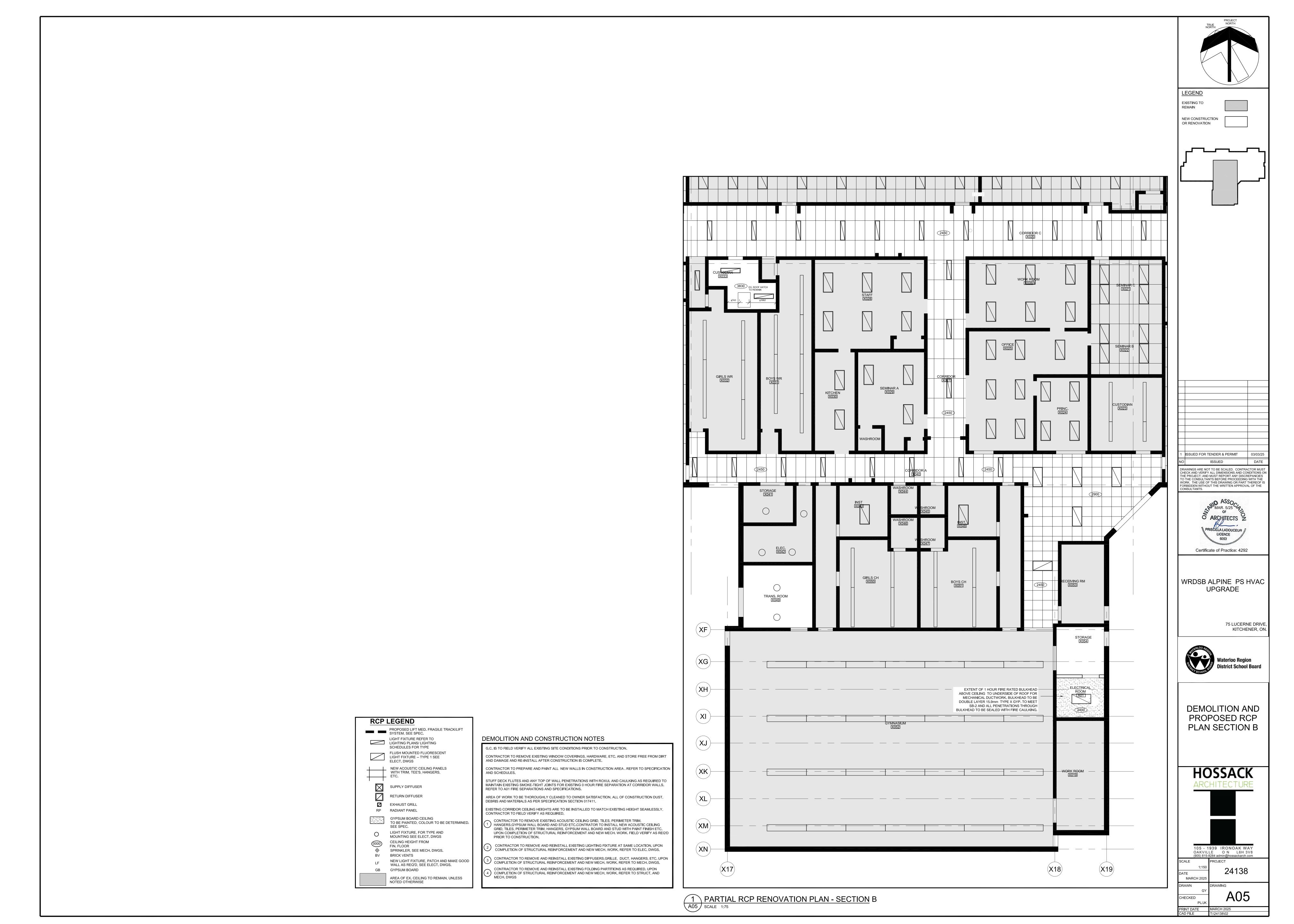
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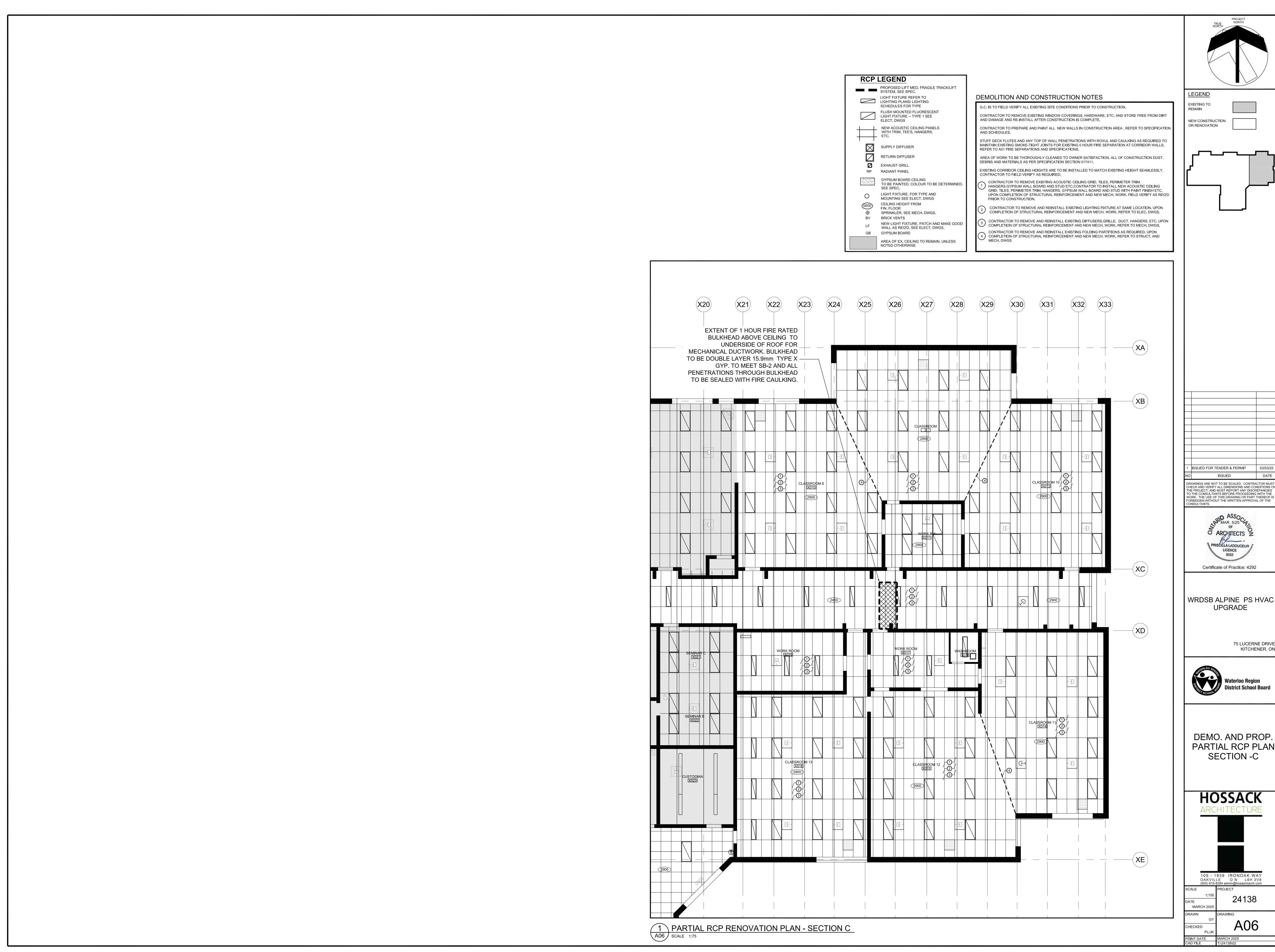
MARCH 2025 HECKED

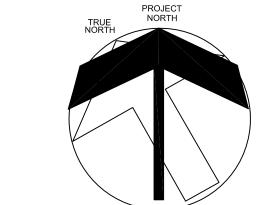


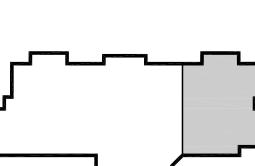


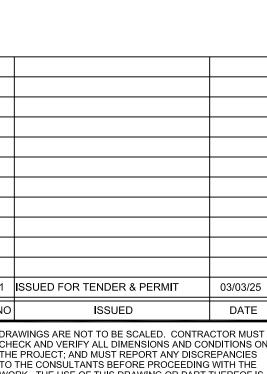






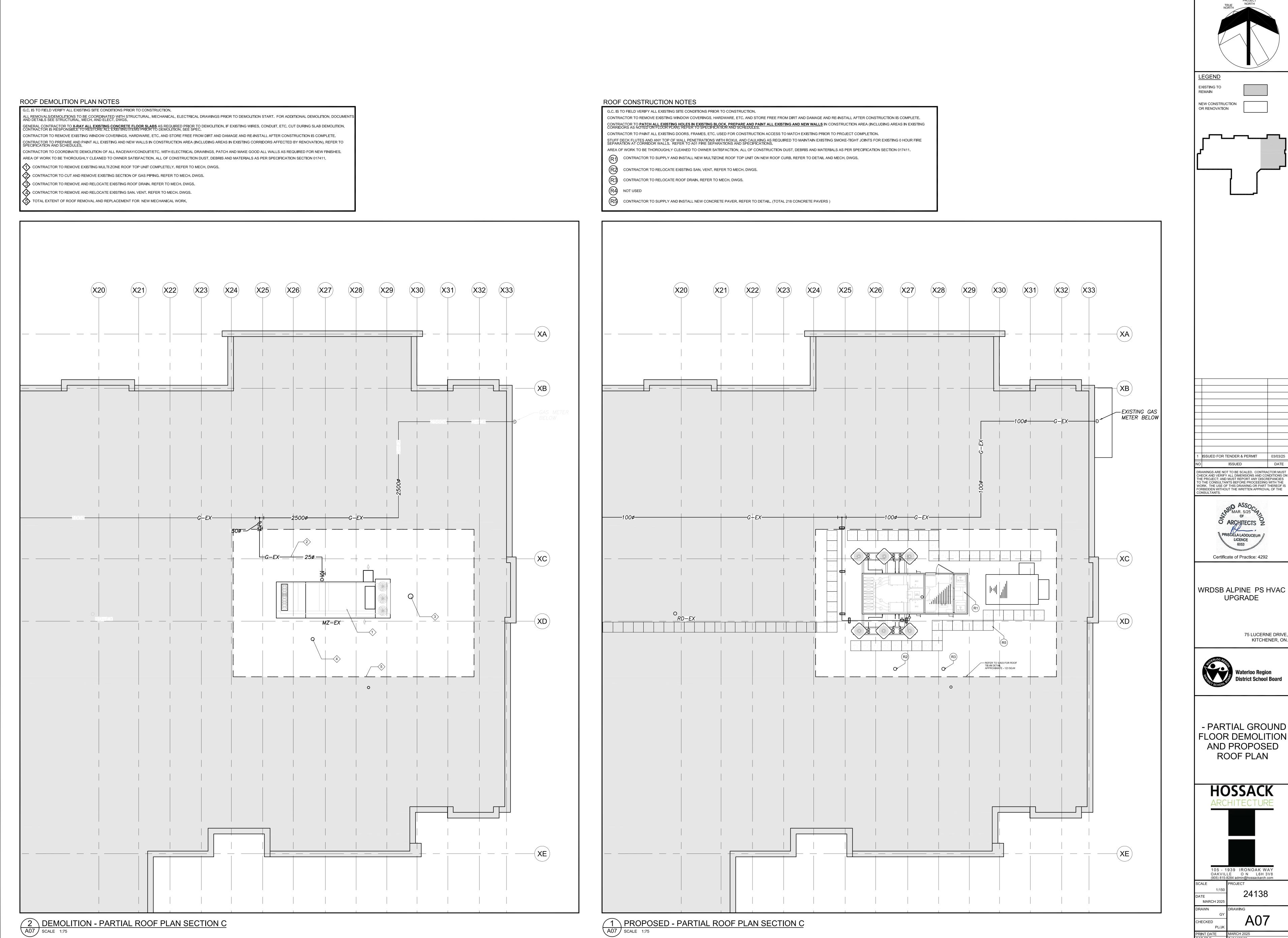


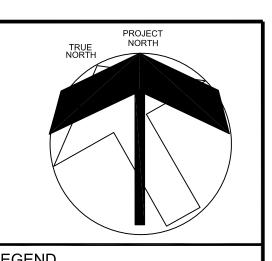


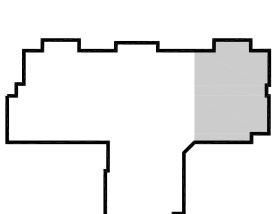


75 LUCERNE DRIVE KITCHENER, ON

PARTIAL RCP PLAN



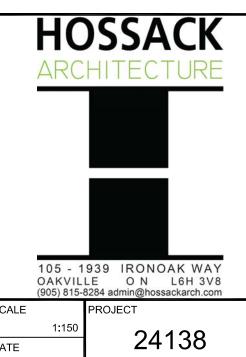


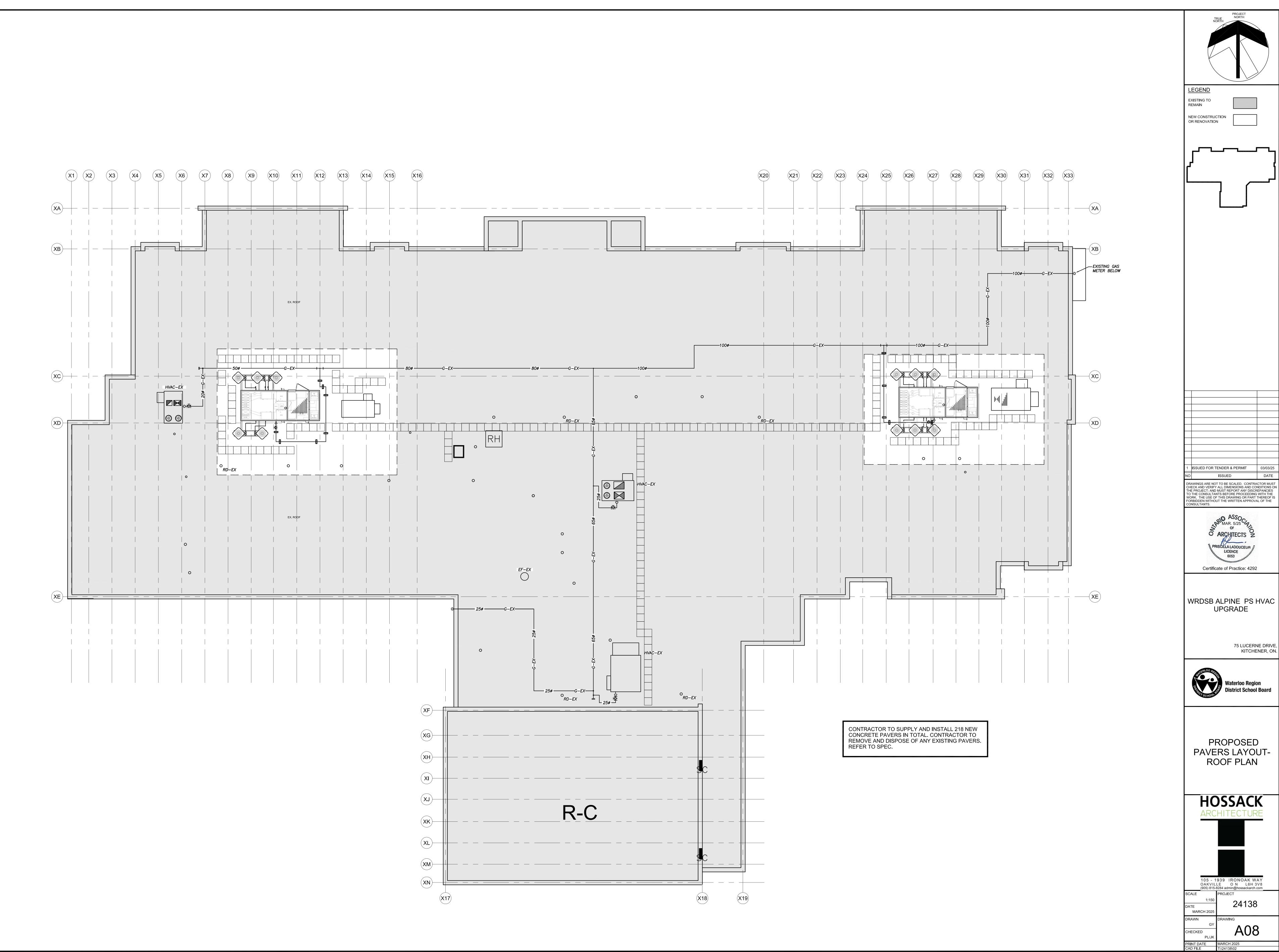


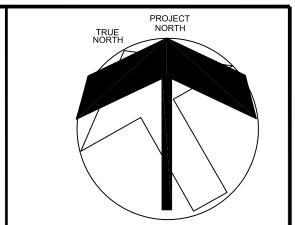
75 LUCERNE DRIVE KITCHENER, ON



- PARTIAL GROUND FLOOR DEMOLITION AND PROPOSED **ROOF PLAN**







GENERAL

- 1. GENERAL CONTRACTOR TO SITE VERIFY ALL CONDITIONS AND OR DIMENSIONS SHOWN OR IMPLIED ON THE 1. SUBMIT FOR CONSULTANT S REVIEW ERECTION DIAGRAMS AND FABRICATION DETAILS SIGNED AND SEALED STRUCTURAL DRAWINGS.
- 2. GENERAL CONTRACTOR TO CO-ORDINATE ALL STRUCTURAL DOCUMENTS AND WORK WITH ARCHITECTURAL, 2. CONSULTANT S REVIEW OF SHOP DRAWING DOES NOT RELEASE THE CONTRACTOR OF HIS RESPONSIBILITY
- 3. REPORT ANY DISCREPANCIES AND OR CONFLICTS IN DIMENSIONS OR DETAILS TO THE ARCHITECT FOR 3. FABRICATION AND ERECTION OF STEEL SHALL BE IN ACCORDANCE WITH CSA S16 (CURRENT). CLARIFICATION PRIOR TO COMMENCING THE WORK IN QUESTION.
- 4. PROVIDE ALL TEMPORARY NEEDLING, SHORING AND BRACING AS REQUIRED TO SAFELY COMPLETE THE WORK SHOWN ON THE STRUCTURAL DRAWINGS. SUBMIT, UPON REQUEST OF THE STRUCTURAL ENGINEER, DRAWINGS DETAILING THE TEMPORARY WORKS, SEALED SIGNED AND DATED BY A LICENSED PROFESSIONAL ENGINEER.
- 5. PROVIDE ALL FALSE WORK AND RESHORING REQUIRED TO CONSTRUCT CONCRETE WALLS, COLUMNS AND BEAMS SHOWN ON THE STRUCTURAL DRAWINGS.
- 6. ALL OPENINGS IN MASONRY WALLS REQUIRE A LINTEL. COORDINATE LOCATIONS AND CLEAR MASONRY OPENING WIDTHS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SELECT THE APPROPRIATE LINTEL FROM "LINTEL SCHEDULE-GENERAL PURPOSE LINTELS" AS SHOWN IN THE SCHEDULE ON DRAWING S1.01, USING WALL CONSTRUCTION AND MAXIMUM CLEAR OPENING WIDTH AS THE CRITERIA.

EXISTING	LOADING	
DEAD LOAD		1.05 kPa
SNOW LOAD		2.30 kPa + DRIFT

STRUCTURAL STEEL

- BY PROFESSIONAL ENGINEER FOR STEEL CONNECTIONS IN ACCORDANCE WITH THE GENERAL NOTES.
- FOR THE COMPLETENESS OF THE WORK NOR CO-ORDINATION WITH OTHER TRADES.

SHAPE	STANDARD	GRADE	MIN. YIELD STRENGTH
CANADIAN WWF & W	GSA G40.21	350W	50 Ksi
HOLLOW STRUCTURAL SECTION CLASS H UNLESS NOTED AS CLASS C	GSA G40.21	350W	50 Ksi
PLATES, CHANNELS, ANGLES	GSA G40.21	300W	50 Ksi
WWF & W NOT ROLLED IN CANADA	ASTM A572	50	50 Ksi

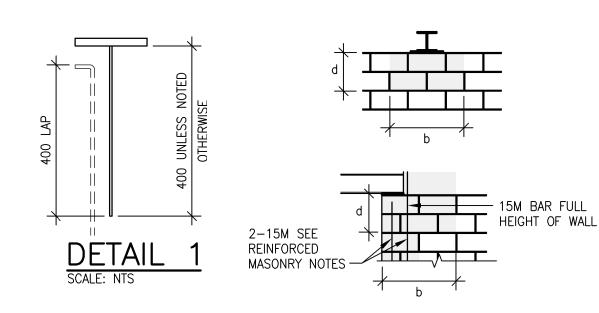
- 4. STRUCTURAL STEEL TO CONFORM TO THE FOLLOWING TABLE UNLESS NOTED OTHERWISE.
- 5. ALL WELDING SHALL BE DONE BY AN ORGANIZATION FULLY APPROVED BY THE CANADIAN WELDING BUREAU UNDER CSA-W47.1 (CURRENT) IN DIVISION 1 OR 2 AT THE TIME OF TENDERING. WELDERS TO BE CWB CERTIFIED TO THE COMPANIES STANDARDS. WELDING AND WELDING MATERIALS SHALL CONFORM TO
- 6. THE FABRICATOR SHALL NOTE THE SIZE AND TYPE OF BOLTS AND WELDS USED IN STRUCTURAL CONNECTIONS ON THE SHOP DRAWINGS.
- 7. ALL STRUCTURAL STEEL SHALL BE SUFFICIENTLY STRAIGHT THAT VARIATIONS CANNOT BE DETERMINED WITH THE UNAIDED EYE. ALL STRUCTURAL STEEL SHALL BE THOROUGHLY CLEANED OF ALL LOOSE MILL SCALE, DIRT, OIL, OR OTHER FOREIGN MATTER BEFORE SHOP PAINTING. SHOP PAINT SHALL CONFORM TO CAN/CGSB 1.40-M89 OR CISC/CPMA STANDARD 2-75.
- 8. STEEL LINTELS SHALL HAVE A MINIMUM BEARING LENGTH OF 8".

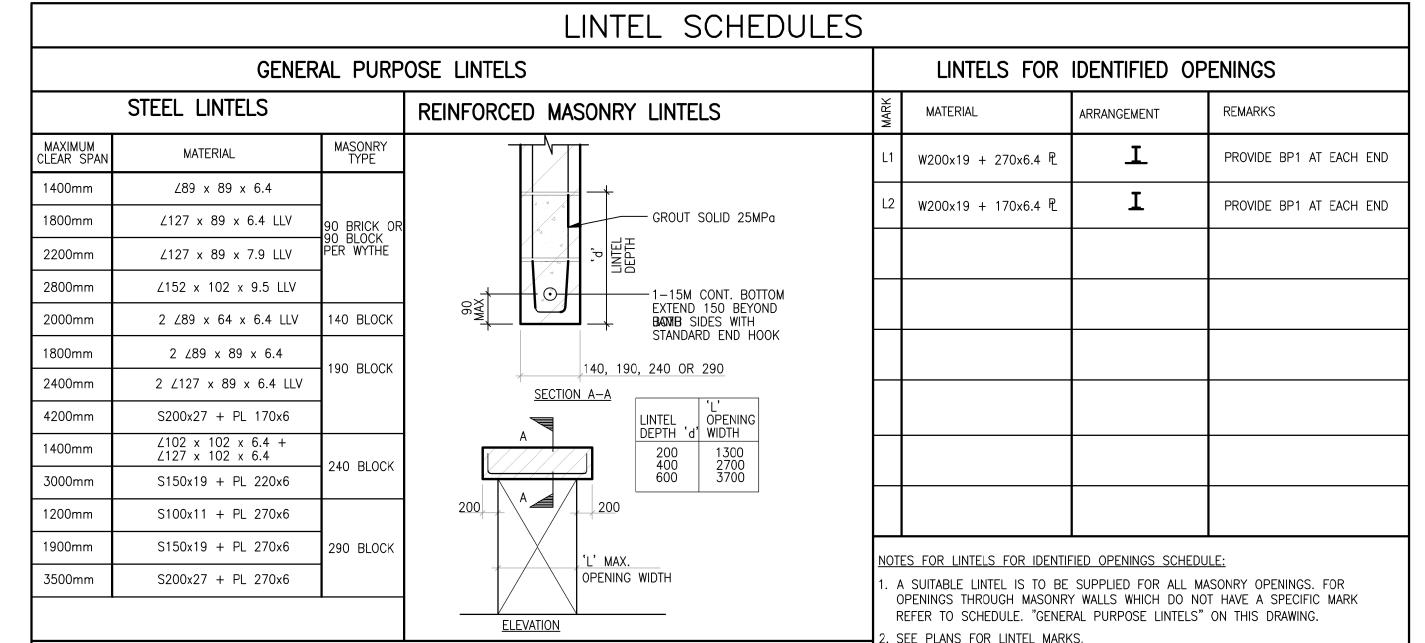
	BEARING PLATE SCHEDULE										
MARK	WALL	PLATE SIZE	ANCHORS	REMARKS	GROUTING						
BP1	190 BLOCK	190x16x190	1-20mm Ø x 400 LG	SEE DETAIL 1	800b x 400d						

TYPICAL JOIST/CHANNEL BEARING PLATE 150x8x150 UNLESS NOTED OTHERWISE ON PLAN OR SECTIONS

. FILL CONCRETE BLOCK UNDER BEARING PLATE 100% SOLID WITH MASONRY GROUT (1'c=20MPa)

- MINIMUM BEAM BEARING PLATE 190x13x200 UNLESS NOTED OTHERWISE
- . ANCHORS TO BE A307 MATERIAL. PROVIDE MINIMUM OF 2 ANCHORS WELDED TO PLATE UNLESS NOTED OTHERWISE. WELD TO DEVELOP FULL TENSILE CAPACITY OF ANCHORS.
- BEARING PLATES TO BE CENTRED ON THE WALL, UNLESS NOTED OTHERWISE. SHORT DIMENSION OF BEARING PLATE IS TO BE CENTRED ON WALL THICKNESS.
- OVER A MINIMUM AREA OF 600 DEEP x 600 LONG, UNLESS NOTED OTHERWISE.
- 6. PROVIDE FULL BEAM BEARING ON BEARING PLATES . BEAM WEBS IN BLOCK WALL TO BE INFILLED WITH BLOCK
- . WHERE BEAMS CANTILEVER OVER TOP OF COLUMNS OR WALLS, PROVIDE 2 STIFFENER PLATES EACH SIDE OF THICKNESS 'w' + 1.6mm (MIN. 10mm THICK)
- 9. CORES AT ALL HOLD DOWN BARS TO BE FILLED SOLID WITH 20MPa GROUT
- 10. AT HOLD DOWN BAR SPLICE LOCATIONS, LAP BARS 600mm MINIMUM
- 1. AT ALL HOLD DOWN BARS, PROVIDE STANDARD HOOK AT UNDERSIDE OF BEARING PLATES





- CONDITIONS OF USE FOR GENERAL PURPOSE LINTEL SCHEDULE:
- "LINTELS FOR IDENTIFIED OPENINGS" ON THIS DRAWING.
- THIS SCHEDULE IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
- . THIS SCHEDULE IS TO BE USED AS A GUIDE WITH REGARD TO WALL SIZE AND OPENING WIDTH FOR ANY LINTELS NOT SPECIFICALLY NOTED ON PLAN.
- CONCRETE BLOCK UNITS ARE HOLLOW AND UNFILLED EXCEPT FOR FIRST COURSE ABOVE LINTEL WHICH SHALL BE FILLED
- SOLID UNLESS NOTED OTHERWISE. . DO NOT SHORE LINTELS DURING WALL CONSTRUCTION.
- PROVIDE 200mm BEARING EACH END ON 400mm LONG BY 2 COURSES DEEP OF FILLED OR SOLID MASONRY UNLESS NOTED OTHERWISE ON DRAWING.
- WHERE LINTEL MARKS ARE SHOWN THUS: "L#". REFER TO SCHEDULE 8. CONNECT LINTELS DIRECTLY TO STRUCTURE WHERE INSUFFICIENT BEARING IS AVAILABLE.
- . A SUITABLE LINTEL IS TO BE SUPPLIED FOR ALL MASONRY OPENINGS. 9. LINTEL SUPPORTING EXTERIOR WYTHE OF MASONRY IN EXTERIOR WALLS SHALL BE HOT DIP GALVANIZED. 10. ALL DOUBLE ANGLE LINTELS TO BE WELDED BACK-TO-BACK TOP AND BOTTOM WITH 5mm FILLET
 - WELDS x 50mm LONG WELD AT 600mm o/c. 11. LINTELS IN CURVED WALLS ARE TO BE ROLLED TO REQUIRED RADIUS.
 - 12. MASONRY CONTROL JOINTS ARE NOT TO BE LOCATED THROUGH LINTELS.
 - 13. FULL HEAD JOINTS ARE REQUIRED FOR DEPTH OF LINTEL.
- MASONRY CONTROL JOINTS ARE NOT TO BE LOCATED THROUGH MASONRY
 - . ALL EXTERIOR LINTELS TO BE HOT-DIP GALVANIZED AFTER FABRICATION AND STRAIGHTENED TO MEET CSA S16 TOLERANCES.

. GROUT FOR LINTEL TO BE 25MPa.

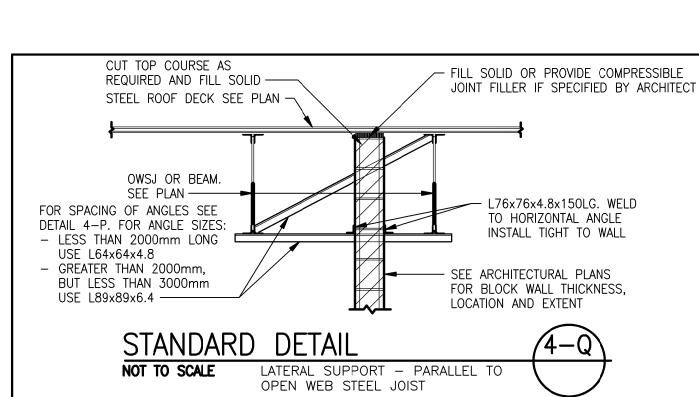
PROVIDE 8" BEARING EACH END UNLESS NOTED OTHERWISE ON DRAWING. BEARING TO BE ON 2'-0" LONG BY 2 COURSES DEEP OF FILLED MASONRY UNLESS OTHERWISE NOTED ON PLAN, DRAWING, OR BEARING PLATE SCHEDULE.

LINTEL SUPPORTING EXTERIOR WYTHE OF MASONRY IN EXTERIOR WALLS SHALL BE

HOT DIP GALVANIZED. SEE GENERAL PURPOSE LINTEL SCHEDULE FOR SIZE.

1. FULL HEAD JOINTS ARE REQUIRED FOR DEPTH OF MASONRY LINTEL WHEN SPECIFIED.

MASONRY CONTROL JOINTS ARE NOT TO BE LOCATED THROUGH MASONRY



MISCELLANEOUS STEEL

8. PLATE SECTIONS TO BE CLASS 300W (44 KSI).

- SUBMIT FOR CONSULTANTS REVIEW ERECTION DIAGRAMS AND FABRICATION DETAILS IN ACCORDANCE
- WITH THE GENERAL NOTES. 2. CONSULTANTS REVIEW OF SHOP DRAWING DOES NOT RELEASE THE CONTRACTOR OF HIS
- RESPONSIBILITY FOR THE COMPLETENESS OF THE WORK NOR CO-ORDINATION WITH OTHER TRADES. 3. FABRICATION AND ERECTION OF STEEL SHALL BE IN ACCORDANCE WITH CSA S16 (CURRENT).
- 4. THE FABRICATOR SHALL NOTE THE SIZE AND TYPE OF BOLTS AND WELDS USED IN STRUCTURAL CONNECTIONS ON THE SHOP DRAWINGS. 5. ALL STEEL TO BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH CAN/CSA-G162-M92 (MINIMUM
- ZINC COATING 600 GSM). PROVIDE SEPARATE PRICE FOR GUARD/HANDRAILS TO BE FABRICATED IN S316 STAINLESS STEEL. 6. ALL THREADED RODS, BOLTS, WASHERS TO BE STAINLESS STEEL S316.

7. STEEL PIPE SECTIONS TO BE MINIMUM GRADE A WITH YIELD STRESS OF 30 KSI.

Project Manager JAN 2025 Design By Project No. 60413_100 Drawn By AS NOTED

Engineers, Scientists, Surveyors

ALPINE PUBLIC

SCHOOL RENOVATION

STRUCTURAL DATA

SSUED FOR TENDER

(519)-204-6510

LUCERNE DRIVE

1 2025/03/06

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NOTE TO CONTRACTOR

ENGINEER'S WRITTEN PERMISSION.

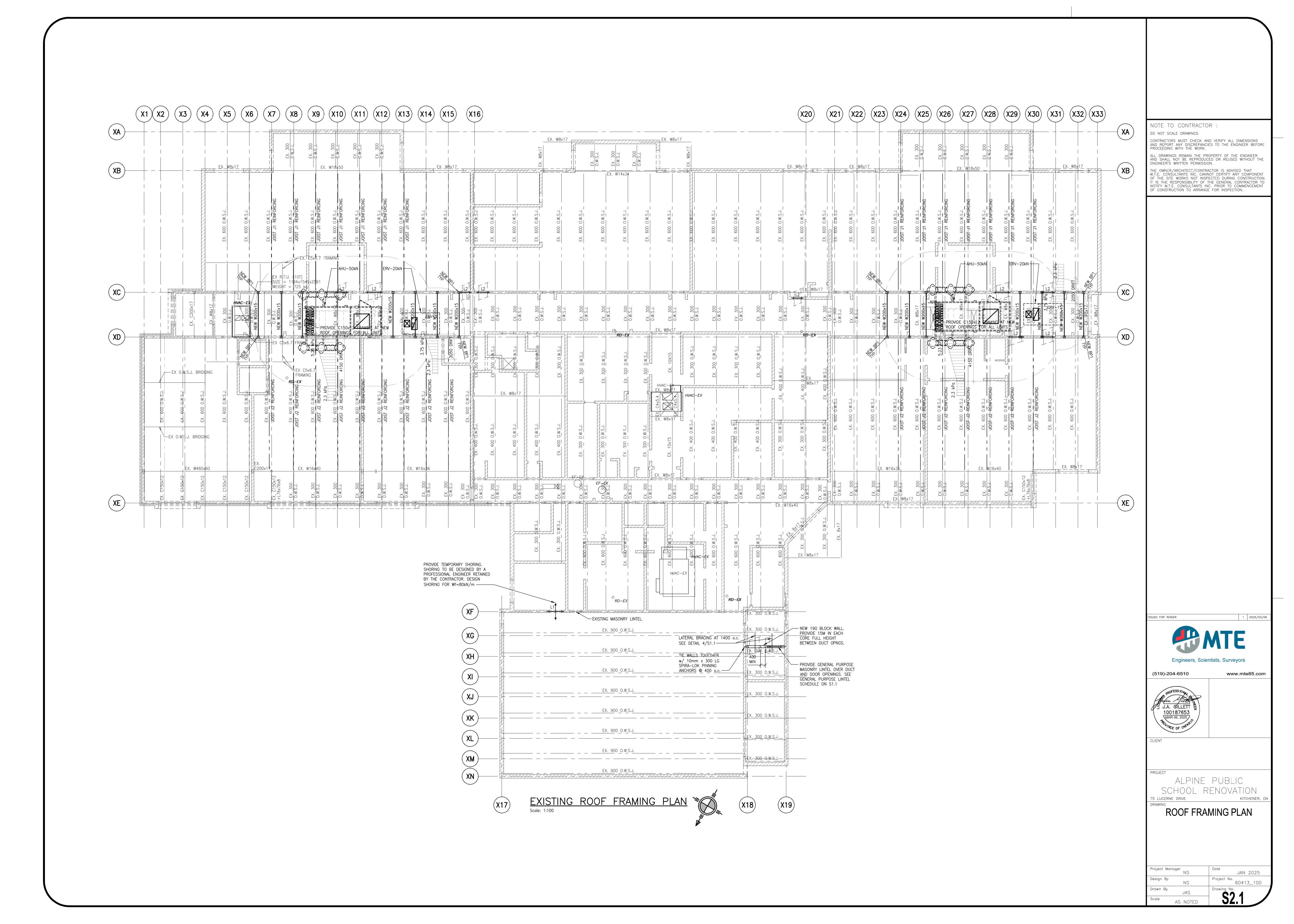
CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

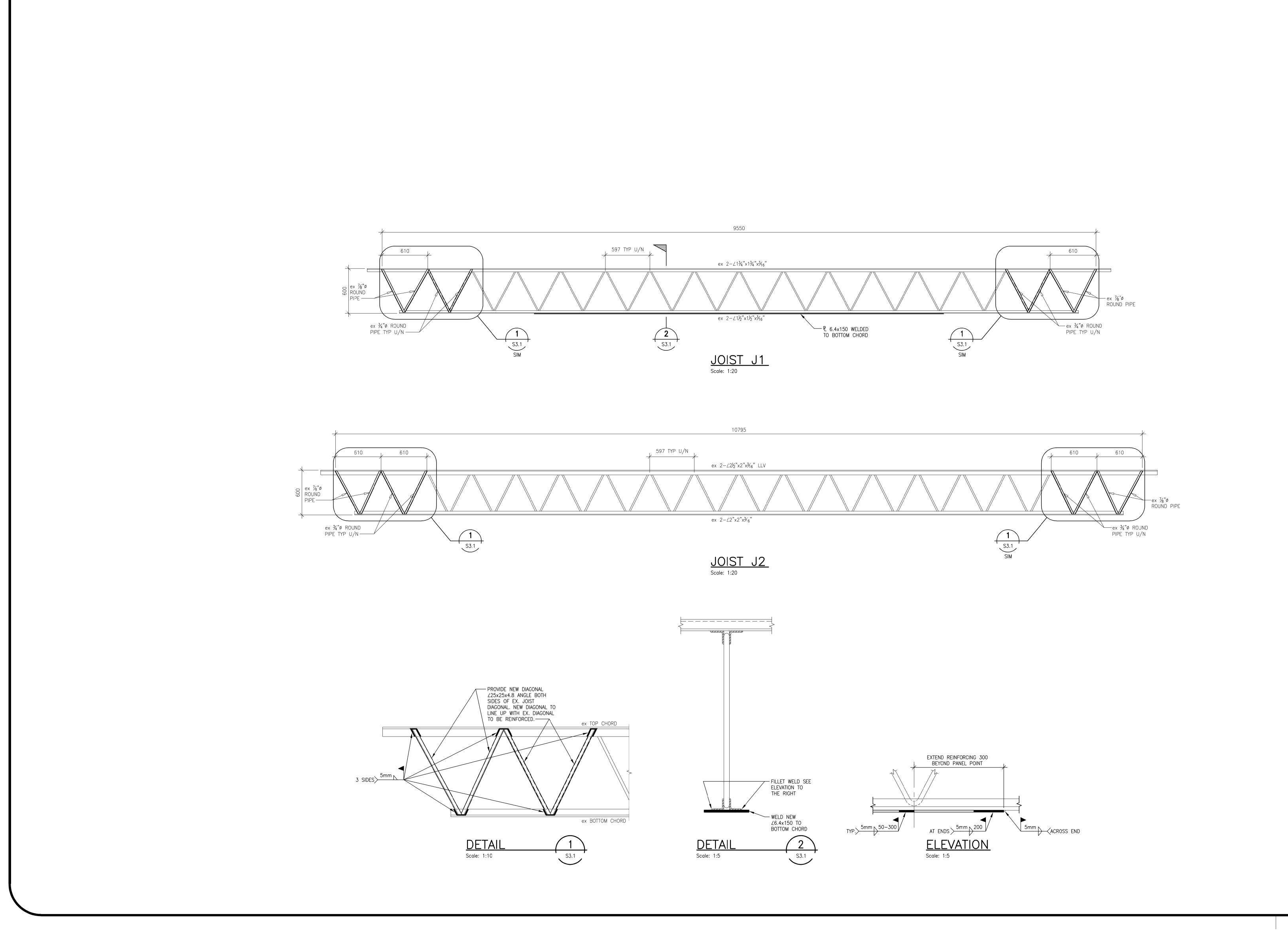
ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED OR REUSED WITHOUT THE

THE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT M.T.E. CONSULTANTS INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY M.T.E. CONSULTANTS INC. PRIOR TO COMMENCEMENT

OF CONSTRUCTION TO ARRANGE FOR INSPECTION.

DO NOT SCALE DRAWINGS.





NOTE TO CONTRACTOR : DO NOT SCALE DRAWINGS.

CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED OR REUSED WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

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ISSUED FOR TENDER

Engineers, Scientists, Surveyors

1 2025/03/06

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ALPINE PUBLIC SCHOOL RENOVATION LUCERNE DRIVE KITCHENER, ON 75 LUCERNE DRIVE

ELEVATIONS AND DETAILS

Project Manager NS Project No. 60413_100 Design By

T	Connection Sizes	Fixture			Trim		Accessories
Туре	HW CW TW Drain Vent	Acceptable Manufacturer	Fixture Description	Acceptable Manufacturer	Trim Description	Acceptable Manufacturer	Accessory Description
ROOF DRAIN	NOTED	ZURN ZA121-CR MIFAB R1200-BU CONTOUR C1000DMP WATTS RD-100-BED-K SMITH 1015-C-R-AD	STANDARD ROOF DRAIN WITH CAST IRON BODY WITH ALUMINUM DOME, UNDER-DECK CLAMP TO SUIT ROOF CONSTRUCTION, ROOF SUMP RECEIVER, FLASHING CLAMP RING WITH INTEGRAL GRAVEL STOP.				

		AHU	AHI	J Data			Coc	oling Coil	Data							Gas Heatir	g Section	1			F	lectrical Do	ıta		I	
Item	Туре	ZONE NUMBER	Supply cfm	OA Size	Medium	Coil Type	Nominal Tons		Sensible MBH	Ent Air L db/wb	.VG Air	ESP in wc	Medium	HIGH FIRE	HIGH FIRE OUTPUT MBH	LOW FIRE	LOW FIRE OUTPUT MBH	45115	ESP G	GAS PRESSURE in wc (MIN/MAX)	Unit	MCA/I	MOCP	Manufacturer & Model	Remarks	Accessories
MZ-1	MULTIZONE ROOF TOP UNIT			3,600	R454B	DX	26	316.0	240.7		55		GAS	880	856	576	560	97%		4.5/10.5	208/3/60	161/175	66/70	CUSTOM EQUIPMENT PMZ3-40YG41		INTEGRAL CONDENSATE NEUTRALIZER WITH SIN
		1	2,000	456 1.0								1.0							0.8						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-060-233	POINT CONNECTION FOR EACH MULTIZONE UNITED
		2	2,000	456 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-060-233	ECONOMIZER FUNCTIO ON ALL FURNACES
		3	1,400	319 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-048-233	SERVICE LIGHTING ANI
		4	1,400	319 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-048-233	REFRIGERANT PIPING EXTERIOR FOR TIE IN
		5	1,400	319 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-048-233	REMOTE HPS (FINAL PIPING BY THIS CONTRACTOR) SINGLE
		6	1,450	331 1.0								1.0							0.8						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-048-233	POINT GAS CONNECTION FIELD MEASUREMENT
		7	2,000	1,000 1.0								1.0							8.0						PRETREAT SECTION	MATCH EXISTING ROO CURB (ADAPTOR PRO
		8	2,000	400 1.0								1.0							8.0						PRETREAT SECTION	IF REQUIRED) AND M. EXISTING SA
		9																								CONNECTIONS 2 FUSI DISCONNECTS (1 PER
MZ-2	MULTIZONE ROOF TOP UNIT		7,960	2,400	R454B	DX	21	253.8	194.7	80/67	55		GAS	770	749	504	490	97%		4.5/10.5	208/3/60	133/150	60/70	CUSTOM EQUIPMENT PMZ3-35YG41		EACH LISTED POWER REQUIREMENT WITH A
		1	2000	301 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-060-233	WITHOUT COOLING) INTEGRATE WITH SPAC
		2	NOT	USED																						CO2 SENSORS SUITAE FOR INLET GAS PRES
		3	1,300	196 1.0								1.0							8.0						MODEL: ML14XP1-048-233	OF 3.5"
		4	2,200	332 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-060-233	
		5	1,000	151 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-036-233	
		6	1,460	220 1.0								1.0							8.0						OUTDOOR CONDENSING UNIT MODEL: ML14XP1-048-233	
		7	2,000	1,000 1.0								1.0							8.0						PRETREAT SECTION	
		8	2,000	400 1.0								1.0							8.0						PRETREAT SECTION	
		9														1										

ltem	Туре	Equalizing Grid	Volume Damper	Acceptable Manufacturer	Description
D1	SQUARE CEILING DIFFUSER	YES	NONE	EH PRICE SCDA	MULTICONE, FULLY ADJUSTABLE, 24x24, STEEL CEILING DIFFUSER W/ROUND NECK. SUITABLE FOR LAY-IN T-BAR CEILING, OR DRYWALL CEILING WHEN C/W FRAME.
D2	ROUND DIFFUSER (EXPOSED)	YES	NONE	EH PRICE RCDA	MULTICONE, FULLY ADJUSTABLE, STEEL DIFFUSER W/ROUND NECK. SUITABLE FOR EXPOSED, HUNG INSTALLATION. PROVIDE CONCEALED SAFETY CHAIN FROM DIFFUSER UP INTO DUCTWORK.
R1	CEILING RETURN GRILLE (NON-DUCTED)	NO	NONE	EH PRICE 80-CH	1/2x1/2x1/2 ALUMINUM EGGCRATE CORE, C/W CHANNEL BORDER FOR LAY-IN T-BAR CEILING.
LD1	LINEAR CEILING DIFFUSER	NO	NONE	EH PRICE SDS-100 WITH SDA PLENUM	2 SLOT (1" WIDE) LONG LINEAR DIFFUSER, EXTRUDED ALUMINUM CONSTRUCTION, SLOPED SHOULDER PLENUM, 180° AIR PATTERN ADJUSTMENT, SUITABLE FOR STANDARD LAY—IN T—BAR CEILING W/MITRED END FLANGES, & INSULATED PLENUM. LENGTH AS INDICATED.

<u> F</u>	<u>AN</u>	<u>SC</u>	<u>IEDU</u>	<u>LE</u>					SPECIFICATION	CATED ON SCHEDULE REFER FOR CONSTRUCTION STANDAR S AND ADDITIONAL INFORMATI
Item	Тур	e	Capacity	ESP	Fan Speed		lotor		Acceptable	Description
EF-1	CEILING EXHAU: FAN	3	400	0.25	rpm 812	hp	Voltag 120/1/	60 (Manufacturer GREENHECK SP-A1050-VG	ACOUSTICALLY INSULATE STEEL HOUSING, DUAL CENTIFUGAL BLOWER WHEELS, 90° DISCHARGI OUTLET W/BACKDRAFT DAMPER, C/W WHITE PAINTED ENAMEL STEEL GRILLE, VIBRATION
	ERAL FA		ES: ANUFACTU	JRERS:	: BROA	AN, GRE	ENHEC	<u> </u> :к, :	ZONEX	ISOLATORS. 2.5 SONES
1. A	VT	CON	NTRO)	DAM	MPEF	R S	6 <u>C</u>	HEDULE	ISOLATORS. 2.5 SONES
1. A	VT (Ca Design	NTRO pacity (Minimum	cfm)	DAN	1PEF Size	Master		HEDULE	ISOLATORS, 2.5 SONES
1. A	VT	Ca Design	NTRO)	DAN	Size	Master	6 <u>C</u>	HEDULE	ISOLATORS. 2.5 SONES
1. A	VT (Ca Design	NTRO pacity (Minimum	cfm)	DAM	1PEF Size	X Waster	6 <u>C</u>	HEDULE	ISOLATORS. 2.5 SONES
1. A	VT -1.1	Ca Design	NTRO pacity (Minimum	cfm) [Maxin	DAM mum 0 2	Size	X Waster	Bypass	HEDULE	ISOLATORS. 2.5 SONES

CAPACITY INDICATED ON SCHEDULE REFER TO

SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.

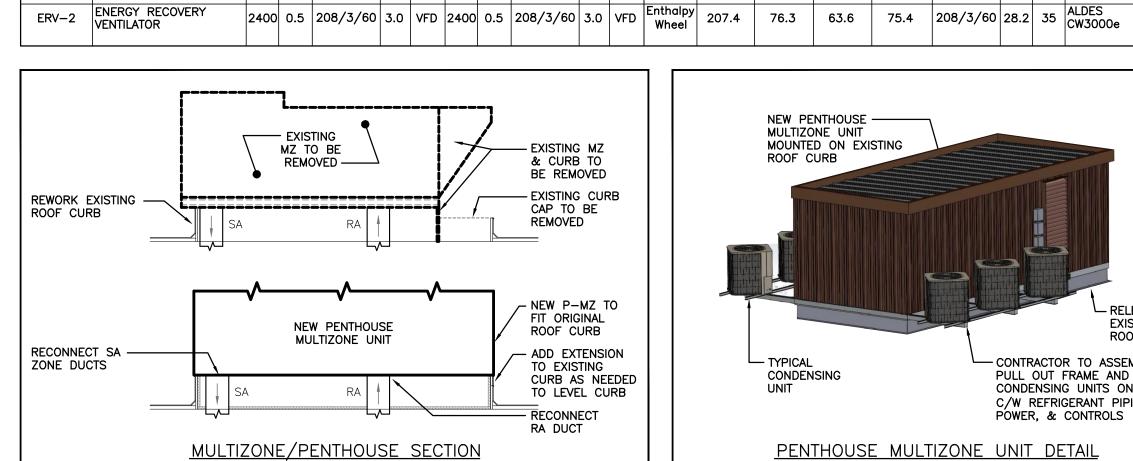
Remarks

INTERLOCK WITH MZ-1. C/W 24" INSULATED ROOF CURB. BACNET CARD. INTAKE AND EXHAUST HOOD.

CO2 SENSOR. FAN INTERLOCK.

CO2 SENSOR. FAN INTERLOCK.

DEFROST DAMPER/RECIRC DEFROST CYCLE INTERLOCK WITH MZ-1. C/W 24" INSULATED ROOF CURB. BACNET CARD. INTAKE AND EXHAUST HOOD.



UNIT

ROOF CURB W/ISOLATION CURB

FLASHING

INSULATION

MATERIAL

VIBRATION ISOLATION CURB

PREFABRICATED ROOF CURB, —

(VIBRATION RAIL CURB NOT

NEW 50mm RIGID INSULATION -

ON NEW VAPOUR BARRIER

MECHANICALLY FASTENED TO POINT OF PENETRATION. REFER TO SPECIFICATION

2"x4" WOOD NAILER -----

HEIGHT AS SPECIFIED.

INCLUDED IN HEIGHT).

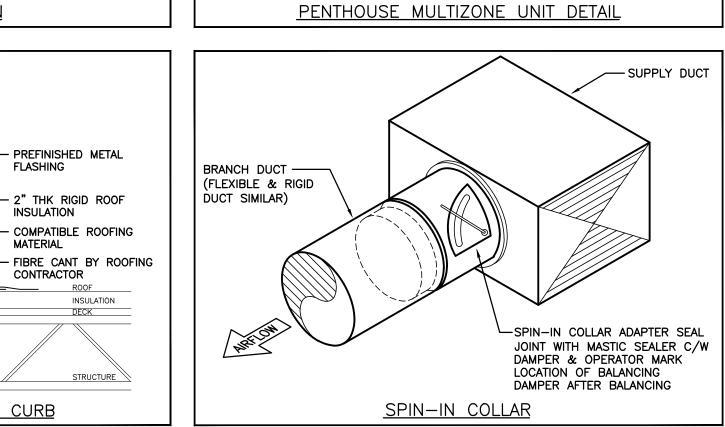
PRE-FAB CURB -FASTENED TO STEEL DECK

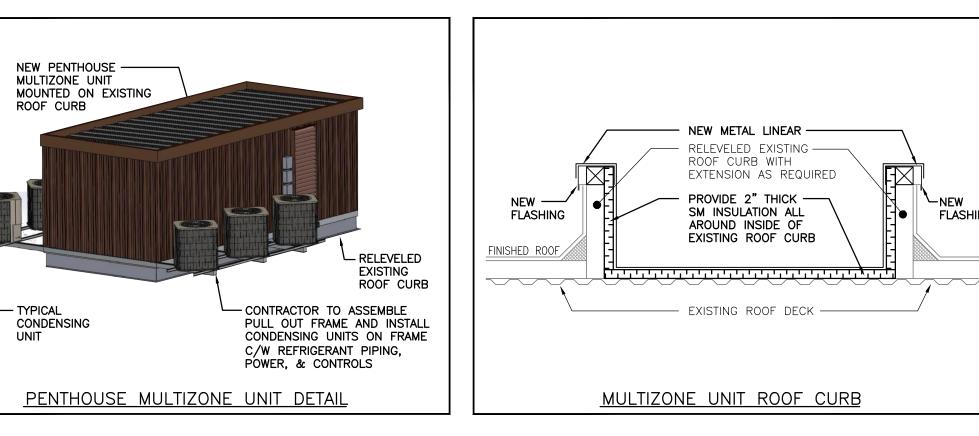
ENERGY RECOVERY UNIT SCHEDULE

ENERGY RECOVERY

VENTILATOR

ERV-1



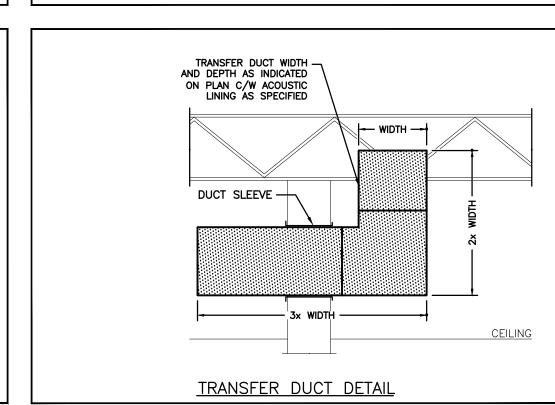


Accessories

CO2 CONTROLLER

CO2 CONTROLLER

DEFROST DAMPER/RECIRC DEFROST CYCLE VIBRATION ISOLATION RAIL AT CURB



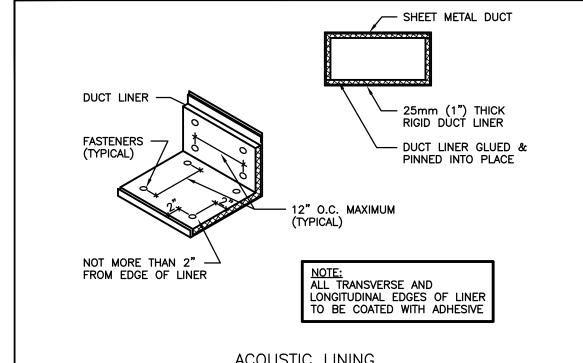
Item	Description	ltem	Description
	- ITEM TO BE REMOVED	^G ©	CO2 SENSOR (WITH GUARD WHERE INDICATED)
	CUT EXISTING & CONNECT NEW PIPING		SUPPLY AIR DUCT
—CD	- CONDENSATE DRAIN		RETURN/EXHAUST AIR DUCT
—G——	- NATURAL GAS	-	ACOUSTIC DUCT LINING
-HPG	- HIGH PRESSURE NATURAL GAS		THERMAL INSULATION
—RL	- REFRIGERANT LIQUID	FSD	FIRE/SMOKE DAMPER
-RS	- REFRIGERANT SUCTION	+	RECTANGULAR DUCTWORK
	TEE CONNECTION		RIGID ROUND DUCT
c —	PIPE DOWN		FLEXIBLE ROUND DUCT
o —	PIPE UP	Type Size Capacity	DIFFUSER/GRILLE SIZE (imp) TYPE & CAPACITY (cfm)
	- REDUCER/INCREASER	AFF	ABOVE FINISHED FLOOR
PRV	- PRESSURE REDUCING VALVE	AFR	ABOVE FINISHED ROOF
	- UNION	EX	EXISTING DUCT (SIZE AS INDICATED)
—	SCREWED OR WELDED PIPE CAP	C.E.T	CONNECT TO EXISTING
₩	PLUG VALVE		TRANSFER DUCT (SIZE AS INDICATED)
G D	THERMOSTAT (WITH GUARD WHERE INDICATED)		

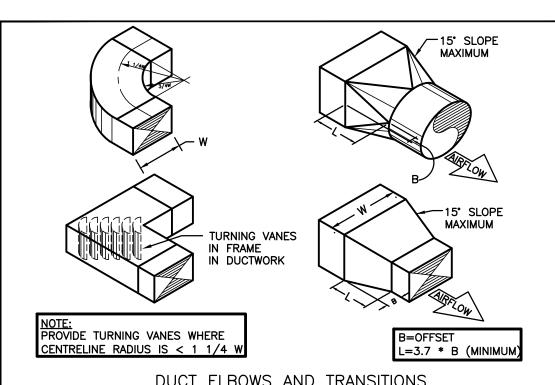
HVAC SYSTEM CLEANING

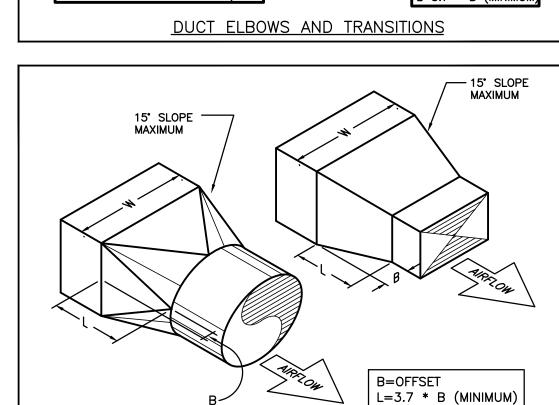
- ALL DUCT SYSTEMS FOR THE MULTIZONE HVAC SYSTEM IS TO BE CLEANED. REFER TO SPECIFICATION.
- 2. DUCTWORK, DIFFUSERS, GRILLES, DAMPERS SHOWN ARE APPROXIMATE. RA CEILING GRILLES ARE NOT SHOWN, BUT ARE INCLUDED TO BE CLEANED.
- 3. CONTRACTOR IS RESPONSIBLE FOR ACCESS TO THE DUCTWORK INCLUDING CEILING TILE REMOVAL & REINSTALLATION, DUCT OPENINGS, ETC TO ALLOW SYSTEM TO BE

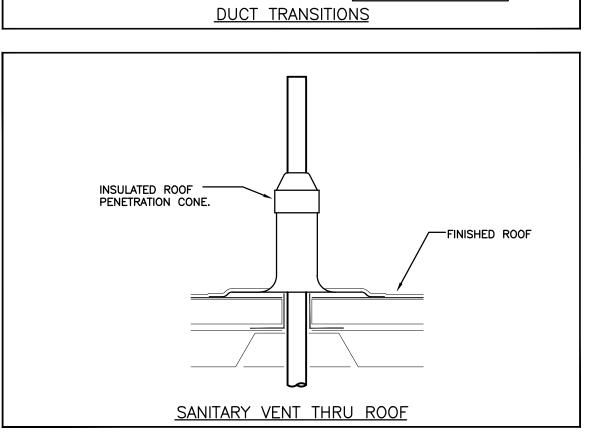
GENERAL NOTES

- A. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PREPARED SPECIFICATION.
- B. CO-ORDINATE WITH THE GENERAL CONTRACTOR ANY OWSJ BRIDGING/CROSS BRACING RELOCATION OR REMOVAL/REPLACEMENT REQUIRED FOR INSTALLATION OF DUCTWORK.
- C. UPON COMPLETION OF THE PROJECT THE CONTRACTORS SHALL PROVIDE THE FOLLOWING CERTIFICATES BEFORE CONFORMANCE LETTERS ARE ISSUED BY THE COPY OF MANDATORY TSSA/CSA-B149 GAS PRESSURE TEST TAG
 LETTER FROM CONTRACTOR VERIFYING THAT ALL REFRIGERATION LEAK DETECTION SYSTEMS AND THEIR TREATMENT OF THE PROPERTY OF THE PROPE

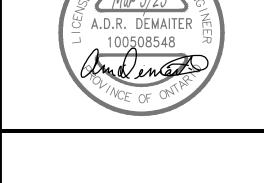








3	ISSUED FOR PERMIT/TENDER	Mar. 05/25	
2	ISSUED FOR 100% REVIEW	Feb. 21/25	
1	ISSUED FOR OWNERS REVIEW	Feb. 10/25	
NO	ISSUED	DATE	
The Foll per Cor The acc to Dra by and The with Do	nmencement of the work. drawings show general arrangement of ow as closely as actual building construmit. Obtain approval for relocation of sesultant before commencement of the work drawings do not indicate all offsets fittessories which may be required. Provid meet the required conditions. Wings and specifications, etc., prepared the Consultant are the property of the office of the completion of se documents are not to be duplicated to be duplicated to the consent of the Consultant. 2025 DEI Consulting Engineers Inc.	ction will rvice from ork. ing and e the same and issued Consultant the project	



WRDSB ALPINE PS HVAC UPGRADE

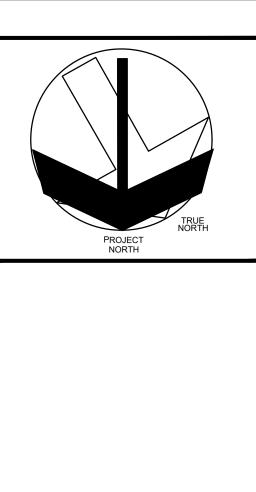
> 75 LUCERNE DRIVE KITCHENER, ON.

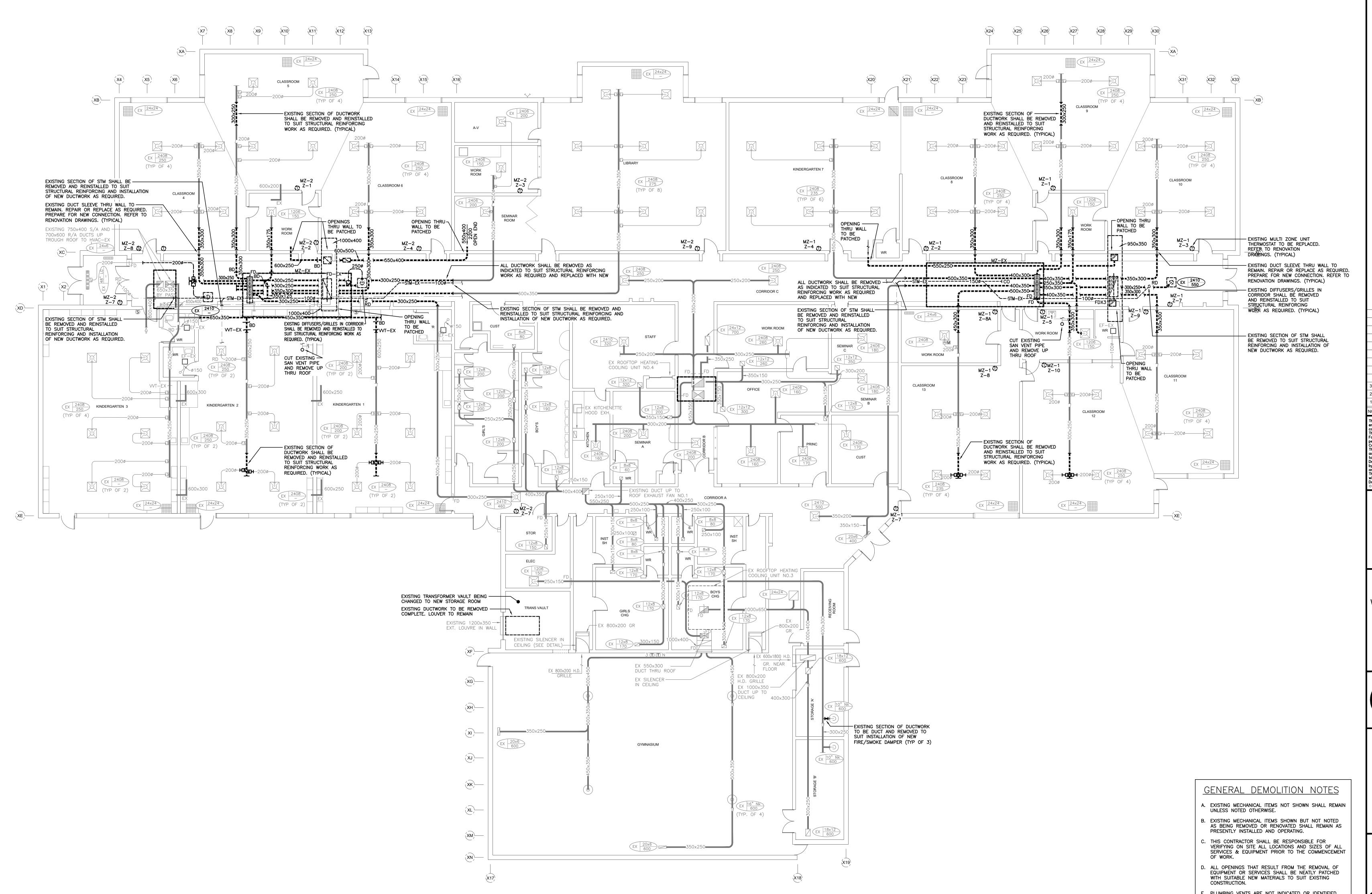


LEGEND, SCHEDULES & **DETAILS**



Proje	ect Number: 24355
SCALE	PROJECT
AS NOTED	24420
DATE JAN. 2025	24138
DRAWN IE / EH	DRAWING
CHECKED AA / AD	M100
PRINT DATE CAD FILE	JANUARY 25





GROUND FLOOR PLAN — DEMOLITION SCALE: 1:100

- E. PLUMBING VENTS ARE NOT INDICATED OR IDENTIFIED.
 REMOVE ALL REDUNDANT VENTS WHILE MAINTAINING
 INTEGRITY OF EXISTING SYSTEMS TO REMAIN.

 F. REMOVAL OF EXISTING PIPING. OR DUCT SYSTEMS
- F. REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
- G. MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
 H. INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
- THIS CONTRACTOR IS TO REMOVE & REPLACE CEILINGS AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.
- J. ALL DIFFUSER/GRILLES ARE TO BE CLEANED IN AREAS OF NEW CEILING. REFER TO ARCHITECTURAL DRAWINGS.

3 ISSUED FOR PERMIT/TENDER Mar. 05/25
2 ISSUED FOR 100% REVIEW Feb. 21/25
1 ISSUED FOR OWNERS REVIEW Feb. 10/25
NO ISSUED DATE

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.

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WRDSB ALPINE PS HVAC UPGRADE

> 75 LUCERNE DRIVE KITCHENER, ON



GROUND FLOOR PLAN DEMOLITION



MECHANICAL | ELECTRICAL | AQUATIC

55 Northland Road, Waterloo, ON N2V 1Y8 Phone: 519-725-3555

Website: deiassociates.ca
Project Number: 24355

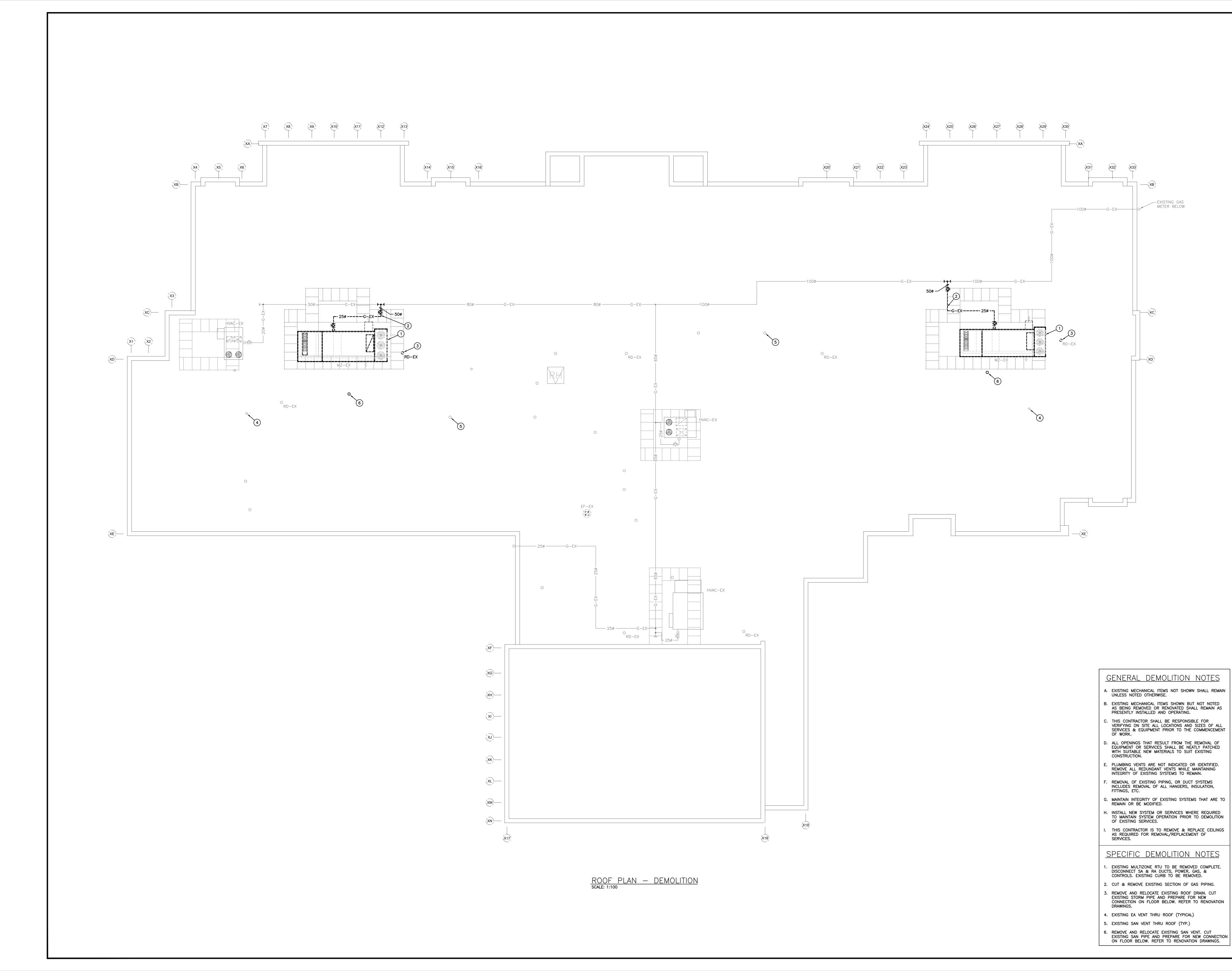
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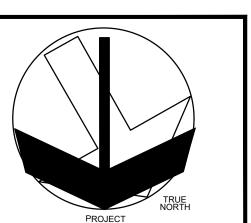
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JANUARY 25

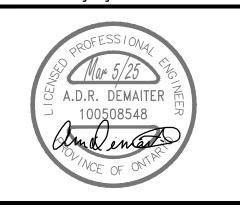




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2 ISSUED FOR 100% REVIEW Feb. 21/25
1 ISSUED FOR OWNERS REVIEW Feb. 10/25
NO ISSUED DATE

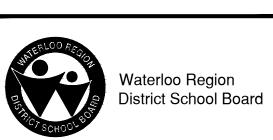
The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
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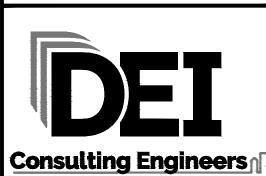
WRDSB ALPINE PS HVAC UPGRADE

> 75 LUCERNE DRIVE, KITCHENER, ON.



ROOF PLAN

ROOF PLAN DEMOLITION



MECHANICAL | ELECTRICAL | AQUATIC

55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca
Project Number: 24355

Project Number: 24355

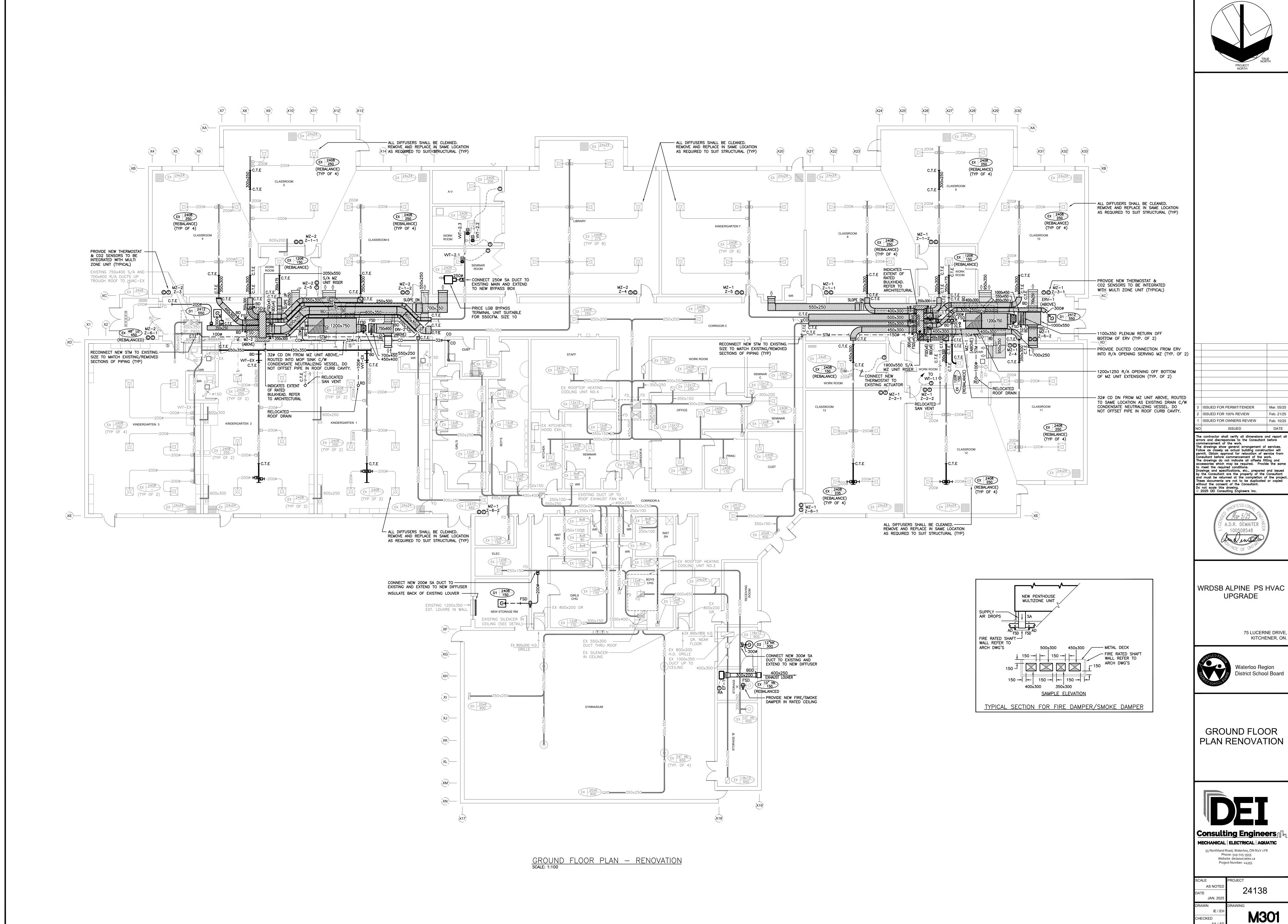
PROJECT

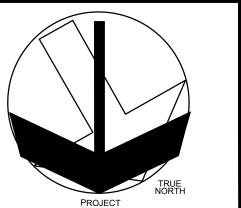
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AS NOTED DATE JAN. 2025

DRAWN IE / EH CHECKED AA / AD

PRINT DATE JANUARY 25





WRDSB ALPINE PS HVAC **UPGRADE**

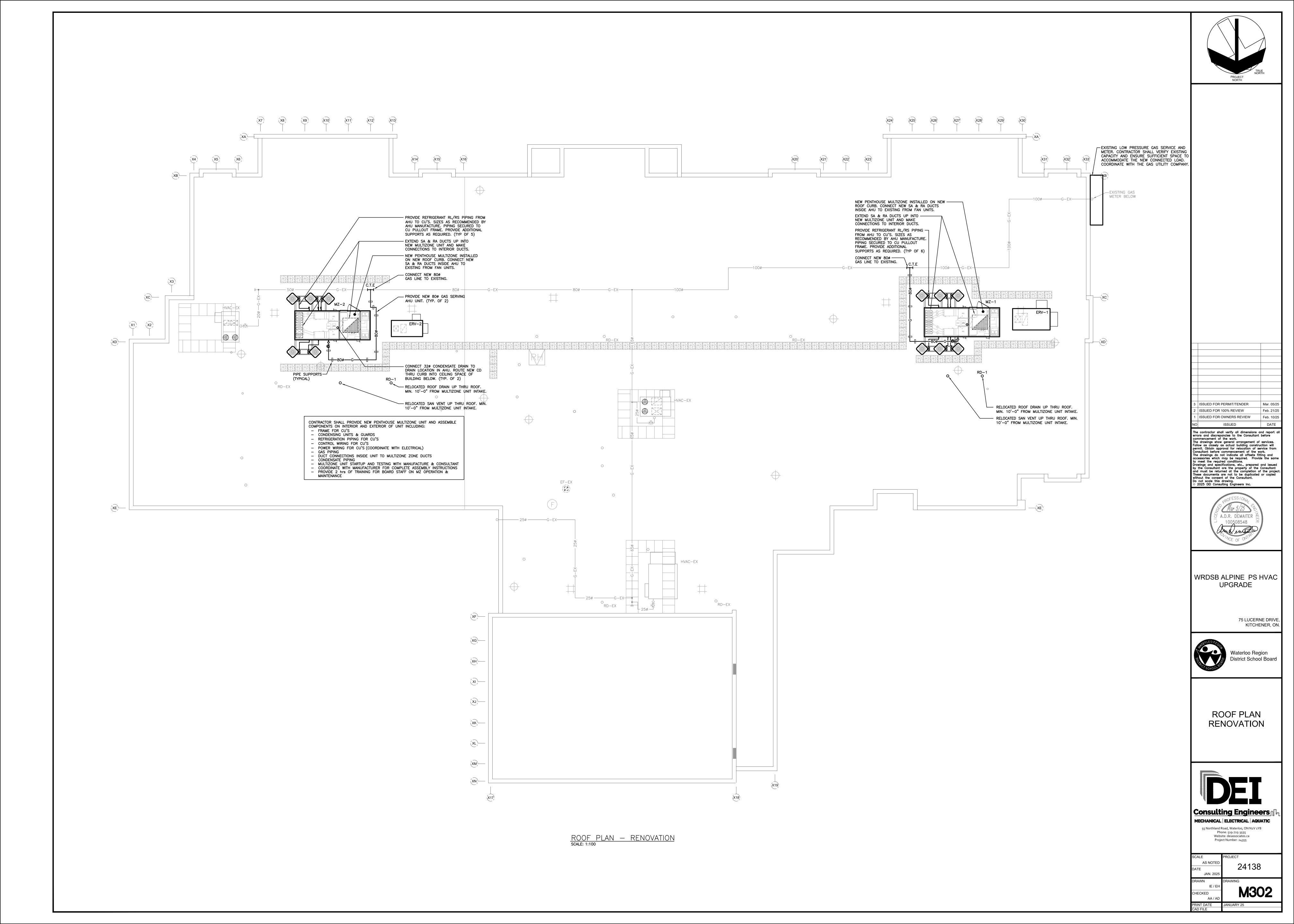
> 75 LUCERNE DRIVE KITCHENER, ON

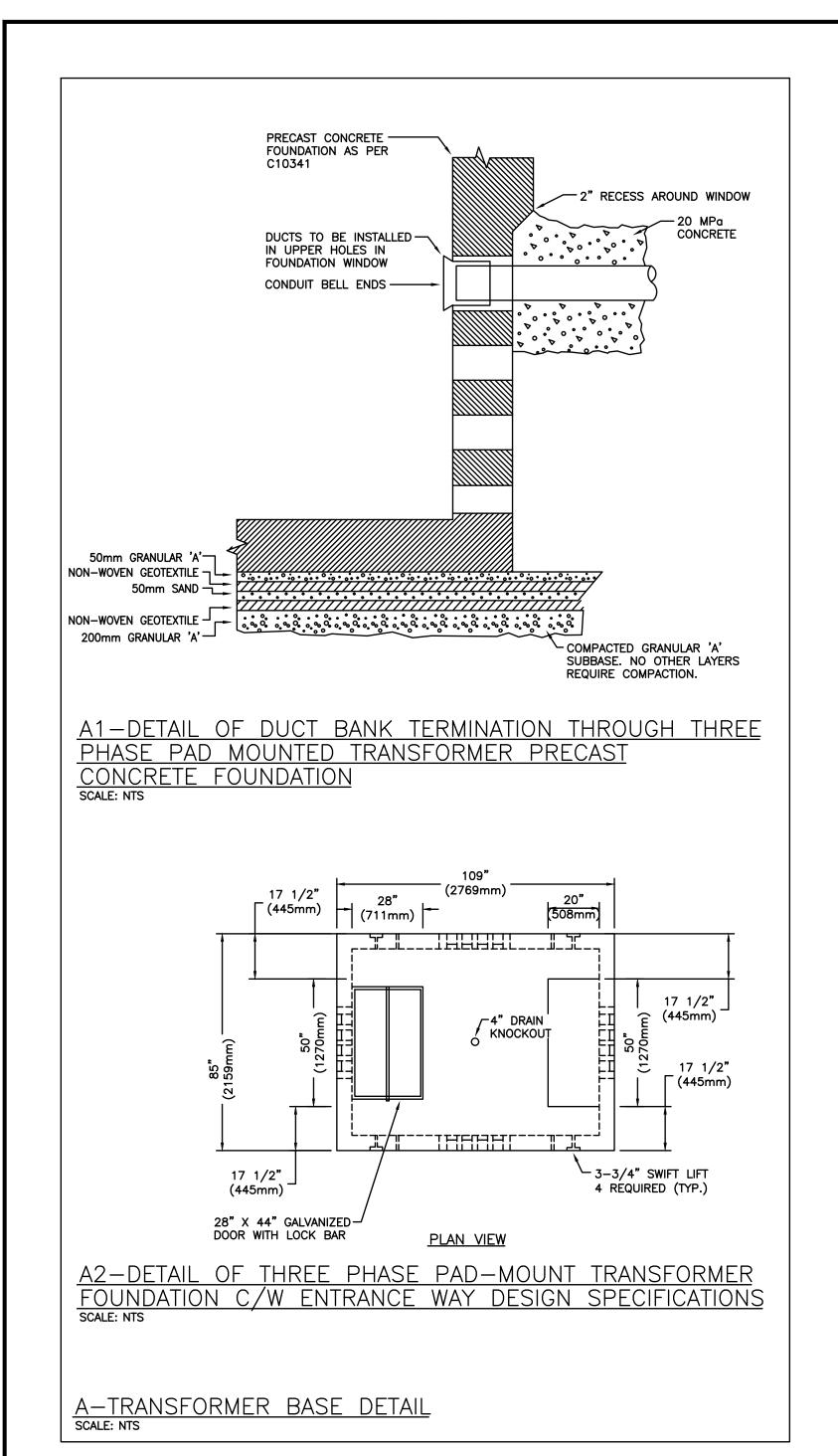
Waterloo Region District School Board

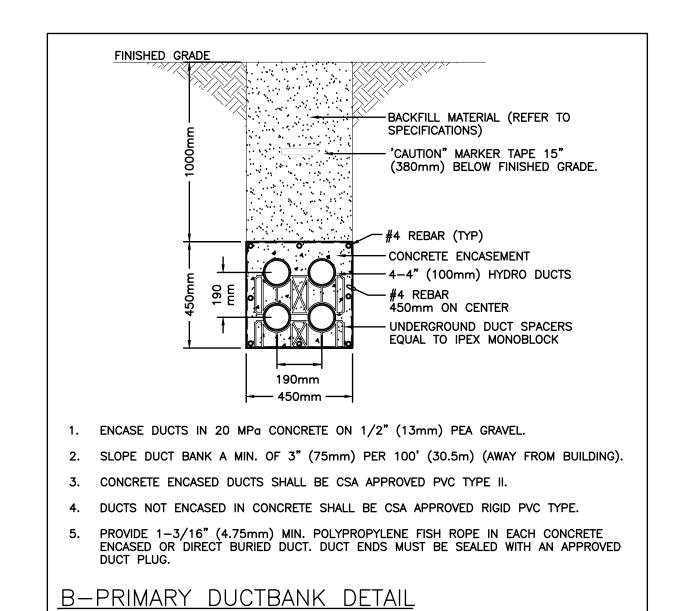
GROUND FLOOR PLAN RENOVATION

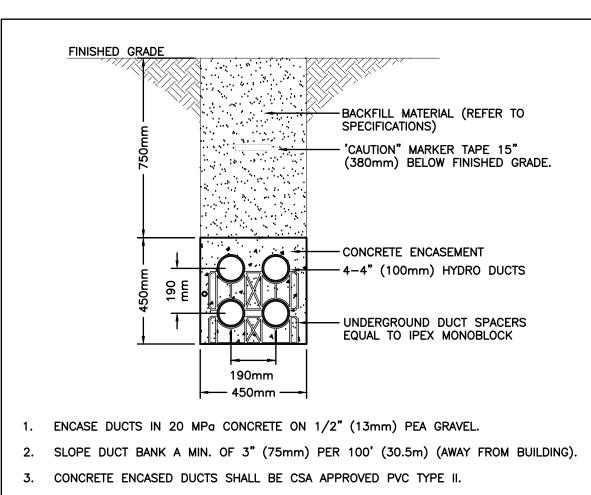
Consulting Engineers MECHANICAL | ELECTRICAL | AQUATIC

Phone: 519-725-3555 Website: deiassociates.ca Project Number: 24355 24138









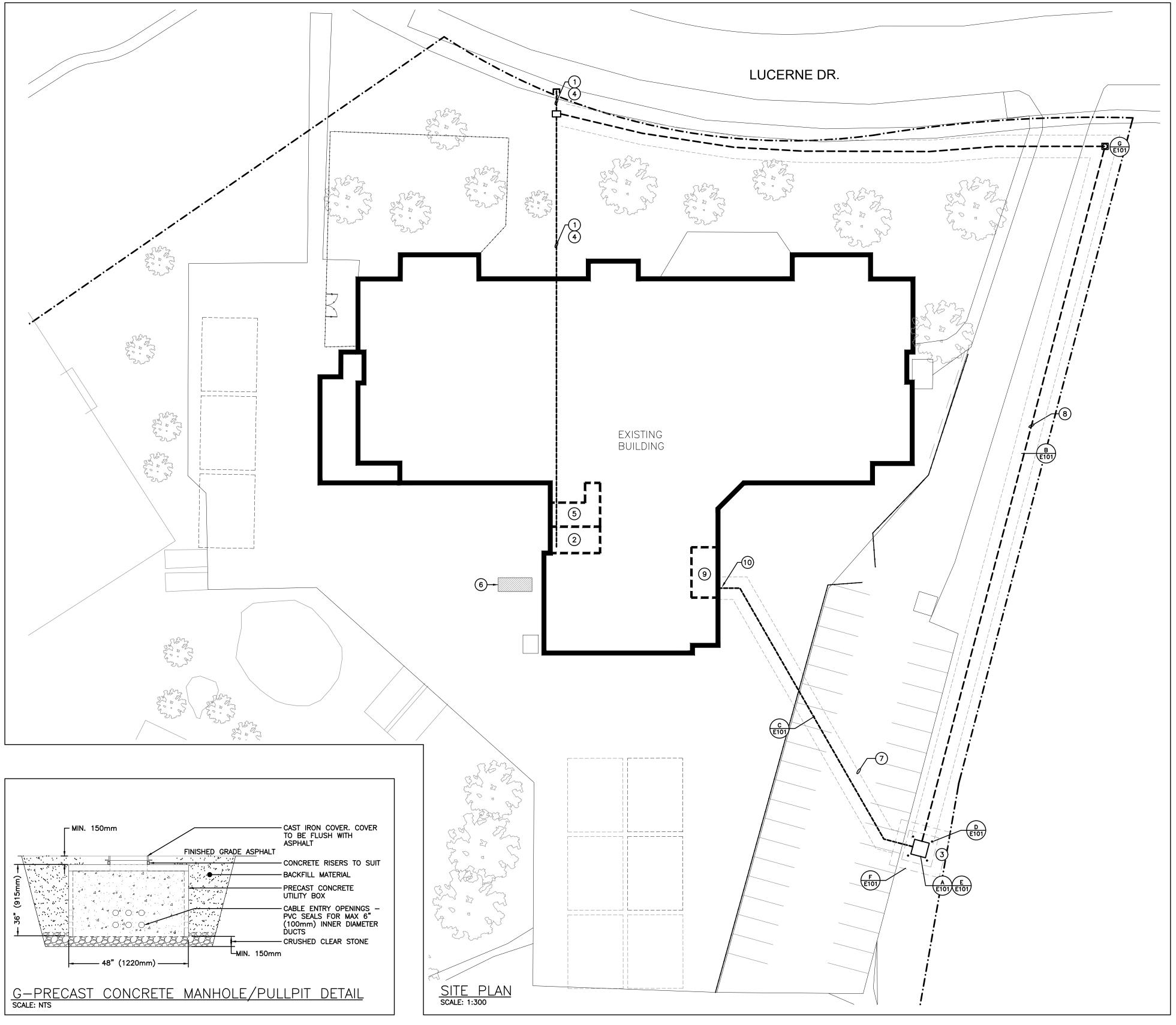
4. DUCTS NOT ENCASED IN CONCRETE SHALL BE CSA APPROVED RIGID PVC TYPE. PROVIDE 1-3/16" (4.75mm) MIN. POLYPROPYLENE FISH ROPE IN EACH CONCRETE ENCASED OR DIRECT BURIED DUCT. DUCT ENDS MUST BE SEALED WITH AN APPROVED DUCT PLUG.

REPLACEMENT OF THE EQUIPMENT.

6. GUARD POST SHALL BE CONNECTED TO GROUND GRID (AS SHOWN) OR TO GROUND ROD AS SHOWN, OR WITH APPROVED

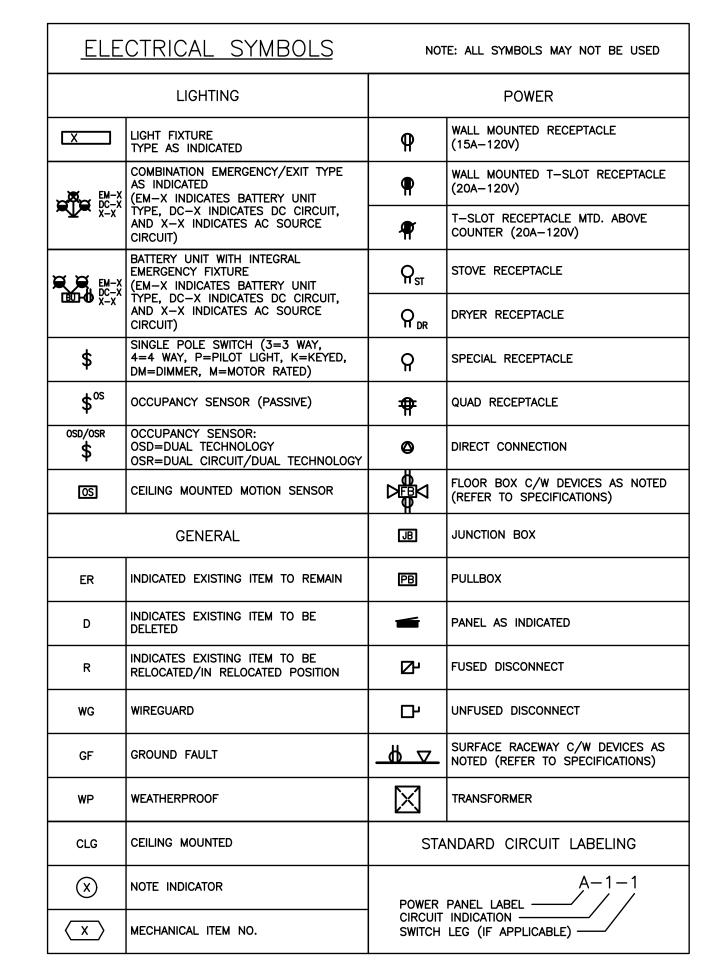
D-DETAIL FOR GUARD POST INSTALLATION AND GROUNDING SCALE: NTS

C-SECONDARY DUCTBANK DETAIL SCALE: NTS



NOTES — REFER TO ELECTRICAL SERVICE SCOPE OF WORK FOR DIVISION OF LABOUR: 1. TRANSFORMER PAD INSTALLATION MUST	
FINISH GRADE FILL GUARD POST WITH CEMENT FOR TO INSTALLATION. 2. CONTAINMENT BOUNDARY TO BE AN EXCAVATED EARTHEN PERMETER. 3. ALL WIRING INSIDE THE CONDUIT AS WELL AS THE CONDUIT TO THE PAD MOUNT STRUCTURE. 4. FIRE QUENCHING STONE TO BE A WASHED CRUSH WITH NOT STONE SMALLER THAN 19mm AND NONE LARGER THAN 25mm WITH A MINIMUM LIQUID VOID RATIO OF 45%. 5. PROTECTIVE BOLLARD TO BE CONNECTED TO UTILITY PROVIDED GROUND LOOP BY ELECTRICAL CONTRACTOR. 6. DIMENSIONS SHOWN IN MILLIMETERS UNLESS OTHERWISE STATED.	SCOPE OF WORK FOR DIVISION OF LABOUR: 1. TRANSFORMER PAD INSTALLATION MUST CONFORM TO ENOVA HYDRO INC. STANDARDS. CONFIRM ALL REQUIREMENTS PRIOR TO INSTALLATION. 2. CONTAINMENT BOUNDARY TO BE AN EXCAVATED EARTHEN PERIMETER. 3. ALL WIRING INSIDE THE CONDUIT AS WELL AS THE CONDUITS TO BE SEALED AT THE ENTRANCE POINT TO THE PAD MOUNT STRUCTURE. 4. FIRE QUENCHING STONE TO BE A WASHED CRUSH WITH NOT STONE SMALLER THAN 19mm AND NONE LARGER THAN 25mm WITH A MINIMUM LIQUID VOID RATIO OF 45%. 5. PROTECTIVE BOLLARD TO BE CONNECTED TO UTILITY PROVIDED GROUND LOOP BY ELECTRICAL CONTRACTOR. 6. DIMENSIONS SHOWN IN MILLIMETERS UNLESS OTHERWISE STATED. PLA 450 MIN. 650 MAX. 1400 GROUND RODS BY ENOVA MUST BE SET IN UNDISTURBED NATIVE SOIL 100mm DUCT ENTRY OPENINGS

S — REFER TO ELECTRICAL SERVICE PE OF WORK FOR DIVISION OF LABOUR:		
TRANSFORMER PAD INSTALLATION MUST CONFORM TO ENOVA HYDRO INC. STANDARDS. CONFORM ALL REQUIREMENTS	2538 —	
PRIOR TO INSTALLATION. CONTAINMENT BOUNDARY TO BE AN EXCAVATED EARTHEN PERIMETER.	600	
ALL WIRING INSIDE THE CONDUIT AS WELL AS THE CONDUITS TO BE SEALED AT THE ENTRANCE POINT TO THE PAD MOUNT STRUCTURE.		TRANSFORMER BASE
FIRE QUENCHING STONE TO BE A WASHED CRUSH WITH NOT STONE SMALLER THAN 19mm AND NONE LARGER THAN 25mm WITH A MINIMUM		TRANSFORMER BASE DRAIN
PROTECTIVE BOLLARD TO BE CONNECTED TO UTILITY PROVIDED GROUND LOOP BY		
ELECTRICAL CONTRACTOR. DIMENSIONS SHOWN IN MILLIMETERS UNLESS OTHERWISE STATED.	- 1200	(TYP.)
		PROTECTIVE BOLLARD AS REQUIRED
	PLAN VIEW	———— 6"(152mm) TOP SLAB (ENOVA STOCK CODE No. 38V029023). ROTATE TO SUIT ORIENTATION OF TRANSFORMER
	100 7	FINISHED TREATMENT
1 100 141114.77777777	200	FIRE QUENCHING STONE
1400	- 600 MAX.	9'-1"W x 4'-2"L x 7'-6"H (2769mm X 1270mm X 2286mm) RISER (ENOVA STOCK CODE No. 38V029021)
	000000	DUCTBANK LOCATIONS VARY
GROUND RODS BY ———————————————————————————————————		
IN UNDISTURBED NATIVE SOIL 100mm DUCT ENTRY OPENINGS		
WITH PVC SEALS. (TYP.)	SECTION VIEW	2-50mm LAYERS OF COMPACTED GRANULAR 'A' SUBBASE. REFER TO ENOVA DRAWINGS FOR FURTHER INFORMATION. 100mm CABLE ENTRY OPENINGS WITH PVC SEALS. BREAK OUT DRAIN KNOCKOUT



ELECTRICAL SERVICE-SCOPE OF WORK

ENOVA HYDRO WILL PROVIDE THE FOLLOWING WORK. COST WILL BE PART OF THE ALLOWANCE FOR UTILITY WORK AS LISTED IN THE SPECIFICATIONS:

- U1 SUPPLY AND INSTALLATION OF PRIMARY FUSING AND CONDUCTORS.
- U2 SUPPLY AND INSTALLATION OF PAD MOUNT TRANSFORMER.
- U3 CONNECTION OF PRIMARY AND SECONDARY CONDUCTORS AT PAD MOUNT TRANSFORMER.
- U4 SUPPLY AND INSTALLATION OF METERING INSTRUMENTATION.
- U5 SUPPLY AND INSTALLATION OF TRANSFORMER CONCRETE BASE AND GROUNDING.
- U6 REMOVAL OF EXISTING METERING EQUIPMENT. U7 SUPPLY AND INSTALLATION OF TRANSFORMER LUGS.
- U8 SUPPLY AND INSTALLATION OF PROTECTIVE BOLLARDS.
- U9 SUPPLY AND TERMINATION OF COAX CABLE FOR CONNECTION FROM METER CABINET TO REMOTE METERING ANTENNA.

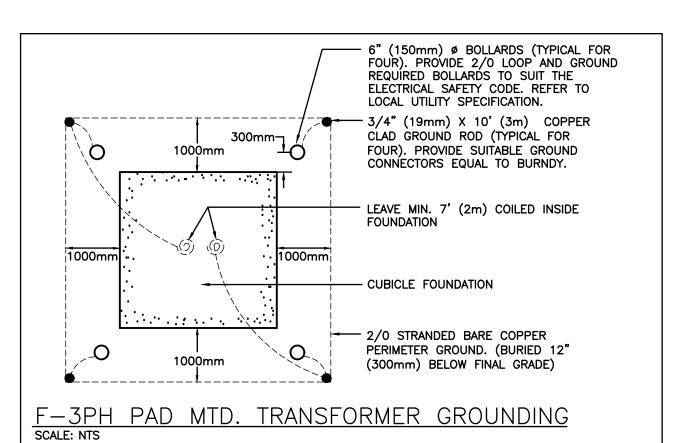
THE ELECTRICAL CONTRACTOR FOR THE BUILDING OWNER (CUSTOMER) SHALL BE RESPONSIBLE FOR THE FOLLOWING:

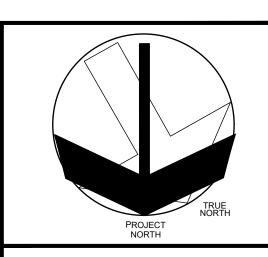
- C1 ALL WORK SHALL MEET UTILITY REQUIREMENTS & INSPECTION. ELECTRICAL CONTRACTOR TO CO-ORDINATE WITH UTILITY PRIOR TO PROCEEDING.
- C2 SUPPLY AND INSTALLATION OF SECONDARY DUCTBANK FROM TRANSFORMER TO MAIN
- C3 SUPPLY AND INSTALLATION OF SECONDARY CABLES AT 208V MAIN SWITCHBOARD. PROVIDE 26'-0" (8000mm) SLACK CONDUCTORS AT TRANSFORMER BASE.
- C4 INSTALLATION OF SERVICE GROUND AT 208V SWITCHBOARD PER ELECTRICAL CODE AND AS SHOWN. PROVIDE COORDINATION STUDY PER SPECIFICATIONS.
- C5 SUPPLY AND INSTALLATION OF METER CABINET PER PLANS AND TO SUIT UTILITY REQUIREMENTS.
- C6 SUPPLY AND INSTALLATION OF CONDUIT TO REMOTE METERING ANTENNA AS SHOWN, AND INSTALLATION OF ANTENNA AND COAX CABLE PROVIDED BY UTILITY.
- C7 SUPPLY AND INSTALLATION OF PRIMARY DUCTBANK.

C8 SUPPLY AND INSTALL OF PULLBOX.

SWITCHBOARD.

- INDICATES APPROXIMATE LOCATION OF EXISTING UNDERGROUND PRIMARY DUCT BANK AND
- FEEDER TO BE DISCONNECTED AND REMOVED BY UTILITY. INDICATES HIGH VOLTAGE ENCLOSURE WITH EXISTING TRANSFORMERS. CONTRACTOR TO
- COORDINATE ENTRANCE INTO THIS AREA WITH UTILITY. INDICATES LOCATION OF NEW PAD MOUNTED TRANSFORMER ON NEW CONCRETE BASE BY ENOVA
- ALL EXISTING UNDERGROUND SERVICES ARE APPROXIMATE. COORDINATE EXACT LOCATIONS ON
- SITE WITH LOCAL AUTHORITIES. PROVIDE ALL REQUIRED LOCATES. INDICATES THE APPROXIMATE LOCATION OF EXISTING MAIN ELECTRICAL ROOM. REFER TO FLOOR
- PLANS FOR EXACT LOCATION.
- INDICATES PROPOSED LOCATION OF TEMPORARY GENERATOR TO BE CONFIRMED WITH SCHOOL BOARD, PROVIDE TEMPORARY PROTECTIVE FENCING.
- CONTRACTOR IS TO SAWCUT ASPHALT FOR ALL CONTRACTOR INSTALLED DUCTBANKS.
- INDICATES APPROXIMATE LOCATION OF NEW PRIMARY DUCTBANK UP TO PROPERTY LINE.
- INDICATES APPROXIMATE LOCATION OF NEW SWITCHBOARD ROOM. REFER TO FLOOR PLANS FOR EXACT LOCATION. CONTRACTOR IS TO SAWCUT NEW SWITCHBOARD ROOM FLOOR TO ALLOW FOR INSTALLATION OF
- SECONDARY DUCTBANK. SCANNING/X-RAYS OF EXISTING FLOOR ARE TO BE COMPLETED PRIOR TO INSTALLATION. COORDINATE PENETRATIONS THROUGH FOUNDATION, HAND DIG AT EXTERIOR
- INDICATES EXISTING PRIMARY CONDUCTOR PULLBOX, ELECTRICAL CONTRACTOR IS TO BRING NEW PRIMARY DUCT TO PULLBOX FOR FINAL PRIMARY CONDUCTOR CONNECTION BY UTILITY. COORDINATE FINAL DUCT CONNECTIONS WITH HYDRO, COORDINATE PRIMARY SHUTDOWNS PRIOR TO WORK RELATED TO THE EXISTING PULLBOX.







ISSUED FOR PERMIT/TENDER ISSUED FOR 100% REVIEW Feb. 21/2 ISSUED FOR OWNERS REVIEW ISSUFD he contractor shall verify all dimensions and report a errors and discrepancies to the Consultant before e drawings show general arrangement of services Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work. The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions. Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant. Do not scale this drawing.

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WRDSB ALPINE PS HVAC **UPGRADE**

75 LUCERNE DRIVE

KITCHENER, ON



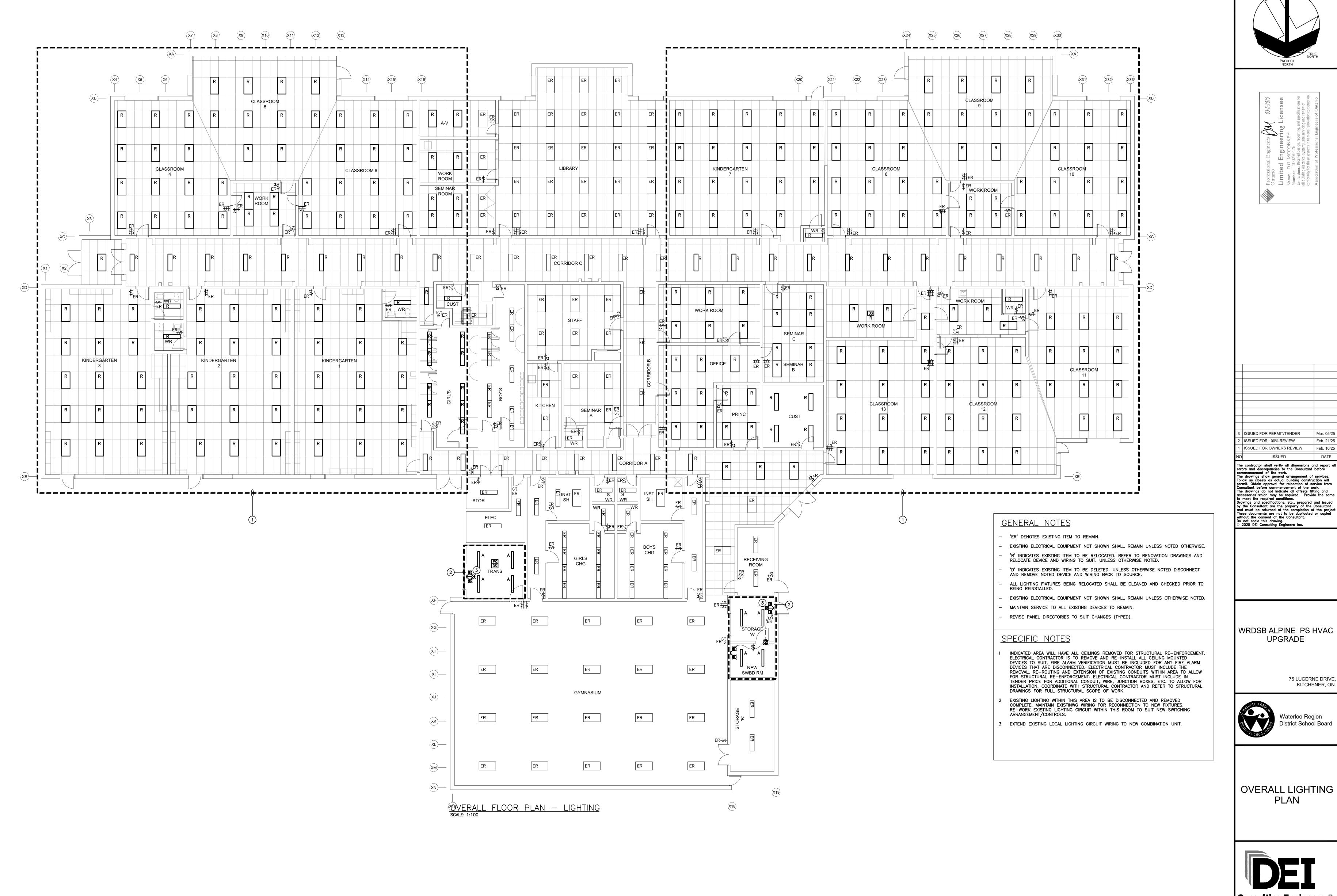
LEGEND, SITE PLAN AND DETAILS

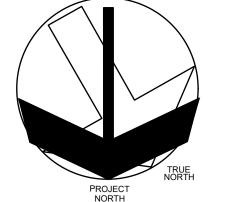


Website: deiassociates.ca

Project Number: 24355

SCALE	PROJECT
AS NOTED	04400
DATE	24138
JAN. 2025	
DRAWN	DRAWING
CT	
CHECKED	1 E 101
DM	
PRINT DATE	JANUARY 25
CAD FILE	





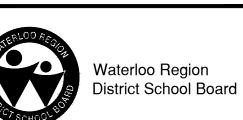
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ISSUFD

WRDSB ALPINE PS HVAC

UPGRADE

75 LUCERNE DRIVE KITCHENER, ON.



OVERALL LIGHTING PLAN



Phone: 519-725-3555 Website: deiassociates.ca Project Number: 24355

55 Northland Road, Waterloo, ON N2V 1Y8





ISSUED FOR PERMIT/TENDER ISSUED FOR 100% REVIEW The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

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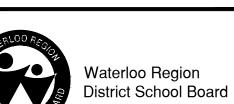
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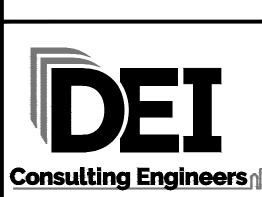
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WRDSB ALPINE PS HVAC UPGRADE

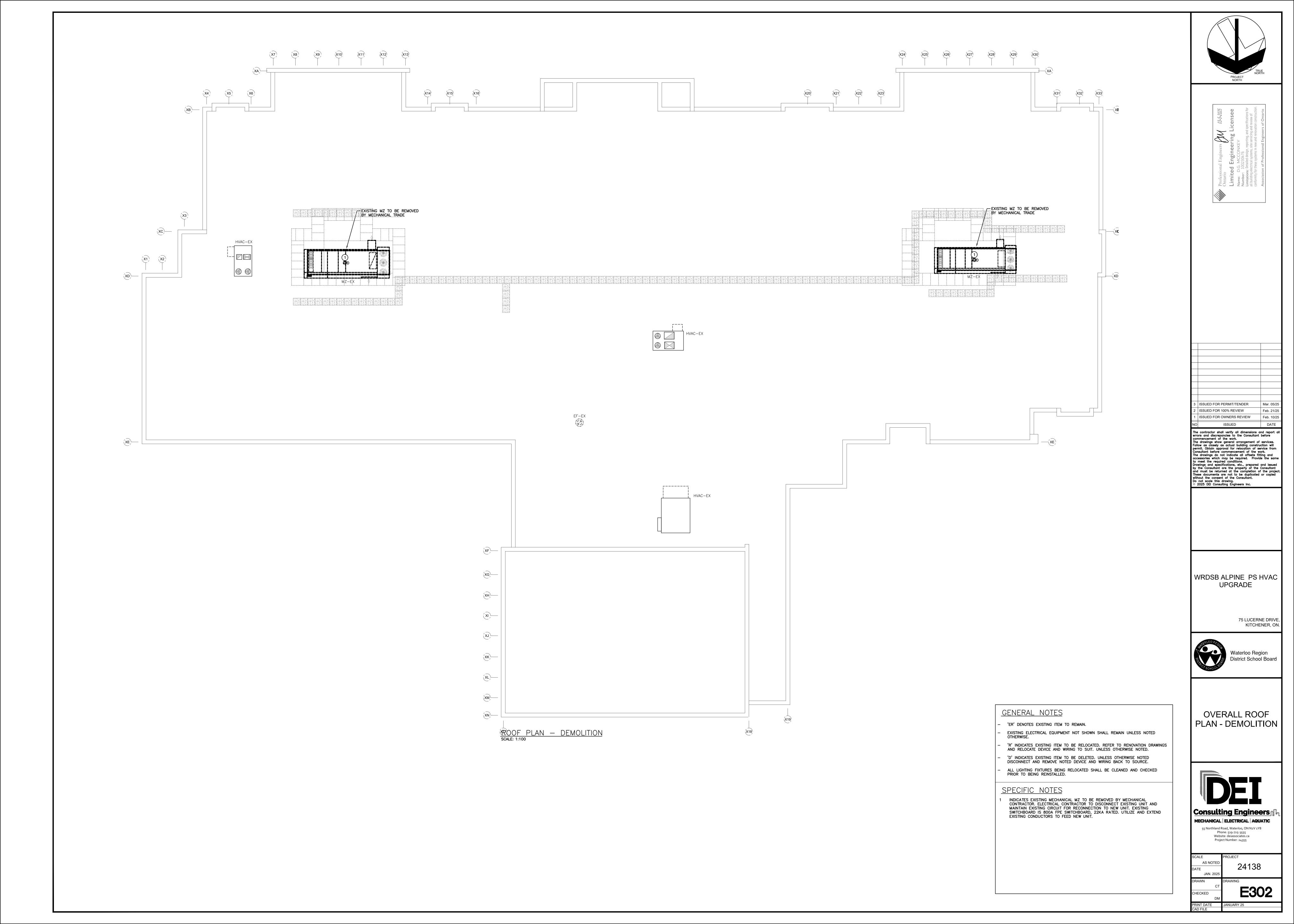
> 75 LUCERNE DRIVE KITCHENER, ON.

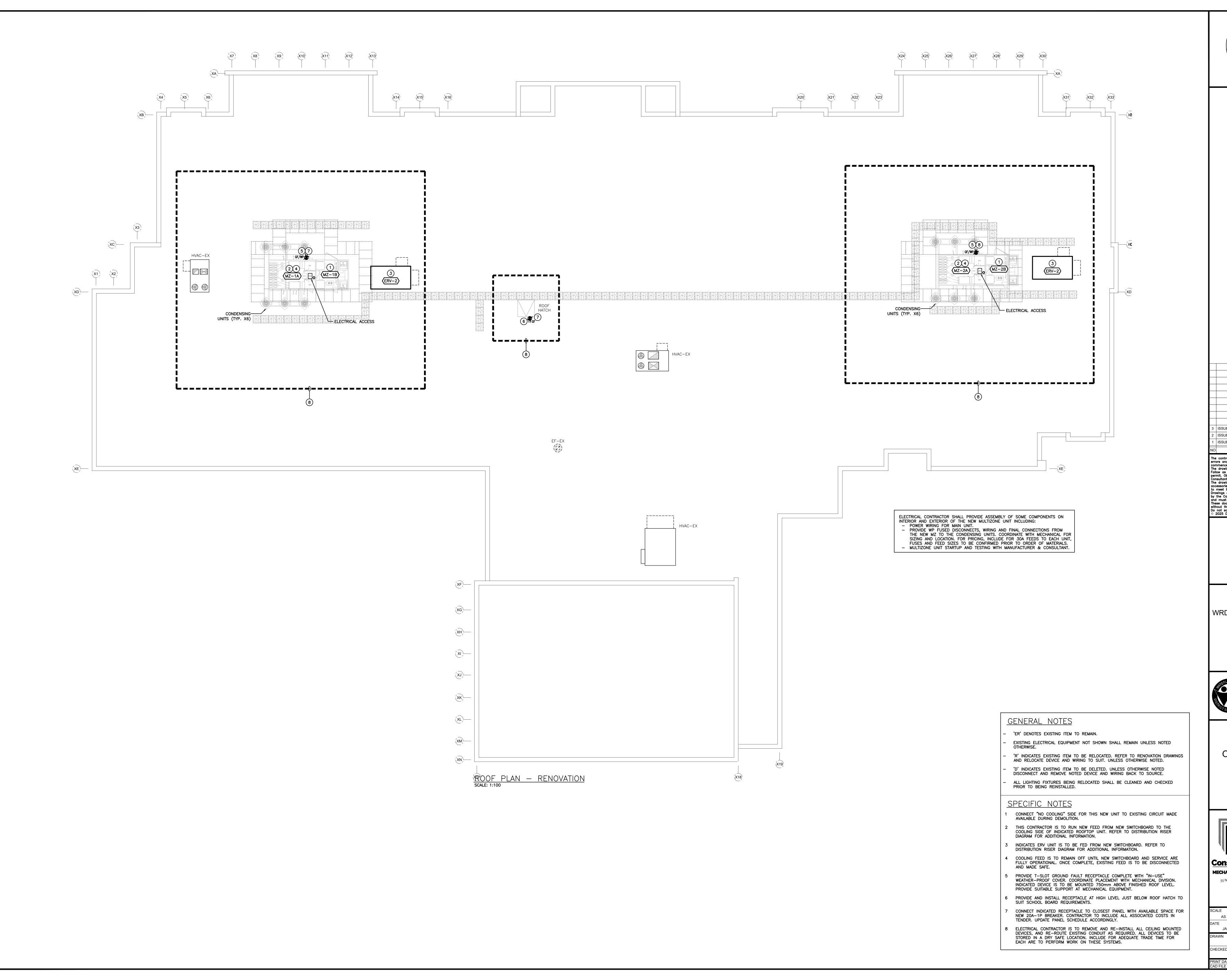


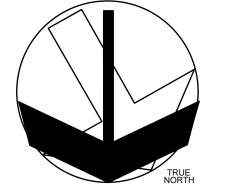
OVERALL POWER AND SYSTEMS



55 Northland Road, Waterloo, ON N2V 1Y8 Phone: 519-725-3555 Website: deiassociates.ca Project Number: 24355







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The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services.
Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

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WRDSB ALPINE PS HVAC UPGRADE

> 75 LUCERNE DRIVE, KITCHENER, ON.

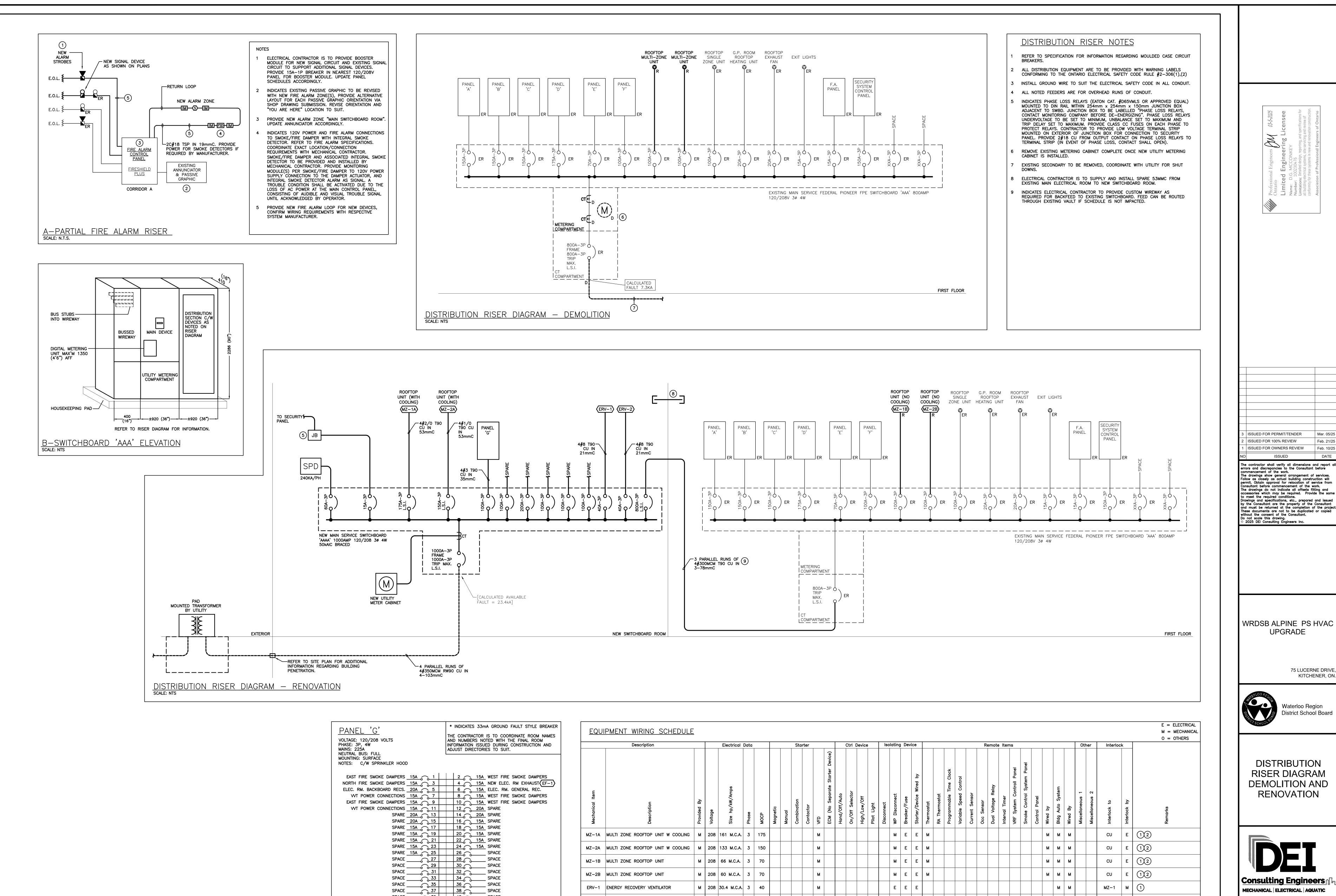


OVERALL ROOF PLAN -RENOVATION



Consulting Engineers n MECHANICAL | ELECTRICAL | AQUATIC 55 Northland Road, Waterloo, ON N2V 1Y8 Phone: 519-725-3555 Website: deiassociates.ca

Project Number: 24355 AS NOTE 24138 JAN. 202



ERV-1 ENERGY RECOVERY VENTILATOR

ERV-2 ENERGY RECOVERY VENTILATOR

EF-1 CEILING EXHAUST FAN

<u>Notes:</u>

SPACE 39 40 SPACE

SPACE 41 42 SPACE

THE UPSTREAM BREAKER.

THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 14000A PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH M 208 30.4 M.C.A. 3 40

M 208 28.2 M.C.A. 3 35

M 120 FHP 1 15

INDICATES UNITS COME COMPLETE WITH INTERNAL FUSED DISCONNECTS, ELECTRICAL CONTRACTOR IS TO CONNECT TO INTERNAL DISCONNECT AND CONFIRM CORRECT FUSING TO MATCH MOCP

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ISSUED FOR OWNERS REVIEW

ISSUFD

he contractor shall verify all dimensions and report a

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WRDSB ALPINE PS HVAC **UPGRADE**

> 75 LUCERNE DRIVE KITCHENER, ON

Waterloo Region District School Board

DISTRIBUTION RISER DIAGRAM **DEMOLITION AND** RENOVATION



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AS NOTE JAN. 202

| M | M

EEEE

PROVIDE MAIN FEED TO UNIT. PROVIDE ADDITIONAL FEED FROM TERMINAL STRIPS WITHIN UNIT TO VARIABLE FREQUENCY DRIVE AND BACK TO UNIT (IN SEPARATE CONDUITS). COORDINATE CONDUCTOR SIZE TO AND FROM VARIABLE FREQUENCY DRIVE WITH MECHANICAL SHOP

MZ-1 M 1

24138 E401 CHECKED