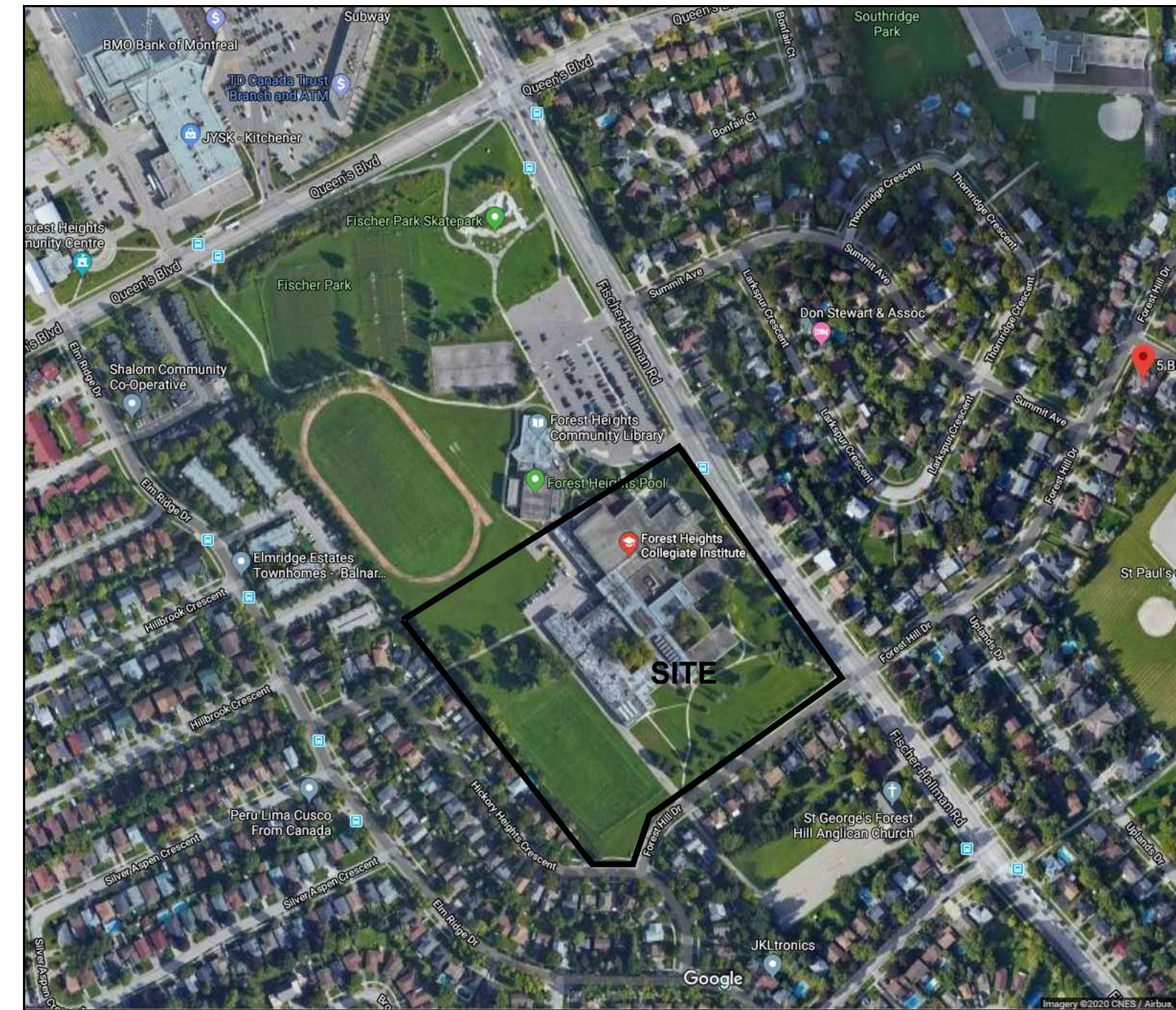




WATERLOO REGION DISTRICT SCHOOL BOARD

FOREST HEIGHTS COLLEGIATE INSTITUTE TECH. SHOP REVITALIZATION AND WINDOW REPLACEMENT

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



SATELLITE VIEW



KEY PLAN

ONTARIO BUILDING CODE DATA MATRIX

Firm Name: Kingsland + Architects Inc.		Certificate of Practice Number: 4549	
Firm Address and Contact Information: Colin J. Kingsland, Partner, B.E.S., B.Arch., O.A.A., LEED AP, 219 Dufferin Street, Suite 308b, Toronto, Ontario M5K 3J1		The architect noted above has exercised responsible control with respect to design activities. The architect's seal number is the architect's BCDN.	
Name and Address of Project: FOREST HEIGHTS C.I. FAMILY STUDIES RENO, PARTIAL WINDOW, BRICK, ASPHALT REPLACEMENT & BF WR		The architect noted above has exercised responsible control with respect to design activities. The architect's seal number is the architect's BCDN.	
Ontario Building Code Data Matrix - Parts 3 & 9		OBC Reference	
Project Description: <input type="checkbox"/> New <input type="checkbox"/> Addition <input checked="" type="checkbox"/> Alteration	<input type="checkbox"/> Part 11 <input checked="" type="checkbox"/> Part 3 <input type="checkbox"/> Part 9		
Major Occupancy(s): Group 'A' - Division 2	1.1.2, [A]		
Building Area (m ²): Existing: 15,893.00 New: - Total: 15,893.00	1.4.1.2, [A]		
Gross Area (m ²): Existing: 32,942.50 New: - Total: 32,942.50	1.4.1.2, [A]		
Number of Storeys: Above Grade: 2 Below Grade: 1	1.4.1.2, [A] & 3.2.1.1		
Number of Streets/Fire Fighter Access: EXISTING	3.2.2.10 & 3.2.5		
Building Classification: ASSEMBLY OCCUPANCY, GROUP A, DIVISION 2	3.2.2.49		
Sprinkler System Proposed: <input type="checkbox"/> entire building <input type="checkbox"/> selected compartments <input type="checkbox"/> selected floor areas <input type="checkbox"/> basement <input type="checkbox"/> in lieu of roof rating <input type="checkbox"/> not required	3.2.2.20, -83 3.2.1.5, 3.2.2.17, INDEX		
Standpipe required: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.2.9.1		
Fire Alarm required: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.2.4.1		
Water Service/Supply is adequate: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.2.5.7		
High Building: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.2.6.1		
Construction Restrictions: <input type="checkbox"/> Comb. Permitted <input checked="" type="checkbox"/> Non-comb. required <input type="checkbox"/> Both	3.2.2.20, -83		
Actual Construction: <input type="checkbox"/> Combustible <input checked="" type="checkbox"/> Non-combustible <input type="checkbox"/> Both	EXISTING		
Mezzanine(s) Area (m ²): N/A	3.2.1.1.(3)-(8)		
Occupant Load based: <input type="checkbox"/> m ² /person <input checked="" type="checkbox"/> design of building	3.1.17.		
Existing Building: Load EXISTING persons			
Barrier-free Design: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.8		
Hazardous Substances: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.3.1.2 & 3.3.1.19.		
Required Fire Resistance Rating (FRR)	Horizontal Assemblies FRR (Hours)	Listed Design No. or Description (SB-3)	3.2.2.20, -83 EXISTING
	Floors: 1 Hours		
	Roof: 45 Mins		
	Mezzanine: n/a Min		
	Supporting Members FRR (Hours)	Listed Design No. or Description (SB-3)	
	Floors: 1 Hours		
	Roof: 45 Mins		
	Mezzanine: n/a Min		
Spatial Separation - Construction of Exterior Walls		3.2.3.1	
Wall	Area of EBF (ft ²)	L.D. (m)	L/H or HL
North	-	-	EXISTING
South	-	-	EXISTING
East	-	-	EXISTING
West	-	-	EXISTING

Ontario Building Code Data Matrix - Parts 11 - Renovation of Existing Building	OBC Reference
11.1 Project Description: Describe Existing Use: SCHOOL - A2 Construction Index: _____ Hazard Index: _____ <input type="checkbox"/> Not Applicable (no change of major occupancy)	11.2.1.1
11.2 Alteration to Existing Building is: Basic Renovation <input checked="" type="checkbox"/> Extensive Renovation <input type="checkbox"/>	11.3.3.1
11.3 Reduction in Performance Level: Structural: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes By Increase in occupant load: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes By change of major occupancy: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Plumbing: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Sewage-system: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	11.4.2 11.4.2.1 11.4.2.2 11.4.2.3 11.4.2.4 11.4.2.5
11.4 Compensating Construction: Structural: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (explain)	11.4.3 11.4.3.2
Increase in occupant load: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (explain)	11.4.3.3
Change of major occupancy: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (explain)	11.4.3.4
Plumbing: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (explain) Plumbing fixtures replaced in Family Studies Classroom	11.4.3.5
Sewage System: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (explain)	11.4.3.6
11.5 Compliance Alternatives Proposed: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (give number(s))	11.5.1
11.6 Alternative Measures Proposed: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (explain)	11.5.2

SYMBOL LEGEND

	EXISTING WALL
	EX. WALL TO BE REMOVED
	NEW WALL
	FIRE SEPARATION
	WALL TYPE - SEE SPECIFICATION
	DOOR NUMBER EXISTING DOOR
	DOOR NUMBER NEW DOOR
	BUILDING SECTION NUMBER SHEET NUMBER
	WALL SECTION NUMBER SHEET NUMBER
	DETAIL NUMBER SHEET NUMBER
	DETAIL DRAWING NUMBER SEE SPECIFICATION
	WINDOW TYPE
	SCREEN TYPE
	ROOM NAME ROOM NUMBER
	CEILING MATERIAL CEILING HEIGHT

FOR DOOR SCHEDULE AND ROOM FINISH SCHEDULE SEE SPECIFICATION.

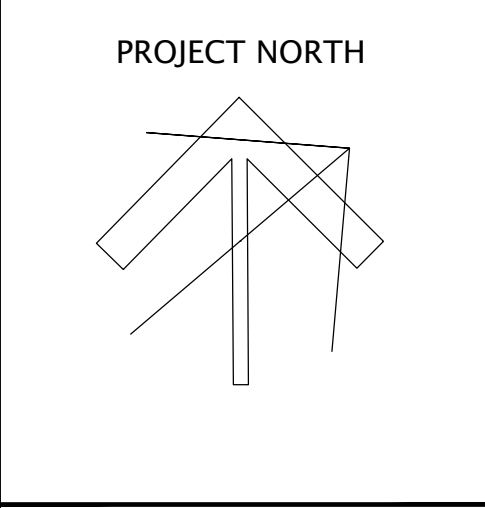
LIST OF DRAWINGS

ARCHITECTURAL	
A0-0	COVER & OBC MATRIX
A2-0	OVERALL FIRST AND SECOND FLOOR PLAN
A2-1	OVERALL SECOND FLOOR PLAN
A2-2	PARTIAL SECOND FLOOR AND ROOF PLANS
A2-3	PARTIAL FIRST FLOOR PLAN
A2-4	TECH WING DEMOLITION & PROPOSED
A2-5	TECH WING CLASSROOM INTERIOR ELEVATIONS
A2-6	TECH WING CLASSROOM INTERIOR ELEVATIONS
A2-7	ENLARGEMENT PLAN AT NEW DOORS OPENING
A2-8	STAFF ROOM - DEMO & NEW AND INTERIOR ELEVATIONS
A2-9	BARRIER FREE - ADO
A2-10	PARTIAL FIRST FLOOR PLAN
A2-11	TECH WING WINDOW REPLACEMENT
A6-1	PARTIAL DEMO AND NEW CEILING PLANS
STRUCTURAL	
S1.0	ROOF FRAMING PLAN, DETAILS, GENERAL NOTES
S2.0	STEEL STUD DETAILS
MECHANICAL	
M000	MECHANICAL TITLE SHEET
M100	PARTIAL FLOOR PLAN - SANITARY DEMOLITION & NEW SANITARY
M200	PARTIAL FLOOR PLAN - DEMOLITION & NEW DOMESTIC
M300	PARTIAL PLAN - HEATING DEMOLITION
M301	PARTIAL FLOOR PLAN - NEW HEATING
M400	PARTIAL FLOOR & ROOF PLANS - HVAC DEMOLITION
M401	PARTIAL FLOOR & ROOF PLANS - NEW HVAC
M402	SECTIONS & DETAILS - NEW HVAC
M500	MECHANICAL SCHEDULES & DETAILS
ELECTRICAL	
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

NO. DATE:	REVISION:
1 24/11/22	ISSUED FOR CLIENT REVIEW
2 25/01/24	ISSUED FOR TENDER AND PERMIT

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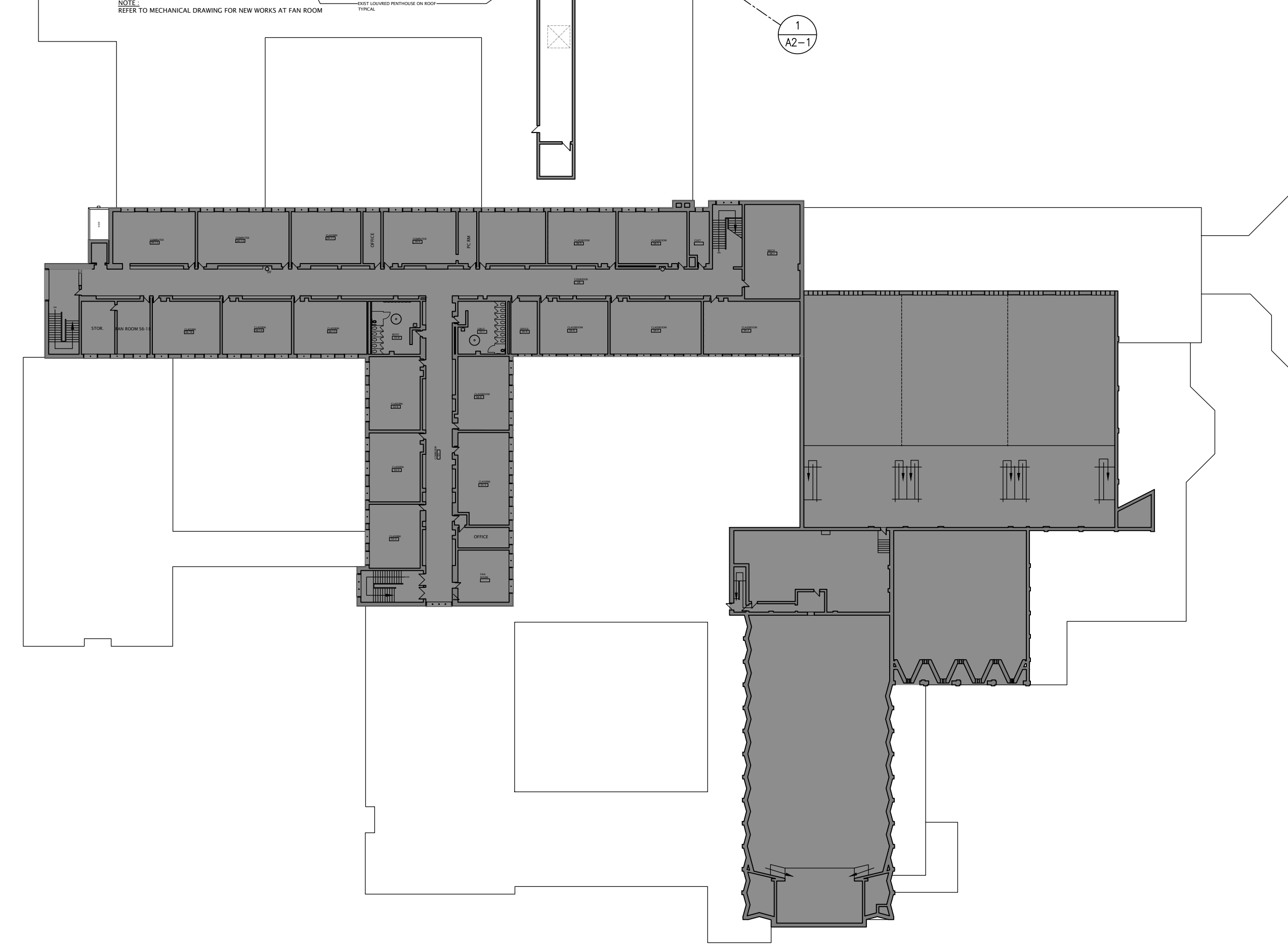
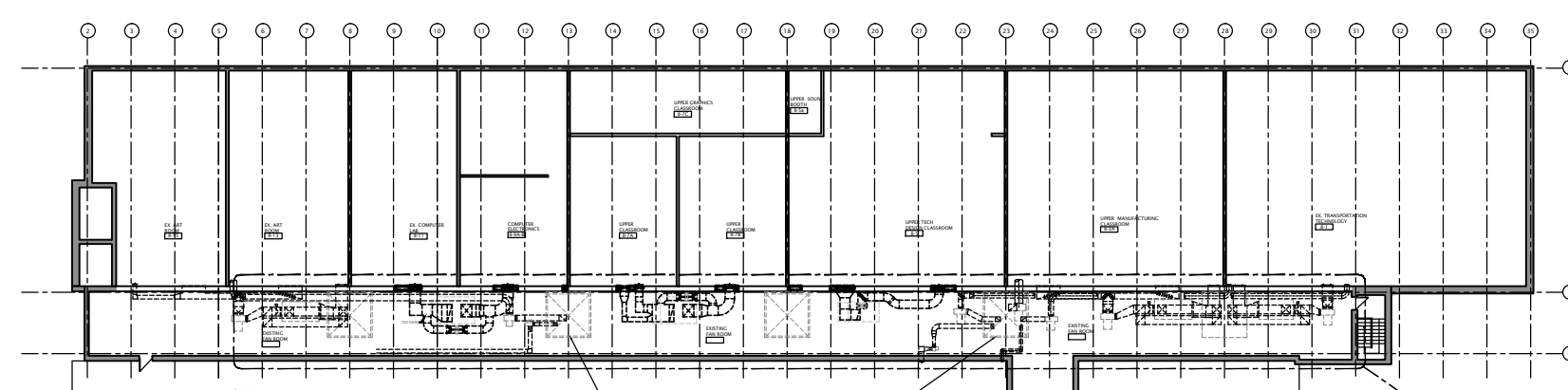
Kingsland + ARCHITECTS INC.

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219 Dufferin Street, Suite 308b
Toronto, Ontario M5K 3J1
ph 416.203.7799
fax 416.203.7763

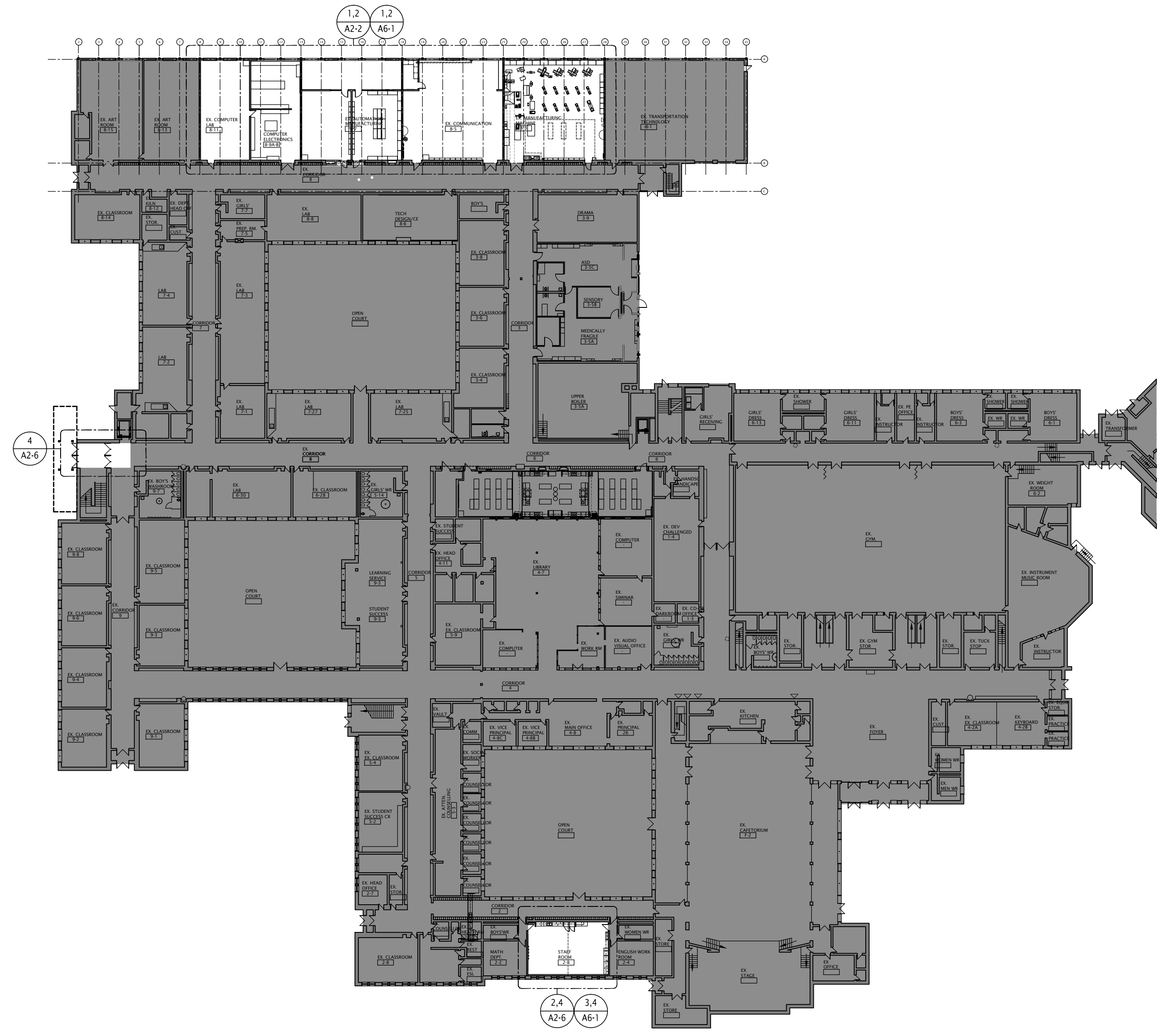


FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION
AND
WINDOW REPLACEMENT
255 Fischer-Hallman Rd,
Kitchener, ON N2M 4X8

DRAWING TITLE: COVER & OBC MATRIX	
PROJECT NO: A23018	SCALE: AS NOTED
DRAWN: K+	DRAWING NO.: REV.
CHECKED: K+	A0-0 2
DATE: JAN/24	



2 OVERALL SECOND FLOOR PLAN
SCALE - 1:500



1 OVERALL FIRST FLOOR PLAN
SCALE - 1:500

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.

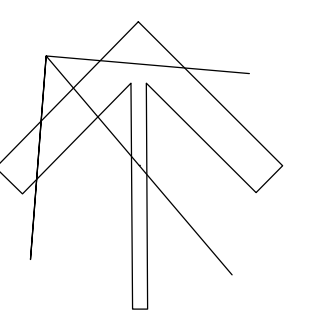
NO.	DATE	REVISION
2	22/07/24	ISSUED FOR TENDER AND PERMIT
1	24/11/24	ISSUED FOR CLIENT REVIEW
0	24/07/24	ISSUED FOR CLIENT REVIEW

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PROJECT NORTH



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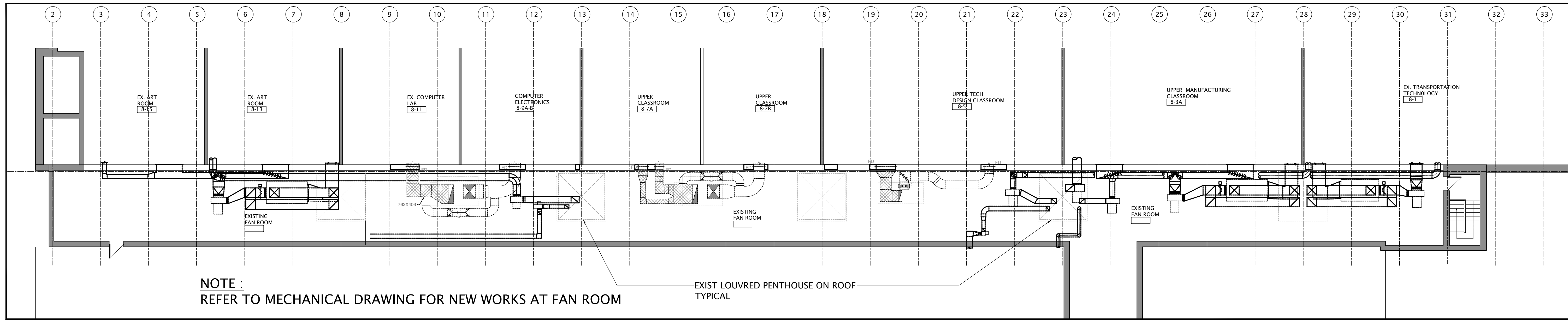
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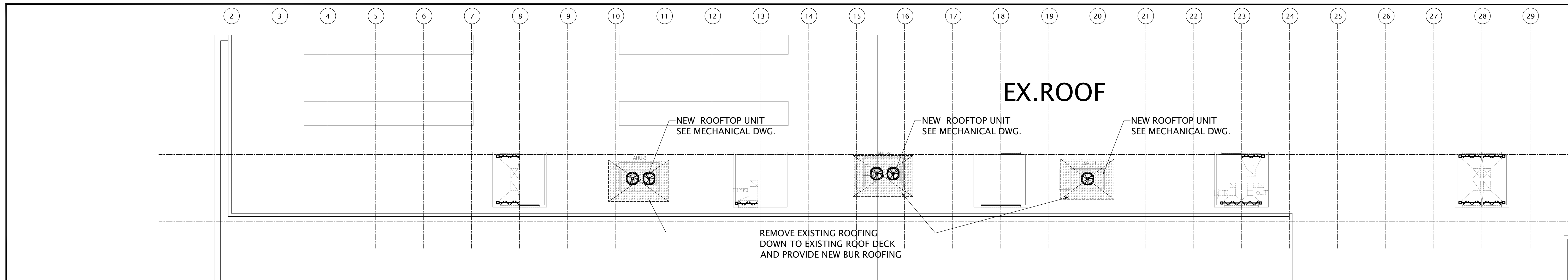
FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION
AND
WINDOW REPLACEMENT
255 Fischer Hallman Rd.
Fischer, ON N2M 0K6

DRAWING TITLE:
OVERALL FIRST & SECOND
FLOOR PLANS

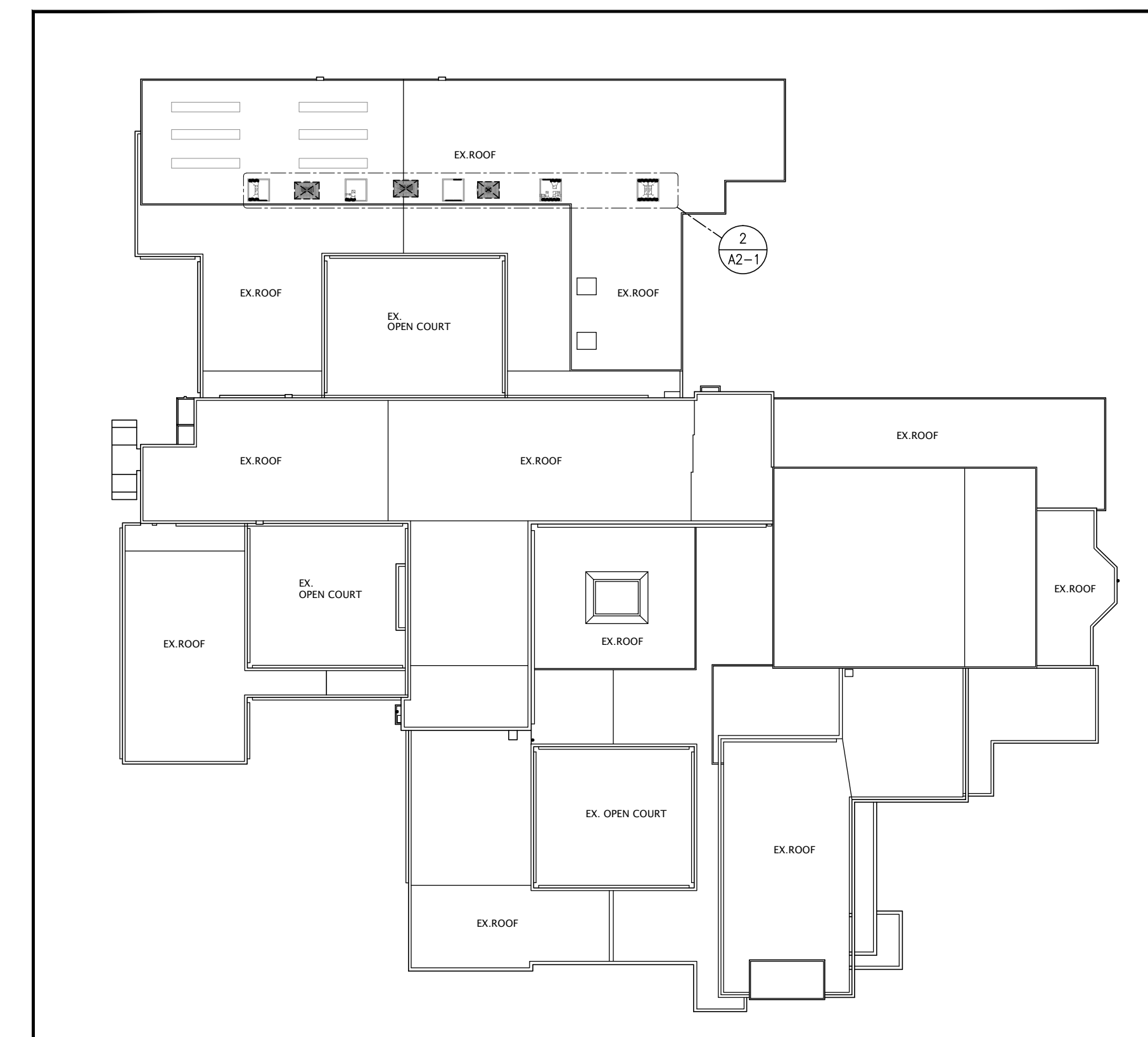
PROJECT NO. A23018	SCALE: 1:500
DRAWN: K+	DRAWING NO. REV. A2-0 2
CHECKED: K+	
DATE: JAN/24	



3 PARTIAL EXISTING SECOND FLOOR - FAN ROOM
SCALE - 1:125



2 PARTIAL EXISTING ROOF PLAN
SCALE - 1:125



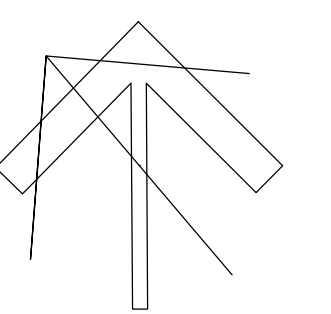
1 OVERALL ROOF PLAN
SCALE - 1:750

NO.	DATE	REVISION
2	24/07/24	ISSUED FOR TENDER AND PERMIT
1	24/11/23	ISSUED FOR CLIENT REVIEW
0	24/07/24	ISSUED FOR CLIENT REVIEW

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PROJECT NORTH



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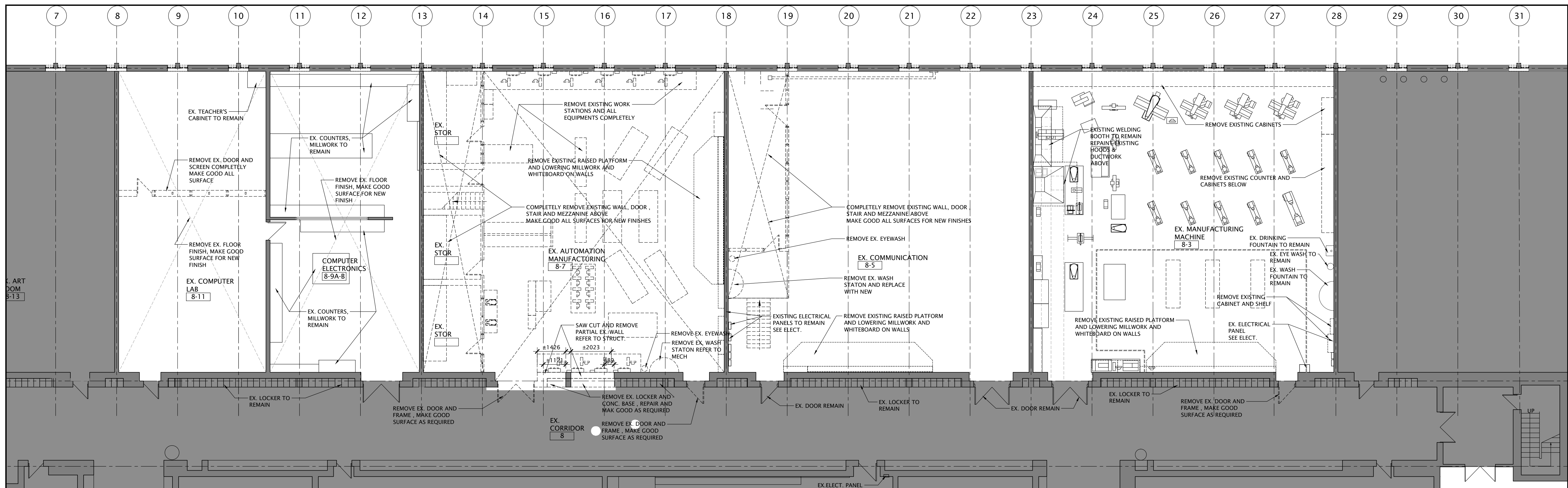
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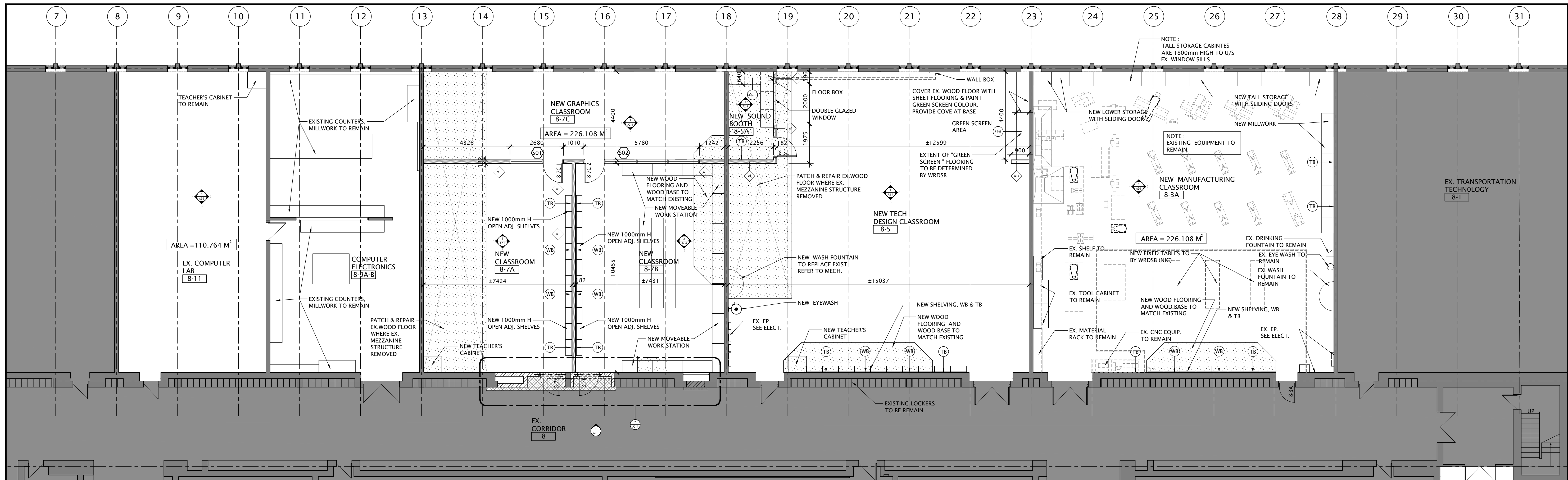
FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION
AND WINDOW REPLACEMENT
255 Fischer Hallman Rd.
Fischer, ON N2M 0K6

DRAWING TITLE:
OVERALL EXISTING FLOOR PLAN
PARTIAL SECOND FLOOR AND
ROOF PLANS

PROJECT NO: A23018	SCALE: NOTED
DRAWN: K+	DRAWING NO.: REV.
CHECKED: K+	A2-1 2
DATE: JAN/24	



1 PARTIAL FIRST FLOOR PLAN - DEMOLITION
SCALE - 1:50



FINISH NOTE FOR TECH CLASSROOM 8.11:

1. PATCH / REPAIR AND REFINISH WOOD FLOOR WHERE GLAZING SCREEN PARTITION REMOVED
2. PROVIDE NEW ACOUSTIC SUSPENDED CEILING & NEW LED LIGHTING TO REPLACES EXISTING CEILING
3. PROVIDE PLYWOOD BACKING TO 8' HEIGHT FOR MILLWORK INSTALLATION.
4. PAINT ALL WALLS

FINISH NOTE FOR TECH CLASSROOM 8.7:

1. PATCH AND REPAIR EXISTING WOOD FLOOR WHERE WOOD FRAME STRUCTURE REMOVED
2. PROVIDE NEW WOOD FLOOR TO MATCH EXISTING WHERE EXISTING RAISED PLATFORM REMOVED
3. PATCH / REPAIR AND REFINISH WOOD FLOOR.
4. REPAIR WALL WHERE EXISTING CHALKBOARD OR WHITEBOARD REMOVED.
5. PAINT EXISTING TECTUM ROOF DECK, STEEL JOIST & NEW DUCTWORK
6. PROVIDE PLYWOOD BACKING TO 8' HEIGHT FOR MILLWORK INSTALLATION.
7. PATCH AND REPAIR TERRAZZO AT NEW DOOR OPENING.
8. PAINT ALL WALLS

FINISH NOTE FOR TECH CLASSROOM 8.5:

1. PATCH AND REPAIR EXISTING WOOD FLOOR WHERE WOOD FRAME STRUCTURE REMOVED
2. PROVIDE NEW WOOD FLOOR TO MATCH EXISTING WHERE EXISTING RAISED PLATFORM REMOVED
3. PATCH / REPAIR AND REFINISH WOOD FLOOR.
4. REPAIR WALL WHERE EXISTING CHALKBOARD OR WHITEBOARD REMOVED.
5. PAINT EXISTING TECTUM ROOF DECK, STEEL JOISTS AND NEW DUCTWORK
6. PROVIDE PLYWOOD BACKING TO 8' HEIGHT FOR MILLWORK INSTALLATION.
7. PAINT ALL WALLS

FINISH NOTE FOR TECH CLASSROOM 8.3:

1. PROVIDE NEW WOOD FLOORING TO MATCH EXISTING WHERE EXISTING RAISED PLATFORM REMOVED
2. PATCH / REPAIR AND REFINISH WOOD FLOOR.
3. REPAIR WALL WHERE EXISTING CHALKBOARD OR WHITEBOARD REMOVED.
4. PAINT EXISTING TECTUM ROOF DECK, STEEL JOISTS AND NEW DUCTWORK
5. PAINT ALL WALLS

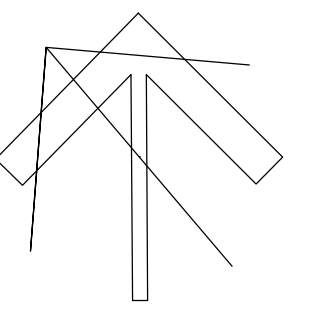
2 PARTIAL FIRST FLOOR PLAN - PROPOSED
SCALE - 1:50

NO. DATE:	REVISION:
0 24/07/24	ISSUED FOR CLIENT REVIEW
1 24/11/24	ISSUED FOR TENDER AND PERMIT
2 25/07/24	ISSUED FOR TENDER AND PERMIT

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PROJECT NORTH



Kingsland + ARCHITECTS INC.

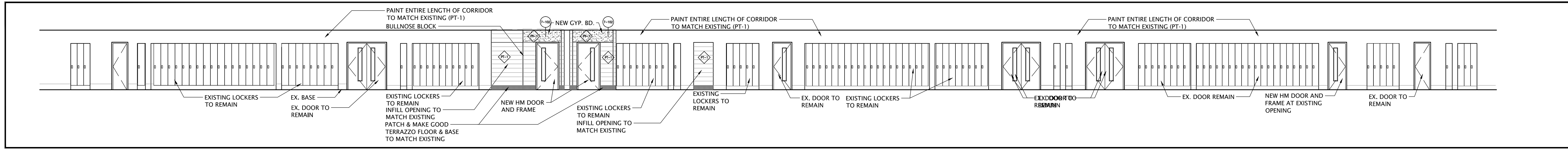
KINGSLAND + ARCHITECTS INC
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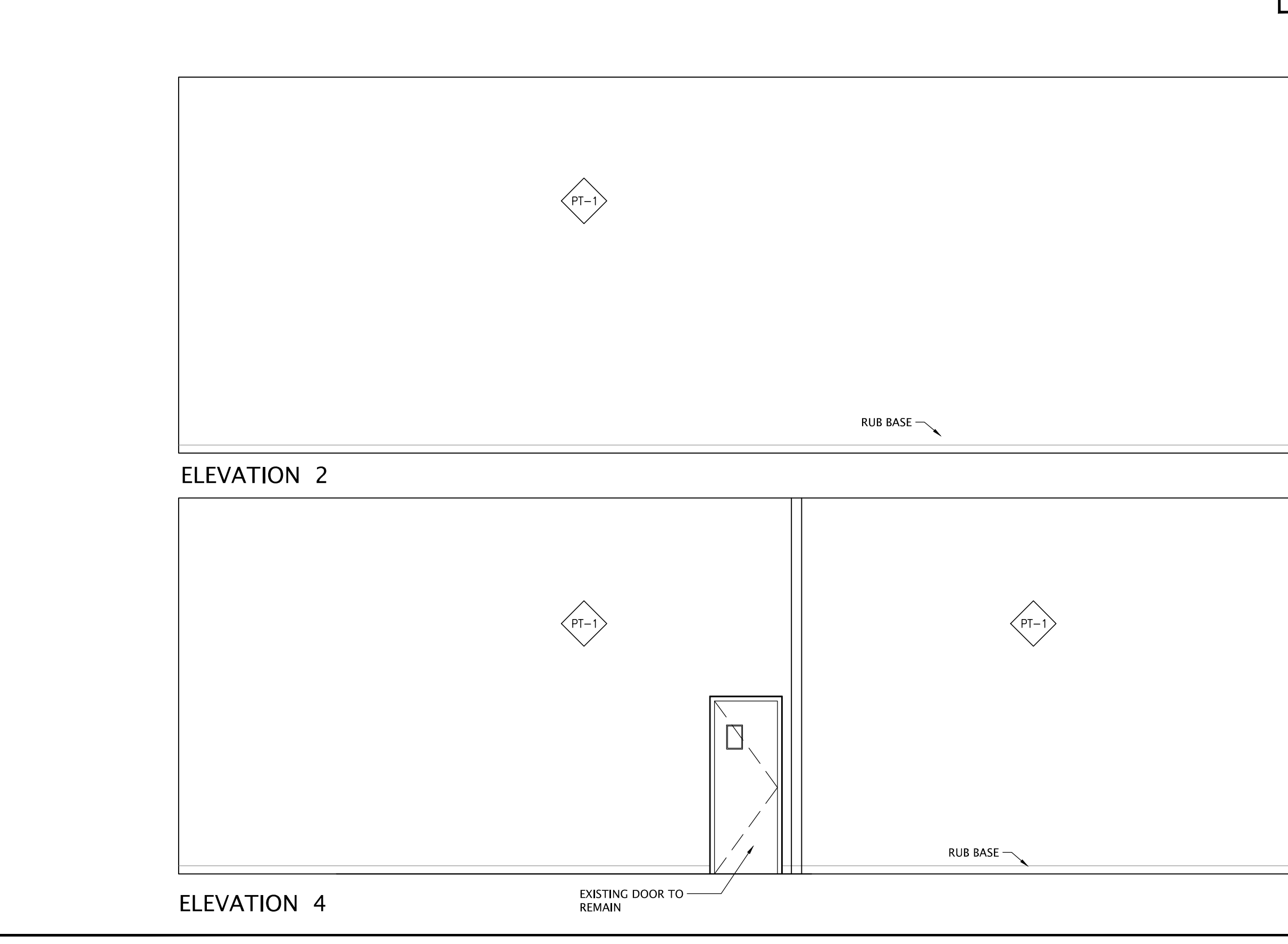
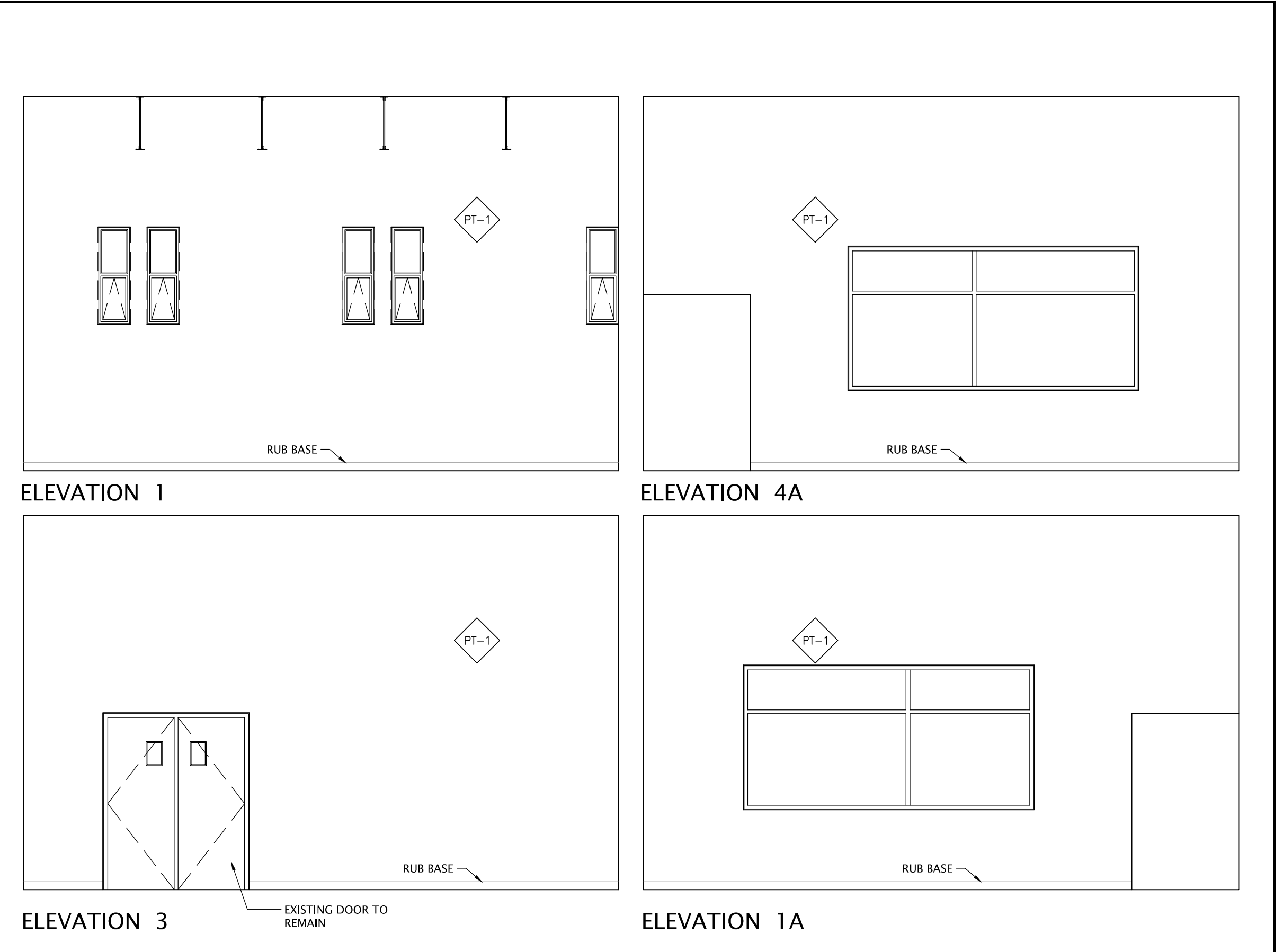
FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION
AND
WINDOW REPLACEMENT
235 Fischer Hallman Rd.
Fischer, ON N2M 4K8

DRAWING TITLE:
PARTIAL FIRST FLOOR PLAN
TECH WING DEMOLITION
& PROPOSED

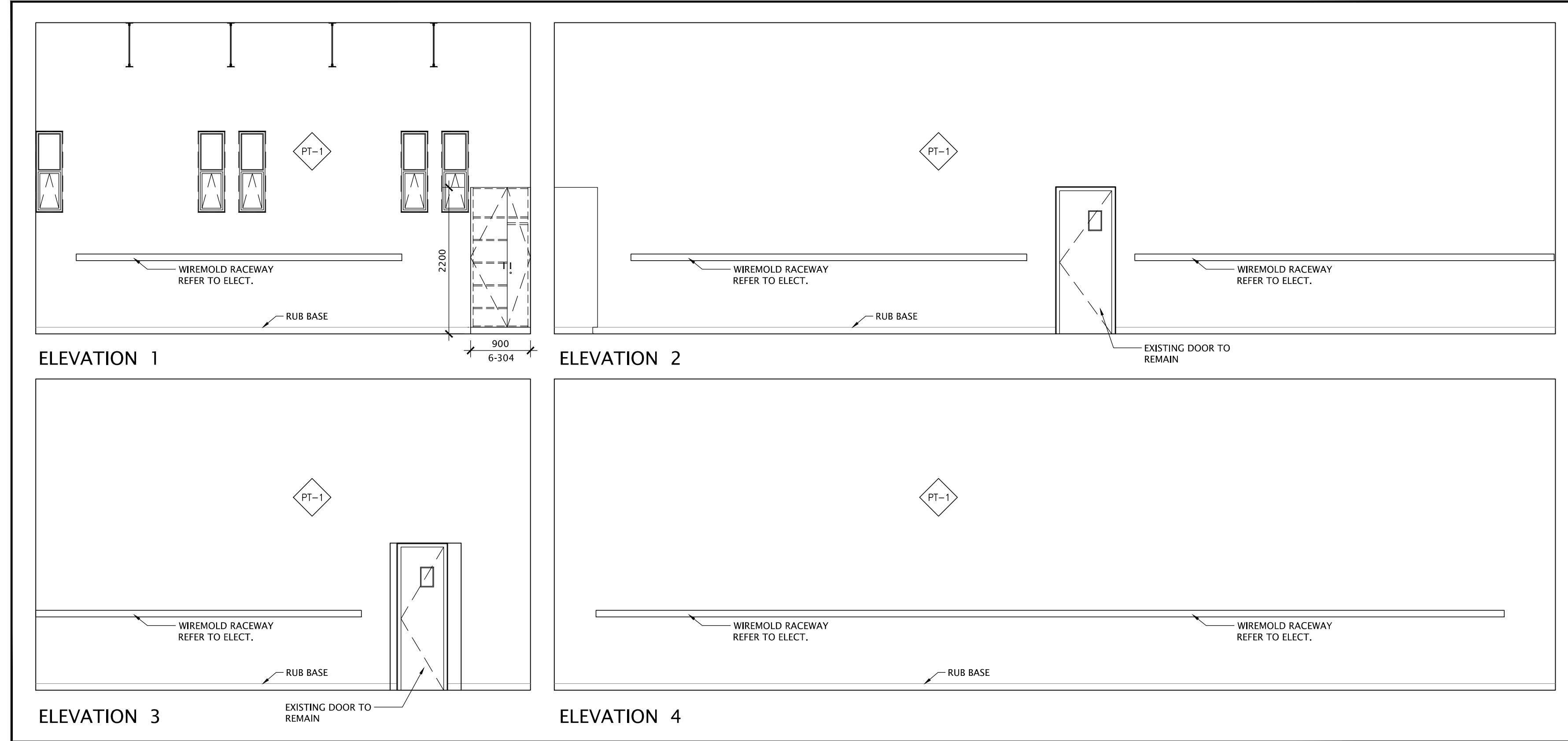
PROJECT NO:	SCALE:
A23018	1:100
DRAWN:	DRAWING NO. / REV.
K+	A2-2 / 2
CHECKED:	
K+	
DATE:	
JAN/24	



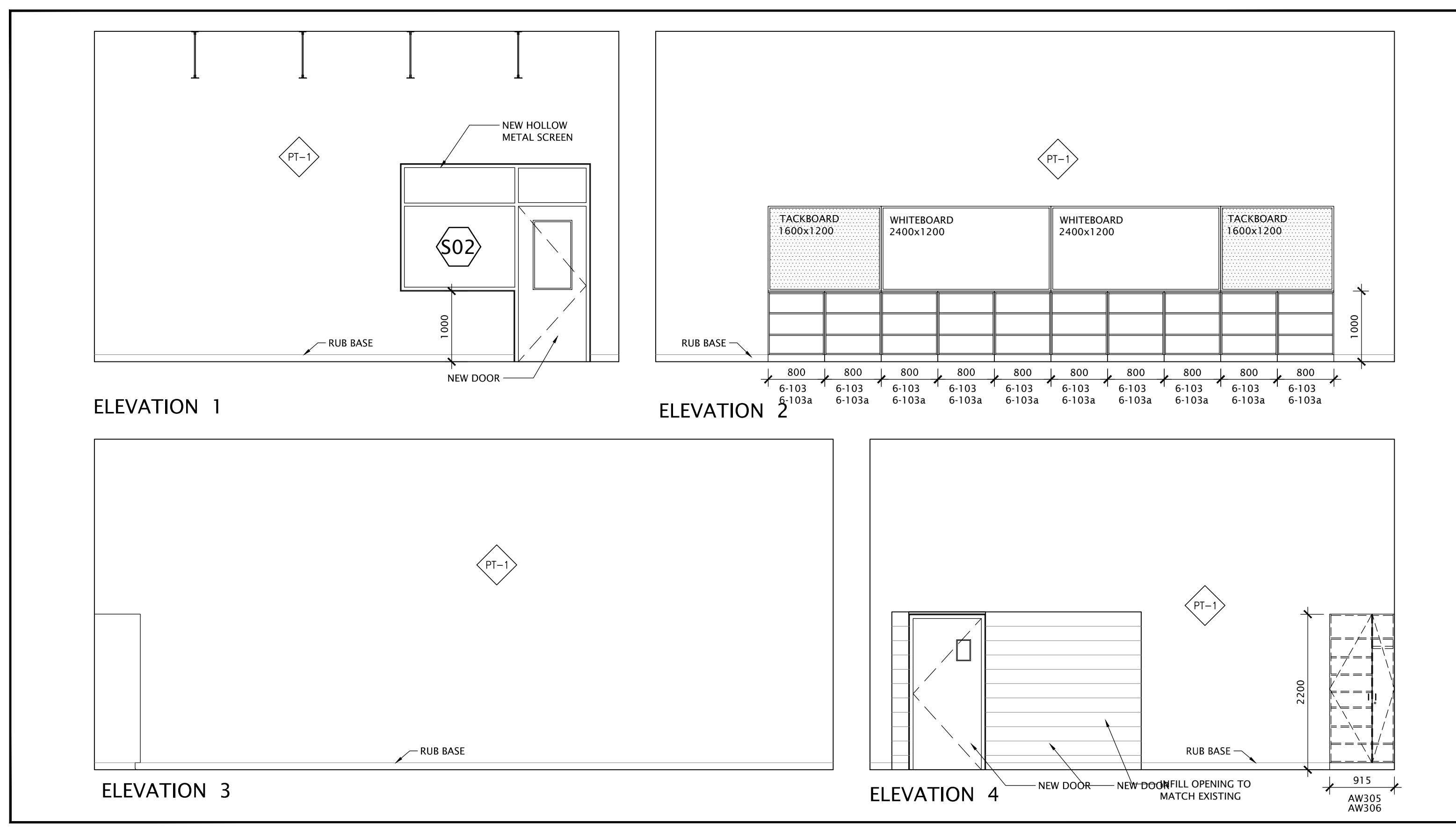
1 EXISTING COORIDOR 8 INTERIOR ELEVATIONS
SCALE - 1:100



3 NEW COMPUTER ELECTRONICS 8-9-A-B INTERIOR ELEVATIONS
SCALE - 1:50



2 EXISTING COMPUTER LAB INTERIOR ELEVATIONS
SCALE - 1:50

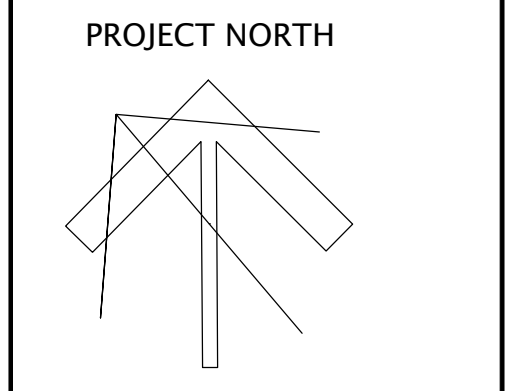


3 NEW CLASSROOM 8-7A INTERIOR ELEVATIONS
SCALE - 1:50

NO.	DATE	REVISION
1	24/07/04	ISSUED FOR CLIENT REVIEW
2	28/07/04	ISSUED FOR TENDER AND PERMIT
3	24/07/04	ISSUED FOR CLIENT REVIEW

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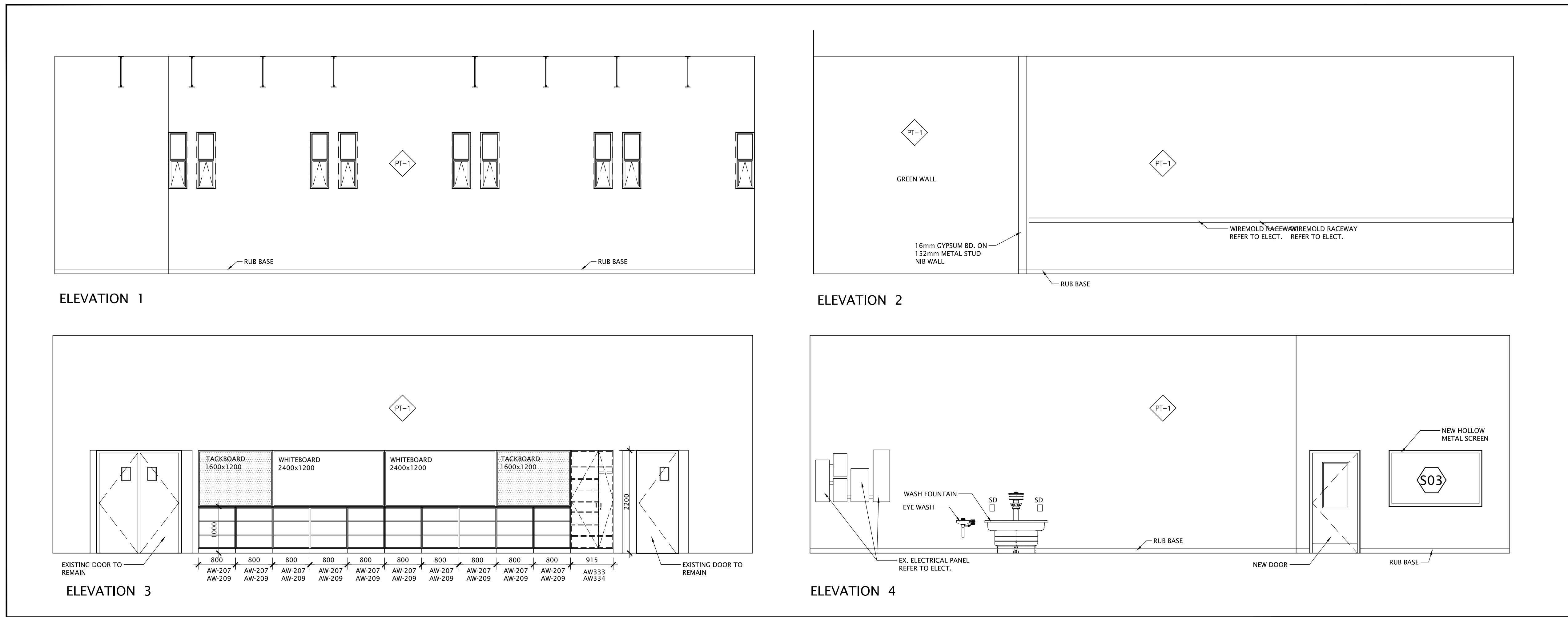
KINGSLAND + ARCHITECTS INC.
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FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT
255 Fischer Hallman Rd.
Kitchener, ON N2M 4K6

DRAWING TITLE:
TECH WING CLASSROOM & CORRIDOR INTERIOR ELEVATIONS

PROJECT NO: A23018	SCALE: 1:100 / 1:50
DRAWN: K+	DRAWING NO.: REV.
CHECKED: K+	A2-3 0
DATE: JAN/24	



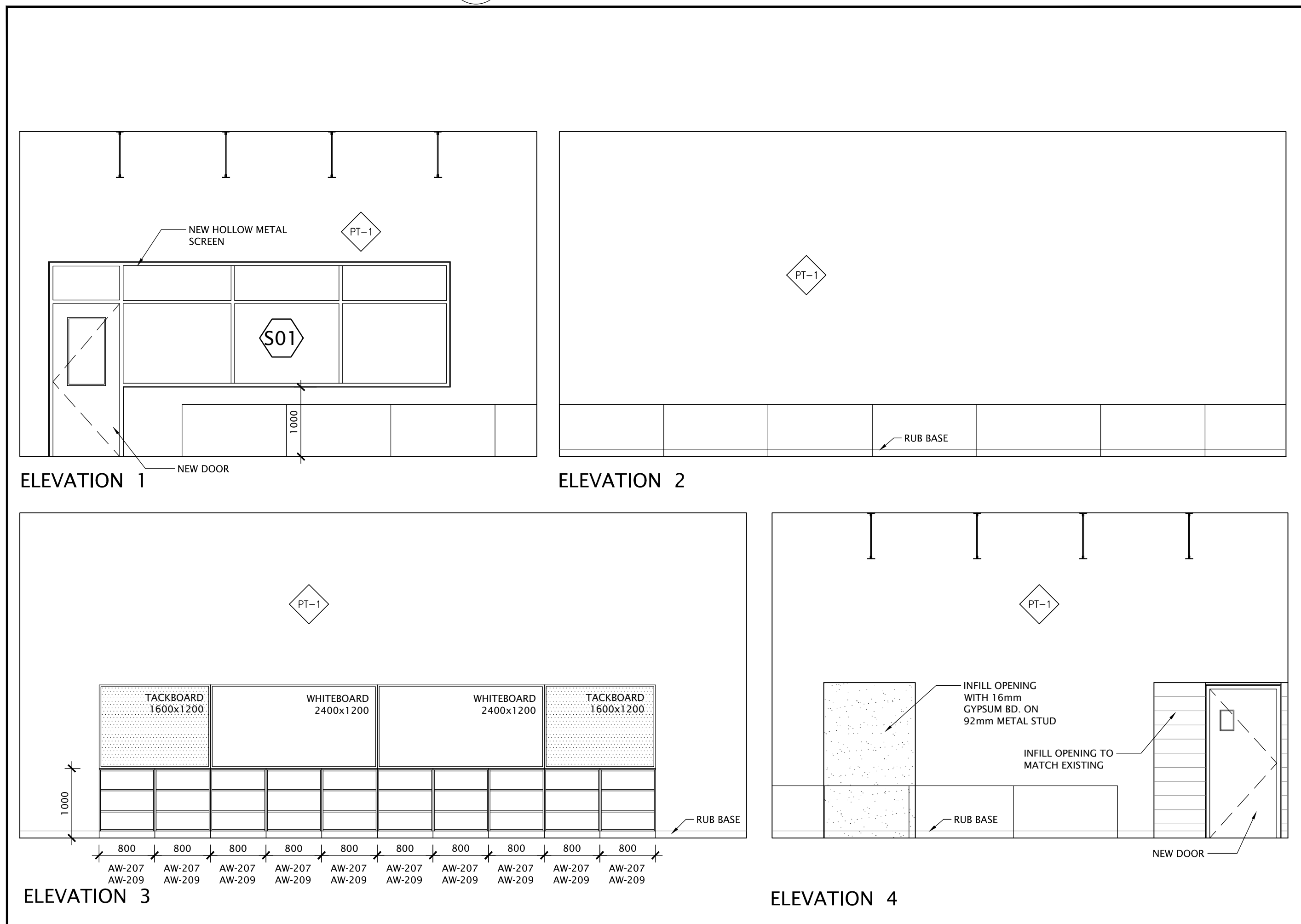
ELEVATION 1

ELEVATION 2

ELEVATION 3

ELEVATION 4

1 NEW TECH DESIGN INTERIOR ELEVATIONS - 8-5
A2-4 SCALE - 1:50



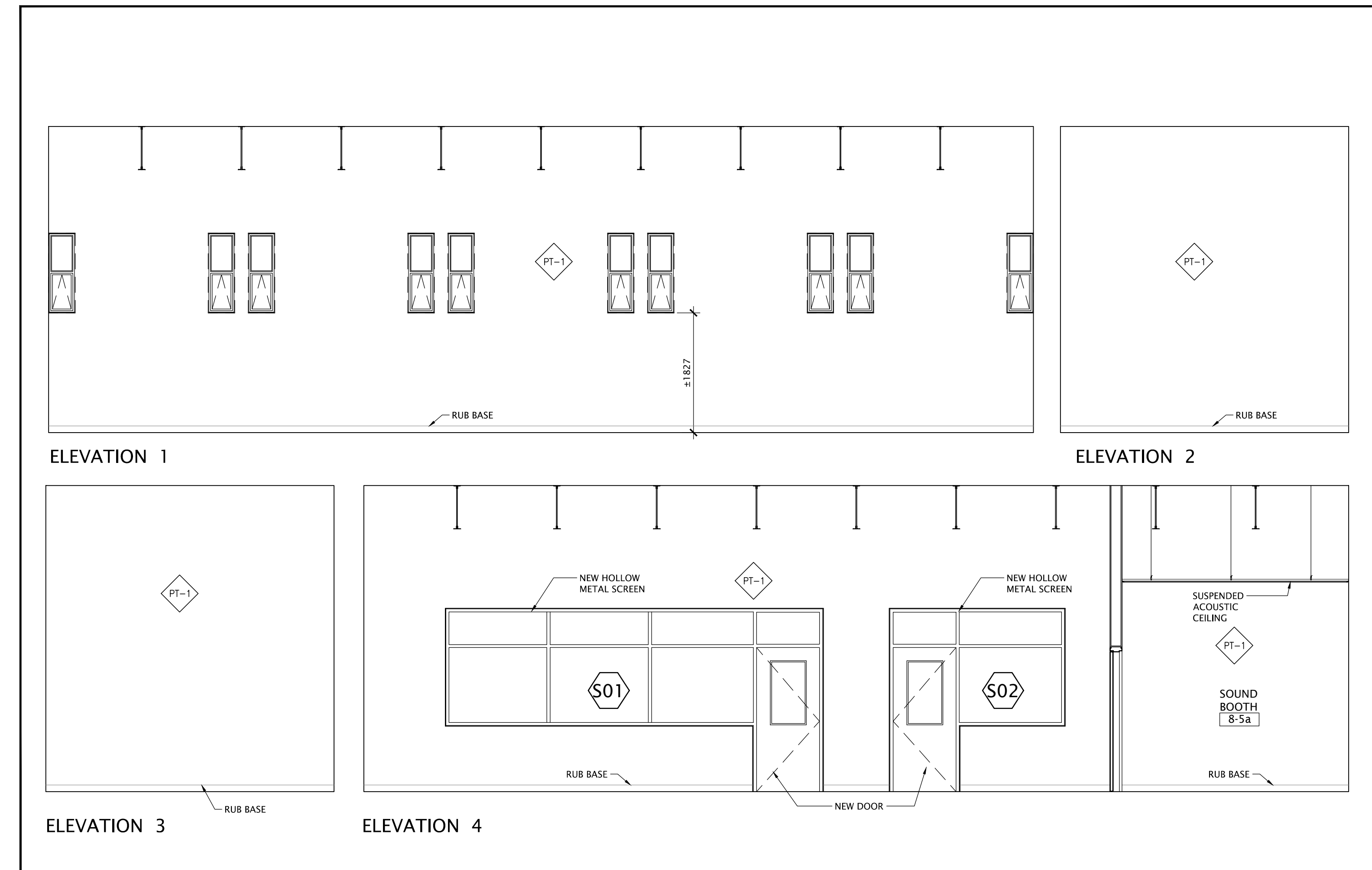
ELEVATION 1

ELEVATION 2

ELEVATION 3

ELEVATION 4

3 NEW CLASSROOM 8-7B INTERIOR ELEVATIONS
A2-4 SCALE - 1:50



ELEVATION 1

ELEVATION 2

ELEVATION 3

ELEVATION 4

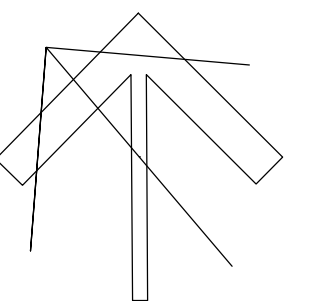
2 NEW GRAPHIC 8-7C INTERIOR ELEVATIONS
A2-4 SCALE - 1:50

NO.	DATE	REVISION
1	24/11/22	ISSUED FOR CLIENT REVIEW
2	22/07/24	ISSUED FOR TENDER AND PERMIT
3	24/07/24	ISSUED FOR CLIENT REVIEW

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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 6. ALL DIMENSIONS GIVEN ARE IN METRIC.

PROJECT NORTH



Kingsland + ARCHITECTS INC.

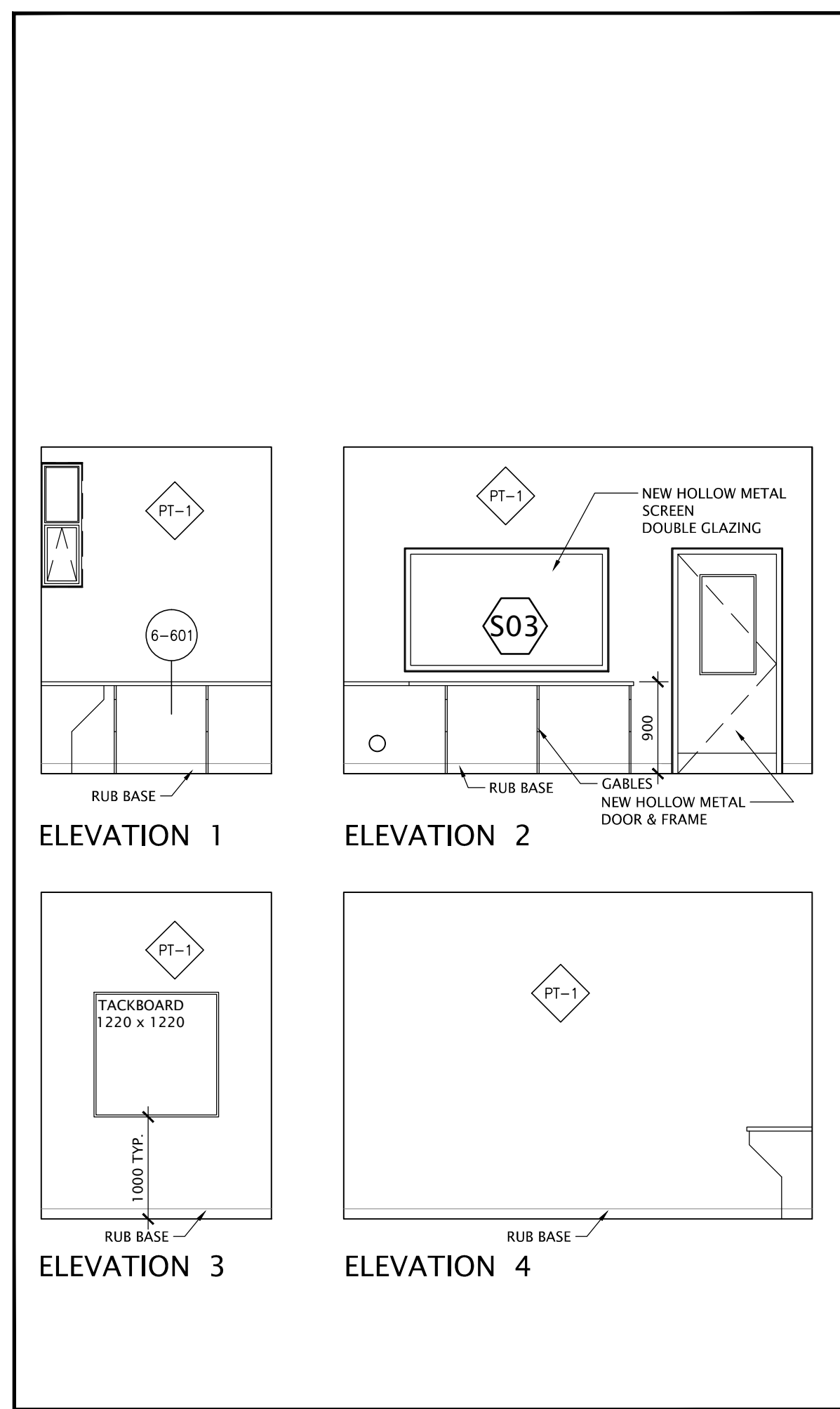
KINGSLAND + ARCHITECTS INC
219 Dufferin Street, Suite 308B
Toronto, Ontario, M5K 3L1
ph 416.203.7799
fax 416.203.7763



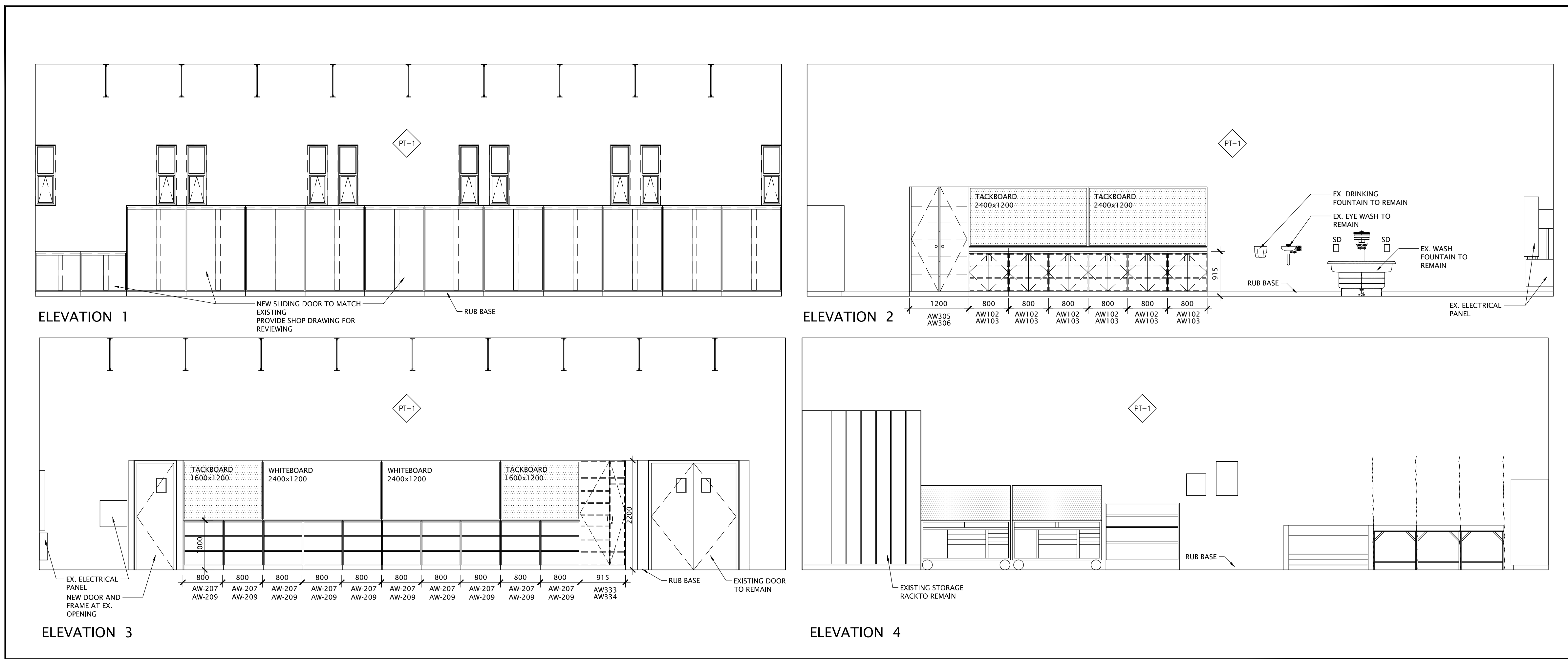
FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION
AND WINDOW REPLACEMENT
255 Fischer Hallman Rd.
Fischer, ON N2M 4K6

DRAWING TITLE:
TECH WING CLASSROOM INTERIOR ELEVATION

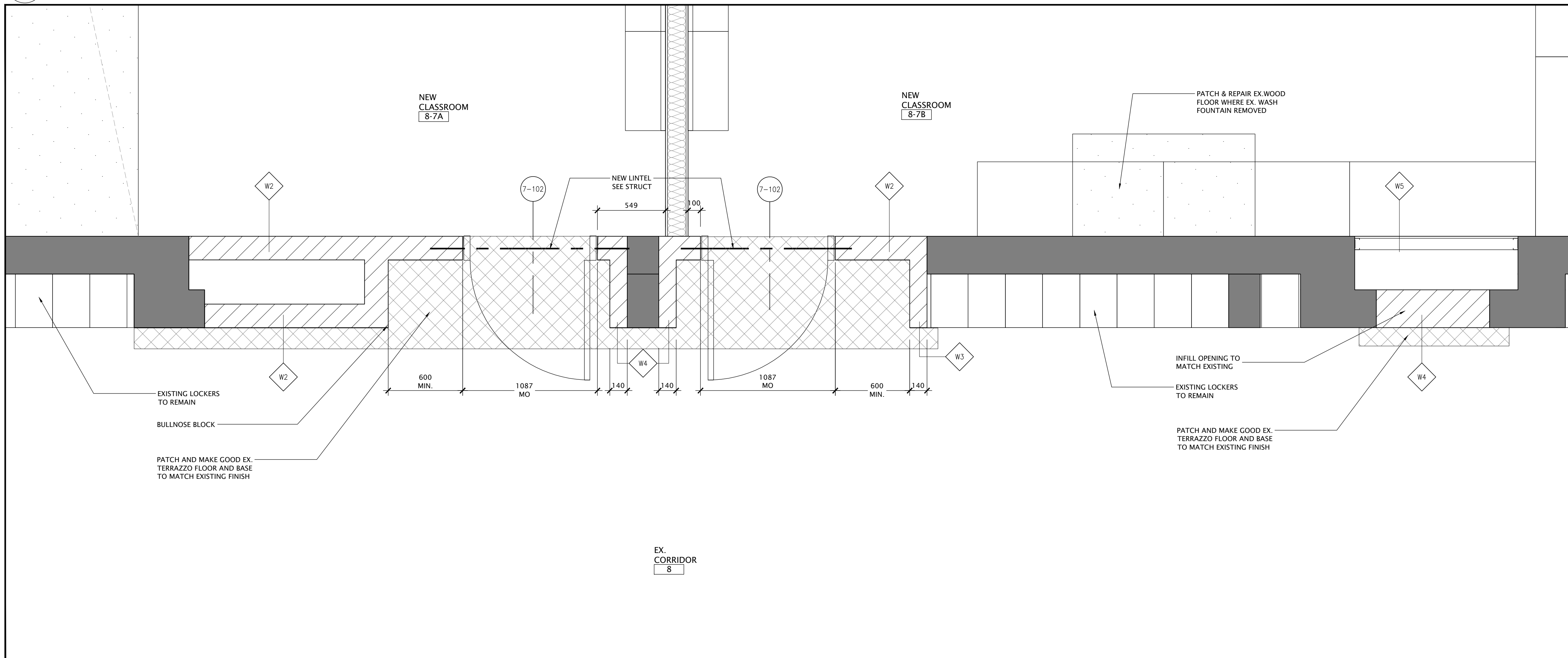
PROJECT NO: A23018	SCALE: 1:50
DRAWN: K+	DRAWING NO.: A2-4
CHECKED: K+	REV: 2
DATE: JAN/24	



3 NEW SOUND BOOTH 8-5A INTERIOR ELEVATIONS
SCALE - 1:50



1 NEW TECH DESIGNER 8-3A INTERIOR ELEVATIONS
SCALE - 1:50

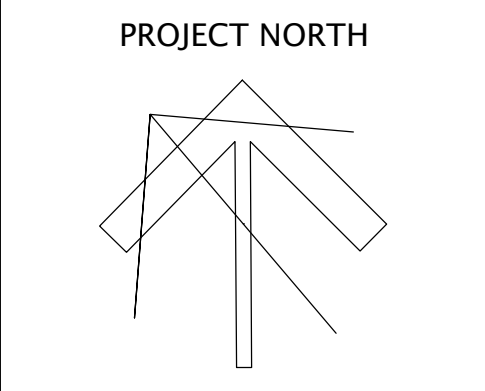


2 ENLARGEMENT AT NEW DOORS OPENING
SCALE - 1:20

NO.	DATE	REVISION
0	24/07/24	ISSUED FOR CLIENT REVIEW
1	24/11/24	ISSUED FOR TENDER AND PERMIT
2	25/07/24	ISSUED FOR TENDER AND PERMIT

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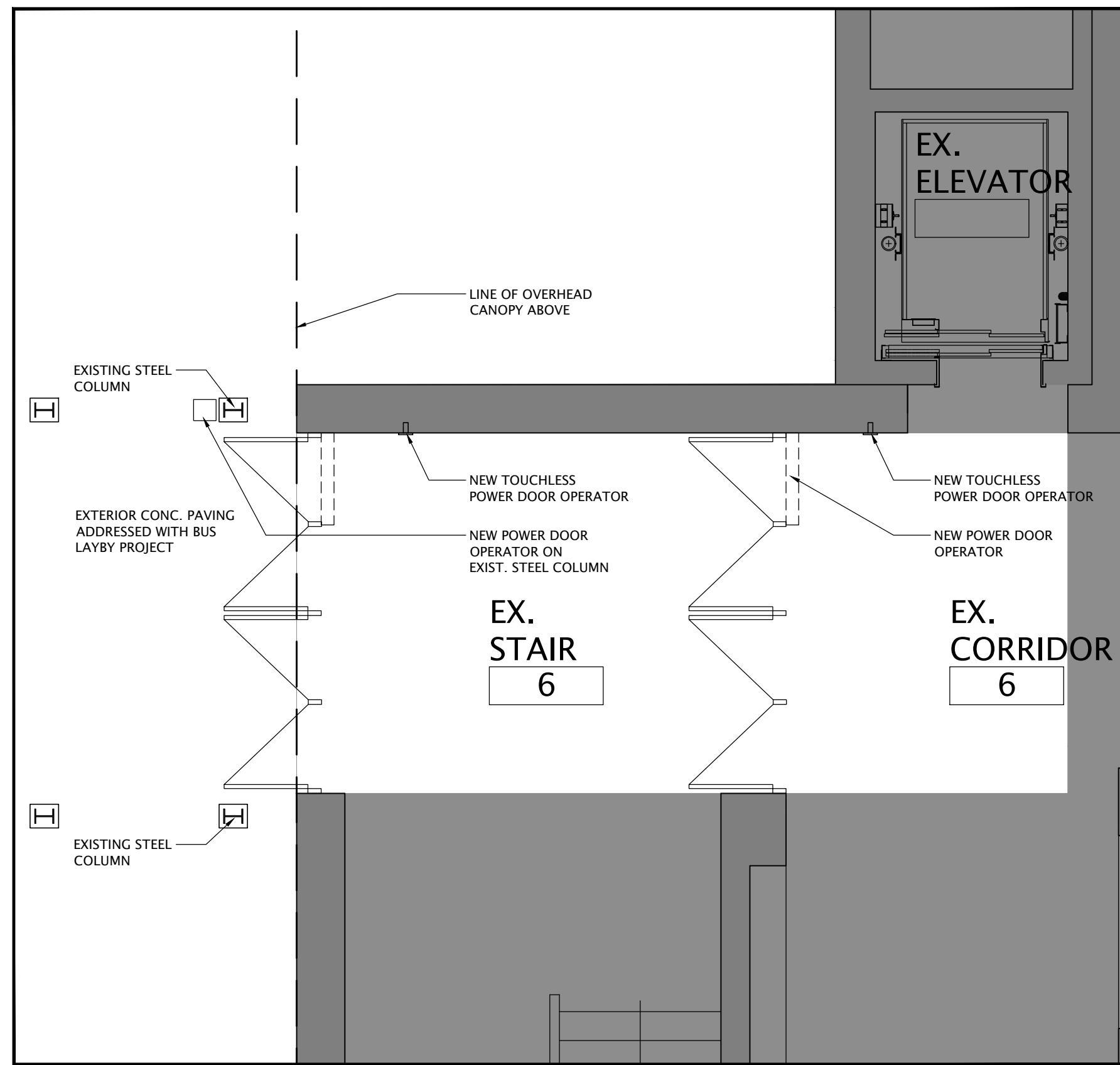
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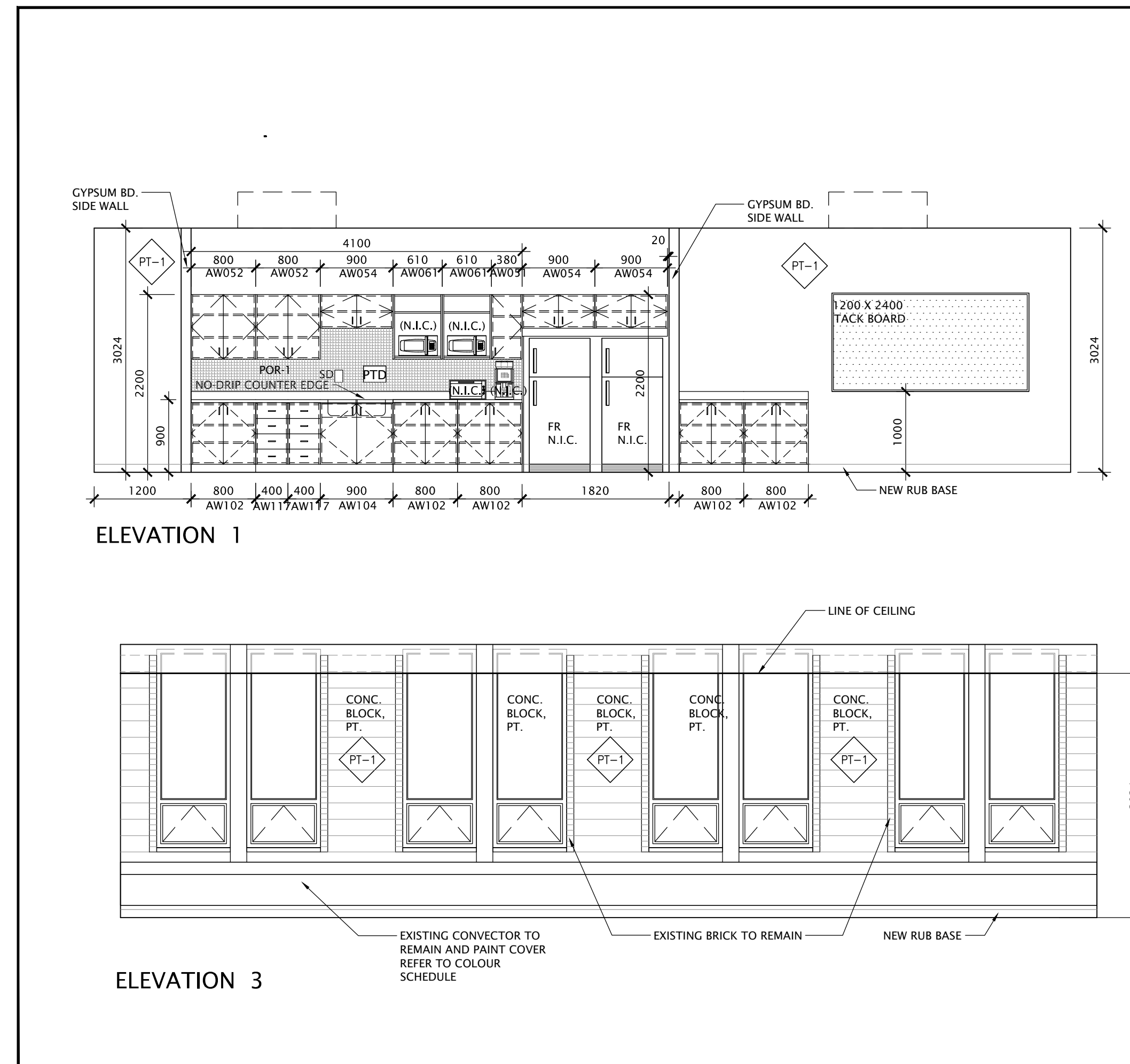


FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT
255 Fischer Hallman Rd.
Scarborough, ON M2M 4K8

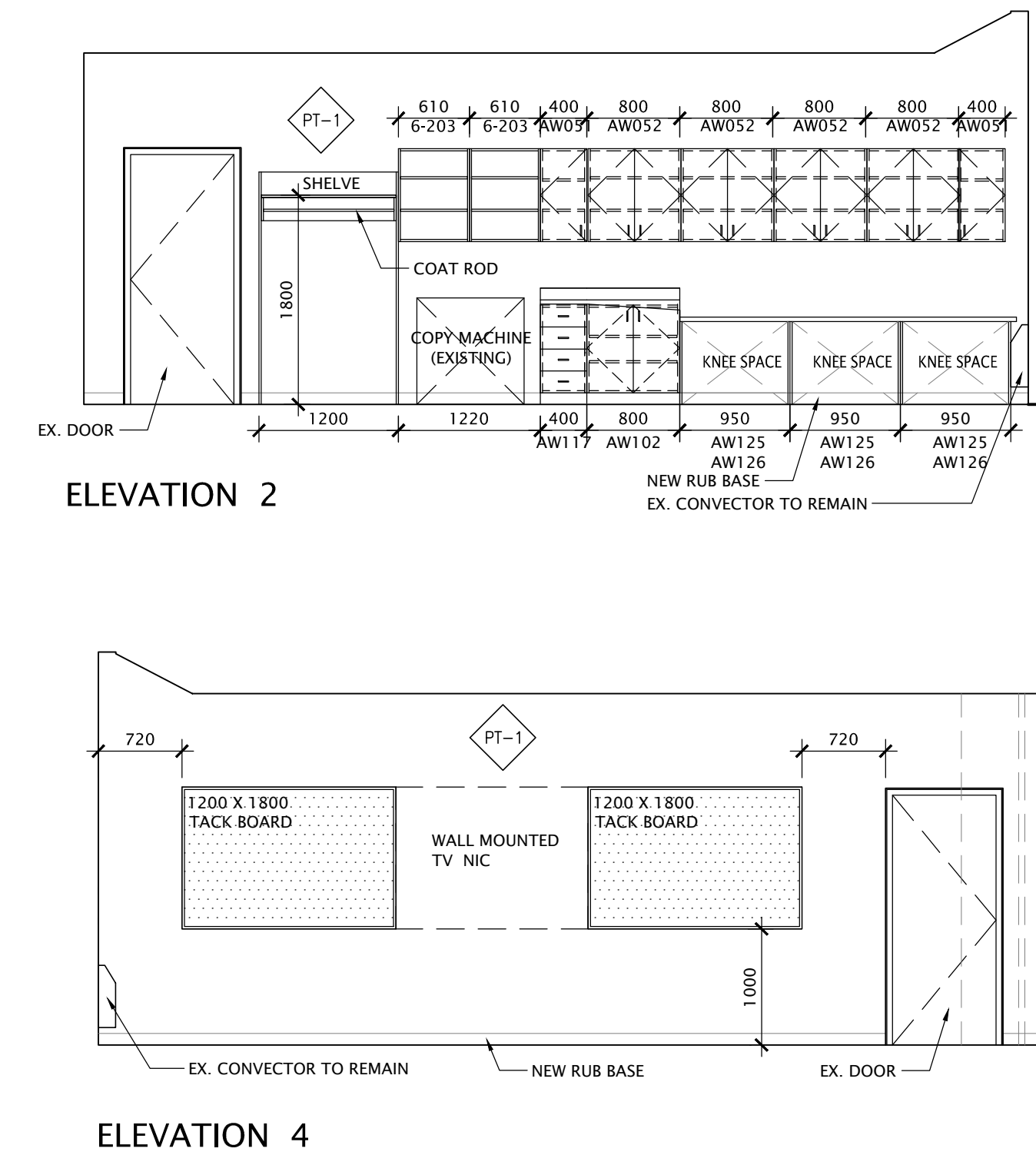
DRAWING TITLE: TECH WING CLASSROOM INTERIOR ELEVATION ENLARGEMENT AT NEW DOORS OPENING		
PROJECT NO: A23018	SCALE: 1:150	
DRAWN: K+	DRAWING NO.:	REV.
CHECKED: K+	A2-5	2
DATE: JAN/24		



4 BARRIER FREE - ADO
A2-6 SCALE - 1:50

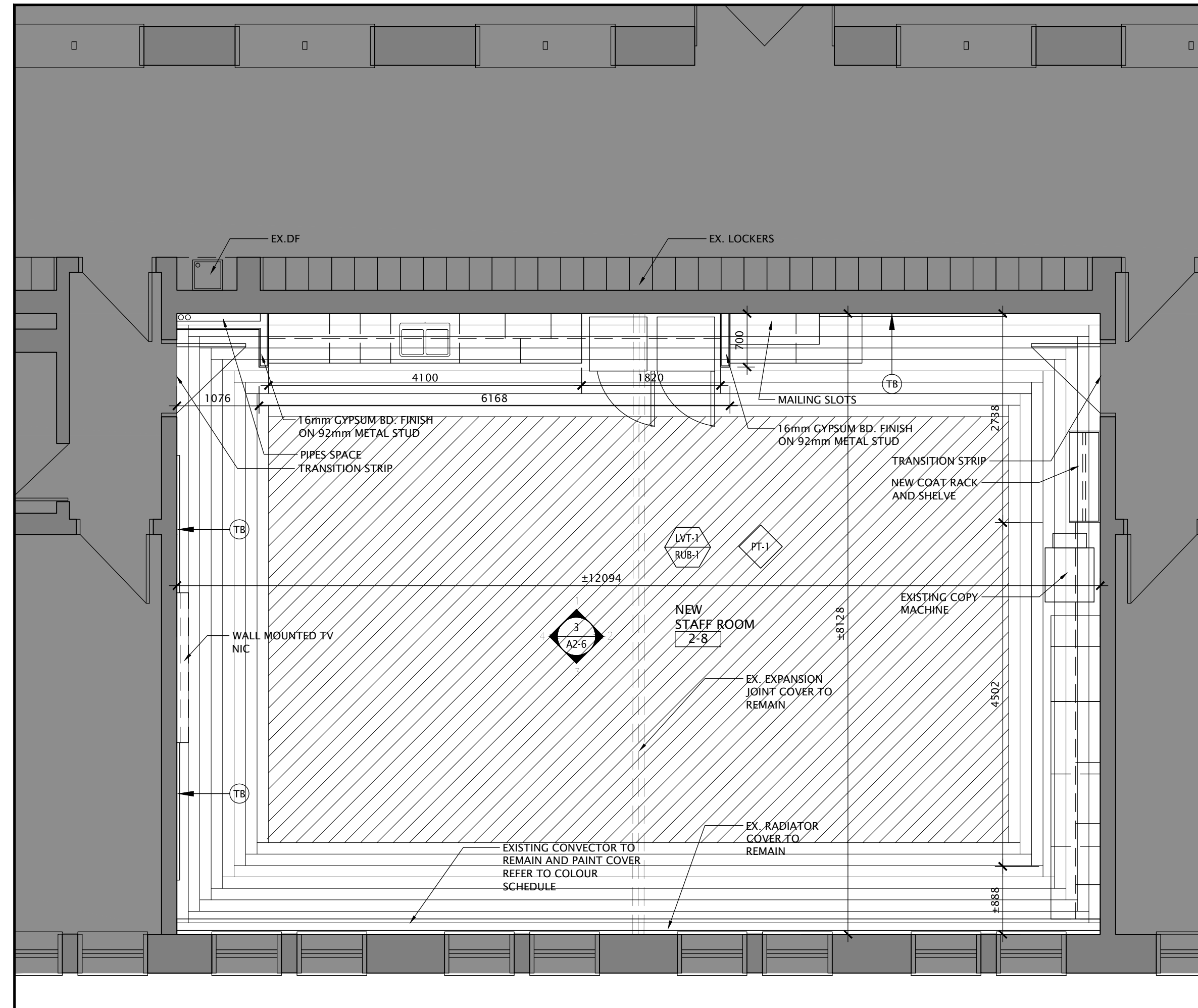


3 STAFF ROOM INTERIOR ELEVATIONS
A2-6 SCALE - 1:50

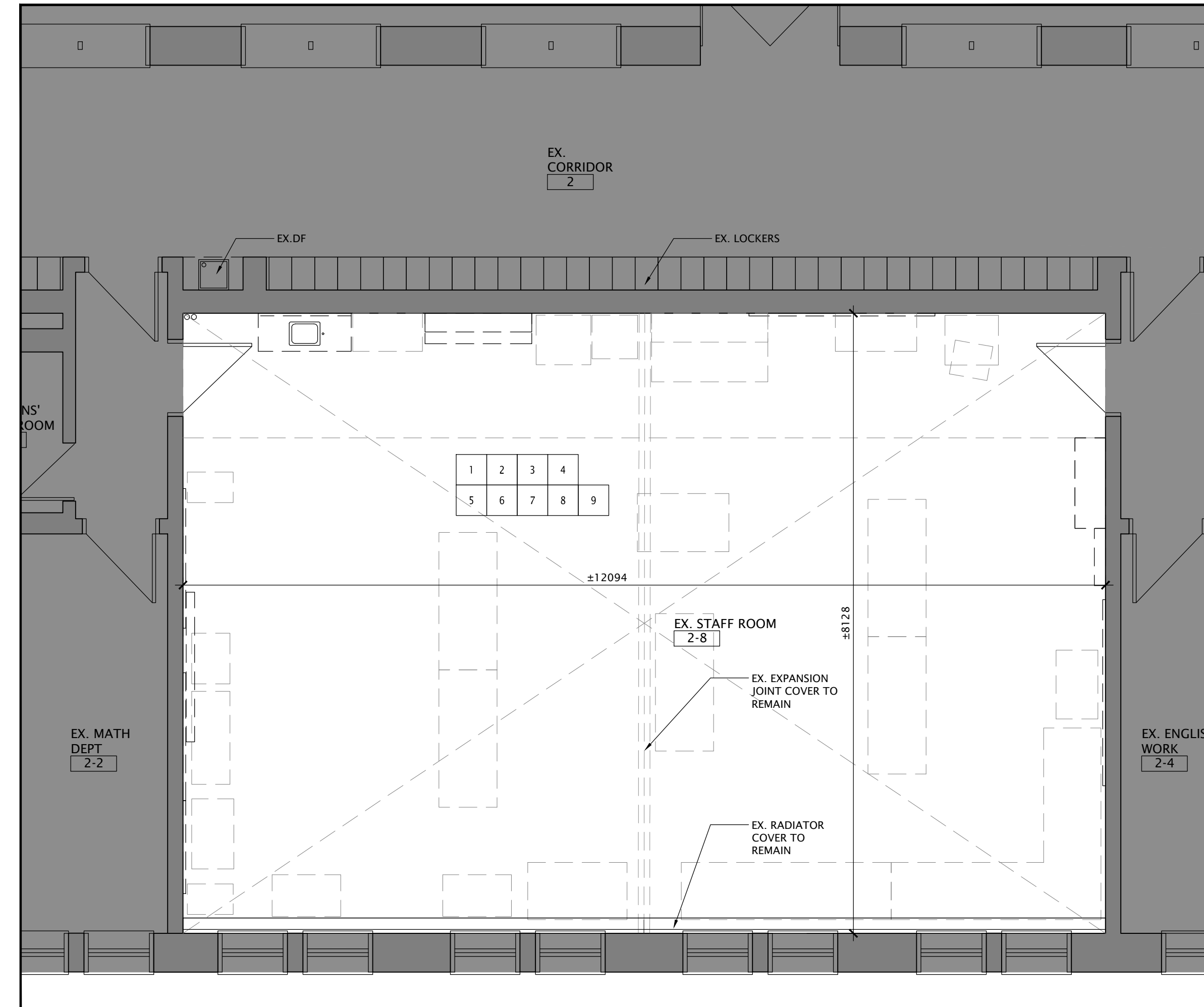


ELEVATION 2
ELEVATION 4

- DEMOLITION NOTES**
- ALL LOOSE FURNITURE, EQUIPMENT WITHIN THE SCOPE OF WORK WILL BE REMOVED BY WRSB FORCES. ANYTHING LEFT BEHIND IS TO BE TURNED OVER TO SCHOOL BOARD AUTHORITY.
- LOOSE FURNITURE TO BE REMOVED BY THE BOARD FORCES. REMOVE FIXED FURNITURE & MILLWORK AS NOTED, AND HAND OVER TO THE BOARD. PATCH AND MAKE GOOD ALL SURFACES.
 - EX. TACKBOARD TO BE REMOVED AND DISCARDED. CLEAN, PATCH & MAKE GOOD ALL SURFACES AFFECTED BY WORK.
 - REMOVE EXISTING FLOOR FINISH. MAKE GOOD ALL SURFACE FOR NEW FINISH. REFER TO FINISH SCHEDULE.
 - EXISTING WINDOW BLINDS TO BE PROTECT OR REMOVE FOR NEW WALL PAINT.
 - REMOVE EXISTING LIGHTING, CEILING TILES AND T-BAR GRID COMPLETELY. SEE RCP DRAWING AND ELECTRICAL DWGS.
 - PREPARE WALLS TO RECEIVE NEW PAINT. REFER TO FINISH SCHEDULE.
 - EXISTING EXPLORE RECEPTACLE / DATA TO REMAIN. REFER ELECT. DRAWING FOR NEW WORK.
 - REMOVE EXISTING SINK COUNTER. CAP EX. SERVICE. REFER TO MECH. FOR NEW WORK.
 - REMOVE EXISTING CEILING MOUNTED TV AND BRACKET.
- NOT IN SCOPE
 - - - EXISTING TO BE REMOVED, SHOWN DASHED
 EX EXISTING
- DURING CONSTRUCTION PROTECT ALL EXISTING SURFACES AS REQUIRED.
- ANY DAMAGE AS A RESULT OF DEMOLITION TO BE REPAIRED BY GENERAL CONTRACTOR.
- PATCH AND MAKE GOOD ALL SURFACES AFFECTED BY DEMOLITION. MAKE READY TO RECEIVE NEW FINISHES.



2 STAFF ROOM - NEW LAYOUT
A2-6 SCALE - 1:50

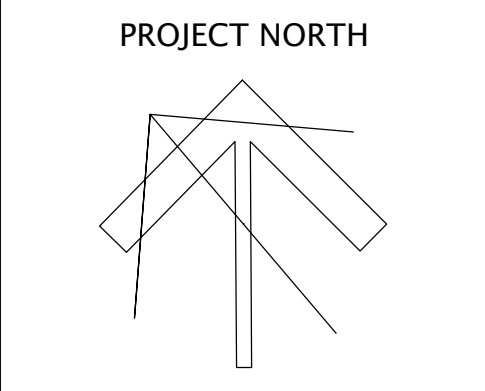


1 STAFF ROOM - DEMOLITION
A2-6 SCALE - 1:50

NO.	DATE	REVISION
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2	25/01/25	ISSUED FOR TENDER AND PERMIT
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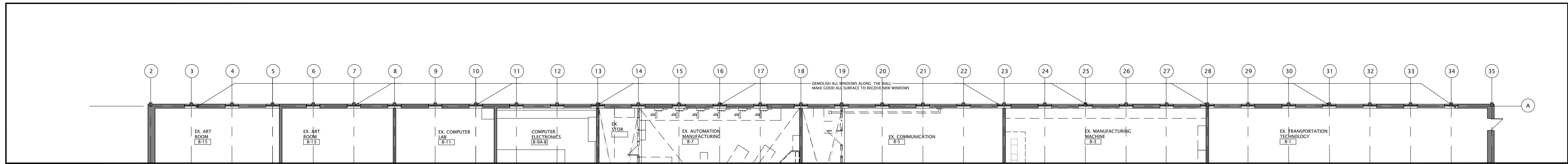
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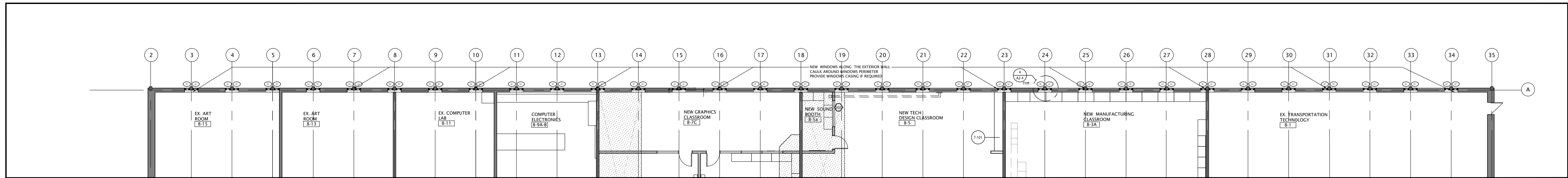
FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT
255 Fischer Hallman Rd.
Fischer, ON N2M 4K8

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

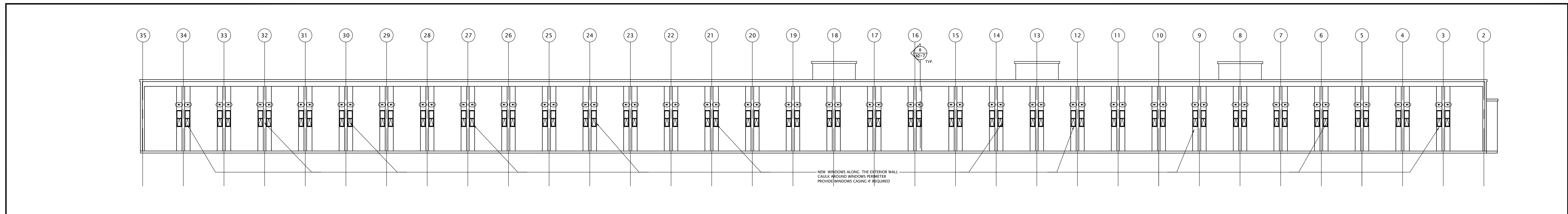
PROJECT NO: A23018	SCALE: 1:50
DRAWN: K+	DRAWING NO. REV. A2-6 2
CHECKED: K+	DATE: JAN/24



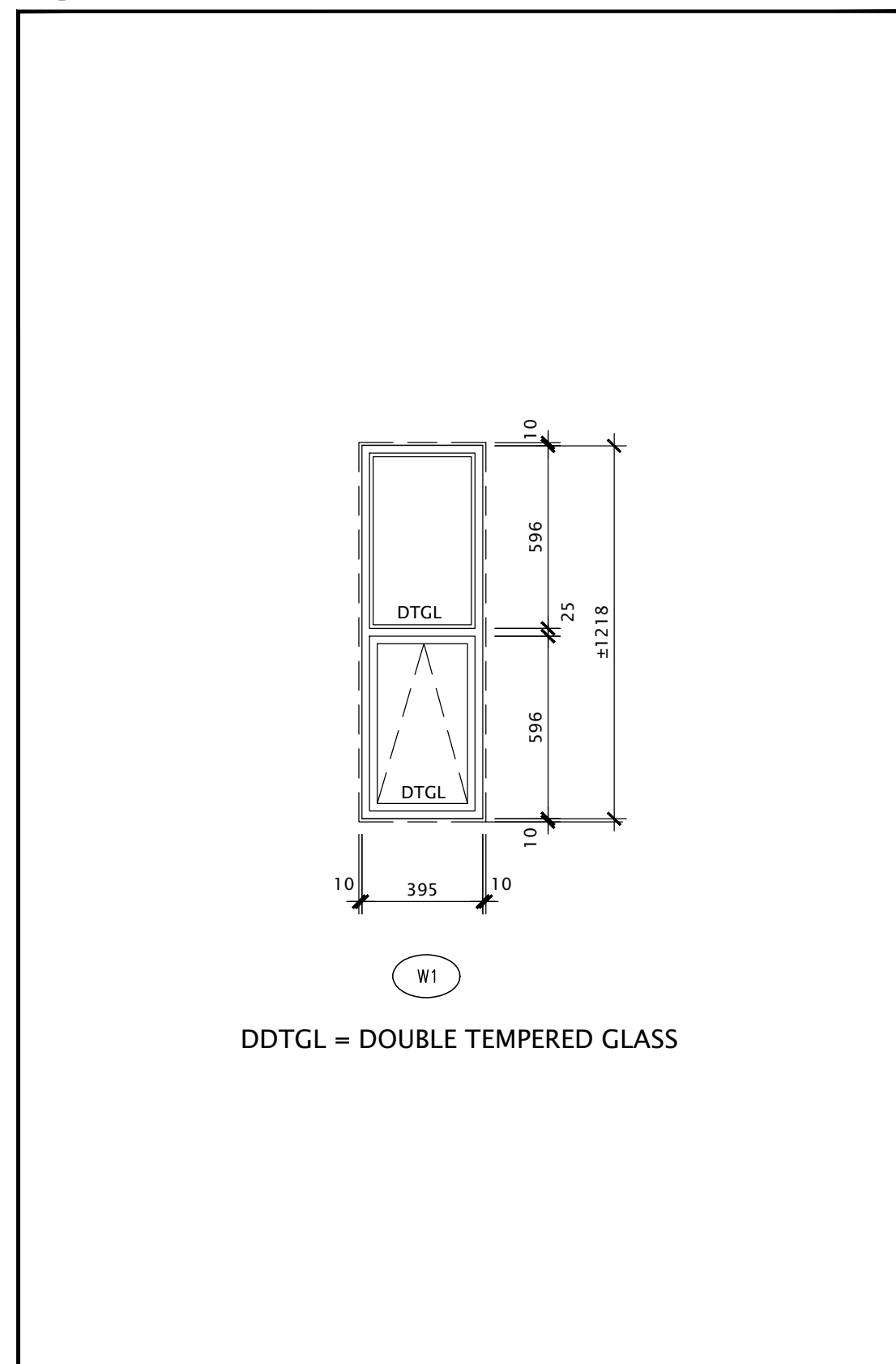
1 PARTIAL FIRST FLOOR PLAN - WINDOW DEMOLITION
SCALE - 1:150



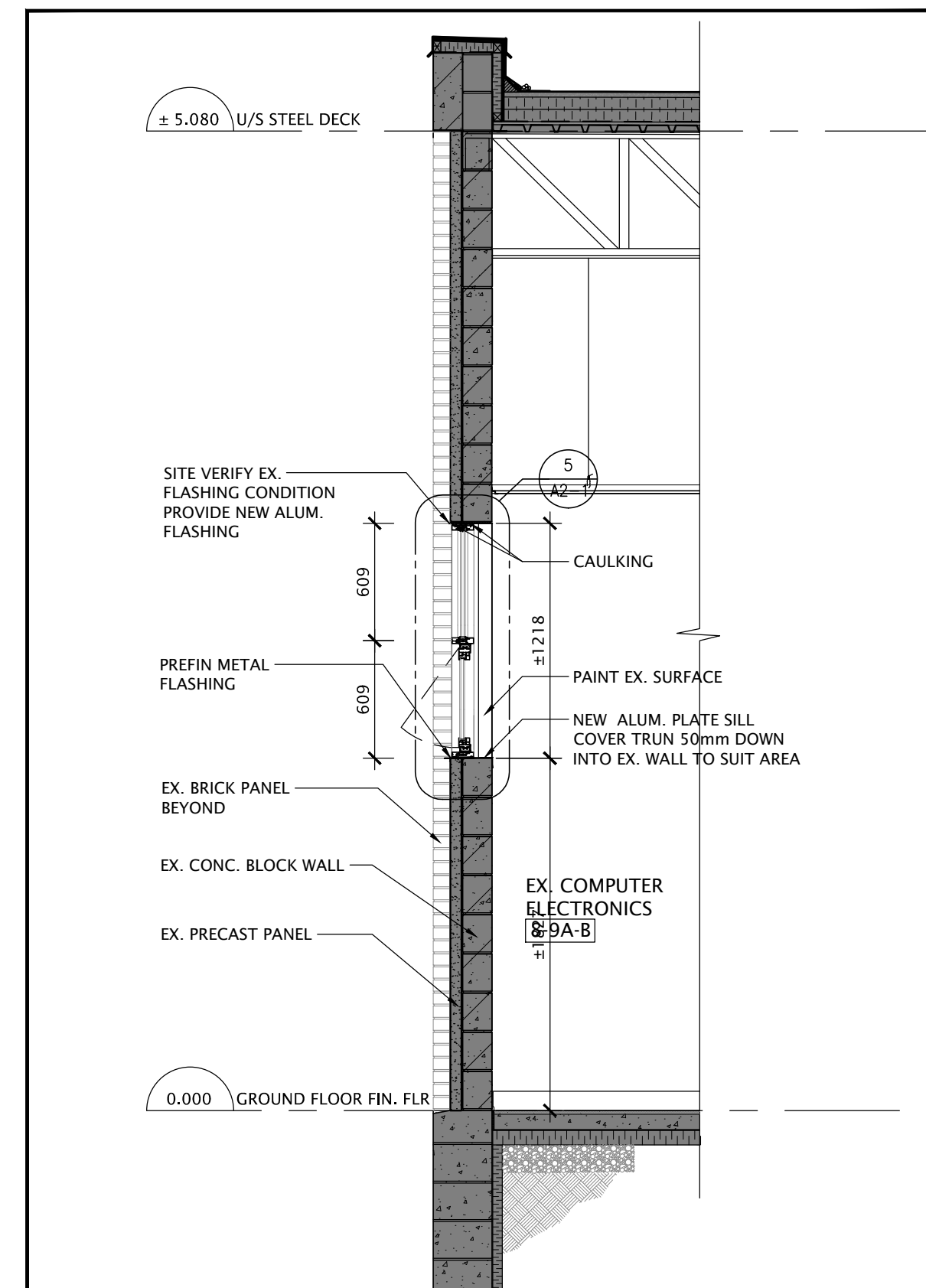
2 PARTIAL FIRST FLOOR PLAN - NEW WINDOW PROPOSED
SCALE - 1:150



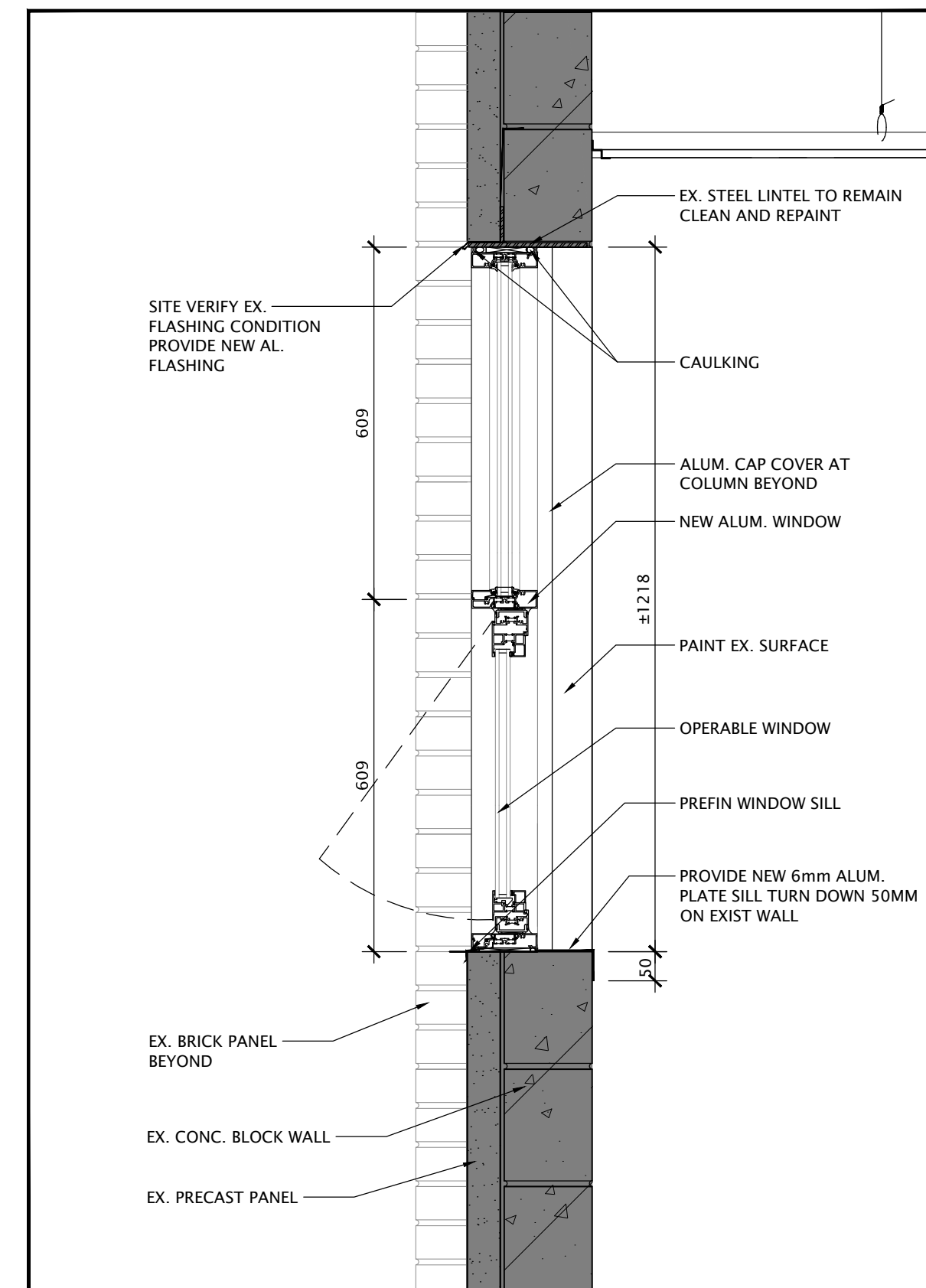
3 PARTIAL FIRST FLOOR PLAN - NEW WINDOW ELEVATION
SCALE - 1:150



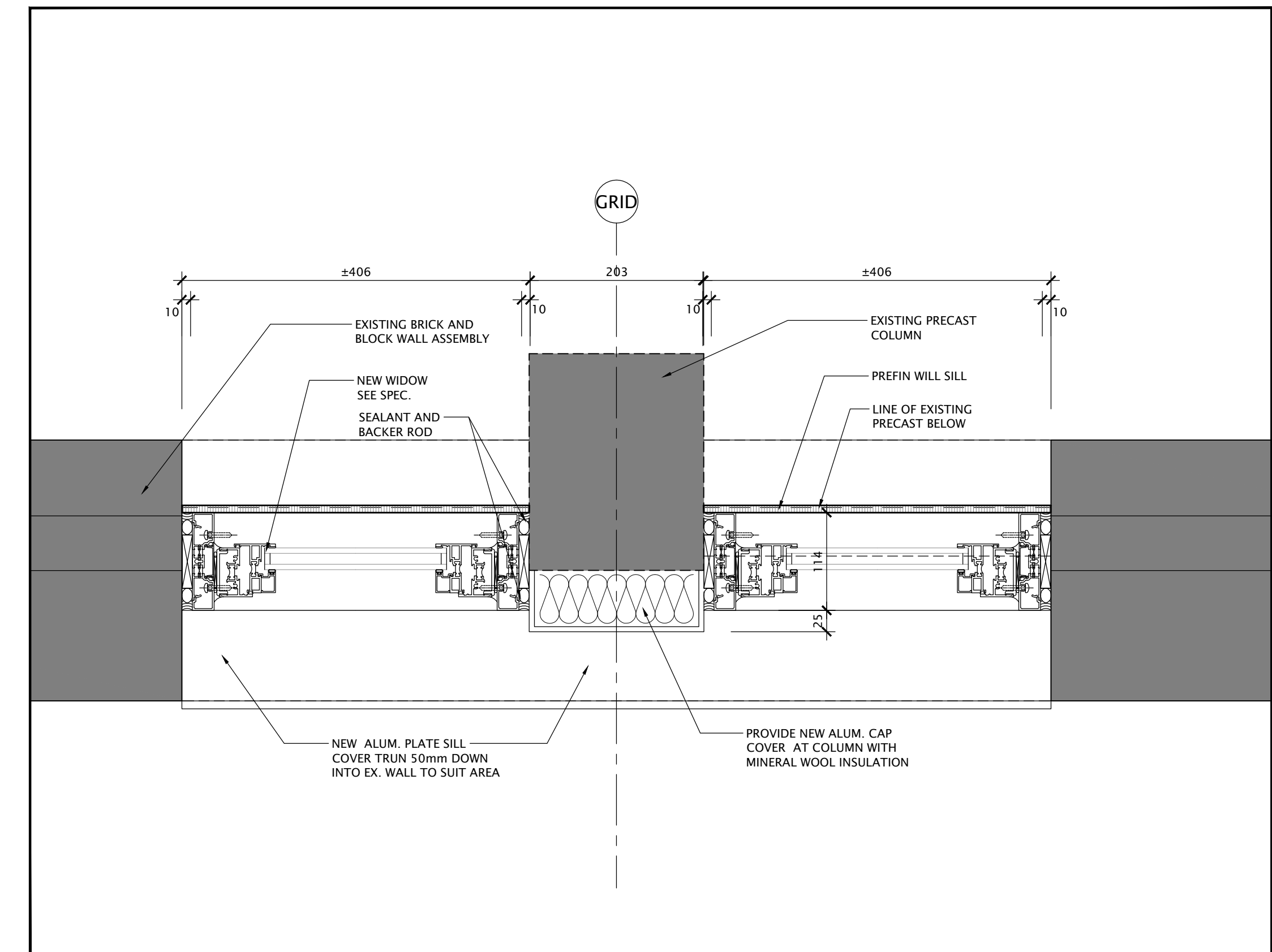
7 WINDOW DETAIL
SCALE - 1:20



6 BUILDING SECTION
SCALE - 1:30



5 WINDOW - SECTION DETAIL
SCALE - 1:10

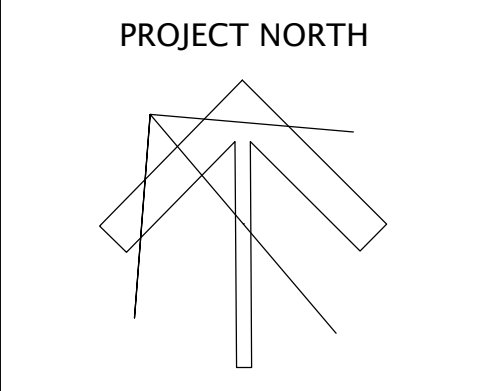


4 WINDOW - PLAN DETAIL
SCALE - 1:5

NO.	DATE	REVISION
1	24/11/24	ISSUED FOR CLIENT REVIEW
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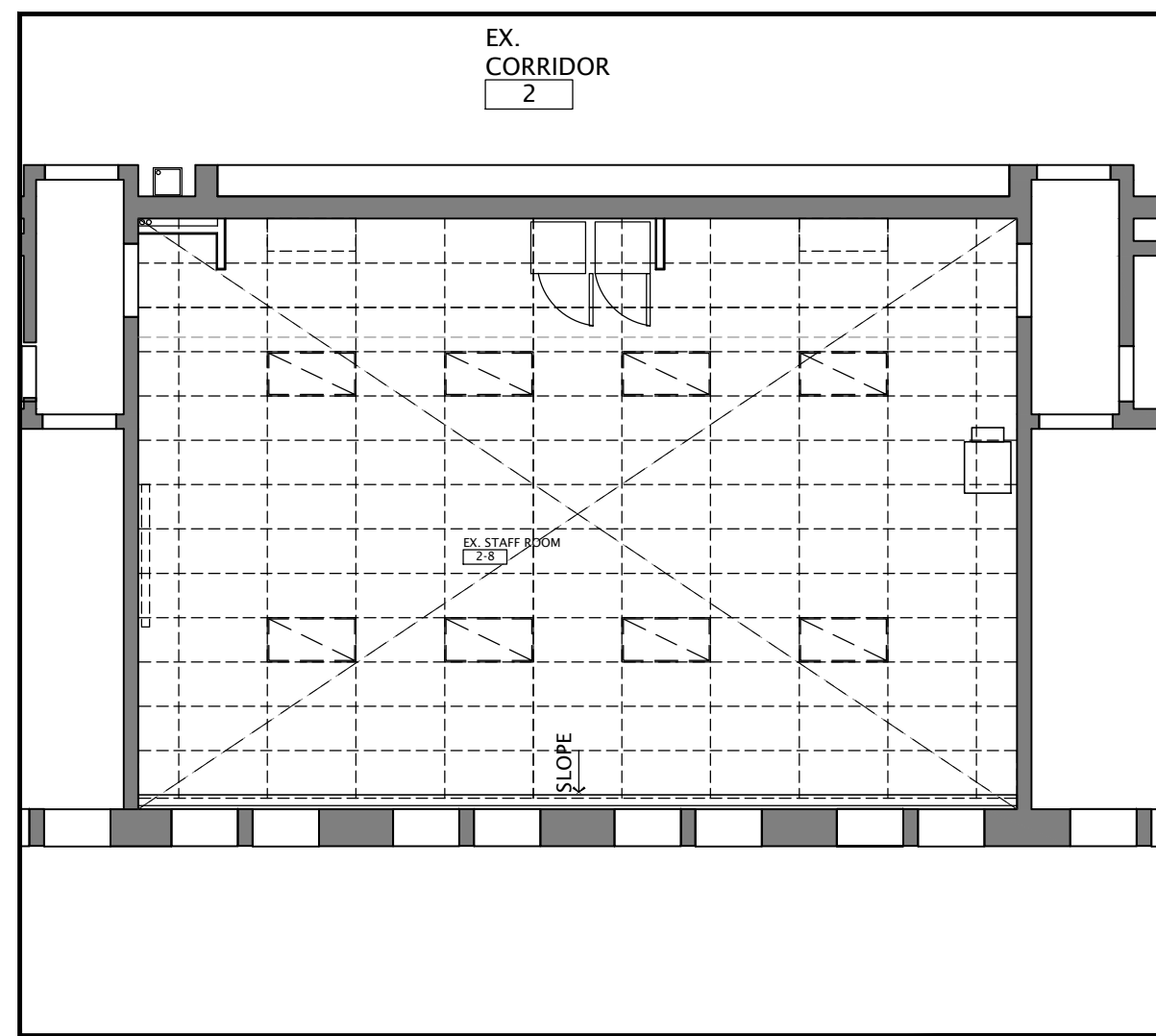


FOREST HEIGHTS C.I.
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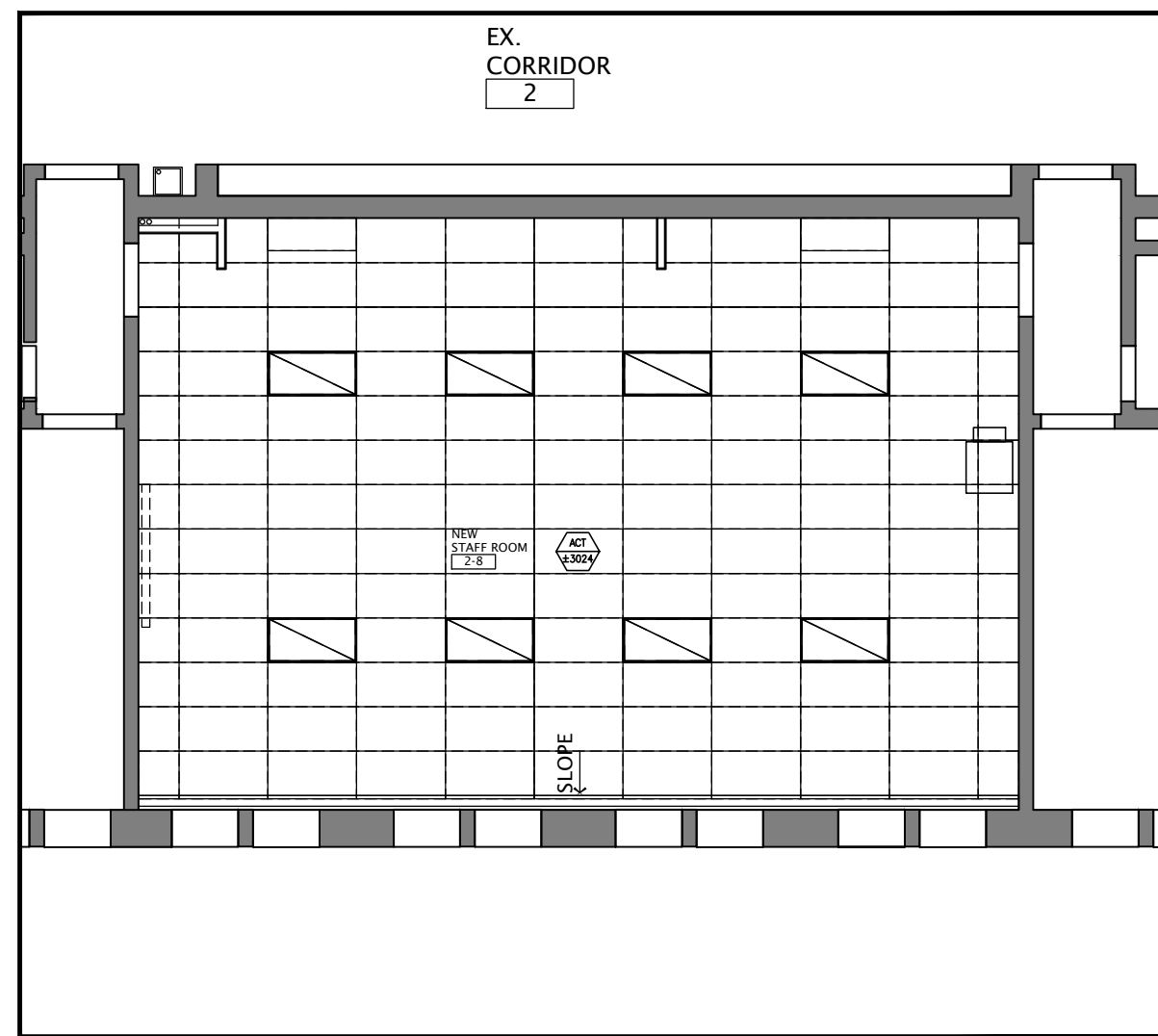
DRAWING TITLE:
PARTIAL FIRST FLOOR PLAN TECH WING WINDOW REPLACEMENT AND DETAILS

PROJECT NO: A23018	SCALE: NOTED
DRAWN: K+	DRAWING NO.: REV.
CHECKED: K+	A2-7
DATE: JAN/24	2

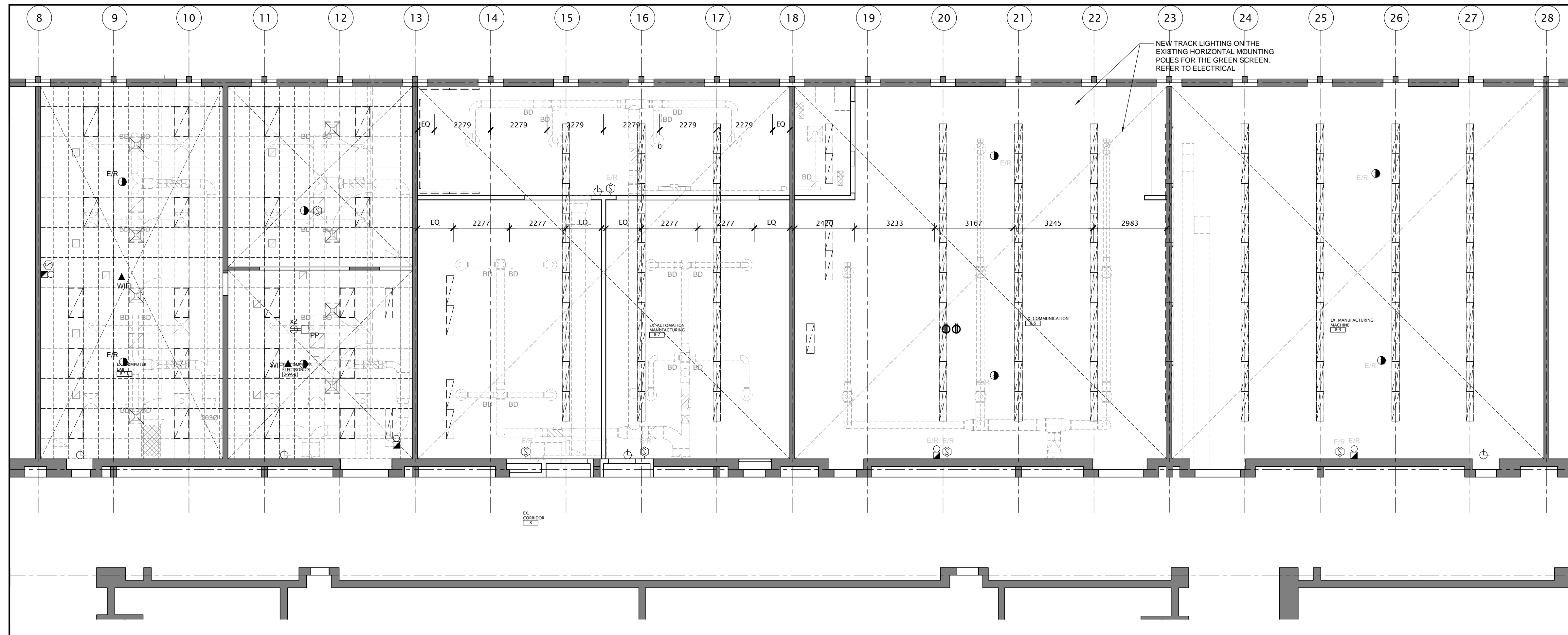
DATE PLOTTED: January 21, 2025



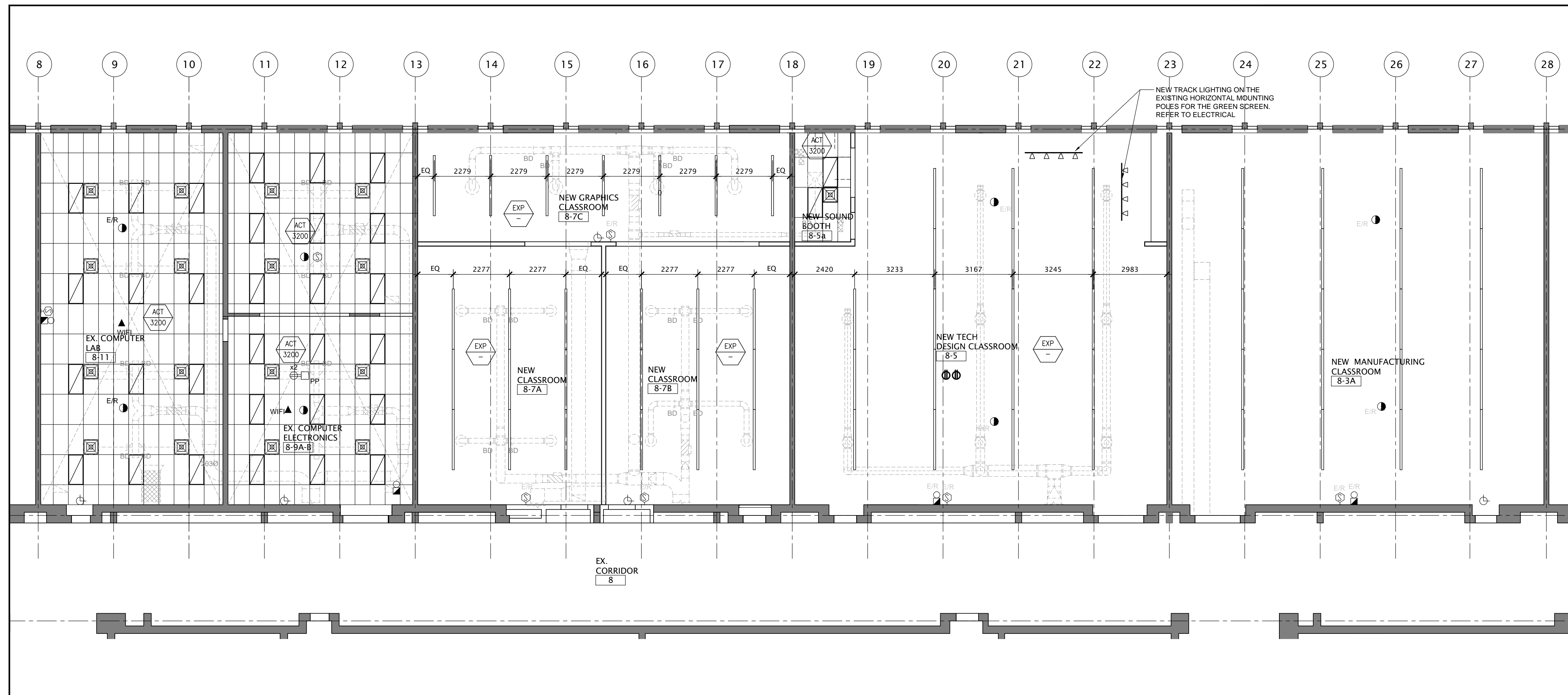
3 FIRST FLOOR CEILING FLOOR PLAN - STAFF ROOM DEMOLITION
A6-1 SCALE - 1:50



4 FIRST FLOOR CEILING FLOOR PLAN - NEW CEILING LAYOUT
A6-1 SCALE - 1:50



1 PARTIAL FIRST CEILING FLOOR PLAN - DEMOLITION
A6-1 SCALE - 1:50

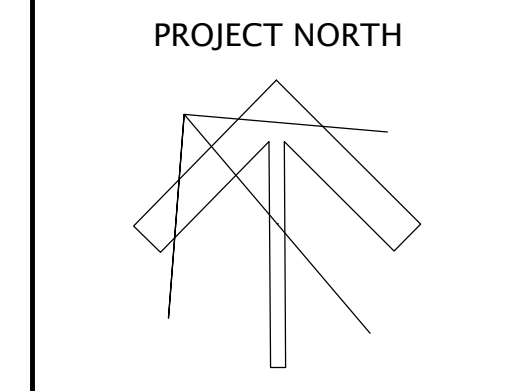


2 PARTIAL FIRST FLOOR CEILING PLAN - PROPOSED
A6-1 SCALE - 1:50

NO.	DATE	REVISION
1	24/07/24	ISSUED FOR CLIENT REVIEW
2	29/07/24	ISSUED FOR TENDER AND PERMIT

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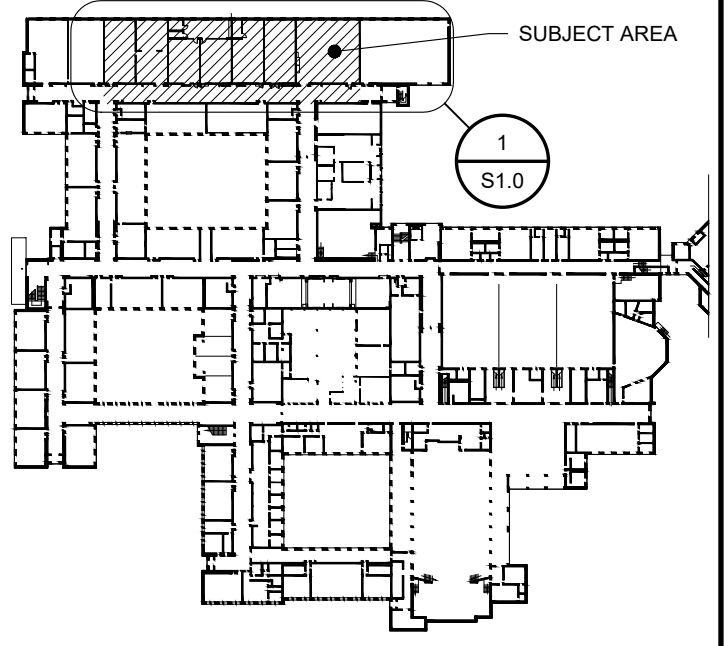
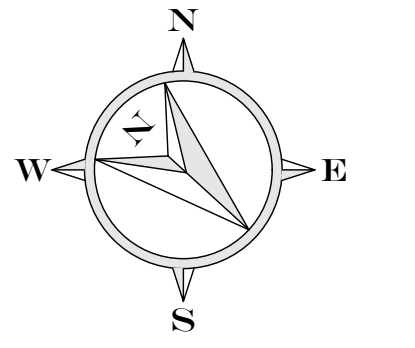
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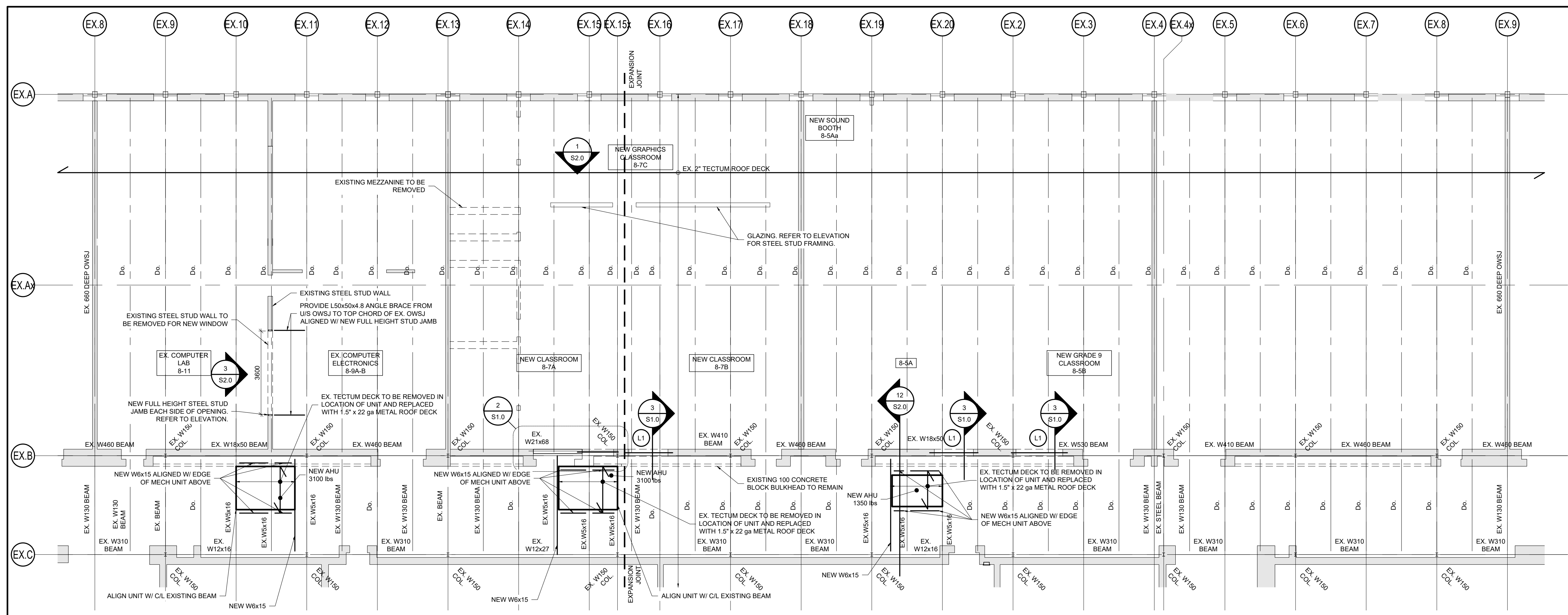
FOREST HEIGHTS C.I.
TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT
255 Fischer Hallman Rd.
Fischer, ON N2M 4K6

DRAWING TITLE:
PARTIAL FIRST FLOOR PLAN
TECH WING DEMOLITION
CEILING & PROPOSED

PROJECT NO: A23018	SCALE: 1:100
DRAWN: K+	DRAWING NO. REV. A6-1 2
CHECKED: K+	
DATE: JAN/24	



KEY PLAN



1 ROOF FRAMING PLAN 1:100

LINTEL SCHEDULE		
LINTEL	SIZE	END BEARING
L1	L127x127x9.5 W (1) 3/16"Ø TAPCON x 2 1/4" LG. @ 400 O.C.	200mm EACH END

CONSTRUCTION NOTES:

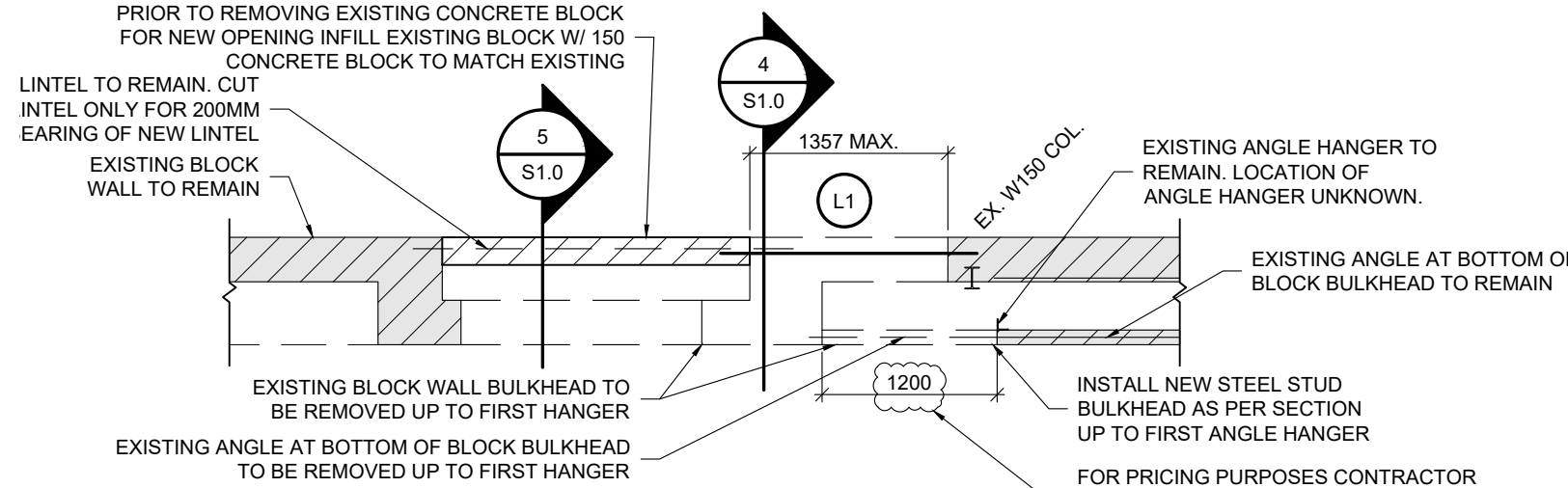
- A. GENERAL**
- ALL WORK SHALL CONFORM TO THE ONTARIO BUILDING CODE AND ALL STANDARDS REFERENCED WITHIN, LOCAL REGULATIONS AND BYLAWS, AND THE OCCUPATIONAL HEALTH AND SAFETY ACT FOR CONSTRUCTION PROJECTS. THE LATEST VERSIONS OF STANDARDS SHALL APPLY.
 - READ THESE DRAWINGS IN CONJUNCTION WITH ALL RELATED CONTRACT DOCUMENTS AND CONSULTANT DRAWINGS.
 - THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS WHICH MAY ADVERSELY AFFECT THE PROPER COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS IN RELATION TO THE DRAWINGS AND NOTIFY THE ENGINEER TO ALL DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.
 - DRAWINGS ARE NOT TO BE SCALED.
 - THE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE WITH THE PARTY WHOM THE ENGINEER HAS ENTERED INTO CONTRACT. THERE ARE NO REPRESENTATIONS MADE TO ANY PARTY WITH WHOM THE ENGINEER HAS NOT ENTERED INTO CONTRACT.
 - THE CONTRACTOR SHALL RETAIN AN INDEPENDENT TESTING AND INSPECTION COMPANY TO ENSURE THAT THE WORK IS DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS INCLUDING COMPACTION TESTING, REINFORCING STEEL PLACEMENT, CONCRETE TESTING AND STRUCTURAL STEEL.
 - THE ENGINEER SHALL BE GIVEN MINIMUM 24 HOURS NOTICE IN WRITING FOR ALL CONSTRUCTION REVIEWS, SITE VISITS AND REVIEWS BY THE ENGINEER OR THEIR REPRESENTATIVES ARE INTENDED FOR THE SOLE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THE REVIEWS SHALL NOT MEAN THAT THE ENGINEER HAS SEEN ALL CONSTRUCTION PROCEDURES. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR ERRORS AND OMISSIONS AND FOR MEETING ALL THE REQUIREMENTS OF THE CONSTRUCTION AND CONTRACT DOCUMENTS.
 - THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR CONSTRUCTION LOADS AND TEMPORARY BRACING TO ENSURE SAFETY AND THE BUILDING IS PLUMB AND IN TRUE ALIGNMENT AT ALL PHASES OF CONSTRUCTION AS PER O REG 21391. ALL BRACING MEMBERS SHOWN ON THE DRAWINGS ARE DESIGNED FOR THE FINISHED STRUCTURE AND MAY NOT BE SUFFICIENT FOR ERECTION PURPOSES. SHORING AND BRACING IS REQUIRED UNTIL PROPOSED STRUCTURE IS PROPERLY IN PLACE. SHORING AND BRACING SHALL BE DESIGNED, REVIEWED AND APPROVED BY A PROFESSIONAL ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED WITH P. ENG'S STAMP FOR OUR REVIEW PRIOR TO CONSTRUCTION.
 - NO SUBSTITUTIONS FROM THE SPECIFIED PRODUCTS AND MATERIALS ARE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.
- C. STRUCTURAL STEEL**
- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST VERSION OF CAN/CSA-S16 AND THE CISC CODE OF STANDARD PRACTICE.
 - STRUCTURAL STEEL SHALL CONFORM TO THE LATEST VERSION OF CAN/CSA G40.20, G40.21 GRADE 350W CLASS C FOR H.S.S., G40.21 GRADE 350W FOR W SHAPE SECTIONS AND G40.21 GRADE 300W FOR CHANNELS, ANGLES AND MISCELLANEOUS METAL.
 - BOLTED CONNECTIONS SHALL USE GRADE A325 BOLTS.
 - WELDING SHALL CONFORM TO CSA W59 AND CSA W47 DIVISION 1 OR DIVISION 2.1 BY THE CANADIAN WELDING BUREAU. WELDING SHALL BE COMPLETED BY CWB CERTIFIED FABRICATOR AND ERECTOR TO THE CSA STANDARDS W178.1 AND W178.2.
 - WHERE FORCES ARE NOT SHOWN ON THE DRAWINGS BEAM REACTIONS SHALL BE 1/2 THE TOTAL UNIFORM DISTRIBUTED FACTORED LOADS NOTED IN THE BEAM LOAD TABLES OF PART 5 OF THE CISC'S HANDBOOK OF STEEL CONSTRUCTION. STRUCTURAL STEEL MEMBERS SHALL NOT BE SPLICED WITHOUT THE APPROVAL OF THE ENGINEER.
 - STEEL BEAMS AND LINTELS SHALL HAVE MINIMUM 8" (203mm) BEARING ON MASONRY UNLESS OTHERWISE NOTED. WELD BEAMS AND LINTELS TO BEARING PLATES WHERE PROVIDED WITH MINIMUM 3/16"x2" (4.8mmx51mm) FILLET WELD EACH SIDE.
 - ALL STRUCTURAL STEEL IS TO BE SHOP PRIME PAINTED UNLESS NOTED OTHERWISE. STRUCTURAL STEEL WHICH IS TO BE PROTECTED WITH SPRAY APPLIED FIREPROOFING IS TO BE KEPT CLEAN AND UNCOATED. STRUCTURAL STEEL EXPOSED TO WEATHER IS TO BE HOT DIP GALVANIZED CONFORMING TO THE LATEST VERSION OF CAN/CSA-G164. ALL COATINGS ARE TO BE TOUCHED UP ON SITE WITH APPROVED PAINT FOR PRIMED STEEL AND ZINC RICH PAINT FOR GALVANIZED STEEL.
 - ALL BUILDING MATERIALS AND EQUIPMENT SUPPORTED BY OPEN WEB STEEL JOISTS ARE TO BE CONNECTED AT JOIST PANEL POINTS.
- D. LIGHT GAUGE STRUCTURAL STEEL FRAMING**
- DESIGN AND INSTALLATION OF COLD FORM STEEL FRAMING TO CONFORM TO THE LATEST VERSION OF CAN/CSA-136.
 - DESIGN OF COLD FORM STEEL FRAMING TO BE AS PER THE GRAVITY AND LATERAL LOADS SPECIFIED ON THE DRAWINGS AND AS PER THE ONTARIO BUILDING CODE. COLD FORM STEEL MEMBERS SHALL CONFORM TO THE DEFLECTION CRITERIA SHALL CONFORM TO THE LATEST VERSION OF CSA S304.1.
 - THE COLD FORM STEEL FRAMING DESIGN ENGINEER SHALL VISIT THE SITE TO PROVIDE FINAL CONSTRUCTION CERTIFICATION FOR THE WORK.
 - COLD FORM STEEL MEMBERS SHALL CONFORM TO THE LATEST VERSION OF ASTM A653. MEMBERS WITH THICKNESS OF 18 GA. OR LIGHTER TO BE MINIMUM 345 MPa (50 ksi) YIELD STRENGTH. MEMBERS HEAVIER THAN 18 GA. TO BE MINIMUM 345 MPa (50 ksi) YIELD STRENGTH. MEMBERS HEAVIER THAN 18 GA. TO BE MINIMUM 345 MPa (50 ksi) YIELD STRENGTH. MEMBERS HEAVIER THAN 18 GA. TO BE MINIMUM 345 MPa (50 ksi) YIELD STRENGTH.
 - PROVIDE BRICK TIES WITH CORROSION RESISTANCE CONFORMING TO THE MINIMUM REQUIREMENTS OF THE LATEST VERSION OF CAN/CSA A370 - CONNECTORS FOR MASONRY.

TESTING REQUIREMENTS	
TEST	COMMENTS
STRUCTURAL STEEL CONNECTIONS	INSPECT ALL FIELD WELDS
ALL TESTING TO BE COMPLETED BY A CERTIFIED INDEPENDENT TESTING AND INSPECTION COMPANY. COPIES OF ALL REPORTS ARE TO BE FORWARDED TO THE ENGINEER FOR REVIEW.	

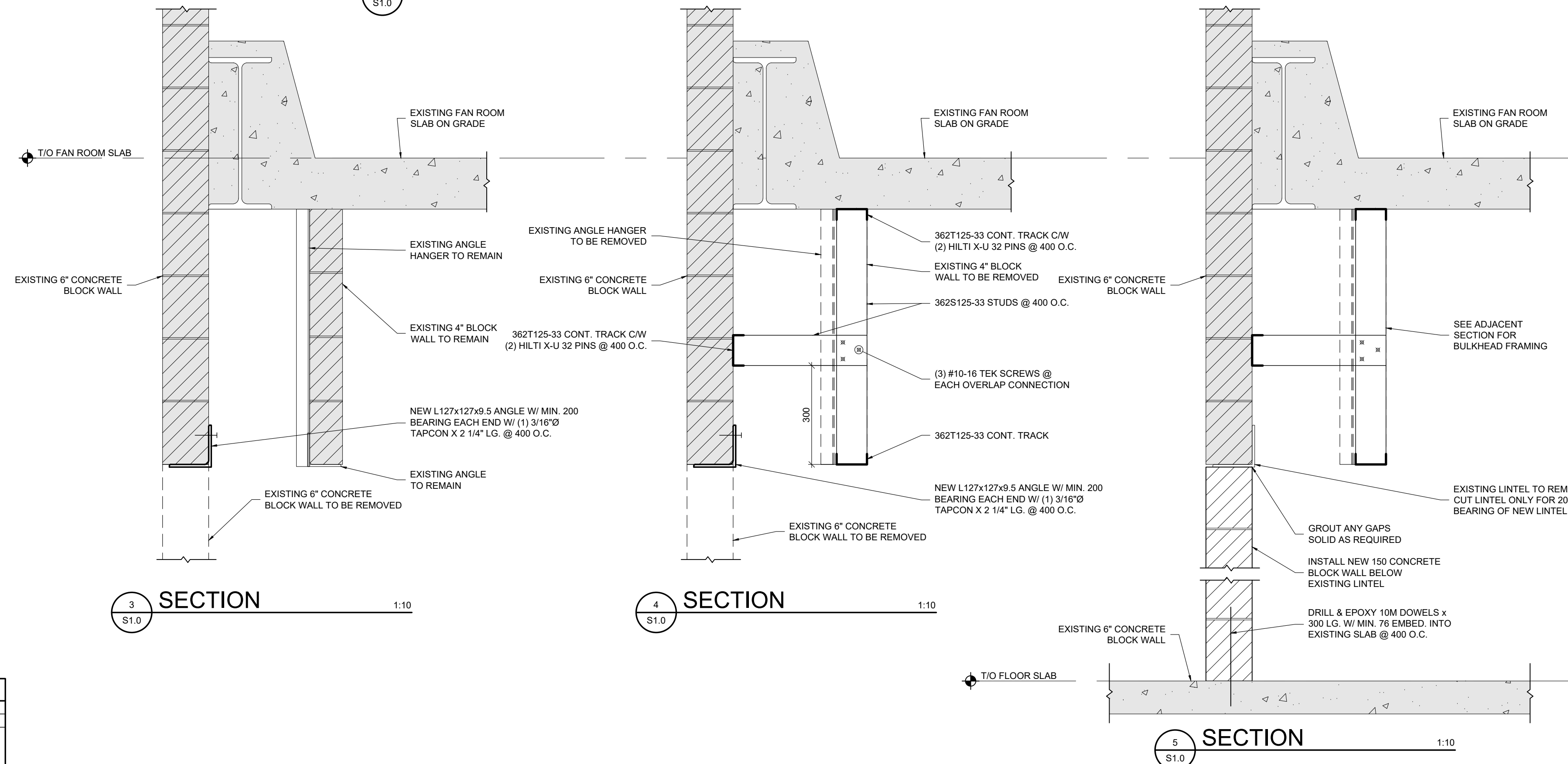
- B. MASONRY**
- MASONRY TO CONFORM TO THE LATEST VERSION OF CAN/CSA-S304.1 AND CSA A311.
 - STRENGTH OF LOAD-BEARING MASONRY UNITS TO BE MINIMUM 15 MPA FOR HOLLOW UNITS BASED ON NET AREA.
 - TYPE "S" MORTAR SHALL BE USED FOR CONCRETE BLOCK. TYPE "N" MORTAR SHALL BE USED FOR BRICK AND DECORATIVE BLOCK. GROUT STRENGTH SHALL BE 20 MPA UNLESS NOTED OTHERWISE. MORTAR AND GROUT TO CONFORM TO THE LATEST VERSION OF CSA A778.
 - ALL MASONRY WALLS SHALL BE CONSTRUCTED WITH FULL MORTAR JOINTS.
 - REINFORCE ALL MASONRY WITH HOT DIP GALVANIZED NO. 9 TRUSS TYPE WIRE REINFORCING @ 16" (406mm). PROVIDE FULL OVERLAP AT ALL INTERSECTIONS AND CORNERS.
 - ALL MASONRY UNDER CONCENTRATED LOADS SHALL BE FILLED SOLID WITH GROUT FOR A WIDTH AND DEPTH EQUAL TO 3 TIMES THE LENGTH OF BEARING WHERE OPEN WEB STEEL JOISTS OR BEAMS BEAR ON UNREINFORCED MASONRY WALLS PROVIDE (1) 15M VERTICAL x48" (1220MM) LONG UNDER BEARING PLATE.
 - ALL MASONRY WALLS ARE TO BE ADEQUATELY BRACED DURING CONSTRUCTION UNTIL THE FLOOR AND ROOF STRUCTURES ARE IN PLACE. BRACING SHALL BE DESIGNED, REVIEWED AND APPROVED BY CONTRACTOR'S ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED WITH ENGINEERING'S STAMP FOR OUR REVIEW PRIOR TO CONSTRUCTION.
- a) GROUT ALL REINFORCED CELLS SOLID AS PER NOTE 3. REINFORCED CELLS TO BE KEPT CLEAR OF MORTAR.
- b) PROVIDE (1) FULL HEIGHT VERTICAL BAR EACH SIDE OF CONTROL JOINTS, OPENINGS, INTERSECTIONS AND ENDS OF WALLS.
- LAP ALL REINFORCING AS PER REINFORCING STEEL CHART ABOVE (MIN).

SHOP DRAWINGS REQUIREMENTS			
NAME	RECD	P. ENG. STAMP	MINIMUM CERTIFICATION REQUIREMENTS:
STRUCTURAL STEEL	YES	YES	LAYOUT, CONNECTIONS

SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO ISSUING TO THE ENGINEER FOR REVIEW.



2 PARTIAL FRAMING PLAN 1:50



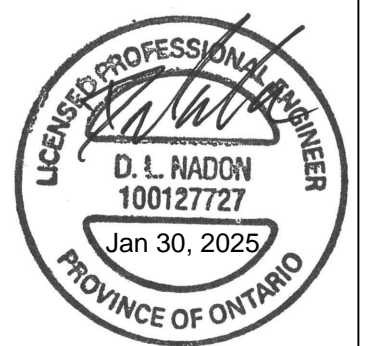
3 SECTION 1:10

4 SECTION 1:10

5 SECTION 1:10

NO.	DATE	REVISION
4	2025/01/30	ISSUED FOR TENDER
3	2025/01/07	ISSUED FOR COORDINATION
2	2024/03/14	ISSUED FOR COORDINATION
1	2024/03/13	ISSUED FOR COORDINATION

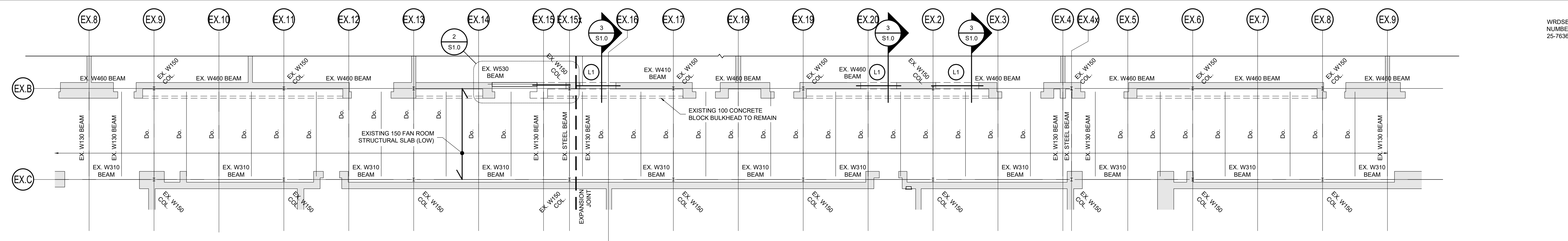
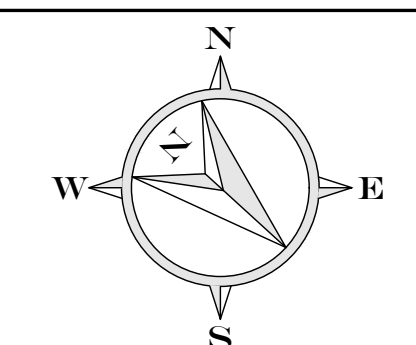
WitzelDyce ENGINEERING INC.
 826 King Street North, Unit 20
 Waterloo, Ontario, N2J 4C6
 www.witzeldyce.com



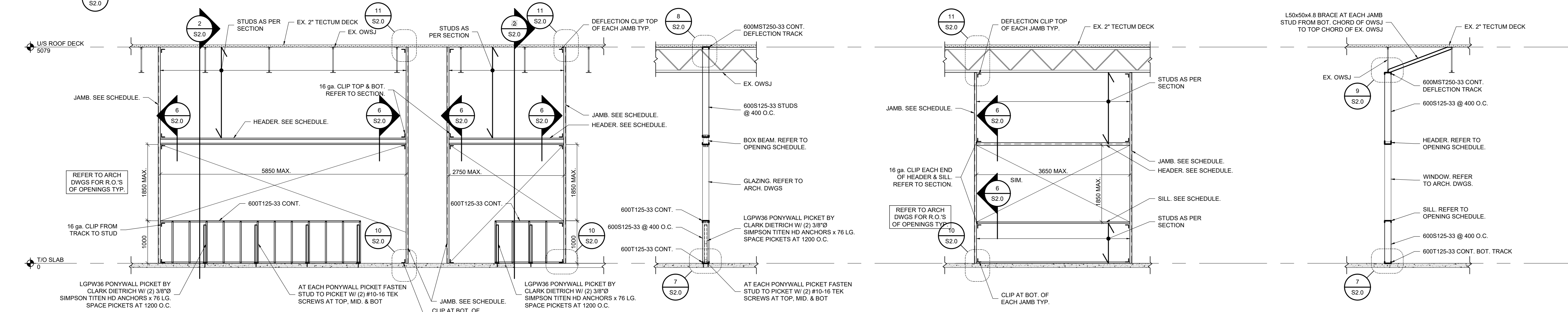
PROJECT
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT
 225 FISCHER-HALLMAN RD. KITCHENER, ON.

DRAWING	
DESIGNER	DLN
PROJECT NO.	10747-201
DRAWN	RGW
DRAWING NO.	
DATE	MARCH 2023
SCALE	AS NOTED

S1.0



1 FAN ROOM FRAMING PLAN 1:100



1 ELEVATION 1:50 NEW GRAPHICS CLASSROOM OPENINGS

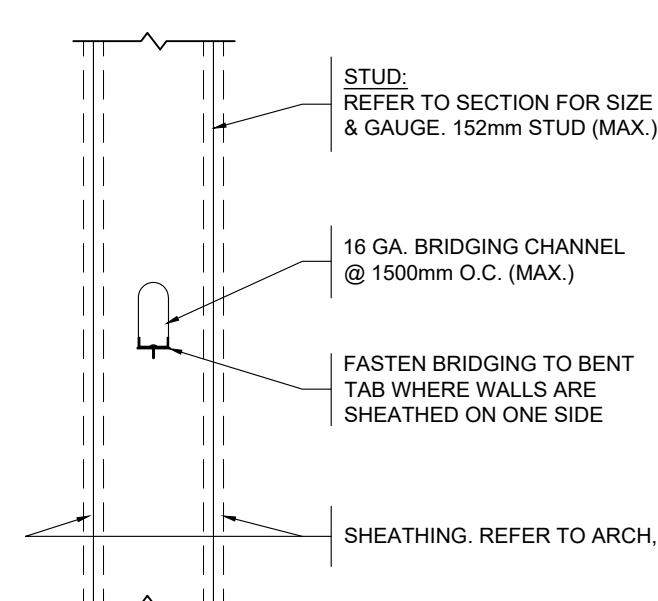
2 SECTION 1:50 NEW GRAPHICS CLASSROOM

3 ELEVATION 1:50 OPENING BETWEEN COMPUTER LAB & COMPUTER ELECTRONICS

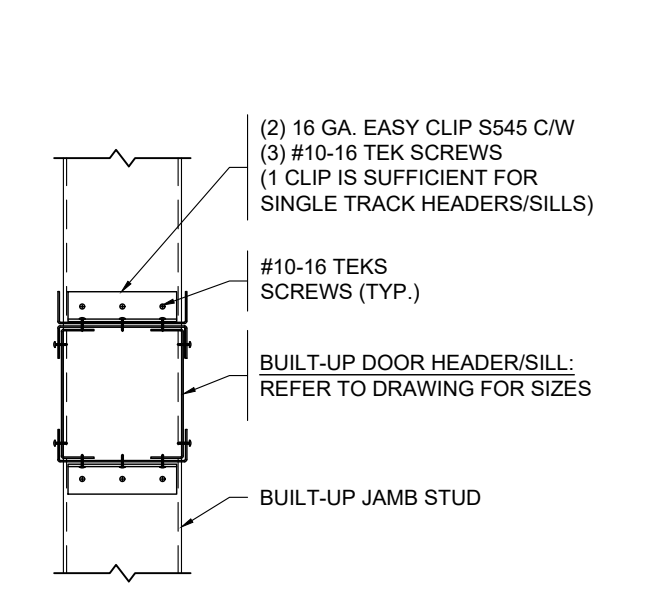
4 SECTION 1:50 OPENING BETWEEN COMPUTER LAB & COMPUTER ELECTRONICS

OPENING	SIZE (WxH)	HEADER SIZE	SILL SIZE	JAMB SIZE
LARGE GLAZING	5777x2800 MAX.	(2) 600T125-54 + (2) 600S162-54	N/A	600S162-54 + 600T125-54
SMALL GLAZING	2677x2800 MAX.	600T300-33 + 600S162-33	N/A	600S162-33 + 600T125-33
COMPUTER RM WINDOW	3650x1850 MAX.	600T300-43 + 600S162-43	600T125-43	600S162-43 + 600T125-43

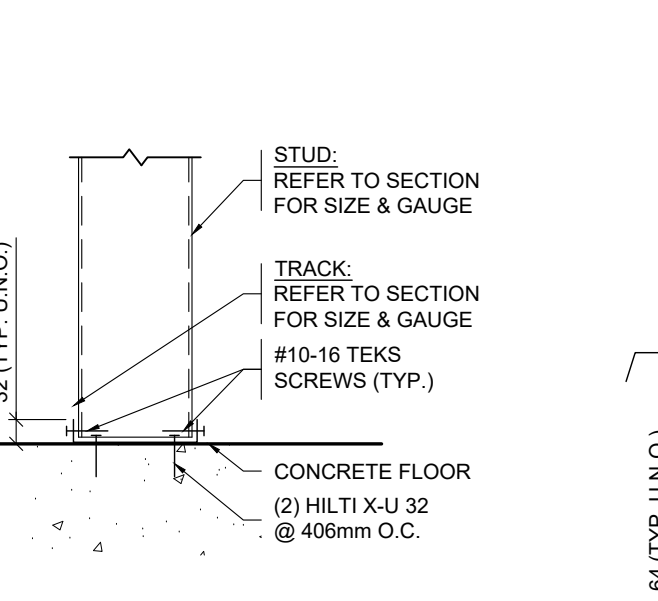
NOTES:
 1. REFER TO ARCH. DWGS. TO CONFIRM HEIGHTS AND LENGTHS.
 2. USE #10-16 TEK SCREWS @ 12" O.C. AS SHOWN FOR STUD TO TRACK FASTENING.
 3. SEE DETAILS FOR SILL/HEADER CONNECTION TO JAMBS.



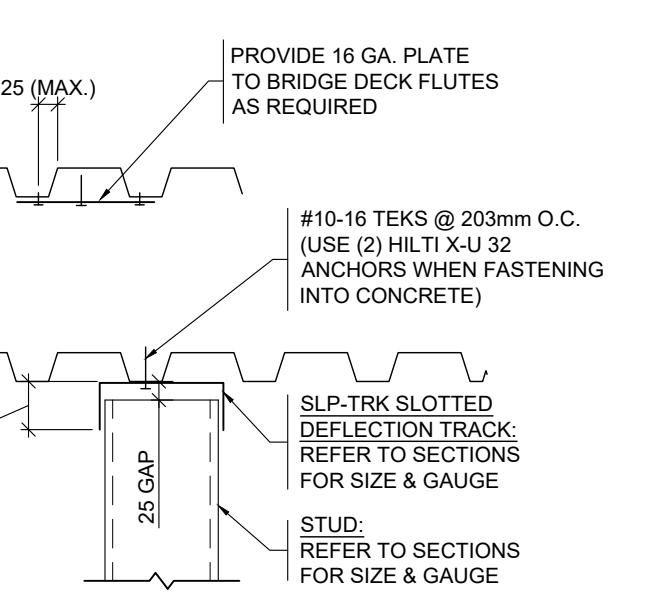
5 DETAIL N.T.S. TYP. KNOCKOUT BRIDGING STUDS SHEATHED BOTH SIDES



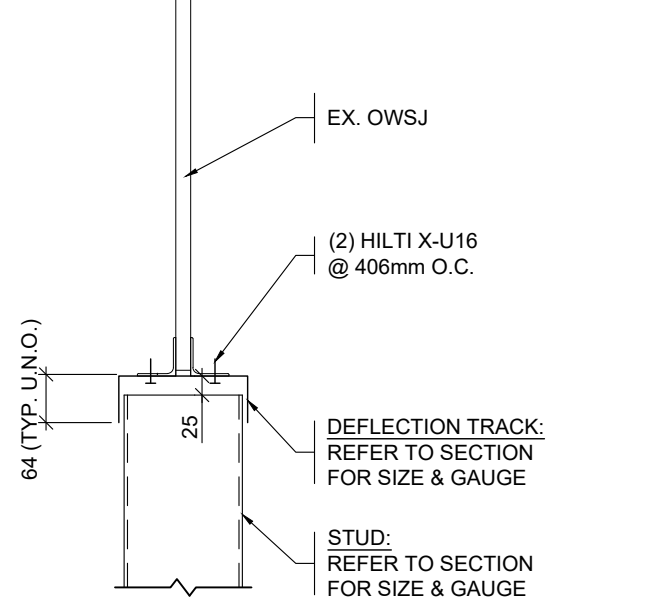
6 DETAIL N.T.S. TYP. HEADER/SILL TO JAMB STUD CONNECTION



7 DETAIL N.T.S. TYP. TRACK AT CONC. FLR.



8 DETAIL N.T.S. TYP. DEFLECTION TRACK TO US OF STEEL DECK

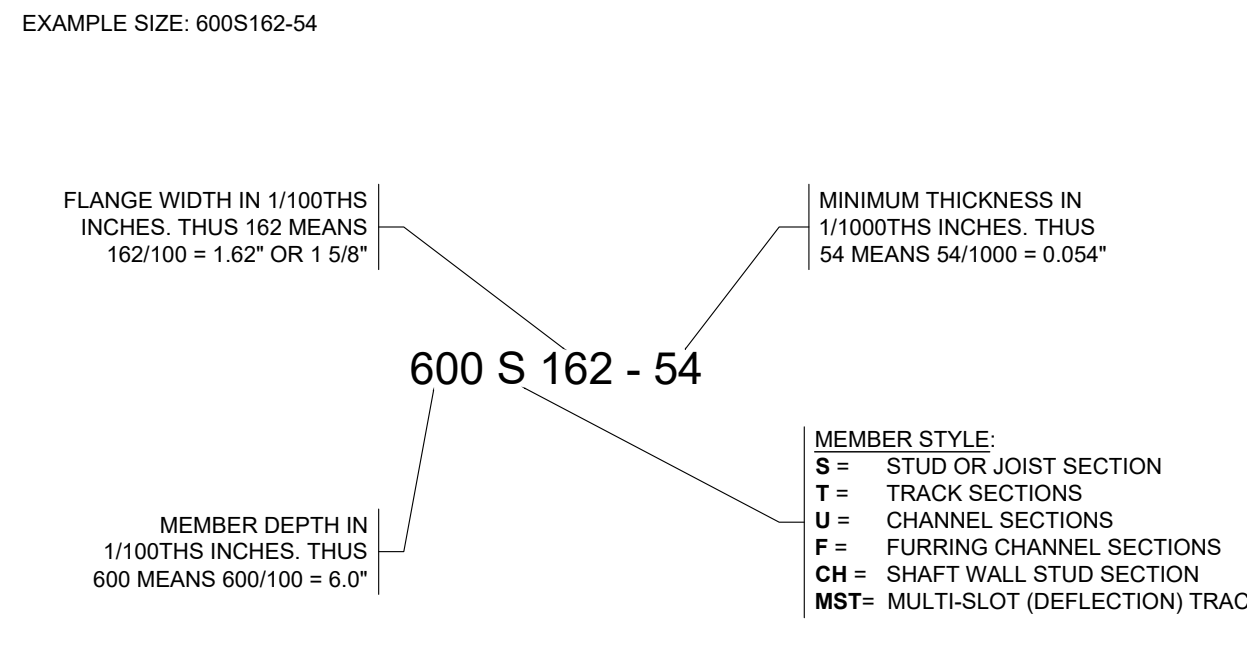


9 DETAIL 1:10 TYP. DEFLECTION TRACK TO US OF OWSJ

STEEL STUD GENERAL NOTES

- ALL METAL STUD WORK SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT "LIGHTWEIGHT STEEL FRAMING DESIGN MANUAL" BY CSSBI 58-2018 AND CSA-S136.
- THESE DRAWINGS ARE FOR DESIGN AND INSTALLATION OF THE LIGHTWEIGHT STEEL FRAMING ONLY. DESIGN AND CONSTRUCTION OF SUPPORTING STRUCTURAL ELEMENTS AND CLADDING ARE THE RESPONSIBILITY OF OTHERS.
- THE CONTRACTOR IS TO NOTIFY THE ENGINEER IN WRITING OF ANY CHANGES OF ASTM ASSURANCES, STANDARD SPECIFICATION FOR SHEET STEEL, ZINC COATED (GALVANIZED) BY THE HOT-DIP PROCESS" AND ASTM A792/A792M, "SPECIFICATION FOR SHEET STEEL, ALUMINUM-ZINC ALLOY-COATED BY HOT-DIP PROCESS". MINIMUM GRADES ARE:
 4.1. GRADE 230, (33ksi) FOR 1.28mm (0.048", 18ga.) MATERIAL AND THINNER, AND
 4.2. GRADE 340, (50ksi) FOR 1.53mm (0.060", 16ga.) MATERIAL AND THICKER.
- STEEL FOR STEEL STUDS AND TRACK SHALL MEET THE REQUIREMENTS OF ASTM A583/A583M, "STANDARD SPECIFICATION FOR SHEET STEEL, ZINC COATED (GALVANIZED) BY THE HOT-DIP PROCESS" AND ASTM A792/A792M, "SPECIFICATION FOR SHEET STEEL, ALUMINUM-ZINC ALLOY-COATED BY HOT-DIP PROCESS". MINIMUM GRADES ARE:
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 4.2. GRADE 340, (50ksi) FOR 1.53mm (0.060", 16ga.) MATERIAL AND THICKER.
- STEEL STUD FLANGES TO BE AS NOTED.
- COMPOSITE WALLS DESIGNED IN ACCORDANCE WITH CSA S304.1-04.
- SPECIFIED HOURLY WIND PRESSURE:
 INTERIOR STUDS: 5psf
- MAXIMUM DEFLECTIONS UNDER SPECIFIED LIVE LOAD SHALL CONFORM TO THE FOLLOWING:
 INTERIOR STUDS: L/240
- FASTENERS:
 9.1. USE OF POWER ACTUATED FASTENERS IS NOT PERMITTED UNLESS NOTED OTHERWISE.
 9.2. USE ONLY FASTENERS AS SPECIFIED ON THE DRAWINGS.
 9.3. FASTENER SPACING SHALL BE MINIMUM 3x FASTENER DIAMETER AND EDGE DISTANCE SHALL BE MINIMUM 2x FASTENER DIAMETER, UNLESS NOTED OTHERWISE.
 9.4. USE HILTI KWIK-PRO SELF TAPPING, SELF DRILLING SCREWS FOR FASTENING LIGHTWEIGHT STEEL FRAMING MEMBERS TOGETHER (OR EQUIVALENT).
 9.5. SCREW DESIGNATIONS (EQ. NO. 12-14 DENOTE DIAMETER-THREADS/INCH).
- WINDOWS AND DOOR JAMBS UP TO 1270mm WIDE TO BE MINIMUM 2-PLY STUDS SCREWED TOGETHER, UNLESS NOTED OTHERWISE.

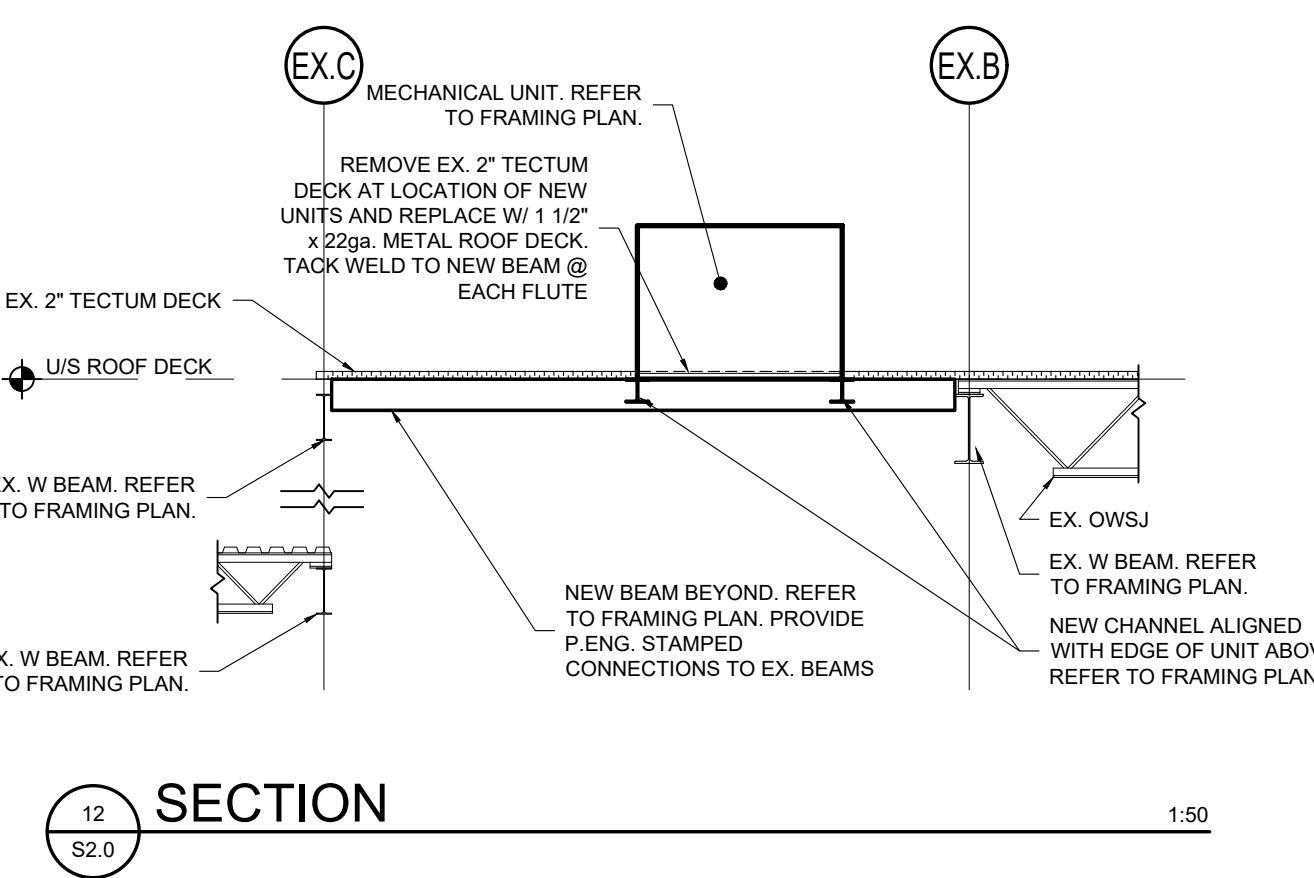
PRODUCT IDENTIFICATION DESIGNATOR



MILS	COLOUR	DESIGN THICKNESS (IMPERIAL)	GAUGE NUMBER (REFERENCE ONLY)
18	N/A	0.0179"	25 GA.
33	WHITE	0.0346"	20 GA.
43	YELLOW	0.0451"	18 GA.
54	GREEN	0.0566"	16 GA.
68	ORANGE	0.0713"	14 GA.
97	RED	0.1017"	12 GA.

10 DETAIL N.T.S. TRACK DETAIL AT BOTTOM OF JAMBS

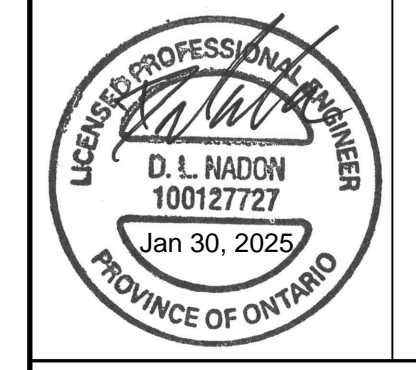
11 DETAIL N.T.S. TRACK DETAIL AT TOP OF JAMBS



12 SECTION 1:50

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WitzelDyce ENGINEERING INC.
 826 King Street North, Unit 20
 Waterloo, Ontario, N2J 4G8
 www.witzeldyce.com



PROJECT
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION AND WINDOW REPLACEMENT
 225 FISCHER-HALLMAN RD. KITCHENER, ON.

STEEL STUD DETAILS

DESIGNER	DLN	PROJECT NO.	10747-201
DRAWN	RGW	DRAWING NO.	S2.0
DATE	MARCH 2023		
SCALE	AS NOTED		

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
M201	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
M402	SECTIONS AND DETAILS - NEW HVAC
M500	MECHANICAL SCHEDULES & DETAILS

MECHANICAL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
PIPING		VALVES	
EX.S	EXISTING SANITARY PIPING	CV	CHECK VALVE
S	SANITARY PIPING	CB	CHECK VALVE & BALL DRIP
EX.ST	EXISTING STORM PIPING	DCVA	DOUBLE CHECK VALVE ASSEMBLY BACKFLOW PREVENTER
ST	STORM PIPING	RPPV	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER
EX.CWP	EXISTING COLD WATER PIPING	BV	BALL VALVE
CWP	COLD WATER PIPING	GV	GATE VALVE
EX.DHWP	EXISTING DOMESTIC HOT WATER PIPING	TMV	THERMOSTATIC MIXING VALVE
DHWP	DOMESTIC HOT WATER PIPING	GLV	GLOBE VALVE
EX.DHWR	EXISTING DOMESTIC HOT WATER RECIRCULATING PIPING	ESV	ELECTRICALLY SUPERVISED O.S & Y VALVE
DHWR	DOMESTIC HOT WATER RECIRCULATING PIPING	TWC	TWO-WAY CONTROL VALVE
EX.TWP	EXISTING TEMPERED WATER PIPING	RCV	RADIATION CONTROL VALVE
TWP	TEMPERED WATER PIPING	MV	MIXING VALVE
EX.V	EXISTING VENT PIPING	BV	BACKFLOW VALVE
V	VENT PIPING	PRV	PRESSURE REDUCING VALVE
EX.SP	EXISTING SPRINKLER PIPING	CBV	CIRCUIT BALANCE VALVE
SP	SPRINKLER PIPING	TCV	THREE-WAY CONTROL VALVE
EX.F	EXISTING FIRE PROTECTION PIPING	TRV	TEMPERATURE & PRESSURE RELIEF VALVE
F	FIRE PROTECTION PIPING	AAV	AUTOMATIC AIR VENT
EX.G	EXISTING GAS PIPING	GC	GAS COOK (SHUT OFF VALVE)
G	GAS PIPING	GM	GAS METER
EX.STM	EXISTING STEAM PIPING	FS	FLOW SWITCH
STM	STEAM PIPING	DWM	DOMESTIC WATER METER
EX.C	EXISTING CONDENSATE PIPING	ILP	IN-LINE PUMP
C	CONDENSATE PIPING	STR	STRAINER
EX.D	EXISTING DRAIN PIPING	U	UNION
D	DRAIN PIPING	TM	THERMOMETER
EX.HS	EXISTING HEATING SUPPLY PIPING	PG	PRESSURE GAUGE
HS	HEATING SUPPLY PIPING	P&T	PRESSURE AND TEMPERATURE GAUGE
EX.HR	EXISTING HEATING RETURN PIPING	FPWH	FROST PROOF WALL HYDRANT
HR	HEATING RETURN PIPING	HB	HOSE BIBB
EX.HPS	EXISTING HEAT PUMP SUPPLY PIPING	CLEAN OUTS AND DRAINS	
HPS	HEAT PUMP SUPPLY PIPING	FC	FLEXIBLE CONNECTION
EX.HPR	EXISTING HEAT PUMP RETURN PIPING	CO	CLEAN OUT (FLOOR MOUNTED)
HPR	HEAT PUMP RETURN PIPING	CO	CLEAN OUT (CEILING MOUNTED)
EX.GLY.HS	EXISTING GLYCOL HEATING SUPPLY PIPING	FD	FLOOR DRAIN
GLY.HS	GLYCOL HEATING SUPPLY PIPING	HD	HUB DRAIN
EX.GLY.HR	EXISTING GLYCOL HEATING RETURN PIPING	FFD	FUNNEL FLOOR DRAIN
GLY.HR	GLYCOL HEATING RETURN PIPING	FD	FLOOR DRAIN
EX.LIQ	EXISTING LIQUID REFRIGERATION LINE	HD	HUB DRAIN
LIQ	LIQUID REFRIGERATION LINE	FFD	FUNNEL FLOOR DRAIN
EX.SUC	EXISTING SUCTION REFRIGERATION LINE	RD	ROOF DRAIN
SUC	SUCTION REFRIGERATION LINE	SPRINKLER	
EX.CHWS	EXISTING CHILLED WATER SUPPLY	US	UPRIGHT SPRINKLER
CHWS	CHILLED WATER SUPPLY	PS	PENDENT SPRINKLER
EX.CHWR	EXISTING CHILLED WATER RETURN	RS	SEMI RECESSED SPRINKLER
CHWR	CHILLED WATER RETURN	SS	SIDEWALL SPRINKLER
/ /	INDICATES PIPING BELOW FLOOR	ES	EXTENDED COVERAGE SIDEWALL SPRINKLER
OXY	OXYGEN PIPING	CS	CONCEALED SPRINKLER
ACET	ACETYLENE PIPING	HVAC	
LEGEND NOTES:		FD	FIRE DAMPER
1. THIS IS A STANDARD LEGEND. ALL SYMBOLS MAY NOT NECESSARILY BE USED ON DRAWINGS.		CSFD	COMBINATION SMOKE / FIRE DAMPER
2. STANDARD MOUNTING HEIGHTS SHOWN ON LEGEND SHALL BE USED, UNLESS NOTED OTHERWISE. ALL TRADES TO COORDINATE THESE HEIGHTS PRIOR TO INSTALLATION.		MD	MOTORIZED DAMPER
		BD	BALANCING DAMPER
		BDD	BACK DRAFT DAMPER
		SPD	SPLITTER DAMPER
		T	THERMOSTAT
		H	HUMIDISTAT
		S	SENSOR
		S	SENSOR
		F	FAN SPEED CONTROLLER
		+	NEW CONNECTION TO EXIST. PIPES/HVAC
FIRE PROTECTION			
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 THAN 44" (1100mm) AFF AS PER 6.2.4, O.F.C.	
	FIRE DEPARTMENT PUMPER CONNECTION	NOT LESS THAN 12" (300mm) AND NOT MORE THAN 36" (900mm) ABOVE GROUND LEVEL PER 3.2.5.16, O.B.C.	

NO.	DATE	REVISION
2	25.01.30	ISSUED FOR TENDER
1	25.01.07	ISSUED FOR OWNERS REVIEW

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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 - ALL DIMENSIONS GIVEN ARE IN METRIC.

EXP Services Inc.
 1310 SHEPPARD AVENUE EAST, SUITE 1100
 SCARBOROUGH, ONTARIO M1B 4Y2
 Canada (905) 476-0800
 www.exp.com

Exp Project # LON-23003-1-03-A0
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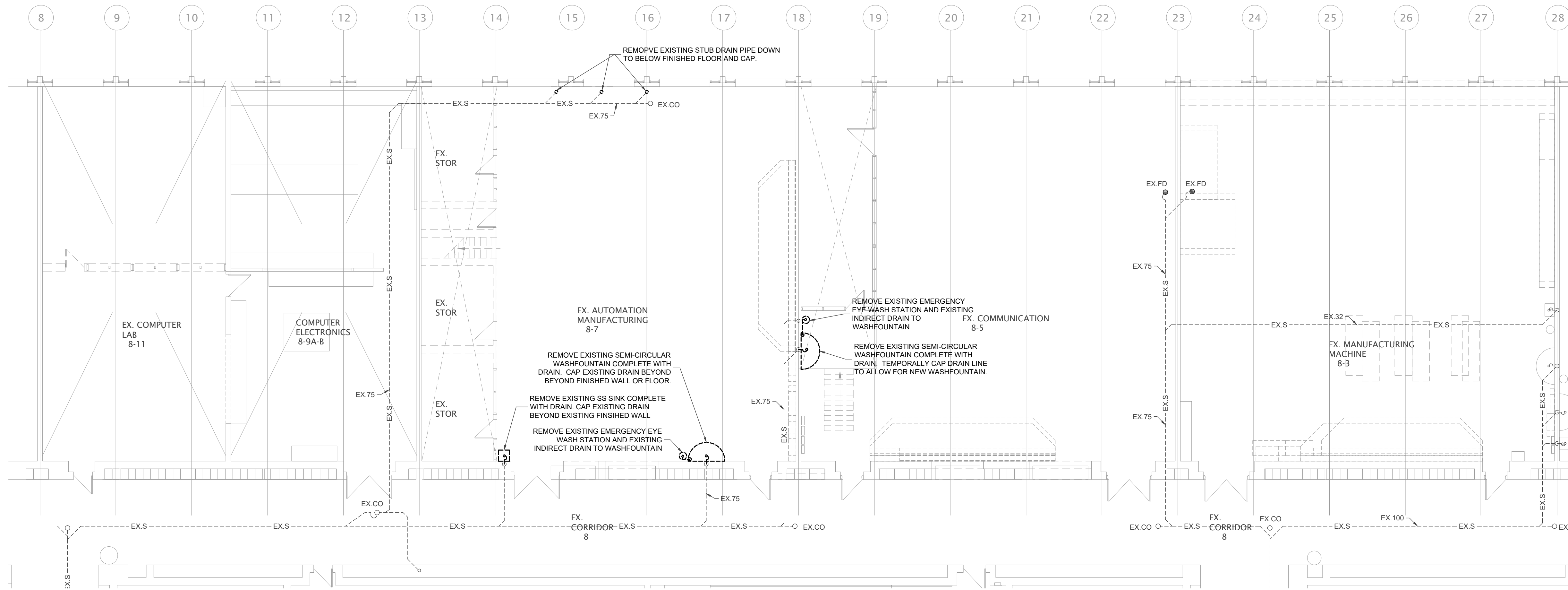
WATERLOO REGION DISTRICT SCHOOL BOARD

FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION

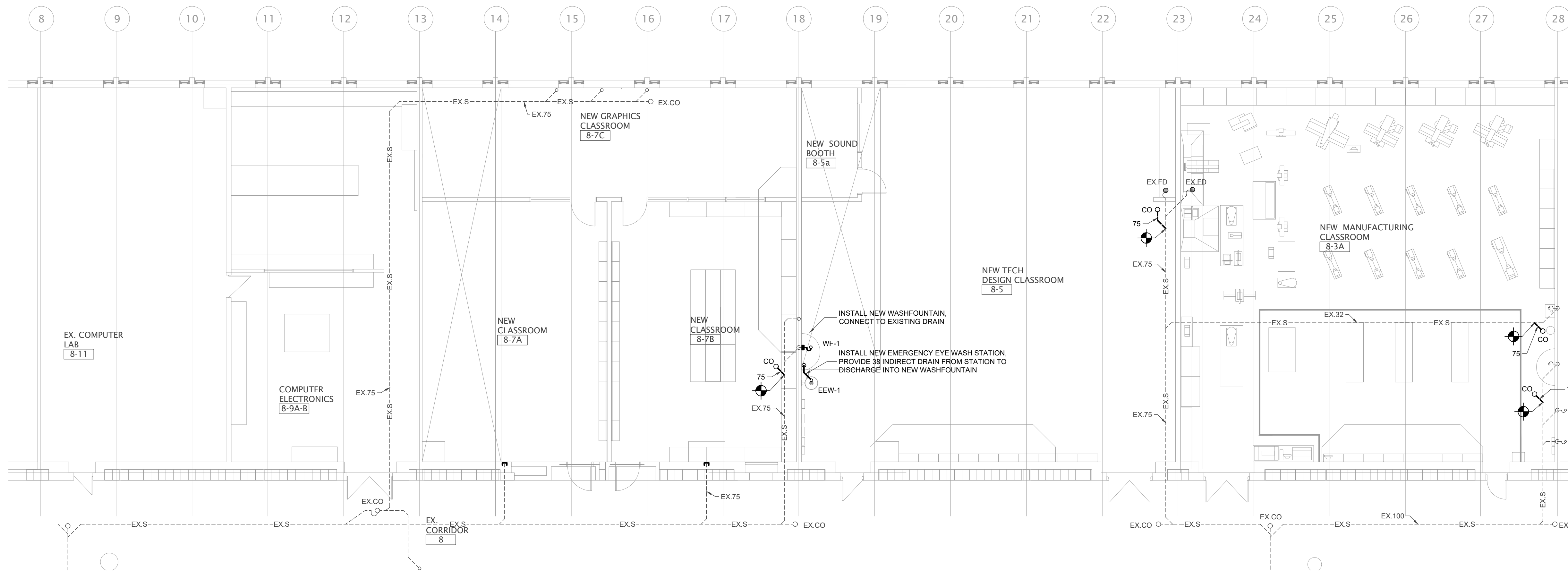
255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

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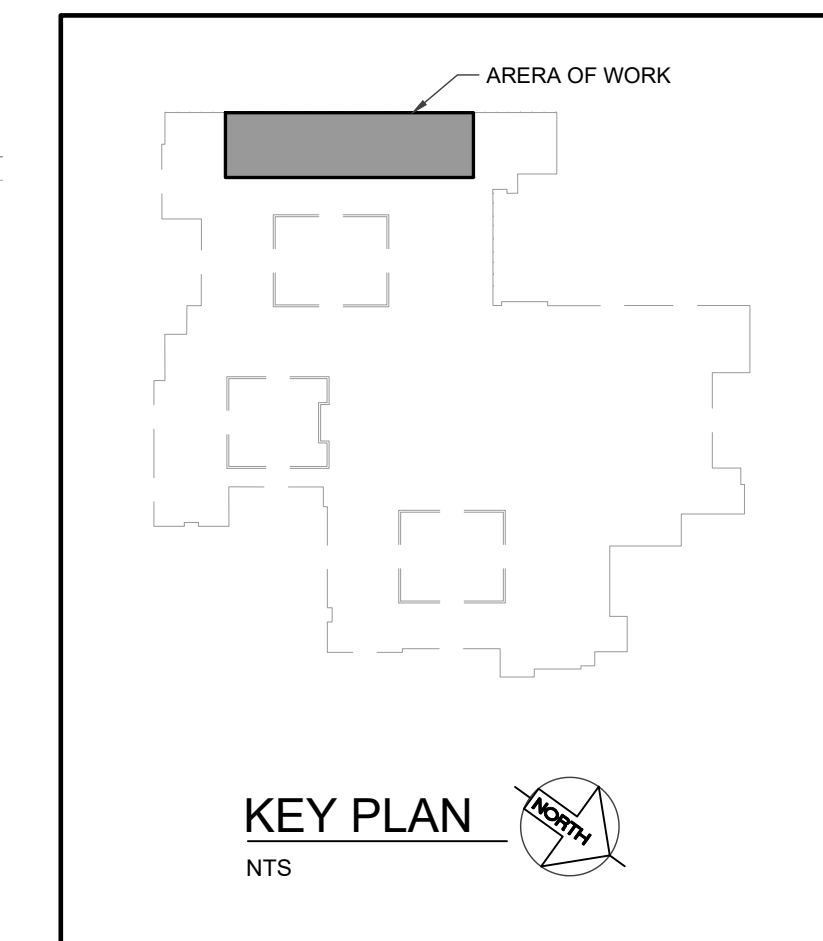
PROJECT NO: A23018	SCALE:
DRAWN: JT/RV	DRAWING NO:
CHECKED: SS	M000
DATE: JAN. 30, 2025	



PARTIAL FLOOR PLAN - SANITARY DEMOLITION
SCALE - 1:100



PARTIAL FLOOR PLAN - NEW SANITARY
SCALE - 1:100



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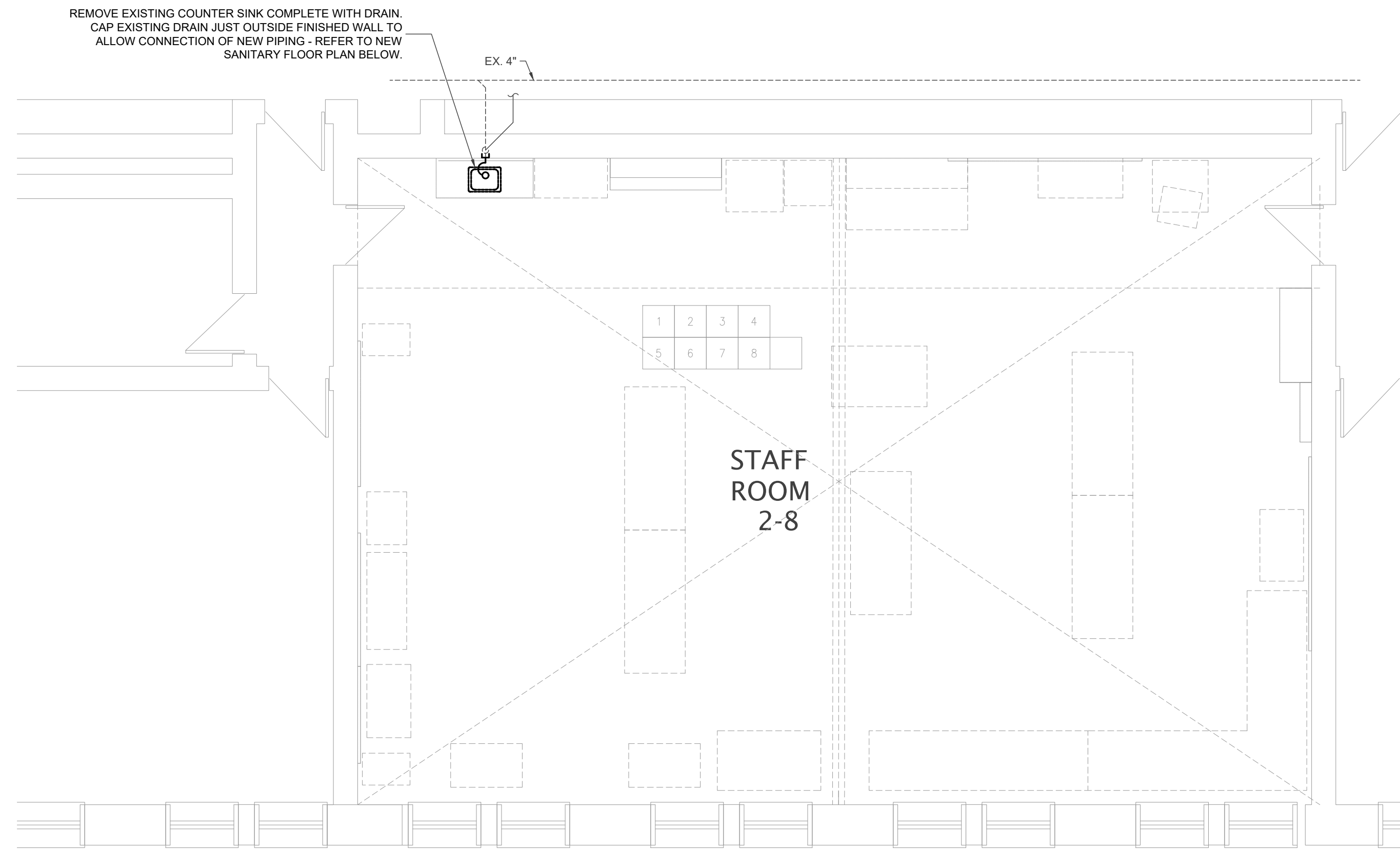
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EXP Services Inc.
1570 Beaver Hall Blvd, Unit #2
London, ON N6H 6K6
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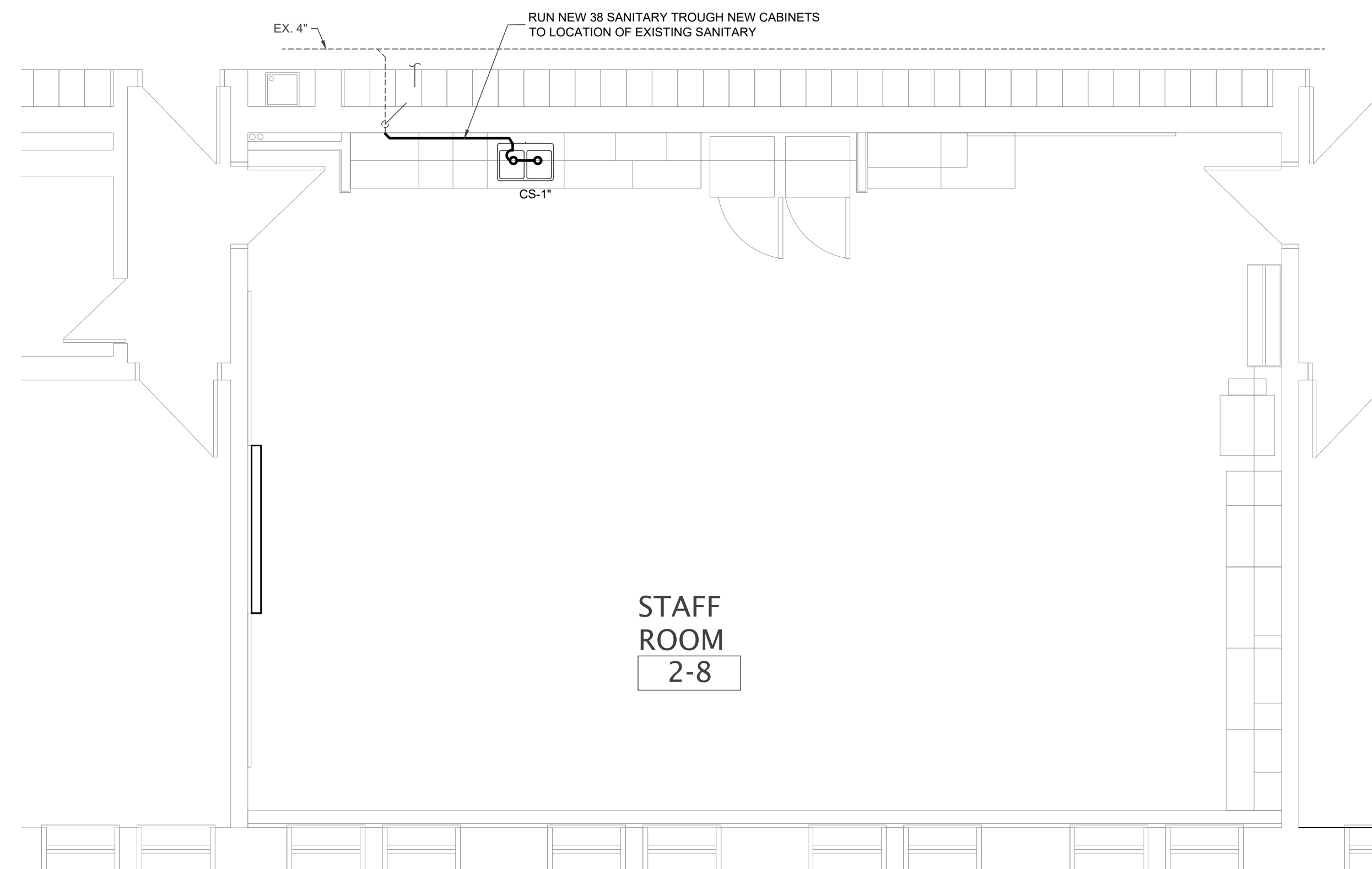
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION
255 Fisher-Hallman Rd,
Kitchener, Ontario
N2M 4X8

DRAWING TITLE: PARTIAL FLOOR PLAN - DEMOLITION & NEW SANITARY	
PROJECT NO: A23018	SCALE: NTS
DRAWN: JT/RV	DRAWING NO: M100
CHECKED: SS	DATE: JAN. 30, 2025



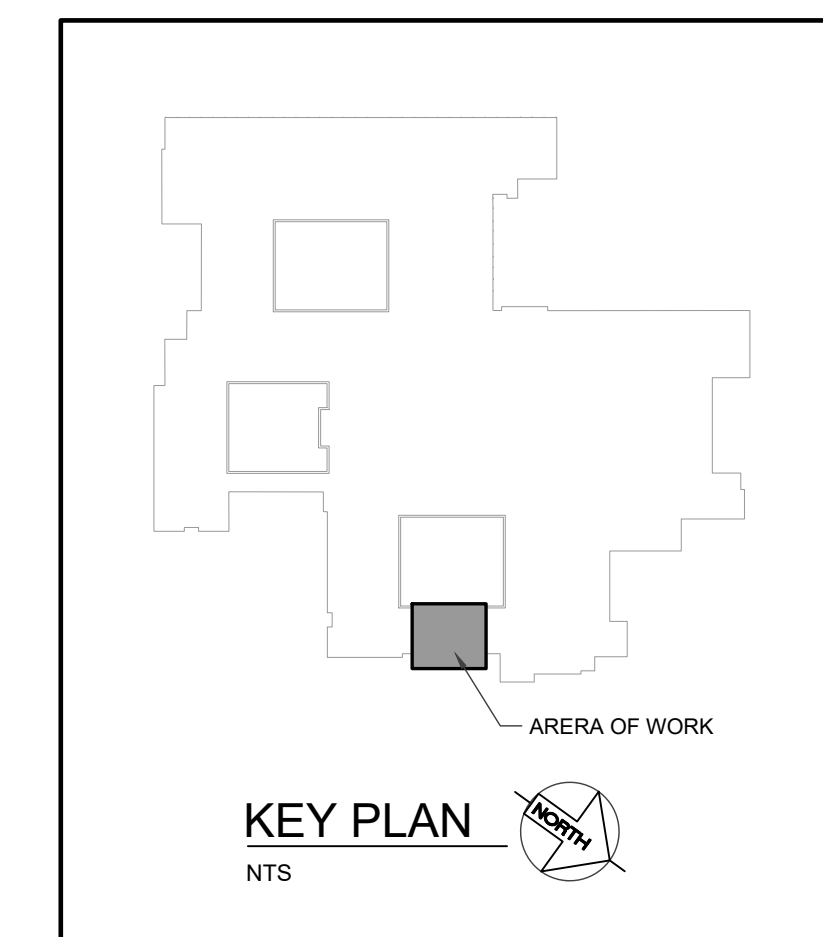
PARTIAL FLOOR PLAN - SANITARY DEMOLITION

SCALE - 1:50



PARTIAL FLOOR PLAN - NEW SANITARY

SCALE - 1:50



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 6. ALL DIMENSIONS GIVEN ARE IN METRIC.

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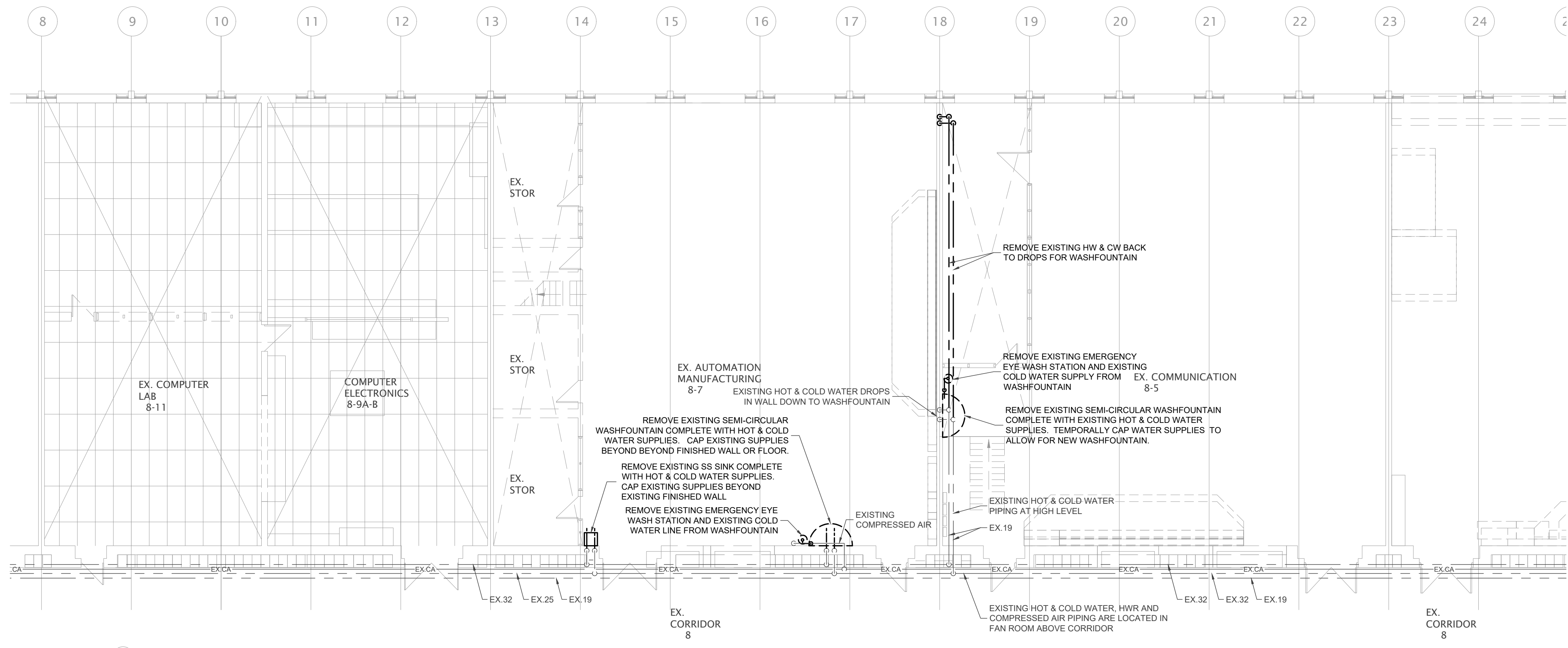
DRAWING TITLE:
PARTIAL FLOOR PLAN - DEMOLITION & NEW SANITARY

PROJECT NO: **A23018** SCALE:

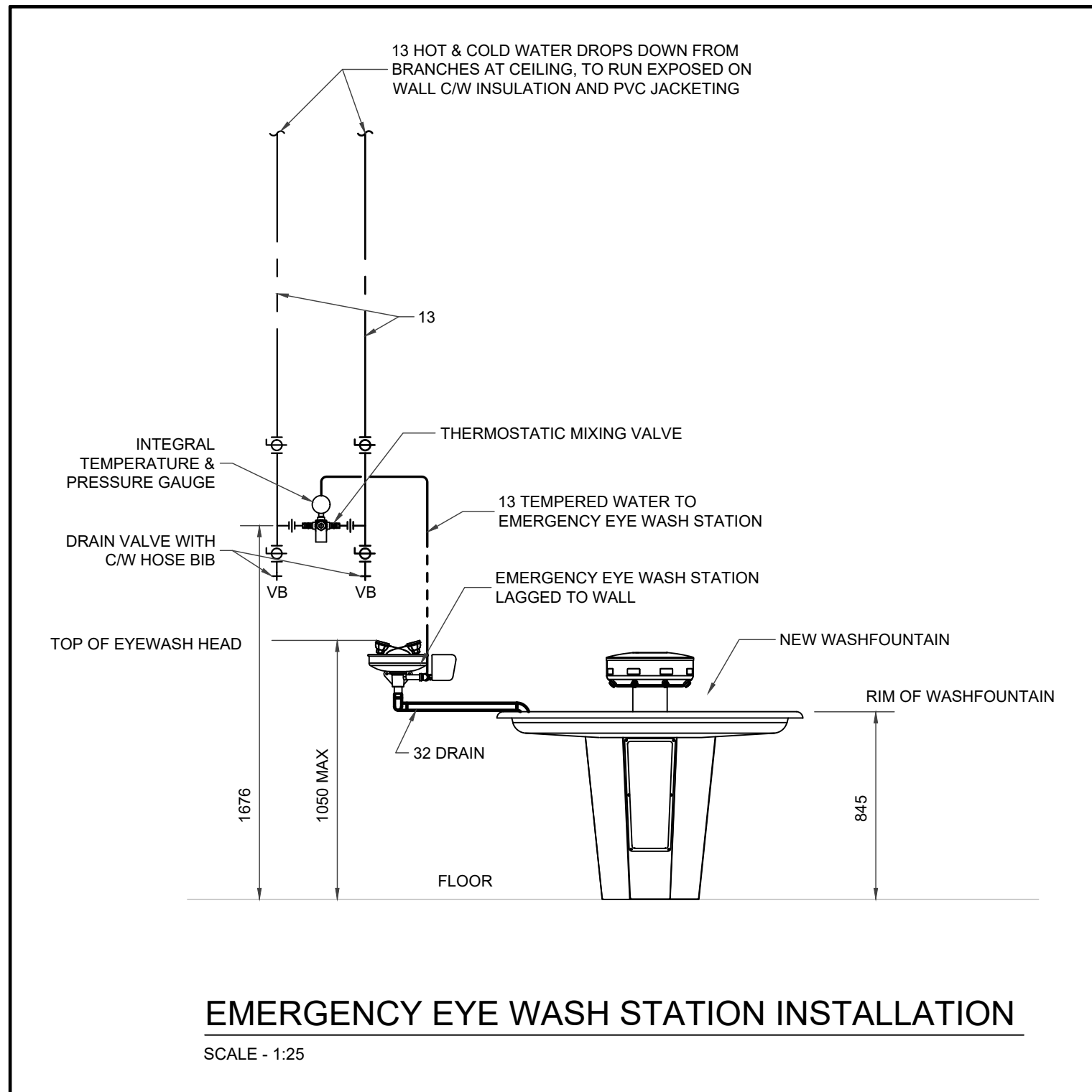
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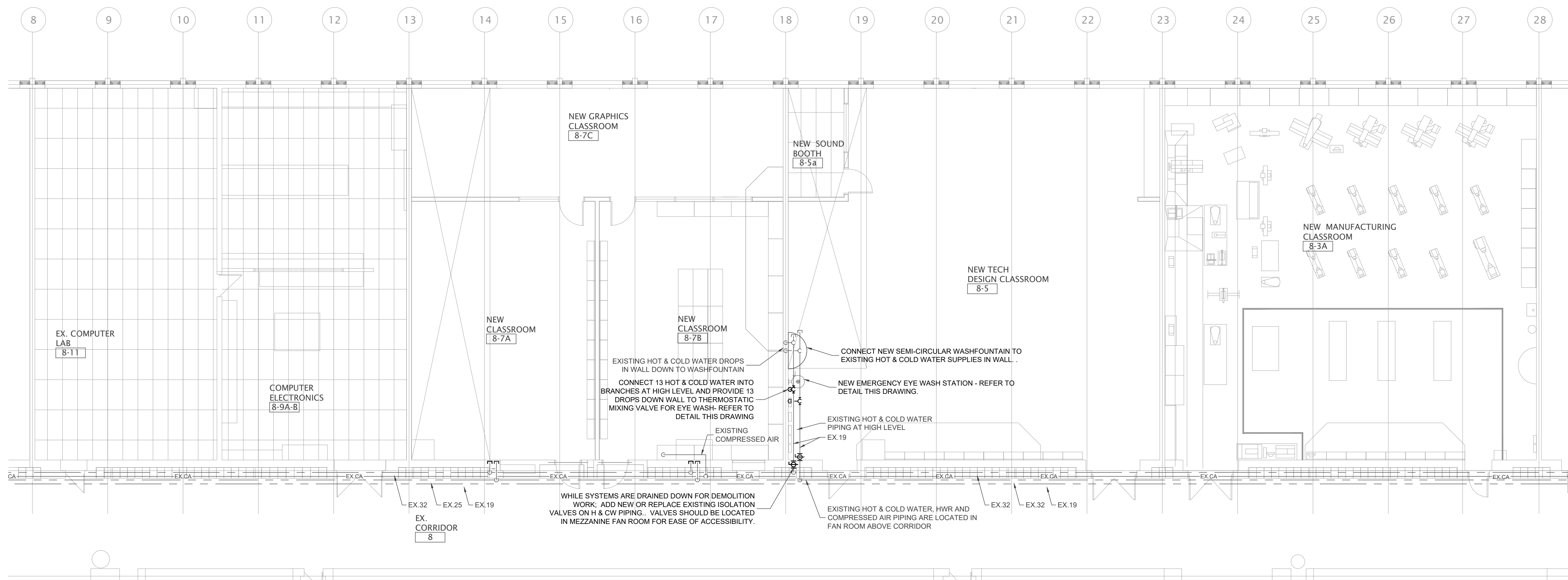
DATE: **JAN. 30, 2025**



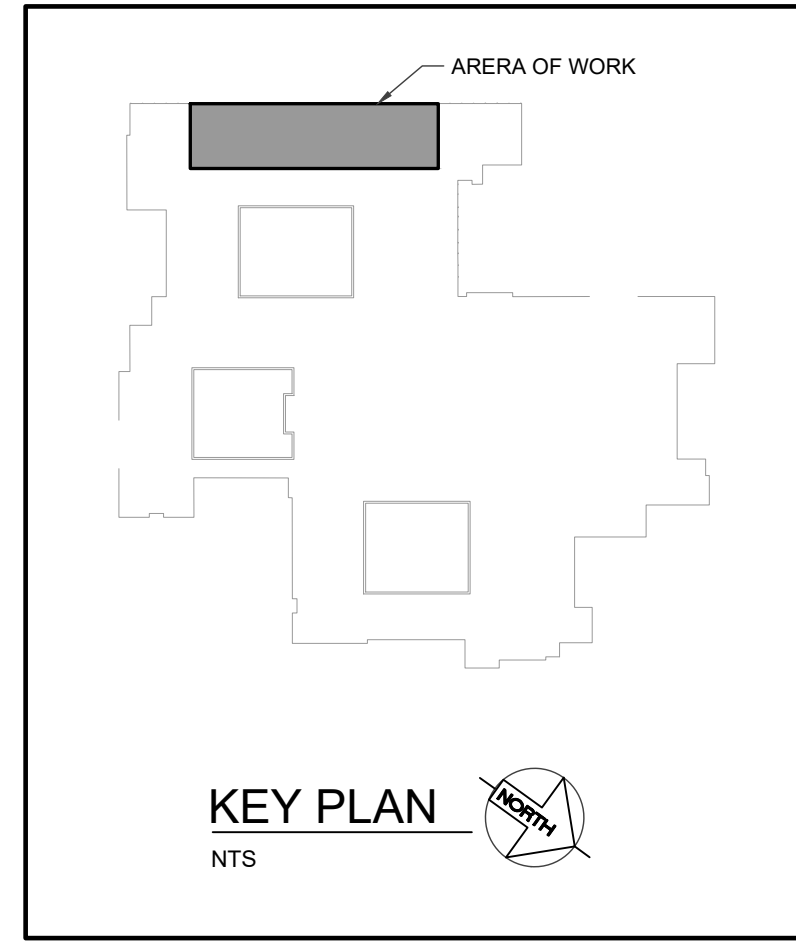
PARTIAL FLOOR PLAN - DOMESTIC DEMOLITION
SCALE - 1:100



EMERGENCY EYE WASH STATION INSTALLATION
SCALE - 1:25



PARTIAL FLOOR PLAN - NEW DOMESTIC
SCALE - 1:100



KEY PLAN
NTS

NO.	DATE	REVISION
2	25.01.30	ISSUED FOR TENDER
1	25.01.07	ISSUED FOR OWNERS REVIEW

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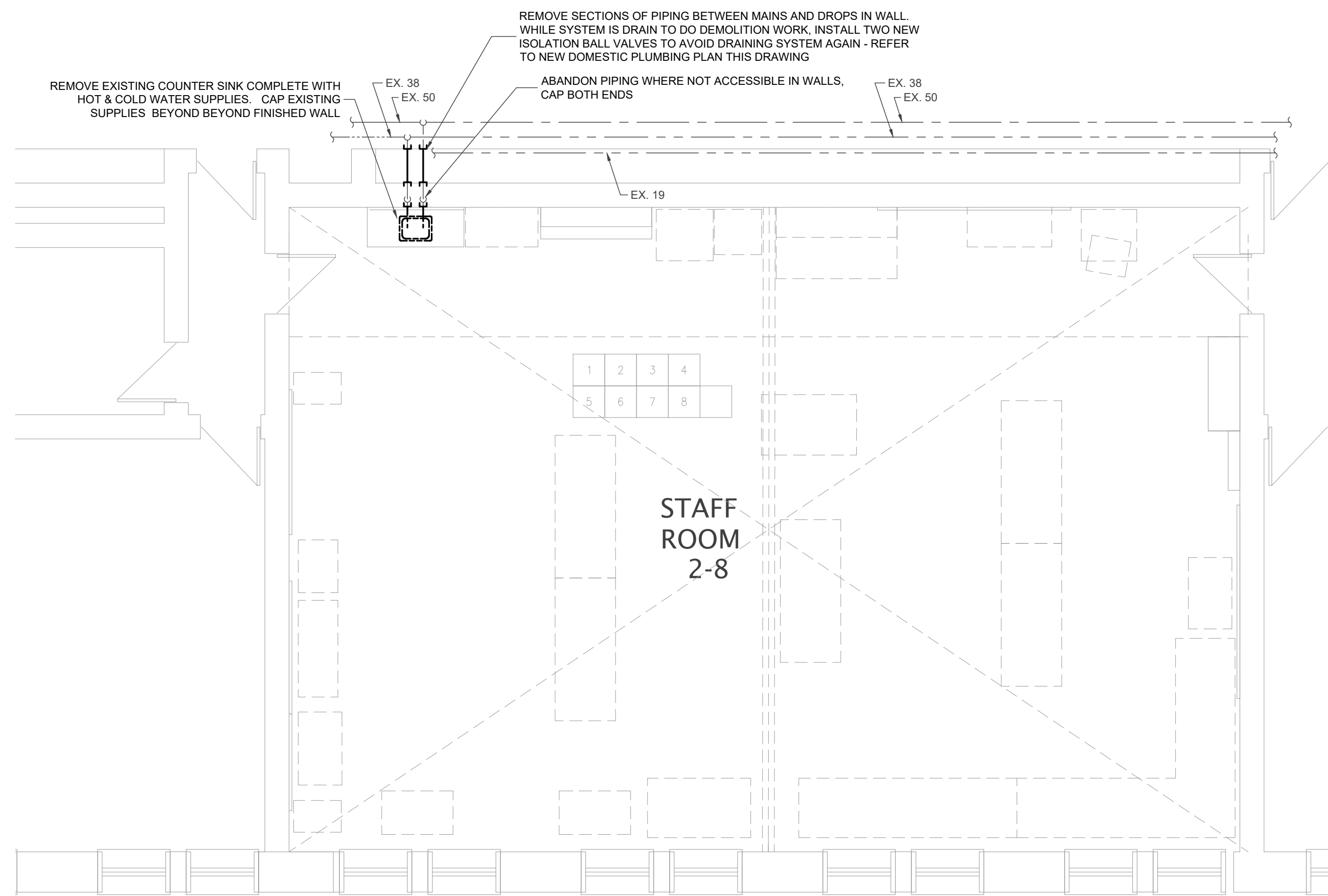
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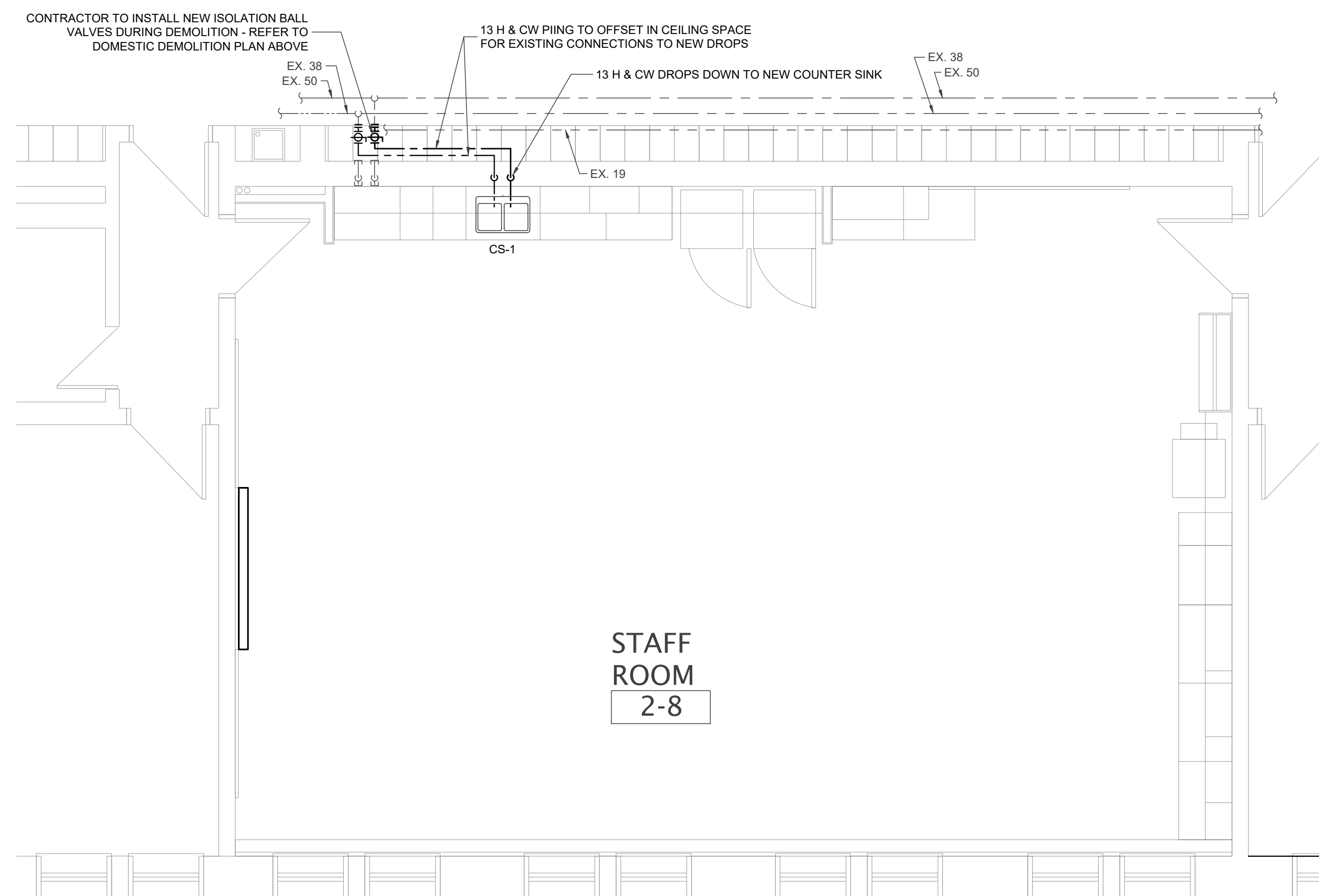
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DRAWING TITLE:
PARTIAL FLOOR PLAN - DEMOLITION & NEW DOMESTIC

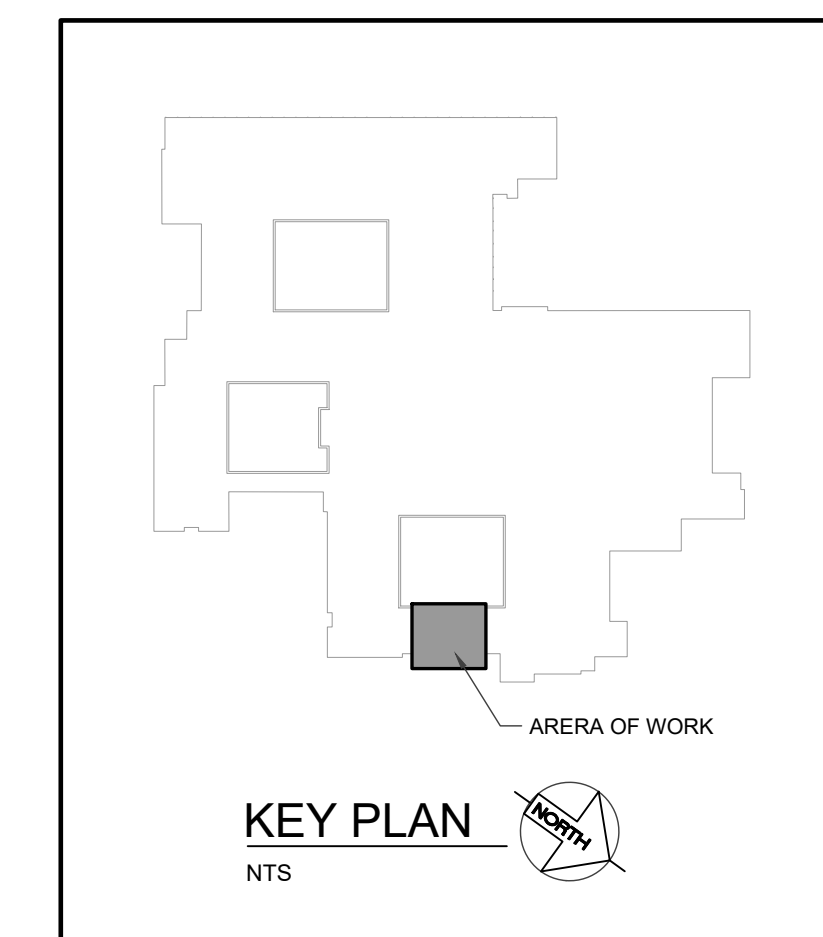
PROJECT NO: A23018	SCALE:
DRAWN: JT/RV	DRAWING NO.:
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DATE: JAN. 30, 2025	



PARTIAL FLOOR PLAN - DOMESTIC DEMOLITION
SCALE - 1:50



PARTIAL FLOOR PLAN - NEW DOMESTIC
SCALE - 1:50



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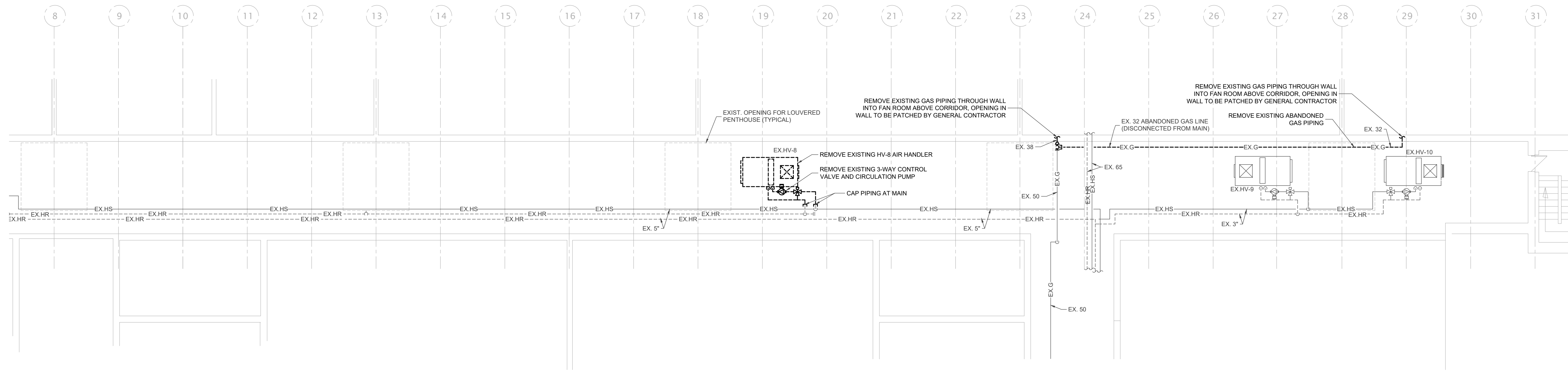


WATERLOO REGION DISTRICT SCHOOL BOARD

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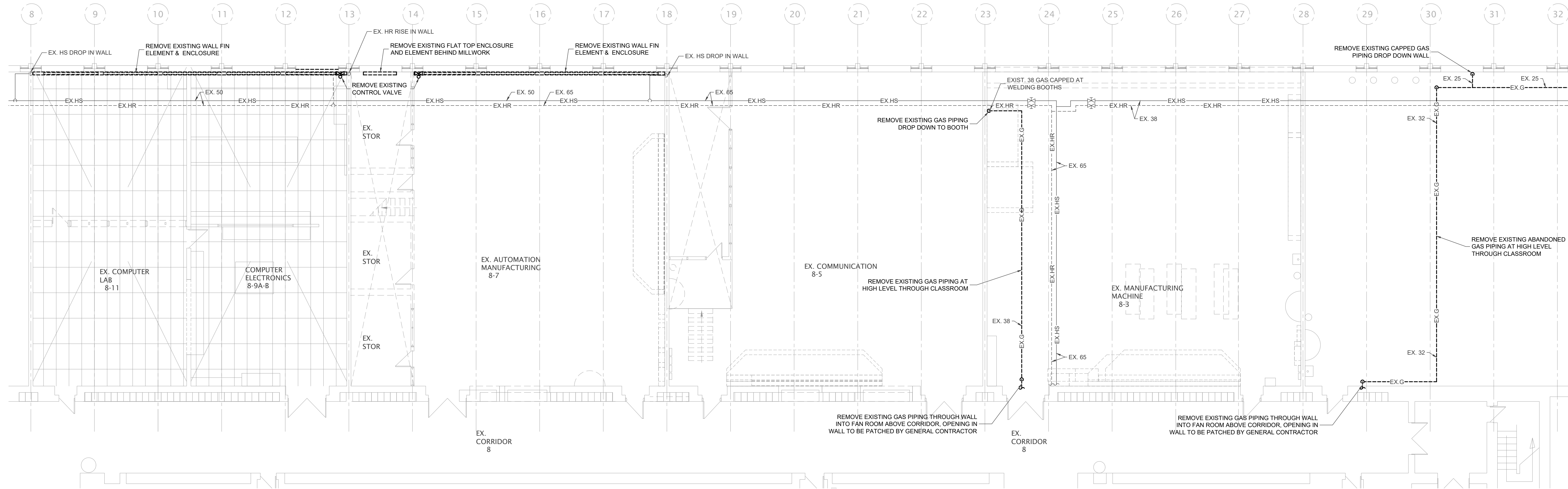
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DRAWING TITLE: PARTIAL FLOOR PLAN - DEMOLITION & NEW DOMESTIC	
PROJECT NO: A23018	SCALE:
DRAWN: JT/RV	DRAWING NO.:
CHECKED: SS	M201
DATE: JAN. 30, 2025	



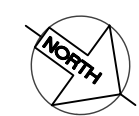
PARTIAL FLOOR PLAN - MEZZANINE MECH. FAN ROOM - HEATING DEMOLITION

SCALE - 1:100

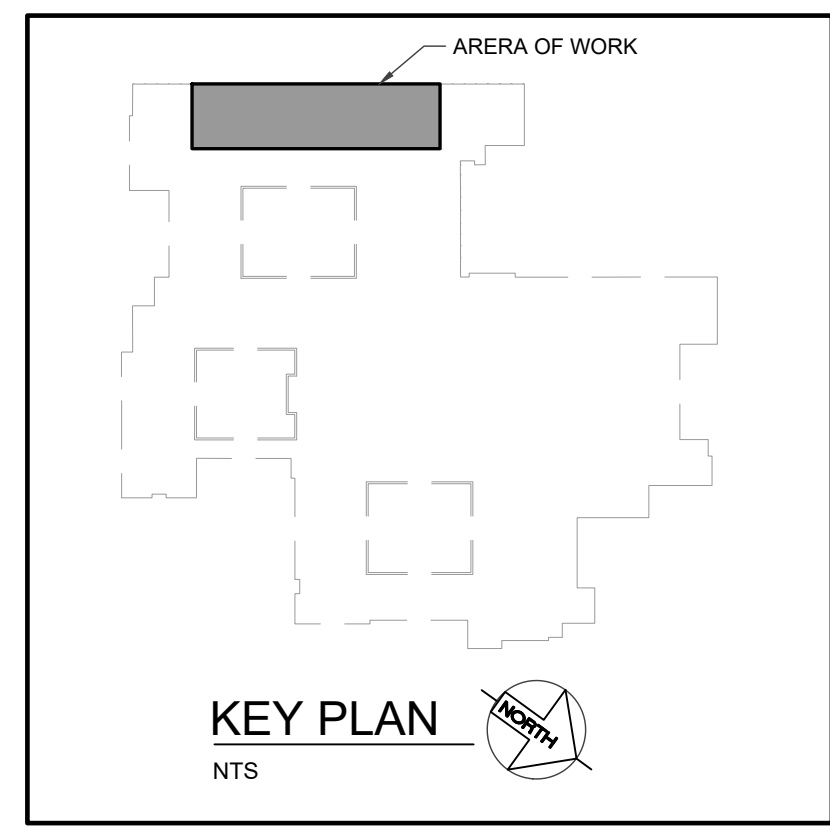


PARTIAL FLOOR PLAN - HEATING DEMOLITION

SCALE - 1:100



NOTES:
 1. EXISTING INFORMATION INDICATED ON THIS DRAWING IS FROM EXISTING DRAWINGS DATED FEBRUARY 1963, AND FROM SITE SURVEYS DURING DESIGN.



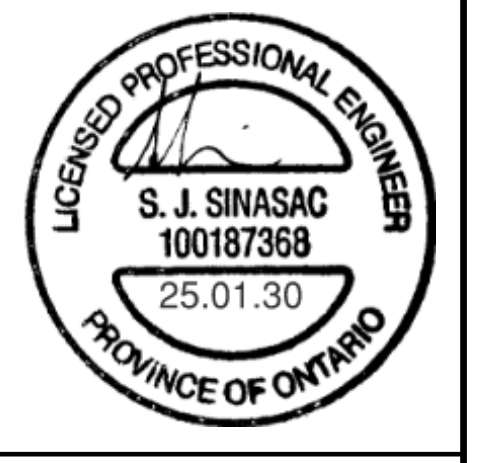
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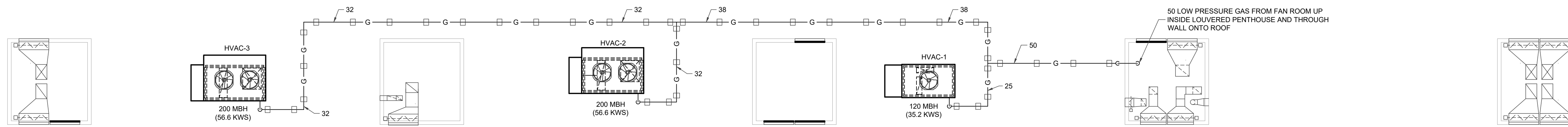
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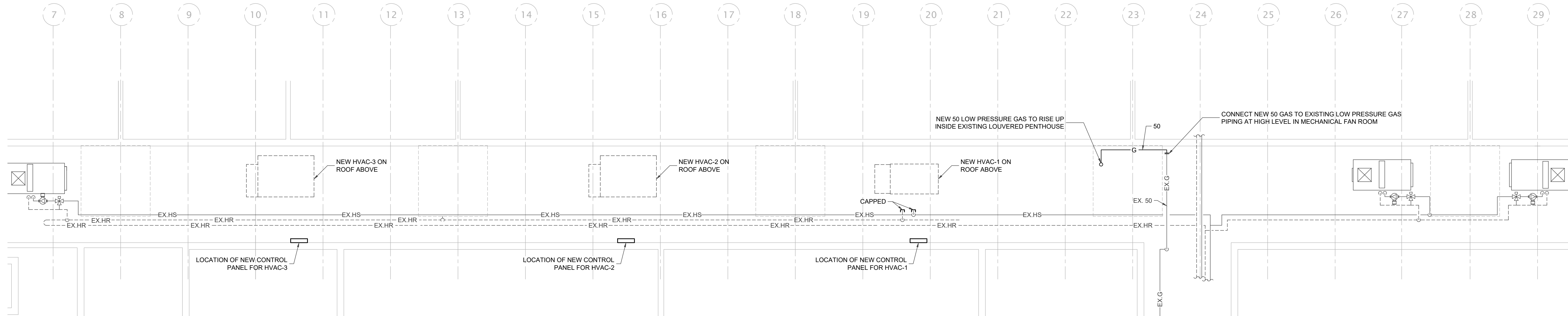
DRAWING TITLE:
PARTIAL FLOOR PLAN - HEATING DEMOLITION

PROJECT NO: A23018	SCALE:
DRAWN: JT/RV	DRAWING NO.:
CHECKED: SS	M300
DATE: JAN. 30, 2025	



PARTIAL ROOF PLAN - ABOVE MEZZANINE MECH. FAN ROOM - NEW HEATING

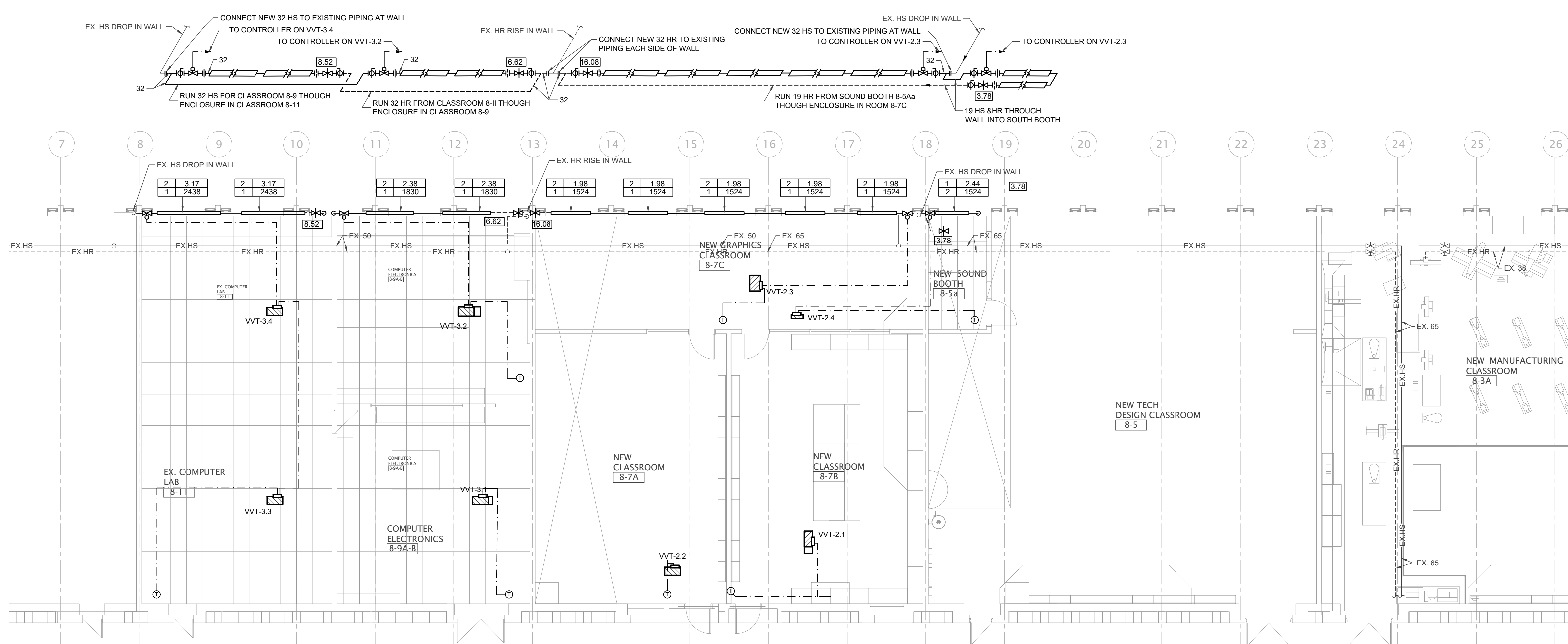
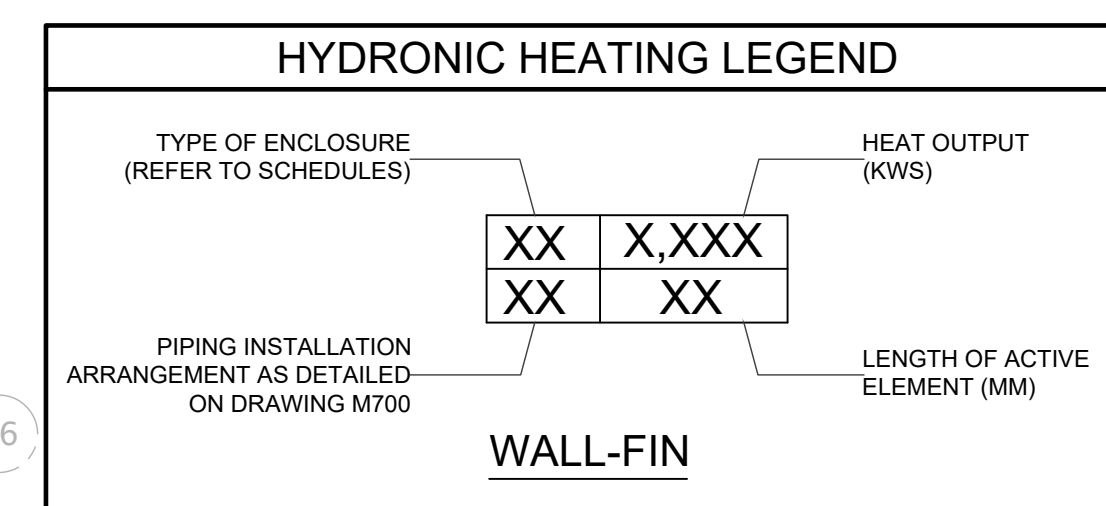
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PARTIAL FLOOR PLAN - MEZZANINE MECH. FAN ROOM - NEW HEATING

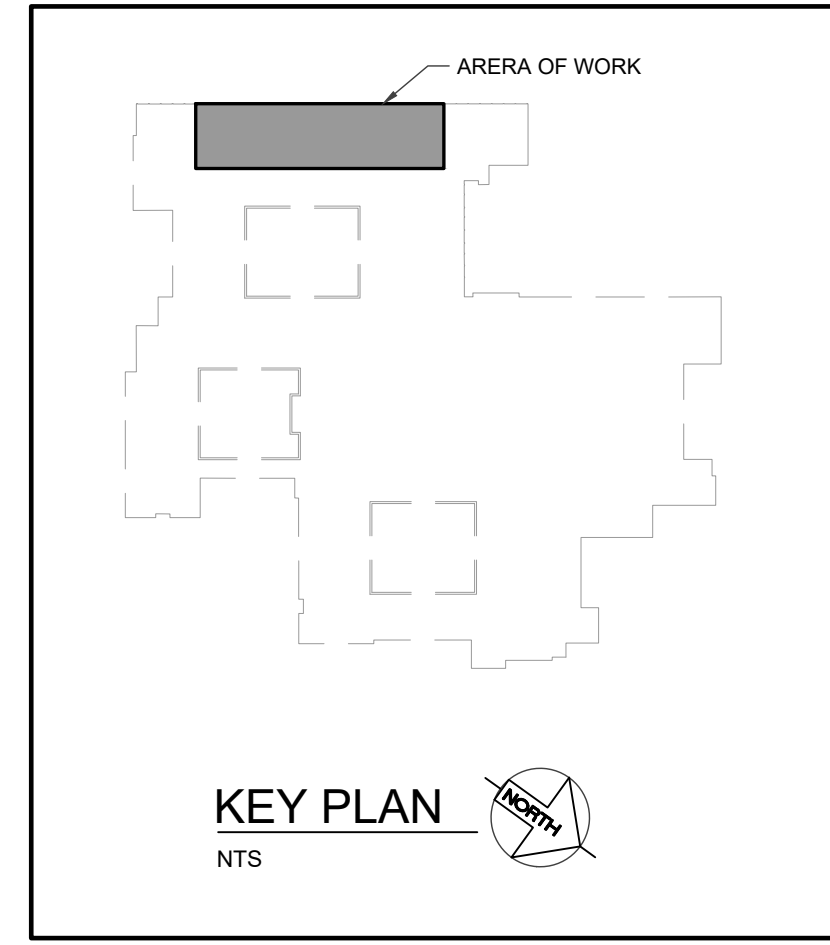
SCALE - 1:100

[0.00] INDICATES VALUE IN LPM FOR BALANCING FLOW ON RADIATION RETURN VALVE.



PARTIAL FLOOR PLAN - NEW HEATING

SCALE - 1:100



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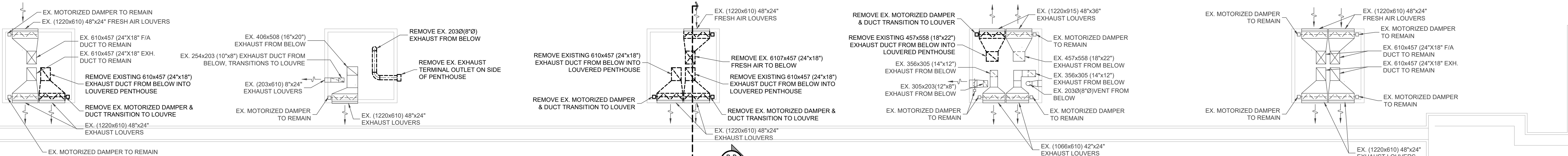
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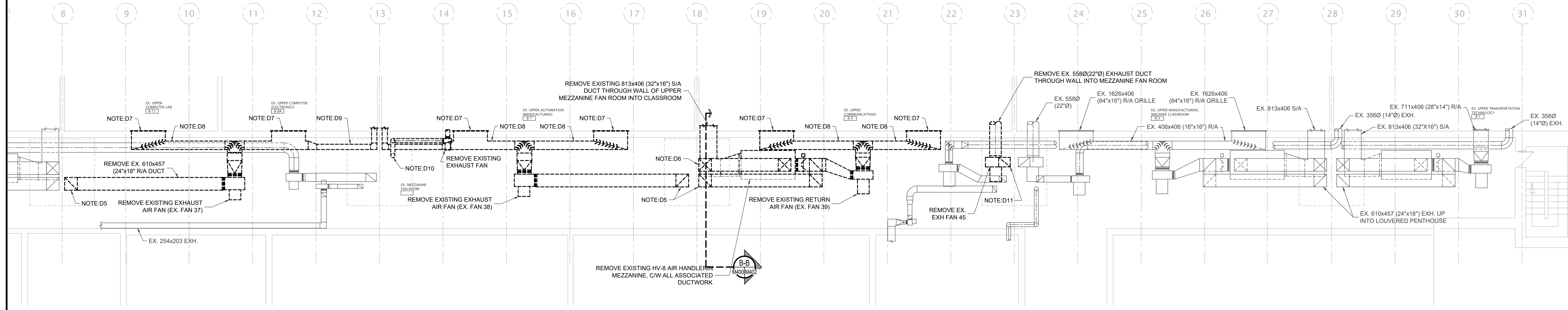
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PARTIAL FLOOR PLAN - NEW HEATING

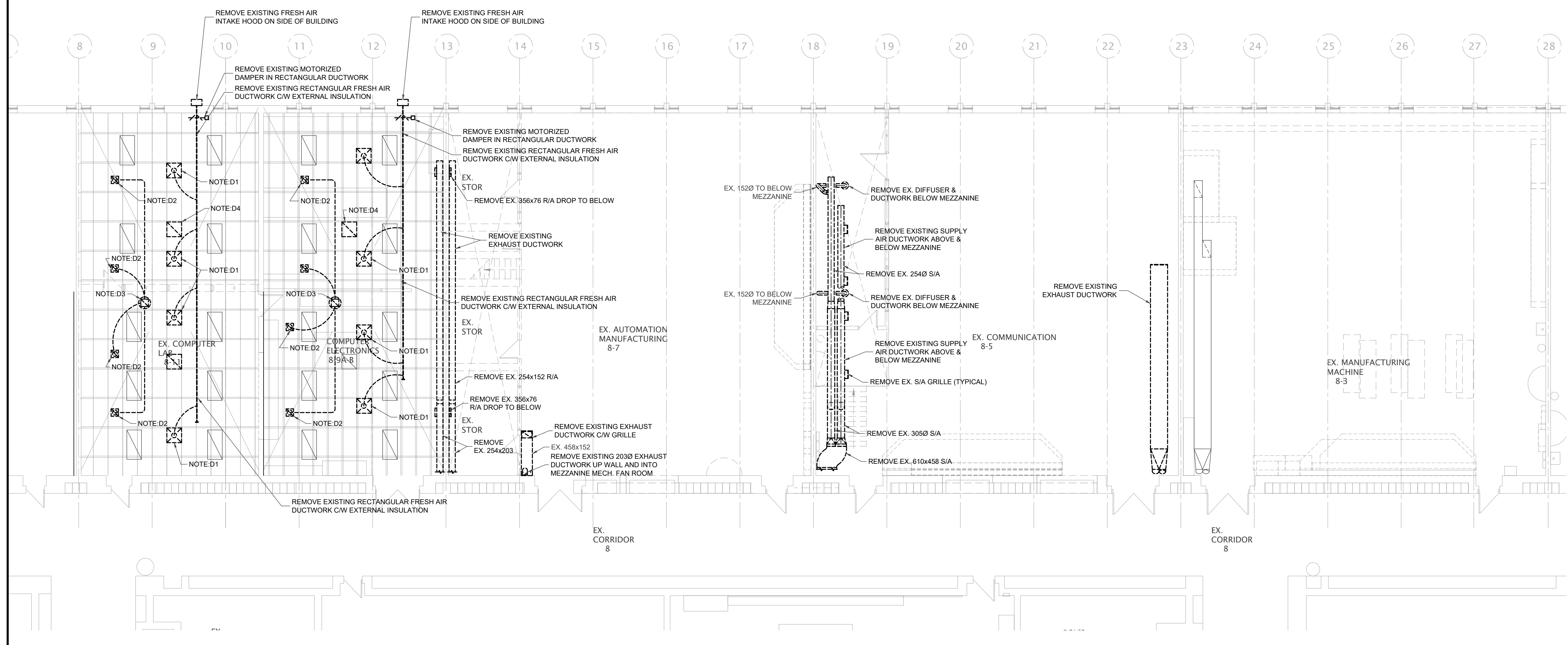
PROJECT NO: A23018	SCALE:
DRAWN: JT/RV	DRAWING NO.:
CHECKED: SS	M301
DATE: JAN. 30, 2025	



PARTIAL ROOF PLAN - HVAC DEMOLITION
SCALE - 1:100

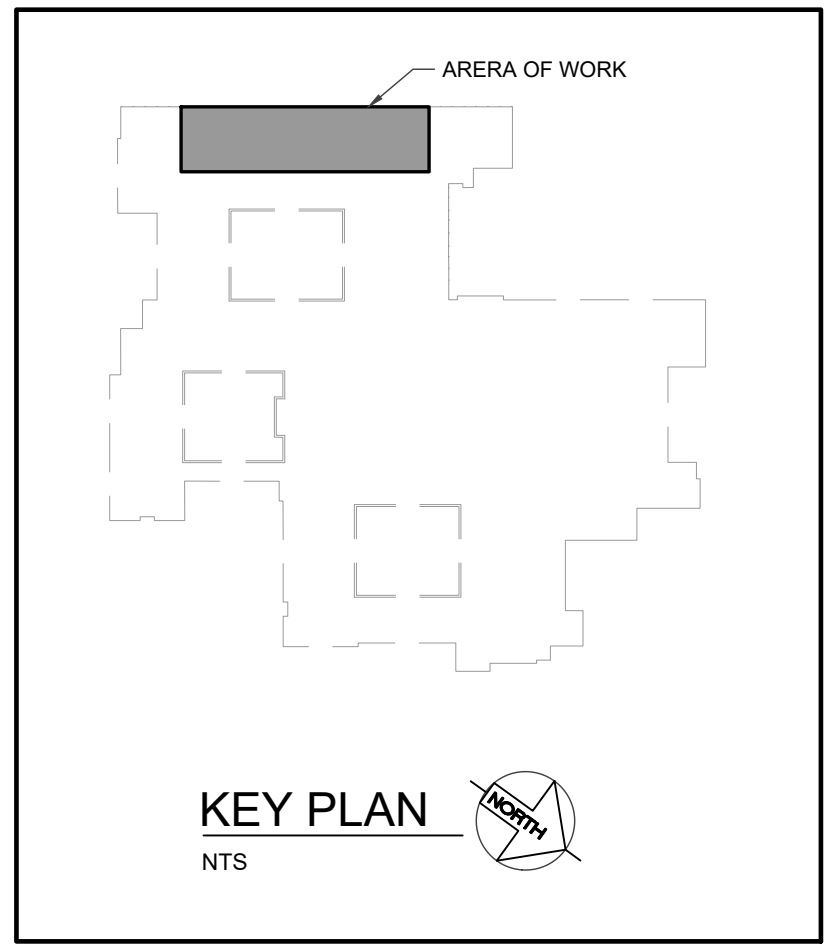


PARTIAL FLOOR PLAN - MEZZANINE MECH. FAN ROOM - HVAC DEMOLITION
SCALE - 1:100



PARTIAL FLOOR PLAN - HVAC DEMOLITION
SCALE - 1:100

- NOTES:**
- D1. REMOVE EXISTING CEILING DIFFUSERS AND FLEXIBLE DUCT RUNS.
 - D2. REMOVE EXISTING EXHAUST GRILLES IN CEILING C/W DUCT RUNS BETWEEN EXHAUST FAN AND GRILLE.
 - D3. REMOVE EXISTING EXHAUST FAN ON ROOF ABOVE C/W WITH EXHAUST PLENUM BELOW ROOF. ROOF CURB TO BE INTERNALLY INSULATED AND CAPPED BY GENERAL CONTRACTOR. REFER TO ARCHITECTURAL DRAWINGS.
 - D4. REMOVE EXISTING RETURN AIR GRILLE IN CEILING.
 - D5. REMOVE EXISTING 610x457 (24"x18") EXHAUST DUCT UP INTO LOUVERED PENTHOUSE ABOVE.
 - D6. REMOVE EXISTING 610x457 (24"x18") FRESH AIR DUCT FROM LOUVERED PENTHOUSE ABOVE.
 - D7. REMOVE EXISTING 1626x406 (64"x16") RETURN AIR GRILLES AND SLEEVES THROUGH WALL INTO MEZZANINE FAN ROOM.
 - D8. REMOVE EXISTING 4046x406 (16"x16") RETURN AND OR EXHAUST DUCTWORK IN MEZZANINE FAN ROOM.
 - D9. REMOVE EXISTING 254x293 (10"x8") EXHAUST DUCT FROM HIGH LEVEL IN CLASSROOM THROUGH WALL INTO AND IN EX. MEZZANINE FAN ROOM.
 - D10. REMOVE EXISTING 2030 (8") EXHAUST DUCT THROUGH WALL INTO FAN ROOM. ALL DUCT IN FAN ROOM & DUCT UP INTO LOUVERED PENTHOUSE ABOVE.
 - D11. REMOVE EXISTING 558x457 (22"x18") EXHAUST DUCT UP INTO LOUVERED PENTHOUSE.



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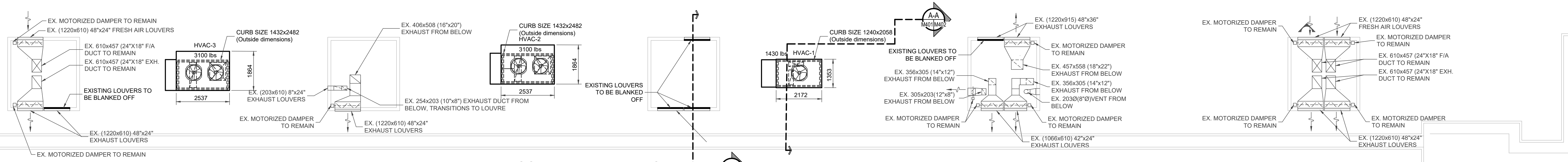


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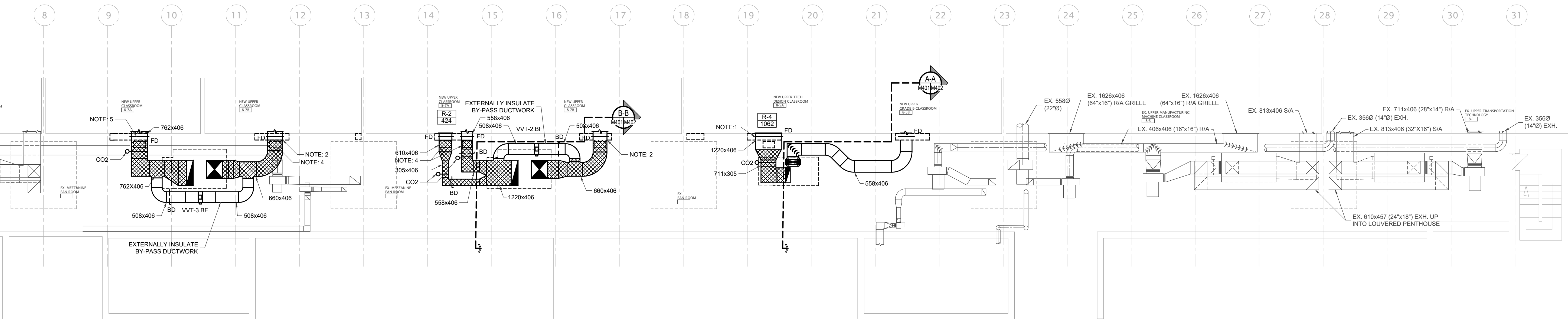


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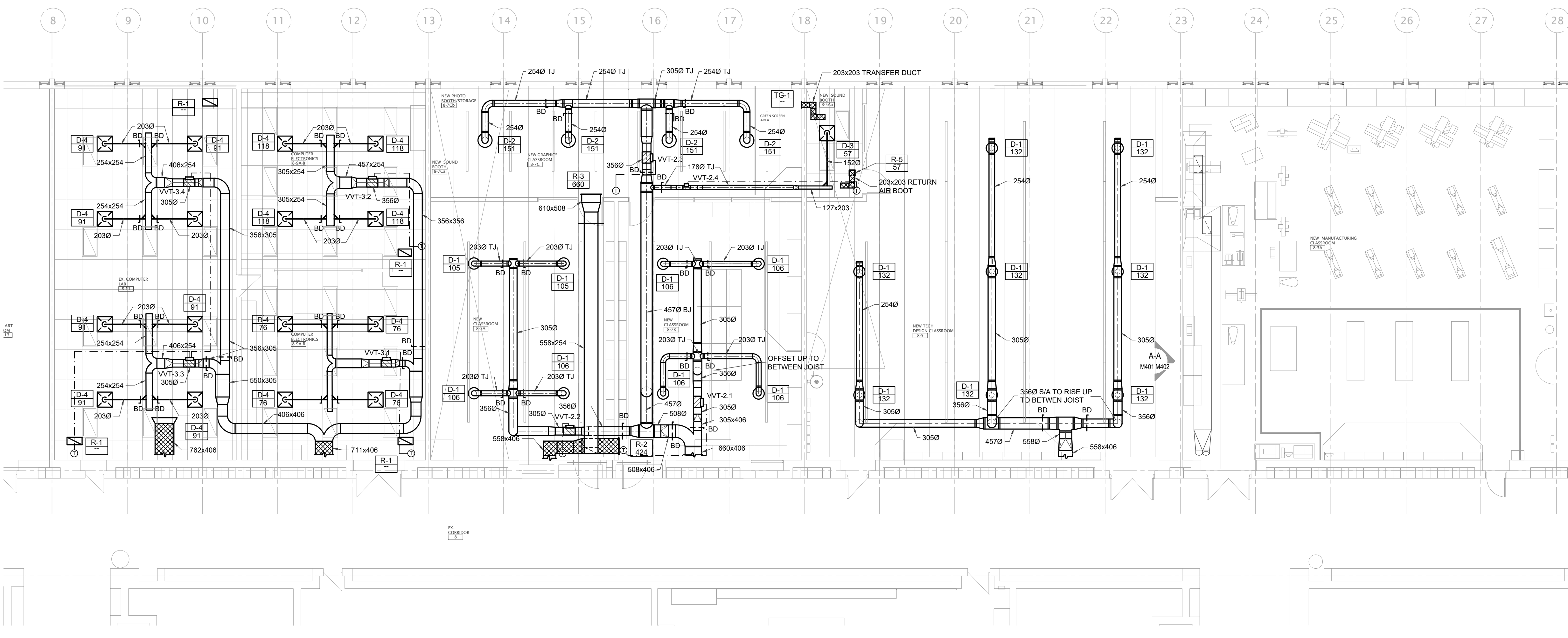
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PROJECT NO: A23018	SCALE:
DRAWN: JT/RV	DRAWING NO.:
CHECKED: SS	M400
DATE: JAN. 30, 2025	



PARTIAL ROOF PLAN - NEW HVAC
SCALE - 1:100

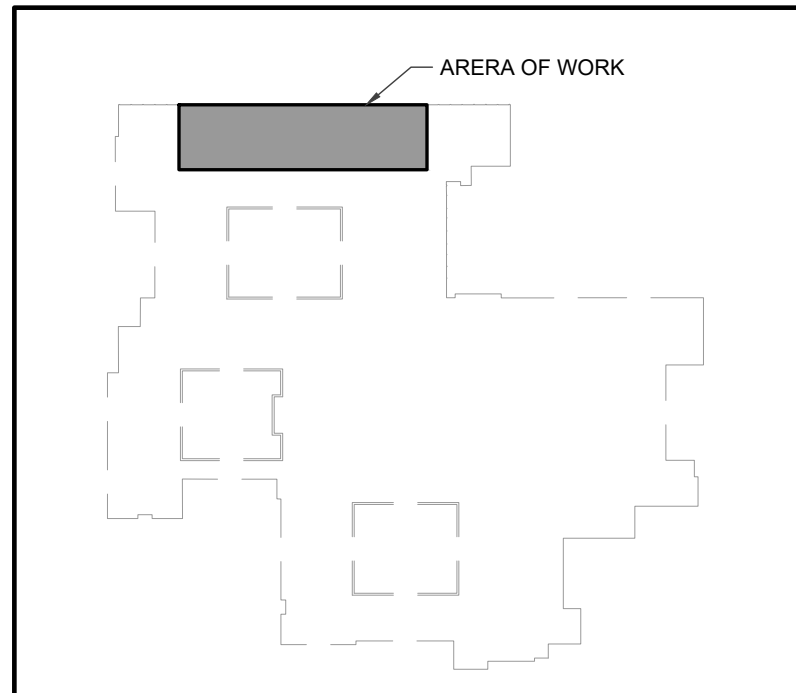


PARTIAL FLOOR PLAN - MEZZANINE MECH. FAN ROOM - NEW HVAC
SCALE - 1:100



PARTIAL FLOOR PLAN - NEW HVAC
SCALE - 1:100

- NOTES:**
- 558x406 SUPPLY AIR DUCT AND 1220x406 RETURN DUCTS ARE TO BE INSTALLED IN EXISTING OPENING LEFT BY THE REMOVAL OF THE EXISTING 1626x406 RETURN AIR GRILLE. DUCTWORK TO BE COMPLETE WITH FIRE DAMPERS. REMAINDER OF OPENING TO BE INFILL BY GENERAL CONTRACTOR REFER TO ARCHITECTURAL DRAWINGS.
 - 600x406 SUPPLY AIR DUCT TO BE INSTALLED IN EXISTING OPENING LEFT BY THE REMOVAL OF THE EXISTING 1626x406 RETURN AIR GRILLE. DUCTWORK TO BE COMPLETE WITH FIRE DAMPERS. REMAINDER OF OPENING TO BE INFILL BY GENERAL CONTRACTOR REFER TO ARCHITECTURAL DRAWINGS.
 - 558x406 AND 610x406 RETURN DUCTS ARE TO BE INSTALLED IN EXISTING OPENING LEFT BY THE REMOVAL OF THE EXISTING 1626x406 RETURN AIR GRILLE. DUCTWORK TO BE COMPLETE WITH FIRE DAMPERS. REMAINDER OF OPENING TO BE INFILL BY GENERAL CONTRACTOR REFER TO ARCHITECTURAL DRAWINGS.
 - PROVIDE FIRE DAMPER ACCESS DOOR IN DUCTWORK ON MEZZANINE SIDE.
 - 762x406 RETURN DUCT TO BE INSTALLED IN EXISTING OPENING LEFT BY THE REMOVAL OF EXISTING 1626x406 RETURN GRILLE. DUCTWORK TO BE COMPLETE WITH FIRE DAMPER. REMAINDER OF OPENING TO BE INFILL BY GENERAL CONTRACTOR REFER TO ARCHITECTURAL DRAWINGS.



KEY PLAN
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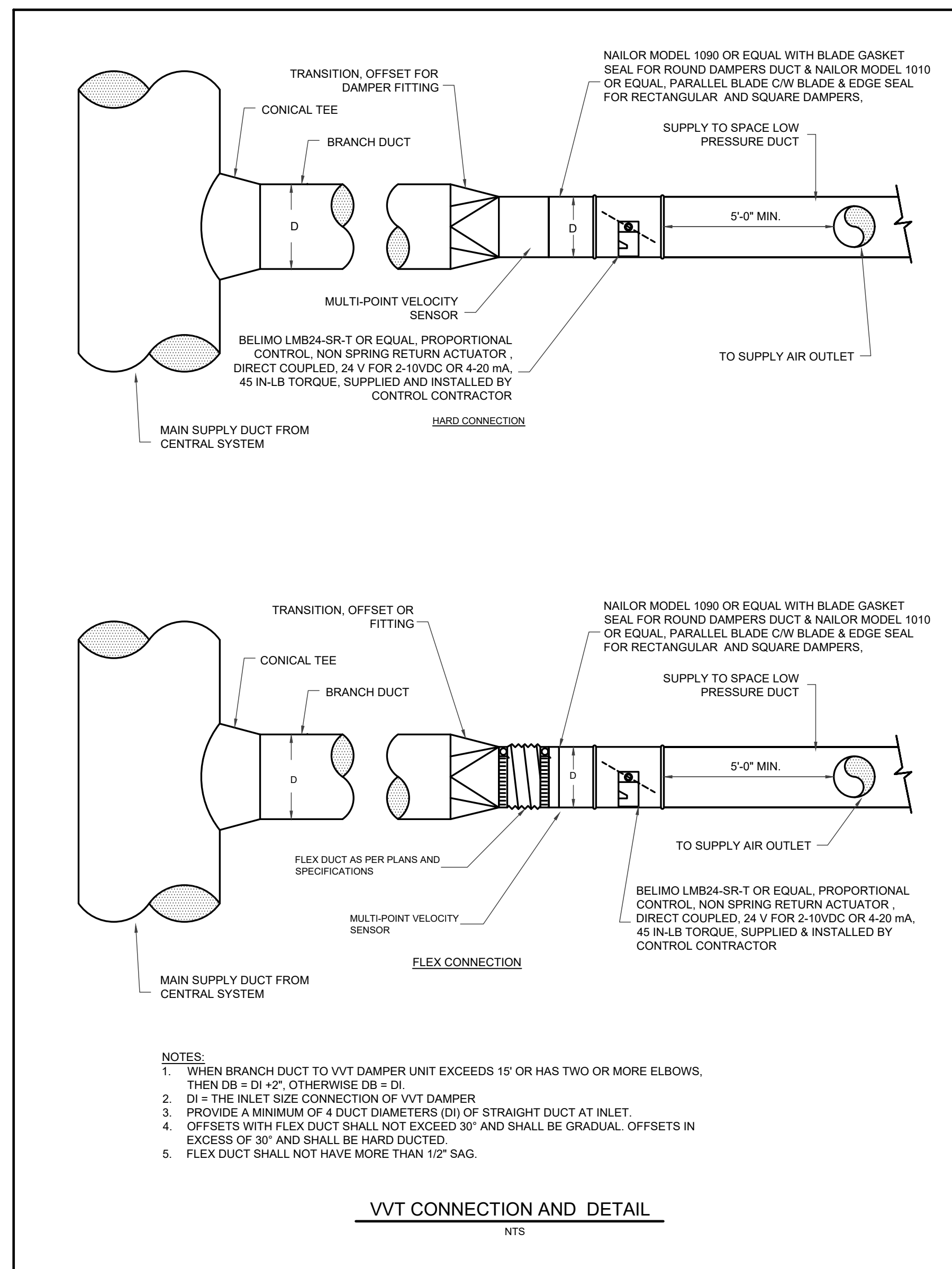
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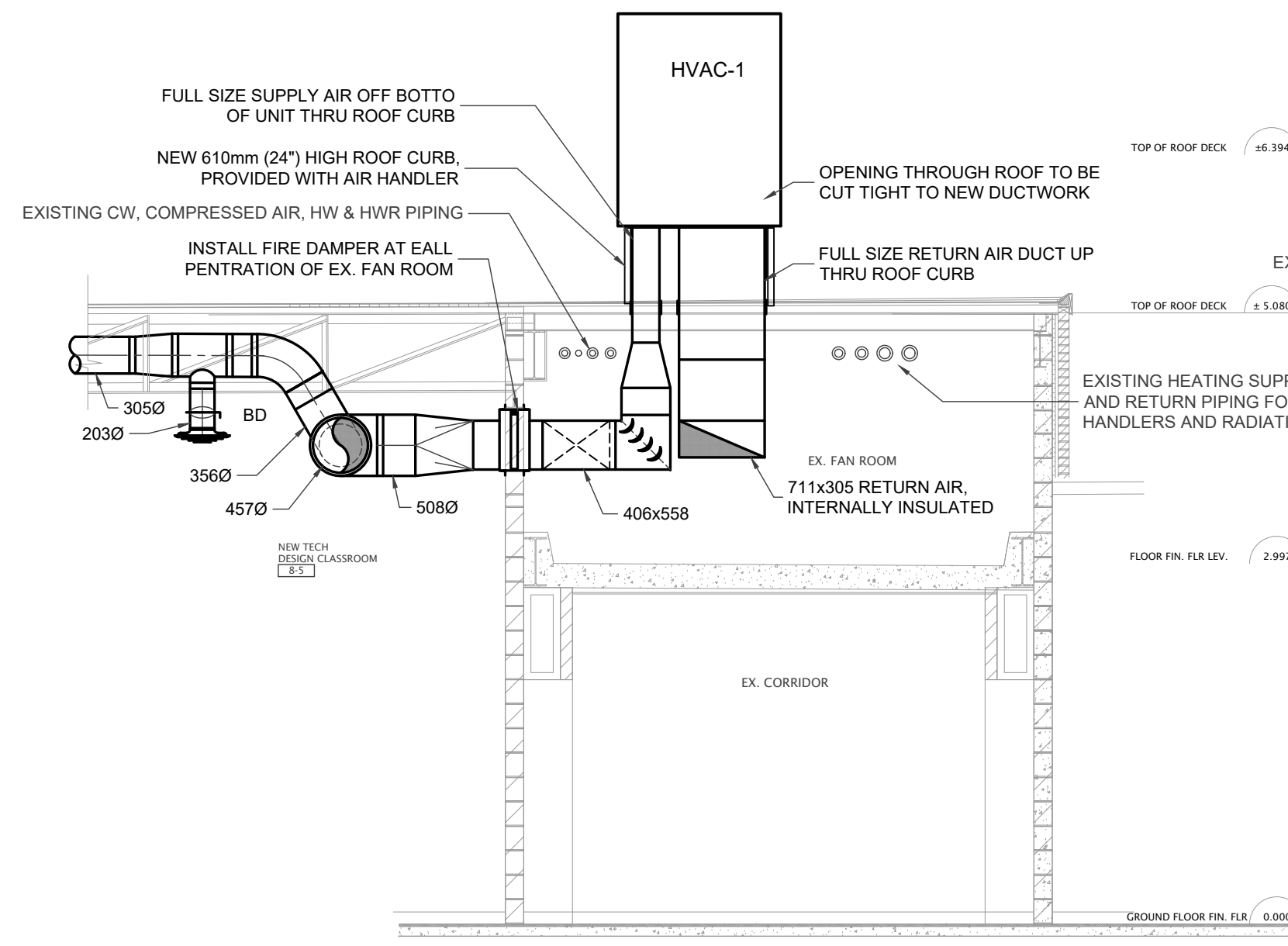
DRAWING TITLE:
PARTIAL FLOOR & ROOF PLANS - NEW HVAC

PROJECT NO: A23018	SCALE:
DRAWN: JT/RV	DRAWING NO.:
CHECKED: SS	M401
DATE: JAN. 30, 2025	

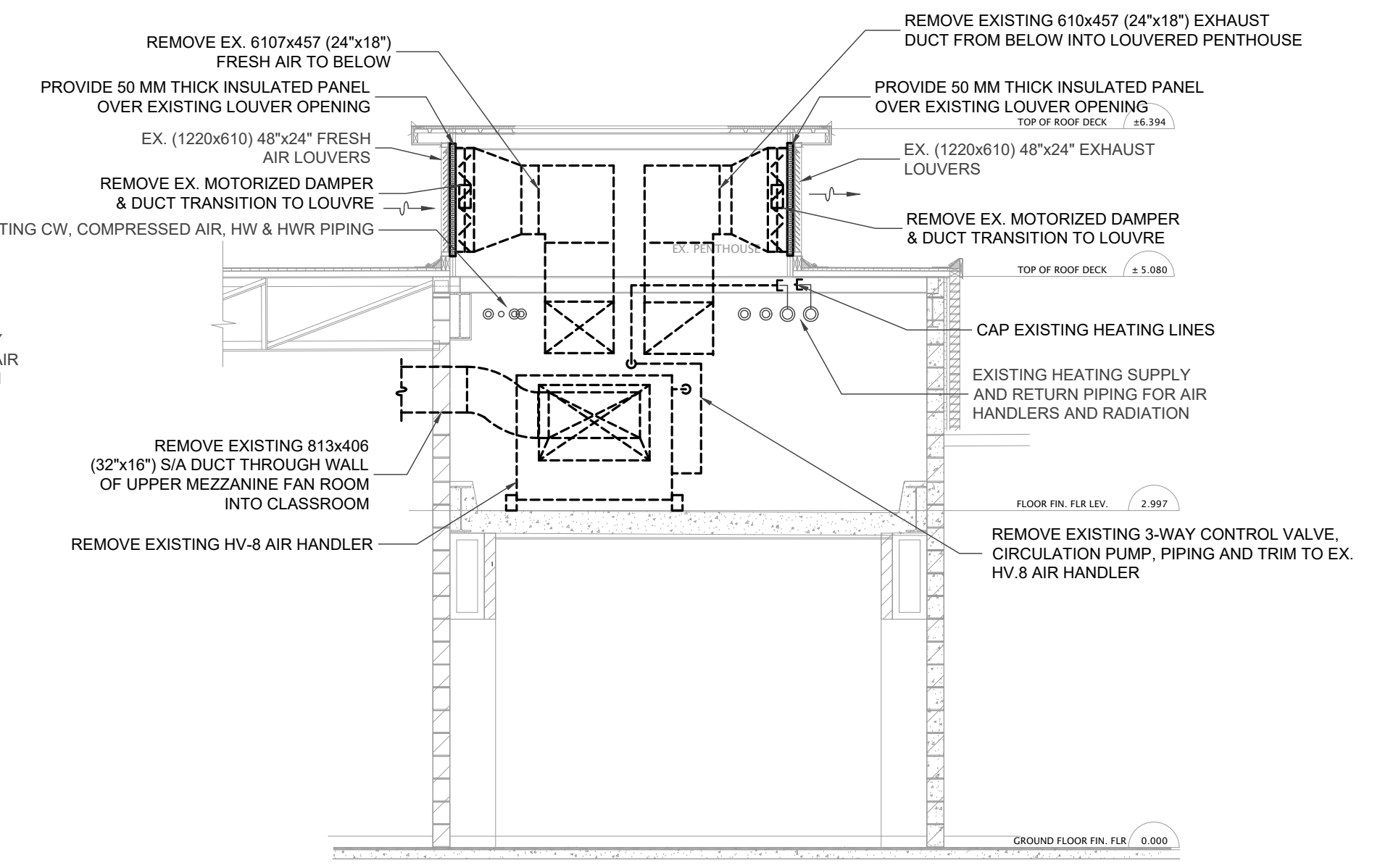


- NOTES:**
1. WHEN BRANCH DUCT TO VVT DAMPER UNIT EXCEEDS 15' OR HAS TWO OR MORE ELBOWS, THEN DB = DI + 2", OTHERWISE DB = DI.
 2. DI = THE INLET SIZE CONNECTION OF VVT DAMPER
 3. PROVIDE A MINIMUM OF 4 DUCT DIAMETERS (DI) OF STRAIGHT DUCT AT INLET.
 4. OFFSETS WITH FLEX DUCT SHALL NOT EXCEED 30" AND SHALL BE GRADUAL. OFFSETS IN EXCESS OF 30" AND SHALL BE HARD DUCTED.
 5. FLEX DUCT SHALL NOT HAVE MORE THAN 1/2" SAG.

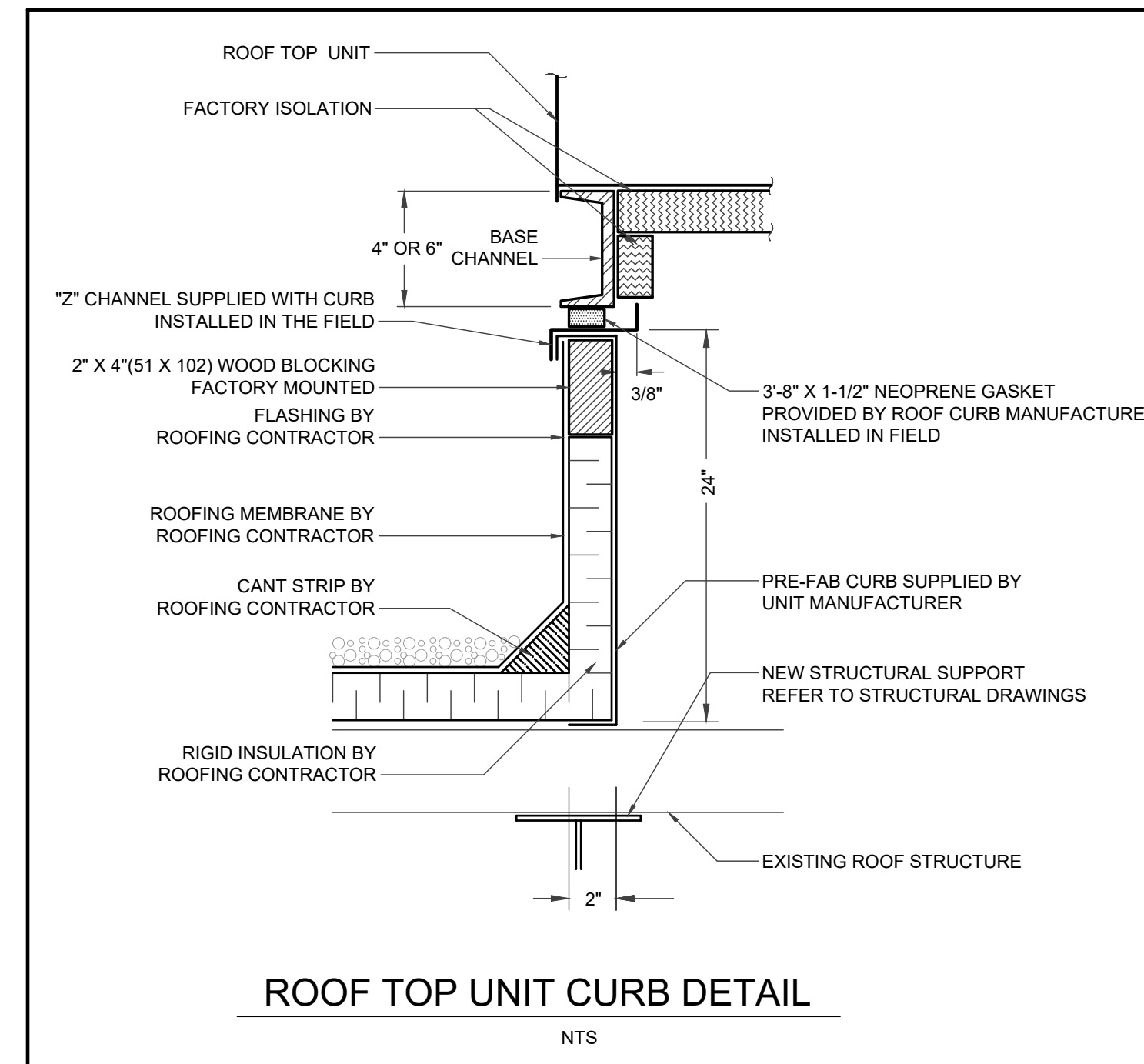
VVT CONNECTION AND DETAIL
NTS



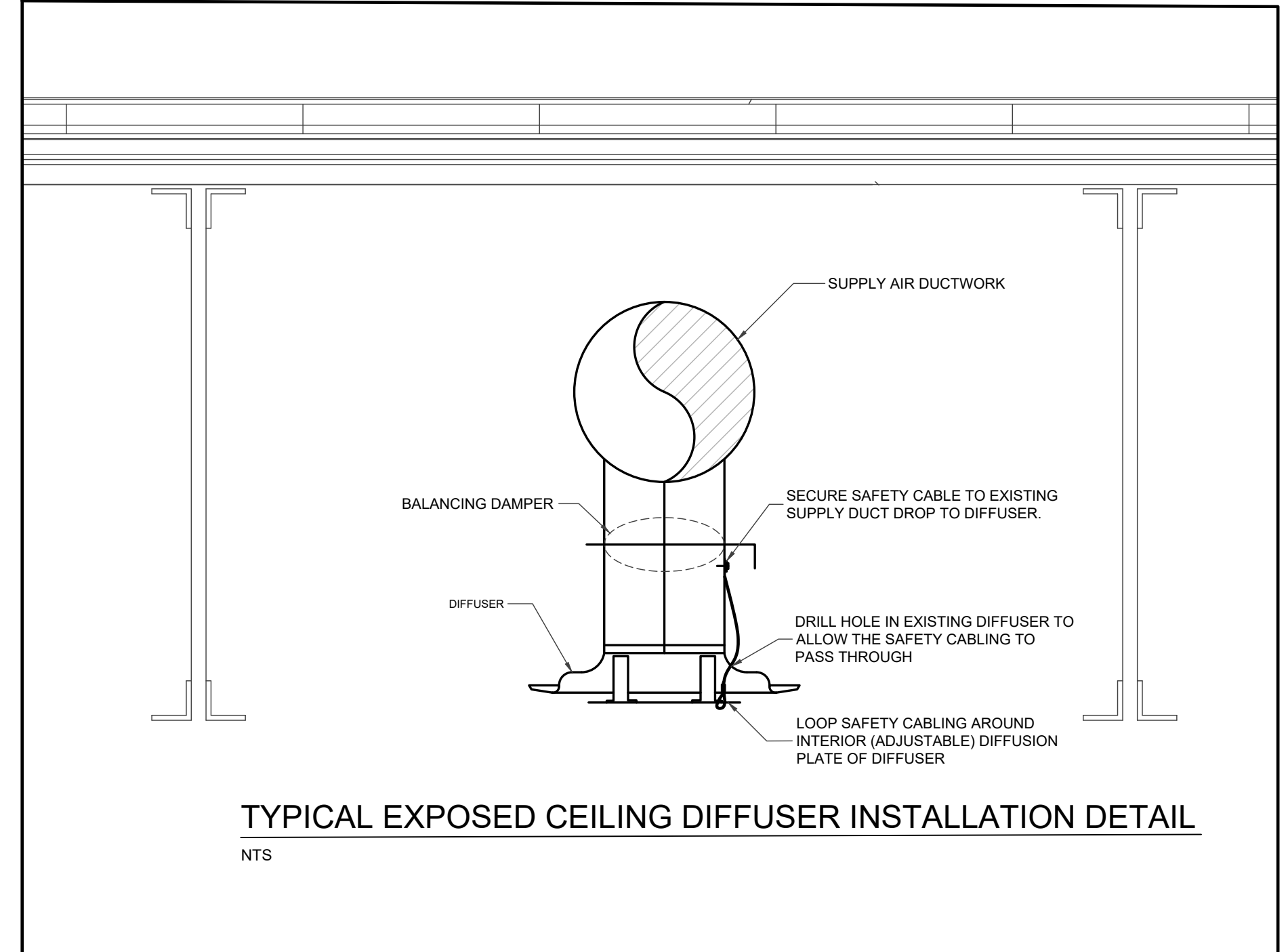
SECTION - A-A NEW HVAC
SCALE - 1:50



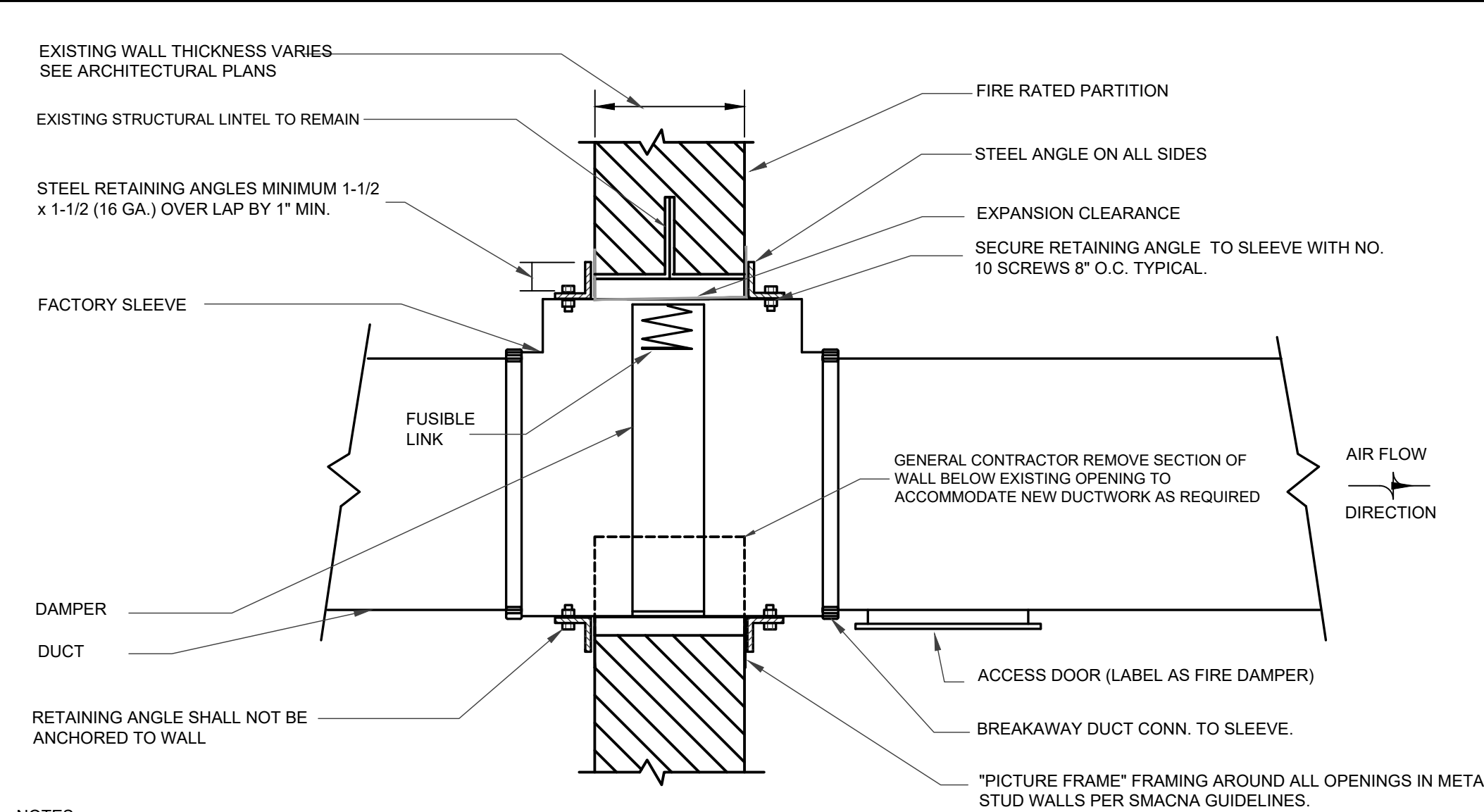
SECTION - B-B DEMOLITION
SCALE - 1:50



ROOF TOP UNIT CURB DETAIL
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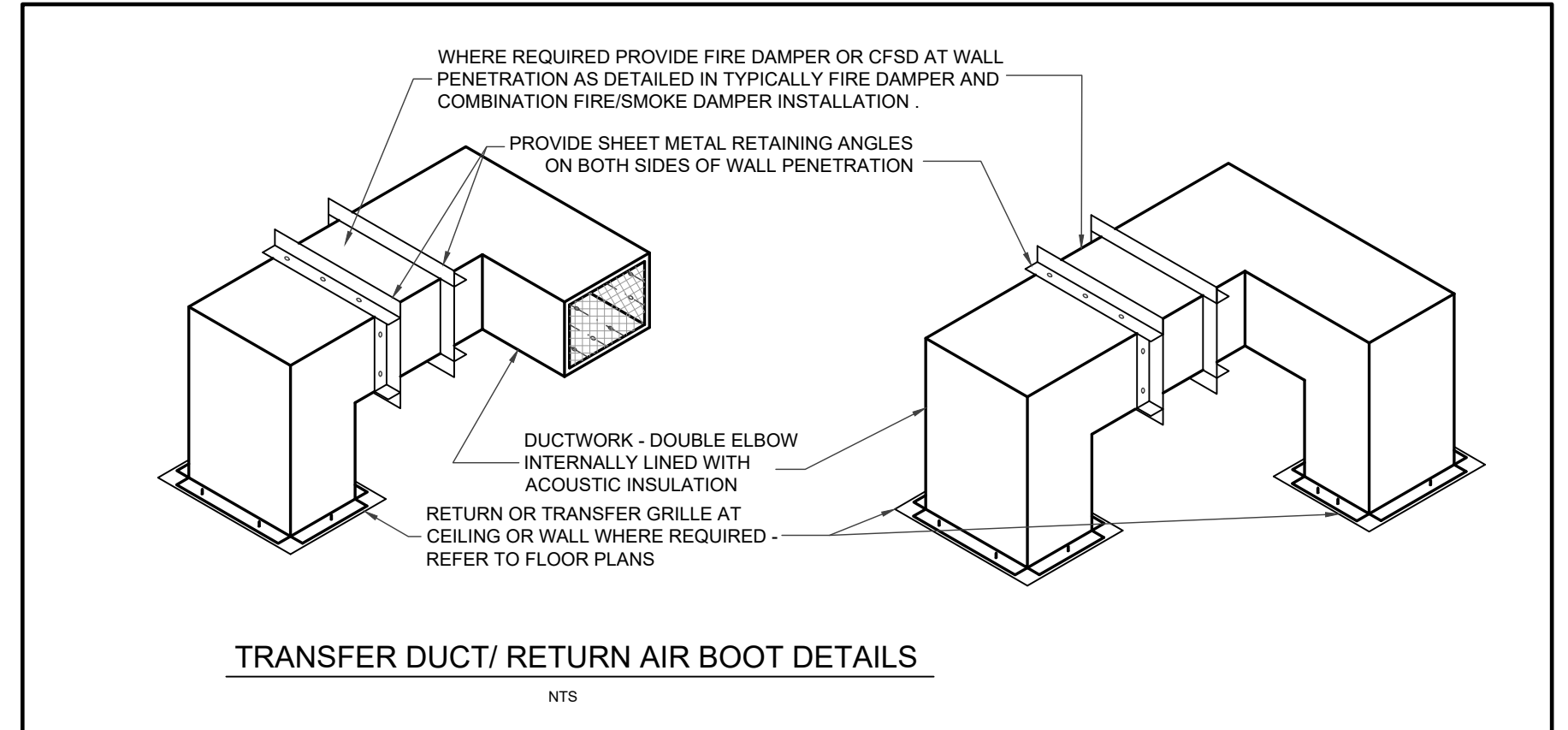


TYPICAL EXPOSED CEILING DIFFUSER INSTALLATION DETAIL
NTS



VERTICAL FIRE DAMPER
N.T.S.

- NOTES:**
1. DAMPERS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS.
 2. DAMPERS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE U.L. / U.L.C. REQUIREMENTS.
 3. VERTICAL DAMPER SHOWN - HORIZONTAL INSTALLATION SIMILAR EXCEPT WITH SPRING LOADED DAMPER.
 4. DAMPER BLADES SHALL BE OUT OF AIRSTREAM TYPE "B" (SEE SMACNA FIRE DAMPER AND HEAT STOP GUIDE - 2ND EDITION
 5. WALL OPENINGS TO BE DUCT DIMENSIONS PLUS 1/8" PER FOOT.
 6. FIRE DAMPER ASSEMBLIES INCLUDING SLEEVES AND INSTALLATION PROCEDURES SHALL BE APPROVED BY THE BUILDING INSPECTOR PRIOR TO INSTALLATION.
 7. GENERAL CONTRACTOR SHALL COORDINATE CEILING ACCESS DOORS AS REQUIRED TO ACCESS DAMPER.
 8. ACCESS DOORS IN DUCT. ACCESS DOOR SHALL BE PROVIDED IN DUCT AND SHALL BE OF ADEQUATE SIZE AND LOCATION TO PERMIT MAINTENANCE & RESETTING OF DAMPER.
 9. MANUFACTURER'S PRINTED INSTRUCTIONS SHALL BE MADE AVAILABLE TO INSPECTING AUTHORITIES.



TRANSFER DUCT/ RETURN AIR BOOT DETAILS
NTS

NO.	DATE	REVISION
2	25.01.30	ISSUED FOR TENDER
1	25.01.07	ISSUED FOR OWNERS REVIEW

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.



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Canada (416) 291-1949
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FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION
255 Fisher-Hallman Rd.
Kitchener, Ontario
N2M 4X8

DRAWING TITLE:
SECTIONS & DETAILS - NEW HVAC

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

AIR HANDLING UNIT SCHEDULE																																			
UNIT NO.	MANUFACTURER	MODEL NO.	LOCATION	SUPPLY FAN				MOTOR				RETURN FAN				MOTOR				COOLING COIL				GAS HEAT				ELECTRICAL			AHRI 210/240 STANDARD EFFICIENCY	WEIGHT			
				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	RPM	AIR P.D. [IN.WG.(Pa)]	ENT. AIR [DBWB "F(°C)]	L.V.G. AIR [DBWB "F(°C)]	ROWS	FPI	SENSIBLE [BTUH (KWS)]	TOTAL [BTUH (KWS)]	REFRIGERANT TYPE	EAT DB "F(°C)	LAT LDB "F(°C)	INPUT BTUH (KWS)	OUTPUT BTUH (KWS)	TURNDOWN RATIO	VOLTAGE	MCA			MCCP	EER	IEER (SEER2)
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	ECM	0.30 (74.65)	76.8/64.4 (24.9/18.0)	55.5/54.4 (13.1/12.4)	4	14	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	ECM	0.33 (82.11)	75.8/63.0 (24.3/17.2)	48.6/48.6 (9.2/9.2)	4	15	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	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	ECM	0.33 (82.11)	75.5/62.6 (24.1/17.0)	48.2/48.2 (9.0/9.0)	4	15	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	110	11.5	19.0	N/A	3,104 (1,408)

AIR HANDLING UNIT SCHEDULE CONTINUED

UNIT NO.	OUTDOOR AIR FLOW		TYPE	ENERGY RECOVERY (ENTHALPY WHEEL)								HEAT PUMP			
	MINIMUM CFM (L/S)	DESIGN CFM (L/S)		ENT. S/A [DBWB "F(°C)]	LVG. S/A [DBWB "F(°C)]	ENT. R/A [DBWB "F(°C)]	MIXED AIR [DBWB "F(°C)]	ENERGY RECOVERED [BTUH (KWS)]	EFF. %	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 (212)	1000 (472)	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 (92.07)	0.37 (92.07)	60.3 (15.7)	81.7 (27.6)	52,572 (15.4)	47 (8.3)
HVAC-2	400 (189)	1220 (576)	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 (12.44)	0.05 (12.44)	65.4 (18.5)	95.1 (35.05)	109,719 (32.15)	47 (8.3)
HVAC-3	410 (194)	875 (413)	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 (7.46)	0.03 (7.46)	67.5 (19.7)	97.2 (36.2)	102,568 (30.5)	41 (5.0)

OR EQUAL - ENGINEERED AIR, BEACON MORRIS, ZEHNDER-RITTLING AND TRANE

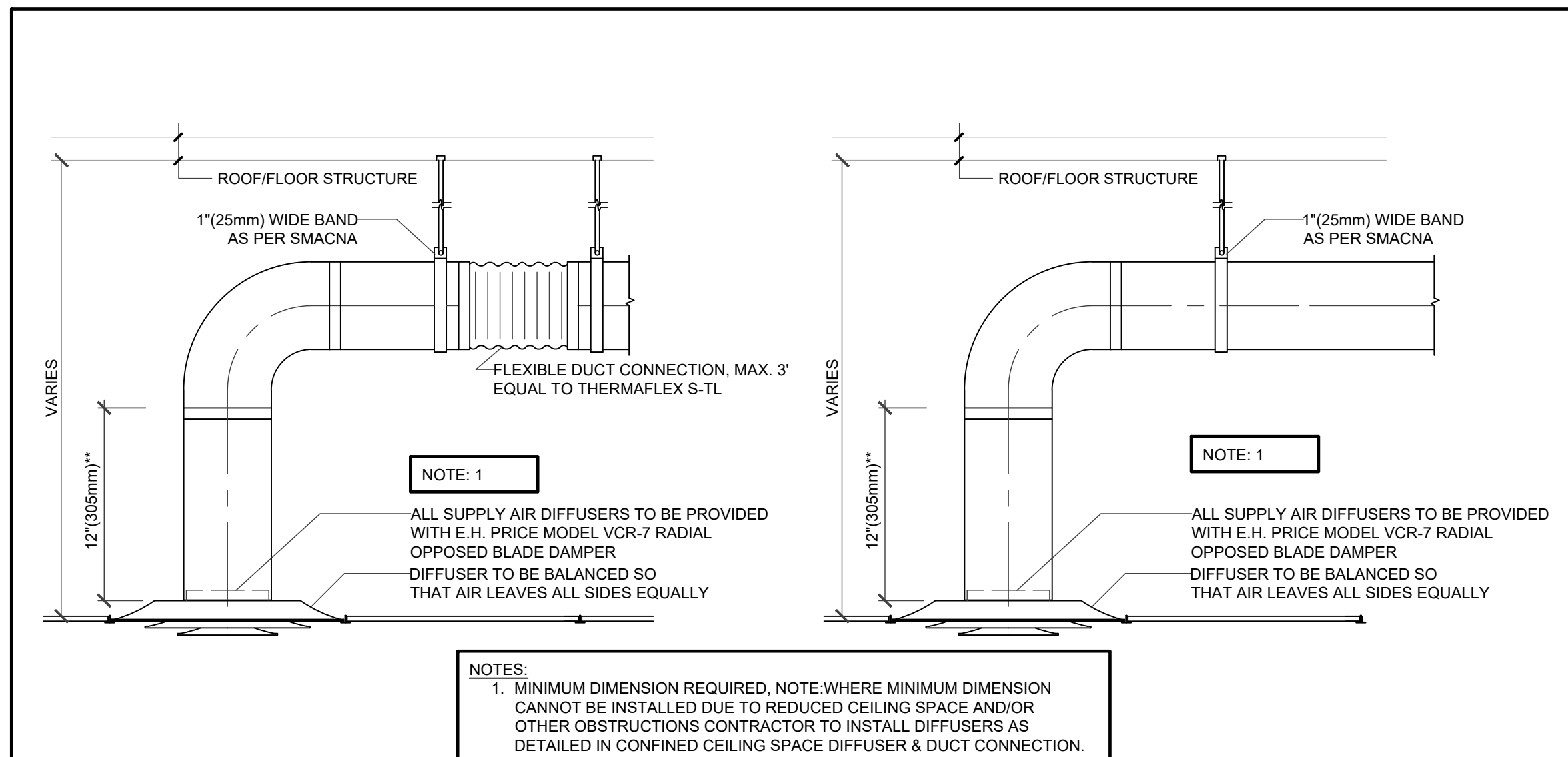
RADIANT WALL FIN SCHEDULE

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

LOUVER, GRILLE AND DIFFUSER SCHEDULE

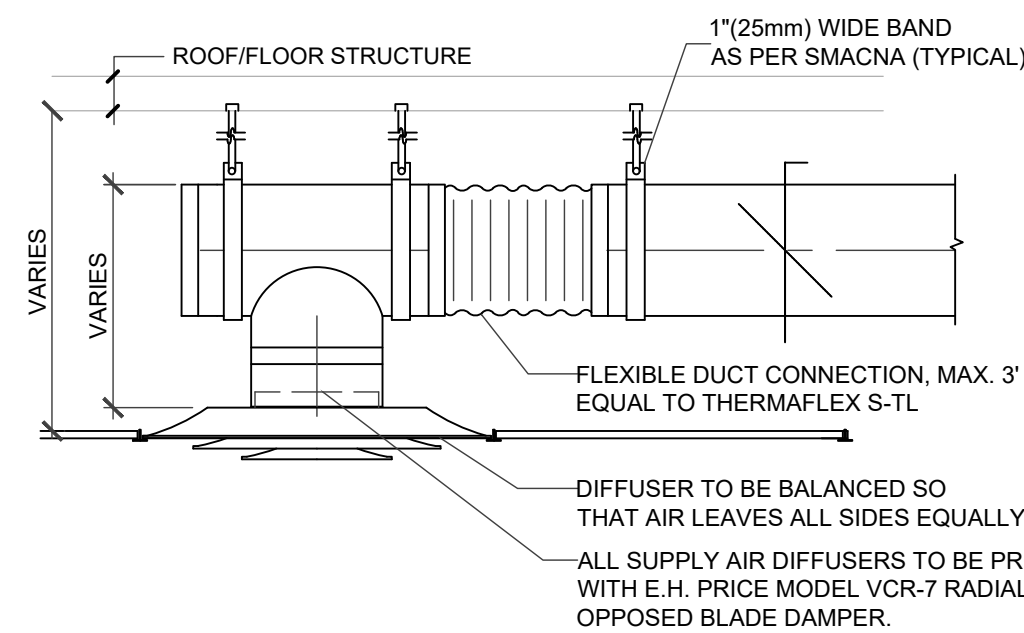
SYMBOL	AIR FLOW RANGE [CFM (L/S)]	NECK SIZE/ FACE SIZE [INCH.(MM)]	MODEL NUMBER	DESCRIPTION
D-1 CFM	140 - 280 (66-132)	8"Ø / 18"Ø (203Ø / 457Ø)	8"Ø/RCDA/B12	FULLY ADJUSTABLE ROUND CONE, 4 CONES, WHITE STEEL
D-2 CFM	280 - 435 (132-205)	10"Ø / 22.5"Ø (254Ø / 572Ø)	10"Ø/RCDA/B12	FULLY ADJUSTABLE ROUND CONE, 4 CONES, WHITE STEEL
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 SQUARE CONE, T-BAR MOUNT, 3 CONES, WHITE STEEL
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 SQUARE CONE, T-BAR MOUNT, 3 CONES, WHITE STEEL
R-1 CFM	VARIABLES	24" x 12" (610 x 305)	24"x12"/80/TB/B12	EGG CRATE FACE RETURN T-BAR LAY-IN, WHITE
R-2 CFM	900 (424)	24" x 16" (610 x 406)	24"x16"/530/F/LA/B12	LOUVERED RETURN GRILLE, 45° DEFLECTION, FLAT BORDER W/ COUNTERSINK SCREW HALES, 3/4" BLADE SPACING, WHITE
R-3 CFM	1400 (660)	24" x 20" (610 x 508)	24"x20"/530/F/LA/B12	LOUVERED RETURN GRILLE, 45° DEFLECTION, FLAT BORDER W/ COUNTERSINK SCREW HALES, 3/4" BLADE SPACING, WHITE
R-4 CFM	2250 (1062)	48" x 16" (1220 x 406)	48"x16"/530/F/LA/B12	LOUVERED RETURN GRILLE, 45° DEFLECTION, FLAT BORDER W/ COUNTERSINK SCREW HALES, 3/4" BLADE SPACING, WHITE
R-5 CFM	VARIABLES	8" x 8" (203 x 203)	8"x8"/80/F/A/B12	EGG CRATE FACE RETURN FLAT BORDER W/ COUNTERSINK SCREW HOLES, WHITE
TG-1 CFM	VARIABLES	8" x 8" (203 x 203)	8"x8"/530/F/LA/B12	LOUVERED RETURN GRILLE, 45° DEFLECTION, FLAT BORDER W/ COUNTERSINK SCREW HALES, 3/4" BLADE SPACING, WHITE

* MANUFACTURER: E.H. PRICE

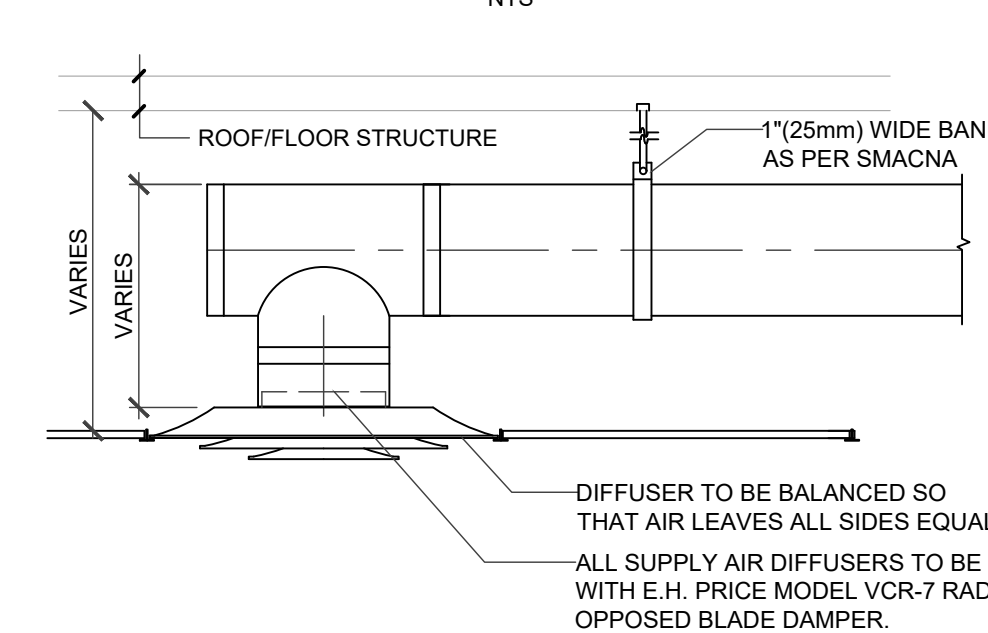


TYPICAL DIFFUSER & DUCT CONNECTION W/ FLEXIBLE DUCT

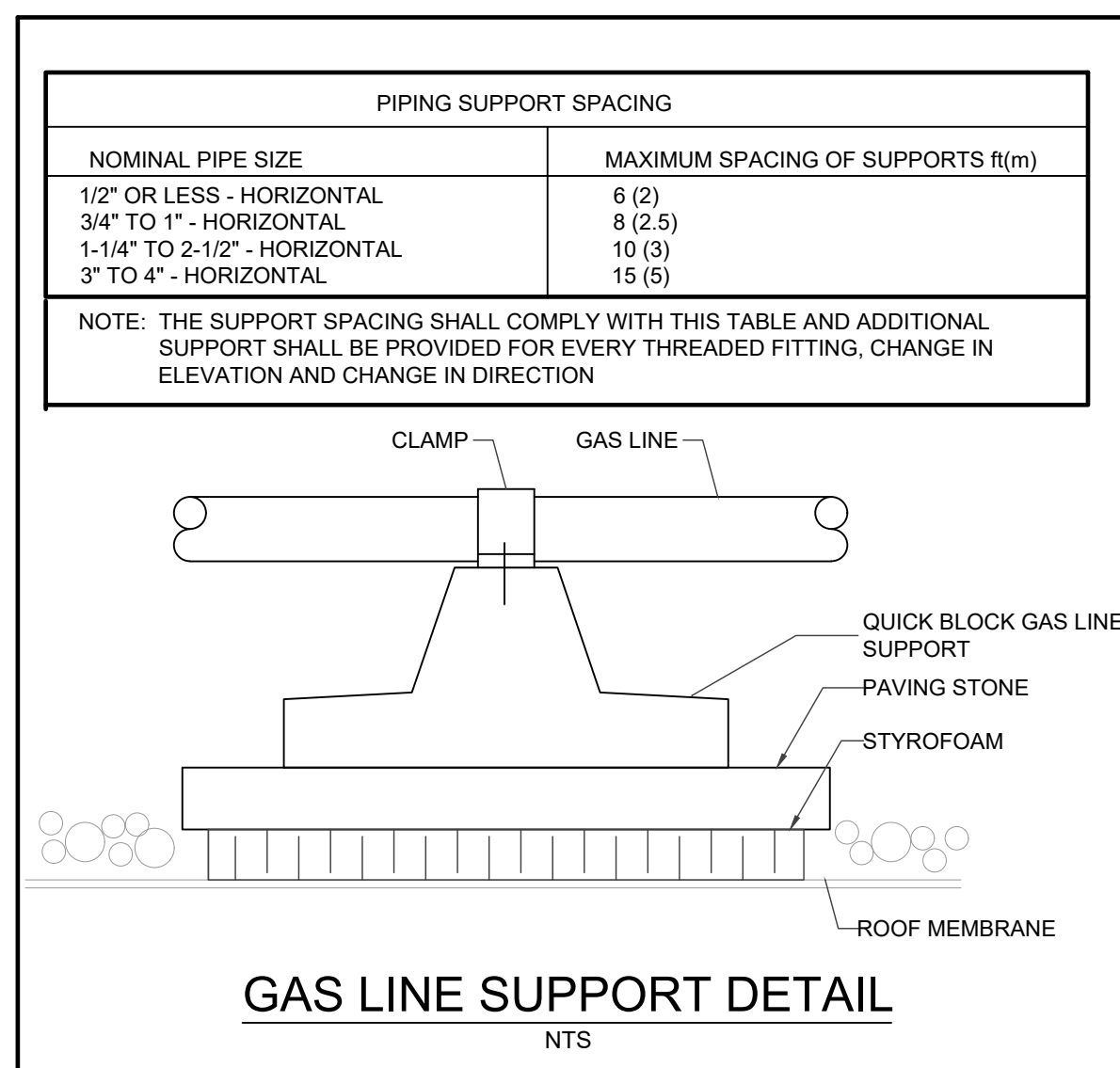
TYPICAL DIFFUSER & DUCT CONNECTION



CONFINED CEILING SPACE DIFFUSER & DUCT CONNECTION W/ FLEXIBLE DUCT



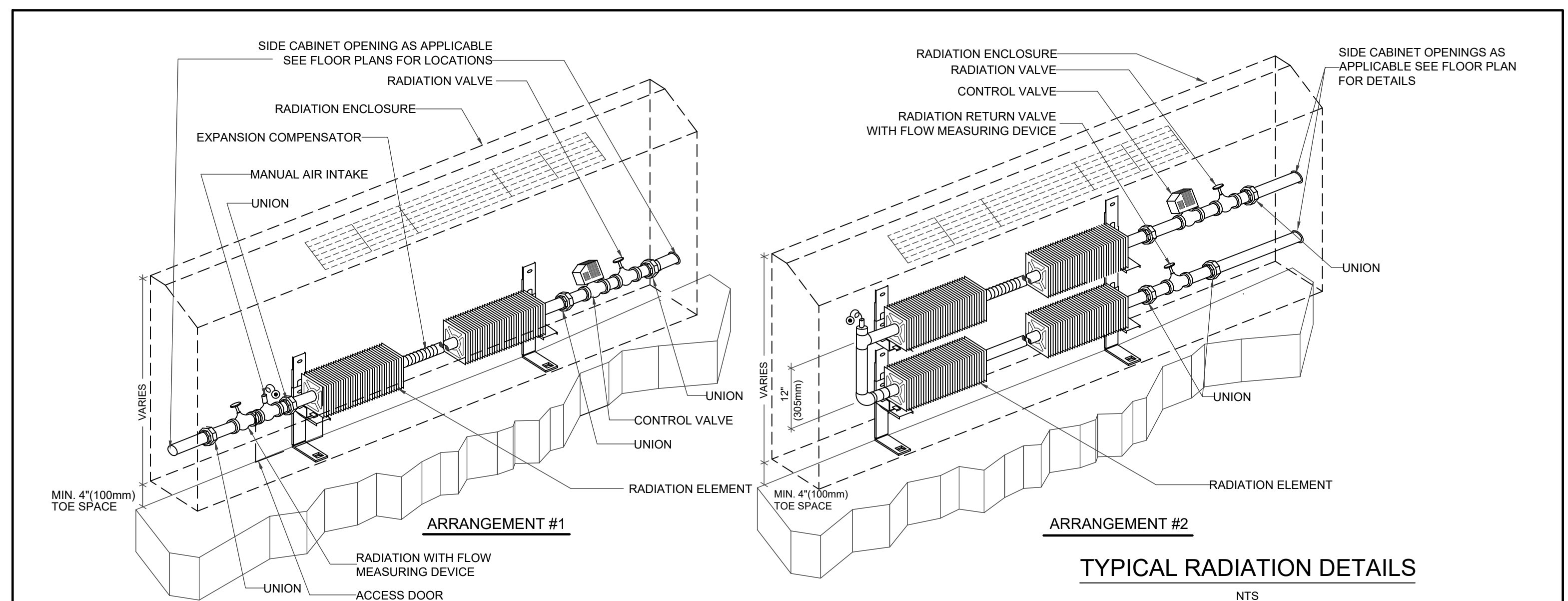
CONFINED CEILING SPACE DIFFUSER & DUCT CONNECTION



GAS LINE SUPPORT DETAIL

V.V.T. CONTROL DAMPER SCHEDULE

VV#	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)	



TYPICAL RADIATION DETAILS

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EXP Project # 104-23003-1-03-40

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FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION
255 Fisher-Hallman Rd, Kitchener, Ontario N2M 4X8

DRAWING TITLE:
MECHANICAL - SCHEDULES & DETAILS

PROJECT NO: A23018
SCALE:

DRAWN: JT/RV
DRAWING NO:

CHECKED: SS
DATE: JAN. 30, 2025

M500

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 SERVICES 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.
6.	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.

ELECTRICAL LEGEND					
SYMBOL	DESCRIPTION	MOUNTING / HEIGHT	SYMBOL	DESCRIPTION	MOUNTING / HEIGHT
LIGHTING			CONTROLS		
	2'-0" x 4'-0" LIGHT FIXTURE	CEILING		KEY PAD	900mm TO 1100mm AS PER OBC 3.8.1.5
	2'-0" x 2'-0" LIGHT FIXTURE	CEILING		DOOR CONTACT - SECURITY	T/O DOOR FRAME
	1'-0" x 4'-0" LIGHT FIXTURE	CEILING		ELECTRICAL STRIKE	DOOR LATCH
	STRIP LIGHT FIXTURE	CEILING		CARD READER	900mm TO 1100mm AS PER OBC 3.8.1.5
	RECESSED DOWNLIGHT FIXTURE	CEILING		TIME CLOCK	AS NOTED
	LIGHT FIXTURE	POLE AS NOTED		MOTION SENSOR - SECURITY	2440mm AFF
	LIGHT FIXTURE	WALL		PUSH BUTTON	AS NOTED
	TRACK LIGHTING	CEILING		SECURITY CAMERA	AS NOTED
	1 POLE, LIGHT SWITCH	900mm TO 1100mm AS PER OBC 3.8.1.5		THERMOSTAT	1200mm AFF AS PER OBC 3.8.1.5
	GANGED LIGHT SWITCHES	900mm TO 1100mm AS PER OBC 3.8.1.5		HUMIDISTAT	1200mm AFF AS PER OBC 3.8.1.5
	DIMMER SWITCH	900mm TO 1100mm AS PER OBC 3.8.1.5		FAN SPEED CONTROLLER	1200mm AFF AS PER OBC 3.8.1.5
	347V SINGLE POLE SWITCH	900mm TO 1100mm AS PER OBC 3.8.1.5		FLOW SWITCH	AS NOTED
	LOW VOLTAGE SWITCH	900mm TO 1100mm AS PER OBC 3.8.1.5		SUPERVISORY VALVE	AS NOTED
	OCCUPANCY SENSOR - LIGHTING	WALL / 3050mm AFF		END OF LINE RESISTOR	2286mm AFF
	OCCUPANCY SENSOR - LIGHTING	CEILING		MOTORIZED DAMPER	AS NOTED
	OCCUPANCY SENSOR - LIGHTING (AIMING AS NOTED)	WALL / 3050mm AFF		ELECTRIC HEATER	AS NOTED
	OCCUPANCY SENSOR - LIGHTING (AIMING AS NOTED)	CEILING		ELECTRIC HEAT TRACING (PIPE OR AREA)	AS NOTED
	PHOTO CELL	AS NOTED	FIRE ALARM		
EMERGENCY 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
	REMOTE EMERGENCY LIGHTING HEADS	2286mm AFF		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
	REMOTE EMERGENCY LIGHTING HEADS	CEILING		FIRE ALARM STROBE	2300mm AFF TO TOP CAN/ULC-ULC-S524 - 5.4
	REMOTE EMERGENCY LIGHTING HEAD	CEILING		SMOKE DETECTOR	2000mm AFF TO 2400mm CAN/ULC-ULC-S524 - 5.4
	RECESSED EMERGENCY LIGHTING HEAD	CEILING		SMOKE DUCT DETECTOR	CEILING
EXIT LIGHTING				SMOKE ALARM	IN DUCT
	EXIT LIGHT FIXTURE	WALL OR CEILING		HEAT DETECTOR 194° FIXED TEMPERATURE	CEILING
	EXIT RIGHT ARROW LIGHT FIXTURE	WALL OR CEILING		HEAT DETECTOR 135° RATE OF RISE	CEILING
	EXIT LEFT ARROW LIGHT FIXTURE	WALL OR CEILING		ELECTRO-MAGNETIC DOOR HOLD OPEN DEVICE	WALL OR FLOOR
	EXIT DUAL FACE RIGHT ARROW LIGHT FIXTURE	WALL OR CEILING	COMMUNICATIONS		
	EXIT DUAL FACE LEFT ARROW LIGHT FIXTURE	WALL OR CEILING		TELEPHONE OUTLET (y INDICATES # OF OUTLETS AT THIS LOCATION)	457mm AFF
POWER				TELEPHONE OUTLET (y INDICATES # OF OUTLETS AT THIS LOCATION)	FLOOR
	ELECTRICAL LIGHTING OR POWER PANEL	1980 mmAFF TO TOP		DATA OUTLET (x INDICATES # OF OUTLETS AT THIS LOCATION)	457mm AFF
	ELECTRICAL EQUIPMENT PANEL AS NOTED	AS NOTED		DATA OUTLET (x INDICATES # OF OUTLETS AT THIS LOCATION)	FLOOR
	DUPLEX RECEPTACLE	457mm AFF		COMBINATION DATA AND TELEPHONE OUTLET (x = # OF DATA DROPS, y = # OF PHONE DROPS)	457mm AFF
	SPLIT DUPLEX RECEPTACLE	OVER COUNTER		COMBINATION DATA AND TELEPHONE OUTLET (x = # OF DATA DROPS, y = # OF PHONE DROPS)	FLOOR
	GFI RECEPTACLE	457mm AFF		TELEVISION (CABLE) OUTLET	457mm AFF
	DUPLEX RECEPTACLE	FLOOR		HDMI OUTLET	AS NOTED
	DIRECT CONNECTION TO AN ELECTRICAL DEVICE	AS NOTED		SOUND SYSTEM SPEAKER OUTLET	CEILING
	DIRECT CONNECTION TO A DATA DEVICE	AS NOTED		P/A SPEAKER C/W SWITCH	900mm TO 1100mm AS PER OBC 3.8.1.5
	QUAD-PLEX RECEPTACLE	457mm AFF		P/A HORN	2286mm AFF
	SWITCHED RECEPTACLE	AS NOTED		PROGRAM BELL	2286mm AFF
	50A RANGE OUTLET	104mm AFF		SOUND SYSTEM VOLUME CONTROL	900mm TO 1100mm AS PER OBC 3.8.1.5
	30A DRYER OUTLET	104mm AFF		NURSE CALL PATIENT STATION	900mm TO 1100mm AS PER OBC 3.8.1.5
	HALF-SWITCHED DUPLEX RECEPTACLE	457mm AFF		NURSE CALL LAVATORY STATION	900mm TO 1100mm AS PER OBC 3.8.1.5
	DUPLEX RECEPTACLE	CEILING		NURSE CALL STAFF STATION CONSOLE	-
	JUNCTION BOX	AS NOTED		NURSE CALL TUB/SHOWER STATION	900mm TO 1100mm AS PER OBC 3.8.1.5
	CLOCK	2286mm AFF		NURSE CALL DOME LIGHT	AS NOTED
	MOTOR DISCONNECT SWITCH	1524mm AFF	ABBREVIATIONS		
	COMBINATION MANUAL STARTER	1524mm AFF	AFF	ABOVE FINISHED FLOOR	
	COMBINATION MAGNETIC STARTER	1524mm AFF	AFG	ABOVE FINISHED GRADE	
	MAGNETIC STARTER	1524mm AFF	HOA	HAND OFF AUTO	
	MANUAL MOTOR STARTER OR CONTACTOR	1524mm AFF	PL	PILOT LIGHT	
	ELECTRICAL MOTOR OR MOTORIZED EQUIPMENT	-	HD	HAND DRYER	
	ELECTRICAL EQUIPMENT OR DEVICE AS NOTED	-	WG	WIRE GUARD	
	VFD	-	C	DENOTES MOUNTED ABOVE COUNTER	
	CIRCUITING	-	m	DENOTES MOUNTED IN MILLWORK	
	CONDUIT	-	WM	WALL MOUNTED	
LEGEND NOTES:			WP	WEATHERPROOF	
1.	THIS IS A STANDARD LEGEND. ALL SYMBOLS MAY NOT NECESSARILY BE USED ON DRAWINGS.				
2.	STANDARD MOUNTING HEIGHTS SHOWN ON LEGEND SHALL BE USED, UNLESS NOTED OTHERWISE. ALL TRADES TO COORDINATE THESE HEIGHTS PRIOR TO INSTALLATION				
3.	FOR HEIGHTS THAT ARE NOT DICTATED THROUGH A CODE OR STANDARD, COORDINATE WITH ARCHITECTURAL ELEVATIONS. WHERE A RANGE IS INDICATED, COORDINATE WITH THE ARCHITECTURAL DRAWINGS AND MAINTAIN THE SAME HEIGHT THROUGHOUT THE PROJECT.				
EM	DENOTES CONNECTED TO EMERGENCY SUPPLY				
TL	TWIST LOCK				
RA	REVERSE ACTING				
FH	MANUAL PULL STATION MOUNTED IN FIRE HOSE CABINET				
MD	MOTORIZED DAMPER				
E	EXISTING TO REMAIN				
R	EXISTING TO BE REMOVED				
E/R	EXISTING TO BE RELOCATED				
RP	REPLACE EXISTING HEAD END DEVICE WITH NEW				
CLG	CEILING MOUNTED				

NO.	DATE	REVISION
2	2021.30	ISSUED FOR TENDER
1	2021.07	ISSUED FOR OWNERS REVIEW

DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO 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.
- THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, AND SPECIFICATIONS.
- THE DESIGN LOADS SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
- 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.
- ALL DIMENSIONS GIVEN ARE IN METRIC.

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EXP Project # LON-230031-LS-A0
 • BUILDINGS • EARTH & ENVIRONMENT • ENERGY • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY



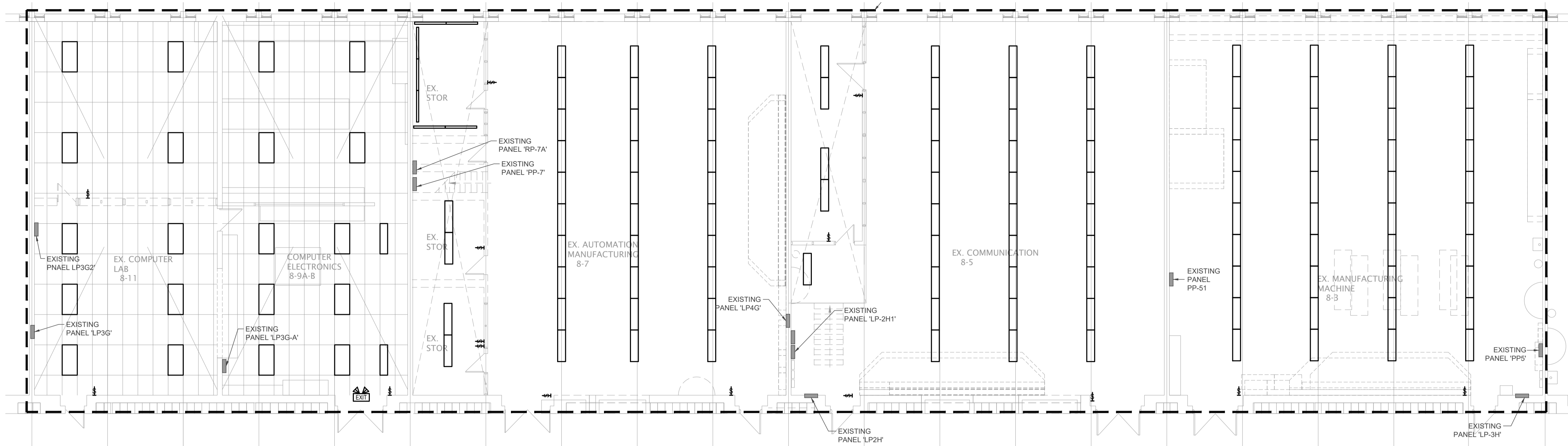
LON-24003082-A0
 ISSUED FOR TENDER



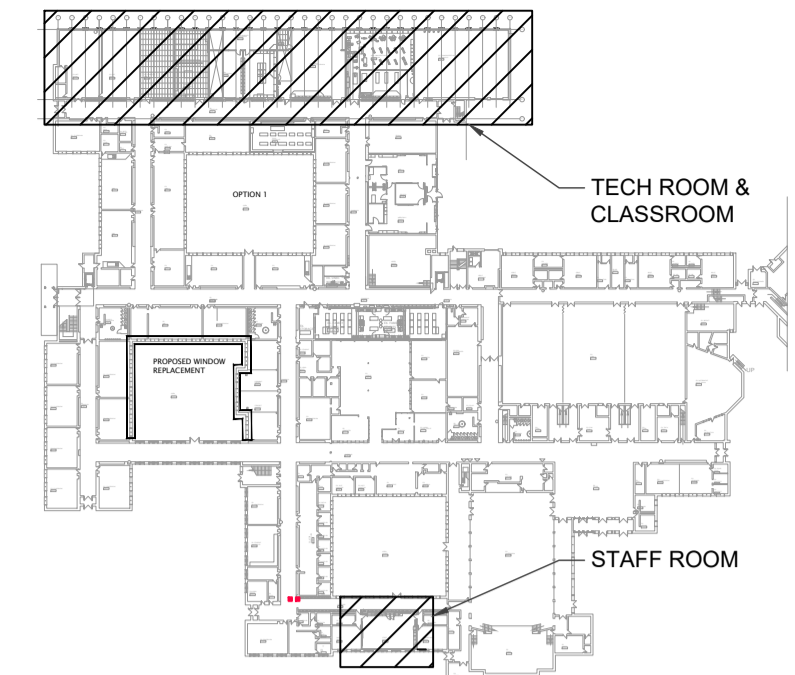
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION
 255 Fisher-Hallman Rd,
 Kitchener, Ontario
 N2M 4X8

DRAWING TITLE:
ELECTRICAL - TITLE SHEET

PROJECT NO: A23018	SCALE:
DRAWN: MP	DRAWING NO.:
CHECKED: AM	E000
DATE: JAN. 30, 2025	



PARTIAL FLOOR PLAN - LIGHTING DEMOLITION
SCALE - 1:100

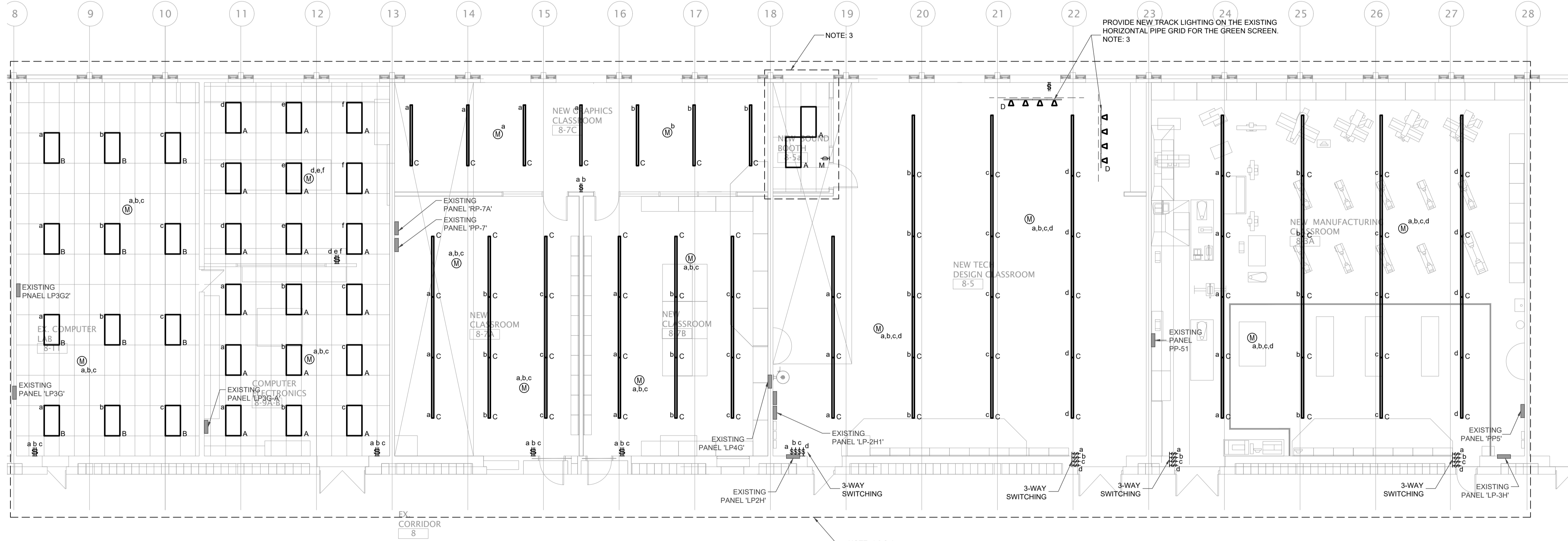


KEY PLAN
SCALE - NTS

NO.	DATE	REVISION
2	20.01.30	ISSUED FOR TENDER
1	20.01.07	ISSUED FOR OWNER'S REVIEW

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- 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.

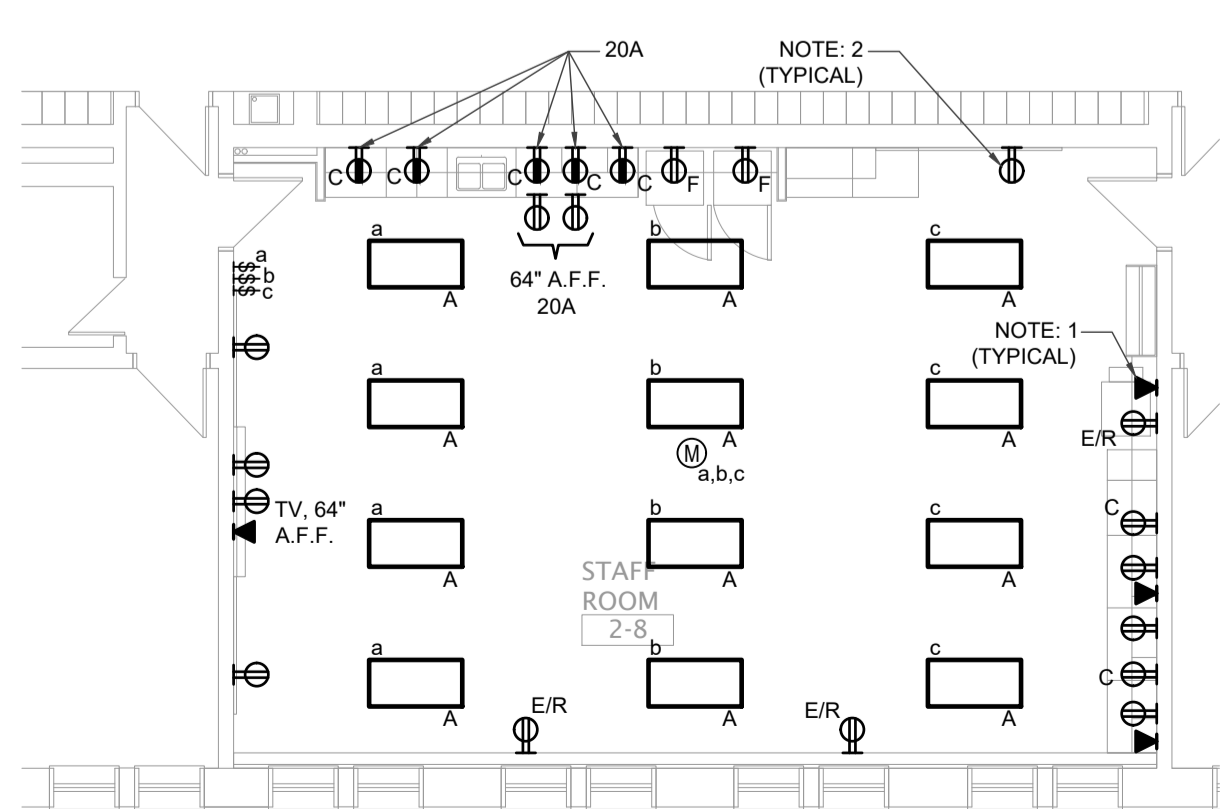


PARTIAL FLOOR PLAN - NEW LIGHTING
SCALE - 1:100

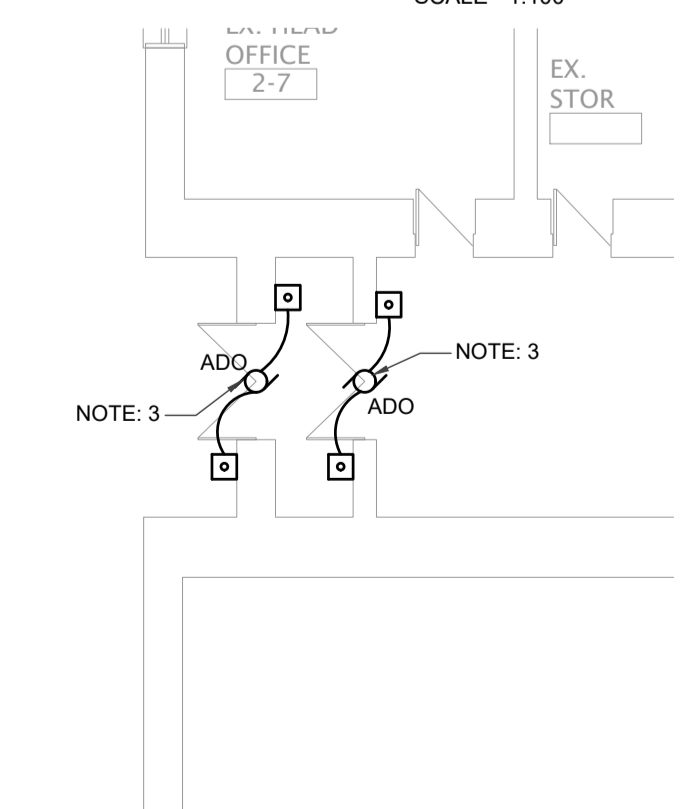
- DEMOLITION NOTES:**
- D1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES AS SHOWN AND REMOVE FROM SITE. COORDINATE LIGHTING FIXTURE DISPOSAL WITH THE SCHOOL BOARD.
 - D2. TEMPORARILY DISCONNECT AND MAINTAIN THE EXISTING LIGHTING BRANCH CIRCUIT WIRING FOR REUSE IN EACH AREA.
 - D3. DISCONNECT AND REMOVE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

- GENERAL NOTES:**
1. PROVIDE NEW LED LIGHT FIXTURES IN LOCATIONS SHOWN ON THIS DRAWING. REFER TO LIGHT FIXTURE SCHEDULE FOR DETAILS.
 2. 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 DETAILS.
 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.



STAFF ROOM - ELECTRICAL LAYOUT
SCALE - 1:100



EXIT #6 - 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.
- POWER & SYSTEMS DRAWING NOTES:**
1. PROVIDE PATHWAY, OUTLET BOX AND ALL REQUIRED ACCESSORIES FOR THE NEW DATA OUTLETS. PROVIDE A 3/4\"/>
 2. 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 RATING.
 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\"/>	RECESSED	40W	LITHONIA #CPX 2 x 4 SERIES SIGNIFY #2SBP SERIES CURRENT LIGHTING #CBT24 SERIES COOPER #CGTX SERIES OR APPROVED EQUAL
B	2'-0\"/>	RECESSED	44W	LITHONIA #CPX 2 x 4 SERIES SIGNIFY #2SBP SERIES CURRENT LIGHTING #CBT24 SERIES COOPER #CGTX SERIES OR APPROVED EQUAL
C	2\"/>	SUSPENDED AT 12\"/>	60W	LITHONIA #TZ1LD SERIES OR APPROVED EQUAL
D	4'-0\"/>	WALL MOUNTED	43W	JUNO #T286L SERIES OR APPROVED EQUAL

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LON-24003082-A0
ISSUED FOR TENDER

WATERLOO REGION DISTRICT SCHOOL BOARD
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION
255 Fisher-Hallman Rd,
Kitchener, Ontario
N2M 4X8

DRAWING TITLE:
PARTIAL FLOOR PLAN - DEMOLITION & NEW LIGHTING

PROJECT NO:
A23018

SCALE:
DRAWING NO:
MP

CHECKED:
AM

DATE:
JAN. 30, 2025

E100

DEMOLITION NOTES

D1. DISCONNECT AND REMOVE THE EXISTING POWER, SYSTEM DEVICES AND EQUIPMENT UNLESS INDICATED OTHERWISE. CONFIRM THE EXTENT OF ELECTRICAL DEVICE DEMOLITION WITH THE ARCHITECT AND OWNER PRIOR TO ANY WORK. REMOVE ALL CONDUCTOR AND ACCESSIBLE CONDUIT ALL THE WAY BACK TO THE SOURCE. DISCONNECT CIRCUIT BREAKERS/SWITCHES FOR REMOVED EQUIPMENT AND MARK AS "SPARE".

- GENERAL NOTES:**
1. FIRE ALARM DEVICES TO BE INSTALLED PER CANULC-S524, "INSTALLATION OF FIRE ALARM SYSTEMS".
 2. PROVIDE FIRE ALARM VERIFICATION FOR ALL NEW OR EXISTING MODIFIED FIRE ALARM DEVICES. VERIFICATION OF FIRE ALARM DEVICES IS TO BE PERFORMED PER CANULC-S537, "VERIFICATION OF FIRE ALARM SYSTEMS".
 3. CONTROLLED RECEPTACLES WITHIN THE CLASSROOMS SHALL BE CONTROLLED THROUGH LIGHTING OCCUPANCY SENSOR. CONTROLLED RECEPTACLES SHALL BE PERMANENTLY MARKED RECEPTACLES FOR AUTOMATIC OUTLET CONTROL, LABELED "CONTROLLED" RECEPTACLES SHALL BE DECORA STYLE, GREEN IN COLOUR WITH BOTH FACES CONTROLLED; HUBBELL #DR15C2GN OR APPROVED EQUAL.
 4. RECEPTACLES RATED 15A OR 20A AND LOCATED LOWER THAN 6'-6" FROM THE FINISHED FLOOR IN ALL

- CLASSROOMS, WASHROOMS, CORRIDORS, STORAGE AND OFFICE AREAS SHALL BE TAMPER-RESISTANT AS PER OESC 26-706.
5. 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.

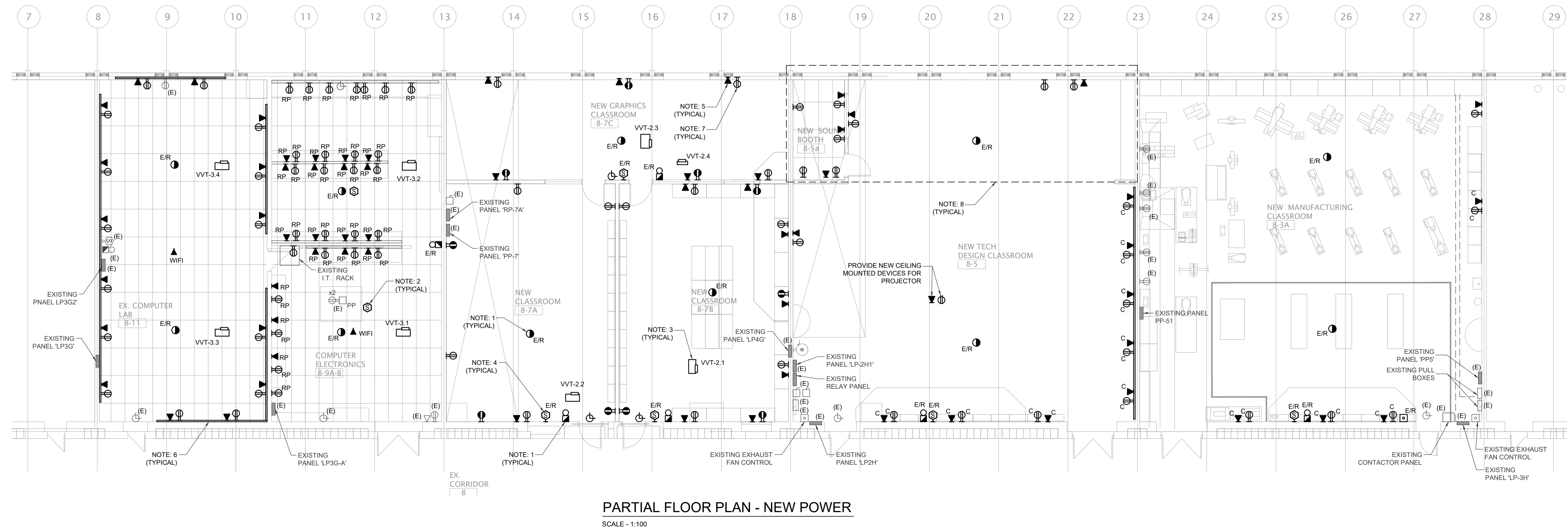
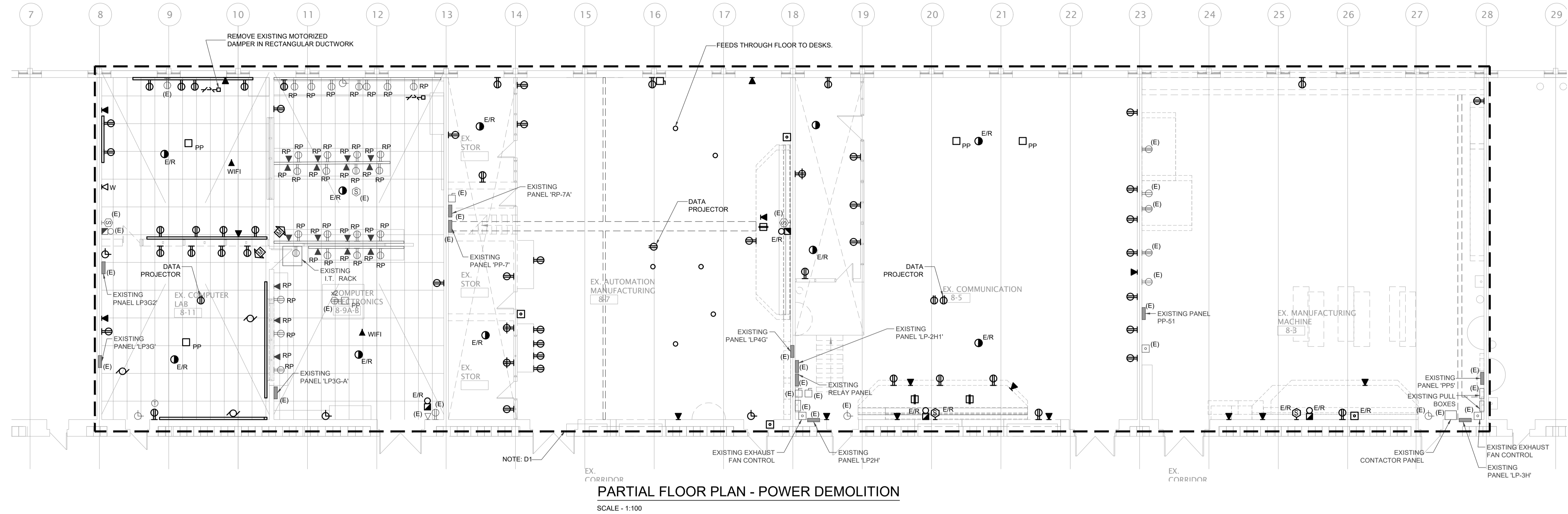
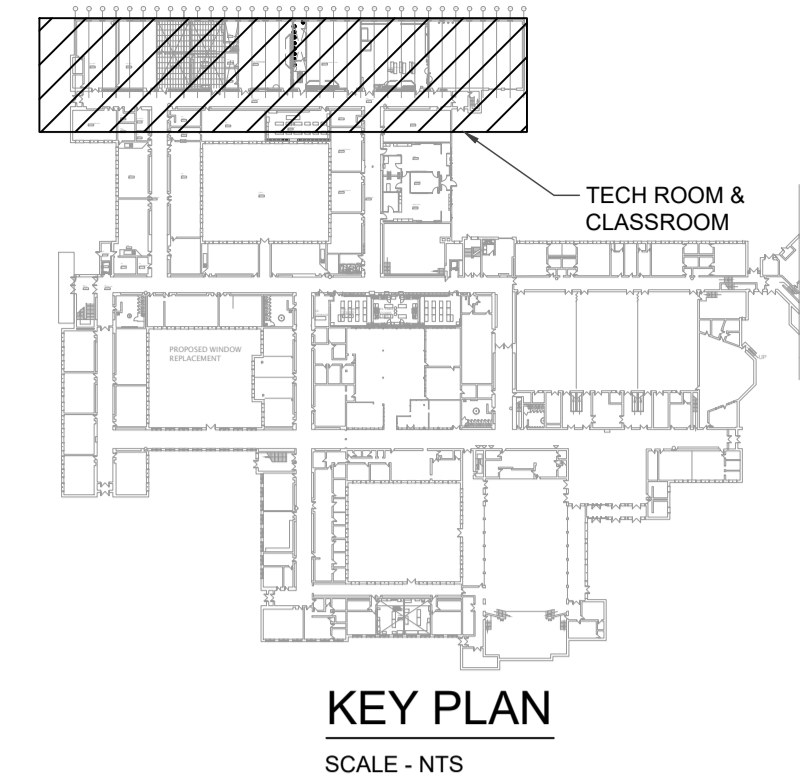
DRAWING NOTES:

1. PROVIDE NEW FIRE ALARM ZONES, CIRCUITS AND ALL REQUIRED PROVISIONS FOR THE NEW OR MODIFIED FIRE ALARM DEVICES FROM THE EXISTING FIRE ALARM CONTROL PANEL INDICATED ON THE KEY PLAN. COORDINATE EXACT REQUIREMENTS WITH THE SUPPLIER.
2. PROVIDE NEW PA SPEAKERS, WIRING AND ALL REQUIRED PROVISIONS TO THE NEW DEVICES FROM

- THE EXISTING PUBLIC ADDRESS SYSTEM CONTROL PANEL. ANY WORK RELATED TO THE PA SYSTEM SHALL BE UNDER CASH ALLOWANCE. REFER TO DIVISION 1 SPECIFICATIONS FOR MORE DETAILS.
3. PROVIDE 120V ELECTRICAL CONNECTIONS, RACEWAY, JUNCTION BOXES AND ALL REQUIRED ACCESSORIES FOR THE CONTROLS WIRING TO THE MECHANICAL EQUIPMENT. WIRING TO BE PROVIDED BY CONTROLS CONTRACTOR. COORDINATE EXACT REQUIREMENTS WITH THE CONTROLS AND MECHANICAL TRADE CONTRACTORS.
 4. RELOCATE THE EXISTING PA SPEAKERS AS SHOWN ON THE DRAWING. MODIFY AND EXTEND THE EXISTING WIRING AND ALL REQUIRED PROVISIONS TO THE RELOCATED DEVICES. ANY WORK RELATED TO THE PA SYSTEM SHALL BE UNDER CASH ALLOWANCE. REFER TO DIVISION 1 SPECIFICATIONS FOR MORE DETAILS.
 5. 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.
6. PROVIDE A WALL MOUNTED, 2-CHANNEL, NON-METALLIC RACEWAY SYSTEM FOR THE NEW POWER AND DATA PROVISIONS. PROVIDE NEW RECEPTACLES AND DATA OUTLETS AS SHOWN, IN THE NEW WALL MOUNTED RACEWAY. RACEWAY SHALL BE WIREMOLD 5500 SERIES OR APPROVED EQUAL. COORDINATE COLOUR AND FINISH WITH THE ARCHITECT AND OWNER.
 7. PROVIDE POWER TO THE NEW RECEPTACLES FROM THE EXISTING LOCAL RECEPTACLES CIRCUITS IN THE EXISTING PANELS INDICATED IN EACH ROOM. 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 RATING.
8. NEW ELECTRICAL AND SYSTEMS PROVISIONS 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.



NO.	DATE	REVISION
1	26.01.07	ISSUED FOR OWNER'S REVIEW
2	26.01.30	ISSUED FOR TENDER

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 6. ALL DIMENSIONS GIVEN ARE IN METRIC.

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EXP Project # 1206-23003-163-A0
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Licensed Professional Engineer
 A. Mukherjee
 100503043
 JAN 30, 2025
 PROVINCE OF ONTARIO

LON-24003082-A0
 ISSUED FOR TENDER

WATERLOO REGION
 DISTRICT SCHOOL BOARD

FOREST HEIGHTS C.I.
 TECH SHOP REVITALIZATION
 255 Fisher-Hallman Rd,
 Kitchener, Ontario
 N2M 4X8

DRAWING TITLE:
**PARTIAL FLOOR PLAN -
 DEMOLITION & NEW
 POWER**

PROJECT NO:
A23018

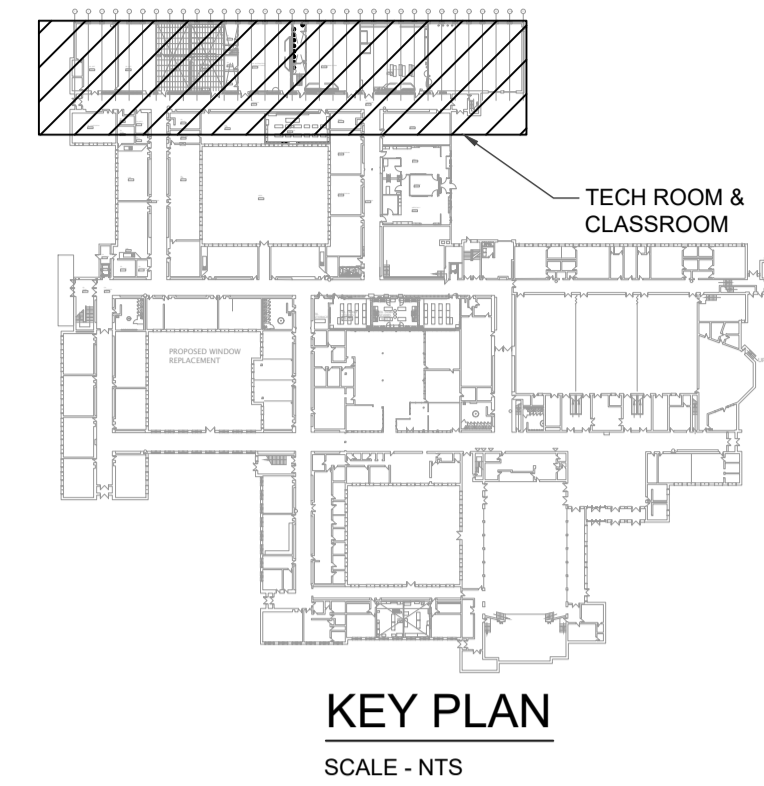
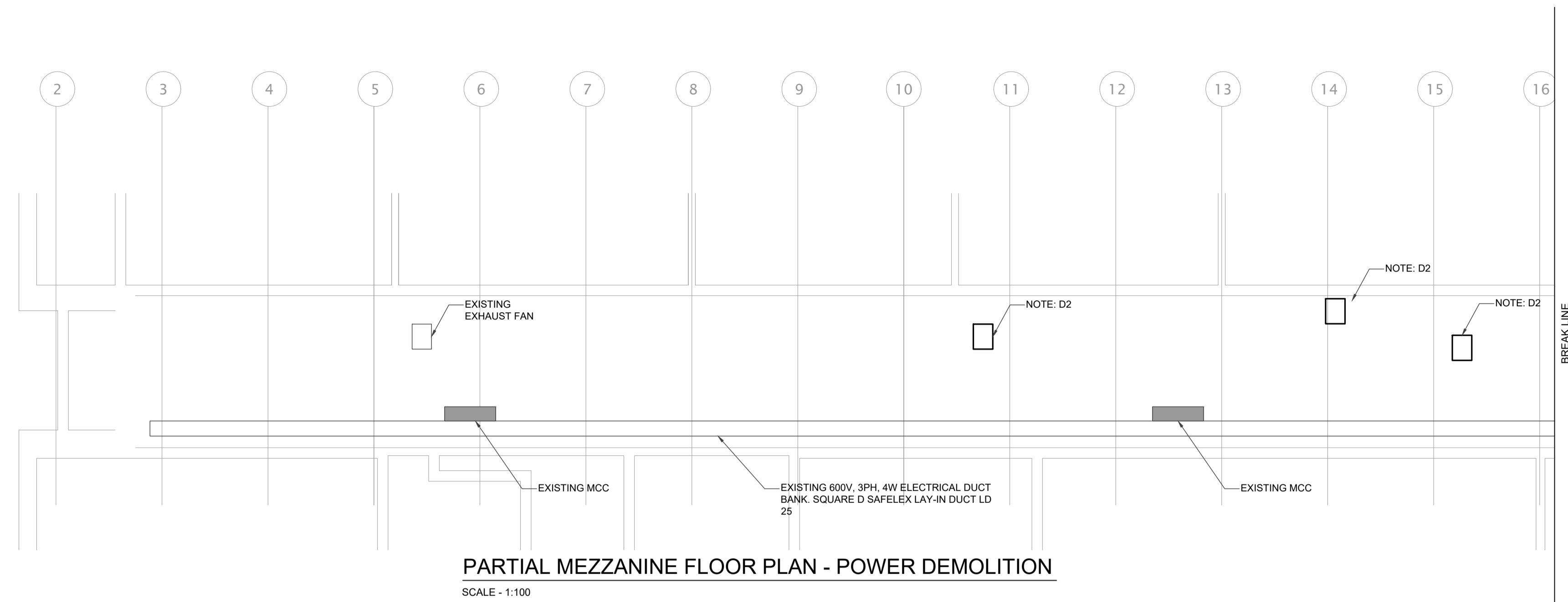
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DRAWN:
MP

CHECKED:
AM

DATE:
JAN. 30, 2025

DRAWING NO:
E200



GENERAL NOTES:

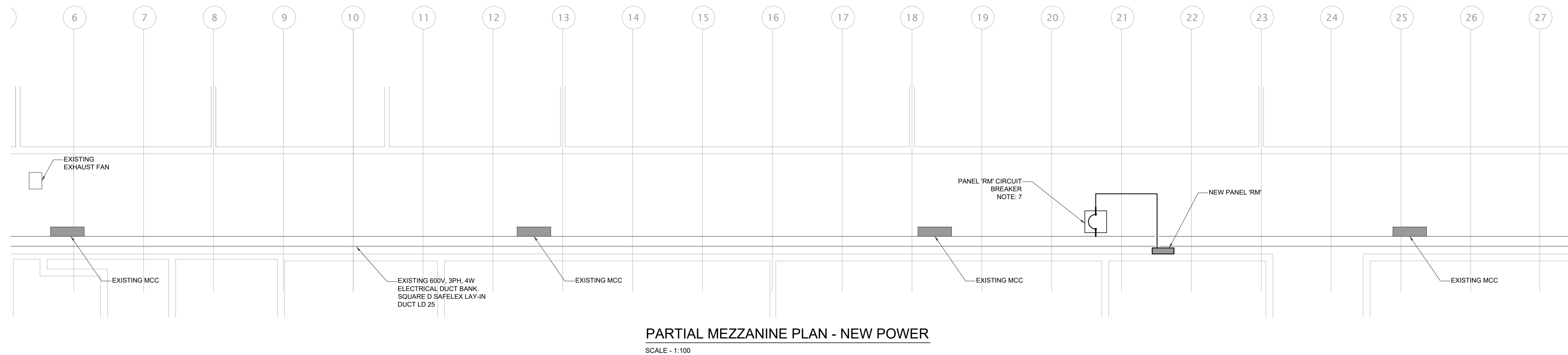
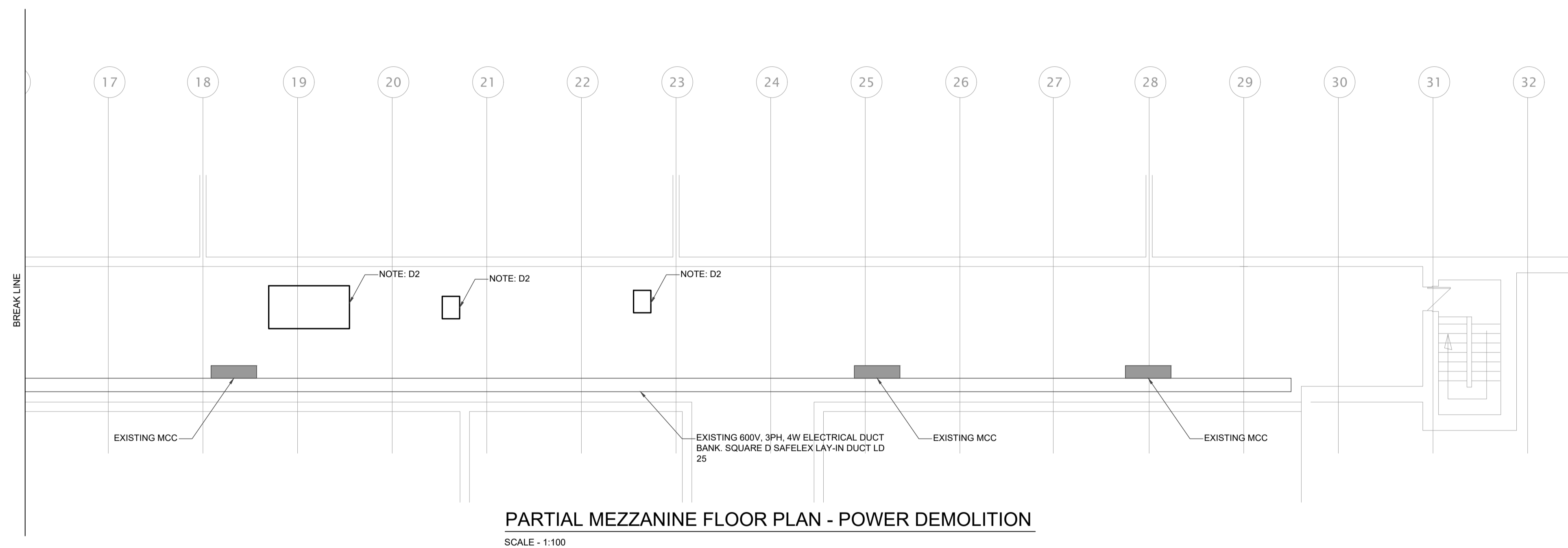
- LOW VOLTAGE WIRING FOR HVAC EQUIPMENT CONTROLS SHALL BE PROVIDED BY THE CONTROLS CONTRACTOR. DIVISION 26 IS RESPONSIBLE FOR PROVIDING PATHWAYS AND 120V CONNECTIONS WHERE NEEDED. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH THE CONTROLS AND MECHANICAL CONTRACTOR.

DRAWING NOTES:

- RECEPTACLES RATED 15A OR 20A AND LOCATED LOWER THAN 6'-0" FROM THE FINISHED FLOOR IN ALL CLASSROOMS, WASHROOMS, CORRIDORS, STORAGE AND OFFICE AREAS SHALL BE TAMPER-RESISTANT AS PER OESC 26-706.
- PROVIDE 120V, 15A RATED, 1PH CIRCUITS TO THE NEW RECEPTACLES FROM THE EXISTING PANELS INDICATED IN EACH ROOM. A MAXIMUM OF FOUR RECEPTACLES SHALL BE ALLOWED FOR EACH NEW CIRCUIT. PROVIDE NEW BREAKERS AS REQUIRED. NEW BREAKER KAIC RATING TO MATCH THE EXISTING PANEL RATING.
- 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.
- PROVIDE NEW CUSTOM BUS PLUG-IN KIT C/W AN ENCLOSED CIRCUIT BREAKER AND CONNECT TO THE EXISTING LAY-IN DUCT BANK IN THE MEZZANINE. REFER TO THE SINGLE LINE DIAGRAM ON DRAWING E301 FOR MORE DETAILS. NEW BUS PLUG-IN KIT AND BREAKER SHALL BE A COMPATIBLE WITH THE EXISTING SAFELEX LAY-IN DUCT LD 25.

DEMOLITION NOTES:

- DISCONNECT AND REMOVE THE EXISTING ELECTRICAL DEVICES AND EQUIPMENT INDICATED ON THE DRAWINGS. CONFIRM THE EXTENT OF ELECTRICAL DEVICE DEMOLITION WITH THE ARCHITECT AND OWNER PRIOR TO ANY WORK. REMOVE ALL CONDUIT AND ACCESSIBLE CONDUIT AND DISCONNECT CIRCUIT BREAKERS/SWITCHES. REMOVE FROM ORIGINAL DIRECTORIES AND NOTE AS "SPARE".
- DISCONNECT AND REMOVE THE EXISTING ELECTRICAL CONNECTIONS AND EQUIPMENT FOR THE EXISTING MECHANICAL UNITS THAT ARE TO BE REMOVED. CONFIRM EXTENT OF DEMOLITION WITH THE GC AND OWNER PRIOR TO ANY WORK. REMOVE ALL CONDUIT AND ACCESSIBLE CONDUIT AND DISCONNECT CIRCUIT BREAKERS/SWITCHES. REMOVE FROM ORIGINAL DIRECTORIES AND NOTE AS "SPARE".



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EXP Project # 1204-230031-1-3-A-0

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LICENSED PROFESSIONAL ENGINEER
 A. MUKHERJEE
 100503043
 JAN 30, 2025
 PROVINCE OF ONTARIO

LON-24003082-A-0
 ISSUED FOR TENDER

WATERLOO REGION DISTRICT SCHOOL BOARD

FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION

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

DRAWING TITLE:
PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER

PROJECT NO:
A23018

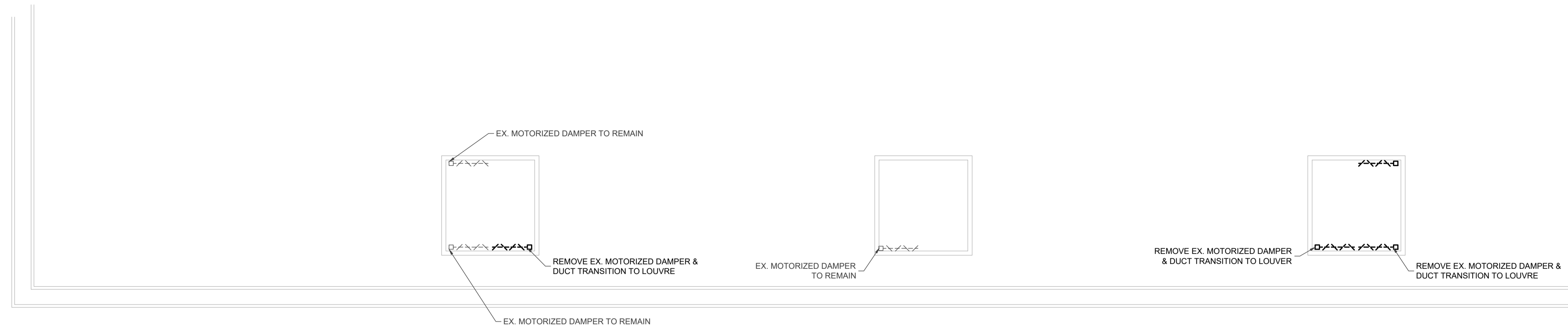
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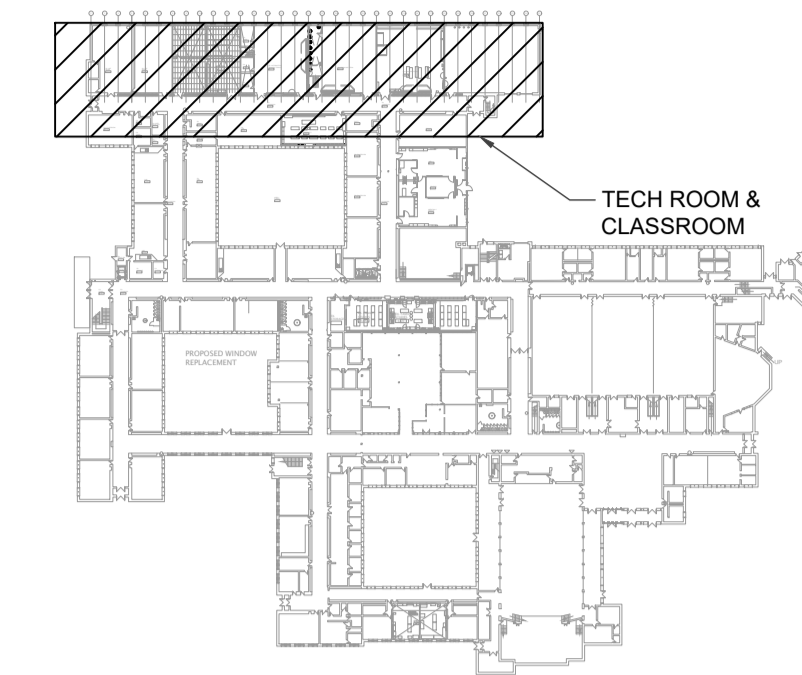
DATE:
 JAN. 30, 2025

DRAWING NO:
E201



PARTIAL ROOF PLAN - POWER DEMOLITION

SCALE - 1:100



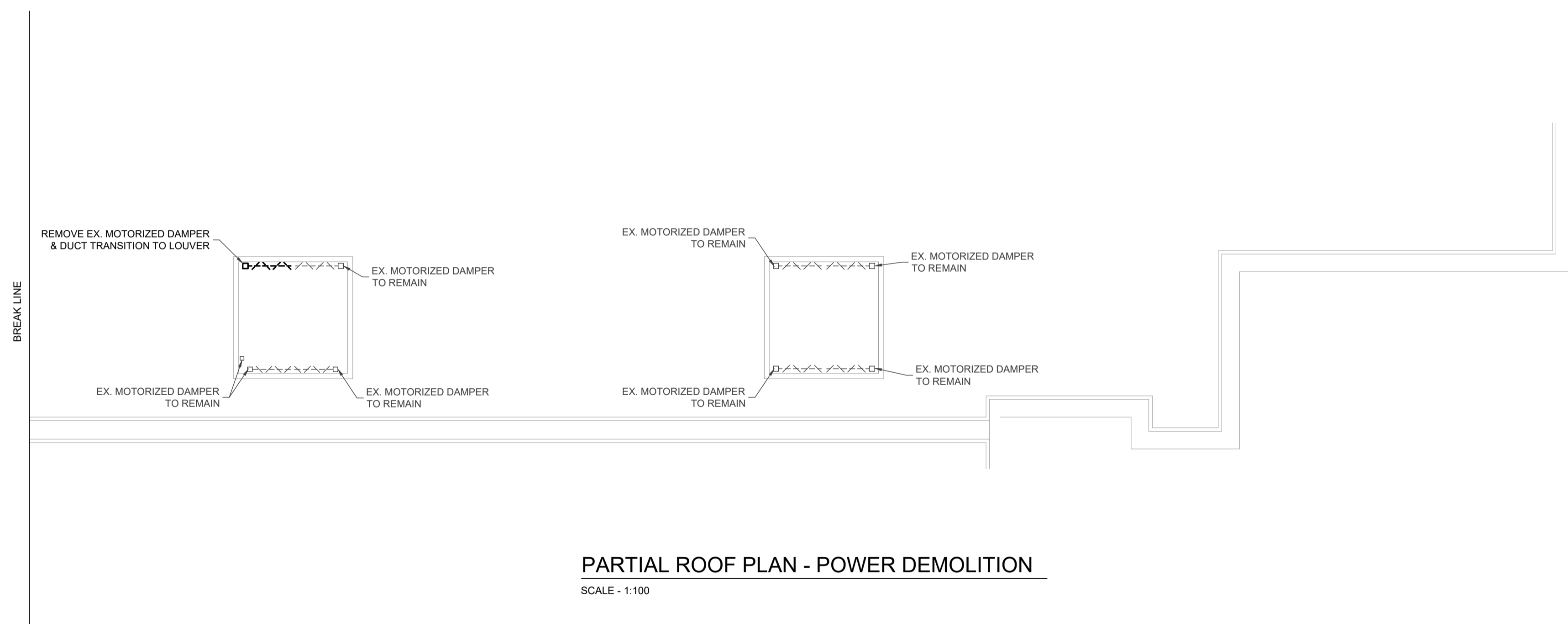
KEY PLAN
SCALE - NTS

GENERAL NOTES:

- CONTROLLED RECEPTACLES WITHIN THE CLASSROOMS SHALL BE CONTROLLED THROUGH OCCUPANCY SENSOR AS DETAILED ON DRAWING E100A. CONTROLLED RECEPTACLES SHALL BE PERMANENTLY MARKED RECEPTACLES FOR AUTOMATIC OUTLET CONTROL, LABELED "CONTROLLED". RECEPTACLES SHALL BE DECORA STYLE, GREEN IN COLOUR WITH BOTH FACES CONTROLLED; HUBBELL #DR15C2GN OR APPROVED EQUAL.
- LOW VOLTAGE WIRING FOR HVAC EQUIPMENT CONTROLS SHALL BE PROVIDED BY THE CONTROLS CONTRACTOR. DIVISION 26 IS RESPONSIBLE FOR PROVIDING PATHWAYS AND 120V CONNECTIONS WHERE NEEDED. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH THE CONTROLS AND MECHANICAL CONTRACTOR.

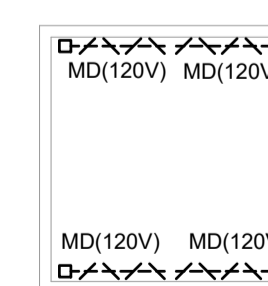
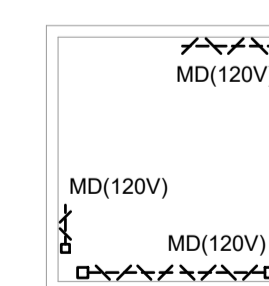
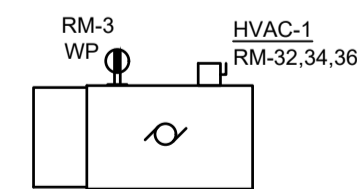
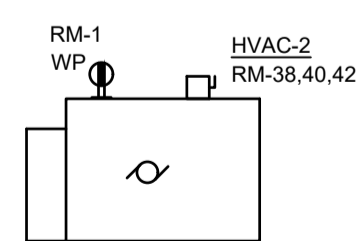
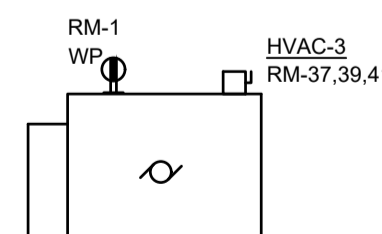
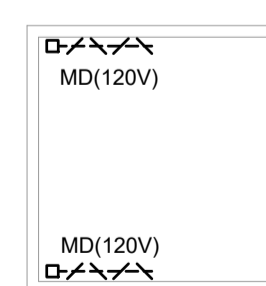
DEMOLITION NOTES

- DISCONNECT AND REMOVE THE EXISTING ELECTRICAL DEVICES AND EQUIPMENT INDICATED ON THE DRAWINGS. CONFIRM THE EXTENT OF ELECTRICAL DEVICE DEMOLITION WITH THE ARCHITECT AND OWNER PRIOR TO ANY WORK. REMOVE ALL CONDUIT AND ACCESSIBLE CONDUIT AND DISCONNECT CIRCUIT BREAKERS/SWITCHES. REMOVE FROM ORIGINAL DIRECTORIES AND NOTE AS "SPARE".



PARTIAL ROOF PLAN - POWER DEMOLITION

SCALE - 1:100



PARTIAL ROOF PLAN - NEW POWER

SCALE - 1:100

NO.	DATE	REVISION
2	20.01.30	ISSUED FOR TENDER
1	20.01.07	ISSUED FOR OWNER'S REVIEW

DO NOT SCALE DRAWINGS. ALL DIMENSIONS TO 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.
 - THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, AND SPECIFICATIONS.
 - THE DESIGN LOADS SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
 - 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.
 - ALL DIMENSIONS GIVEN ARE IN METRIC.

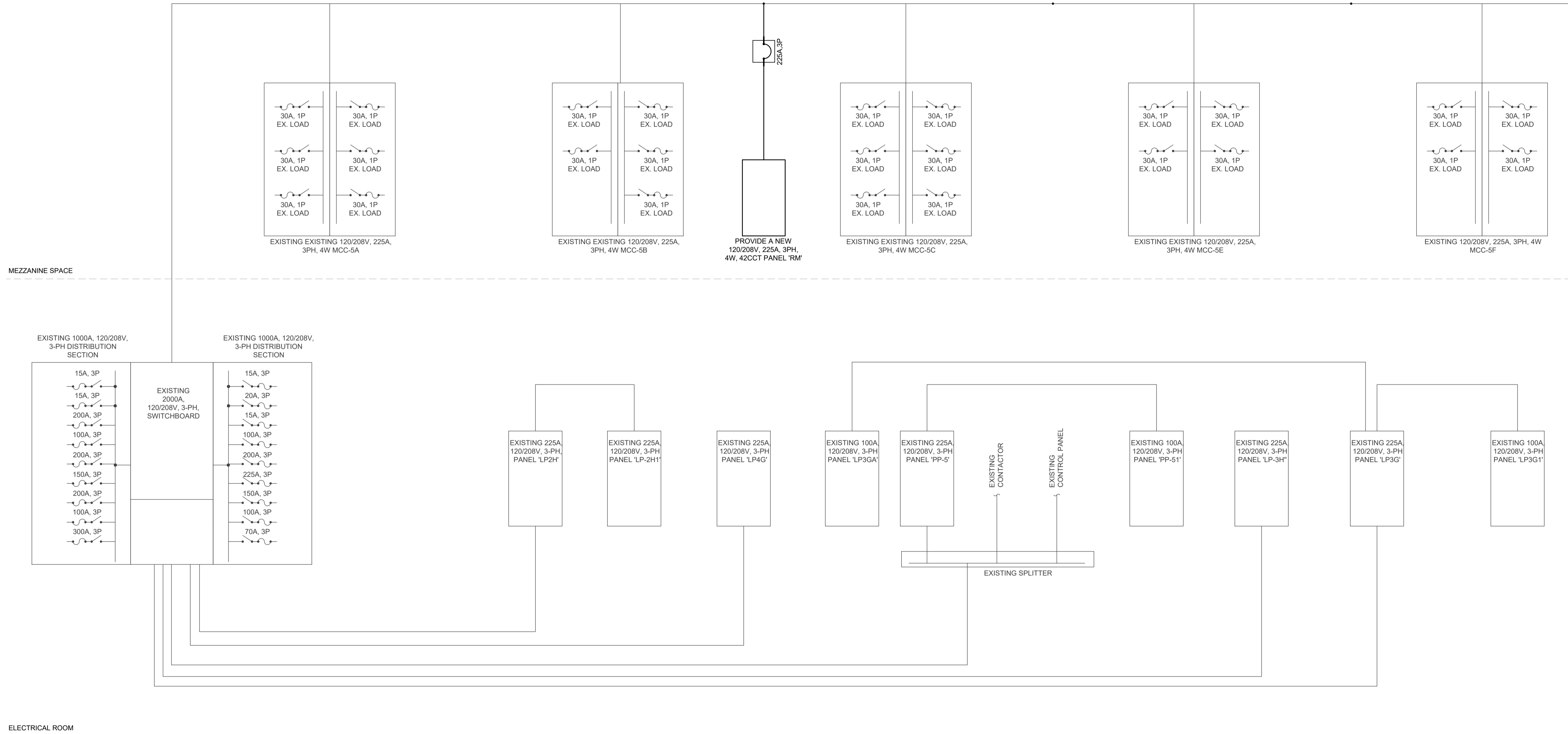
EXP Services Inc.
 EXP Project # 1204-230031-13-A0
 • BUILDINGS • EARTH & ENVIRONMENT • ENERGY • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY

LICENSED PROFESSIONAL ENGINEER
A. MUKHERJEE
 100503043
 JAN 30, 2025
 PROVINCE OF ONTARIO
 LON-24003082-A0
 ISSUED FOR TENDER

WATERLOO REGION DISTRICT SCHOOL BOARD
FOREST HEIGHTS C.I. TECH SHOP REVITALIZATION
 255 Fisher-Hallman Rd,
 Kitchener, Ontario
 N2M 4X8

DRAWING TITLE: PARTIAL FLOOR PLAN - DEMOLITION & NEW POWER	
PROJECT NO: A23018	SCALE:
DRAWN: YG	DRAWING NO:
CHECKED: AM	E202
DATE: JAN. 30, 2025	

EXISTING 600V, 3PH, 4W ELECTRICAL DUCT BANK IN THE ATTIC SPACE ABOVE. SQUARE D SAFELEX LAY-IN DUCT LD 25



ELECTRICAL RISER DIAGRAM

SCALE - 1:100

NOTES:

1. NEW ELECTRICAL CIRCUIT BREAKER, PANEL AND EQUIPMENT SHALL BE RATED FOR A MINIMUM KAIC RATING TO MATCH THE EXISTING UPSTREAM EQUIPMENT.

NO.	DATE	REVISION
2	2021.30	ISSUED FOR TENDER
1	2021.07	ISSUED FOR OWNER'S REVIEW

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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 6. ALL DIMENSIONS GIVEN ARE IN METRIC.

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DRAWING TITLE:
ELECTRICAL RISER DIAGRAM

PROJECT NO: A23018	SCALE:
DRAWN: YG	DRAWING NO:
CHECKED: AM	E300
DATE: JAN. 30, 2025	

