RECEIVED
BUILDING SERVICES
PERMIT NO: 22-~~111973 REV 01~~
DATE: 08/16/2024
OAKVILLE TOWN OF OAKVILLE

REMOVE EXISTING DOOR AND FRAME AS SHOWN DOTTED
INFILL EXISTING DOOR OPENING WITH CONCRETE BLOCKS
MAKE GOOD. PAINT.
PROVIDE 1200W X 2400H WHITEBOARD 150 AFF

SAWCUT AND REMOVE EXISTING TERRAZZO FLOORING TO NEAREST JOINT
PROVIDE TERRAZZO TO EXTEND AS SHOWN
PROVIDE TERRAZZO BASE TO MATCH EXISTING RETURNED TO FRAME

200 3342 200
2092 1200
1 SK11
EXIST. 22
MATCH EXIST.
L.V.T.

SHORE AND BRACE WALL AS REQUIRED
SAWCUT OPENING 200 WIDER AT EACH JAMB AND ONE BLOCK COURSE ABOVE HEAD
– PROVIDE LINTEL REFER TO DRAWING SK11 DETAIL 1
PROVIDE BULLNOSE BLOCK

1hr FRR Fire Separation

3/4hr FPR door & frame c/w closer

REMOVE EXISTING WALL MOUNTED PA SPEAKER
PROVIDE CELING MOUNTED PA SPEAKER
REMOVE AND REINSTALL EXISTING ELECTRICAL EQUIPMENT AS REQUIRED
–SEE ELECTRICAL
REPAIR DAMAGE TO EXISTING SUBSTRATE CAUSED BY REMOVAL OF MECHANICAL FASTENERS
MAKE GOOD

REMOVE EXISTING MILLWORK AS SHOWN DOTTED
REPAIR DAMAGE TO EXISTING SUBSTRATE CAUSED BY REMOVAL OF MECHANICAL FASTENERS
MAKE GOOD

2 SK11

REMOVE EXISTING DOOR AND FRAME AS SHOWN DOTTED
PROVIDE DOOR AND FRAME AND SIDELIGHTS
MAKE GOOD. PAINT.
PROVIDE ALP LOCKDOWN SHADES 950W X 1120H AT DOOR GLAZING
PROVIDE ROLLER SHADE AT DOOR SCREEN SIDELITES

REMOVE AND REINSTALL EXISTING WHITEBOARD

REMOVE EXISTING MILLWORK AS SHOWN DOTTED
REPAIR DAMAGE TO EXISTING SUBSTRATE CAUSED BY REMOVAL OF MECHANICAL FASTENERS
MAKE GOOD

REMOVE EXISTING CABINETS. COUNTERTOP AND CUPBOARD AS SHOWN DOTTED
REPAIR DAMAGE TO EXISTING SUBSTRATE CAUSED BY REMOVAL OF MECHANICAL FASTENERS
MAKE GOOD

LIBRARY
22

Max. 60 persons occupant load to be posted

REMOVE AND REINSTALL EXISTING TACKBOARD

REMOVE EXISTING WOOD LAMINATED FLOORING, CARPET AND RUBBER BASE
CLEAN RESIDUAL ADHESIVE
PROVIDE LVT FLOORING AND 150 RUBBER BASE
REMOVE AND REPLACE EXISTING WINDOW SHADES
PREPARE EXISTING SUBSTRATE, PRIME AND PAINT EXISTING WALLS AT ENTIRE ROOM
REPAIR DAMAGE TO EXISTING SUBSTRATE CAUSED BY REMOVAL OF MECHANICAL FASTENERS
MAKE GOOD

REMOVE EXISTING MILLWORK AS SHOWN DOTTED
REPAIR DAMAGE TO EXISTING SUBSTRATE CAUSED BY REMOVAL OF MECHANICAL FASTENERS
MAKE GOOD

REMOVE EXISTING MILLWORK AS SHOWN DOTTED
REPAIR DAMAGE TO EXISTING SUBSTRATE CAUSED BY REMOVAL OF MECHANICAL FASTENERS
MAKE GOOD

REMOVE EXISTING RADIATORS AS SHOWN DOTTED
–SEE MECHANICAL

ELEMENTS OF STRUCTURES, NON-STRUCTURAL COMPONENTS AND THEIR EQUIPMENT INCLUDING THEIR CONNECTIONS TO THE STRUCTURE SHALL BE DESIGNED IN CONFORMANCE WITH OBC DIV.B, PART 4.

PORTABLE EXTINGUISHERS SHALL BE PROVIDED AND INSTALLED IN CONFORMANCE WITH THE ONTARIO FIRE CODE

IN BUILDING OF COMBUSTIBLE CONSTRUCTION, EXCEPT FOR EXIT CLOSURES, FLAME SPREAD RATING SHALL NOT EXCEED 150 ON WALLS AND CEILINGS

BUILDING SERVICES
OAKVILLE REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.
PERMIT NO: 22-111973R1
DATE: Sep.24, 2024
REVIEWED BY: N. Varias
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE

ONTARIO ASSOCIATION OF ARCHITECTS
MINGPENG LIU
LICENCE 9826

GLADYS SPEERS PUBLIC SCHOOL RENOVATIONS
2150 SAMWAY RD, OAKVILLE ONTARIO

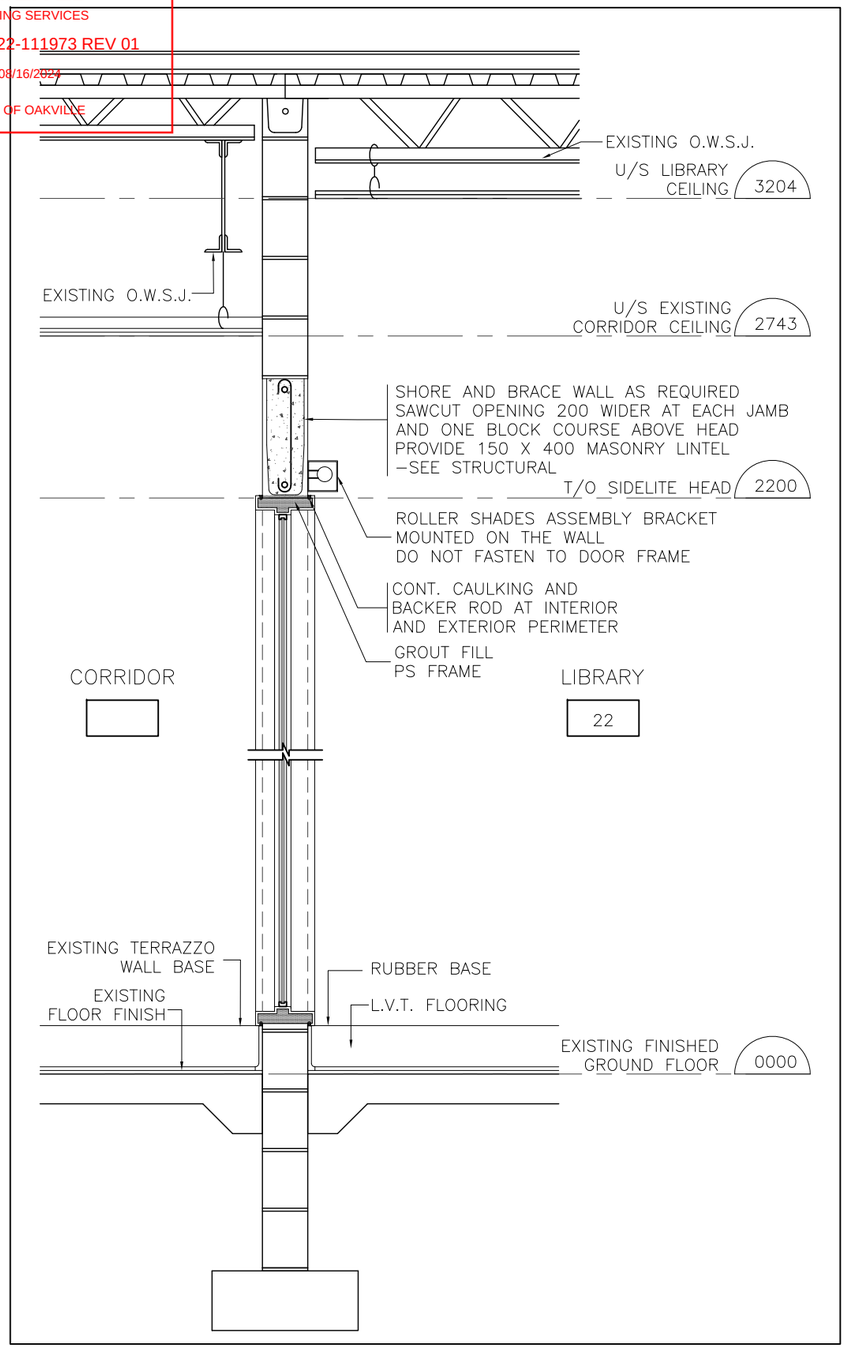
Liu Lim Architects inc.
Unit 100 – 706 Euclid Avenue
Toronto, Ontario, Canada M6G 2T9
Tel:(416)591–6575 Fax:(416)591–1010

Title: ENLARGED LIBRARY 22 PLAN

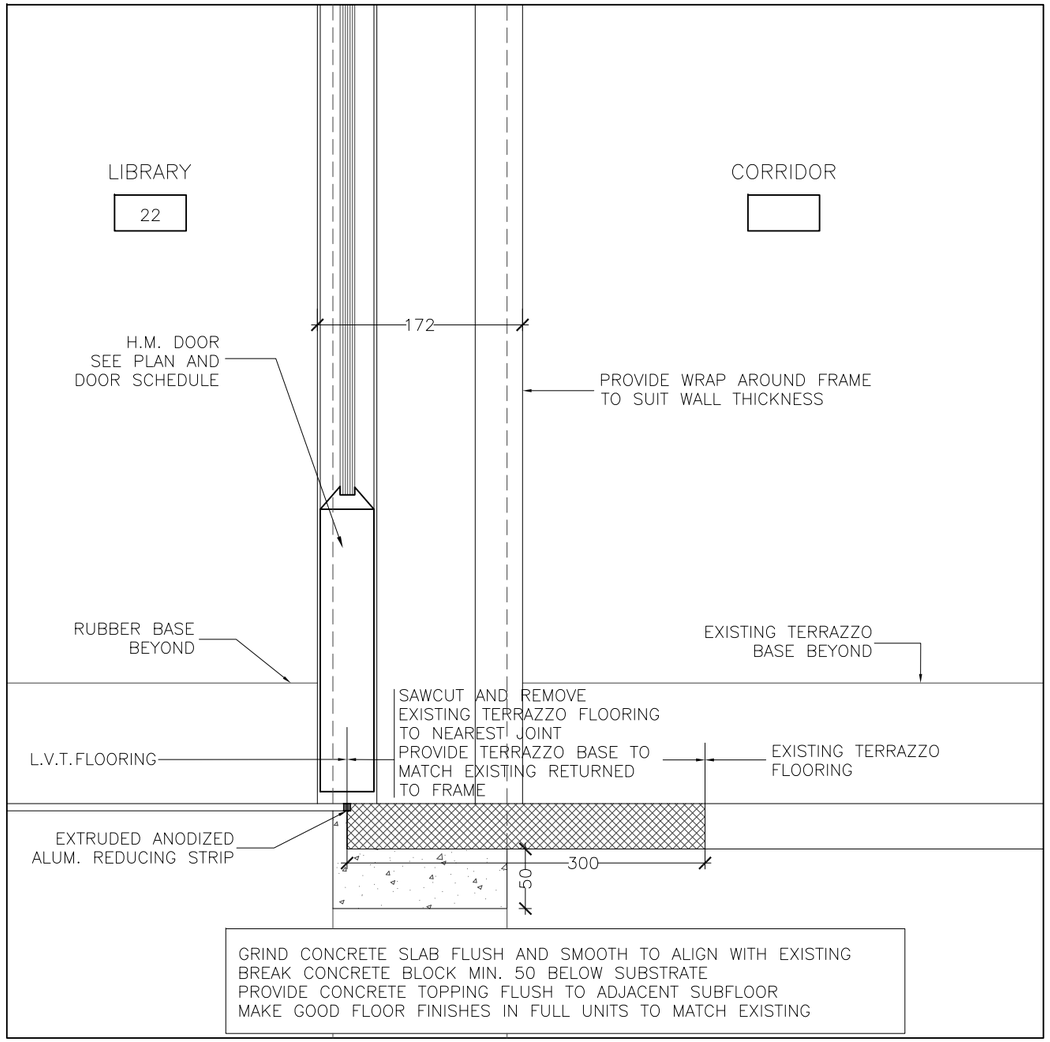
Date:	Issued:
APR. 19, 2024	
Drawn by: L.Z.	Scale: 1:50
Job No: 21153	Drawing: SK10

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2025
OAKVILLE TOWN OF OAKVILLE

BUILDING SERVICES
OAKVILLE
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.
PERMIT NO: 22-111973R1
DATE: Sep.24, 2024
REVIEWED BY: N. Varias
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE



1 SK10 DOOR 22 SCREEN EXISTING MASONRY WALL SECTION 1:20



2 SK10 DOOR THRESHOLD SECTION 1:5

ONTARIO ASSOCIATION OF ARCHITECTS
MINGPENG LIU
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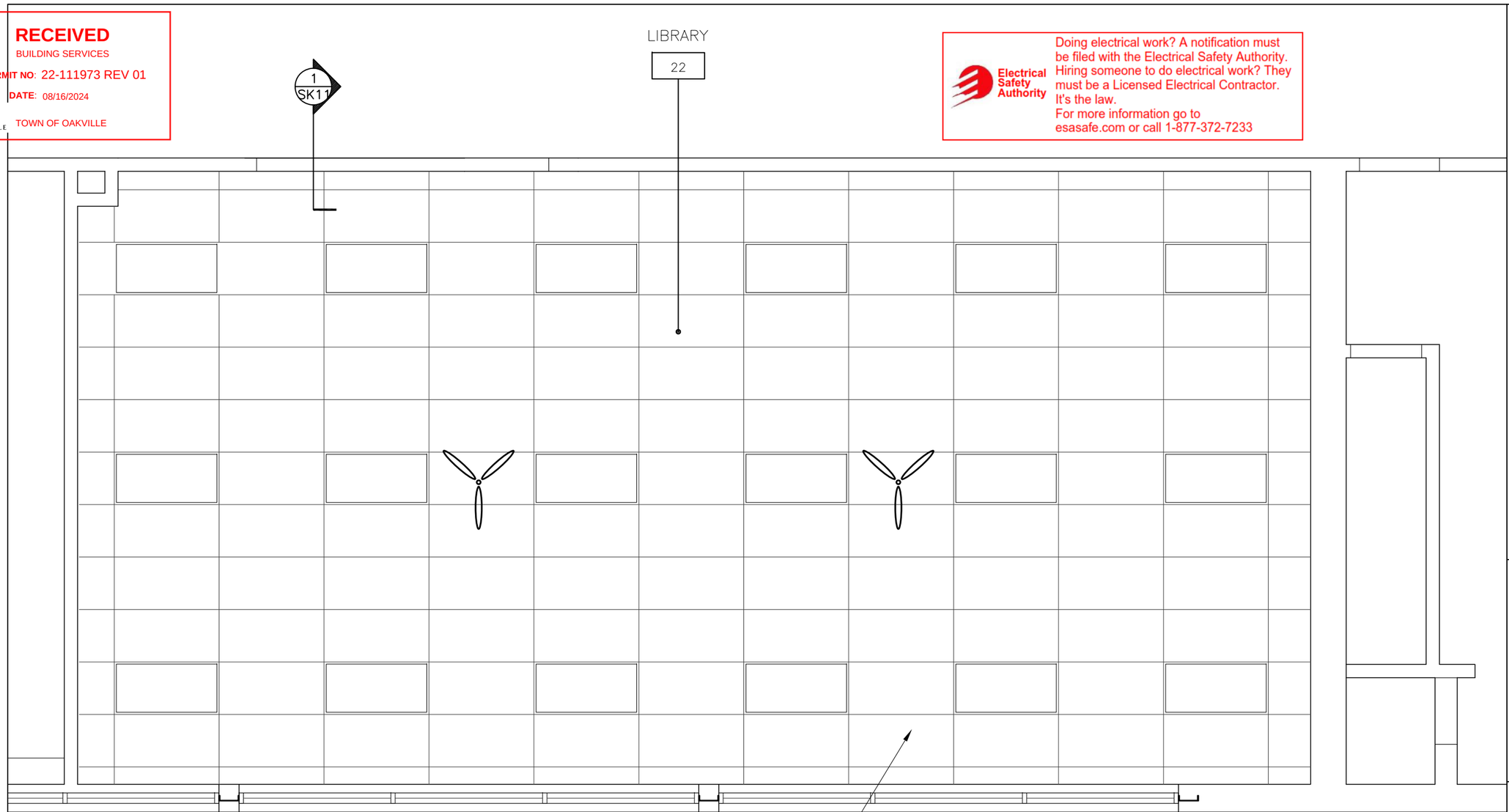
GLADYS SPEERS PUBLIC SCHOOL RENOVATIONS
2150 SAMWAY RD,
OAKVILLE ONTARIO

Liu Lim Architects inc.
Unit 100 – 706 Euclid Avenue
Toronto, Ontario, Canada M6G 2T9
Tel:(416)591–6575 Fax:(416)591–1010

Title: SECTION AND DETAIL

Date:	Issued:
APR. 19, 2024	
Drawn by: L.Z.	Scale: 1:5
Job No: 21153	Drawing: SK11



REMOVE EXISTING ACOUSTIC TILE PANELS
PROVIDE ACOUSTIC TILE PANELS
EXISTING T-BARS TO REMAIN
CLEAN AND MAKE GOOD
EXISTING RECESSED LIGHT FIXTURES TO REMAIN
CLEAN LENSES BOTH SIDES

LEGEND

EXISTING LIGHT FIXTURE TO REMAIN
CLEAN LENSES BOTH SIDES

REMOVE AND REINSTALL EXISTING FAN
CLEAN FAN LEAVES BOTH SIDES

NOTE:
DO NOT FASTEN TO OR SUSPEND FROM METAL DECK
PROVIDE SECONDARY FRAMING SYSTEM
TO STRUCTURAL MEMBERS AS REQUIRED
SEE MECHANICAL AND ELECTRICAL

3.8.1.5.(1) Controls

Controls for the operation of building services or safety devices, including electrical switches, thermostats and intercom switches, intended to be operated by the occupant and located in a barrier-free path of travel shall,
(a) be mounted,
  (i) 1 200 mm above the finished floor, in the case of a thermostat or a manual pull station, and
  (ii) not less than 900 mm and not more than 1 100 mm above the finished floor, in the case of all other controls, and
(b) be located so as to be adjacent to and centred on either the length or the width of a clear floor space of 810 mm by 1 370 mm, and
(c) be operable,
  (i) using one hand, without requiring tight grasping, pinching with fingers or twisting of the wrist, and with a force of not more than 22.2 N, in the case of a manual pull station, and
  (ii) using a closed fist and with a force of not more than 22.2 N, in the case of all other controls.

Emergency Lighting

Emergency lights shall be provided along paths of egress as per 3.2.7. or 9.9.12.
Emergency lighting shall always be maintained to an average level of illumination of at least 10 lx at floor level.

ONTARIO ASSOCIATION OF ARCHITECTS
MINGPENG LIU
LICENCE
9826

GLADYS SPEERS PUBLIC
SCHOOL RENOVATIONS
2150 SAMWAY RD,
OAKVILLE ONTARIO

Liu + Lim Architects inc.
Unit 100 – 706 Euclid Avenue
Toronto, Ontario, Canada M6G 2T9
Tel:(416)591-6575 Fax:(416)591-1010

Title:
ENLARGED LIBRARY REFLECTED CEILING PLAN

Date:	Issued:
APR. 19, 2024	
Drawn by: L.Z.	Scale: 1:50
Job No: 21153	Drawing: SK12

GENERAL NOTES

1. THE NEW STEEL LINTEL HAS BEEN DESIGNED AND REVIEWED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE 2012. AMENDED BY RESOLUTION 88/19, EFFECTIVE JANUARY 1, 2020.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS WITH THE SITE CONDITIONS AND THE LATEST ISSUE OF ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. REPORT ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
3. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.
4. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION OF OPENINGS, EQUIPMENT BASES, SUMP PITS, AND TRENCHES NOT INDICATED ON STRUCTURAL DRAWINGS.
5. SEE DRAWINGS FOR DESIGN LOADS. DO NOT EXCEED DURING CONSTRUCTION.
6. ALL REFERENCES TO CODES & STANDARDS ARE TO THE LATEST ISSUE.

SITE INSPECTION REPORTS & TESTING

1. THE ONTARIO BUILDING CODE 2012 SPECIFIES THAT GENERAL FIELD REVIEWS OF THE BUILDING BE CARRIED OUT DURING THE COURSE OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE START OF CONSTRUCTION TO FACILITATE SUCH REVIEWS BY THE STRUCTURAL ENGINEER.

STRUCTURAL METAL

1. CONFORM TO CSA STANDARD CAN/CSA S16 LIMIT STATES DESIGN OF STEEL STRUCTURES.
2. CONFORM TO CSA STANDARD W55.3, RESISTANCE WELDING QUALIFICATIONS CODE FOR FABRICATORS OF STRUCTURAL MEMBERS USED IN BUILDINGS.
3. CONFORM TO CSA STANDARD W59, WELDED STEEL CONSTRUCTION (METAL ARC WELDING).
4. WELDING ELECTRODES – CSA STANDARD W48, FILLER METALS AND ALLIED MATERIALS FOR METAL ARC WELDING.
5. STRUCTURAL STEEL – CSA STANDARD G40.20/G40.21, GENERAL REQUIREMENTS FOR ROLLED OR WELDED STRUCTURAL QUALITY STEEL/STRUCTURAL QUALITY STEELS. GRADE 350W FOR GENERAL PURPOSE STRUCTURAL STEEL SHAPES, 300W FOR ANGLES, CHANNELS, RODS AND PLATES. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CSA STANDARD G40.20 GRADE 350W, HOT FORM WELDED OR HOLLOW STRUCTURAL SECTION, CLASS H.
6. HIGH STRENGTH BOLTS, NUTS AND WASHERS A.S.T.M. STANDARD A325, STANDARD SPECIFICATION FOR STRUCTURAL BOLTS, STEEL, HEAT TREATED 120/105 ksi MINIMUM TENSILE STRENGTH OR A325M, STANDARD SPECIFICATION FOR HIGH STRENGTH BOLTS FOR STRUCTURAL STEEL JOINTS (METRIC).
7. ANCHOR RODS – A.S.T.M. F1554 GRADE 36
8. PRIMER:
   A) STRUCTURAL STEEL NOT EXPOSED: CAN/CGSB–1.40 OR CISC/CPMA 1–73a OVER NOMINAL CLEANING. SSPC SPECIFICATION SP2 AND SP3.

DESIGN LOADS

BUILDING IMPORTANCE: HIGH

ROOF

100mm THK. MASONRY WALL: XX kPa

UNIT CONCRETE MASONRY

1. CONFORM TO CSA STANDARD S304.1 – DESIGN OF MASONRY STRUCTURES.
2. CONFORM TO CSA STANDARD A165 – CSA STANDARD ON CONCRETE MASONRY UNITS.
3. CONFORM TO CSA STANDARD A371 – MASONRY CONSTRUCTION FOR BUILDINGS.
4. CONFORM TO CSA STANDARD A370 – CONNECTORS FOR MASONRY.
5. MASONRY UNITS TO BE SUPPLIED TO THE FOLLOWING MINIMUM SPECIFICATION U.N.O.:
   HOLLOW BLOCK: H/15/A/M
   SOLID BLOCK: S/15/A/M
6. MORTAR AND GROUT TO CONFORM TO CSA STANDARD A179 – MORTAR AND GROUT FOR UNIT MASONRY.
7. MORTAR CUBES PREPARED IN THE FIELD TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 8.5 MPa.
8. GROUT CYLINDERS PREPARED IN THE FIELD TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 10.0 MPa.
9. TYPE S MORTAR U.N.O.
10. FINE GROUT U.N.O.
11. GROUT SLUMP TO BE 200mm TO 250mm U.N.O.

MASONRY LINTEL SCHEDULE

MARK	DEPTH (D)	REINFORCEMENT
ML1	400	1–20M TOP & BOTTOM 10M STIRRUP LINKS AT 200mm O/C.

OAKVILLE BUILDING DIVISION
REVIEWED
PERMIT NO: 22-111973 Rev 01
Structural Plans Review
DATE: 9/9/2024
REVIEWED BY: hbuys

NOTES:

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
OAKVILLE TOWN OF OAKVILLE

RIMKUS
ENTER YOUR OFFICE ADDRESS
ENTER YOUR CITY, STATE ZIP
EXPERT@RIMKUS.COM
(800) 580-3228 | (555) YOUR-PHONE

SEAL:

LICENSED PROFESSIONAL ENGINEER
2024.03.15
J. F. DUPERLY
100187921
PROVINCE OF ONTARIO

NO.	ISSUED FOR:	DATE (Y-M-D):
1.	ISSUED FOR INFORMATION	23-06-22
2.	ISSUED FOR CLIENT REVIEW	23-12-28
3.	ISSUED FOR PERMIT	24-03-15
4.		
5.		
6.		
7.		

PROJECT:
GLADY SPEERS P.S. RECEPTION OFFICE RENOVATION
2150 SAMWAY ROAD
OAKVILLE, ON

CLIENT:
WK LIM. & MP LIU ARCHITECTS INC.

SHEET TITLE:
NOTES AND SCHEDULES

PROJECT NO:	100217771
DATE (Y-M-D):	2023-12-28
SCALE:	AS SHOWN
DESIGNED BY:	G.T.
DRAWN BY:	A.T.
CHECKED BY:	G.T.

DRAWING NO: **S01**
SHEET NO: 1 OF 4

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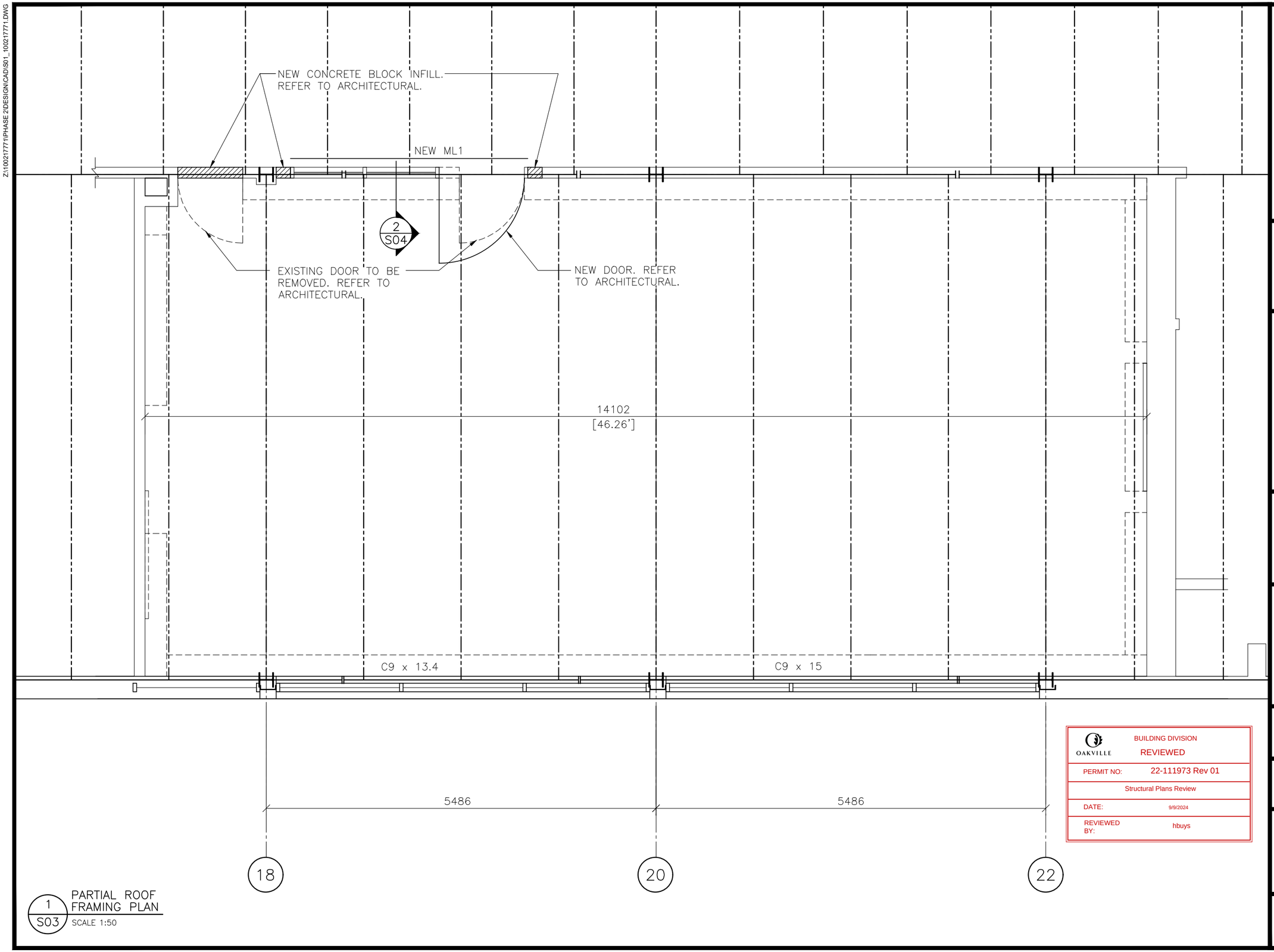

1 S03 PARTIAL ROOF FRAMING PLAN
SCALE 1:50

NOTES:

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PERMIT NO: 22-111973 REV 01
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PROJECT:
GLADY SPEERS P.S. RECEPTION OFFICE RENOVATION
2150 SAMWAY ROAD
OAKVILLE, ON

CLIENT:
WK LIM. & MP LIU ARCHITECTS INC.

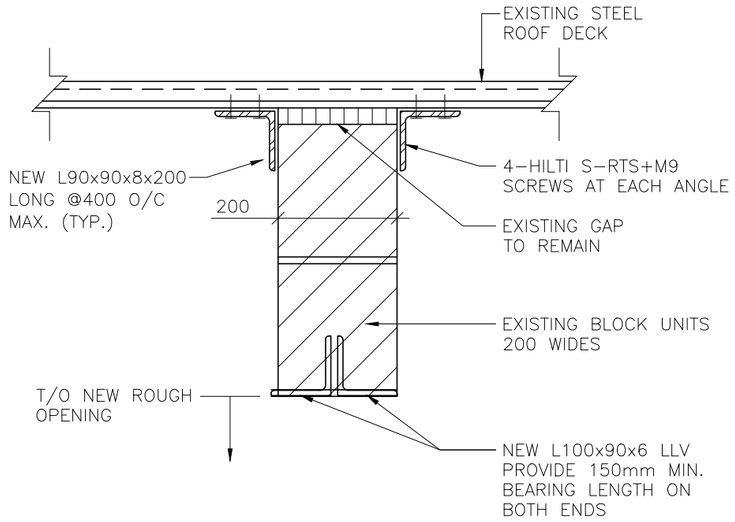
SHEET TITLE:
PARTIAL ROOF FRAMING PLAN

BUILDING DIVISION
OAKVILLE REVIEWED
PERMIT NO: 22-111973 Rev 01
Structural Plans Review
DATE: 9/9/2024
REVIEWED BY: hbuys

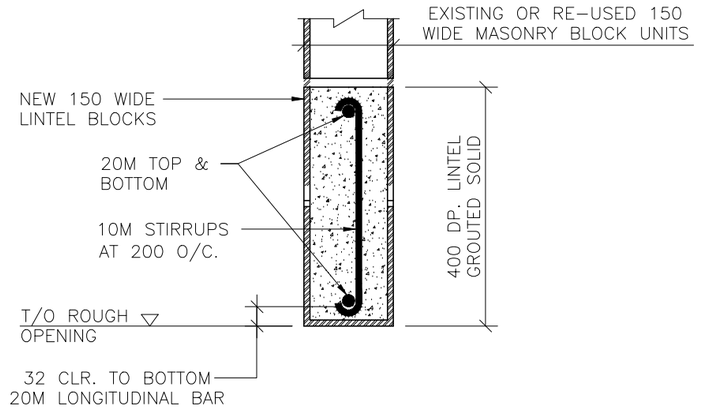
PROJECT NO:	100217771
DATE (Y-M-D):	2023-12-28
SCALE:	AS SHOWN
DESIGNED BY:	G.T.
DRAWN BY:	A.T.
CHECKED BY:	G.T.

DRAWING NO: **S03**

SHEET NO: 3 OF 4



1 / S04 SECTION AT NEW LINTEL
SCALE 1:10



2 / S04 MASONRY LINTEL SECTION
SCALE 1:10

BUILDING DIVISION
OAKVILLE
REVIEWED

PERMIT NO: 22-111973 Rev 01

Structural Plans Review

DATE: 9/9/2024

REVIEWED BY: hbuys

NOTES:

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OAKVILLE TOWN OF OAKVILLE

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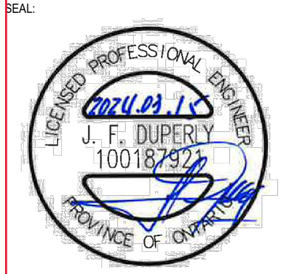
SEAL:



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PROJECT:
GLADY SPEERS P.S. RECEPTION
OFFICE RENOVATION
2150 SAMWAY ROAD
OAKVILLE, ON

CLIENT:
WK LIM. & MP LIU
ARCHITECTS INC.

SHEET TITLE:
SECTIONS

PROJECT NO:	100217771
DATE (Y-M-D):	2023-12-28
SCALE:	AS SHOWN
DESIGNED BY:	G.T.
DRAWN BY:	A.T.
CHECKED BY:	G.T.

DRAWING NO: **S04**

SHEET NO: 4 OF 4

Firm Name: W.K. Lim & M.P. Liu Architects inc.
Certificate of Practice Number: 6505
Unit 100 – 706 Euclid Avenue
Toronto, Ontario M6G 2T9
Tel: 416-591-6575
Fax: 416-591-1010

Name of Project:
Gladys Spears Public School
Location:
2150 Samway Road, Oakville, ON

Ontario's 2012 Building Code Data Matrix – Division B, Part 11 – Renovation of Existing Building				**OBC Reference**
11.1	Existing Building classification:	Describe Existing Use: _Elementary School_ Construction Index: (Unchanged) Hazard Index: (Unchanged) ■ Not Applicable (no change of major occupancy)		11.2.1 T 11.2.1.1A T 11.2.1.1B to N
11.2	Alteration to Existing Building is:	Basic Renovation ■ Extensive Renovation ☐		11.3.3.1 11.3.3.2
11.3	Reduction in Performance Level:	Structural: By Increase in occupant load: By change of major occupancy: Plumbing: Sewage-system:	■ No ☐ Yes ■ No ☐ Yes ■ No ☐ Yes ■ No ☐ Yes ■ No ☐ 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 ■ No ☐ Yes (explain) Increase in occupant load: ■ No ☐ Yes (explain)		11.4.3 11.4.3.2 11.4.3.3

		Change of major occupancy: ■ No ☐ Yes (explain) Plumbing: ■ No ☐ Yes (explain) Sewage System: ■ No ☐ Yes (explain)	11.4.3.4 11.4.3.5 11.4.3.6
11.5	Compliance Alternatives Proposed:	■ No ☐ Yes (give number(s)) _____	11.5.1

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NOTE (1):

SHORE AND BRACE WALL AS REQUIRED
SAWCUT OPENING 200 WIDER AT EACH JAMB
AND ONE BLOCK COURSE ABOVE HEAD – PROVIDE LINTEL
REFER TO DRAWING A4 DETAIL 3

GRIND SUBFLOOR SMOOTH AND FLUSH TO ADJACENT SUBFLOOR
CHIP FOUNDATION 50 BELOW SUBFLOOR
PROVIDE FLUSH CONCRETE TOPPING – FINISH TO MATCH EXISTING SUBSTRATE

REMOVE AS REQUIRED AND EXTEND FINISH FLOORING IN FULL UNITS TO MATCH EXISTING FOR FULL WIDTH OF OPENING
PROVIDE BULLNOSE CONCRETE BLOCK AT JAMBS TO MATCH WIDTH OF EXISTING MASONRY OR PROVIDE METAL FRAME OF THROAT DEPTH TO CAP BLOCK
SET FRAME ANCHORS INTO MASONRY COURSING

PRIME AND PAINT ENTIRE WALL PLANE OF MASONRY OPENING BOTH SIDES & MAKE GOOD

NOTE (2):

REMOVE EXISTING DOOR AND FRAME ASSEMBLY AND TRIM TO MASONRY OPENING
CLEAN MASONRY OPENINGS OF RESIDUAL SEALANT
FILL OPENING WITH MASONRY TO MATCH EXISTING ADJACENT WALL ASSEMBLY
MAKE GOOD
PAINT ENTIRE WALL PLANE ON INTERIOR WALL(S)

REMOVE EXISTING V.C.T. FLOORING AND WALL BASE
CLEAN & STRIP SUBSTRATE OF RESIDUAL SEALANT
PROVIDE L.V.T. FLOORING AND RUBBER BASE

REMOVE EXISTING MILLWORK AND KITCHEN EQUIPMENT AND APPLIANCES
CLEAN SUBSTRATES OF RESIDUAL ADHESIVE AND CAULKING
MAKE GOOD

GYM
21

SERT

W.
W.
Cus.
Boiler Rm.

21A
EXIST. L.V.T.
STORAGE
21A

FRIDGE N.I.C.
FRIDGE N.I.C.
STOVE N.I.C.
650
3865
2965
650
2164
2533
D/W N.I.C.

STAFF
20

PROVIDE 300W X150H 2 SIDED GYPSUM BOARD BULKHEAD FRONT FACE AND SOFFIT BELOW EXISTING ACOUSTIC TILE CEILING
12.7 GYP. BD ON 38 X 89 METAL FURRING @ 400 O.C. MAX

ACCESS AND MAKE GOOD EXISTING CEILINGS AND WALL ASSEMBLIES

EXISTING FIRE ALARM CONTROL PANELS

SHIFT EXISTING FRIDGE AND RELOCATE EXISTING RECEPTACLE AS REQUIRED

PROVIDE HM DOUBLE DOORS AND FRAME
20A
FRIDGE N.I.C.
2000
900
1630

Office

WATERMAIN
20A

16 IMPACT RESISTANT GYPSUM BOARD BOTH SIDES ON 89 METAL STUDS @ 400 O.C. MAX.
PAINT

1. CORE EXISTING WALL ASSEMBLIES AS REQUIRED –SEE MECHANICAL AND CIVL
   PACK JOINTS AND PROVIDE INTERIOR AND EXTERIOR CAULKING ON BACKER ROD
2. SAWCUT AND MAKE GOOD PLANTING BEDS, SOD AND EXISTING ASPHALT AS REQUIRED

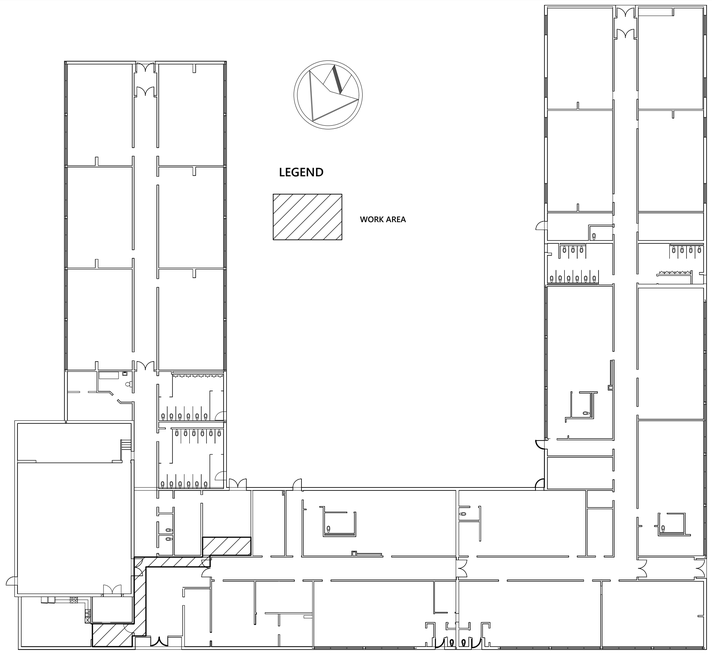
ONTARIO ASSOCIATION OF ARCHITECTS
MINGPENG LIU
LICENCE
9826

GLADYS SPEERS PUBLIC SCHOOL RENOVATIONS
2150 SAMWAY RD, OAKVILLE ONTARIO

Liu Lim Architects inc.
Unit 100 – 706 Euclid Avenue
Toronto, Ontario, Canada M6G 2T9
Tel:(416)591–6575 Fax:(416)591–1010

Title:
ENLARGED WATERMAIN 20A PLAN

Date:	Issued:
MAY 8, 2024	
Drawn by: L.Z.	Scale: 1:100
Job No: 21153	Drawing: SK13



SCHOOL KEY PLAN – GROUND FLOOR
SCALE: N.T.S.

1. DOMESTIC WATER PIPING–COPPER

PIPING: DOMESTIC COLD WATER PIPING, WITHIN BUILDING. COPPER TUBE, HARD DRAWN, TYPE L: TO ASTM B88M–85. ALL PIPING SHALL HAVE CERTIFICATION MARKINGS FOR COMPLIANCE WITH ASTM B88–83.
FITTINGS: BRASS OR BRONZE FLANGES AND FLANGED FITTINGS: TO ANSI B16.24–1979. BRASS OR BRONZE THREADED FITTINGS: TO ANSI B16.15–1978. CAST BRONZE TO ANSI B16.18–1984 OR WROUGHT COPPER AND BRONZE TO ANSI B16.22–1980.
GATE VALVES (USE ON ALL DCW PIPING INCLUDING BY–PASS): FLANGED: RISING STEM: TO MSS SP–70–1976, CLASS 125, 860 KPA, FF FLANGE, CAST–IRON BODY, OS&Y BRONZE TRIM. STANDARD OF ACCEPTANCE: JENKINS, CRANE, TOYO, KITZ.
BALL VALVES (USE FOR EXPANSION TANK ISOLATION AND ITS DRAIN VALVE):
SOLDERED: CLASS 125, 860KPA, BRONZE BODY, BRONZE BALL, WITH TEFLON SEAL. STANDARD OF ACCEPTANCE: TOYO, JENKINS, CRANE, KITZ.

2. BACK FLOW PREVENTER FIRE LINE

THE DOUBLE CHECK DETECTOR ASSEMBLY SHALL CONSIST OF TWO INDEPENDENT TRI–LINK CHECK MODULES WITHIN A SINGLE HOUSING, SLEEVE ACCESS PORT, FOUR TEST COCKS AND TWO DRIP TIGHT SHUTOFF VALVES. TRI–LINK CHECKS SHALL BE REMOVABLE AND SERVICEABLE, WITHOUT THE USE OF SPECIAL TOOLS. THE HOUSING SHALL BE CONSTRUCTED OF 304 SCHEDULE 40 STAINLESS STEEL PIPE WITH GROOVE END CONNECTIONS. TRI–LINK CHECKS SHALL HAVE REVERSIBLE ELASTOMER DISCS AND IN OPERATION SHALL PRODUCE DRIP TIGHT CLOSURE AGAINST REVERSE FLOW CAUSED BY BACKPRESSURE OR BACKSIPHONAGE. THE BYPASS ASSEMBLY SHALL CONSIST OF A METER, WHICH REGISTERS IN EITHER GALLON OR CUBIC MEASUREMENT, A DOUBLE CHECK BACKFLOW ASSEMBLY AND REQUIRED TEST COCKS. ASSEMBLY SHALL BE A WATTS SERIES 757DCDA OSY

3. DCW PIPING INSULATION

CGSB 51–GP–9M, RIGID MINERAL FIBRE SLEEVING FOR PIPING WITH VAPOUR BARRIER JACKET. THICKNESS: 1". STANDARD OF ACCEPTANCE: FIBERGLAS 850, MANSON, KNAUF.

INSULATION FASTENING – TAPE: SELF ADHESIVE TAPE RATED UNDER 25 FOR FLAME SPREAD AND UNDER 50 FOR SMOKE DEVELOPMENT. LAP SEAL ADHESIVE: QUICK–SETTING ADHESIVE FOR JOINTS AND LAP SEALING OF VAPOUR BARRIERS. FLAME SPREAD 10 SMOKE DEVELOPMENT 0.

JACKETS – PVC OR CANVAS: APPLY IN ALL EXPOSED AREAS: COMPACT, FIRM ULC LISTED HEAVY PLAIN WEAVE, COTTON FABRIC AT 220 G/M2. ON CONCEALED VALVES AND FITTINGS USE ULC LISTED PLAIN WEAVE COTTON FABRIC AT 120 G/M2.

APPLICATION: APPLY INSULATION AFTER REQUIRED TESTS HAVE BEEN COMPLETED AND APPROVED BY THE CONSULTANT. INSULATION AND SURFACES SHALL BE CLEAN AND DRY WHEN INSTALLED AND DURING APPLICATION OF ANY FINISH. APPLY INSULATION AND COVERINGS ON HOT PIPING WHILE SURFACE IS BETWEEN 90 TO 120°F. PROTECT INSULATION WITH INSULATION SHIELDS CONSISTING OF HIGH DENSITY INSULATION AND SHEET STEEL SUPPORT. ALTERNATIVELY BURY PIPE HANGER IN INSULATION AND APPLY INSULATION UP HANGER ROD NOT LESS THAN 4 TIMES THE INSULATION THICKNESS.

4. FIRE PIPE AND FITTINGS

SHALL BE IN ACCORDANCE WITH NFPA 14 AND NFPA 13.THREADED OR FLANGED FITTINGS SHALL BE ANSI B 16.3 CAST IRON, CLASS 125 MINIMUM. THREADED FITTING ARE NOT PERMITTED ON PIPE WITH WALL THICKNESS LESS THAN SCHEDULE 40.

CLAMP–ON FITTINGS WITH RUBBER GASKETS SHALL BE LISTED FOR THE PIPING APPLICATION. PLAIN END PIPE, FITTINGS WITH LOCKING LUGS OR SHEAR BOLTS ARE NOT PERMITTED.

5. FIRE VALVES

DO NOT USE QUARTER TURN BALL VALVES FOR 50mm (2") OR LARGER DRAIN VALVES.

LISTED INDICATING VALVES:

- GATE: OS&Y, 1200KPA (175 PSIG) WOG.
- BUTTERFLY: GEAR OPERATED, INDICATING TYPE, 1200 KPA (175 PSIG) WOG.
- CHECK VALVES: SWING TYPE, RUBBER FACED OR WAFER TYPE SPRING LOADED BUTTERFLY CHECK VALVE, 1200 KPA (175 PSIG) WOG.
- DRAIN VALVES: THREADED BRONZE ANGLE, GLOBE, BALL OR BUTTERFLY, 1000 KPA (150 PSIG.) WOG EQUIPPED WITH REDUCER AND HOSE CONNECTION WITH CAP OR CONNECTED TO A DRAIN LINE.
- AUTOMATIC BALL DRIPS: CAST BRASS 19mm (3/4") IN–LINE AUTOMATIC BALL DRIP WITH BOTH ENDS THREADED WITH IRON PIPE THREADS.

STANDARD OF ACCEPTANCE: TYCO, WILSON AND COUSINS.

6. VALVE SUPERVISORY SWITCHES

PROVIDE EACH INDICATING STANDPIPE AND CONTROL VALVE WITH ADEQUATE MEANS FOR MOUNTING A VALVE SUPERVISORY SWITCH.

MOUNT SWITCH SO AS NOT TO INTERFERE WITH NORMAL OPERATION OF THE VALVE AND ADJUST TO OPERATE WITHIN TWO REVOLUTIONS TOWARD THE CLOSED POSITION OF THE VALVE CONTROL, OR WHEN THE STEM IS MOVED NO MORE THAN ONE FIFTH OF THE DISTANCE FROM ITS NORMAL POSITION.

THE MECHANISM SHALL BE CONTAINED IN A WEATHERPROOF DIE CAST ALUMINUM HOUSING, WHICH SHALL PROVIDE A 19mm (3/4") TAPPED CONDUIT ENTRANCE AND INCORPORATE THE NECESSARY FACILITIES FOR ATTACHMENT TO THE VALVES.

SWITCH HOUSING TO BE FINISHED IN RED BAKED ENAMEL.

VALVE SUPERVISORY SWITCHES FOR BALL AND BUTTERFLY VALVES: MAY BE INTEGRAL WITH THE VALVE.

ALL CONDUIT AND WIRING CONNECTED THERETO SHALL BE PROVIDED.

STANDARD OF ACCEPTANCE: TYCO.

DRAWING LIST

SYMBOLS

	DOMESTIC COLD WATER SUPPLY
	DOMESTIC HOT WATER SUPPLY
D	SANITARY DRAIN
F	FIRE LINE
	VALVE
	STRAINER
	CHECK VALVE
	PIPE DOWN
	PIPE UP
NC	NORMALLY CLOSED
BFPA	BACKFLOW PREVENTER ASSEMBLY
DCVA	DOUBLE CHECK VALVE ASSEMBLY
M	WATER METER
F/S	FLOW SWITCH
PG	PRESSURE GAUGE
CTE	CONNECT TO EXISTING
CUT	CUT POINT OF EXISTING SERVICE

Revisions

Ref.	No.	Description	Date	Initial
1	6	ISSUED FOR CCN #6	2023/07/19	
2	2	75% REVIEW	2022/03/09	
3	3	100% REVIEW	2022/03/31	
4	4	ISSUED FOR TENDER	2022/04/26	
5	5	ISSUED FOR CCN #7	2024–04–26	

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
OAKVILLE TOWN OF OAKVILLE

Project:

GLADYS SPEERS PS
RENOVATIONS
2150 SAMWAY RD, OAKVILLE, ON L6L 2P6

liu lim Architects inc.

Unit 100 – 706 Euclid Avenue
Toronto, Ontario, Canada M6G 2T9
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LICENSED PROFESSIONAL ENGINEER
July 2023
G. STRASHUN
PROVINCE OF ONTARIO

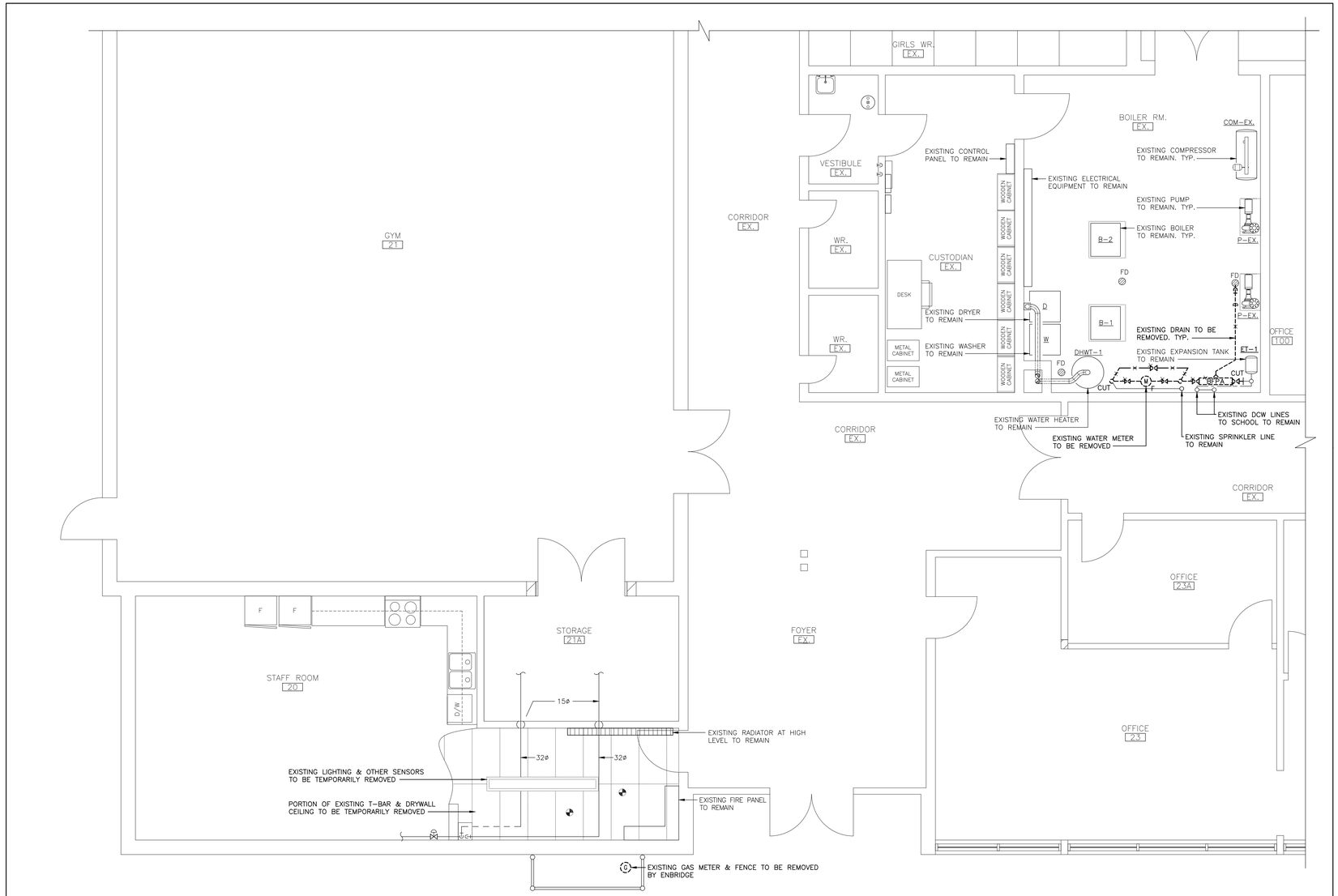
Consultant:

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

Title:

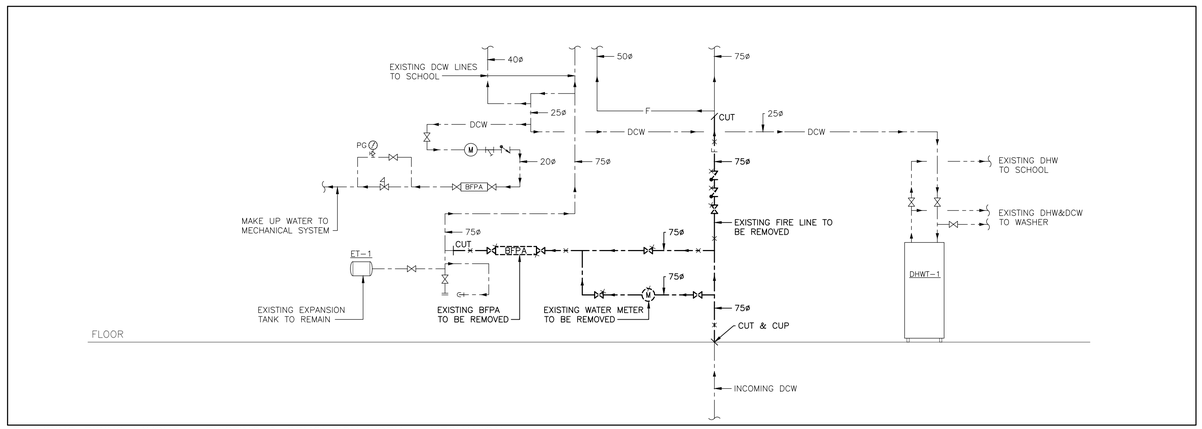
LEGEND, KEY PLAN & NOTES – MECHANICAL

Drawn by: P.C.	Date: JUNE 2023
Checked by: O.S.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 2022–01	Drawing No.: M-1.3
Set No.:	of: 3



PART OF GROUND FLOOR – EQUIPMENT & PIPING LAYOUT – EXISTING & DEMOLITION WORK – MECHANICAL

SCALE: 1:50



PLUMBING PIPING LAYOUT – EXISTING & DEMOLITION WORK – MECHANICAL

SCALE: N.T.S.

DEMOLITION NOTES:

PIPE SIZES AND ARRANGEMENT SHOWN ON THE DRAWINGS HAVE BEEN SITE MEASURED. MAKE ANY CHANGES REQUIRED TO SUIT THE ACTUAL SITE CONDITIONS AT NO COST TO THE OWNER.

REMOVE THE EXISTING WATER METER, BACKFLOW PREVENTER AND ASSOCIATED PIPES.

REMOVE THE FIRE LINE DOUBLE CHECK VALVE AND PORTION OF THE PIPE AS REQUIRED. TEMPORARY DISCONNECT DEVICES FROM THE FIRE ALARM TO ALLOW FOR THE INSTALLATION.

CAP EXISTING DCW LINE ABOVE THE FLOOR.

Revisions

Ref.	No.	Description	Date	Initial
△	6	ISSUED FOR CCN #6	2023/07/19	
△	2	75% REVIEW	2022/03/09	
△	3	100% REVIEW	2022/03/31	
△	4	ISSUED FOR TENDER	2022/04/26	
△	5	ISSUED FOR CCN #7	2024-04-26	

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TOWN OF OAKVILLE

Project:

GLADYS SPEERS PS
RENOVATIONS
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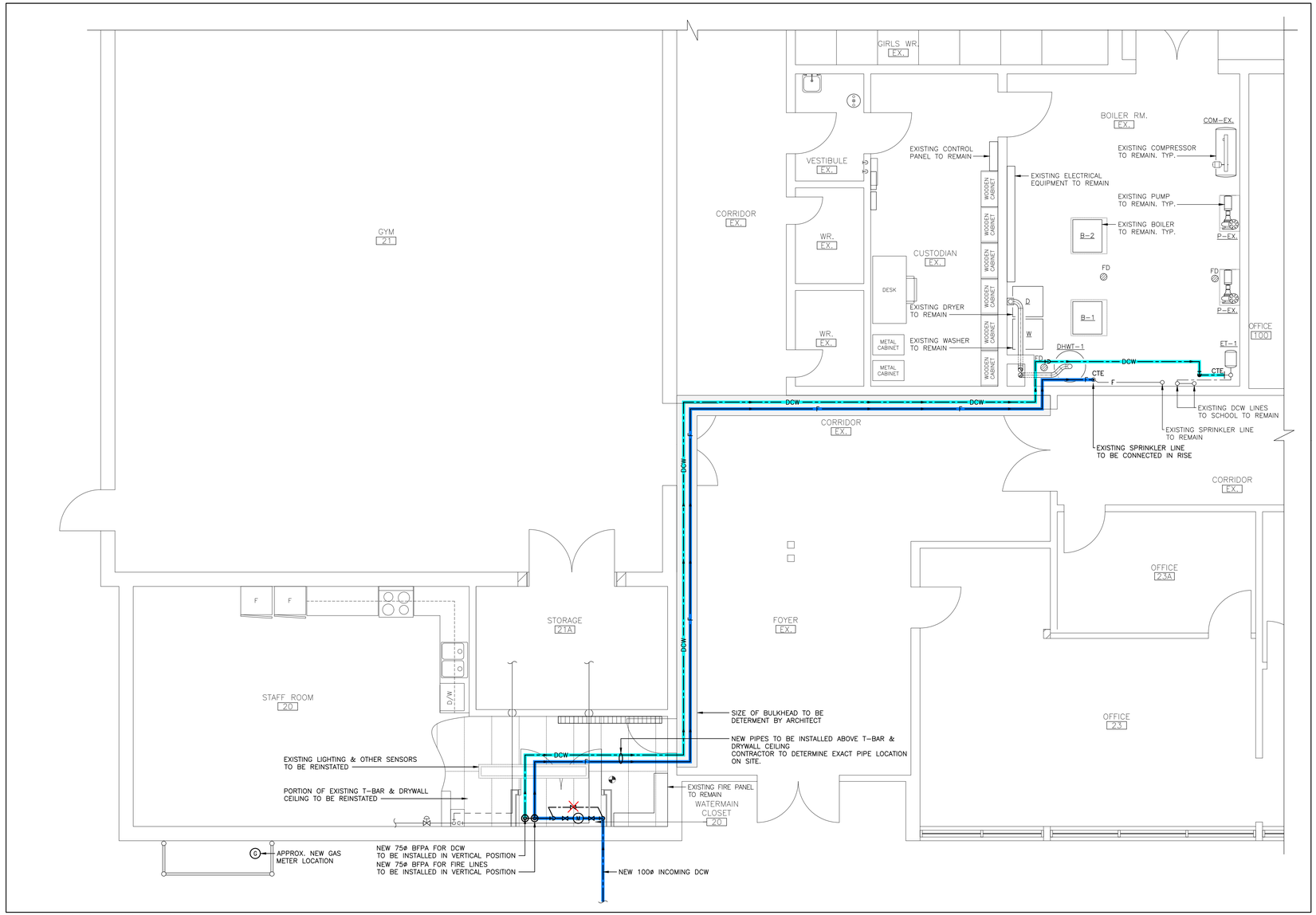
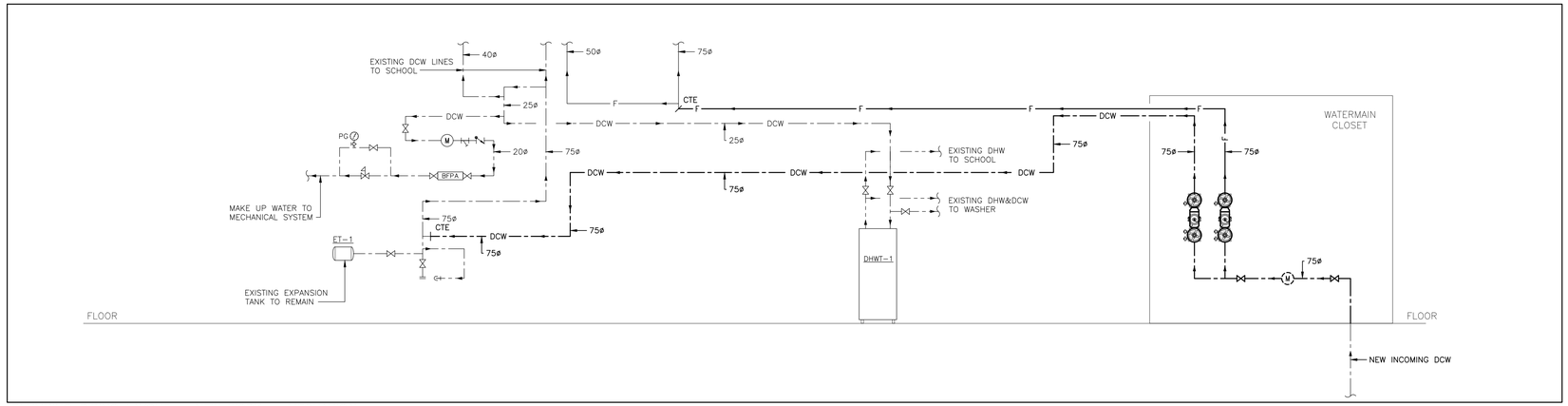
Title:

PART OF SCHOOL
– EQUIPMENT & PIPING LAYOUT
– EXISTING & DEMOLITION
– MECHANICAL

Drawn by:	Date:
P.C.	JUNE 2023
Checked by:	**Plotted:**
O.S.	
Scale:	**Issued:**
AS SHOWN	
Job No.:	**Drawing No.:**
2022-01	M-2.4
Set No.:	of: 3



PART OF GROUND FLOOR – EQUIPMENT & PIPING LAYOUT – NEW WORK – MECHANICAL
SCALE: 1:50



PLUMBING PIPING LAYOUT – NEW WORK – MECHANICAL
SCALE: N.T.S.

NEW WORK NOTES:

NEW BACKFLOW PREVENTER (BFPA) TO MATCH PIPE SIZE. INSULATE NEW DCW PIPING IN THE MECHANICAL ROOM.

INSTALL NEW BFPA BETWEEN 750 [30"] – 1500 [60"] A.F.F. ALLOW A MIN. OF 300 [12"] CLEAR SPACE ABOVE THE NEW BFPA. INSTALL BFPA TO MAINTAIN MIN. 750MM CLEARANCE IN FRONT. PROVIDE ADEQUATE SUPPORTS FOR ALL NEW PIPING AND BFPA.

OFFSET PIPING AS NECESSARY IN ORDER TO MAINTAIN ALL REQUIRED CLEARANCES; COORDINATE INSTALLATION ON SITE; ALLOW FOR ANY ADDITIONAL OFFSETS AS PART OF THIS CONTRACT.

COORDINATE WATER SHUT-DOWN WITH SCHOOL REPRESENTATIVE.

PROVIDE GROUNDING TO THE NEW PIPING SYSTEM AS REQUIRED BY CODE.

PROVIDE A MICROBIOLOGY LAB TEST REPORT FOR THE NEW INCOMING DCW SERVICE.

PROVIDE BACKFLOW PREVENTION DEVICE TEST REPORTS FOR ALL NEW BACKFLOW PREVENTERS.

LOCATIONS OF NEW PIPING AND EQUIPMENT ARE APPROXIMATE. COORDINATE THE LOCATION OF EQUIPMENT AND NEW PIPE INSTALLATION WITH EXISTING SERVICES IN ORDER TO AVOID INTERFERENCE; MAKE ALL NECESSARY ADJUSTMENTS AS PART OF THIS CONTRACT.

ALLOW FOR FIRE ALARM VERIFICATIONOF THE NEW AND EXISTING DEVICES LOCATED IN THE MECHANICAL ROOM IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION AND FIRE DEPARTMENT.

PROVIDE ALL THE DIGGING (INDOOR AND OUTDOOR) AND CUTTING OF THE SLAB AS REQUIRED FOR THE CAPPING OF THE EXISTING PIPE AND INSTALLATION OF THE NEW ONE. PRIOR TO ANY CUTTING OR DIGGING, CONTRACTOR SHALL SCAN/ X-RAY AS REQUIRED TO IDENTIFY LOCATION OF ALL EXISTING UNDERGROUND SERVICES. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.

PROVIDE SHORING AS REQUIRED FOR THE TRENCH. THE SHORING SYSTEM SHALL BE DESIGNED AND APPROVED BY A STRUCTURAL ENGINEER.

REPAIR THE FLOOR TO MATCH EXISTING AT THE COMPLETION OF THE INSTALLATION.

COORDINATE LOCATION OF THE DCW AND FIRE LINE CONNECTION OUTSIDE THE BUILDING WITH THE CIVIL ENGINEER. TEMPORARY RELOCATE THE EXISTING GAS METER AND ASSOCIATED ENCLOSURE AS REQUIRED TO ALLOW FOR THE INSTALLATION OF THE NEW UNDERGROUND DCW PIPE. COORDINATE WITH CONSUMMER GAS AND PAY FOR ALL THE REQUIRED APPROVALS AND WORK.

REINSTATE ALL THE FINISHES OUTSIDE OF THE BUILDING INCLUDING ASPHALT, PAVING, GRASS AFFECTED BY THE WORK.

BUILDING SERVICES
OAKVILLE
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.

PERMIT NO:	22-111973R1
	Plumbing Plans Review
DATE:	9/12/2024
REVIEWED BY:	gatia
	CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE

Issuance of the Building Permit does not constitute Fire Department Approval of all aspects of design and installation. Plans Review acceptance is based on a General Review of Fire Safety Systems design. A Fire Final Inspection is required for Fire Department Approval.

REVIEWED BY OAKVILLE FIRE DEPARTMENT

FINAL INSPECTION REQUIRED BY OAKVILLE FIRE DEPARTMENT

Revisions

Ref.	No.	Description	Date	Initial
△	6	ISSUED FOR CCN #6	2023/07/19	
△	2	75% REVIEW	2022/03/09	
△	3	100% REVIEW	2022/03/31	
△	4	ISSUED FOR TENDER	2022/04/26	
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BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
OAKVILLE TOWN OF OAKVILLE

Project:

GLADYS SPEERS PS
RENOVATIONS
2150 SAMWAY RD, OAKVILLE, ON L6L 2P6

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LICENSED PROFESSIONAL ENGINEER
July 2023
G. STRASHUN
PROVINCE OF ONTARIO

Consultant:

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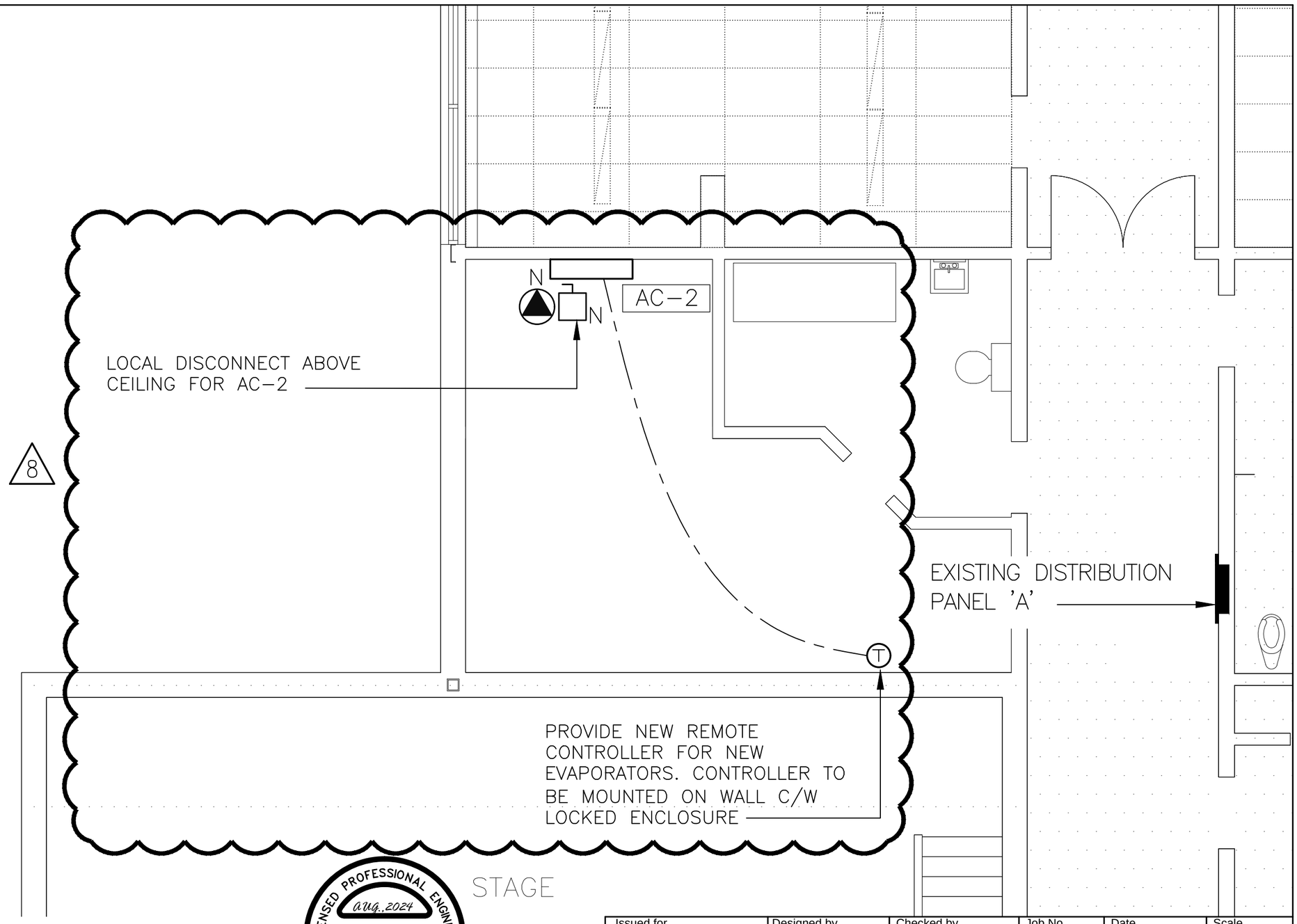
Title:

PART OF SCHOOL
– EQUIPMENT & PIPING LAYOUT
– NEW WORK
– MECHANICAL

Drawn by: P.C.	Date: JUNE 2023
Checked by: O.S.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 2022-01	Drawing No.: M-3.4
Set No.:	of: 3

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
OAKVILLE TOWN OF OAKVILLE

BUILDING SERVICES
OAKVILLE
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.
PERMIT NO: 22-111973R1
Mechanical Plans Review
DATE: 9/12/2024
REVIEWED BY: gatia
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE



LICENSED PROFESSIONAL ENGINEER
aug.2024
G. STRASHUN
PROVINCE OF ONTARIO

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	M.V.	O.C.	2022-01	04/22/2024	1:50

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

Job Name: GLADYS SPEERS PS - HVAC UPGRADES
Drawing Name: GR. FLR - EQUIPMENT LAYOUT - NEW WORK - ELECTRICAL
REF. DWG.: E-3.1
SKETCH #: SKE-3.1-8A

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
OAKVILLE TOWN OF OAKVILLE

BUILDING SERVICES
OAKVILLE
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.
PERMIT NO: 22-111973R1
Mechanical Plans Review
DATE: 9/12/2024
REVIEWED BY: gatia
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE

GIRLS WR.

8

LOCAL DISCONNECT FOR AC-3

NEW DISTRIBUTION PANEL 'DP-1' SEE DWG E-3.2 FOR MORE DETAILS

BOILER RM.
EX.

N

T

AC-3

CUSTODIAN

N

PROVIDE NEW REMOTE CONTROLLER FOR NEW EVAPORATORS. CONTROLLER TO BE MOUNTED ON WALL C/W LOCKED ENCLOSURE

WR.

LOCATION FOR NEW SUBPANEL DH-1

N

WR.

OFFICE
100

H TO BE RE-USED

CORRIDOR

RE-INSTALL E
IN NEW LOCA
SHOWN. RE-C

LICENSED PROFESSIONAL ENGINEER
aug. 2024
G. STRASHUN
PROVINCE OF ONTARIO

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	M.V.	O.C.	2022-01	04/22/2024	1:50

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Job Name: GLADYS SPEERS PS - HVAC UPGRADES
Drawing Name: GR. FLR - EQUIPMENT LAYOUT - NEW WORK - ELECTRICAL
REF. DWG.: E-3.1
SKETCH #: SKE-3.1-8B

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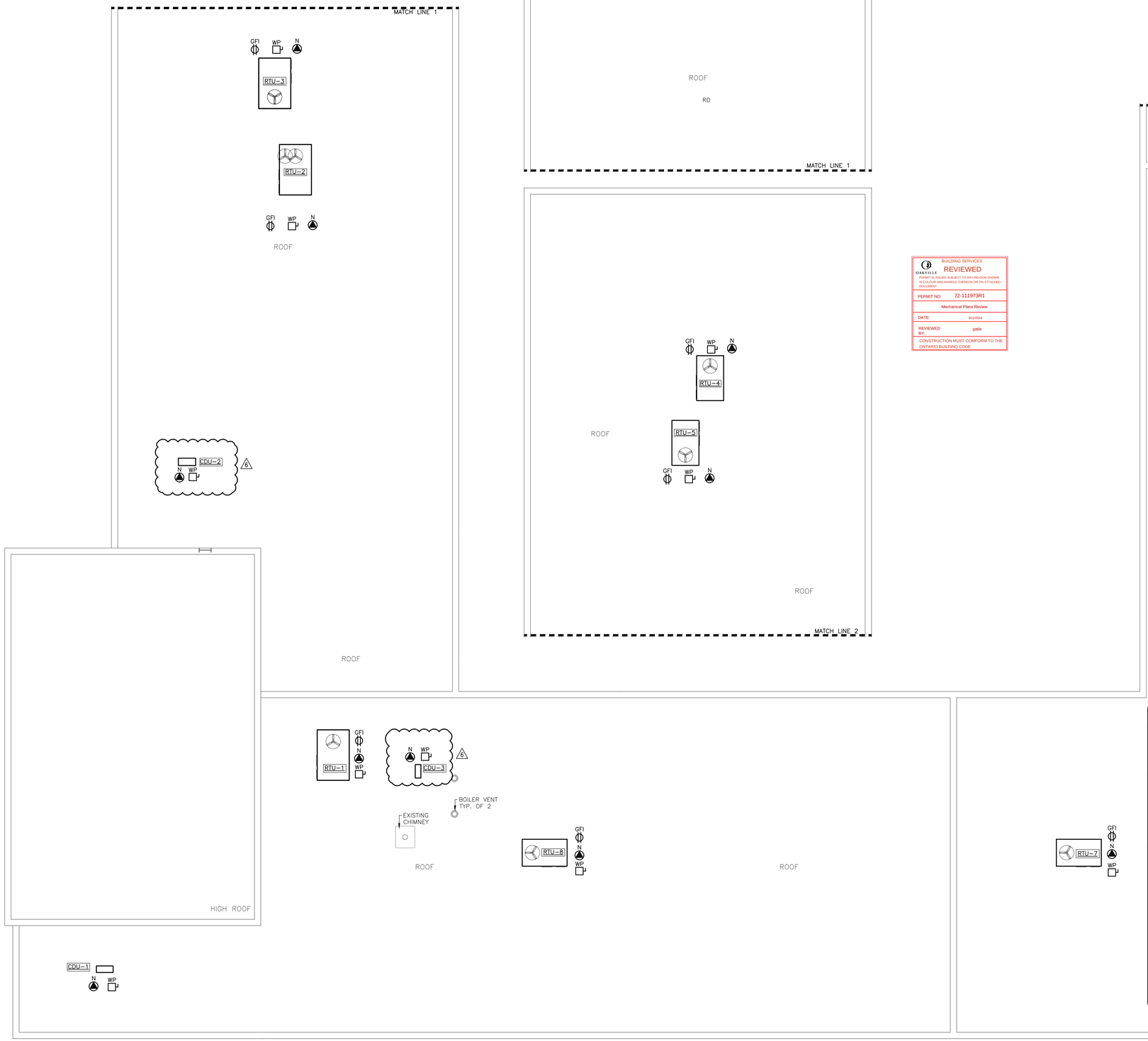
OAKVILLE TOWN OF OAKVILLE



BUILDING SERVICES
OAKVILLE
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT
PERMIT NO: 22-111973R1
Mechanical Plans Review
DATE: 9/12/2024
REVIEWED BY: gatta
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE

NEW DISTRIBUTION PANEL. FOR DETAILS AND POWER SOURCE REFER TO ELECTRICAL UPGRADE DRAWINGS.

PANEL DP-1
120V/208V, 3PH, 4W
TYPE: NEW
MAINS: 600 A
MAIN BKR: –
MOUNTING: MAIN DISTRIBUTION
LOCATION: MECH./BOILER ROOM

WATTS	DESCRIPTION	PROT.	CIRCUITS		PROT.	DESCRIPTION	WATTS
	RTU-1	60A 3P	1	2	45A 3P	RTU-8	
			3	4			
			5	6			
	RTU-2	60A 3P	7	8	20A 2P	CDU-1	
			9	10			
			11	12	20A 2P	AC-1	
	RTU-3	60A 3P	13	14			
			15	16		GYM BLINDS	
			17	18		SPARE	
	RTU-4	50A 3P	19	20	40A 3P	CDU-2	
			21	22			
			23	24			
	RTU-5	50A 3P	25	26	15A 3P	UV-JK IN JK CLASSROOM 9	
			27	28			
			29	30			
	RTU-6	45A 3P	31	32		SPARE	
			33	34		SPARE	
			35	36		SPARE	
	RTU-7	60A 3P	37	38		SPARE	
			39	40		SPARE	
			41	42		SPARE	

ROOF PLAN – EQUIPMENT LAYOUT – NEW WORK – ELELCTRICAL
SCALE: 1:100

Revisions

Ref.	No.	Description	Date	Initial
△	1	50% REVIEW 0	2022/02/17	
△	2	75% REVIEW	2022/03/09	
△	3	100% REVIEW	2022/03/31	
△	4	ISSUED FOR TENDER	2022/04/26	
△	5	ISSUED FOR CCN #5	2022/05/26	
△	6	ISSUED FOR CCN #9	2024/04/24	

Project:

GLADYS SPEERS PS RENOVATIONS
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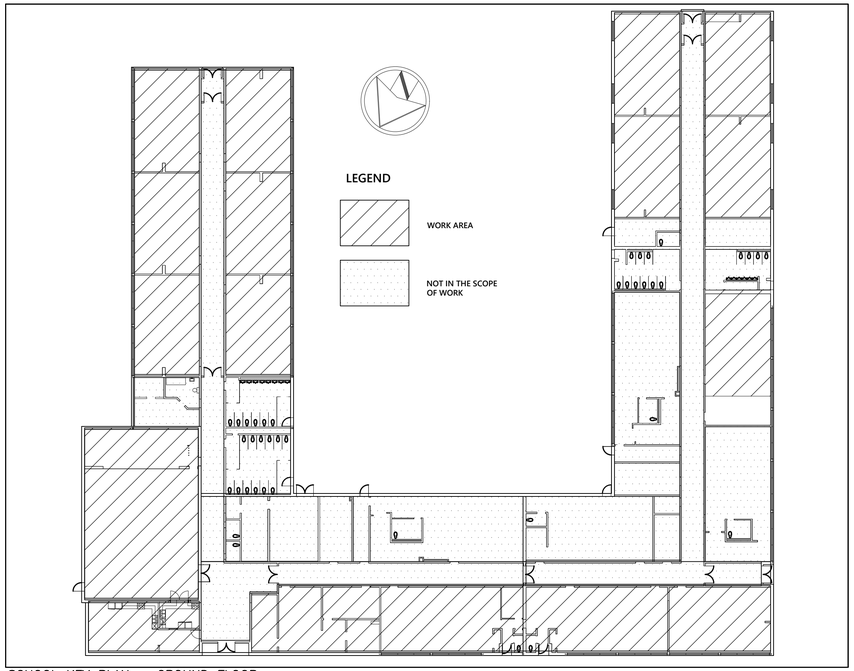
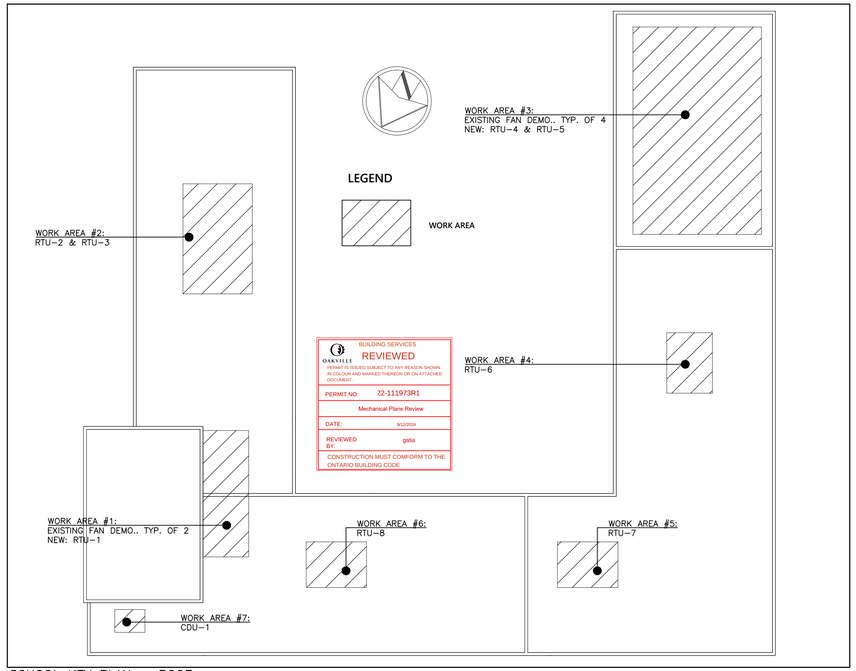
Title:

ROOF – EQUIPMENT LAYOUT – NEW WORK – ELECTRICAL

Drawn by: P.C.	Date: DECEMBER 2021
Checked by: O.S.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 2022-01	Drawing No.: E-3.2
Set No.:	of: 5



SCHOOL KEY PLAN – GROUND FLOOR
SCALE: 1:400



SCHOOL KEY PLAN – ROOF
SCALE: 1:400

SCHEDULE OF ROOFTOP UNIT

TAG	SUPPLY AIR FLOW CFM	SUPPLY E.S.P. Pa [in. wg]	SUPPLY FAN HP	HEATING CAPACITY INPUT kW [MBH]	HEATING CAPACITY OUTPUT kW [MBH]	MIN. OUTDOOR AIR (CFM)	DX COOLING PERFORMANCE TOTAL CAP. kW [MBH]	DX COOLING PERFORMANCE SENS. CAP. kW [MBH]	DX COOLING PERFORMANCE TEMP °C [°F] EDBT/EWBT	DX COOLING PERFORMANCE TEMP °C [°F] LDBT/LWBT	UNIT POWER VOLTAGE	UNIT POWER AMPS (MCA)	UNIT POWER MOCP (A)	UNIT WEIGHT KG [LBS]	REMARKS
RTU-1	4,000	249 [1.0]	2.75	73.3 [250]	58.6 [200]	1,500	33.4 [114]	27.5 [94]	26.7/19.4 [80/67]	14.5/14.2 [58.2/57.6]	208/3/60	48	60	730 [1,608]	
RTU-2	4,000	375 [1.5]	2.75	73.3 [250]	58.6 [200]	1,500	33.4 [114]	27.5 [94]	26.7/19.4 [80/67]	14.5/14.2 [58.2/57.6]	208/3/60	48	60	730 [1,608]	
RTU-3	4,000	375 [1.5]	2.75	73.3 [250]	58.6 [200]	1,500	33.4 [114]	27.5 [94]	26.7/19.4 [80/67]	14.5/14.2 [58.2/57.6]	208/3/60	48	60	730 [1,608]	
RTU-4	2,400	375 [1.5]	2.75	44.0 [150]	35.6 [122]	1,000	21.6 [74]	17.2 [59]	26.7/19.4 [80/67]	14.1/14.1 [57.3/57.1]	208/3/60	37	50	639 [1,408]	
RTU-5	2,400	375 [1.5]	2.75	44.0 [150]	35.6 [122]	1,000	21.6 [74]	17.2 [59]	26.7/19.4 [80/67]	14.1/14.1 [57.3/57.1]	208/3/60	37	50	639 [1,408]	
RTU-6	2,000	125 [0.5]	1.00	38.1 [130]	30.5 [104]	550	17.8 [61]	13.5 [46]	26.7/19.4 [80/67]	14.5/14.2 [58.2/57.6]	208/3/60	30.0	45	450 [992]	
RTU-7	4,000	375 [1.5]	2.75	73.3 [250]	58.6 [200]	1,500	33.4 [114]	27.5 [94]	26.7/19.4 [80/67]	14.5/14.2 [58.2/57.6]	208/3/60	48	60	730 [1,608]	
RTU-8	2,000	125 [0.5]	1.00	38.1 [130]	30.5 [104]	150	17.8 [61]	13.5 [46]	26.7/19.4 [80/67]	14.5/14.2 [58.2/57.6]	208/3/60	30.0	45	450 [992]	

NOTE: CLG: AIR EDBT/EWBT 78°F/66°F, LDBT/LWBT 55.9/55.2°F;

SCHEDULE OF VAV COILS

TAG	SERVING	MAX. AIR FLOW L/S (CFM)	MIN. AIR FLOW L/S (CFM)	MIN. PRES. DIFFERENT. (PA)	INLET SIZE DIA. (MM)	OUTLET SIZE (MM)	DIMENSIONS LxHxD MM[IN]	REMARKS
VAV-2-1	CLASSROOM 01	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-2-2	CLASSROOM 02	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-2-3	CLASSROOM 03	755 (1,600)	520 (1100)	2.5	300	425x350	470x390x330 [18.5x15.5x13]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-3-1	CLASSROOM 04	755 (1,600)	520 (1100)	2.5	300	425x350	470x390x330 [18.5x15.5x13]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-3-2	CLASSROOM 05	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-3-3	CLASSROOM 06	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-4-1	CLASSROOM 13	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-4-2	CLASSROOM 12	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-5-1	CLASSROOM 14	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-5-2	CLASSROOM 15	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-7-1	CLASSROOM 17	567 (1,200)	400 (850)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-7-2	CLASSROOM 18	661 (1,400)	450 (950)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR
VAV-7-3	CLASSROOM 19	661 (1,400)	450 (950)	2.5	250	350x300	390x340x305 [15.5x13.5x12]	C/W MINIMUM 900MM SOUND ATTENUATOR

SCHEDULE OF OUTDOOR CONDENSERS

TAG	MANUFACTURER	MODEL	COOLING CAP. TONS [MBH]	REFRIGERANT	CONNECTION SIZES RL (MM/IN)	CONNECTION SIZES RG (MM/IN)	EQUIPMENT SIZE (HxLxW, MM)	POWER SUPPLY (V/PH/MCA)	MOCP	WEIGHT KG [LB]	REMARKS
CU-1	MITSUBISHI	MUY-GE24NA	2.0 [24]	R410A	9.5 [⅜]	15.9 [⅝]	875x840x330	230/1/60	20	54 [119]	C/W ECOFOOT SNOW STAND
CU-3	DAIKIN	RXS24LVJU	2.0 [24]	R410A	6.35 [¼]	15.9/[⅝]	762x889x305	208-230/1/60	20	72.0 [159]	C/W ECOFOOT SNOW STAND, WORKS WITH AC-2
CU-4	DAIKIN	RK12BXVJU	1.0 [12]	R410A	6.35 [¼]	9.5/[⅜]	550x673x284	208-230/1/60	15	27.2 [60]	C/W ECOFOOT SNOW STAND, WORKS WITH AC-3
NOTE:											

SCHEDULE OF INDOOR A/C UNITS

TAG	TYPE	MANUFACTURER	MODEL	CLG. CAP. (TONS/KW)	AIR FLOW (CFM)	POWER SUPPLY (V/PH/Hz)	MCA (A)	MOCP (A)	WEIGHT KG [LB]	EQUIPMENT SIZE (HxLxW, MM)	REFRIG. PIPE (MM) LIQUID	REFRIG. PIPE (MM) GAS	DRAIN (MM)	REMARKS
AC-1	WALL MOUNTED	MITSUBISHI	MSY-GE24NA	2.0/7.3	368-736	230/1ø/60	1.0	20	16.8 [37]	330x1,152x240	9.5	15.9	32	COOLING ONLY; C/W CONDENSATE PUMP
AC-2	WALL MOUNTED	DAIKIN	FTK24BXVJURK	2.0/7.3	350-643	208/1ø/60	1.0	15	14 [31]	340x1,1049x248	6.35	15.9	15.9	COOLING ONLY; C/W CONDENSATE PUMP
AC-3	WALL MOUNTED	DAIKIN	FTK12BXVJURK	1/3.5	132-473	208/1ø/60	1.0	15	9.7 [21.4]	288x1,785x250	6.35	9.5	15.9	COOLING ONLY; C/W CONDENSATE PUMP
NOTE: COMPLETE WITH WIRED MA REMOTE CONTROLLERS, AND ADAPTER OR CENTRAL CONTROLLER FOR INTERFACE WITH EXISTING BUILDING AUTOMATION SYSTEM														

SYMBOLS LIST

SYMBOL	DESCRIPTION
300x150	SHEET METAL DUCT – FIRST FIGURE INDICATES DIMENSION SHOWN
	SHEET METAL RISER UP – SUPPLY
	SHEET METAL RISER UP – RETURN AND EXHAUST
	SHEET METAL RISER DOWN – SUPPLY
	SHEET METAL RISER DOWN – RETURN AND EXHAUST
F/D	FUSIBLE LINK FIRE DAMPER WITH ACCESS DOOR IN DUCT
MD	MOTORIZED DAMPER
VD	VOLUME DAMPER
	SUPPLY AIR GRILLE
	EXHAUST OR RECIRC. GRILLE
	FLEXIBLE CONNECTION
O.E.D.	OPEN ENDED DUCT WITH BALANCING DAMPER AND BELLMOUTH INLET
A.D.	ACCESS DOOR
UH	UNIT HEATER
T	ROOM THERMOSTAT
	UNION
AV	MANUAL AIR VENT
	AUTOMATIC CONTROL VALVE – TWO WAY
	MIXING OR DIVERTER VALVE (3-WAY)
	VALVE
	BALANCING VALVE
	CHECK VALVE
	STRAINER – OVER 50mm PROVIDE WITH VALVED FLUSHING DRAIN
	PIPE TURNING DOWN
	PIPE TURNING UP
	PIPE REDUCER
	PLUMBING TRAP
TG	THERMOMETER
PG	PRESSURE GUAGE
S	SMOKE SENSOR
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
RD	ROOF DRAIN
RWL	RAIN WATER LEADER
HB	HOSE BIBB
VTR	VENT THROUGH ROOF
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
	DOMESTIC COLD WATER PIPE
	DOMESTIC HOT WATER PIPE
CTE	CONNECT TO EXISTING
CUT	CUT POINT OF EXISTING SERVICE
C/W	COMPLETE WITH
EF	EXHAUST FAN
EX	EXISTING TO REMAIN
RL	TO BE RELOCATED
VFD	VARIABLE FREQUENCY DRIVE
	PERIMETER CONVECTOR
RAD-1 2,200 2,000 W	PERIMETER CONVECTOR TYPE CV-1, FINNED ELEMENT LENGTH 2,200 MM, HEATING OUTPUT 2,000 W.
S/A, R/A O/A, E/A	DENOTES: SUPPLY AIR, RETURN AIR, OUTSIDE AIR, EXHAUST AIR

SCHEDULE OF GRILLES & DIFFUSERS

TYPE	SERVICE	MANUFACTURER	MODEL	VOLUME CONTROL	FINISH	REMARKS
A	SUPPLY	E.H. PRICE	SDG	YES	B12	SPIRAL DUCT GRILLES
B	RETURN	E.H. PRICE	80ECRG	NO	B12	EGG CRATE RETURN GRILLE
C	SUPPLY	E.H. PRICE	SCD	YES	B12	SQUARE CONE DIFFUSER
D	SUPPLY	E.H. PRICE	RCD	NO	B12	ROUND CONE DIFFUSER
E	RETURN	E.H. PRICE	95	NO	B12	LOUVERED RETURN GRILLE

SCHEDULE OF CONVECTOR

TAG	MANUFACTURER	MODEL	HEATING OUTPUT (BTU/FT)	HEATING AGENT SUPPLY (°F)	HEATING AGENT RETURN (°F)	TUBE DIAM (IN)	FIN SIZE (IN)	FIN SPACING (FINS/FT)	REMARKS
RAD-1	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-2	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-3	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-4	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-5	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-6	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-16A	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-17	ENGINEERED AIR	1 ROW	1,060	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-18	ENGINEERED AIR	1 ROW	1,060	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE
RAD-19	ENGINEERED AIR	3 ROWS (12" CENTERS)	3,010	82 [180]	71 [160]	1 ¼"	4" x 4"	50/FT	WALL MOUNTED/WITHOUT ENCLOSURE

Revisions

Ref.	No.	Description	Date	Initial
	1	50% REVIEW 0	2022/02/17	
	2	75% REVIEW	2022/03/09	
	3	100% REVIEW	2022/03/31	
	4	ISSUED FOR TENDER	2022/04/26	
	5	ISSUED FOR CCN #5	2022/05/26	
6	6	ISSUED FOR CCN #9	2024/05/07	

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
OAKVILLE TOWN OF OAKVILLE

Project:

GLADYS SPEERS PS RENOVATIONS
2150 SAMWAY RD, OAKVILLE, ON L6L 2P6

Liu + Lim Architects inc.
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LICENSED PROFESSIONAL ENGINEER
AUG. 2022
G. STRASHUN
PROVINCE OF ONTARIO

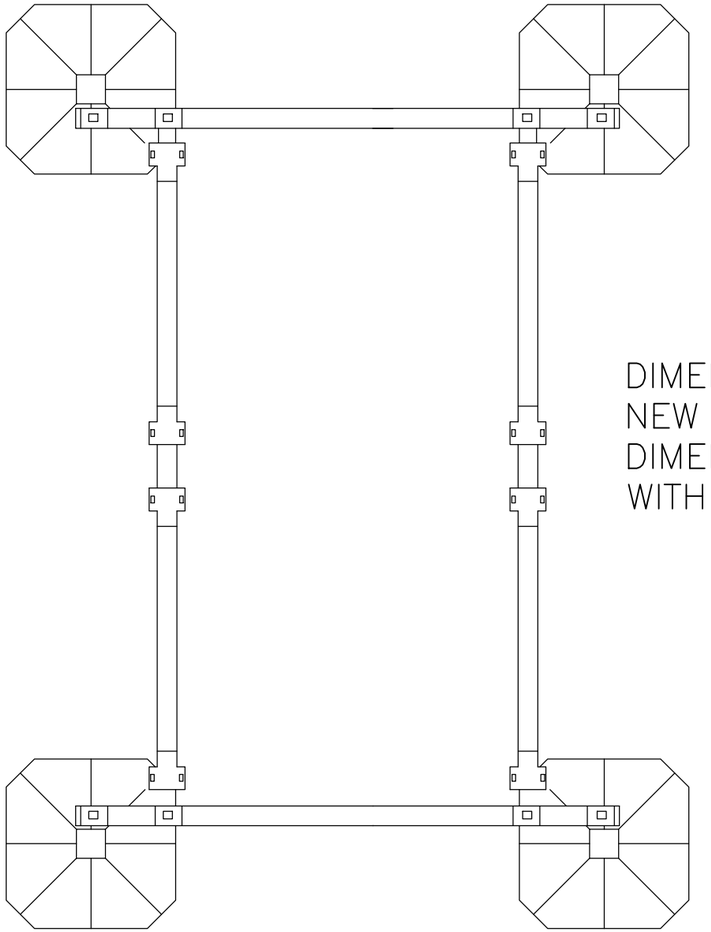
Consultant:

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

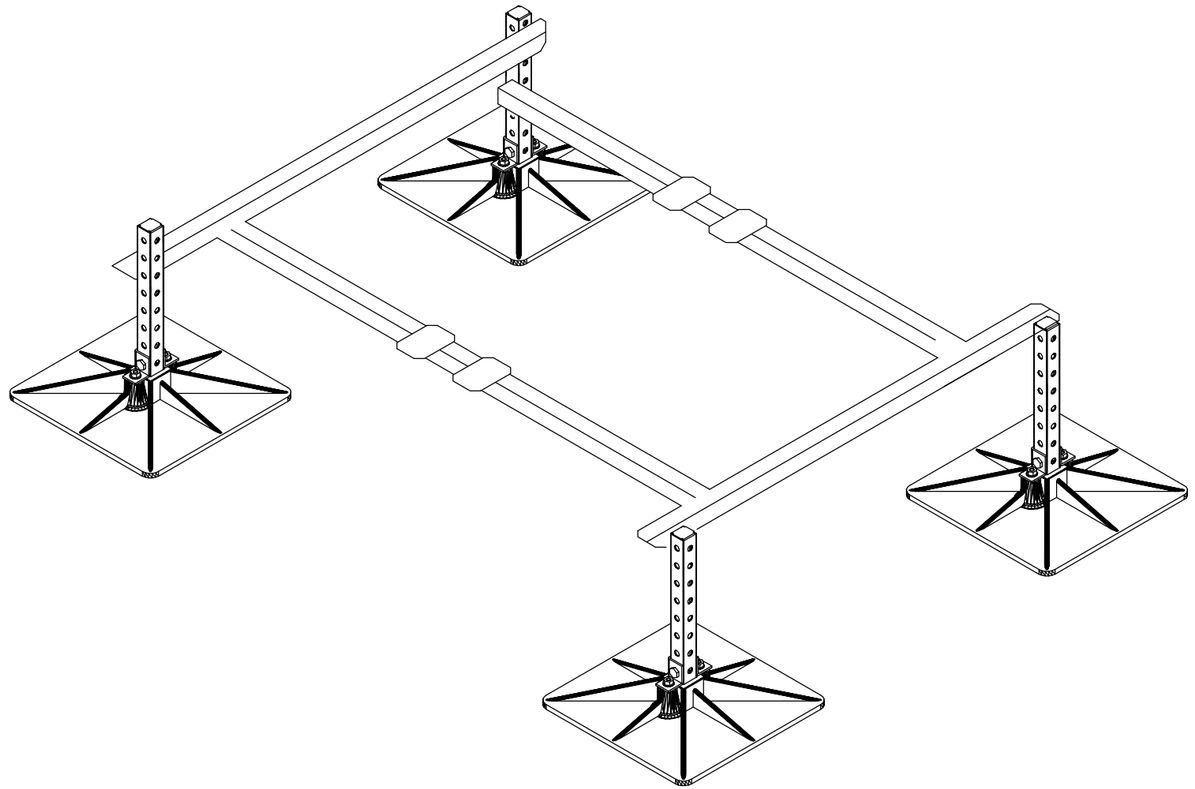
Title:

SYMBOL LIST, EQUIPMENT SCHEDULE, KEY PLANS & NOTES – MECHANICAL

Drawn by: P.C.	Date: DECEMBER 2021
Checked by: O.S.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 2022-01	Drawing No.: M-1.1
Set No.:	of: 10



DIMENSIONS TO SUIT
NEW CONDENSER
DIMENSION, COORDINATE
WITH MANUFACTURER



MAX HEIGHT 395mm
MIN HEIGHT 290mm

BIG FOOT FRAMEWORK

N.T.S.

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	M.V.	O.S	2022-01	2024-04-22	1:50

SAB ENGINEERING Inc.
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Job Name		SKETCH #
GLADYS SPEERS PS - HVAC UPGRADES		
Drawing Name	REF. DWG.	
SCHEDULE & DETAILS - MECHANICAL	M-1.2	SKM-1.2-1

CTE

TO VAV-2-1

T

5

BOOK SHELVES
32ø

AC-2

12ø

TERMINATE CONDENSATE
LINE TO OUTSIDE, AVOID
WALKWAY. TYPICAL

RL
RG

10

RL/RG PIPES UP TO
CDU-3 ON THE ROOF

40ø

50ø-HWR&HWS
TO REMAIN

40ø

EXISTING RADIATOR
TO REMAIN

20ø

300 CFM
'A'-450x150
TYP. OF 4

CLASSROO
06

75ø

UH-EX

40ø

T

450x450
THROUGH ROOF

75ø

40ø

65ø

20ø

BUILDING SERVICES
OAKVILLE
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.

PERMIT NO: 22-111973R1

Mechanical Plans Review

DATE: 9/12/2024

REVIEWED BY: gatia

CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	M.V.	O.S	2022-01	2024-04-22	1:50

SAB ENGINEERING Inc.
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Job Name
GLADYS SPEERS PS - HVAC UPGRADES

Drawing Name
PART OF GROUND FLOOR - NEW WORK - MECHANICAL

REF. DWG. M-3.1

SKETCH # SKM-3.1-10A

4

50ø

75ø

TERMINATE CONDENSATE LINE TO NEAREST SINK.

200x150 TYP. OF 3

15ø

100x200

12ø

BOILER RM. EX.

32ø BYPASS BOX#2

250ø

F/D

F/D

REFER TO DWG M-3.2 FOR CONTINUATION

75ø

WR.

RTU-1

CUSTODIAN

AC-3

RISE

1000x400

50ø

125x200

RL/RG PIPES UP TO CDU-4 ON THE ROOF

10

OFFICE 100

150x250

175x125 THRU ROOF

WR.

CORRIDOR

75ø

65ø RTU-8

400 CFM

650x300

550

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	M.V.	O.S	2022-01	2023-04-22	1:50

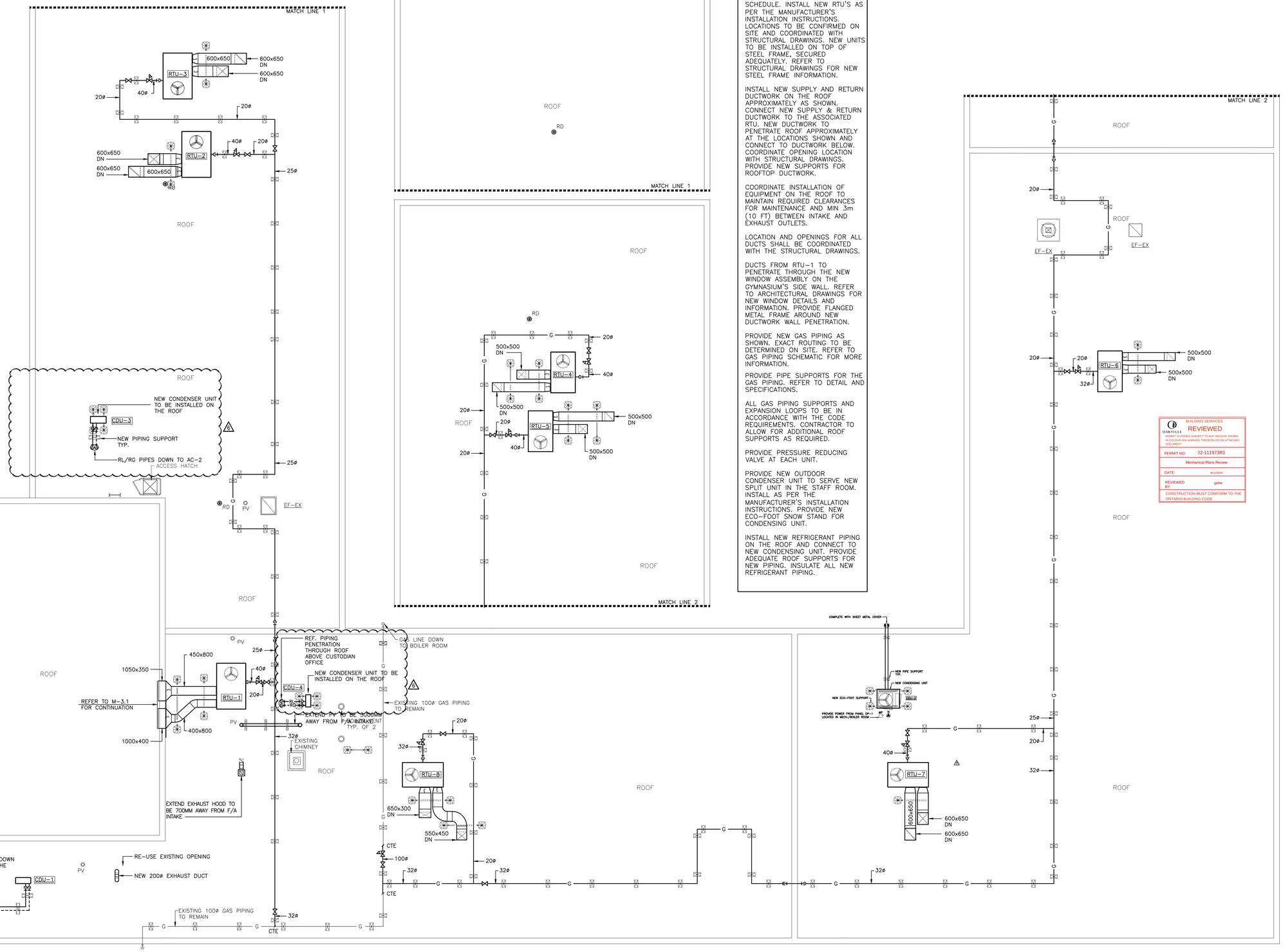
SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

Job Name: GLADYS SPEERS PS - HVAC UPGRADES

Drawing Name: PART OF GROUND FLOOR - NEW WORK - MECHANICAL

REF. DWG. M-3.1

SKETCH # SKM-3.1-10B



ROOF PLAN – EQUIPMENT LAYOUT – NEW WORK – MECHANICAL
SCALE: 1:100

NEW WORK NOTES:

PROVIDE NEW ROOFTOP UNITS AS PER THE MECHANICAL EQUIPMENT SCHEDULE. INSTALL NEW RTU'S AS PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. LOCATIONS TO BE CONFIRMED ON SITE AND COORDINATED WITH STRUCTURAL DRAWINGS. NEW UNITS TO BE INSTALLED ON TOP OF STEEL FRAME, SECURED ADEQUATELY. REFER TO STRUCTURAL DRAWINGS FOR NEW STEEL FRAME INFORMATION.

INSTALL NEW SUPPLY AND RETURN DUCTWORK ON THE ROOF APPROXIMATELY AS SHOWN. CONNECT NEW SUPPLY & RETURN DUCTWORK TO THE ASSOCIATED RTU. NEW DUCTWORK TO PENETRATE ROOF APPROXIMATELY AT THE LOCATIONS SHOWN AND CONNECT TO DUCTWORK BELOW. COORDINATE OPENING LOCATION WITH STRUCTURAL DRAWINGS. PROVIDE NEW SUPPORTS FOR ROOFTOP DUCTWORK.

COORDINATE INSTALLATION OF EQUIPMENT ON THE ROOF TO MAINTAIN REQUIRED CLEARANCES FOR MAINTENANCE AND MIN 3m (10 FT) BETWEEN INTAKE AND EXHAUST OUTLETS.

LOCATION AND OPENINGS FOR ALL DUCTS SHALL BE COORDINATED WITH THE STRUCTURAL DRAWINGS.

DUCTS FROM RTU-1 TO PENETRATE THROUGH THE NEW WINDOW ASSEMBLY ON THE GYMNASIUM'S SIDE WALL. REFER TO ARCHITECTURAL DRAWINGS FOR NEW WINDOW DETAILS AND INFORMATION. PROVIDE FLANGED METAL FRAME AROUND NEW DUCTWORK WALL PENETRATION.

PROVIDE NEW GAS PIPING AS SHOWN. EXACT ROUTING TO BE DETERMINED ON SITE. REFER TO GAS PIPING SCHEMATIC FOR MORE INFORMATION.

PROVIDE PIPE SUPPORTS FOR THE GAS PIPING. REFER TO DETAIL AND SPECIFICATIONS.

ALL GAS PIPING SUPPORTS AND EXPANSION LOOPS TO BE IN ACCORDANCE WITH THE CODE REQUIREMENTS. CONTRACTOR TO ALLOW FOR ADDITIONAL ROOF SUPPORTS AS REQUIRED.

PROVIDE PRESSURE REDUCING VALVE AT EACH UNIT.

PROVIDE NEW OUTDOOR CONDENSER UNIT TO SERVE NEW SPLIT UNIT IN THE STAFF ROOM. INSTALL AS PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE NEW ECO-FOOT SNOW STAND FOR CONDENSING UNIT.

INSTALL NEW REFRIGERANT PIPING ON THE ROOF AND CONNECT TO NEW CONDENSING UNIT. PROVIDE ADEQUATE ROOF SUPPORTS FOR NEW PIPING. INSULATE ALL NEW REFRIGERANT PIPING.

BUILDING SERVICES
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PERMIT IS ISSUED SUBJECT TO ANY REVISION SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT
PERMIT NO: 22-111973R1
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DATE: 9/12/2024
REVIEWED BY: gatta
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE

Revisions

Ref.	No.	Description	Date	Initial
△	1	50% REVIEW 0	2022/02/17	
△	2	75% REVIEW	2022/03/09	
△	3	100% REVIEW	2022/03/31	
△	4	ISSUED FOR TENDER	2022/04/26	
△	5	ISSUED FOR CCN-3	2023/04/04	
6	6	ISSUED FOR CCN-9	2024-05-07	

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Project:

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LICENSED PROFESSIONAL ENGINEER
AUG. 2022
G. STRASHUN
PROVINCE OF ONTARIO

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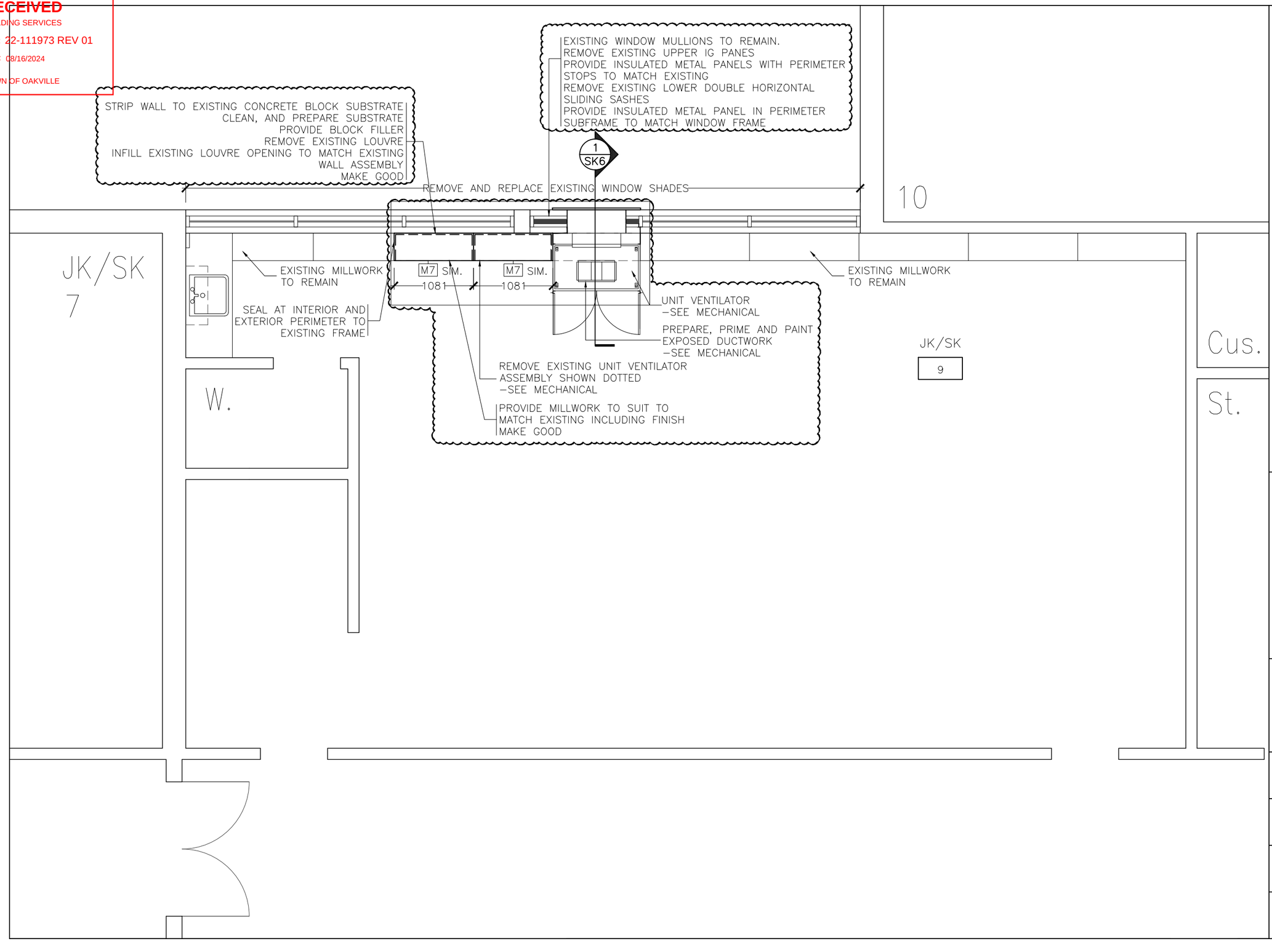
Title:

ROOF – EQUIPMENT LAYOUT – EXISTING & NEW WORK – MECHANICAL

Drawn by: P.C.	Date: DECEMBER 2021
Checked by: O.S.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 2022-01	Drawing No.: M-3.3
Set No.:	of: 10



ONTARIO ASSOCIATION OF ARCHITECTS
MINGPENG LIU
LICENCE
9826

GLADYS SPEERS PUBLIC SCHOOL RENOVATIONS
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OAKVILLE ONTARIO

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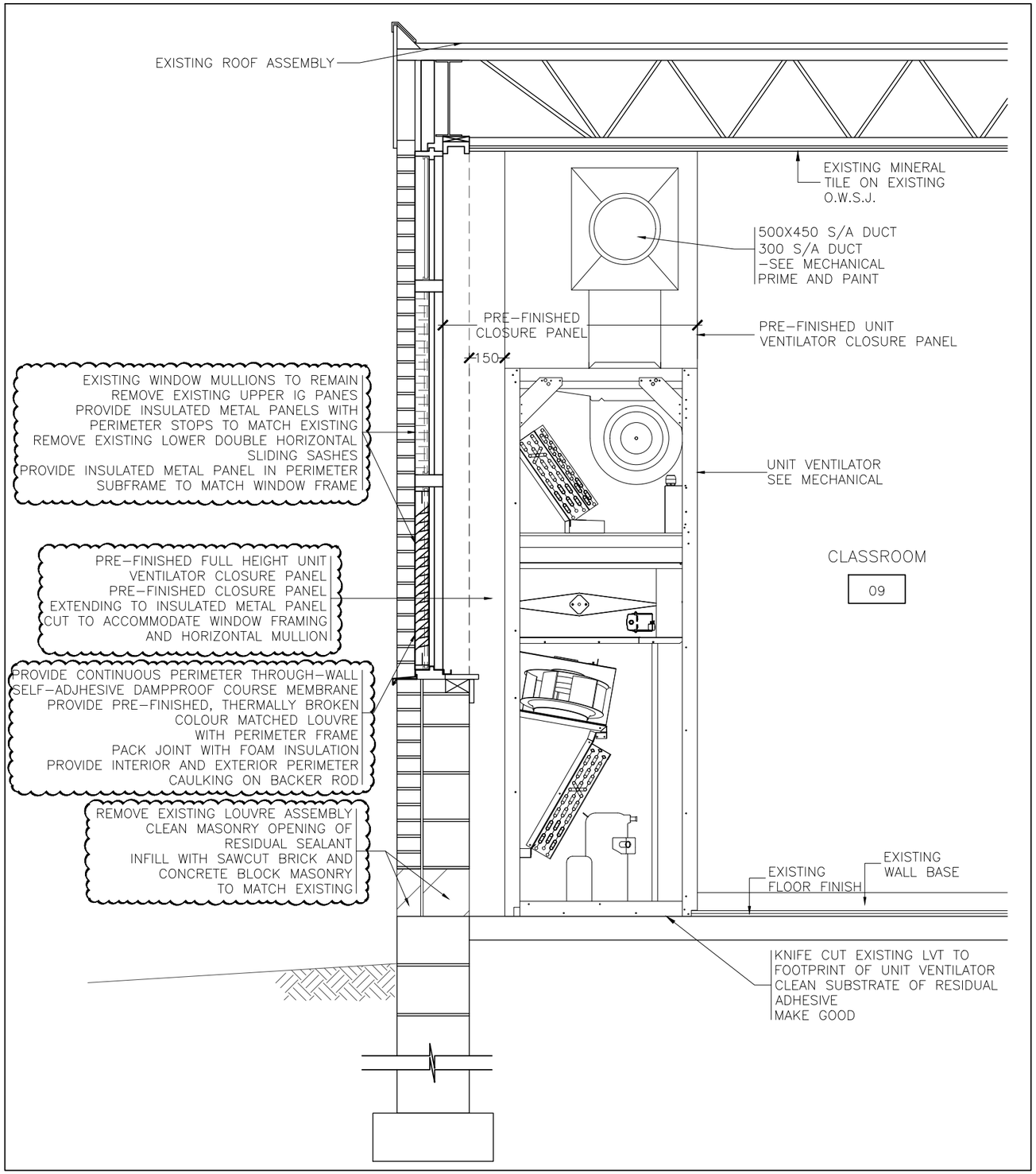
Title:
ENLARGED
JK/SK 9 PLAN

Date:	Issued:
JUL. 09, 2024	
Drawn by: L.Z.	Scale: 1:50
Job No: 21153	Drawing: SK5



GLADYS SPEERS PUBLIC SCHOOL RENOVATIONS
2150 SAMWAY RD,
OAKVILLE ONTARIO

ONTARIO ASSOCIATION OF ARCHITECTS
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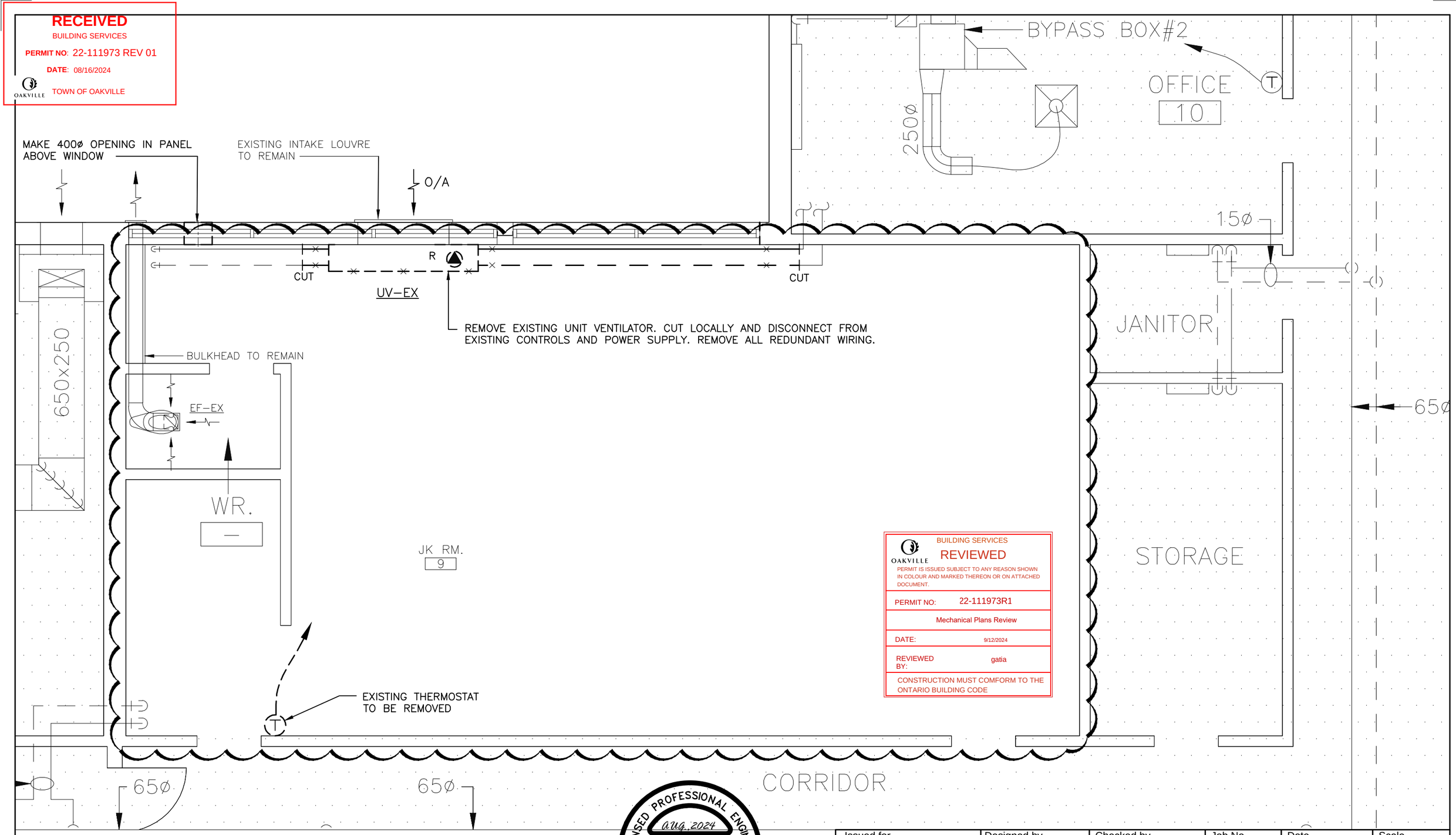
Title:
EXISTING EXTERIOR WALL AT UNIT VENTILATOR SECTION

Date:	Issued:
JUL. 09, 2024	
Drawn by: L.Z.	Scale: 1:20
Job No: 21153	Drawing: SK6



BUILDING SERVICES
OAKVILLE
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DATE: 9/12/2024
REVIEWED BY: gatia
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE

LICENSED PROFESSIONAL ENGINEER
AUG. 2024
G. STRASHUN
PROVINCE OF ONTARIO

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	P.C.	O.C.	2022-01	04/04/2023	1:50

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

Job Name: GLADYS SPEERS PS - HVAC UPGRADES
Drawing Name: GR. FLOOR - JK. ROOM - NEW WORK - MECHANICAL
REF. DWG.: M-2.1
SKETCH #: SKM-2.1-6

NEW 400ø PRESSURE RELIEF DAMPER
NEW 450x450 E/A LOUVRE

TERMINATE CONDENSATE LINE TO OUTSIDE, AVOID WALKWAY

NEW HG&HL PIPES UP TO CDU-2 ON THE ROOF

EXISTING INTAKE LOUVRE TO REMAIN

EXISTING LOUVRE TO REMAIN

F/A

NEW HWS&HWR PIPES TO MATCH EXISTING PIPES SIZE

NEW 25ø HWS&HWR TO THE NEW UNIT VENTILATOR. FOR CONNECTION SEE DWG. SKM-3.1-7-D

250ø

OFFICE
10

T

15ø

CTE (2) (1)

CTE

CTE

CTE

300ø

350ø

300ø

JANITOR

UV-JK9

A
SKM-3.1
-7-D

BULKHEAD TO REMAIN

N

FOU UV-JK PROVIDE POWER FROM PANEL DP-1 LOCATED IN MECH./BOILER ROOM

265 CFM
'A'-500x150
TYP. OF 5

275 CFM
'A'-500x150

NEW UNIT VENTILATOR TO BE INSTALLED

650x250

EF-EX

WR.

JK RM.
9

65ø

WORK NOTES:

1. NEW 800x200 O/A DUCT AND NEW PLENUM O/A 1,300x250x250 TO BE EXTERNAL INSULATED.
2. NEW HWS&HWR PIPES TO BE INSTALLED ABOVE F/A DUCT

TO UV-JK9

NEW THERMOSTAT

T

7

65ø

65ø

RTU-7

CORRIDOR

STORAGE

LICENSED PROFESSIONAL ENGINEER
aug. 2024
G. STRASHUN
PROVINCE OF ONTARIO

Issued for	Designed by	Checked by	Job No.	Date	Scale
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SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

Job Name: GLADYS SPEERS PS - HVAC UPGRADES

Drawing Name: GR. FLOOR - JK. ROOM - NEW WORK - MECHANICAL

REF. DWG. M-3.1

SKETCH # SKM-3.1-7-A

RL/RG PIPES DOWN TO UV-JK9
IN THE JK CLASSROOM 9 (GR. FL)
COMPLETE WITH SHEET METAL COVER

NEW PIPE SUPPORT
TYP.

NEW CONDENSING UNIT

NEW ECO-FOOT SUPPORT

CDU-2

PROVIDE POWER FROM PANEL DP-1
LOCATED IN MECH./BOILER ROOM

WP

N

7

G

25ø

20ø

40ø

32ø

RTU-7

50

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	P.C.	O.C.	2022-01	04/04/2023	1:50

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

Job Name: GLADYS SPEERS PS - HVAC UPGRADES

Drawing Name: PART OF THE ROOF - NEW WORK - MECHANICAL

REF. DWG.: M-3.1

SKETCH #: SKM-3.1-7-B

SCHEDULE OF UNIT VENTILATORS

TAG	AIR FLOW TOTAL (CFM)	AIR FLOW MIN OA (CFM)	ESP Pa [IN WC]	HEATING CAPACITY TOTAL kW [MBH]	HEATING CAPACITY EAT °C [°F]	HEATING CAPACITY LAT °C [°F]	HEATING CAPACITY WATER FLOW L/S [GPM]	HEATING CAPACITY WPD kPa [FT WC]	DX COOLING TOTAL CAP. kW [MBH]	DX COOLING SENS. CAP. kW [MBH]	DX COOLING REFRIGERANT	POWER (V/PH/HZ)	BLOWER MOTOR HP	MCA (AMPS)	MOCP (AMPS)	UNIT DIMENSIONS H x W x D [MM]	WEIGHT KG [LBS]	REMARKS
UV–JK9	1,600	420	63 [0.25]	21 [70.8]	10 [50]	33 [91]	0.48 [7.7]	14.8 [5.0]	16 [53]	11 [36]	R410A	208/3/60	3/4	7.5	15	2,238x1,188x660	386 [850]	COMPLETE WITH DUCT SHROUD

NOTES:

1. PERFORMANCE BASED ON EWT/LWT 180/160°F, BALANCE THE FLOW AT EACH UNIT AS INDICATED ON THE DRAWINGS AND SCHEDULE.
2. UNIT VENTILATOR C/W MANUFACTURER LOUVER, WALL SLEEVE
3. C/W TOP DUCT COVER, PEDESTAL BASE

SCHEDULE OF OUTDOOR CONDENSERS

TAG	COOLING CAP. kW [MBH]	REFRIGERANT	CONNECTION SIZES RL–MM [IN]	CONNECTION SIZES RG–MM [IN]	EQUIPMENT SIZE (HxWxL, MM)	WEIGHT KG [LBS]	POWER SUPPLY (V/PH/Hz)	MCA (AMPS)	MOCP (AMPS)	REMARKS
CDU–2	85.1 [290]	R–410A	1x12.7 [½"]	1x22.2 [⅞"]	1,145x1,042x1,245	295 [650]	208/3/60	25.7	40	FOR UV–JK9 IN JK CLASSROOM 9

NOTES:

1. PROVIDE ALL INTERCONNECTED REFRIGERANT LINE SET BETWEEN INDOOR AND OUTDOOR UNIT.
2. UNIT TO BE BACNET AND CONTROLLED BY THE BAS.
3. ALL THE FINAL SIZE FOR THE REFRIGERATION PIPES TO BE BY THE UNIT/ SYSTEM MANUFACTURER BASED ON FINAL ROUTING.
4. MANUFACTURER TO PROVIDE DETAILED PIPE SIZE AND SCHEMNATIC AS PART OF SHOP DRAWINGS SUBMITAL.

SCHEDULE OF GRILLES & DIFFUSERS

TYPE	SERVICE	MANUFACTURER	MODEL	VOLUME CONTROL	FINISH	REMARKS
A	SUPPLY	E.H. PRICE	SDG	YES	B12	SPIRAL DUCT GRILLES

MECHANICAL EQUIPMENT WIRING SCHEDULE

EQUIPMENT DESCRIPTION	POWER SOURCE	STARTER TYPE	MCA/BHP/ KW/AMP	VOLTS/PH./ FREQUENCY	BREAKER SIZE OR FUSE SIZE	FEEDER SIZE	REMARKS
UV–JK9	BOILER RM DISTRIBUTION PANEL 'DP–1'	INTEGRAL	7.5 MCA 0.75 HP	208/3/60	15A	3#AWG12+G IN 21mmC	PROVIDE NEW FUSED DISCONNECT AND CONNECT TO NEW DISTRIBUTION PANEL 'DP–1'. PROVIDE ALL WIRING BETWEEN THE PANEL 'DP–1', DISCONNECT, WEATHERPROOF DISCONNECT AND EQUIPMENT. ALL WIRING TO BE IN EMT CONDUIT. PROVIDE LOCAL DISCONNECT SWITCH.
CDU–2	BOILER RM DISTRIBUTION PANEL 'DP–1'	INTEGRAL	25.7 MCA 0.75 HP	208/3/60	40A	3#AWG8+G IN 35mmC	PROVIDE NEW FUSED DISCONNECT AND CONNECT TO NEW DISTRIBUTION PANEL 'DP–1'. PROVIDE ALL WIRING BETWEEN THE PANEL 'DP–1', DISCONNECT, WEATHERPROOF DISCONNECT AND EQUIPMENT. ALL WIRING TO BE IN RIGID METAL CONDUIT. LAST 900 MM SHALL BE LIQUID–TIGHT FLEXIBLE FEEDERS. PROVIDE LOCAL DISCONNECT SWITCH.

NOTES:

PROVIDE CONNECTION TO MECHANICAL EQUIPMENT TO ENSURE THAT FULL OPERATIONAL SYSTEMS ARE DELIVERED TO THE OWNER.

PROVIDE POWER CONNECTION TO ALL EQUIPMENT LISTED IN THE SCHEDULE. REFER ROOF LAYOUT FOR EXACT LOCATION OF EQUIPMENT.

PROVIDE SEPARATE DISCONNECTS FOR INDIVIDUAL MECHANICAL EQUIPMENT. SIZE AS INDICATED IN THE SCHEDULE.

DISCONNECTS LOCATIONS SHALL BE VERIFIED AND CO–COORDINATED ON SITE.

CONNECT NEW UNITS TO EXISTING FIRE ALARM SYSTEM. INCLUDE ALL REQUIRED WIRING AND DEVICES. PROVIDE VERIFICATION OF THE FIRE ALARM SYSTEM.

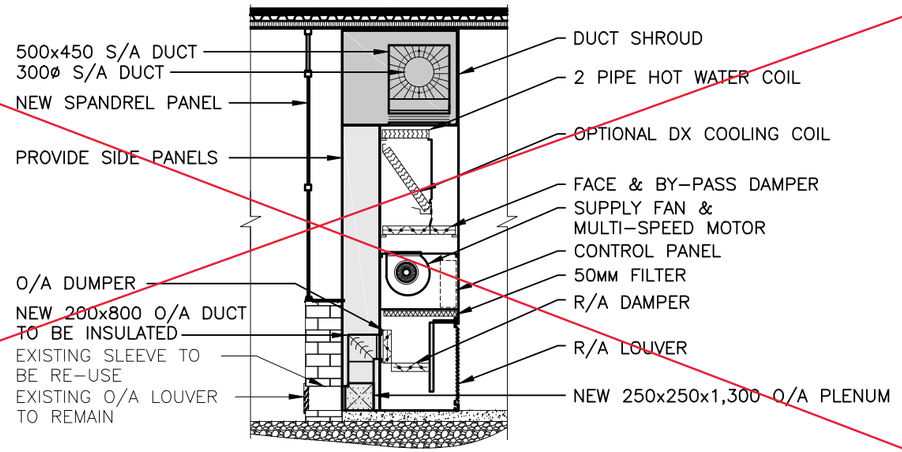
CONNECT NEW UNITS TO EXISTING BAS. INCLUDE ALL REQUIRED WIRING AND DEVICES. PROVIDE VERIFICATION OF THE BAS.

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	P.C.	O.C.	2022-01	04/04/2023	N.T.S.

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

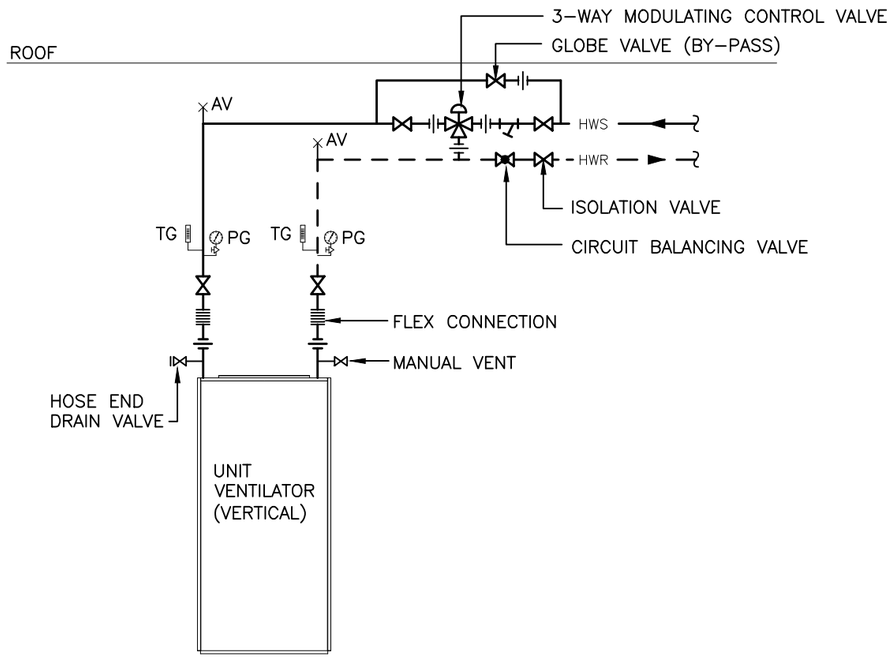
Job Name: GLADYS SPEERS PS - HVAC UPGRADES
Drawing Name: SCHEDULE - MECHANICAL
REF. DWG.: M-3.1
SKETCH #: SKM-3.1-7-C

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
TOWN OF OAKVILLE



SECTION 'A-A'
SCALE: 1:50

BUILDING SERVICES
OAKVILLE
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.
PERMIT NO: 22-111973R1
Mechanical Plans Review
DATE: 9/12/2024
REVIEWED BY: gatia
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE



TYPICAL UNIT VENTILATOR PIPING CONNECTION
N.T.S.

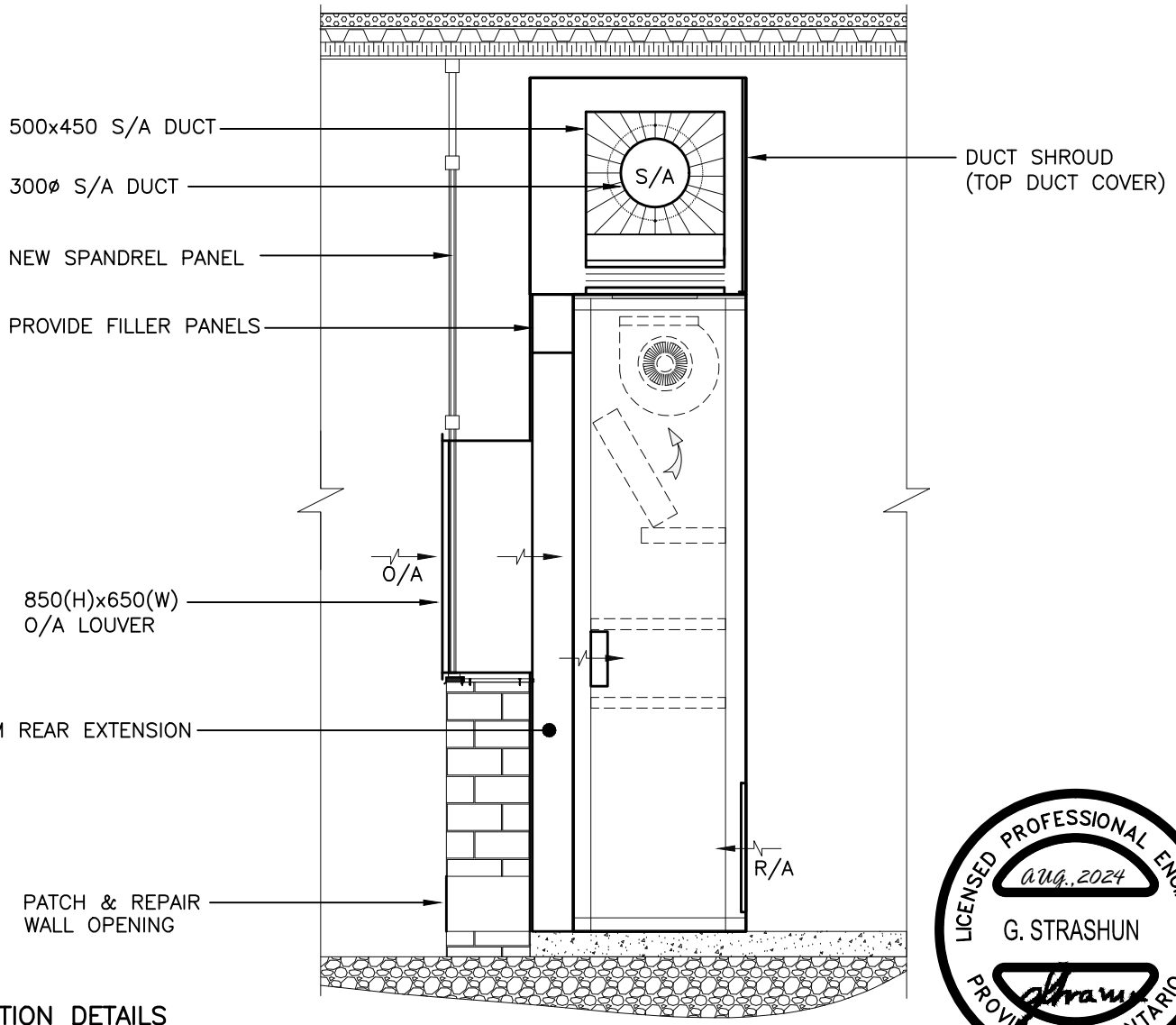
LICENSED PROFESSIONAL ENGINEER
aug., 2024
G. STRASHUN
PROVINCE OF ONTARIO

Issued for	Designed by	Checked by	Job No.	Date	Scale
CCN-9	P.C.	O.C.	2022-01	04/04/2023	AS SHOWN

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL: (905)-787 8885 FAX (905)-787 8771

Job Name: GLADYS SPEERS PS - HVAC UPGRADES
Drawing Name: SCHEDULE - MECHANICAL
REF. DWG.: M-3.1
SKETCH #: SKM-3.1-7-D

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 08/16/2024
TOWN OF OAKVILLE



BUILDING SERVICES
REVIEWED
PERMIT IS ISSUED SUBJECT TO ANY REASON SHOWN IN COLOUR AND MARKED THEREON OR ON ATTACHED DOCUMENT.

PERMIT NO:	22-111973R1
Mechanical Plans Review	
DATE:	9/12/2024
REVIEWED BY:	gatia
CONSTRUCTION MUST COMFORM TO THE ONTARIO BUILDING CODE	

LICENSED PROFESSIONAL ENGINEER
aug.,2024
G. STRASHUN
PROVINCE OF ONTARIO

SECTION A–A: INSTALLATION DETAILS
1:25

Issued for	Designed by	Checked by	Job No.	Date	Scale
SI-2	T.N.	O.C.	2022-01	25/06/2024	AS SHOWN

SAB ENGINEERING Inc.
588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6
TEL. (905)-787 8885 FAX (905)-787 8771

Job Name: GLADYS SPEERS PS - HVAC UPGRADES
Drawing Name: UV CONNECTION DETAILS - MECHANICAL
REF. DWG.: M-3.1
SKETCH #: SKM-3.1-7-D-R1

SAB ENGINEERING Inc.
Unit 25
Richmond Hill, Ontario
L4C 9Y6
Tel: (905)-787-8885
Fax: (905)-787-8771
E-mail: sabengineering@rogers.com

Town of Oakville
1225 Trafalgar Road
Oakville, ON
L6H 0H3

November 7, 2024

RECEIVED
BUILDING SERVICES
PERMIT NO: 22-111973 REV 01
DATE: 11/19/2024
OAKVILLE
TOWN OF OAKVILLE

Re: Permit No. 22 – 111973 REV 01
Gladys Speers PS – Renovations
2150 Samway Road, Oakville , ON., L6L 2P6

Att: David Lindsay, *Fire Prevention Officer*

Dear Mr. Lindsay,

We have reviewed the comments in your letter dated September 11, 2024, and our answerers are as follows:

1. Please see attached hydraulic calculations and specification sheet for the proposed back flow preventer assembly.

If you need additional information, please do not hesitate to contact us.

Best Regards,

Gabriela Strashun, P. Eng.

SAB ENGINEERING Inc.

WESTBROOK SPRINKLER DESIGN

HYDRAULIC DESIGN SUMMARY

PROJECT NAME: **GLADYS SPEERS PS**
2150 SAMWAY ROAD

DESIGN AREA "FSP-1"

- DESIGN IS BASED ON NFPA 14 (1960). THIS WAS THE NFPA 14 CODE USED AT THE TIME OF CONSTRUCTION.
- DESIGN SPECIFIES TWO 1 1/2" FHV TO BE CALCULATED AT A FLOW OF 35 USGPM & A PRESSURE OF 25 PSI.

NUMBER OF FHC CALCULATED: 2:

NOV. 05, 2024

LICENSED PROFESSIONAL ENGINEER
90218512
M. M. BASSILY
PROVINCE OF ONTARIO

DEMAND (AT SOURCE): 70.3 USGPM @ 40.1 PSI

AVAILABLE (AT SOURCE): 70.3 USGPM @ 55.0 PSI

FIRE HYDRANT FLOW TEST CONDUCTED BY WSD ON FIRE HYDRANTS ON SAMWAY ROAD ON MAY 14, 2024:

- STATIC: 55 PSI
- FLOW: 950 USGPM @ 50 PSI

DATE: 10/21/2024 C:\USERS\14168\DOCUMENTS\HASSDATA\2150 SAMWAY ROAD.SDF
JOB TITLE: GLADYS SPEERS, 2150 SAMWAY ROAD - FSP

WATER SUPPLY DATA

SOURCE NODE TAG	STATIC PRESS. (PSI)	RESID. PRESS. @ (PSI)	FLOW (GPM)	AVAIL. PRESS. @ (PSI)	TOTAL DEMAND (GPM)	REQ'D PRESS. (PSI)
SOURCE	55.0	50.0	950.0	55.0	70.3	40.1

AGGREGATE FLOW ANALYSIS:

TOTAL FLOW AT SOURCE	70.3 GPM
TOTAL HOSE STREAM ALLOWANCE AT SOURCE	0.0 GPM
OTHER HOSE STREAM ALLOWANCES	0.0 GPM
TOTAL DISCHARGE FROM ACTIVE SPRINKLERS	70.3 GPM

NODE ANALYSIS DATA

NODE TAG	ELEVATION (FT)	NODE TYPE	PRESSURE (PSI)	DISCHARGE (GPM)
F1	5.0	K= 7.00	25.0	35.0
F2	5.0	K= 7.00	25.4	35.3
J1	12.0	- - - -	22.3	- - -
J2	12.0	- - - -	22.7	- - -
J3	12.0	- - - -	28.3	- - -
TOR	12.0	- - - -	28.9	- - -
BFO	3.0	- - - -	32.9	- - -
BFI	3.0	- - - -	39.9	- - -
SPG	3.0	- - - -	39.9	- - -
SOURCE	3.0	SOURCE	40.1	70.3

PIPE DATA

PIPE TAG / END NODES	ELEV. (FT)	NOZ. (K)	PT (PSI)	DISC. (GPM)	Q(GPM) VEL(FPS)	DIA(IN) HW(C) FL/FT	LENGTH (FT)		PRESS. SUM. (PSI)
Pipe: 1					-35.0	2.067 PL	9.00	PF	0.3
F1	5.0	7.0	25.0	35.0	3.3	120 FTG	ET	PE	-3.0
J1	12.0	0.0	22.3	0.0		0.013 TL	24.00	PV	
Pipe: 2					-35.3	2.067 PL	9.00	PF	0.3
F2	5.0	7.0	25.4	35.3	3.4	120 FTG	ET	PE	-
J2	12.0	0.0	22.7	0.0		0.014 TL	24.00	PV	
Pipe: 3					-35.0	2.470 PL	76.00	PF	0.4
J1	12.0	0.0	22.3	0.0	2.3	120 FTG	----	PE	0.0
J2	12.0	0.0	22.7	0.0		0.006 TL	76.00	PV	
Pipe: 4					-70.3	2.470 PL	246.00	PF	5.6
J2	12.0	0.0	22.7	0.0	4.7	120 FTG	2ET	PE	0.0
J3	12.0	0.0	28.3	0.0		0.021 TL	270.05	PV	
Pipe: 5					-70.3	3.260 PL	64.50	PF	0.6
J3	12.0	0.0	28.3	0.0	2.7	120 FTG	6E	PE	0.0
TOR	12.0	0.0	28.9	0.0		0.005 TL	120.95	PV	
Pipe: 6					-70.3	3.260 PL	9.00	PF	0.0
TOR	12.0	0.0	28.9	0.0	2.7	120 FTG	----	PE	3.9
BFO	3.0	0.0	32.9	0.0		0.005 TL	9.00	PV	
Pipe: 7					FIXED PRESSURE LOSS DEVICE				
BFO	3.0	0.0	32.9	0.0	7.0 psi, 70.3 gpm				
BFI	3.0	0.0	39.9	0.0					
Pipe: 8					-70.3	4.026 PL	1.00	PF	0.0
BFI	3.0	0.0	39.9	0.0	1.8	120 FTG	----	PE	0.0
SPG	3.0	0.0	39.9	0.0		0.002 TL	1.00	PV	
Pipe: 9					-70.3	4.026 PL	150.00	PF	0.3
SPG	3.0	0.0	39.9	0.0	1.8	150 FTG	2ETG	PE	0.0
SOURCE	3.0	SRCE	40.1	(N/A)		0.001 TL	213.46	PV	

NOTES (HASS):

(1) Calculations were performed by the HASS 2023 D computer program in accordance with NFPA (2020) under license no. 64619073 granted by

HRS Systems, Inc.
208 Southside Square
Petersburg, TN 37144
(931) 659-9760

(2) The system has been calculated to provide an average imbalance at each node of 0.018 gpm and a maximum imbalance at any node of 0.163 gpm.

(3) Total pressure at each node is used in balancing the system.
Maximum water velocity is 4.7 ft/sec at pipe 4.

(4) Items listed in bold print on the cover sheet

are automatically transferred from the calculation report.

(5) Available pressure at source node SOURCE under full flow conditions is
54.94 psi with a flow of 85.17 gpm.

(6) PIPE FITTINGS TABLE

HASS Pipe Table Name: standard

PAGE: A MATERIAL: S40 HWC: 120

Diameter	Equivalent Fitting Lengths in Feet								
(in)	E Ell	T Tee	L LngEll	C ChkVlv	B BfyVlv	G GatVlv	A AlmChk	D DPVlv	N NTee
	F F45Ell								
2.067	5.00	10.00	3.00	11.00	6.00	1.00	10.00	10.00	10.00
	2.50								
4.026	10.00	20.00	6.00	22.00	12.00	2.00	20.00	20.00	20.00
	5.00								

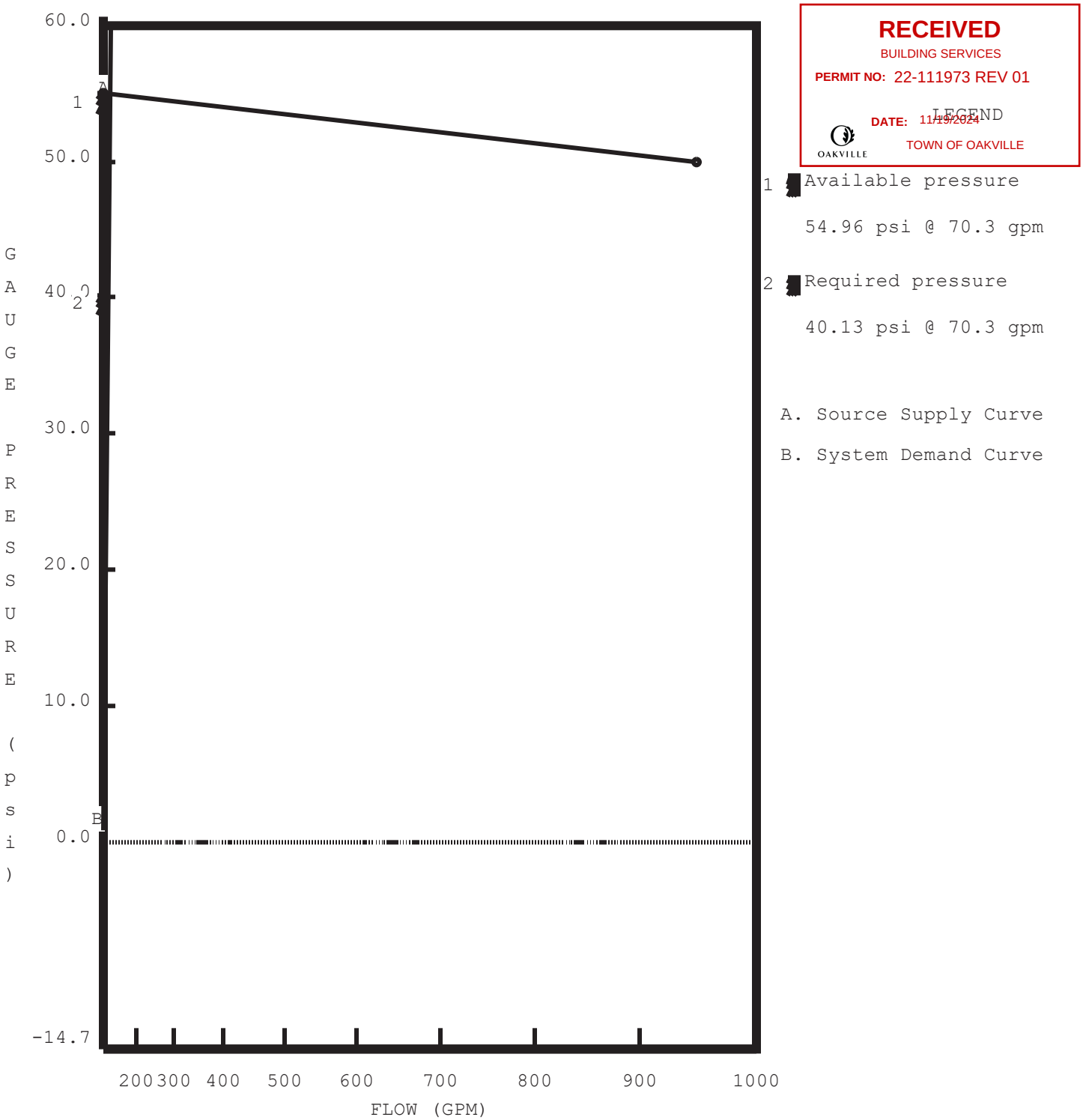
PAGE: * MATERIAL: Custom

Diameter	Equivalent Fitting Lengths in Feet								
(in)	E Ell	T Tee	L LngEll	C ChkVlv	B BfyVlv	G GatVlv	A AlmChk	D DPVlv	N NPTee
	F F45Ell								
2.470	6.01	12.02	4.01	14.03	7.01	1.00	10.02	10.02	12.02
	3.01								
3.260	9.41	20.16	6.72	21.50	13.44	1.34	17.47	17.47	20.16
	4.70								

DATE: 10/21/2024 C:\USERS\14168\DOCUMENTS\HASSDATA\2150 SAMWAY ROAD.SDF
JOB TITLE: GLADYS SPEERS, 2150 SAMWAY ROAD - FSP

WATER SUPPLY ANALYSIS

Static: 55.00 psi Resid: 50.00 psi Flow: 950.0 gpm



LEGEND

1 Available pressure
54.96 psi @ 70.3 gpm

2 Required pressure
40.13 psi @ 70.3 gpm

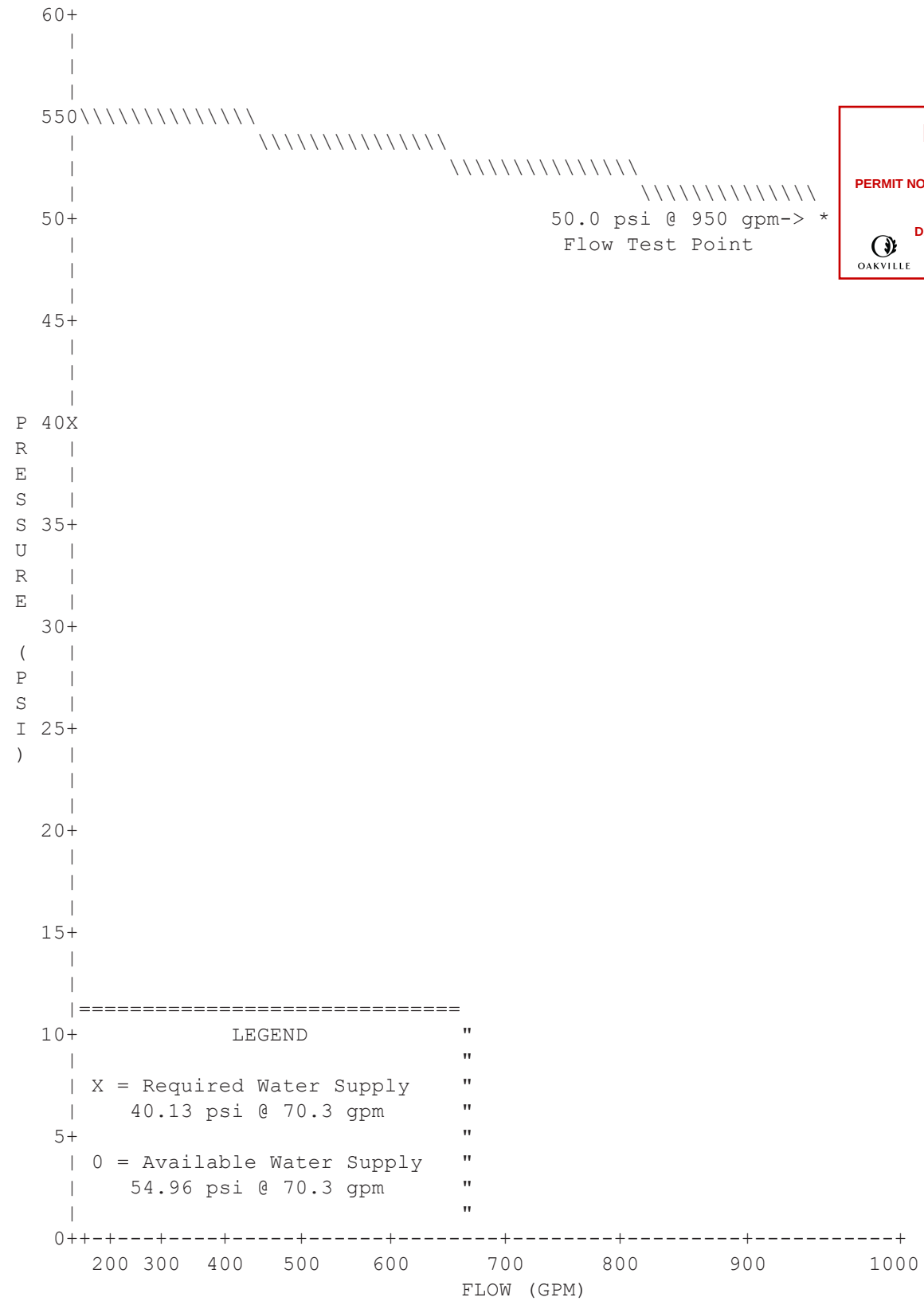
A. Source Supply Curve

B. System Demand Curve

Note: (1) Dashed Lines indicate extrapolated values from Test Results

DATE: 10/21/2024 C:\USERS\14168\DOCUMENTS\HASSDATA\2150 SAMWAY ROAD.SDF
JOB TITLE: GLADYS SPEERS, 2150 SAMWAY ROAD - FSP

WATER SUPPLY CURVE



Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

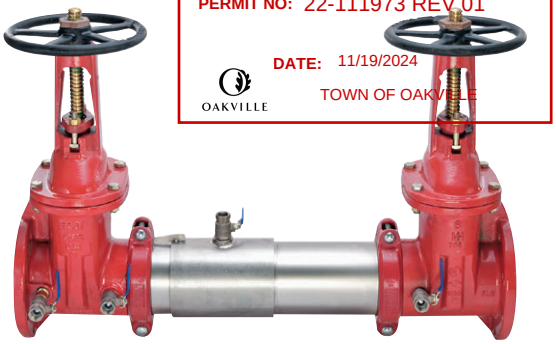
LEAD FREE*

Series 757, 757N

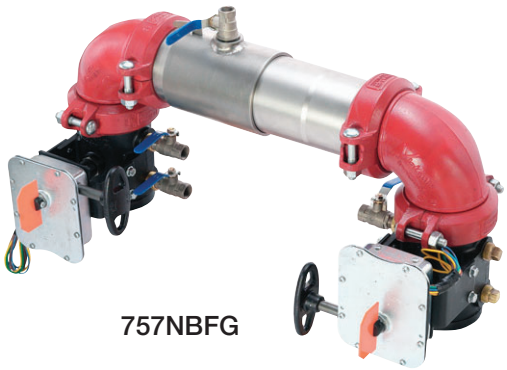
Double Check Valve Assemblies

Sizes: 2½" – 10"

Series 757, 757N Double Check Valve Assemblies are used to prevent backflow of non-health hazard pollutants that are objectionable but not toxic, from entering the potable water supply system. Series 757, 757N may be installed under continuous pressure service and may be subjected to backpressure and backsiphonage. Series 757, 757N consists of two independently operating check valves, two shutoff valves, and four test cocks.



757OSY



757NBFG

757OSY
(Vertical)

Features

- Extremely compact design
- 70% Lighter than traditional designs
- 304 (Schedule 40) Stainless steel housing & sleeve
- Groove fittings allow integral pipeline adjustment
- Patented tri-link check provides lowest pressure loss
- Unmatched ease of serviceability
- Available with grooved butterfly valve shutoffs
- Available for horizontal, vertical or N pattern installations
- Replaceable check disc rubber
- Sizes 2½", 3" and 4" available with quarter-turn ball valve shutoffs

Specifications

The Double Check Valve Assembly shall consist of two independent tri-link check modules within a single housing, sleeve access port, four test cocks and two drip tight shut-off valves. Tri-link checks shall be removable and serviceable, without the use of special tools. The housing shall be constructed of 304 Schedule 40 stainless steel pipe with groove end connections. Tri-link checks shall have reversible elastomer discs and in operation shall produce drip tight closure against reverse flow caused by backpressure or backsiphonage. Assembly shall be a Watts Series 757, 757N.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

***The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.**

WATTS®

Available Models

Suffix:

NRS –	non-rising stem resilient seated gate valves
OSY –	UL/FM outside stem and yoke, resilient seated gate valves
BFG –	UL/FM grooved gear operated butterfly valves with tamper switch
QT –	2½", 3" and 4" quarter-turn ball valves
**OSY FxG –	Flanged inlet gate connection and grooved outlet gate connection
**OSY GxF –	Grooved inlet gate connection and flanged outlet gate connection
**OSY GxG –	Grooved inlet gate connection and grooved outlet gate connection

Available with grooved NRS gate valves - consult factory**
Post indicator plate and operating nut available - consult factory**
**Consult factory for dimensions

Dimensions — Weight

Materials

Housing & Sleeve: 304 (Schedule 40) Stainless Steel
Elastomers: EPDM, Silicone and Buna-N
Tri-link Checks: Noryl®, Stainless Steel
Check Discs: Reversible Silicone or EPDM
Test Cocks: Bronze Body Nickel Plated
Pins & Fasteners: 300 Series Stainless Steel
Springs: Stainless Steel

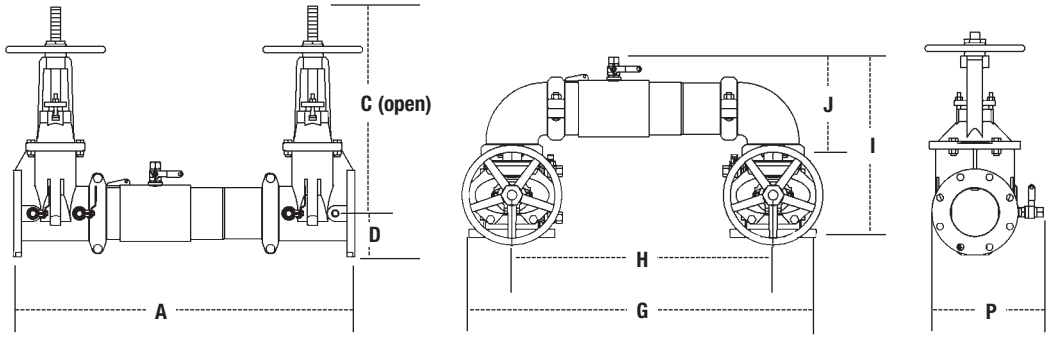
Pressure — Temperature

Temperature Range: 33°F – 140°F (0.5°C – 60°C)
Maximum Working Pressure: 175psi (12.1 bar)

Approvals

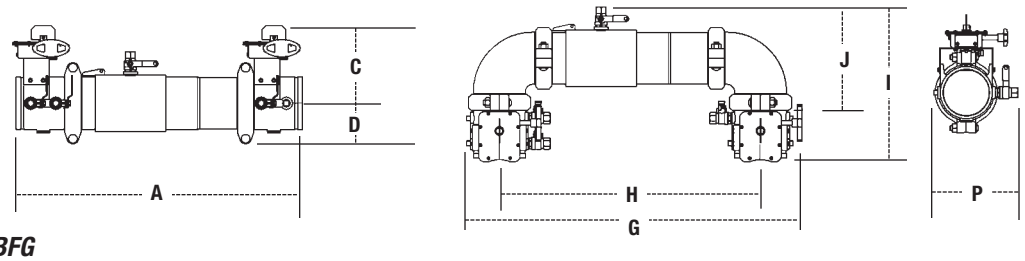
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The Unversity of Southern California (FCCCHR-USC)
- AWWA C511-97

1015 B64.5 (**BFG & OSY Only)



757, 757N

SIZE	DIMENSIONS																WEIGHT					
	A		C (OSY)		C (NRS)		D		G		H		I		J		P		757NRS		757OSY		757N NRS		757N OSY	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*	*lbs.*	*kgs.*	*lbs.*	*kgs.*	*lbs.*	*kgs.*
2½	30¾	781	16⅜	416	9⅜	238	3½	89	29 1/16	738	21½	546	15½	393	8 13/16	223	9 3/16	234	115	52	125	57	123	56	133	60
3	31¾	806	18⅞	479	10¼	260	3 1/16	94	30¼	768	22¼	565	17⅛	435	9 3/16	233	10½	267	131	59	145	66	144	65	158	72
4	33¾	857	22¾	578	12 3/16	310	4	102	33	838	23½	597	18½	470	9 15/16	252	11 3/16	284	161	73	161	73	184	83	184	83
6	43½	1105	30⅛	765	16	406	5½	140	44¾	1137	33½	851	23 3/16	589	13 1/16	332	15	381	273	124	295	134	314	142	336	152
8	49¾	1264	37¾	959	19 15/16	506	6 1/16	170	54⅛	1375	40⅛	1019	27 7/16	697	15 11/16	399	17 3/16	437	438	199	480	218	513	233	555	252
10	57¾	1467	45¾	1162	23 13/16	605	8⅜	208	66	1676	49½	1257	32½	826	17 5/16	440	20	508	721	327	781	354	891	404	951	431

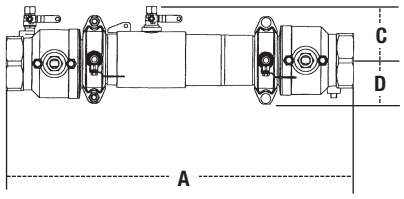


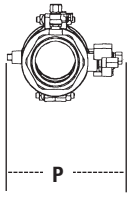
757BFG, 757NBFG

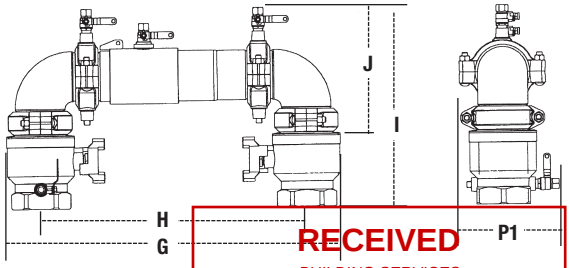
SIZE	DIMENSIONS																WEIGHT			
	A		C		D		G		H		I		J		P		757BFG		757N BFG	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*
2½	27¾	705	8	203	3½	89	29⅞	759	21½	546	14 15/16	379	8 13/16	223	9	229	56	25	64	29
3	28¼	718	8 5/16	211	3 1/16	94	30 1/16	779	22¼	565	15 7/16	392	9 3/16	233	9½	241	54	24	67	30
4	29	737	8 15/16	227	3 1/16	94	31 15/16	811	23½	597	16¼	412	9 15/16	252	10	254	61	28	84	38
6	36½	927	10	254	5	127	43 3/16	1097	33¼	845	19 11/16	500	13 1/16	332	10½	267	117	53	157	71
8	42¾	1086	12¼	311	6½	165	51 1/16	1297	40⅛	1019	23 3/16	592	15 11/16	399	14 3/16	361	261	118	337	153

Noryl® is a registered trademark of SABIC Innovative Plastics Holding BV.

Dimensions — Weight continued







757QT

SIZE	DIMENSIONS																		WEIGHT			
	A		C		D		G		H		I		J		P		P1		QT		QTN	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*	*lbs.*	*kgs.*
2½	27¼	692	4⅞	124	6⅞	175	30¼	768	24½	622	16 1/16	407	11⅜	289	11 5/16	287	11 5/16	287	40	18	50	23
3	28¼	718	4⅞	124	6⅞	175	30¼	768	24½	622	16 9/16	420	11⅜	289	11 5/16	287	11 5/16	287	50	23	60	27
4	31½	800	4⅞	124	6⅞	175	30¼	768	24½	622	18 5/16	465	11⅜	289	11 5/16	287	11 5/16	287	70	32	80	36

Capacity

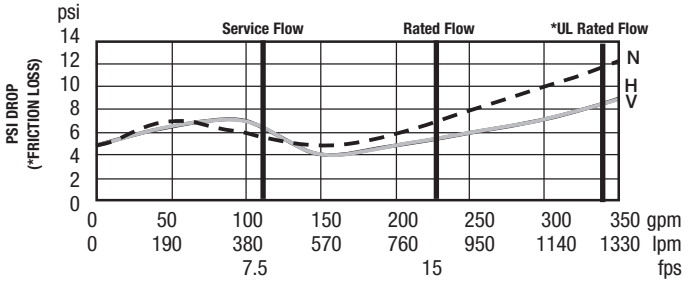
Series 757, 757N flow curves as tested by Underwriters Laboratory. Flow characteristics collected using butterfly shutoff valves

Horizontal Vertical N - Pattern

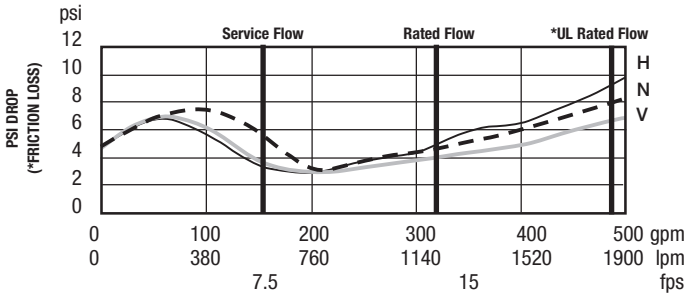
Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends that the maximum water velocity in services be not more than 10fps.

2½"



3"



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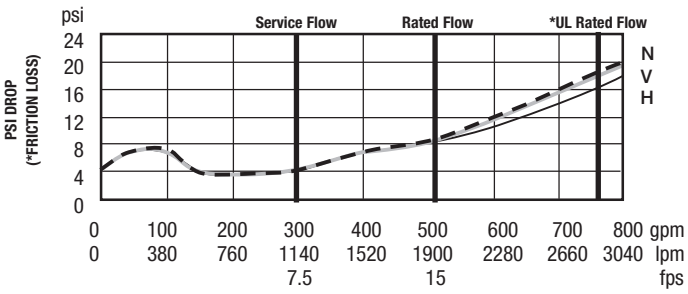
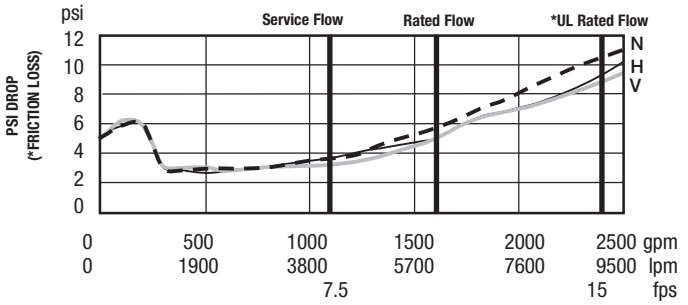
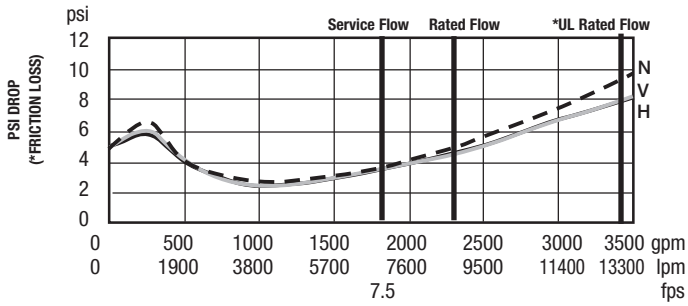


8"



10"



NOTICE

Inquire with governing authorities for local installation requirements

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Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca
Latin America: Tel: (52) 81-1001-8600 • Watts.com