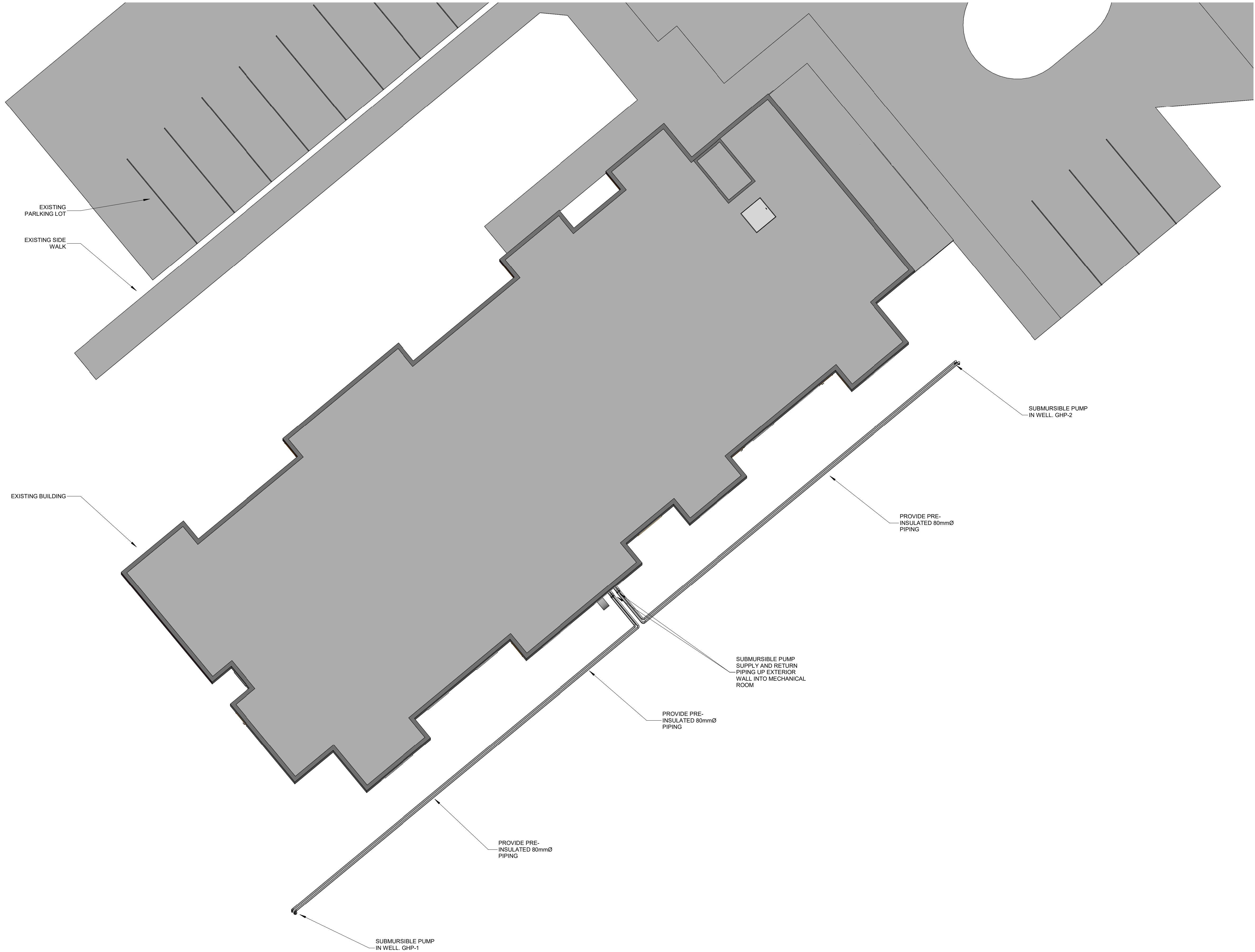




1 M - SITE PLAN
M001 SCALE:

KEY PLAN:

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No.	Date	Description	By

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LANARK COUNTY
20 BOURKE ST. SMITHS FALLS,
ON, K7A 3L9

PROJECT NAME:

LANARK DEEP RETROFIT DESIGN

SHEET TITLE:

SITE PLAN

DISCIPLINE:

MECHANICAL

DRAFTER:	N.S.	SCALE:	AS NOTED
DESIGNER:	N.S.	DATE:	09.07.2026
APPROVER:	N.S.	CHECKER:	C.M.
PROJECT No:	Project Number	DRAWING No:	M001
SHEET No:	1 of 6		

MECHANICAL LEGEND

GENERAL

	EXISTING TO REMAIN
	EXISTING TO REMOVE
	ELBOW DOWN
	ELBOW UP
	TEE UP
	TEE DOWN
	PIPE LINE CONTINUED
	STORMWATER LEADER
	SANITARY LEADER
	STACK VENT
	FIRE PROTECTION RISER
	DEMO KEYNOTE
	KEYNOTE
	REVISION
	SECTION VIEW
	DETAIL VIEW
	PLUMBING FIXTURE TAG
	EQUIPMENT TAG
	PHOTO TAG/ VIEW
	AIR OUTLET OR INLET TAG
	RADIATION TAG
	RADIANT PANEL TAG

ABBREVIATIONS

UP	UP
DN	DOWN
W/	WITH
A.D.	ACCESS DOOR
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
CFM	CUBIC FEET PER MINUTE
L/S	LITER PER SECOND

MECHANICAL SYSTEMS

	FPD	FIRE PROTECTION - DRY SYSTEM
	FPW	FIRE PROTECTION - WET SYSTEM
	CNG	MECHANICAL - CONDENSATE BY GRAVITY
	HWS	MECHANICAL - HEATED WATER SUPPLY
	HWR	MECHANICAL - HEATED WATER RETURN
	CWS	MECHANICAL - CHILLED WATER PLUG LOAD SUPPLY
	CWR	MECHANICAL - CHILLED WATER PLUG LOAD RETURN
	CHWS	MECHANICAL - CHILLED WATER SUPPLY
	CHWR	MECHANICAL - CHILLED WATER RETURN
	HGS	MECHANICAL - HEATED GLYCOL SUPPLY
	HGR	MECHANICAL - HEATED GLYCOL RETURN
	CHGS	MECHANICAL - CHILLED GLYCOL SUPPLY
	CHGR	MECHANICAL - CHILLED GLYCOL RETURN
	GTS	MECHANICAL - GEOTHERMAL SUPPLY
	GTR	MECHANICAL - GEOTHERMAL RETURN
	GV	MECHANICAL - GENERAL GAS VENT
	GNV	MECHANICAL - NATURAL GAS VENT
	NG	MECHANICAL - NATURAL GAS
	SID	PLUMBING - EQUIPMENT DRAIN SYSTEM
	SAL	PLUMBING - LABOTARY SYSTEM
	STM	PLUMBING - STORMWATER SYSTEM
	SAN	PLUMBING - GENERAL SANITARY SYSTEM
	DHW	PLUMBING - DOMESTIC HOT WATER
	DHWR	PLUMBING - DOMESTIC HOT WATER RECIRCULATION
	DCW	PLUMBING - DOMESTIC COLD WATER
	NPCW	PLUMBING - NON-POTABLE COLD WATER
	NPHW	PLUMBING - NON-POTABLE HOT WATER
	NPHWR	PLUMBING - NON DOMESTIC HOT WATER RECIRCULATION
	CB/A	VENTILATION - COMBUSTION AIR
	E/A	VENTILATION - EXHAUST AIR - GENERAL PURPOSE
	R/A	VENTILATION - RETURN AIR
	S/A	VENTILATION - SUPPLY AIR
	O/A	VENTILATION - OUTDOOR AIR

PIPE FITTINGS AND SPECIALTIES

	SHUTOFF VALVE
	BALL VALVE
	BUTTERFLY VALVE
	GATE VALVE
	PLUG VALVE
	TWO WAY SOLENOID CONTROL VALVE
	TWO WAY CONTROL VALVE
	THREE WAY CONTROL VALVE
	BALANCING VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE
	RELIEF VALVE
	FLOW SWITCH
	AUTOMATIC AIR VENT
	THERMOMETER
	PRESSURE WELL
	PRESSURE GAUGE
	PRESSURE TAP
	BACKFLOW PREVENTER
	STRAINER
	UNION
	FLANGE
	WATER FLOW METER
	GAS FLOW METER
	PUMP
	ANCHOR
	PIPE SLEEVE OR OPENING
	EXPANSION JOINT c/w GUIDES
	FLOW DIRECTION
	HOSE BIBB
	NON FREEZE HOSE BIBB
	CLEANOUT (ABOVE GRADE)
	CLEANOUT (BELOW GRADE)
	VERTICAL SHUTOFF
	WATER HAMMER ARRESTOR
	TRAP PRIMER
	END CAP
	CARTRIDGE FILTER
	CATCH BASIN
	MANHOLE
	ROOF DRAIN
	FLOOR DRAIN
	FUNNEL FLOOR DRAIN
	STEAM TRAP
	CO ₂ SENSOR
	HUMIDISTAT
	THERMOSTAT
	THERMOSTAT c/w GUARD
	SENSOR
	SWITCH

HVAC SYMBOLS

	RECTANGULAR DUCT (WIDTH x HEIGHT)
	ROUND DUCT (DIAMETER)
	CONDUIT OVAL (WIDTH x HEIGHT)
	OVAL DUCT (WIDTH X DEPTH)
	DUCT WITH INSULATION
	SUPPLY OR OUTDOOR AIR : VERTICAL DUCT RISE
	RETURN AIR: VERTICAL DUCT RISE
	EXHAUST AIR : VERTICAL DUCT RISE
	SUPPLY OR OUTDOOR AIR : VERTICAL DUCT DROP
	RETURN AIR : VERTICAL DUCT DROP
	EXHAUST AIR : VERTICAL DUCT DROP
	FLOW AIR DIRECTION
	LEVEL CHANGE UP
	LEVEL CHANGE DOWN
	GRAVITY BACKDRAFT DAMPER IN DUCT
	MOTORIZED DAMPER IN DUCT
	MANUAL BALANCING DAMPER
	ELECTRIC COIL
	COOLING COIL
	HEATING COIL
	FLEXIBLE DUCT
	FLEXIBLE DUCT CONNECTOR (MINIMUM 100mm)
	ROOF EXHAUST AIR FAN
	RADIANT PANEL
	CHILLED BEAMS
	SILENCER
	HUMIDIFIER
	PREFILTER
	FILTER
	SUPPLY DIFFUSER
	SIDE WALL SUPPLY GRILLE
	SIDE WALL RETURN / EXHAUST GRILLE
	CEILING RETURN / EXHAUST
	DOOR TRANSFER
	LOUVER SUPPLY OR EXHAUST
	GOOSENECK SUPPLY OR EXHAUST

KEY PLAN:

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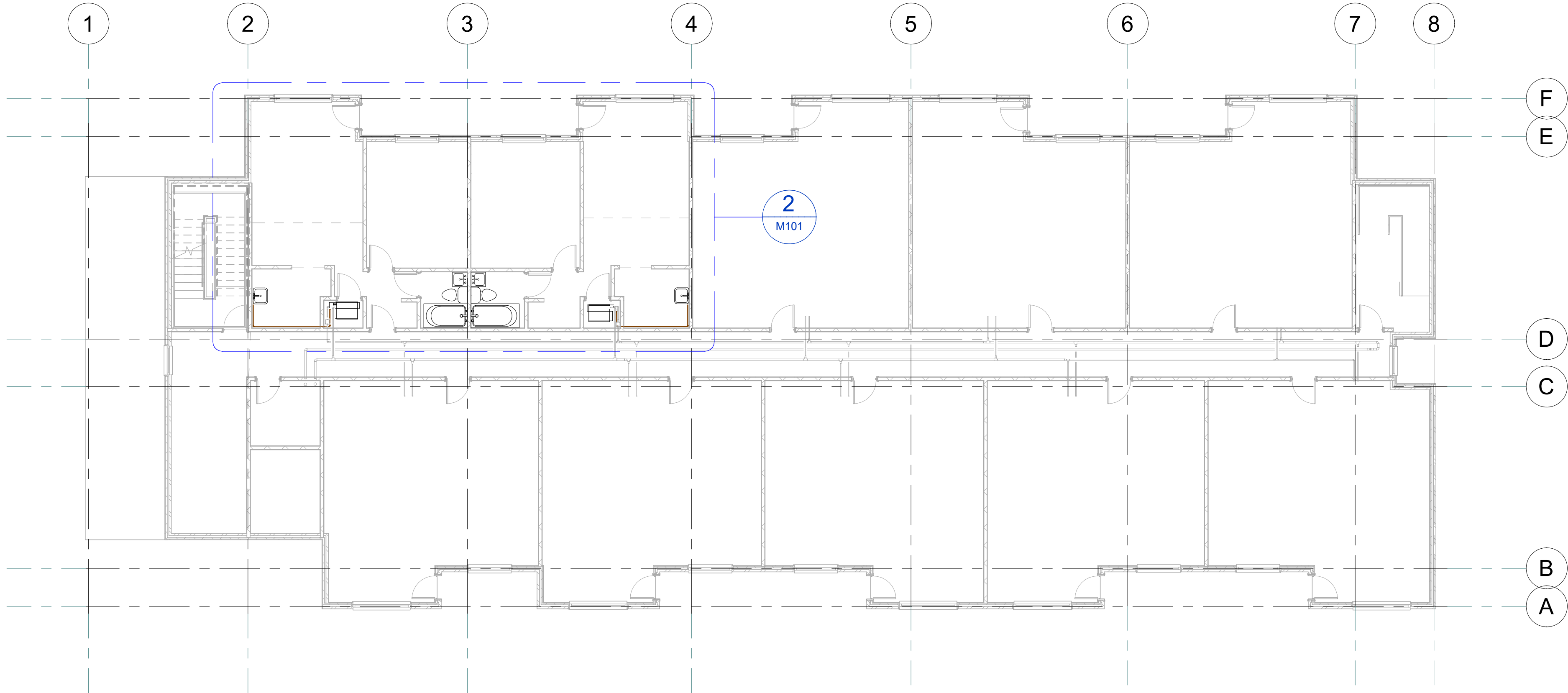
CLIENT:
LANARK COUNTY
20 BOURKE ST. SMITHS FALLS,
ON, K7A 3L9

PROJECT NAME:
LANARK DEEP RETROFIT DESIGN

SHEET TITLE:
SYMBOL LEGEND

DISCIPLINE:
MECHANICAL

DRAFTER:	N.S.	SCALE:	AS NOTED
DESIGNER:	N.S.	DATE:	09.07.2026
APPROVER:	N.S.	CHECKER:	C.M.
PROJECT No:	Project Number	DRAWING No:	M002
SHEET No:	1 of 6		

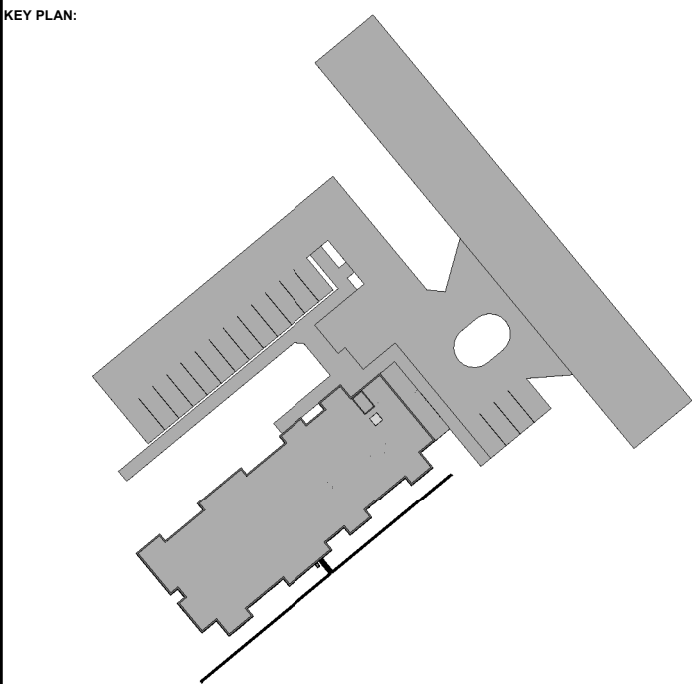
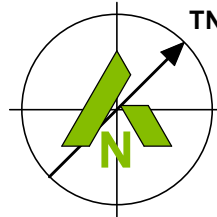


1 L02-05 PLUMBING
M101 SCALE: 1 : 100

CONNECT CONDENSATE DRAIN INTO KITCHEN
SINK DRAIN WITH DISHWASHER INSTALL KIT.
PROVIDE 1 LOOP OF FLEXIBLE PIPING PRIOR TO
CONNECTION TO DRAIN KIT. ROUTE PIPING
THROUGH CEILING SPACE ABOVE KITCHEN,
THROUGH PIPE CHASE ALONG REAR HALLWAY
SIDE OF KITCHEN AS SHOWN. DROP INTO REAR
OF CABINETS IN PIPESHAPE. TYP FOR ALL UNITS.

2 ALL LEVELS - PLUMBING - TYPICAL UNITS
M101 SCALE: 1 : 50

THE PLUMBING FIXTURES HAVE
BEEN UPDATED BY THE BUILDING
MAINTAINERS, EXCEPT FOR A FEW
ORIGINAL UNITS. MECHANICAL
CONTRACTOR TO CARRY A \$15,000
ALLOWANCE FOR NEW PLUMBING
FIXTURES AND INSTALLATION.
COORDINATE WITH BUILDING
OWNER FOR NUMBER OF
REPLACEMENT FIXTURES, AND
FIXTURES MAKE& MODEL.



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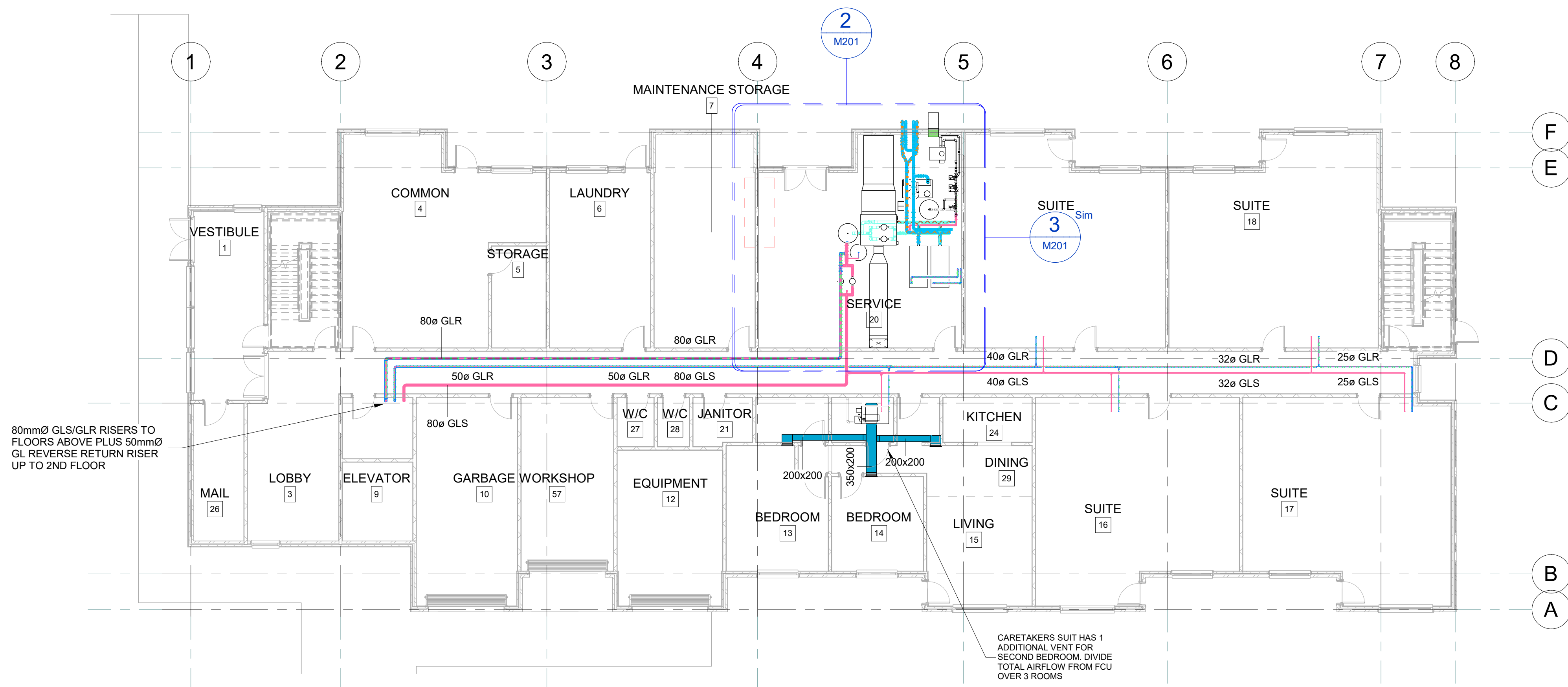
CLIENT:
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20 BOURKE ST. SMITHS FALLS,
ON, K7A 3L9

PROJECT NAME:
LANARK DEEP RETROFIT DESIGN

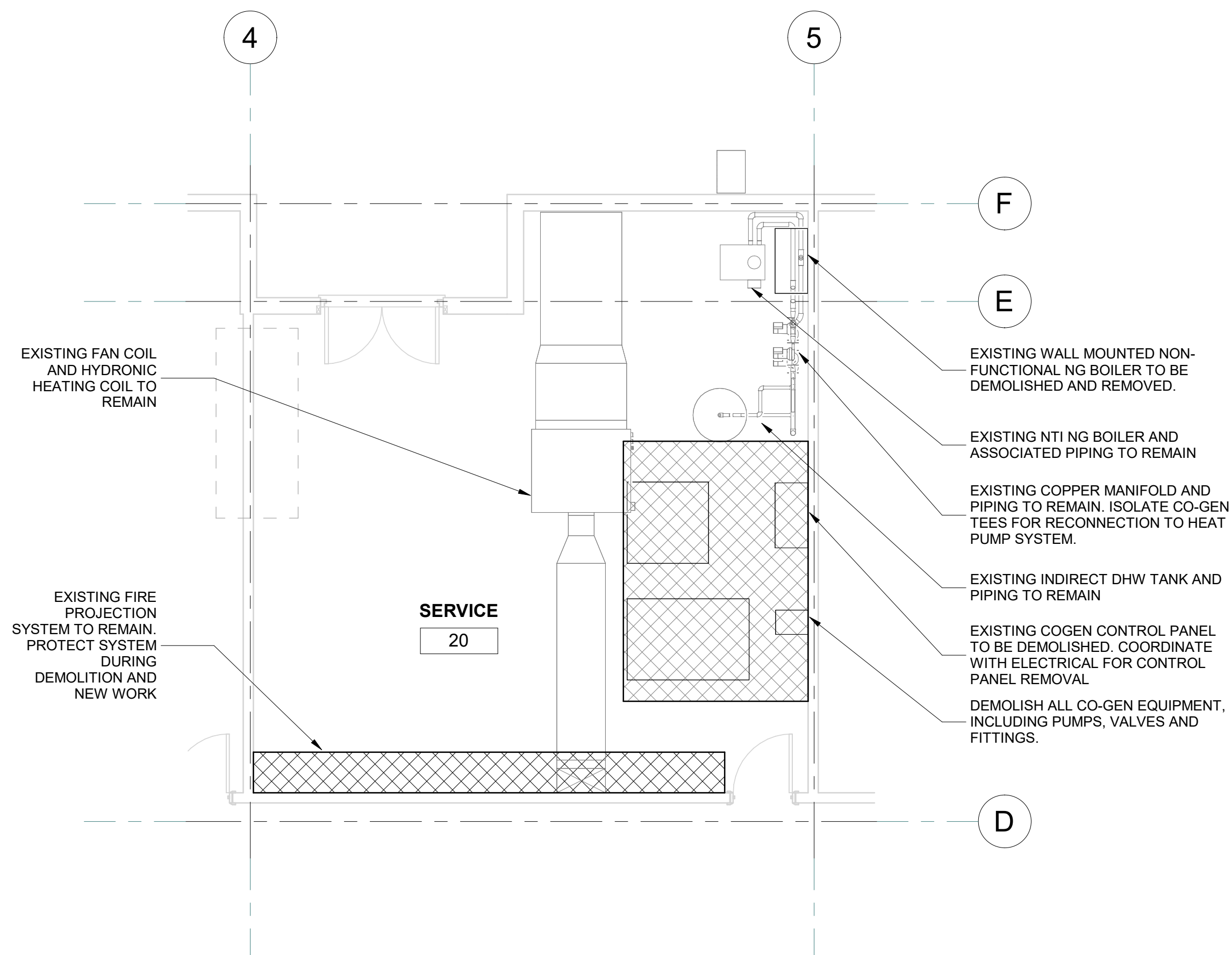
SHEET TITLE:
**PLUMBING TYPICAL UPPER FLOOR
PLAN**

DISCIPLINE:
MECHANICAL

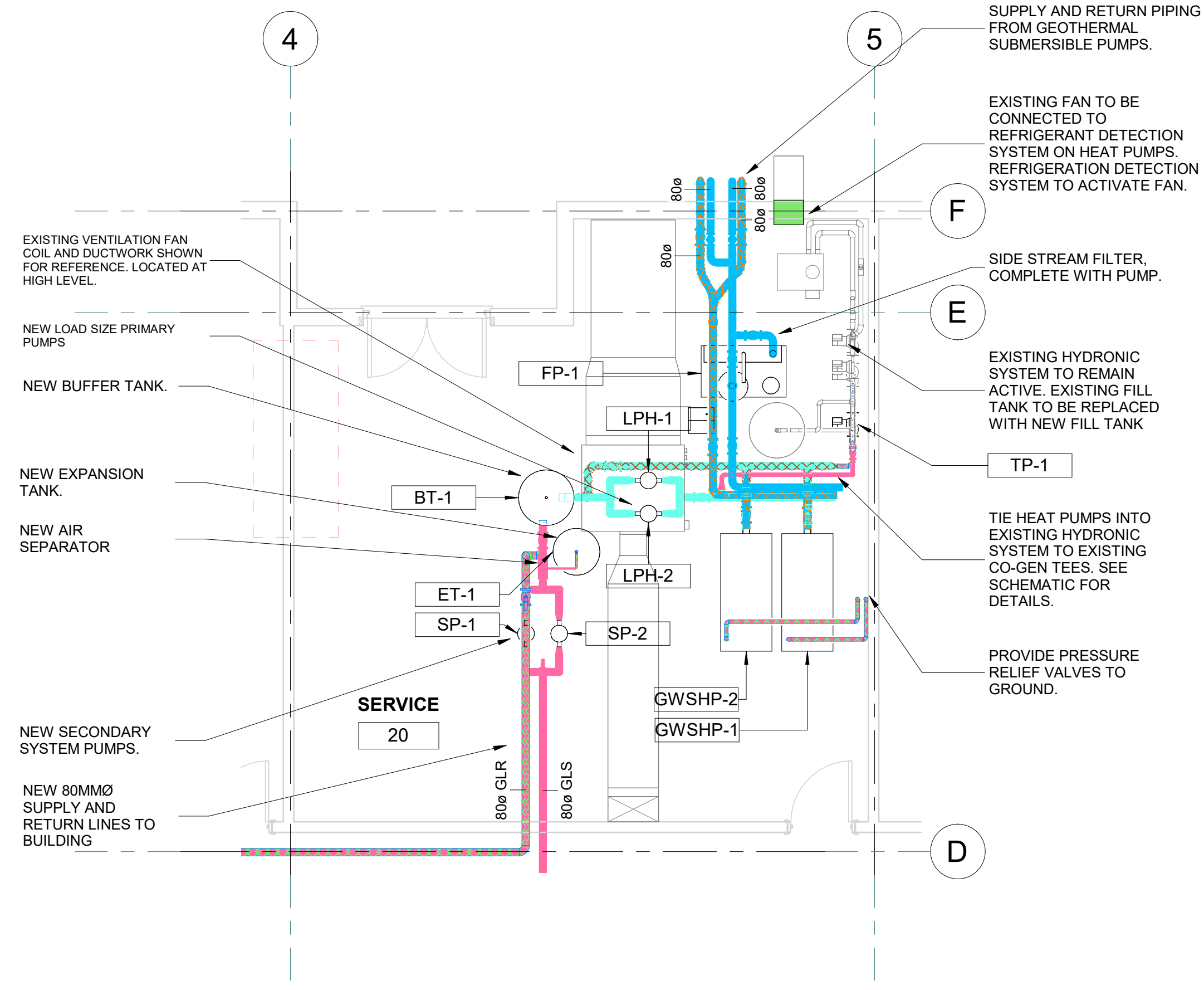
DRAFTER:	Author	SCALE:	AS NOTED
DESIGNER:	Designer	DATE:	09.07.2026
APPROVER:	Approver	CHECKER:	Checker
PROJECT No:	Project Number	DRAWING No:	M101
SHEET No:	of		



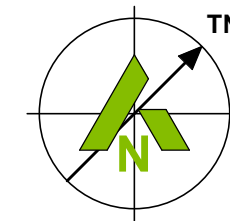
1 L01 - GROUND FLOOR MECHANICAL
M201 SCALE: 1 : 100



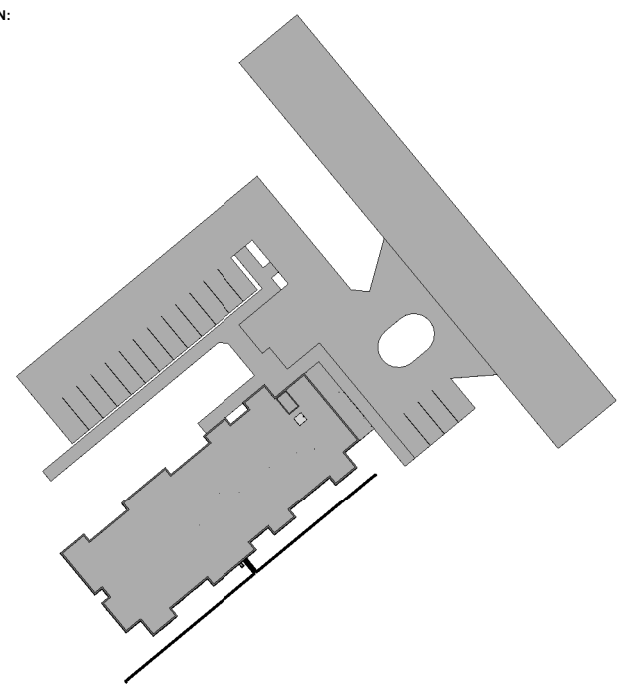
2 L01 - MECHANICAL ROOM DEMOLITION
M201 SCALE: 1 : 50



3 L01 - MECHANICAL ROOM NEW WORK
M201 SCALE: 1 : 50



KEY PLAN:

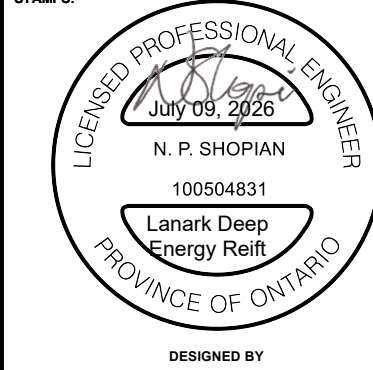


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20 BOURKE ST. SMITHS FALLS,
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PROJECT NAME:

LANARK DEEP RETROFIT DESIGN

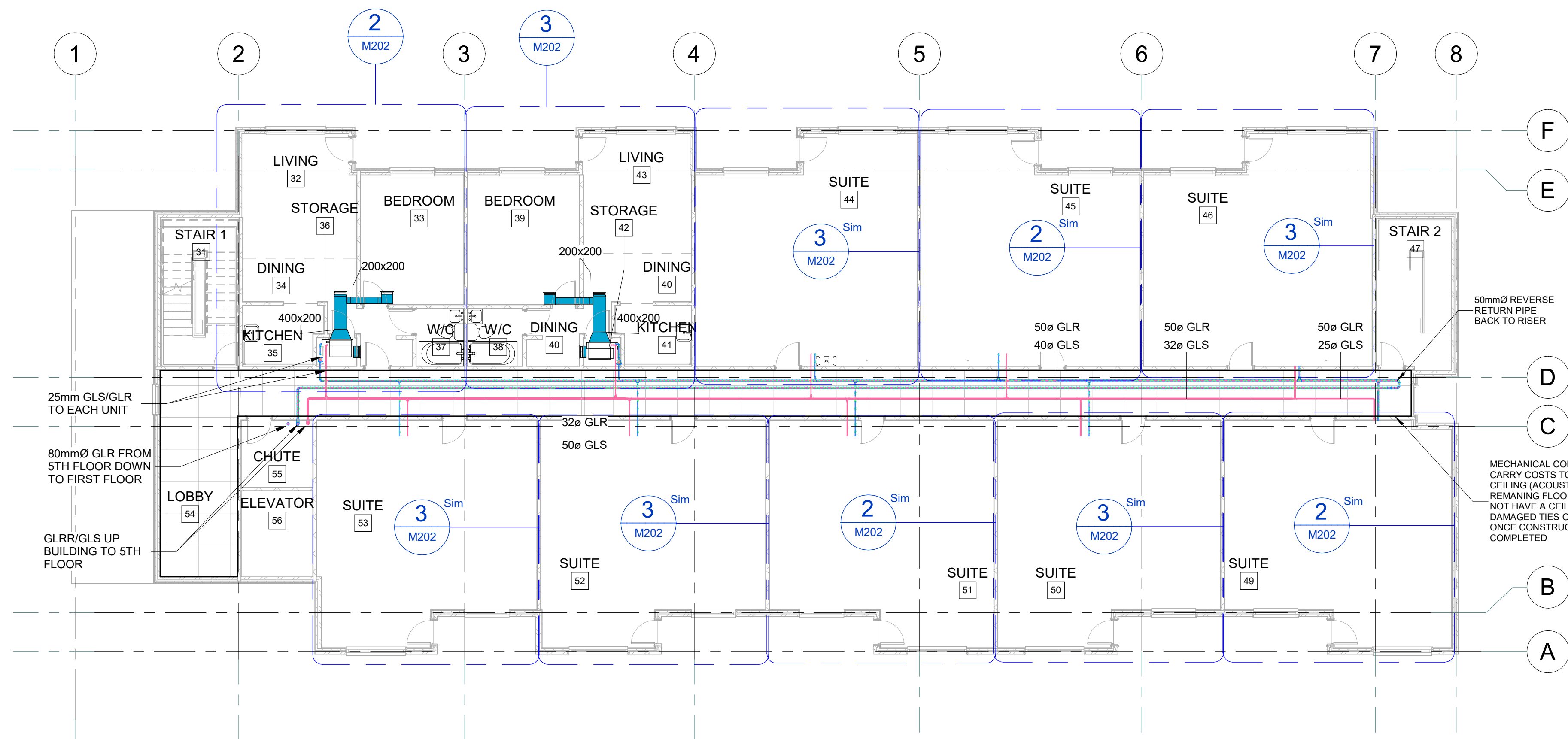
SHEET TITLE:

MECHANICAL GROUND FLOOR
PLAN

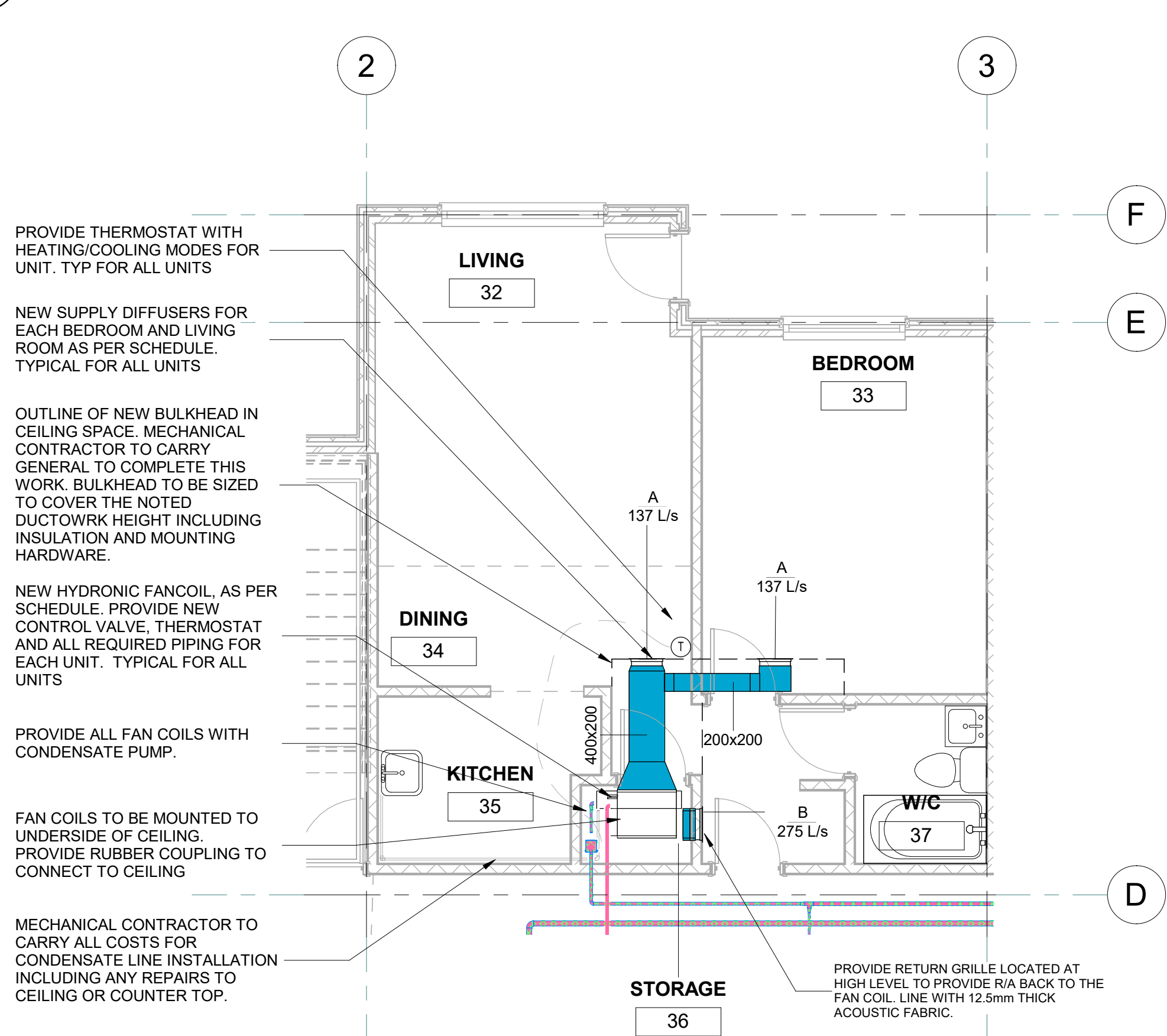
DISCIPLINE:

MECHANICAL

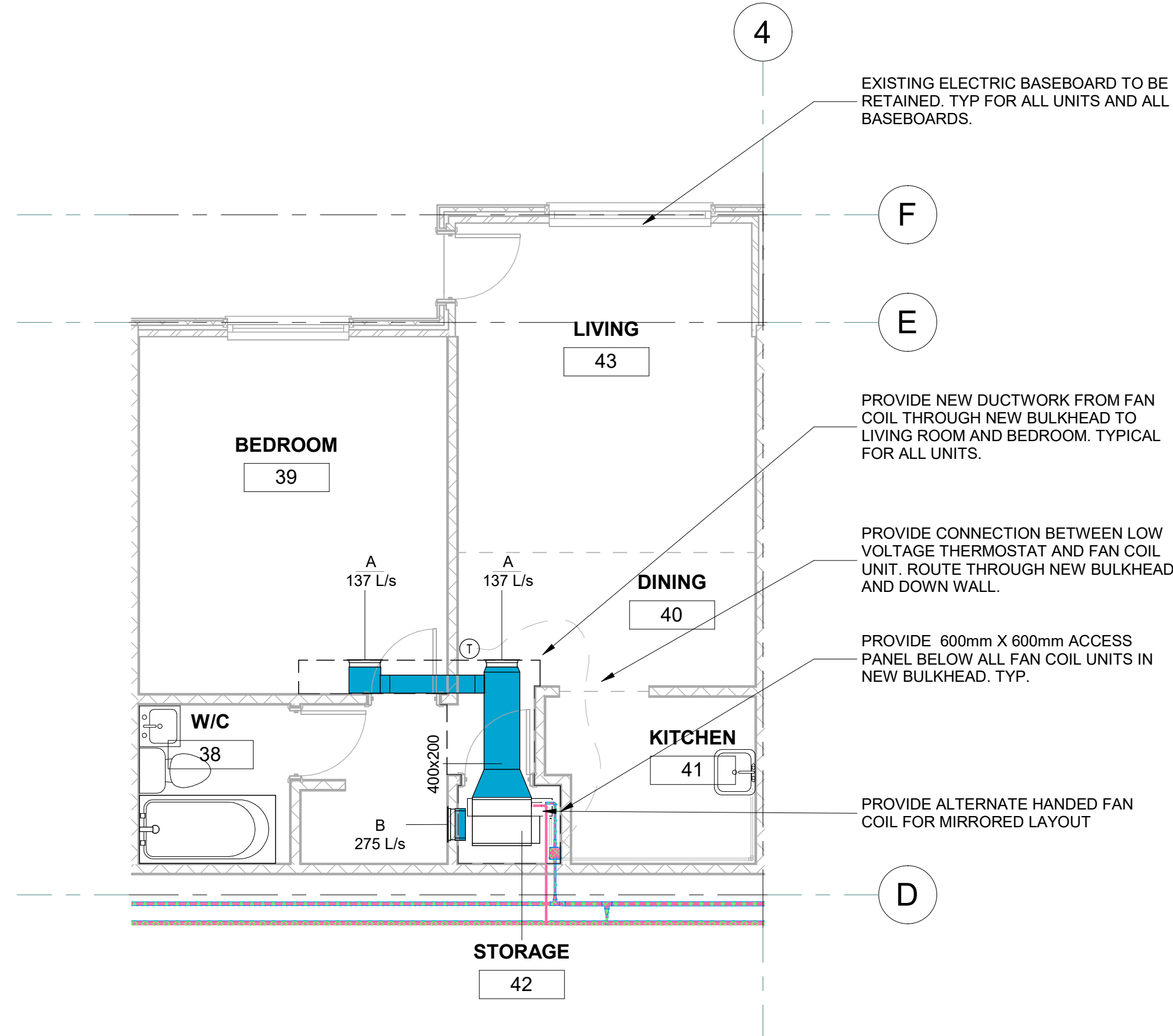
DRAFTER:	N.S.	SCALE:	AS NOTED
DESIGNER:	N.S.	DATE:	09.07.2026
APPROVER:	N.S.	CHECKER:	C.M.
PROJECT NO:	Project Number	DRAWING NO:	M201
SHEET NO:	3 of 6		



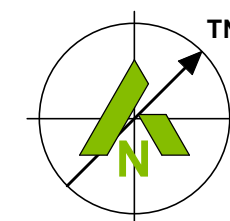
1 L02-L05 - MECHANICAL TYPICAL FLOOR PLAN
M202 SCALE: 1 : 100



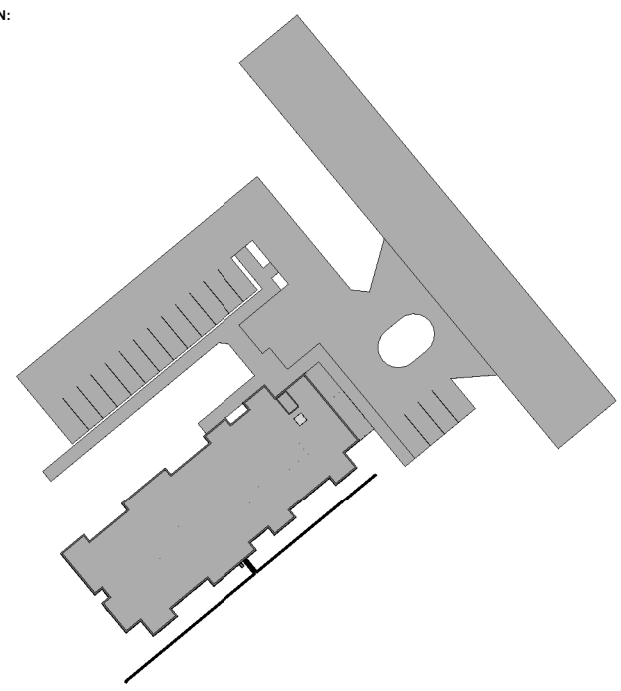
2 MECHANICAL TYPICAL SUITES (1 OF 2)
M202 SCALE: 1 : 50



3 MECHANICAL TYPICAL SUITS (2 OF 2)
M202 SCALE: 1 : 50

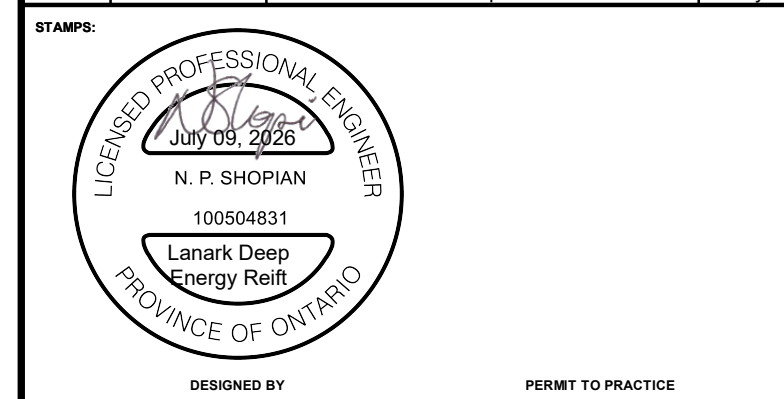


KEY PLAN:



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20 BOURKE ST. SMITHS FALLS,
ON, K7A 3L9

PROJECT NAME:
LANARK DEEP RETROFIT DESIGN

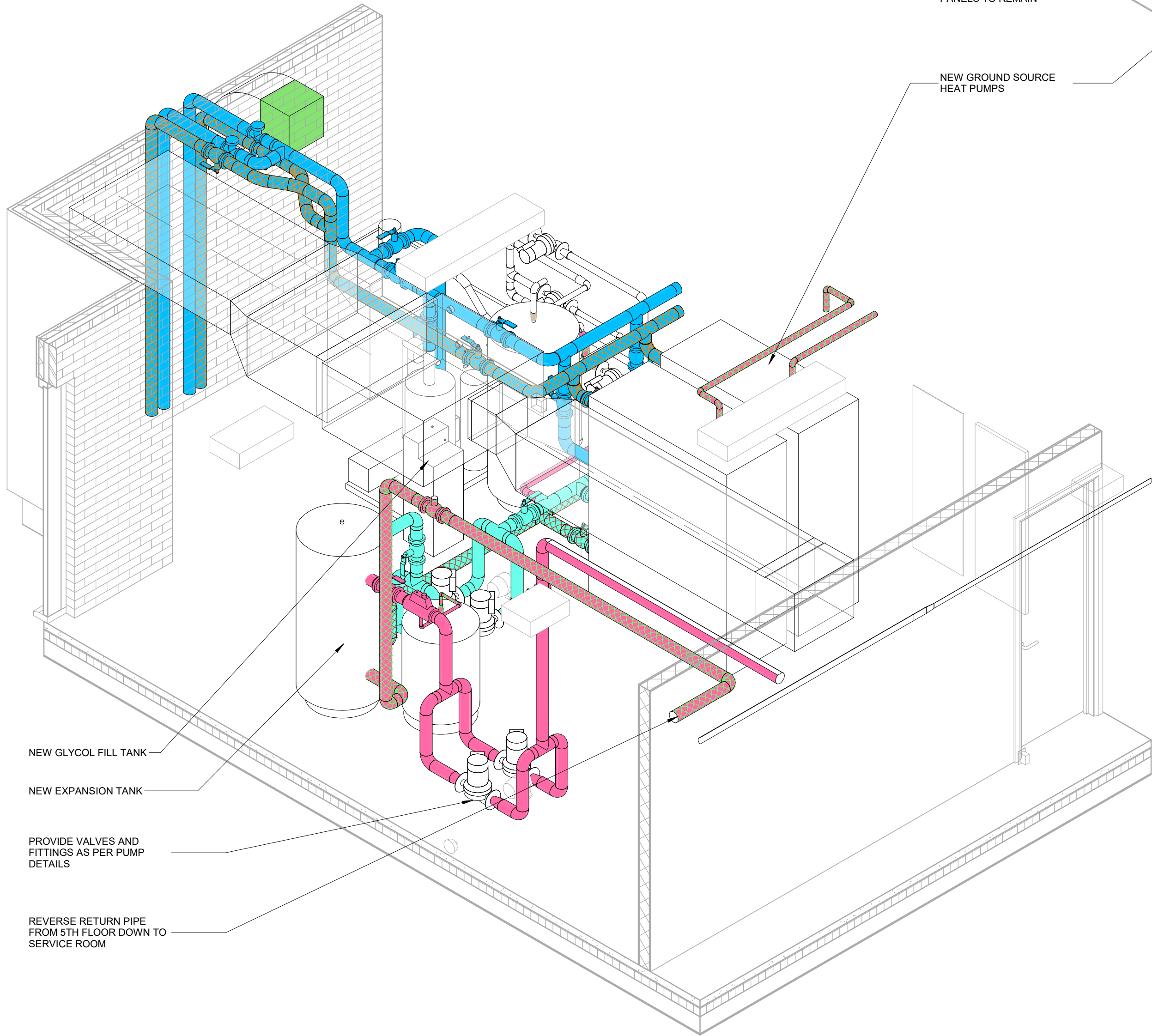
SHEET TITLE:
**MECHANICAL TYPICAL UPPER
FLOOR PLAN**

DISCIPLINE:
MECHANICAL

DRAFTER:	N.S.	SCALE:	AS NOTED
DESIGNER:	N.S.	DATE:	09.07.2026
APPROVER:	N.S.	CHECKER:	C.M.
PROJECT No:	Project Number	DRAWING No:	M202
SHEET No:	4 of 6		

TITLEBLOCK 22034 VERT.ENG
PRINT DATE: 2026-07-09 1:53:40 PM
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1 ISO - SERVICE ROOM
M302 SCALE:

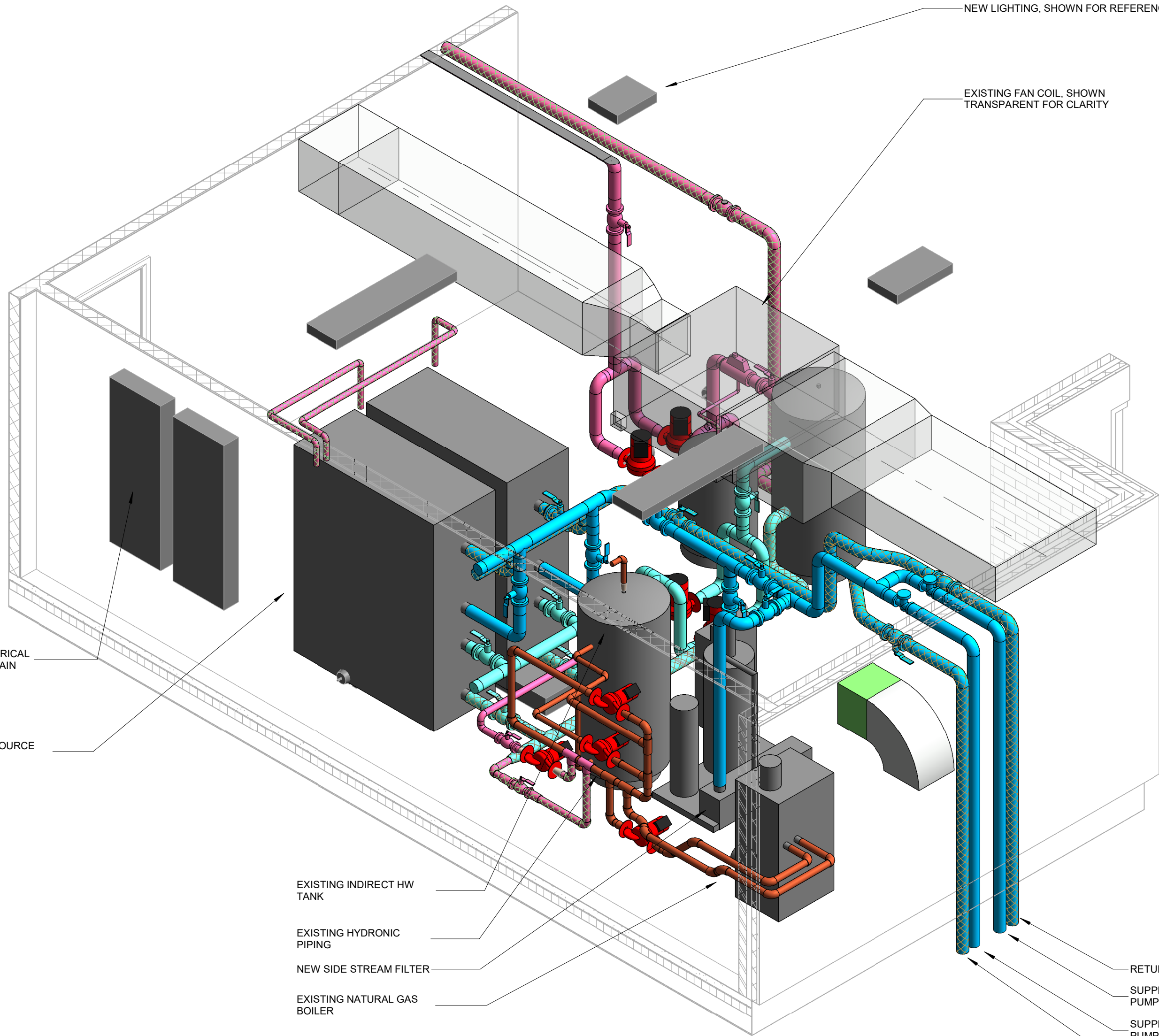


EXISTING ELECTRICAL
PANELS TO REMAIN

NEW GROUND SOURCE
HEAT PUMPS

EXISTING INDIRECT HW
TANK
EXISTING HYDRONIC
PIPING
NEW SIDE STREAM FILTER
EXISTING NATURAL GAS
BOILER

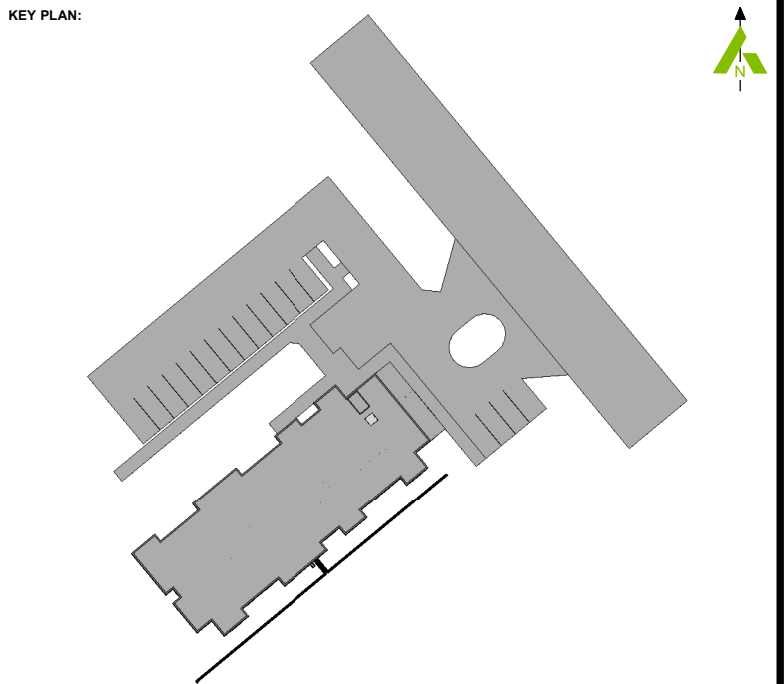
2 ISO 2 - SERVICE ROOM
M302 SCALE:



NEW LIGHTING, SHOWN FOR REFERENCE.

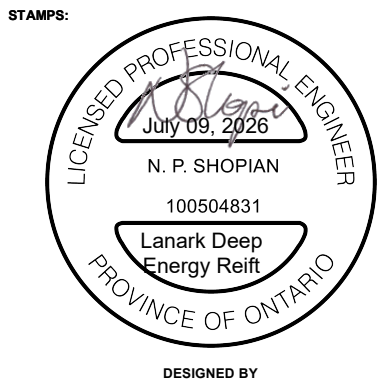
EXISTING FAN COIL, SHOWN
TRANSPARENT FOR CLARITY

RETURN LINE TO WELL
SUPPLY LINE FROM WELL
PUMP
SUPPLY LINE FROM WELL
PUMP
RETURN LINE TO WELL



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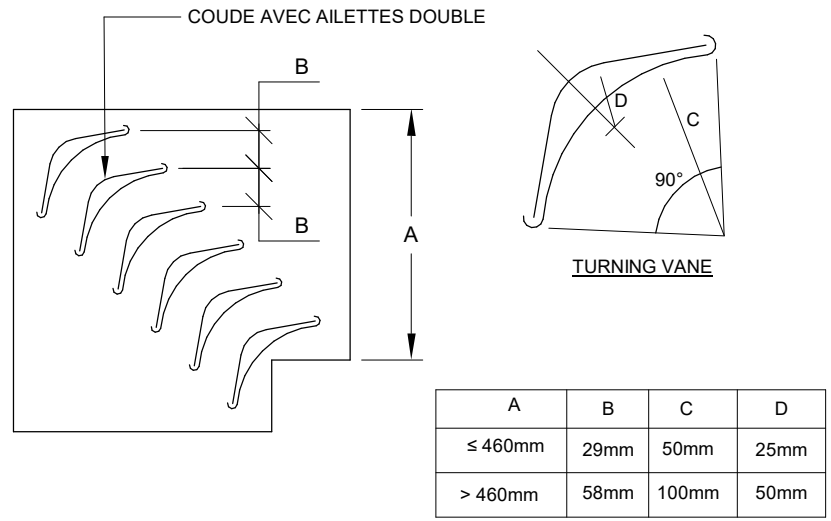
ENGINEER:
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T 613.860.2462 F 613.860.1870
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CLIENT:
LANARK COUNTY
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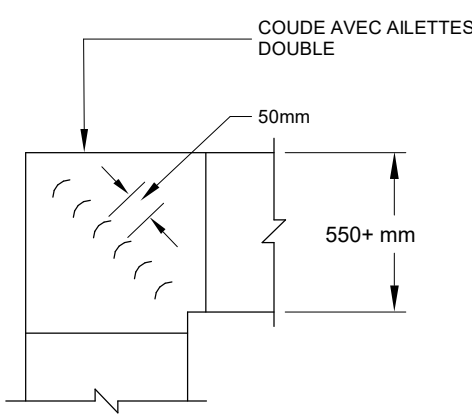
PROJECT NAME:
LANARK DEEP RETROFIT DESIGN

SHEET TITLE:
MECHANICAL ISOMETRIC VIEWS

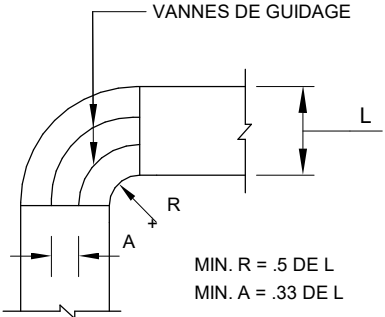
DISCIPLINE: MECHANICAL			
DRAFTER:	N.S.	SCALE:	AS NOTED
DESIGNER:	N.S.	DATE:	09.07.2026
APPROVER:	N.S.	CHECKER:	C.M.
PROJECT No:	Project Number	DRAWING No:	M302
SHEET No:	of		



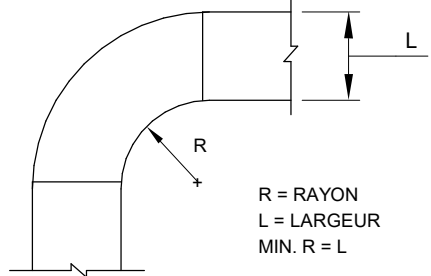
SQUARE ELBOW



SQUARE ELBOW



SHORT RADIUS ELBOW



SHORT RADIUS ELBOW

NOTE

ROUND ELBOWS SHALL BE PREFERRED FOR INSTALLATION. SQUARE ELBOWS SHALL ONLY BE PERMITTED WHERE SPACE IS INSUFFICIENT TO INSTALL ROUND ELBOWS.

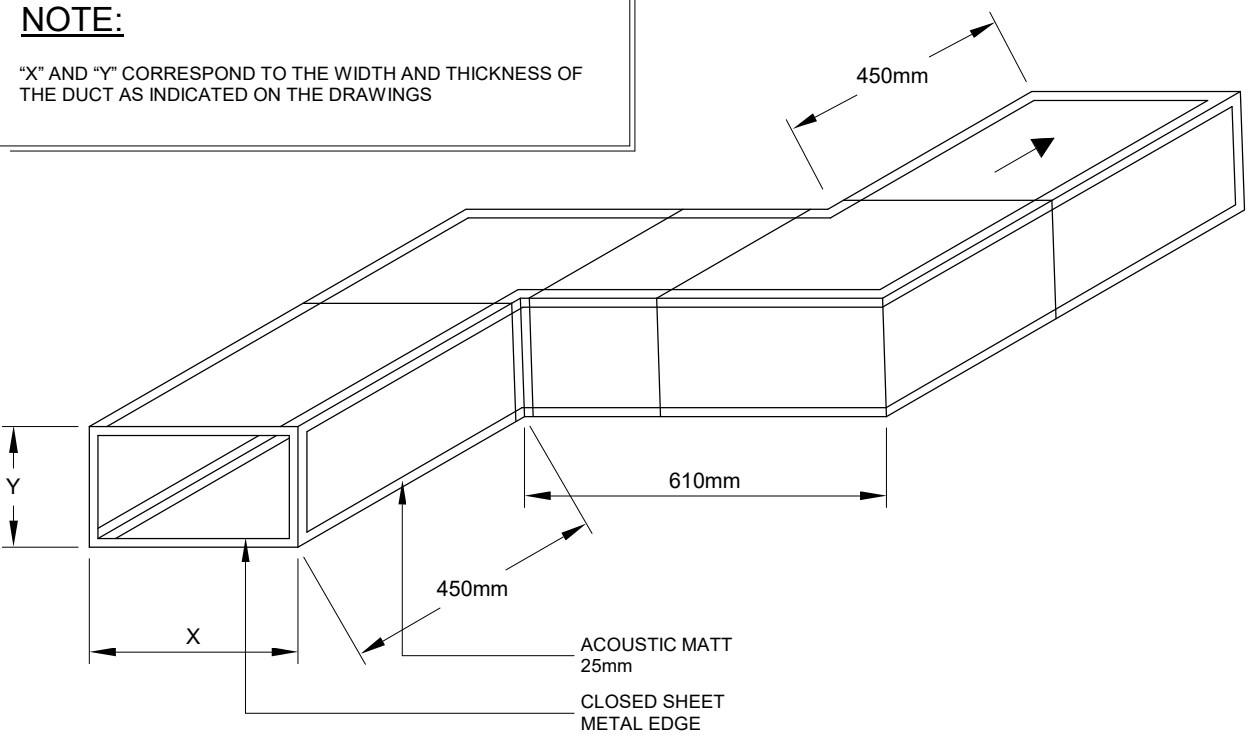
1

TYPICAL VENTILATION ELBOW DETAIL

SCALE: N.T.S.

NOTE:

"X" AND "Y" CORRESPOND TO THE WIDTH AND THICKNESS OF THE DUCT AS INDICATED ON THE DRAWINGS



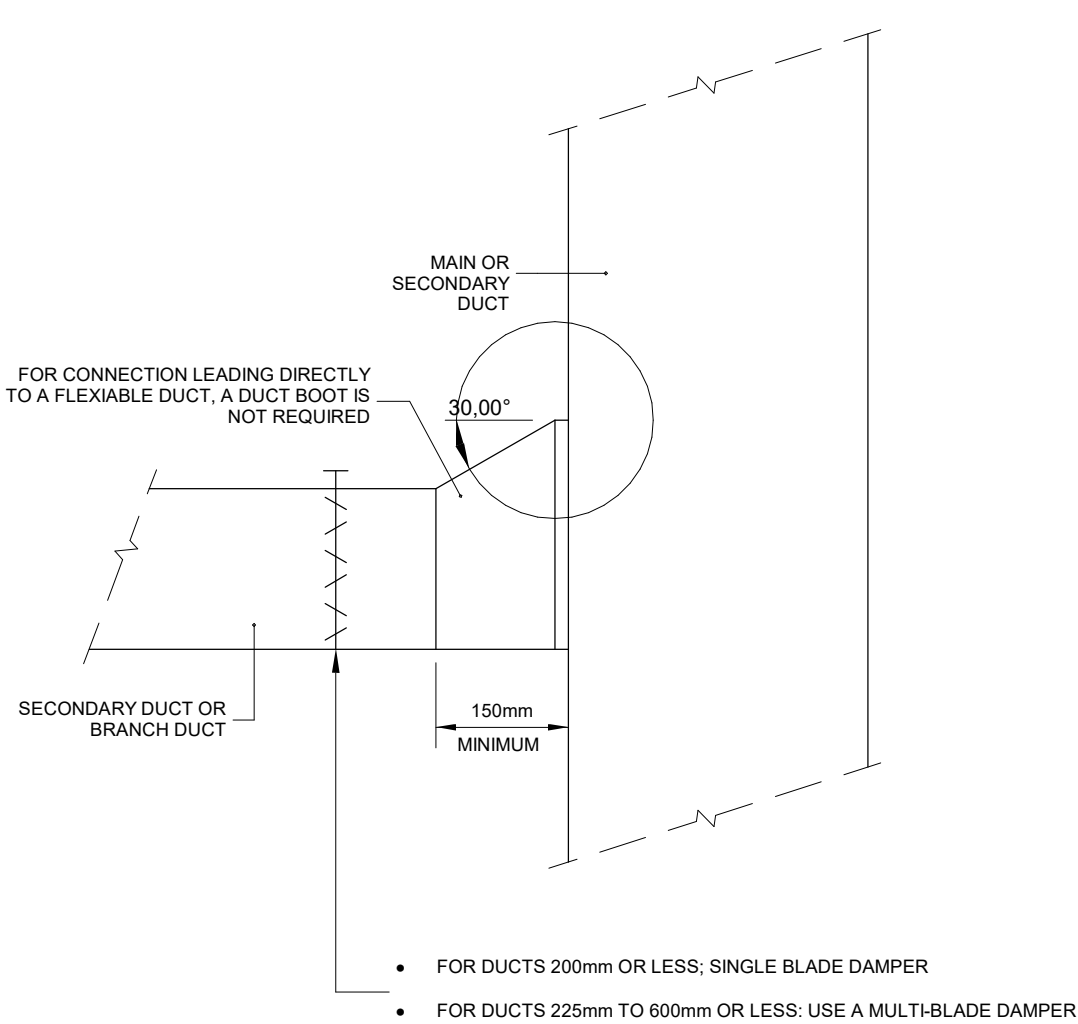
3

ACOUSTIC AIR TRANSFER DUCT DETIAL

SCALE: N.T.S.

NOTES:

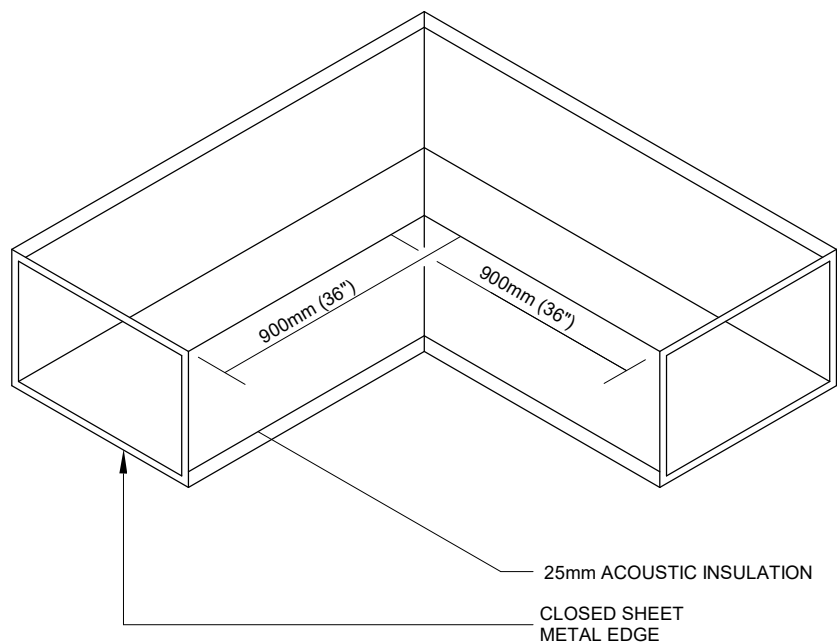
- EACH BRANCH OR SECONDARY CONNECTION TAKEN FROM A MAIN DUCT SHALL BE EQUIPPED WITH A MANUAL BALANCING DAMPER. (REFER ALSO TO GRILLE AND DIFFUSER CONNECTION DETAILS)
- BALANCING DAMPERS SHALL BE LOCATED NEAR CONNECTIONS AND AWAY FROM GRILLES AND DIFFUSERS TO REDUCE NOISE.
- DO NOT SUBSTITUTE BALANCING DAMPERS WITH AIR DEFLECTORS.



2

RECTANGULAR BRANCH CONNECTIONS

SCALE: N.T.S.

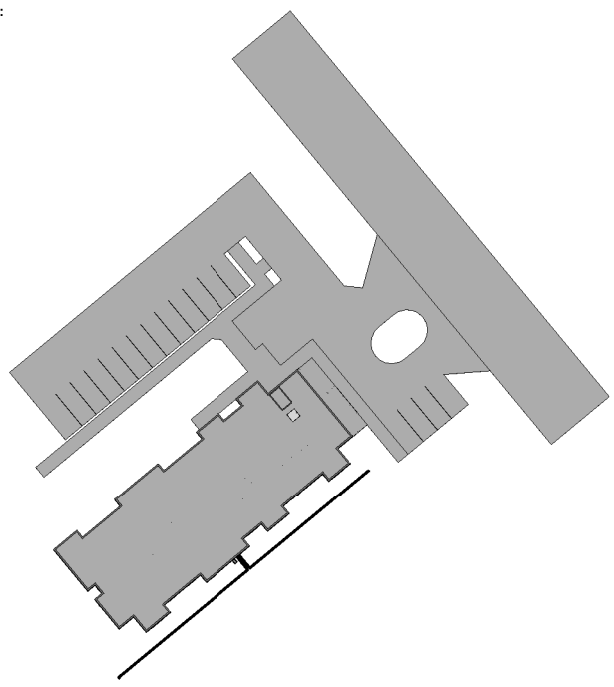


4

ACOUSTIC ELBOW DETIAL

SCALE: N.T.S.

KEY PLAN:



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Date

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N.S.

By

Description

Date

No.

By

Description

Date

No.

By

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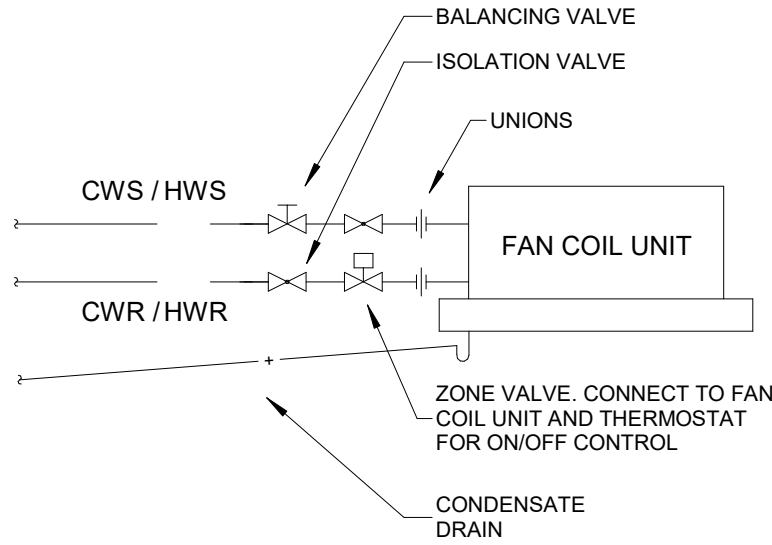
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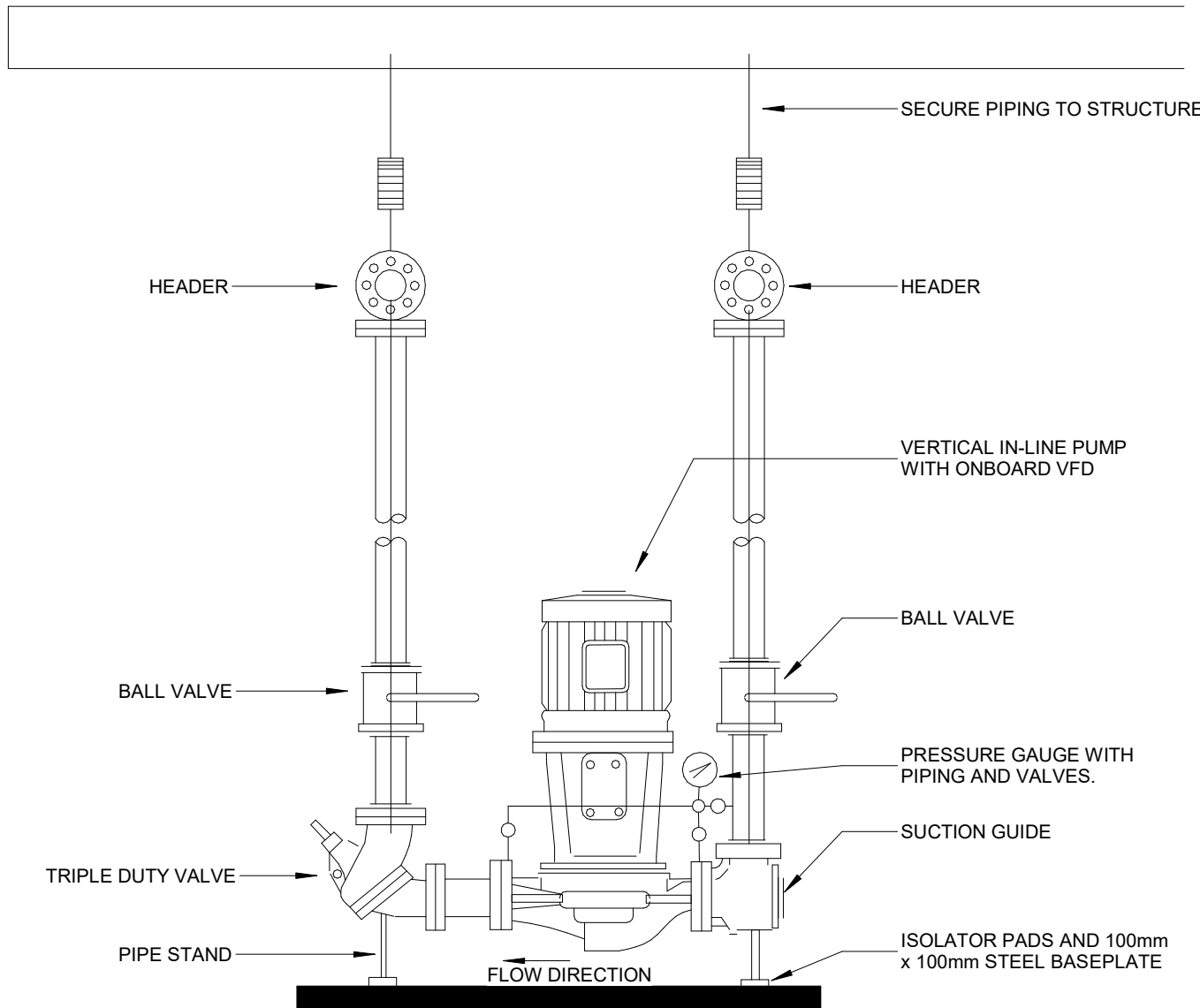
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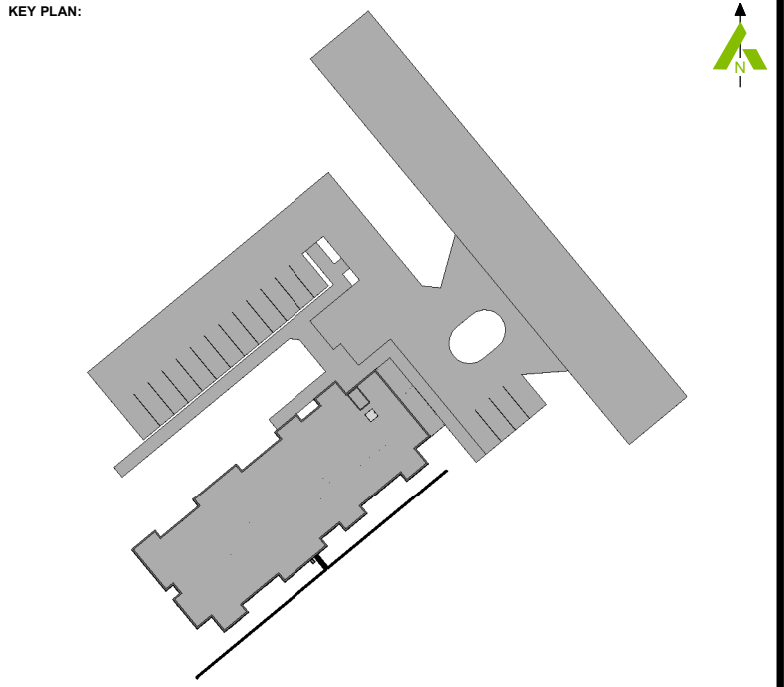
Description



1 FAN COIL UNIT PIPING SCHEMATIC
502 SCALE: N.T.S.



2 PUMP PIPING INSTALLATION DETAIL
502 SCALE: N.T.S.



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No.	Date	Description	By

STAMPS:

DESIGNED BY

PERMIT TO PRACTICE

CONSULTANT(S):

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www.cima.ca

CLIENT:

LANARK COUNTY

20 BOURKE ST. SMITHS FALLS,
ON, K7A 3L9

PROJECT NAME:

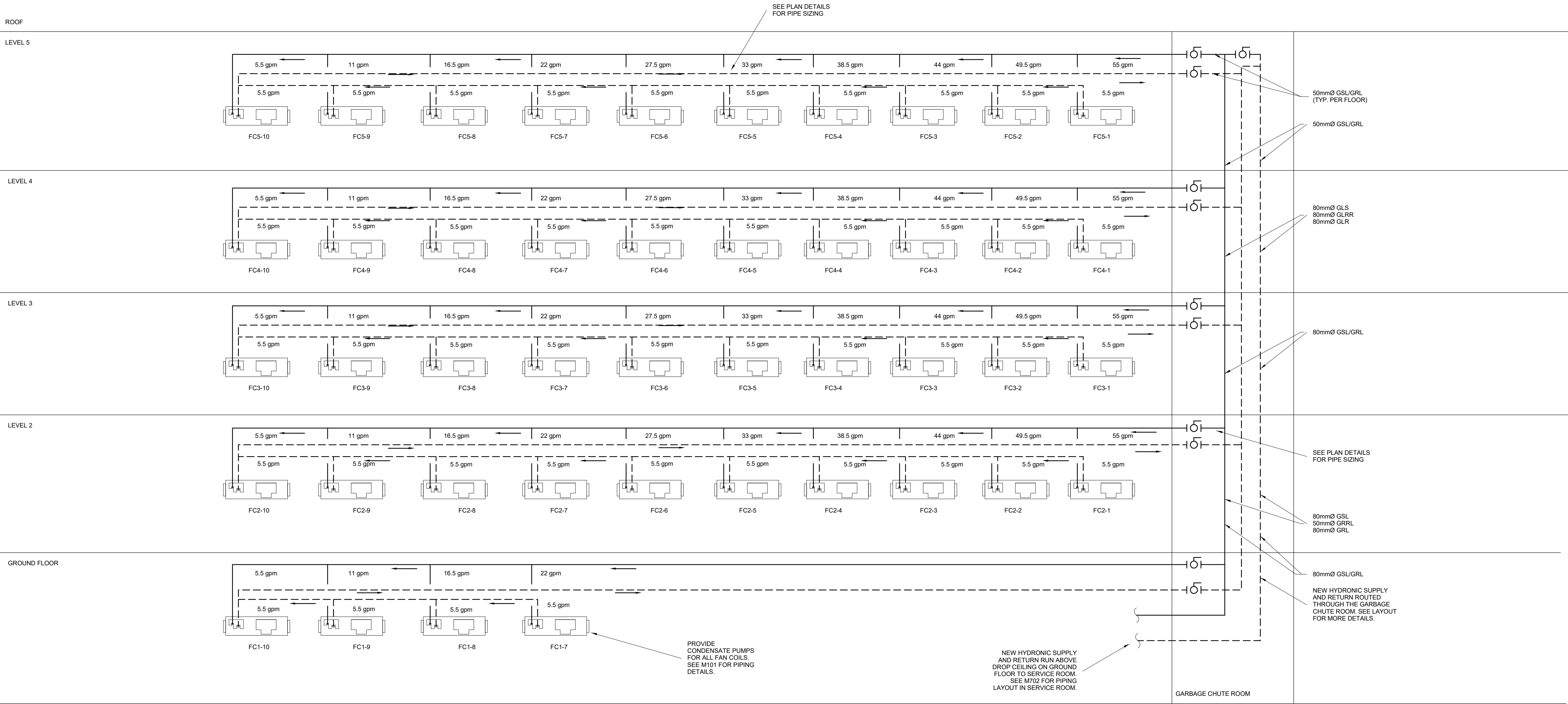
LANARK DEEP RETROFIT DESIGN

SHEET TITLE:

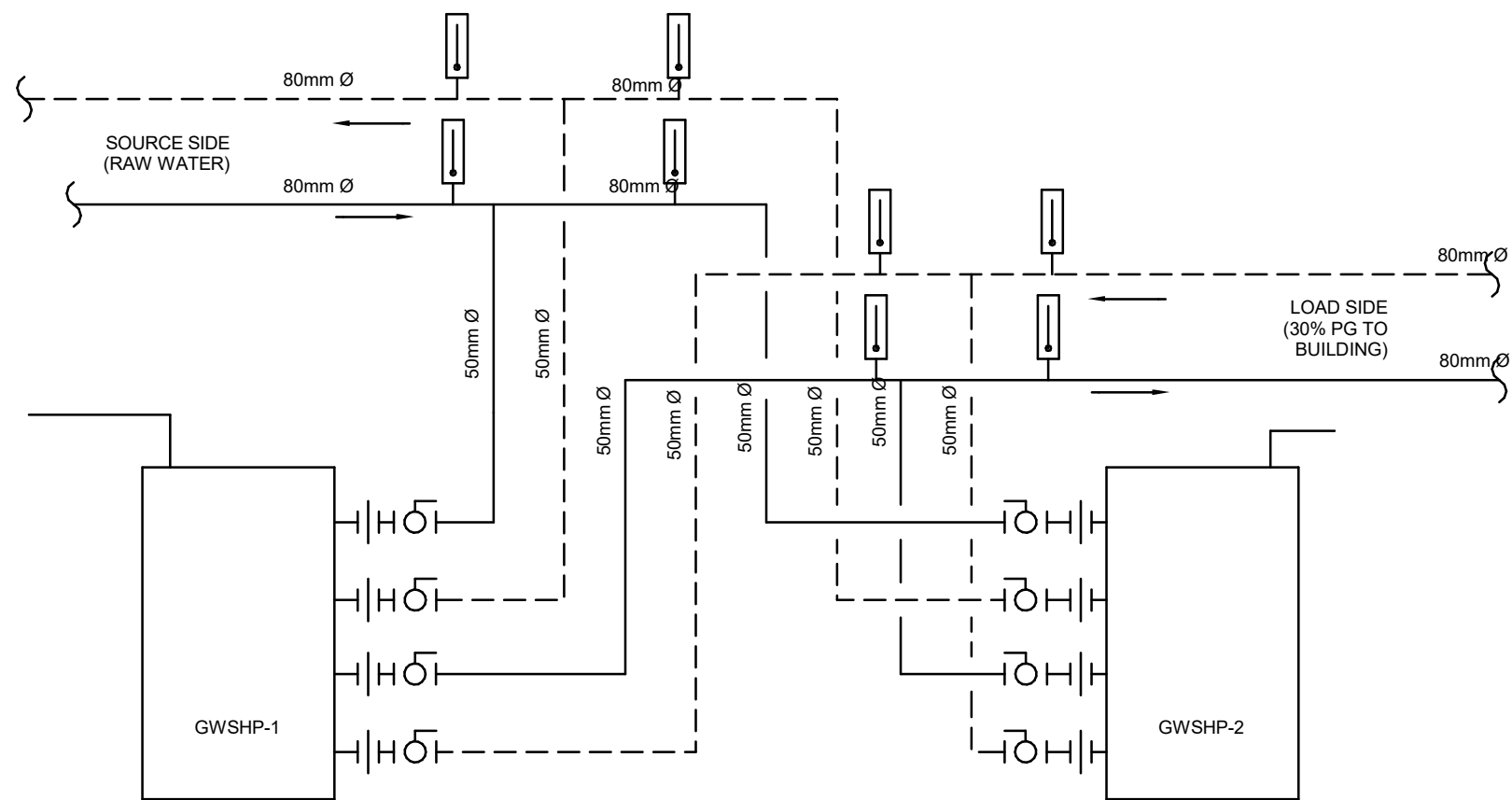
PIPING DETAILS

DISCIPLINE: MECHANICAL			
DRAFTER:	N.S.	SCALE:	AS NOTED
DESIGNER:	N.S.	DATE:	09.07.2026
APPROVER:	N.S.	CHECKER:	C.M.
PROJECT No:	Project Number	DRAWING No:	M502
SHEET No:	5 of 7		

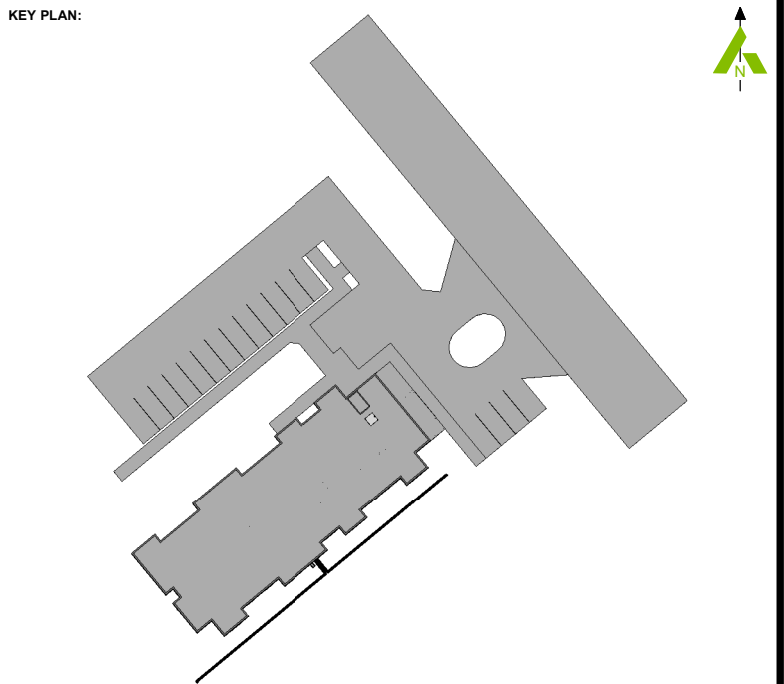
TAG	SERVED AREA	MANUFACTURER	MODEL	SIZE	AIR / FAN				RETURN TYPE	FLUID	COOLING CAPACITY								HEATING CAPACITY						PIPE CONNECT...	FILTER	MOTOR		ELECTRICAL			SOUND	CONTROL	WEIGHT	REMARKS
					AIRFLOW	ESP	FAN POWER	FAN QTY			TOTAL	SENSIBLE	FLOW	EWT	LWT	EAT	LAT	CAPACITY	FLOW	EWT	LWT	EAT	LAT	TYPE			HP/QTY	POWER	MCA	MOP					
[-]	[-]	[-]	[-]	[-]	[CFM]	[IN.WG]	[W]	[-]	[-]	[-]	[MBH]	[MBH]	[GPM]	[°F]	[°F]	[°F]	[°F]	[MBH]	[GPM]	[°F]	[°F]	[°F]	[°F]	[IN/IN]	[-]	[-]	[-]	[V/PH/Hz]	[A]	[A]	[NC]	[-]	[LBS]	[-]	
FC1-1	Unit1	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC1-2	Unit2	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC1-3	Unit3	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC1-4	Unit4	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC1-5	Unit5	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-1	Unit6	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-2	Unit7	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-3	Unit8	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-4	Unit9	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-5	Unit10	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-6	Unit11	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-7	Unit12	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-8	Unit13	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-9	Unit14	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC2-10	Unit15	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-1	Unit16	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-2	Unit17	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-3	Unit18	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-4	Unit19	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-5	Unit20	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-6	Unit21	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-7	Unit22	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-8	Unit23	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-9	Unit24	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC3-10	Unit25	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-1	Unit26	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-2	Unit27	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-3	Unit28	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-4	Unit29	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-5	Unit30	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-6	Unit31	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-7	Unit32	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-8	Unit33	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-9	Unit34	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC4-10	Unit35	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC5-1	Unit36	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC5-2	Unit37	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC5-3	Unit38	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68	96	1"	MERV13	ECM	1/12	115/1/60	1.3	15		Local T-stat	59.5		
FC5-4	Unit39	Jaga	Briza 22	4	583	0	70	1	Open	30% PG	13.5	13.3	2.7	44	54	75	58.5	13.0	2.7	113	103	68													



1 GROUND WATER SOURCE HEAT PUMP SCHEMATIC
M701 SCALE: 1 : 2

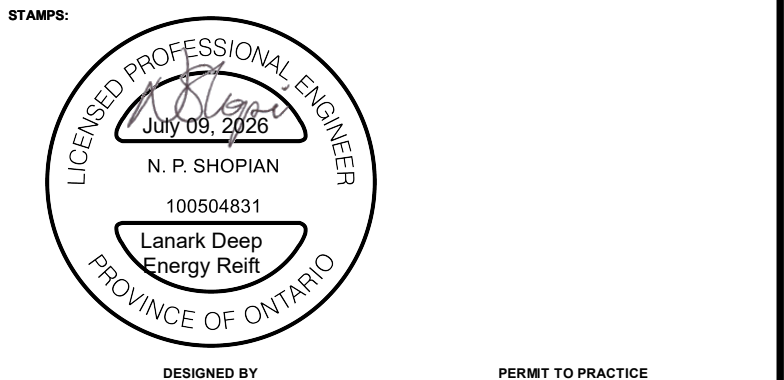


2 GSHP PIPING SCHEMATIC
M701 SCALE: 1 : 2



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No.	Date	Description	By



CONSULTANT(S):

ENGINEER:

CLIENT:

PROJECT NAME:

LANARK DEEP RETROFIT DESIGN

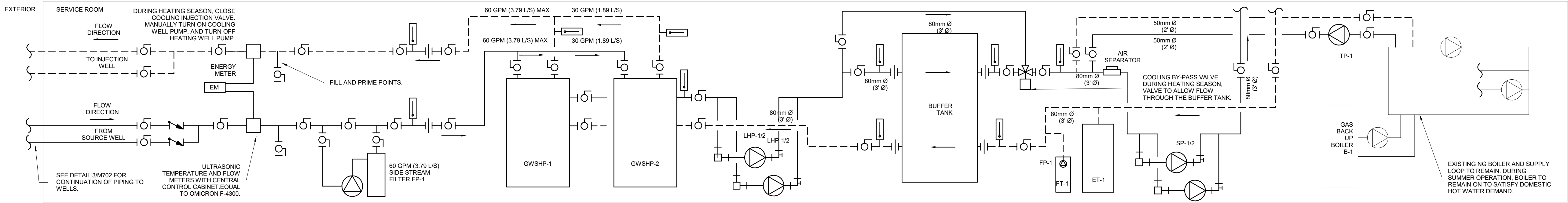
SHEET TITLE:

MECHANICAL SCHEMATICS

DISCIPLINE:

MECHANICAL

ENGINEER:	
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1400 Blair Towers Place Ottawa, ON K1J 9B8 T 613.860.2462 F 613.860.1870 www.cima.ca	
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LANARK COUNTY 20 BOURKE ST. SMITHS FALLS, ON, K7A 3L9	
PROJECT NAME:	
LANARK DEEP RETROFIT DESIGN	
SHEET TITLE:	
MECHANICAL SCHEMATICS	
DISCIPLINE:	
MECHANICAL	
DRAFTER:	N.S.
DESIGNER:	N.S.
APPROVER:	N.S.
PROJECT No:	Project Number
SHEET No:	6 of 6
SCALE:	AS NOTED
DATE:	09.07.2026
CHECKER:	C.M.
DRAWING No:	M701

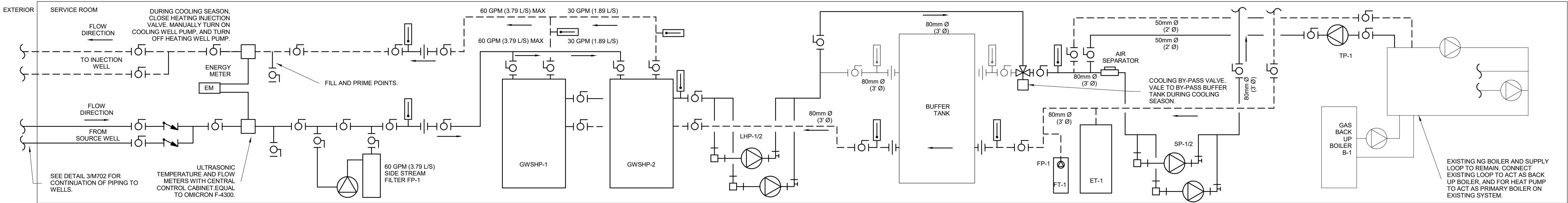


WINTER START UP SEQUENCE:

HEAT PUMPS TO BE MANUALLY TURNED FROM SUMMER (COOLING) TO WINTER (HEATING) MODE.
MANUALLY TURN OFF 3 WAY HEATING BUFFER TANK BYPASS VALVE.
SET BACK NATURAL GAS BOILER TO 50°C (122°F)
TURN ON INJECTION PUMP TP-1
PRIME GHP-2 (WINTER) PUMP LINES IF REQUIRED.
OPEN THE WINTER RETURN LINE VALVE.
CLOSE THE SUMMER RETURN LINE VALVE.
TURN ON GHP-2 (WINTER) PUMP.
TURN OFF GHP-1 (SUMMER) PUMP

1 GROUND WATER SOURCE HEAT PUMP HEATING (WINTER) OPERATION

M702 SCALE: 1 : 2

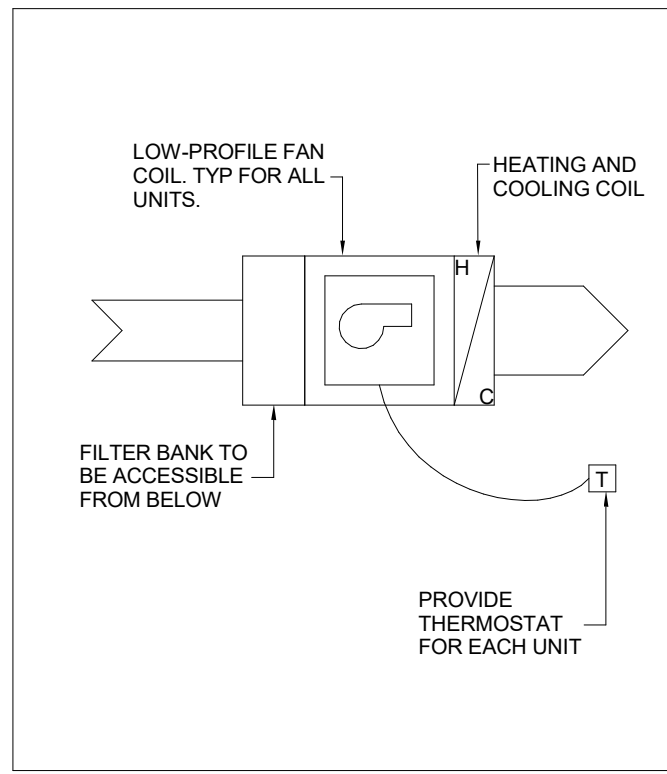


SUMMER START UP SEQUENCE:

HEAT PUMPS TO BE MANUALLY CHANGED FROM WINTER (HEATING) TO SUMMER (COOLING) MODE.
MANUALLY TURN ON 3 WAY HEATING BUFFER TANK BYPASS VALVE.
SET BACK NATURAL GAS BOILER TO 60°C (140°F)
TURN OFF INJECTION PUMP TP-1
PRIME GHP-1 (SUMMER) PUMP LINES IF REQUIRED.
OPEN THE SUMMER RETURN LINE VALVE.
CLOSE THE WINTER RETURN LINE VALVE.
TURN ON GHP-1 (SUMMER) PUMP.
TURN OFF GHP-2 (WINTER) PUMP

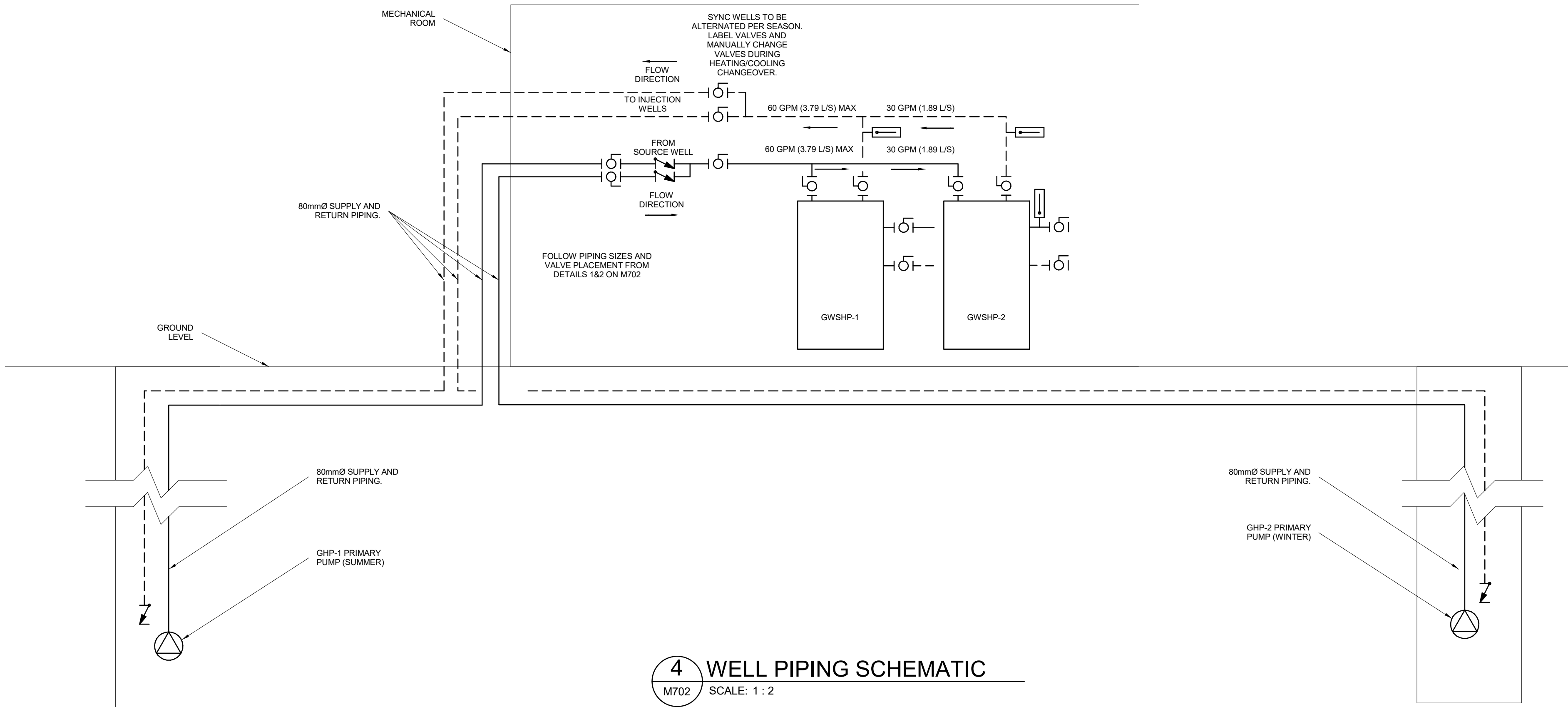
2 GROUND WATER SOURCE HEAT PUMP COOLING (SUMMER) OPERATION

M702 SCALE: 1 : 2



3 FAN COIL UNIT CONTROL SCHEMATIC

M702 SCALE: 1 : 100



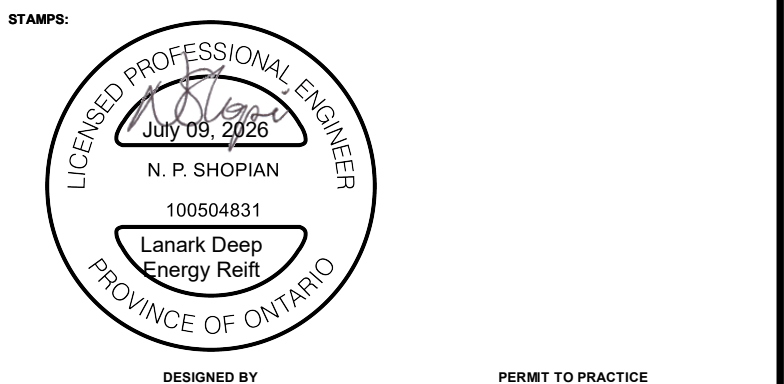
4 WELL PIPING SCHEMATIC

M702 SCALE: 1 : 2



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No.	Date	Description	By
0	09.07.2026	ISSUED FOR TENDER	N.S.



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PROJECT NAME:
LANARK DEEP RETROFIT DESIGN

SHEET TITLE:
MECHANICAL SCHEMATICS

DISCIPLINE:		MECHANICAL	
DRAFTER: N.S.		SCALE: AS NOTED	
DESIGNER: N.S.		DATE: 09.07.2026	
APPROVER: N.S.		CHECKER: C.M.	
PROJECT No: Project Number		DRAWING No: M702	
SHEET No: 6 of 6			