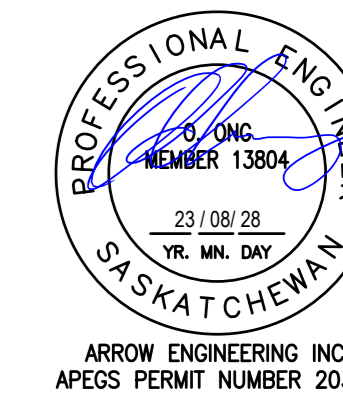
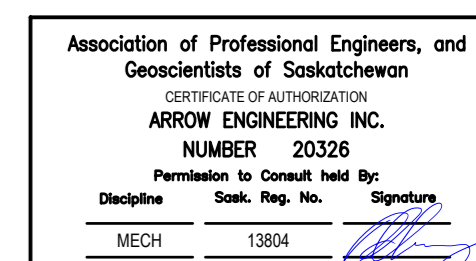


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MECHANICAL LEGEND

LINETYPES	
---	CONTROLS WIRING
---	SANITARY PIPING
---	DOMESTIC COLD WATER PIPING
---	CHILLED GLYCOL SUPPLY PIPING
---	CHILLED GLYCOL RETURN PIPING
---	CONDENSER WATER SUPPLY PIPING
---	CONDENSER WATER RETURN PIPING
PLUMBING	
→	PIPE FLOW ARROW
⊥	PIPE CAP
+	PIPE CONNECTION
⊖	PIPE DROP
⊕	PIPE RISE
⊕	PIPE TEE (BELOW)
⊖	PIPE TEE (ABOVE)
VENTILATION	
→	OUTDOOR AIR DUCT UP/DOWN
→	SUPPLY DUCT UP/DOWN
→	RETURN DUCT UP/DOWN
→	EXHAUST DUCT UP/DOWN
→	ROUND DUCT UP/DOWN
→	BALANCING DAMPER
FD	FIRE DAMPER
SG	SIDEWALL GRILLE
RD	ROUND DIFFUSER CW TAKEOFF AND BALANCING DAMPER
SL	SINGLE LINE DUCTWORK ENDCAP
SL	SINGLE LINE DUCTWORK TAKEOFF
SL	SINGLE LINE DUCTWORK TRANSITION
SL	SINGLE LINE DUCTWORK WALL CAP
SCHEMATICS	
+	FLEX PIPE CONNECTION
+	2-WAY CONTROL VALVE
+	3-WAY CONTROL VALVE
+	CHECK VALVE
+	BALL VALVE
+	BUTTERFLY VALVE
+	UNION
+	PUMP
+	PRESSURE/TEMPERATURE PORT
+	WYE STRAINER CW BALL VALVE, CAP & CHAIN
+	PRESSURE SAFETY VALVE
+	PRESSURE GAUGE CW ISOLATION
+	TEMPERATURE GAUGE
+	FS-FLOW SWITCH
TAGS	
TYPE	DIFFUSER/GRILLE TAG
NECK (mm)	2000
FLOW (L/s)	220
DETAIL NUMBER	100
DRAWING NUMBER	100
EQ	EQUIPMENT TAG
KN	KEYNOTE REFERENCE
EXISTING/DEMOLITION	
---	EXISTING EQUIPMENT
---	EXISTING EQUIPMENT TO BE DEMOLISHED
ABBREVIATIONS	
CH	CHILLER
CT	COOLING TOWER
DCW	DOMESTIC COLD WATER
EF	EXHAUST FAN
GT	GLYCOL TANK
HE	HEAT EXCHANGER
NC	"NORMALLY CLOSED"
NO	"NORMALLY OPEN"
P	PUMP
UNO	"UNLESS NOTED OTHERWISE"

DEMOLITION NOTES

- ALL EXISTING BUILDING INFORMATION PREPARED FROM EXISTING DRAWINGS PREPARED BY DANIELS WINGENAK ENGINEERING LTD. ON JANUARY 2002 AND SITE VISIT CONDUCTED BY ARROW ENGINEERING ON JUNE 30, 2022.
 - ALL ITEMS BEING DEMOLISHED TO BE DISPOSED OF ACCORDING TO THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- HATCHING DENOTES ITEMS TO BE DEMOLISHED

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0	28	08	2023	ISSUED FOR TENDER	MA
No.	Date	Revision			By/PC
Date Printed	30/08/2023	Date Imprimée			

- Verify all dimensions and site conditions and be responsible for same.
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.

A	A Detail no. No. du détail	A
C	B Location drawing no. no. de dessin	B
	C Drawing no. dessin no.	C

project
SAS OF CHILLER REPLACEMENT / SAS OF REMPLACEMENT DU REFRIGERISSE

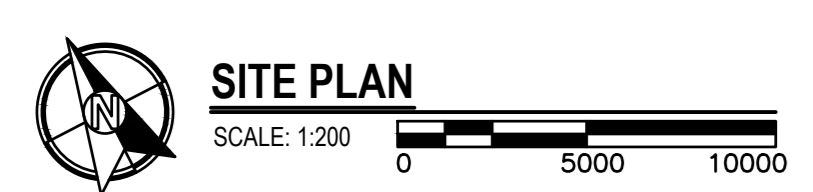
110 GYMNASIUM PLACE

MECHANICAL SITE PLAN AND SCHEDULES

designed	MA	conçu	date	MAR - 2023	date
drawn	MA	dessiné	scale	COMME INDIQUE	échelle
checked	OO	vérifié	sheet	-	feuille
approved	OO	approuvé	W.O.no.		D.T.no.

desig.no.		dessin no.	
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C-MI



AIR TERMINAL SCHEDULE

TAG	MAKE	MODEL	FUNCTION	MOUNTING	DESCRIPTION	NOTES
S-1	EXISTING		SUPPLY	DUCT	ROUND CONE DIFFUSER	1
S-2	PRICE	S20	SUPPLY	DUCT	LOUVERED FACE SUPPLY - DOUBLE DEFLECTION	2

NOTES:
1. RE-BALANCE EXISTING DIFFUSER PER DRAWINGS.
2. CW OPPOSED BLADE DAMPER.

COOLING TOWER SCHEDULE

TAG	MAKE	MODEL	LOCATION	FLUID	WATER FLOW (GPM)	EWT (°F)	LWT (°F)	WET BULB (°F)	MOTOR (HP)	ELECTRICAL (V/Ph/Hz)	WEIGHT (lbs)	NOTES
CT-1	EVAPCO	ECO-ATWB 12-SL24	ROOF	35% E.G.	1,335.0	90	80	66	10.00	575/3/60	67,020	1

NOTES:
1. PROVIDE START UP AND COMMISSIONING BY A FACTORY TRAINED TECHNICIAN, AS SPECIFIED.

PUMP SCHEDULE

TAG	MAKE	MODEL	FUNCTION	LOCATION	FLUID	FLOW RATE (GPM)	HEAD (ft)	MOTOR (HP)	ELECTRICAL (V/Ph/Hz)	SPEED (RPM)	VFD (Y/N)	NOTES
P-7	TACO	SKS801D-A-4P-PD	COMPRESSOR CIRC	MECHANICAL 0302.1	35% E.G.	1,920.0	72.2	40.00	575/3/60	1,780	Y	1
P-8	TACO	SKS801D-A-4P-PD	COMPRESSOR CIRC	MECHANICAL 0302.1	35% E.G.	1,920.0	72.2	40.00	575/3/60	1,780	Y	1
P-9	TACO	SKS4007D-A-3P-PD	EVAPORATOR CIRC	MECHANICAL 0302	35% E.G.	995.0	115.0	25.00	575/3/60	3,500	Y	1
P-10	TACO	SKS4007D-A-3P-PD	EVAPORATOR CIRC	MECHANICAL 0302	35% E.G.	995.0	115.0	25.00	575/3/60	3,500	Y	1
P-11	TACO	SKS4007D-A-3P-PD	EVAPORATOR CIRC	MECHANICAL 0302	35% E.G.	995.0	115.0	25.00	575/3/60	3,500	Y	1

NOTES:
1. MECHANICAL CONTRACTOR TO VERIFY VOLTAGE PRIOR TO ORDERING EQUIPMENT.

CHILLER SCHEDULE

TAG	MAKE	MODEL	LOCATION	COOLING CAPACITY (MBH)	CHILLED WATER (35% P.G.) (TON)	CONDENSER WATER (35% P.G.) (GPM)	ELECTRICAL (V/Ph/Hz)	WEIGHT (lbs)	NOTES									
				EWT (°F)	LWT (°F)	FLOW RATE (GPM)	PRESSURE DROP (PSI)	EWT (°F)	LWT (°F)	FLOW RATE (GPM)	PRESSURE DROP (PSI)	V/Ph/Hz	MCA	MOCQ	WEIGHT (lbs)	NOTES		
CH-1	MULTISTACK	(6) MSS90MCCB	MECH ROOM 0302.1	6,000.0	500.0	54.0	44.0	1,271.0	5.1	85.0	94.3	1,573.0	5.2	575/3/60	222.0	300.0	28,950	1

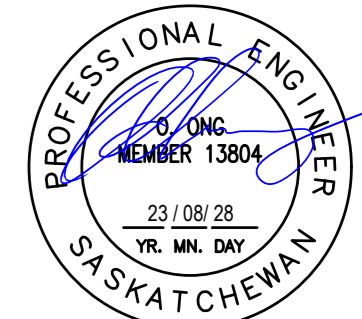
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Association of Professional Engineers, and Geoscientists of Saskatchewan
 Incorporated in Saskatchewan
ARROW ENGINEERING INC.
 NUMBER 25326
 Permitted to General Work for
 Discipline: Mech. Reg. No. 13804
 DESIGNER: [Signature]
 CHECKER: [Signature]



ARROW ENGINEERING INC.
 APECS PERMIT NUMBER 20326

MECHANICAL LEGEND	
LINETYPES	VENTILATION
--- CONTROLS WIRING	--- OUTDOOR AIR DUCT UP/DOWN
--- SAN SANITARY PIPING	--- SUPPLY DUCT UP/DOWN
--- DOMESTIC COLD WATER PIPING	--- RETURN DUCT UP/DOWN
--- CGS CHILLED GLYCOL SUPPLY PIPING	--- EXHAUST DUCT UP/DOWN
--- CGR CHILLED GLYCOL RETURN PIPING	--- ROUND DUCT UP/DOWN
--- CS CONDENSER WATER SUPPLY PIPING	--- BALANCING DAMPER
--- CR CONDENSER WATER RETURN PIPING	--- FD = FIRE DAMPER
PLUMBING	--- SIDEWALL GRILLE
--- PIPE FLOW ARROW	--- ROUND DIFFUSER CW TAKEOFF AND BALANCING DAMPER
--- PIPE CAP	--- SINGLE-LINE DUCTWORK ENDCAP
--- PIPE CONNECTION	--- SINGLE-LINE DUCTWORK TAKEOFF
--- PIPE DROP	--- SINGLE-LINE DUCTWORK TRANSITION
--- PIPE RISE	--- SINGLE-LINE DUCTWORK WALL CAP
--- PIPE TEE (BELOW)	TAGS
--- PIPE TEE (ABOVE)	--- TYPE: 2.1 DIFFUSER/GRILLE
	--- NECK (mm): 2000 TAG
	--- FLOW (L/s): 100
	--- DETAIL NUMBER: 1 DRAWING REFERENCE
	--- DRAWING NUMBER: M2
	--- EQUIPMENT TAG KEYNOTE REFERENCE
	--- EQUIPMENT REFERENCE
EXISTING/DEMOLITION	--- EXISTING EQUIPMENT
--- EXISTING EQUIPMENT	--- EXISTING EQUIPMENT TO BE DEMOLISHED
ABBREVIATIONS	--- CH CHILLER
--- CT COOLING TOWER	--- DCW DOMESTIC COLD WATER
--- EF EXHAUST FAN	--- GT GLYCOL TANK
--- HE HEAT EXCHANGER	--- NC "NORMALLY CLOSED"
--- NO "NORMALLY OPEN"	--- P PUMP
--- UNO "UNLESS NOTED OTHERWISE"	

DEMOLITION NOTES	
1.	ALL EXISTING BUILDING INFORMATION PREPARED FROM EXISTING DRAWINGS PREPARED BY DANIEL S. WINGERAK ENGINEERING LTD. ON JANUARY 2022 AND SITE VISIT CONDUCTED BY ARROW ENGINEERING ON JUNE 30, 2022.
2.	ALL ITEMS BEING DEMOLISHED TO BE DISPOSED OF ACCORDING TO THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
	HATCHING DENOTES ITEMS TO BE DEMOLISHED

KEYNOTES	
1.	REMOVE AND REPLACE EXISTING FLUID COOLER, CONTROLS AND ASSOCIATED PIPING BACK TO ISOLATION VALVES.
2.	REPLACE EXISTING PLATFORM, COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.
3.	1500 CGS DN.
4.	1500 CGR FROM BELOW.
5.	750 DRAM DN.
6.	1500 DCW FROM BELOW.
7.	FIELD LOCATE AND VERIFY EXACT LOCATION.
8.	TIE-IN TO EXISTING CGS AND CGR PIPING.
9.	FIELD LOCATE AND VERIFY EXACT LOCATION.
10.	RUN NEW 750 SAN TO NEAREST DRAIN IN PENTHOUSE.
11.	TIE-IN NEW 500 DCW TO EXISTING IN PENTHOUSE.
12.	FIELD LOCATE AND VERIFY EXACT LOCATION.
13.	REMOVE AND REPLACE 3-WAY CONTROL VALVE AND ASSOCIATED CONTROLS IN MECHANICAL PENTHOUSE.
14.	REMOVE EXISTING WATER TREATMENT SYSTEM, ASSOCIATED EQUIPMENT, PIPING, VALVES, AND CONTROLS.

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Date Issued	Issued For	By
02/08/2023	ISSUED FOR TENDER	MA
No.	Date	Revision
Date Printed	30/09/2023	Date Imprimee

- Verify all dimensions and site conditions and be responsible for same.
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.

A	A Detail no. No. du détail	A
B	B Location drawing no. Lieu dessin no.	B
C	C Drawing no. dessin no.	C

project: **SAB OF CHILLER REPLACEMENT / SAB DE REMPLACEMENT DU REFRIGERISSEUR**

110 GYMNASIUM PLACE

MECHANICAL ROOF PLANS

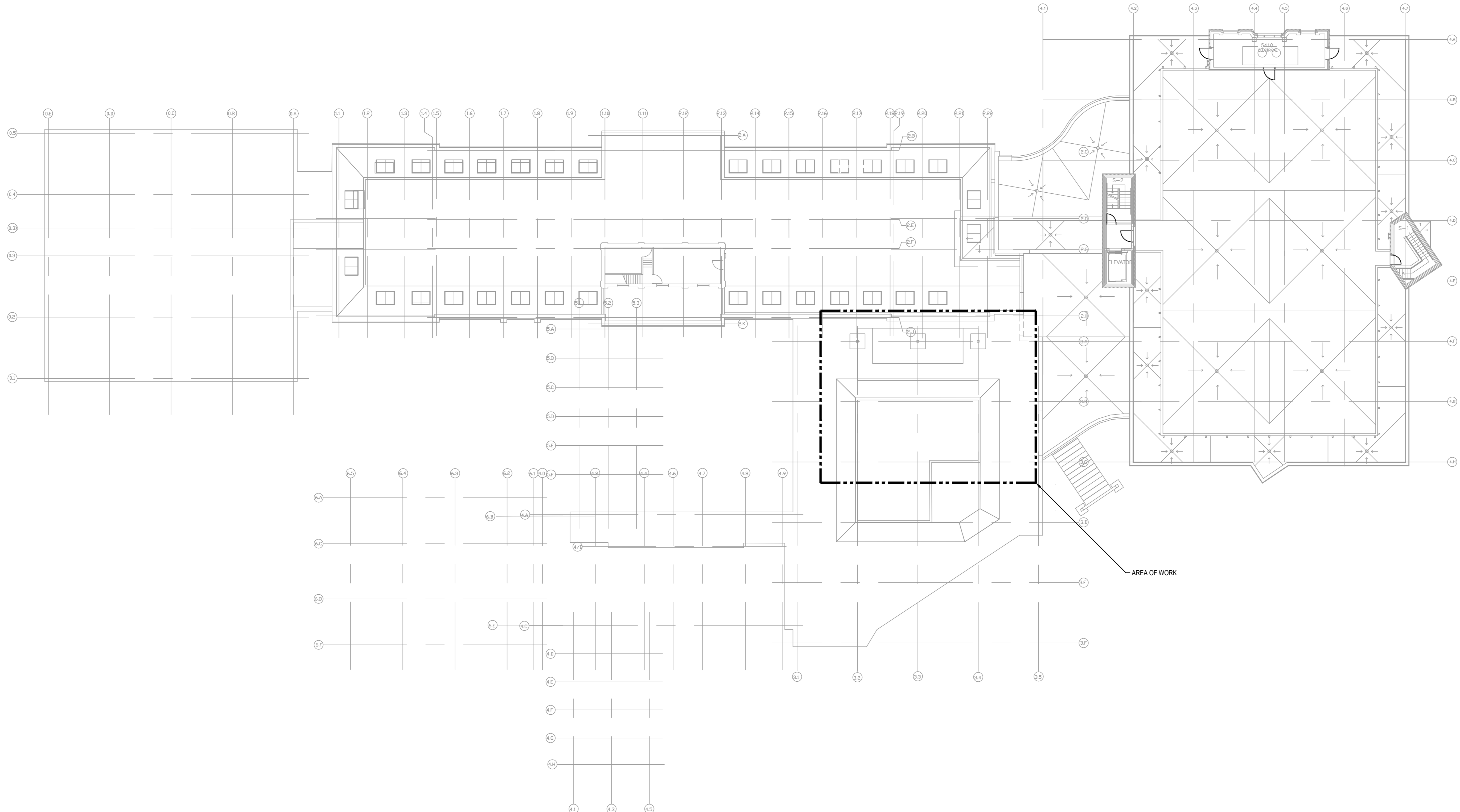
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drawn: **MA** dessiné: **MA** scale: **COMME INDIQUE** échelle:

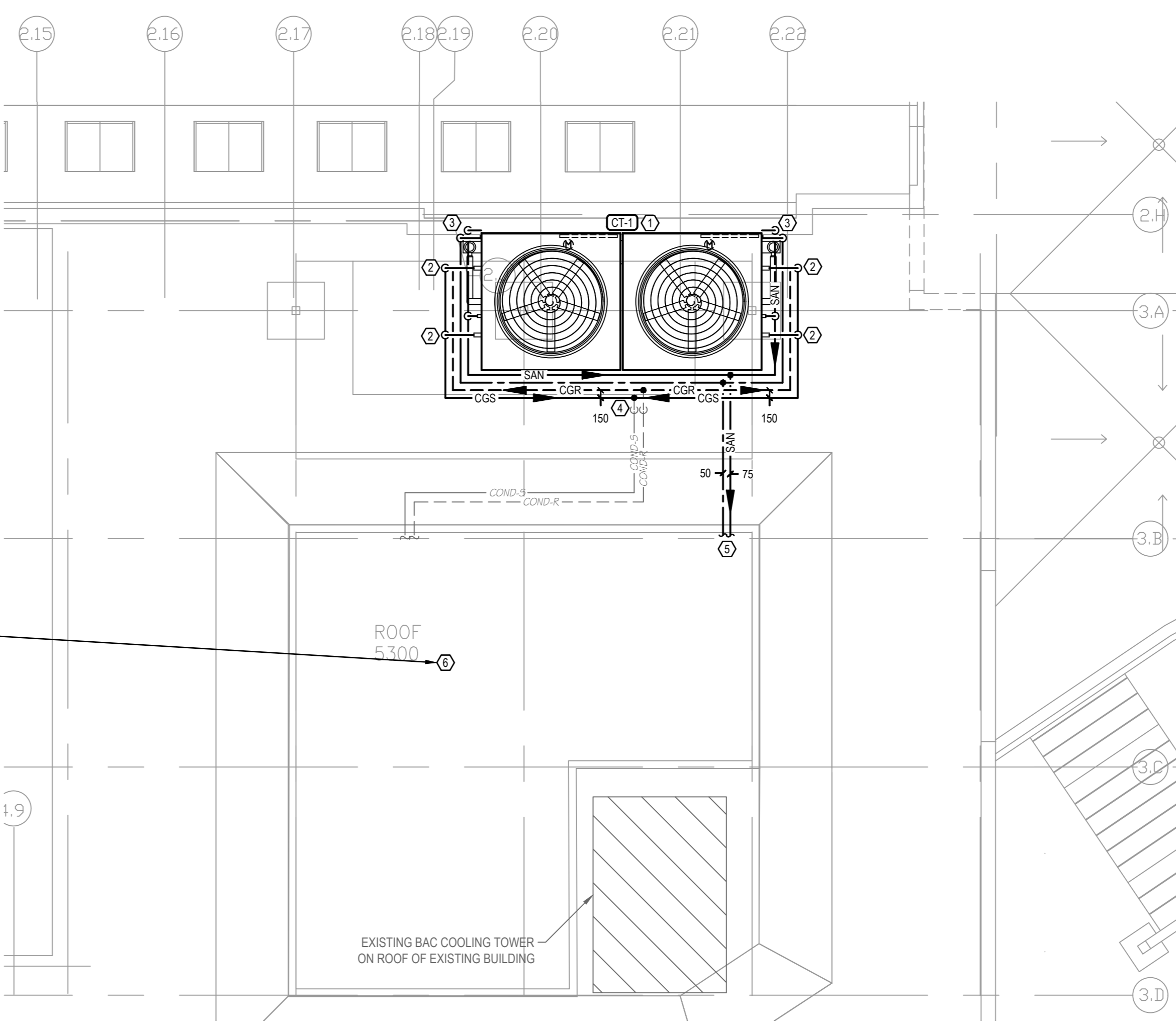
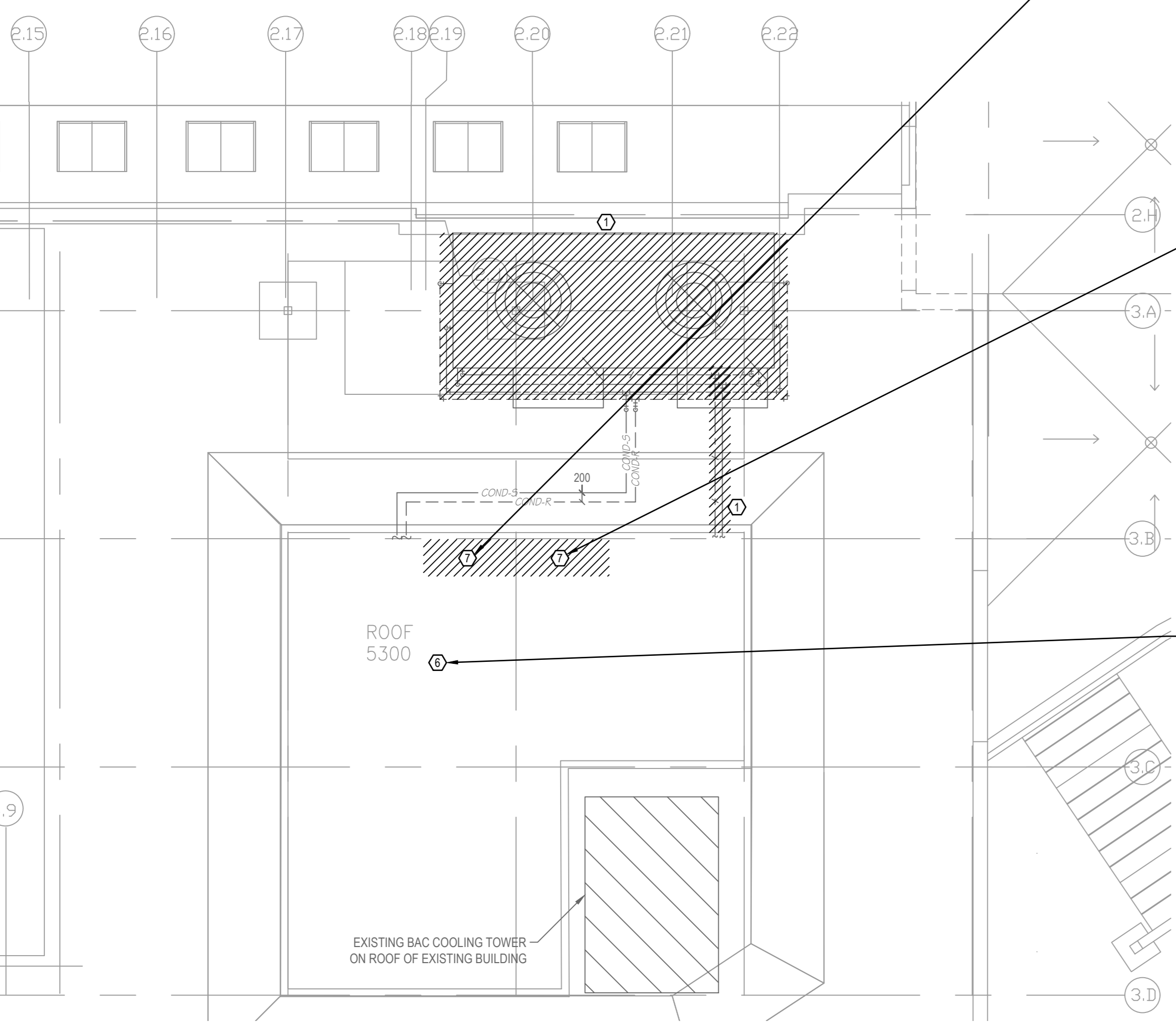
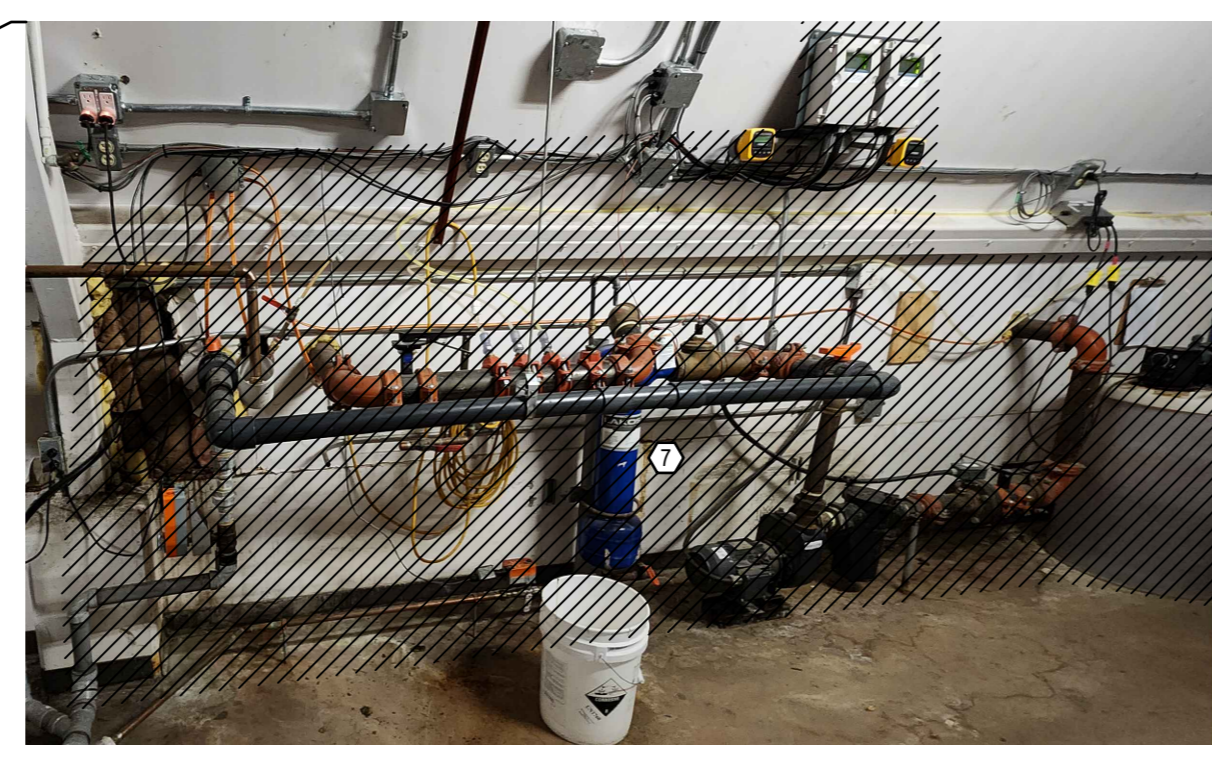
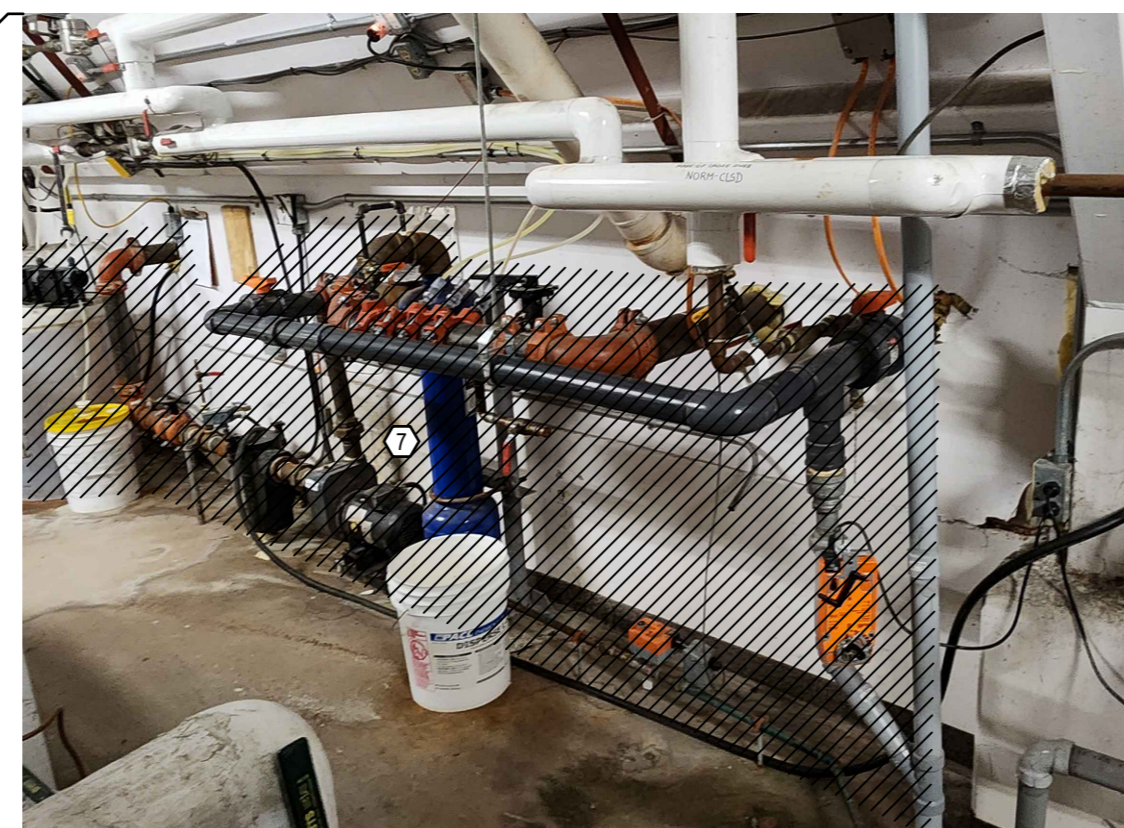
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approved: **OO** approuvé: **OO** W.O.no.: **-** D.T.no.:

desg.no.: **C-M2** dessin no.:



ROOF KEY PLAN
 SCALE: 1:200
 0 5000 10000



1 PARTIAL ROOF PLAN - DEMOLITION
 SCALE: 1:200
 0 2500 5000 10000

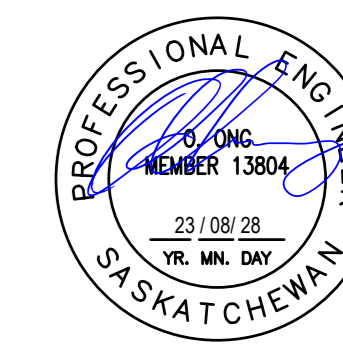
2 PARTIAL ROOF PLAN - PIPING
 SCALE: 1:200
 0 2500 5000 10000

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Association of Professional Engineers, and Geoscientists of Saskatchewan
 Incorporated as a corporation
ARROW ENGINEERING INC.
 NUMBER 25326
 Permitted to practice in the Province of Saskatchewan
 Discipline: Mech. Eng. No. 13804
 Date: 12/08/2018



ARROW ENGINEERING INC.
 APECS PERMIT NUMBER 25326

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0	28 08 2023	ISSUED FOR TENDER	MA
No.	Date	Revision	By/For
Date Printed:	30/08/2023	Date Imprimee:	

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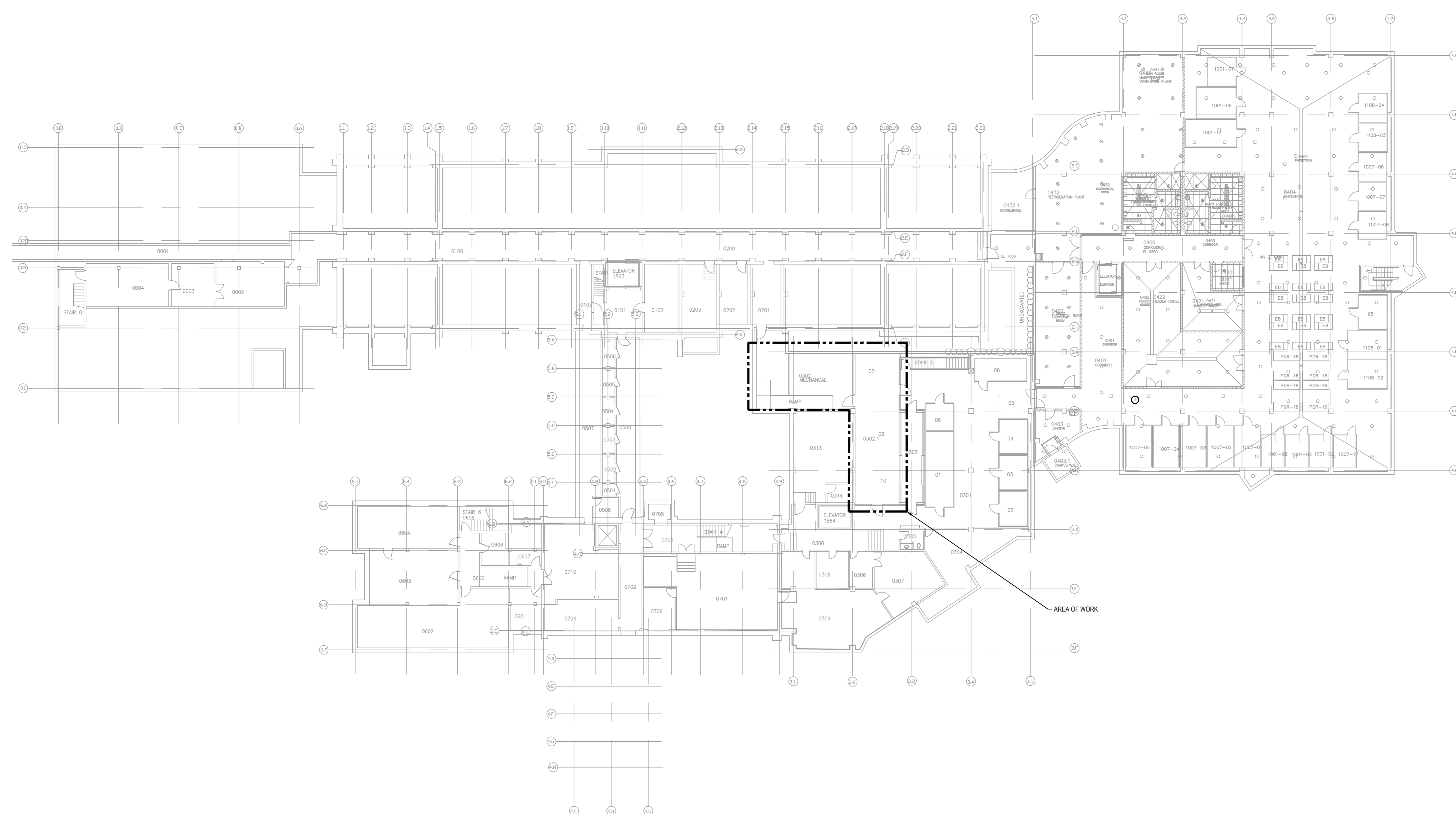
A	A Detail no. No. du détail	A
B	B Location drawing no. No. de dessin	B
C	C Drawing no. Dessin no.	C

project: **SAB OF CHILLER REPLACEMENT / SAB DE REMPLACEMENT DU REFRIGERISSEUR**

110 GYMNASIUM PLACE
 drawing: **LEVEL 0 MECHANICAL ROOM PLANS**

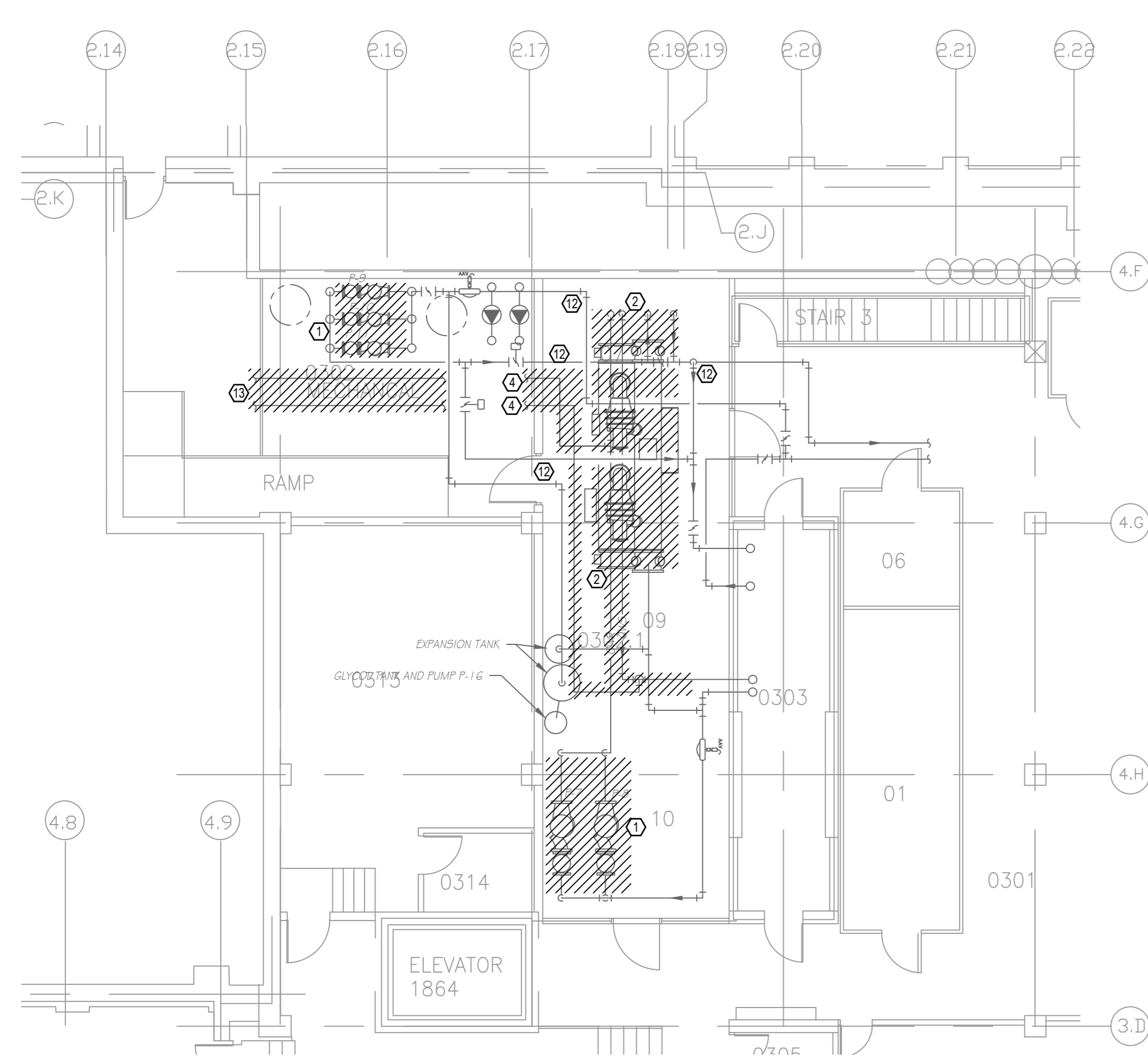
designed	MA	compu	date	MAR - 2023	date
drawn	MA	dessiné	scale	COMME INDICU?	échelle
checked	OO	vérifié	sheet	c/oa 3	feuille
approved	OO	approuvé	W.O.no.		D.T.no.
dep.no.					dessin no.

C-M3

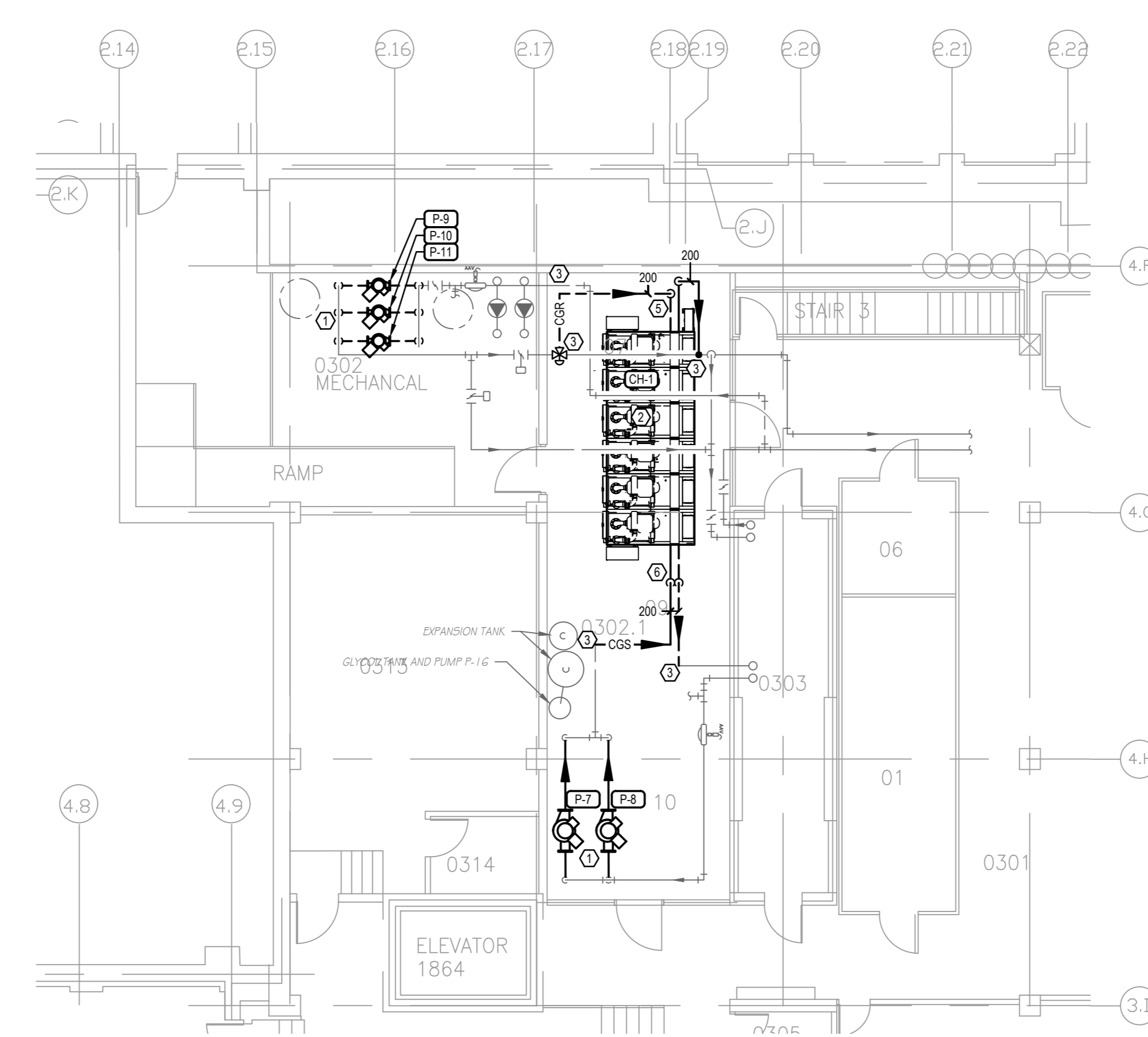


LEVEL 0 KEY PLAN
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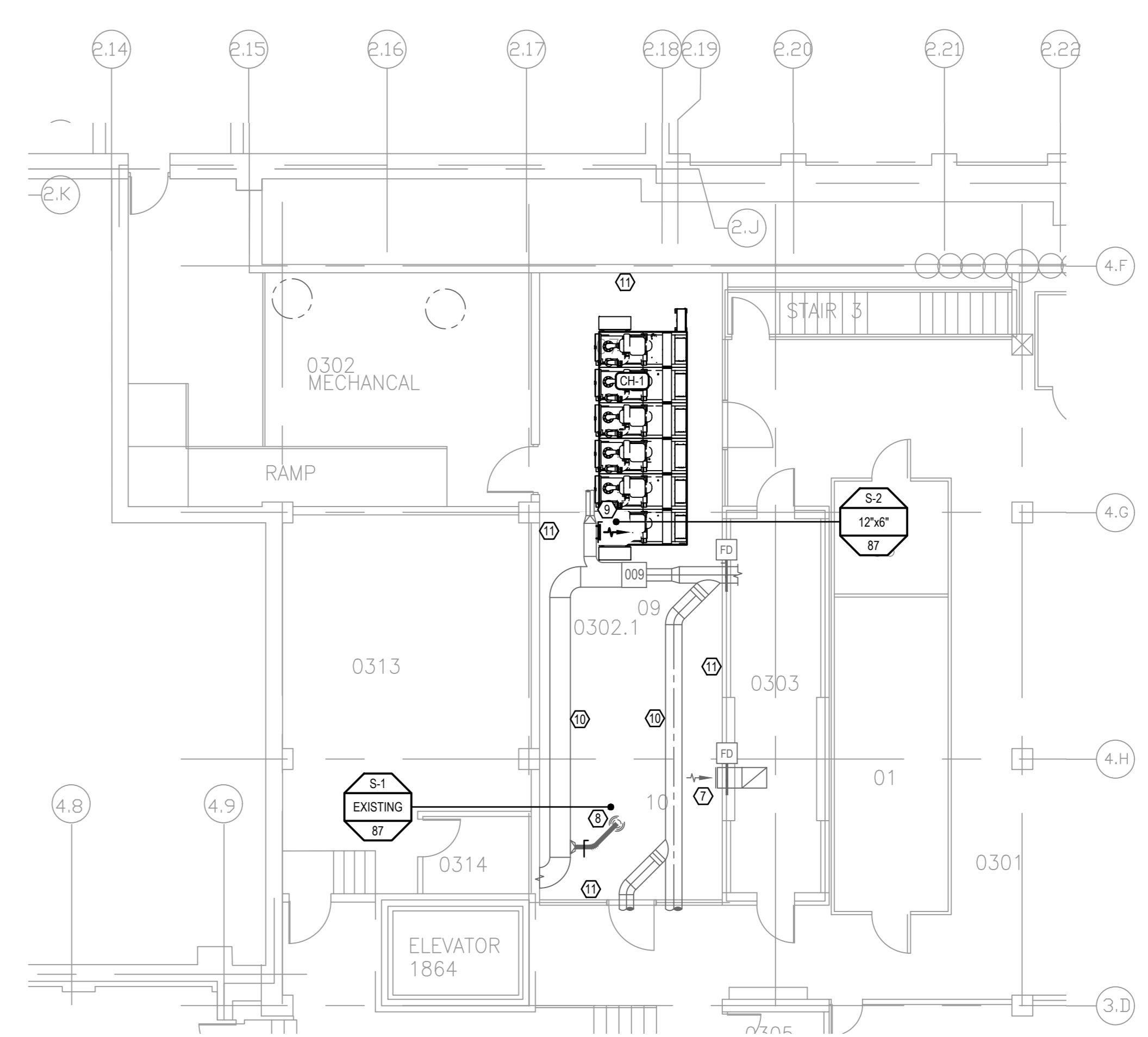
KEYNOTES	
①	REMOVE AND REPLACE EXISTING PUMPS, CONTROLS & ASSOCIATED PIPING BACK TO ISOLATION VALVES. REFER TO DRAWING C-M CHILLED WATER SCHEMATIC.
②	REMOVE AND REPLACE EXISTING CHILLER, CONTROLS & ASSOCIATED PIPING BACK TO ISOLATION VALVES. MODIFY EXISTING C-SS/CGR PIPING AS REQUIRED TO SUIT NEW CHILLER LAYOUT. REFER TO DRAWING C-M CHILLED WATER SCHEMATIC.
③	FIELD LOCATE & VERIFY EXACT LOCATION. TIE IN TO EXISTING C-SS AND C-GR PIPING.
④	FIELD LOCATE & VERIFY EXACT LOCATION. REMOVE BYPASS PIPING TO EXISTING CHILLER.
⑤	2000 CCR DN TO CHILLED WATER HEADER. REFER TO DRAWING C-M CHILLED WATER SCHEMATIC.
⑥	2000 CCR FROM BELOW CHILLED WATER HEADER. REFER TO DRAWING C-M CHILLED WATER SCHEMATIC.
⑦	2000 CCR DN TO CONDENSER WATER HEADER. REFER TO DRAWING C-M CHILLED WATER SCHEMATIC.
⑧	FIELD LOCATE & VERIFY EXACT LOCATION. EXISTING EA DUCT TO REMAIN. RE-BALANCE TO 162 L/s FOR REFRIGERANT LEAK.
⑨	FIELD LOCATE & VERIFY EXACT LOCATION. EXISTING SA DUCTWORK AND GRILLE TO REMAIN. RE-BALANCE TO 87 L/s.
⑩	FIELD LOCATE & VERIFY EXACT LOCATION. REMOVE AND REPLACE EXISTING SA TAKE-OFF WITH NEW SA GRILLE. BALANCE TO 87 L/s.
⑪	EXISTING DUCTWORK TO REMAIN.
⑫	FIELD LOCATE & VERIFY EXACT LOCATION. PATCH AND REPAIR OPENINGS IN WALLS TO MATCH EXISTING. SEAL EXISTING PIPING AND DUCT PENETRATIONS AS REQUIRED.
⑬	FIELD LOCATE & VERIFY EXACT LOCATION. EXISTING SYSTEM C-SS/CGR PIPING AND BYPASS PIPING TO REMAIN OR BE RECONNECTED AFTER NEW CHILLER INSTALLED.
⑭	DEMOLISH EXISTING OBSOLETE CHILLER AND PIPING.



1 LEVEL 0 MECHANICAL ROOM - DEMOLITION
 SCALE: 1:200
 0 2500 5000 10000



2 LEVEL 0 MECHANICAL ROOM - PIPING
 SCALE: 1:200
 0 2500 5000 10000



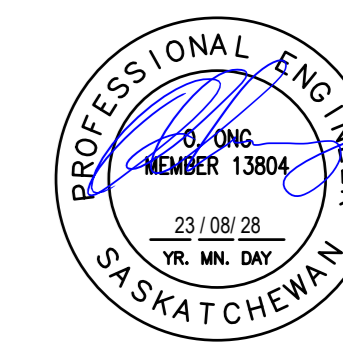
3 LEVEL 0 MECHANICAL ROOM - VENTILATION
 SCALE: 1:200
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GENERAL NOTES

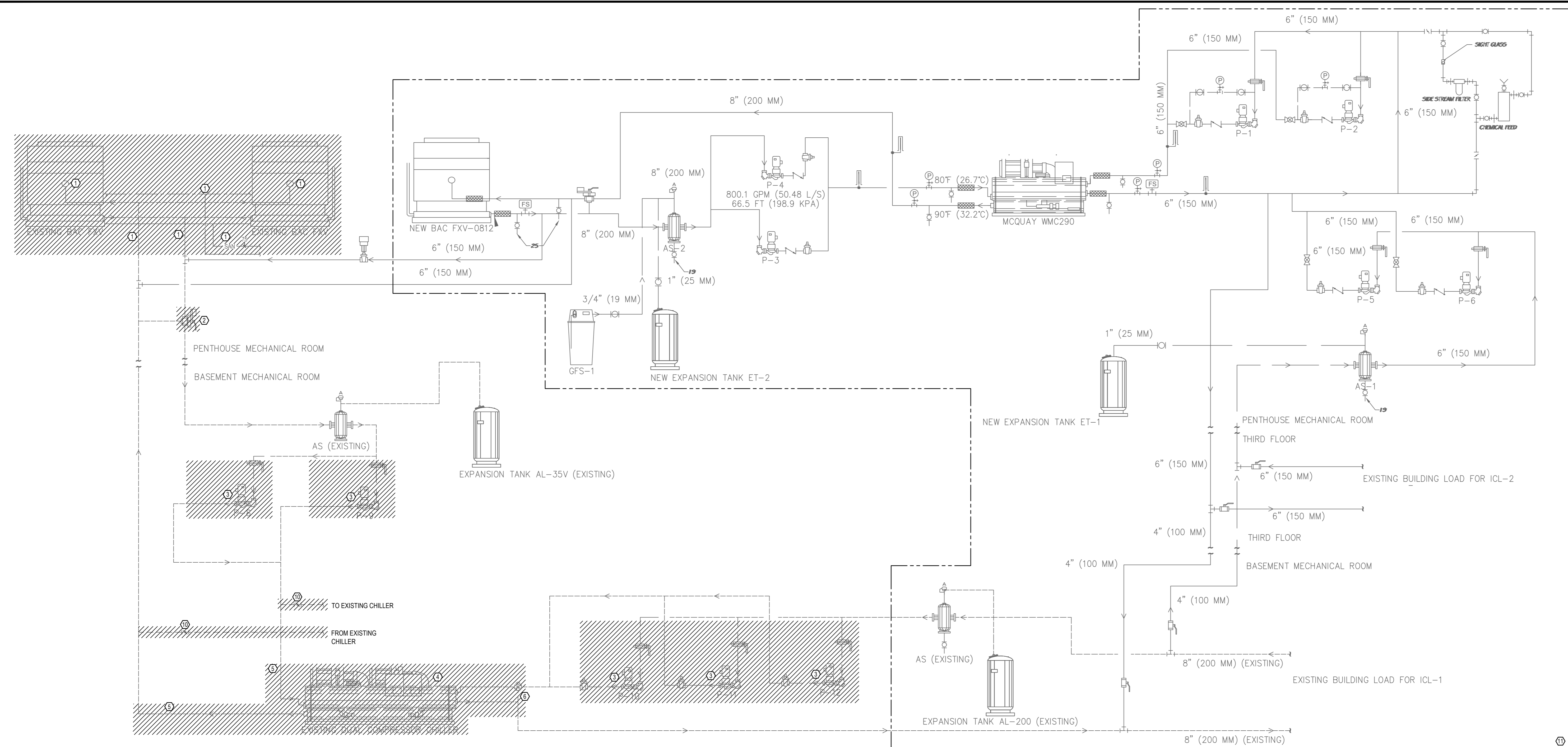
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- CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS BEYOND AREA OF WORK AND CLEAN ALL SURFACES AT COMPLETION.



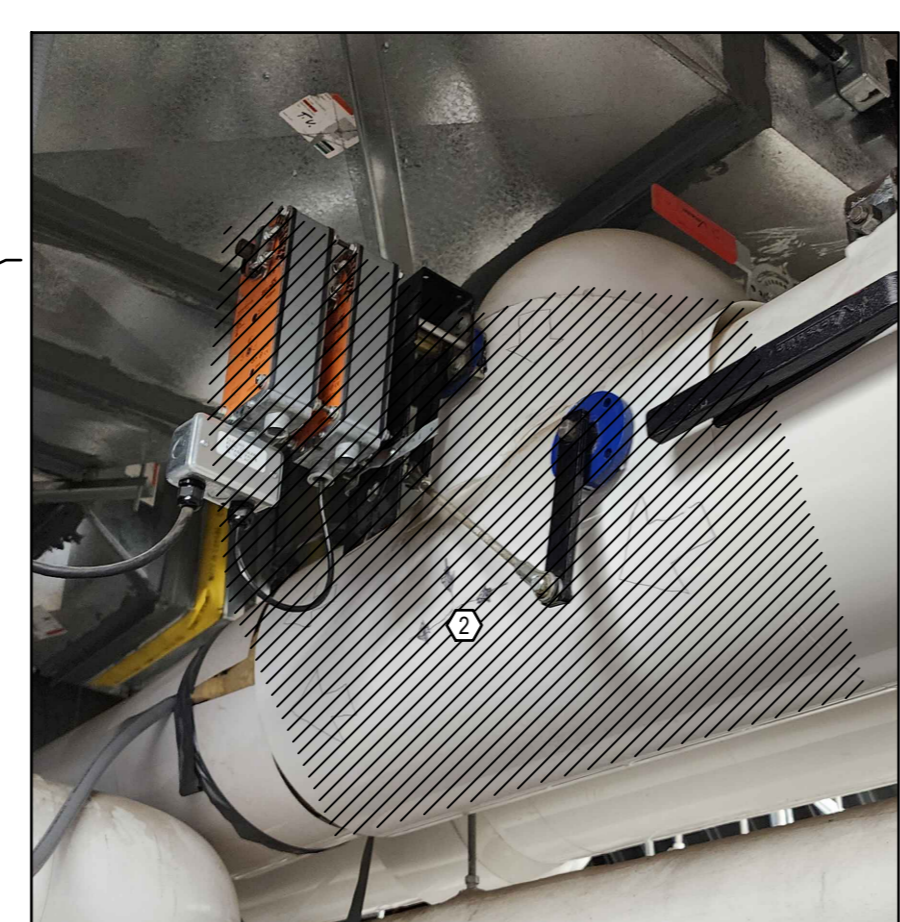
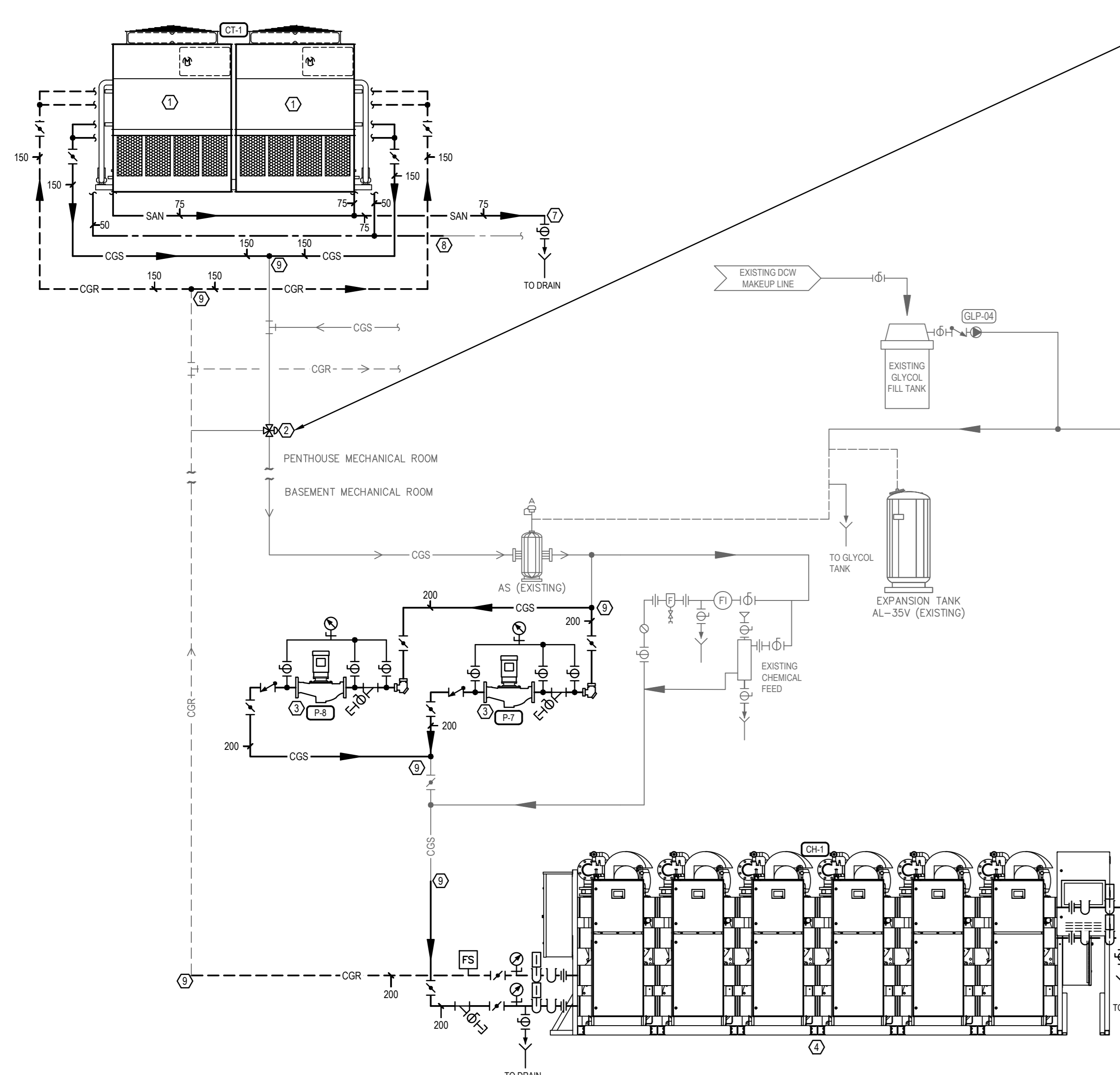
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EXISTING CHILLED WATER SCHEMATIC
SCALE: N.T.S.



KEYNOTES	
①	REMOVE AND REPLACE EXISTING FLUID COOLER, CONTROLS AND ASSOCIATED CGS/GR PIPING BACK TO ISOLATION VALVES. REMOVE DOW PIPING BACK TO MECHANICAL PENTHOUSE MAIN. REMOVE EXISTING DRAIN PIPING.
②	FIELD LOCATE AND VERIFY EXACT LOCATION. REMOVE AND REPLACE 3-WAY VALVE IN MECHANICAL PENTHOUSE.
③	REMOVE AND REPLACE EXISTING PUMPS, CONTROLS & ASSOCIATED PIPING BACK TO ISOLATION VALVES.
④	REMOVE AND REPLACE EXISTING CHILLER, CONTROLS & ASSOCIATED PIPING BACK TO ISOLATION VALVES. MODIFY EXISTING CGS/GR PIPING AS REQUIRED TO SUIT NEW CHILLER LAYOUT.
⑤	FIELD LOCATE & VERIFY EXACT LOCATION. EXISTING CGS/GR BYPASS PIPING TO REMAIN AND BE RECONNECTED AFTER NEW CHILLER IS INSTALLED.
⑥	FIELD LOCATE & VERIFY EXACT LOCATION. MODIFY EXISTING CGS/GR MAIN FROM PUMPS AS REQUIRED. REMOVE AND REPLACE 3-WAY BYPASS VALVE.
⑦	FIELD LOCATE & VERIFY EXACT LOCATION. RUN 150 SAN TO NEAREST DRAIN IN PENTHOUSE.
⑧	FIELD LOCATE & VERIFY EXACT LOCATION. TIE-IN NEW 500 DOW PIPING TO EXISTING IN PENTHOUSE.
⑨	FIELD LOCATE & VERIFY EXACT LOCATION. TIE-IN TO EXISTING CGS/GR PIPING.
⑩	FIELD LOCATE & VERIFY EXACT LOCATION. REMOVE BYPASS PIPING TO EXISTING CHILLER. TIE-IN TO EXISTING BYPASS PIPING.
⑪	EXISTING CHILLED WATER SYSTEM TO REMAIN.

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No.	Date	Revision	By/For

- Verify all dimensions and site conditions and be responsible for same.
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.

A	A Detail no. No. du détail	A
B	B Location drawing no. Ref. dessin	B
C	C Drawing no. dessin no.	C

project
SAS OF CHILLER REPLACEMENT / SAS DE REMPLACEMENT DU REFRIGERISSEUR

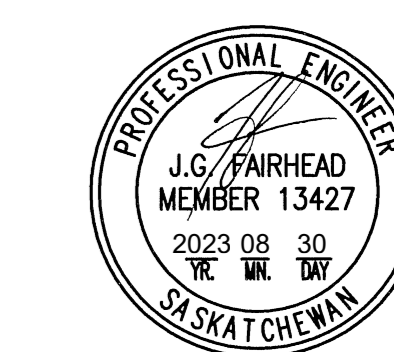
110 GYMNASIUM PLACE

DETAILS, SCHEMATICS AND SCHEDULES

designed	MA	compu	date	MAR - 2023	date
drawn	MA	dessiné	scale	COMME INDICU?	échelle
checked	OO	vérifié	sheet	- of/du 3	feuille
approved	OO	approuvé	W.O.no.		D.T.no.
dep.no.	C-M4				dessin no.

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS AND CLEARANCES ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES AND/OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
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No. Date Revision
Date Printed: 30/08/2023 Date Imprinted:

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A Detail no. No. du détail
B Location drawing no. sur dessin
C Drawing no. dessin no.

PROJECT: 808 OF CHILLER REPLACEMENT

110 GYMNASIUM PLACE

drawing: ROOF ELECTRICAL PLANS

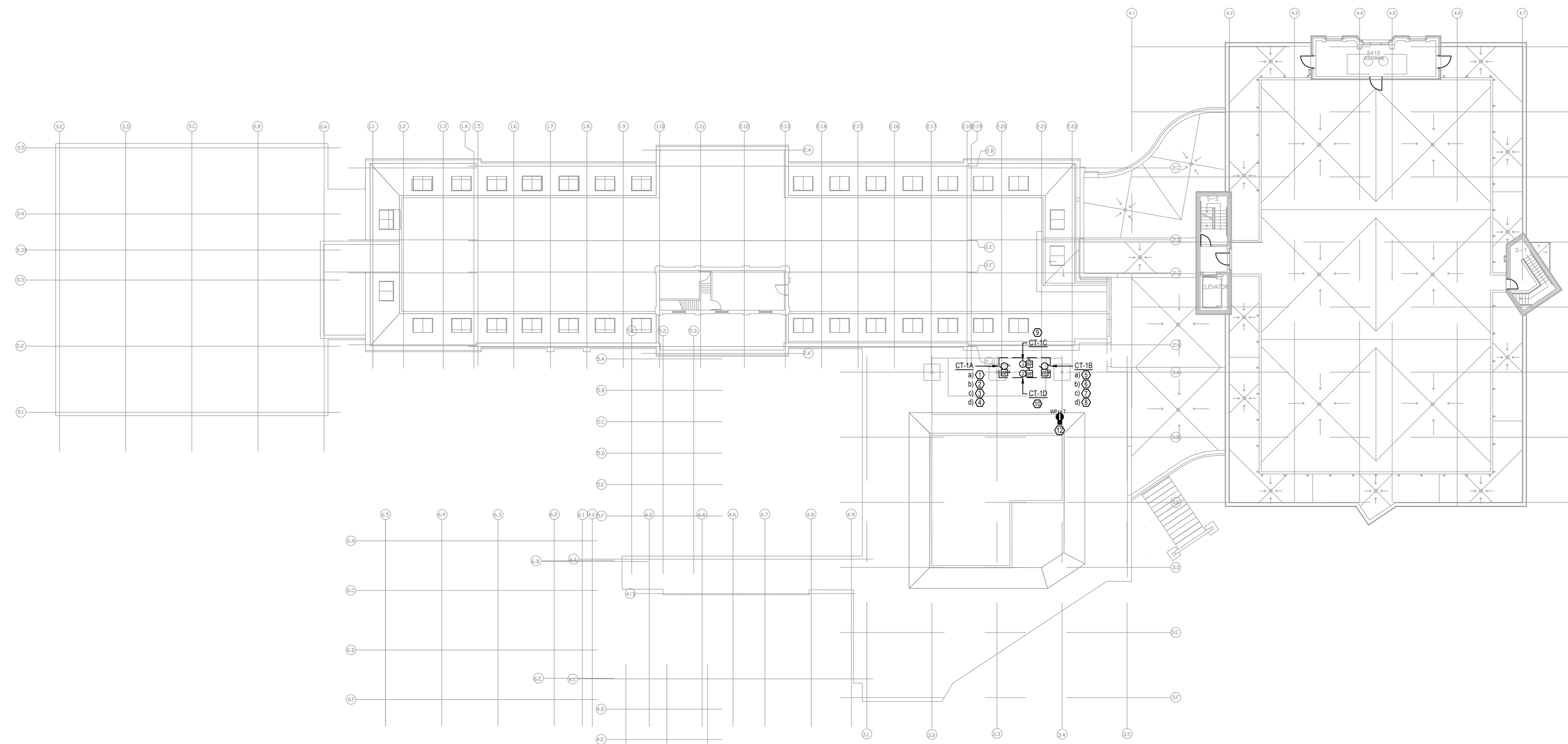
designed: LT compu: date: MARCH/2023

drawn: LT dessin: scale: AS SHOWN échelle:

checked: JF vérifié: sheet: of/du 2 feuille

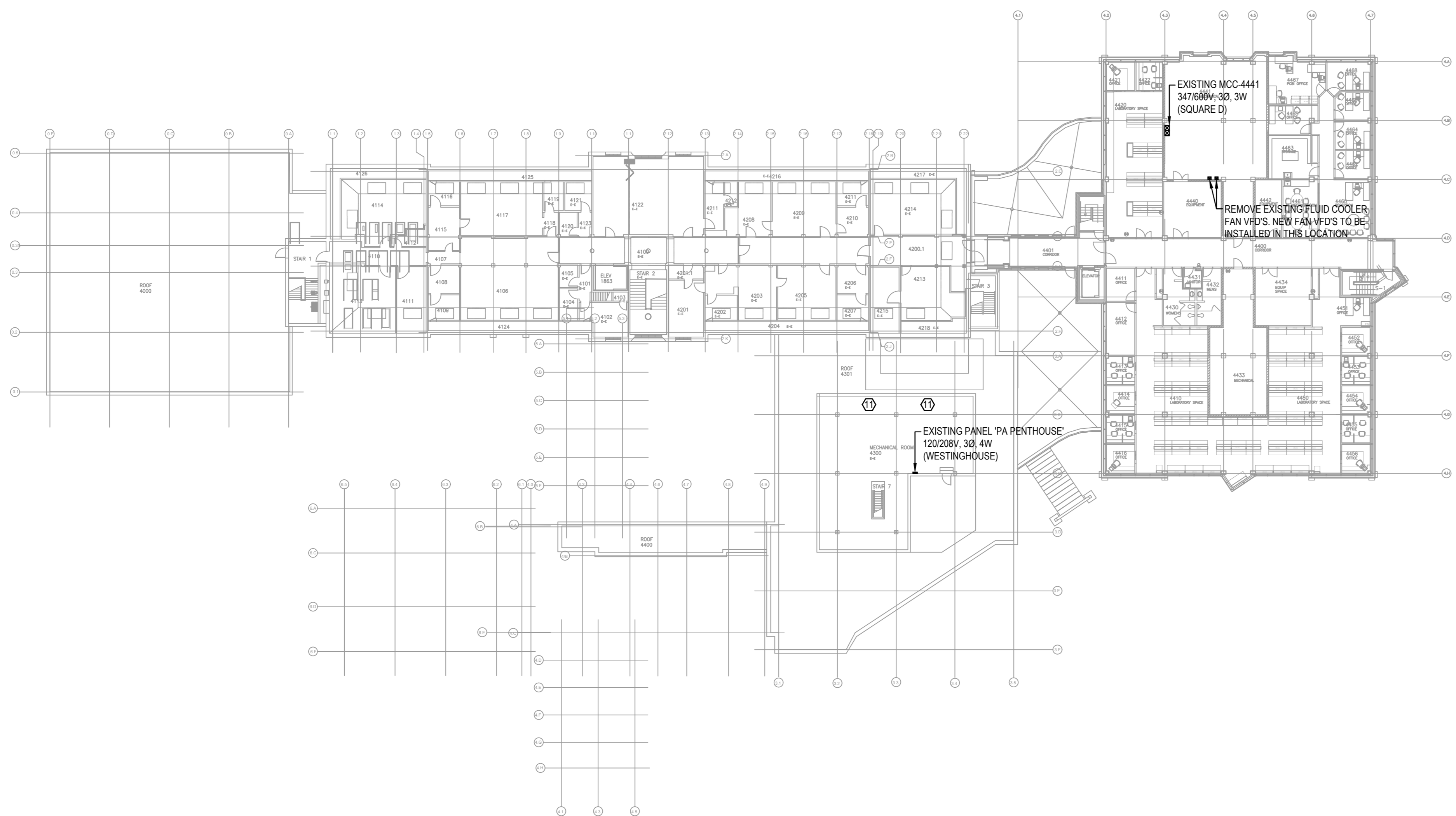
approved: JF approuvé: W.O.no. D.T.no.

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- KEYNOTES**
- EXISTING FLUID COOLER FAN #1 TO BE REMOVED AND REPLACED. CONTRACTOR TO REMOVE CABLING AND BREAKER FEEDING EXISTING FAN. REPLACE EXISTING BREAKER IN MCC-4441 WITH NEW 40A3P BREAKER AND PROVIDE NEW CABLING AND CONNECTION AS PER MOTOR SCHEDULE.
 - EXISTING FLUID COOLER PUMP #1 TO BE REMOVED AND REPLACED. CONTRACTOR TO RE-USE EXISTING CABLING AND BREAKER/STARTER (MCC-4441) FEEDING EXISTING UNIT. CONTRACTOR TO DISCONNECT EXISTING PUMP AND CONNECT NEW PUMP. EXTEND CABLING AS REQUIRED.
 - CONTRACTOR TO PROVIDE AND INSTALL NEW CABLING, BREAKER AND CONNECTION TO COOLING TOWER PROBE (SECTION #1). PROBE TO BE FED FROM EXISTING PANEL PA PENTHOUSE (CCT-PA-26).
 - CONTRACTOR TO PROVIDE AND INSTALL NEW CABLING, BREAKER AND CONNECTION TO COOLING TOWER PULSE PURE (SECTION #1). PULSE PURE TO BE FED FROM EXISTING PANEL PA PENTHOUSE (CCT-PA-26).
 - EXISTING FLUID COOLER FAN #2 TO BE REMOVED AND REPLACED. CONTRACTOR TO REMOVE CABLING AND BREAKER FEEDING EXISTING FAN. REPLACE EXISTING BREAKER IN MCC-4441 WITH NEW 40A3P BREAKER AND PROVIDE NEW CABLING AND CONNECTION AS PER MOTOR SCHEDULE.
 - EXISTING FLUID COOLER PUMP #2 TO BE REMOVED AND REPLACED. CONTRACTOR TO RE-USE EXISTING CABLING AND BREAKER/STARTER (MCC-4441) FEEDING EXISTING UNIT. CONTRACTOR TO DISCONNECT EXISTING PUMP AND CONNECT NEW PUMP. EXTEND CABLING AS REQUIRED.
 - CONTRACTOR TO PROVIDE AND INSTALL NEW CABLING, BREAKER AND CONNECTION TO COOLING TOWER PROBE (SECTION #2). PROBE TO BE FED FROM EXISTING PANEL PA PENTHOUSE (CCT-PA-26).
 - CONTRACTOR TO PROVIDE AND INSTALL NEW CABLING, BREAKER AND CONNECTION TO COOLING TOWER PULSE PURE (SECTION #2). PULSE PURE TO BE FED FROM EXISTING PANEL PA PENTHOUSE (CCT-PA-26).
 - CONTRACTOR TO PROVIDE AND INSTALL NEW CABLING, BREAKER AND CONNECTION TO COOLING TOWER HEATER. HEATER TO BE FED FROM EXISTING MCC-4441. PROVIDE NEW BUCKET IN EXISTING MCC SPACE.
 - CONTRACTOR TO PROVIDE AND INSTALL NEW CABLING, BREAKER AND CONNECTION TO COOLING TOWER FAN MOTOR HEATER. HEATER TO BE FED FROM EXISTING PANEL PA PENTHOUSE (CCT-PA-26).
 - CONTRACTOR TO REMOVE EXISTING WATER FILTER SYSTEM PUMP CONNECTION AND ALL ASSOCIATED WIRING BACK TO SOURCE.
- ROOFTOP EQUIPMENT MAINTENANCE RECEPTACLE TO BE MOUNTED IN PEDESTAL EQUAL TO ACE MFG AP-420G-AH, RT. RECEPTACLE TO BE 120V, 20A, T-SLOT, (FCI) PEDESTAL TO BE CLEAR MOUNTED FOR MINIMUM RECEPTACLE HEIGHT NOT LESS THAN 750mm ABOVE THE FINISHED ROOF IN ACCORDANCE WITH CEC 26-104. ALL ROOFTOP EQUIPMENT TO BE LOCATED WITHIN 7.5m FROM A MAINTENANCE RECEPTACLE. IF RECEPTACLES ARE TO BE MOUNTED ON ANYTHING OTHER THAN THE INDICATED PEDESTAL, CONFIRM ACCEPTABLE LOCATIONS MOUNTING WITH LOCAL RAU PRIOR TO ROUGH IN. CONTRACTOR TO PROVIDE AND INSTALL NEW CABLING, BREAKER (20A3P) AND CONNECTION TO MAINTENANCE RECEPTACLE. RECEPTACLE TO BE FED FROM EXISTING PANEL PA PENTHOUSE (CCT-PA-26).

1 ROOF - ELECTRICAL PLAN
SCALE: 1:200
0 2500 5000 10000



2 LEVEL 04 - ELECTRICAL PLAN
SCALE: 1:200
0 2500 5000 10000

MOTOR SCHEDULE								
ITEM	DESCRIPTION	LOAD	VOLTAGE	PHASE	BREAKER	CONDUIT & WIRE SIZE	CONTROL	COMMENTS
CH-1(A)	CHILLER (SECTION #1)	222.0 MCA	600V	3	300A3P	3" C-3855MCM	BY MANUF.	PROVIDE DISCONNECT
CH-1(B)	CHILLER (SECTION #2)	222.0 MCA	600V	3	300A3P	3" C-3855MCM	BY MANUF.	PROVIDE DISCONNECT
P-7	COMPRESSOR CIRC. PUMP	40.0 HP	600V	3	60A3P	1" C-386	VFD	PROVIDE DISCONNECT
P-8	COMPRESSOR CIRC. PUMP	40.0 HP	600V	3	60A3P	1" C-386	VFD	PROVIDE DISCONNECT
P-9	EVAPORATOR CIRC. PUMP	25.0 HP	600V	3	40A3P	3/4" C-388	VFD	PROVIDE DISCONNECT
P-10	EVAPORATOR CIRC. PUMP	25.0 HP	600V	3	40A3P	3/4" C-388	VFD	PROVIDE DISCONNECT
P-11	EVAPORATOR CIRC. PUMP	25.0 HP	600V	3	40A3P	3/4" C-388	VFD	PROVIDE DISCONNECT
CT-1A	COOLING TOWER FAN SECTION #1 (CT-1A-a)	23.6 A	600V	3	40A3P	3/4" C-388	VFD	PROVIDE WP DISCONNECT
	COOLING TOWER PUMP SECTION #1 (CT-1A-b)	5.16 A	600V	3	15A3P	3/4" C-3812	BY MANUF.	PROVIDE WP DISCONNECT
	COOLING TOWER PROBE SECTION #1 (CT-1A-c)	NOM.	120V	1	15A1P	3/4" C-2812	BY MANUF.	PROVIDE WP DISCONNECT
CT-1B	COOLING TOWER PULSE PURE SECTION #1 (CT-1B-a)	2.5 A	120V	1	15A1P	3/4" C-2812	BY MANUF.	PROVIDE WP DISCONNECT
	COOLING TOWER FAN SECTION #2 (CT-1B-b)	23.6 A	600V	3	40A3P	3/4" C-388	VFD	PROVIDE WP DISCONNECT
	COOLING TOWER PUMP SECTION #2 (CT-1B-b)	5.16 A	600V	3	15A3P	3/4" C-3812	BY MANUF.	PROVIDE WP DISCONNECT
CT-1C	COOLING TOWER PROBE SECTION #2 (CT-1B-c)	NOM.	120V	1	15A1P	3/4" C-2812	BY MANUF.	PROVIDE WP DISCONNECT
	COOLING TOWER PULSE PURE SECTION #2 (CT-1B-d)	2.5 A	120V	1	15A1P	3/4" C-2812	BY MANUF.	PROVIDE WP DISCONNECT
CT-1C	COOLING TOWER HEATER	48.0 KW	600V	3	60A3P	1" C-386	BY MANUF.	PROVIDE WP DISCONNECT
CT-1D	COOLING TOWER FAN MOTOR HEATER	2.0 A	120V	1	15A1P	3/4" C-2812	BY MANUF.	PROVIDE WP DISCONNECT

NOTES:
- REVIEW MECHANICAL SHOP DRAWINGS PRIOR TO ORDERING ELECTRICAL EQUIPMENT. IF NECESSARY, ADJUST DISTRIBUTION TO SUIT ELECTRICAL REQUIREMENTS.
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- ALL CIRCUIT BREAKER SIZED FOR VFD DRIVES TO BE VERIFIED WITH DRIVE INSTALLATION MANUAL PRIOR TO INSTALL AND CONNECTION.