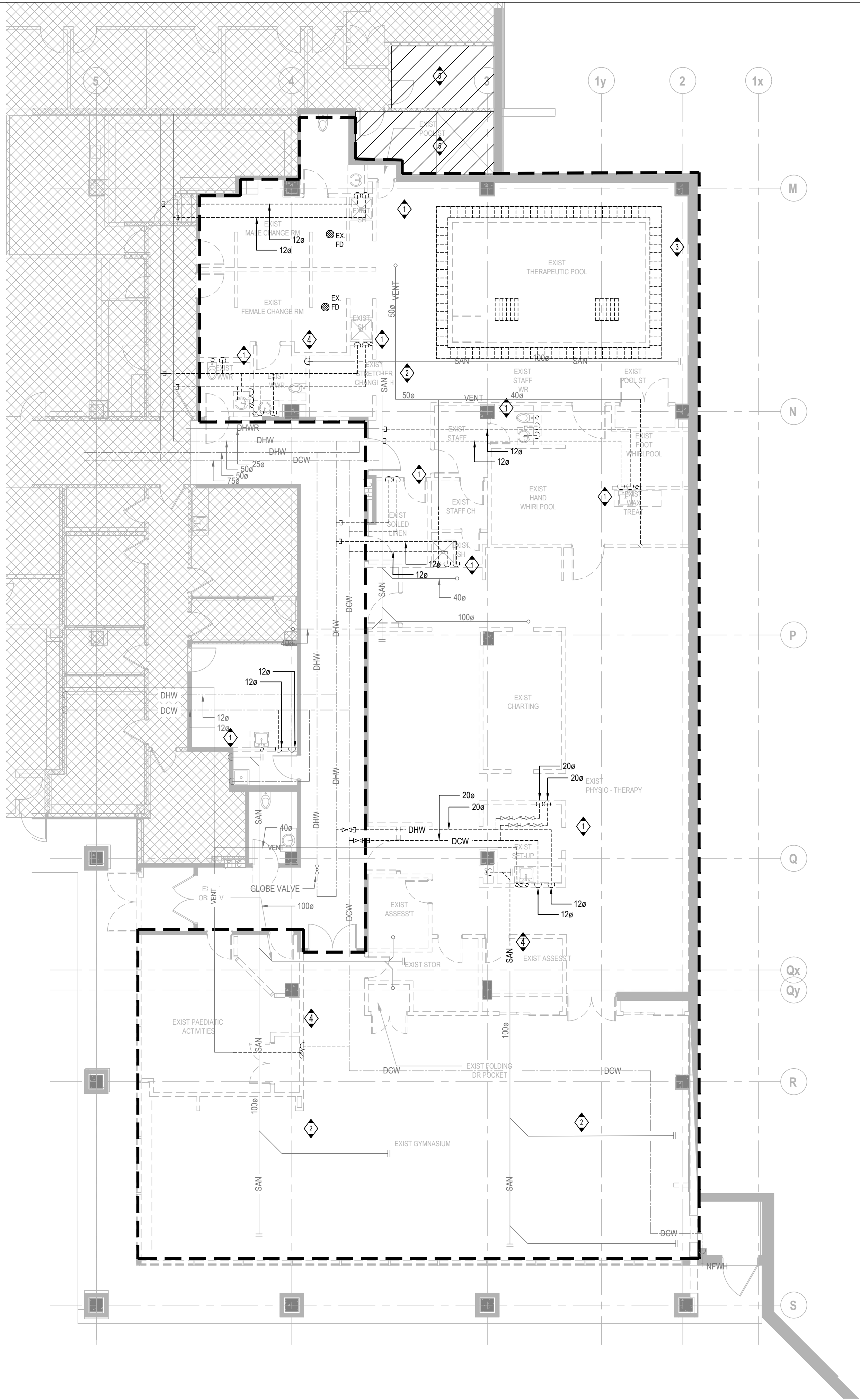


GENERAL NOTES:	
1. ALL SERVICES SHOWN ARE DIAGRAMMATIC ONLY. THE ARRANGEMENTS OF EQUIPMENT SHOWN ARE APPROXIMATE AND MAY BE ALTERED BY THE ENGINEERS TO MEET THE ON-SITE CONDITIONS OF THE PROJECT.	7. EXISTING DUCT MAINS OR BRANCHES TO BE FINISHED WITH CAPPED CONNECTIONS AFTER ANY PARTIAL DEMOLITION.
2. CONTRACTOR TO REVIEW THE EXISTING SERVICES AND DISCUSS WITH THE CLIENT/ENGINEER BEFORE ALTERATIONS	8. CONTRACTOR SHALL MAINTAIN CONTINUOUS OPERATION OF PLUMBING STACKS AND WATER SUPPLY MAINS THAT REQUIRE OFFSETTING AND MAKING NEW CONNECTIONS RESPECTIVELY DURING CONSTRUCTION PERIOD.
3. CONTRACTOR TO REROUTE ANY SERVICES IF REQUIRED TO INSTALL NEW SERVICES.	9. CONTRACTOR SHALL COORDINATE WITH OTHER MECHANICAL AND ELECTRICAL TRADES FOR FINAL PIPE ROUTING ON SITE.
4. ALL EXISTING PLUMBING SERVICES SHOWN IS APPROXIMATE AND BASED ON VISUAL SITE SURVEY AND ON EXISTING RECORD DRAWINGS. CONTRACTOR SHALL VERIFY ALL CONNECTIONS, PIPE SIZES, LOCATIONS AND INVERTS OF DRAINS ON SITE AND REPORT ANY DISCREPANCY TO THE CONSULTANT FOR RESOLUTION.	10. CONTRACTOR TO PROVIDE FOR ANY REQUIRED OFFSETS TO AVOID INTERFERENCE WITH OTHER SERVICES.
5. ANY PLUMBING SERVICES THAT ARE NOT SHOWN ON THE DRAWINGS THAT ARE EXPOSED DURING DEMOLITION/CONSTRUCTION SHALL BE VERIFIED BY THE CONTRACTOR TO THE SOURCE. ROUTING SHALL BE REPORTED TO THE CONSULTANT WITH PROPOSED RESOLUTIONS REQUIRED FOR THE SERVICE AT NO EXTRA COST TO THE OWNER.	11. CONTRACTOR TO ALLOW FOR ADDITIONAL PIPE HANGERS AND SUPPORTS ON EXISTING PIPING IF NECESSARY.
6. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL COORDINATE WITH THE FACILITY'S PROJECT MANAGER THE DATE AND DURATION OF TIME REQUIRED FOR DISCONNECTING AND RECONNECTING PIPING. CONTRACTOR TO KEEP INTERRUPTIONS TO THE FACILITY'S OPERATIONS TO A MINIMUM.	12. CONTRACTOR TO ALLOW FOR INSULATION ON EXISTING PIPING IF IT IS DAMAGED OR MISSED.
	13. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CUTTING EXISTING WALLS AND FLOOR SLAB. IF EXISTING SERVICES ARE CUT/DAMAGED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PATCH AND REPAIR THE SERVICE.
	14. CAP ALL OBSOLETE WASTE PIPING BELOW THE SLAB, WATER PIPING BACK AT MAINS AND VENT PIPING ABOVE FINISHED CEILINGS. PATCH ALL FLOORS, WALLS AND CEILINGS AS REQUIRED TO MEET FIRE RATINGS.

PLUMBING FIXTURES SIZING TABLE				
FIXTURE DESCRIPTION	DRAIN	VENT	CW	HW
WATER CLOSET- FLUSH VALVE	100mm 4"	40mm 1-1/2"	25mm 1"	
LAVATORY	32mm 1-1/4"	32mm 1-1/4"	15mm 1/2"	15mm 1/2"
SINK	40mm 1-1/2"	32mm 1-1/4"	15mm 1/2"	15mm 1/2"

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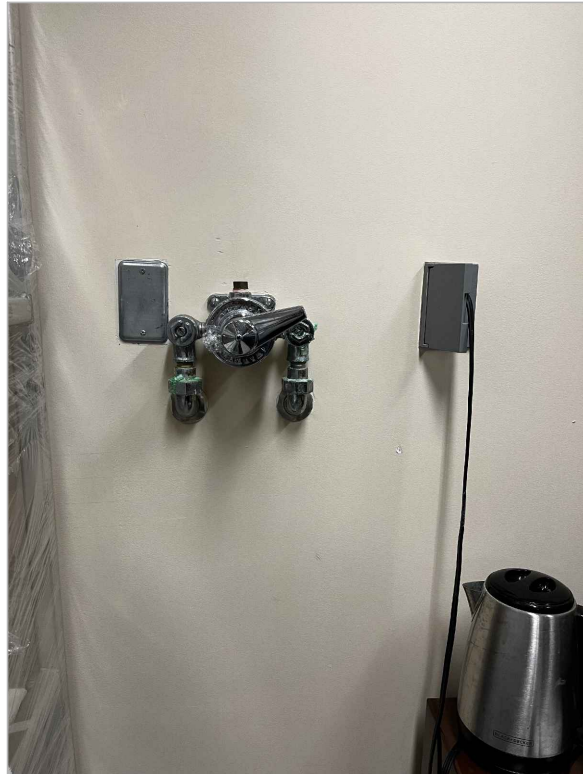
1 LEVEL 1 PLAN -PLUMBING -DEMOLITION
M2.01 SCALE: 1:100

GENERAL NOTES:

1. THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH LOCATION OF ALL EXISTING UTILITIES STUB-OUTS, PIPING, EQUIPMENT, ETC., AND/OR ANY CONDITION THAT MAY AFFECT HIS ALL THE NECESSARY RE-ROUTING, RELOCATING AND/OR REMOVAL OF EXISTING PIPING, EQUIPMENT, ETC., SHALL BE INCLUDED IN THE SCOPE OF WORK.
2. DEMOLITION DRAWINGS INDICATE VISIBLE/KNOWN DEVICES AND/OR SERVICES ONLY. CONTRACTOR SHALL INCLUDE FOR ALL COSTS ASSOCIATED WITH DEMOLITION SCOPE OF WORK IN THE BID PRICE. CONTRACTORS TO INVESTIGATE AND RECORD EXISTING CONDITIONS PRIOR TO SUBMITTING THE BID.
3. ANY SERVICES THAT ARE NOT SHOWN ON THE DRAWINGS THAT ARE EXPOSED DURING DEMOLITION/CONSTRUCTION SHALL BE VERIFIED BY THE CONTRACTOR TO THE SOURCE. ROUTING SHALL BE REPORTED TO THE CONSULTANT WITH PROPOSED RESOLUTIONS REQUIRED FOR THE SERVICE AT NO EXTRA COST TO THE OWNER.
4. CONTRACTOR SHALL MAINTAIN CONTINUOUS OPERATION OF PLUMBING STACKS AND WATER SUPPLY MAINS THAT REQUIRE OFFSETTING AND MAKING NEW CONNECTIONS RESPECTIVELY DURING CONSTRUCTION PERIOD.
5. CONTRACTOR SHALL COORDINATE WITH OTHER MECHANICAL AND ELECTRICAL TRADES FOR FINAL PIPE ROUTING ON SITE.
6. CONTRACTOR TO ALLOW FOR FIXING ANY EXISTING SANITARY PIPING WHERE SLOPE HAS NOT BEEN MAINTAINED TO KEEP OCCUPIED SPACES FUNCTIONAL.
7. CAP ALL OBSOLETE WASTE PIPING BELOW THE SLAB, WATER PIPING BACK AT MAINS AND VENT PIPING ABOVE FINISHED CEILINGS. KEEP ANY SERVICES TO MAINTAIN EXISTING RISERS

KEY NOTES

- 1 EXISTING PLUMBING FIXTURES TO BE DISCONNECTED AND REMOVED C/W ASSOCIATED . DCW, DHW, DHWR, SANITARY DRAINAGE AND PLUMBING VENT PIPE AND CAP EXISTING PIPING AT MAIN. PATCH AND MAKE FLOOR, WALL CEILING GOOD AS REQUIRED IF SPACE IS OUTSIDE RENOVATION AREA.
- 2 MAIN DCW, DHW, DHWR, SANITARY DRAINAGE AND PLUMBING IN THE CEILING SPACE TO REMAIN IN THE RENOVATION AREA.
- 3 EXISTING THERAPY POOL PLUMBING & DRAINAGE SYSTEM TO BE REMOVED INCLUDING DCW, DHW, DHWR, FILTRATION, SANITARY DRAINAGE AND PLUMBING VENT AND CAP EXISTING PIPING AT MAIN AS REQUIRED. TEST THE EXISTING VALVE FOR HOLDING AND PROVIDE NEW VALVE AS REQUIRED.
- 4 DRAINAGE PIPE TO BE DEMOLISHED AND RE-ROUTED AFTER FOUNDATION WORK IS DONE.
- 5 EXISTING POOL MECHANICAL ROOM TO BE BE CLEARED FROM ALL MECHANICAL EQUIPMENT. CAP ALL SERVICES BACK TO THE MAINS.
- 6 ALL PICTURES SHOWN ARE BASIC REPRESENTATIVES OF EXISTING SYSTEMS/ EQUIPMENT. CONTRACTORS TO VERIFY ALL SERVICES / EQUIPMENT ON SITE.



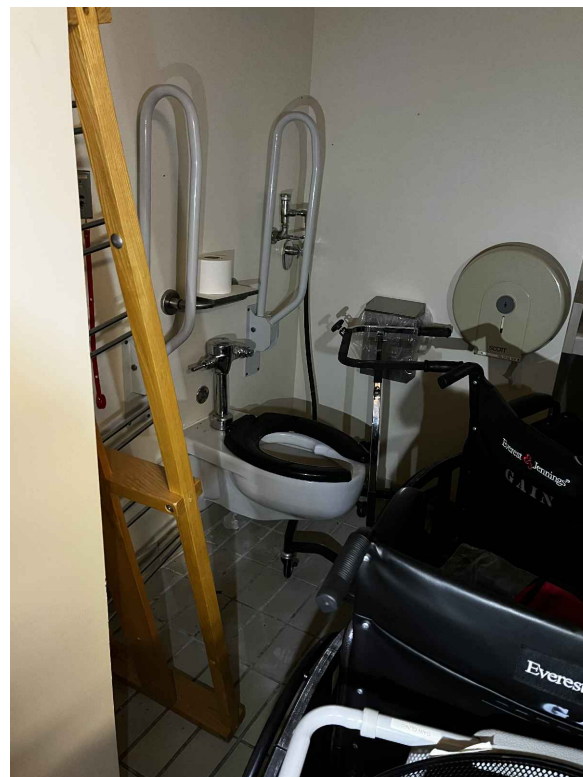
EXISTING MIXING VALVE TO BE REMOVED AND CAP ALL THE SERVICES BACK TO THE MAIN.



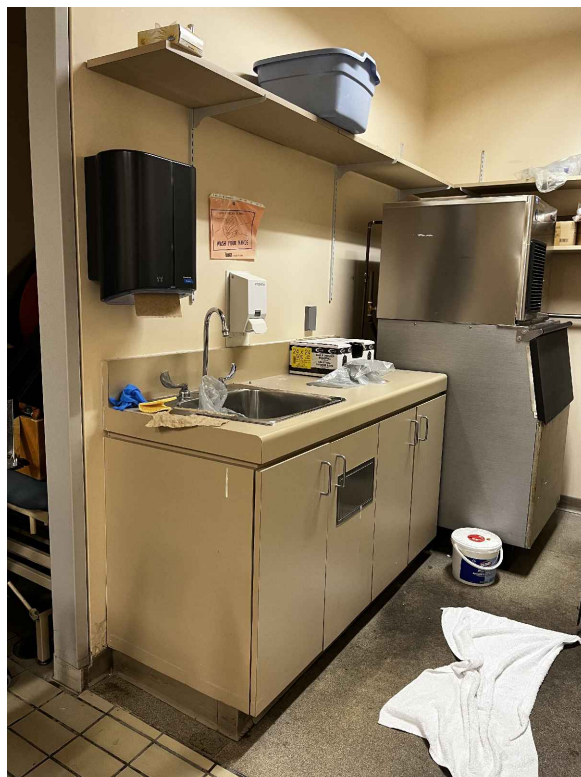
EXISTING FLOOR DRAIN TO BE REMOVED AND CAP THE PIPING BACK TO THE MAIN (TYP).



EXISTING FLOOR DRAIN TO BE REMOVED AND CAP THE PIPING BACK TO THE MAIN (TYP).



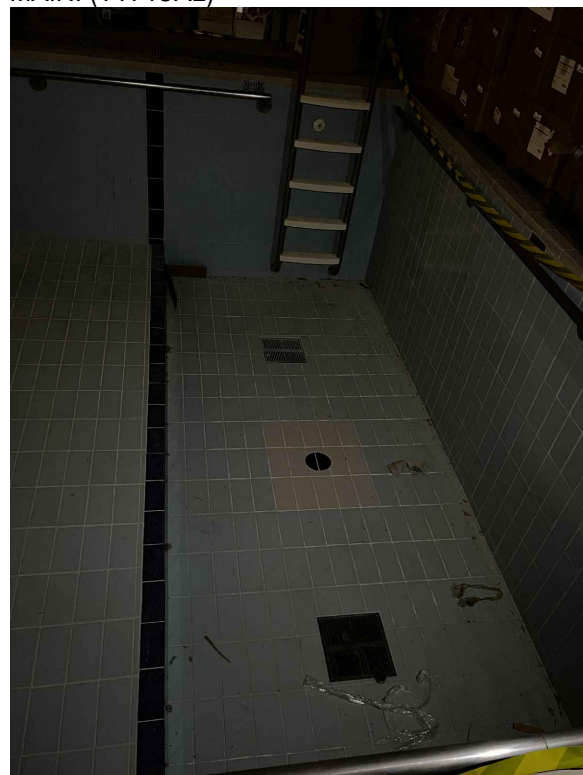
EXISTING WATER CLOSET TO BE REMOVED AND CAP ALL THE SERVICES BACK TO THE MAIN. (TYPICAL)



PLUMBING SERVICES FOR WORKING COUNTER SINK / ICE MACHINE TO BE REMOVED AND CAP ALL THE SERVICES BACK TO THE MAIN. (TYPICAL)



EXISTING DRINKING FOUNTAIN TO BE REMOVED AND CAP ALL THE SERVICES BACK TO THE MAIN. (TYPICAL)



EXISTING MAIN DRAIN IN THE THERAPY POOL. ALL SERVICES TO BE REMOVED AND CAPPED AT THE PIPE MAINS TO ELIMINATE ALL PIPE NOT IN USE WITHIN RENOVATION AREA (TYPICAL)



EXISTING ICE MACHINE TO BE REMOVED AND CAP ALL THE SERVICES BACK TO THE MAIN. (TYPICAL)

6	2024-04-17	ISSUED FOR TENDER AND BUILDING PERMIT APPLICATION
5	2024-04-05	ISSUED FOR PROGRESS
4	2023-12-08	ISSUED FOR MOH STAGE 2.3 SUBMISSION
3	2023-10-06	ISSUED FOR 100% CD
2	2023-08-25	ISSUED FOR 90% CD
1	2023-02-28	ISSUED FOR MOH 2.2 SKETCH PLAN SUBMISSION
0	2023-12-22	ISSUED FOR COSTING
REV.	YYYY-MM-DD	REVISION / DRAWING ISSUE
		REVIEW



1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, MINISTRY OF THE ENVIRONMENT, MINISTRY OF LABOUR, THE MUNICIPALITY AND OTHER AUTHORITIES HAVING JURISDICTION WHICH ARE TO BE CONSIDERED AN INTEGRAL PART OF THE SPECIFICATION.
2. CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR CUTTING, PATCHING, CORING, AND FIRE STOPPING, FLOOR FINISH TO MATCH ADJACENT AREAS.
3. CONTRACTOR SHALL MAINTAIN CONTINUOUS OPERATION OF THE PLUMBING STACKS AND WATER SUPPLY MAINS WHICH REQUIRE OFFSETTING AND NEW CONNECTIONS DURING THE CONSTRUCTION PERIOD.
4. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL COORDINATE WITH THE HOSPITAL THE DATE AND PERIOD OF TIME REQUIRED FOR OFFSETTING PLUMBING STACKS, DISCONNECTING AND MAKING NEW CONNECTION OF PLUMBING PIPING, IN ORDER TO KEEP INTERRUPTIONS OF THE HOSPITAL'S DAILY OPERATIONS TO A MINIMUM.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING FOR ANY REQUIRED SHUT-DOWN WITH HOSPITAL. CONTRACTOR SHALL INCLUDE FOR AND DETERMINE THE BEST METHOD TO MINIMIZE SERVICE INTERRUPTION AND IMPACT ON HOSPITAL OPERATION, INCLUDING USE OF HOT TAP/TEMPORARY FREEZING AND AFTER-HOUR WORK AS REQUIRED.
6. ALL EXISTING SERVICES AND UTILITIES ARE TO BE MAINTAINED AND COORDINATED WITH BY THE CONTRACTOR. ANY DISRUPTION MUST BE COORDINATED WITH THE FACILITY PRIOR TO THE WORK.
7. ALL NEW DRAINAGE PIPING SHALL BE FLUSHED AFTER INSTALLATION. PIPING TO BE CLEARED AND FREE OF ANY DEBRIS.

1 PROVIDE TRAP SEAL PRIMER FOR ALL FLOOR DRAINS AND CONNECT TO THE NEAREST VENT.

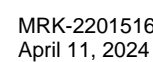


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6	2024-04-17	ISSUED FOR TENDER AND BUILDING PERMIT APPLICATION						
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REV.	YYYY-MM-DD	REVISION / DRAWING ISSUE						REVIEW



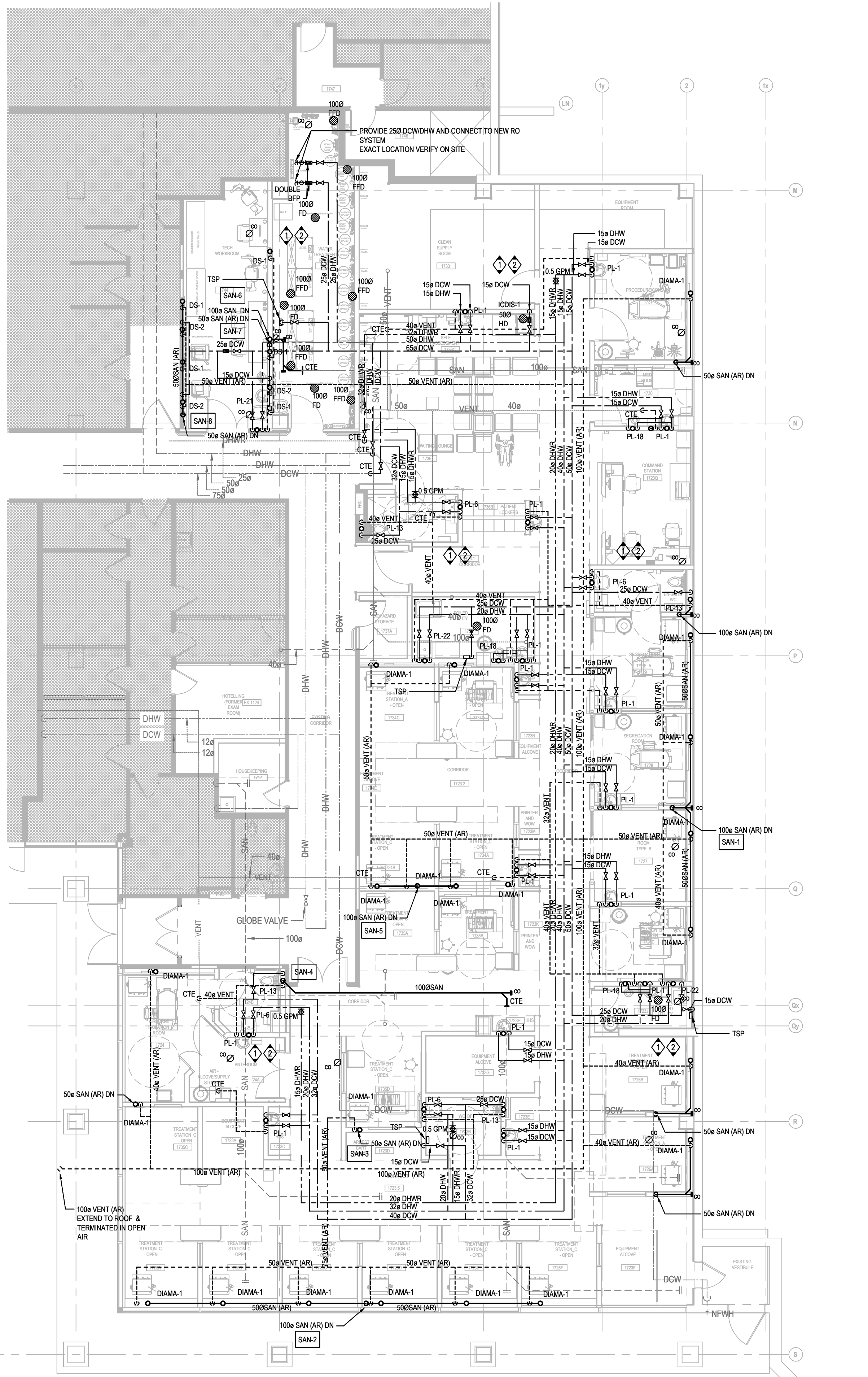
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SCARBOROUGH, ON, CANADA

PROJECT NO.	PLOT DATE	DRAWN
MRK-22001516	SCALE 1:100	REVIEWED
DRAWING NO.		REVISION

10. **M2.02**



1 LEVEL 1 PLAN -PLUMBING -NEW WORK
M2.03 SCALE: 1:100

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, MINISTRY OF THE ENVIRONMENT, MINISTRY OF LABOUR, THE MUNICIPALITY AND OTHER AUTHORITIES HAVING JURISDICTION WHICH ARE TO BE CONSIDERED AN INTEGRAL PART OF THE SPECIFICATION.
- CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR CUTTING, CORING, AND FIRE STOPPING, FLOOR FINISH TO MATCH ADJACENT AREAS.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS OPERATION OF THE PLUMBING STACKS AND WATER SUPPLY MAINS WHICH REQUIRE OFFSETTING AND NEW CONNECTIONS DURING THE CONSTRUCTION PERIOD.
- PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL COORDINATE WITH THE HOSPITAL THE DATE AND PERIOD OF TIME REQUIRED FOR OFFSETTING PLUMBING STACKS, DISCONNECTING AND MAKING NEW CONNECTION OF PLUMBING PIPING, IN ORDER TO KEEP INTERRUPTIONS OF THE HOSPITAL'S DAILY OPERATIONS TO A MINIMUM.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING FOR ANY REQUIRED SHUT-DOWN WITH HOSPITAL. CONTRACTOR SHALL INCLUDE FOR AND DETERMINE THE BEST METHOD TO MINIMIZE SERVICE INTERRUPTION AND IMPACT ON HOSPITAL OPERATION, INCLUDING USE OF HOT TAP/TEMPORARY FREEZING AND AFTER-HOUR WORK AS REQUIRED.
- ALL EXISTING SERVICES AND UTILITIES ARE TO BE MAINTAINED AND COORDINATED WITH BY THE CONTRACTOR. ANY DISRUPTION MUST BE COORDINATED WITH THE FACILITY PRIOR TO THE WORK.
- ALL NEW DRAINAGE PIPING SHALL BE FLUSHED AFTER INSTALLATION. PIPING TO BE CLEARED AND FREE ANY DEBRIS.

PLUMBING FIXTURE NOTES:

INFECTION CONTROL SINK PL-1

EMERGENCY EYEWASH PL-18

WALL HANG LAVATORY PL-6

BARRIER-FREE WATER CLOSET PL-13

STAINLESS STEEL DUMP SINK PL-21.

WALL HANG STAINLESS STEEL SOILED UTILITY SINK PL-22.

ICE/WATER DISPENSER ICDS-1: EQUIPMENT PROVIDED BY OTHERS , PROVIDE 150 DCW WITH BACKFLOW PREVENTER AND 500 HUB DRAIN FOR INDIRECT DRAIN CONNECTION.

DIALYSIS MACHINE DIAMA-1: EQUIPMENT PROVIDED BY OTHERS, PROVIDE 500 ACID RESISTANT DRAIN WITH P TRAP AND 400 ACID RESISTANT VENT CONNECT TO RO BOX.

DIALYSIS SINK DS-1: DIALYSIS SINK PROVIDED BY BAXTER, PROVIDE 500 ACID RESISTANT DRAIN AND 400 ACID RESISTANT VENT CONNECT TO DIALYSIS SINK.

DIALYSIS SINK FOR PORTABLE RO CART DS-2: DIALYSIS SINK PROVIDED BY BAXTER, PROVIDE 150 DCW WITH SHUT OFF VALVE AND 500 ACID RESISTANT DRAIN AND 400 ACID RESISTANT VENT CONNECT TO DIALYSIS SINK

KEY NOTES:

- PROVIDE TRAP SEAL PRIMER (TSP) FOR ALL FD / FFD / HD AND P TRAP FOR RO BOXES.
- PROVIDE BACKFLOW PREVENTION FOR ALL OF THE FOLLOWING ITEMS:
 - ICE / WATER DISPENSER
 - DOMESTIC COLD / HOT WATER LINE CONNECTION FOR THE RO SYSTEM BY BAXTER.
 - DOMESTIC COLD WATER LINE FOR THE DIALYSIS SINKS FOR PORTABLE RO CART DS-2:

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2	2023-08-25	ISSUED FOR 90% CD		
1	2023-02-28	ISSUED FOR MOH 2.2 SKETCH PLAN SUBMISSION		
0	2023-12-22	ISSUED FOR COSTING		
REV.	YYYY-MM-DD	REVISION / DRAWING ISSUE		REVIEW



PROJECT NO. MRK-22001516	PLOT DATE	DRAWN
	SCALE 1:100	REVIEWED
DRAWING NO. M3.01		REVISION



1 LEVEL 1 PLAN -FIRE PROTECTION -NEW WORK
M3.02 SCALE: 1:100

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL FIRE CODE, FIRE CODE MINISTRY OF THE ENVIRONMENT, MINISTRY OF LABOUR, THE MUNICIPALITY AND OTHER AUTHORITIES HAVING JURISDICTION WHICH ARE TO BE CONSIDERED AN INTEGRAL PART OF THE SPECIFICATION.
- CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR CUTTING, CORING, AND FIRE STOPPING, FLOOR FINISH TO MATCH ADJACENT AREAS.
- ANY FIRE PROTECTION SERVICES NOT SHOWN ON THE DRAWINGS THAT ARE EXPOSED DURING DEMOLITION / CONSTRUCTION SHALL BE VERIFIED BY THE CONTRACTOR AS TO THE SOURCE AND ROUTING AND SHALL BE REPORTED TO THE CONSULTANT WITH PROPOSED SOLUTIONS AT NO EXTRA COST TO THE OWNER.
- PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL COORDINATE WITH THE HOSPITAL THE DATE AND PERIOD OF TIME REQUIRED FOR OFFSETTING FIRE PROTECTION STACKS, DISCONNECTING AND MAKING NEW CONNECTION OF FIRE PROTECTION PIPING, IN ORDER TO KEEP INTERRUPTIONS OF THE HOSPITAL'S DAILY OPERATIONS TO A MINIMUM.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING FOR ANY REQUIRED SHUT-DOWN WITH HOSPITAL. CONTRACTOR SHALL INCLUDE FOR AND DETERMINE THE BEST METHOD TO MINIMIZE SERVICE INTERRUPTION AND IMPACT ON HOSPITAL OPERATION, INCLUDING USE OF HOT TAP/TEMPORARY FREEZING AND AFTER-HOUR WORK AS REQUIRED.
- ALL EXISTING SERVICES AND UTILITIES ARE TO BE MAINTAINED AND COORDINATED WITH BY THE CONTRACTOR. ANY DISRUPTION MUST BE COORDINATED WITH THE FACILITY PRIOR TO THE WORK.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE CURRENT FLOW TEST INFORMATION PRIOR TO PREPARATION OF DRAWINGS AND HYDRAULIC CALCULATIONS.
- CONTRACTOR TO PROVIDE FIRE WATCH AS REQUIRED TO MAINTAIN FIRE SAFETY OF THE CONSTRUCTION SITE SCOPE AREA.
- COORDINATE WITH BUILDING SUPERVISOR FOR APPROVAL TO SWITCH OFF VALVES FEEDING THE AREA PRIOR TO DEMOLISHING WORK.
- DRAIN THE FIRE PIPE LINE PRIOR TO COMMENCING WORK, COORDINATE ON SITE.

KEY NOTES:

- CONTRACTOR TO PROVIDE NEW CONCEALED FAST RESPONSE TYPE SPRINKLER HEADS TO ALL NEW CEILINGS C/W BRANCH PIPING TO THE SPRINKLER MAIN. PROVIDE ALL ASSOCIATED ACCESSORIES, PIPE HANGERS AND SUPPORTS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPE FOR COORDINATION.
- CONTRACTOR TO SUBMIT SPRINKLER SHOP DRAWING WITH THE ENGINEER'S STAMP AND THE HYDRAULIC LOAD CALCULATIONS TO THE CITY AS PART OF PERMIT SUBMISSION.
- EXISTING FIRE HOSE CABINET TO REMAIN.

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6	2024-04-17	ISSUED FOR TENDER AND BUILDING PERMIT APPLICATION		
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2	2023-08-25	ISSUED FOR 90% CD		
1	2023-02-28	ISSUED FOR MOH 2.2 SKETCH PLAN SUBMISSION		
0	2023-12-22	ISSUED FOR COSTING		
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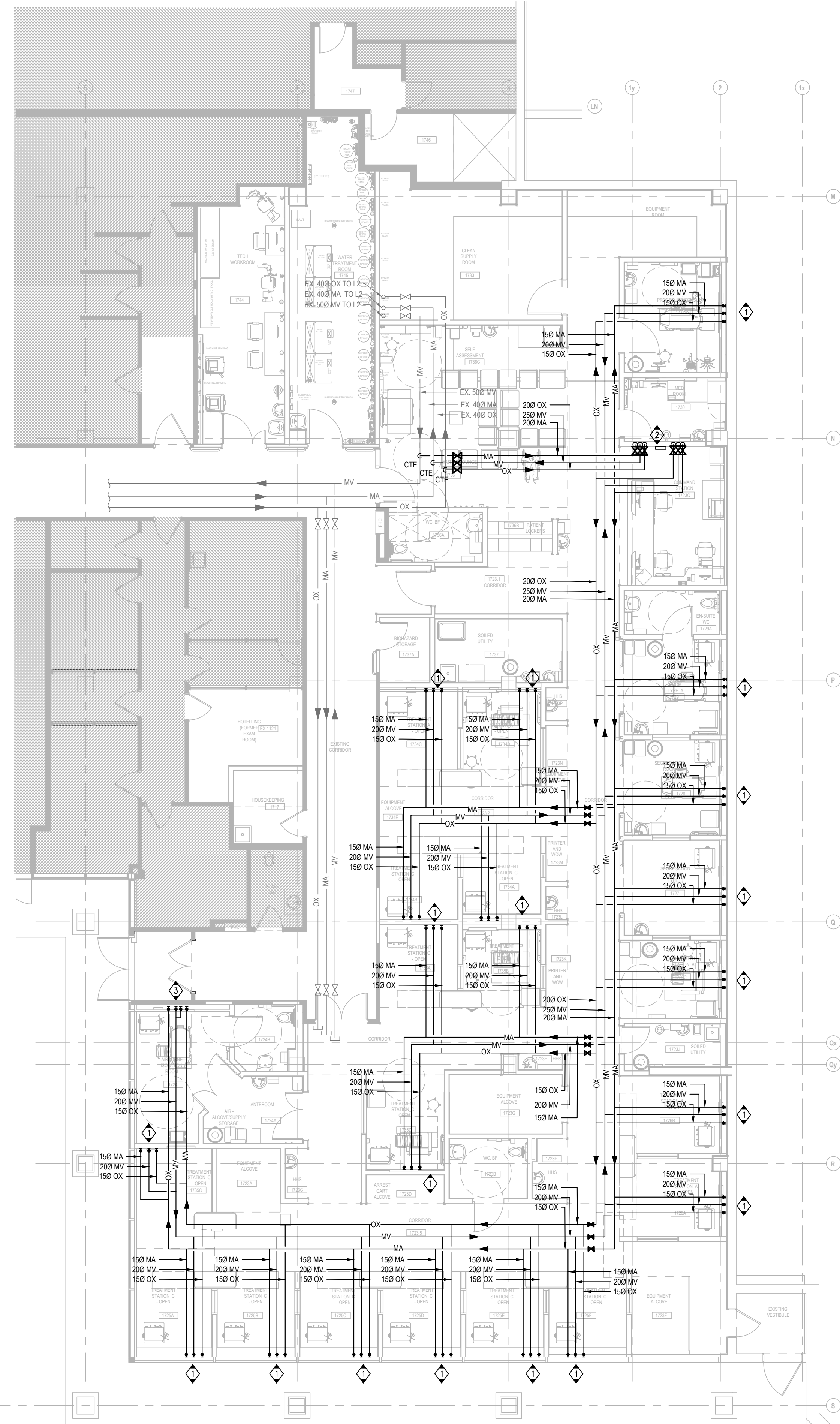
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DRAWING TITLE

LEVEL 1 PLAN - FIRE
PROTECTION - NEW WORK

PROJECT NO.	PLOT DATE	DRAWN
MRK-22001516	SCALE	REVIEWED
DRAWING NO.	1:100	REVISION
M3.02		



1 LEVEL 1 PLAN -MEDICAL GASES -NEW WORK
M4.02 SCALE: 1:100

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CANADIAN STANDARDS ASSOCIATION , MINISTRY OF THE ENVIRONMENT, MINISTRY OF LABOUR, THE MUNICIPALITY AND OTHER AUTHORITIES HAVING JURISDICTION WHICH ARE TO BE CONSIDERED AN INTEGRAL PART OF THE SPECIFICATION.
- CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR CUTTING, PATCHING, CORING, AND FIRE STOPPING, FLOOR FINISH TO MATCH ADJACENT AREAS.
- THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH LOCATION OF ALL EXISTING UTILITIES STUB-OUTS, PIPING, EQUIPMENT, ETC., AND/OR ANY CONDITION THAT MAY AFFECT HIS WORK. ALL THE NECESSARY RE-ROUTING, RELOCATING AND/OR REMOVAL OF EXISTING PIPING, EQUIPMENT, ETC., SHALL BE INCLUDED IN THE SCOPE OF WORK. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITIES ASSUMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING FOR ANY REQUIRED SHUT-DOWN WITH HOSPITAL. CONTRACTOR SHALL INCLUDE FOR AND DETERMINE THE BEST METHOD TO MINIMIZE SERVICE INTERRUPTION AND IMPACT ON HOSPITAL OPERATION, INCLUDING USE OF HOT TAP/TEMPORARY FREEZING AND AFTER-HOUR WORK AS REQUIRED.
- ALL EXISTING SERVICES AND UTILITIES ARE TO BE MAINTAINED AND COORDINATED WITH BY THE CONTRACTOR. ANY DISRUPTION MUST BE COORDINATED WITH THE FACILITY PRIOR TO THE WORK.
- MEDICAL GASES SYSTEM SHALL BE IN ACCORDANCE WITH AND SUBJECT TO CSA Z7396.1-17.
- FOR EXCAT LOCATION OF MEDICAL GAS OUTLETS, REFER TO ARCHITECTURAL WALL ELEVATION ADN DETAIL DRAWINGS.

KEY NOTES:

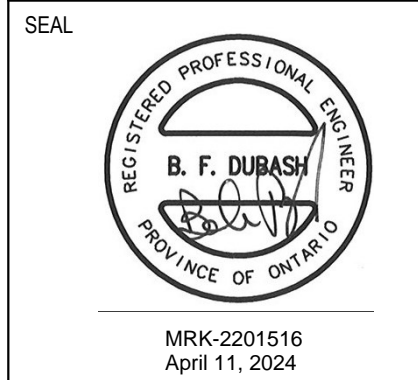
- ◇ PROVIDE 1 NO. OF OXYGEN, 1 NO. OF MEDICAL AIR & 1 NO. OF MEDICAL VACUUM OUTLET, REFER TO ARCHITECTURAL LAYOUT ON EXACT OUTLET LOCATION.
- ◇ PROVIDE ZONE VALVE BOX WITH ZONE ALARM PANEL TO MONITOR THE DOWNSTREAM PRESSURE OF THE MEDICAL GASES SYSTEM .
- ◇ PROVIDE 1 NO. OF OXYGEN, 1 NO. OF MEDICAL AIR & 2 NOS. OF MEDICAL VACUUM OUTLETS FOR AIRBORNE ISOLATION ROOM, REFER TO ARCHITECTURAL LAYOUT ON EXACT OUTLET LOCATION.



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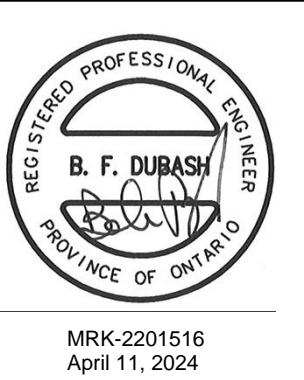
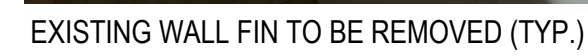


PROJECT
**SHN DIALYSIS CARE UNIT -
CENTENARY HOSPITAL**
SCARBOROUGH, ON, CANADA
DRAWING TITLE
**LEVEL 1 PLAN - MEDICAL
GASES - NEW WORK**

PROJECT NO. MRK-22001516	PLOT DATE SCALE 1:100	DRAWN REVIEWED
DRAWING NO. M4.02	REVISION	



- 5 POOL ROOM (PICTURE 5)



PROJECT NO. MRK-22001516	PLOT DATE	DRAWN
	SCALE #####	REVIEWED
DRAWING NO. M5.02		REVISION



- ① WASHROOM EXHAUST SHALL BE CONNECTED TO EXISTING DUCT MAIN AND FAN SYSTEM.
- ② DUCTS THROUGH OUTDOOR CORRIDOR. CONTRACTOR TO PROVIDE INSULATION AND ENCLOSURE TO COVER THE DUCTS.
- ③ CONTRACTOR TO INCLUDE ACOUSTIC FLEXIBLE DUCT AT TAKEOFF TO EACH DIFFUSER AND GRILLE (MINIMUM 1.5 METERS) TYPICAL FOR ROOMS AND FOR SUPPLY, RETURN AND EXHAUST AIR SYSTEMS.
- ④ CONTRACTOR TO INCLUDE FOR ALL ELBOWS AS SHOWN TO MITIGATE THE SOUND (TYPICAL)

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PROJECT

SHN DIALYSIS CARE UNIT -
CENTENARY HOSPITAL

SCARBOROUGH, ON, CANADA

DRAWING TITLE

LEVEL 1 PLAN - VENTILATION - NEW WORK

PROJECT NO.	
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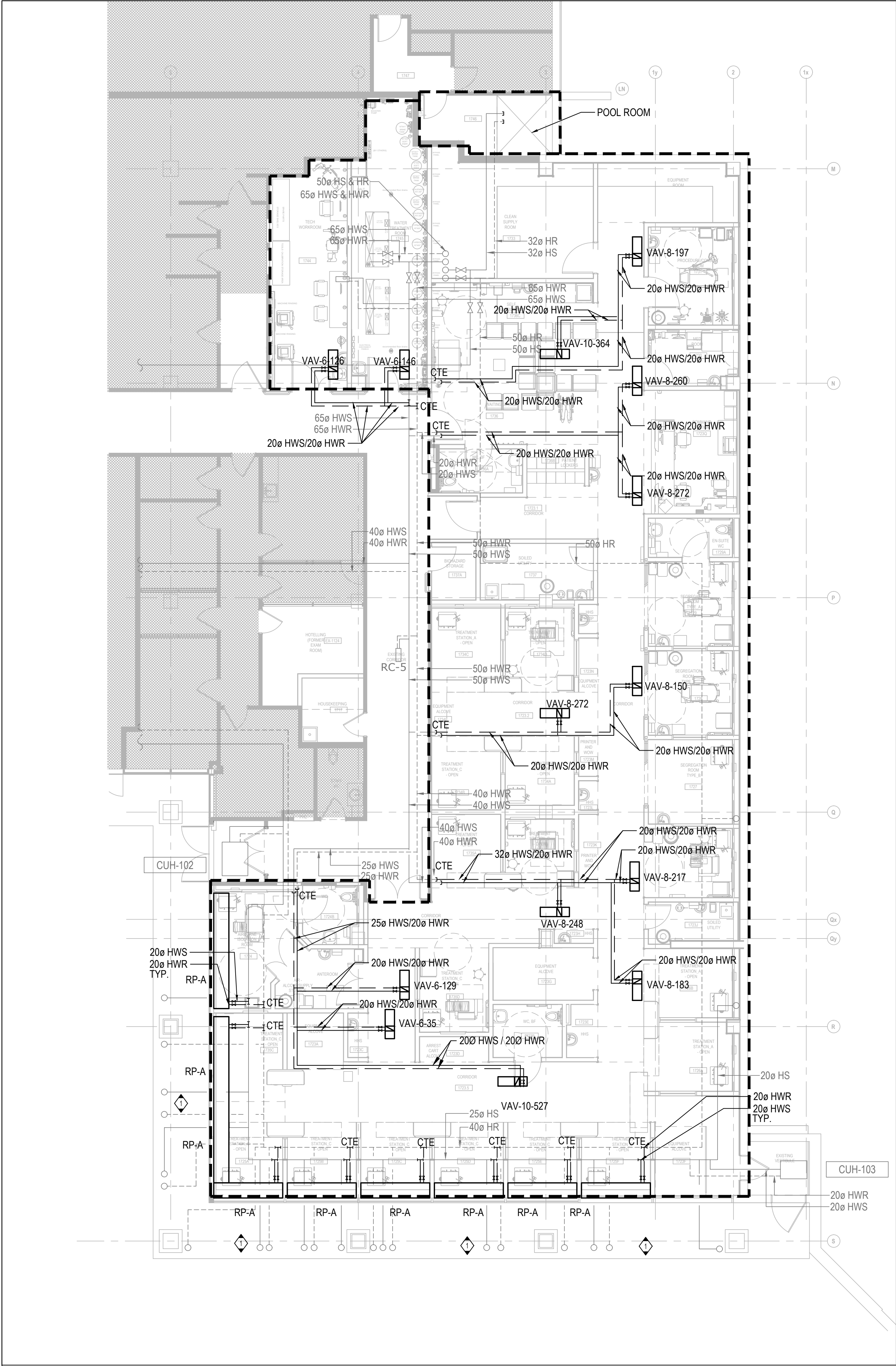
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DRAWING NO.

NO.
M5.03

REVISION



1 LEVEL 1 PLAN - HVAC PIPING - NEW WORK
M5.04 SCALE: 1/80

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, MINISTRY OF THE ENVIRONMENT, MINISTRY OF LABOUR, THE MUNICIPALITY AND OTHER AUTHORITIES HAVING JURISDICTION WHICH ARE TO BE CONSIDERED AN INTEGRAL PART OF THE SPECIFICATION.
- ALL EXISTING MECHANICAL SERVICES ARE SHOWN IN THEIR APPROXIMATE/BEST ESTIMATED LOCATION. EXACT LOCATION OF THE SERVICES TO BE VERIFIED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION.
- ALL WORK MUST BE PERFORMED WITH MINIMAL DISRUPTION TO THE OPERATION OF THE HOSPITAL. COORDINATE WORK WITH THE HOSPITAL TO SCHEDULE WORK. CONTRACTOR TO ALLOW FOR AFTER-HOURS WORK AS REQUIRED BY THE HOSPITAL, TO BE COORDINATED WITH AND APPROVED BY THE HOSPITAL BEFORE THE START OF AFTER-HOURS WORK.
- CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR CUTTING, CORING, AND FIRE STOPPING, FLOOR FINISH TO MATCH ADJACENT AREAS.
- ALL EXISTING SIZES FOR THE MECHANICAL SERVICES ARE SHOWN FROM THE EXISTING RECORD DRAWINGS. ALL EXISTING SIZES FOR THE MECHANICAL SERVICES ARE SHOWN FROM THE EXISTING RECORD DRAWINGS CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- DEMOLITION WORK SHALL INCLUDE ALL MATERIALS, LABOR, EXTENSIONS, CONNECTIONS, CUTTING, REPAIRING, ADAPTING AND OTHER WORK REQUIRED TO MAINTAIN SERVICE PENDING THE COMPLETION OF THE PERMANENT WORK.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT PROPERTY IN AREAS WHERE WORK IS BEING CONDUCTED. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED TO BUILDING COMPONENTS DUE TO WORK OPERATIONS PATCH AND REPAIR EXISTING SURFACES DAMAGED AS REQUIRED TO MATCH ADJACENT SURFACES.
- EXISTING PIPES SERVING AREAS REMAINING IN SERVICE AT THIS TIME SHALL NOT BE INTERRUPTED UNLESS A TEMPORARY INTERRUPTION IS COORDINATED WITH THE OWNER.
- THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH LOCATION OF ALL EXISTING UTILITIES STUB-OUTS, PIPING, EQUIPMENT, ETC., AND/OR ANY CONDITION THAT MAY AFFECT HIS WORK. ALL THE NECESSARY RE-ROUTING, RELOCATING AND/OR REMOVAL OF EXISTING PIPING, EQUIPMENT, ETC., SHALL BE INCLUDED IN THE SCOPE OF WORK. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITIES ASSUMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING FOR ANY REQUIRED SHUT-DOWN WITH HOSPITAL. CONTRACTOR SHALL INCLUDE FOR AND DETERMINE THE BEST METHOD TO MINIMIZE SERVICE INTERRUPTION AND IMPACT ON HOSPITAL OPERATION, INCLUDING USE OF HOT TAP/TEMPORARY FREEZING AND AFTER-HOUR WORK AS REQUIRED.
- ALL EXISTING SERVICES AND UTILITIES ARE TO BE MAINTAINED AND COORDINATED WITH BY THE CONTRACTOR. ANY DISRUPTION MUST BE COORDINATED WITH THE FACILITY PRIOR TO THE WORK.
- PROTECT ALL EXISTING EQUIPMENT AND SERVICES FROM DEBRIS AND UNWANTED MATERIALS. CLEAN AS NECESSARY TO MAINTAIN SERVICE DURING DEMOLITION PERIOD AND ON COMPLETION OF THE WORK NECESSARY TO MAINTAIN SERVICE DURING DEMOLITION PERIOD AND ON COMPLETION OF THE WORK. INSTALLATION. CONTRACTOR TO VERIFY EXISTING PIPING, SIZES AND CONDITIONS ON SITE AND REPORT TO ENGINEER ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.

KEYNOTES:

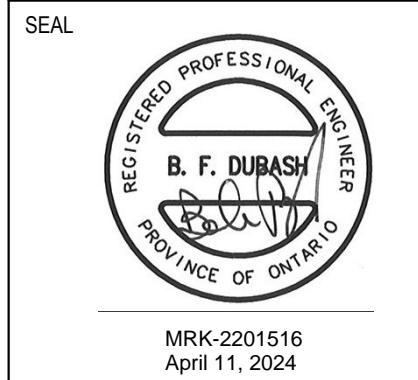
- THE HEATING FOR REST OF THE BUILDING AND SOFFIT SPACES SHALL CONTINUE TO WORK DURING THE RENOVATION. THE NEW PIPING SHALL BE INSTALLED AND CONNECTED TO THE MAIN SYSTEM ONCE READY, TO MINIMIZE THE SHUT DOWN TO EXISTING SYSTEM. ANY SHUT DOWN SHALL BE FULLY COORDINATED WITH THE HOSPITAL.



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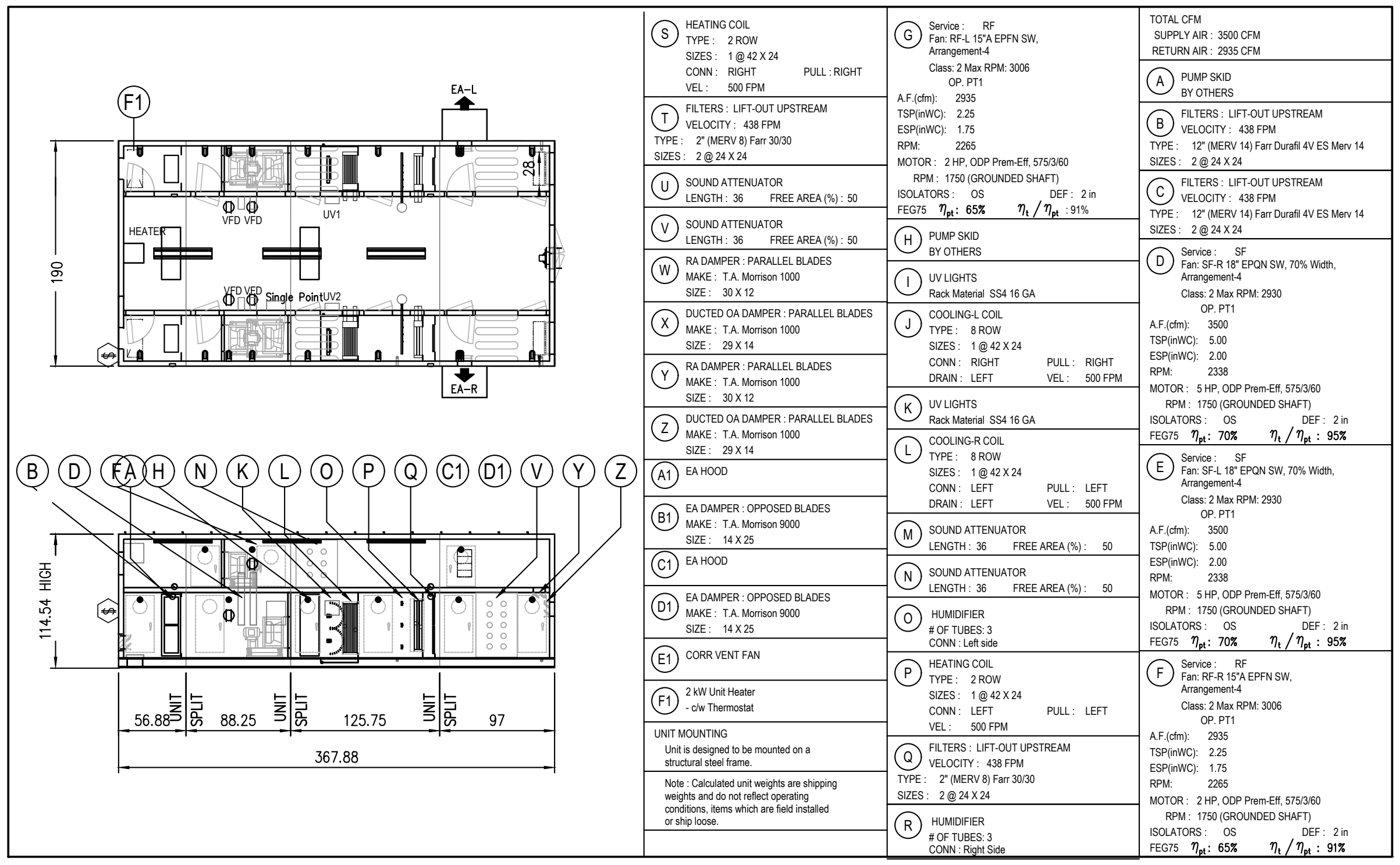
REV.	DATE	DESCRIPTION	BY	CHKD.
6	2024-04-17	ISSUED FOR TENDER AND BUILDING PERMIT APPLICATION		
5	2024-04-05	ISSUED FOR PROGRESS		
4	2023-12-08	ISSUED FOR MOH STAGE 2.3 SUBMISSION		
3	2023-10-06	ISSUED FOR 100% CD		
2	2023-08-25	ISSUED FOR 90% CD		
1	2023-02-28	ISSUED FOR MOH 2.2 SKETCH PLAN SUBMISSION		
0	2023-12-22	ISSUED FOR COSTING		
REV.	YYYY-MM-DD	REVISION / DRAWING ISSUE		REVIEW



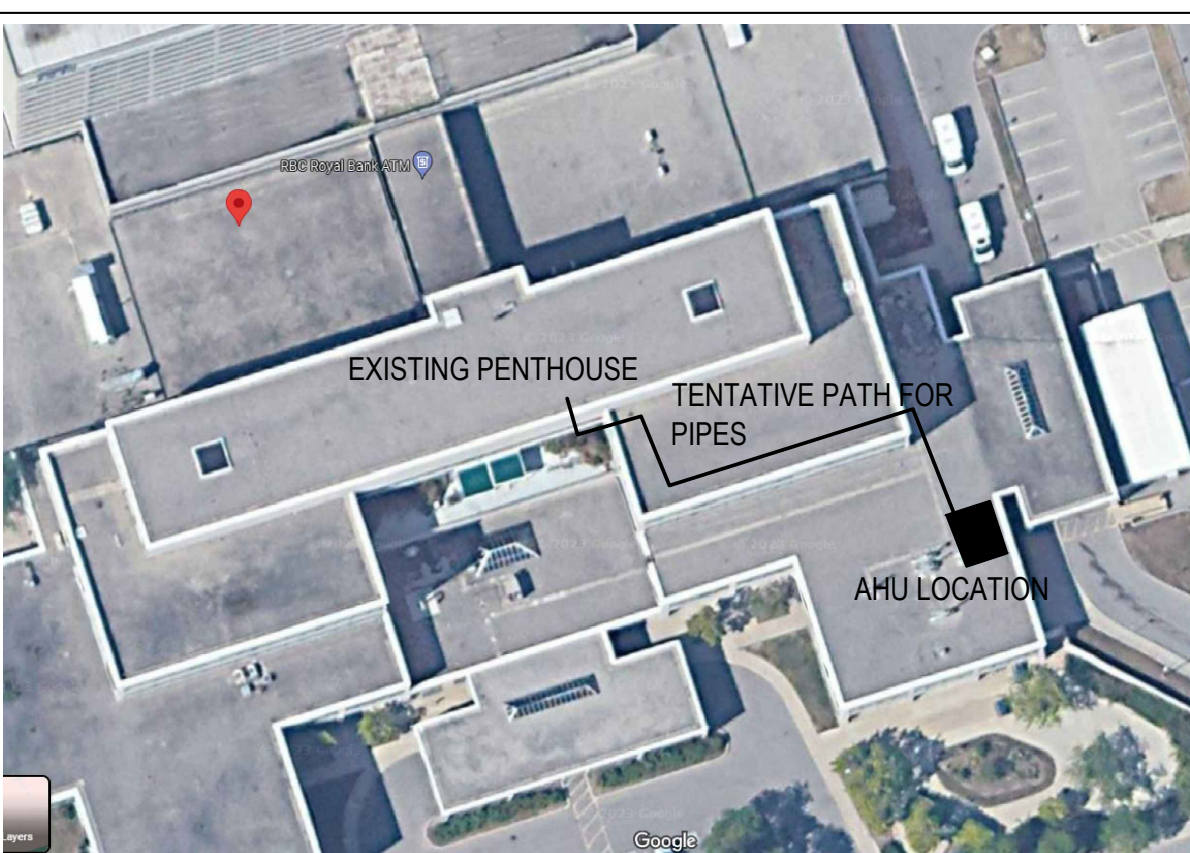
PROJECT
**SHN DIALYSIS CARE UNIT -
CENTENARY HOSPITAL**
SCARBOROUGH, ON, CANADA

DRAWING TITLE
**LEVEL 1 PLAN - HVAC
PIPING - NEW WORK**

PROJECT NO. MRK-22001516	PLOT DATE SCALE #####	DRAWN REVIEWED
DRAWING NO. M5.04	REVISION	



2 AHU DETAILED LAYOUT (BY HAakon)
M5.05 SCALE: NTS



TENTATIVE PIPE PATH (GOOGLE IMAGE)

GENERAL NOTES:

- ALL EXISTING MECHANICAL SERVICES ARE SHOWN IN THEIR APPROXIMATE/BEST ESTIMATED LOCATION. EXACT LOCATION OF THE SERVICES TO BE VERIFIED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION.
- ALL WORK MUST BE PERFORMED WITH MINIMAL DISRUPTION TO THE OPERATION OF THE HOSPITAL. COORDINATE WORK WITH THE HOSPITAL TO SCHEDULE WORK. CONTRACTOR TO ALLOW FOR AFTER-HOURS WORK AS REQUIRED BY THE HOSPITAL, TO BE COORDINATED WITH AND APPROVED BY THE HOSPITAL BEFORE THE START OF AFTER-HOURS WORK.
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- ALL SERVICES WHICH NEED CONNECT TO EXISTING SHALL INCLUDE ALL MATERIALS, LABOR, EXTENSIONS, CONNECTIONS, CUTTING, REPAIRING, ADAPTING AND OTHER WORK REQUIRED TO MAINTAIN SERVICE FOR COMPLETION OF THE WORK.
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KEY NOTES:

- ◇ CONTRACTOR TO PROVIDE INTAKE PLENUM C/W LOUVER FOR INTAKE.

CONNECT THE NEW SERVICES TO THE EXISTING MAINS.

ROOF LINE FOR HIGHER ROOF IS NOT ON SCALE. CONTRACTOR TO VERIFY THE LENGTH OF PIPING ON SITE.



HEPA FILTER ASSEMBLY (STACKED WITH 2N CONFIGURATION)

EXISTING FANS

ISOLATION EXH. DUCT DOWN TO ISOLATION ROOM WRAPPED AROUND THE BUILDING.

300x250 CAP FOR FUTURE USE RELOCATING MAIN RISERS THROUGH THE SHAFT. ARCH. TO COORDINATE FOR FUTURE RENOVATIONS.

HEPA FILTER (N+1) STACKED CONFIGURATION C/W PLENUMS

VESTIBULE COMPLETES WITH STEAM SKID, PUMPS, PRV, ETC FOR THE AHU

REMOVE EXISTING EXHAUST FAN W/ CURB. REUSE EXISTING DUCTWORK. REPAIR THE ROOF OPENING IF REQUIRED.

RUN EXHAUST DUCTWORK BELOW AHU

PROVIDE NEW FAN FOR SAME SIZE AND EXTEND DUCTWORK UNDER THE AHU CURB.

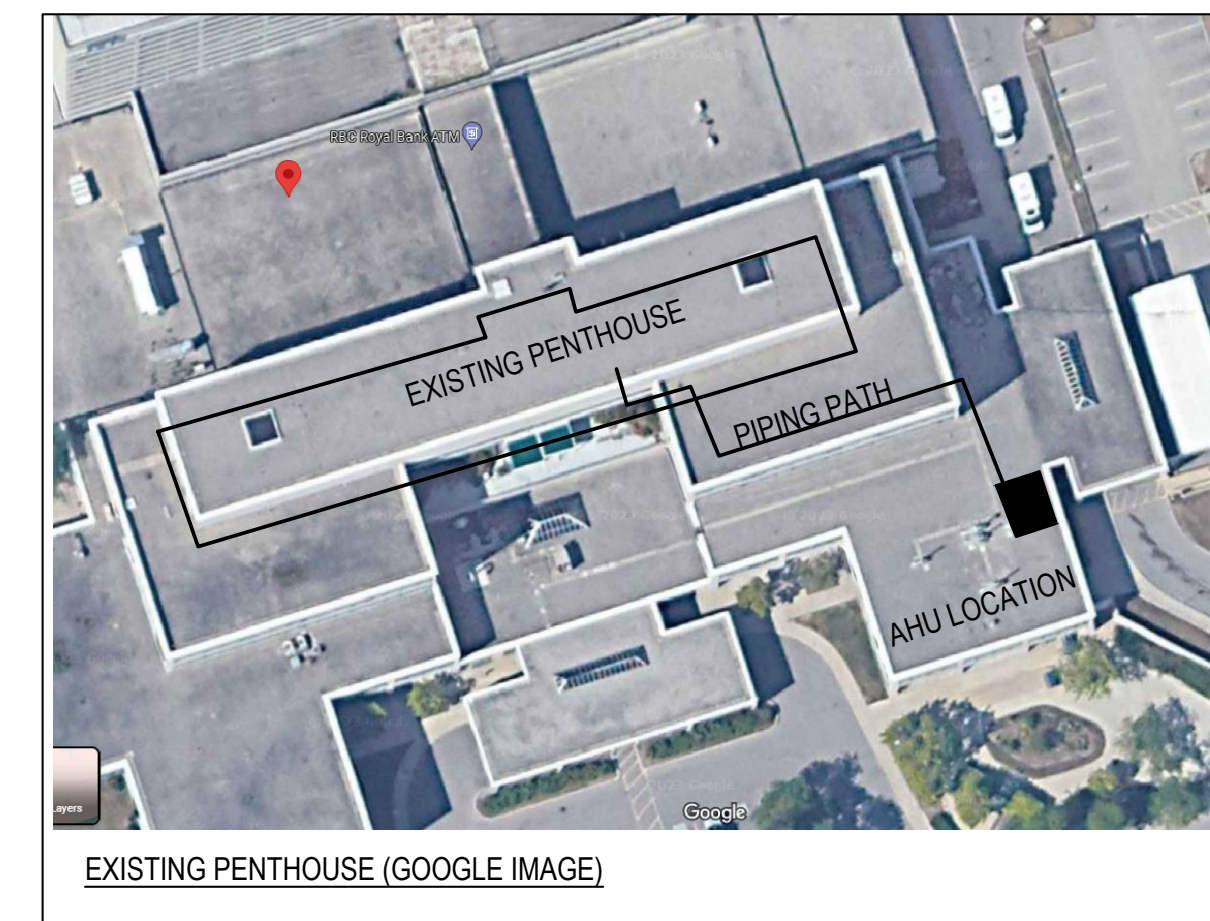
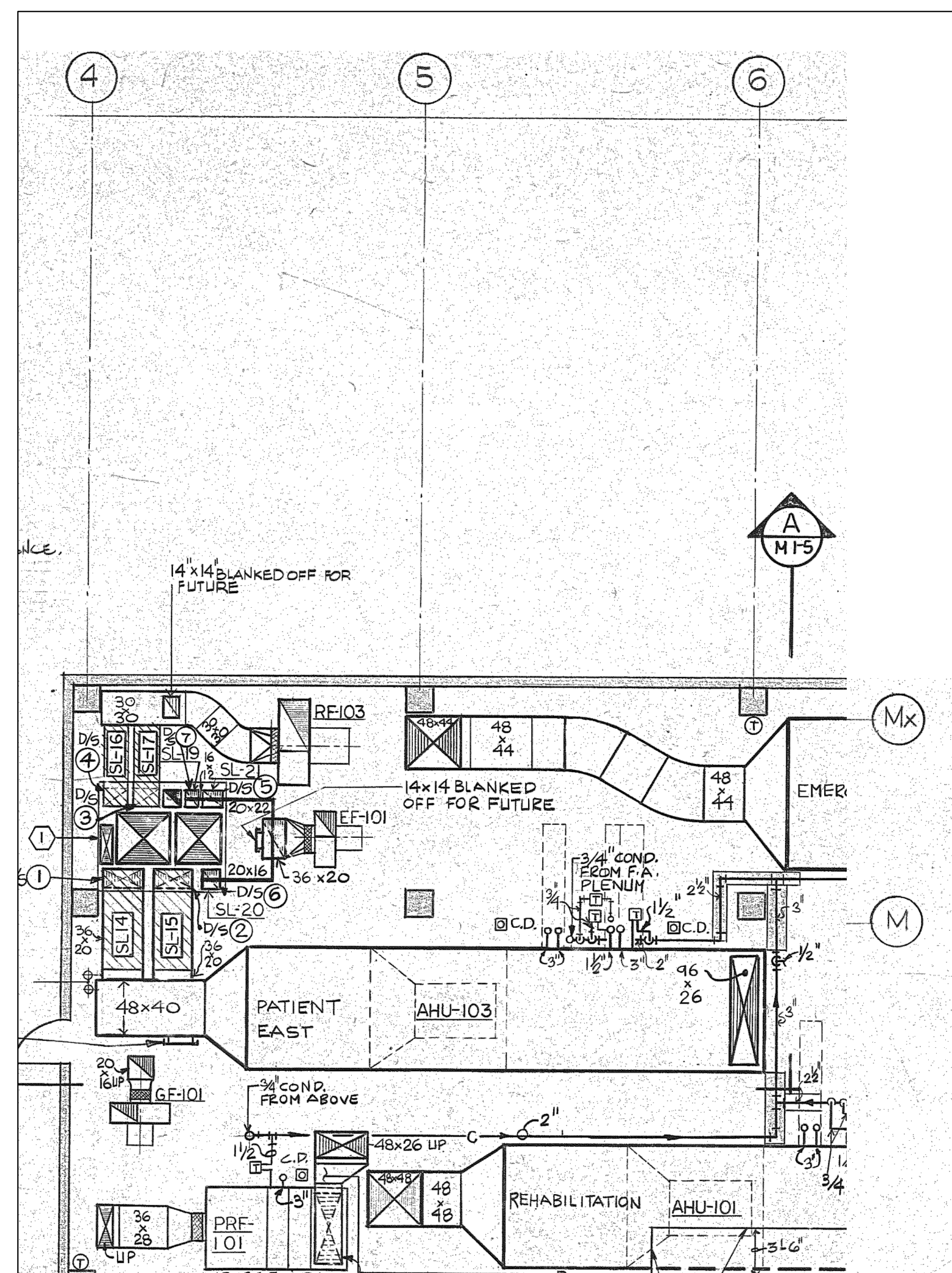
R/A 500x350
S/A 500x350
R/A 1000x600
S/A 1000x600
CAP FOR FUTURE USE RELOCATING MAIN RISERS THROUGH THE SHAFT. ARCH. TO COORDINATE FOR FUTURE RENOVATIONS.
S/A 1000x600 / R/A 1000x600 DUCTS DOWN C/W INSULATION

S/A & R/A DUCTS ON THE ROOF C/W ROOF SUPPORTS AS PER SMACNA STANDARDS AND MECHANICAL SPECIFICATION

EF-01 & 02 (N+1)

1. ALL EXISTING MECHANICAL SERVICES ARE SHOWN IN THEIR APPROXIMATE/BEST ESTIMATED LOCATION. EXACT LOCATION OF THE SERVICES TO BE VERIFIED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION.
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1 LOCATION OF PIPES TO BE COORDINATED ON SITE. REFER TO STRUCTURAL DRAWINGS FOR WALL OPENINGS



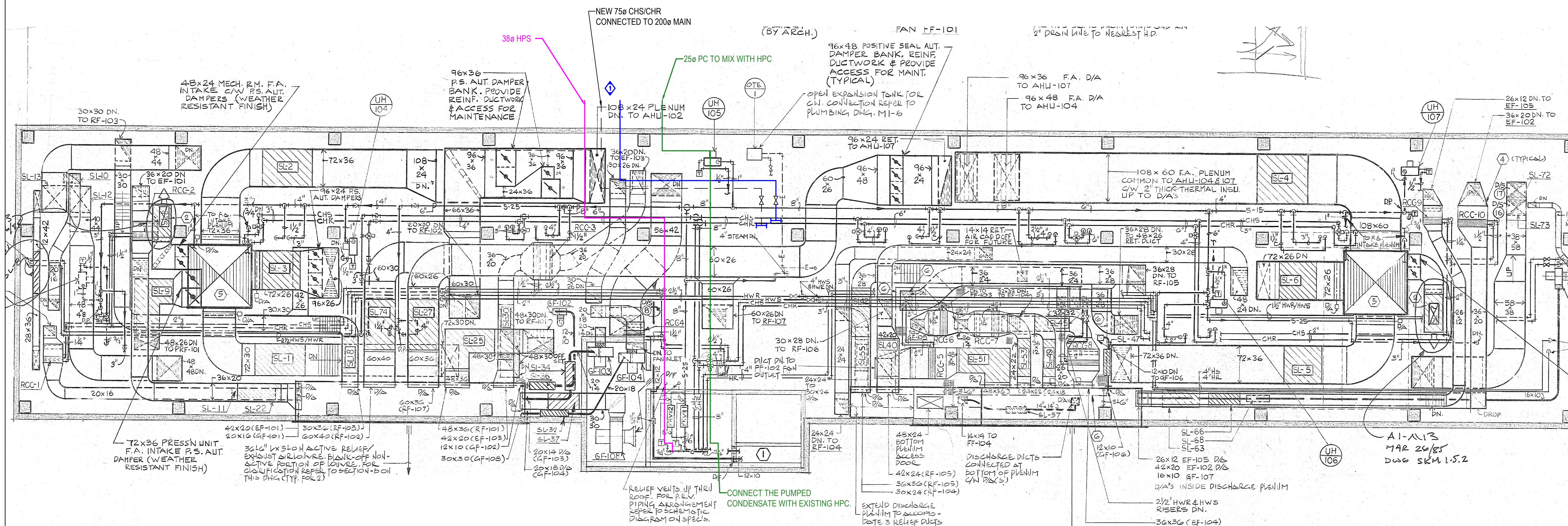
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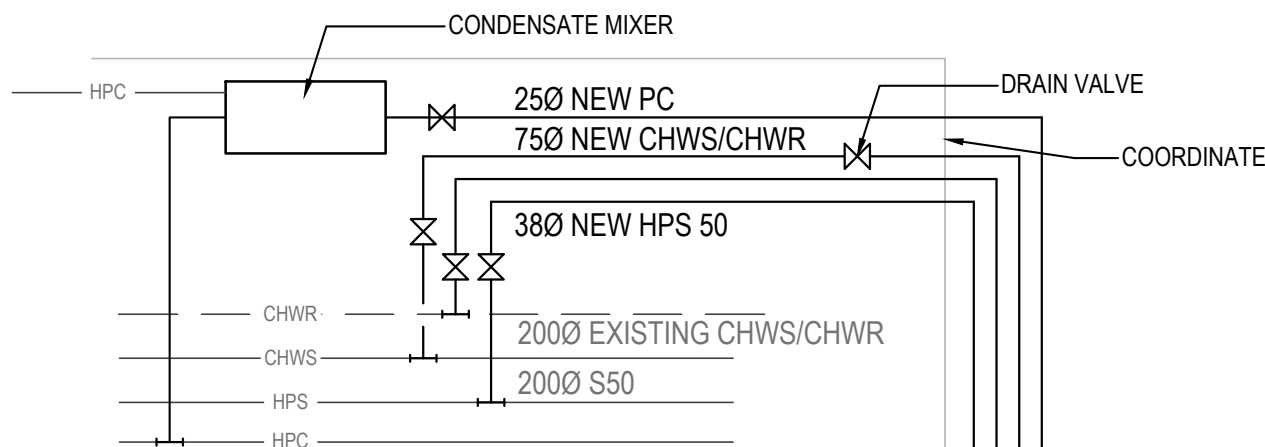
PROJECT

SHN DIALYSIS CARE UNIT -
CENTENARY HOSPITAL

SCARBOROUGH, ON. CANADA

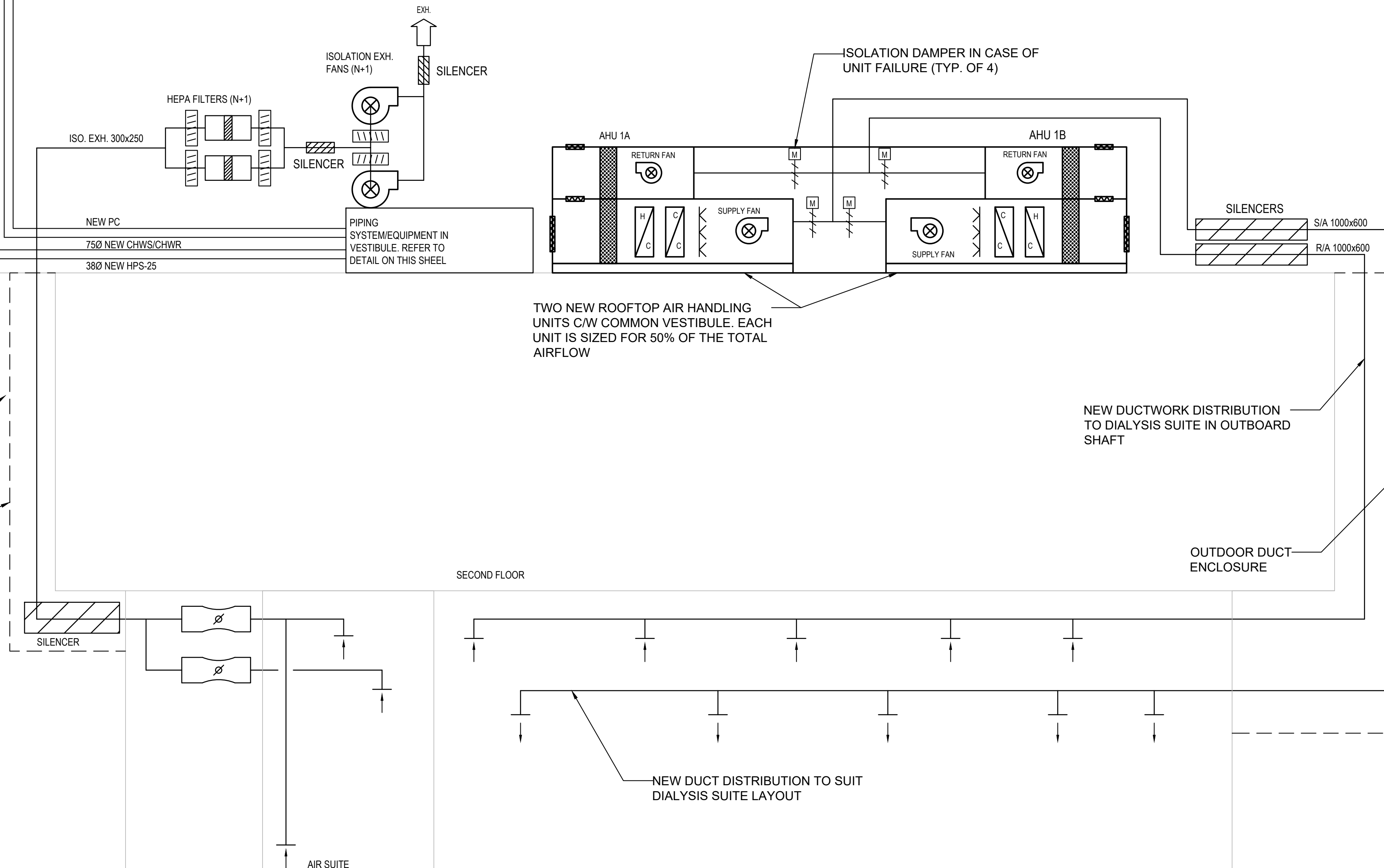
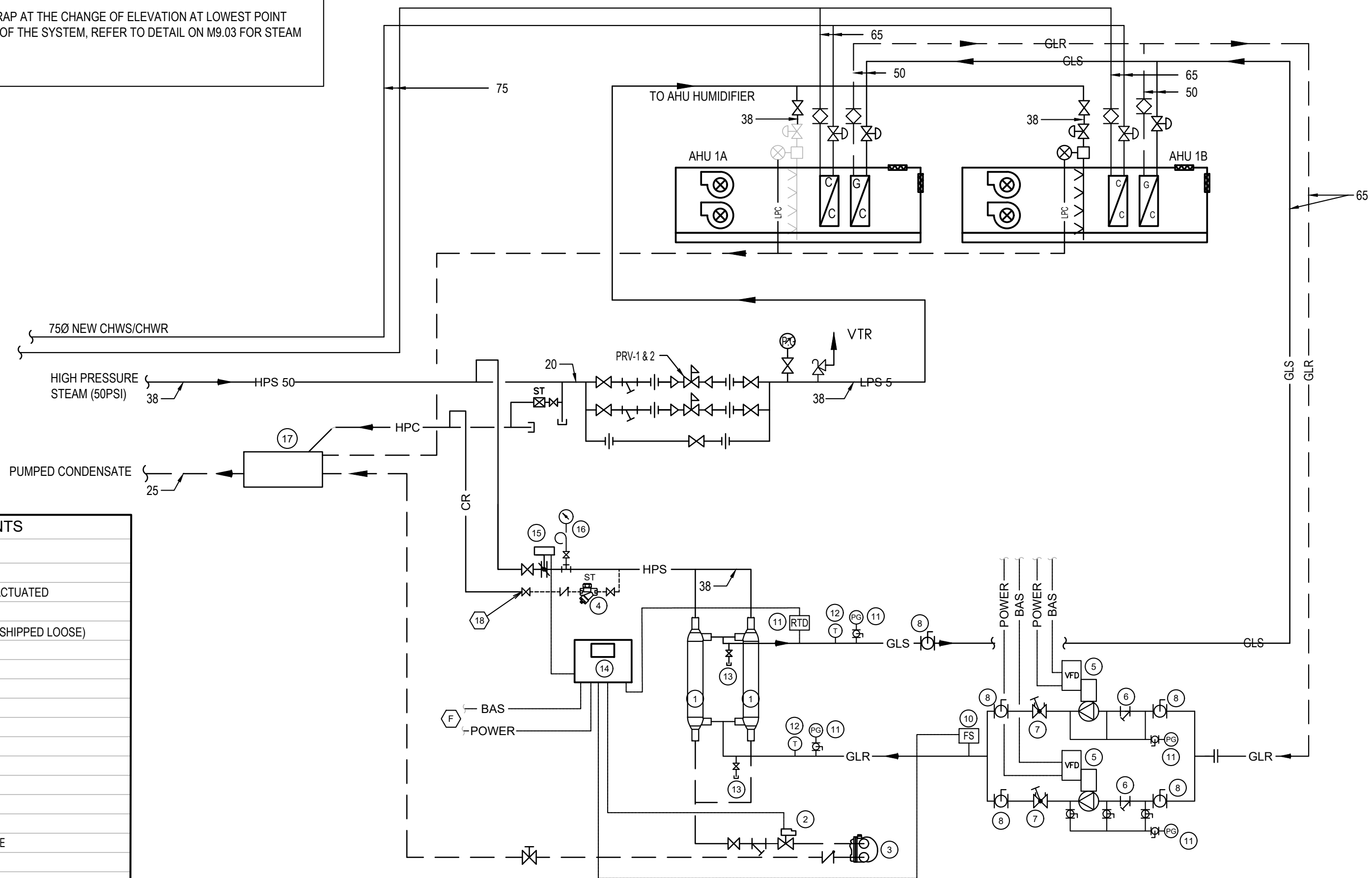
LEVEL 5 PENTHOUSE -
HVAC PIPING - NEW WORK

PROJECT NO. MRK-22001516	PLOT DATE	DRAWN
	SCALE ####	REVIEWED
DRAWING NO. M5.06		REVISION



1. CONTRACTOR TO PROVIDE THE TRAP AT THE CHANGE OF ELEVATION AT LOWEST POINT
2. SCHEMATIC IS GENERAL OUTLINE OF THE SYSTEM, REFER TO DETAIL ON M9.03 FOR STEAM SYSTEM SKID (N+1)

MAIN COMPONENTS	
ITEM	DESCRIPTION
1	SHELL & COIL HEAT EXCHANGER (N+1)
2	CONDENSATE CONTROL VALVE - ELECT ACTUATED
3	STEAM TRAP
4	OVERFLOW STEAM TRAP C/W STRAINER (SHIPPED LOOSE)
5	HYDRONIC PUMP WITH VFD (N+1)
6	HYDRONIC STRAINER
7	HYDRONIC CIRCUIT BALANCING VALVE
8	ISOLATION BUTTERFLY VALVE TYPICAL
9	RTD - TEMPERATURE SENSOR
10	FS - FLOW SWITCH
11	PG - PRESSURE GAUGE C/W BALL VALVE
12	T - THERMOMETER
13	CLEAN-IN-PLACE DRAIN POINTS
14	CONTROL PANEL C/W CONTROLLER
15	HI-LIMIT TEMP STEAM SHUT-OFF MODULATING VALVE
16	PRESSURE GAUGE WITH SYPHON PIGTAIL
17	CONDENSATE TANK C/W PUMPS (N+1)
18	HP CONDENSATE CONNECTION OVERFLOW DRIP TRAP



GENERAL NOTES:

1. CONTRACTOR TO PROVIDE PIPE CHASE IN MECHANICAL SCOPE WITH INSULATION AND HEAT TRACING ON THE ROOF.
2. CHILLED WATER SUPPLY & RETURN SHALL BE EXTENDED FROM LEVEL 5 PENTHOUSE
3. HIGH PRESSURE STEAM (HPS-60) AT 50 PSI SHALL BE EXTENDED FROM LEVEL 5 PENTHOUSE.
4. NEW CONDENSATE PUMP SHALL BE PROVIDED IN THE AHU VESTIBULE AND EXTENDED TO EXISTING PENTHOUSE.
5. AHU VESTIBULE SHALL BE MIN. 8"0" WIDE OR LARGE ENOUGH TO ACCOMMODATE NEW HEAT EXCHANGERS, PUMPS, PUMP SET ETC.
6. ADD STEAM TRAPS AT THE LOWEST POINT.

6	2024-04-17	ISSUED FOR TENDER AND BUILDING PERMIT APPLICATION
5	2024-04-05	ISSUED FOR PROGRESS
4	2023-12-08	ISSUED FOR MOH STAGE 2.3 SUBMISSION
3	2023-10-06	ISSUED FOR 100% CD
2	2023-08-25	ISSUED FOR 90% CD
1	2023-02-28	ISSUED FOR MOH 2.2 SKETCH PLAN SUBMISSION
0	2022-12-22	ISSUED FOR COSTING
REV.	YYYY-MM-DD	REVISION / DRAWING ISSUE
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FAN SCHEDULE													
SYSTEM REFERENCE TAG	DESCRIPTION	LOCATION	MANUFACTURER / MODEL	AIR FLOW (CFM)	AIR FLOW (L/S)	FAN E.S.P. (PA)	ELECTRICAL		FAN EFFICIENCY %	ELECTRICAL DATA	FLA	EMERGENCY POWER (Y/N)	REMARKS
							POWER (V/Hz/PH)	MOTOR (HP)					
EF-1 & 2	ISOLATION EXH.	ROOF	COOK / 70 CPS	600	283	747	575/3/60	1.5	86.5	575/3/60	2.40	Y	FAN C/W VFD, DUTY & STANDBY
NOTES: 1. PROVIDE LOCAL DISCONNECTS ON ROOF 2. PROVIDE VFD FOR ALL FANS 3. FANS SHALL BE MOUNTED ON SPRING ISOLATORS													

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HEPA FILTER SCHEDULE																				
SYSTEM REFERENCE TAG	DESCRIPTION SERVICE	LOCATION	MANUFACTURER	MODEL NO.	CONFIGURATION ASPECT RATIO (HXW)	BUBBLE TIGHT DAMPERS	AIR FLOW		1st STAGE FILTER (PRE-FILTERS)				2nd STAGE FILTER (HEPA)				TOTAL PRESSURE DROP (PA)		WEIGHT	REMARKS
							(CFM)	(L/s)	FILTER DESCRIPTION (SIZE IN MM)	EFFICIENCY (%)	PRESS. DROP (PA)		FILTER DESCRIPTION (SIZE IN MM)	EFFICIENCY (%)	FILTER PRESS. DROP (PA)		INITIAL EST. (PA)	FINAL (RECOMMENDED) (PA)		
											INITIAL EST.	FINAL (RECOMMENDED)			INITIAL EST.	FINAL (RECOMMENDED)			(KG)	
HF-01 (2N)	ISOLATION EXH	ROOF	IAS/CTC	CTC-B2-412-HX1-RCD-1222-A4 (BAG IN BAG OUT)	1600x1650	YES	600	283	300x600x100	99.99	37.35	125	600x300x300	99.99%	125	311	374	498	216	ASSEMBLY STACKED C/W BASE AND PROVIDE 2N REDUNDANCY
NOTES: 1. HEPA FILTER ASSEMBLY SHALL BE COMPLETE WITH STAND (MIN. 600MM) PROVIDED BY THE CONTRACTOR IN ADDITION TO THE HEPA FILTER ASSEMBLY BASE. 2. HOUSING SHALL BE B2-SERIES, GASKET SEAL TYPE 3. INLET DAMPER MODEL "RCD-1222 - M" (MANUAL HAND WHEEL ACTUATOR) 4. OUTLET DAMPER MODEL "RCD-1222 - E" (BETTIS 24V ELECTRIC ACTUATOR) 5. DAMPER INSIDE DIMENSIONS "12H x 22" (W OVAL BLADE) 6. HEPA FILTER ASSEMBLY TO BE CONNECTED BY PLENUM OR DUCTS AS RECOMMENDED BY THE MANUFACTURER. THE PICTURE PROVIDED ON THE DRAWING IS FOR REFERENCE ONLY																				

PUMP SCHEDULE (HYDRONIC SYSTEM)														
SYSTEM REFERENCE TAG	DESCRIPTION SYSTEM	LOCATION	MANUFACTURER	MODEL	FLUID TYPE	FLOW RATE (L/S)	PUMP HEAD (KPA)	MOTOR SIZE	RPM	ELECTRICAL (V/PH/Hz)	VFD (Y/N)	OPERATION (DUTY/STANDBY)	EMERGENCY POWER (Y/N)	REMARKS
								POWER (KW)						
P - 1 & 2	GLYCOL HEATING	AHU VESTIBULE	BELL & GOSSETT	BG-E90-150AAB	40% PG	3.3	60	0.6	1725.0	575/3/60	Y	N+1	Y	
NOTES:	1. PUMPS TO BE INSTALLED WITHIN VESTIBULE CONNECTED TO BAS SYSTEM, CONTRACTOR TO COORDINATE FOR THE LAYOUT AND PROPOSE LAYOUT DRAWING BASED ON FINAL SHOP DRAWINGS FOR APPROVAL 2. ALL PUMPS COMPLETE WITH VFDS. MECHANICAL CONTRACTOR TO SUPPLY AND ELECTRICAL CONTRACTOR TOINSTALL THE VFD. 3. PROVIDE SUCTION GUIDE & FLO-TREX VALVE 4. PROVIDE 25-50MM RUBBER/NEOPRENE PADS													

SYSTEM REFERENCE TAG	RADIATED SOUND POWER LEVEL (db)								DISCHARGE SOUND POWER LEVEL (db)								REMARKS
	BAND	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC		
VAV-6	PRIMARY	55	49	45	38	35	32		62	55	46	30	22	26			
	TOTAL ATTENUATION	18	19	20	26	31	36		37	29	40	51	53	39			
	ROOM SOUND LEVEL	37	30	25	12	4	0	19	25	26	6	0	0	0	<15		
VAV-8	PRIMARY	56	46	40	35	27	22		69	62	48	37	29	30			
	TOTAL ATTENUATION	18	19	20	26	31	36		27	29	40	51	53	39			
	ROOM SOUND LEVEL	38	27	20	9	0	0	18	42	33	8	0	0	0	22		
VAV-10	PRIMARY	51	50	44	38	30	24		67	61	50	38	29	31			
	TOTAL ATTENUATION	18	19	20	26	31	36		29	30	41	51	52	39			
	ROOM SOUND LEVEL	33	31	24	12	0	0	18	38	31	9	0	0	0	18		
NOTES:																	

CONDENSATE RECEIVER TANK AND PUMP SCHEDULE														
SYSTEM REFERENCE TAG	DESCRIPTION	MODEL	MANUFACTURER	LOCATION	SERVING	CONFIGURATION	RECEIVER VOLUME (L)	PUMP FLOW (L/S)	PUMP DISCHARGE PRESS. (kPa)	ELECTRICAL			WEIGHT	REMARKS
										VOLTAGE V/Ph/Hz	MOTOR (HP)	EMERGENCY (Y/N)	(kg)	
CP-1	CONDENSTE TANK/PUMP SET	AFH-41420JDAX	ARMSTRONG	AHU VESTIBULE	CONDESATE SYSTEM	N+1 PUMPS	57	0.2	275	575/3/60	1	Y	86	
NOTES:	1. 15 GALLON DUPLEX 4100 SERIES WITH J CONDESATE PUMPS (N+1)													



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MRK-2201516
April 11, 2024

PROJECT

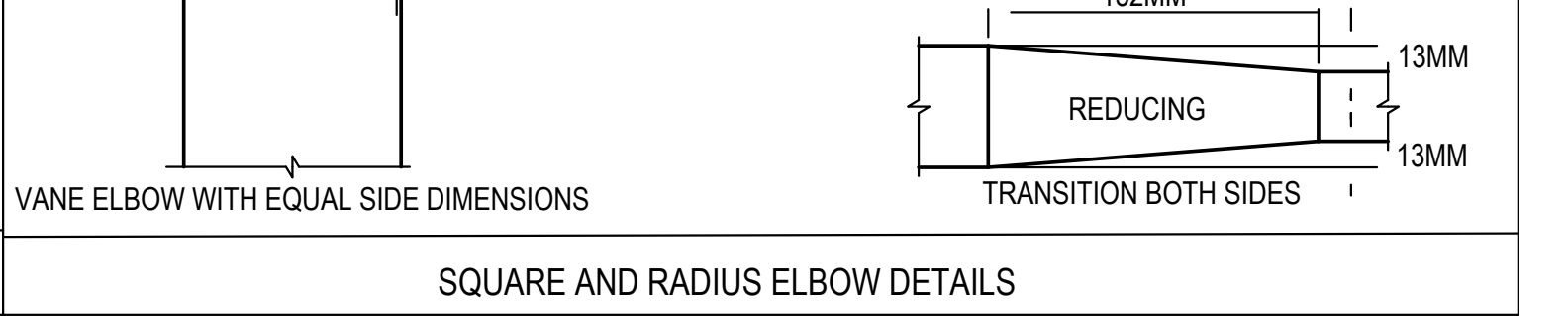
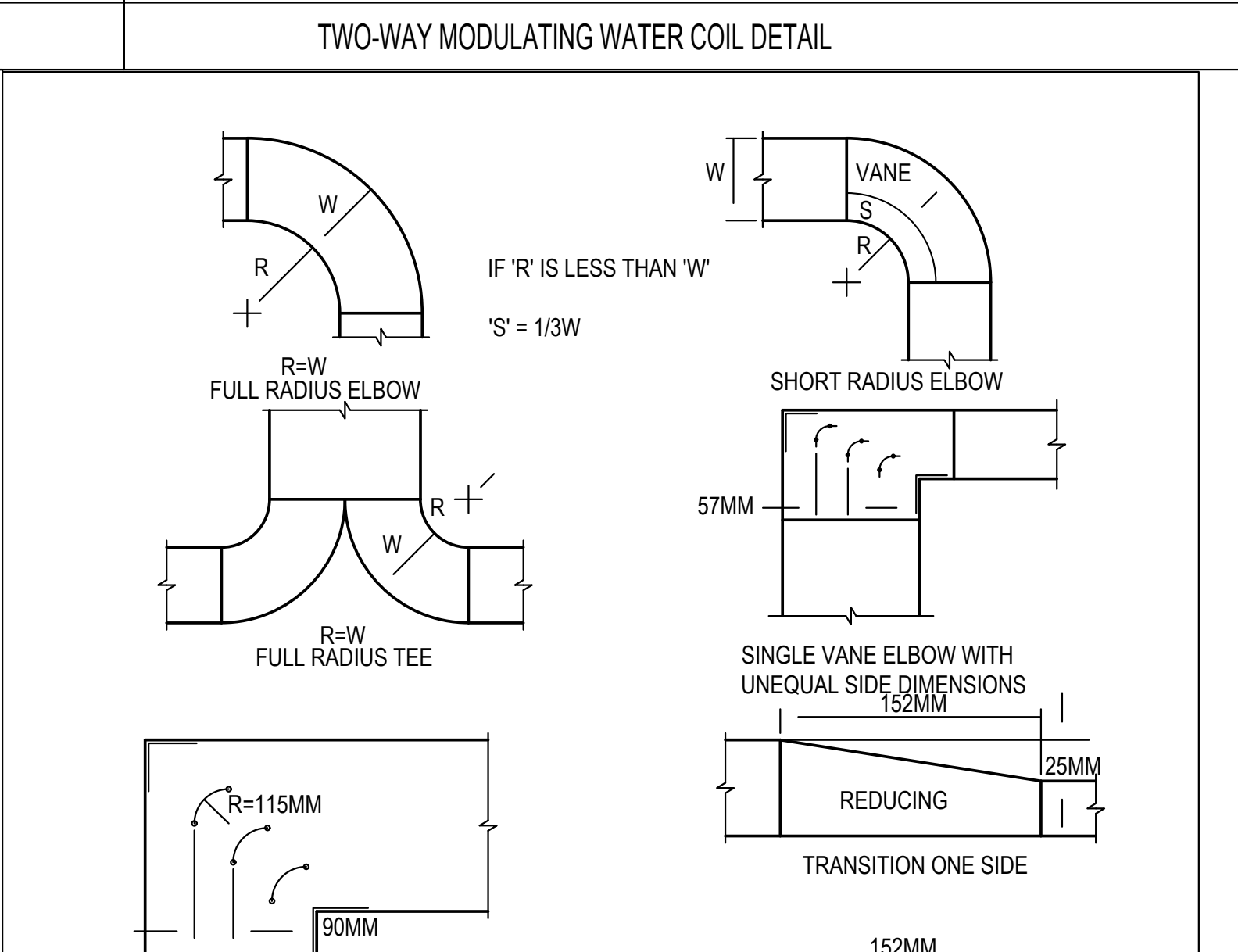
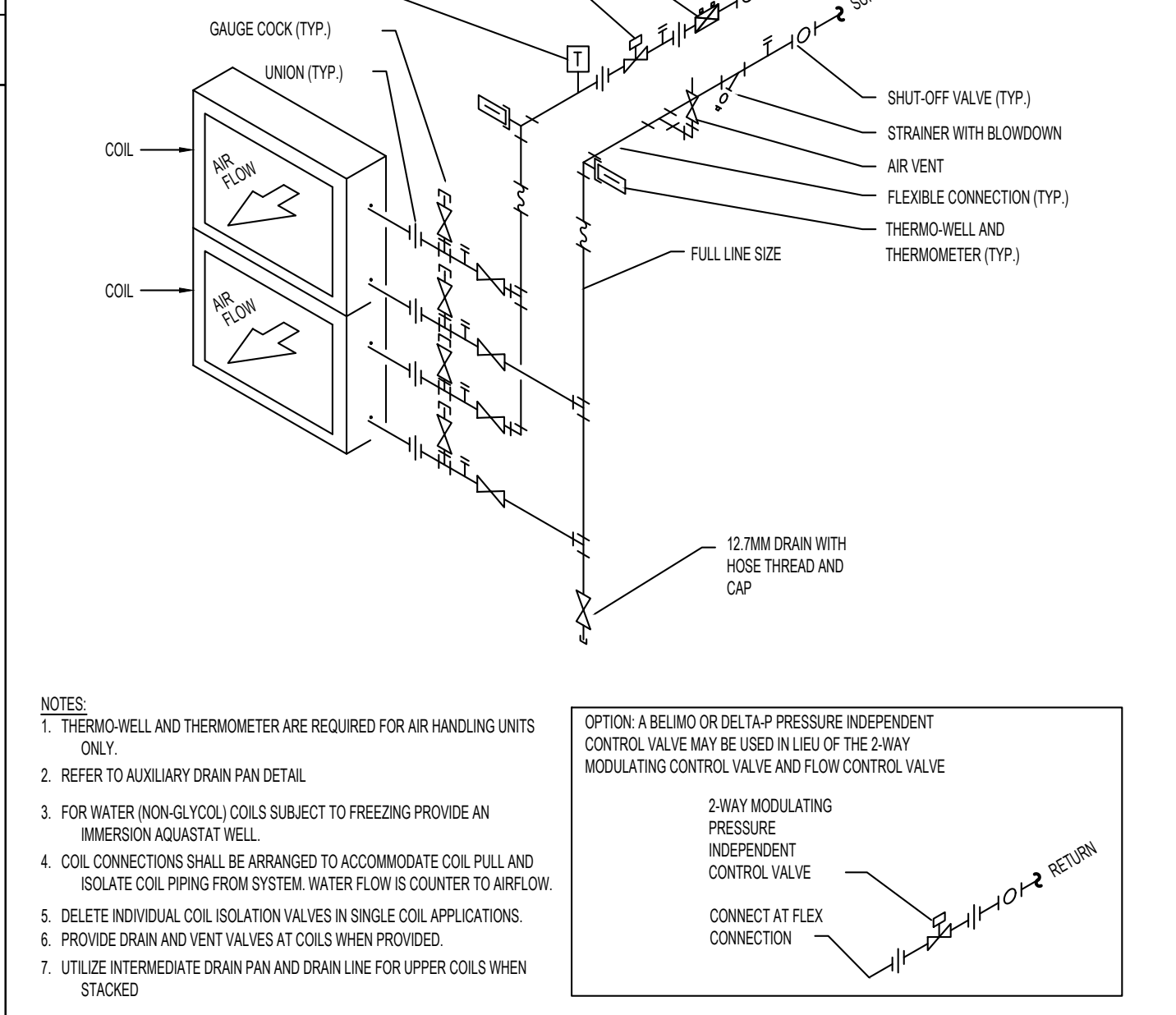
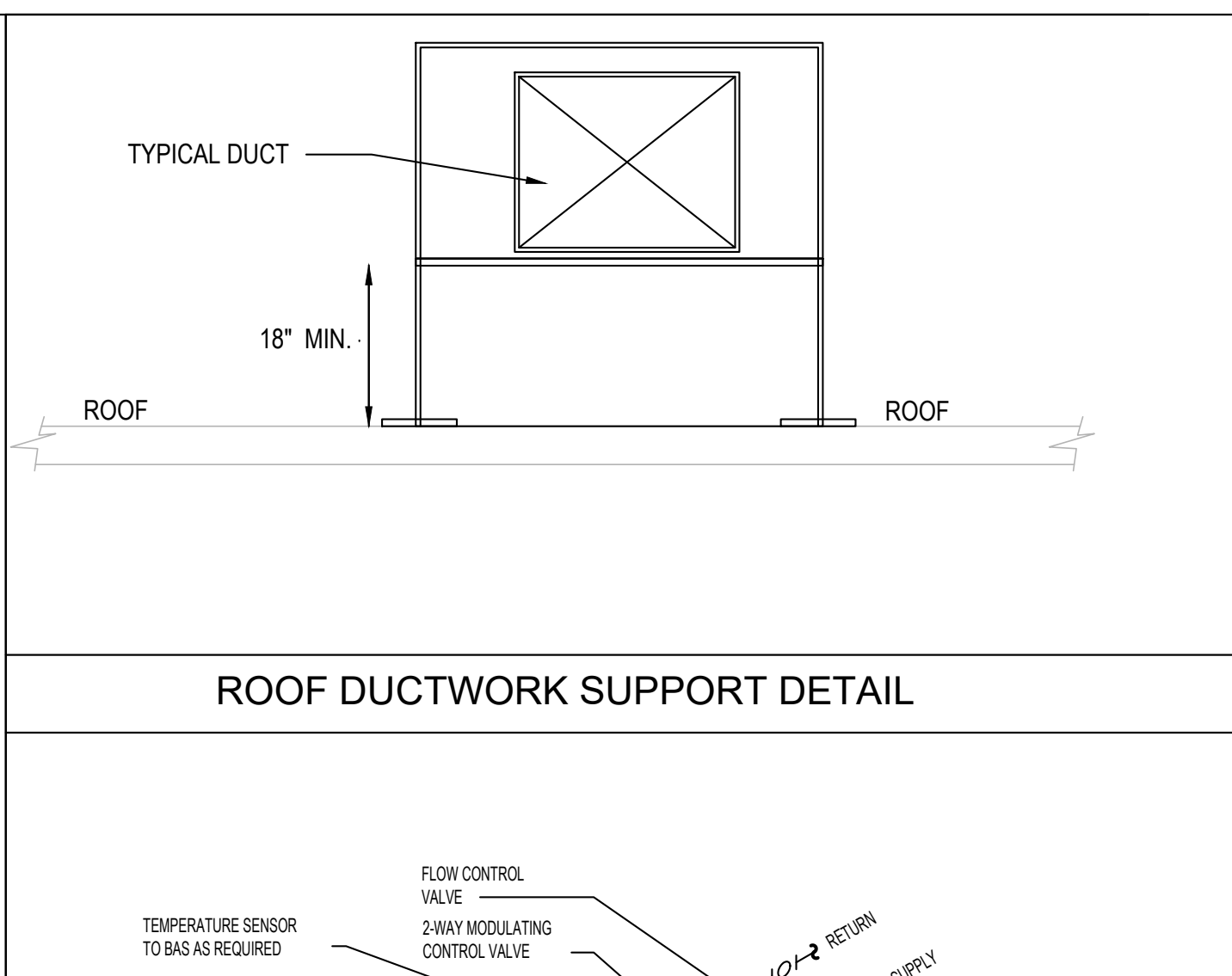
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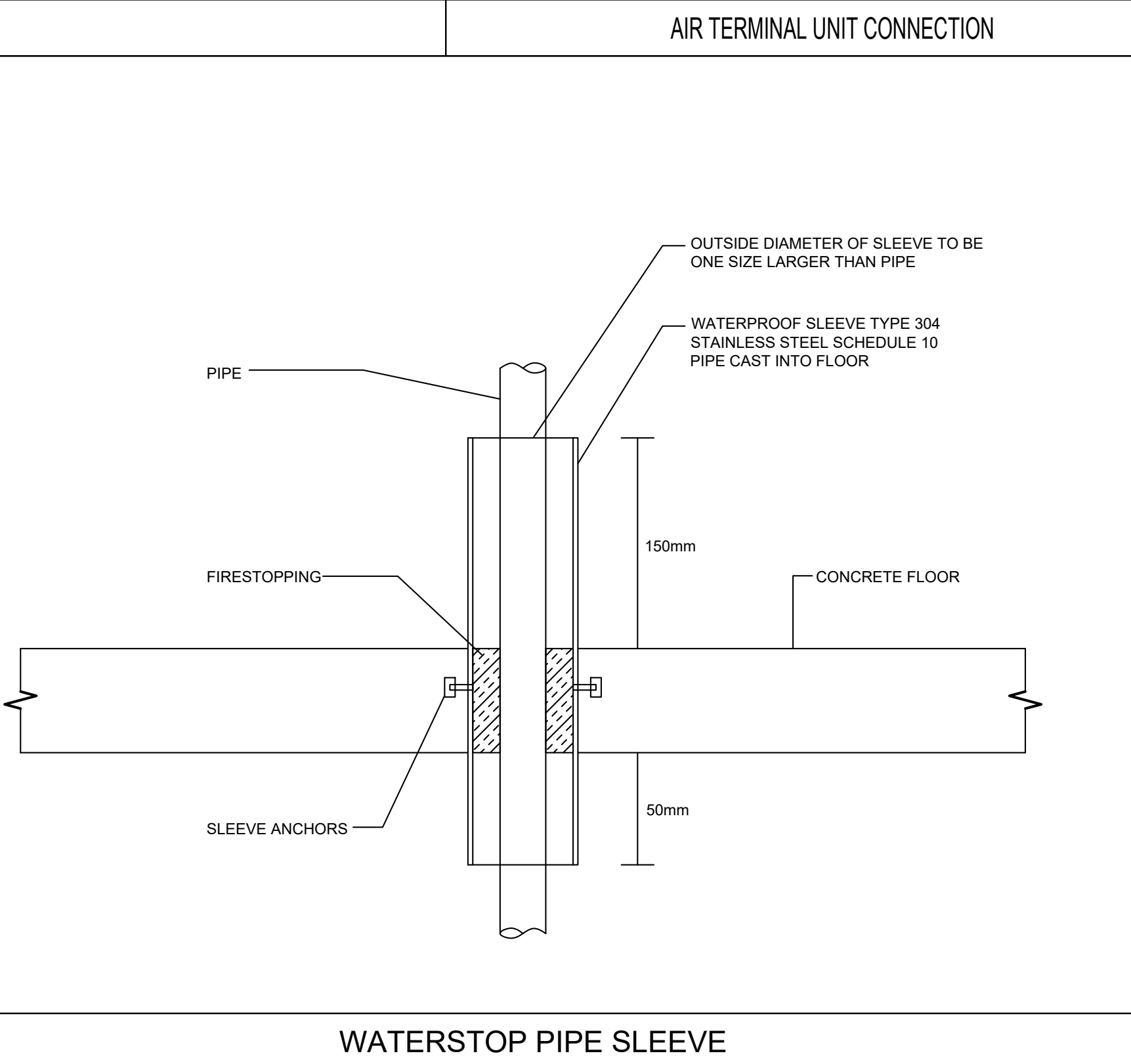
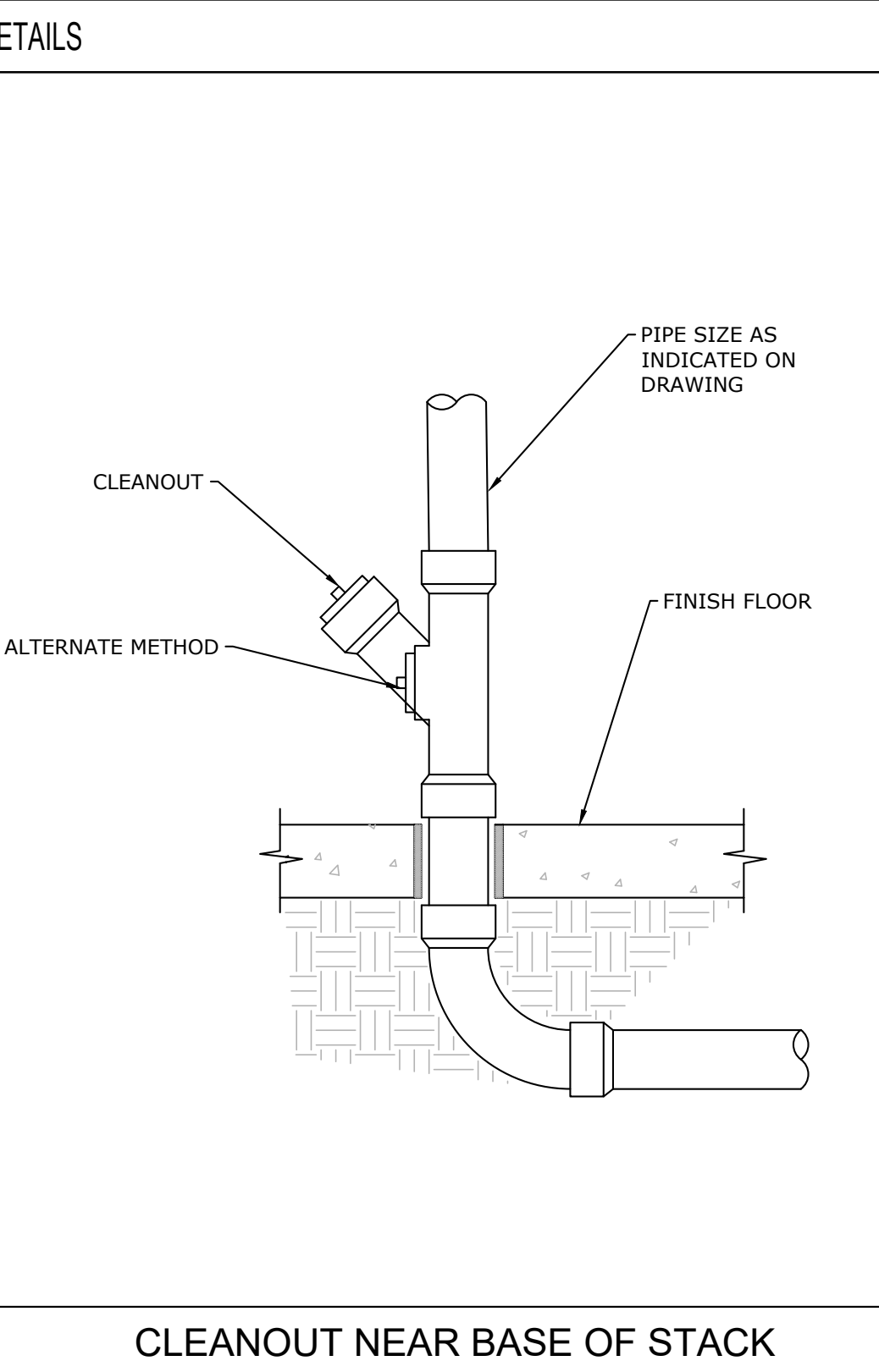
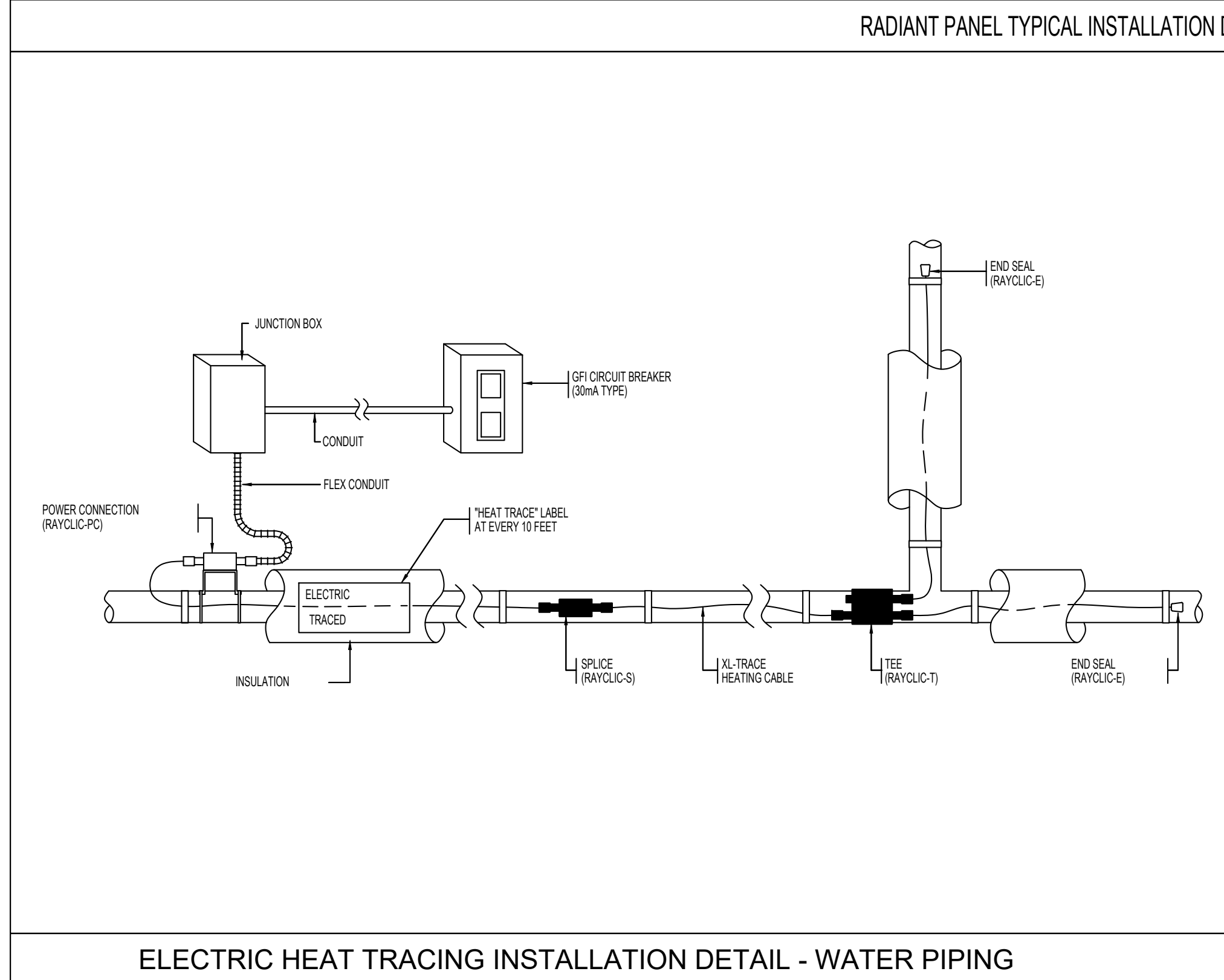
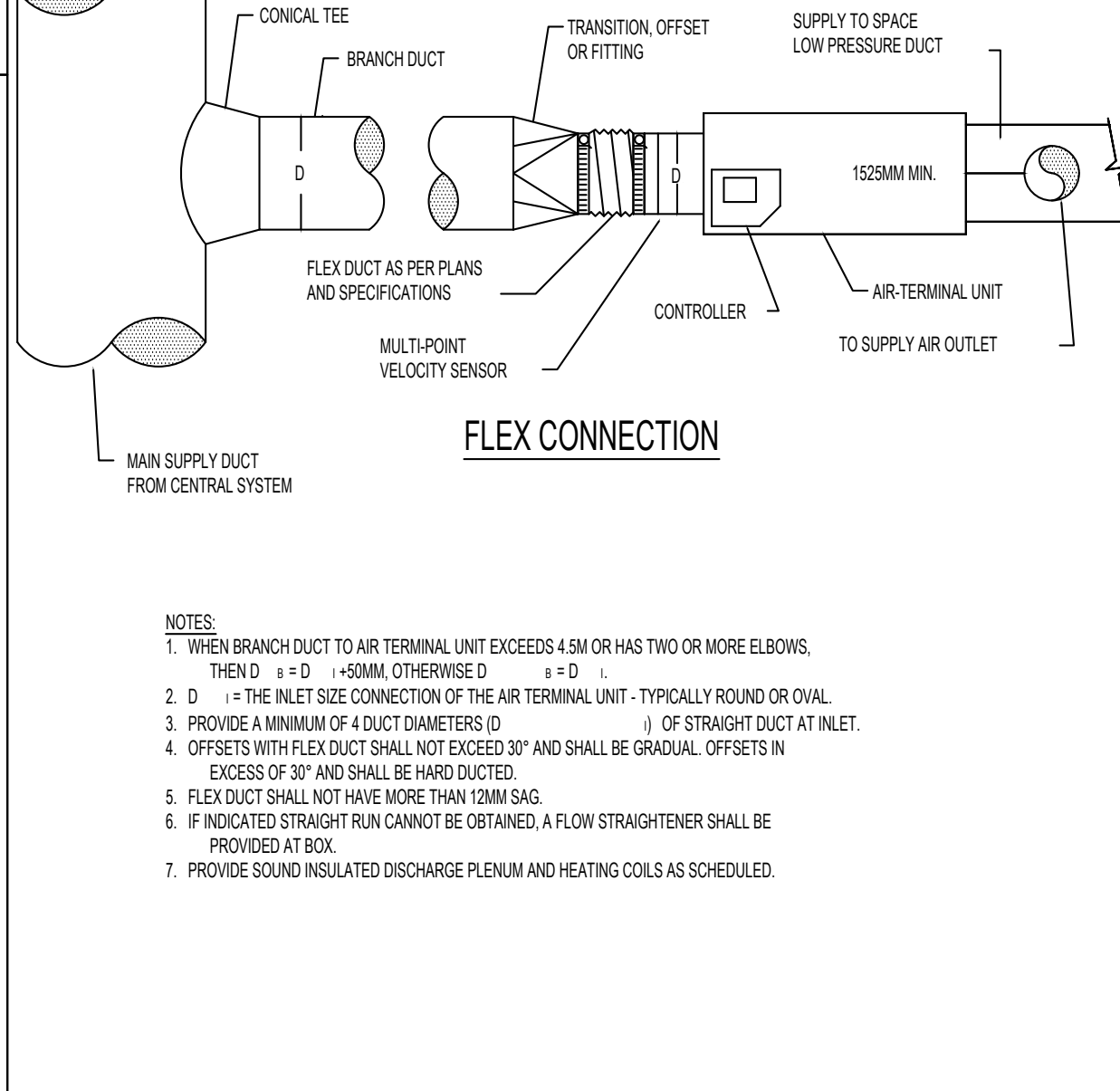
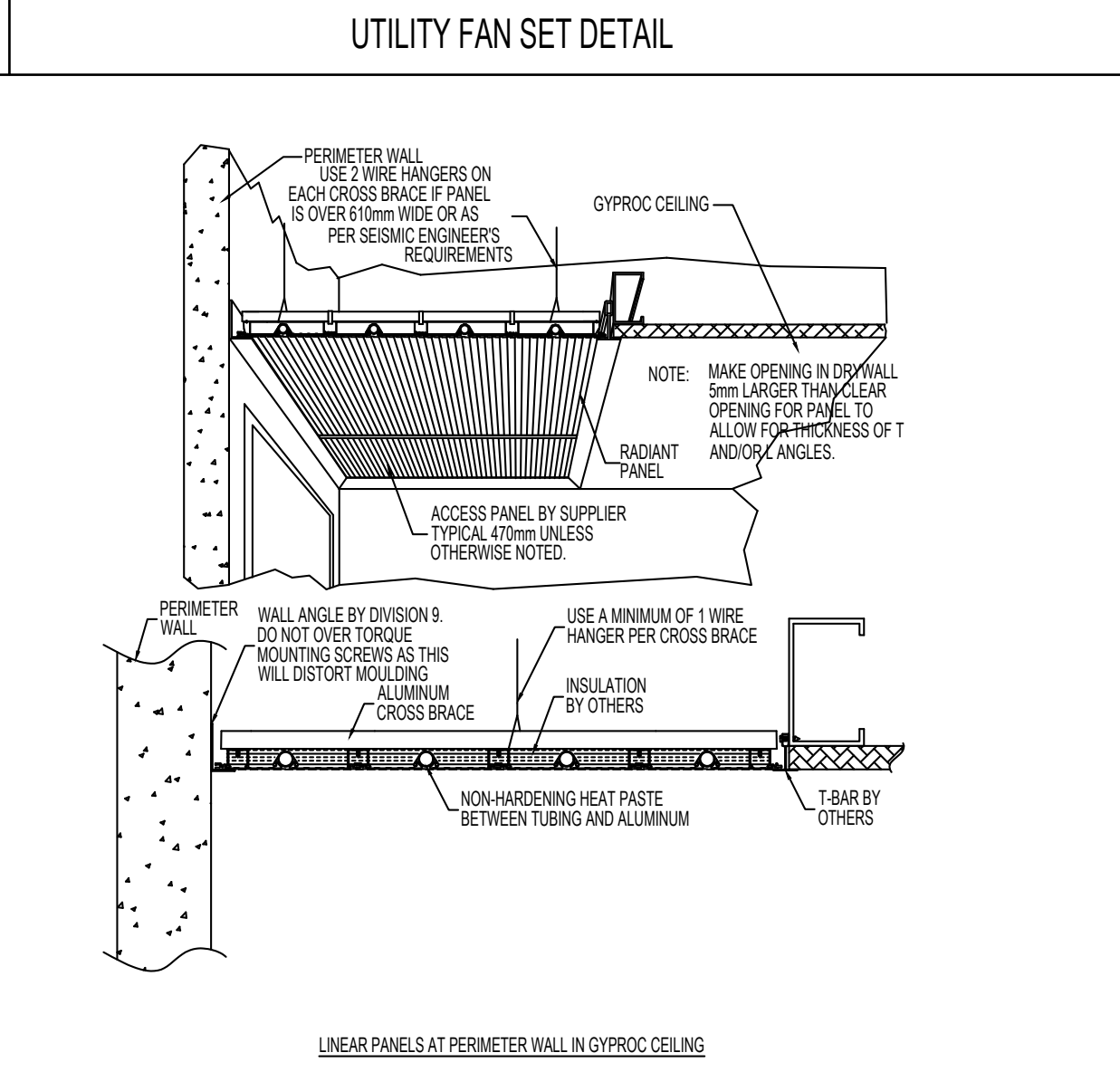
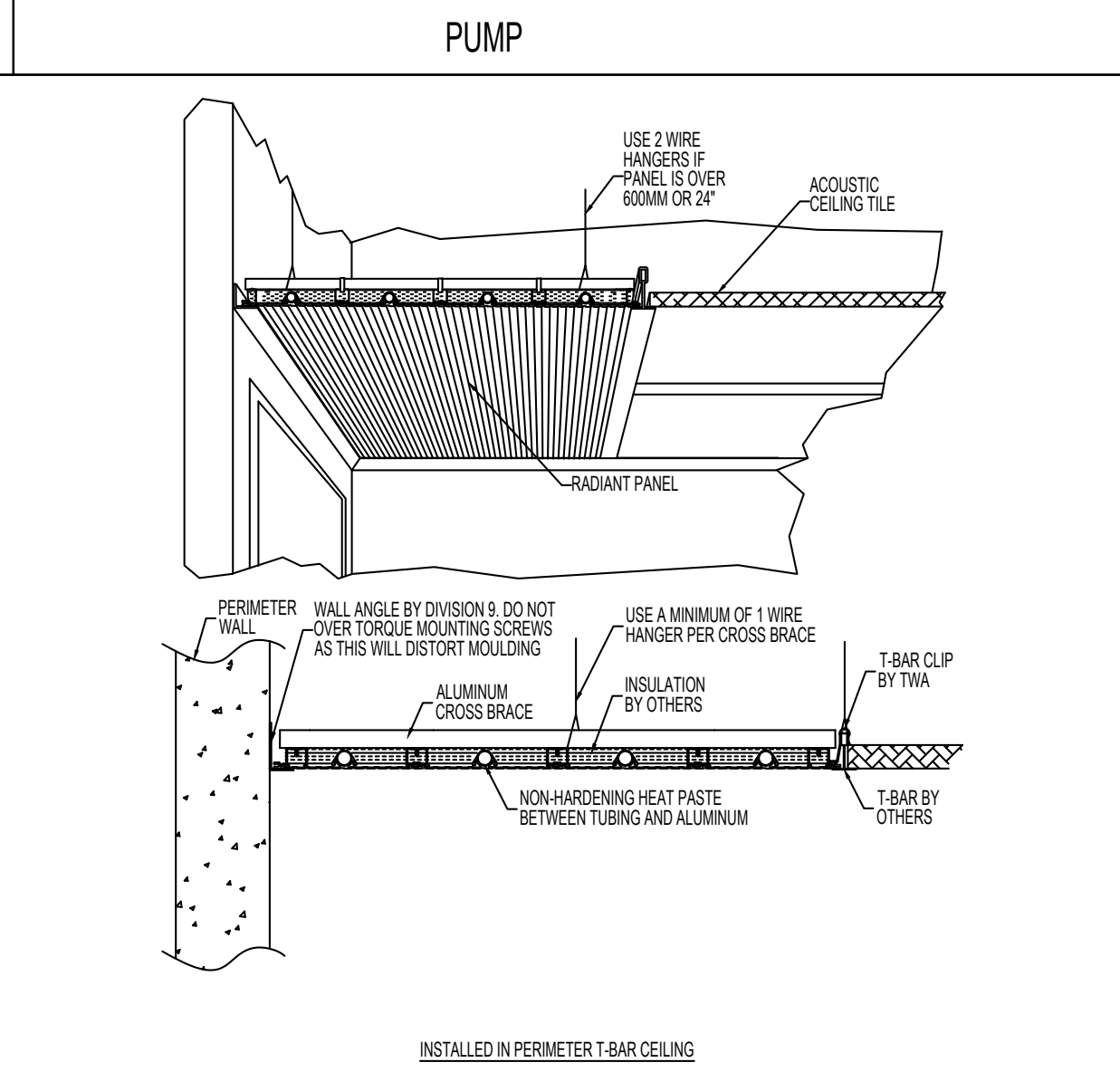
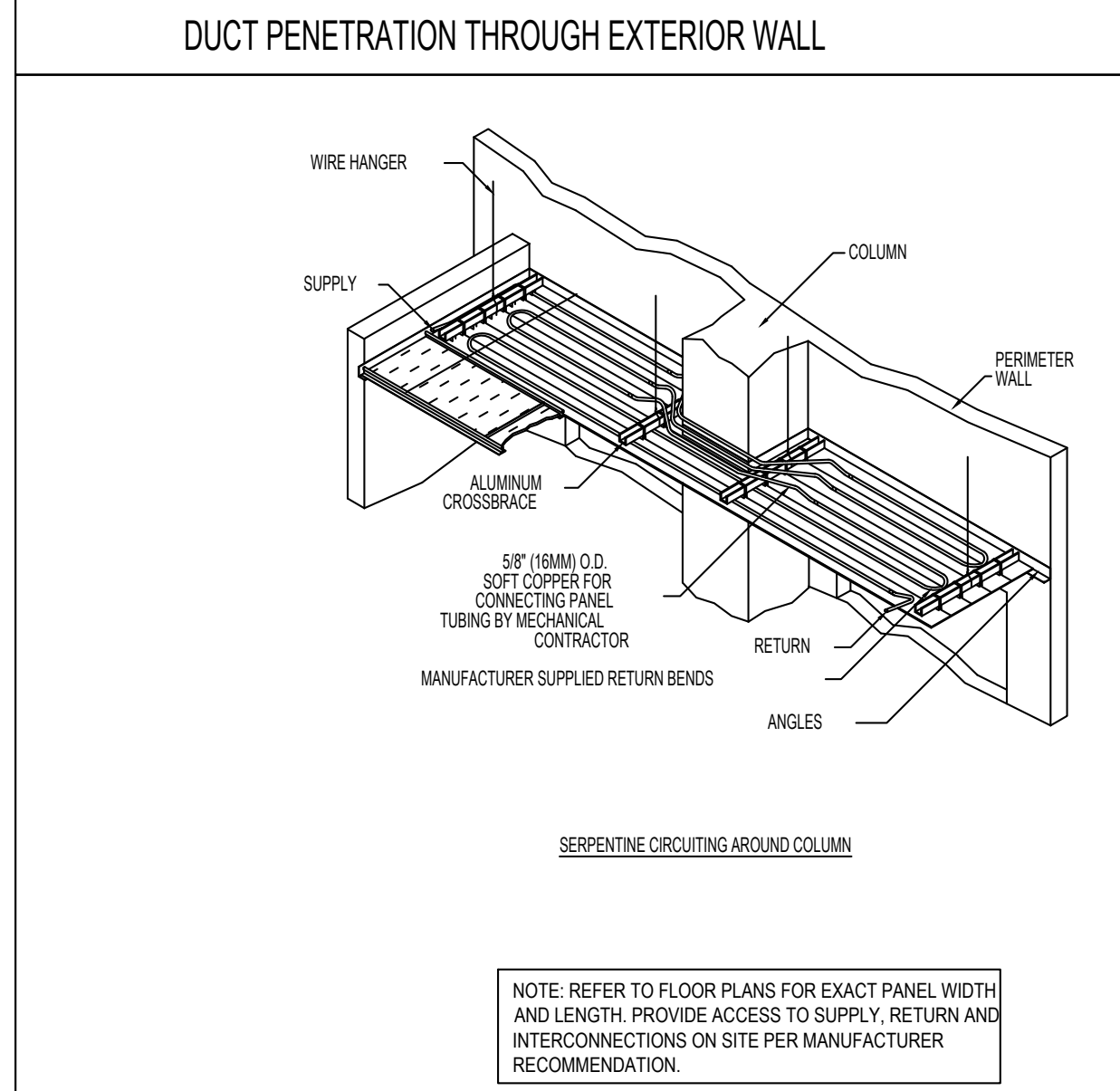
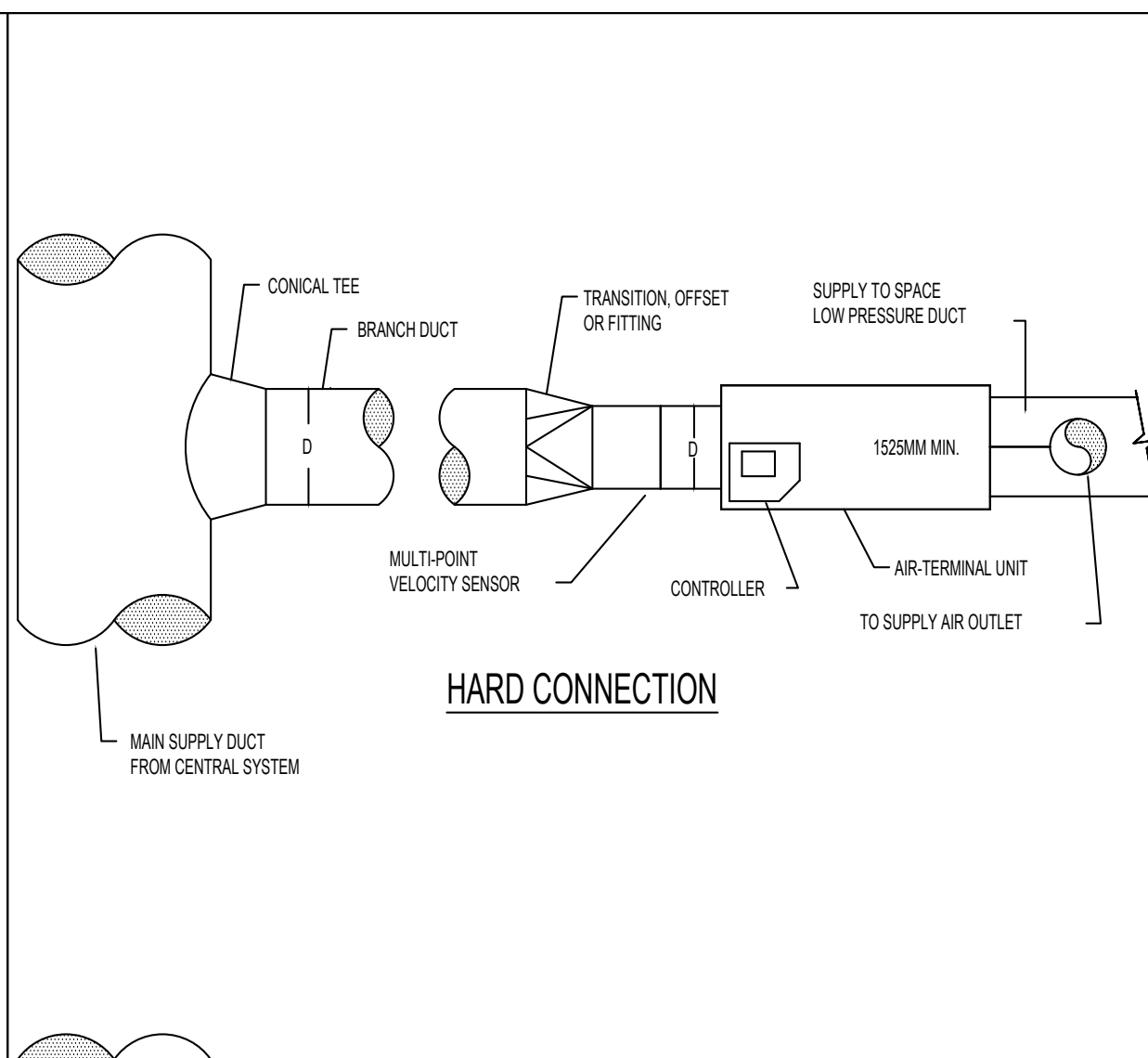
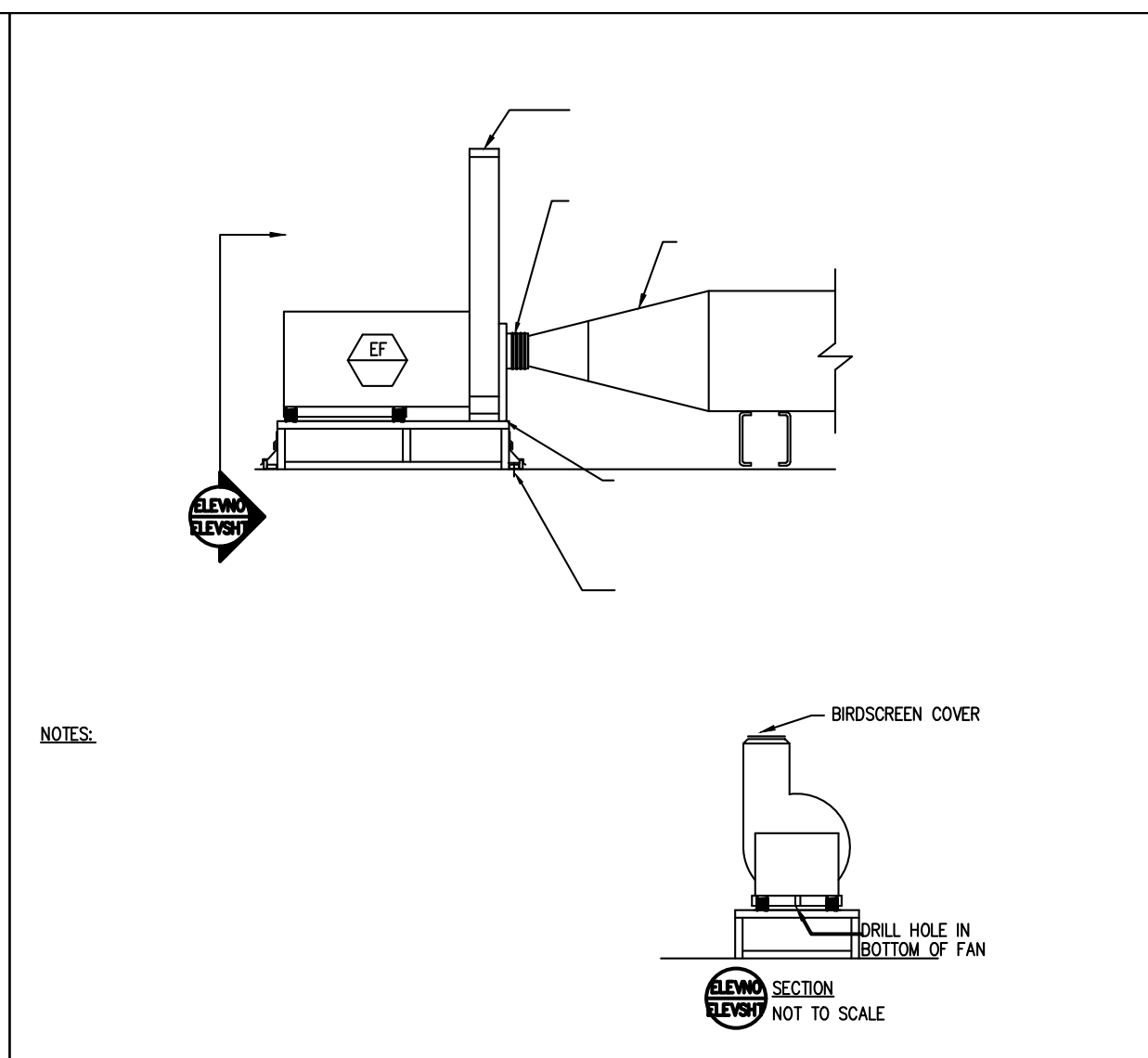
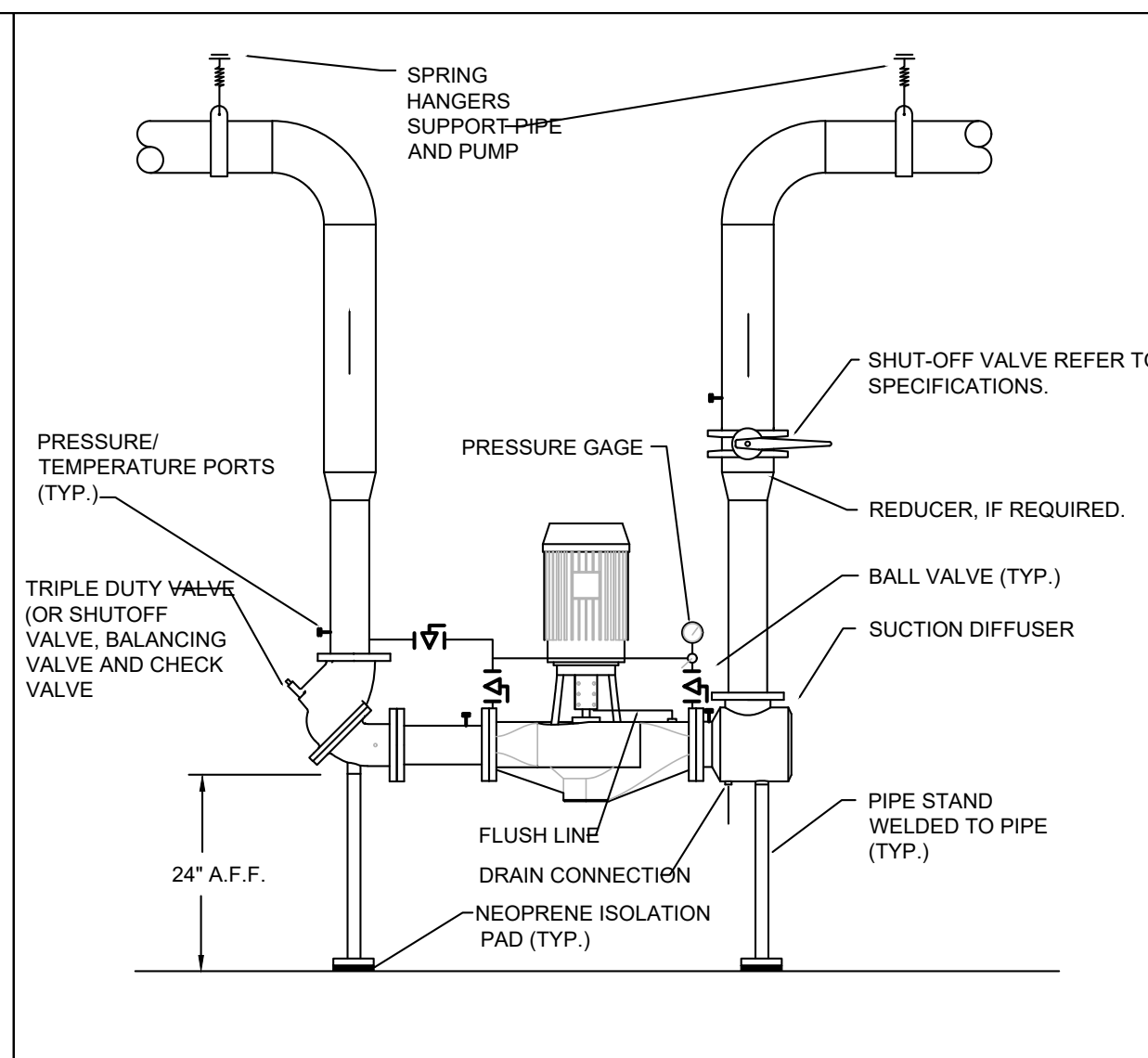
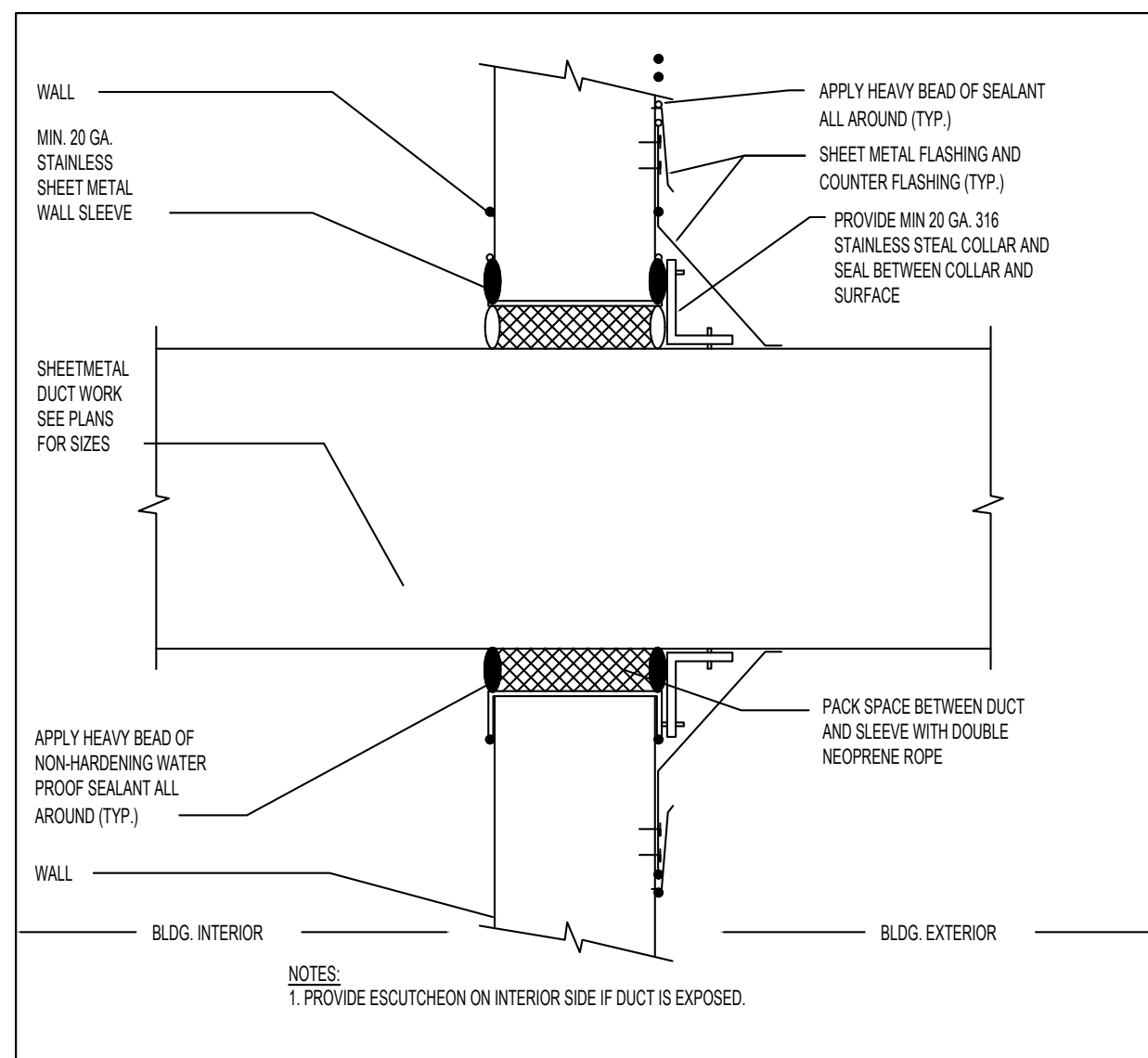
SCARBOROUGH, ON, CANADA

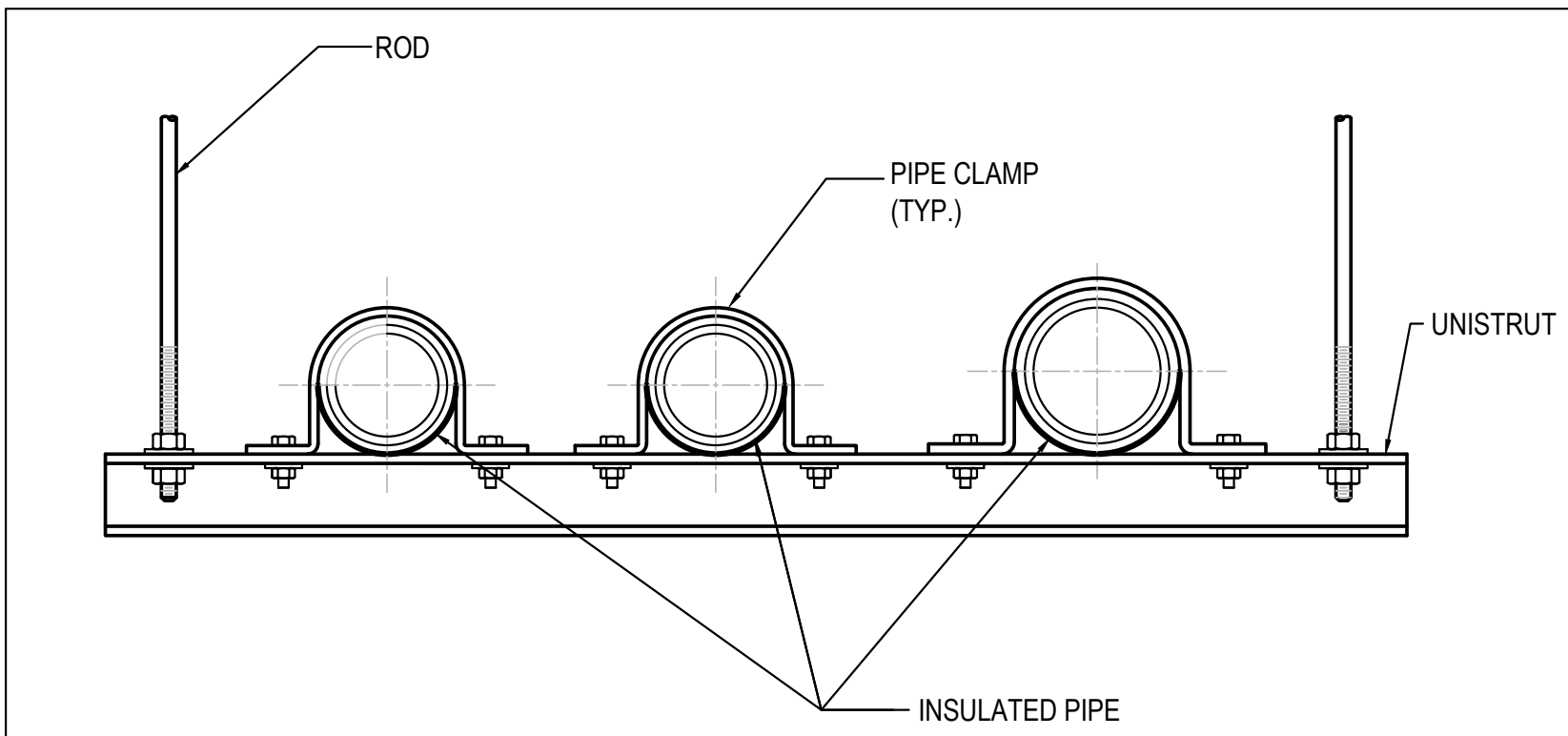
DRAWING TITLE

MECHANICAL SCHEDULES #2

PROJECT NO.	PLOT DATE	DRAWN
MRK-2201516	SCALE	REVIEWED
DRAWING NO.		REVISION
M7.02		

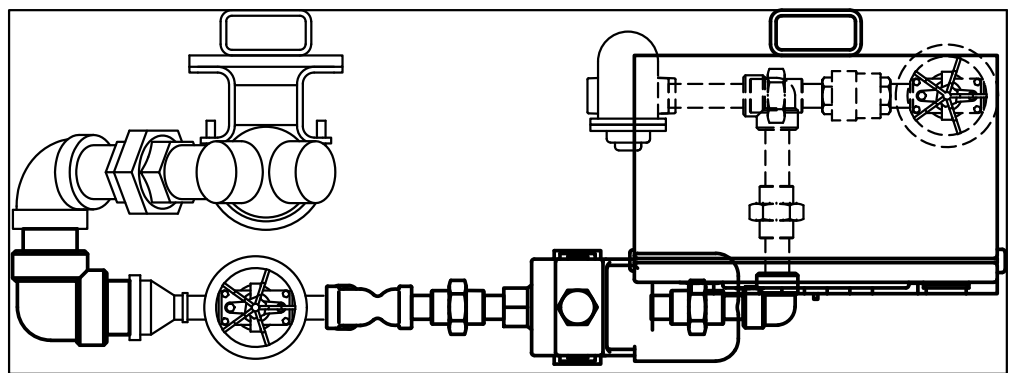
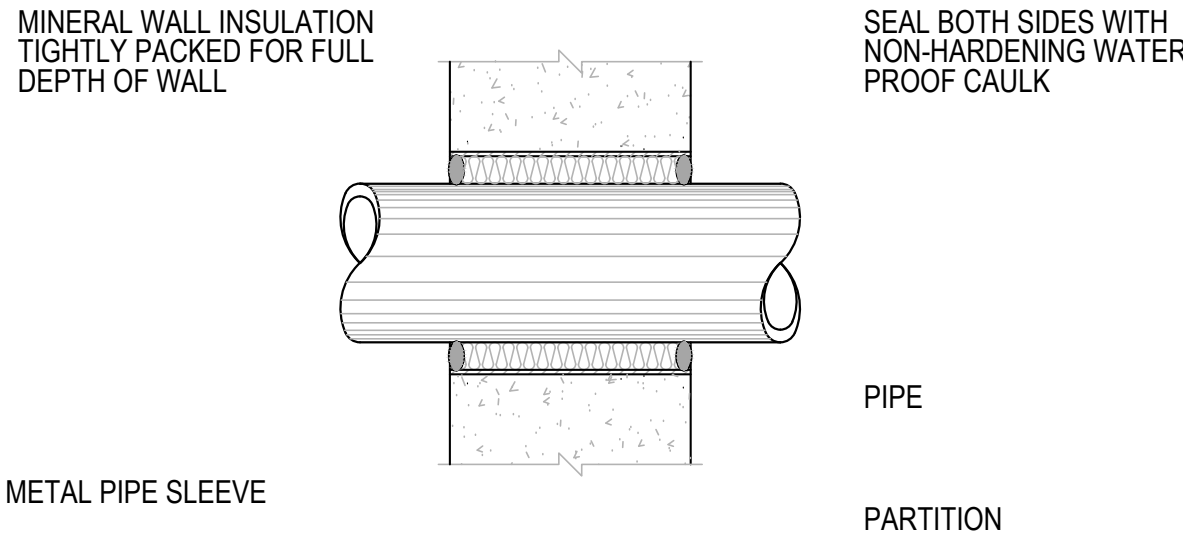




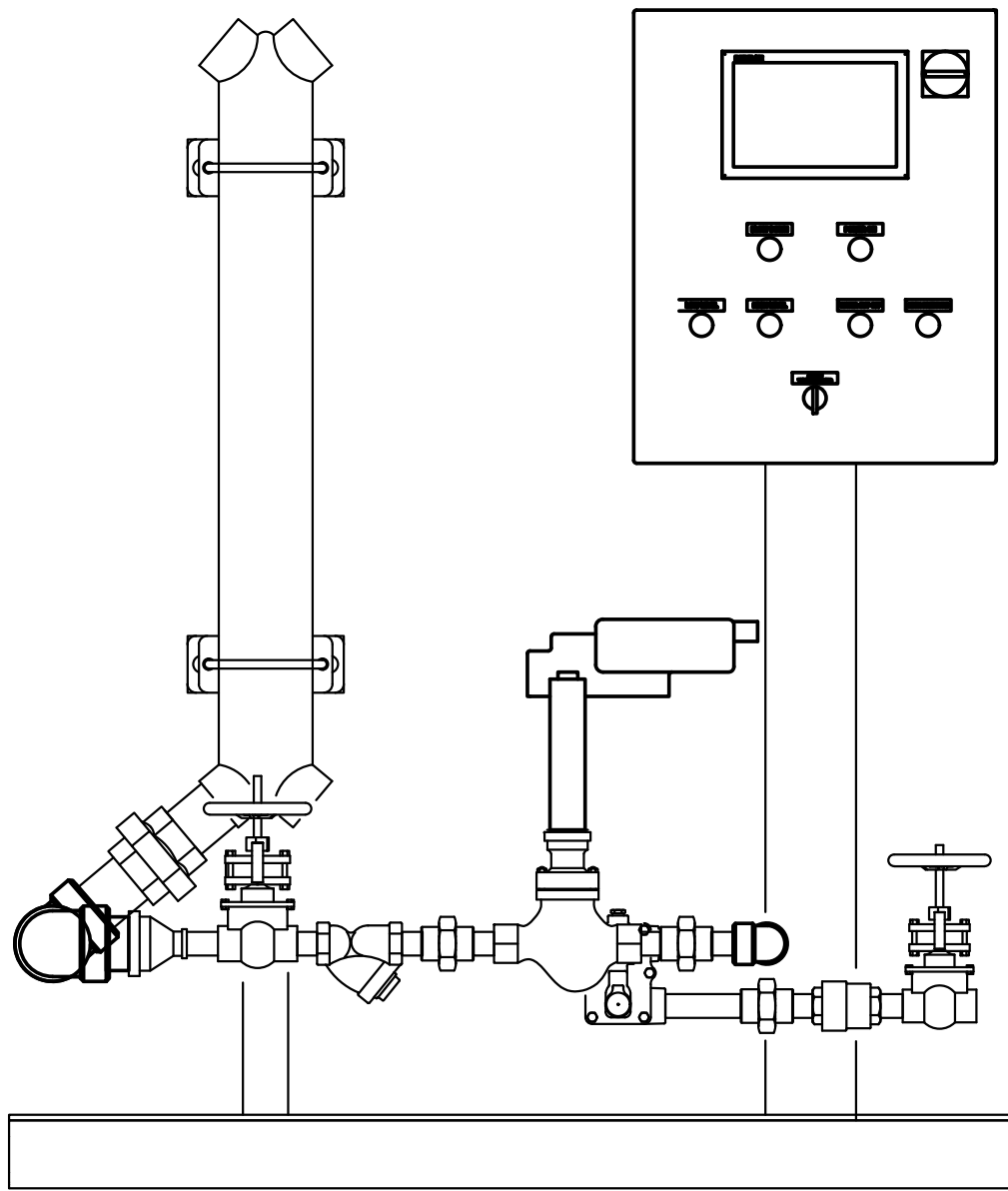


NOTES:

1. ALL HANGING METHODS TO BE COORDINATED WITH STRUCTURAL.

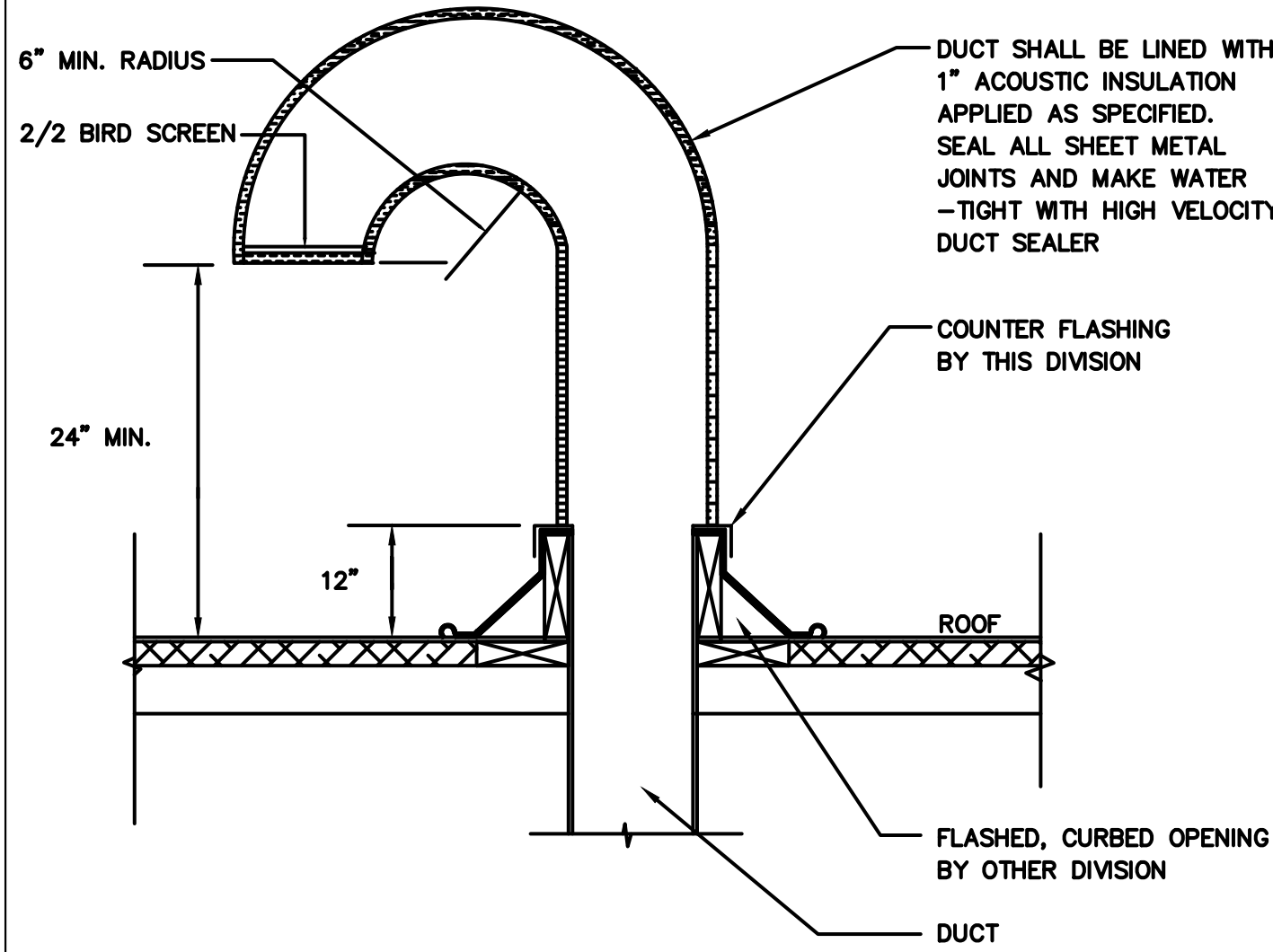


SERVICE CONNECTIONS	
A	2" NPT 50 PSIG STEAM CONNECTION INLET
B	2" NPT GLS CONNECTION OUTLET TO COIL
C	2" NPT GLR CONNECTION INLET FROM COIL
D	3/4" NPT SUB-COOLED CONDENSATE CONNECTION OUTLET

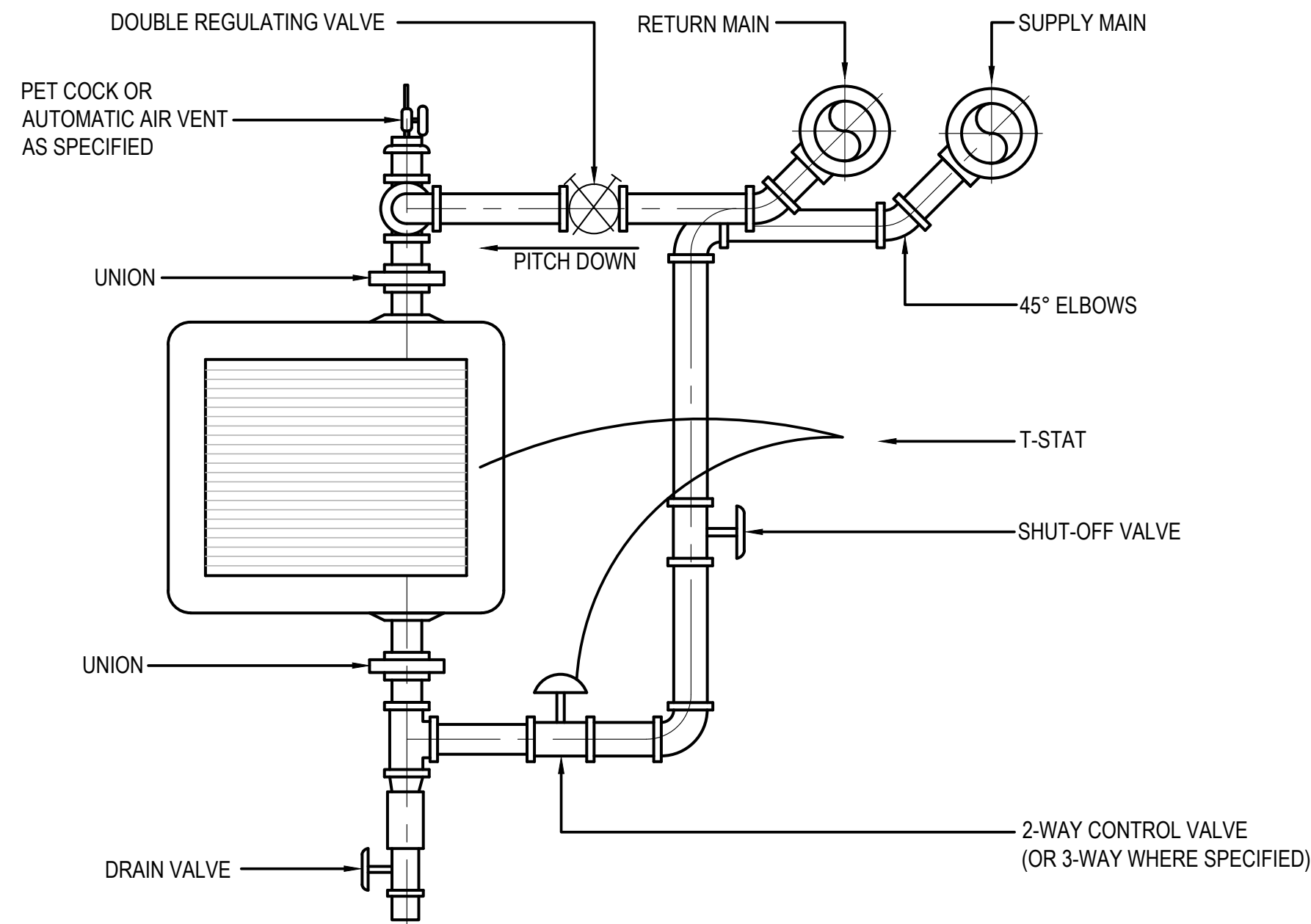


MAIN COMPONENTS ON SKID	
1	JAD 3.12 SHELL & COIL HEAT EXCHANGER
2	1/2" CONDENSATE CONTROL VALVE
3	3/4" FLOAT & THERMOSTATIC STEAM TRAP
4	CONTROL PANEL WITH TOUCH SCREEN CONTROLLER & BACNET

PIPE GROUP HANGER SUPPORT



PIPE PENETRATION THROUGH NON-FIRE RATE WALL DETAIL



SIMPLEX HEX SKID - HX-1 & 2
MODEL: CH52-145/165-50-205-40PG-SC-EL-1-LOP-KEL-CPHMI

PERFORMANCE: (N+1)

PRIMARY SIDE:
STEAM LOAD: 485 HR
STEAM PRESS: 50 PSIG (SATURATED)
CONDENSATE: 205°F (SUBCOOLED)

SECONDARY SIDE:
MEDIUM: 40% PG
HEAT LOAD: 487 MBH
FLOW: 52 USGPM
TEMPERATURE: 145°F IN / 165°F OUT
HE PD: 4.66 PSIG

COMPONENTS SHIPPED LOOSE WITH SKIDS

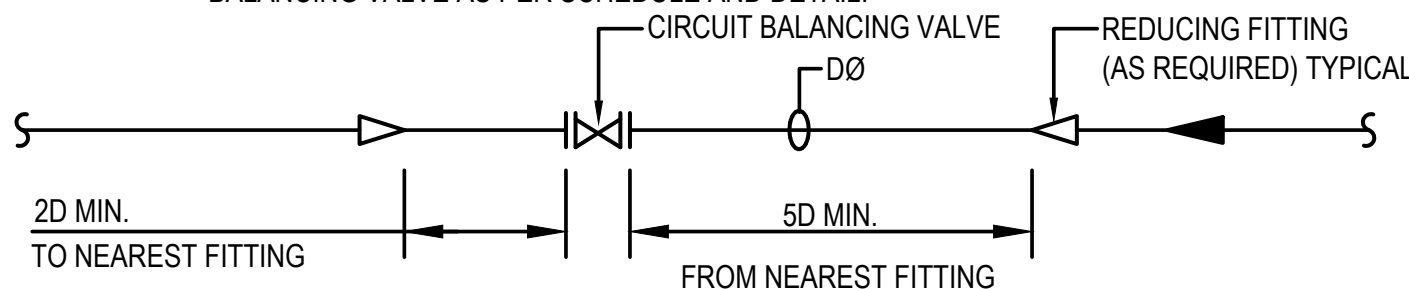
5	HI-LIMIT TEMP MODULATING STEAM SHUT-OFF CONTROL VALVE
6	OVERFLOW DRIP TRAP - THERMODYNAMIC c/w STRAINER
7	RTD

STEAM SKID (BY PRESTON PHIPPS)

CIRCUIT BALANCING VALVE SCHEDULE (IMPERIAL)			
SIZE	NOM FLOW (GPM)	MAX. GPM	
1/2"	UP TO	3.1	4.3
3/4"	3	6.9	9.6
1"	6.8	10.1	14.5
1 1/4"	10.2	16.2	24
1 1/2"	15	24	32
2"	25	40	55
2 1/2"	40	100	138
3"	95	145	200
4"	145	235	310
5"	230	320	500
6"	320	490	700
8"	500	900	1250

NOTE:

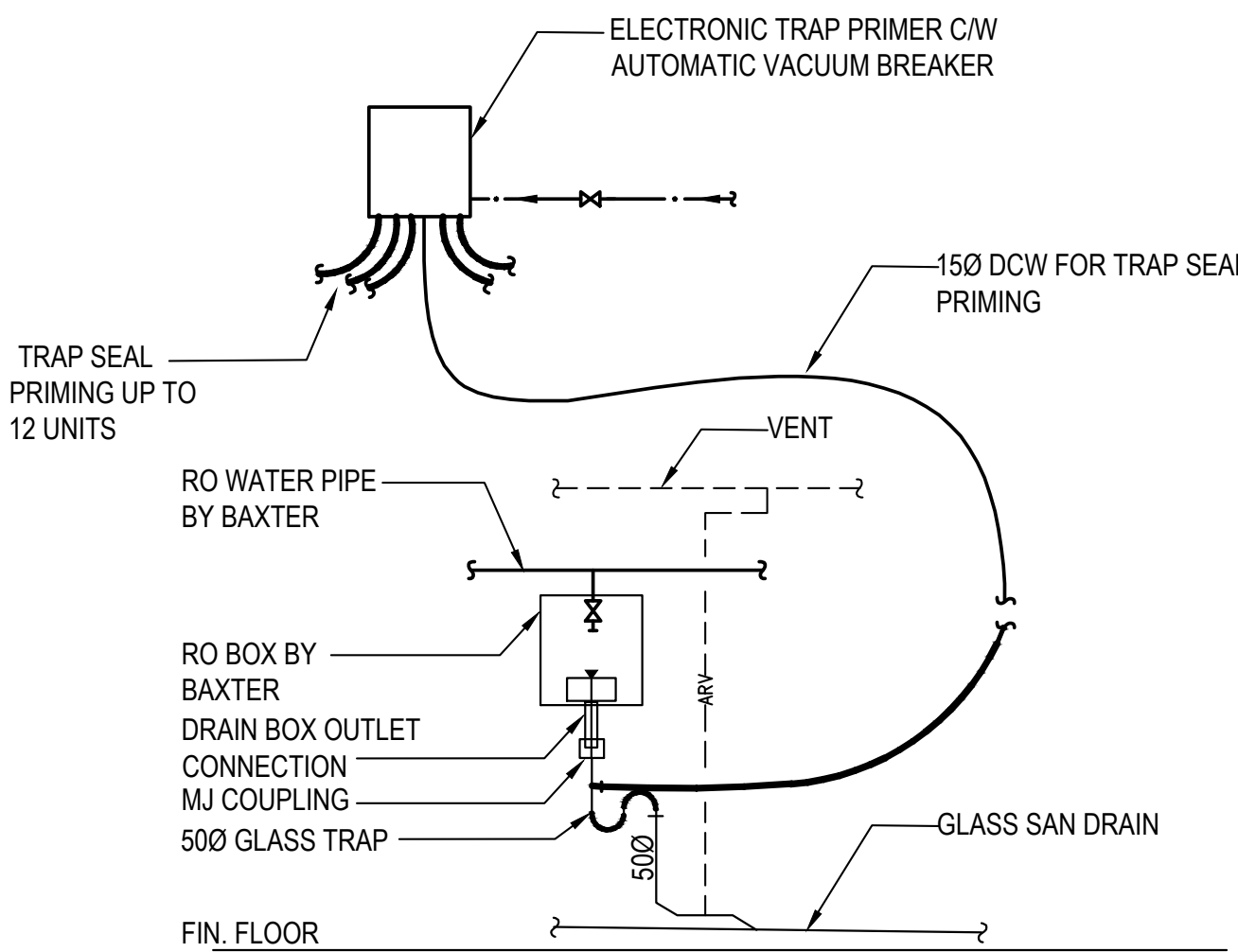
1. ABOVE SELECTION BASED ON TOUR & ANDERSSON: 1FT ΔP @ MIN., 1 PSI (6.9kPa) NOMINAL & 2 PSI (13.8 KPA) MAX. AT FULL OPEN.
2. MECHANICAL CONTRACTOR MUST SIZE AND PROVIDE WATER CIRCUIT BALANCING VALVE AS PER SCHEDULE AND DETAIL.



CIRCUIT BALANCING VALVE DETAIL/SCHEDULE

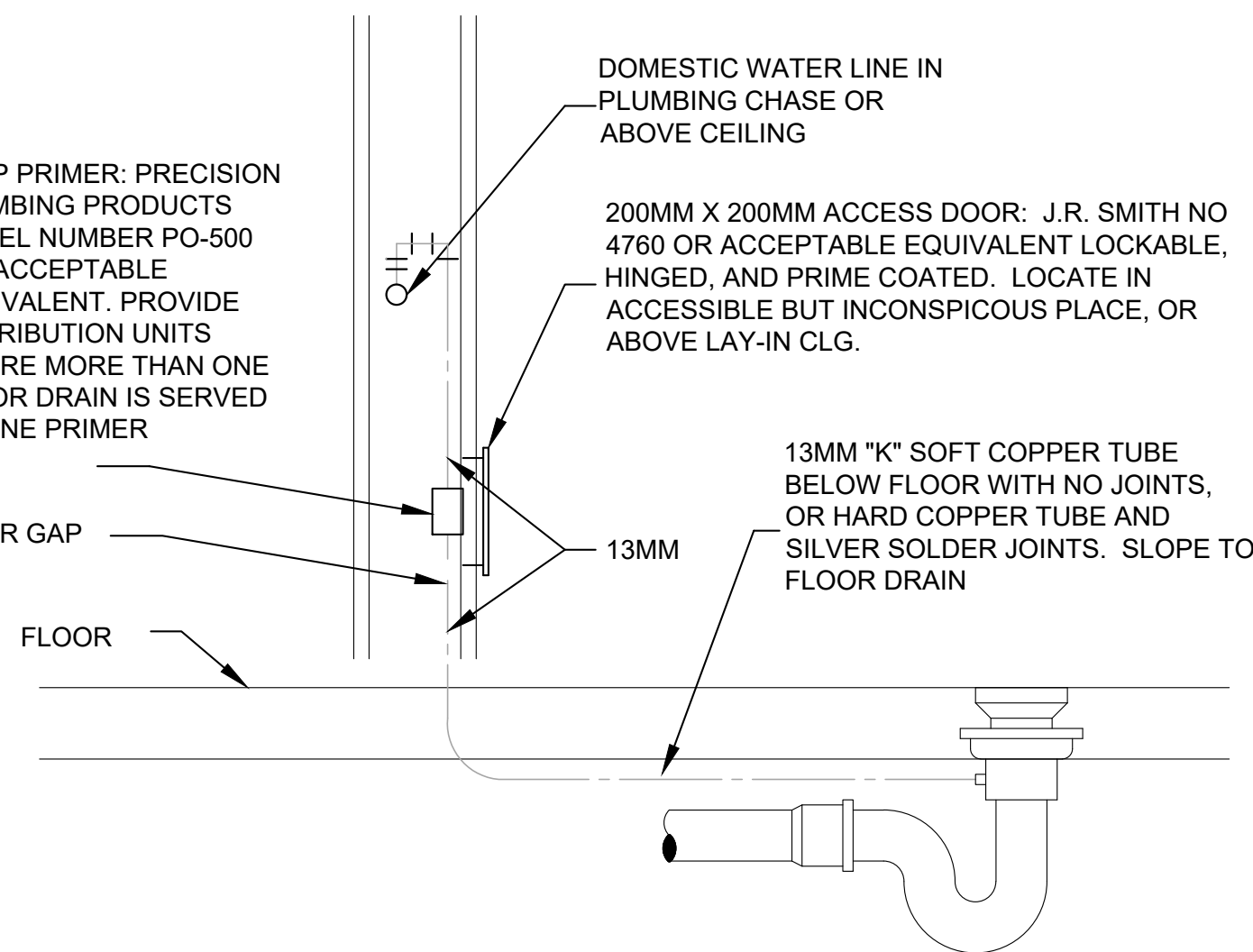
CIRCUIT BALANCING VALVE SCHEDULE (METRIC)			
SIZE	NOM FLOW (GPM)	MAX. L/S	
15	UP TO	0.20	0.27
20	0.19	0.44	0.61
25	0.43	0.64	0.91
32	0.64	1.02	1.51
40	0.95	1.51	2.02
50	1.58	2.52	3.5
65	2.52	6.3	8.70
75	5.99	9.1	13
100	9.15	15	20
125	14.51	20	32
150	20.19	31	44
200	31.55	57	79

TYPICAL CONNECTIONS TO HOT WATER UNIT HEATER



RO WATER BOX DETAIL

TRAP PRIMER: PRECISION PLUMBING PRODUCTS MODEL NUMBER PO-500 OR ACCEPTABLE EQUIVALENT. PROVIDE DISTRIBUTION UNITS WHERE MORE THAN ONE FLOOR DRAIN IS SERVED BY ONE PRIMER



TRAP SEAL PRIMER DETAIL

6	2024-04-17	ISSUED FOR TENDER AND BUILDING PERMIT APPLICATION	
5	2024-04-05	ISSUED FOR PROGRESS	
4	2023-12-08	ISSUED FOR MOH STAGE 2.3 SUBMISSION	
3	2023-10-06	ISSUED FOR 100% CD	
2	2023-08-25	ISSUED FOR 90% CD	
1	2023-02-28	ISSUED FOR MOH 2.2 SKETCH PLAN SUBMISSION	
0	2022-12-22	ISSUED FOR COSTING	
REV.	YYYY-MM-DD	REVISION / DRAWING ISSUE	REVIEW