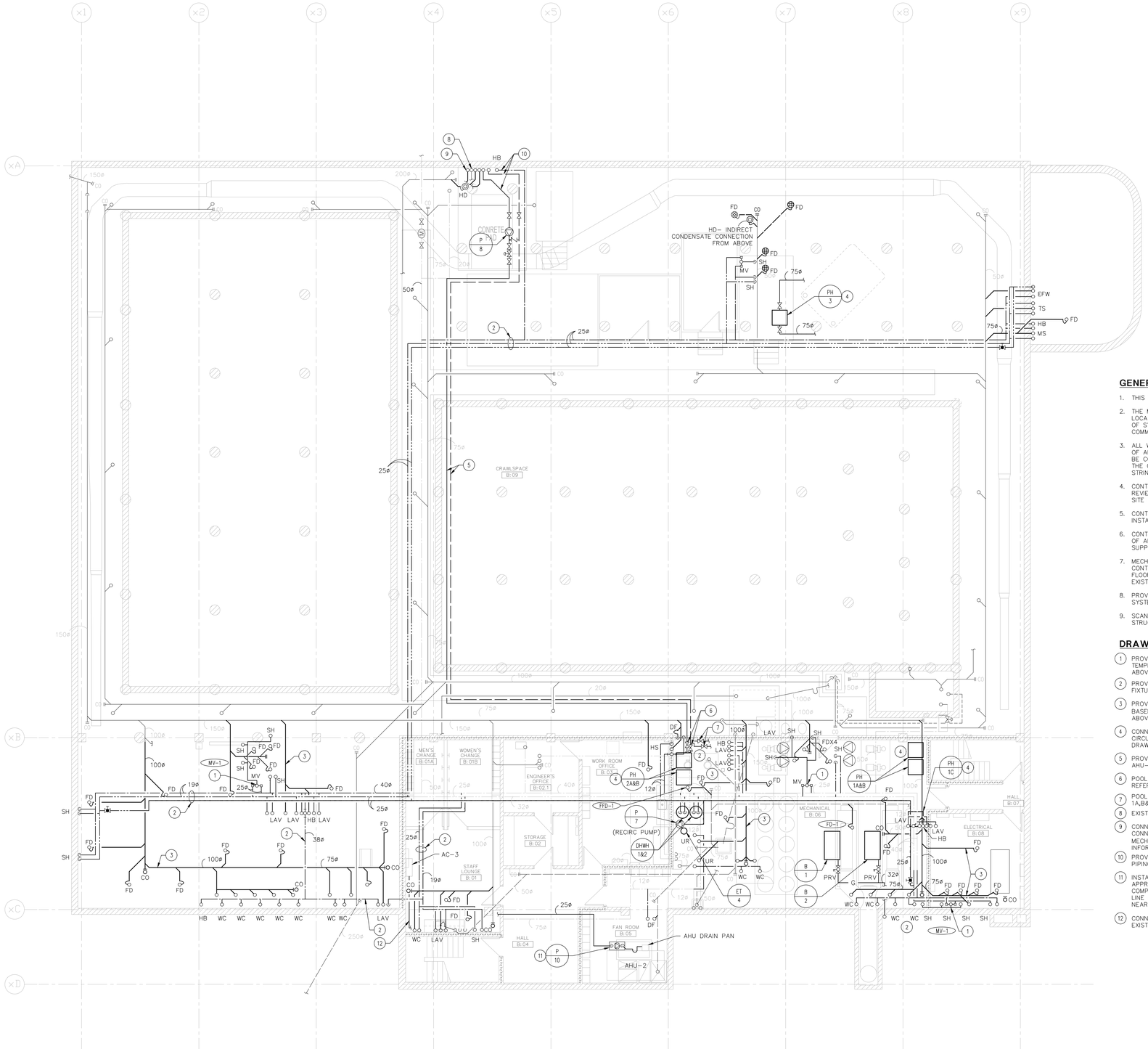
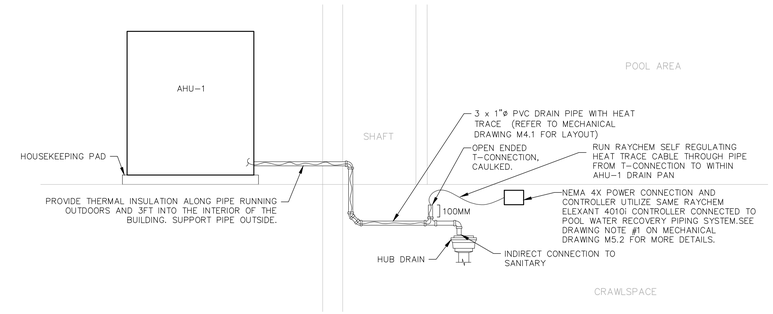


1 M4.0 BASEMENT – PLUMBING RENOVATION LAYOUT
SCALE: 1:100



2 M4.0 AHU–1 CONDENSATE DRAIN SCHEMATIC
SCALE: N.T.S.

GENERAL NOTES:

1. THIS DRAWING IS DIAGRAMMATIC ONLY. DO NOT SCALE.
2. THE MECHANICAL SYSTEMS SHOWN ARE APPROXIMATE IN LOCATION ONLY. CONTRACTOR TO VERIFY EXACT LOCATION OF SYSTEMS BEING MODIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. ALL WORK SHALL COMPLY WITH THE MOST CURRENT VERSION OF ALL APPLICABLE CODES AND STANDARDS, WHICH SHALL BE CONSIDERED PART OF THESE CONTRACT DOCUMENTS. IN THE CASE OF CONFLICTING REQUIREMENTS, THE MOST STRINGENT REGULATION SHALL PREVAIL.
4. CONTRACTOR TO MAINTAIN CURRENT AND READILY REVIEWABLE AS–BUILT DRAWINGS ACCURATELY REFLECTING SITE INSTALLATIONS.
5. CONTRACTOR TO ENSURE ALL MATERIALS MODIFIED OR INSTALLED IN AN AIR PLENUM ARE RATED FOR SUCH USE.
6. CONTRACTOR TO MAINTAIN DIGITAL PHOTOGRAPHIC RECORDS OF ALL INSTALLATIONS PRIOR TO CONCEALMENT BY SUPPORTING TRADES.
7. MECHANICAL CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR FOR SCANNING, CUTTING AND PATCHING OF FLOOR AND SLAB TO DETERMINE EXACT LOCATION OF EXISTING DRAIN PIPES WHERE NEW DRAIN PIPES TIE IN.
8. PROVIDE CAP ON ALL PIPING TO PREVENT DEBRIS ENTERING SYSTEM.
9. SCAN STRUCTURE PRIOR TO CORING, COORDINATE WITH STRUCTURAL.

DRAWINGS NOTES:

1. PROVIDE THERMOSTATIC MIXING VALVE COMPLETE WITH TEMPERATURE GAUGE FOR A GROUP OF SHOWER HEADS ABOVE.
2. PROVIDE NEW DOMESTIC WATER PIPING FOR NEW PLUMBING FIXTURES THROUGH THE MAIN FLOOR.
3. PROVIDE NEW SANITARY MOUNTED AT HIGH LEVEL IN BASEMENT/CRAWLSPACE FOR NEW PLUMBING FIXTURES ABOVE. PROVIDE NEW VENTING FOR EACH FIXTURE.
4. CONNECT THE NEW POOL HEATERS INTO THE EXISTING POOL CIRCULATING SYSTEMS AS PER THE HEATING SCHEMATICS ON DRAWING M8.0.
5. PROVIDE NEW POOL HEAT RECOVERY PIPING FROM NEW AHU–1.
6. POOL HEAT RECOVERY CONNECTION TO POOL HEATERS 2A&B. REFER TO HEATING SCHEMATIC M8.0 FOR DETAILS.
7. POOL HEAT RECOVERY CONNECTION TO POOL HEATERS 1A,B&C. REFER TO HEATING SCHEMATIC M8.0 FOR DETAILS.
8. EXISTING RAINWATER LEADER FROM ABOVE.
9. CONNECT THE CONDENSATE FROM AHU–1 VIA INDIRECT CONNECTION INTO HUB DRAIN AS SHOWN. REFER TO MECHANICAL DETAIL M4.0/2 ON THIS SHEET FOR FURTHER INFORMATION.
10. PROVIDE AN ALARM ON THE HEAT TRACE FOR THE AHU–1 PIPING.
11. INSTALL NEW CONDENSATE PUMP (P–10) IN THIS APPROXIMATE LOCATION CONNECTED TO AHU–2 DRAIN PAN COMPLETE WITH DEEP SEAL TRAP CONNECTION. RUN PUMPED LINE UP TO HIGH LEVEL AND OFFSET TO EXISTING SINK NEARBY IN BASEMENT AND CONNECT TO SANITARY SYSTEM.
12. CONNECT CONDENSATE FROM AC–3 CONDENSATE PUMP TO EXISTING SINK SANITARY.

GAS LOAD CHART

EQUIPMENT NO.	INPUTS
NEW BOILER B–1 IN BASEMENT	1,250,000 BTUH
NEW BOILER B–2 IN BASEMENT	1,250,000 BTUH
NEW AIR HANDLING UNIT AHU–1 OUTSIDE	1,000,000 BTUH
EXISTING EMERGENCY GENERATOR	200,000 BTUH
TOTAL	3,700,000 BTUH

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
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No. 7183

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MCW Consultants Ltd.
13600
210-1821 Wellington Avenue
Winnipeg, Manitoba, R3H 0G4
Phone – (204) 775-7300
mcw_wpg@mcw.com
www.mcw.com

No.	Date	Issue / Revision	By
0	22/12/2023	ISSUED FOR CONSTRUCTION	JVL

Drawn By: EJ
Printing Date: 22/12/2023

PROVINCE OF MANITOBA
J.E. VAN LEEUWEN
Member 38282
REGISTERED PROFESSIONAL ENGINEER
2023-12-21

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LM Architectural Group
500-136 Market Ave
Winnipeg Manitoba Canada R3B 0P4
t: (204) 942.0681 f: (204) 943.8676
www.lm-architects.com

CITY OF WINNIPEG
BONIVITAL POOL RENEWAL

1215 Archibald St, Winnipeg, MB.

BASEMENT - PLUMBING RENOVATION LAYOUT

Comm. No.: 2129 Sheet: **M4.0**
Plotted on: