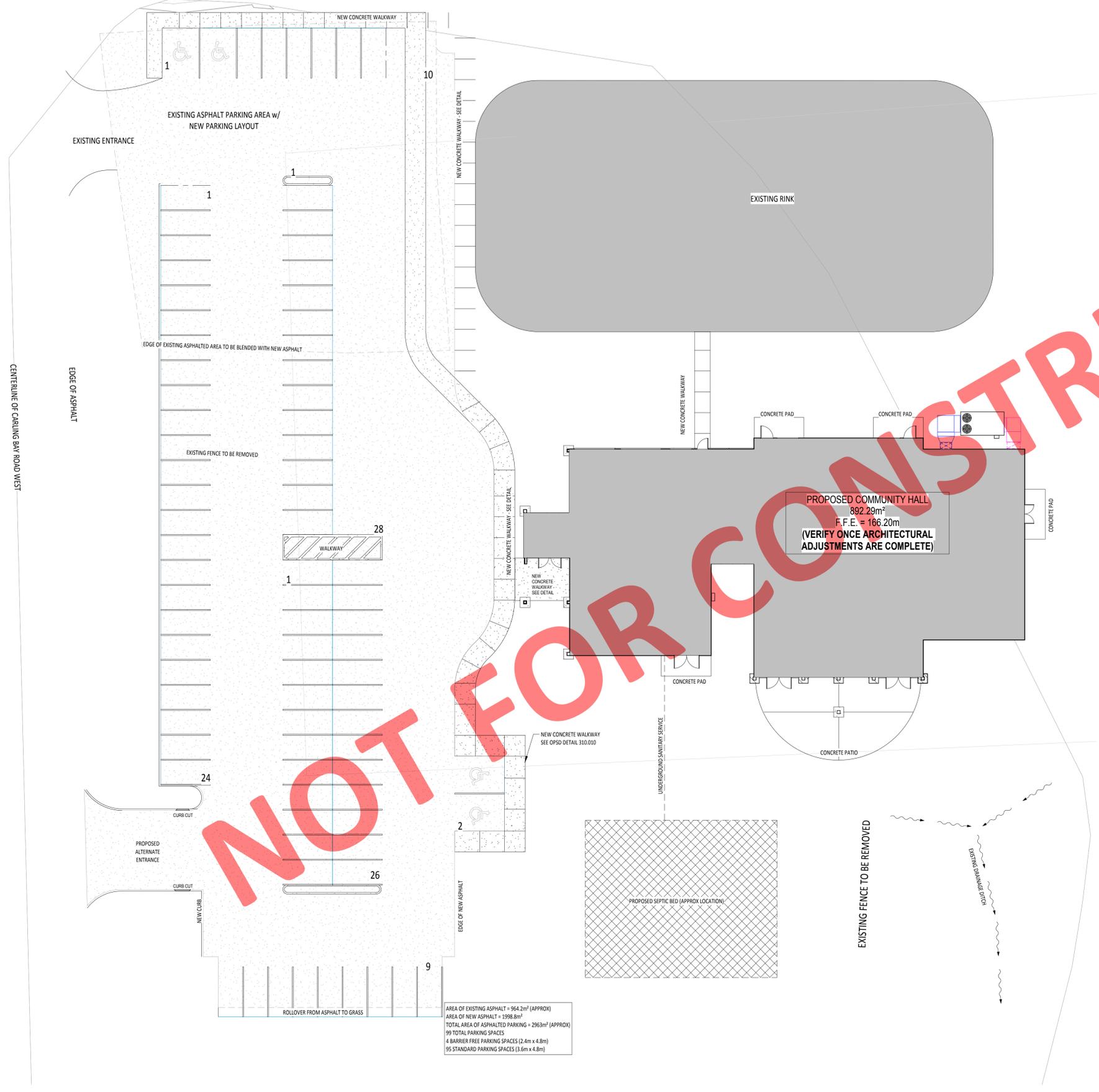


BENCHMARK TAKEN AT TOP OF WELL CAP. ELEVATION = 166.847masl



4 MECHANICAL SITE PLAN
Scale: 1:200

MECHANICAL ABBREVIATIONS

- AFF - Above finished floor
- AHU - Air handling Unit
- BTU - British Thermal Unit
- CFM - Cubic Feet per Minute
- L/S - Litres per second
- UN - Unless otherwise noted
- DDC - Direct Digital Control
- EAT - External Air Temperature
- OAT - Outdoor Air Temperature
- MAT - Mixed air temperature
- RAT - Return air temperature
- LAT - Leaving Air Temperature
- ΔT - temperature difference
- ΔP - Pressure Difference
- HP - Horsepower
- ESP - Total Static Pressure
- FD - Fire Damper
- FF - Fire Flaps
- EW - Entering water temperature
- LWT - Leaving water temperature
- BHP - Brake Horse Power
- FLA - Full load amps
- MCA - Minimum Circuit Amps
- MOC - Maximum Overcurrent protection
- GPM - Gallons per minute
- KW - Kilowatt
- NC - Normally Closed
- NO - Normally Open
- FPM - Feet per Minute
- MBH - thousands of BTUs per hour
- NTS - Not to scale
- PRV - Pressure Reducing Valve
- PSI - Pound per square inch
- PSIG - Pound per square inch gauge
- VFD - Variable Frequency Drive
- V/PH - Volts/Phase
- UDC - Under floor
- ARCH - Architect/Architectural
- AHRI - Air-conditioning, heating and refrigeration institution
- ARI - American Refrigeration Institute
- ASHRAE - American Society of Heating and Air-conditioning Engineers
- COP - Coefficient of Performance
- DB - Dry Bulb
- wB - Wet Bulb
- DWG - Drawing
- DX - Direct expansion
- EER - Energy efficiency Ratio
- SEER - seasonal energy efficiency ratio
- ELEC - Electric/Electrical
- MECH - Mechanical
- MD - Motorized Damper
- FT - Feet
- IN - Inch
- M - Meter
- MM - Millimeter
- OBD - Opposed blade damper
- BD - Balancing damper
- BDG - Back draft damper
- SQFT - Square feet
- SENS - Sensible
- SMACNA - sheet metal and air conditioning contractor's national association
- ULC - Underwriter's Laboratory of Canada
- CSA - Canadian Standards Association
- W.C. - Water column
- W.G. - Water gauge
- O.C. - On Centre
- VENT - Ventilation
- RH - Relative Humidity
- FE - Fire Extinguisher
- FEC - Fire extinguisher cabinet
- FHC - Fire Hose Cabinet
- °C - Degrees Celsius
- °F - Degrees Fahrenheit

EQUIPMENT TAG-LEGEND

- BB - Boiler tag
- PE - Pump Tag
- EXPR - Expansion Tank Tag
- FTF - Fill pump/Tank Tag
- CUU - Condensing Unit Tag
- ACR - Air conditioning Unit tag
- BRB - Bypass Box tag
- WVV - Variable air volume Tag
- FCUR - Fan coil unit tag
- RHC - Reheat Coil tag
- EF - Exhaust Fan
- RTUR - Rooftop Unit
- AHUE - Air handling unit
- MUAU - Make up air unit
- PTAC - Package thermal air conditioning unit
- H.P.A. - Heat Pump
- FA - Furnace Tag
- CH - Chiller Tag
- CTC - Cooling Tower Tag
- WCK - Water Closet Tag
- UR - Urinal Tag
- LB - Laboratory Tag
- CSH - Counter Sink Tag
- SSR - Service Sink Tag
- LTE - Laundry Tub Tag
- FDR - Floor drain Tag
- BDE - Bidet Tag
- SH - Shower Tag
- DFH - Drinking Fountain tag
- BTB - Bath Tub Tag
- HBH - Hose Bib Tag
- WHH - Wall Hydrant Tag
- WME - Washing Machine Tag
- DWR - Dish Washer Tag

GENERAL NOTES AND CONDITIONS

1. CONTRACTOR SHALL CHECK AND VERIFY DATA NOTED HEREIN WITH SITE CONDITIONS AND SHALL BE RESPONSIBLE FOR REPORTING ANY AND ALL DISCREPANCIES TO THE DESIGNER PRIOR TO SUBMISSION OF TENDER BID AND COMMENCEMENT OF CONSTRUCTION.
2. CONTRACTOR SHALL PROVIDE ALL SHOP DRAWINGS REQUIRED TO COMPLETE THE PROJECT AND SHALL SUBMIT THESE TO SMES FOR REVIEW.
3. ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF SMES AND CANNOT BE USED OR DUPLICATED WITHOUT WRITTEN AUTHORIZATION OF THE CONSULTANT.
4. ALL DRAWINGS AND SPECIFICATIONS SHALL BE RETURNED TO SMES AFTER PROJECT COMPLETION. CONSTRUCTION TO PROCEED ONLY ON WRITTEN AUTHORIZATION.
5. THE DRAWINGS SHOW THE GENERAL INTENT OF THE WORK NOT THE DETAILS OF INSTALLATION. COORDINATE THE ROUTING AND INSTALLATION OF MECHANICAL SERVICES WITH EXISTING CONDITIONS, STRUCTURE AND THE WORK OF ALL OTHER TRADES.
6. DO NOT SCALE MECHANICAL DRAWINGS. REFER TO ARCHITECTURAL OR INTERIOR DESIGN DRAWINGS FOR THE EXACT LOCATION OF ANY DEVICE, FEATURE ETC. AND COORDINATE ALL REQUIREMENTS.

HVAC GENERAL NOTES

1. ALL MECHANICAL EQUIPMENT AND INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, AND ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
2. ALL EQUIPMENT TO BEAR THE CSA AND ULC LABELS.
3. PRIOR TO PURCHASING ANY MATERIALS OR STARTING ANY WORK, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, VERIFY ALL LOCATIONS, ROUTING, PENETRATIONS AND SIZES DUCT, PIPE, EQUIPMENT ETC. SHOWN ON THE DRAWINGS OR AFFECTING THIS WORK AND SHALL REPORT ANY DEVIATIONS TO THE CONSULTANT.
4. CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT OR SUBMITTING SHOP DRAWINGS AND SHALL FURNISH EQUIPMENT WIRING FOR THE VOLTAGES SHOWN THEREIN.
5. ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH A METHOD OF DISCONNECTION AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE, FUSED OR NON-FUSED WITH EQUIPMENT CHARACTERISTICS, MANUFACTURER'S RECOMMENDATIONS AND ELECTRICAL DRAWINGS.
6. ALL REQUIRED CONTROL WIRING NOT SHOWN ON THE ELECTRICAL NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK. ALL CONTROL WIRING INCLUDING THERMOSTAT WIRING BE PLENUM RATED WHERE RUNNING IN RETURN AIR PLENUMS.
7. UNLESS OTHERWISE NOTED, STARTERS, SMOKE DETECTORS, TRANSFORMERS, CONTROLS AND CONTROL WIRING REQUIRED FOR ALL MECHANICAL SYSTEMS SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
8. ALL MECHANICAL SYSTEMS AND EQUIPMENT SHALL BE QUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY OWNER.
9. ALL HVAC COMPRESSORS SHALL HAVE AN EXTENDED 5 YEAR MANUFACTURER'S WARRANTY.
10. CONNECTIONS TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS, TRANSITIONS TO ALL EQUIPMENT SHALL BE VERIFIED AND PROVIDED FOR EQUIPMENT FURNISHED.
11. DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD AND ASHRAE GUIDELINES.
12. SEE SPECIFICATIONS FOR GAUGES, THICKNESS, BRACING, REQUIREMENTS, ETC. OF DUCTWORK.
13. UNLESS OTHERWISE NOTED PROVIDE AIR TURNING VANES AT 90 DEGREE RECTANGULAR DUCT.
14. DUCT SIZES AND ALL OPENINGS THROUGH BUILDING CONSTRUCTION SHALL SUIT EQUIPMENT FURNISHED.
15. COORDINATE ALL DIFFUSER, GRILLE AND REGISTER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND EQUIPMENT OF ALL TRADES.
16. LOCATE THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS AND HUMIDITY SENSORS AT 48" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. COORDINATE LOCATIONS WITH OTHER EQUIPMENT, FURNITURE, AND DOOR SWINGS.
17. ALL EQUIPMENT, DUCTWORK, ETC. SHALL BE SUPPORTED AS DETAILED AND AS SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.
18. REFER TO TYPICAL DETAILS FOR PIPING AND INSTALLATION OF EQUIPMENT.
19. PROVIDE 1" CONDENSATE DRAINS FROM ALL AIR CONDITIONING EQUIPMENT, HRV, AHU'S, HUMIDIFIERS, COOLING COILS ETC. TO NEAREST LOCAL DRAIN, GRADE PIPING IN DIRECTION OF DRAIN. PROVIDE CONDENSATE PUMPS WHERE GRADE OR OBSTRUCTIONS PREVENT SUFFICIENT PIPE GRADING.
20. ACCESS PANELS IN DUCTWORK AND CEILING SHALL BE PROVIDED WHERE REQUIRED FOR OPERATIONS, BALANCING OR MAINTENANCE OF MECHANICAL EQUIPMENT. NOTE THAT WHERE REMOVABLE CEILING PANELS ACCESS DOORS/PANELS ARE REQUIRED.
21. ALL DUCTWORK AND PIPING IS SHOWN SCHEMATICALLY. PROVIDE ALL TRANSITIONS, TURNING VANES, ELBOWS, FITTINGS ETC. TO ALLOW SMOOTH FLOWS.
22. PROVIDE CONCRETE HOUSEKEEPING PAD UNDER ALL FLOOR. MOUNTED EQUIPMENT, REFER TO SPECIFICATIONS AND DETAILED DRAWINGS REQUIREMENTS.
23. VERIFY ALL FINISHES WITH ARCHITECT PRIOR TO PURCHASING ANY/ALL DIFFUSERS, GRILLES, REGISTERS, LOUVERS AND DISTRIBUTION DEVICES.
24. PROVIDE FLEXIBLE DUCT CONNECTIONS ON ALL DUCTWORK CONNECTION TO EACH FAN, AIR HANDLING UNITS, AND FAN COIL UNITS AND ANY OTHER EQUIPMENT CAPABLE OF TRANSMITTING VIBRATIONS CONNECTED WITH DUCTWORK.
25. INTERRUPTIONS TO EXISTING SERVICES SHALL BE SCHEDULED FOR TIMES OTHER THAN NORMAL OPERATING HOURS (SUCH AS NIGHTS AND WEEKENDS), SUCH INTERRUPTIONS TO EXISTING SERVICES SHALL NOT BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE AND PROPER COORDINATION WITH OTHER TRADES. PRE-WORK SHALL BE PERFORMED TO MAKE THE SHUTDOWN PERIOD AS BRIEF AS POSSIBLE.
26. ALL EQUIPMENT, DUCTWORK, ETC. TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER OR DISPOSED OF LEGALLY, AS DIRECTED BY OWNER. ALL OPENINGS CREATED BY THE REMOVAL PROCESS TO BE PROPERLY SEALED AND MATCH ALL EXISTING RATINGS.
27. FIRE STOP ALL PENETRATIONS THROUGH RATED ASSEMBLIES WITH EQUIPMENT MATCHING WALL/FLOOR ASSEMBLY'S FIRE RATING. CONFIRM WITH ARCHITECTURAL DRAWINGS FOR EXACT RATINGS AND LOCATIONS.
28. LOCATE ALL OUTSIDE AIR INTAKES A MINIMUM OF 10'-0" FROM ANY/ALL PLUMBING VENTS AND EXHAUSTS AIR DISCHARGE LOCATIONS. LOWEST POINT OF EACH OUTSIDE AIR INTAKE GOOSENECK ON ROOF SHALL BE A MINIMUM OF 36" ABOVE ROOF.
29. UNLESS OTHERWISE NOTED, ALL EQUIPMENT AND VALVE DRAINS SHALL BE INDEPENDENTLY PIPED AT FULL SIZE TO THE NEAREST PLUMBING DRAIN CONFIRM AND COORDINATE EXACT ROUTING AND LOCATIONS ON SITE.
30. SLEEVE AND SEAL ALL PIPING PENETRATIONS THROUGH BUILDING PARTITIONS. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS IN CHILLED AND HOT WATER PIPING.
31. MAXIMUM ALLOWABLE LENGTH OF ALL FLEX DUCT TO BE 10'. RIGID DUCT TO BE AS CLOSE TO AIR TERMINAL DEVICE AS POSSIBLE PRIOR TO RUNNING FLEX DUCT.
32. SEAL ANY UNUSED PORTIONS OF INTAKE/EXHAUST LOUVERS WITH 2 LAYERS OF 2" RIGID INSULATION C/W SHEET METAL PANELING. ASSEMBLY TO BE APPROPRIATELY SEALED.
33. INSULATE ALL AIR INTAKE DUCTWORK AND ALL EXHAUST DUCTWORKS A MINIMUM OF 1" FROM EXHAUST LOUVER.
34. PROVIDE BALANCING DAMPERS FOR ALL NEW DUCTWORK THAT THE BRANCH CONNECTIONS. ENSURE ADEQUATE ACCESS AVAILABLE IF NOT THEN ACCESS TO BE PROVIDED AS PART OF THE SCOPE OF WORK. PROVIDE VOLUME DAMPERS FOR ALL SUPPLY AIR DIFFUSERS, GRILLES OR REGISTERS AS DETAILED IN THE ASSOCIATED SCHEDULES.
35. PROVIDE VIBRATION ISOLATION FOR ALL SUSPENDED EQUIPMENT.

PLUMBING GENERAL NOTES

1. INSTALLATION SHALL BE IN ACCORDANCE TO THE ONTARIO BUILDING CODE, ANWA STANDARDS/GUIDELINES AND ALL AUTHORITIES HAVING JURISDICTION.
2. CONTRACTOR SHALL VERIFY ALL TIE IN POINTS TO EXISTING PLUMBING, SANITARY AND VENT LINES PRIOR TO STARTING WORK.
3. CONTRACTOR TO PROVIDE ALL FITTINGS, ACCESSORIES, AND MATERIALS REQUIRED TO FACILITATE THE COMPLETION OF THE WORK INDICATED ON THE DRAWINGS AND SPECIFICATIONS.
4. ALL PIPING SHALL BE ROUTED ABOVE CEILING SPACE UNLESS OTHERWISE NOTED. ALL PIPING EXPOSED TO VIEW SHALL BE ROUTED AS HIGH AS POSSIBLE AND TIGHT TO THE UNDERSIDE OF THE STRUCTURE.
5. ALL PIPING SHALL BE CONCEALED IN WALL SPACE AND BEHIND FIXED FURNISHINGS (MILLWORK) UNLESS OTHERWISE NOTED.
6. ALL EXPOSED PIPING IN OCCUPIED AND FURNISHED AREAS SHALL BE CHROME PLATED WITH CHROME PLATED ESCUTCHEONS AT PIPE ENTRY INTO SPACE. ESCUTCHEONS TO COMPLETELY COVER ALL PENETRATIONS THROUGH ASSEMBLY.
7. SLEEVE OR CORE-DRILL FLOOR SLABS, WALLS ETC. AS REQUIRED FOR PIPING. VERIFY LOCATION OF ANY AND ALL STRUCTURAL BEAMS, JOISTS, ETC. PRIOR TO COMMENCEMENT OF DRILLING. CONFIRM AND COORDINATE ALL REQUIREMENTS AND CARRY ALL COSTS.
8. CONTRACTOR TO PROVIDE TEST PLUGS IN ALL PLUMBING AND SANITARY/VENT PIPING DURING CONSTRUCTION TO PREVENT ANY DEBRIS FROM ENTERING SYSTEM UNTIL FINAL PRODUCT IS INSTALLED.
9. WHEREVER FOUNDATIONS, EXTERIOR WALLS OR ROOFING SYSTEMS ARE PENETRATED FOR INSTALLATION OF SYSTEMS, THEY SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION AND SEALED WEATHER TIGHT.
10. ACCESS PANELS TO BE PROVIDED WHERE VALVES, CONTROL DEVICES, ETC. ARE CONCEALED WITHIN WALLS OR CEILING ASSEMBLIES. ALL DEVICES REQUIRING ACCESS FOR MAINTENANCE OR ADJUSTMENT SHALL BE MADE ACCESSIBLE.
11. ALL CONNECTIONS BETWEEN FERROUS AND NONFERROUS PIPING SHALL BE PROTECTED WITH AN ISOLATION, DIELECTRIC UNION/COUPLING.
12. FIRE STOP ALL PENETRATIONS THROUGH RATED ASSEMBLIES WITH RATED FIRE STOPPING EQUIPMENT/MATERIALS.
13. PROVIDE A METHOD OF ISOLATION FOR ALL DOMESTIC HOT AND COLD WATER BRANCHES OFF THE MAIN. ENSURE ADEQUATE ACCESS PROVIDED FOR ISOLATION DEVICES AS INDICATED ABOVE.
14. ALL PIPING, INSULATIONS, SANITARY AND VENT LINES RUN IN A PLENUM SPACE SHALL BE RATED FOR SUCH DUTY.

PLUMBING PIPE TYPES

- - - DOMESTIC COLD WATER
- - - DOMESTIC HOT WATER 140°F
- - - DOMESTIC HOT WATER 120°F
- - - DOMESTIC RECIRCULATING WATER
- - - SANITARY BELOW GRADE
- - - SANITARY ABOVE GRADE
- - - SANITARY VENT BELOW GRADE
- - - SANITARY VENT ABOVE GRADE
- - - STORM WATER BELOW GRADE
- - - STORM WATER ABOVE GRADE
- - - COMPRESSED AIR

HYDRONIC PIPE TYPES

- - - GAS LINE
- - - HOT WATER SUPPLY
- - - HOT WATER RETURN
- - - GLYCOL SUPPLY
- - - GLYCOL RETURN

HVAC DUCT TYPES

- - - EXHAUST DUCT
- - - RETURN DUCT
- - - SUPPLY DUCT

PLUMBING SYMBOLS

- BACK FLOW PREVENTER
- CHECK VALVE
- BACK WATER VALVE
- BALL VALVE
- BALANCING VALVE
- PRESSURE REGULATING VALVE
- PRESSURE RELIEF VALVE
- CONTROL VALVE
- MIXING VALVE
- CLEAN OUT
- CLEAN OUT IN FLOOR
- FLOOR DRAIN
- HOSE BIB
- P TRAP
- P TRAP WITH PRIMER
- PIPE DROP
- PIPE RISE
- PRESSURE GAUGE
- MIXING VALVE
- THERMOMETER
- WATER METER
- FIRE DAMPER WITH ACCESS PANEL
- BALANCING DAMPER

EQUIPMENT TAG & REFERENCE LEGEND

- PRODUCT TAG 1 AIR DISTRIBUTION DEVICE
- LENGTH (FT) 250
- PRODUCT TAG 2 HYDRONIC BASEBOARD TAG
- OUTPUT (BTU/H) 3500
- VIEW REFERENCE 3 DRAWING REFERENCE CALLOUT
- SHEET REFERENCE 40000
- HOSE BIB 1 DRAWING NOTE REFERENCE NUMBER
- P TRAP 2 DRAWING REVISION REFERENCE NUMBER
- PIPE DROP 3
- PIPE RISE 4
- PRESSURE GAUGE 5
- THERMOMETER 6
- WATER METER 7
- FIRE DAMPER WITH ACCESS PANEL 8
- BALANCING DAMPER 9

1. THESE DRAWINGS MUST BE CHECKED BY THE CUSTOMER OR CONTRACTOR. ANY ERRORS OR OMISSIONS MUST BE REPORTED IN WRITING TO STEENHOF BUILDING SERVICES GROUP PRIOR TO COMMENCEMENT OF CONSTRUCTION.

2. OWNER OR CONTRACTOR MUST CHECK AND VERIFY ALL SITE CONDITIONS BEFORE PROCEEDING WITH THE WORK.

3. ALL DIMENSIONS SHOWN ON THESE DRAWINGS MUST BE CHECKED AGAINST ALL OTHER PROJECT DRAWINGS. ALL DISCREPANCIES MUST BE REPORTED TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.

4. FOR CONSTRUCTION PURPOSES, USE ONLY THE LATEST APPROVED DRAWINGS LABELLED 'ISSUED FOR CONSTRUCTION'.

5. DO NOT SCALE THE DRAWINGS.

6. DIMENSIONS ARE TO THE INSIDE FACE OF STUDO AND OUTSIDE FACE OF EXTERIOR FINISHED U.A.D.

TRUE NORTH	PROJECT NORTH
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REVISION SCHEDULE

No.	DESCRIPTION	DATE
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Project Status: **ISSUED FOR REVIEW**

Scale:

Steenhof Building Services Group
126 Mississauga Street East
Orillia, ON L3V 1V7
Tel: 705-325-5400 Fax: 705-325-9400
Website: www.steenhofbuilding.com

Project: **CARLING COMMUNITY HALL**

Address: 2 CARLING BAY WEST ROAD, CARLING, ONTARIO

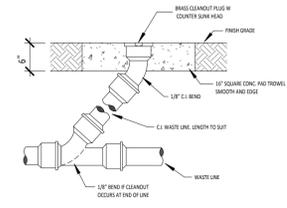
Project No: **17-023**

Drawn By: BR Date: JUNE 2017

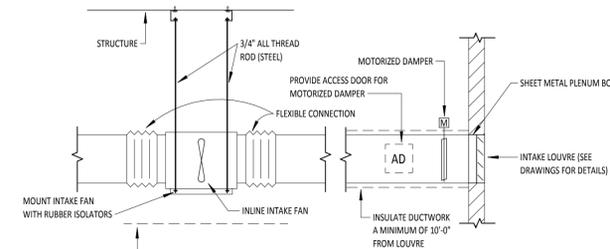
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Drawing No.: **M000**

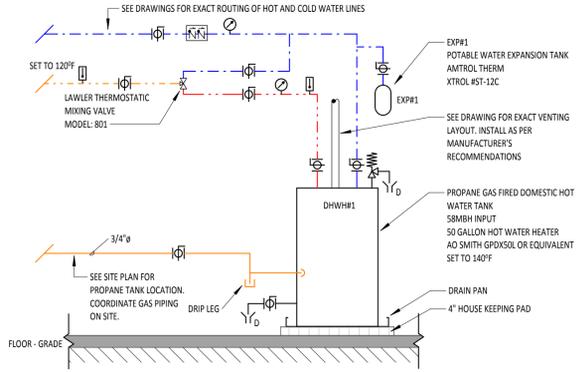
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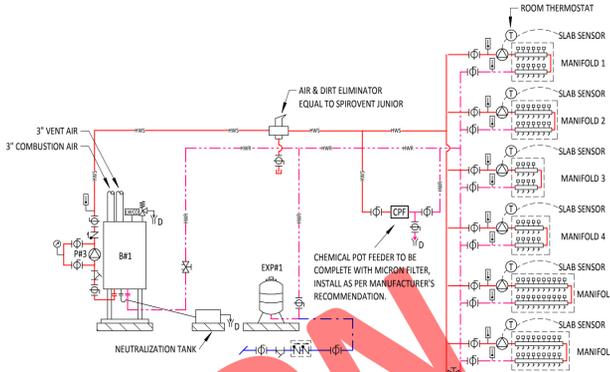
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N.T.S.



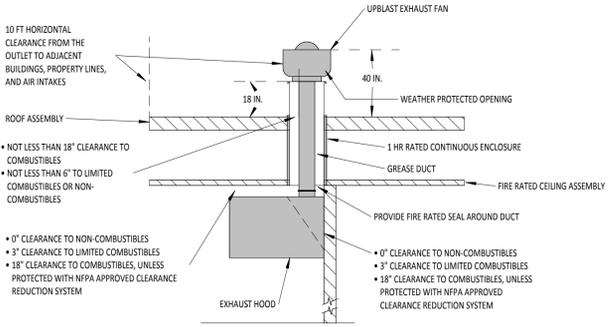
2 INLINE INTAKE FAN DETAIL
N.T.S.



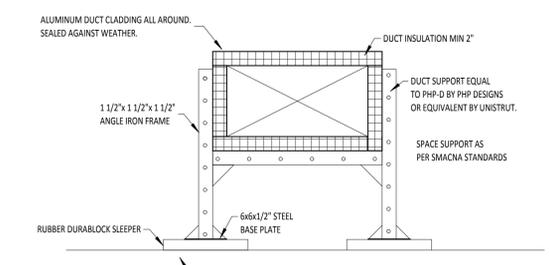
3 DOMESTIC HOT WATER HEATER DETAIL
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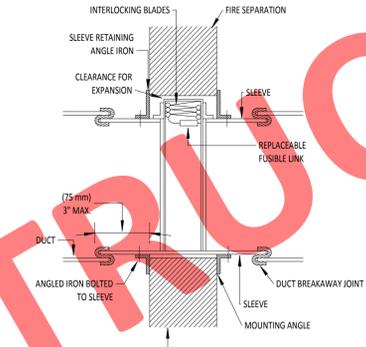
4 BOILER & HEADER RISER CONNECTION TO DHW PRIORITY LOOP
N.T.S.



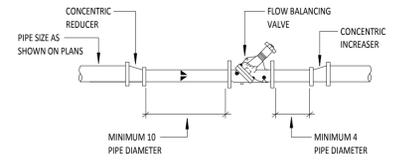
5 TYPICAL SECTION VIEW FOR ONE-STORY BUILDING WITH FIRE RATED ROOF-CEILING ASSEMBLY
N.T.S.



6 DUCT SUPPORT DETAIL
N.T.S.



7 FIRE DAMPER INSTALLATION
N.T.S.



8 FLOW BALANCING VALVE INSTALLATION
N.T.S.

Heater Schedule								
Tag	Manufacturer	Model	Heating Capacity (KW)	AirFlow (CFM)	Motor (V/Hz/Ph)	MOCP	Notes	Accessories
DHW1	Neptronic	DFC00H				1		A

NOTES
1. ENSURE DUCT HEATER MODULATES BASED ON INLET AIR TEMPERATURE AND SET TEMPERATURE REQUIREMENT FROM ROOM THERMOSTAT.

ACCESSORIES
A. PROVIDE WITH MODULATING SCR CONTROL, ELECTRONIC AIRFLOW SWITCH, THERMOSTAT AND DUCT SENSOR.

ERV Schedule								
Tag	Manufacturer	Model	E.S.P. (IN W.C.)	Supply Airflow (CFM)	Return Airflow (CFM)	Motor (V/Hz/Ph) MOCP	Notes	Accessories
ERV1	Lifebreath	1230ERV	0.4	1050	1050	120V/60Hz/SP MCA: 23.5 MOCP: 30A	1, 2, 3	A, B

NOTES
1. FRESH AIR AND EXHAUST AIR DUCTWORK TO BE INSULATED TO UNIT.
2. PROVIDE STRUCTURAL FRAME FOR WALL/ROOF MOUNTING COMPLETE WITH VIBRATION ISOLATION.
3. COORDINATE ERV CONTROL TIE-IN TO AIR HANDLING UNIT.

ACCESSORIES
A. MOTORIZED DAMPERS ON FRESH AIR SUPPLY AND EXHAUST.
B. DISCONNECT SWITCH AND AIR FILTERS.

Fan Schedule							
Tag	Manufacturer	Model	AirFlow (CFM)	Static Pressure (in. W.G.)	Motor (V/Hz/Ph)	Notes	Accessories
F#1	Jenco Fans	SQB12-15	2700	0.50	(115V/60Hz/1Ph) 1.5HP	1	A
F#2	Rupp Air	BOV18RA	3000	1.25	(230V/60Hz/3Ph) FLA: 4.2A	1	B

NOTES
1. INSTALL HOOD AS PER NFPA 96
2. FIRE SUPPRESSION CONTRACTOR TO COMPLETE INSTALLATION, TEST AND CERTIFY FIRE SUPPRESSION SYSTEM.

ACCESSORIES
A. PROVIDE A GREASE FILTER, LEFT AND RIGHT END PANELS AND FIRE SUPPRESSION.

Boiler Schedule								
TAG	Manufacturer	Model	Fuel Type	Heating Capacity - Input/Output (BTU/hr)	Design Temperature - Supply/Return (°F)	Elec. Info (V/Hz/Ph) MOCP	Notes	Accessories
B#1	Triangle Tube	Prestige Solo 250	Propane	222000.0 Btu/h				

Cooling Unit Schedule							
Tag	Manufacturer	Model	Cooling Capacity (TONS)	AirFlow (CFM)	Elec. Info (A/V/Hz/Ph) MOCP	Notes	Accessories
AC#1	LG	LSN120H014	1 ton	353 CFM			A
CU#1	LG	LSU120H014	1 ton		10A/208V/60Hz/SP MOCP: 15A	1	B

NOTES
1. MOUNTED ON CONCRETE HOUSE KEEPING PAD OUTDOORS.

ACCESSORIES
A. PROGRAMMABLE AIR CONTROL, WINTER START CONTROL, START ASSIST, LIQUID LINE SOLENOID VALVE, LOW AMBIENT KIT
B. PROVIDE WALL THERMOSTAT

Air Handling Unit Schedule											
Type Mark	Manufacturer	Model	AirFlow (CFM)	Static Pressure (in. W.C.)	Heating Capacity (Btu/hr)	Cooling Capacity (Tons)	Filter	Electrical Info (V/Ph/Hz) MCA: MOCP:	Unit Weight (lbs)	Notes	Accessories
AHU#1	Carrier	48A45020ELW12ERC	8000 CFM	0.5	350/283	20.0 ton		(575V/3Ph/60Hz) MCA: 54A MOCP: 60A	4047	1	A, B

NOTES
1. TIE IN CONTROLS FOR INLINE AND EXHAUST FANS FOR SIMULTANEOUS OPERATION.

ACCESSORIES
A. PROVIDE WITH WEATHERPROOF LOUVRE, MOTORIZED DAMPER, SPEED CONTROLLER AND DISCONNECT.
B. PROVIDE WITH ROOF CURB, VARIABLE SPEED CONTROL, GREASE BOX, BACK DRAFT DAMPER AND DISCONNECT

Exhaust Hood Schedule							
Type Mark	Manufacturer	Model	Unit Length	Total CFM	Notes	Accessories	
EHW#1	Rupp Air	5424 R-ND-2	13' 4"	3000 CFM	1	A	

NOTES
1. INSTALL HOOD AS PER NFPA 96
2. FIRE SUPPRESSION CONTRACTOR TO COMPLETE INSTALLATION, TEST AND CERTIFY FIRE SUPPRESSION SYSTEM.

ACCESSORIES
A. PROVIDE A GREASE FILTER, LEFT AND RIGHT END PANELS AND FIRE SUPPRESSION.

- THESE DRAWINGS MUST BE CHECKED BY THE CUSTOMER OR CONTRACTOR. ANY ERRORS OR OMISSIONS MUST BE REPORTED IN WRITING TO STEENHOF BUILDING SERVICES GROUP PRIOR TO COMMENCEMENT OF CONSTRUCTION.
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- DIMENSIONS ARE TO THE INSIDE FACE OF STUD AND OUTSIDE FACE OF EXTERIOR FINISHED U.O.D

TRUE NORTH PROJECT NORTH

REVISION SCHEDULE

No.	DESCRIPTION	DATE
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Project Status:
PRELIMINARY

Scale:



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126 Mississauga Street East
Orillia, ON L3V 1V7
Tel: 705-325-5400 Fax: 705-325-8400
Website: www.steenhofbuilding.com

Project:
CARLING COMMUNITY HALL

Address:
2 CARLING BAY WEST ROAD, CARLING, ONTARIO

Project No:
17-023

Drawn By: Author Date: JUNE 2017

Chkd By: NC Scale: As Indicated

Drawing No.:
M002

DETAILS & SCHEDULES

Dwg Title:

Revision:

NOT FOR CONSTRUCTION

N:\17_Progect\2017\17-023 - New Rupp Roof & Community Green/Drainage - MEP\17-023 Carling Community Center & Hall Rev04.rvt

Plumbing Fixture Self Input Schedule						
Tag	Fixture Name	DCW	DHW	Sanitary	Vent	Description
CS#1	Counter Sink #1	1/2"	1/2"	1 1/2"	1 1/4"	
CS#2	Double Compartment Sink	1/2"	1/2"	1 1/2"	1 1/4"	
CS#3	Triple Compartment Sink	1/2"	1/2"	1 1/2"	1 1/4"	
FD#1	Floor Drain			3"	1 1/4"	Provide with trap seal primer
HB#1	Hose Bib	1/2"				
LF#1	Group Wash Fountain	1/2"	1/2"	1 1/2"	1 1/4"	
LR#2	Lavatory	1/2"	1/2"	1 1/2"	1 1/4"	Provide barrier free installation
LR#3	Lavatory	1/2"	1/2"	1 1/2"	1 1/4"	
LR#4	Hand Washing Sink	1/2"	1/2"	1 1/2"	1 1/4"	
SH#1	Shower	1/2"	1/2"	3"	1 1/2"	Provide barrier free installation
SS#1	Mop Sink	1/2"	1/2"	3"	1 1/2"	
UR#1	Urinal	1/2"		2"	1 1/2"	
W/CR#1	Water Closet	1/2"		3"	1 1/2"	
W/CR#2	Water Closet	1/2"		3"	1 1/2"	Provide barrier free installation

SANITARY DRAWING NOTES

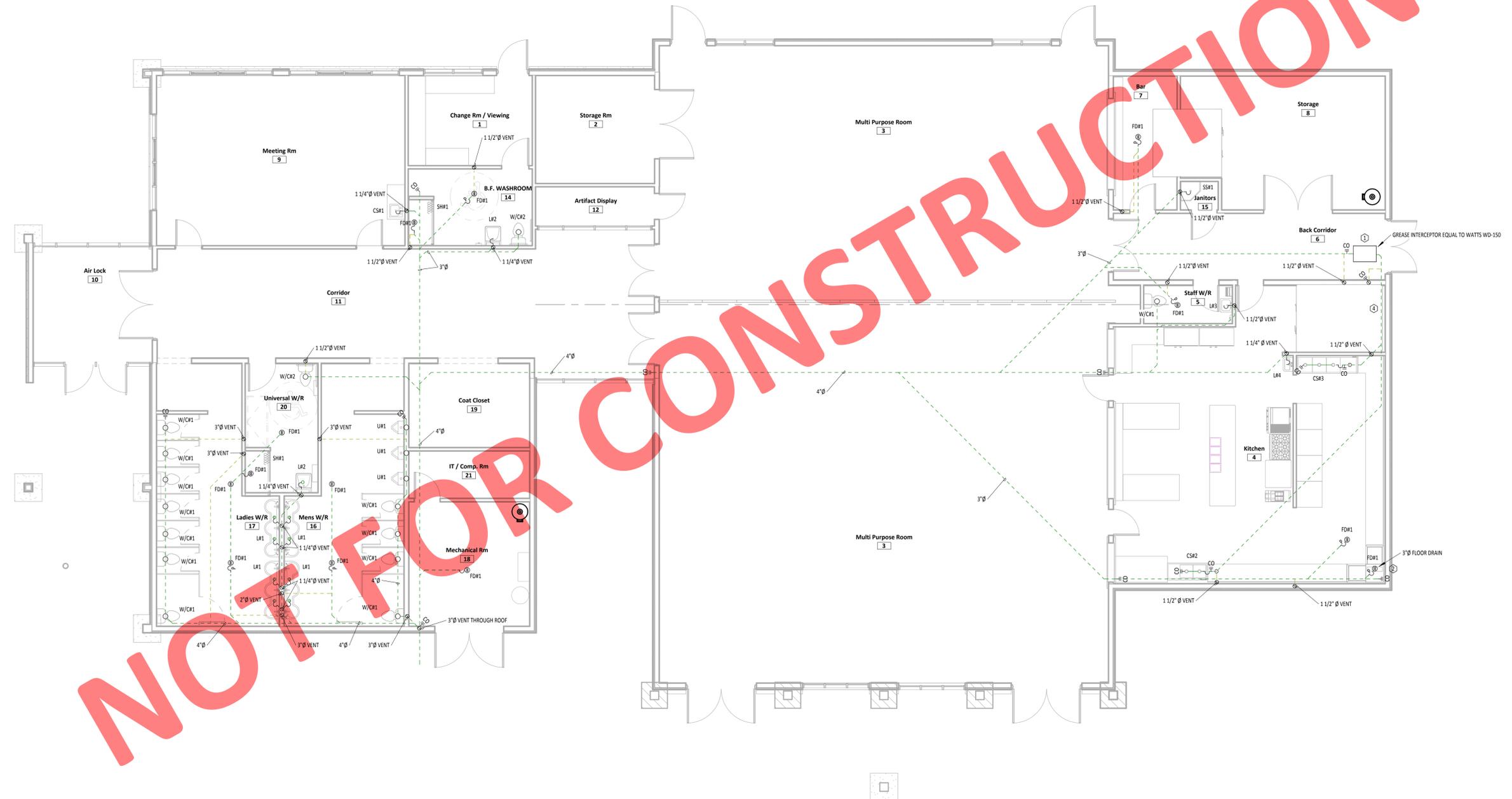
- GREASE INTERCEPTOR SHALL BE RECESSED AND INSTALLED SUCH THAT IT WILL NOT BECOME A TRIPPING HAZARD.
- PROVIDE INDIRECT CONNECTION FROM DISHWASHER DISCHARGE TO FLOOR DRAIN.
- ENSURE ALL CLEANOUTS ARE ACCESSIBLE.
- COORDINATE WALK IN FRIDGE INSTALLATION WITH SANITARY BELOW GRADE. ENSURE APPLIANCE IS MANUFACTURED AND TEMPERATURE RANGE IS SET SUCH THAT THERE IS NO RISK OF FREEZING THE SANITARY LINE.
- CONTRACTOR TO COORDINATE ALL VENT PIPE ROUTING WITHIN ATTIC SPACE AND ALL THROUGH ROOF TERMINATIONS.

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- ALL DIMENSIONS SHOWN ON THESE DRAWINGS MUST BE CHECKED AGAINST ALL OTHER PROJECT DRAWINGS. ALL DISCREPANCIES MUST BE REPORTED TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
- FOR CONSTRUCTION PURPOSES, USE ONLY THE LATEST APPROVED DRAWINGS LABELLED 'ISSUED FOR CONSTRUCTION'.
- DO NOT SCALE THE DRAWINGS.
- DIMENSIONS ARE TO THE INSIDE FACE OF STUD AND OUTSIDE FACE OF EXTERIOR FINISHED U.O.D.

TRUE NORTH PROJECT NORTH

REVISION SCHEDULE

No.	DESCRIPTION	DATE



NOT FOR CONSTRUCTION

Project Status:
ISSUED FOR REVIEW

Scale:



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Website: www.steenhofbuilding.com

Project:
CARLING COMMUNITY HALL

Address:
2 CARLING BAY WEST ROAD, CARLING, ONTARIO

Project No:
17-023

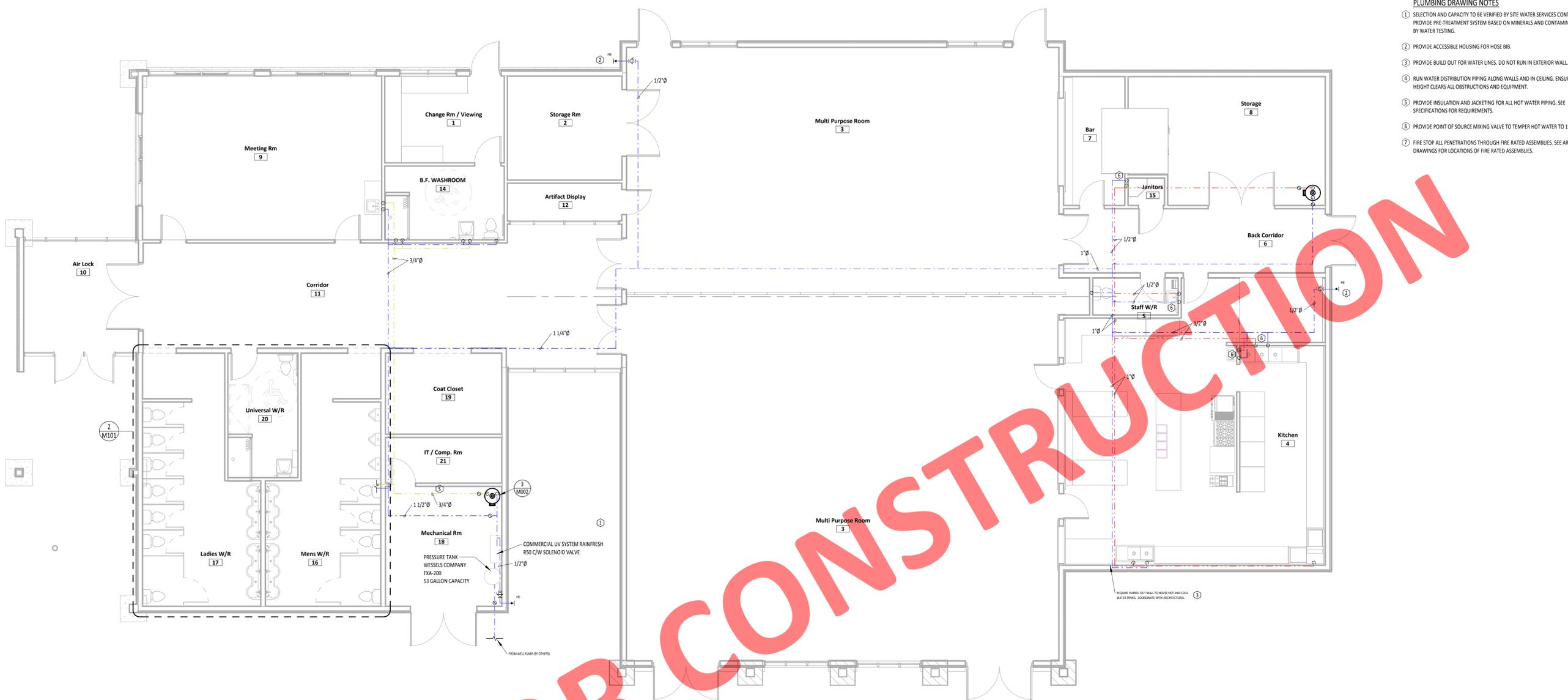
Drawn By: MS Date: JUNE 2017
Chkd By: NC Scale: As Indicated

Drawing No.:
M100

MECHANICAL SANITARY FLOOR PLAN

1 PLUMBING - SANITARY FLOOR PLAN
Scale: 1:75

N:\13_P\Projects\2017\17-023 - New Rm. Roof & Community Centre\Drawings - MEP\17-023 Carling Community Center & Rm. Roof.rvt



- PLUMBING DRAWING NOTES**
- SELECTION AND CAPACITY TO BE VERIFIED BY SITE WATER SERVICES CONTRACTOR. PROVIDE PRE-TREATMENT SYSTEM BASED ON MINERALS AND CONTAMINANTS FOUND BY WATER TESTING.
 - PROVIDE ACCESSIBLE HOUSING FOR HOSE BIB.
 - PROVIDE BUILD OUT FOR WATER LINES. DO NOT RUN IN EXTERIOR WALL.
 - RUN WATER DISTRIBUTION PIPING ALONG WALLS AND IN CEILING. ENSURE MOUNTING HEIGHT CLEARS ALL OBSTRUCTIONS AND EQUIPMENT.
 - PROVIDE INSULATION AND JACKETING FOR ALL HOT WATER PIPING. SEE SPECIFICATIONS FOR REQUIREMENTS.
 - PROVIDE POINT OF SOURCE MIXING VALVE TO TEMPER HOT WATER TO 120°F.
 - FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED ASSEMBLIES.

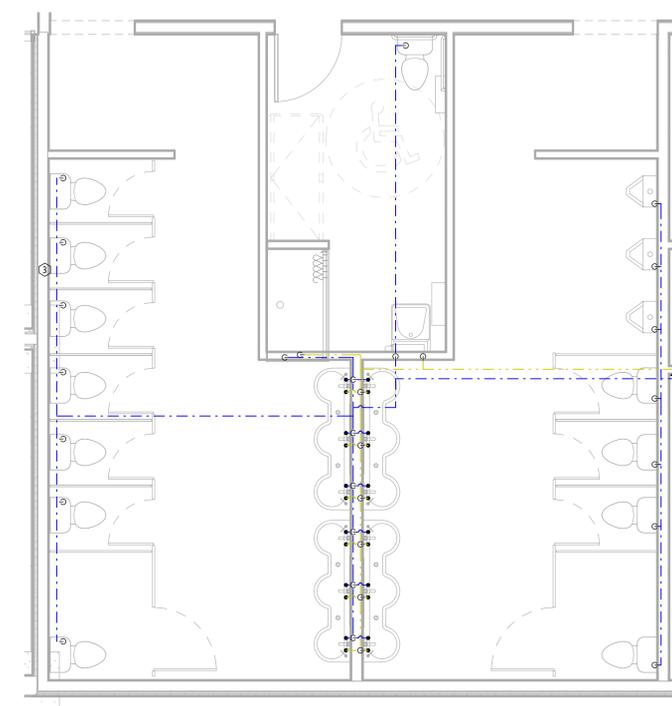
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TRUE NORTH PROJECT NORTH

REVISION SCHEDULE

No.	DESCRIPTION	DATE

1 PLUMBING - DOMESTIC WATER PLAN
 Scale: 1:75



2 ENLARGED DOMESTIC HOT & COLD WATER
 Scale: 1/4" = 1'-0"

NOT FOR CONSTRUCTION

Project Status:
ISSUED FOR REVIEW

Seal:



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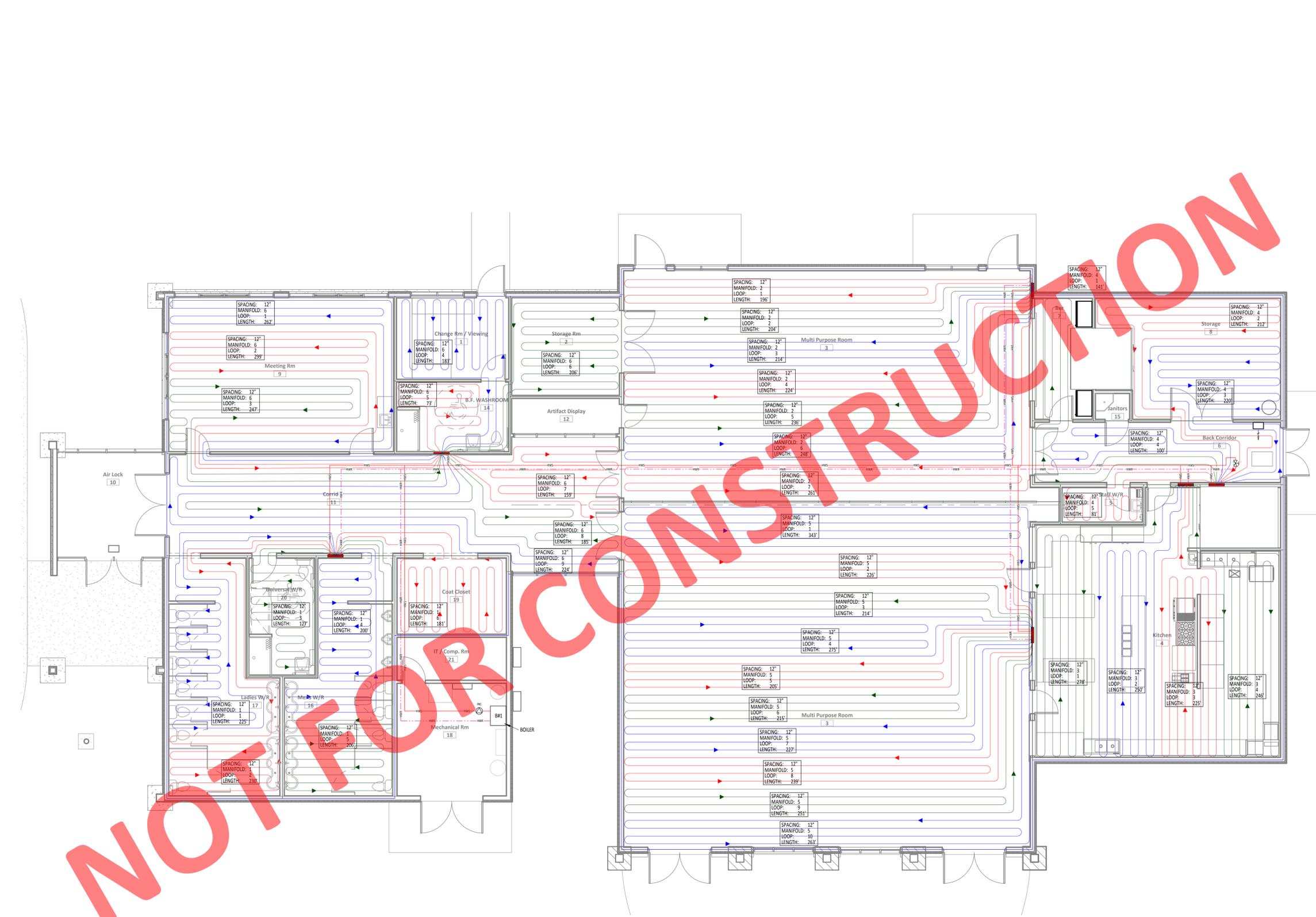
Project No:
17-023

Drawn By: MS Date: JUNE 2017
 Chkd By: N.C. Scale: As Indicated

Drawing No.:
M101

MECHANICAL HOT WATER AND DOMESTIC COLD WATER FLOOR PLAN

N:\17_P\17023\17-023 - New Rest Room & Community Centre\Drawings - MEP\17-023 Carling Community Center & Rest Room



1 RADIANT HEATING
Scale: 1:75

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TRUE NORTH PROJECT NORTH

REVISION SCHEDULE

No.	DESCRIPTION	DATE

Project Status:
PRELIMINARY

Seal:



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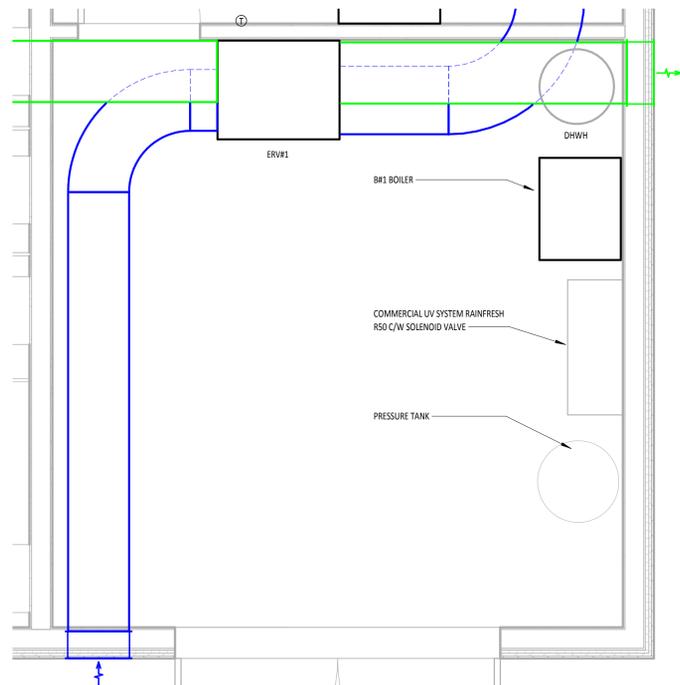
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Chkd By: Checker Scale: 1:75

Drawing No.:
M200

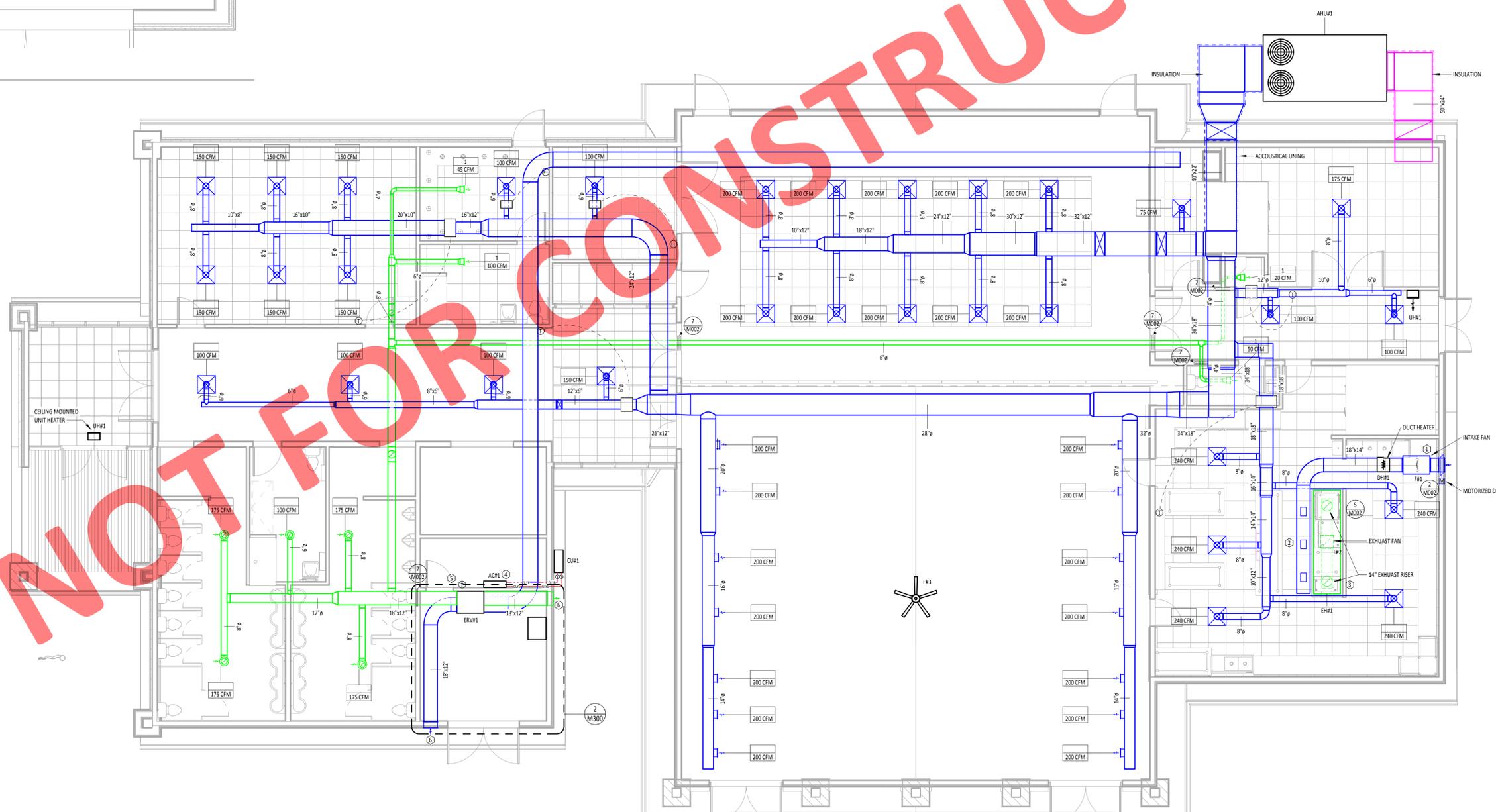
Revision:

HEATING & COOLING

N:\17_Progect\1717-023 - New Riv. Road & Community Centre\Drawings - MEP\17-023 Carling Community Center & Riv. Road.rvt



2 ENLARGED MECHANICAL ROOM
Scale: 1:25



1 MAIN FLOOR - RCP HVAC
Scale: 1:75

- HVAC DRAWING NOTES**
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 6. DIMENSIONS ARE TO THE INSIDE FACE OF STUD AND OUTSIDE FACE OF EXTERIOR FINISHED U.O.D.
 7. PROVIDE INSULATION FOR INTAKE FAN AND DUCTING TO DUCT HEATER.
 8. PROVIDE SUPPLY AIR PLENUM WITH ADJUSTABLE BLADE GRILLES.
 9. PROVIDE NFPA RATED HOOD WITH FIRE SUPPRESSION AS SPECIFIED. COORDINATE INSTALLATION OF PIPING, CONTROLS AND FIRE SUPPRESSION REQUIREMENTS WITH FIRE SUPPRESSION CONTRACTOR. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SUPPORT DETAILS AND REQUIREMENTS.
 10. PROVIDE CONDENSATE DRAIN LINE TO NEAREST FLOOR DRAIN.
 11. PROVIDE BALANCING DAMPERS OR ADJUSTABLE GRILLES AT ALL EXHAUST LOCATIONS.
 12. PROVIDE WEATHER HOODS WITH BUILT IN 1/4" MESH. ENSURE LOCATION OF INTAKE/EXHAUST CLEARS SNOW LINE. INSTALL AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 13. PROVIDE FIRE DAMPERS FOR ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED ASSEMBLIES.

TRUE NORTH	PROJECT NORTH
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PRELIMINARY

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17-023

Drawn By: BR Date: JUNE 2017
Chkd By: NC Scale: As Indicated

Dwg Title:
M300

Revision:

HVAC

NOT FOR CONSTRUCTION