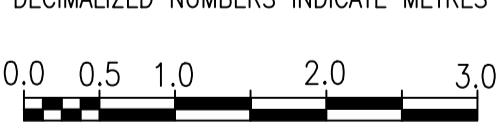


## DRAWING NOTES

1. NEW 450x450 INSULATED SUPPLY DUCTWORK C/W BACK DRAFT DAMPER. SUPPORT DUCT AT 2000mm O/C. REFER TO DETAILS. CONNECT DUCT TO NEW AHU. SUPPLY FLEXIBLE CONNECT AT AHU TO MINIMIZE VIBRATION.
2. INSTALL NEW AHU-C601 AND AHU-C602 ON MANUFACTURERS SUPPLIED EQUIPMENT CURBS. INSTALL VIBRATION ISOLATION AS PER MANUFACTURES RECOMMENDATIONS.
3. NEW 350x300 INSULATED SUPPLY DUCTWORK C/W BACK DRAFT DAMPER. SUPPORT DUCT AT 2000mm O/C. REFER TO DETAILS. CONNECT DUCT TO NEW AHU. SUPPLY FLEXIBLE CONNECT AT AHU TO MINIMIZE VIBRATION.
4. SUPPLY AND INSTALL NEW 300x300 EXHAUST DUCT. SUPPORT FROM BUILDING STRUCTURE AND ROOF DECK. REFER TO FAN MOUNTING FOR FAN DETAILS.
5. NEW FRP Ø500 DUCT TO BE SUPPORTED FROM BUILDING STRUCTURE.
6. SUPPLY AND INSTALL NEW CHLORINE SCRUBBER AND EXHAUST FAN PACKAGE. NEW Ø500 DUCT TO BE INSTALLED FROM SCRUBBER THROUGH EXISTING WALL OPENING.
7. INSTALL NEW Ø80 FLOOR DRAIN. HEAT TRACE DRAIN LINE BACK TO EXISTING EMBEDDED FLOOR DRAIN PIPING. REFER TO DETAIL.
8. SUPPLY AND INSTALL NEW 2kW WALL HEATER. CO-ORDINATE WITH ELECTRICAL TO SUPPLY POWER AND CONTROLS.
9. SUPPLY AND INSTALL NEW DELUGE EYE WASH/SAFETY SHOWER COMBINATION UNIT. FIELD RUN NEW TEMPERED WATER PIPING FROM NEW INSTANTANEOUS HOT WATER HEATER.
10. SUPPLY AND INSTALL NEW EXHAUST FAN. SUPPORT FAN FROM EXISTING STRUCTURE. REFER TO FAN CURB FOR FAN MOUNTING DETAIL. CO-ORDINATE WITH ELECTRICAL TO SUPPLY POWER AND CONTROLS.
11. RE-USE EXISTING 300x300 WALL OPENING FOR NEW EXHAUST DUCT. SUPPLY AND INSTALL 300x300 DUCT.
12. RE-USE EXISTING 300x1000 WALL OPENING FOR NEW EXHAUST DUCT. SUPPLY AND INSTALL 300x300 DUCT. INFILL REMAINING OPENING AND MAKE WEATHER TIGHT. REFER TO STRUCTURAL FOR INFILL DETAILS.
13. SUPPLY AND INSTALL NEW THERMOSTAT AND CONTROL WIRING FOR AHU-C601 AND AHU-C602.
14. EXISTING DRAINAGE PIPING TO REMAIN. EXISTING FLOOR DRAINS, IN CHLORINE STORAGE ROOM, TO BE ABANDONED AND FILLED OR REMOVED.
15. EXISTING CONTROL WIRING AND THERMOSTATS TO REMAIN. EXISTING ELECTRIC HEATER (NOT SHOWN) TO REMAIN.
16. EXISTING EYE WASH/SAFETY SHOWER TO REMAIN.
17. SUPPLY AND INSTALL NEW INSTANTANEOUS WATER HEATER. CONNECT TO EXISTING DCW. PIPE Ø40 TEMPERED WATER TO SAFETY SHOWER/EYEWASH.
18. SUPPLY AND INSTALL NEW Ø200 DUCT C/W 600x600 SPD DIFFUSER.
19. SUPPLY AND INSTALL NEW SUPPLY FAN C/W FLEXIBLE DUCT CONNECTORS. SUPPORT FAN FROM EXISTING STRUCTURE. SUPPLY AND INSTALL NEW DUCT HEATER AND THERMOSTAT. CO-ORDINATE WITH ELECTRICAL TO SUPPLY POWER AND CONTROLS.
20. RE-USE EXISTING 600x600 WALL OPENING FOR NEW EXHAUST DUCT. SUPPLY AND INSTALL 600x600 DUCT AND TRANSITION TO Ø500 EXTERIOR DUCT.
21. RE-USE EXISTING 1200x1500 WALL OPENING FOR NEW SUPPLY DUCT. SUPPLY AND INSTALL 450x450 DUCT. REFER TO STRUCTURAL FOR INFILL DETAILS.
22. RE-USE EXISTING 600x800 WALL OPENING FOR NEW SUPPLY DUCT. SUPPLY AND INSTALL 300x400 LOUVRE. REFER TO STRUCTURAL FOR INFILL DETAILS.
23. HEAT TRACE SANITARY DRAIN LINE. REFER TO DETAIL AND TO ELECTRICAL.
24. SUPPLY DAMPER VOLUME NOTED IS FOR EMERGENCY OPERATION. OCCUPIED OPERATION VOLUME TO BE 212 L/S AND UN- OCCUPIED VOLUME TO BE 0 L/S.
25. EXHAUST DAMPER VOLUME NOTED IS FOR OCCUPIED OPERATION. UN- OCCUPIED OPERATION VOLUME TO BE 163 L/S AND EMERGENCY VOLUME TO BE 0 L/S.
26. SUPPLY AND INSTALL NEW 600x600 MOTORIZED DAMPER.
27. SUPPLY DAMPER VOLUME NOTED IS FOR EMERGENCY OPERATION. OCCUPIED OPERATION VOLUME TO BE 0 L/S AND UN- OCCUPIED VOLUME TO BE 0 L/S.

## METRIC

WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES



## DESIGN CRITERIA:

THE BUILDING ENVIRONMENTAL HEATING/COOLING SYSTEMS SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED TO THE REQUIREMENTS OF THE MANITOBA BUILDING CODE AND VENTILATED AT A MINIMUM OF 6 AIR CHANGES PER HOUR (ACH) CONTINUOUSLY. MORE SPECIFICALLY AS FOLLOWS:

- OUTDOOR CONDITIONS OF -33°C IN WINTER.
- INDOOR CONDITIONS OF 21°C IN WINTER.

| GENERAL NOTES  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. DRAWING INFORMATION BASED ON HISTORICAL DRAWING AND SITE INVESTIGATIONS.</li> <li>2. INSULATION ON ALL EXISTING DOMESTIC WATER, FRESH AIR INTAKE, RAIN WATER LEADER, CONDENSATE AND DRAIN PIPE FITTINGS MAY CONTAIN ASBESTOS MATERIALS. REFER TO EXISTING ASBESTOS REPORTS TO CONFIRM.</li> <li>3. MASONRY BLOCK WALLS, CEILING OR WALL HARD PLASTERS AND CERAMIC FLOOR TILES MAY CONTAIN ASBESTOS.</li> <li>4. FLOW SWITCHES ARE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.</li> <li>5. BALANCE SUPPLY AND EXHAUST DAMPERS TO VOLUMES NOTED.</li> </ol> |  |

ENGINERS  
GEOSCIENTISTS  
MANITOBA  
Certificate of Authorization  
AtkinsRéalis Canada Inc.  
No. 4489

| AtkinsRéalis  |   | ENGINEER'S SEAL | THE CITY OF WINNIPEG  |
|---|---|-----------------|---|
| 148 Nature Park Way, Winnipeg, Manitoba<br>Canada R3P 0X7 | 204-786-8080                              |                 | Winnipeg<br>WATER AND WASTE DEPARTMENT  |
| DESIGNED BY:<br>T. SHAW                                   | CHECKED BY:<br>S. NORSWORTHY              |                 | MCPHILLIPS PUMPING STATION<br>CHLORINE SYSTEM UPGRADE<br>MECHANICAL<br>NEW WORK<br>MAIN FLOOR AND ROOF PLAN |
| DRAWN BY:<br>M. GAUDINO                                   | APPROVED BY:<br>S. NORSWORTHY             |                 |   |
| SCALE: AS NOTED   | ISSUED FOR CONSTRUCTION<br>BY: M. SKINNER |                 |   |
| DATE: 2023-03-06  | DATE: 2023/04/30                          |                 |   |
| NO. REVISIONS   | DATE DESIGN CHECK                         |                 | CONSULTANT NO.: 694715-3000-45DD-1002   |
| CITY DRAWING NUMBER<br>1-0640C-M0002                      |   | SHEET<br>001    | REV.<br>00  |
| SIZE<br>A1  |   |                 |   |