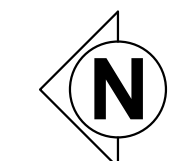


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Project: BID OPPORTUNITY 878-2021

PAN AM POOL UNIVERSAL  
CHANGE ROOM  
25 POSEIDON BAY

Sheet Title

**MAIN FLOOR - HVAC  
RENOVATION PLAN**

Project No. 21085

Date: 22-04-26

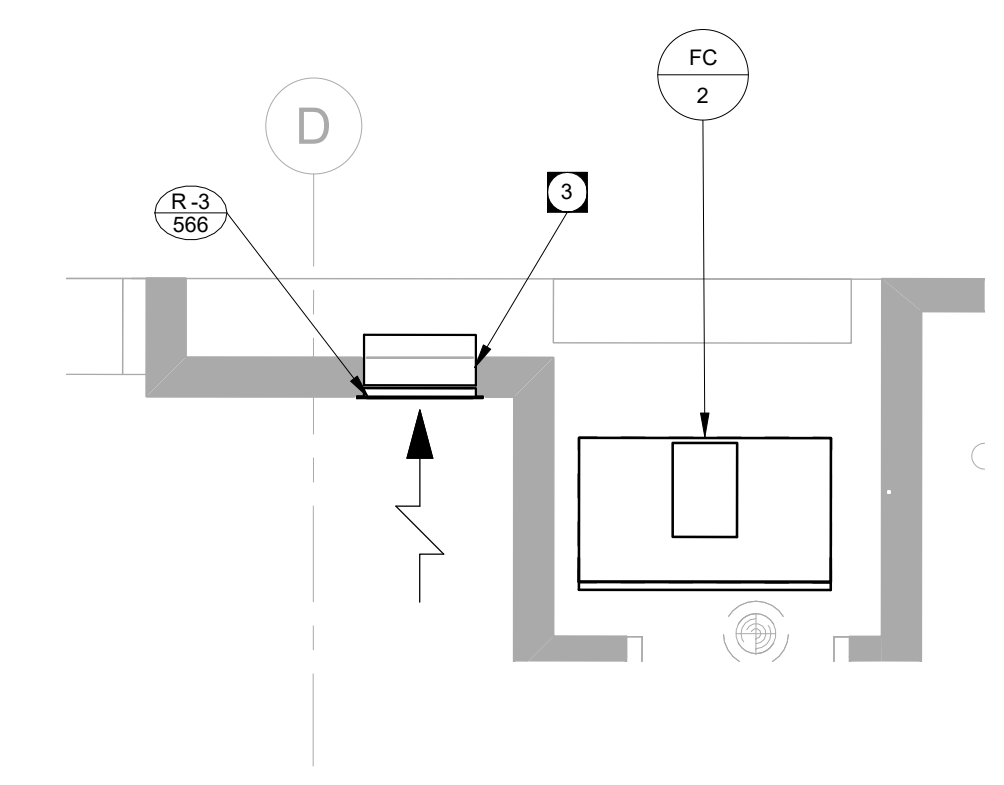
**MH2.2**

**HVAC GENERAL NOTES**

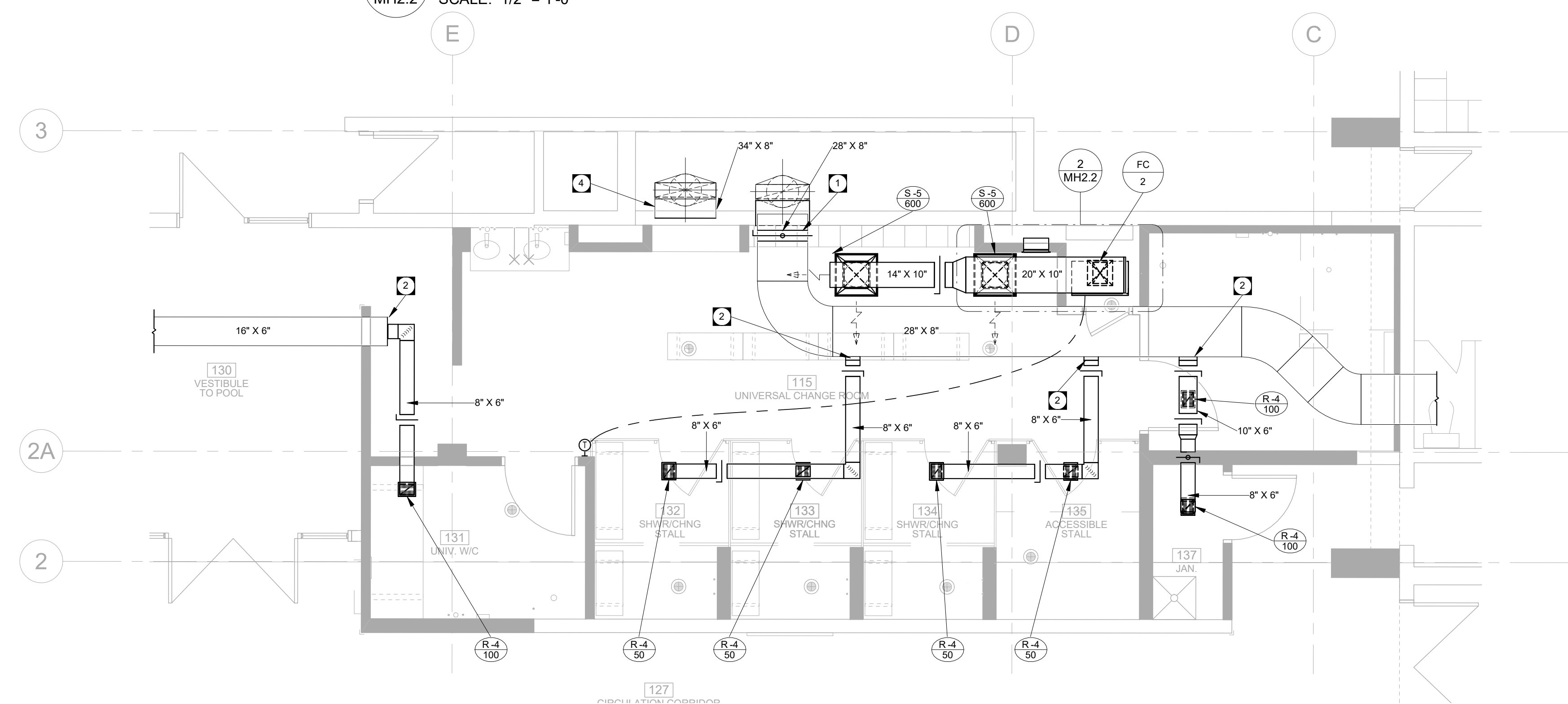
- A. FIRESTOP ALL MECHANICAL PENETRATIONS THROUGH FIRE-RATED FLOOR AND WALL ASSEMBLIES. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND TYPE OF RATINGS. DUCT TRANSITIONS MAY NOT BE SHOWN IN DETAIL. ON PLAN, REFER TO DETAILS SHEETS AND SMACNA - HVAC DUCT CONSTRUCTION STANDARDS FOR REQUIRED DUCT TRANSITIONS AND FITTINGS. ALL DUCT TAPS TO BRANCH DUCTS SHALL HAVE 45 DEGREE ENTRY FITTINGS.
- B. INSTALL FIRE DAMPERS ON ALL DUCTS PENETRATING FIRE RATED WALL ASSEMBLIES. COMPLETE WITH ACCESS DOORS. SEE STANDARD DETAIL. REFER TO ARCHITECTURAL DRAWING FOR WALL TYPES.
- C. ALL DUCTWORK SHALL BE SEALED AND INSULATED ACCORDING TO THE MECHANICAL SPECIFICATIONS.
- D. COORDINATE FINAL THERMOSTAT INSTALLATION HEIGHT AND DISTANCE FROM DOOR WITH ARCHITECT.
- E. REFER TO SPECIFICATION FOR ADDITIONAL STANDARD INSTALLATION DETAILS.
- F. DUCT INSULATION MATERIALS SHALL MEET SMOKE AND FLAME SPREAD REQUIREMENTS FOR PLENUM INSULATION.
- G. DUCT INSULATION SHALL FOLLOW THE SCHEDULES IN THE SPECIFICATION AS A MINIMUM REQUIREMENT. THESE REQUIREMENTS SHALL APPLY REGARDLESS OF WHETHER OR NOT DUCT INSULATION IS SHOWN ON THE DRAWINGS.
- H. WHERE DUCT INSULATION IS SHOWN ON THE DRAWINGS (EITHER WITH THE HATCHING CONVENTION OR BY MEANS OF A KEY NOTE) AND EXCEEDS THE REQUIREMENTS OF THE SCHEDULES IN THE SPECIFICATION, THE ADDITIONAL INSULATION REQUIREMENTS SHALL BE MET.
- I. PROVIDE MANUAL BALANCE DAMPERS FOR EACH EXHAUST, SUPPLY, AND RETURN GRILLE WHERE AN AIR VOLUME HAS BEEN PROVIDED.
- J. INSTALL BALANCE DAMPERS AS FAR AWAY FROM GRILLES OR DIFFUSERS SERVED AS PRACTICALLY POSSIBLE.
- K. INSTALL ALL BALANCE DAMPERS IN AN EASILY ACCESSIBLE LOCATION.
- L. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF GRILLES AND DIFFUSERS.
- M. REFER TO CONTROLS SCHEMATICS FOR REQUIREMENTS FOR SENSORS, ACTUATORS AND OTHER CONTROLS COMPONENTS.
- N. CONTRACTOR SHALL SCAN FOR REBAR AND CONDUIT AND PROVIDE RESULTS OF SCAN IN WRITING TO OWNER PRIOR TO CORING OR DRILLING IN ANY CONCRETE WALL OR FLOOR.
- O. AT DUCT HEATER INTAKE, INSTALL A MINIMUM OF 24" STRAIGHT DUCT. INSTALL A MINIMUM OF 30" OF DUCT BETWEEN DIFFUSER, GRILLE OR ACCESS DOOR AND DUCT HEATER DISCHARGE. INSTALL HEAT SUCH THAT THERE IS 24" CLEARANCE BETWEEN CONTROL BOX COVER AND ANY OBSTRUCTION.
- P. FRESH AIR INTAKES SHALL BE A MINIMUM OF 3 METERS FROM ALL EXHAUST DISCHARGES. COMPLETE WITH LOUVER, BACKDRAFT DAMPER AND BIRD SCREEN.

**KEY NOTES**

- 1. PROVIDE NEW FIRE DAMPER WHERE EXISTING EXHAUST DUCT PASSES INTO SHAFT ABOVE THE CEILING LEVEL.
- 2. CONNECT TO EXISTING EXHAUST DUCT.
- 3. NEW LOW LEVEL RETURN FOR FAN COIL. INSTALL BOTTOM OF GRILLE A MINIMUM OF 300MM A.F.F.
- 4. CAP EXISTING DUCT WITHIN WALL. GENERAL CONTRACTOR TO REPAIR OPENING AS PER ARCHITECTURAL REQUIREMENTS.



**2 MAIN FLOOR - LOW LEVEL PARTIAL PLAN**  
MH2.2 SCALE: 1/2" = 1'-0"



**1 MAIN FLOOR PARTIAL PLAN - HVAC**  
MH2.2 SCALE: 1/4" = 1'-0"

| CONDENSING UNIT SCHEDULE |             |                  |       |        |                             |          |
|--------------------------|-------------|------------------|-------|--------|-----------------------------|----------|
| MARK                     | UNIT SERVED | COOLING CAPACITY |       |        | ELECTRICAL CONDENSER (V/PH) | NOTES    |
|                          |             | (Btu/h)          | (kW)  | (tons) |                             |          |
| CU                       | 2           | FC-2             | 42100 | 12     | 3.5                         | 208/3/60 |

1. COMPLETE WITH A MINIMUM OF 1 STAGE DIGITAL SCROLL.

| DIFFUSER & GRILLES SCHEDULE |       |                   |   |
|-----------------------------|-------|-------------------|---|
| MARK                        | MODEL | NOTES             |   |
| S                           | 5     | 21X21/SMX/B12     | 1 |
| R                           | 3     | 34X14/730/FLA/B12 | 2 |
| R                           | 4     | 8x8/730/FLA/B12   | 2 |

1. DIRECTIONAL DIFFUSER. REFER TO DRAWING FOR FLOW ARROWS FROM DIFFUSERS FOR THE REQUIRED DIRECTIONAL PATTERN.  
2. STAINLESS STEEL EXHAUST GRILLE.

| FAN COIL SCHEDULE |       |             |                      |                           |                 |                  |         |        |         |         |                            |            |       |        |              |          |         |     |
|-------------------|-------|-------------|----------------------|---------------------------|-----------------|------------------|---------|--------|---------|---------|----------------------------|------------|-------|--------|--------------|----------|---------|-----|
| MARK              | MODEL | ZONE SERVED | SUPPLY AIRFLOW (cfm) | SUPPLY FAN E.S.P. (°w.c.) | HEAT INPUT (Pa) | COOLING CAPACITY |         |        |         | FILTERS | MAXIMUM DIMENSIONS (WxDxH) | ELECTRICAL | NOTES |        |              |          |         |     |
|                   |       |             | (L/s)                |                           |                 | (Btu/h)          | (kW)    | (tons) | (Btu/h) | (kW)    |                            | (mm)       | (in)  |        |              |          |         |     |
| FC                | 2     | LE          | 1200                 | 566                       | 0.75            | 187              | 44669.0 | 13     | 44669.0 | 13      | 3.7                        | 31048.0    | 9     | MERV-8 | 750x750x1800 | 30x30x60 | 120/160 | 1.2 |

1. ECM DRIVEN BLOWER, DIRECT DRIVE.  
2. UNIT IS VERTICAL ORIENTATION.

| FAN COIL SOUND POWER SCHEDULE |  |          |          |          |          |          |          |          |
|-------------------------------|--|----------|----------|----------|----------|----------|----------|----------|
| MARK                          | MAXIMUM SOUND POWER LEVELS (dB) (DISCHARGE/INLET/RADIATED) |          |          |          |          |          |          |          |
|                               | 63 Hz  | 125 Hz   | 250 Hz   | 500 Hz   | 1000 Hz  | 2000 Hz  | 4000 Hz  |          |
| FC                            | 2  | 92/80/70 | 90/81/68 | 81/70/60 | 77/69/51 | 78/68/54 | 73/59/50 | 75/56/34 |

| FAN COIL - COIL SCHEDULE |                       |                  |          |       |      |      |       |                               |      |      |      |        |       |    |    |    |        |     |
|--------------------------|-----------------------|------------------|----------|-------|------|------|-------|-------------------------------|------|------|------|--------|-------|----|----|----|--------|-----|
| MARK                     | HEATING COIL CAPACITY | COOLING CAPACITY |          |       |      |      |       | COOLING COIL AIR TEMPERATURES |      |      |      | MEDIUM | NOTES |    |    |    |        |     |
|                          |                       | TOTAL            | SENSIBLE | EDB   | EWB  | LDB  | LWB   | (°F)                          | (°C) | (°F) | (°C) |        |       |    |    |    |        |     |
|                          | (Btu/h)               | (kW)             | (Btu/h)  | (kW)  | (°F) | (°C) | (°F)  | (°C)                          | (°F) | (°C) | (°F) | (°C)   |       |    |    |    |        |     |
| FC                       | 2                     | 44669            | 13.1     | 44669 | 13.1 | 3.7  | 31048 | 9.1                           | 80   | 27   | 67   | 19     | 56    | 14 | 56 | 14 | R-410a | 1.2 |

1. PROVIDE WITH STAINLESS STEEL DRAIN PAN.  
2. PROVIDE WITH COATED COIL FOR POOL APPLICATION. REFER TO SPECIFICATIONS. VELOCITY OF COIL NOT TO EXCEED 450 FPM.