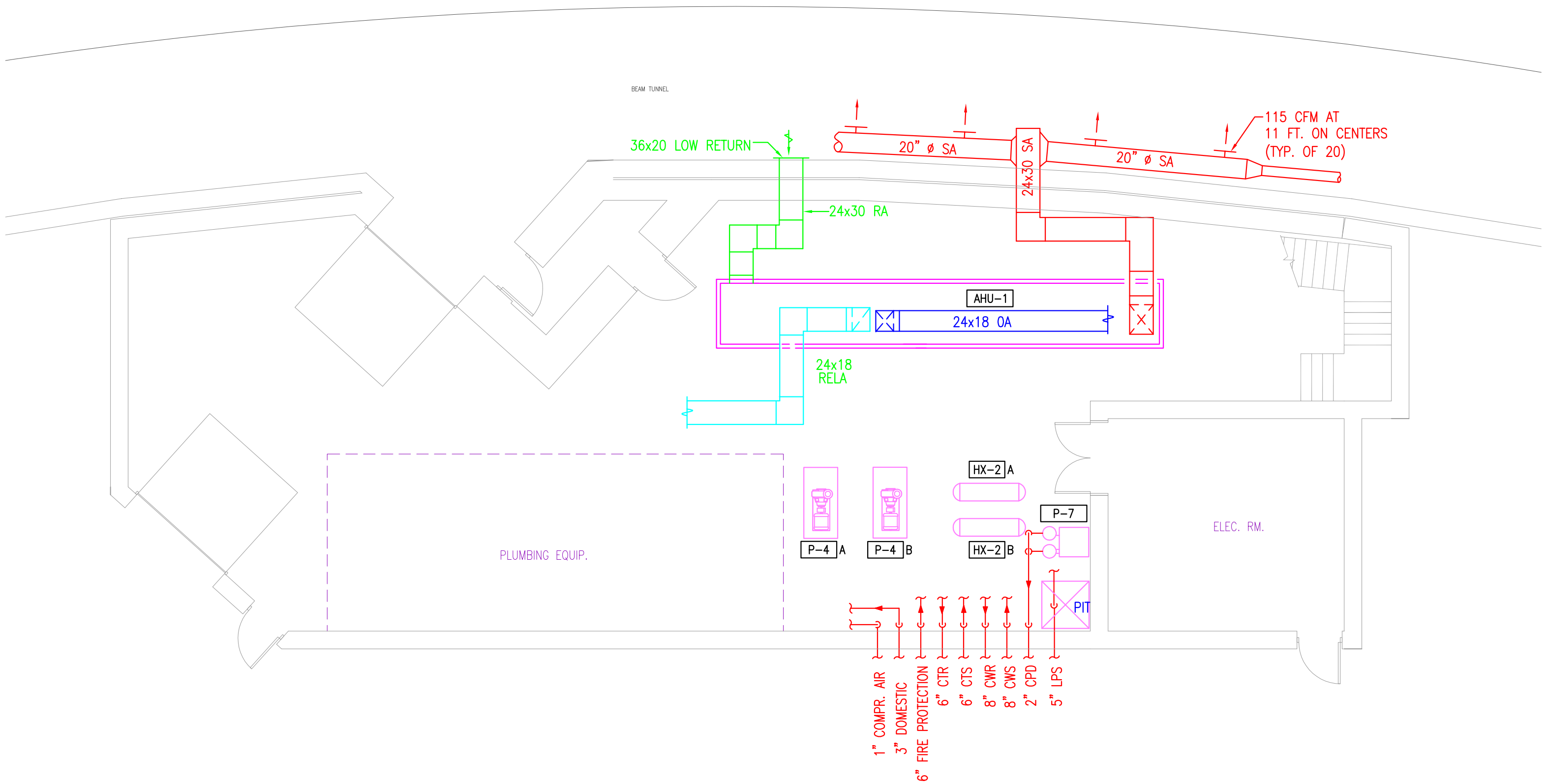
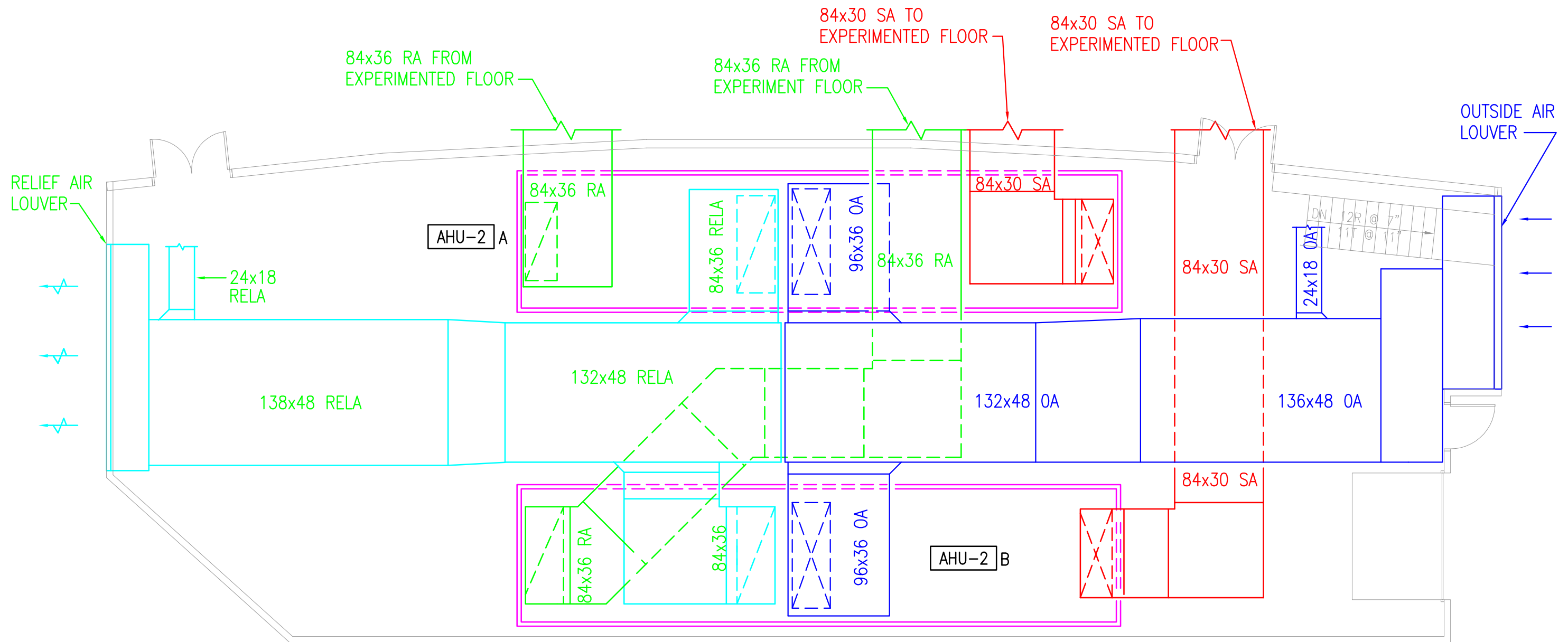
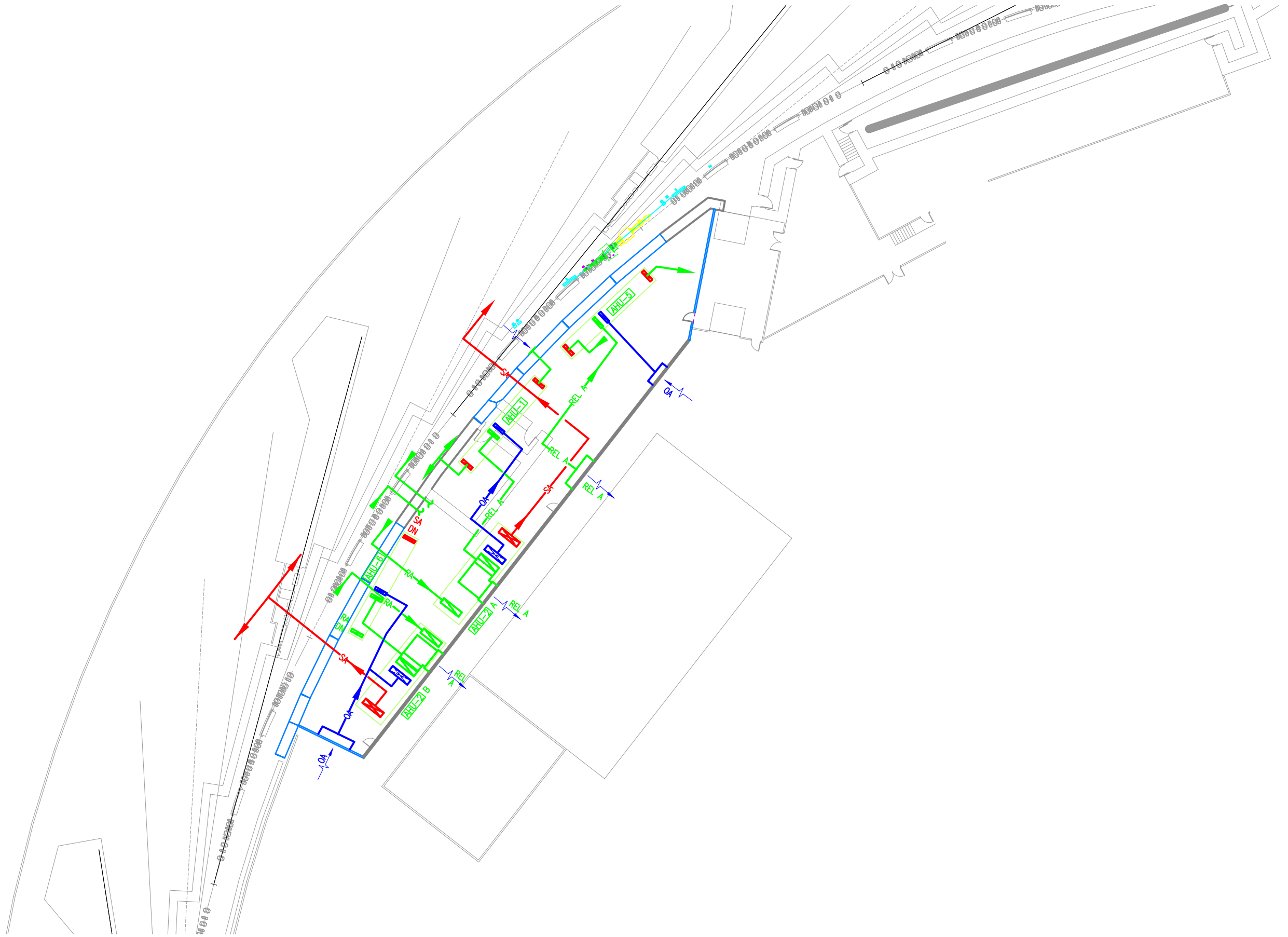


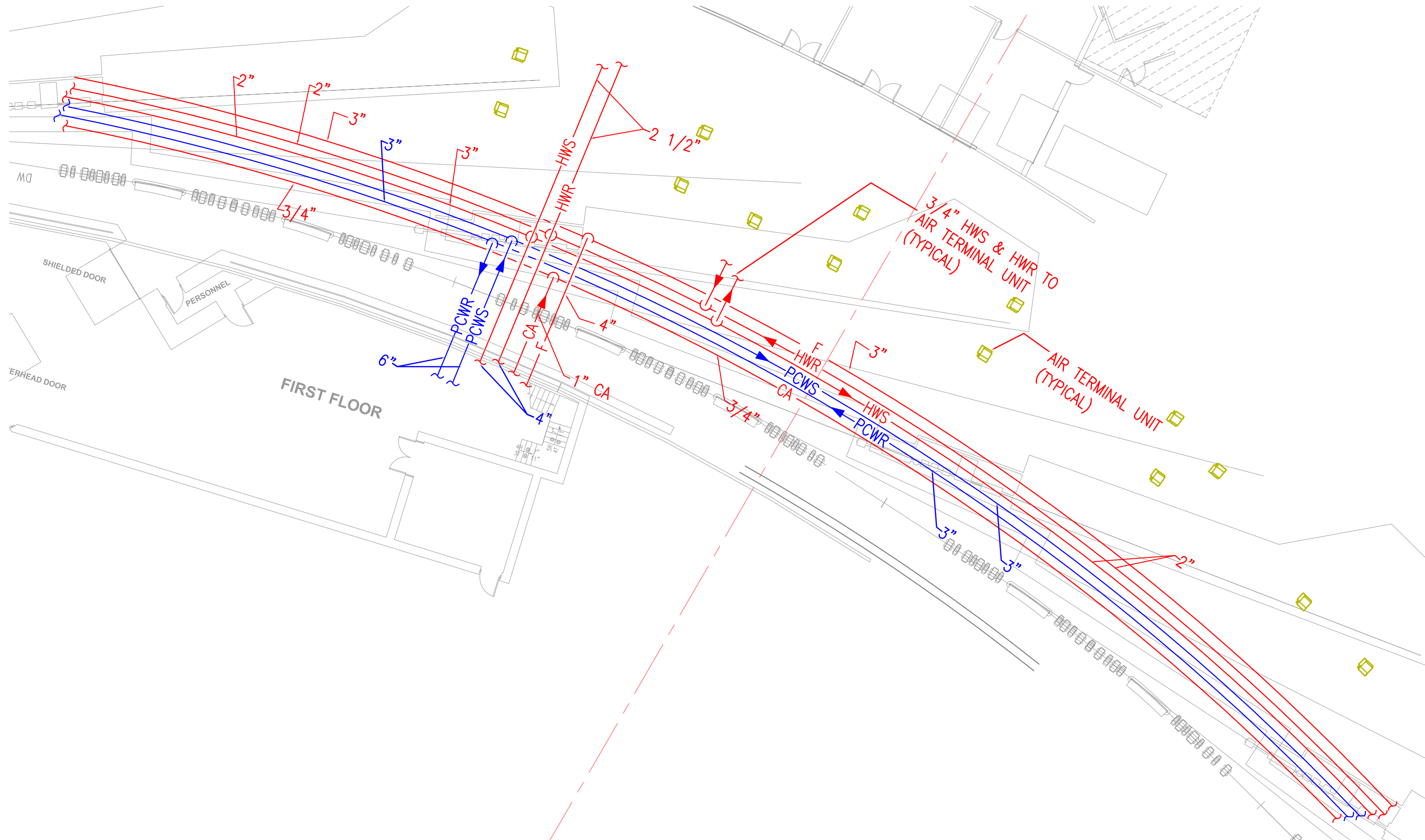
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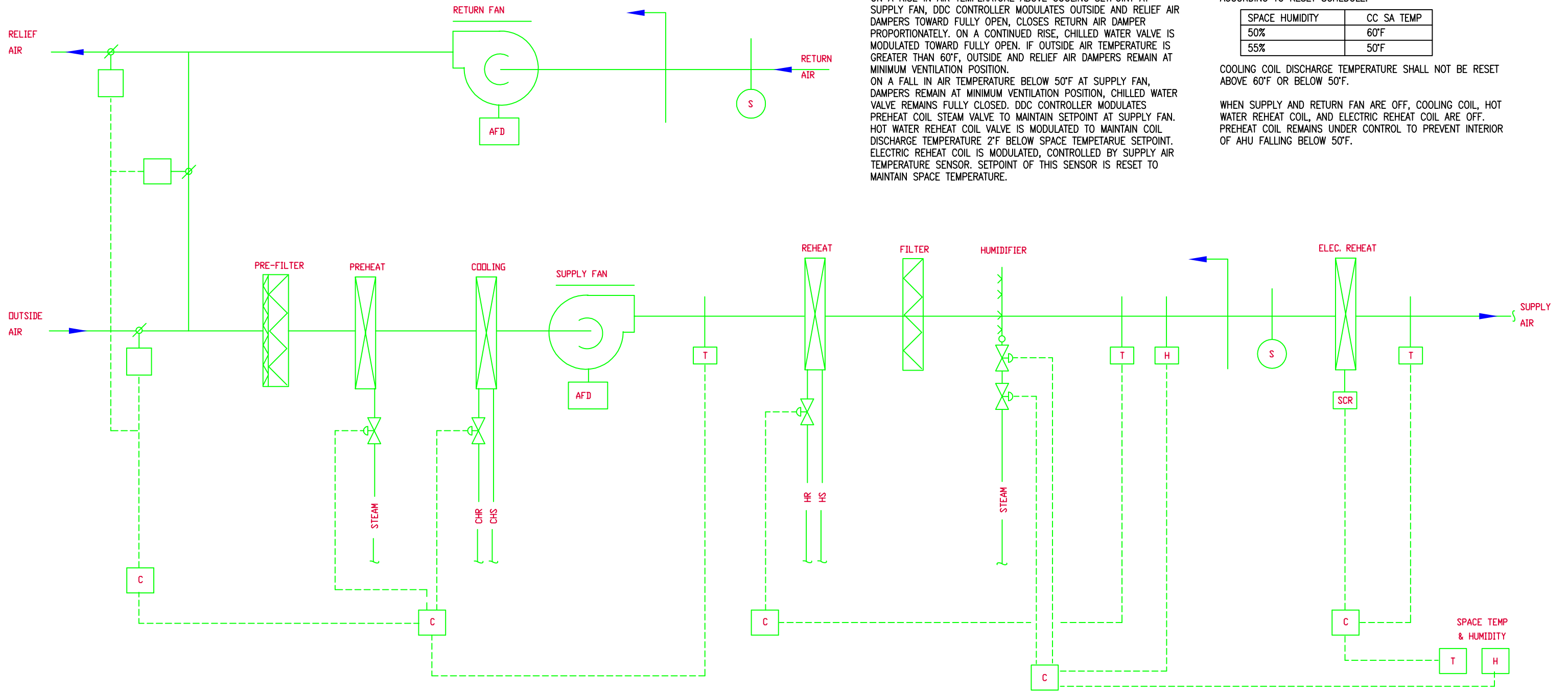




MECHANICAL ROOM - UPPER LEVEL







**ACCELERATOR TUNNEL AHU  
SEQUENCE OF OPERATION**

UNIT IS MANUALLY STARTED AND RUNS CONTINUOUSLY. WHEN UNIT IS STARTED, SUPPLY AND RETURN AIR FANS START, OUTSIDE AND RELIEF AIR DAMPERS OPEN TO MINIMUM VENTILATION POSITION.

**TEMPERATURE CONTROL**  
ON A RISE IN AIR TEMPERATURE ABOVE COOLING SETPOINT AT SUPPLY FAN, DDC CONTROLLER MODULATES OUTSIDE AND RELIEF AIR DAMPERS TOWARD FULLY OPEN, CLOSES RETURN AIR DAMPER PROPORTIONATELY. ON A CONTINUED RISE, CHILLED WATER VALVE IS MODULATED TOWARD FULLY OPEN. IF OUTSIDE AIR TEMPERATURE IS GREATER THAN 60°F, OUTSIDE AND RELIEF AIR DAMPERS REMAIN AT MINIMUM VENTILATION POSITION.  
ON A FALL IN AIR TEMPERATURE BELOW 50°F AT SUPPLY FAN, DAMPERS REMAIN AT MINIMUM VENTILATION POSITION, CHILLED WATER VALVE REMAINS FULLY CLOSED. DDC CONTROLLER MODULATES PREHEAT COIL STEAM VALVE TO MAINTAIN SETPOINT AT SUPPLY FAN. HOT WATER REHEAT COIL VALVE IS MODULATED TO MAINTAIN COIL DISCHARGE TEMPERATURE 2°F BELOW SPACE TEMPERATURE SETPOINT. ELECTRIC REHEAT COIL IS MODULATED, CONTROLLED BY SUPPLY AIR TEMPERATURE SENSOR. SETPOINT OF THIS SENSOR IS RESET TO MAINTAIN SPACE TEMPERATURE.

**HUMIDITY CONTROL**  
ON A FALL IN SPACE HUMIDITY BELOW SETTING, DDC CONTROLLER MODULATED HUMIDIFIER STEAM VALVE TO PROVIDE HUMIDIFICATION. HIGH LIMIT HUMIDITY SENSOR OVER-RIDES CONTROL TO PREVENT SUPPLY AIR HUMIDITY EXCEEDING 90% RH. WHEN SUPPLY FAN IS OFF OR WHEN HUMIDIFICATION IS NOT NEEDED, HUMIDIFIER ISOLATION VALVE CLOSES TO PREVENT HEATING OF STEAM JACKET.  
ON A RISE IN SPACE HUMIDITY ABOVE SETTING, DDC CONTROLLER LOWERS COOLING SETPOINT OF COOLING COIL CONTROLLER ACCORDING TO RESET SCHEDULE.

SPACE HUMIDITY	CC SA TEMP
50%	60°F
55%	50°F

COOLING COIL DISCHARGE TEMPERATURE SHALL NOT BE RESET ABOVE 60°F OR BELOW 50°F.

WHEN SUPPLY AND RETURN FAN ARE OFF, COOLING COIL, HOT WATER REHEAT COIL, AND ELECTRIC REHEAT COIL ARE OFF. PREHEAT COIL REMAINS UNDER CONTROL TO PREVENT INTERIOR OF AHU FALLING BELOW 50°F.

