

CONDENSING UNIT (CU-1)
 TRANE 4TTR4030 AIR-COOLED CONDENSING UNIT. 2.5 TON NOMINAL CAPACITY. 208/3, 17 AMPS. 5.3 LBS OF R-410A. 160 LBS.

COOLING COIL (CC-1)
 TRANE CASED DX COOLING COIL. 36 MBH NOMINAL CAPACITY. 17.5"X16.3" CONVERTIBLE CABINET. FULL DRAIN PAN WITH PRIMARY/SECONDARY CONNECTIONS. 50 LBS.

VARIABLE AIR VOLUME BOX (VAV-1.4.1)
 TRANE VCVWF-12 (EXISTING). PROVIDE WITH NEW 2-ROW REHEAT COIL. 1,100 CFM WITH 46 EAT & 82 LAT. 43 MBH CAPACITY. 1.5 GPM @ 180 DEG EWT.

HUMIDIFIER (HUM-1)
 DRI-STEAM VAPORMIST VM-6 W/INSULATED SINGLE-TUBE DISPERSION. 1,600 CFM AIRFLOW. 54 DEG F & 52% RH EAT, 55 DEG F & 76% RH LAT. 18.0 LBS/HR CAPACITY. 208/3, 25 AMPS.

CONTROL NARRATIVE

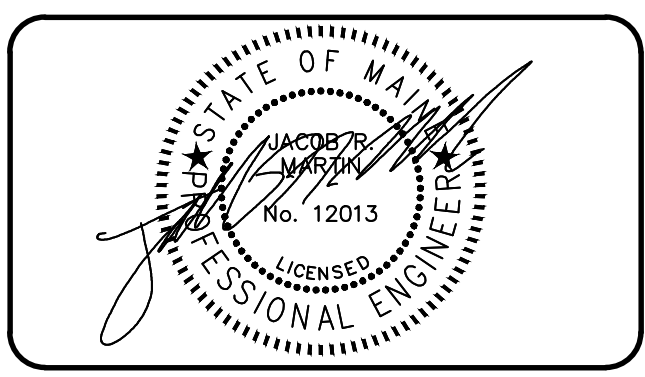
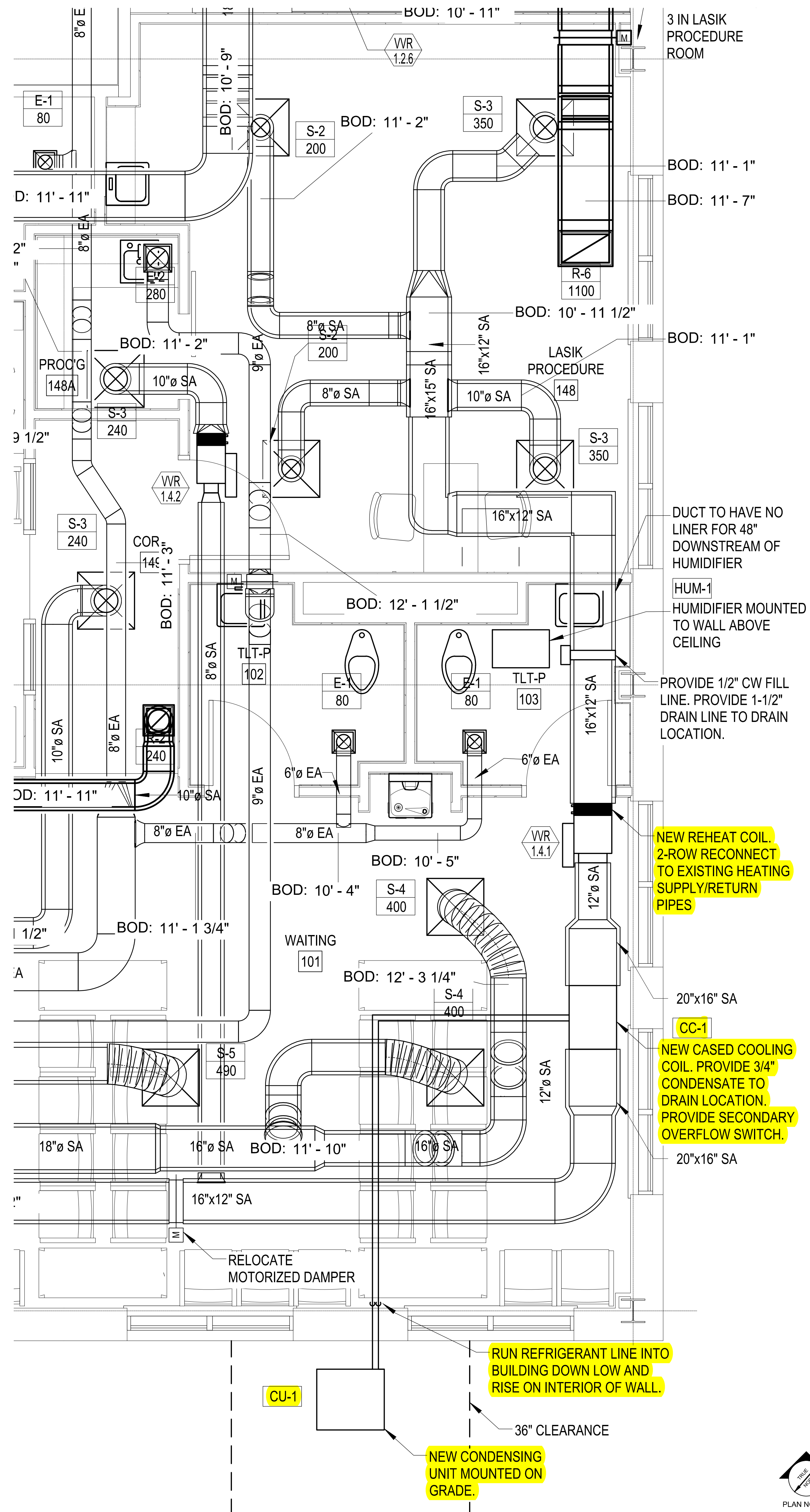
-VAV BOX IS TO OPERATE AT A CONSTANT FIXED AIRFLOW DURING OCCUPIED HOURS. UNOCCUPIED HOURS BOX COULD SETBACK TO 50%(ADJ) AIRFLOW.

-SENSIBLE COOLING MODE: WHEN SPACE TEMPERATURE SENSOR IS ABOVE COOLING SETPOINT (70 DEG F, ADJ) AND HUMIDITY IS WITHIN RANGE, HEATING VALVE ON RE-HEAT COIL SHALL MODULATE CLOSED TO PROVIDE A LEAVING AIR TEMPERATURE OF 55 DEG F FROM PRIMARY AHU. IF SPACE IS STILL NOT MEETING SETPOINT, CONDENSING UNIT WILL ACTIVATE TO PROVIDE 2ND STAGE OF COOLING. HUMIDIFIER CAN OPERATE AS NECESSARY TO MAINTAIN SPACE RH SETPOINT.

-HEATING MODE: WHEN SPACE TEMPERATURE SENSOR IS BELOW HEATING SETPOINT (68 DEG F, ADJ) AND HUMIDITY IS WITHIN RANGE, HEATING VALVE ON RE-HEAT COIL SHALL MODULATE OPEN IN ORDER TO INCREASE DISCHARGE AIR TEMPERATURE. CONTROLS SHALL KEEP DISCHARGE AIR TEMP AT NEUTRAL OR ABOVE DURING HEATING MODE TO PREVENT LOW DISCHARGE AIR TEMPERATURES. HUMIDIFIER CAN OPERATE AS NECESSARY TO MAINTAIN SPACE RH SETPOINT.

-DEHUMIDIFICATION MODE: WHEN SPACE HUMIDITY LEAVE IS ABOVE SETPOINT (45% ADJ), DX COOLING COIL AND RE-HEAT COIL WILL WORK TOGETHER FOR DEHUMIDIFICATION. CONDENSING UNIT SHALL RUN TO ACHIEVE A LEAVING COIL TEMPERATURE OF 42 DEG F. RE-HEAT COIL VALVE SHALL MODULATE TO MAINTAIN SPACE TEMPERATURE SETPOINT. HUMIDIFIER IS LOCKED-OUT DURING DEHUMIDIFICATION MODE.

-HUMIDIFICATION MODE: WHEN SPACE HUMIDITY IS BELOW SETPOINT (45% ADJ), HUMIDIFIER SHALL RUN TO MAINTAIN SPACE SETPOINT.



MAINE EYE LASIK ROOM

161 MARGINAL WAY
PORTLAND, ME

REV.	DESCRIPTION	DATE

ISSUE STATUS:
FOR CONSTRUCTION
 4-4-17

PROJECT:
MAINE EYE LASIK ROOM
 PORTLAND, ME

SHEET TITLE:
FIRST FLOOR LASIK ROOM ENLARGED PLAN

DATE: 4-4-17	PROJECT#: 16261
DRAWN: MAC	CHECKED: JRM
SCALE: 1/2"=1'-0"	

SHEET #
M-1

1 LASIK ROOM ENLARGED HVAC PLAN
 SCALE: 1/2"=1'-0"

