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**CONSULTANT**  
Consultant:  
CMTA CONSULTING ENGINEERS, INC.  
10411 MEETING STREET  
PROSPECT, KY 40059  
(502)326-3085

**ARCHITECT/ENGINEER OF RECORD**  
A/E:  
GUIDON DESIGN INC.  
1221 N PENNSYLVANIA STREET  
INDIANAPOLIS, IN 46202  
(502)326-3085

**STAMP**  
KENNETH L. SEIBERT  
LICENSED PROFESSIONAL ENGINEER  
20405

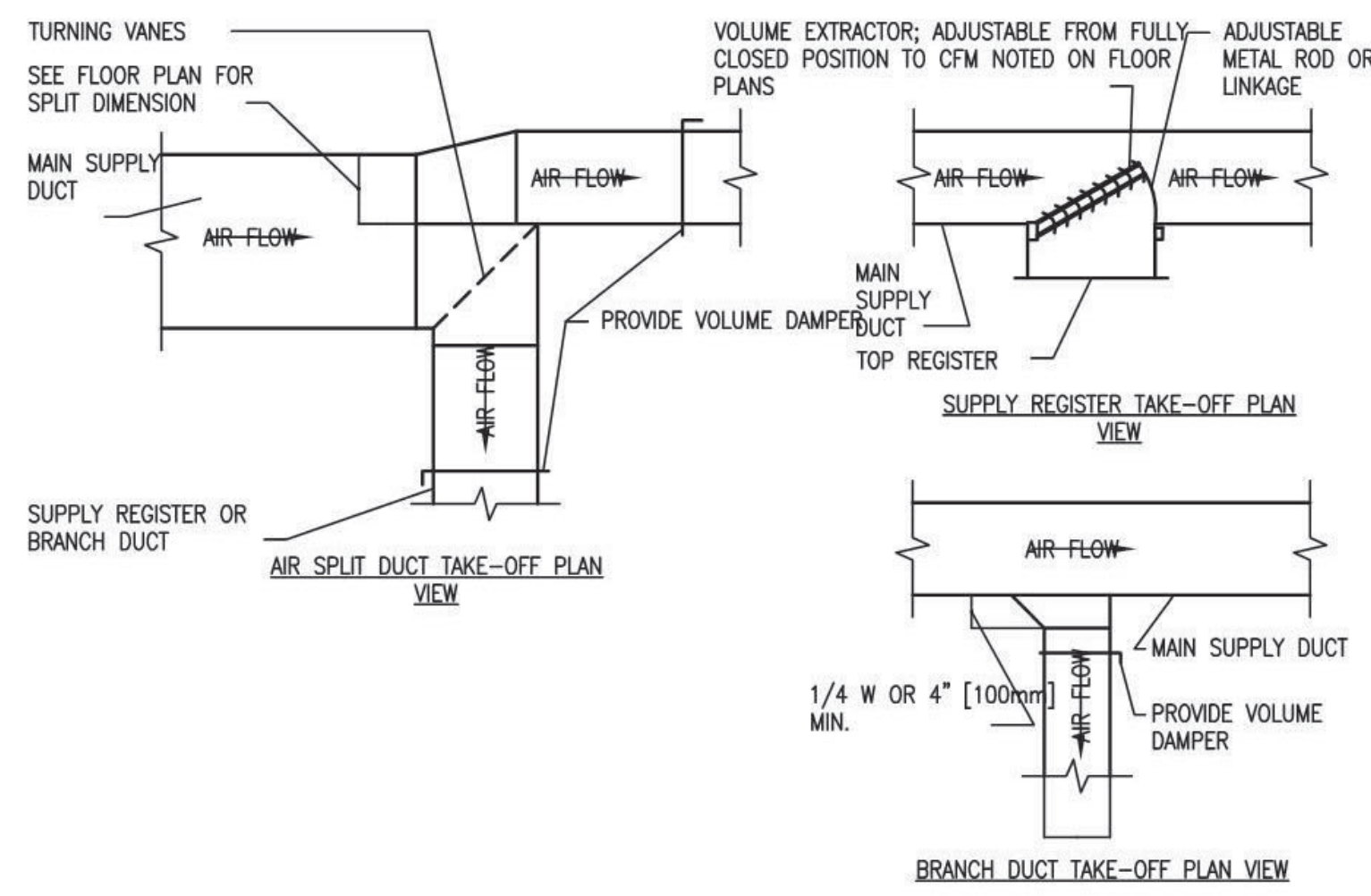
**Office of Construction and Facilities Management**  
VA U.S. Department of Veterans Affairs

Drawing Title  
**MECHANICAL DETAILS**  
Approved:

Phase  
**BID DOCUMENTS**

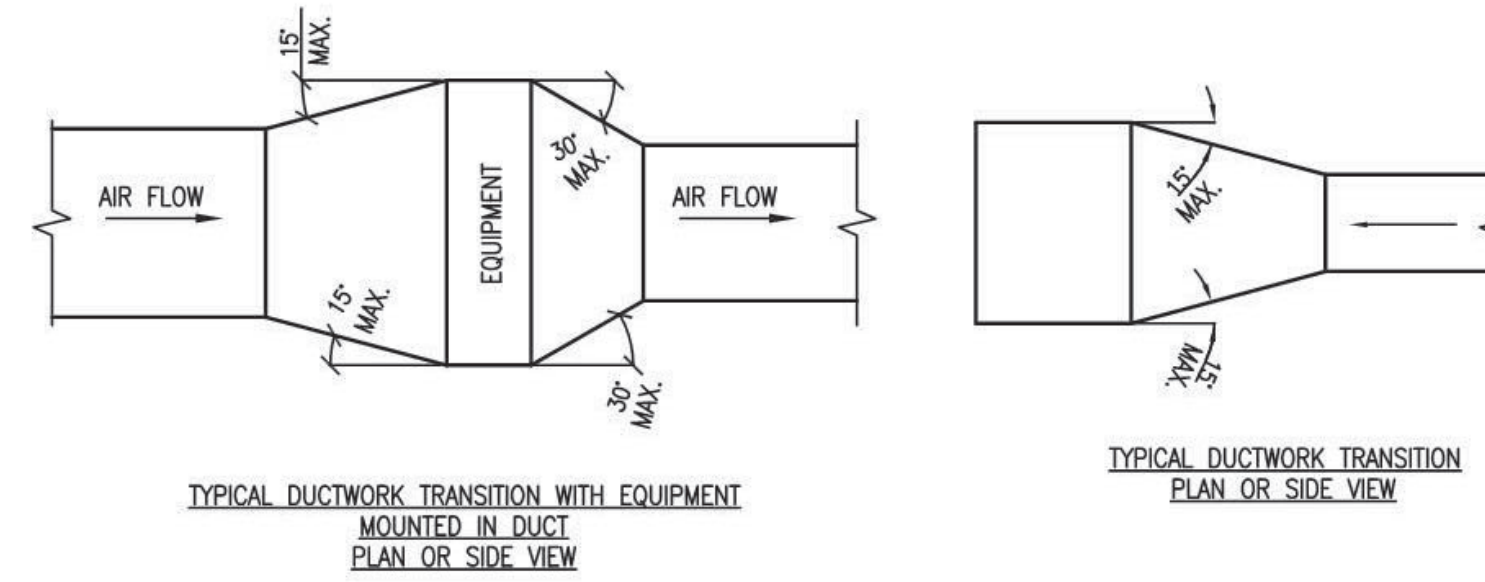
Project Title  
**VA WICHITA - MED/SURG BEDS FOR PATIENT PRIVACY**  
Location  
**WICHITA, KANSAS**  
Issue Date  
**05/22/2020**  
Checked  
Drawn

Project Number  
**589-701**  
Building Number  
**1 & 1C**  
Drawing Number  
**MH500**



**SUPPLY DUCTWORK TAKE-OFFS**

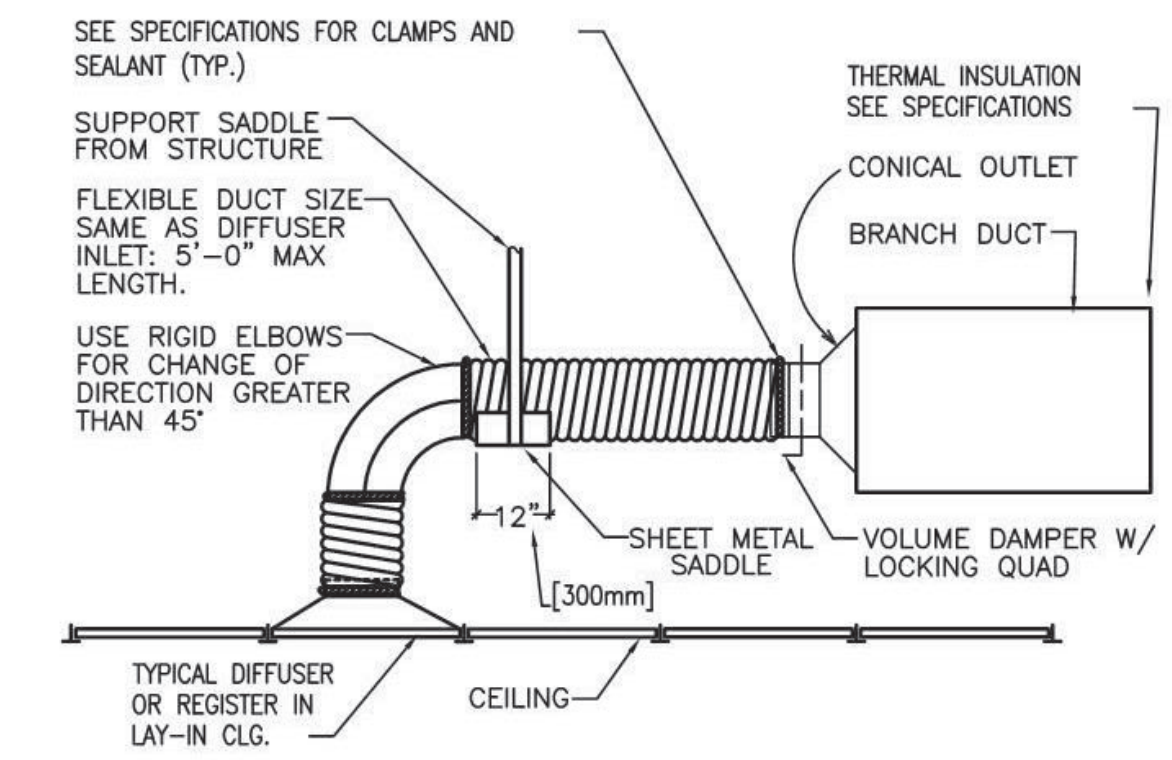
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NOTE:  
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

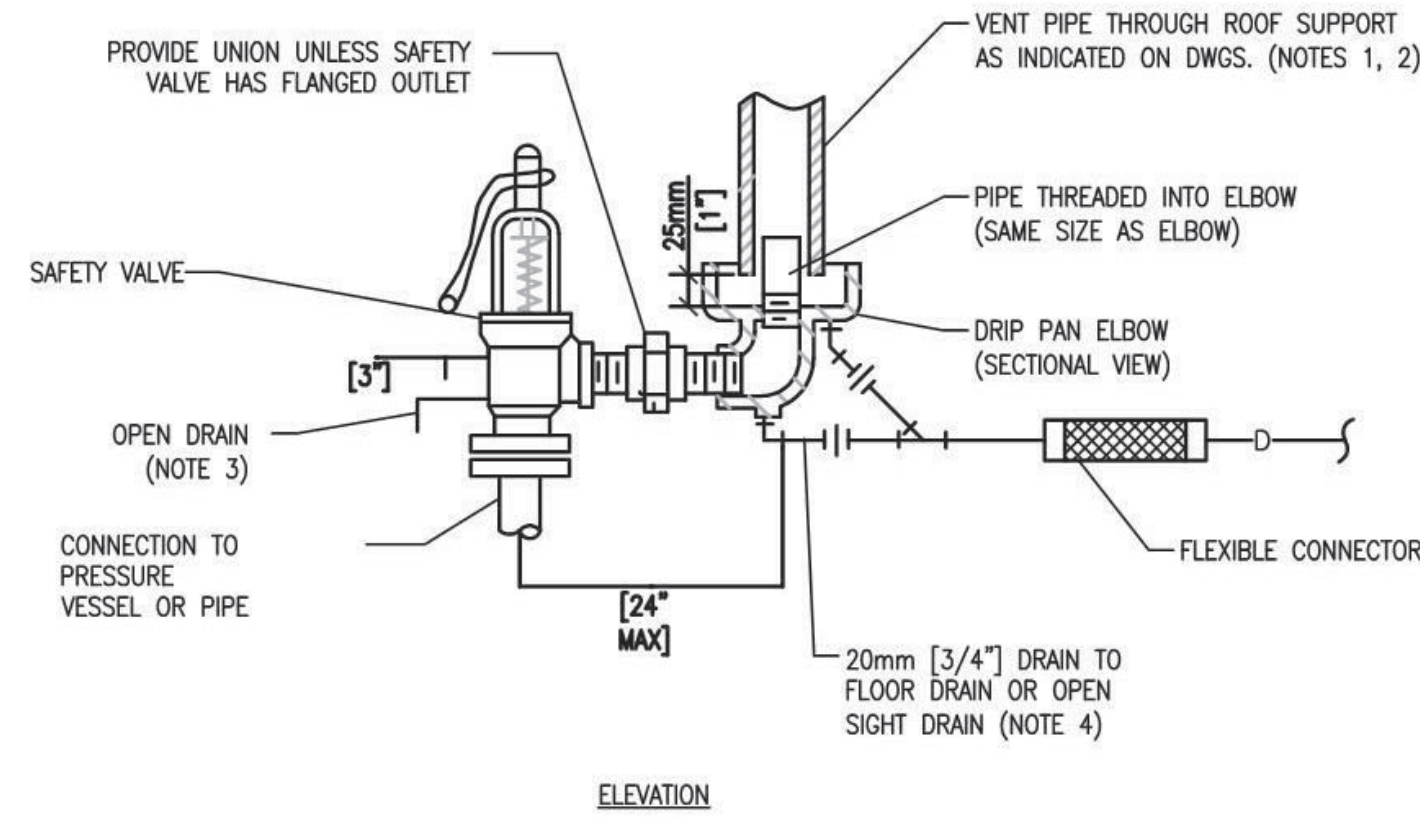
**DUCTWORK TRANSITIONS  
(WITH EQUIPMENT MOUNTED IN DUCT)**

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**FLEXIBLE AIR DUCT CONNECTOR**

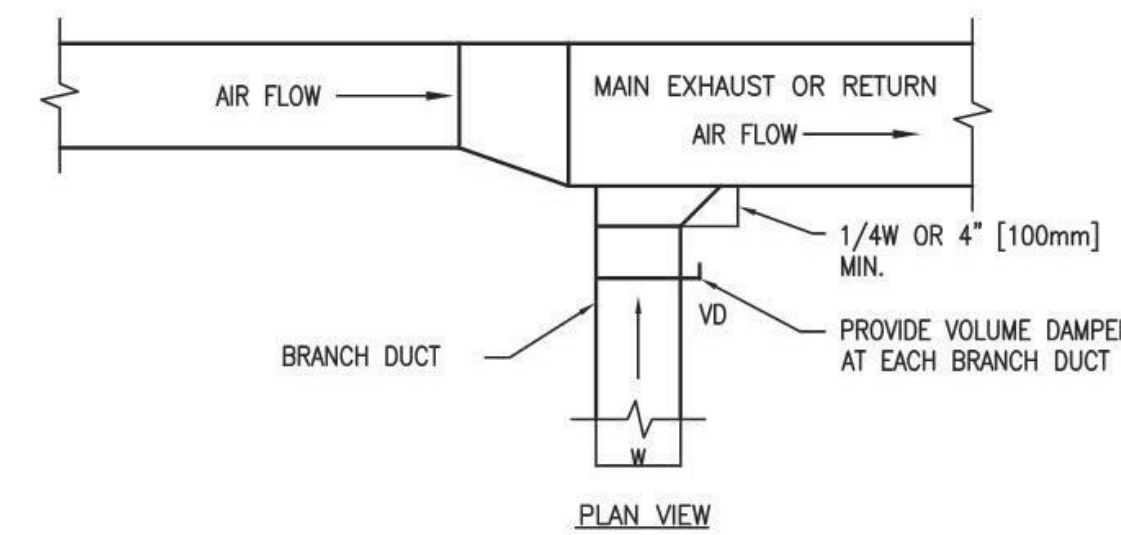
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- NOTES:
- UNLESS OTHERWISE SHOWN ON THE DRAWINGS, SIZE THE VENT PIPE SO THAT STEAM IS NOT BLOWN OUT AT THE VENT PIPE ENTRANCE. UTILIZE THE CALCULATION METHOD CONTAINED IN ANSI B31.1, POWER PIPING CODE, APPENDIX II.
  - VENT PIPE SHALL TERMINATE 1829mm [6'] MIN. ABOVE FINISHED ROOF.
  - DISCHARGE OF DRAIN SHALL BE DIRECTED AWAY FROM PLATFORMS OR OTHER AREAS WHICH PERSONNEL MAY OCCUPY.
  - NO OTHER DRAIN SHALL BE CONNECTED TO THE DRIP PAN ELBOW DRAIN PIPE.

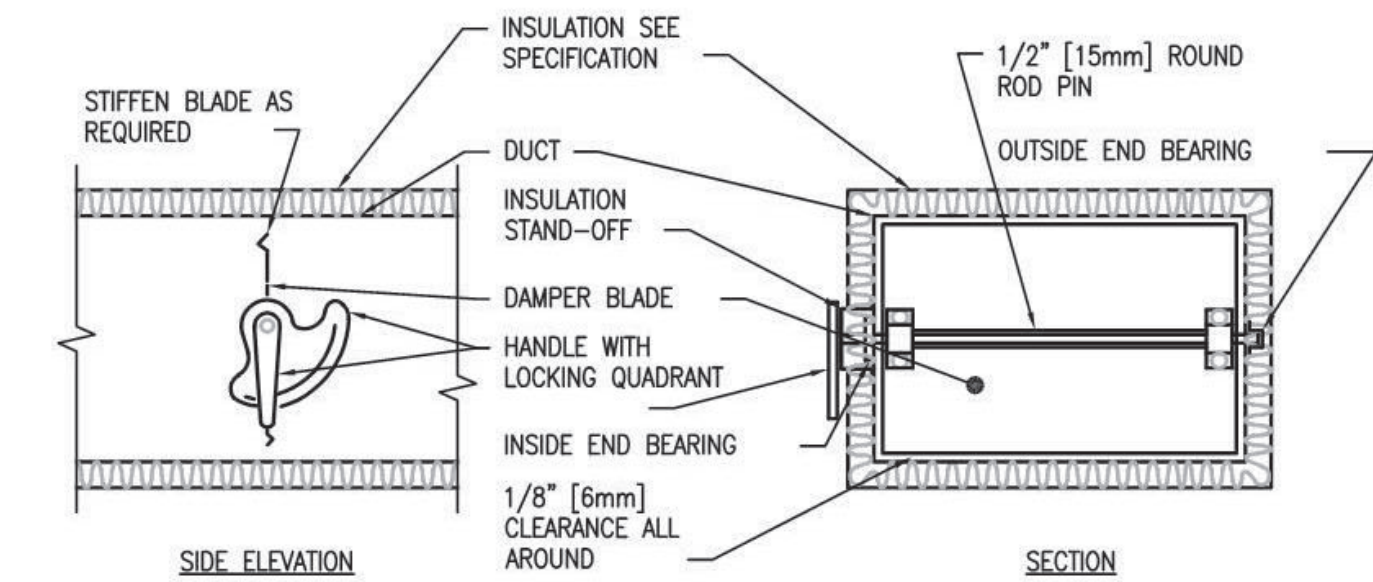
**STEAM SAFETY VALVE**

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**EXHAUST OR RETURN BRANCH DUCTWORK**

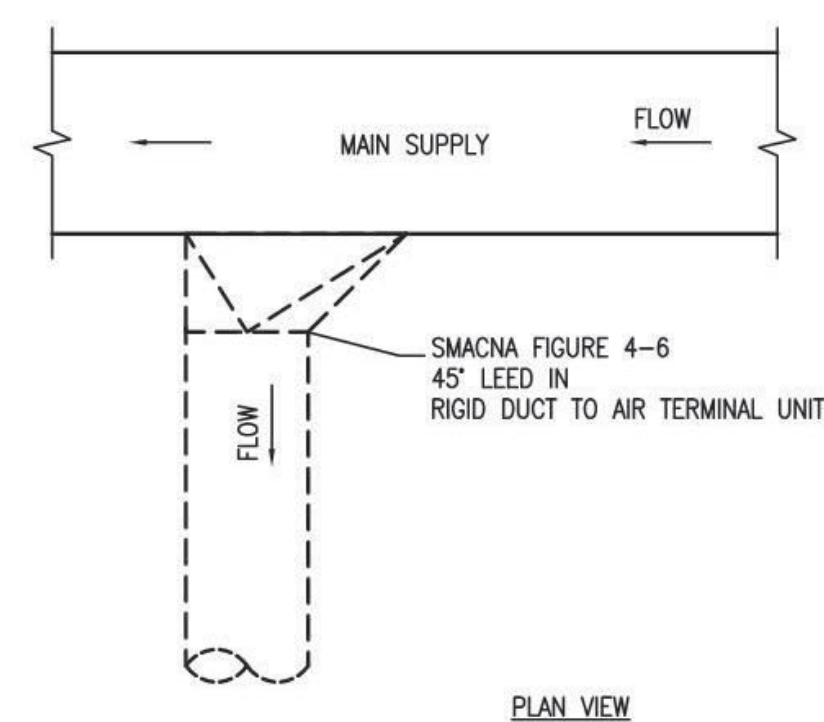
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- NOTE:
- DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
  - DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

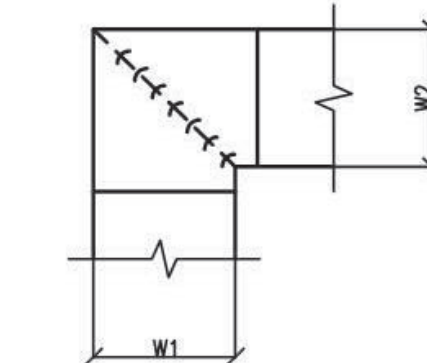
**VOLUME DAMPER DETAIL**

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**SUPPLY DUCT TAKEOFF -  
AIR TERMINAL UNITS**

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- NOTE:
- ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
  - WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
  - ALL SINGLE THICKNESS VANES SHALL HAVE A 2" [50mm] RADIUS, 1 1/2" [40mm] MAXIMUM SPACE BETWEEN VANES AND A 3/4" [20mm] TRAILING EDGE.
  - WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" [500mm] VANES SHALL BE DOUBLE VANE TYPE.

**DUCTWORK SQUARE VANE ELBOWS**

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and Facilities  
Management

VA U.S. Department  
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Project Title  
**VA WICHITA - MED/SURG BEDS  
FOR PATIENT PRIVACY**

Location  
**WICHITA, KANSAS**

Issue Date  
05/22/2020

Checked

Drawn

Project Number  
589-701

Building Number  
1 & 1C

Drawing Number  
**MH501**

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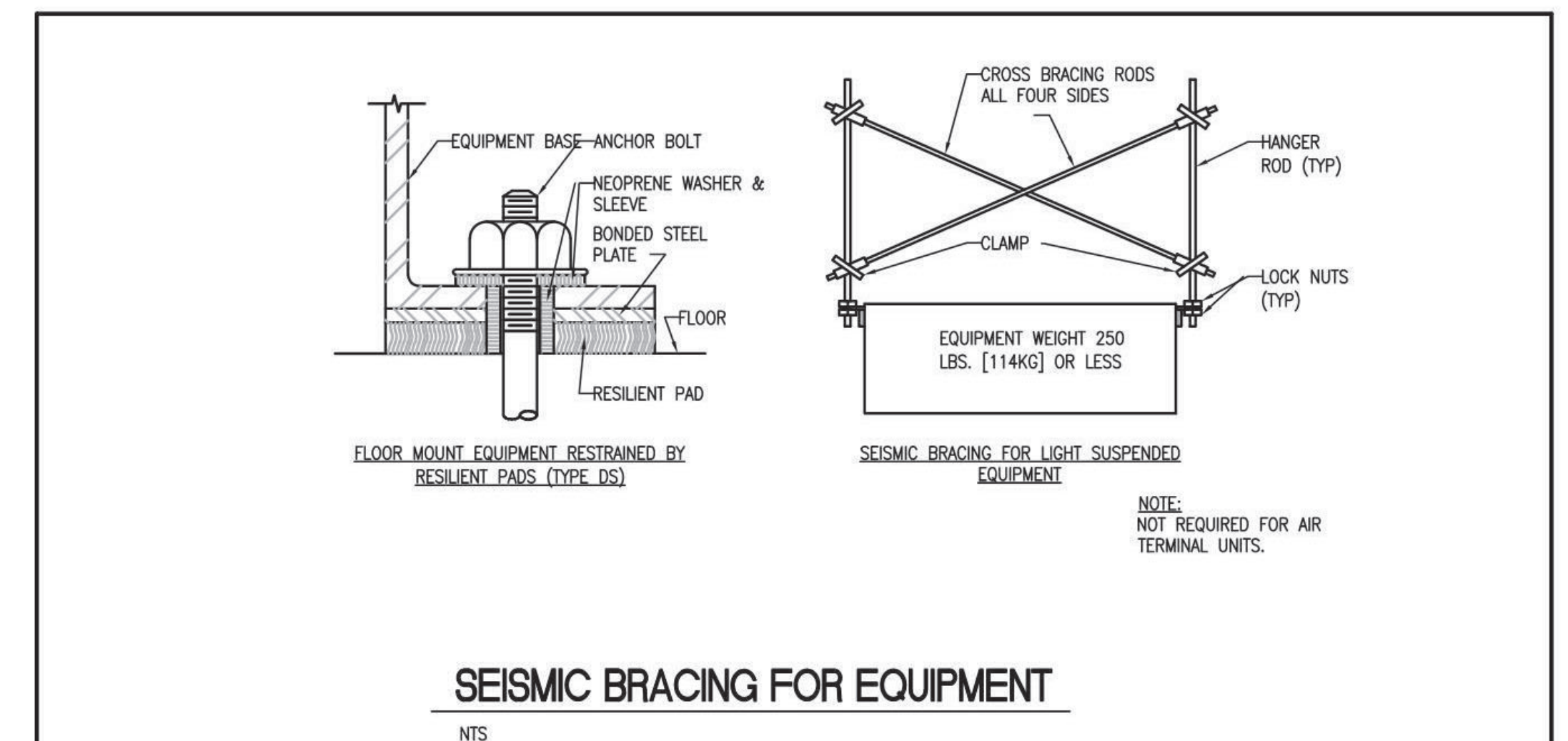
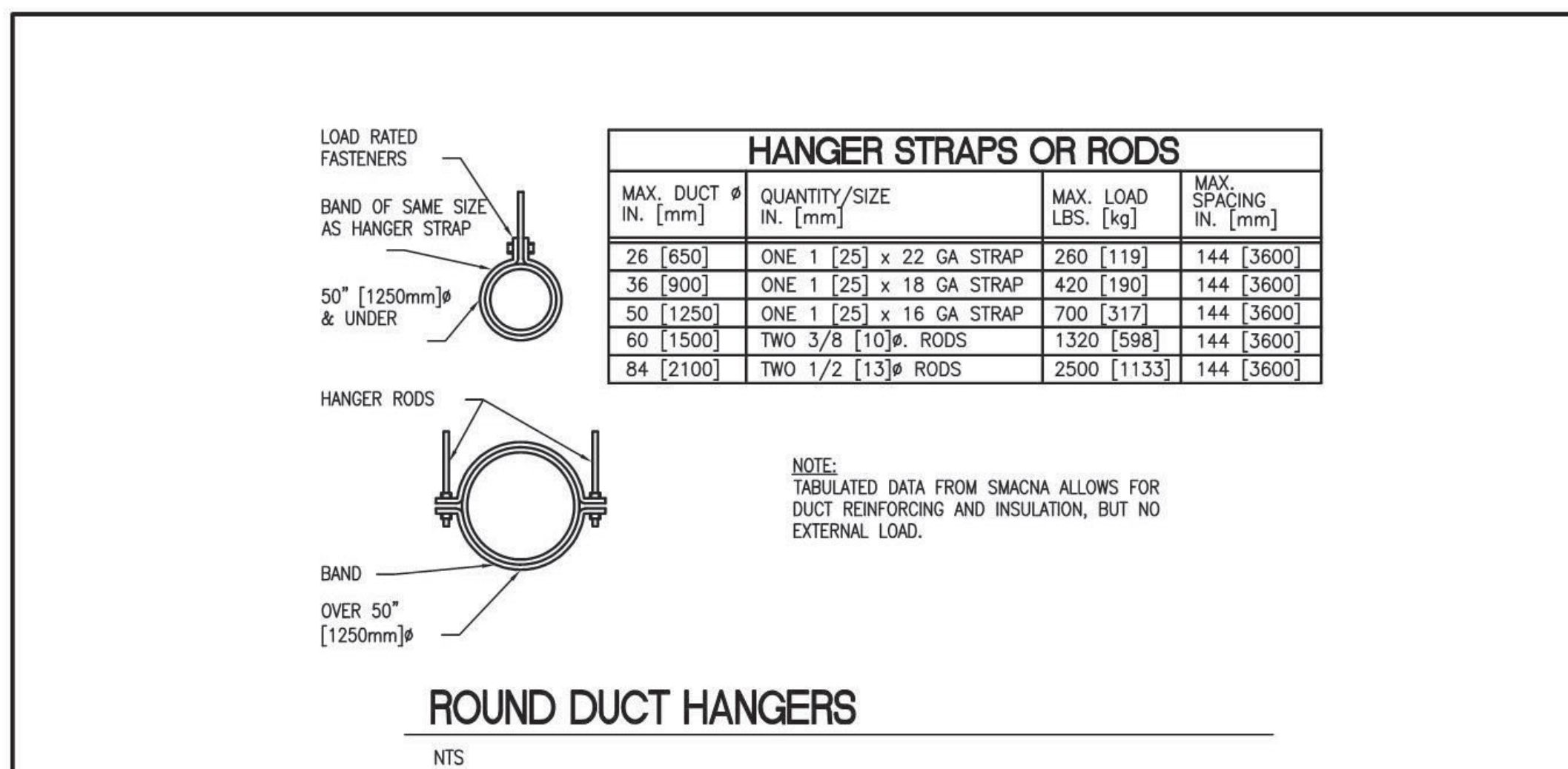
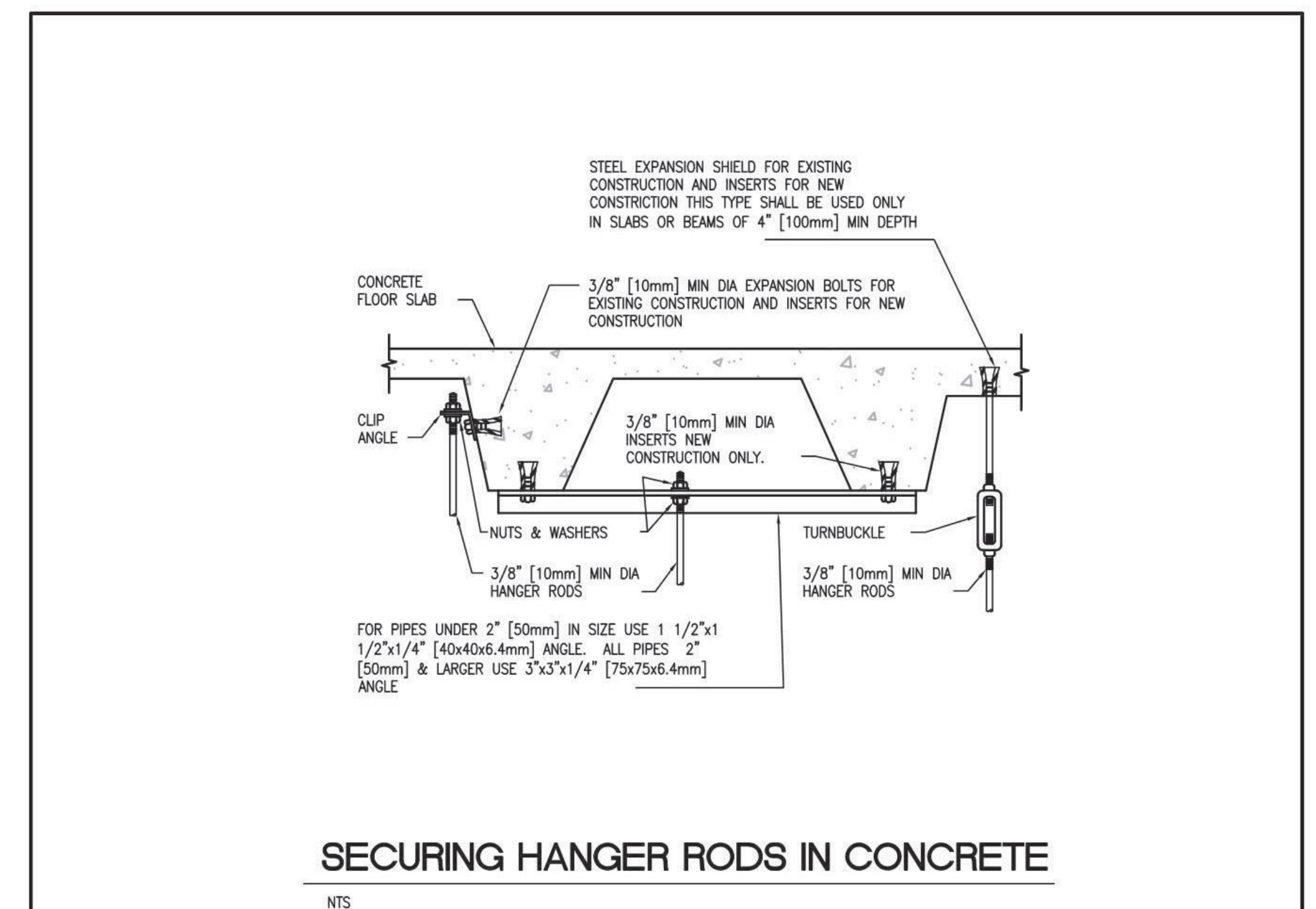
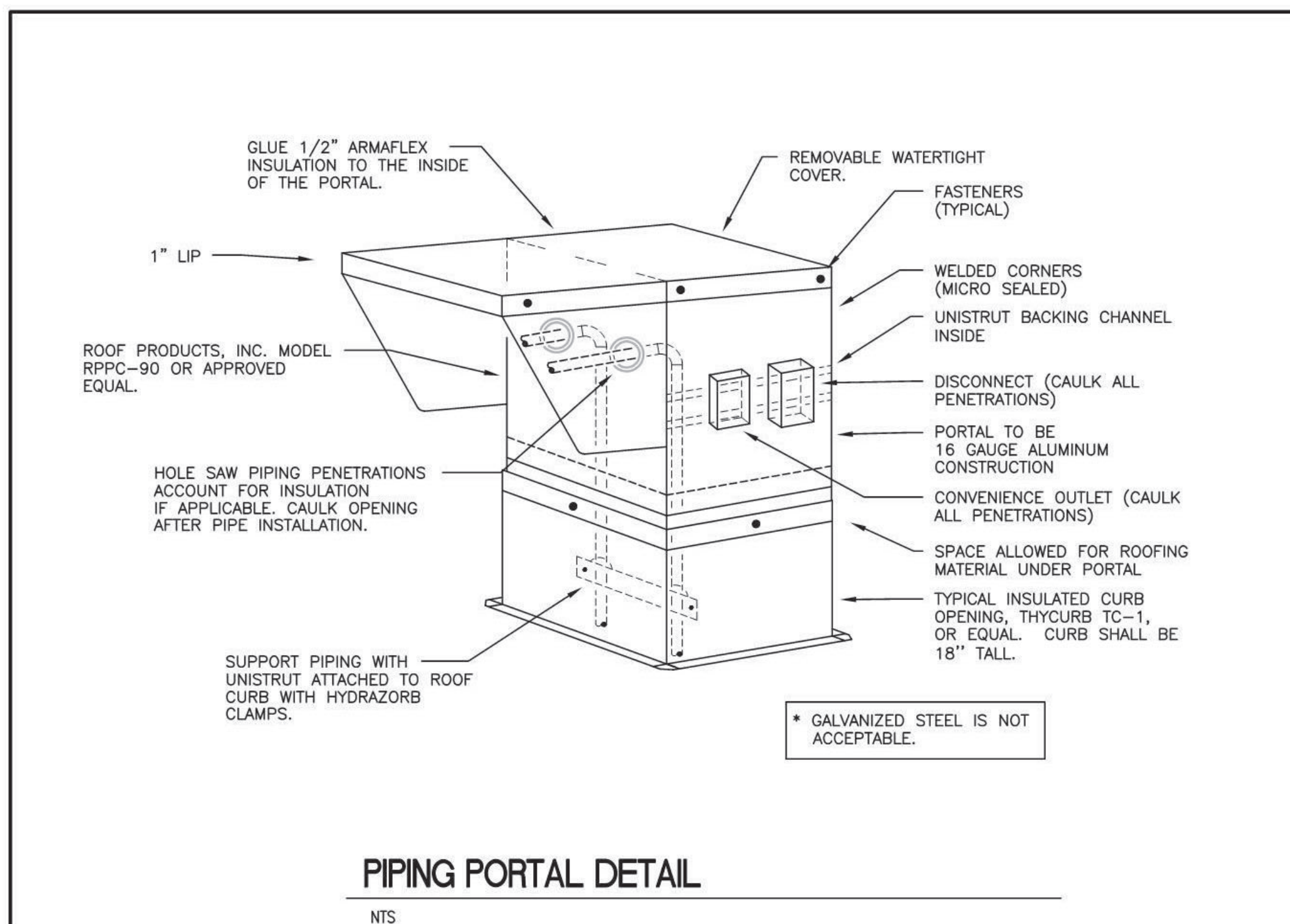
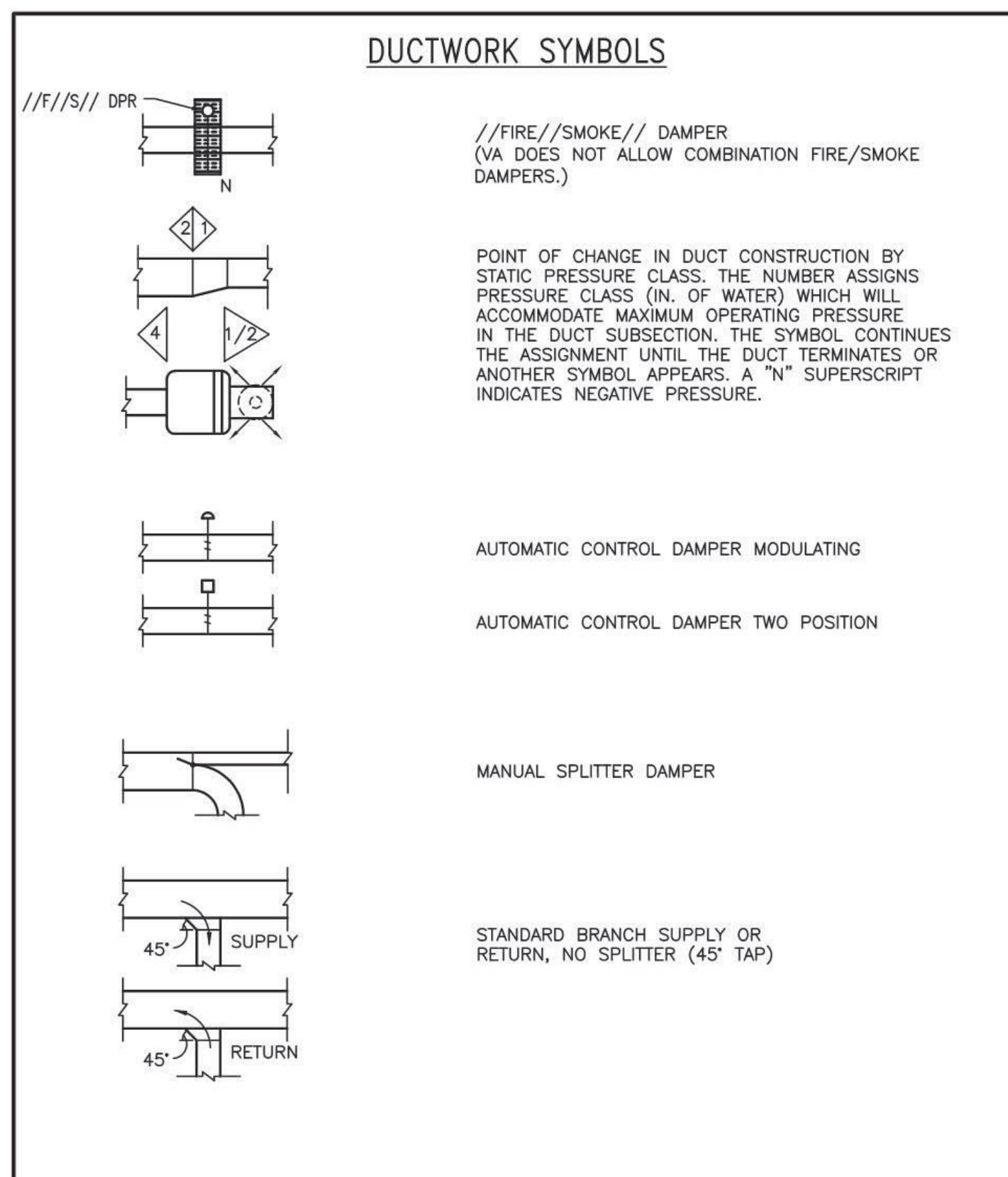
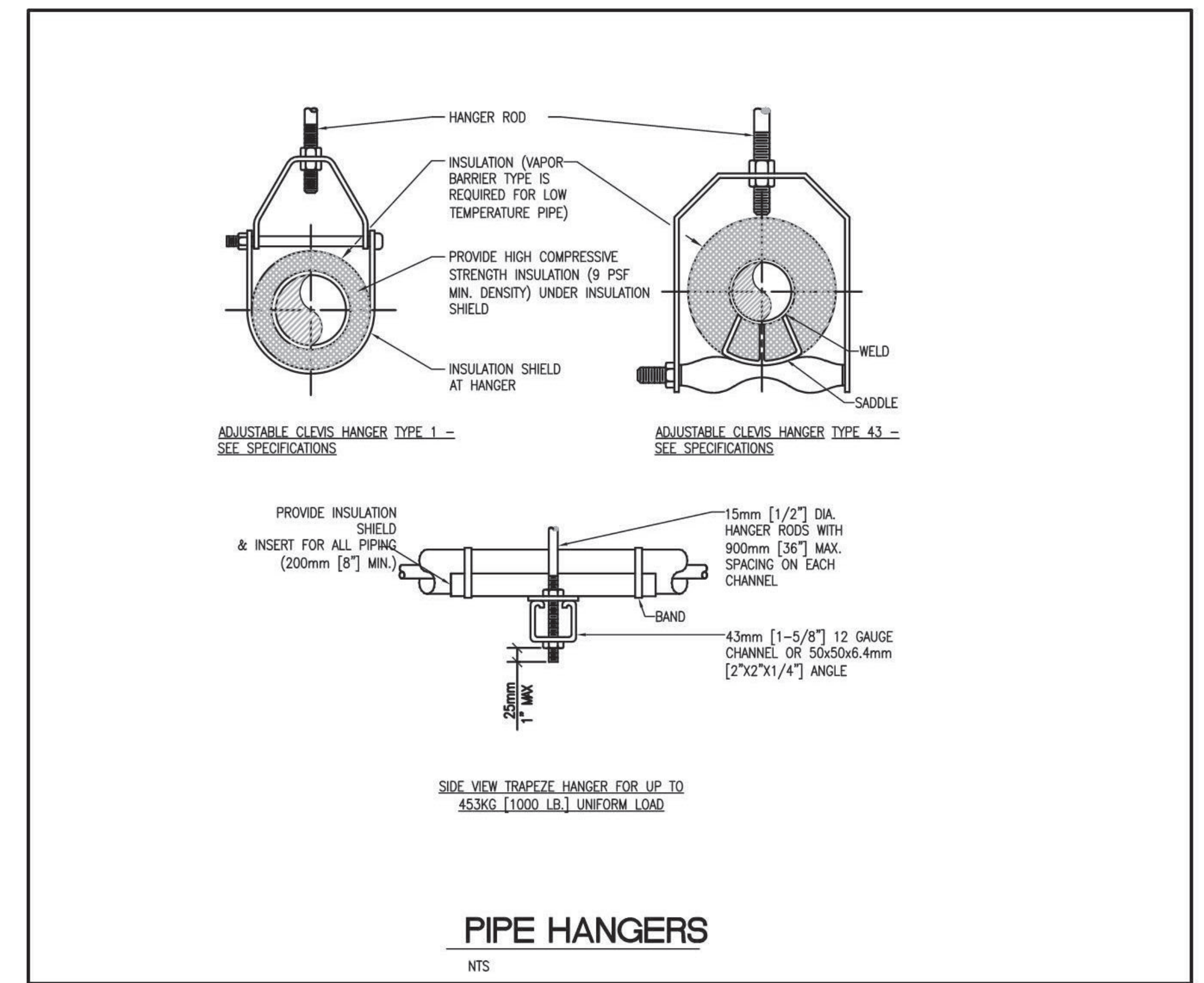
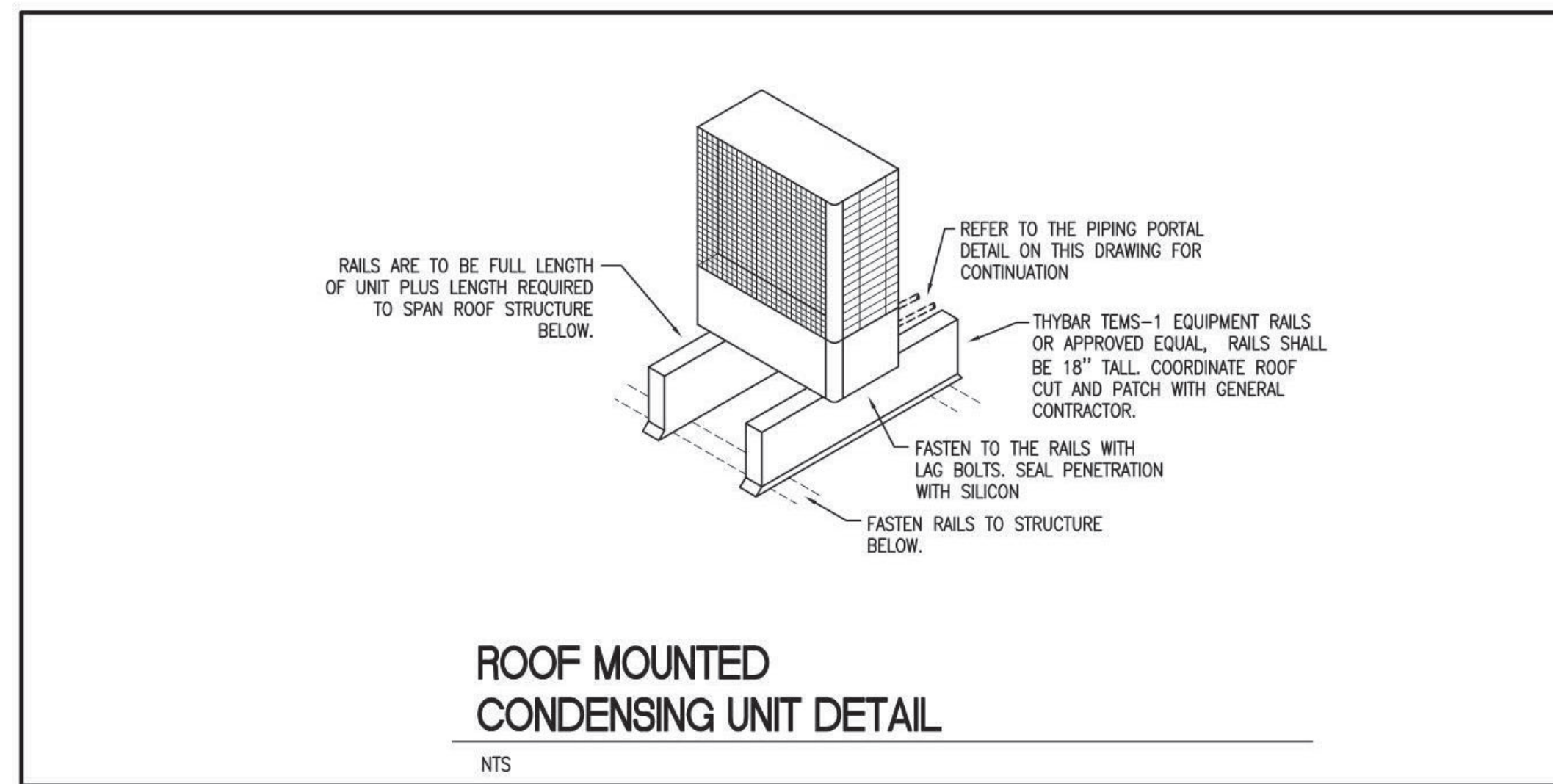
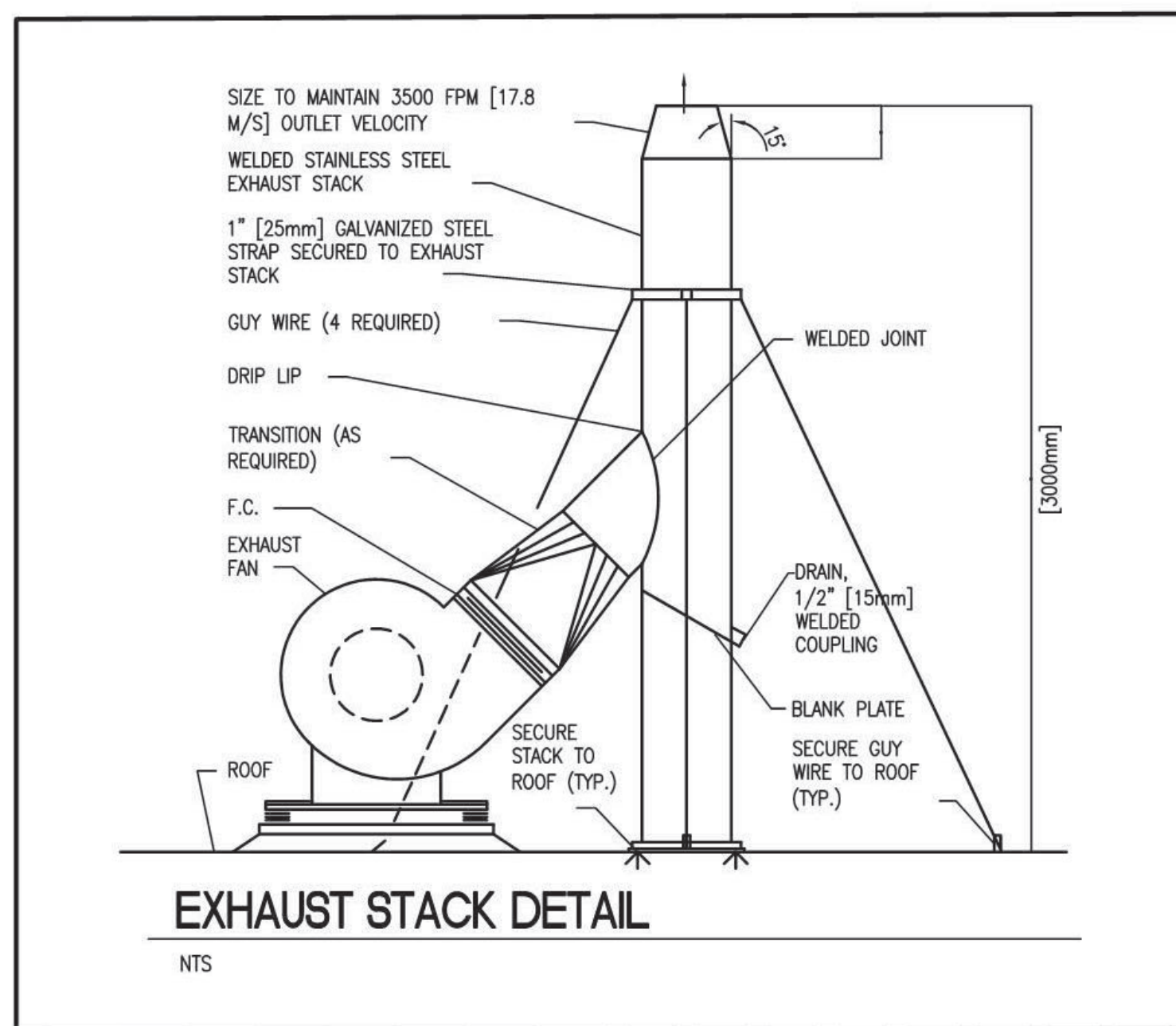
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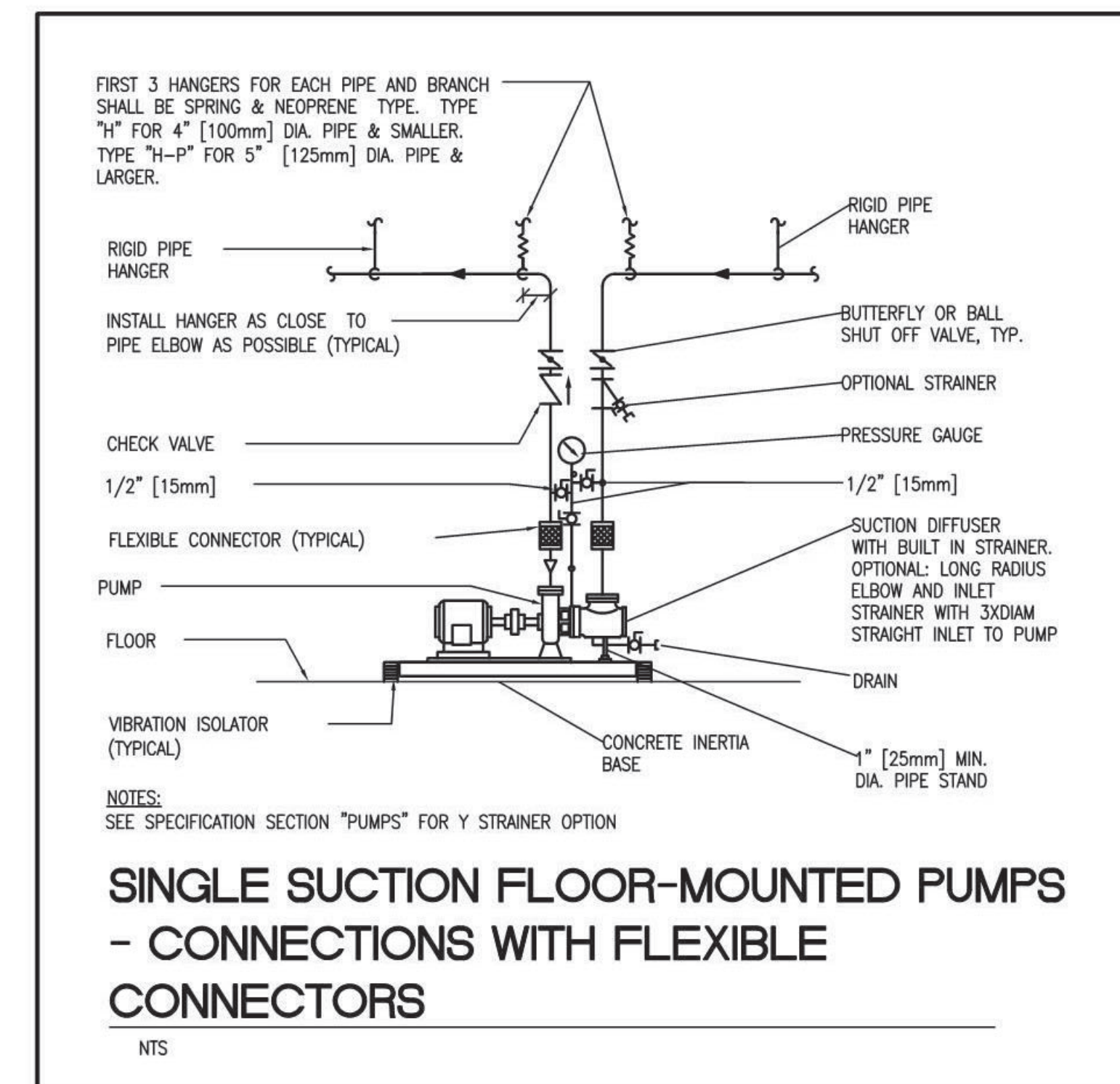
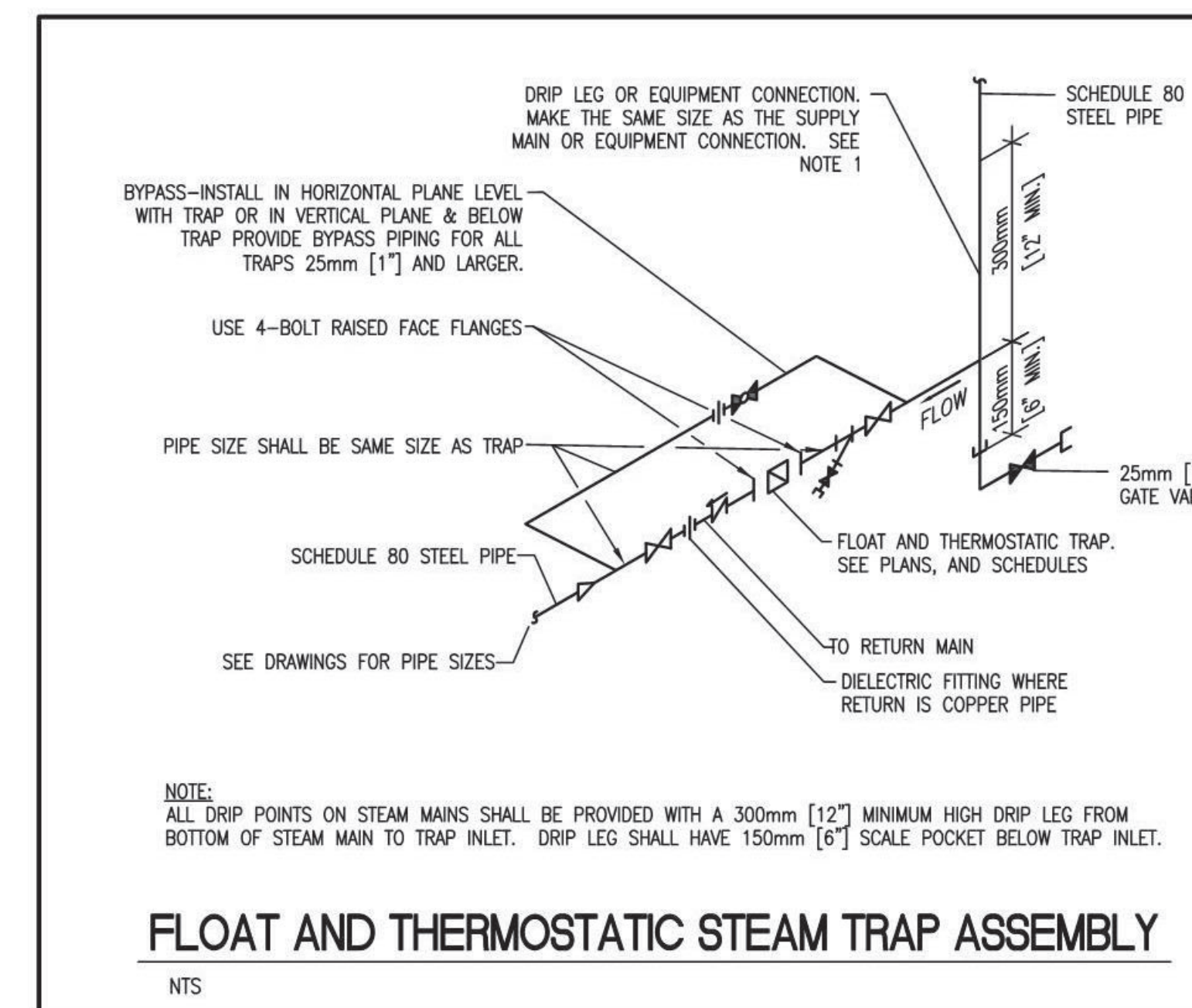
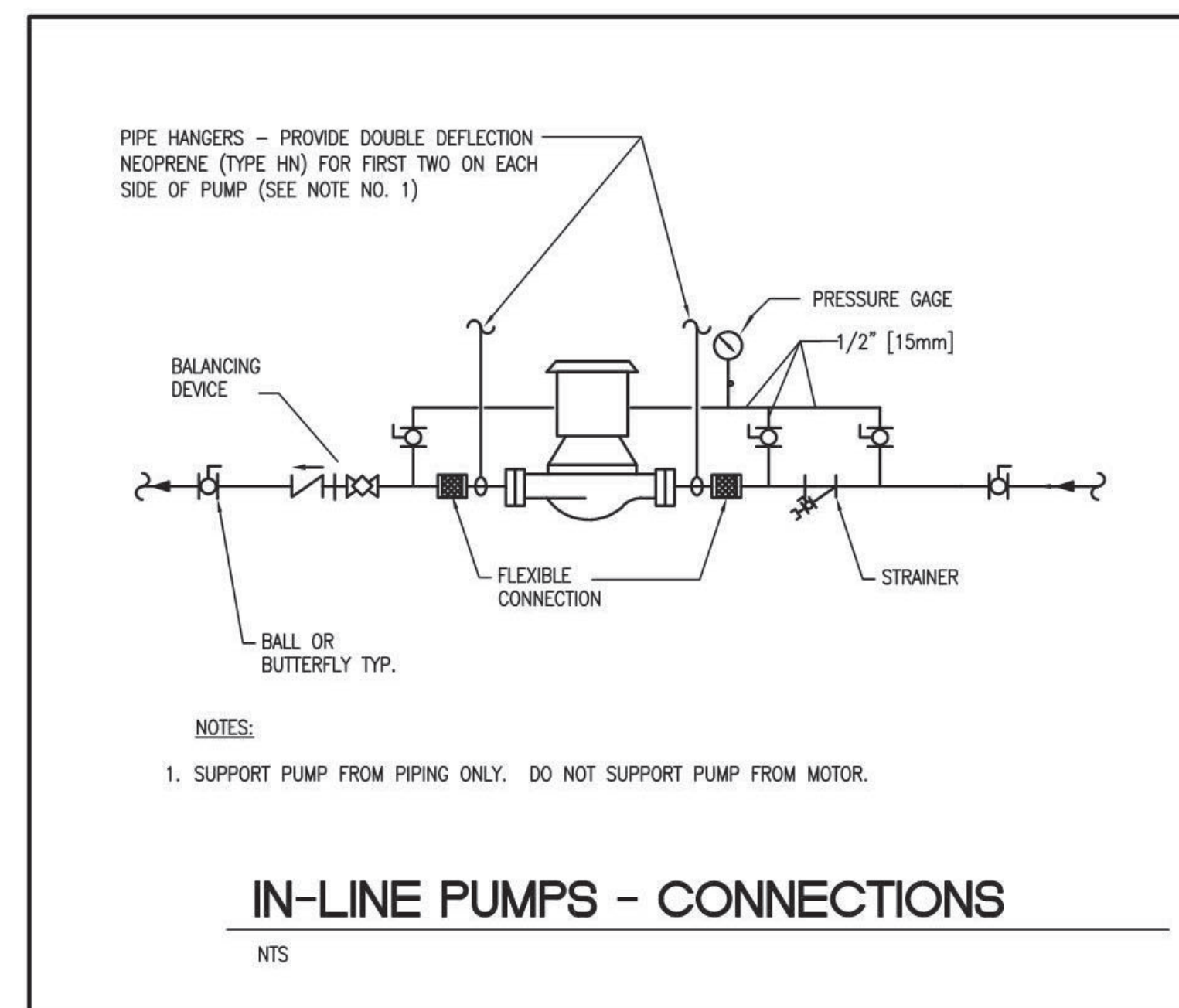
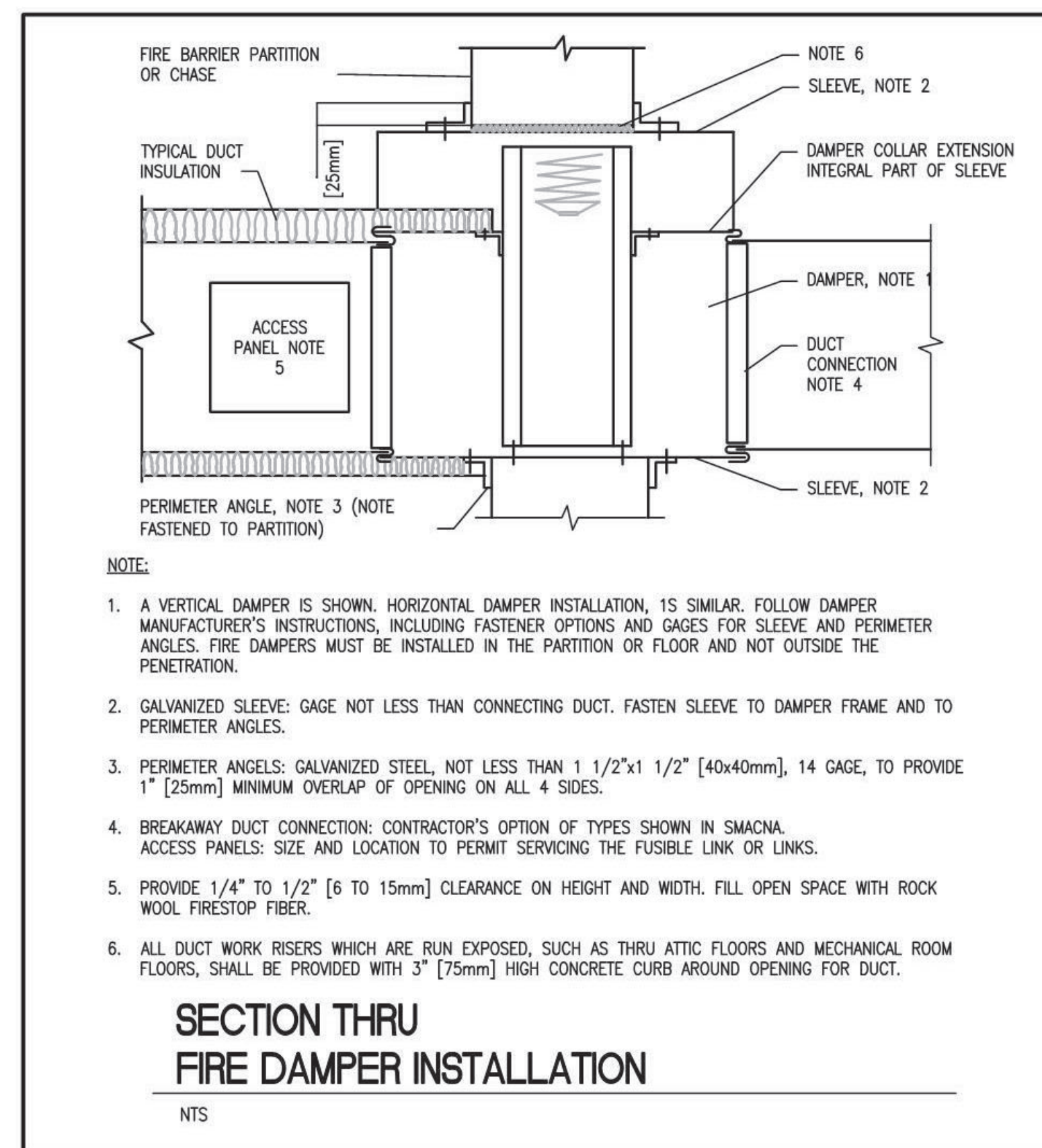
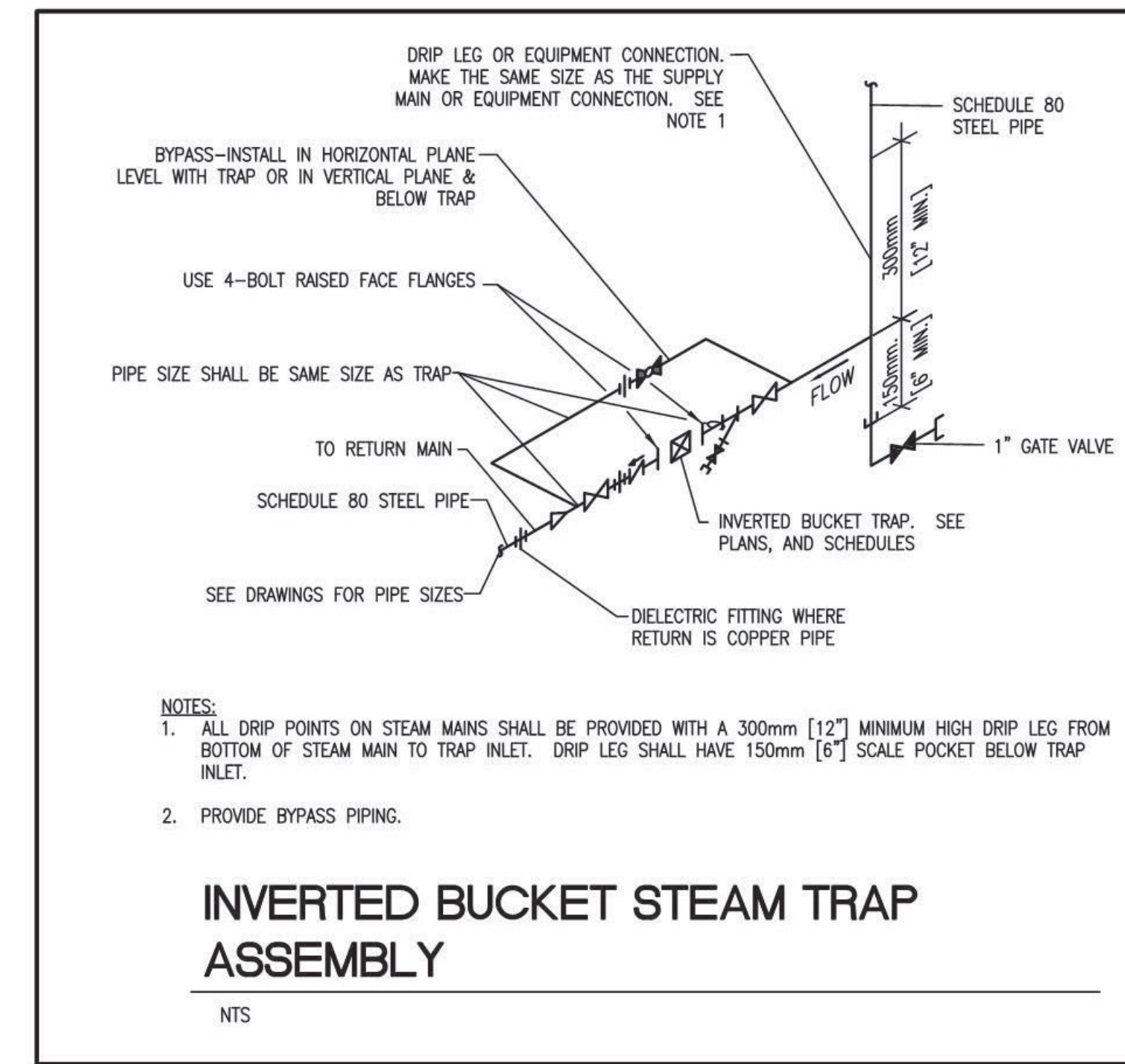
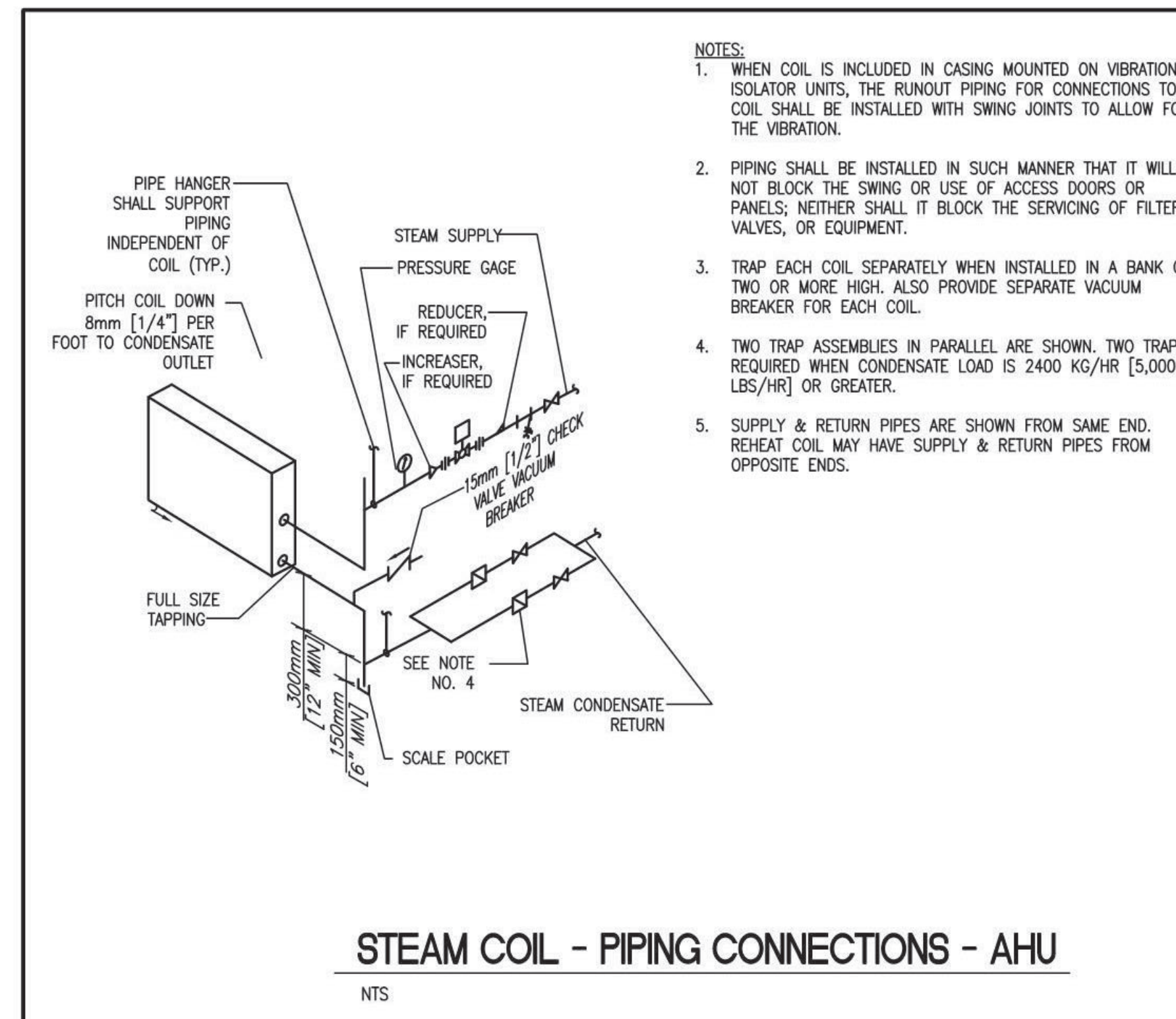
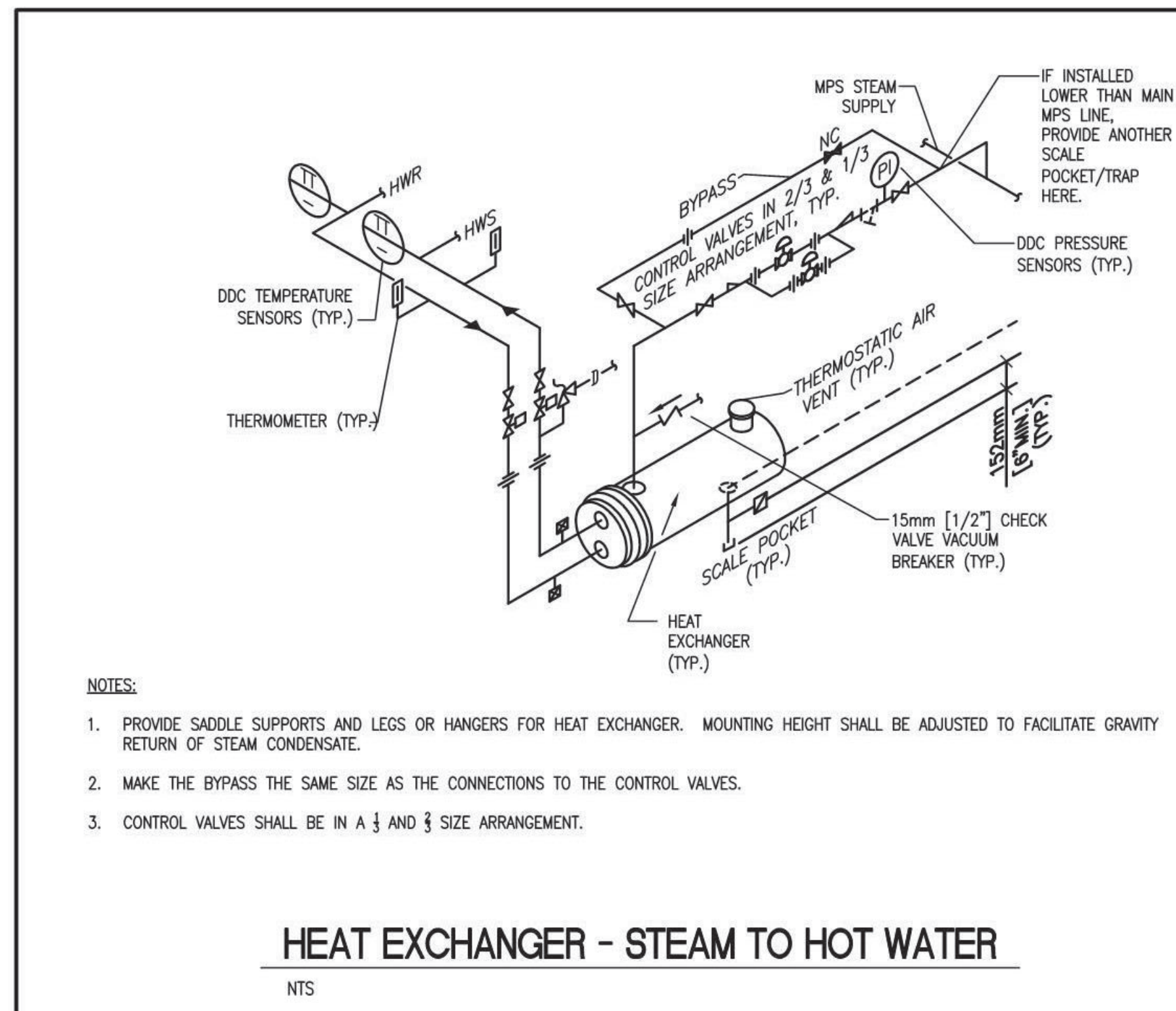
Office of Construction and Facilities Management  
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 Location  
**WICHITA, KANSAS**  
 Issue Date  
 05/22/2020

Project Number  
 589-701  
 Building Number  
 1 & 1C  
 Drawing Number  
**MH502**



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 KENNETH L. SEIBERT  
 LICENSED PROFESSIONAL ENGINEER  
 STATE OF KANSAS

Office of  
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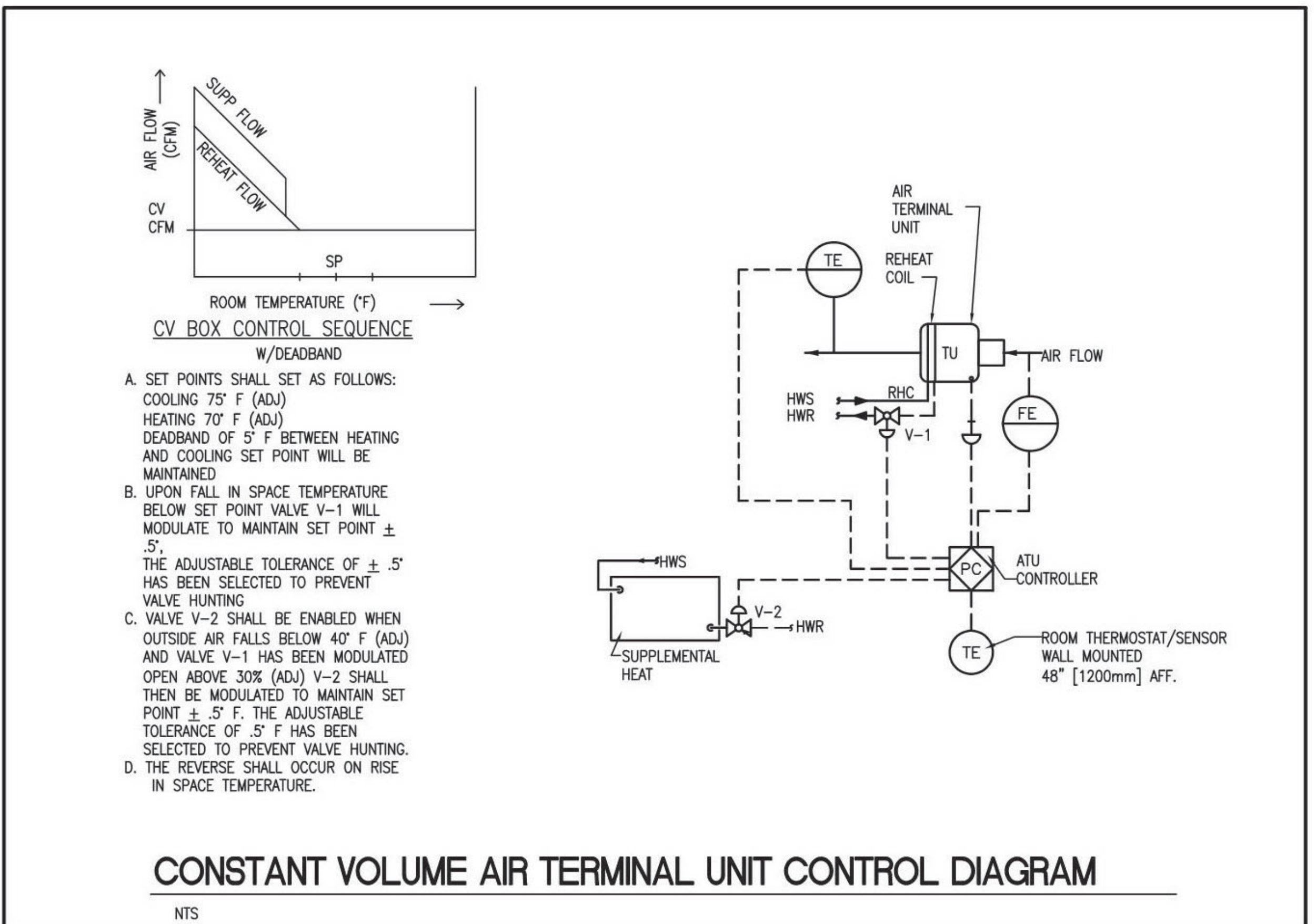
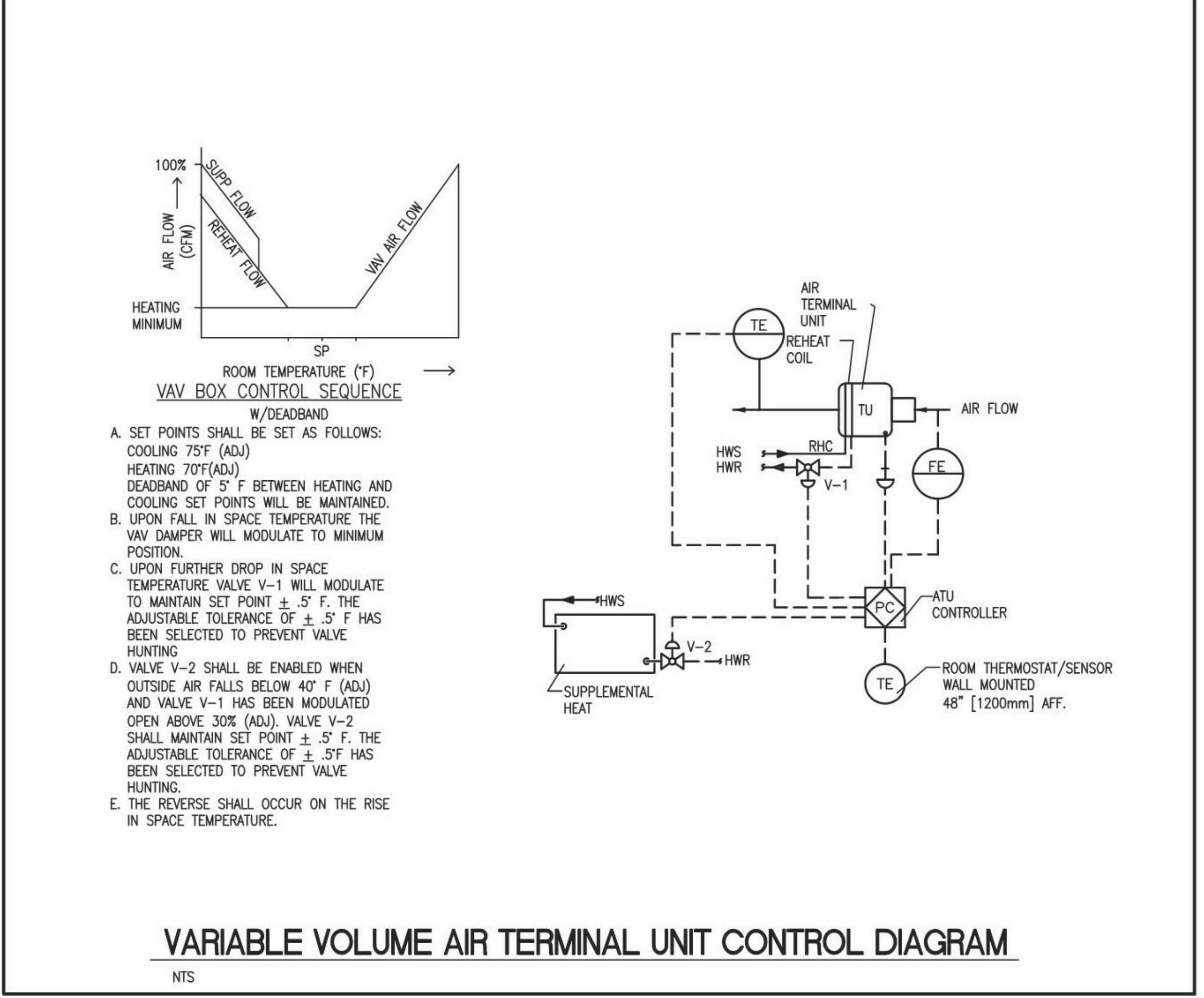
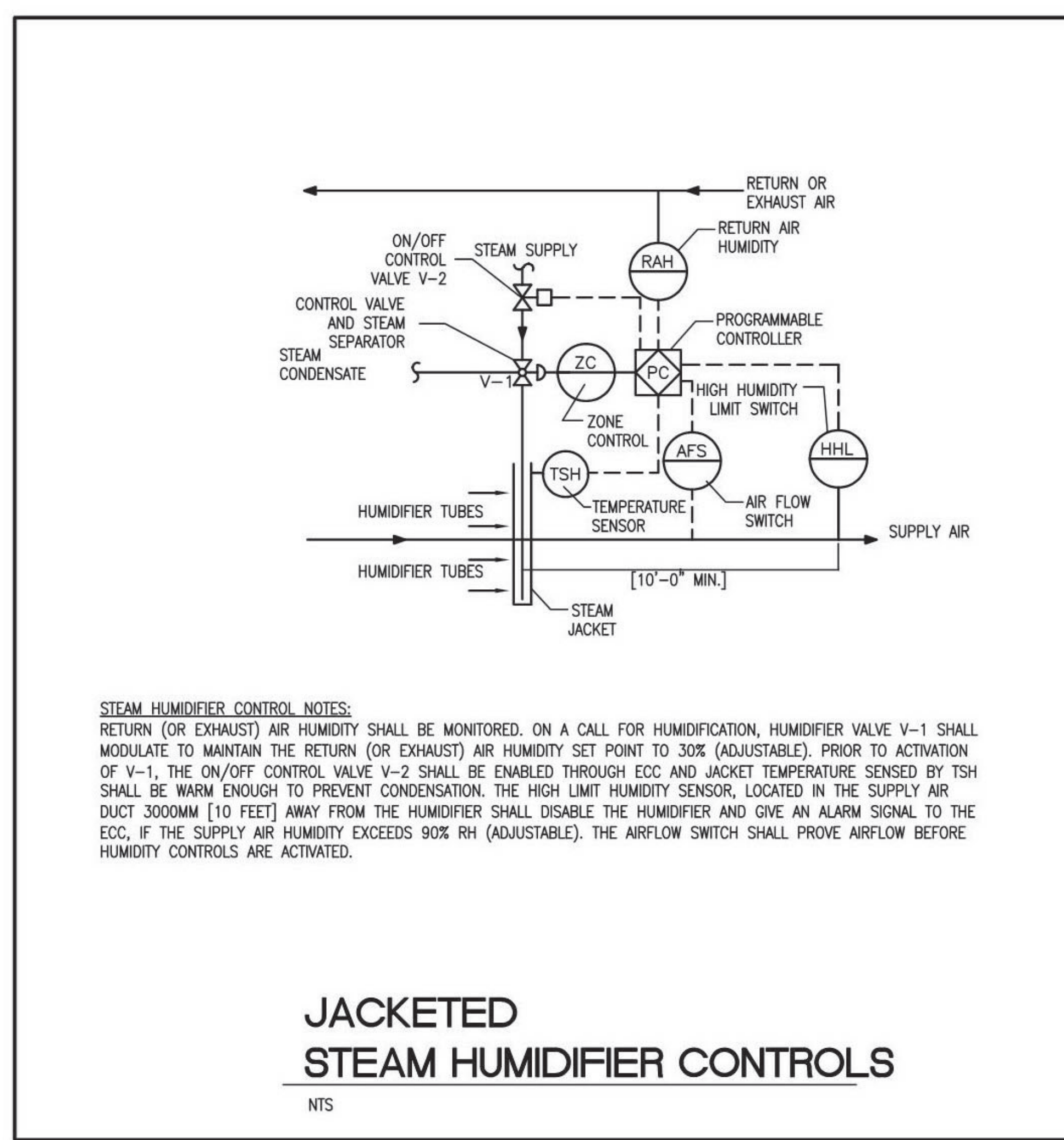
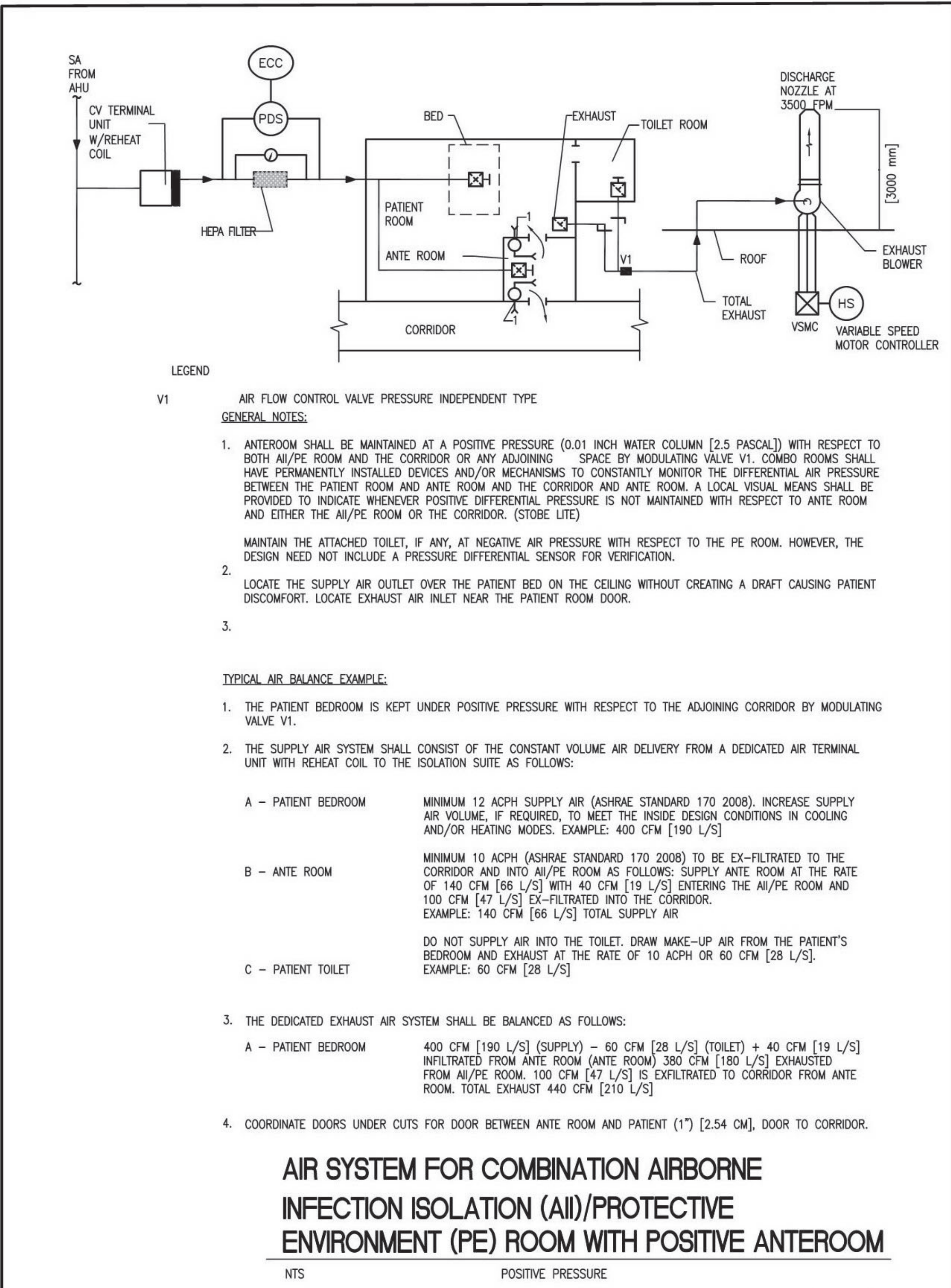
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**VA WICHITA - MED/SURG BEDS  
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Project Number  
 589-701  
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 1 & 1C  
 Drawing Number  
**MH503**

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Office of Construction and Facilities Management  
 VA U.S. Department of Veterans Affairs

Drawing Title  
**MECHANICAL CONTROLS**

Approved:

Phase  
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**VA WICHITA - MED/SURG BEDS FOR PATIENT PRIVACY**

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**WICHITA, KANSAS**

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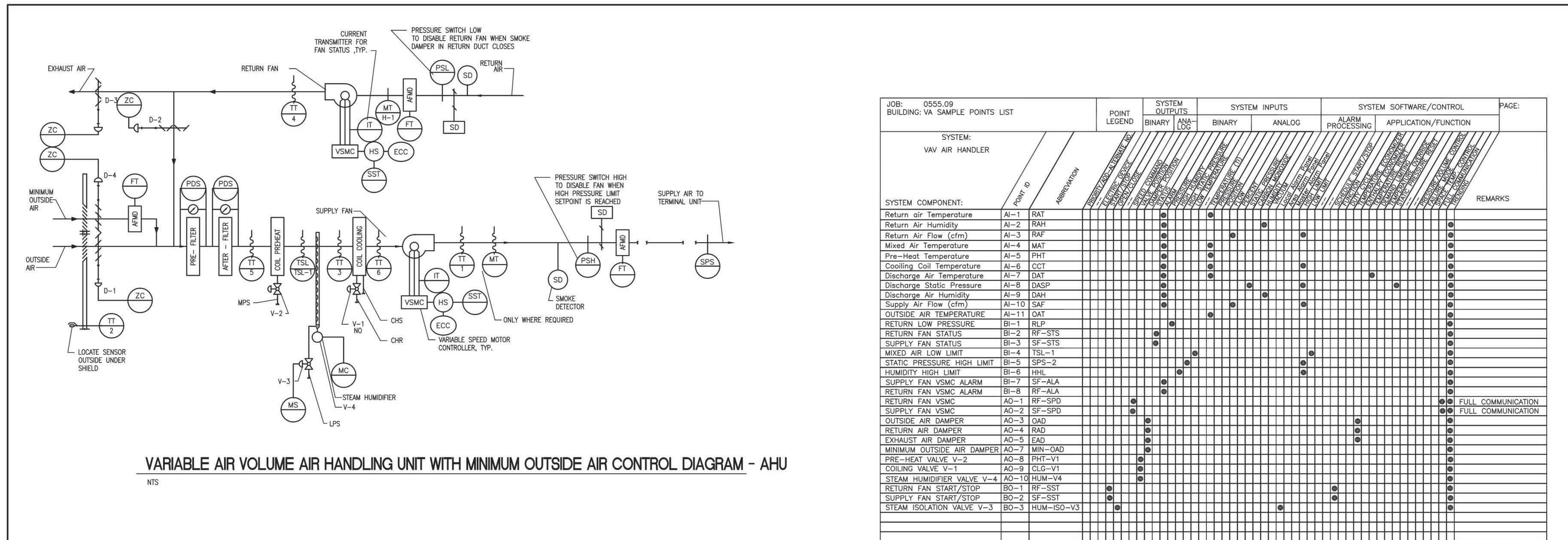
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VARIABLE AIR VOLUME AIR HANDLING UNIT WITH MINIMUM OUTSIDE AIR CONTROL DIAGRAM - AHU

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SEQUENCE OF OPERATION FOR VARIABLE AIR VOLUME AIR HANDLING UNIT WITH MINIMUM OUTSIDE AIR

1. GENERAL

1.1 UNIT IS NORMALLY STARTED AND STOPPED REMOTELY AT THE ECC. H-O-A SWITCH SHALL BE KEPT IN THE "AUTO" POSITION. "HAND" AND "OFF" POSITIONS SHALL BE USED ONLY FOR MAINTENANCE. WHEN THE UNIT IS "OFF" D-1, D-3 SHALL BE FULLY CLOSED. WHEN THE UNIT IS "ON" D-1, SD-1 AND SD-2 SHALL BE FULLY OPEN. D-2 AND D-3 SHALL MODULATE IN ACCORDANCE WITH THE FOLLOWING SEQUENCE.

2. TEMPERATURE CONTROL

2.1 SUPPLY AIR TEMPERATURE, SENSED BY TT-1, SHALL BE MAINTAINED AT SETPOINT VIA DIGITAL CONTROL PANEL BY MODULATING V-1 OR D-2 AND D-3 OR V-2 IN SEQUENCE.  
2.2 WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS ABOVE 75°F (23.9°C), THE DIGITAL CONTROL PANEL SHALL PREVENT THE MODULATION OF D-2 AND D-3 AND SHALL ASSUME THE MINIMUM OUTSIDE AIR POSITION (D-2 FULLY OPENED AND D-3 FULLY CLOSED). THE DIGITAL CONTROL PANEL SHALL MODULATE V-1 TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.  
2.3 WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS BETWEEN 65°F (18.3°C) AND THE SUPPLY AIR TEMPERATURE SENSED BY TT-1, DAMPER D-2 SHALL FULLY CLOSE AND D-3 SHALL BE FULLY OPEN (MAXIMUM OUTSIDE AIR POSITION). THE DIGITAL CONTROL PANEL SHALL MODULATE V-1 TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.  
2.4 WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS BELOW THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1, DAMPERS D1, D-2 AND D-3 SHALL MODULATE TO MAINTAIN THE SCHEDULED SUPPLY AIR TEMPERATURE. IF D-2 IS OPEN AND D-3 IS CLOSED TO MINIMUM OUTSIDE AIR, V-2 SHALL MODULATE OPEN TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.

3. AIR FLOW CONTROL

3.1 THE SUPPLY AIR FLOW SHALL BE CONTROLLED BY THE DIGITAL CONTROL PANEL MODULATING THE SUPPLY FAN VARIABLE SPEED MOTOR CONTROLLER TO MAINTAIN 1.0" (25mm) OF DUCT STATIC PRESSURE (FIELD ADJUSTABLE), SENSED BY SPS-1. RESET STATIC PRESSURE BASED ON ACTUAL BUILDING LOAD BY POLLING ALL AHU.  
3.2 THE DIGITAL CONTROL PANEL, USING TOTAL SUPPLY AIR AND RETURN AIR FLOW SIGNALS, SHALL RESET THE RETURN AIR FAN VSMC TO MAINTAIN A CONSTANT AIR FLOW DIFFERENCE BETWEEN THE SUPPLY AIR AND THE RETURN AIR EQUAL TO MINIMUM OUTSIDE AIR.  
3.3 USING HIGH PRESSURE SENSOR SPS-2 LOCATED AT THE SUPPLY FAN DISCHARGE, SHALL PREVENT THE SUPPLY FAN FROM DEVELOPING OVER 3" (75mm) OF STATIC PRESSURE (FIELD ADJUSTABLE). IF STATIC PRESSURE AT SPS-2 DOES EXCEED 3" (75mm) THE SUPPLY AIR FAN SHALL STOP. SPS-2 SHALL BE HARDWIRED TO THE SUPPLY FAN VSMC AND UNIT SHALL BE SHUTDOWN IN HAND/AUTO OR BYPASS MODE. SPS-2 WILL REQUIRE MANUAL RESET AT THE DEVICE.

4. HUMIDITY CONTROL

4.1 WHEN THE DIGITAL CONTROL PANEL IS NOT CALLING FOR HUMIDITY, SENSED BY RETURN AIR HUMIDITY H-1, 2-WAY "ON-OFF" CONTROL VALVE V-3 SHALL REMAIN CLOSED. WHEN THE DIGITAL CONTROL PANEL IS CALLING FOR HUMIDITY, V-3 SHALL REMAIN OPEN.  
4.2 RETURN AIR HUMIDITY SHALL BE MAINTAINED AT SETPOINT OF 35% RH (ADJ) VIA DIGITAL CONTROL PANEL BY MODULATING CONTROL VALVE V-4 TO MAINTAIN THE DESIRED HUMIDITY. THE DCP SHALL OVERRIDE THIS CONTROL TO MAINTAIN HUMIDITY OF ROOM AS SENSED BY H-2. DCP SHALL CLOSE VALVE V-3 WHENEVER THE SUPPLY FAN IS OFF. VALVE V-4 SHALL BE INTERLOCKED WITH A TEMPERATURE SWITCH TO KEEP THE HUMIDIFIER OFF UNTIL CONDENSATE TEMPERATURE APPROACHES STEAM TEMPERATURE.

5. FREEZE PROTECTION

5.1 IF THE AIR TEMPERATURE AS SENSED BY TT-3 FALLS BELOW 45°F (7°C), AN ALARM SIGNAL SHALL INDICATE AT THE DCP AND ECC. IF THIS TEMPERATURE FALLS BELOW 40°F (4.4°C), AS SENSED BY THE TSL THE SUPPLY AND RETURN FANS SHALL SHUT DOWN AND A CRITICAL ALARM SHALL INDICATE AT THE DIGITAL CONTROL PANEL AND ECC. TSL SHALL BE HARDWIRED TO THE SUPPLY FAN UPD AND UNIT SHALL BE SHUTDOWN IN HAND/AUTO OR BYPASS MODE. TSL WILL REQUIRE MANUAL RESET AT THE DEVICE.

6. AUTOMATIC SHUTDOWN/RESTART

6.1 WHEN SMOKE IS DETECTED BY DUCT SMOKE DETECTOR, SD, THE SUPPLY AND RETURN FANS SHALL SHUT "OFF" AND AN ALARM SIGNAL SHALL BE TRANSMITTED TO THE FIRE ALARM SYSTEM. ALL SMOKE DAMPERS IN THE SUPPLY AND RETURN DUCTS SHALL CLOSE.  
6.2 EXHAUST FANS SERVING AREA OF THE SUPPLY FAN SHALL CONTINUE TO RUN. SUPPLY AND RETURN FANS SHALL RESTART AND SMOKE DAMPERS SHALL OPEN WHEN FIRE ALARM CIRCUIT IS RESET.

7. EMERGENCY CONSTANT SPEED OPERATION

7.1 UPON FAILURE OF THE VSMC, THE SUPPLY AND RETURN FANS SHALL BE STARTED/STOPPED MANUALLY AT THE DIGITAL CONTROL PANEL OR THE ECC THROUGH THE BY-PASS STARTER. FANS SHALL THEN BE OPERATED AT CONSTANT SPEED.

| JOB: 0555.09<br>BUILDING: VA SAMPLE POINTS LIST |                 | POINT LEGEND | SYSTEM OUTPUTS        |                     | SYSTEM INPUTS   |                    | SYSTEM SOFTWARE/CONTROL   |                        | PAGE:                  |
|---|-----------------|--------------|-----------------------|---------------------|-----------------|--------------------|---------------------------|------------------------|------------------------|
|   |                 |              | BINARY                | ANA-LOG             | BINARY          | ANALOG             | ALARM PROCESSING          | APPLICATION/FUNCTION   |                        |
| SYSTEM:   | VAV AIR HANDLER |              |                       |                     |                 |                    |                           |                        |                        |
| SYSTEM COMPONENT:                               | Point ID        | Abbreviation | RETURN AIR FAN STATUS | RETURN AIR HUMIDITY | RETURN AIR FLOW | DISCHARGE AIR FLOW | DISCHARGE AIR TEMPERATURE | DISCHARGE AIR HUMIDITY | DISCHARGE AIR PRESSURE |
| Return air Temperature                          | AI-1            | RAT          |                       |                     |                 |                    |                           |                        |                        |
| Return Air Humidity                             | AI-2            | RAH          |                       |                     |                 |                    |                           |                        |                        |
| Return Air Flow (cfm)                           | AI-3            | RAF          |                       |                     |                 |                    |                           |                        |                        |
| Mixed Air Temperature                           | AI-4            | MAT          |                       |                     |                 |                    |                           |                        |                        |
| Pre-Heat Temperature                            | AI-5            | PHT          |                       |                     |                 |                    |                           |                        |                        |
| Cooling Coil Temperature                        | AI-6            | CCT          |                       |                     |                 |                    |                           |                        |                        |
| Discharge Air Temperature                       | AI-7            | DAT          |                       |                     |                 |                    |                           |                        |                        |
| Discharge Static Pressure                       | AI-8            | DASP         |                       |                     |                 |                    |                           |                        |                        |
| Discharge Air Humidity                          | AI-9            | DAH          |                       |                     |                 |                    |                           |                        |                        |
| Supply Air Flow (cfm)                           | AI-10           | SAF          |                       |                     |                 |                    |                           |                        |                        |
| OUTSIDE AIR TEMPERATURE                         | AI-11           | OAT          |                       |                     |                 |                    |                           |                        |                        |
| RETURN LOW PRESSURE                             | BI-1            | RLP          |                       |                     |                 |                    |                           |                        |                        |
| RETURN FAN STATUS                               | BI-2            | RF-ST5       |                       |                     |                 |                    |                           |                        |                        |
| SUPPLY FAN STATUS                               | BI-3            | SF-ST5       |                       |                     |                 |                    |                           |                        |                        |
| MIXED AIR LOW LIMIT                             | BI-4            | TSL-1        |                       |                     |                 |                    |                           |                        |                        |
| STATIC PRESSURE HIGH LIMIT                      | BI-5            | SPS-2        |                       |                     |                 |                    |                           |                        |                        |
| HUMIDITY HIGH LIMIT                             | BI-6            | HHL          |                       |                     |                 |                    |                           |                        |                        |
| SUPPLY FAN VSMC ALARM                           | BI-7            | SF-ALA       |                       |                     |                 |                    |                           |                        |                        |
| RETURN FAN VSMC ALARM                           | BI-8            | RF-ALA       |                       |                     |                 |                    |                           |                        |                        |
| RETURN FAN VSMC                                 | AO-1            | RF-SPD       |                       |                     |                 |                    |                           |                        | FULL COMMUNICATION     |
| SUPPLY FAN VSMC                                 | AO-2            | SF-SPD       |                       |                     |                 |                    |                           |                        | FULL COMMUNICATION     |
| OUTSIDE AIR DAMPER                              | AO-3            | OAD          |                       |                     |                 |                    |                           |                        |                        |
| RETURN AIR DAMPER                               | AO-4            | RAD          |                       |                     |                 |                    |                           |                        |                        |
| EXHAUST AIR DAMPER                              | AO-5            | EAD          |                       |                     |                 |                    |                           |                        |                        |
| MINIMUM OUTSIDE AIR DAMPER                      | AO-7            | MIN-OAD      |                       |                     |                 |                    |                           |                        |                        |
| PRE-HEAT VALVE V-2                              | AO-8            | PHT-V1       |                       |                     |                 |                    |                           |                        |                        |
| COOLING VALVE V-1                               | AO-9            | CLG-V1       |                       |                     |                 |                    |                           |                        |                        |
| STEAM HUMIDIFIER VALVE V-4                      | AO-10           | HUM-V4       |                       |                     |                 |                    |                           |                        |                        |
| RETURN FAN START/STOP                           | BO-1            | RF-SST       |                       |                     |                 |                    |                           |                        |                        |
| SUPPLY FAN START/STOP                           | BO-2            | SF-SST       |                       |                     |                 |                    |                           |                        |                        |
| STEAM ISOLATION VALVE V-3                       | BO-3            | HUM-ISO-V3   |                       |                     |                 |                    |                           |                        |                        |

POINTS LIST FOR VAV AIR HANDLING UNIT WITH MINIMUM OUTSIDE AIR

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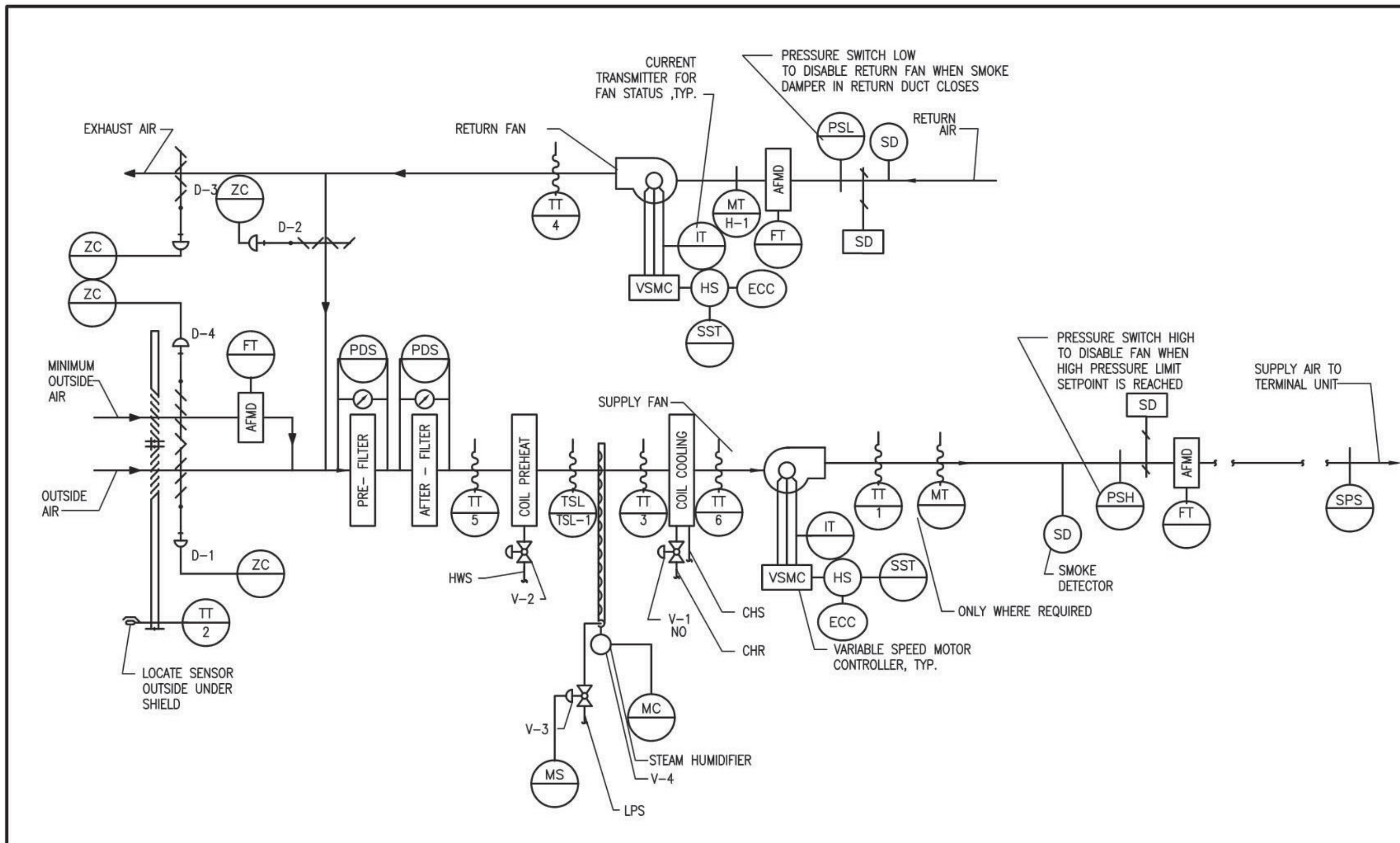
Office of Construction and Facilities Management  
VA U.S. Department of Veterans Affairs

Drawing Title  
**MECHANICAL CONTROLS**  
Approved:

Phase  
**BID DOCUMENTS**

Project Title  
**VA WICHITA - MED/SURG BEDS FOR PATIENT PRIVACY**  
Location  
**WICHITA, KANSAS**  
Issue Date  
05/22/2020  
Checked  
AJM  
Drawn  
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1 & 1C  
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MH505



VARIABLE AIR VOLUME AIR HANDLING UNIT WITH MINIMUM OUTSIDE AIR CONTROL DIAGRAM - RTU

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SEQUENCE OF OPERATION FOR VARIABLE AIR VOLUME AIR HANDLING UNIT WITH MINIMUM OUTSIDE AIR

1. GENERAL

1.1 UNIT IS NORMALLY STARTED AND STOPPED REMOTELY AT THE ECC. H-0-A SWITCH SHALL BE KEPT IN THE "AUTO" POSITION. "HAND" AND "OFF" POSITIONS SHALL BE USED ONLY FOR MAINTENANCE. WHEN THE UNIT IS "OFF" D-1, D-3, SHALL BE FULLY CLOSED. WHEN THE UNIT IS "ON" D-1, D-3 AND D-2 SHALL BE FULLY OPEN. D-2 AND D-3 SHALL MODULATE IN ACCORDANCE WITH THE FOLLOWING SEQUENCE:

2. TEMPERATURE CONTROL

2.1 SUPPLY AIR TEMPERATURE, SENSED BY TT-1, SHALL BE MAINTAINED AT SETPOINT VIA DIGITAL CONTROL PANEL BY MODULATING V-1 OR D-2 AND D-3 OR V-2 IN SEQUENCE.

2.2 WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS ABOVE 75°F (23.9°C), THE DIGITAL CONTROL PANEL SHALL PREVENT THE MODULATION OF D-2 AND D-3 AND SHALL ASSUME THE MINIMUM OUTSIDE AIR POSITION (D-2 FULLY OPENED AND D-3 FULLY CLOSED). THE DIGITAL CONTROL PANEL SHALL MODULATE V-1 TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.

2.3 WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS BETWEEN 65°F (18.3°C) AND THE SUPPLY AIR TEMPERATURE SENSED BY TT-1, DAMPERS D-2 AND D-3 SHALL FULLY CLOSE AND D1 AND D3 SHALL BE FULLY OPEN (MAXIMUM OUTSIDE AIR POSITION). THE DIGITAL CONTROL PANEL SHALL MODULATE V-1 TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.

2.4 WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS BELOW THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1, DAMPERS D1, D-2 AND D-3 SHALL MODULATE TO MAINTAIN THE SCHEDULED SUPPLY AIR TEMPERATURE. IF D-2 IS OPEN AND D-3 IS CLOSED TO MINIMUM OUTSIDE AIR, V-2 SHALL MODULATE OPEN TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.

3. AIR FLOW CONTROL

3.1 THE SUPPLY AIR FLOW SHALL BE CONTROLLED BY THE DIGITAL CONTROL PANEL MODULATING THE SUPPLY FAN VARIABLE SPEED MOTOR CONTROLLER TO MAINTAIN 1.0" (25mm) OF DUCT STATIC PRESSURE (FIELD ADJUSTABLE), SENSED BY SPS-1. RESET STATIC PRESSURE BASED ON ACTUAL BUILDING LOAD BY POLLING ALL AHU.

3.2 THE DIGITAL CONTROL PANEL, USING TOTAL SUPPLY AIR AND RETURN AIR FLOW SIGNALS, SHALL RESET THE RETURN AIR FAN VSMC TO MAINTAIN A CONSTANT AIR FLOW DIFFERENCE BETWEEN THE SUPPLY AIR AND THE RETURN AIR EQUAL TO MINIMUM OUTSIDE AIR.

3.3 USING HIGH PRESSURE SENSOR SPS-2 LOCATED AT THE SUPPLY FAN DISCHARGE, SHALL PREVENT THE SUPPLY FAN FROM DEVELOPING OVER 3" (75mm) OF STATIC PRESSURE (FIELD ADJUSTABLE). IF STATIC PRESSURE AT SPS-2 DOES EXCEED 3" (75mm) THE SUPPLY AIR FAN SHALL STOP. SPS-2 SHALL BE HARDWIRED TO THE SUPPLY FAN VSMC AND UNIT SHALL BE SHUTDOWN IN HAND/AUTO OR BYPASS MODE. SPS-2 WILL REQUIRE MANUAL RESET AT THE DEVICE.

4. HUMIDITY CONTROL

4.1 WHEN THE DIGITAL CONTROL PANEL IS NOT CALLING FOR HUMIDITY, SENSED BY RETURN AIR HUMIDITY H-1, 2-WAY "ON-OFF" CONTROL VALVE V-3 SHALL REMAIN CLOSED. WHEN THE DIGITAL CONTROL PANEL IS CALLING FOR HUMIDITY, V-3 SHALL REMAIN OPEN.

4.2 RETURN AIR HUMIDITY SHALL BE MAINTAINED AT SETPOINT OF 35% RH (ADJ) VIA DIGITAL CONTROL PANEL BY MODULATING CONTROL VALVE V-4 TO MAINTAIN THE DESIRED HUMIDITY. THE DCP SHALL OVERRIDE THIS CONTROL TO MAINTAIN HUMIDITY OF 80% AS SENSED BY H-2. DCP SHALL CLOSE VALVE V-3 WHENEVER THE SUPPLY FAN IS OFF. VALVE V-4 SHALL BE INTERLOCKED WITH A TEMPERATURE SWITCH TO KEEP THE HUMIDIFIER OFF UNTIL CONDENSATE TEMPERATURE APPROACHES STEAM TEMPERATURE.

5. FREEZE PROTECTION

5.1 IF THE AIR TEMPERATURE AS SENSED BY TT-3 FALLS BELOW 45°F (7°C), AN ALARM SIGNAL SHALL INDICATE AT THE DCP AND ECC. IF THIS TEMPERATURE FALLS BELOW 40°F (4.4°C), AS SENSED BY THE TSL THE SUPPLY AND RETURN FANS SHALL SHUT DOWN AND A CRITICAL ALARM SHALL INDICATE AT THE DIGITAL CONTROL PANEL AND ECC. TSL SHALL BE HARDWIRED TO THE SUPPLY FAN UPD AND UNIT SHALL BE SHUTDOWN IN HAND/AUTO OR BYPASS MODE. TSL WILL REQUIRE MANUAL RESET AT THE DEVICE.

6. AUTOMATIC SHUTDOWN/RESTART

6.1 WHEN SMOKE IS DETECTED BY DUCT SMOKE DETECTOR, SD, THE SUPPLY AND RETURN FANS SHALL SHUT "OFF" AND AN ALARM SIGNAL SHALL BE TRANSMITTED TO THE FIRE ALARM SYSTEM. ALL SMOKE DAMPERS IN THE SUPPLY AND RETURN DUCTS SHALL CLOSE.

6.2 EXHAUST FANS SERVING AREA OF THE SUPPLY FAN SHALL CONTINUE TO RUN. SUPPLY AND RETURN FANS SHALL RESTART AND SMOKE DAMPERS SHALL OPEN WHEN FIRE ALARM CIRCUIT IS RESET.

7. EMERGENCY CONSTANT SPEED OPERATION

7.1 UPON FAILURE OF THE VSMC, THE SUPPLY AND RETURN FANS SHALL BE STARTED/STOPPED MANUALLY AT THE DIGITAL CONTROL PANEL OR THE ECC THROUGH THE BY-PASS STARTER. FANS SHALL THEN BE OPERATED AT CONSTANT SPEED.

| SYSTEM COMPONENT:          | POINT ID | ABBREVIATION | SYSTEM OUTPUTS |        | SYSTEM INPUTS |        | SYSTEM SOFTWARE/CONTROL |                      | PAGE:              |
|----------------------------|----------|--------------|----------------|--------|---------------|--------|-------------------------|----------------------|--------------------|
|                            |          |              | BINARY         | ANALOG | BINARY        | ANALOG | ALARM PROCESSING        | APPLICATION/FUNCTION |                    |
| Return air Temperature     | AI-1     | RAT          |                |        |               |        |                         |                      |                    |
| Return Air Humidity        | AI-2     | RAH          |                |        |               |        |                         |                      |                    |
| Return Air Flow (cfm)      | AI-3     | RAF          |                |        |               |        |                         |                      |                    |
| Mixed Air Temperature      | AI-4     | MAT          |                |        |               |        |                         |                      |                    |
| Pre-Heat Temperature       | AI-5     | PHT          |                |        |               |        |                         |                      |                    |
| Cooling Coil Temperature   | AI-6     | CCT          |                |        |               |        |                         |                      |                    |
| Discharge Air Temperature  | AI-7     | DAT          |                |        |               |        |                         |                      |                    |
| Discharge Air Humidity     | AI-9     | DAH          |                |        |               |        |                         |                      |                    |
| Supply Air Flow (cfm)      | AI-10    | SAF          |                |        |               |        |                         |                      |                    |
| OUTSIDE AIR TEMPERATURE    | AI-11    | OAT          |                |        |               |        |                         |                      |                    |
| RETURN LOW PRESSURE        | BI-1     | RLP          |                |        |               |        |                         |                      |                    |
| RETURN FAN STATUS          | BI-2     | RF-ST5       |                |        |               |        |                         |                      |                    |
| SUPPLY FAN STATUS          | BI-3     | SF-ST5       |                |        |               |        |                         |                      |                    |
| MIXED AIR LOW LIMIT        | BI-4     | TSL-1        |                |        |               |        |                         |                      |                    |
| STATIC PRESSURE HIGH LIMIT | BI-5     | SPS-2        |                |        |               |        |                         |                      |                    |
| HUMIDITY HIGH LIMIT        | BI-6     | HHL          |                |        |               |        |                         |                      |                    |
| SUPPLY FAN VSMC ALARM      | BI-7     | SF-ALA       |                |        |               |        |                         |                      |                    |
| RETURN FAN VSMC ALARM      | BI-8     | RF-ALA       |                |        |               |        |                         |                      |                    |
| RETURN FAN VSMC            | AO-1     | RF-SPD       |                |        |               |        |                         |                      | FULL COMMUNICATION |
| SUPPLY FAN VSMC            | AO-2     | SF-SPD       |                |        |               |        |                         |                      | FULL COMMUNICATION |
| OUTSIDE AIR DAMPER         | AO-3     | OAD          |                |        |               |        |                         |                      |                    |
| RETURN AIR DAMPER          | AO-4     | RAD          |                |        |               |        |                         |                      |                    |
| EXHAUST AIR DAMPER         | AO-5     | EAD          |                |        |               |        |                         |                      |                    |
| MINIMUM OUTSIDE AIR DAMPER | AO-7     | MIN-OAD      |                |        |               |        |                         |                      |                    |
| PRE-HEAT VALVE V-2         | AO-8     | PHT-V1       |                |        |               |        |                         |                      |                    |
| COILING VALVE V-1          | AO-9     | CLG-V1       |                |        |               |        |                         |                      |                    |
| STEAM HUMIDIFIER VALVE V-4 | AO-10    | HUM-V4       |                |        |               |        |                         |                      |                    |
| RETURN FAN START/STOP      | BO-1     | RF-SST       |                |        |               |        |                         |                      |                    |
| SUPPLY FAN START/STOP      | BO-2     | SF-SST       |                |        |               |        |                         |                      |                    |
| STEAM ISOLATION VALVE V-3  | BO-3     | HUM-ISO-V3   |                |        |               |        |                         |                      |                    |

POINTS LIST FOR VAV AIR HANDLING UNIT WITH MINIMUM OUTSIDE AIR

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Office of Construction and Facilities Management  
 VA U.S. Department of Veterans Affairs

Drawing Title  
**MECHANICAL CONTROLS**

Approved:

Phase  
**BID DOCUMENTS**

Project Title  
**VA WICHITA - MED/SURG BEDS FOR PATIENT PRIVACY**

Location  
**WICHITA, KANSAS**

Issue Date  
 05/22/2020

Checked

Drawn

Project Number  
 589-701

Building Number  
 1 & 1C

Drawing Number  
**MH506**

| RTU SCHEDULE |    |       |         |          |                     |      |       |         |             |        |     |     |     |     |            |            |         |        |     |            |     |     |         |       |           |              |             |             |      |                    |             |                |     |     |             |             |                  |                |      |             |      |             |             |     |                |    |               |               |                |                    |      |               |                |                |                      |     |      |      |   |
|--------------|----|-------|---------|----------|---------------------|------|-------|---------|-------------|--------|-----|-----|-----|-----|------------|------------|---------|--------|-----|------------|-----|-----|---------|-------|-----------|--------------|-------------|-------------|------|--------------------|-------------|----------------|-----|-----|-------------|-------------|------------------|----------------|------|-------------|------|-------------|-------------|-----|----------------|----|---------------|---------------|----------------|--------------------|------|---------------|----------------|----------------|----------------------|-----|------|------|---|
| IDENTITY     |    |       |         |          | SUPPLY FAN          |      |       |         |             | MOTOR  |     |     |     |     | RETURN FAN |            |         |        |     | ELECTRICAL |     |     |         |       | HEATING   |              |             |             |      | HEATING WATER COIL |             |                |     |     | FILTER      |             |                  |                |      | BLENDER     |      |             |             |     | UNIT SIZE (IN) |    |               |               |                | Chilled Water Coil |      |               |                |                | Chilled Water Coil 2 |     |      |      |   |
| G MARK       | #  | MODEL | PRODUCT | LOCATION | AREA SERVED         | TSP  | TYPE  | FAN RPM | ESP (IN-WG) | DRIVE  | MCA | BHP | HP  | VFD | DISCONN    | TYPE       | FAN RPM | DRIVE  | MCA | BHP        | HP  | VFD | Voltage | Phase | Total Cap | Entering DBT | Leaving DBT | DESCRIPTION | ROWS | FPI                | APD (IN-WG) | FACE VEL (FPM) | EWT | LWT | WPD (FT-WG) | Actual Flow | TYPE             | FACE AREA (SF) | SIZE | APD (IN-WG) | MERV | DESCRIPTION | APD (IN-WG) | L   | W              | H  | OPER. WT (LB) | F.V. (ft/min) | A.P.D. (inH2O) | W.P.D. (ftH2O)     | Rows | F.V. (ft/min) | A.P.D. (inH2O) | W.P.D. (ftH2O) | Rows                 |     |      |      |   |
| 1C-RTU-1     | 68 | 0AH   | Skyline | ROOF     | SECOND AND THIRD 1C | 4.71 | QPAC3 | 11302   | 2.00        | Direct | 17  | 4.9 | 7.0 | No  | No         | EBM5 SRP11 | 9733    | Direct | 7   | 1.2        | 2.3 | No  | 460 V   | 3     | 270000.0  | 40           | 60          | 5WH0902B    | 2    | 9                  | 0.17        | 495            | 180 | 145 | 4.90        | 15          | Pleated (MERV 8) | 15.2           | 2.00 | 0.61        | 30   | Kees Inc.   | 0.29        | 432 | 68             | 54 | 7151          | 468           | 0.63           | 7.11               | 6    | 468           | 0.12           | 7.11           | 2                    | 468 | 0.12 | 7.11 | 2 |

REMARKS:  
 1. PROVIDE WITH SESMIC CURB.  
 2. SELECT COOLING COIL FOR 15% GLYCOL.  
 3. PROVIDE WITH HUMIDIFIER AND DISTRIBUTION TUBES, 175 LBS/HR.

| AHU2 SCHEDULE |          |     |               |                             |             |       |      |             |       |       |     |     |     |         |            |          |           |              |             |             |      |      |             |                |                |      |             |      |               |                    |                |                |      |  |
|---------------|----------|-----|---------------|-----------------------------|-------------|-------|------|-------------|-------|-------|-----|-----|-----|---------|------------|----------|-----------|--------------|-------------|-------------|------|------|-------------|----------------|----------------|------|-------------|------|---------------|--------------------|----------------|----------------|------|--|
| IDENTITY      |          |     |               |                             | SUPPLY FAN  |       |      |             |       | MOTOR |     |     |     |         | ELECTRICAL |          |           |              |             | HEATING     |      |      |             |                | FILTER         |      |             |      |               | Chilled Water Coil |                |                |      |  |
| MARK          | DES. AHU | #   | MODEL         | LOCATION                    | AREA SERVED | TSP   | TYPE | ESP (IN-WG) | DRIVE | MCA   | BHP | HP  | VFD | DISCONN | Voltage    | Phase    | Total Cap | Entering DBT | Leaving DBT | DESCRIPTION | ROWS | FPI  | APD (IN-WG) | FACE VEL (FPM) | FACE AREA (SF) | SIZE | APD (IN-WG) | MERV | OPER. WT (LB) | F.V. (ft/min)      | A.P.D. (inH2O) | W.P.D. (ftH2O) | Rows |  |
| 1-AHU-2       | 423      | CAH | EAST BASEMENT | SECOND AND THIRD FLOOR EAST | 5.77        | QPAC3 | 3.00 | Direct      | 81    | 3.3   | 4.2 | Yes | No  | 200 V   | 3          | 915460.0 | 40        | 92           | 5JA0701B    | 1           | 7    | 0.09 | 528         | 30.4           | 2.00           | 0.00 | 30          | 6457 | 512           | 0.68               | 4.73           | 6              |      |  |

REMARKS:  
 1. UNIT SHALL BE DOUBLE WALL CONSTRUCTION. PERFORATED PANELS ARE NOT ACCEPTABLE. SUPPLY STAINLESS STEEL W/ CONDENSATE DRAIN PAN FOR CHILLED WATER COIL SECTIONS. ENTIRE DRAIN SHALL BE PITCHED TO OUTLET. PROVIDE STAINLESS STEEL COOLING COIL CASINGS. WATER CARRY OVER IS NOT ALLOWED. SELECT COOLING COILS ACCORDINGLY.  
 2. REFER TO THE DRAWINGS FOR CONFIGURATION. THE TOTAL STATIC PRESSURE FOR THE FANS SHALL INCLUDE THE FOLLOWING: (A) THE LISTED ESP, (B) DIRTY FILTER ALLOWANCE, (C) PRESSURE DROPS THROUGH UNIT CONFIGURATION INCLUDING (COILS, DAMPERS, ETC.)  
 3. PROVIDE INTERNALLY ISOLATED (WITH HOUSED SPRINGS, 2" MINIMUM) FANS AND PROVIDE WITH HIGH EFFICIENCY ODP FAN MOTOR.  
 4. COORDINATE SHIPPING SPLITS AS REQUIRED FOR INSTALLATION.  
 5. COOLING COILS SHALL BE SELECTED FOR 15% GLYCOL.  
 6. PROVIDE ACCESS DOORS ON BOTH SIDES OF UNITS.  
 7. HEIGHT INCLUDES INTEGRAL BASE RAIL.

| REGISTERS, GRILLES AND DIFFUSERS SCHEDULE |  |           |                 |           |           |               |
|---|--|-----------|-----------------|-----------|-----------|---------------|
| SYMBOL                                    | MATERIAL & TYPE  | CFM RANGE | INLET DUCT SIZE | FACE SIZE | NECK SIZE | REMARKS       |
| S-1                                       | EXTRUDED ALUMINUM SQUARE PLAQUE FACE                   | 0-100     | 6"Ø             | 24x24     | 6"Ø       | 1, 2, 3       |
| S-1A                                      | EXTRUDED ALUMINUM SQUARE PLAQUE FACE                   | 0-100     | 6"Ø             | 12x12     | 6"Ø       | 1, 2, 3, 6    |
| S-2                                       | EXTRUDED ALUMINUM SQUARE PLAQUE FACE                   | 101-225   | 8"Ø             | 24x24     | 8"Ø       | 1, 2, 3       |
| S-3                                       | EXTRUDED ALUMINUM SQUARE PLAQUE FACE                   | 226-350   | 10"Ø            | 24x24     | 10"Ø      | 1, 2, 3       |
| S-4                                       | EXTRUDED ALUMINUM SQUARE PLAQUE FACE                   | 351-600   | 12"Ø            | 24x24     | 12"Ø      | 1, 2, 3       |
| S-5                                       | EXTRUDED ALUMINUM 3/4" BLADE SPACING DOUBLE DEFLECTION | 101-225   | 12"Ø            | 14"x10"   | 12"Ø      | 1, 2, 3, 4, 5 |
| S-6                                       | 48" ALUMINUM 2-1" SLOTS WITH PLENUM                    | 37.5 / LF | 8"Ø             | 48"X5"    | 8"Ø       | 1, 3          |
| R-1                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 0-100     | 6"Ø             | 24x24     | 6"Ø       | 1, 2, 3       |
| R-2                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 101-225   | 8"Ø             | 24x24     | 8"Ø       | 1, 2, 3       |
| R-3                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 226-350   | 10"Ø            | 24x24     | 10"Ø      | 1, 2, 3       |
| R-4                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 351-600   | 12"Ø            | 24x24     | 12"Ø      | 1, 2, 3       |
| R-5                                       | EXTRUDED ALUMINUM 3/4" BLADE SPACING SINGLE DEFLECTION | 101-225   | 12"Ø            | 14"x10"   | 12"Ø      | 1, 2, 3, 4, 5 |
| R-6                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 601-1000  | 14"Ø            | 24x24     | 14"Ø      | 1, 2, 3       |
| R-7                                       | 48" ALUMINUM 2-1" SLOTS WITH PLENUM                    | 75 / LF   | 10"Ø            | 48"X5"    | 10"Ø      | 1, 3          |
| E-1                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 0-100     | 6"Ø             | 24x24     | 6"Ø       | 1, 2, 3       |
| E-1A                                      | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 0-100     | 6"Ø             | 12x12     | 6"Ø       | 1, 2, 3, 6    |
| E-2                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 101-225   | 8"Ø             | 24x24     | 8"Ø       | 1, 2, 3       |
| E-2A                                      | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 101-225   | 8"Ø             | 12x12     | 8"Ø       | 1, 2, 3, 6    |
| E-4                                       | EXTRUDED ALUMINUM FRAME W/ 1/2" CUBE CORE              | 351-600   | 12"Ø            | 24x24     | 12"Ø      | 1, 2, 3       |

REMARKS:  
 1. CEILING T-BAR MOUNTED IN 24"x24" ALUMINUM PANEL UNLESS NOTED WITH AN 'A' ON THE PLANS.  
 2. PROVIDE DIFFUSER WITH MOLDED THERMAL BLANKET.  
 3. PROVIDE WHITE IN COLOR.  
 4. SIDEWALL OR DUCT MOUNTED.  
 5. PROVIDE WITH ALUMINUM OPPOSED BLADE DAMPER.  
 6. 'A' INDICATES GRILLE SHALL BE PROVIDED WITH 1" BORDER TO BE SURFACE MOUNTED.

| PUMP SCHEDULE |           |               |     |           |          |                    |      |         |       |           |         |
|---------------|-----------|---------------|-----|-----------|----------|--------------------|------|---------|-------|-----------|---------|
| MARK          | MODEL     | SERVICE       | GPM | HEAD (FT) | MOTOR HP | MIN EFFICIENCY (%) | RPM  | VOLTAGE | PHASE | FREQUENCY | REMARKS |
| 1-P-HWC-1     | SERIES 60 | RTU HW COIL   | 15  | 10        | 0.25     | 44                 | 1800 | 115 V   | 1     | 60        | 2, 3    |
| 1-P-HWA       | 1510      | HEATING WATER | 90  | 60        | 5        | 64.9               | 1800 | 208 V   | 3     | 60        | 1, 2, 3 |

REMARKS:  
 1. PROVIDE WITH CONCRETE PAD.  
 2. PUMP SHALL NOT USE MORE THAN 90% OF FULL IMPELLER.  
 3. LESS EFFICIENT PUMPS WILL NOT BE ACCEPTED.

| HEAT EXCHANGER SCHEDULE |         |               |           |           |                        |                      |          |         |
|-------------------------|---------|---------------|-----------|-----------|------------------------|----------------------|----------|---------|
| MARK                    | MODEL   | SERVICE       | WATER GPM | EWTLWT    | HEATING CAPACITY (MBH) | STEAM PRESSURE (PSI) | LBS / HR | REMARKS |
| 1-HX                    | SU-65-2 | HEATING WATER | 90        | 150 / 180 | 1320                   | 30                   | 1,419    | BELOW   |

REMARKS:  
 1. PROVIDE WITH STRAND.

| VA/CAV/OAV/FVAV BOX SCHEDULE |         |       |                 |                       |             |               |      |           |           |                       |           |           |     |                           |      |                               |         |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---------|-------|-----------------|-----------------------|-------------|---------------|------|-----------|-----------|-----------------------|-----------|-----------|-----|---------------------------|------|-------------------------------|---------|--|--|--|--|--|--|--|--|--|--|
| TAG / SIZE                   | UNIT ID | MODEL | DUCT CONNECTION | COOLING CFM MAX / MIN | HEATING CFM | SP DOWNSTREAM | MBH  | EAT DEG F | LAT DEG F | AIR PRESSURE DROP IN. | EWT DEG F | LWT DEG F | GPM | WATER PRESSURE DROP FT HD | ROWS | HEATING COIL RUNOUT PIPE SIZE | REMARKS |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 2.1     | DESV  | 6" 12"x8"       | 350 / 175             | 260         | 0.25"         | 11.3 | 55        | 95        | 0.16                  | 180       | 145       | 0.7 | 0.09                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 2.2     | DESV  | 6" 12"x8"       | 350 / 185             | 260         | 0.25"         | 11.3 | 55        | 95        | 0.16                  | 180       | 145       | 0.7 | 0.09                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-04                       | 2.3     | DESV  | 4" 12"x8"       | 175 / 125             | 125         | 0.25"         | 7.4  | 55        | 95        | 0.03                  | 180       | 162       | 0.6 | 0.06                      | 1    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-07                       | 2.4     | DESV  | 7" 12"x10"      | 450 / 250             | 335         | 0.25"         | 14.5 | 55        | 95        | 0.15                  | 180       | 138       | 0.7 | 0.13                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 2.5     | DESV  | 5" 12"x8"       | 150 / 100             | 100         | 0.25"         | 4    | 55        | 92        | 0.02                  | 180       | 153       | 0.5 | 0.08                      | 1    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 2.6     | DESV  | 5" 12"x8"       | 200 / 100             | 150         | 0.25"         | 5.7  | 55        | 90        | 0.03                  | 180       | 158       | 0.5 | 0.15                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-08                       | 2.7     | DESV  | 8" 12"x10"      | 620 / 360             | 465         | 0.25"         | 14.2 | 55        | 90        | 0.17                  | 180       | 134       | 0.6 | 0.11                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 2.8     | DESV  | 6" 12"x8"       | 250 / 125             | 175         | 0.25"         | 9.2  | 55        | 95        | 0.09                  | 180       | 149       | 0.6 | 0.06                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 2.9     | DESV  | 5" 12"x8"       | 200 / 100             | 150         | 0.25"         | 8.6  | 55        | 95        | 0.06                  | 180       | 151       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-04                       | 2.10    | DESV  | 4" 12"x8"       | 150 / 100             | 100         | 0.25"         | 7    | 55        | 95        | 0.04                  | 180       | 157       | 0.6 | 0.08                      | 1    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 2.11    | DESV  | 6" 12"x8"       | 300 / 150             | 200         | 0.25"         | 11.6 | 55        | 95        | 0.08                  | 180       | 141       | 0.6 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-09                       | 2.12    | DESV  | 9" 14"x12"      | 750 / 375             | 450         | 0.25"         | 17.1 | 55        | 90        | 0.23                  | 180       | 136       | 0.8 | 0.15                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-09                       | 2.13    | DESV  | 9" 14"x12"      | 750 / 375             | 450         | 0.25"         | 17.1 | 55        | 90        | 0.23                  | 180       | 136       | 0.8 | 0.15                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-10                       | 2.14    | DESV  | 10" 14"x12"     | 670 / 335             | 500         | 0.25"         | 19.9 | 55        | 91        | 0.15                  | 180       | 136       | 0.9 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 2.15    | DESV  | 6" 12"x8"       | 225 / 110             | 170         | 0.25"         | 9.1  | 55        | 95        | 0.08                  | 180       | 149       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.1     | DESV  | 6" 12"x8"       | 310 / 160             | 230         | 0.25"         | 10.3 | 55        | 95        | 0.13                  | 180       | 145       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 3.2     | DESV  | 5" 12"x8"       | 200 / 100             | 150         | 0.25"         | 5.7  | 55        | 90        | 0.03                  | 180       | 158       | 0.5 | 0.15                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-07                       | 3.3     | DESV  | 7" 12"x10"      | 300 / 150             | 225         | 0.25"         | 12.5 | 55        | 95        | 0.09                  | 180       | 138       | 0.6 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-07                       | 3.4     | DESV  | 7" 12"x10"      | 410 / 205             | 310         | 0.25"         | 13.1 | 55        | 94        | 0.13                  | 180       | 136       | 0.6 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 3.5     | DESV  | 5" 12"x8"       | 200 / 100             | 150         | 0.25"         | 5.7  | 55        | 90        | 0.03                  | 180       | 158       | 0.5 | 0.15                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 3.6     | DESV  | 5" 12"x8"       | 200 / 100             | 150         | 0.25"         | 5.7  | 55        | 90        | 0.03                  | 180       | 158       | 0.5 | 0.15                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-07                       | 3.7     | DESV  | 7" 12"x10"      | 410 / 205             | 310         | 0.25"         | 13.1 | 55        | 94        | 0.13                  | 180       | 136       | 0.6 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 3.8     | DESV  | 5" 12"x8"       | 200 / 100             | 150         | 0.25"         | 5.7  | 55        | 95        | 0.06                  | 180       | 151       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-07                       | 3.9     | DESV  | 7" 12"x10"      | 300 / 150             | 225         | 0.25"         | 11.6 | 55        | 95        | 0.08                  | 180       | 141       | 0.6 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-09                       | 3.10    | DESV  | 9" 14"x12"      | 360 / 180             | 270         | 0.25"         | 15.6 | 55        | 95        | 0.06                  | 180       | 145       | 0.9 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.11    | DESV  | 6" 12"x8"       | 240 / 120             | 180         | 0.25"         | 9.3  | 55        | 95        | 0.09                  | 180       | 149       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-07                       | 3.12    | DESV  | 7" 12"x10"      | 270 / 135             | 200         | 0.25"         | 11   | 55        | 95        | 0.06                  | 180       | 143       | 0.6 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-10                       | 3.13    | DESV  | 10" 14"x12"     | 625 / 325             | 470         | 0.25"         | 19.5 | 55        | 93        | 0.14                  | 180       | 136       | 0.9 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.14    | DESV  | 6" 12"x8"       | 325 / 170             | 245         | 0.25"         | 10.6 | 55        | 94        | 0.14                  | 180       | 144       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-04                       | 3.15    | DESV  | 4" 12"x8"       | 125 / 100             | 100         | 0.25"         | 4    | 55        | 92        | 0.02                  | 180       | 152       | 0.5 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.16    | DESV  | 6" 12"x8"       | 250 / 125             | 175         | 0.25"         | 9.2  | 55        | 95        | 0.09                  | 180       | 149       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 3.17    | DESV  | 5" 12"x8"       | 205 / 100             | 150         | 0.25"         | 4    | 55        | 92        | 0.03                  | 180       | 153       | 0.5 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.18    | DESV  | 6" 12"x8"       | 225 / 110             | 170         | 0.25"         | 9.1  | 55        | 90        | 0.08                  | 180       | 149       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-07                       | 3.19    | DESV  | 7" 12"x10"      | 400 / 200             | 300         | 0.25"         | 13   | 55        | 95        | 0.12                  | 180       | 137       | 0.6 | 0.1                       | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-05                       | 3.20    | DESV  | 5" 12"x8"       | 200 / 100             | 150         | 0.25"         | 5.7  | 55        | 90        | 0.03                  | 180       | 158       | 0.5 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.21    | DESV  | 6" 12"x8"       | 300 / 240             | 240         | 0.25"         | 10.5 | 55        | 95        | 0.12                  | 180       | 145       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-16                       | 3.22    | DESV  | 16" 24"x18"     | 1200 / 600            | 900         | 0.25"         | 41.4 | 55        | 95        | 0.09                  | 180       | 134       | 1.8 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.23    | DESV  | 6" 12"x8"       | 300 / 240             | 240         | 0.25"         | 10.5 | 55        | 95        | 0.12                  | 180       | 145       | 0.6 | 0.08                      | 2    | 3/4"                          |         |  |  |  |  |  |  |  |  |  |  |
| 1-V-06                       | 3.24    | DESV  | 6"              |                       |             |               |      |           |           |                       |           |           |     |                           |      |                               |         |  |  |  |  |  |  |  |  |  |  |





**SYSTEMS DEVICE / CABLING DEMOLITION NOTE:**

CONTRACTOR SHALL TAKE DOWN EXISTING FIRE ALARM, OVER-HEAD PAGING, NURSE CALL, TELEVISION, CCTV AND DATA VOICE DEVICES FROM PRESENT LOCATIONS INDICATED AND REMOVE CABLING FOR THOSE SAME DEVICES COMPLETELY BACK TO SOURCE OR NEXT DEVICE (SEE TAGGED NOTE #4 FOR WAP DEVICES) WHERE EXISTING CABLING SERVING DEVICES OUTSIDE THE SUITE ARE FOUND. CONTRACTOR SHALL WRAP ALL LOOSE CABLING ABOVE CEILING (TEMPORARILY SUPPORT IF NEEDED) AND SHALL CLEARLY LABEL EACH CABLE BY SPECIFIC SYSTEM, TYPE, PORT, ETC. AS REQUIRED FOR RE-CONNECTION. THE CONTRACTOR SHALL NOT CUT OR REMOVE ANY SYSTEMS CABLES UNLESS SPECIFICALLY AUTHORIZED BY THE OWNER. UTILIZE NEW CABLING FOR NEW DEVICES ON PROJECT.

**DEMOLITION WORK NOTE:**

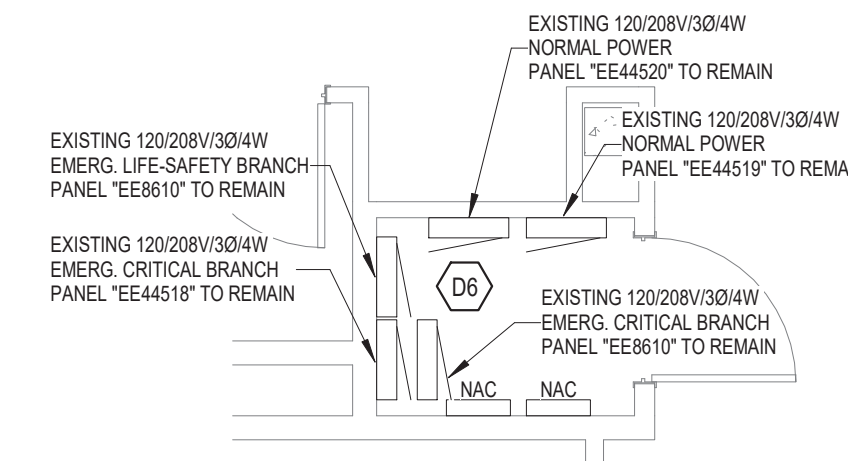
CONTRACTOR SHALL REMOVE ALL EXISTING LIGHT FIXTURES, ELECTRICAL OUTLETS, DEVICES, FIRE ALARM, CONDUIT, WIRING, PANELS, ETC. THROUGHOUT ENTIRE RENOVATION AREA WITHIN HATCHED BORDER INDICATED ON FLOOR PLANS (EXCEPT AS NOTED ON FLOOR PLANS) WHERE OUTLETS THAT WILL NOT BE RE-USED ARE LOCATED ON EXISTING WALLS THAT ARE REMAINING. CONTRACTOR SHALL REMOVE DEVICE, WIRING, ETC. AS REQUIRED AND PROVIDE BLANK COVERPLATE FOR OUTLET BOX WHERE EXISTING CONDUITS, RACEWAYS, WIRING PENETRATIONS, ETC. IN FLOORS, CEILINGS, OR ROOFS. CONTRACTOR SHALL PATCH AND REPAIR THOSE PENETRATIONS AS REQUIRED AND PAINT TO MATCH NEW ROOM/ROOF FINISHES. FIELD VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

**TEMPORARY FIRE ALARM HEAT DETECTION:**

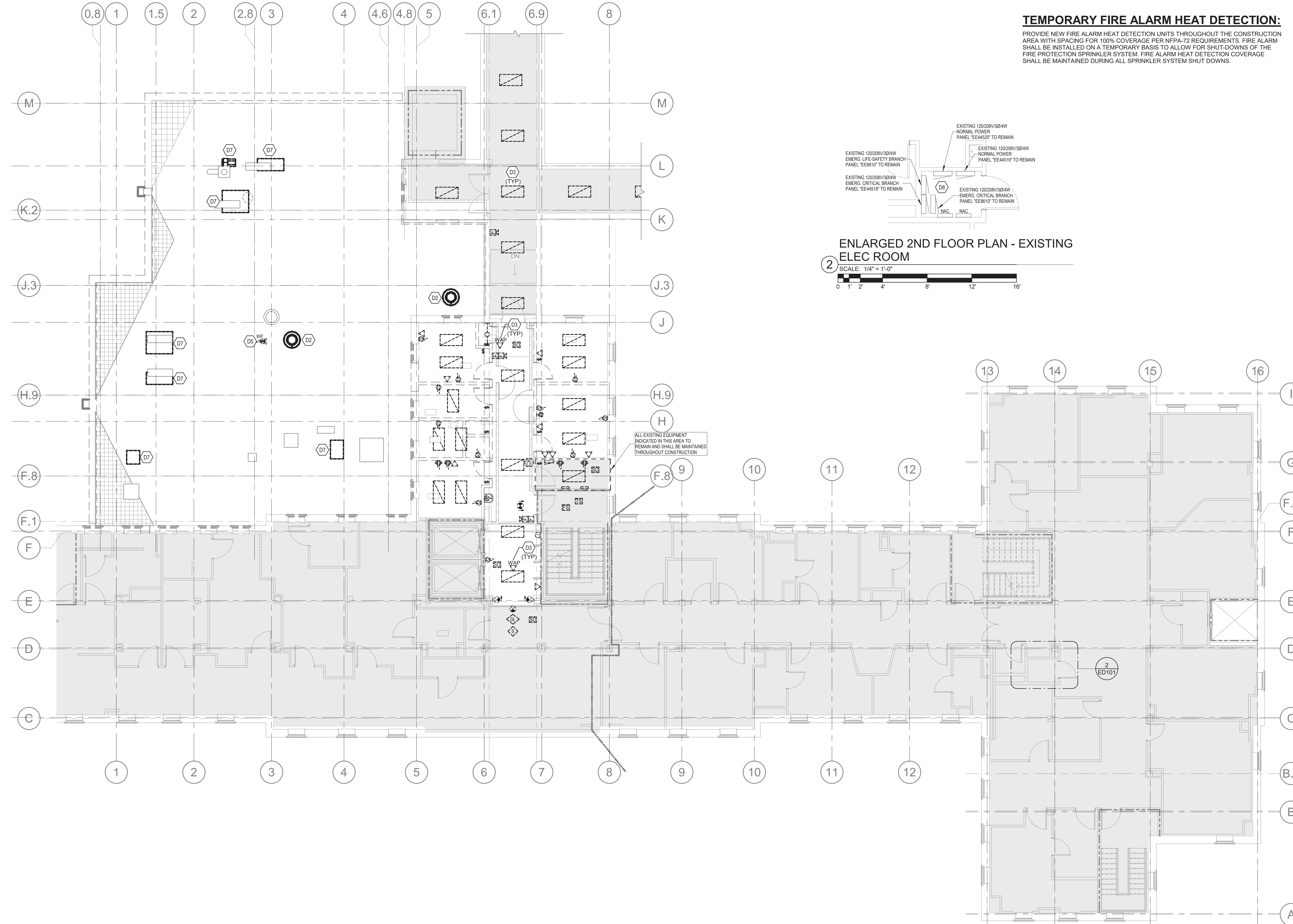
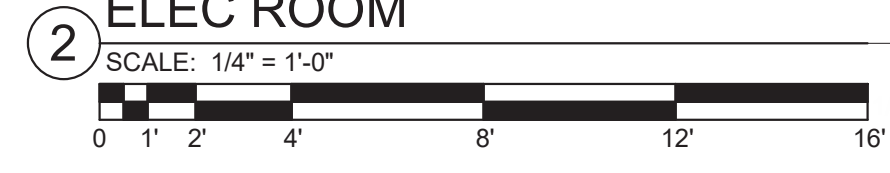
PROVIDE NEW FIRE ALARM HEAT DETECTION UNITS THROUGHOUT THE CONSTRUCTION AREA WITH SPACING FOR 100% COVERAGE PER NFPA-72 REQUIREMENTS. FIRE ALARM SHALL BE INSTALLED ON A TEMPORARY BASIS TO ALLOW FOR SHUT-DOWNS OF THE FIRE PROTECTION SPRINKLER SYSTEM. FIRE ALARM HEAT DETECTION COVERAGE SHALL BE MAINTAINED DURING ALL SPRINKLER SYSTEM SHUT-DOWNS.

**ELECTRICAL DEMOLITION NOTES:**

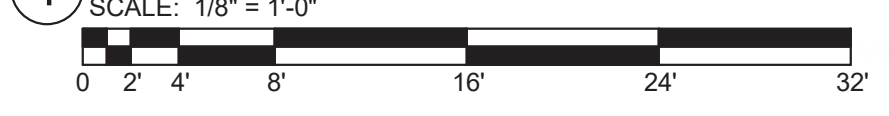
- A. DOTTED LINES INDICATE ITEMS FOR REMOVAL (U.O.N.) AND THIN SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- B. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS - THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE-DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.
- C. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.
- D. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (U.O.N.). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS).
- E. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.
- F. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.
- G. PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.
- H. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS / CEILINGS AS REQUIRED WHERE DEVICES ARE BEING REMOVED OR INSTALLED.
- I. UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.
- J. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.
- K. CONTRACTOR SHALL SEAL ALL EXISTING AND NEW PENETRATIONS OF BUILDING ENVELOPE (EXTERIOR WALLS, ROOF, ETC.) WATER-TIGHT AND AS APPROVED BY ARCHITECT AND ENGINEER. ROOFING SHALL BE RESTORED BY A LICENSED ROOFING CONTRACTOR BASED ON WRITTEN INSTRUCTIONS AND DETAILS FROM ROOFING MANUFACTURER AS REQUIRED TO MAINTAIN ROOF WARRANTY. REFER TO ARCHITECTURAL AND ENGINEERING PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.
- L. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED, REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK PLANS. INTERCEPT AND EXTEND ALL EXISTING CABLING TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.
- M. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPEWRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION.
- N. ALL ABANDONED CABLING ABOVE CEILING SHALL BE REMOVED. PROVIDE NEW J-HOOK SUPPORTS FOR EXISTING UNSUPPORTED CABLING TO REMAIN. COORDINATE WITH OWNER PRIOR TO DEMOLITION TO IDENTIFY EXISTING CABLING TO REMAIN.
- O. RELOCATE JUNCTION BOXES AND OTHER EXISTING ITEMS REQUIRING ACCESS TO ACCESSIBLE LOCATIONS WHERE NEW WORK BY ANY TRADE WOULD MAKE SUCH ITEMS INACCESSIBLE.



**ENLARGED 2ND FLOOR PLAN - EXISTING ELEC ROOM**

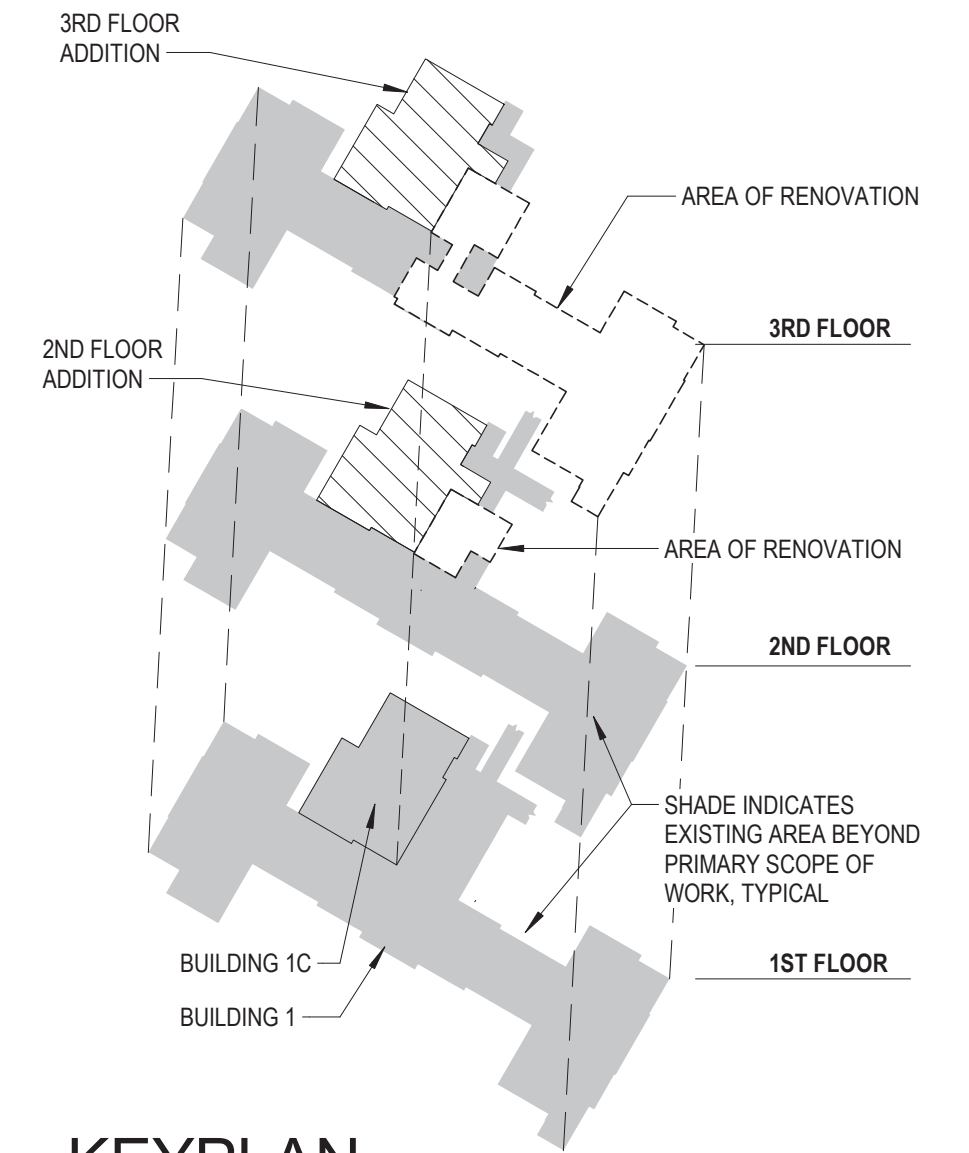


**1 SECOND FLOOR PLAN - DEMOLITION**



**TAGGED NOTES**

| #  | Description  |
|----|--|
| D2 | REMOVE EXISTING ELECTRICAL CONNECTIONS TO MECHANICAL EQUIPMENT BEING REMOVED. ALL WIRING SHALL BE REMOVED BACK TO ELECTRICAL PANEL COMPLETELY. COORDINATE REMOVAL AND EXACT EQUIPMENT LOCATIONS WITH MECHANICAL CONTRACTOR (TYPICAL).  |
| D3 | TAKE DOWN ANY AND ALL EXISTING DATA "WIRELESS ACCESS POINTS" (WAPs) FROM SUSPENDED CEILING BEING REMOVED AND TIE-OFF AT THE PRESENT LOCATION. CONTRACTOR SHALL PROTECT AND LEAVE THESE WAP UNITS IN PLACE, SO AS NOT TO COMPROMISE EXISTING COVERAGE. PLACE BACK INTO NEW CEILING AT THE SAME APPROXIMATE LOCATION ONCE CEILING INSTALLATION IS COMPLETED. (CLEAN UNITS PRIOR TO REINSTALLATION). NEW WIRING SHALL BE PROVIDED TO IDF/MDF CLOSET TO RELOCATED DEVICES AS REQUIRED. THE CONTRACTOR SHALL RE-CERTIFY SYSTEM FOR THE AFFECTED AREA ONCE INSTALLATION IS COMPLETED. PROVIDE ADDITIONAL "WAP" DEVICES (MATCH EXISTING) IF REQUIRED FOR RE-CERTIFICATION. TYPICAL AT ALL "WAP" DEVICES INDICATED ON THIS PLAN (TYPICAL). |
| D5 | EXISTING DEVICE, WIRING, CONDUIT, ETC. TO BE COMPLETELY REMOVED BACK TO SOURCE.  |
| D6 | EXISTING ELECTRICAL PANELS IN THIS ROOM TO REMAIN.   |
| D7 | EXISTING ROOF TOP EQUIPMENT TO BE REMOVED AND RELOCATED. REFER TO NEW ROOF PLANS FOR NEW LOCATIONS AND ADDITIONAL REQUIREMENTS. REFER TO MECHANICAL DRAWINGS AND SCHEDULES FOR ADDITIONAL INFORMATION.   |



**KEYPLAN**  
1" = 100'-0"

|   |   |  |  |   |   |   |
|---|---|--|--|---|---|---|
| <p><b>CONSULTANT</b></p> <p>Consultant:<br/>CMTA CONSULTING ENGINEERS, INC.<br/>10411 MEETING STREET,<br/>PROSPECT, KY 40059<br/>(502)326-3085</p> <p><b>CMTA</b></p> | <p><b>ARCHITECT/ENGINEER OF RECORD</b></p> <p>A/E:<br/>GUIDON DESIGN, INC<br/>1221 N PENNSYLVANIA STREET<br/>INDIANAPOLIS, IN 46202<br/>(317) 800-6388</p> <p><b>GUIDON</b></p> | <p><b>Office of Construction and Facilities Management</b></p> <p>VA U.S. Department of Veterans Affairs</p> | <p>Drawing Title</p> <p><b>SECOND FLOOR PLAN - ELECTRICAL DEMOLITION</b></p> | <p>Phase</p> <p><b>BID DOCUMENTS</b></p>      | <p>Project Title</p> <p><b>VA WICHITA - MED/SURG BEDS FOR PATIENT PRIVACY</b></p> | <p>Project Number</p> <p><b>589-701</b></p> |
|   |   |  | <p>Approved:</p>   | <p>Location</p> <p><b>WICHITA, KANSAS</b></p> | <p>Building Number</p> <p><b>1 &amp; 1C</b></p>                                   |   |
| <p>Revisions:</p>   | <p>Date:</p>  | <p>Issue Date</p> <p>05/22/2020</p>  | <p>Checked</p> <p>PDY</p>  | <p>Drawn</p> <p>RAH</p>                       | <p>Drawing Number</p> <p><b>ED101</b></p>   |   |

A

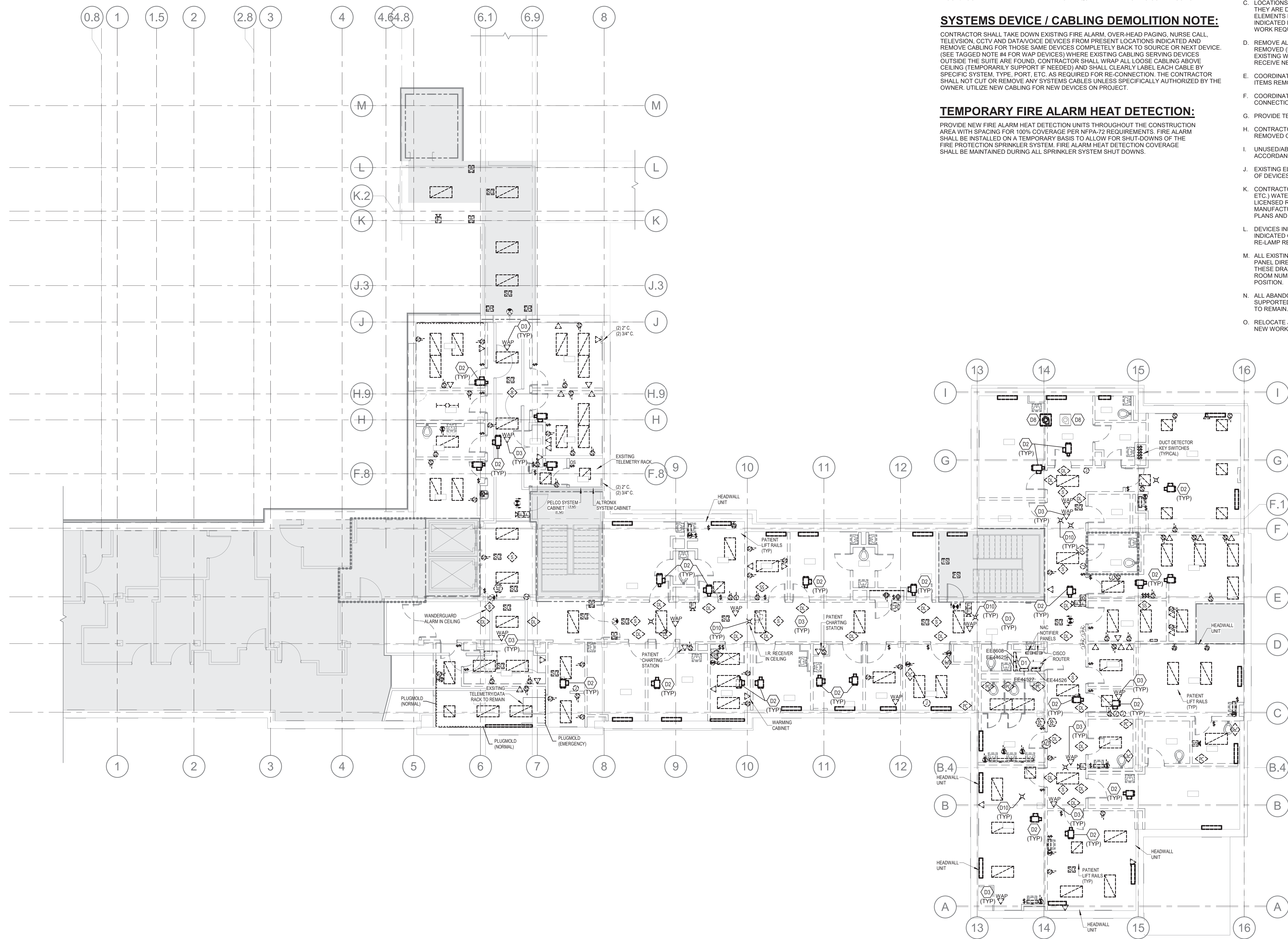
B

C

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E

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**DEMOLITION WORK NOTE:**

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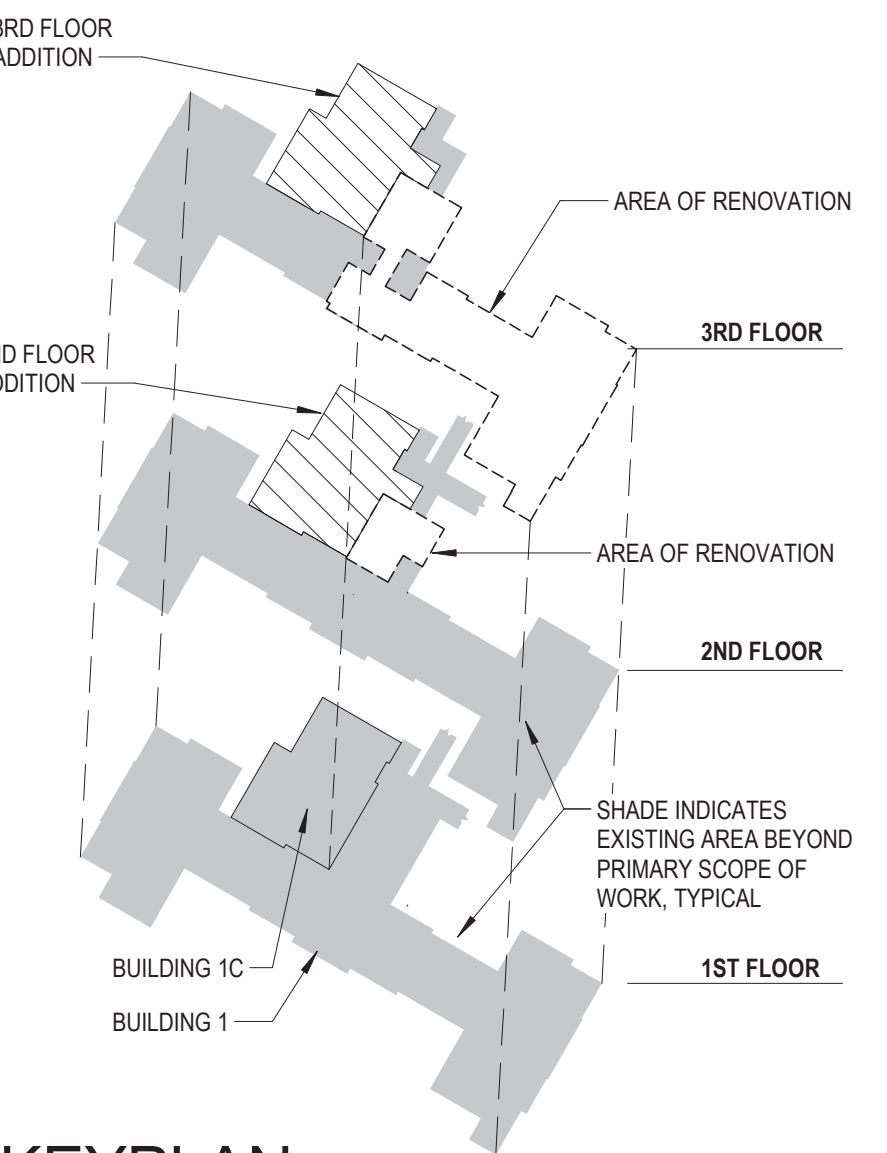
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**ELECTRICAL DEMOLITION NOTES:**

- A. DOTTED LINES INDICATE ITEMS FOR REMOVAL (U.O.N.) AND THIN SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- B. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE OR CIRCUIT IS INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE-DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.
- C. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.
- D. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (U.O.N.). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS).
- E. COORDINATE REMOVAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.
- F. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.
- G. PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.
- H. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS / CEILINGS AS REQUIRED WHERE DEVICES ARE BEING REMOVED OR INSTALLED.
- I. UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.
- J. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.
- K. CONTRACTOR SHALL SEAL ALL EXISTING AND NEW PENETRATIONS OF BUILDING ENVELOPE (EXTERIOR WALLS, ROOF, ETC.) WATER-TIGHT AND AS APPROVED BY ARCHITECT AND ENGINEER. ROOFING SHALL BE RESTORED BY A LICENSED ROOFING CONTRACTOR BASED ON WRITTEN INSTRUCTIONS AND DETAILS FROM ROOFING MANUFACTURER AS REQUIRED TO MAINTAIN ROOF WARRANTY. REFER TO ARCHITECTURAL AND ENGINEERING PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.
- L. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED, REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK PLANS. INTERCEPT AND EXTEND ALL EXISTING CABLING TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.
- M. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPE-WRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION.
- N. ALL ABANDONED CABLING ABOVE CEILING SHALL BE REMOVED. PROVIDE NEW J-HOOK SUPPORTS FOR EXISTING UN-SUPPORTED CABLING TO REMAIN. COORDINATE WITH OWNER PRIOR TO DEMOLITION TO IDENTIFY EXISTING CABLING TO REMAIN.
- O. RELOCATE JUNCTION BOXES AND OTHER EXISTING ITEMS REQUIRING ACCESS TO ACCESSIBLE LOCATIONS WHERE NEW WORK BY ANY TRADE WOULD MAKE SUCH ITEMS INACCESSIBLE.

**TAGGED NOTES**

- D1 THE FOLLOWING SHALL APPLY TO ALL EXISTING ELECTRICAL PANELS TO BE REMOVED: REMOVE EXISTING POWER PANEL AND PANEL FEED COMPLETELY BACK TO SOURCE. FIELD VERIFY IF PANEL HAS ANY EXISTING DEVICES, LIGHTS, ETC. ON CIRCUITS THAT ARE TO REMAIN. RE-ROUTE THESE CIRCUITS TO EXISTING/NEW PANELS THAT ARE IN THE SAME AREA AS REQUIRED (UTILIZE SPACES/SPARES IN THESE PANELS AS NECESSARY). CONTRACTOR SHALL CAREFULLY DETERMINE EXTENT OF WORK PRIOR TO DEMOLITION OF THE PANEL/PANEL FEEDER. REFER TO PANEL DEMOLITION DETAIL AND POWER RISER.
- D2 REMOVE EXISTING ELECTRICAL CONNECTIONS TO MECHANICAL EQUIPMENT BEING REMOVED. ALL WIRING SHALL BE REMOVED BACK TO ELECTRICAL PANEL COMPLETELY. COORDINATE REMOVAL AND EXACT EQUIPMENT LOCATIONS WITH MECHANICAL CONTRACTOR (TYPICAL).
- D3 TAKE DOWN ANY AND ALL EXISTING DATA "WIRELESS ACCESS POINTS" (WAP) FROM SUSPENDED CEILING BEING REMOVED AND TIE-OFF AT THE PRESENT LOCATION. CONTRACTOR SHALL PROTECT AND LEAVE THESE WAP UNITS IN PLACE, SO AS NOT TO COMPROMISE EXISTING COVERAGE. PLACE BACK INTO NEW CEILING AT THE SAME APPROXIMATE LOCATION ONCE CEILING INSTALLATION IS COMPLETED (CLEAN UNITS PRIOR TO REINSTALLATION). NEW WIRING SHALL BE PROVIDED TO ID/MDP CLOSET TO RELOCATED DEVICES AS REQUIRED. THE CONTRACTOR SHALL RE-CERTIFY SYSTEM FOR THE AFFECTED AREA ONCE INSTALLATION IS COMPLETED. PROVIDE ADDITIONAL "WAP" DEVICES (MATCH EXISTING) IF REQUIRED FOR RE-CERTIFICATION. TYPICAL AT ALL "WAP" DEVICES INDICATED ON THIS PLAN (TYPICAL).
- D8 REMOVE EXISTING ELECTRICAL CONNECTIONS TO MECHANICAL EQUIPMENT LOCATED IN ATTIC BEING REMOVED. ALL WIRING SHALL BE REMOVED BACK TO ELECTRICAL PANEL COMPLETELY. COORDINATE REMOVAL AND EXACT EQUIPMENT LOCATIONS WITH MECHANICAL CONTRACTOR (TYPICAL).
- D10 TAKE DOWN ANY AND ALL EXISTING DATA "PHILIPS TELEMETRY ANTENNAS" FROM SUSPENDED CEILING BEING REMOVED AND TIE-OFF AT THE PRESENT LOCATION. CONTRACTOR SHALL PROTECT AND LEAVE THESE TELEMETRY ANTENNAS IN PLACE, SO AS NOT TO COMPROMISE EXISTING COVERAGE. PLACE BACK INTO NEW CEILING AT THE SAME APPROXIMATE LOCATION ONCE CEILING INSTALLATION IS COMPLETED (CLEAN UNITS PRIOR TO REINSTALLATION). NEW WIRING SHALL BE PROVIDED FROM EXISTING PHILIPS TELEMETRY RACK AT EQUIPMENT STORAGE 349 TO RELOCATED DEVICES AS REQUIRED. THE CONTRACTOR SHALL CONFIRM ALL DEVICE LOCATIONS (PRIOR TO ANY ROUGH-IN) WITH HOSPITAL'S SYSTEM VENDOR (PHILIPS). CONTRACTOR TO VERIFY WITH PHILIPS IF ANY NEW DATA DROP CABLES NEED TO BE Routed TO THE TELEMETRY RACK (AT EQUIPMENT STORAGE 349) INSTEAD OF TO THE NEW DATA RACKS AT DATA C208 / DATA C310. PROVIDE ADDITIONAL SYSTEM DEVICES (MATCH EXISTING) FOLLOWING VENDOR CONFIRMATION. TYPICAL AT ALL TELEMETRY ANTENNA DEVICES WITHIN THE RENOVATION AREA (TYPICAL).



**1 THIRD FLOOR PLAN - DEMOLITION**  
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| Revisions: | Date: |
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**Drawing Title**  
 THIRD FLOOR PLAN - ELECTRICAL DEMOLITION

**Approved:**

**Phase**  
 BID DOCUMENTS

|  |                                  |
|--|----------------------------------|
| <b>Project Title</b><br>VA WICHITA - MED/SURG BEDS FOR PATIENT PRIVACY | <b>Project Number</b><br>589-701 |
| <b>Location</b><br>WICHITA, KANSAS                                     | <b>Building Number</b><br>1 & 1C |
| <b>Issue Date</b><br>05/22/2020  | <b>Drawing Number</b><br>ED102   |
| <b>Checked</b><br>PDY  | <b>Drawn</b><br>RAH              |