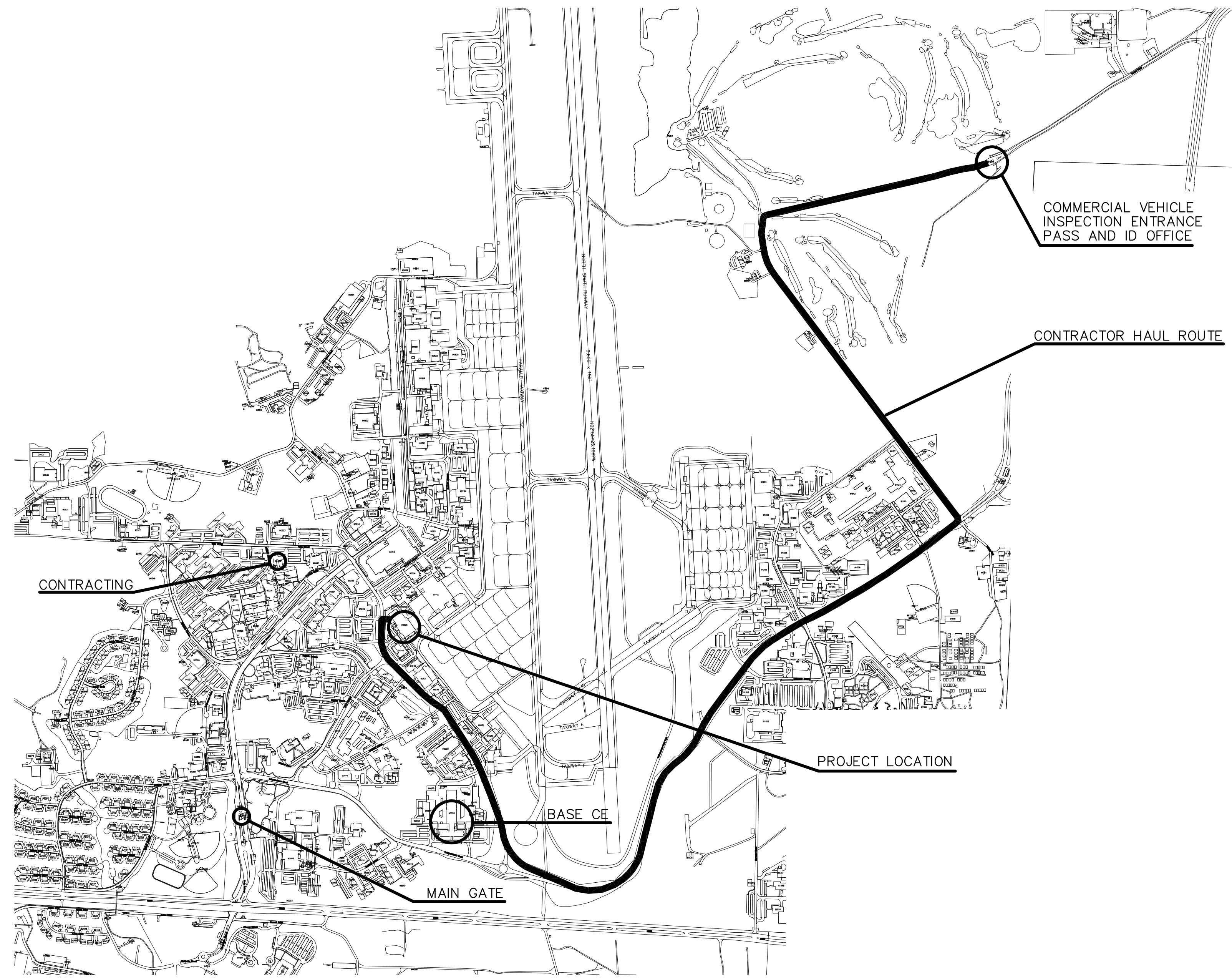
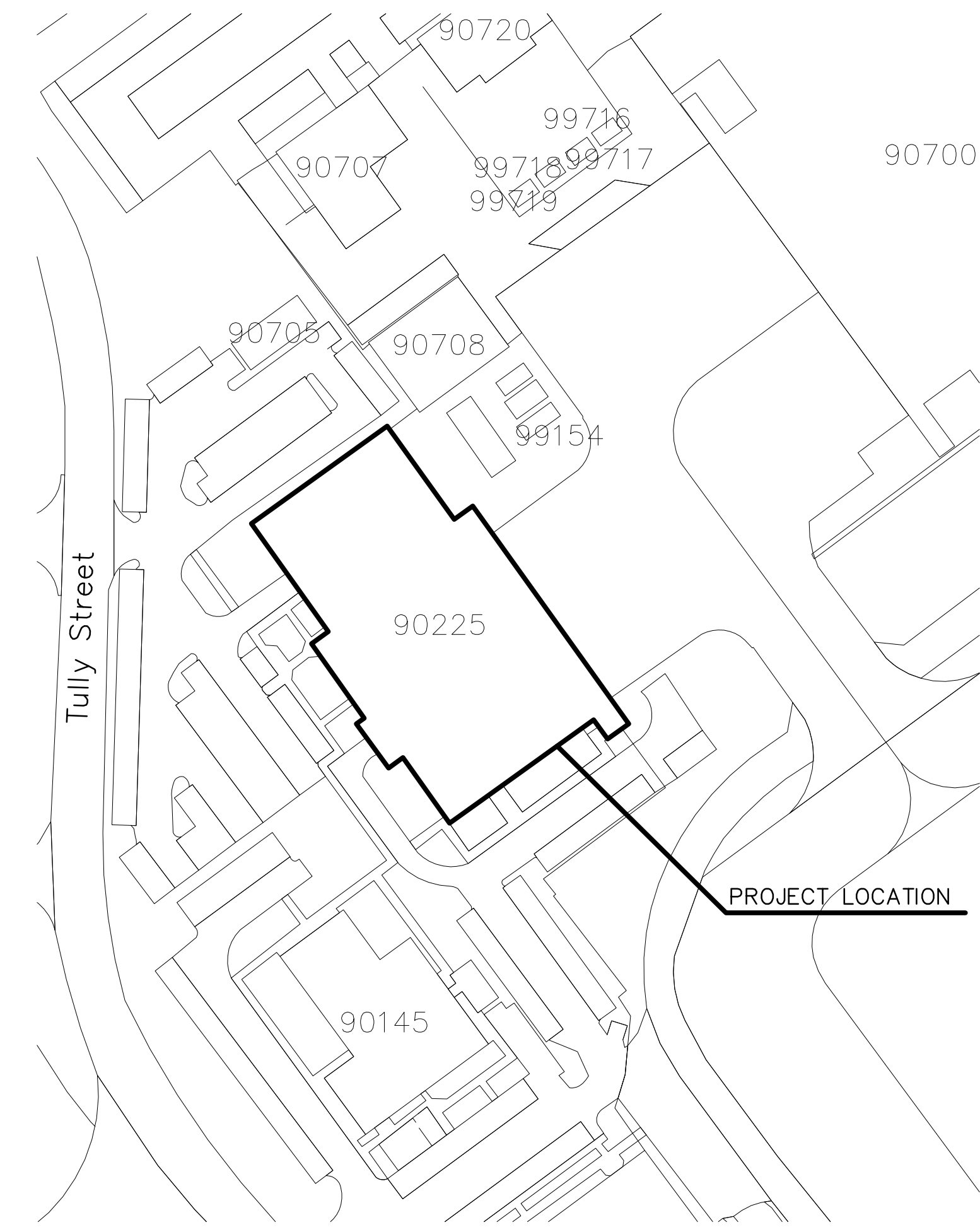


# REPAIR CORROSION CONTROL FACILITY (CCF) REGULATED AREA TRANSITIONS HANGAR 90225 HURLBURT FIELD, FL.

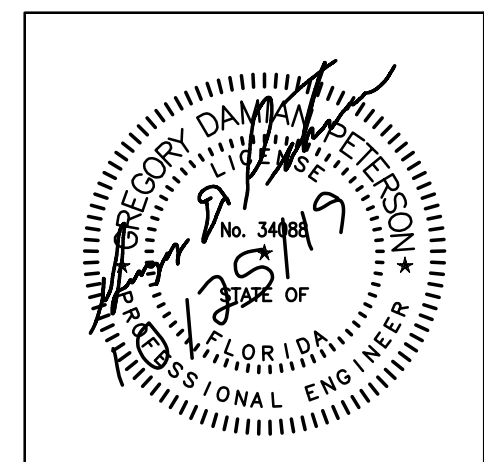


BASE MAP



LOCATION MAP

**PETERSON ENGINEERING INC.**  
(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY
BUILDING 90225
TITLE AND LOCATION MAPS

<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b>
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON
HURLBURT FIELD, FLORIDA

DATE:	28 OCT 2019
DESIGNED BY:	GDP
DRAWN BY:	DJM
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	G-001
SHEET NUMBER:	1 of 80

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REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**  
INDEX OF DRAWINGS

**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA



DATE:  
**28 OCT 2019**

DESIGNED BY:  
**GDP**

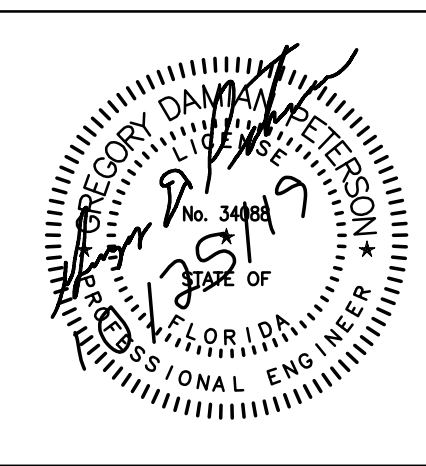
DRAWN BY:  
**DJM**

BUILDING NUMBER:  
**90225**

PROJECT NUMBER:  
**CP1028800**

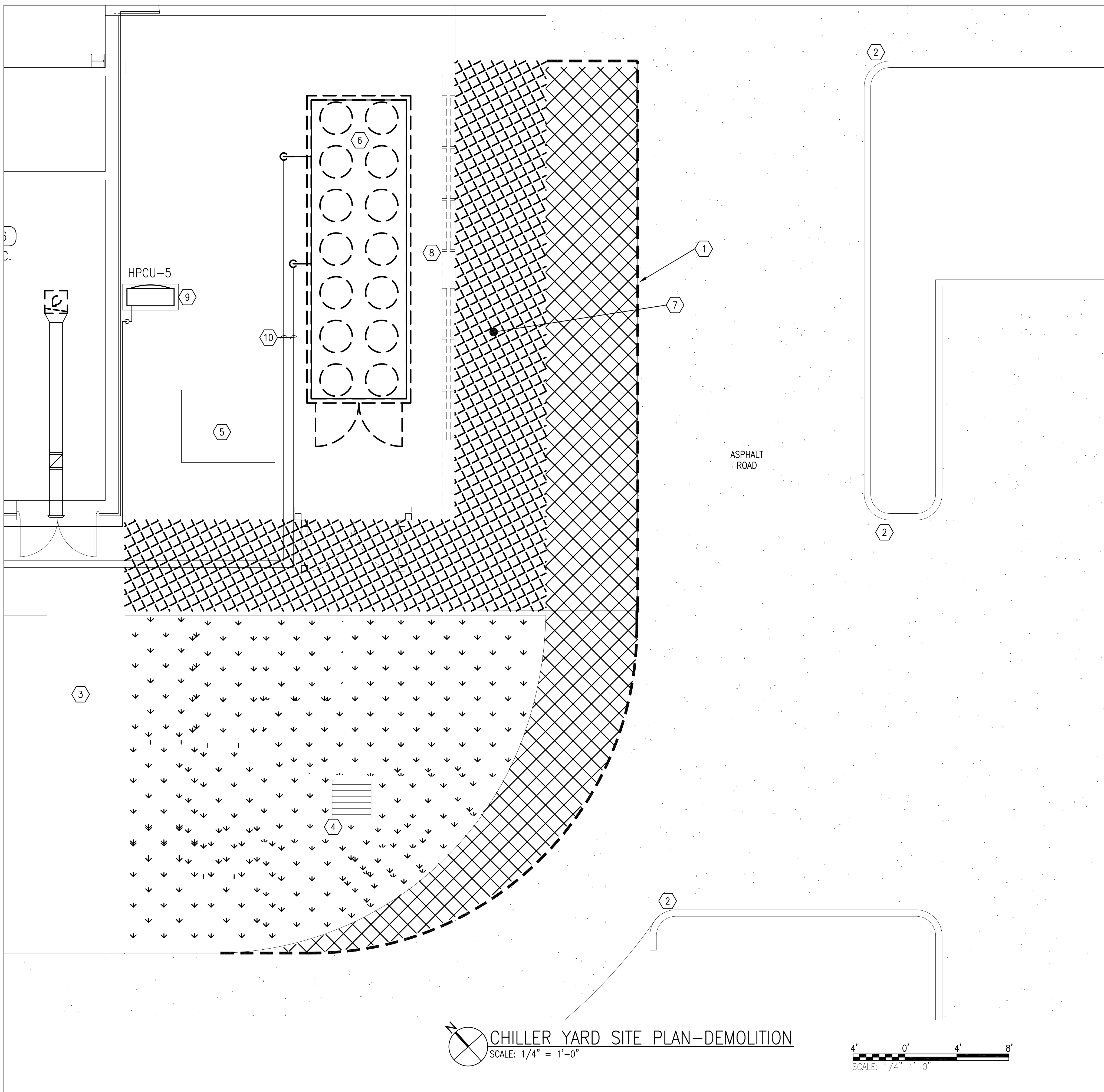
SHEET REFERENCE:  
**G-002**

SHEET NUMBER:  
**2 of 80**



**PETERSON ENGINEERING INC.**  
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SHEET NOTES

- ① CUT AND REMOVE EXISTING ASPHALT TO POINT INDICATED.
- ② EXISTING TO REMAIN CONCRETE CURB.
- ③ EXISTING TO REMAIN SIDEWALK.
- ④ EXISTING TO REMAIN STORM DRAIN GRATE.
- ⑤ EXISTING TO REMAIN TRANSFORMER.
- ⑥ AIR COOLED CHILLER AND PAD TO BE REMOVED.
- ⑦ REMOVE EXISTING SIDEWALK AS SHOWN.
- ⑧ EXISTING WALL TO BE REMOVED INCLUDES GATE AND FOUNDATION FOOTERS. AREA TO BE FILLED AND PREPARED FOR NEW CHILLER AND GRAVEL.
- ⑨ EXISTING TO REMAIN.
- ⑩ EXISTING UNDERGROUND PIPING TO REMAIN. PREPARE TO CONNECT TO NO NEW CHILLER.

LEGEND

- ASPHALT REMOVAL
- SIDEWALK REMOVAL

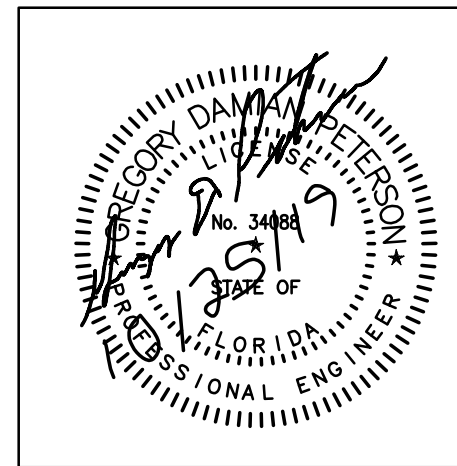
REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
CHILLER YARD SITE PLAN-DEMOLITION

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

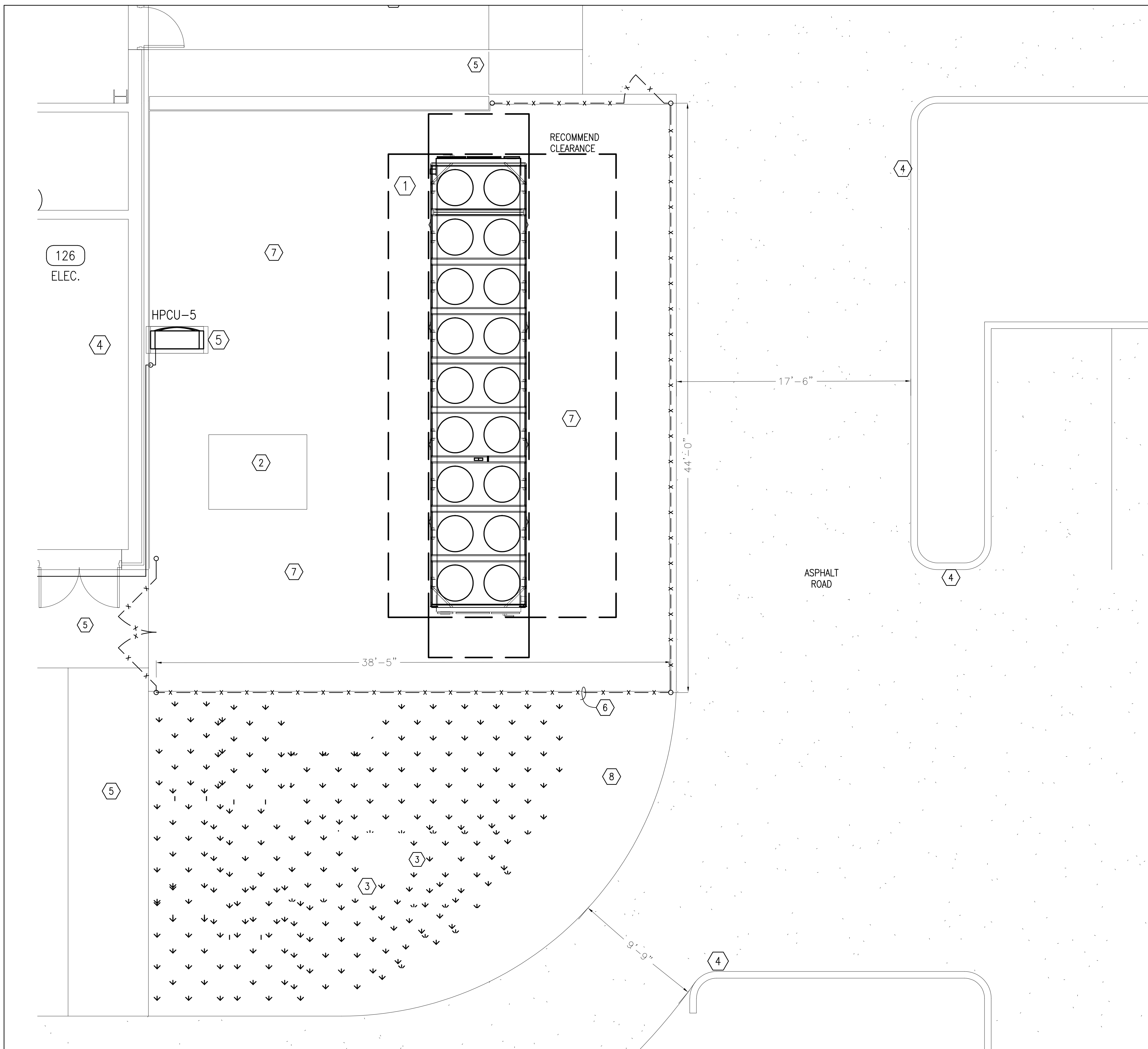
DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: G-003  
SHEET NUMBER: 3 of 80

**PETERSON ENGINEERING INC.**  
(PROF. ENG. #: 3600)  
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PENSACOLA, FLORIDA 32502  
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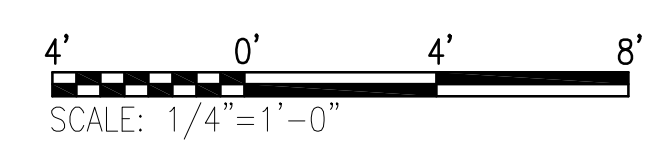
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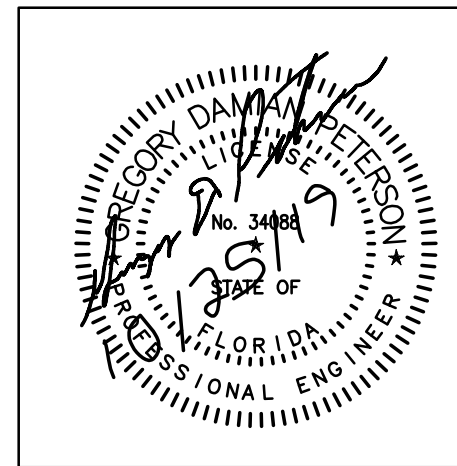
SHEET NOTES

- ① NEW AIR COOLED CHILLER ON CONCRETE PAD.
- ② EXISTING TO REMAIN TRANSFORMER.
- ③ EXISTING TO REMAIN STORM DRAIN GRATE.
- ④ EXISTING TO REMAIN CONCRETE CURB.
- ⑤ EXISTING TO REMAIN SIDEWALK.
- ⑥ INSTALL NEW FENCE.
- ⑦ THE TOTAL CHILLER YARD TO HAVE LIMESTONE.
- ⑧ ALL DISTURBED AREA TO BE FILLED , LEVELED AND SODDED 100%.

CHILLER YARD SITE PLAN-NEW WORK  
SCALE: 1/4" = 1'-0"



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REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225  
 CHILLER YARD SITE PLAN-NEW WORK

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
 DESIGNED BY: GDP  
 DRAWN BY: DJM  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE: G-004  
 SHEET NUMBER: 4 of 80







**STRUCTURAL - GENERAL NOTES**

- TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE FOLLOWING GOVERNING DESIGN CODES:
  - INTERNATIONAL BUILDING CODE 2015 EDITION
  - AISC STEEL CONSTRUCTION MANUAL (14TH EDITION)
  - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, (ACI 318-14)
  - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-10)
  - STRUCTURAL WELDING CODE AWS D1.1, 2008
  - UNIFIED FACILITIES CRITERIA, STRUCTURAL ENGINEERING 3-301-01, W/ CHANGE 4, 1 NOVEMBER 2018
  - UNIFIED FACILITIES CRITERIA, STRUCTURAL ENGINEERING 1-200-01, 20 JUNE 2016, W/ CHANGE 2, 1 NOVEMBER 2018
- THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE MECHANICAL AND ELECTRICAL. USE THESE NOTES IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS. IF A CONFLICT EXISTS, THE MORE STRINGENT GOVERNS.
- SEE PROJECT SPECIFICATIONS FOR TESTING.
- THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS, INCLUDING DIMENSIONS, AND SITE CONDITIONS AND COORDINATE WITH FIELD DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. ANY AND ALL DISCREPANCIES SHALL BE SUBMITTED IN WRITING TO CONTRACTING OFFICER. DO NOT MODIFY OR CHANGE THE SIZE OR DIMENSIONS OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE CONTRACTING OFFICER.
- IT SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR TO LOCATE ANY AND ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT, AND TO PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITY LINES FROM ALL DAMAGE. EACH CONTRACTOR SHALL PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC. EACH CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLIGENCE.
- WHERE A CONSTRUCTION DETAIL IS NOT SHOWN OR NOTED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR WORK. DETAILS LABELED "TYPICAL DETAILS" ON THE DRAWINGS APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. ANY QUESTIONS REGARDING APPLICABILITY OF TYPICAL DETAILS SHALL BE RESOLVED BY THE ARCHITECT / ENGINEER.
- DESIGN LOAD CRITERIA:
  - BUILDING RISK CATEGORY..... II
  - GRAVITY LOADS:
    - SLAB ON GRADE (U.N.O.)..... 150 PSF
    - ROOF LIVE LOAD..... 20 PSF
    - ROOF DEAD LOAD..... 20 PSF
- WIND LOADS:
  - ULTIMATE DESIGN WIND SPEED..... 145 MPH
  - NOMINAL DESIGN WIND SPEED..... 112 MPH
  - WIND EXPOSURE CATEGORY..... C
  - INTERNAL PRESSURE COEFFICIENT..... ±0.18 (ENCLOSED)
- SEISMIC LOADS: SEISMIC IMPORTANCE FACTOR  $I_e$ ..... 1.0
  - SEISMIC RESPONSE,  $S_s$ ..... (0.08) 8.0%
  - SEISMIC RESPONSE,  $S_1$ ..... (0.05) 5.0%
  - SPECTRAL RESPONSE,  $S_{ds}$ ..... 0.085g
  - SPECTRAL RESPONSE,  $S_{d1}$ ..... 0.08g
  - SEISMIC FORCE RESISTING SYSTEM, STEEL ORD. REINF. MASONRY WALLS..... N/A
  - DESIGN BASE SHEAR..... N/A
  - SEISMIC RESPONSE COEFFICIENT,  $C_s$ ..... (0.033) 3.3%
  - RESPONSE MODIFICATION COEFFICIENT,  $R$ ..... 3.5
  - SEISMIC DESIGN CATEGORY..... EQUIVALENT LATERAL FORCE
  - SEISMIC DESIGN CATEGORY..... B
- THE SPECIALTY ENGINEER, DEFINED AS - A PROFESSIONAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, WHO PERFORMS SPECIALTY STRUCTURAL ENGINEERING SERVICES FOR SELECTED SPECIALTY-ENGINEERED ELEMENTS IDENTIFIED IN THE CONTRACT DOCUMENTS, AND WHO HAS EXPERIENCE AND TRAINING IN THE SPECIALTY. DOCUMENTS SIGNED AND SEALED BY THE SPECIALTY ENGINEER SHALL BE COMPLETED BY OR UNDER THE DIRECT SUPERVISION OF THE SPECIALTY ENGINEER, AT MINIMUM ROOF TOP EQUIPMENT SYSTEMS, FIXED LADDER SYSTEMS, LADDER CAGE, FALL PROTECTION, ETC AND THEIR ATTACHMENTS TO THE STRUCTURE SHALL BE DESIGNED BY A SPECIALTY ENGINEER TO CONFORM TO ALL LOADING REQUIREMENTS INCLUDING WIND RESISTANCE.
- DO NOT SCALE THE DRAWINGS. USE DIMENSIONS SHOWN ON PLAN IN CONJUNCTION WITH CONTRACTOR FIELD VERIFIED INFORMATION. IF A CONFLICT EXISTS, NOTIFY THE CONTRACTING OFFICER IN WRITING FOR RESOLUTION OF ANY AND ALL CONFLICTS.

**SHOP DRAWING SUBMITTALS**

- THE REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS DONE BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE STRUCTURAL ENGINEER. THE REVIEW BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE ONLY. IF SHOP DRAWINGS HAVE NOT BEEN REVIEWED AND APPROVED BEFORE SUBMITTAL TO THE STRUCTURAL ENGINEER, THEY SHALL BE RETURNED WITHOUT APPROVAL.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY AND ALL ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF ALL SHOP DRAWINGS IN RELATIONSHIP TO THE CONSTRUCTION DOCUMENTS.
- ALL MODIFICATIONS MADE FOR SUBMITTALS THAT ARE RE-SUBMITTED SHALL CLEARLY NOTE ALL CHANGES.
- REPRODUCING THE CONTRACT DOCUMENTS FOR USE AS SHOP DRAWINGS IS NOT ALLOWED, AND SHOP DRAWINGS WILL BE RETURNED WITHOUT APPROVAL.
- GENERAL SHOP DRAWING REQUIREMENTS:
  - SUBMIT SHOP DRAWINGS AND ANY OTHER SPECIAL INFORMATION NECESSARY FOR PROPER FABRICATION, ERECTION, AND PLACEMENT OF STRUCTURAL FABRICATIONS. INCLUDE PLANS, ELEVATIONS, AND SECTIONS. CLEARLY SHOW ANCHORAGES, CONNECTIONS, AND ACCESSORY ITEMS. THE DETAILER MUST INTERPRET THE CONTRACT DOCUMENTS AND CLEARLY CONVEY THIS INTERPRETATION TO THE FIELD IN THE FORM OF PLACING OR ERECTION DRAWINGS.
  - CONCRETE AND CMU REINFORCING DETAILER- PROVIDE PLACING DRAWINGS FOR FABRICATION AND PLACING OF REINFORCING STEEL. THESE DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: BAR LISTS, SCHEDULES, BENDING DETAILS, PLACING DETAILS, PLACING PLANS, AND PLACING ELEVATIONS.
    - CLEARLY SHOW FOUNDATION REINFORCING. INDICATE BAR LENGTHS, LOCATION AND SPLICES OF CONTINUOUS BARS, AND BAR SUPPORTS. CLEARLY SHOW LOCATIONS OF ALL DOWELS ON PLAN. INDICATE FOOTING STEP LOCATIONS AND PROVIDE DETAILS.

**SHALLOW FOUNDATION REQ'S**

- GEOTECHNICAL REPORT - FOUNDATION DESIGN CRITERIA HAS BEEN BASED ON AN ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF WITH MAXIMUM DIFFERENTIAL SETTLEMENT OF 1/2". THE CONTRACTOR SHALL ENGAGE A GEOTECHNICAL ENGINEER (PROFESSIONAL ENGINEER) TO VERIFY THIS INFORMATION PRIOR TO CASTING FOUNDATIONS FOR NEW MAT FOUNDATION.
- IF BEARING SOIL IS DISTURBED DURING FOUNDATION PREPARATION, THE CONTRACTOR SHALL RECOMPACT TO REQUIRED DENSITY, AS DEFINED BY THE GEOTECHNICAL ENGINEER.
- DO NOT EXCAVATE FOR ANY PURPOSE WITHIN ONE FOOT OF THE ANGLE OF REPOSE OF ANY SOIL BEARING FOOTING OR FOUNDATION UNLESS FOOTING OR FOUNDATION IS FIRST PROPERLY PROTECTED AGAINST SETTLEMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL ACCUMULATED WATER FROM EXCAVATIONS AND DEWATERING OPERATIONS IN SUCH A WAY AS NOT TO CAUSE INCONVENIENCE TO THE WORK AND DAMAGE TO THE STRUCTURAL ELEMENTS.

**STRUCTURAL CONCRETE**

- ALL CAST-IN-PLACE CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318-14 AND ACI 301, EXCEPT AS MODIFIED BY THE PROJECT CONSTRUCTION DOCUMENTS. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 03300.
- ALL CONCRETE SHALL MEET THE PROJECT SPECIFICATIONS AND SHALL DEVELOP COMPRESSIVE STRENGTHS AS FOLLOWS (28 DAY STRENGTH):
  - NORMAL WEIGHT CONCRETE (145 PCF)..... 3500 PSI
  - FOUNDATION & SLABS ON GRADE..... 4000 PSI
  - ALL OTHER CONCRETE..... 4000 PSI

PROVIDE CURRENT (MAX. 1 YEAR OLD) STATISTICAL DATA FOR EACH CONCRETE MIX SUBMITTED IN ACCORDANCE WITH ACI 318-14.
- ALL REINFORCING BARS FOR CONCRETE SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI AND MEET THE REQUIREMENTS OF ASTM A-615. FOR PLACEMENT OF REINFORCING CONFORM TO ACI-301, ACI-315, ACI-318, AND CRSI "MANUAL OF STANDARD PRACTICE". ALL REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED, AND FIRMLY TIED IN PLACE WITH BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH THE ABOVE REQUIREMENTS. PROVIDE CLASS "B" LAP SPLICE FOR CONTINUOUS BARS. USE THE FOLLOWING COVER:
  - CONCRETE COVER REQUIREMENTS FOR REINFORCEMENT, U.N.O.:
    - CONCRETE CAST AGAINST EARTH..... 3"
    - CONCRETE POURED IN FORMS BUT EXPOSED TO WEATHER OR EARTH:
      - #5 REINFORCEMENT AND SMALLER..... 1 1/2"
      - REINFORCEMENT LARGER THAN #5..... 2"
      - WELDED WIRE FABRIC..... 1" FROM TOP OF SLAB
      - CONCRETE POURED IN FORMS BUT NOT EXPOSED TO WEATHER OR EARTH.....
    - #11 REINFORCEMENT AND SMALLER..... 3/4"
- NO CONDUIT PLACED IN CONCRETE SLAB SHALL HAVE AN OUTSIDE DIAMETER GREATER THAN 1/3 THE THICKNESS OF THE SLAB. NO CONDUIT SHALL BE EMBED IN A SLAB THAT IS LESS THAN 4" THICK. MINIMUM CLEAR DISTANCE SHALL BE IN ACCORDANCE WITH ACI 318.
- ALL REINFORCING BARS, ANCHOR BOLTS, DOWELS AND OTHER CONCRETE INSERTS SHALL BE SECURED ADEQUATELY IN POSITION PRIOR TO PLACEMENT OF CONCRETE. CONTRACTOR SHALL USE TEMPLATES TO INSURE ACCURATE PLACEMENT OF ANCHOR BOLTS, DOWELS, ETC.
- ALL CONCRETE SHALL BE CONSOLIDATED BY USE OF A MECHANICAL VIBRATOR OR OTHER MEANS APPROVED BY THE ENGINEER.
- CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. CONCRETE SHALL BE PLACED IN ITS FINAL POSITION WITHIN 90 MINUTES AFTER ADDITION OF BATCH WATER. CONCRETE SHALL BE DISCARDED IF THE FOREGOING ELAPSED TIME IS EXCEEDED.

**STEEL JOISTS**

- STEEL JOISTS SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE (SJI), K-SERIES JOISTS SHALL HAVE MINIMUM Fy= 50 KSI.
- STEEL JOIST MANUFACTURER SHALL SUBMIT ERECTION AND SHOP DRAWINGS SHOWING JOIST LOCATIONS, BRIDGING, CONNECTIONS AND DETAILS, SPECIAL AND EXTENDED ENDS (WHEN APPLICABLE).
- JOISTS SHALL BE STORED PROPERLY ON DRY AND LEVEL GROUND, SO THAT DEFORMATION OF THE JOIST DOES NOT OCCUR. IN INSTANCES WHERE JOISTS ARE DAMAGED, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL JOIST SHALL BE PAINTED WITH A GRAY RUST INHIBITIVE PRIMER, UNLESS NOTED OTHERWISE BY THE ARCHITECT.
- ANY SINGLE PANEL POINT OF THE LOWER CHORD OF JOISTS MUST BE CAPABLE OF SAFELY SUPPORTING A SUSPENDED CONCENTRATED LOAD OF 200 POUNDS IN ADDITION TO OTHER LOADS. ROOF JOISTS SHALL HAVE SUFFICIENT CAPACITY TO SUPPORT 2500 LB POINT LOAD POINT FOR MECHANICAL UNITS. POINT LOADS SHALL BE DETERMINED BY MECHANICAL PLANS.
- UNLESS NOTED ON PLANS, DESIGN OF JOIST K-SERIES STEEL JOISTS SHALL BE CONNECTED TO STEEL BY 1/8" WELD, 3" LONG EACH SIDE.
- BRIDGING SHALL BE PROVIDED IN ACCORDANCE WITH S.J.I. REQUIREMENTS.
- HORIZONTAL BRIDGING SHALL BE AN ANGLE AT TOP AND BOTTOM, DESIGNED FOR L/R LESS THAN OR EQUAL TO 300.
- DIAGONAL BRIDGING SHALL BE AN ANGLE DESIGNED FOR L/R LESS THAN OR EQUAL TO 200.
- UNLESS NOTED, 2ND AND 3RD JOIST SPACES FROM WALLS AND 1ST AND 2ND JOIST SPACES FROM DISCONTINUITIES SHALL HAVE CROSS BRIDGING (TO BE ALIGNED WITH HORIZONTAL BRIDGING).
- JOIST BRIDGING SHALL NOT BE USED TO SUPPORT EQUIPMENT, PIPING, CONDUITS, DUCTWORK, ETC.
- WHERE FIELD WELDING IS REQUIRED AT TOP OR BOTTOM CHORDS OF JOISTS, TEMPORARILY SHORE AT EACH SIDE OF WELDING LOCATION.
- SEE MECHANICAL DRAWINGS FOR DUCT LOCATIONS. DUCTS MAY TRANSVERSE THROUGH JOIST WEBS. SEE MECHANICAL DRAWINGS JOIST MANUFACTURER SHALL ACCOUNT FOR SIZE AND ADDITIONAL LOADING.

**CHEMICAL ADHESIVE FOR ANCHORAGE**

- ADHESIVE ANCHORS SHALL BE AS SPECIFIED ON THE CONSTRUCTION DRAWINGS OR APPROVED EQUIVALENT. ACCEPTABLE SYSTEMS SHALL INCLUDE: SIMPSON, HILTI (EPOXY OR POLYESTER RESIN ADHESIVE) ANCHORS OR APPROVED EQUIVALENT WITH DIAMETER AND EMBEDMENT LENGTH AS NOTED ON THE DRAWINGS OR IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. INSTALL ALL ANCHORAGE PER THE MANUFACTURERS RECOMMENDATIONS.
- DIAMETER OF HOLE SHALL BE AS RECOMMENDED BY MANUFACTURER FOR THE PARTICULAR PRODUCT SPECIFIED IN THE DRAWINGS.
- UNLESS NOTED, ANCHOR SPACING AND ANCHOR EDGE DISTANCE SHALL BE ACCORDING TO THE MANUFACTURER'S MOST CURRENT PUBLICATION IN ORDER TO DEVELOP MAXIMUM WORKING LOADS.
- DO NOT EXCEED MANUFACTURER'S MAX. RECOMMENDED TIGHTENING TORQUE.
- ALL ANCHORS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND UNDER MANUFACTURER'S SUPERVISION IN ORDER TO DEVELOP THE MOST CURRENT PUBLISHED WORKING LOADS.
- INSTALLATION OF ALL ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION SHALL INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR EQUIVALENT.
- ALL ANCHORS INSTALLED SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION BY AN INSPECTOR SPECIALLY APPROVED FOR THAT PURPOSE BY THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL FURNISH A REPORT TO THE LICENSED DESIGN PROFESSIONAL AND BUILDING OFFICIAL THAT THE WORK COVERED BY THE REPORT HAS BEEN PERFORMED AND THE MATERIALS USED AND THE INSTALLATION PROCEDURES USED CONFORM WITH THE APPROVED CONTRACT DOCUMENTS AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)
- TESTING OF EPOXIED ANCHORAGE SHALL BE REQUIRED. THE CONTRACTOR SHALL TEST A MINIMUM OF 10% OF EACH DAYS PRODUCTION AND NOT LESS THAN TWO ANCHORS. THE TEST SHALL BE ACCOMPLISHED BY APPLYING A TENSILE LOAD OF 1000 POUNDS TO THE EMBED ANCHOR. IF ANY TEST FAILS THE LOAD TEST, ALL APPLICATIONS FOR THAT DAY SHALL BE TESTED. THE TESTING RESULTS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER.

**EPOXY ANCHOR INSTALLATION NOTES**

**HOLE PREPARATION**

- DRILL - DRILL HOLE TO SPECIFIED DIAMETER AND DEPTH.
- BLOW - REMOVE DUST FROM HOLE WITH OIL-FREE COMPRESSED AIR FOR A MINIMUM OF 4 SECONDS. COMPRESSED AIR NOZZLE MUST REACH THE BOTTOM OF THE HOLE.
- BRUSH - CLEAN WITH A NYLON BRUSH FOR A MINIMUM OF 4 CYCLES. BRUSH SHOULD PROVIDE RESISTANCE TO INSERTION. IF NO RESISTANCE IS FELT, THE BRUSH IS WORN AND MUST BE REPLACED.
- BLOW - REMOVE DUST FROM HOLE WITH OIL-FREE COMPRESSED AIR FOR A MINIMUM OF 4 SECONDS. COMPRESSED AIR NOZZLE MUST REACH THE BOTTOM OF THE HOLE.

**CARTRIDGE PREPARATION**

- CARTRIDGE PREPARATION SHALL INCLUDE CHECKING EXPIRATION DATE ON PRODUCT LABEL. DO NOT USE EXPIRED PRODUCT. PRODUCT IS USABLE UNTIL END OF PRINTED EXPIRATION MONTH.
- ATTACH - ATTACH PROPER NOZZLE TO CARTRIDGE. DO NOT MODIFY NOZZLE.
- INSERT - INSERT CARTRIDGE INTO DISPENSING TOOL.
- DISPENSE - DISPENSE ADHESIVE TO THE SIDE UNTIL PROPERLY MIXED (UNIFORM COLOR).

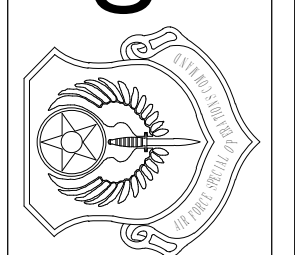
**FILLING THE HOLE**

- INSTALL ADHESIVE RETAINING CAP. REFER TO ADHESIVE RETAINING CAPS FOR PROPER ARC SIZE.
- FILL - FILL HOLE 1/2 - 2/3 FULL, STARTING FROM BOTTOM OF HOLE TO PREVENT AIR POCKETS. WITHDRAW NOZZLE AS HOLE FILLS UP.
- INSERT CLEAN, OIL-FREE ANCHOR, TURNING SLOWLY UNTIL THE ANCHOR CONTACTS THE BOTTOM OF THE HOLE.
- DO NOT DISTURB THREADED ROD ANCHOR UNTIL FULLY CURED. (SEE CURE SCHEDULE FOR SPECIFIC ADHESIVE IN CONTRACT DOCUMENTS AND COORDINATE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS.)

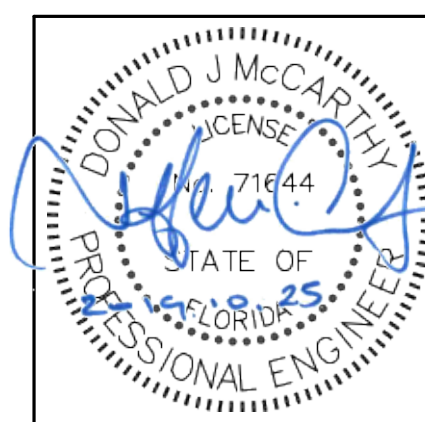
REV#	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY,  
REGULATED AREA  
GENERAL NOTES**

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

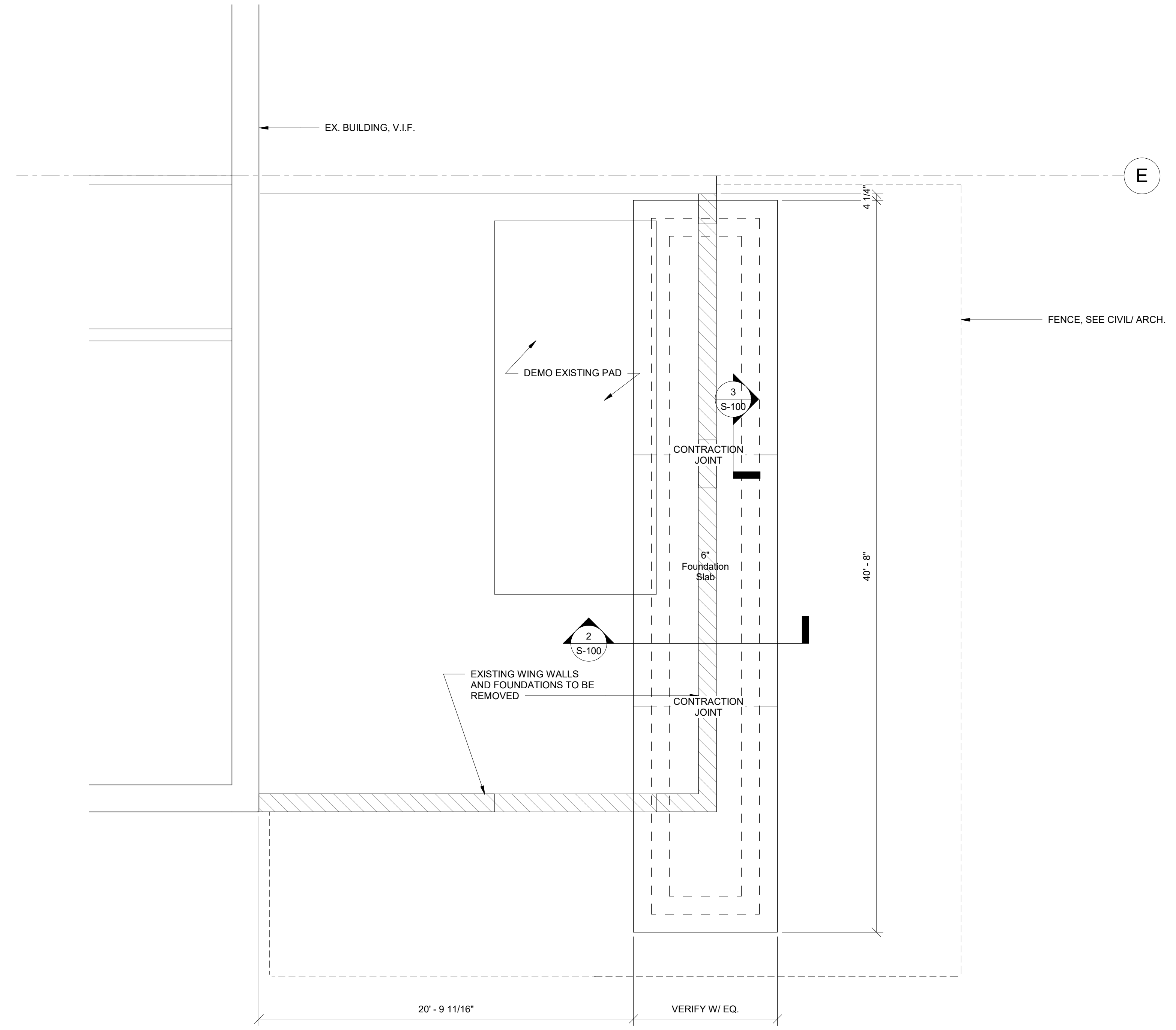


DATE: **28 OCT 2019**  
 DESIGNED BY: **DJM**  
 DRAWN BY: **WEH**  
 BUILDING NUMBER: **90225**  
 PROJECT NUMBER: **CP1028800**  
 SHEET REFERENCE: **S-001**  
 SHEET NUMBER: **6 of 80**

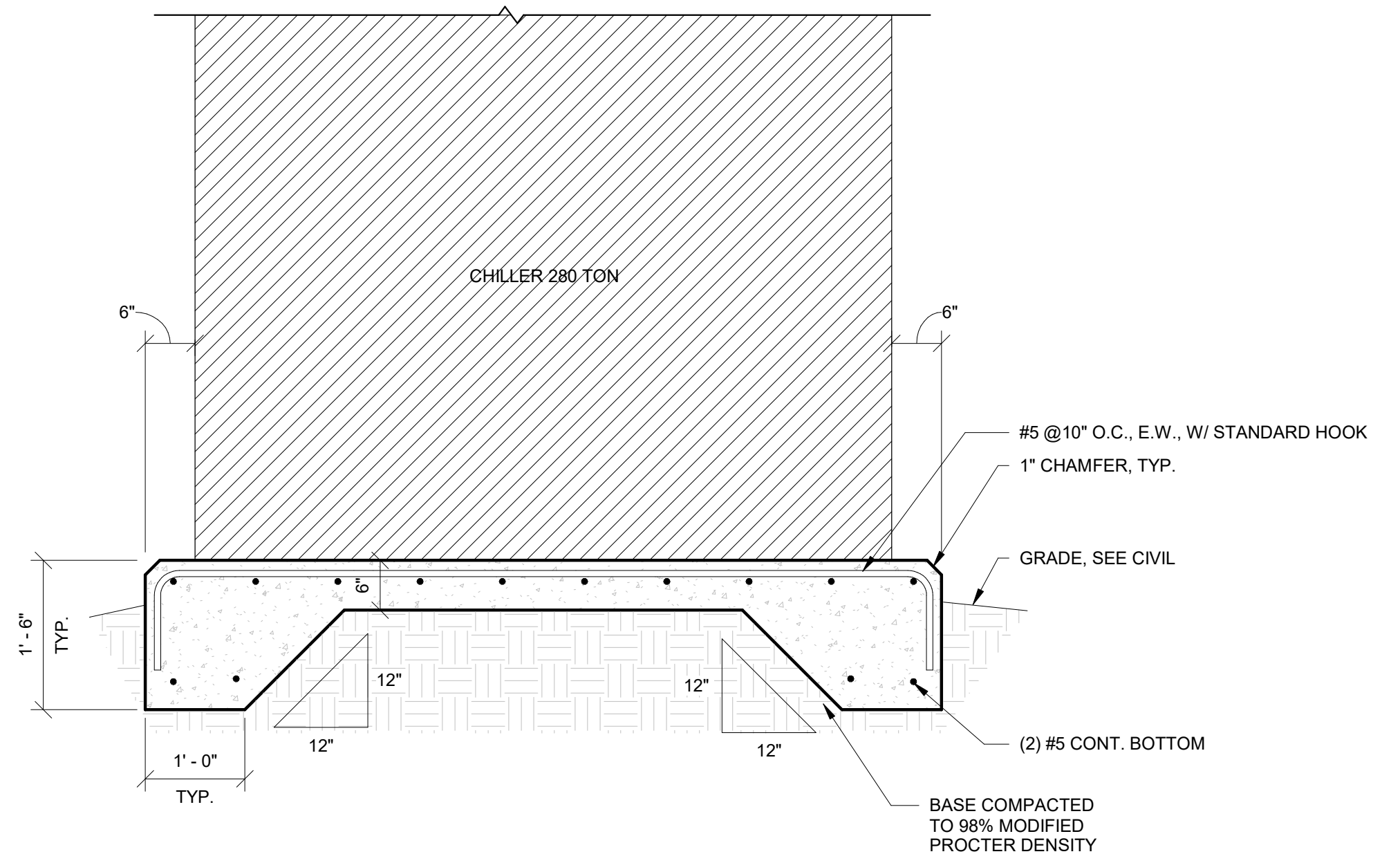




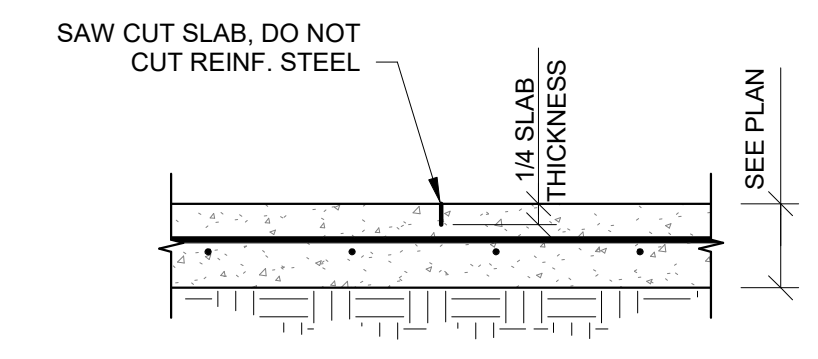
**NOTES:**  
 1. ATTACHMENT OF NEW CHILLER TO FOUNDATION SHALL BE BY CHILLER MANUFACTURER. COORDINATE DEPTH OF FOUNDATION WITH CHILLER ANCHORAGE PRIOR TO CASTING CONCRETE. IF CHILLER ANCHORAGE IS GREATER THAN 1'-0", THICKENED EDGE AS REQUIRED.



**1 MECHANICAL FOUNDATION PLAN**  
 1/4" = 1'-0"

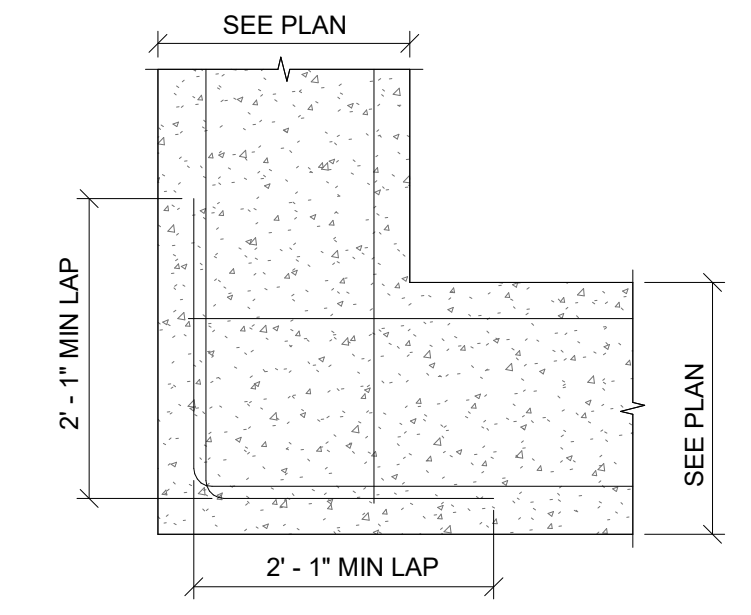


**2 CHILLER PAD SECTION**  
 3/4" = 1'-0"



**NOTES:**  
 1. IN LIEU OF CONTRACTION JOINT CONTRACTOR MAY USE CONSTRUCTION JOINT, CONTRACTOR'S OPTION.

**3 CONTRACTION JOINT (C.J.)**  
 3/4" = 1'-0"



**4 FOUNDATION REINF. @ CORNER**  
 3/4" = 1'-0"



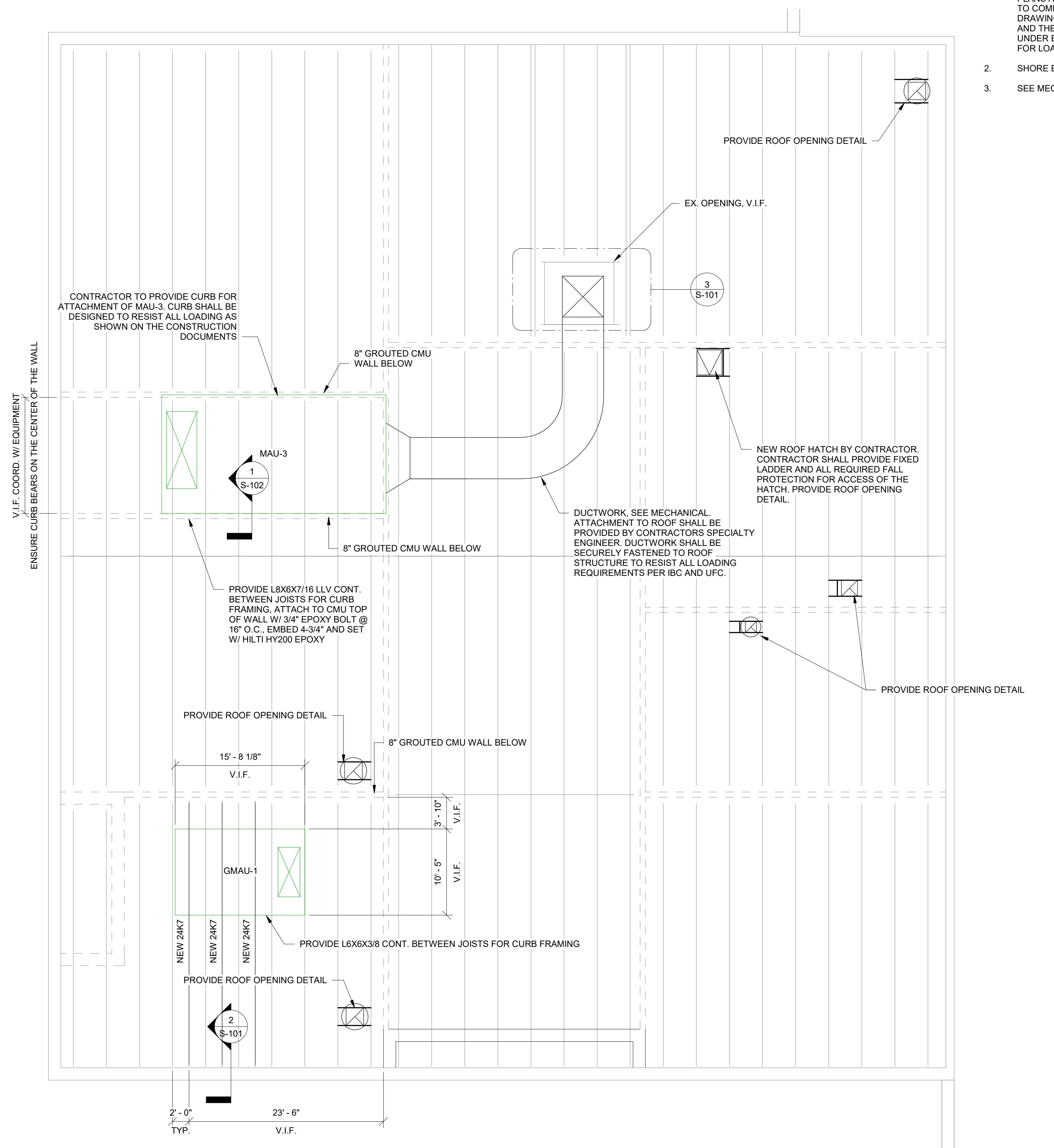
REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY, REGULATED AREA**  
**CHILLER FOUNDATION PLAN**

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

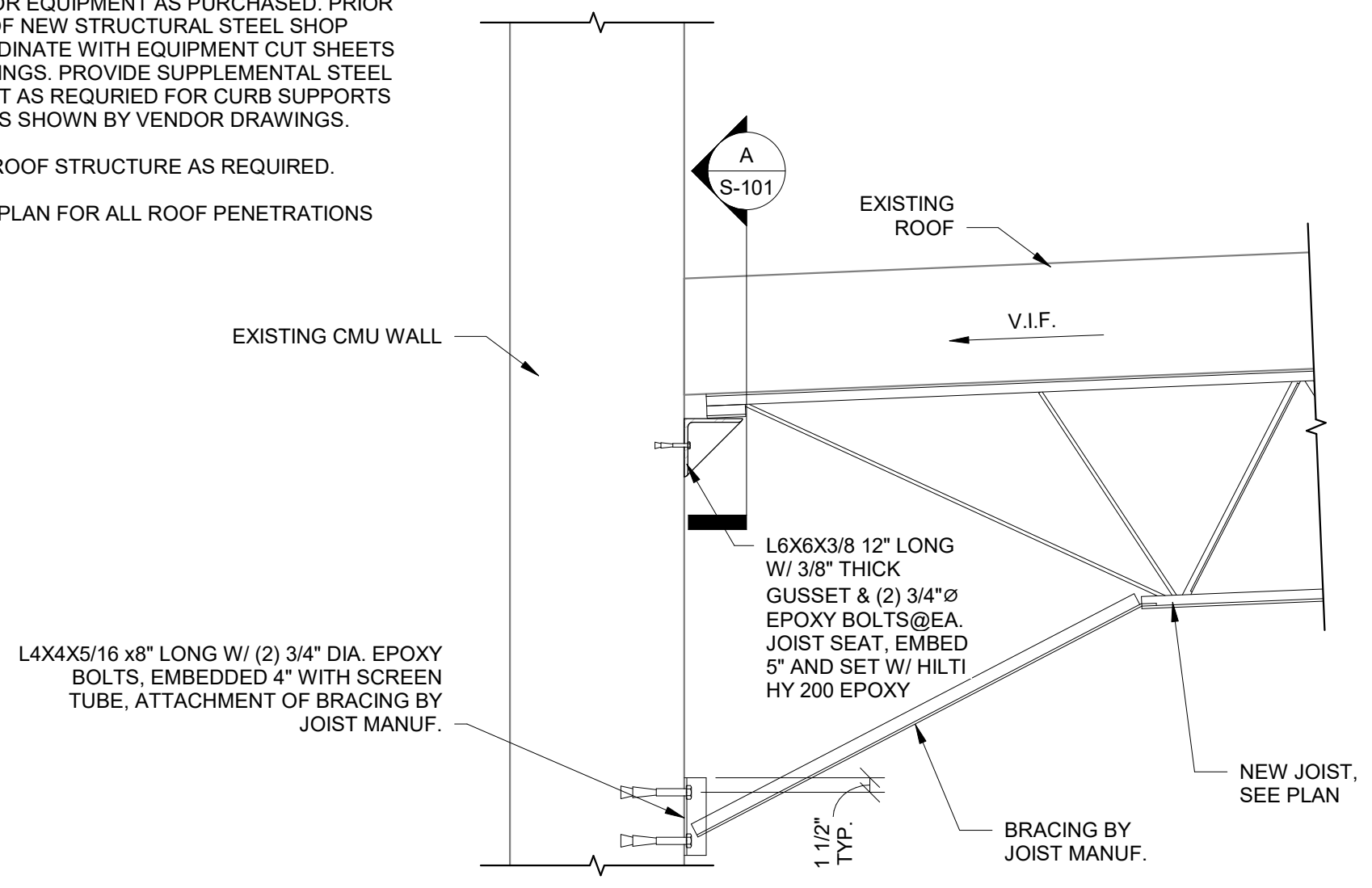
DATE: **28 OCT 2019**  
 DESIGNED BY: **DJM**  
 DRAWN BY: **WEH**  
 BUILDING NUMBER: **90225**  
 PROJECT NUMBER: **CP1028800**  
 SHEET REFERENCE: **S-100**  
 SHEET NUMBER: **7 of 80**



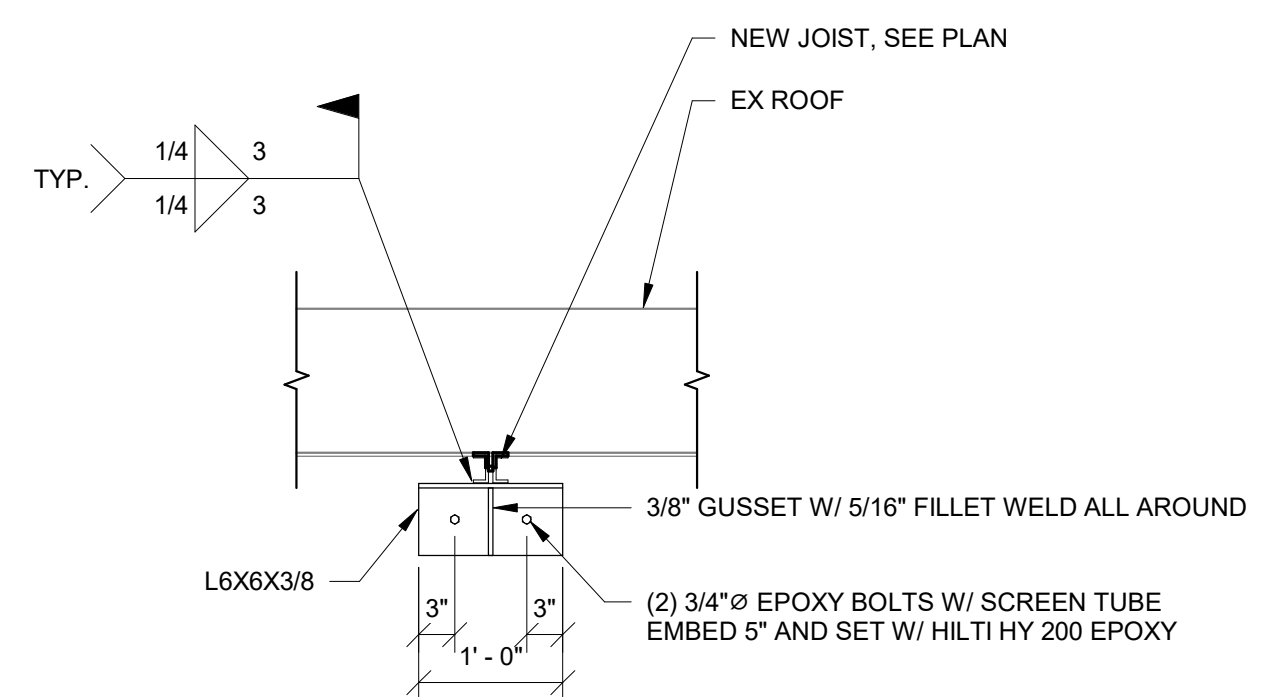


**1 ROOF FRAMING PLAN**  
1/8" = 1'-0"

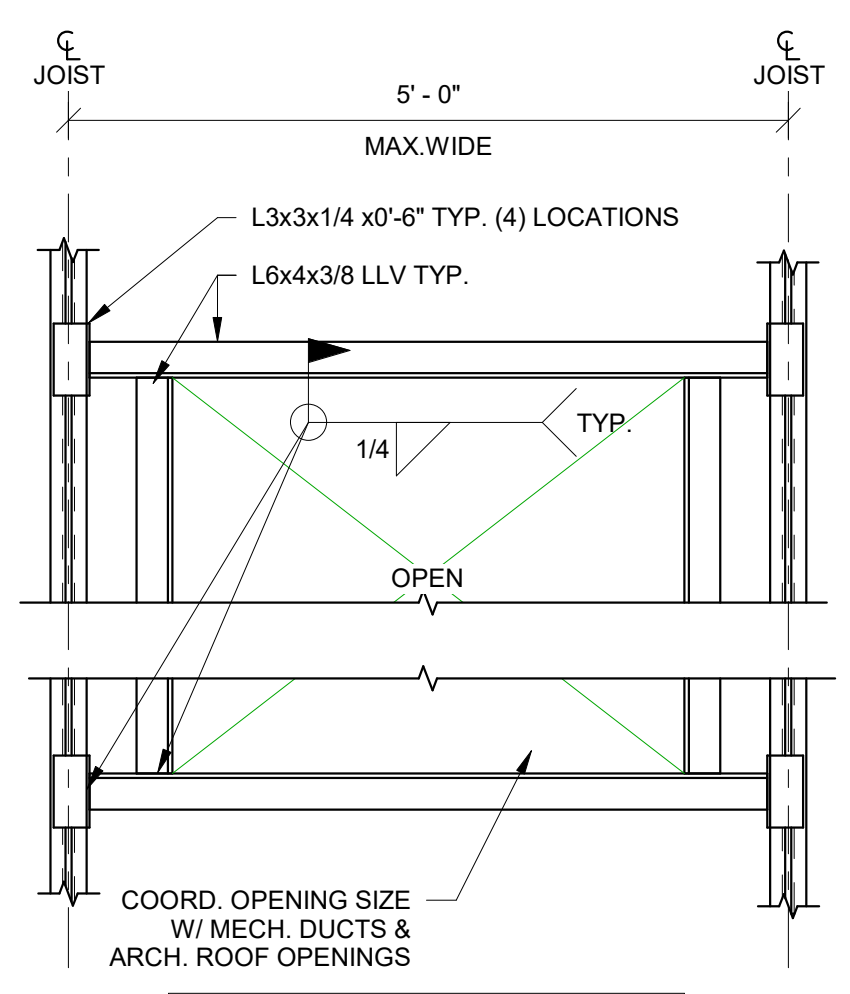
- NOTE:**
1. ROOF MOUNTED HVAC EQUIPMENT SHALL BE COORDINATED WITH ARCHITECTURAL AND MECHANICAL PLANS AND VENDOR EQUIPMENT AS PURCHASED. PRIOR TO COMPLETION OF NEW STRUCTURAL STEEL SHOP DRAWINGS, COORDINATE WITH EQUIPMENT CUT SHEETS AND THESE DRAWINGS. PROVIDE SUPPLEMENTAL STEEL UNDER EQUIPMENT AS REQUIRED FOR CURB SUPPORTS FOR LOADINGS AS SHOWN BY VENDOR DRAWINGS.
  2. SHORE EXISTING ROOF STRUCTURE AS REQUIRED.
  3. SEE MECHANICAL PLAN FOR ALL ROOF PENETRATIONS



**2 JOIST CONNECTION DETAIL**  
3/4" = 1'-0"



**A JOIST BEARING CONNECTION**  
3/4" = 1'-0"



**3 ROOF OPENING DETAIL**  
3/4" = 1'-0"

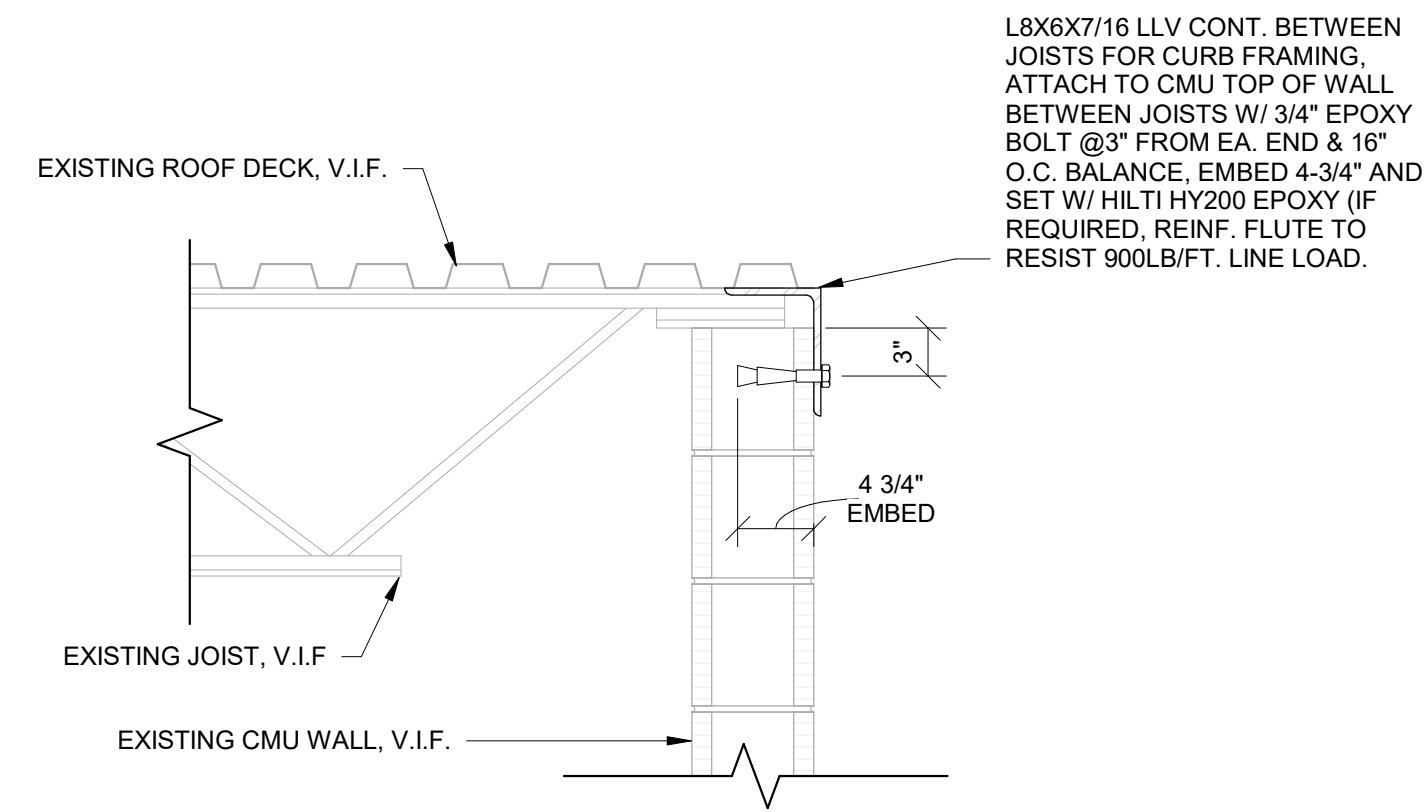


REV#	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY,  
REGULATED AREA  
MECHANICAL FRAMING PLAN**

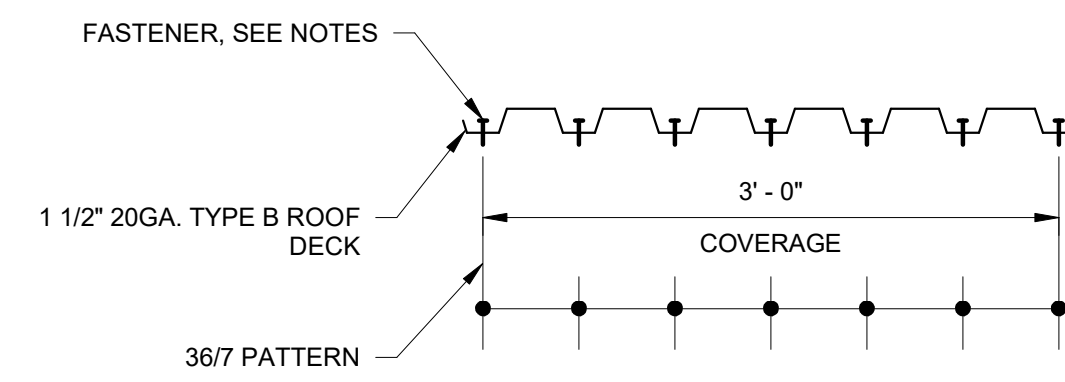
**AIR FORCE SPECIAL  
OPERATIONS COMMAND  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA**

DATE: **28 OCT 2019**  
 DESIGNED BY: **DJM**  
 DRAWN BY: **WEH**  
 BUILDING NUMBER: **90225**  
 PROJECT NUMBER: **CP1028800**  
 SHEET REFERENCE: **S-101**  
 SHEET NUMBER: **8 of 80**

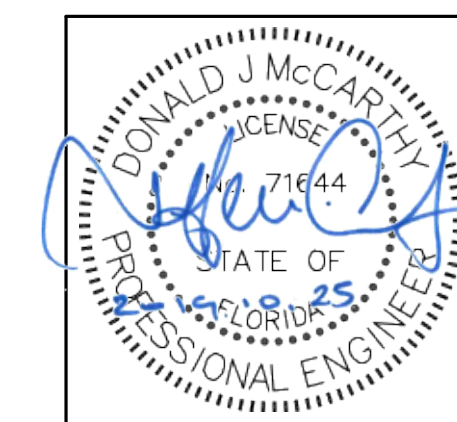


**1** STRUCTURAL DETAIL  
1" = 1'-0"

- NOTES:**
1. ATTACH DECK TO JOIST W/ #12 SCREWS IN PRE-DRILLED HOLES FOR BASE MATERIAL THICKER THAN 1/4" USE HILTI 0.157"Ø X-U P.A.F.'S FOR ATTACHMENT.
  2. PROVIDE #10 SCREWS FOR SIDELAP FASTENING OF DECKS TOGETHER. LOCATE #10 SCREWS @12" O.C.



**2** ROOF DECK ATTACHMENT  
1" = 1'-0"



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY,  
REGULATED AREA  
STRUCTURAL DETAILS**

**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: **28 OCT 2019**

DESIGNED BY: **DJM**

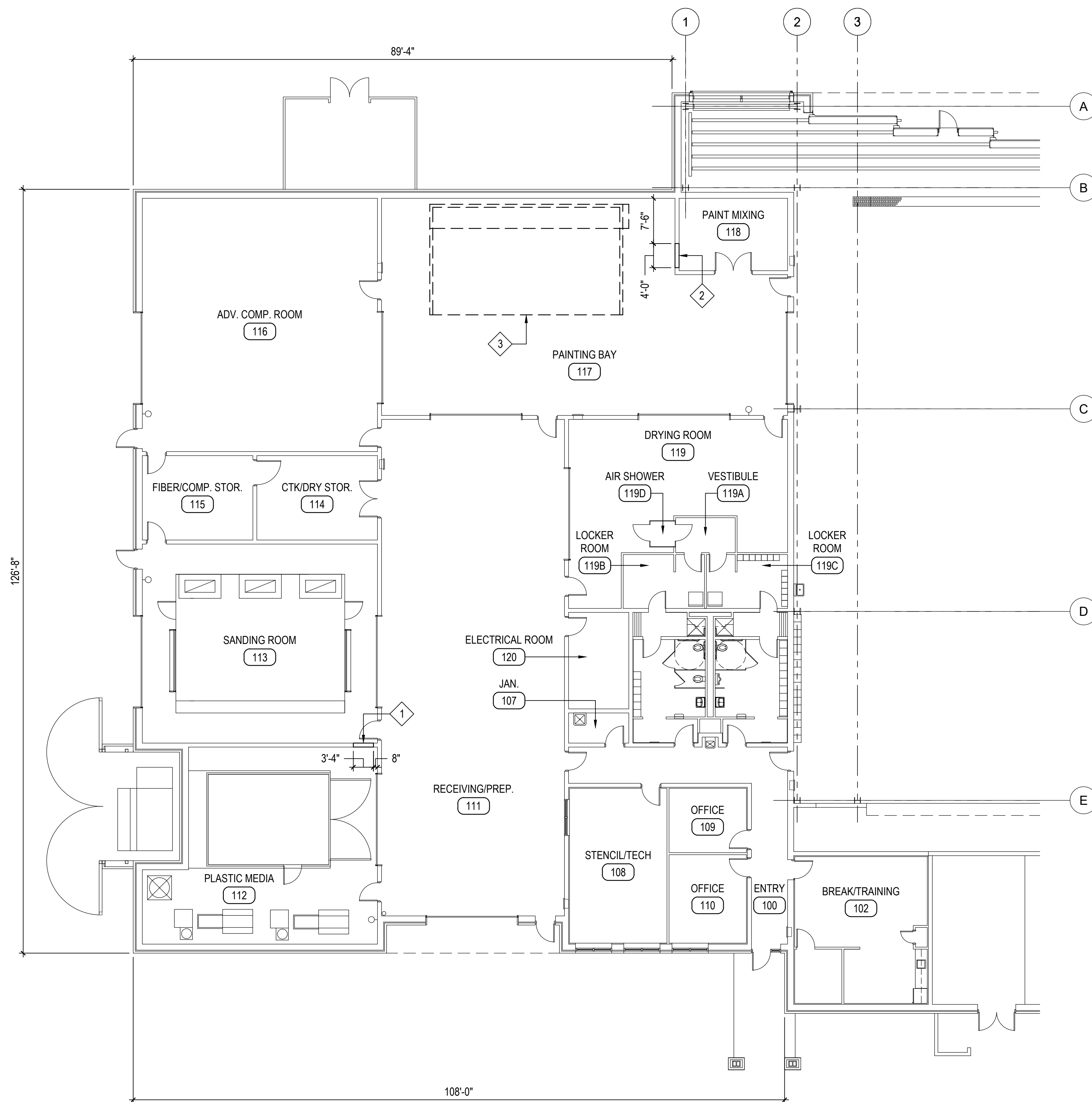
DRAWN BY: **WEH**

BUILDING NUMBER: **90225**

PROJECT NUMBER: **CP1028800**

SHEET REFERENCE: **S-102**

SHEET NUMBER: **9 of 80**



**FLOOR PLAN - DEMOLITION 'AREA 'A''**

SCALE: 3/32" = 1'-0"

**LEGEND:**

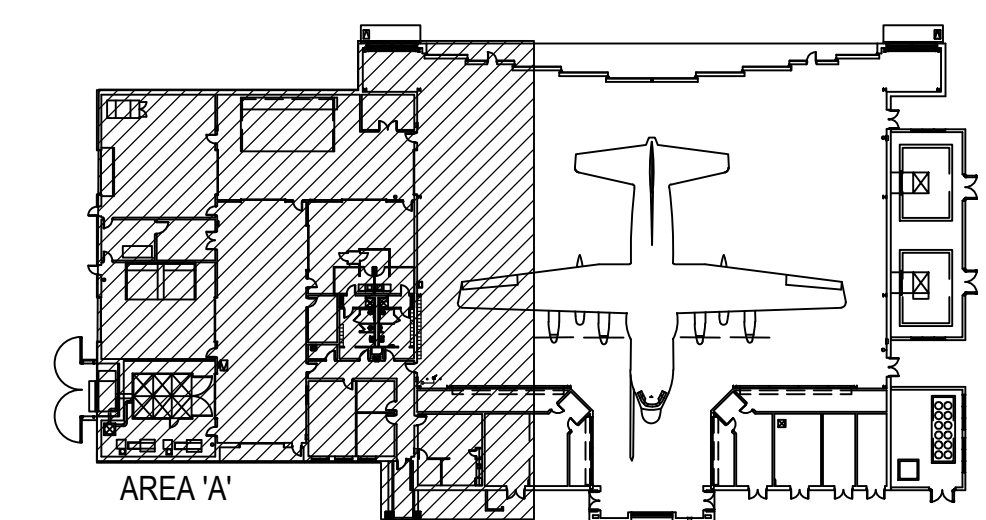
- EXISTING WALL TO BE DEMOLISHED
- XXXX  
XXX ROOM IDENTIFICATION

**KEYNOTES:**

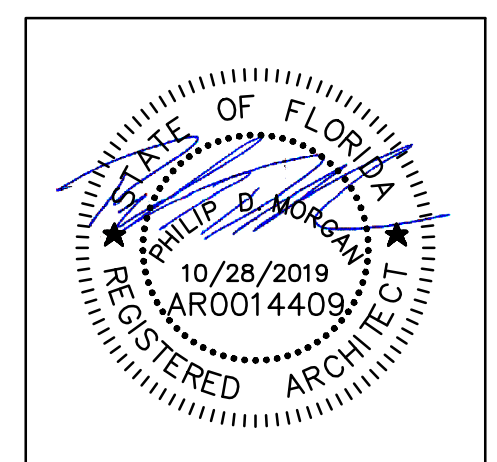
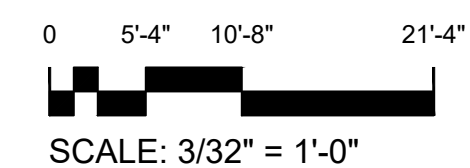
- 1 DEMOLISH EXISTING WALL AND PREPARE OPENING TO RECEIVE NEW HOLLOW METAL DOOR AND FRAME. NEW ROUGH OPENING TO BE 3'-4" WIDE X 7'-4" HIGH.
- 2 DEMOLISH EXISTING WALL AND PREPARE OPENING TO RECEIVE NEW HOLLOW METAL CASED OPENING FRAME. NEW ROUGH OPENING TO BE 4'-0" WIDE X 7'-4" HIGH.
- 3 DEMOLISH EXISTING PAINT BOOTH

**GENERAL NOTES:**

1. CONTRACTOR SHALL REPAIR ALL VOIDS, OPENINGS OR HOLES IN EXISTING SUBSTRATES THAT RESULT FROM THE REMOVAL OF EXISTING EQUIPMENT, FIXTURES, DEVICES, PIPING AND SIMILAR ITEMS. CONTRACTOR SHALL USE SIMILAR MATERIALS, EQUAL IN QUALITY TO THE AREAS BEING REPAIRED, AND SHALL NOT RESTRICT OR DECREASE THE FIRE RATING PRECEDING THE REMOVAL OF THE ITEM IN QUESTION. WALL FINISH OR SIMILAR ITEMS, CONTRACTOR SHALL PATCH AND REPAIR THE EXISTING.
2. HOLES CUT IN EXISTING PERMANENT WALLS, ROOF AND FLOORS TO PERMIT THE INSTALLATION OF DUCTWORK, PIPING, CONDUIT AND SIMILAR ITEMS SHALL BE CAREFULLY MADE AND RESTRICTED TO ITS SMALLEST PRACTICABLE SIZE. OVERSIZE, IRREGULAR, OR UNNECESSARY OPENINGS SHALL BE FILLED IN, PATCHED AND REPAIRED. THE INTEGRITY OF ALL FIRE BARRIERS INCLUDING WALLS, CEILINGS AND FLOORS SHALL BE MAINTAINED BY USING APPROVED UL WALLS, CEILINGS AND FLOOR ASSEMBLIES.



**KEY PLAN**  
NO SCALE



REV #	DATE	DESCRIPTION

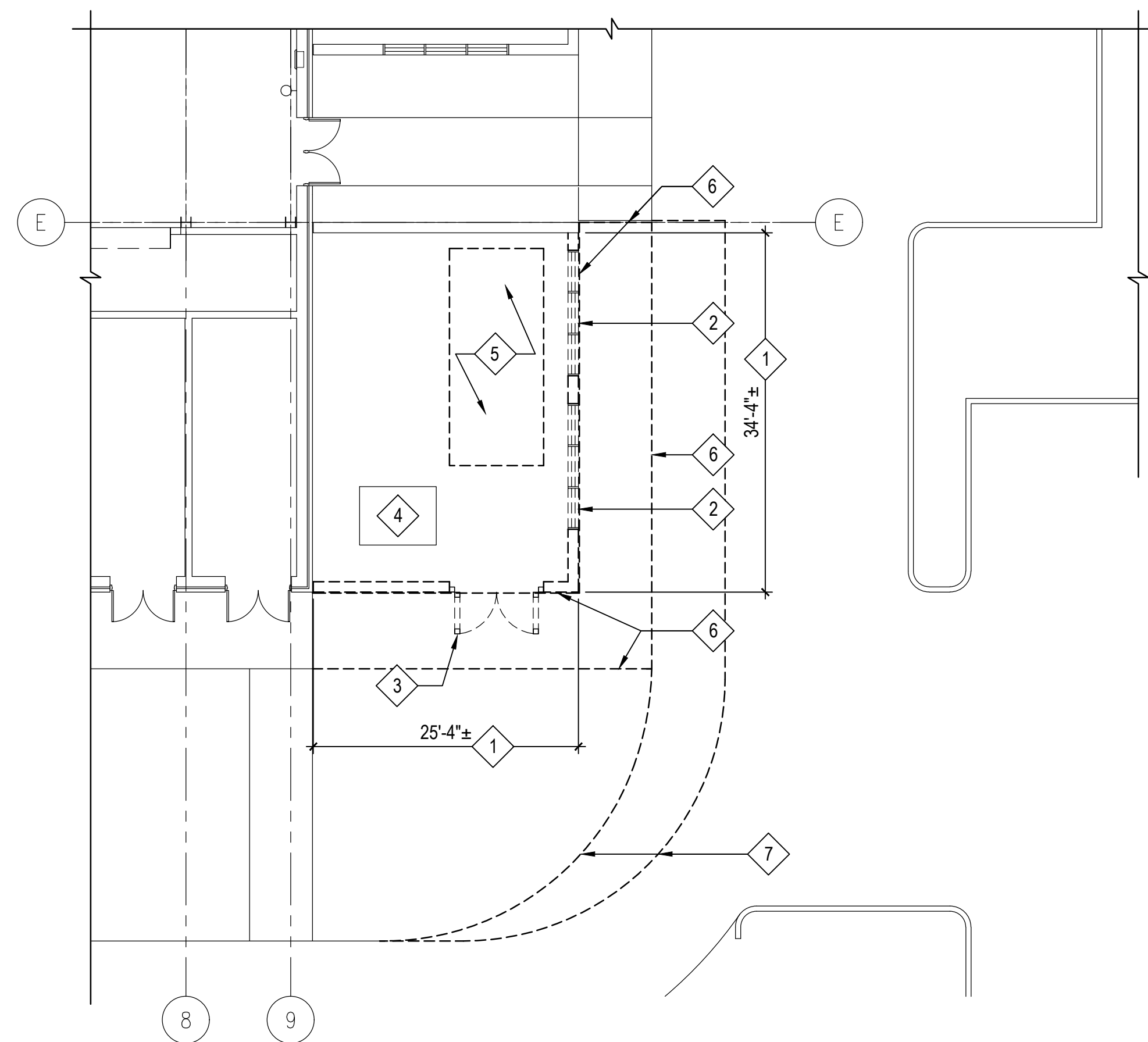
**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

FLOOR PLAN - DEMOLITION

**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: PDM  
DRAWN BY: SJB  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: D-101  
SHEET NUMBER: 10 of 80





**FLOOR PLAN - DEMOLITION 'AREA B'**

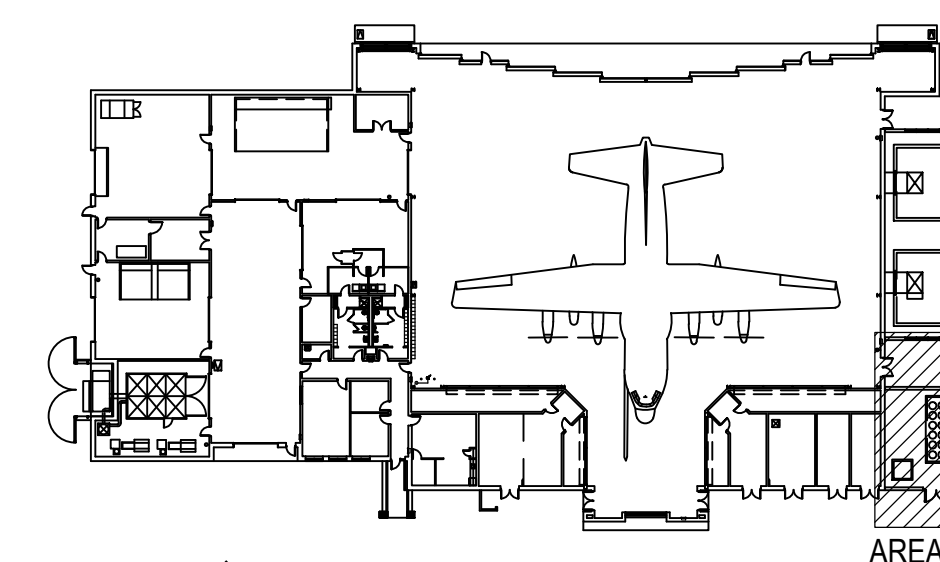
SCALE: 3/32" = 1'-0"

**LEGEND:**

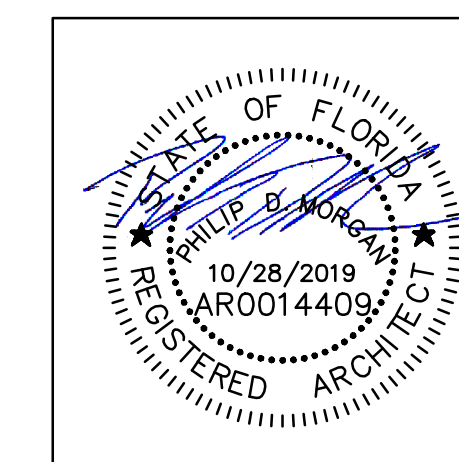
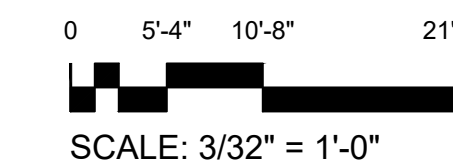
- ===== EXISTING WALL TO BE DEMOLISHED
- XXXX  
XXX ROOM IDENTIFICATION

**KEYNOTES:**

- 1 DEMOLISH EXISTING 10'-0"H±, 12" SPLIT-FACED, RIBBED, CMU WALL AND FOUNDATION IN ITS ENTIRETY. SAWCUT NEAT AND TRUE.
- 2 DEMOLISH EXISTING WALL LOUVER IN ITS ENTIRETY.
- 3 DEMOLISH EXISTING 10'-0"H LOUVERED GATES, COLUMNS AND COLUMN FOUNDATIONS IN THEIR ENTIRETY.
- 4 EXIST TRANSFORMER TO REMAIN
- 5 DEMOLISH EXISTING CHILLER AND CHILLER PAD IN ITS ENTIRETY. SEE PLUMBING/MECHANICAL DOCUMENTS.
- 6 DEMOLISH EXISTING SIDEWALK TO EXTENTS INDICATED. SEE NEW WORK SHEET A102.
- 7 DEMOLISH EXISTING ASPHALT DRIVE AND BASE TO EXTENTS INDICATED. SEE NEW WORK SHEET A102



**KEY PLAN**  
NO SCALE



REVISIONS

REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
FLOOR PLAN - DEMOLITION - AREA 'B'

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

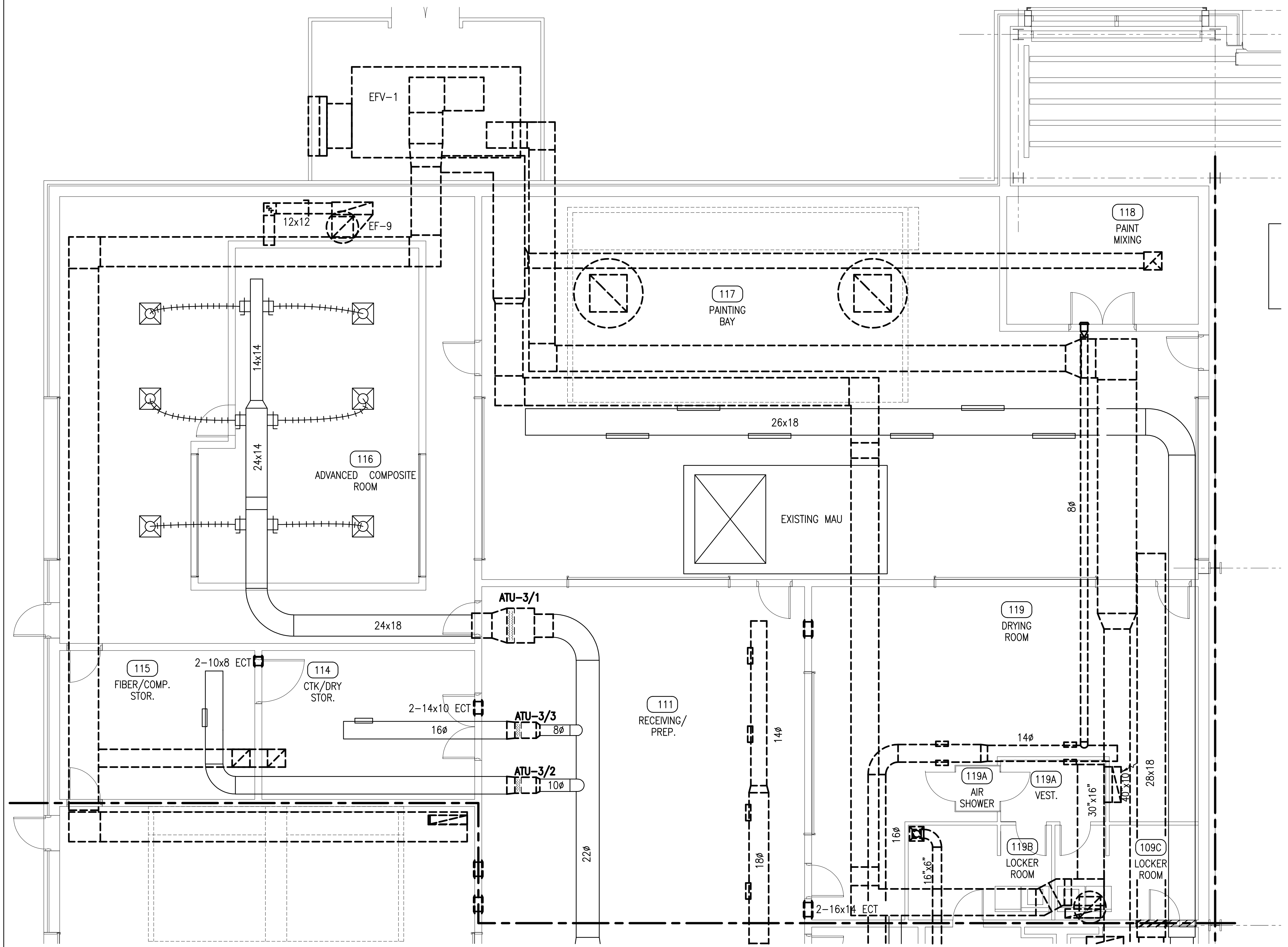


DATE: 28 OCT 2019  
DESIGNED BY: PDM  
DRAWN BY: SJB  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE:

D-102

SHEET NUMBER:  
11 of 80

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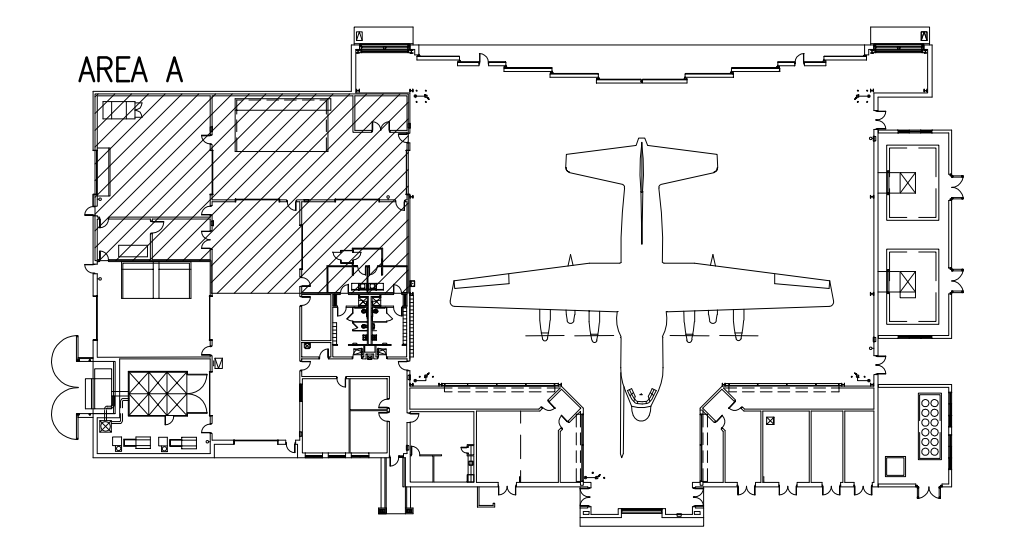
HEXAVALENT CHROMIUM REMEDIATION PLAN - AREA A  
SCALE: 3/16" = 1'-0"

**GENERAL NOTES**

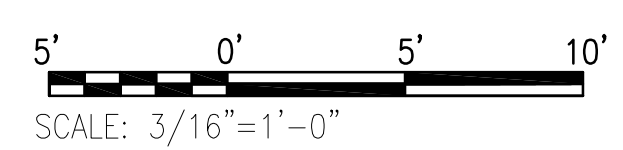
1. CONTRACTOR SHALL REMOVE SURFACE DUST AND DIRT FROM ALL DUCTWORK, PIPING, EQUIPMENT, AND OTHER SURFACES WITHIN 3 FEET OF MATERIALS BEING DEMOLISHED OR REPLACED. CONTRACTOR MAY USE WIPES, RAGS, HEPA VACUUMS AND/OR ANY BASE APPROVED METHODS TO EFFECTIVELY COMPLETE CLEANING OPERATIONS. WATER OR WATER BLASTING SHALL NOT BE USED AS A CLEANING METHOD. ALL CLEANING MATERIALS AND PPE USED SHALL BE MANAGED AS HAZARDOUS WASTE.
2. THE BASE WILL TAKE RESPONSIBILITY FOR MANIFESTING, TRACKING AND DISPOSING OF THE WASTE RAGS, WIPES, ETC. UP TO TEN CONTRACTOR PROVIDED 55 GALLON DRUMS. HAZARDOUS WASTE GENERATED IN EXCESS OF TEN CONTRACTOR PROVIDED 55 GALLON DRUMS WILL BE THE CONTRACTOR'S RESPONSIBILITY FOR DISPOSAL. CONTRACTOR SHALL DISPOSE OF HAZARDOUS WASTE IN ACCORDANCE WITH ALL LOCAL, STATE, FEDERAL AND HURLBURT FIELD ENVIRONMENTAL COMPLIANCE RULES AND REGULATIONS.
3. ALL SCRAP METAL PIPING AND COMPONENTS, OTHER THAN MERCURY CONTAINING DEVICES, SHALL BE RECLAIMED BY THE CONTRACTOR AND SHIPPED TO AN FDEP AND EPA APPROVED RECYCLE FACILITY. CONTRACTOR SHALL PROVIDE RECYCLE FACILITY CREDENTIALS AND SHIPPING DOCUMENTS TO THE COR AND HAZARDOUS WASTE PROGRAM MANAGER FOR APPROVAL PRIOR TO TRANSPORTING THE SCRAP OFF-SITE. THE HURLBURT FIELD RECYCLE CENTER MAY BE CONSIDERED AS A RECYCLING OPTION. MERCURY SWITCHES AND MERCURY CONTAINING DEVICES OF ANY TYPE SHALL BE TURNED IN TO THE BASE.
4. CONTRACTOR SHALL PERFORM LABORATORY ANALYSIS FOR CONFIRMATION THAT ALL REMOVED PIPES, FIXTURES, EQUIPMENT, COMPONENTS, DEMOLITION DEBRIS, AND QUESTIONABLE MATERIALS INTENDED FOR RECYCLE OR DISPOSAL WERE PROPERLY CLEANED. THE HURLBURT FIELD HAZARDOUS WASTE PROGRAM MANAGER WILL PROVIDE GUIDANCE FOR SAMPLE COLLECTION. A COPY OF THE LAB REPORT SHALL BE SUBMITTED TO THE COR AND HAZARDOUS WASTE PROGRAM MANAGER FOR ENVIRONMENTAL APPROVAL PRIOR TO TRANSPORTING RECYCLABLE MATERIALS AND ANY DEMOLITION DEBRIS OFF SITE.
5. SEE DRAWINGS (MECHANICAL, ELECTRICAL, ARCHITECTURAL) FOR ADDITIONAL CLARIFICATION OF DEMOLITION REQUIREMENTS.
6. THE 100% OUTSIDE AIR MAKEUP AIR UNITS AND ASSOCIATED DUCTWORK DO NOT REQUIRE CHROMIUM REMEDIATION.

**LEGEND**

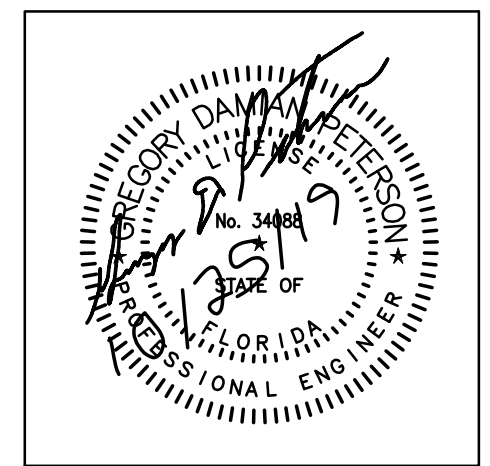
----- INDICATES EQUIPMENT TO BE CLEANED



KEY PLAN  
NO SCALE



**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PE# 18116



REV #	DATE	DESCRIPTION

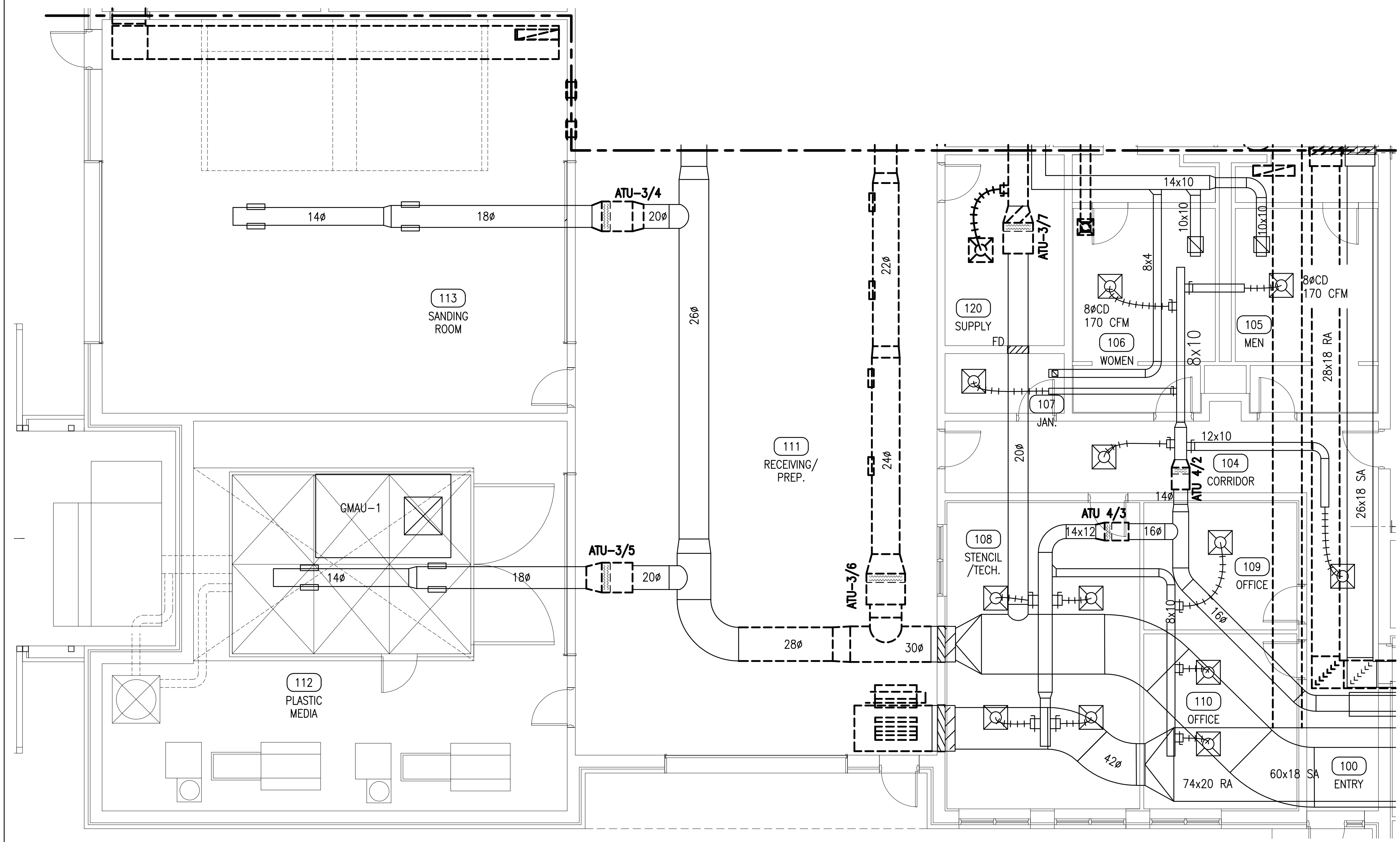
**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

HEXAVALENT CHROMIUM REMEDIATION PLAN - AREA A

**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: D-201  
SHEET NUMBER: 12 of 80

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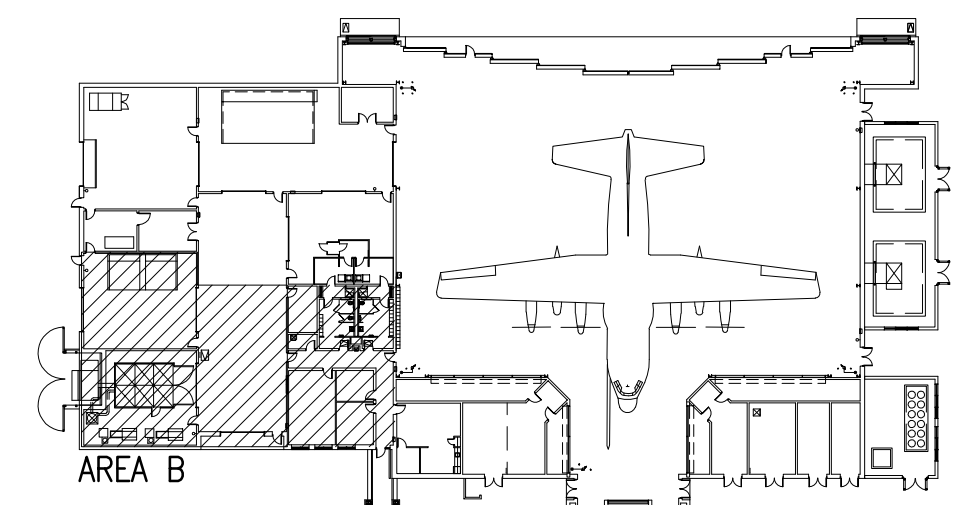
 **HEXAVALENT CHROMIUM REMEDIATION PLAN - AREA B**  
SCALE: 3/16" = 1'-0"

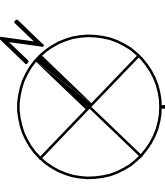
**GENERAL NOTES**

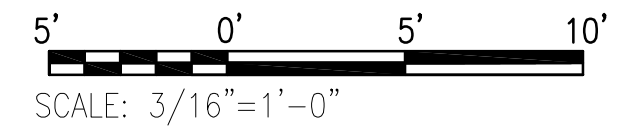
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5. SEE DRAWINGS (MECHANICAL, ELECTRICAL, ARCHITECTURAL) FOR ADDITIONAL CLARIFICATION OF DEMOLITION REQUIREMENTS.
6. THE 100% OUTSIDE AIR MAKEUP AIR UNITS AND ASSOCIATED DUCTWORK DO NOT REQUIRE CHROMIUM REMEDIATION.

**LEGEND**

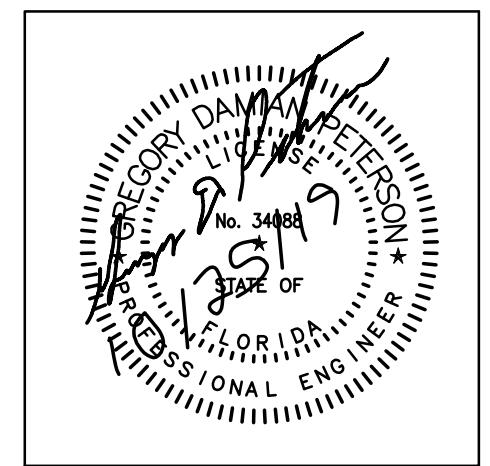
----- INDICATES EQUIPMENT TO BE CLEANED



 **KEY PLAN**  
NO SCALE



**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PE# 18116



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

HEXAVALENT CHROMIUM REMEDIATION PLAN - AREA B

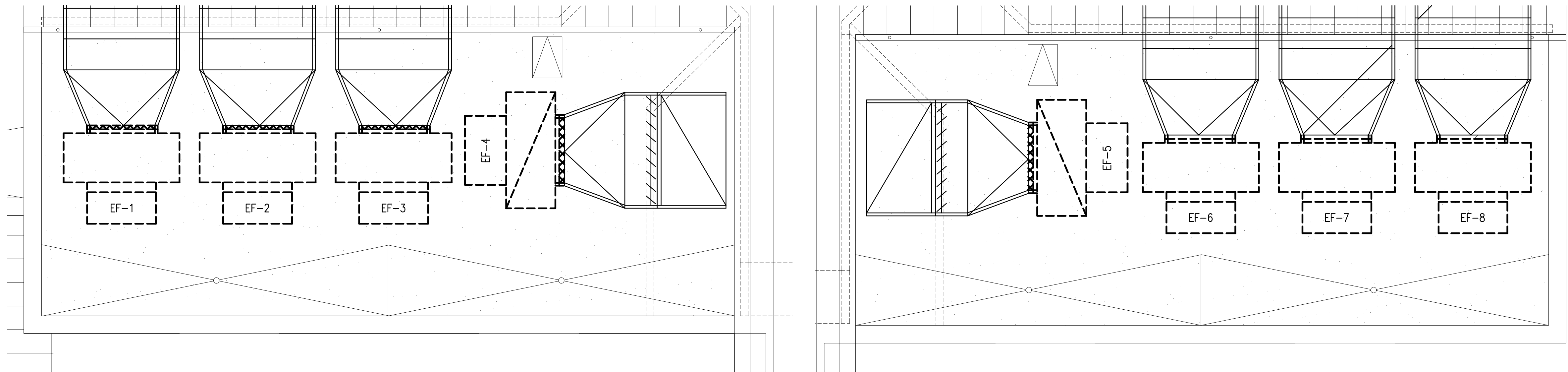
**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: D-202  
SHEET NUMBER: 13 of 80

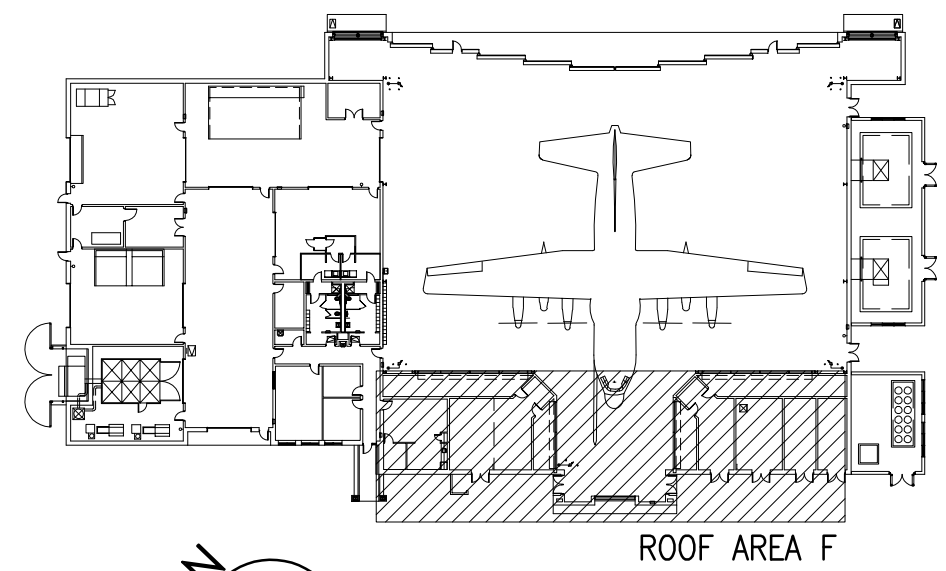




10/30/2019 1:37:35 PM, djmarshall, ANSI\_D\_(22.00\_x\_34.00\_inches)

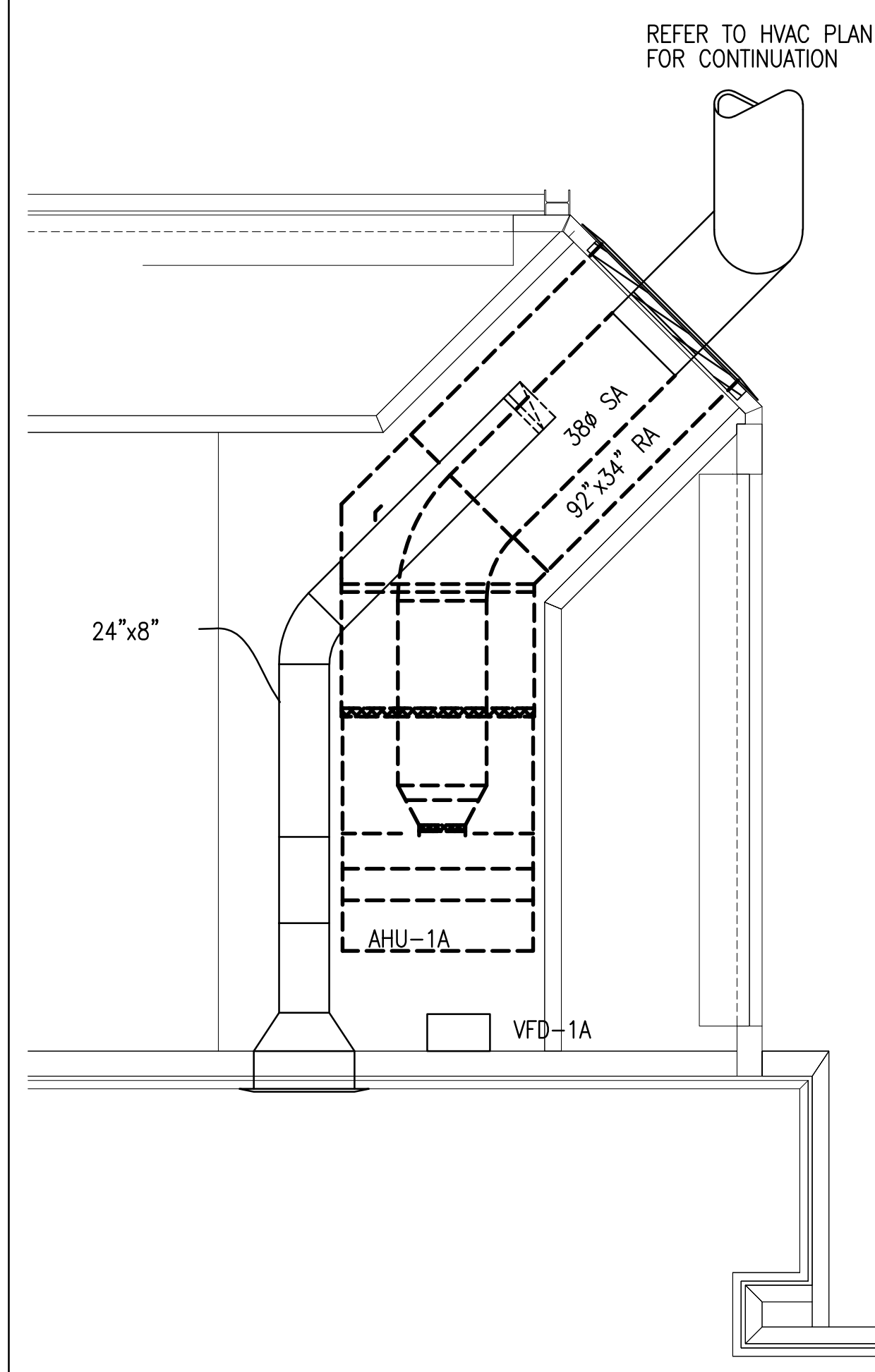


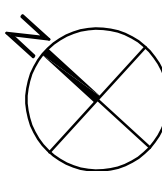
 **HEXAVALENT CHROMIUM REMEDIATION PLAN – ROOF**  
SCALE: 3/16" = 1'-0"

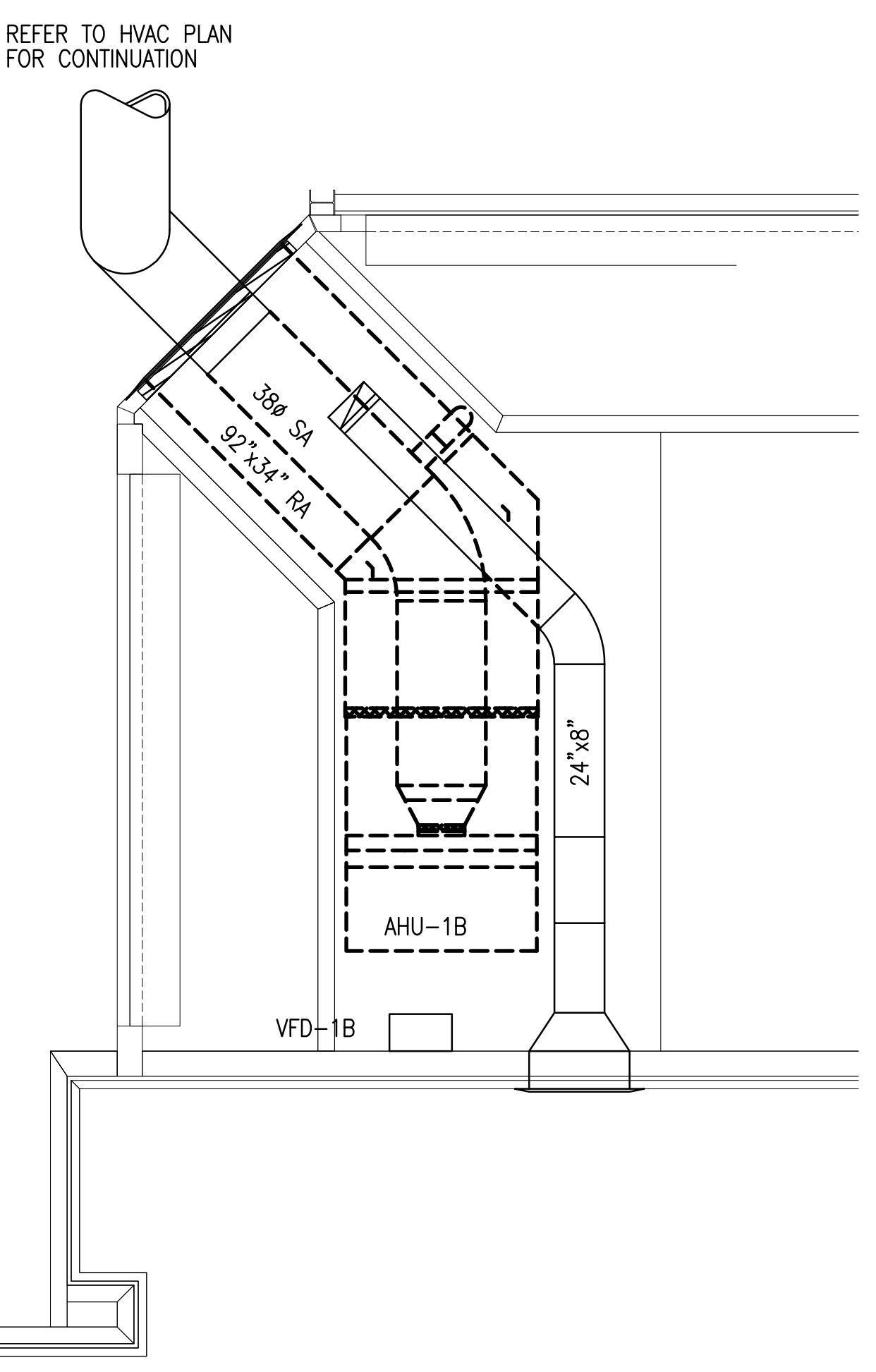


 **KEY PLAN**  
NO SCALE

- GENERAL NOTES**
- CONTRACTOR SHALL REMOVE SURFACE DUST AND DIRT FROM ALL DUCTWORK, PIPING, EQUIPMENT, AND OTHER SURFACES WITHIN 3 FEET OF MATERIALS BEING DEMOLISHED OR REPLACED. CONTRACTOR MAY USE WIPES, RAGS, HEPA VACUUMS AND/OR ANY BASE APPROVED METHODS TO EFFECTIVELY COMPLETE CLEANING OPERATIONS. WATER OR WATER BLASTING SHALL NOT BE USED AS A CLEANING METHOD. ALL CLEANING MATERIALS AND PPE USED SHALL BE MANAGED AS HAZARDOUS WASTE.
  - THE BASE WILL TAKE RESPONSIBILITY FOR MANIFESTING, TRACKING AND DISPOSING OF THE WASTE RAGS, WIPES, ETC. UP TO TEN CONTRACTOR PROVIDED 55 GALLON DRUMS. HAZARDOUS WASTE GENERATED IN EXCESS OF TEN CONTRACTOR PROVIDED 55 GALLON DRUMS WILL BE THE CONTRACTOR'S RESPONSIBILITY FOR DISPOSAL. CONTRACTOR SHALL DISPOSE OF HAZARDOUS WASTE IN ACCORDANCE WITH ALL LOCAL, STATE, FEDERAL AND HURLBURT FIELD ENVIRONMENTAL COMPLIANCE RULES AND REGULATIONS.
  - ALL SCRAP METAL PIPING AND COMPONENTS, OTHER THAN MERCURY CONTAINING DEVICES, SHALL BE RECLAIMED BY THE CONTRACTOR AND SHIPPED TO AN FDEP AND EPA APPROVED RECYCLE FACILITY. CONTRACTOR SHALL PROVIDE RECYCLE FACILITY CREDENTIALS AND SHIPPING DOCUMENTS TO THE COR AND HAZARDOUS WASTE PROGRAM MANAGER FOR APPROVAL PRIOR TO TRANSPORTING THE SCRAP OFF-SITE. THE HURLBURT FIELD RECYCLE CENTER MAY BE CONSIDERED AS A RECYCLING OPTION. MERCURY SWITCHES AND MERCURY CONTAINING DEVICES OF ANY TYPE SHALL BE TURNED IN TO THE BASE.
  - CONTRACTOR SHALL PERFORM LABORATORY ANALYSIS FOR CONFIRMATION THAT ALL REMOVED PIPES, FIXTURES, EQUIPMENT, COMPONENTS, DEMOLITION DEBRIS, AND QUESTIONABLE MATERIALS INTENDED FOR RECYCLE OR DISPOSAL WERE PROPERLY CLEANED. THE HURLBURT FIELD HAZARDOUS WASTE PROGRAM MANAGER WILL PROVIDE GUIDANCE FOR SAMPLE COLLECTION. A COPY OF THE LAB REPORT SHALL BE SUBMITTED TO THE COR AND HAZARDOUS WASTE PROGRAM MANAGER FOR ENVIRONMENTAL APPROVAL PRIOR TO TRANSPORTING RECYCLABLE MATERIALS AND ANY DEMOLITION DEBRIS OFF SITE.
  - SEE DRAWINGS (MECHANICAL, ELECTRICAL, ARCHITECTURAL) FOR ADDITIONAL CLARIFICATION OF DEMOLITION REQUIREMENTS.
  - THE 100% OUTSIDE AIR MAKEUP AIR UNITS AND ASSOCIATED DUCTWORK DO NOT REQUIRE CHROMIUM REMEDIATION.



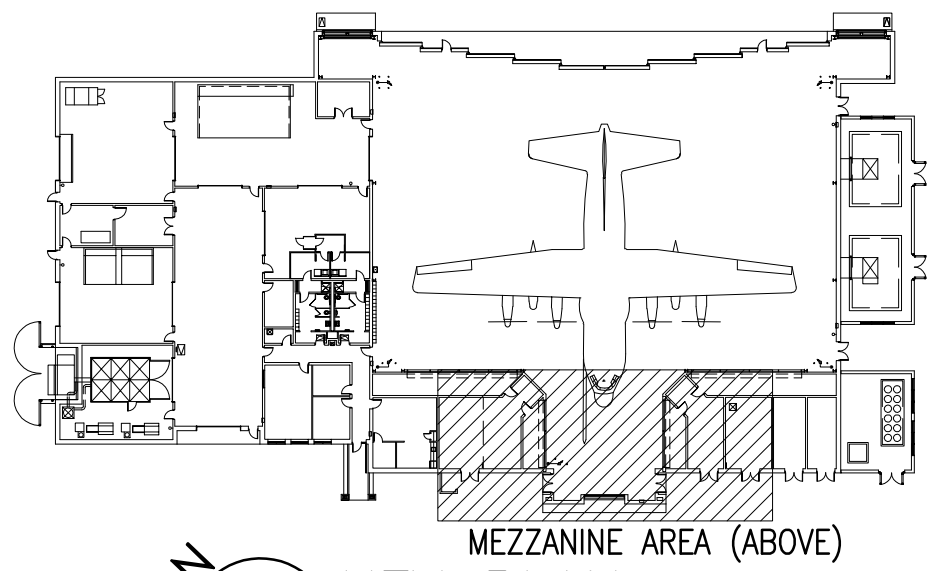
 **HEXAVALENT CHROMIUM REMEDIATION PLAN – MEZZANINE**  
SCALE: 3/16" = 1'-0"

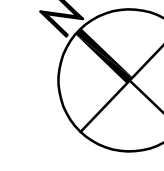


5' 0' 5' 10'  
SCALE: 3/16"=1'-0"

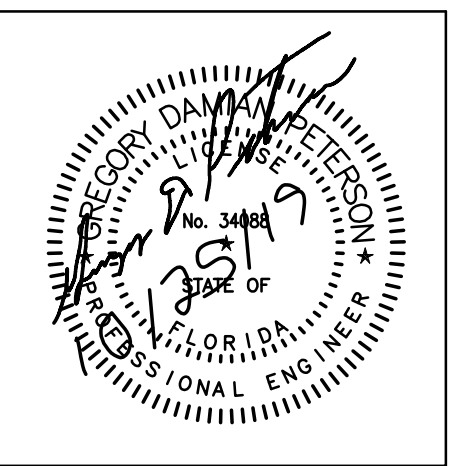
**LEGEND**

--- INDICATES EQUIPMENT TO BE CLEANED



 **KEY PLAN**  
NO SCALE

**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PE# 18116



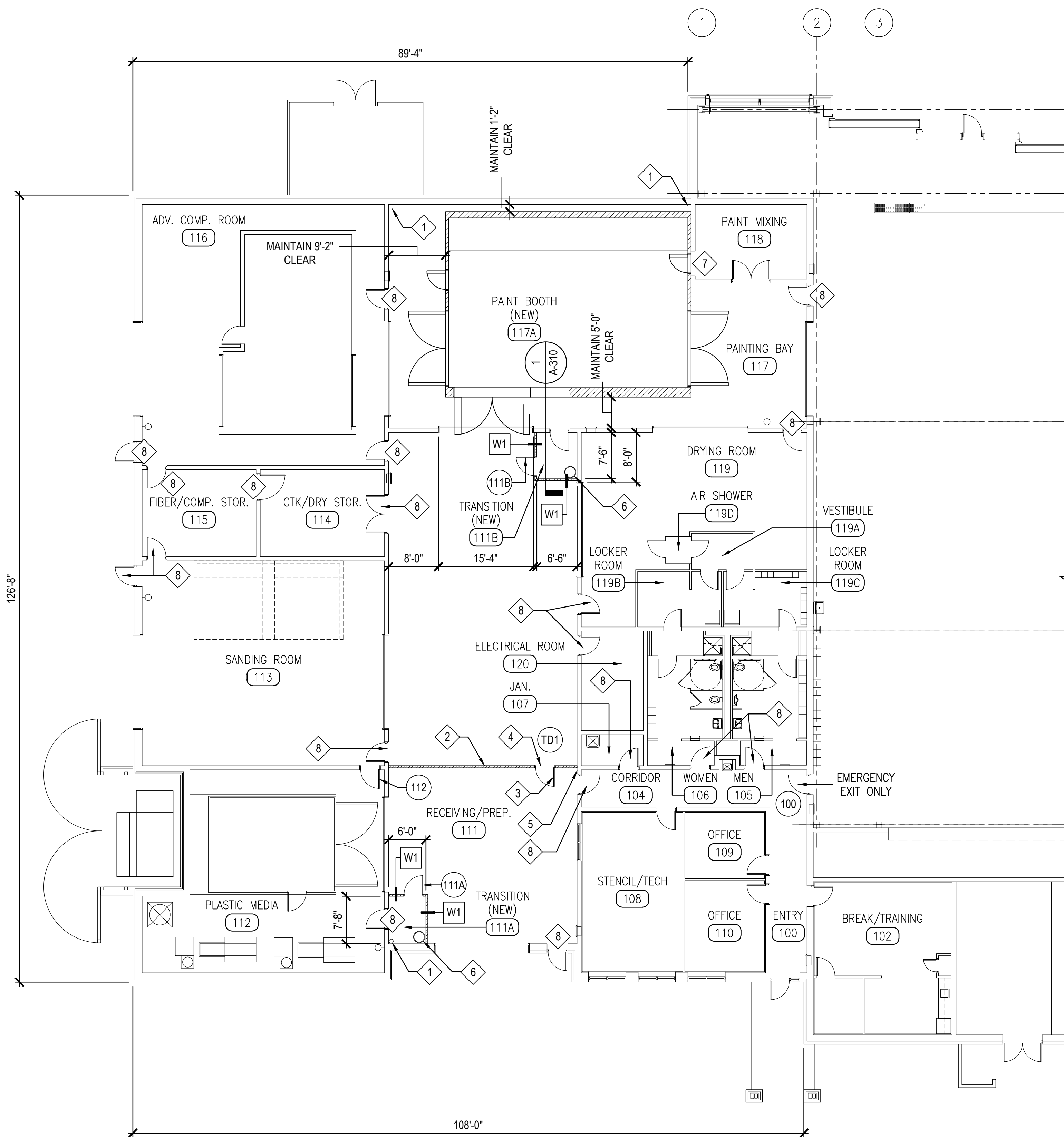
REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

HEXAVALENT CHROMIUM REMEDIATION PLAN-MEZZANINE/ROOF

**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: D-204  
SHEET NUMBER: 15 of 80



**FLOOR PLAN - NEW WORK 'AREA A'**  
SCALE: 3/32" = 1'-0"

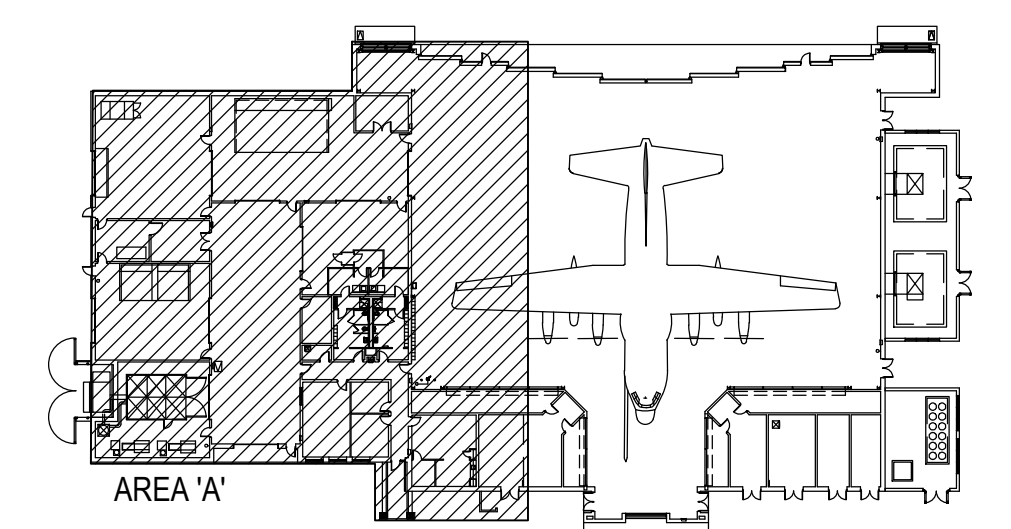
LEGEND:	
	NEW METAL STUD PARTITION, SEE WALL TYPES SHEETS A-XXX
	DOOR IDENTIFICATION, SEE DOOR SCHEDULE SHEET A-601.
	ROOM IDENTIFICATION
	WALL TYPE, SEE DETAIL 1/A-310

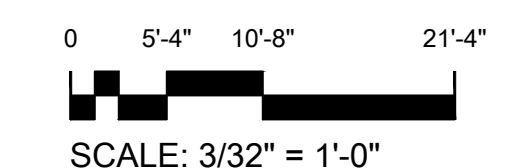
GENERAL NOTES:	
1.	ALL DIMENSIONS TO NEW PARTITION/WALL CONSTRUCTION ARE FROM FINISH FACE OF EXISTING CONSTRUCTION TO FACE OF NEW STUD, UNLESS NOTED OTHERWISE.

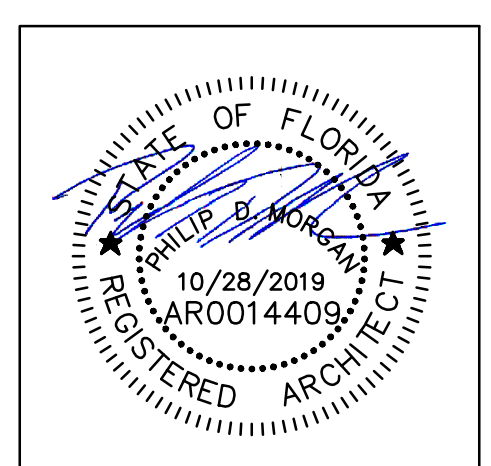
KEYNOTES:	
1	EXISTING RAIN LEADER PIPE, TO REMAIN.
2	PROVIDE TEMPORARY DIVIDER WALL IN RECEIVING/PREP. DURING CONSTRUCTION. WALL TO BE 8' HIGH, CONSTRUCTED OF 2X4 WOOD STUDS @ 24" O.C. WITH 1/2" PLYWOOD SHEATHING ON ONE SIDE, BRACE AS NEEDED. WALL TO BE REMOVED AFTER CONSTRUCTION HAS BEEN COMPLETED. ANY DAMAGE TO EXISTING FLOOR/WALL SURFACES THAT OCCURS DURING CONSTRUCTION AND/OR REMOVAL OF THIS TEMPORARY WALL WILL BE REPAIRED BY THE CONTRACTOR.
3	TEMPORARY WOOD DOOR WITH WOOD FRAME, TO REMAIN IN PLACE AND UNLOCKED DURING THE TIME THAT THE TEMPORARY DIVIDER WALL IS IN PLACE. PROVIDE PANIC BAR AND PASSAGE HARDWARE. DOOR IS REQUIRED TO AVOID BLOCKING ANY LIFE SAFETY EXIT PATH OF TRAVEL.
4	PROVIDE LIGHTED EXIT SIGN ABOVE TEMPORARY DOOR, SEE ELECTRICAL DOCUMENTS.
5	LOCATE TEMPORARY DIVIDER WALL TO AVOID ANY ADJACENT WALL MOUNTED ITEMS IN THIS AREA.
6	32 GALLON GFGI PLASTIC WASTE BIN.
7	4'-0" W x 7'-4" H MASONRY OPENING. SEE DETAILS 5/A601 & 6/A601
8	PROVIDE ONE (1) SET WEATHERSTRIPPING 303AV, THRESHOLD NGP # 896 ADN SWEEP 315AN AT 3'-0" x 7'-0" DOOR AND FRAME.



**KEY PLAN**  
NO SCALE



SCALE: 3/32" = 1'-0"



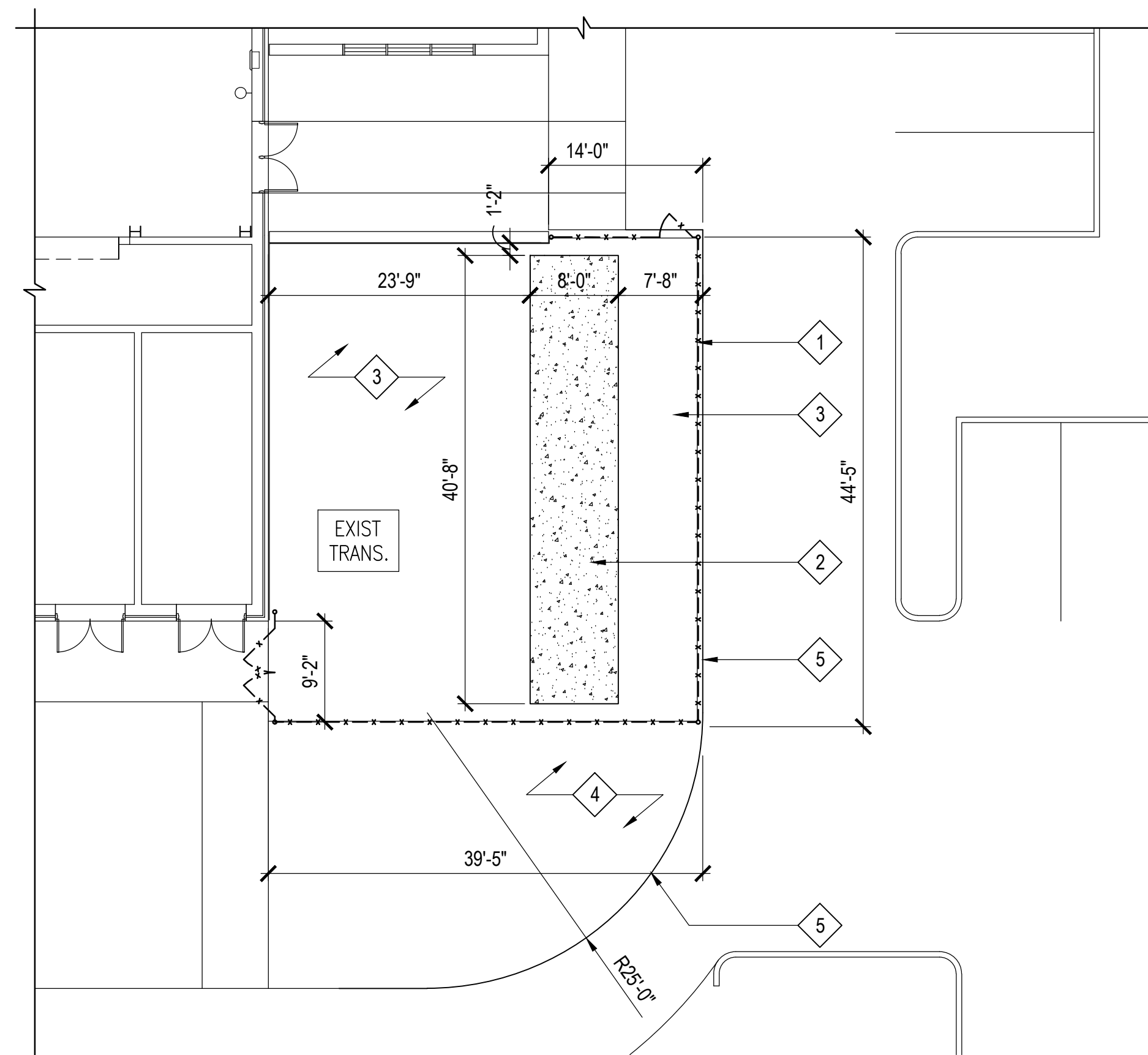
**REPAIR CORROSION CONTROL FACILITY**  
**BUILDING 90225**  
 FLOOR PLAN - NEW WORK

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
 DESIGNED BY: PDM  
 DRAWN BY: SJB  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE:

SHEET NUMBER:  
**A-101**  
 16 of 80





**FLOOR PLAN - NEW WORK 'AREA B'**  
SCALE: 3/32" = 1'-0"

**LEGEND:**

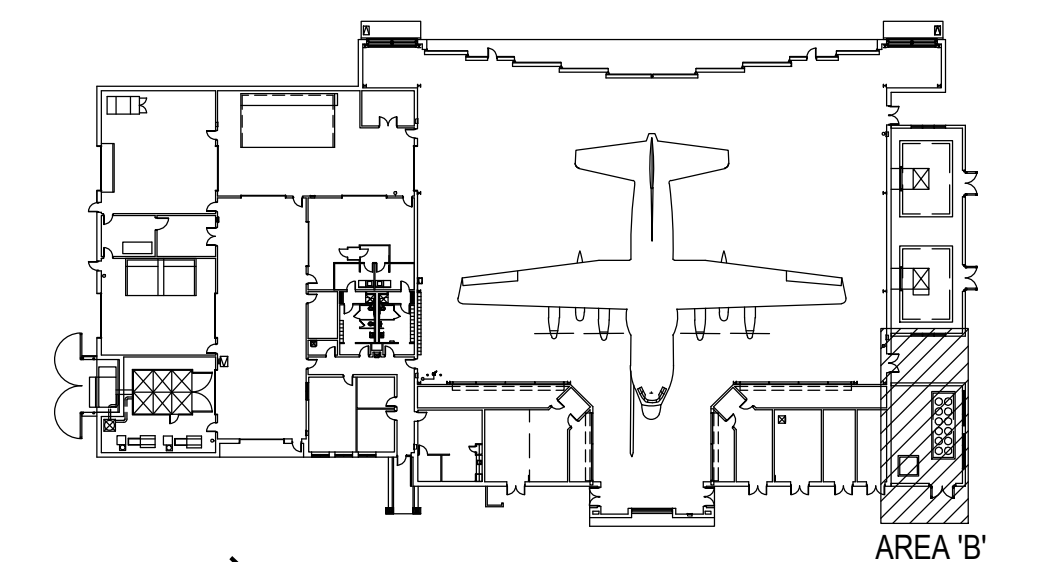
- NEW METAL STUD PARTITION, SEE WALL TYPES SHEETS A-XXX
- DOOR IDENTIFICATION, SEE DOOR SCHEDULE SHEET A-601.
- ROOM IDENTIFICATION
- WALL TYPE, SEE DETAIL 1/A-310

**GENERAL NOTES:**

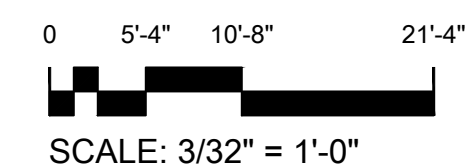
1. ALL DIMENSIONS TO NEW PARTITION/WALL CONSTRUCTION ARE FROM FINISH FACE OF EXISTING CONSTRUCTION TO FACE OF NEW STUD, UNLESS NOTED OTHERWISE.

**KEYNOTES:**

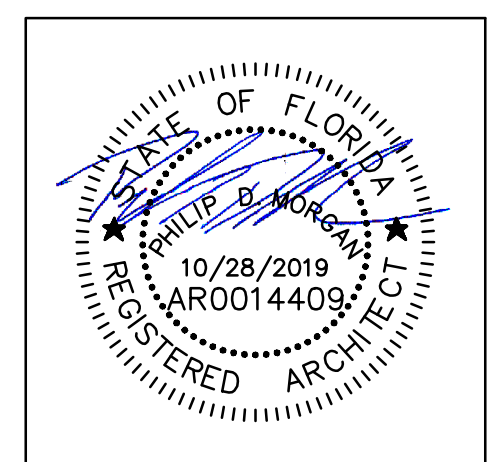
- 6'-0" CHAINLINK FENCE WITH PAIR OF 4'-0" GATES - SEE SHEET A301
- CHILLER PAD - SEE STRUCTURAL DRAWINGS.
- 4" DEEP CRUSHED LIMESTONE. COMPACT AND GRADE.
- SEE SHEET G-004 FOR SITE WORK INFORMATION.
- SAWCUT EXIST ASPHALT DRIVE NEAT AND TRUE



**KEY PLAN**  
NO SCALE



SCALE: 3/32" = 1'-0"



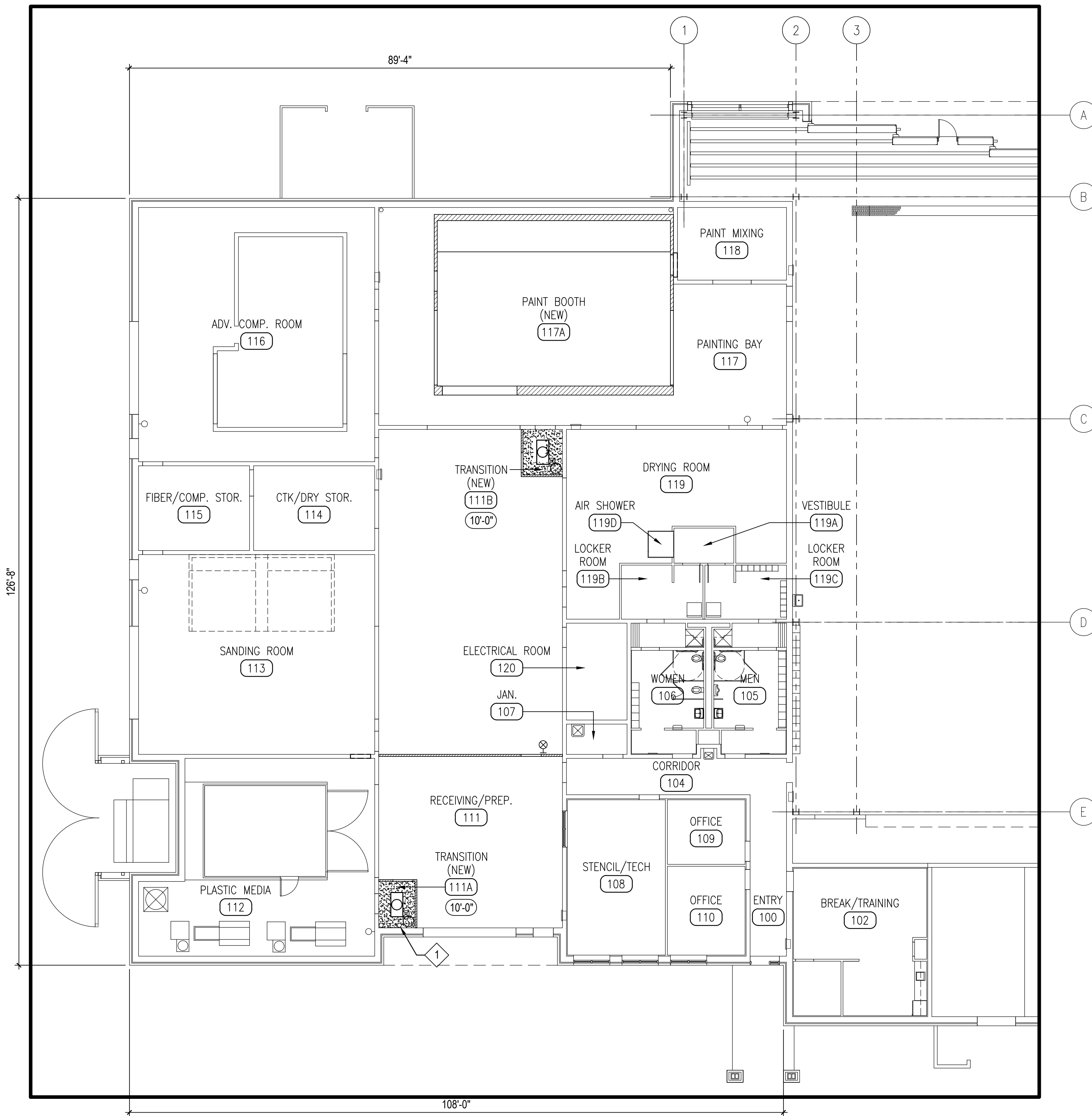
**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**  
 FLOOR PLAN - NEW WORK AREA 'B'

**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA



DATE: 28 OCT 2019  
 DESIGNED BY: PDM  
 DRAWN BY: SJB  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE:

SHEET NUMBER:  
**A-102**  
 17 of 80



**LEGEND:**

- XXXX  
XXX ROOM IDENTIFICATION
- XXX CEILING HEIGHT.
- GYPSUM WALLBOARD CEILING, PAINTED. SEE FINISH SCHEDULE.
- 2x4 LED LIGHT FIXTURE, RECESSED MOUNT, SEE ELECTRICAL DOCUMENTS.
- SUPPLY DIFFUSER, SEE MECHANICAL DOCUMENTS.
- WALL MOUNTED EXIT LIGHT, SEE ELECTRICAL DOCUMENTS.

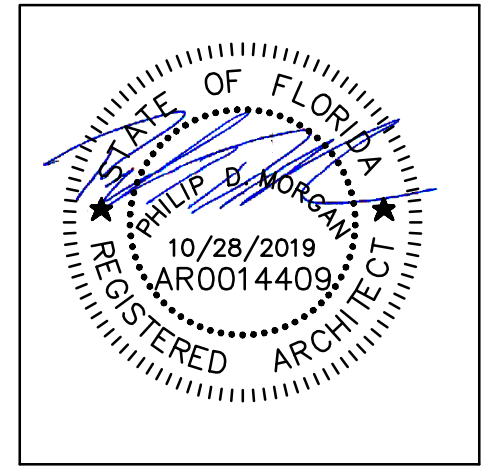
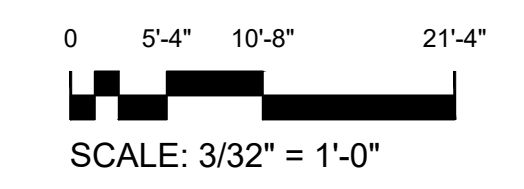
**KEYNOTES:**

- 1 EXISTING RAIN LEADER PIPE, TO REMAIN.

REV #	DATE	DESCRIPTION



**REFLECTED CEILING PLAN - NEW WORK**  
SCALE: 3/32" = 1'-0"



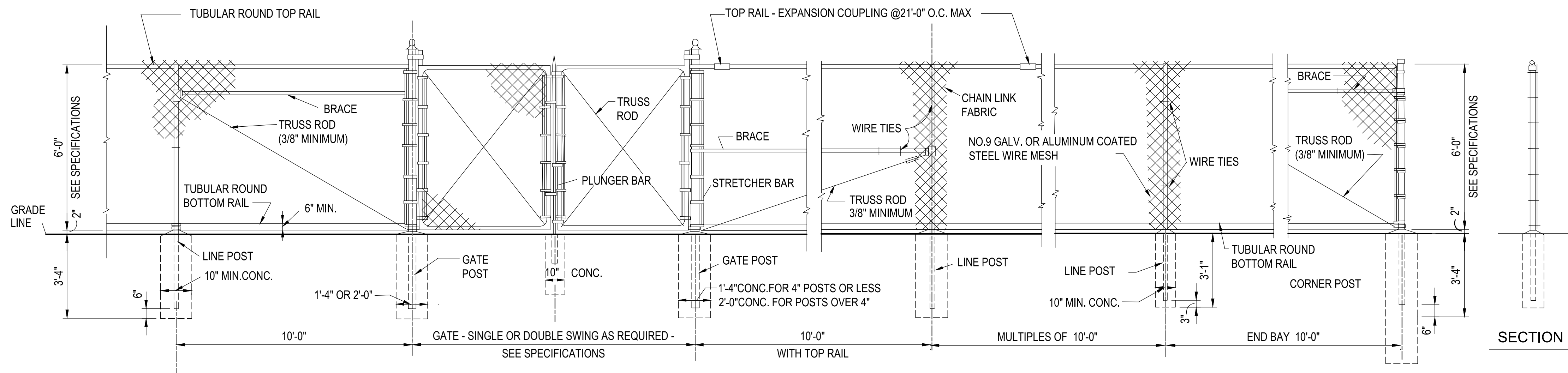
REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
REFLECTED CEILING PLAN - NEW WORK

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA



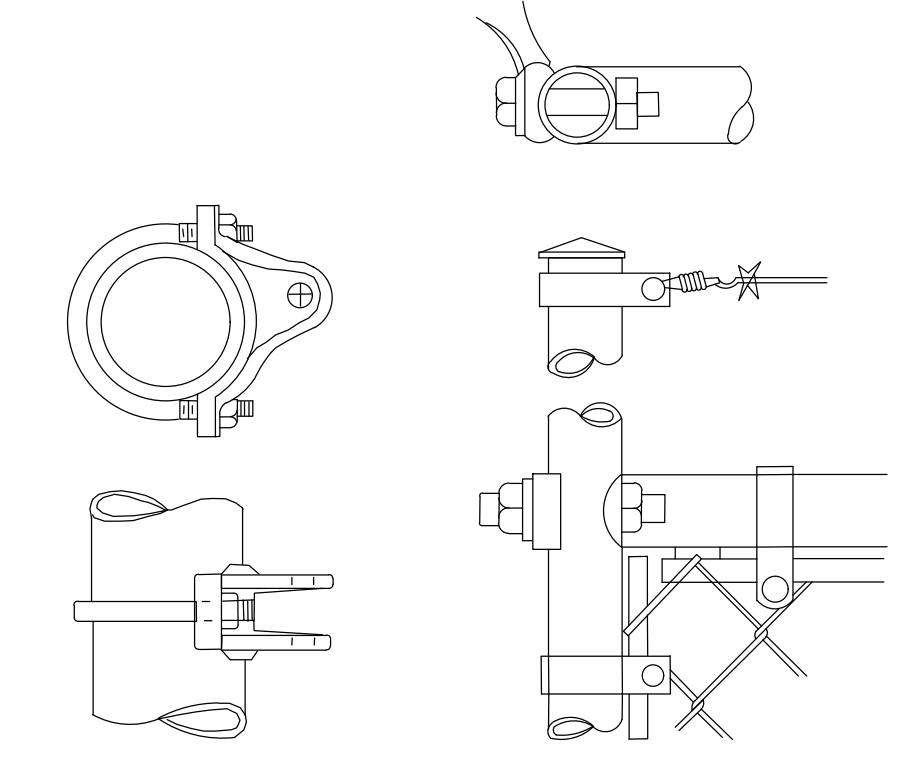
DATE: 28 OCT 2019  
DESIGNED BY: PDM  
DRAWN BY: SJB  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE:

A-111  
SHEET NUMBER: 18 of 80



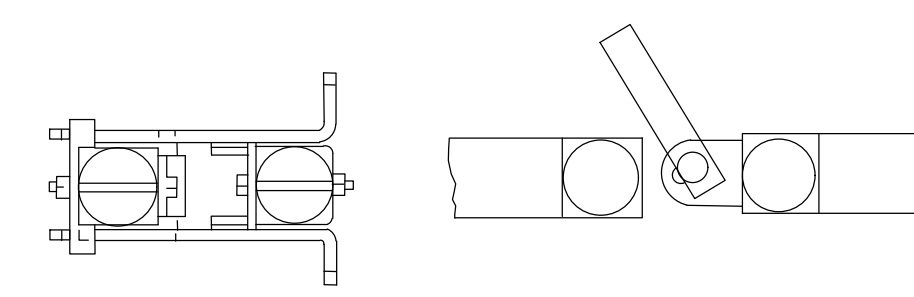
**CHAIN LINK FENCE**

NOT TO SCALE



POST HINGE

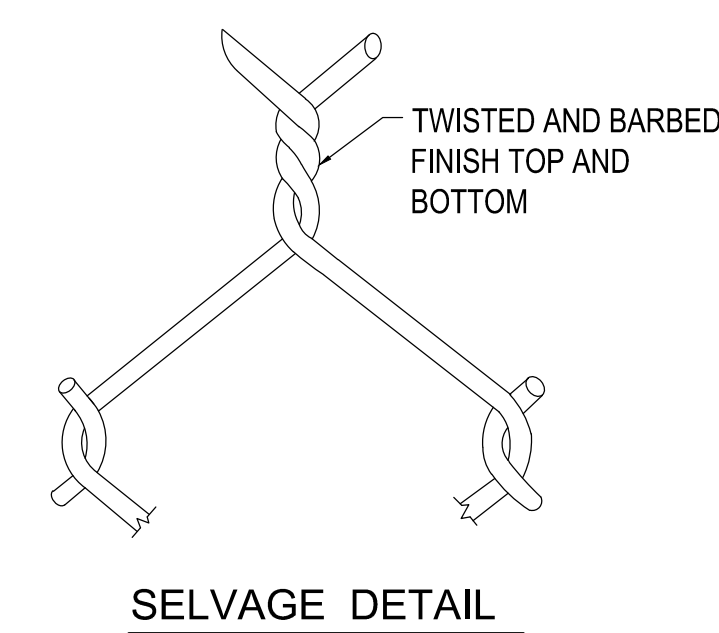
GATE FRAME HINGE



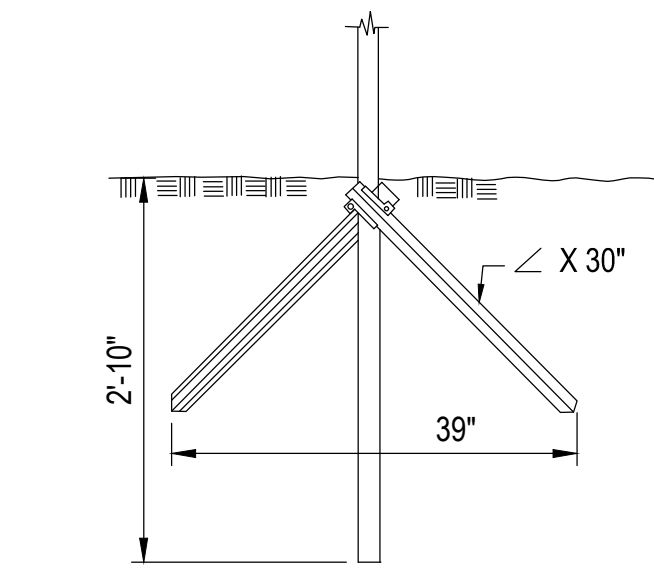
LATCH ASSEMBLY

DROP BAR ASSEMBLY

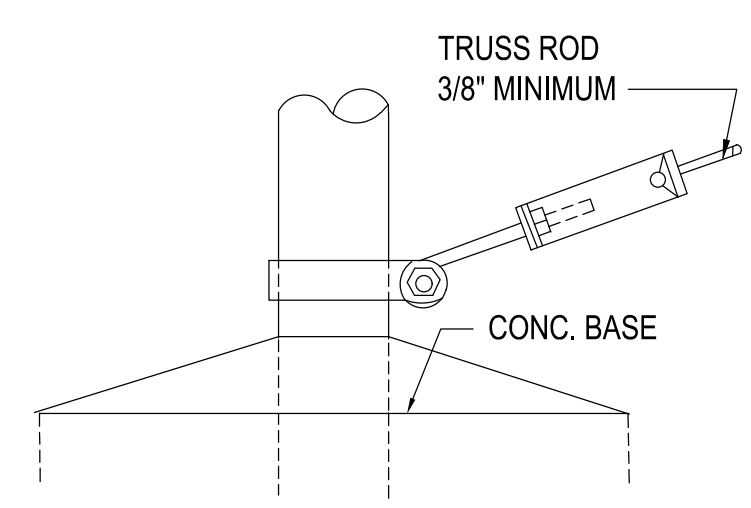
SWING GATE DETAILS  
NOT TO SCALE



SOLVAGE DETAIL

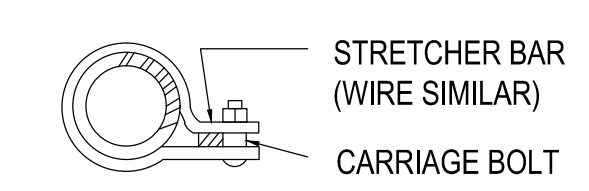


ALTERNATE DRIVE ANCHOR  
METHOD OF POST SETTING

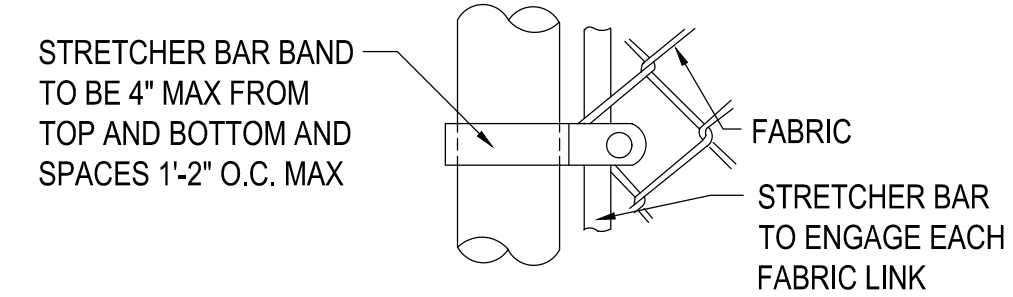


TRUSS ROD & BAND

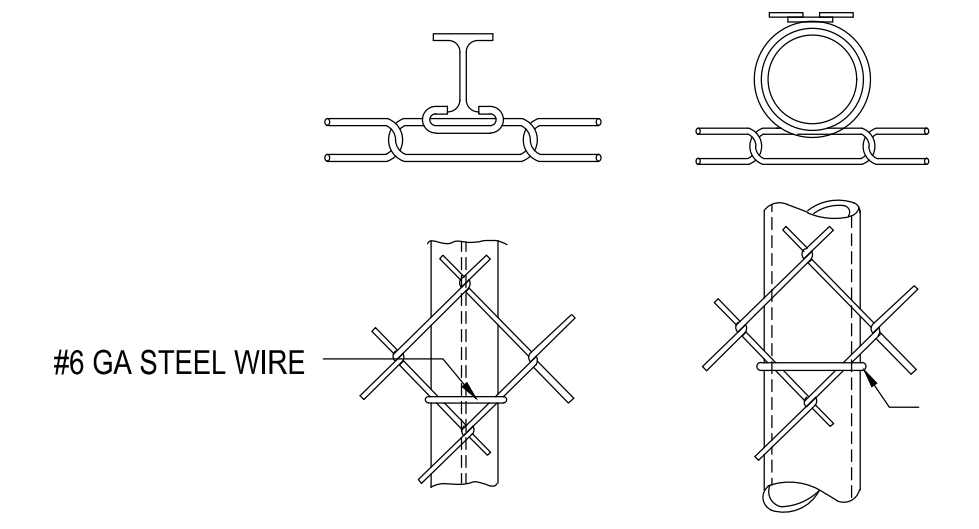
USE AND SECTION	STEEL POST SCHEDULE		
	MINIMUM OUTSIDE DIMENSIONS (NOMINAL)		
	FABRIC LESS THAN 72"	FABRIC 72" TO 96"	FABRIC OVER 96"
Corner, End & Pull Posts			
Tubular - Round	2.375" O.D.	2.875" O.D.	4.00" O.D.
Line Posts			
Tubular - Round	1.90" O.D.	2.375" O.D.	2.875" O.D.
Bottom & Brace Rails			
Tubular - Round		1.66" O.D.	
Tubular - Square		1.50" O.D.	
H-Section		1.625" x 1.50"	
C-Section (Roll-Formed)		1.625" x 1.25"	



PLAN AT BANDS

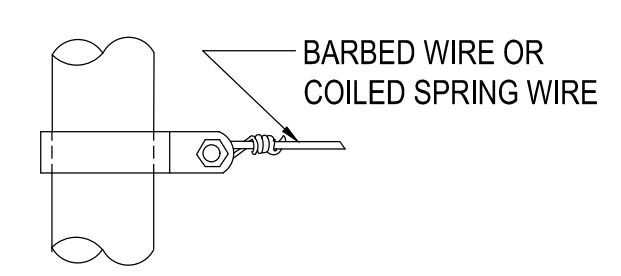


DETAIL - END OR GATE POST

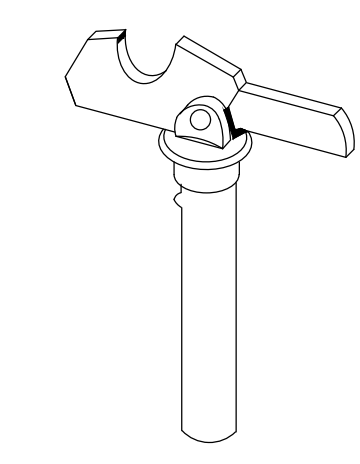


H - BEAM ROUND POST

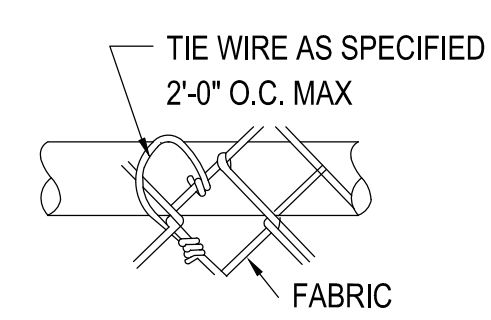
LINE POST ATTACHMENTS



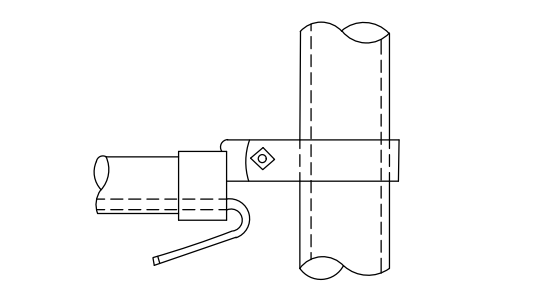
BAND FOR WIRE STRETCHING



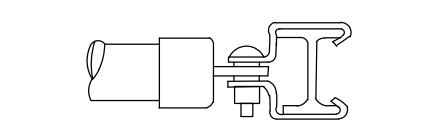
GATE KEEPER  
(TO HOLD GATE OPEN)



WIRES TIES FOR  
TOP OR BRACE RAIL



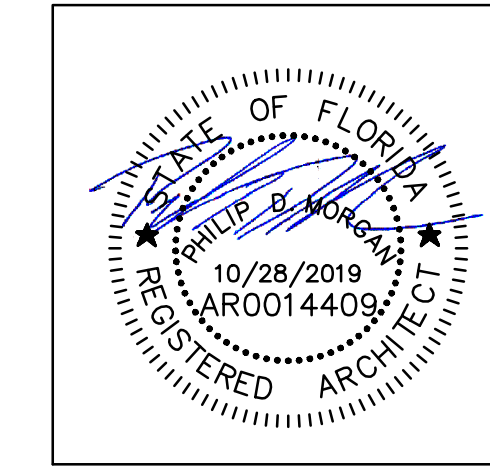
CLAMP FOR BRACE RAIL  
ROUND POST



CLAMP FOR BRACE  
RAIL H - BEAM

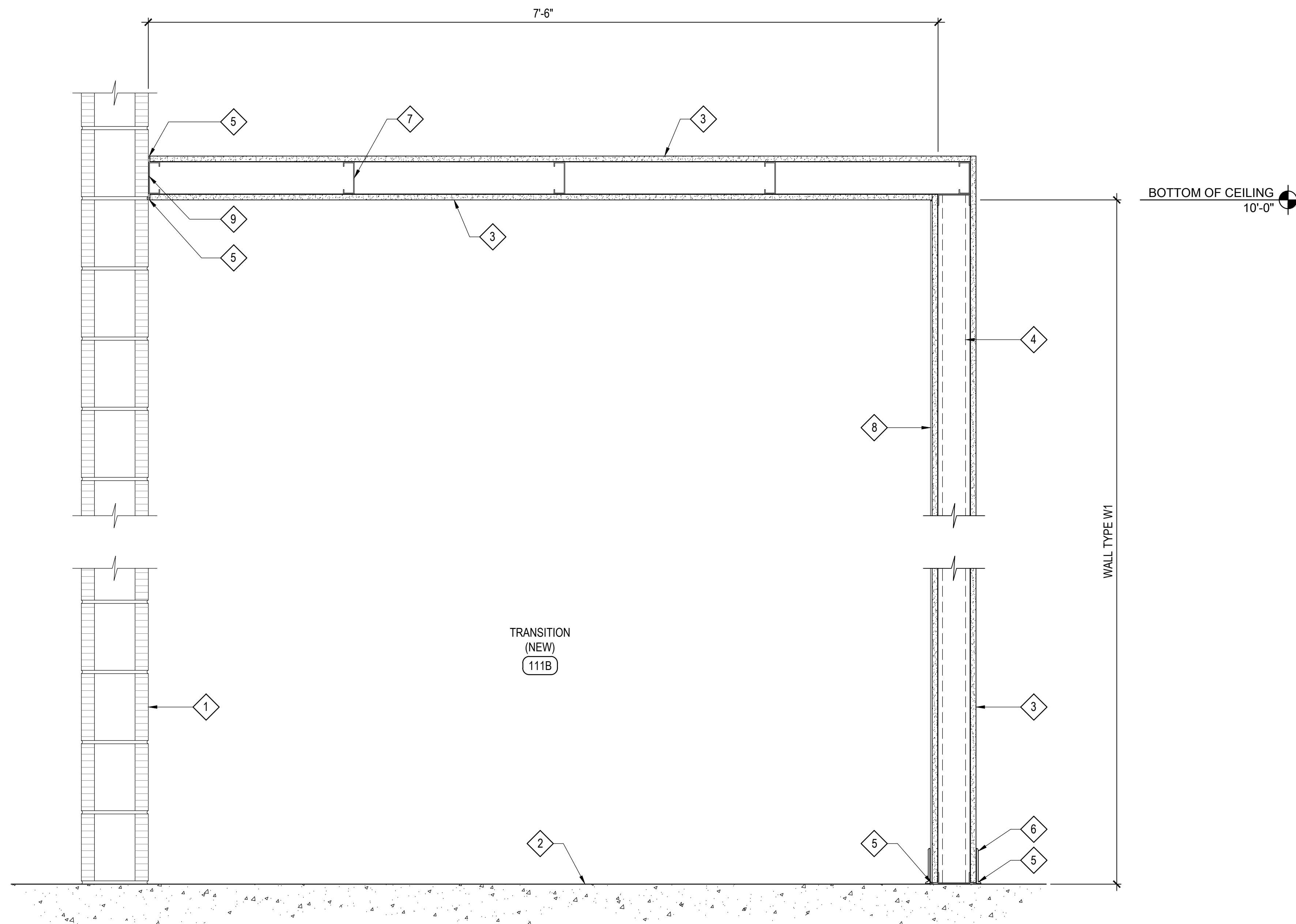
**FASTENING DETAILS - FOR TUBULAR POST OR H-COLUMNS**

NOT TO SCALE



DESCRIPTION	
DATE	
REV #	
REPAIR CORROSION CONTROL FACILITY BUILDING 90225 WALL SECTION	
AIR FORCE SPECIAL OPERATIONS COMMAND 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA	
DATE:	28 OCT 2019
DESIGNED BY:	PDM
DRAWN BY:	JDM
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	
A-301	
SHEET NUMBER:	19 of 80





1 WALL SECTION  
A-310 1 1/2" = 1'-0"

**KEYNOTES:**

- 1 EXISTING CMU WALL CONSTRUCTION.
- 2 EXISTING CONCRETE FLOOR SLAB.
- 3 5/8" GYPSUM BOARD, PAINT.
- 4 3 5/8" GALVANIZED METAL STUDS @ 16" O.C.
- 5 CONTINUOUS SEALANT, TYPICAL.
- 6 VINYL WALL BASE, TYPICAL.
- 7 3 5/8" GALVANIZED METAL STUDS @ 24" O.C., CEILING FRAMING.
- 8 FIBERGLASS REINFORCED PANEL, SMOOTH FINISH. EXTEND PANEL FROM FLOOR TO CEILING @ ALL WALL SURFACES.
- 9 WHERE METAL STUD RIM JOIST ABUTTS WALL SET IN 2 BEADS OF SEALANT CONTINUOUS.

REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
WALL SECTION

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA



DATE: 28 OCT 2019  
DESIGNED BY: PDM  
DRAWN BY: SJB  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE:



A-310  
SHEET NUMBER: 20 of 80

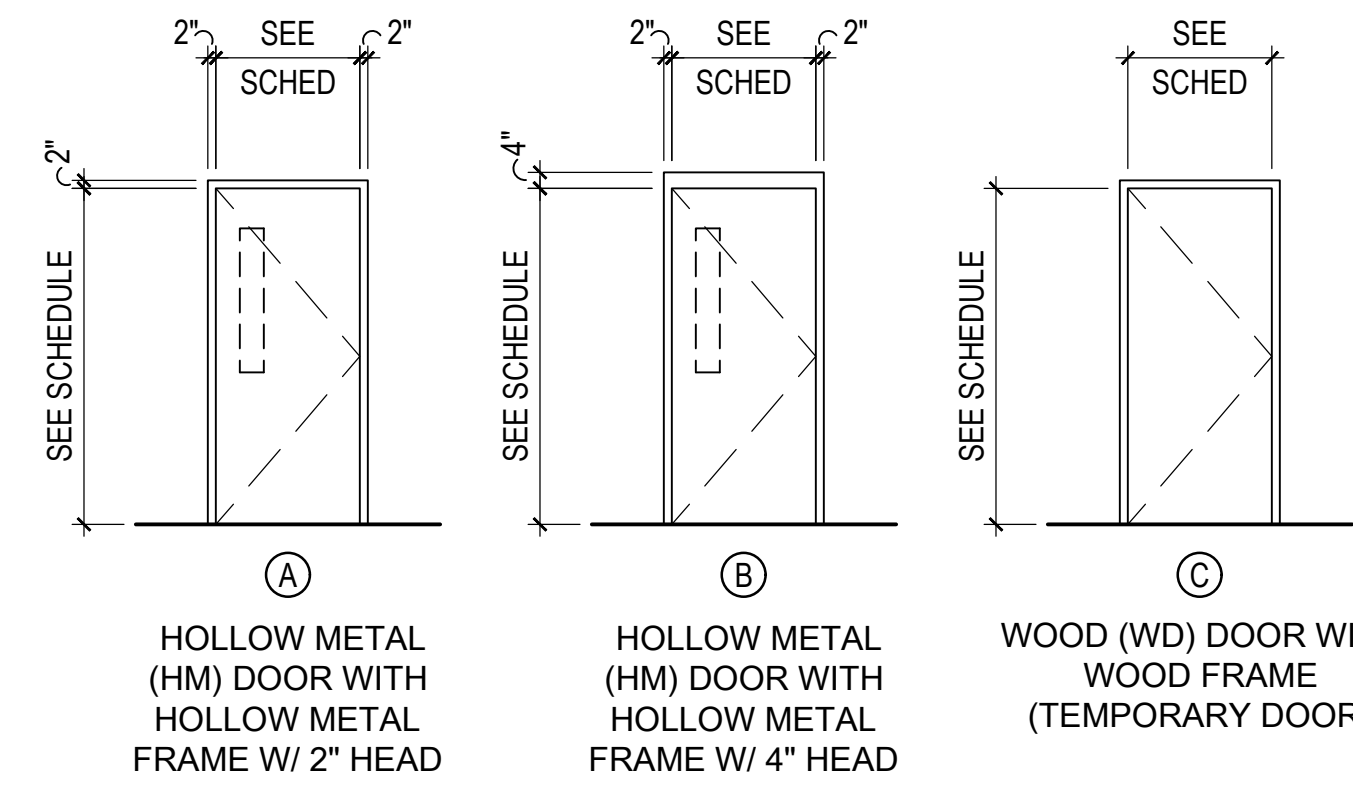


DOOR SCHEDULE												
DOOR NUMBER	TYPE	DOOR TYPE				FIRE RATING	FRAME MATERIAL	GLAZING	DETAILS			COMMENTS
		WIDTH	HEIGHT	THICKNESS	MATERIAL				HEAD	JAMB	SILL	
100	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	-	EXISTING	-	-	-	-	SEE HARDWARE NOTES THIS SHEET
111A	A	3'-0"	7'-0"	1 3/4"	HM	-	HM	6" X 36" NL	1/A-601	2/A-601	7/A-601	-
111B	A	3'-0"	7'-0"	1 3/4"	HM	-	HM	6" X 36" NL	1/A-601	2/A-601	7/A-601	-
112	B	3'-0"	7'-0"	1 3/4"	HM	-	HM	6" X 36" NL	3/A-601	4/A-601	7/A-601	INSULATED DOOR PANEL TEMPORARY DOOR
TD1	C	3'-0"	7'-0"	1 3/4"	WD	-	WD	-	-	-	-	-

LEGEND:  
 NL NARROW LITE VISION PANEL HM HOLLOW METAL WD WOOD

### DOOR AND FRAME TYPES

SCALE: 1/4" = 1'-0"



### EXISTING DOOR 100 HARDWARE NOTES:

- REMOVE ALL EXISTING DOOR HARDWARE.
- PROVIDE ALARMED PANIC BAR HARDWARE ON HANGAR BAY SIDE OF DOOR.
- PROVIDE "EMERGENCY EXIT ONLY" SIGNAGE ON HANGAR BAY SIDE OF DOOR.

### TEMPORARY DOOR TD1 HARDWARE NOTES:

- PROVIDE PANIC BAR AND PASSAGE HARDWARE. DOOR IS TO REMAIN UNLOCKED DURING CONSTRUCTION. DOOR IS REQUIRED TO AVOID BLOCKING ANY LIFE SAFETY EXIT PATH OF TRAVEL.

### KEYNOTES:

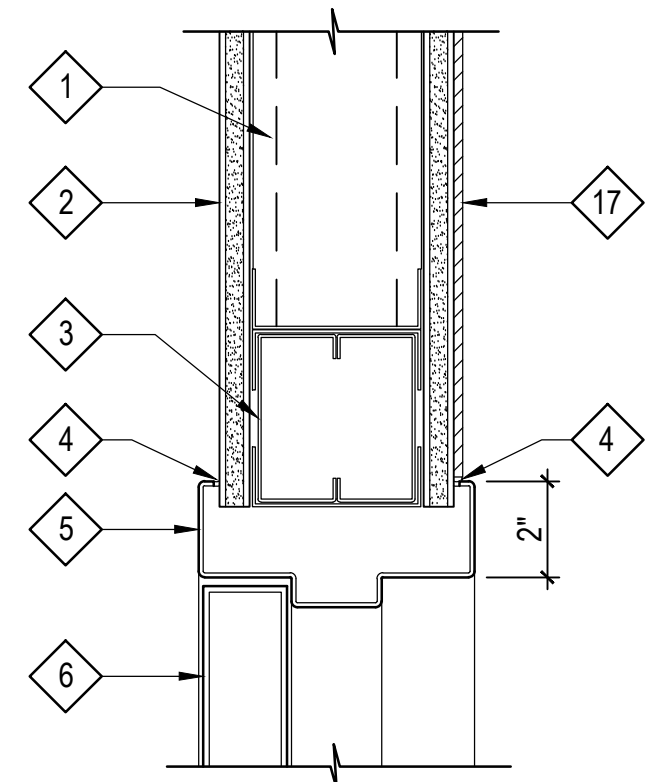
- 3 5/8" GALVANIZED METAL STUDS @ 16" O.C.
- 5/8" GYPSUM BOARD
- DOUBLE 3 5/8" GALVANIZED METAL STUD HEADER
- CONTINUOUS SEALANT
- GALVANIZED HOLLOW METAL DOOR FRAME, PAINT
- DOOR AS SCHEDULED
- DOUBLE 3 5/8" GALVANIZED METAL STUDS @ JAMB
- JAMB ANCHORS, 3 PER SIDE, MINIMUM
- EXISTING CMU WALL CONSTRUCTION
- L6 x 4 x 5/16 LLV EACH SIDE EXISTING CMU. BEAR 16" MIN. EACH SIDE - PAINT TO MATCH WALLS
- CONTINUOUS SEALANT
- 1/2"Ø EXPANSION ANCHOR INTO NEW CMU JAMB BLOCK, 3 PER SIDE, MINIMUM
- 2" WIDE x 3/16" THICK x OPENING WIDTH PLATE.
- DOOR SWEEP, SEE DOOR HARDWARE SPECIFICATIONS
- ALUMINUM THRESHOLD SET IN FULL BED OF SEALANT
- EXISTING CONCRETE FLOOR SLAB
- FIBERGLASS REINFORCED PANEL FINISH @ INTERIOR OF TRANSITION ROOM WALL
- NEW 8" CMU AT JAMB, "TOOTH" IN TO ALIGN W/ EXISTING. PAINT TO MATCH.
- GROUT CELLS SOLID

REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225  
 AIR FORCE SPECIAL OPERATIONS COMMAND  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

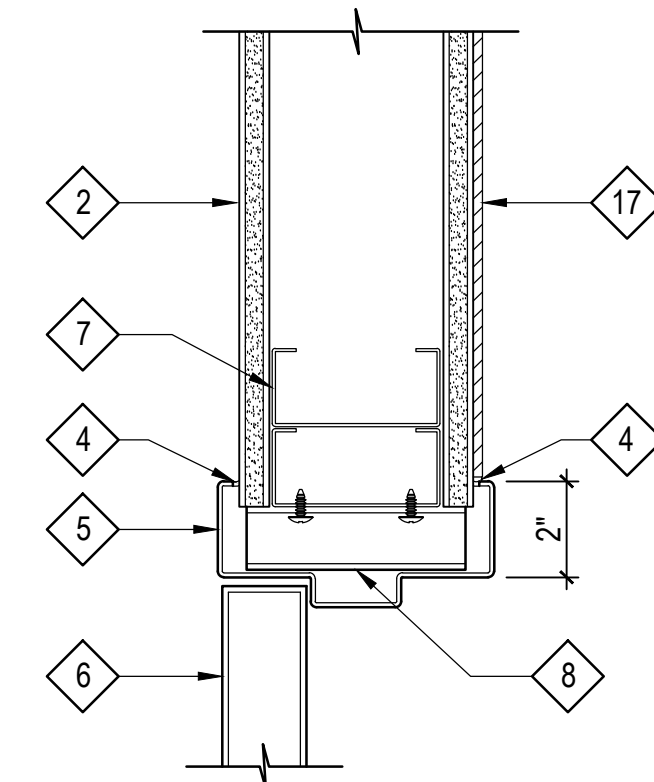
DATE:  
28 OCT 2019

DESIGNED BY:  
PDM  
 DRAWN BY:  
SJB  
 BUILDING NUMBER:  
90225  
 PROJECT NUMBER:  
CP1028800  
 SHEET REFERENCE:

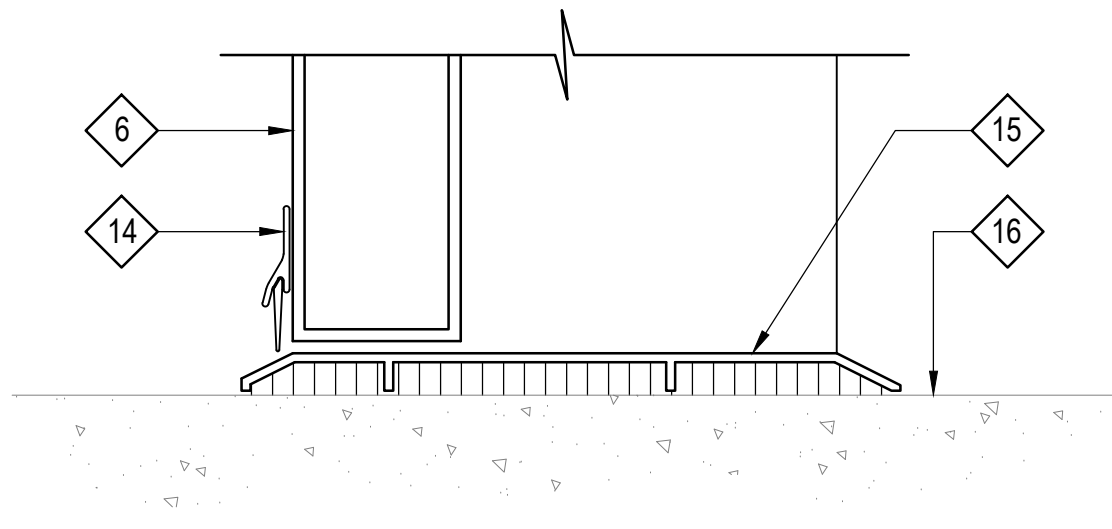
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 SHEET NUMBER:  
21 of 80



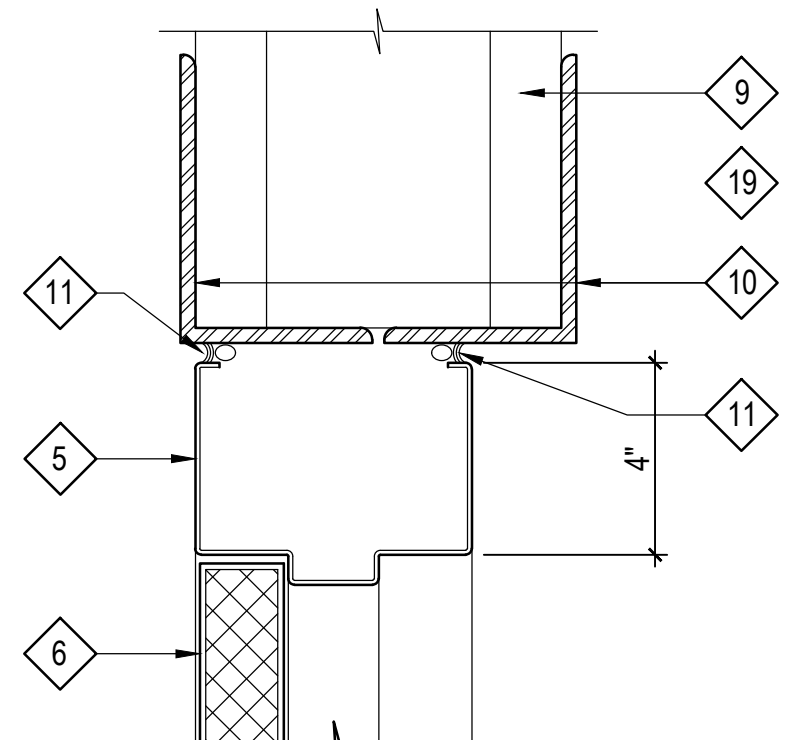
1 DOOR HEAD DETAIL  
A-601 SCALE: 3" = 1'-0"



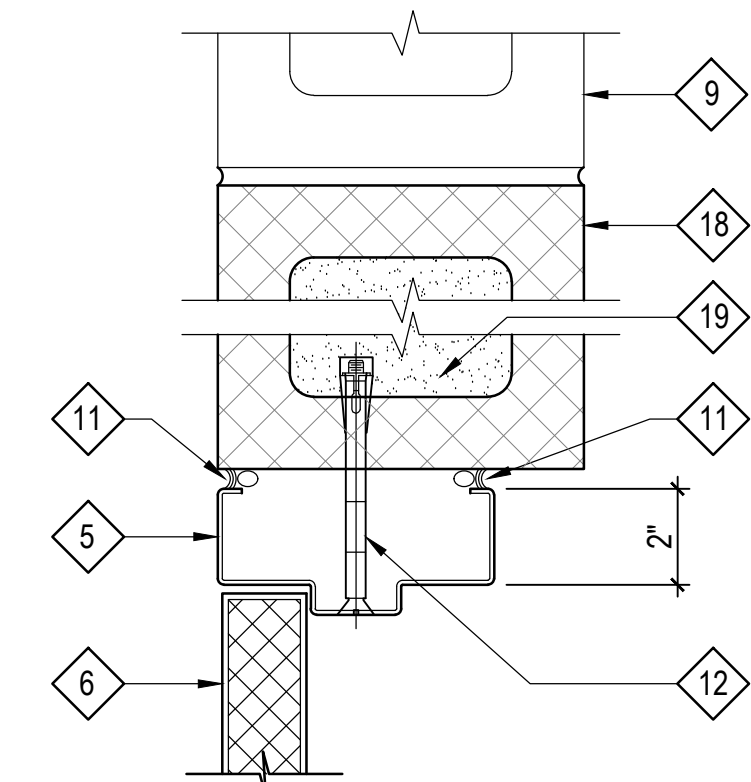
2 DOOR JAMB DETAIL  
A-601 SCALE: 3" = 1'-0"



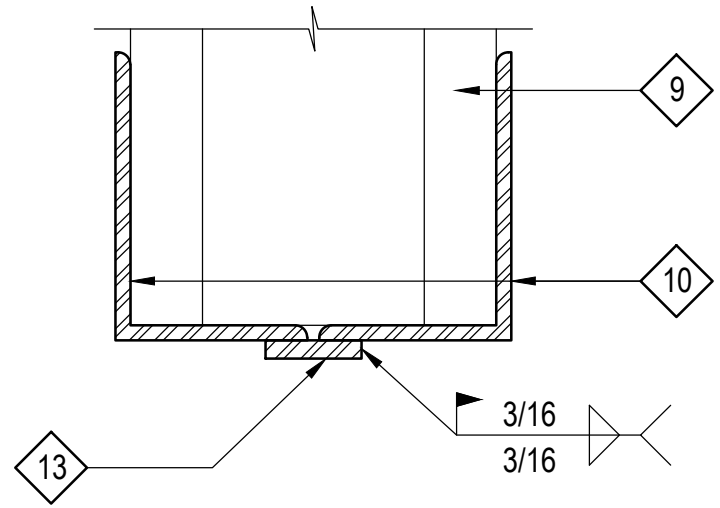
7 DOOR SILL DETAIL  
A-601 NOT TO SCALE



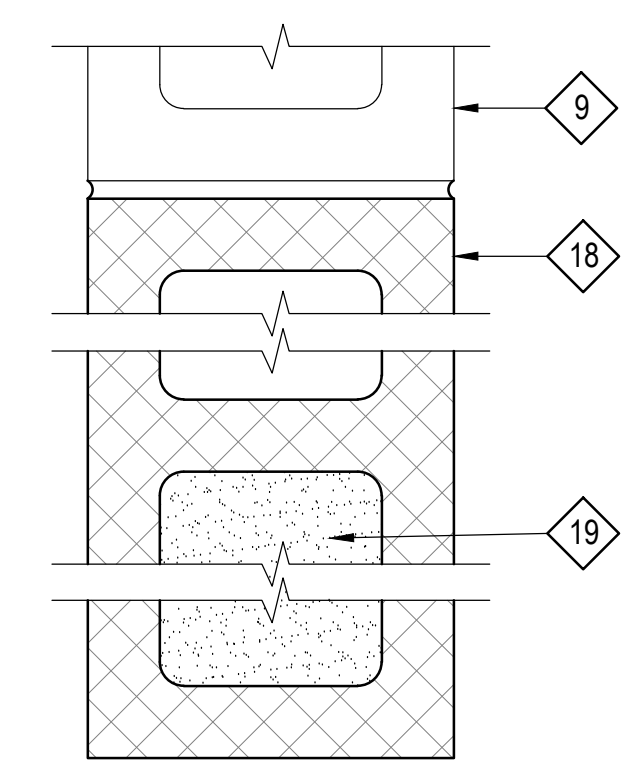
3 DOOR HEAD DETAIL  
A-601 SCALE: 3" = 1'-0"



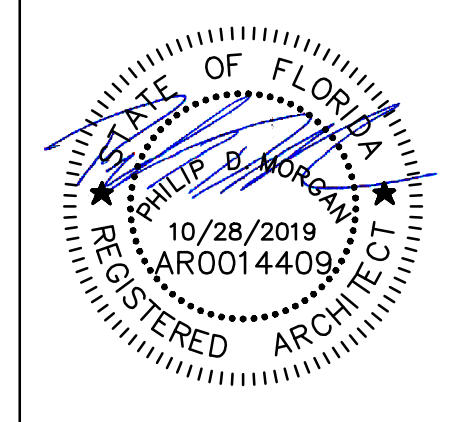
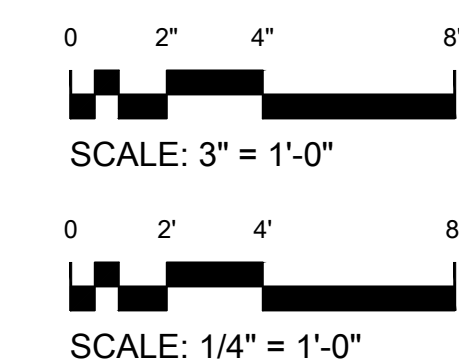
4 DOOR JAMB DETAIL  
A-601 SCALE: 3" = 1'-0"



5 HEAD OPENING DETAIL  
A-601 SCALE: 3" = 1'-0"



6 JAMB OPENING DETAIL  
A-601 SCALE: 3" = 1'-0"



### FIRE PROTECTION GENERAL NOTES

- ALL SPRINKLER PIPING, BRACES AND HANGERS SHALL BE DESIGNED TO MEET APPLICABLE SEISMIC REQUIREMENTS.
- QUICK RESPONSE SPRINKLERS SHALL BE USED THROUGHOUT, EXCEPT IN ROOMS OR AREAS FOR WHICH QUICK RESPONSE SPRINKLERS ARE NOT LISTED, OR WHERE THEIR USE HAS BEEN SPECIFICALLY PROHIBITED BY NFPA OR THE AUTHORITY HAVING JURISDICTION.
- PIPING SHALL BE INSTALLED SO THAT ALL PORTIONS OF THE SYSTEM CAN BE DRAINED BACK THROUGH VALVES IN ACCORDANCE WITH THE REFERENCED NFPA STANDARDS.
- ALL FIRE WALL PENETRATIONS SHALL BE MADE WITH UL APPROVED FIRE STOPPING SYSTEMS LISTED TO MAINTAIN THE FIRE RATING OF THE WALLS IN WHICH THEY ARE INSTALLED.
- INSPECTOR'S TEST VALVE TO BE PIPED FROM END OF LAST BRANCH LINE WITH NO EXPOSED PIPE IN FINISHED SPACES.
- FULLY COORDINATE INSTALLATION OF PIPE WITH ALL OTHER TRADES, WITH PARTICULAR EMPHASIS ON COORDINATION WITH HVAC DUCTWORK. SPRINKLER PIPE SHALL NOT BE SUSPENDED FROM DUCT HANGERS UNLESS THESE SUPPORTS ARE SPECIFICALLY DESIGNED TO ACCOMMODATE SPRINKLER PIPE. HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13.
- CALCULATIONS AND FIRE FLOW TEST SHALL BE CONDUCTED BY FIRE PROTECTION CONTRACTOR.
- FIRE PROTECTION CONTRACTOR SHALL REPAIR ALL LEAKS IN THE FIRE SUPPRESSION SYSTEM CREATED DURING CONSTRUCTION. FIRE PROTECTION CONTRACTOR SHALL DO A PRE-CONSTRUCTION LEAK TEST.
- FIRE SUPPRESSION MODIFICATIONS SHALL BE IN ACCORDANCE WITH UFC 3-600-01, FIRE PROTECTION ENGINEERING FOR FACILITIES, NFPA13, THE SPECIFICATIONS, AND THE AUTHORITY HAVING JURISDICTION. FIRE SPRINKLER CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- FLEXIBLE SPRINKLER HOSE SHALL NOT BE PERMITTED.

### FIRE PROTECTION DESIGN CRITERIA

NAME OF FACILITY: BUILDING #90225  
 LOCATION: HURLBURT AFB  
 TYPE OF CONSTRUCTION: NON-COMBUSTIBLE  
 OWNER: GOVERNMENT  
 AUTHORITY HAVING JURISDICTION: AFCEC  
 BUILDING HAZARD: AS SHOWN ON PLAN

### SPRINKLER DESIGN CRITERIA

ROOM/AREA PROTECTED	OCCUPANCY CLASSIFICATION	DESIGN DENSITY GPM/SQ. FT.	WET DESIGN AREA SQ. FT.
RESTROOMS, STENCIL/TECH, OFFICES, CORRIDORS, LOBBY, LOCKER ROOMS.	LIGHT	0.10	1500
CTK/DRY STOR., RECEIVING/PREP,	ORDINARY	0.20	2500
ADVANCED COMPOSITES ROOM, PAINTING BAY, PAINT MIXING ROOM, FIBER/COMP STOR., DRYING ROOM, FIBERGLASS ROOM, PLASTIC MEDIA AND BLAST ROOM.	EXTRA	0.3	2500








### EXISTING FIRE PUMP SCHEDULE

TYPE	QTY.	GPM(EA)	NET PUMP HEAD	SUCTION/DIS'CHG	DRIVER		ELECTRICAL		
					HP	RPM	VOLT	HZ	#
ELECTRIC DRIVER HORIZONTAL SUCTION SPLIT CASE	3	2500	100 PSI	10x8	250	1785	460	60	3
ELECTRIC VERTICAL MULTISTAGE JOCKEY PUMP	1	20	110 PSI	2X2	3	3450	208	60	3

NOTES:

- THIS FIRE PUMP DATA IS PROVIDED FOR INFORMATION ONLY.
- THE FIRE PUMPS ARE LOCATED IN A DETACHED PUMP HOUSE 90705. THE FIRE PUMPS SERVE MULTIPLE HANGARS.
- THE FIRE PUMPS ARE SUPPLIED BY A DEDICATED WATER TANK.
- PIPING DISTANCE FROM PUMP TO BLDG. 90225: 560 FT
- PIPING DIAMETER FROM PUMP TO BLDG 90225: 10 INCH

### LEGEND

- AHJ AUTHORITY HAVING JURISDICTION
- SQ. FT. SQUARE FOOT
- IAW IN ACCORDANCE WITH
- AFF ABOVE FINISHED FLOOR
- PSI POUNDS PER SQUARE INCH
- GPM GALLONS PER MINUTE
- OS&Y OUTSIDE SCREW AND YOKE
-  DEMOLISH TO POINT
-  CONNECT TO EXISTING
-  UPRIGHT SPRINKLER HEAD
-  PENDANT SPRINKLER
-  DEMOLITION SPRINKLER PIPING
-  NEW SPRINKLER PIPING
-  EXISTING SPRINKLER PIPING

**PETERSON ENGINEERING INC.**

(PROF. ENG. #: 3600)  
 75 SOUTH "F" STREET  
 PENSACOLA, FLORIDA 32502  
 (850) 434-0513  
 PEI# 18116

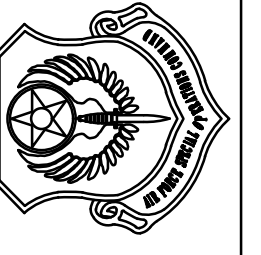


REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

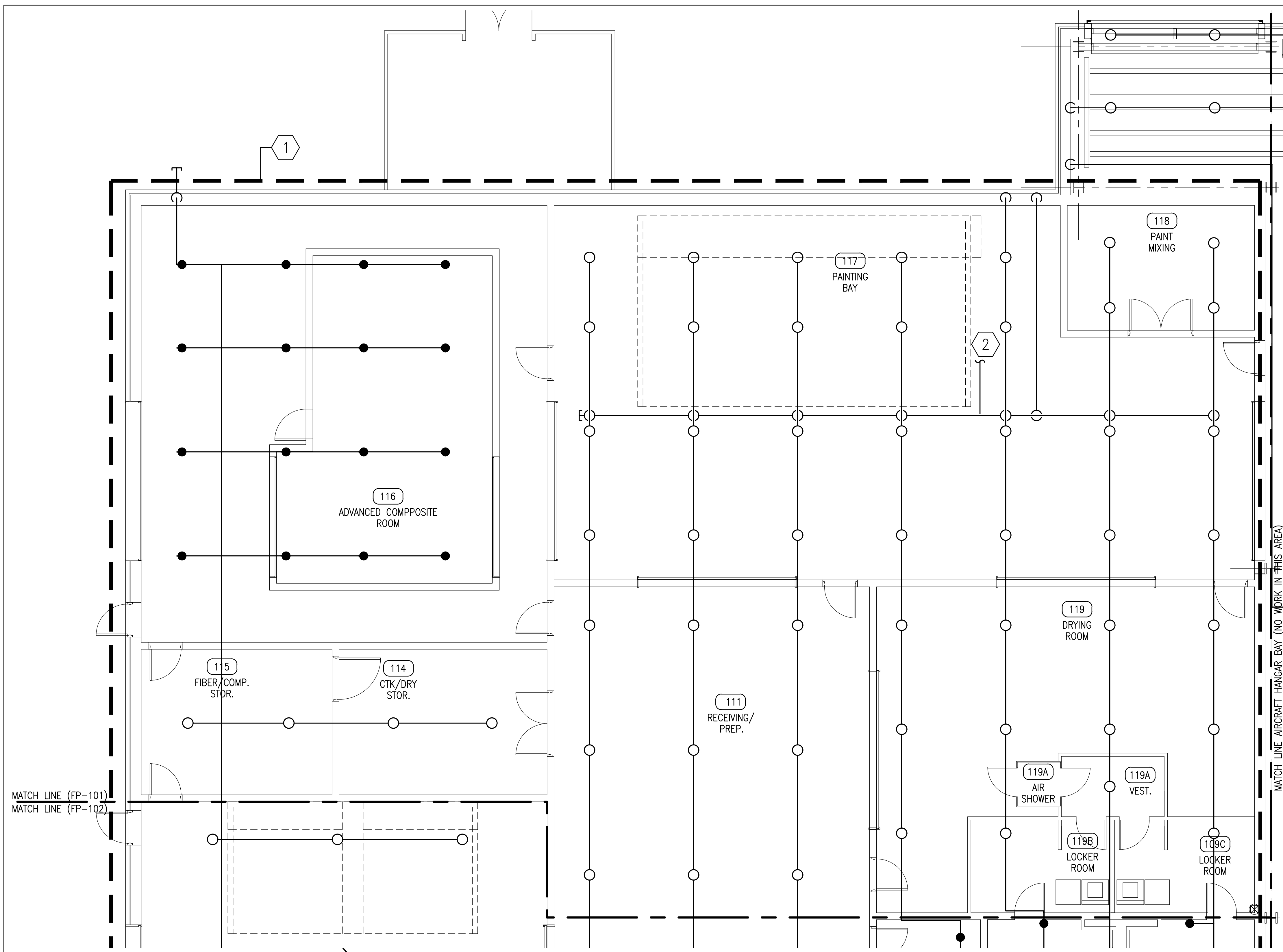
GENERAL FIRE PROTECTION NOTES, LEGEND  
AND ABBREVIATIONS

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA



DATE: 28 OCT 2019  
 DESIGNED BY: FCB  
 DRAWN BY: DJM  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE: FP-001  
 SHEET NUMBER: 22 of 80



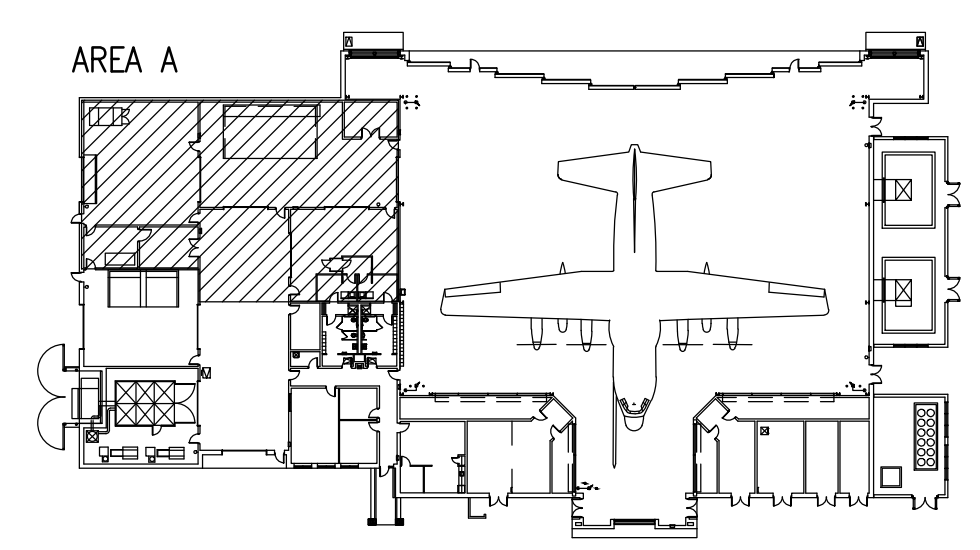


**SHEET NOTES**

- ① REMOVE / RECONFIGURE FIRE SUPPRESSION PIPING AS NEEDED TO ACCOMMODATE INSTALLATION OF NEW PAINT BOOTH, SANDING BOOTH, HVAC EQUIPMENT, DUCTWORK, AND PIPING. FIRE SUPPRESSION MODIFICATIONS SHALL BE IN ACCORDANCE WITH UFC 3-600-01, FIRE PROTECTION ENGINEERING FOR FACILITIES, NFPA13, THE SPECIFICATIONS, AND THE AUTHORITY HAVING JURISDICTION. FIRE SPRINKLER CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- ② EXISTING PIPING TAKEOFF FOR PAINT BOOTH SPRINKLERS.

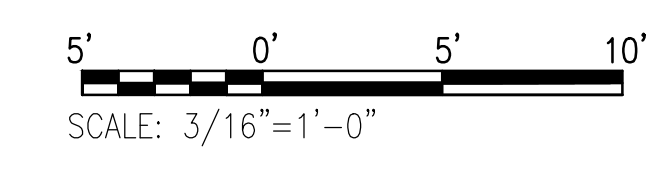
**LEGEND**

- AHJ AUTHORITY HAVING JURISDICTION
- SQ. FT. SQUARE FOOT
- IAW IN ACCORDANCE WITH
- AFF ABOVE FINISHED FLOOR
- PSI POUNDS PER SQUARE INCH
- GPM GALLONS PER MINUTE
- OS&Y OUTSIDE SCREW AND YOKE
- DEMOLISH TO POINT
- ◀▶ CONNECT TO EXISTING
- UPRIGHT SPRINKLER HEAD
- PENDANT SPRINKLER
- - - DEMOLITION SPRINKLER PIPING
- NEW SPRINKLER PIPING
- EXISTING SPRINKLER PIPING



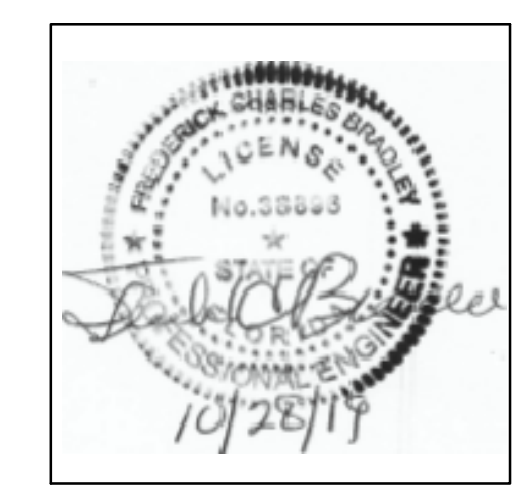
**KEY PLAN**  
NO SCALE

**FIRE PROTECTION DEMOLITION PLAN – AREA A**  
SCALE: 3/16" = 1'-0"



**PETERSON ENGINEERING INC.**

(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

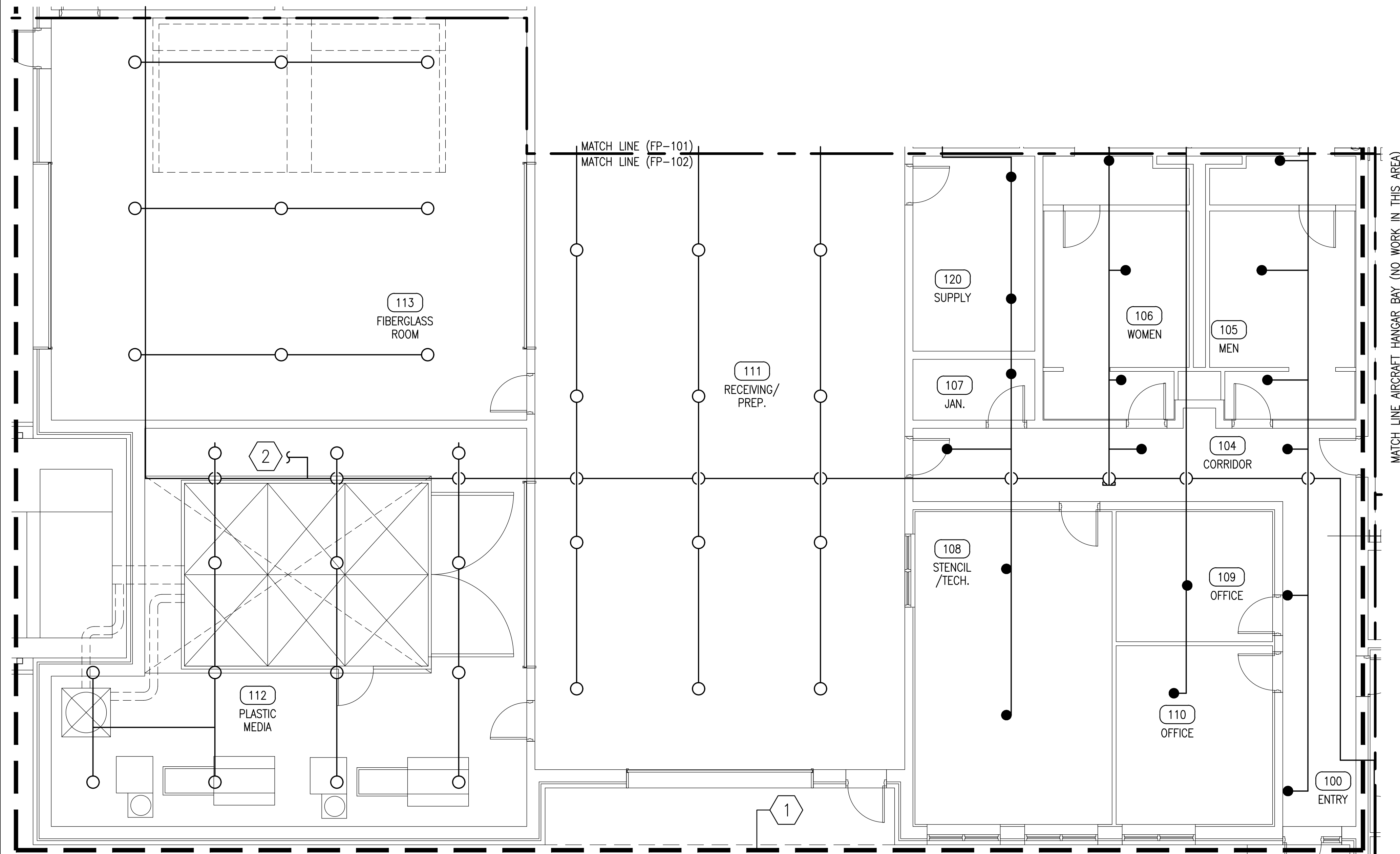
**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

**FIRE PROTECTION DEMOLITION PLAN – AREA A**

DATE: 28 OCT 2019  
DESIGNED BY: FCB  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: FP-101  
SHEET NUMBER: 23 of 80



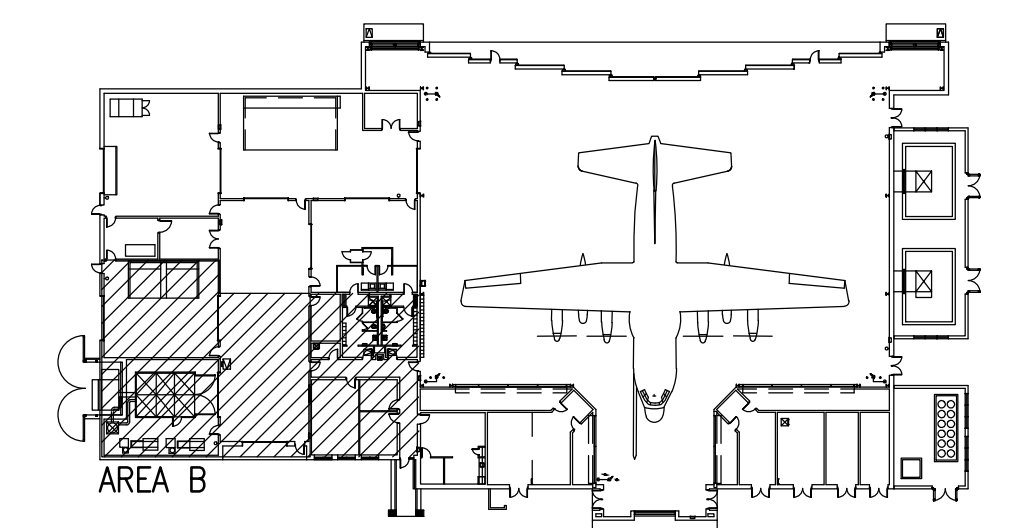


**SHEET NOTES**

- ① REMOVE AND RECONNECT FIRE SUPPRESSION PIPING AS NEEDED TO ACCOMMODATE INSTALLATION OF NEW PAINT BOOTH, SANDING BOOTH, HVAC EQUIPMENT, DUCTWORK, AND PIPING. FIRE SUPPRESSION MODIFICATIONS SHALL BE IN ACCORDANCE WITH UFC 3-600-01, FIRE PROTECTION ENGINEERING FOR FACILITIES, NFPA13, THE SPECIFICATIONS, AND THE AUTHORITY HAVING JURISDICTION. FIRE SPRINKLER CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- ② EXISTING PIPING TAKEOFF FOR SAND BLASTING BOOTH SPRINKLERS. SAND BLASTING BOOTH SPRINKLERS ARE EXISTING TO REMAIN.

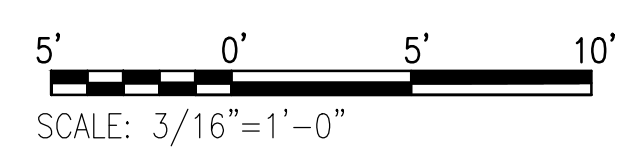
**LEGEND**

- AHJ AUTHORITY HAVING JURISDICTION
- SQ. FT. SQUARE FOOT
- IAW IN ACCORDANCE WITH
- AFF ABOVE FINISHED FLOOR
- PSI POUNDS PER SQUARE INCH
- GPM GALLONS PER MINUTE
- OS&Y OUTSIDE SCREW AND YOKE
- DEMOLISH TO POINT
- ◀▶ CONNECT TO EXISTING
- UPRIGHT SPRINKLER HEAD
- PENDANT SPRINKLER
- - - DEMOLITION SPRINKLER PIPING
- NEW SPRINKLER PIPING
- EXISTING SPRINKLER PIPING



**KEY PLAN**  
NO SCALE

**FIRE PROTECTION DEMOLITION PLAN – AREA B**  
SCALE: 3/16" = 1'-0"



**PETERSON ENGINEERING INC.**  
(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

**FIRE PROTECTION DEMOLITION PLAN – AREA B**

DATE: 28 OCT 2019  
DESIGNED BY: FCB  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: FP-102  
SHEET NUMBER: 24 of 80

**SPECIAL NOTE**

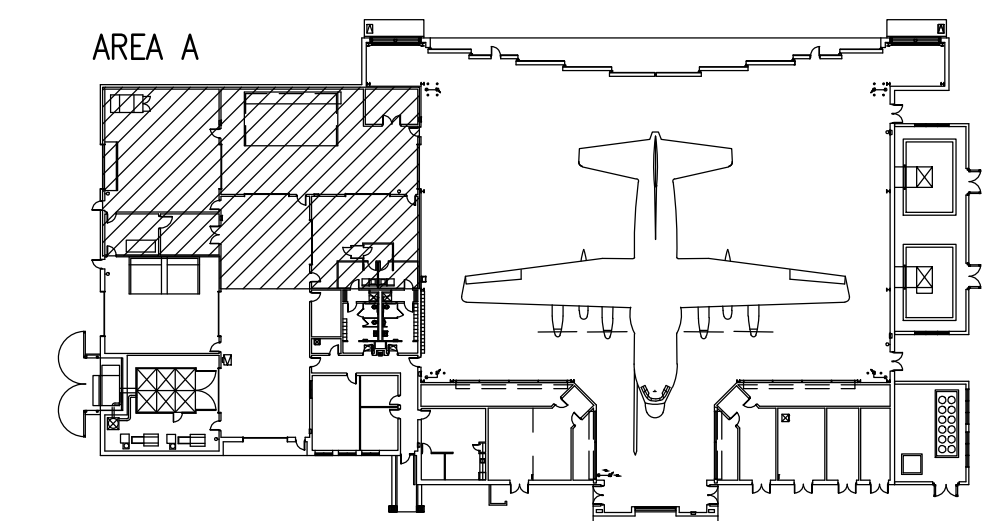
CONTRACTOR SHALL PROVIDE AND INSTALL AN ELECTRONIC SHUTOFF VALVE IN THE PAINT BOOTH COMPRESSED AIR SUPPLY LINE. THE COMPRESSED AIR SHUT OFF VALVE SHALL CLOSE WHEN A SIGNAL IS RECEIVED FROM THE FIRE ALARM PANEL OR THE PAINT BOOTH SHUTDOWN SWITCH LOCATED ON THE PAINT BOOTH.

**SHEET NOTES**

- 1 REMOVE AND RECONNECT FIRE SUPPRESSION PIPING AS NEEDED TO ACCOMMODATE INSTALLATION OF NEW PAINT BOOTH, SANDING BOOTH, HVAC EQUIPMENT, DUCTWORK, AND PIPING. FIRE SUPPRESSION MODIFICATIONS SHALL BE IN ACCORDANCE WITH UFC 3-600-01, FIRE PROTECTION ENGINEERING FOR FACILITIES, NFPA13, THE SPECIFICATIONS, AND THE AUTHORITY HAVING JURISDICTION. FIRE SPRINKLER CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- 2 PROVIDE ADDITIONAL FIRE SUPPRESSION SPRINKLERS IN NEW VESTIBULE. TIE INTO EXISTING WET PIPE FIRE SUPPRESSION SYSTEM.
- 3 PROVIDE SPRINKLERS INSIDE PAINT BOOTH, INCLUDING PAINT BOOTH EXHAUST PLENUM. SPRINKLER COVERAGE SHALL BE MAINTAINED INSIDE AND OUTSIDE OF THE PAINT BOOTH.
- 4 PROVIDE SPRINKLERS IN PAINT BOOTH EXHAUST DUCTS ABOVE PAINT BOOTH IN ACCORDANCE WITH NFPA 33-9.6.6. SEE MECHANICAL DRAWINGS FOR EXHAUST DUCT LOCATIONS.
- 5 CONNECT NEW PAINT BOOTH SPRINKLER SUPPLY LINE TO EXISTING FIRE SPRINKLER SYSTEM.
- 6 PROVIDE AND INSTALL FLOW SWITCH AND SHUTOFF VALVE WITH TAMPER SWITCH IN PAINT BOOTH SUPPLY LINE. SHUTOFF VALVE SHALL BE MOUNTED AT 5 FEET ABOVE THE FLOOR.

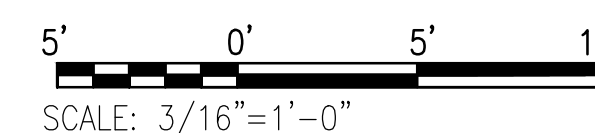
**LEGEND**

- AHJ AUTHORITY HAVING JURISDICTION
- SQ. FT. SQUARE FOOT
- IN ACCORDANCE WITH
- ABOVE FINISHED FLOOR
- POUNDS PER SQUARE INCH
- GPM GALLONS PER MINUTE
- OS&Y OUTSIDE SCREW AND YOKE
- DEMOLISH TO POINT
- CONNECT TO EXISTING
- UPRIGHT SPRINKLER
- PENDANT SPRINKLER
- DEMOLITION SPRINKLER PIPING
- NEW SPRINKLER PIPING
- EXISTING SPRINKLER PIPING



**KEY PLAN**  
NO SCALE

**FIRE PROTECTION NEW WORK PLAN - AREA A**  
SCALE: 3/16" = 1'-0"



**PETERSON ENGINEERING INC.**

(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

**FIRE PROTECTION NEW WORK PLAN - AREA A**

DATE: 28 OCT 2019  
DESIGNED BY: FCB  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: FP-201  
SHEET NUMBER: 25 of 80



**SPECIAL NOTE**

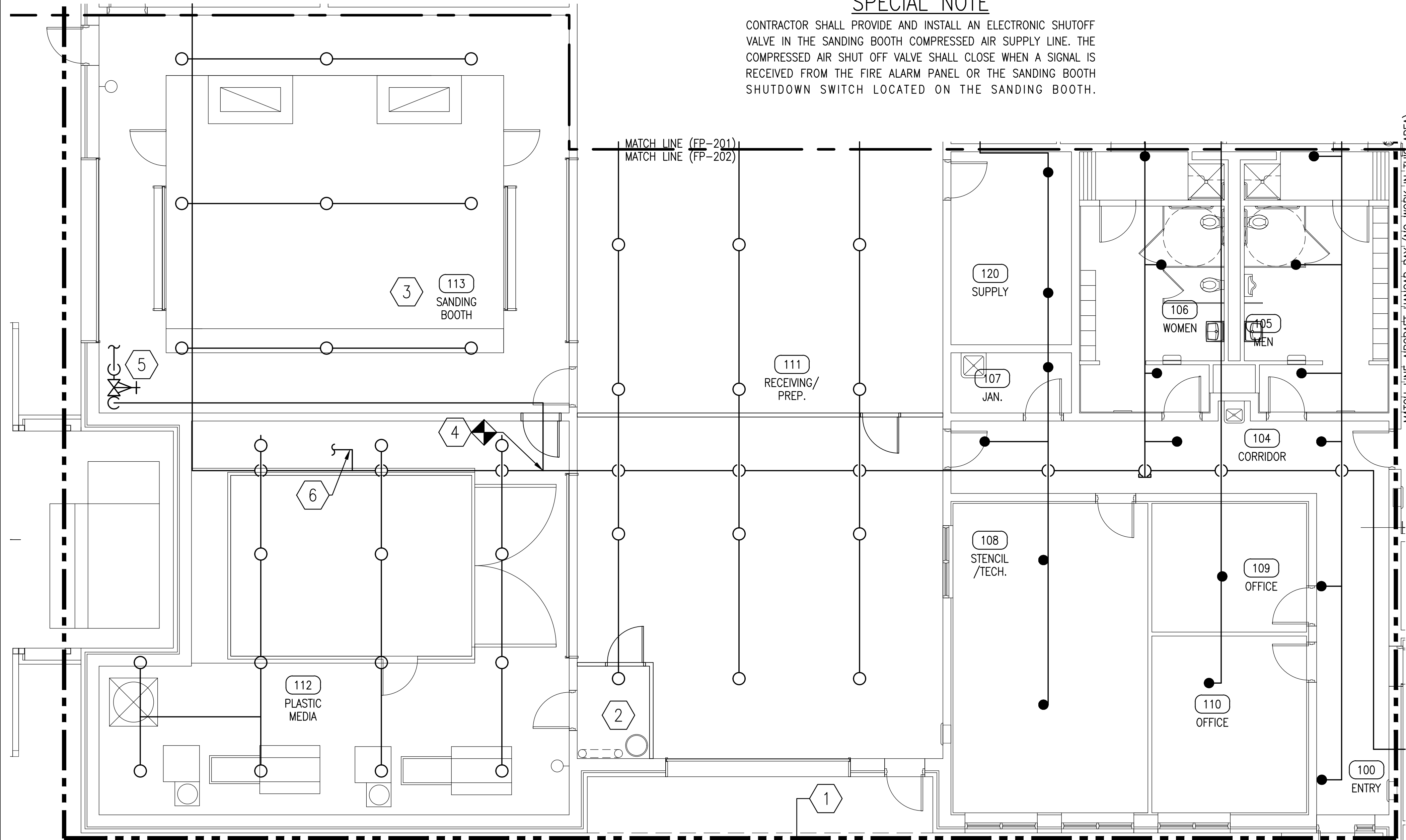
CONTRACTOR SHALL PROVIDE AND INSTALL AN ELECTRONIC SHUTOFF VALVE IN THE SANDING BOOTH COMPRESSED AIR SUPPLY LINE. THE COMPRESSED AIR SHUT OFF VALVE SHALL CLOSE WHEN A SIGNAL IS RECEIVED FROM THE FIRE ALARM PANEL OR THE SANDING BOOTH SHUTDOWN SWITCH LOCATED ON THE SANDING BOOTH.

**SHEET NOTES**

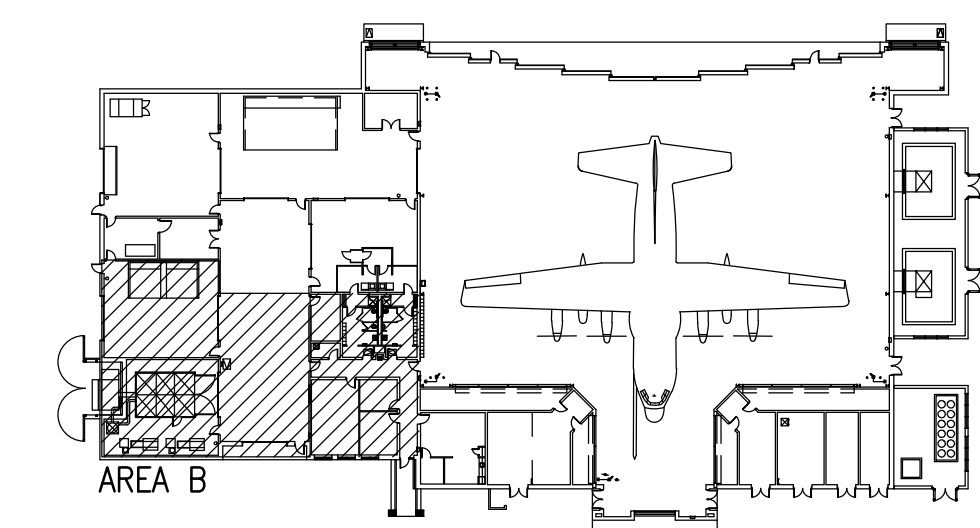
- 1 REMOVE AND RECONNECT FIRE SUPPRESSION PIPING AS NEEDED TO ACCOMMODATE INSTALLATION OF NEW PAINT BOOTH, SANDING BOOTH, HVAC EQUIPMENT, DUCTWORK, AND PIPING. FIRE SUPPRESSION MODIFICATIONS SHALL BE IN ACCORDANCE WITH UFC 3-600-01, FIRE PROTECTION ENGINEERING FOR FACILITIES, NFPA13, THE SPECIFICATIONS, AND THE AUTHORITY HAVING JURISDICTION. FIRE SPRINKLER CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- 2 PROVIDE ADDITIONAL FIRE SUPPRESSION SPRINKLER IN NEW VESTIBULE. TIE INTO EXISTING WET PIPE FIRE SUPPRESSION SYSTEM.
- 3 PROVIDE NEW SPRINKLERS INSIDE SANDING BOOTH INCLUDING AIR PLENUMS. SPRINKLER COVERAGE SHALL BE MAINTAINED INSIDE AND OUTSIDE OF THE SANDING BOOTH.
- 4 CONNECT NEW SANDING BOOTH SPRINKLER SUPPLY LINE TO EXISTING FIRE SPRINKLER SYSTEM.
- 5 PROVIDE AND INSTALL FLOW SWITCH AND SHUTOFF VALVE WITH TAMPER SWITCH IN SANDING BOOTH SUPPLY LINE. SHUTOFF VALVE SHALL BE MOUNTED AT 5 FEET ABOVE THE FLOOR.
- 6 EXISTING TO REMAIN SUPPLY CONNECTION TO BLAST BOOTH BELOW.

**LEGEND**

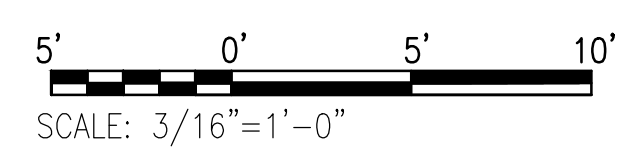
- AHJ AUTHORITY HAVING JURISDICTION
- SQ. FT. SQUARE FOOT
- IAW IN ACCORDANCE WITH
- AFF ABOVE FINISHED FLOOR
- PSI POUNDS PER SQUARE INCH
- GPM GALLONS PER MINUTE
- OS&Y OUTSIDE SCREW AND YOKE
- DEMOLISH TO POINT
- CONNECT TO EXISTING
- UPRIGHT SPRINKLER
- PENDANT SPRINKLER
- DEMOLITION SPRINKLER PIPING
- NEW SPRINKLER PIPING
- EXISTING SPRINKLER PIPING



**FIRE PROTECTION NEW WORK PLAN - AREA B**  
SCALE: 3/16" = 1'-0"



**KEY PLAN**  
NO SCALE



**PETERSON ENGINEERING INC.**

(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

FIRE PROTECTION NEW WORK PLAN - AREA B

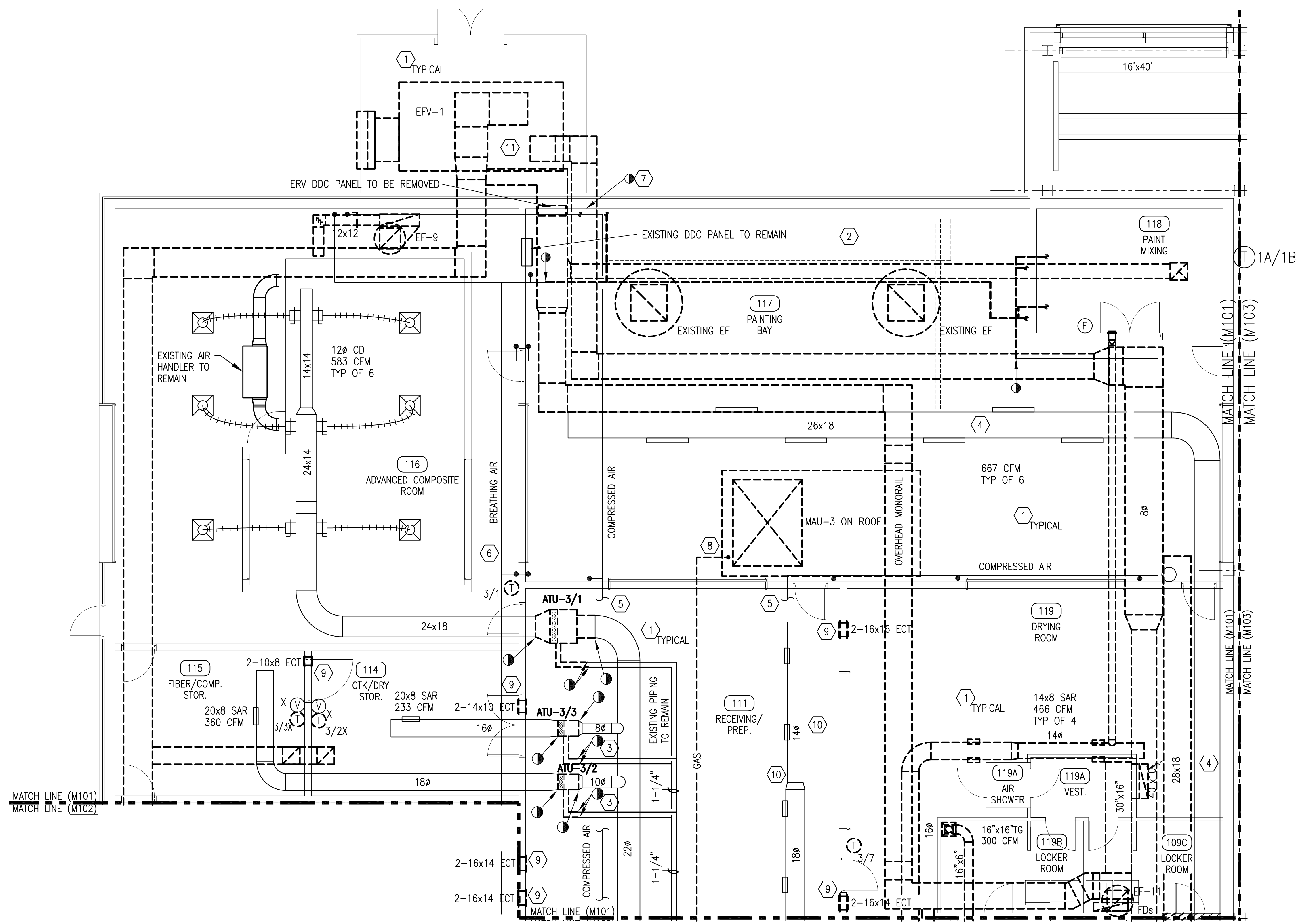
**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: FCB  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: FP-202  
SHEET NUMBER: 26 of 80





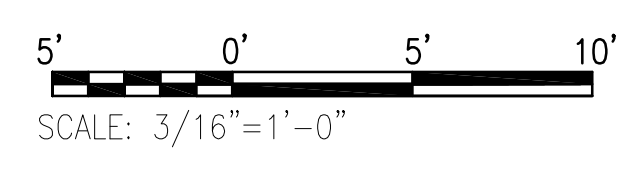
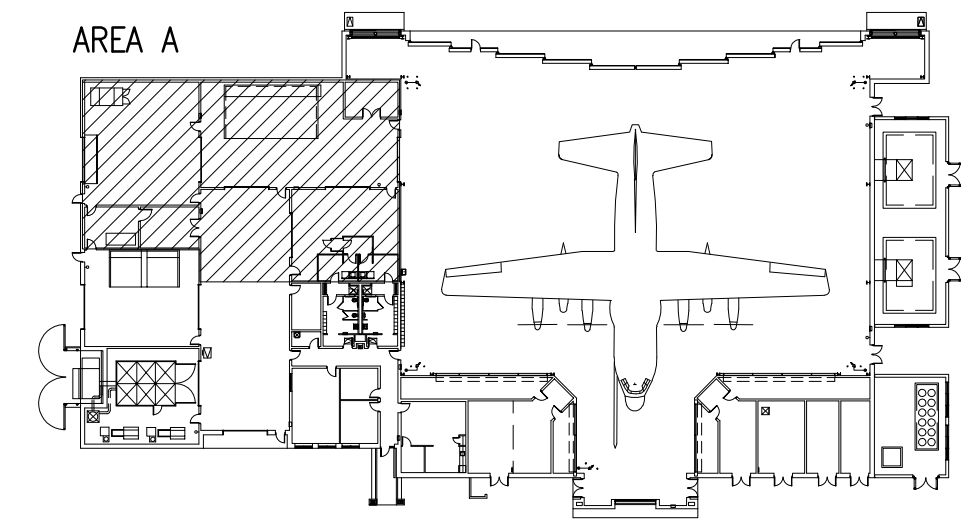
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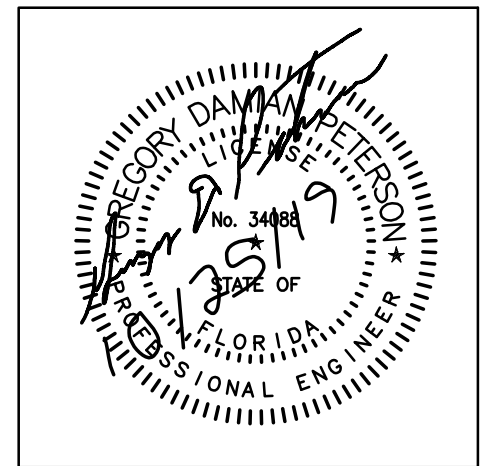
**SHEET NOTES**

- 1 REMOVE DUCTWORK, EXHAUST FANS, THERMOSTATS, AIR HANDLERS, CONTROLS AND TRANSFER GRILLES AS SHOWN. ALL TRANSFER GRILLE OPENINGS THAT ARE NOT REUSED SHALL BE PATCHED AND SEALED AIR TIGHT.
- 2 REMOVE EXISTING PAINT BOOTH IN PAINTING BAY.
- 3 DEMOLISH PIPING TO POINT INDICATED.
- 4 EXISTING DUCTWORK TO REMAIN AND BE REUSED.
- 5 EXISTING TO REMAIN COMPRESSED AIR LINE.
- 6 EXISTING TO REMAIN BREATHING AIR LINE.
- 7 DEMOLISH COMPRESSED AIR DROP. CAP PIPING.
- 8 DEMOLISH EXISTING GAS UP TO MAU-3.
- 9 REMOVE ALL TRANSFER RETURN GRILLES/DUCTS.
- 10 PATCH ALL HOLES IN WALLS TO MATCH EXISTING WALLS, WHERE DUCTS ARE REMOVED AND NOT TO BE REINSTALLED.
- 11 RELOCATE EXISTING SUPPLY DUCTWORK AWAY FROM NEW RETURN DUCTWORK. PROVIDE NEW HANGARS TO SUPPORT DUCTWORK.

**MECHANICAL DEMOLITION PLAN - AREA A**  
SCALE: 3/16" = 1'-0"



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(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



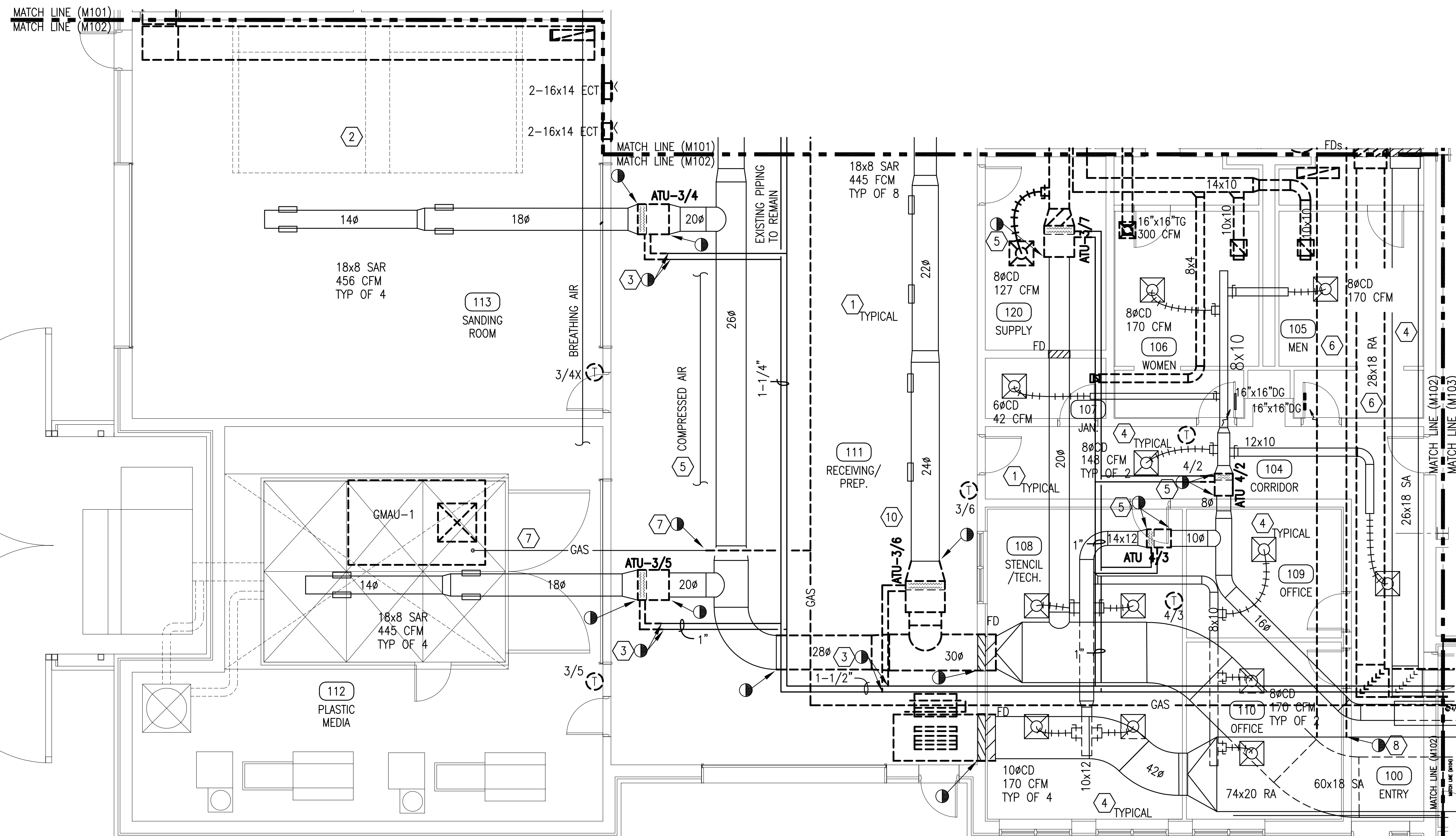
REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**  
MECHANICAL DEMOLITION PLAN - AREA A

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: **28 OCT 2019**  
DESIGNED BY: **GDP**  
DRAWN BY: **DJM**  
BUILDING NUMBER: **90225**  
PROJECT NUMBER: **CP1028800**  
SHEET REFERENCE: **M-101**  
SHEET NUMBER: **28 of 80**

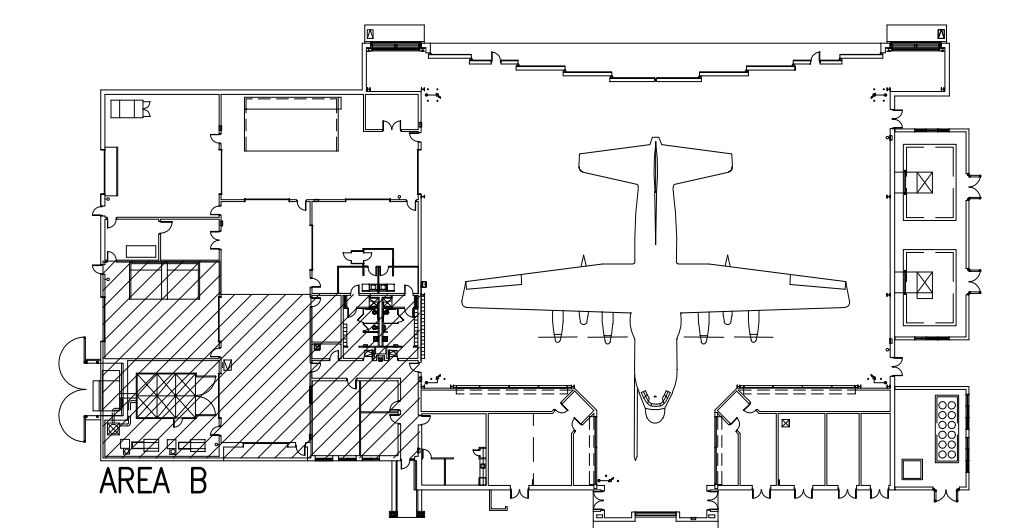
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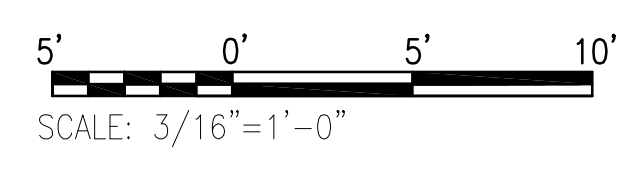
**MECHANICAL DEMOLITION PLAN - AREA B**  
SCALE: 3/16" = 1'-0"

**SHEET NOTES**

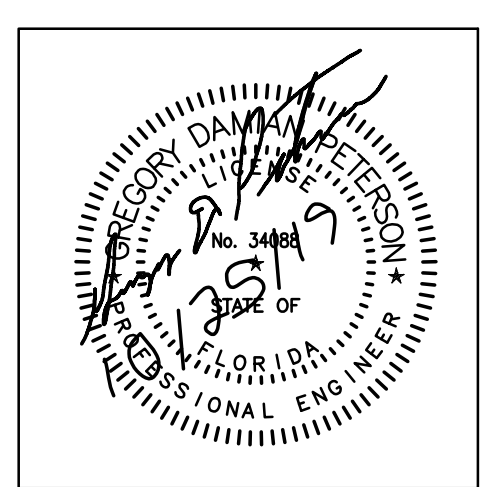
- 1 REMOVE DUCTWORK, THERMOSTATS, CONTROLS AND TRANSFER GRILLES AS SHOWN. ALL TRANSFER GRILLE OPENINGS THAT ARE NOT REUSED SHALL BE PATCHED AND SEALED AIR TIGHT.
- 2 REMOVE EXISTING SANDING BOOTH IN SANDING ROOM.
- 3 DEMOLISH PIPING TO POINT INDICATED.
- 4 EXISTING DUCTWORK TO REMAIN AND BE REUSED.
- 5 DEMOLISH EXISTING AIR TERMINAL UNIT AND REHEAT COIL AND PREPARE FOR CONNECTION TO NEW TERMINAL UNIT.
- 6 DEMOLISH DUCTWORK AS INDICATED.
- 7 REUSE EXISTING GAS UP TO GMAU-1. CONTRACTOR TO MAKE FINAL GAS CONNECTION TO GMAU-1 ON ROOF. CONTRACTOR TO FIELD VERIFY EXISTING GAS PIPING SIZE TO TIE INTO NEW 4" GAS LINE FEEDING MAU-3.
- 8 REMOVE DUCTWORK BACK TO POINT INDICATED. PATCH AND SEAL EXISTING TO REMAIN DUCTWORK AIR TIGHT.
- 9 REMOVE ALL TRANSFER RETURN GRILLES/DUCTS. PATCH ALL HOLES IN WALLS TO MATCH EXISTING WALLS, WHERE DUCTS ARE REMOVED AND NOT TO BE REINSTALLED.
- 10 RELOCATE EXISTING SUPPLY DUCTWORK AWAY FROM NEW RETURN DUCTWORK. PROVIDE NEW HANGARS TO SUPPORT DUCTWORK.



**KEY PLAN**  
NO SCALE



**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

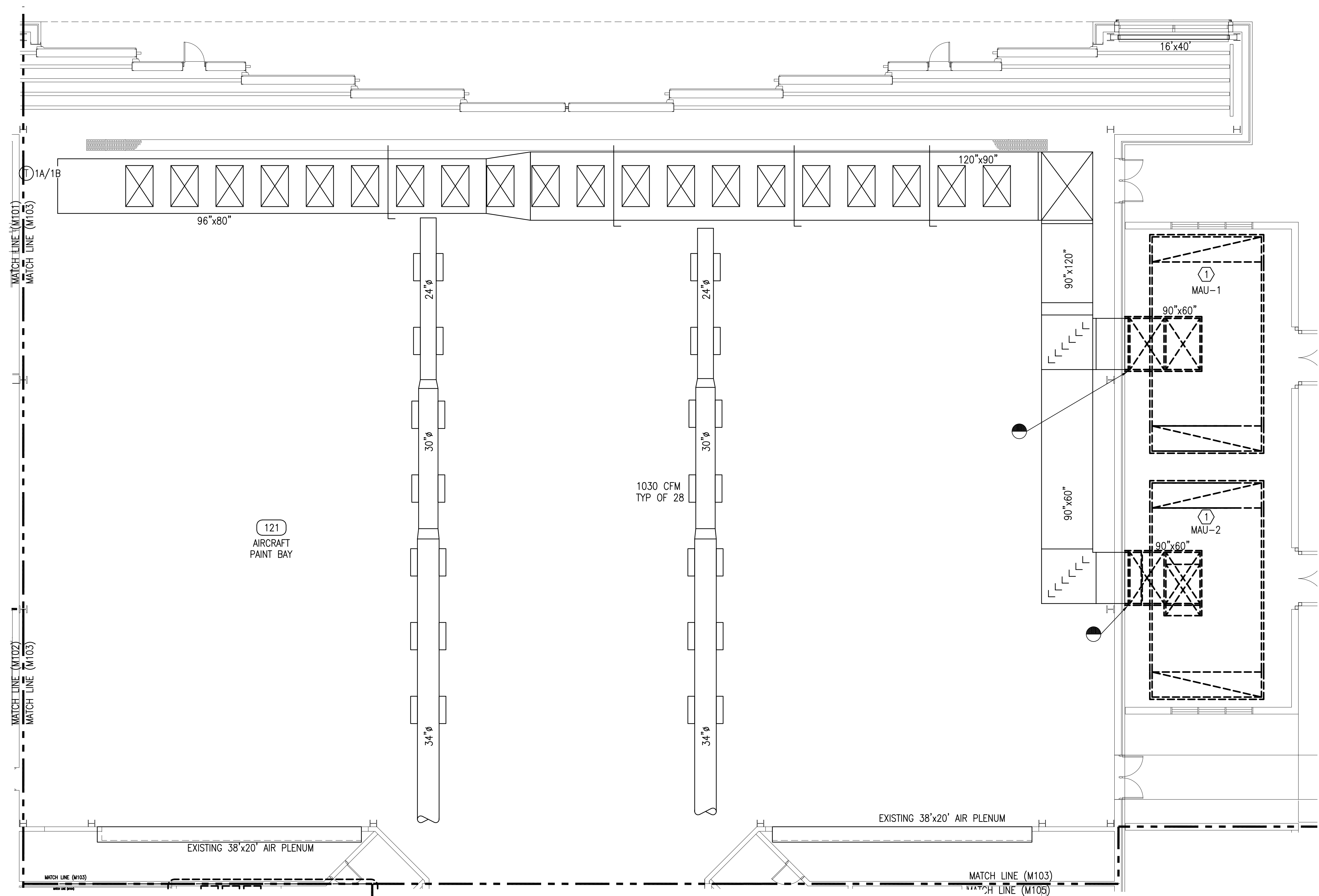
MECHANICAL DEMOLITION PLAN - AREA B

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: **28 OCT 2019**  
DESIGNED BY: **GDP**  
DRAWN BY: **DJM**  
BUILDING NUMBER: **90225**  
PROJECT NUMBER: **CP1028800**  
SHEET REFERENCE: **M-102**  
SHEET NUMBER: **29 of 80**

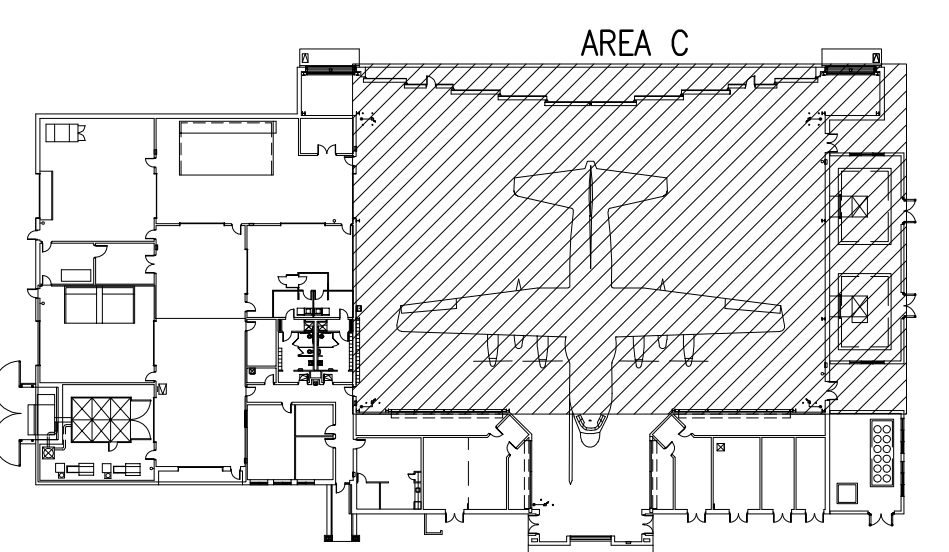


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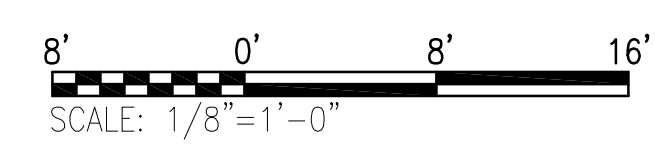
**SHEET NOTES**

- 1 REMOVE EXISTING MAKE-UP AIR UNITS. PREPARE DUCT CONNECTIONS FOR NEW MAKE-UP AIR UNITS.

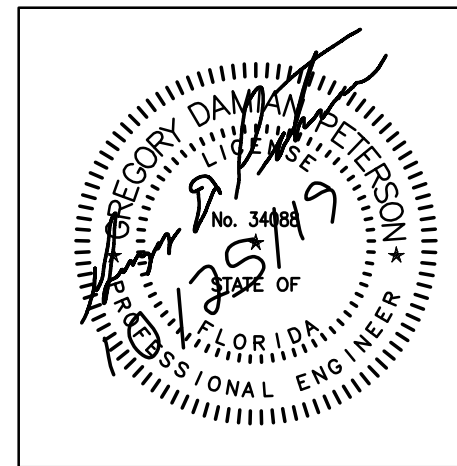


**KEY PLAN**  
NO SCALE

**MECHANICAL DEMOLITION PLAN - AREA C**  
SCALE: 1/8" = 1'-0"



**PETERSON ENGINEERING INC.**  
(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



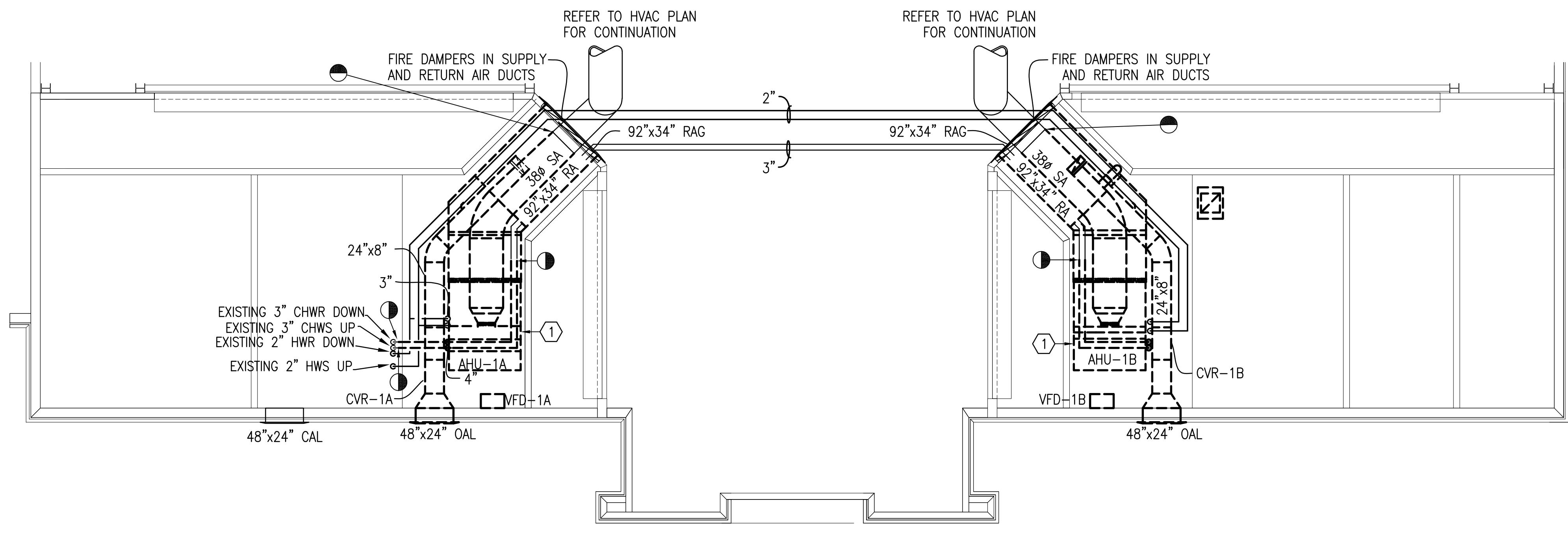
REV #	DATE	DESCRIPTION
<b>REPAIR CORROSION CONTROL FACILITY BUILDING 90225</b>		
MECHANICAL DEMOLITION PLAN - AREA C		
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> <small>1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA</small>		
DATE: 28 OCT 2019 DESIGNED BY: GDP DRAWN BY: DJM BUILDING NUMBER: 90225 PROJECT NUMBER: CP1028800 SHEET REFERENCE: M-103 SHEET NUMBER: 30 of 80		







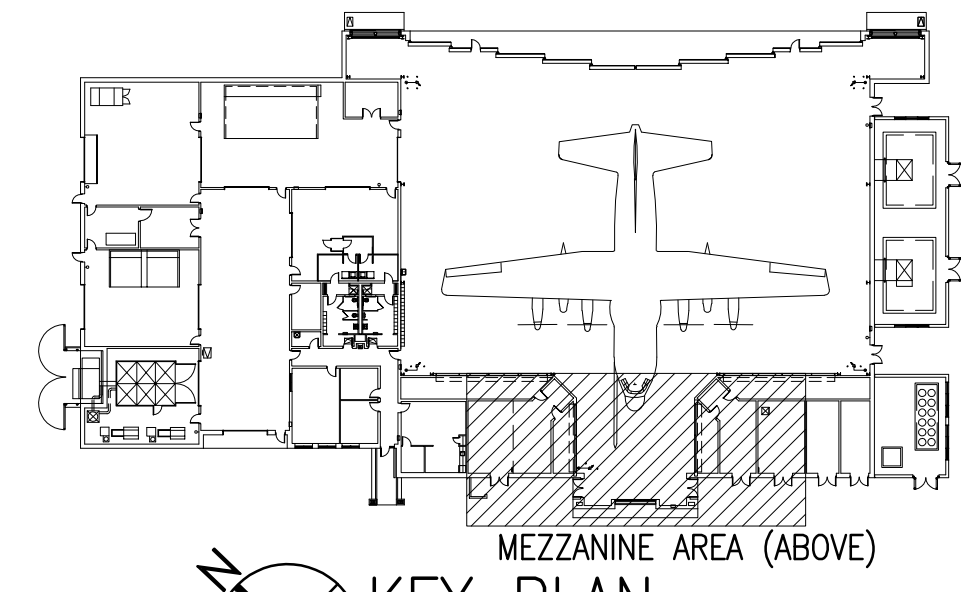
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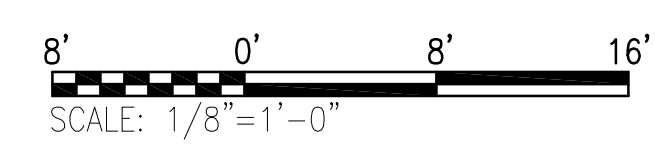
MECHANICAL MEZZANINE DEMOLITION PLAN  
SCALE: 1/8" = 1'-0"

SHEET NOTES

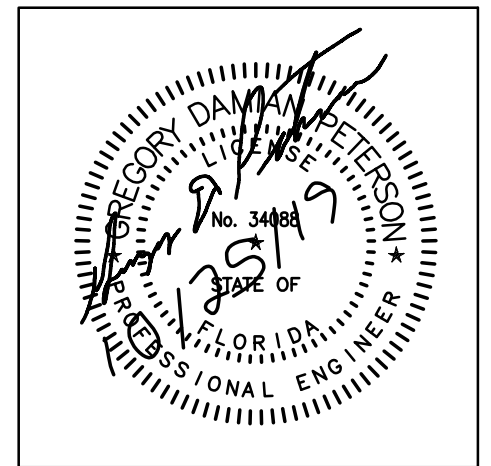
- 1 REMOVE EXISTING AHU AND DUCTWORK AND PIPING AS INDICATED. REMOVE EXISTING VFD.



KEY PLAN  
NO SCALE



**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



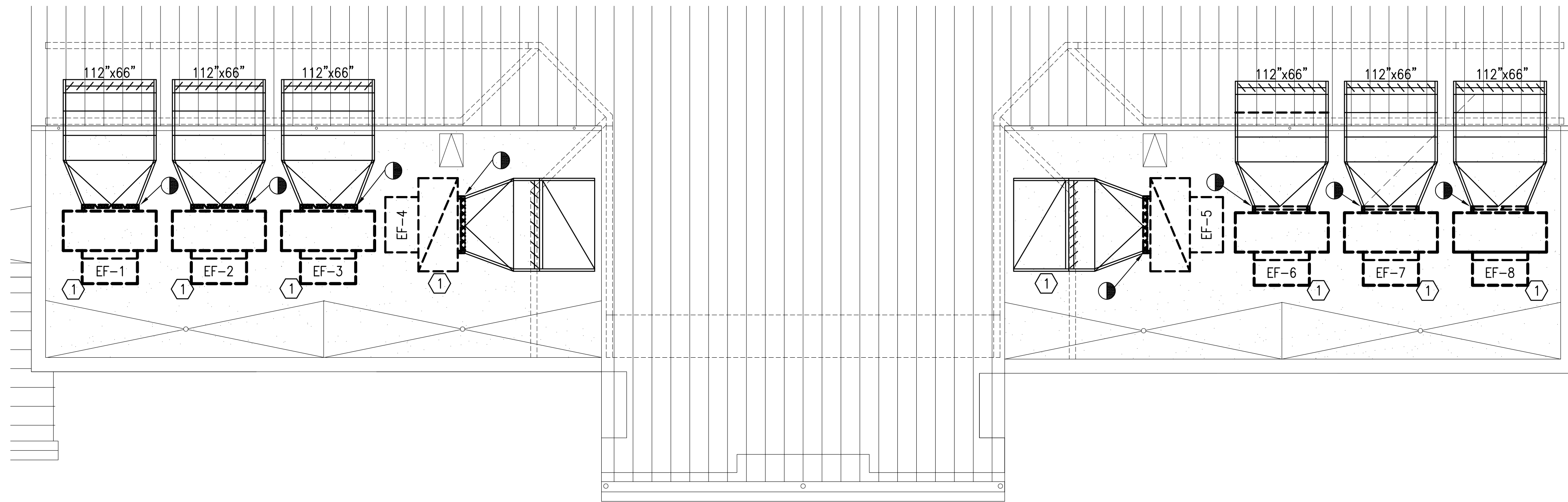
REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
MECHANICAL MEZZANINE DEMOLITION PLAN

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: M-106  
SHEET NUMBER: 33 of 80

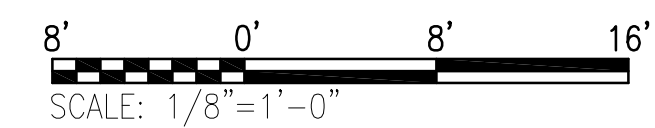
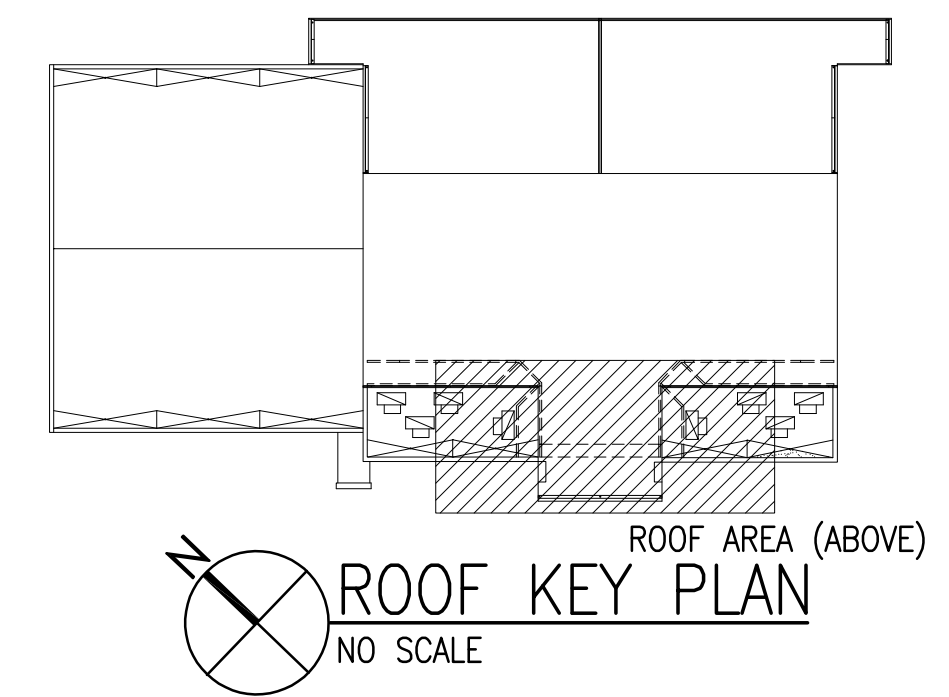
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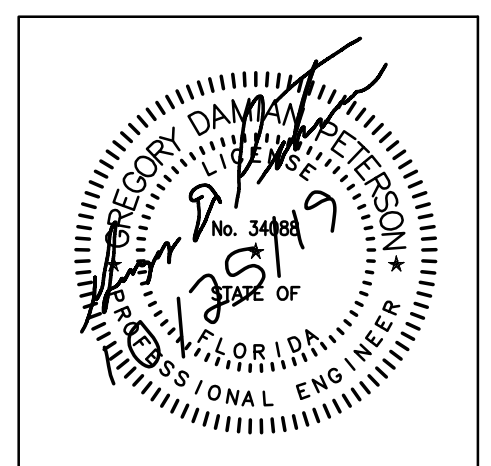
 MECHANICAL DEMOLITION PLAN – ROOF AREA  
SCALE: 1/8" = 1'-0"

SHEET NOTES

- ① REMOVE EXISTING EXHAUST FAN. REUSE EXHAUST DUCTWORK, CONNECT TO NEW EXHAUST FAN.
- ② TRANSITION DUCTWORK AS REQUIRED TO CONNECT EXISTING DUCT TO NEW FANS.



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(850) 434-0513  
PEI# 18116



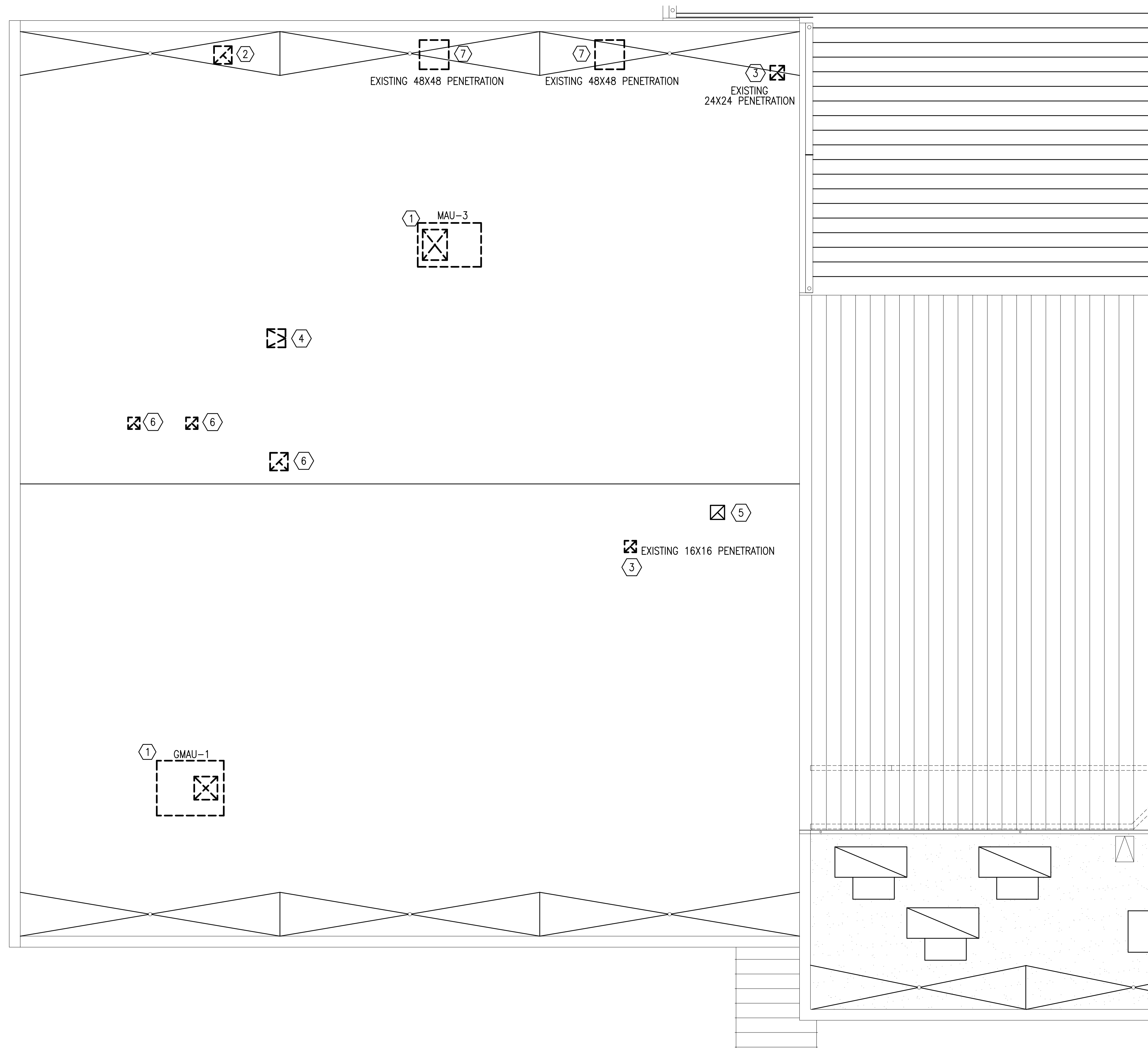
REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**  
MECHANICAL DEMOLITION PLAN – ROOF AREA

**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

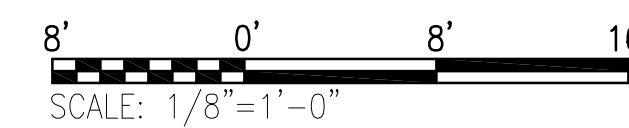
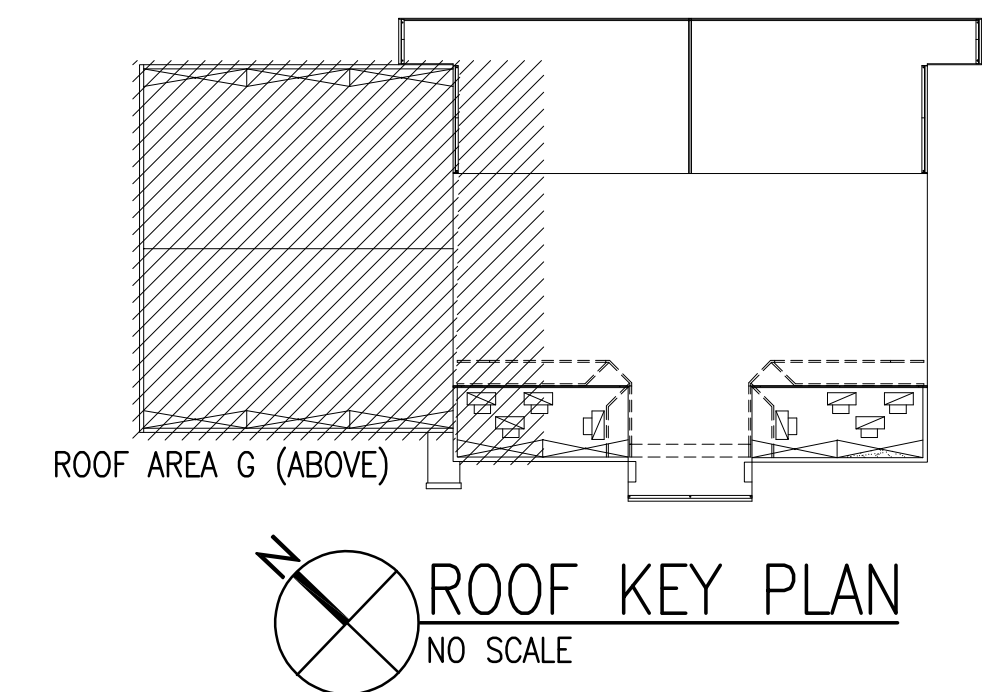
DATE: **28 OCT 2019**  
DESIGNED BY: **GDP**  
DRAWN BY: **DJM**  
BUILDING NUMBER: **90225**  
PROJECT NUMBER: **CP1028800**  
SHEET REFERENCE: **M-107**  
SHEET NUMBER: **34 of 80**

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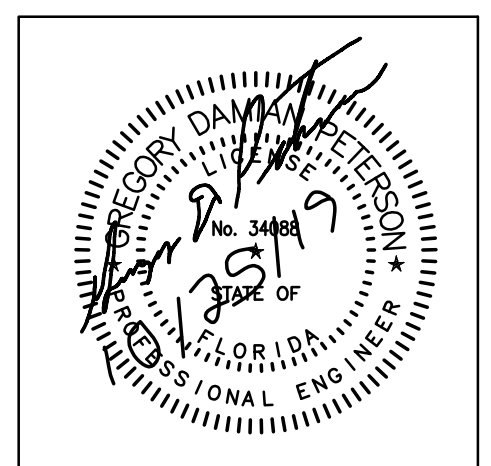


SHEET NOTES

- ① DEMOLISH MAKE-UP AIR UNITS ON ROOF AS SHOWN.
- ② DEMOLISH EXHAUST FAN ON ROOF. REMOVE CURB AND PATCH ROOF TO MATCH EXISTING.
- ③ EXISTING CAPPED ROOF CURB. ROUTE NEW DUCTWORK WITHIN EXISTING ROOF CURB. SEE NEW ROOF PLAN ON SHEET M-208.
- ④ DEMOLISH ROOF HATCH. SEE SHEET M-208 FOR NEW ROOF HATCH INFORMATION. COORDINATE WITH STRUCTURAL DRAWINGS FOR NEW ROOF HATCH.
- ⑤ EXISTING TO REMAIN DRYER VENTS.
- ⑥ REMOVE EXISTING CAPPED ROOF CURB. PATCH ROOF TO MATCH EXISTING.
- ⑦ DEMOLISH EXISTING EXHAUST FANS BELOW THE ROOF. DEMOLISH EXHAUST DISCHARGE ON ROOF. RE-USE EXISTING CURB TO ROUTE NEW EXHAUST DISCHARGE UP THRU THE ROOF. SEE NEW ROOF PLAN ON SHEET M-208.



**PETERSON ENGINEERING INC.**  
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 PEI# 18116



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225**

MECHANICAL DEMOLITION PLAN - ROOF AREA G

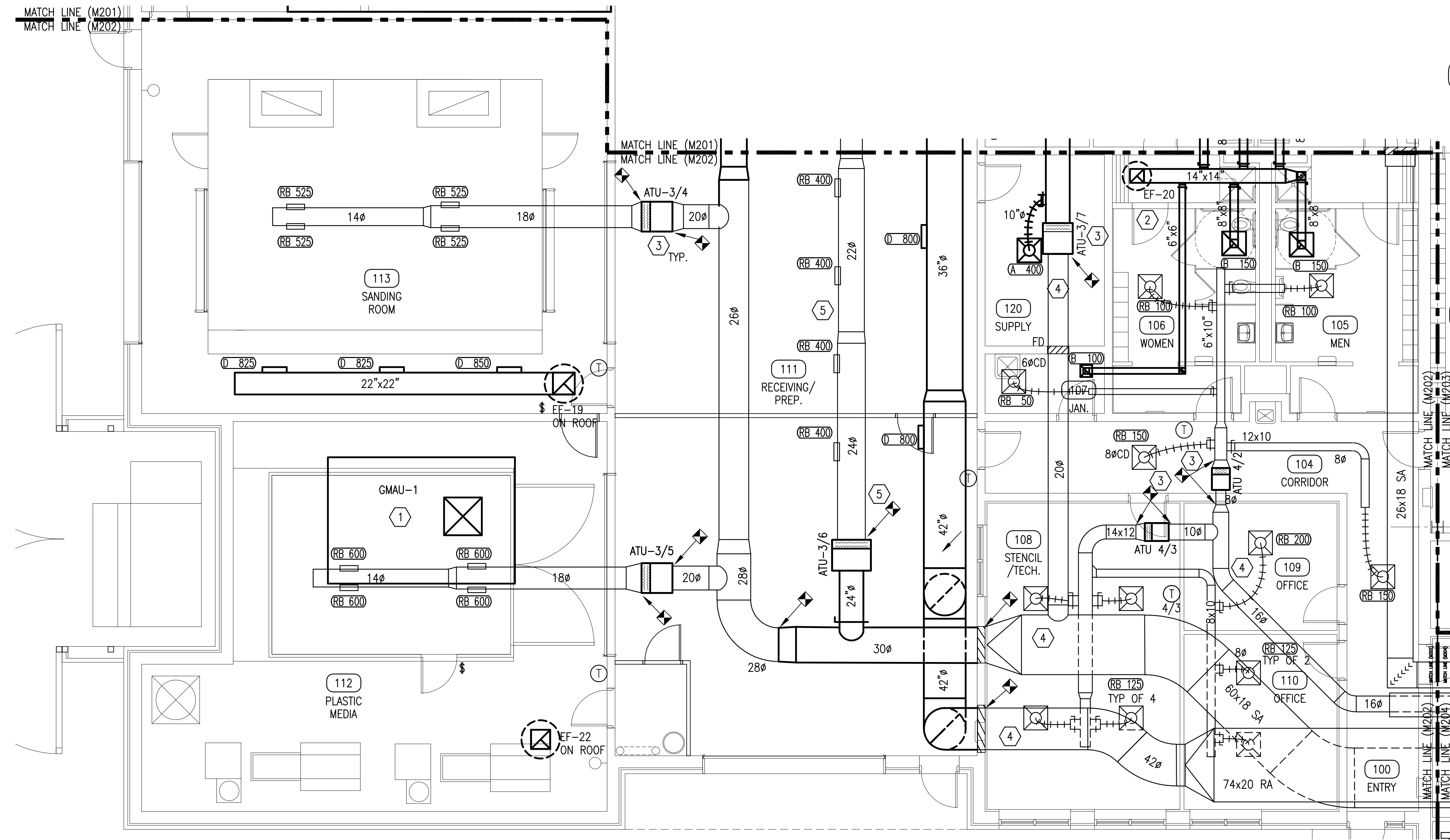
**AIR FORCE SPECIAL  
 OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

DATE: **28 OCT 2019**  
 DESIGNED BY: **GDP**  
 DRAWN BY: **DJM**  
 BUILDING NUMBER: **90225**  
 PROJECT NUMBER: **CP1028800**  
 SHEET REFERENCE: **M-108**  
 SHEET NUMBER: **35 of 80**





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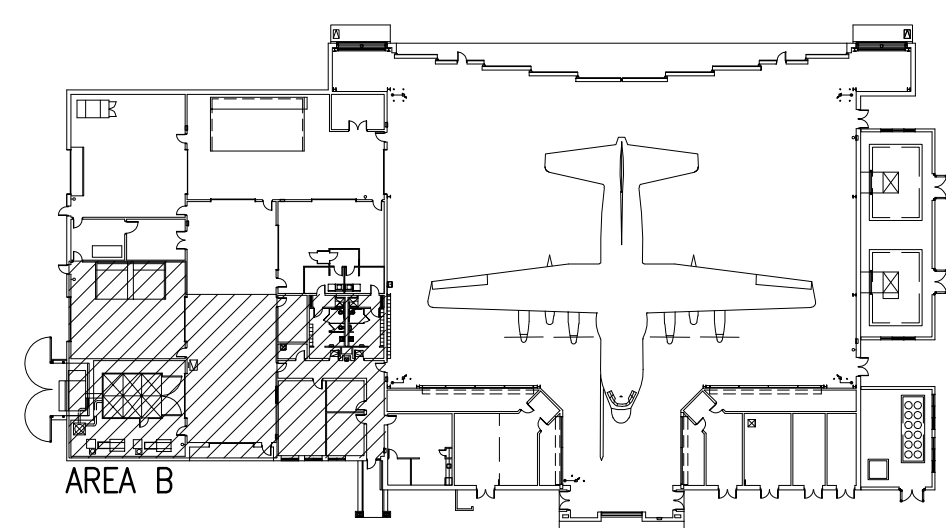
**SHEET NOTES**

- 1 PROVIDE AND INSTALL NEW MAKE-UP AIR UNIT ON ROOF. SEE SCHEDULE, SHEET M-602.
- 2 PROVIDE AND INSTALL ROOF MOUNTED EXHAUST FAN WITH HEPA FILTER. SEE SCHEDULE SHEET M-602.
- 3 PROVIDE AND INSTALL NEW VAV BOX AND HOT WATER REHEAT COIL.
- 4 EXISTING DUCT TO REMAIN AND BE REUSED.
- 5 RELOCATE EXISTING SUPPLY DUCTWORK AWAY FROM NEW RETURN DUCTWORK. PROVIDE NEW HANGARS TO SUPPORT DUCTWORK.

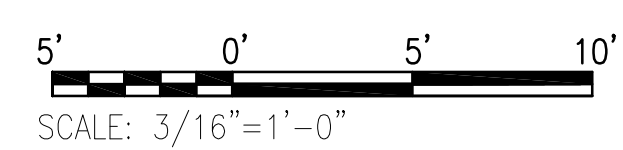
**GENERAL NOTES**

ALL EXISTING DDC PANELS TO REMAIN AND BE REUSED UNLESS OTHERWISE INDICATED.

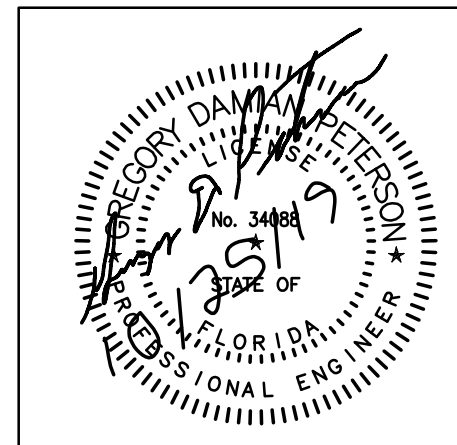
**MECHANICAL NEW WORK PLAN - AREA B**  
SCALE: 3/16" = 1'-0"



**KEY PLAN**  
NO SCALE

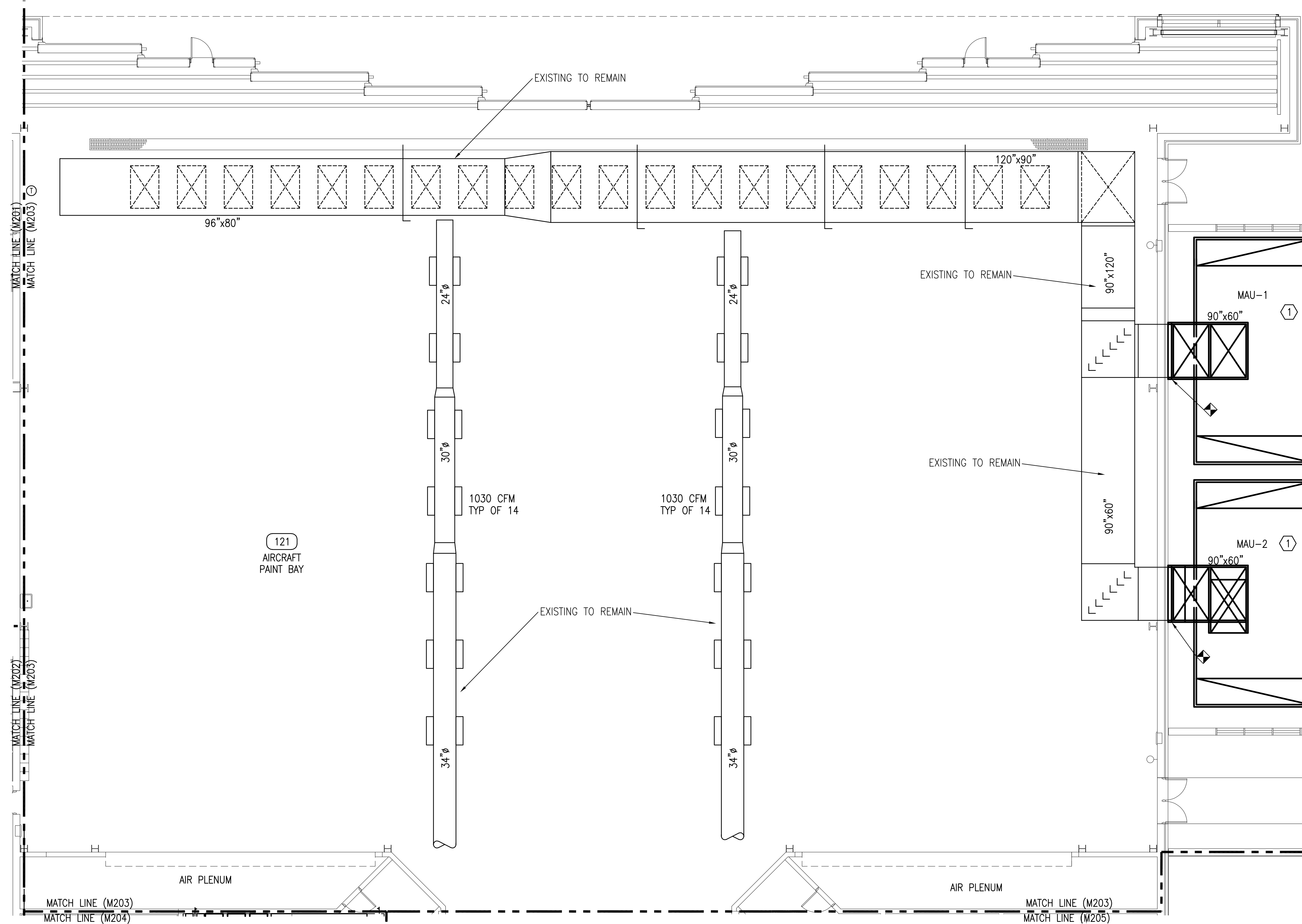


**PETERSON ENGINEERING INC.**  
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PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION
<b>REPAIR CORROSION CONTROL FACILITY BUILDING 90225</b> MECHANICAL NEW WORK PLAN - AREA B		
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA		
DATE:	28 OCT 2019	
DESIGNED BY:	GDP	
DRAWN BY:	DJM	
BUILDING NUMBER:	90225	
PROJECT NUMBER:	CP1028800	
SHEET REFERENCE:	M-202	
SHEET NUMBER:	37 of 80	

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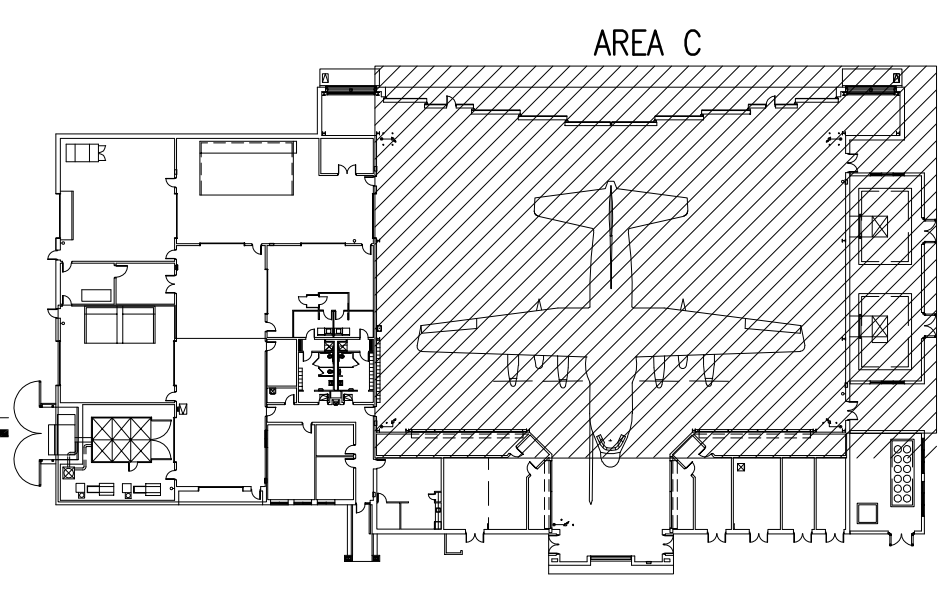


**SHEET NOTES**

1 PROVIDE AND INSTALL NEW MAKE-UP AIR UNIT. SEE SCHEDULE, SHEET M-602. MOUNT NEW UNITS ON EXISTING CONCRETE PADS. REMOVE AND RECONNECT EXISTING DUCTWORK AND BRACING ABOVE UNIT TO ALLOW SPACE FOR DEMOLITION OF OLD AND INSTALLATION OF NEW MAKE-UP AIR UNITS.

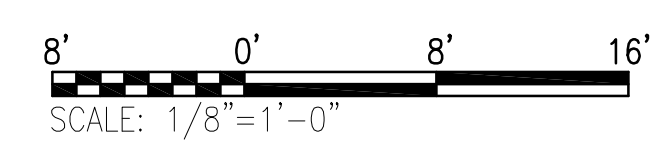
**GENERAL NOTES**

ALL EXISTING DDC PANELS TO REMAIN AND BE REUSED UNLESS OTHERWISE INDICATED.  
NEW START/STOP SWITCHES IN HANGAR TO BE INSTALLED IN SAME LOCATIONS AS EXISTING.

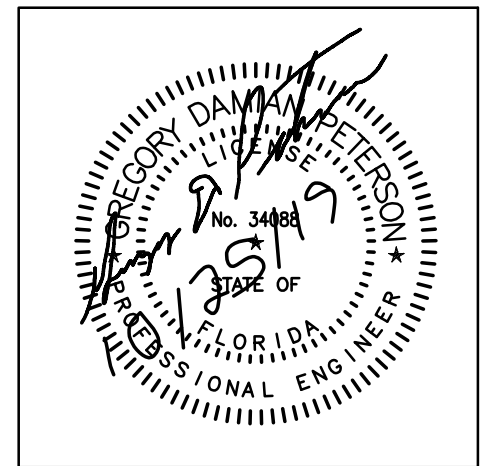


KEY PLAN  
NO SCALE

MECHANICAL NEW WORK PLAN – AREA C  
SCALE: 1/8" = 1'-0"



**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

MECHANICAL NEW WORK PLAN – AREA C

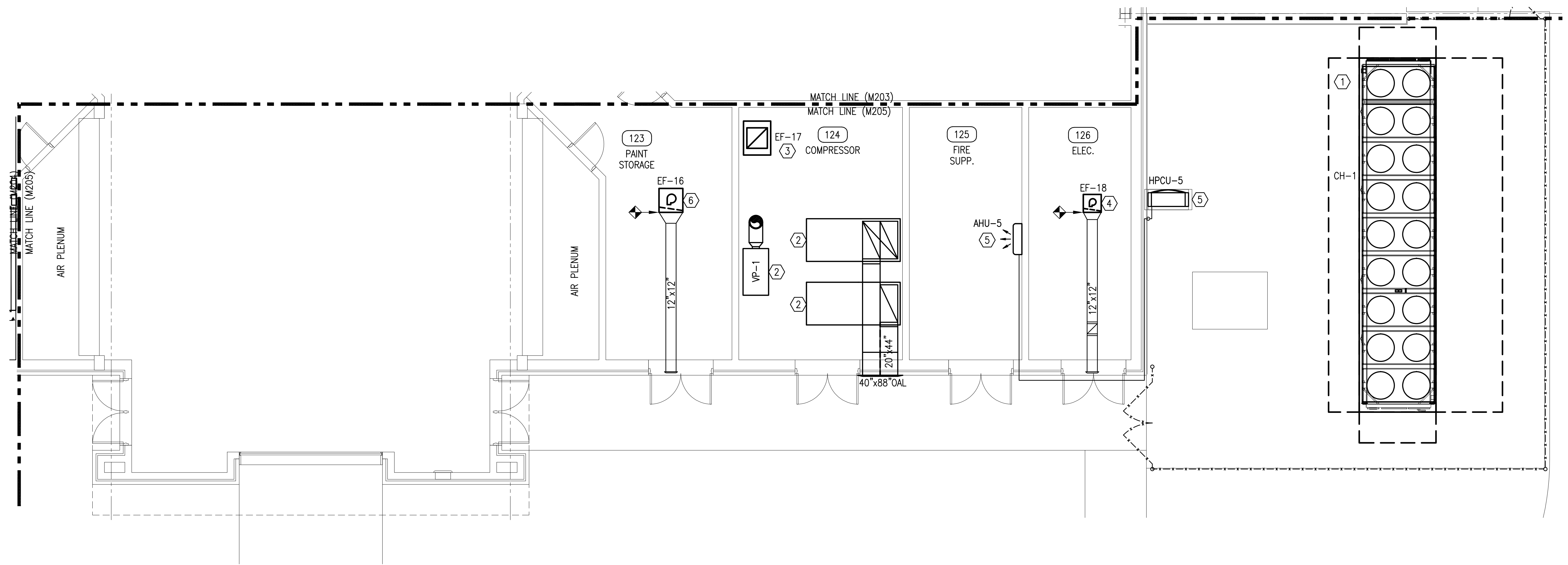
**AIR FORCE SPECIAL  
OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: M-203  
SHEET NUMBER: 38 of 80





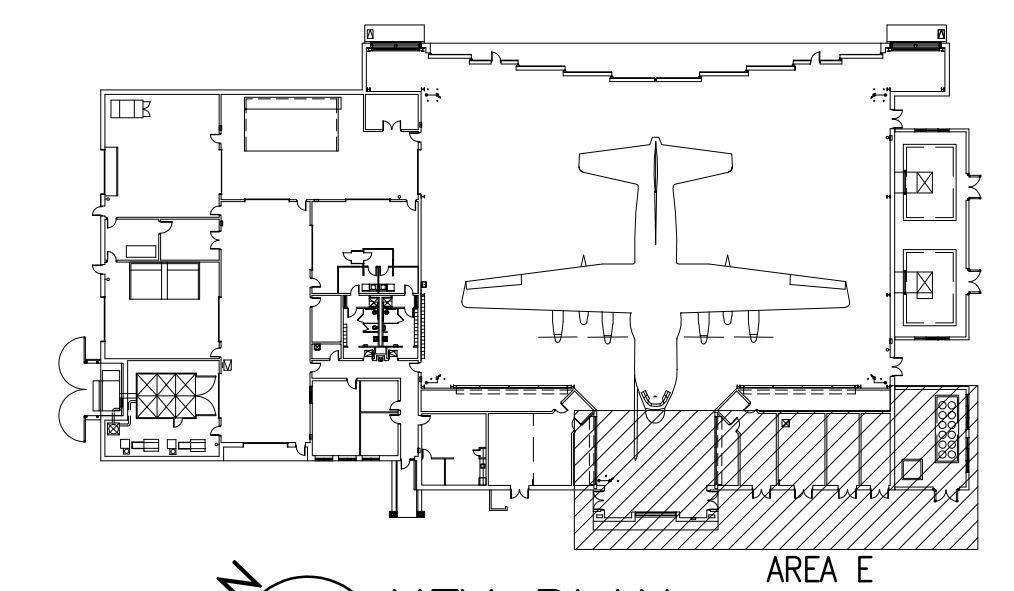
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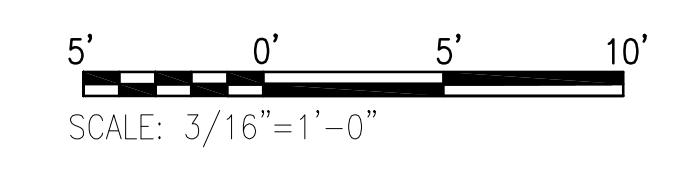
**MECHANICAL NEW WORK PLAN – AREA E**  
 SCALE: 3/16" = 1'-0"

**SHEET NOTES**

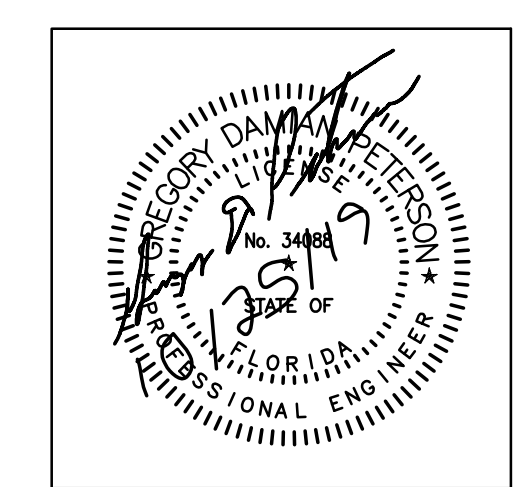
- ① PROVIDE AND INSTALL NEW AIR COOLED CHILLER. SEE SCHEDULE, SHEET M-601. SEE SHEET M-212 FOR ADDITIONAL INFORMATION.
- ② RECONNECT EXISTING EQUIPMENT THAT WAS REMOVED FOR INSTALLATION OF NEW AHU-1B.
- ③ NEW EF-17 SUSPENDED FROM CEILING. CONNECT TO EXISTING DUCTWORK.
- ④ NEW EF-18
- ⑤ EXISTING TO REMAIN
- ⑥ NEW EF-16



**KEY PLAN**  
 NO SCALE

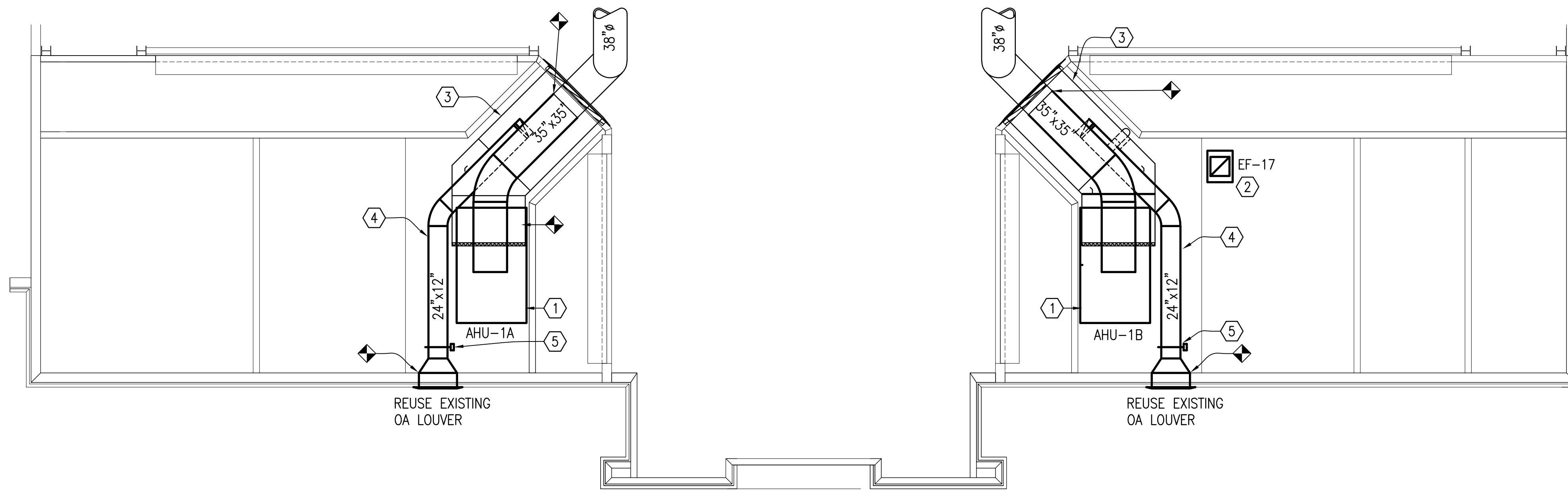


**PETERSON ENGINEERING INC.**  
 (PROF. ENG. # 3600)  
 75 SOUTH "F" STREET  
 PENSACOLA, FLORIDA 32502  
 (850) 434-0513  
 PEI# 18116



REV #	DATE	DESCRIPTION
<b>REPAIR CORROSION CONTROL FACILITY                  BUILDING 90225</b> MECHANICAL NEW WORK PLAN – AREA E		
<b>AIR FORCE SPECIAL                  OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA		
DATE:	28 OCT 2019	
DESIGNED BY:	GDP	
DRAWN BY:	DJM	
BUILDING NUMBER:	90225	
PROJECT NUMBER:	CP1028800	
SHEET REFERENCE:	M-205	
SHEET NUMBER:	40 of 80	

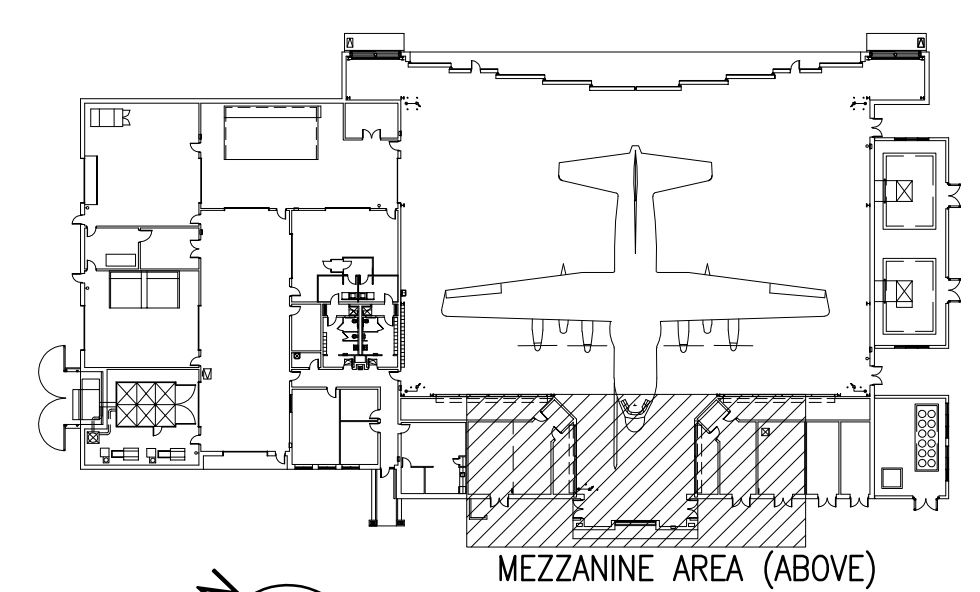
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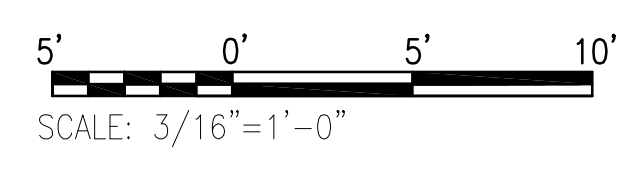
MECHANICAL MEZZANINE NEW WORK PLAN  
SCALE: 1/8" = 1'-0"

SHEET NOTES

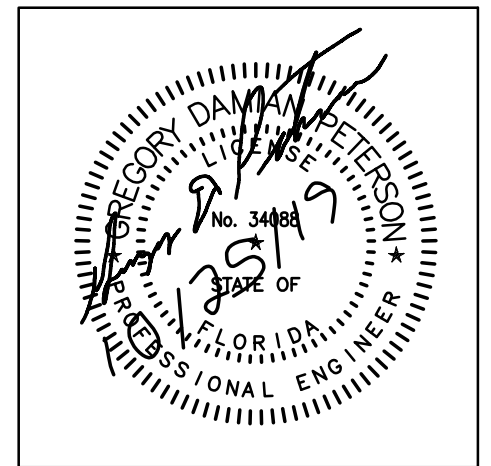
- 1 PROVIDE AND INSTALL AIR HANDLING UNITS IN MEZZANINE AS SHOWN. SEE SCHEDULE, SHEET M-601.
- 2 PROVIDE AND INSTALL NEW EXHAUST FAN 17.
- 3 REUSE EXISTING RA DUCTWORK. PROVIDE AND INSTALL NEW RA DUCTWORK TO MAKE CONNECTION TO NEW AHU.
- 4 PROVIDE AND INSTALL NEW 20"x20" OA DUCT. TIE INTO EXISTING OA LOUVER.
- 5 NEW OA DAMPER.



KEY PLAN  
NO SCALE



**PETERSON ENGINEERING INC.**  
(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

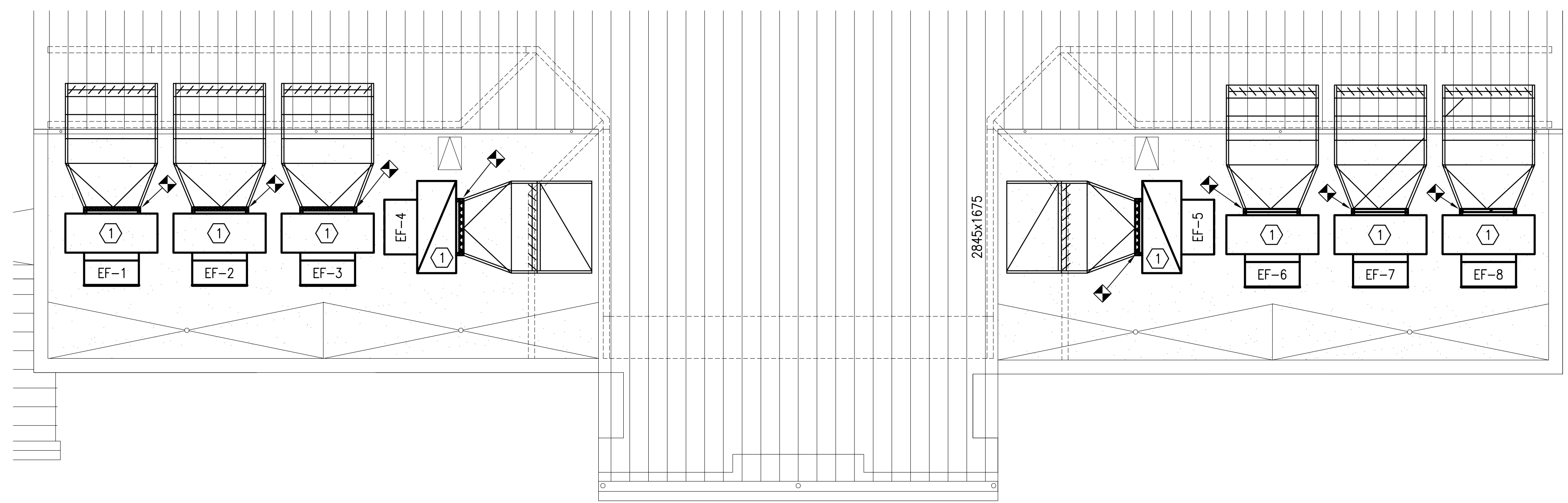
REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
MECHANICAL MEZZANINE NEW WORK PLAN

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: M-206  
SHEET NUMBER: 41 of 80



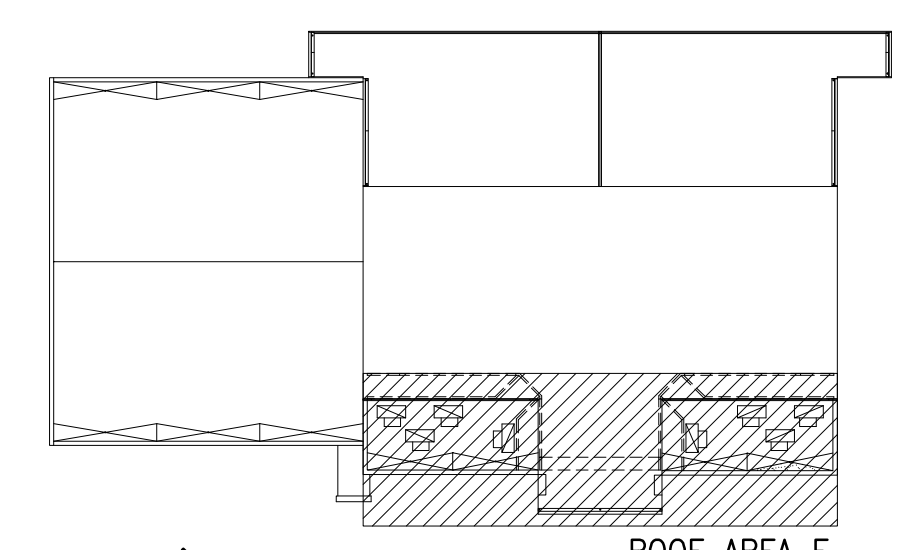
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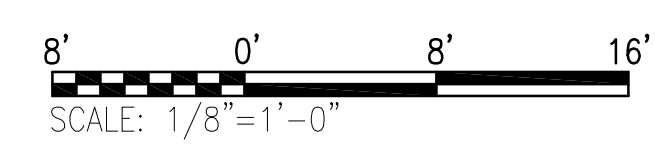
MECHANICAL NEW WORK PLAN – ROOF AREA F  
SCALE: 1/8" = 1'-0"

SHEET NOTES

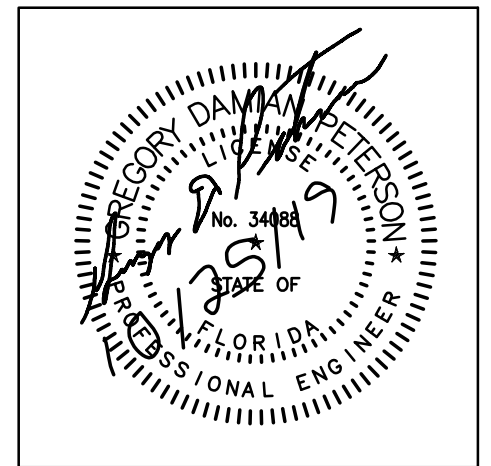
1 PROVIDE AND INSTALL NEW EXHAUST FANS ON ROOF AS SHOWN. SEE SCHEDULE, SHEET M-602. REUSE EXHAUST DUCTWORK ON ROOF.



ROOF KEY PLAN  
NO SCALE



**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
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PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



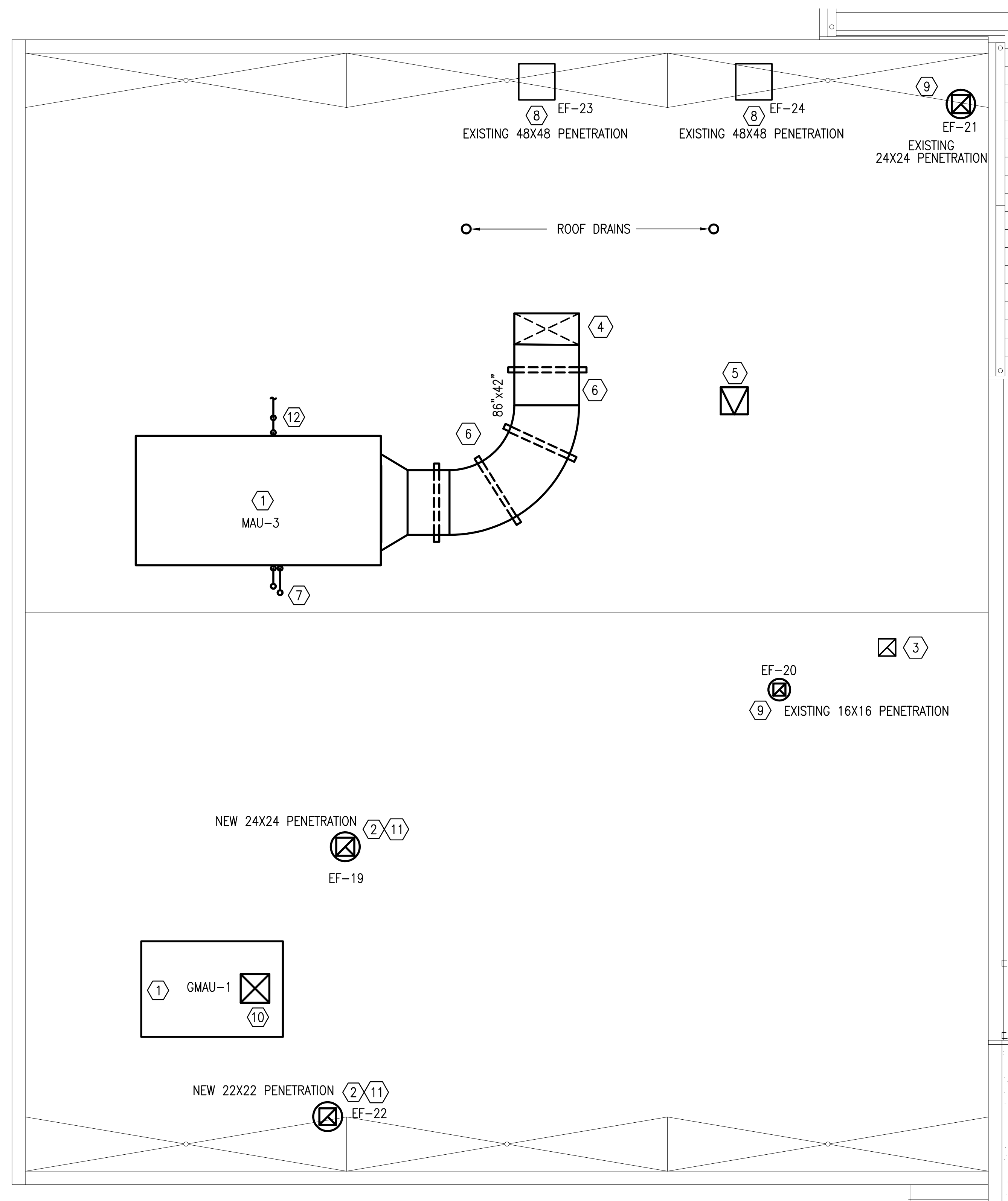
REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
MECHANICAL NEW WORK PLAN – ROOF AREA F

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: M-207  
SHEET NUMBER: 42 of 80

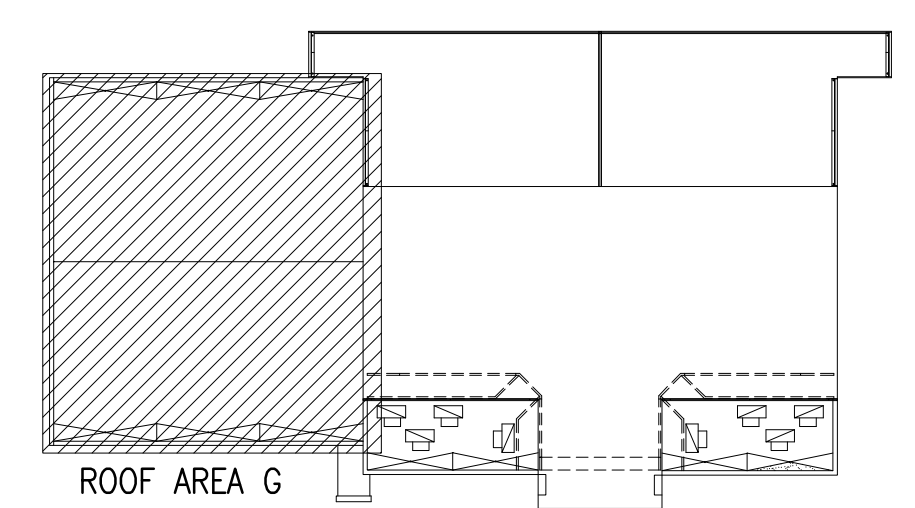
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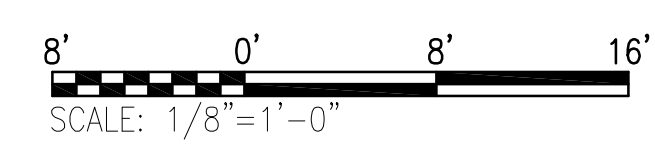
**MECHANICAL NEW WORK PLAN – ROOF AREA G**  
SCALE: 1/8" = 1'-0"

**SHEET NOTES**

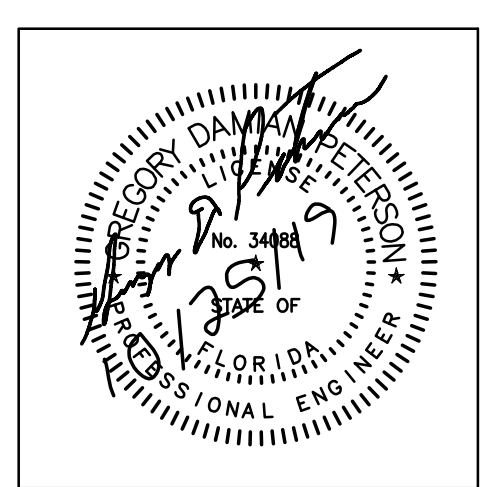
- 1 PROVIDE AND INSTALL NEW MAKE-UP AIR UNIT ON ROOF AS SHOWN. SEE SCHEDULE, SHEET M-602.
- 2 PROVIDE AND INSTALL NEW EXHAUST FAN ON ROOF. SEE SCHEDULE, SHEET M-602.
- 3 EXISTING TO REMAIN DRYER VENTS.
- 4 86"x42" SA DUCT DOWN THRU ROOF TO PAINT BOOTH PLENUM. REUSE EXISTING ROOF PENETRATION. PROVIDE NEW ROOF CURB FOR SA DUCT.
- 5 INSTALL NEW CONTRACTOR FURNISHED INSULATED, THERMALLY-BROKEN, LADDER ACCESS ROOF HATCH 36"x30" MINIMUM AND OSHA COMPLIANT SAFETY RAILING SYSTEM WITH FLORIDA PRODUCT APPROVAL. LOCATION TO BE COORDINATED WITH STRUCTURAL DRAWINGS. FLASH TO EXISTING ROOF WITH MATERIALS TO MAINTAIN ROOF MANUFACTURERS WARRANTY. REPAIR EXISTING ROOF AS REQUIRED TO MATCH EXISTING. PROVIDE NEW CRICKET ON UP-SLOPE SIDE OF ROOF HATCH. PROVIDE WALK PADS TO SERVICE AREAS OF ROOFTOP UNITS. ROOF HATCH EQUAL TO BILCO MODEL E50TB. CONTRACTOR SHALL PROVIDE FIXED LADDER AND ALL REQUIRED FALL PROTECTION FOR ACCESS OF HATCH. SEE STRUCTURAL DRAWINGS FOR NEW ROOF OPENING FRAME.
- 6 PROVIDE ROOF MOUNTED DUCT SUPPORTS 8'-0" ON CENTER. ROUTE DUCTWORK 2'-0" ABOVE FINISHED ROOF.
- 7 4" CHILLED WATER PIPING TO MAU-3 FROM BELOW. PROVIDE CURB WITH CAP FOR WEATHER PROOF PENETRATION THROUGH ROOF.
- 8 RE-USE EXISTING CURB TO ROUTE NEW EXHAUST DISCHARGE UP THRU THE ROOF. EF-23 AND EF-24 TO BE INSTALLED BELOW ROOF, ABOVE PAINT BOOTH. INSTALL NEW EXHAUST DISCHARGE ON ROOF FOR EF-23 AND EF-24.
- 9 PROVIDE AND INSTALL NEW EXHAUST FAN ON ROOF. ROUTE NEW DUCTWORK WITHIN EXISTING ROOF CURB. SEE SCHEDULE, SHEET M-602.
- 10 REUSE EXISTING ROOF PENETRATION FOR GMAU-1 SUPPLY DUCTWORK. PROVIDE NEW ROOF CURB FOR GMAU-1.
- 11 NEW ROOF PENETRATION, PROVIDE AND INSTALL NEW ROOF CURB.
- 12 ROUTE NEW 2" PVC DRAIN LINE TO ROOF DRAIN.



**ROOF KEY PLAN**  
NO SCALE



**PETERSON ENGINEERING INC.**  
(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

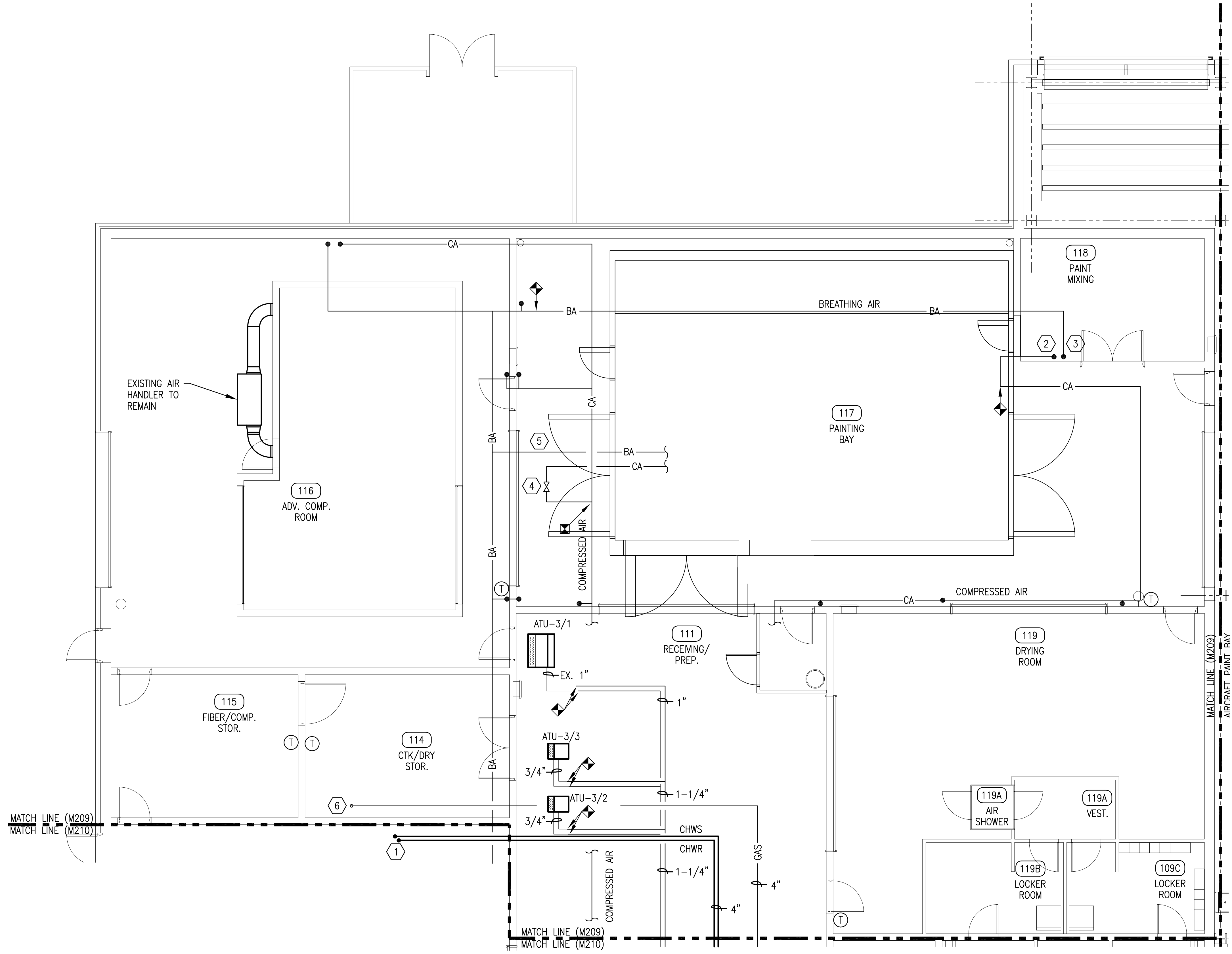
**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

MECHANICAL NEW WORK PLAN – ROOF AREA G

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

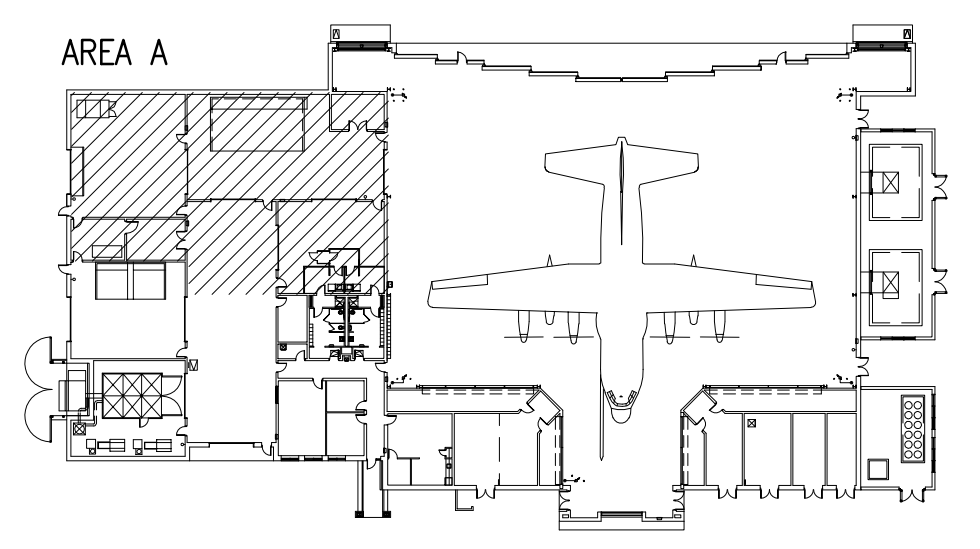
DATE: **28 OCT 2019**  
DESIGNED BY: **GDP**  
DRAWN BY: **DJM**  
BUILDING NUMBER: **90225**  
PROJECT NUMBER: **CP1028800**  
SHEET REFERENCE: **M-208**  
SHEET NUMBER: **43 of 80**

10/30/2019 1:18:43 PM, djmarshall, ANSI\_D\_(22.00\_x\_34.00\_inches)



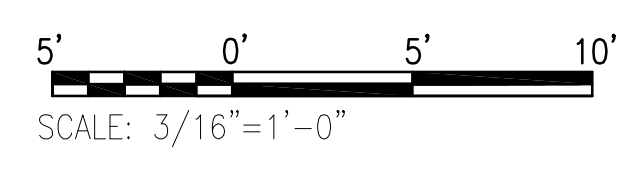
**SHEET NOTES**

- ① 4" CHWS&R UP TO MAU-3 ON ROOF.
- ② NEW 1" COMPRESSED AIR DROP, VALVE AND CAP 42" AFF. COMPRESSED AIR PIPING SHALL BE SCHEDULE 80 STEEL.
- ③ NEW 1" BREATHING AIR DROP, VALVE AND CAP 42" AFF. BREATHING AIR PIPING SHALL BE STAINLESS STEEL.
- ④ NEW COMPRESSED AIR LINE TO PAINT BOOTH. TIE INTO COMPRESSED AIR DROPS IN PAINT BOOTH. PROVIDE AND INSTALL NEW AUTOMATIC VALVE IN LINE TO AUTOMATICALLY SHUTDOWN COMPRESSED AIR EQUIPMENT. COMPRESSED AIR VALVE TO SHUT DURING EMERGENCY SHUTDOWN OR FIRE CONDITION.
- ⑤ NEW BREATHING AIR LINE TO PAINT BOOTH. TIE INTO BREATHING AIR DROPS IN PAINT BOOTH.
- ⑥ NEW 4" NATURAL GAS UP TO MAU-3 ON ROOF.

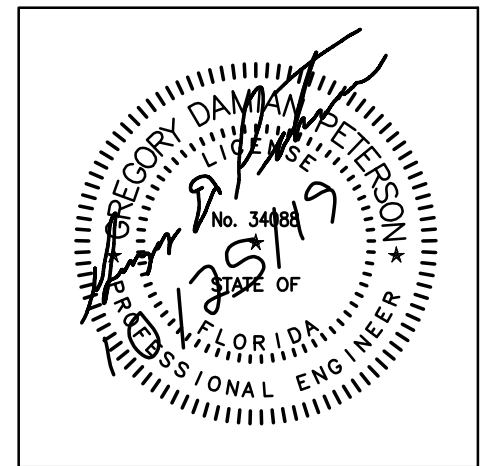


**KEY PLAN**  
NO SCALE

**MECHANICAL NEW WORK PIPING PLAN - AREA A**  
SCALE: 3/16" = 1'-0"



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REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225**

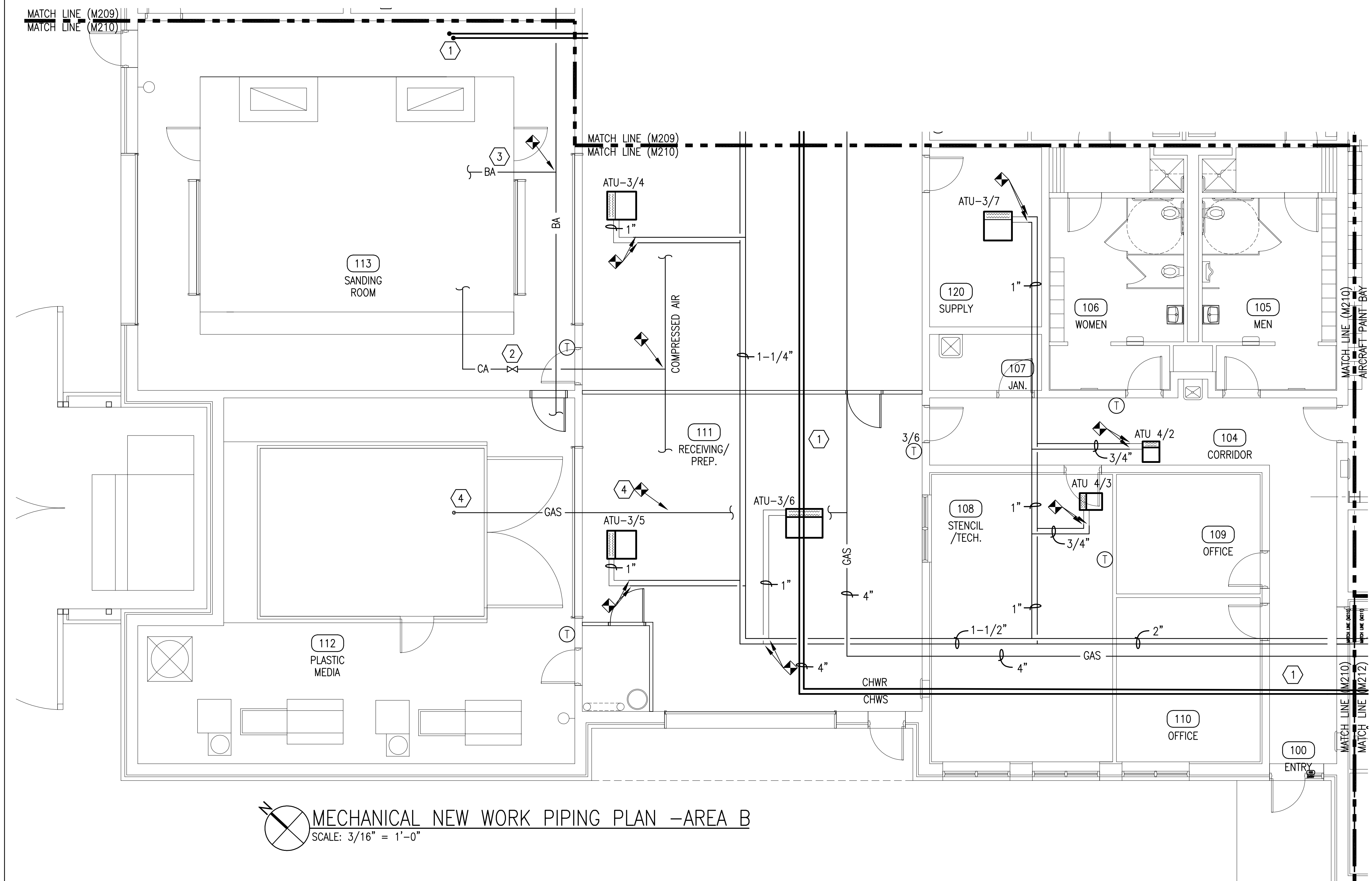
MECHANICAL NEW WORK PIPING PLAN - AREA A

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: M-209  
SHEET NUMBER: 44 of 80



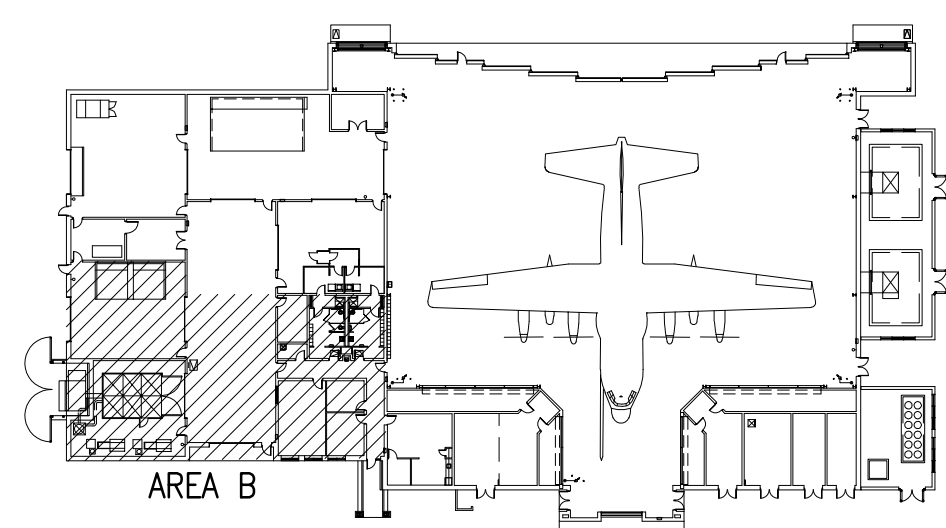
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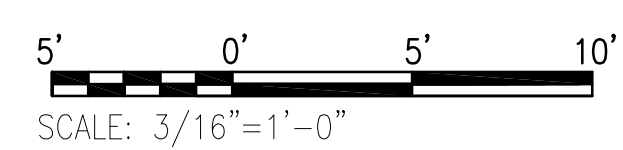
MECHANICAL NEW WORK PIPING PLAN - AREA B  
SCALE: 3/16" = 1'-0"

SHEET NOTES

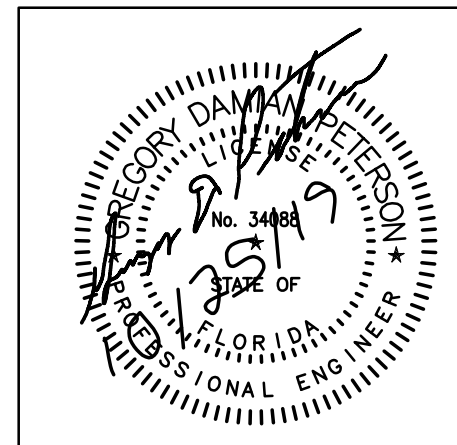
- ① NEW CHWS&R TO MAU-3 ON ROOF.
- ② NEW COMPRESSED AIR LINE TO SANDING BOOTH. TIE INTO COMPRESSED AIR DROPS IN SANDING BOOTH. PROVIDE AND INSTALL NEW AUTOMATIC VALVE IN LINE TO AUTOMATICALLY SHUTDOWN COMPRESSED AIR EQUIPMENT. COMPRESSED AIR VALVE TO SHUT DURING EMERGENCY SHUTDOWN OR FIRE CONDITION.
- ③ NEW BREATHING AIR LINE TO SANDING BOOTH. TIE INTO BREATHING AIR DROPS IN SANDING BOOTH.
- ④ REUSE NATURAL GAS PIPING TO GMAU-1. CONTRACTOR TO MAKE FINAL GAS CONNECTION TO NEW GMAU-1 ON ROOF. CONTRACTOR TO FIELD VERIFY EXISTING GAS PIPING SIZE TO TIE INTO NEW 4" GAS LINE FEEDING



KEY PLAN  
NO SCALE

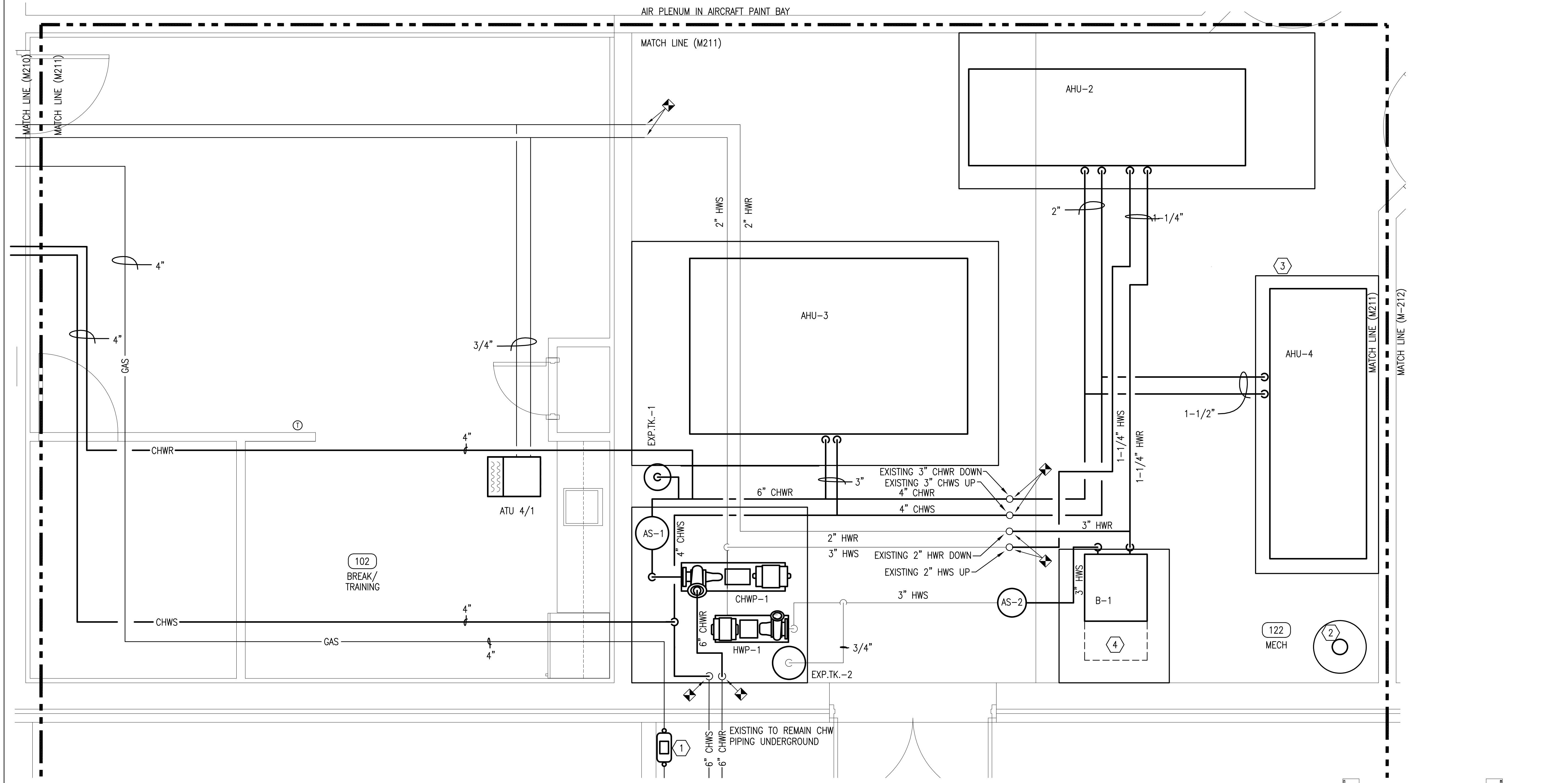


**PETERSON ENGINEERING INC.**  
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PEI# 18116



REV #	DATE	DESCRIPTION
REPAIR CORROSION CONTROL FACILITY BUILDING 90225		
MECHANICAL NEW WORK PIPING PLAN - AREA B		
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA		
DATE:	28 OCT 2019	
DESIGNED BY:	GDP	
DRAWN BY:	DJM	
BUILDING NUMBER:	90225	
PROJECT NUMBER:	CP1028800	
SHEET REFERENCE:	M-210	
SHEET NUMBER:	45 of 80	

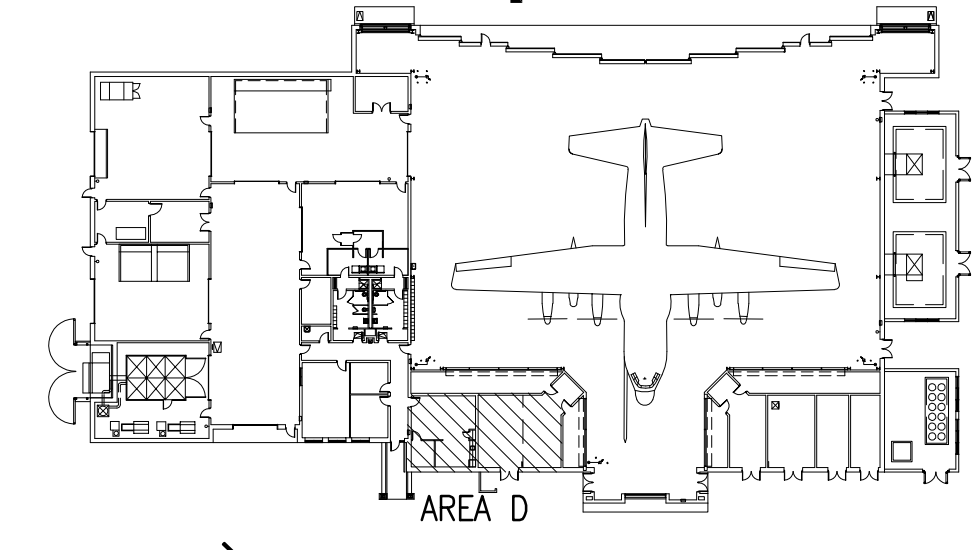
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**MECHANICAL NEW WORK PIPING PLAN - AREA D**  
 SCALE: 1/2" = 1'-0"

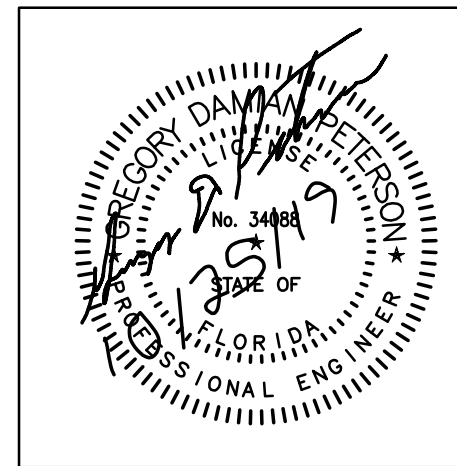
**SHEET NOTES**

- 1 THE EXISTING GAS METER SHALL BE REPLACED. THE NEW METER SHALL BE SIZED FOR 5400 MBTU TOTAL LOAD. THE METER SHALL BE PROVIDED WITH PRESSURE REGULATOR SIZED FOR REQUIREMENTS OF EQUIPMENT BEING PROVIDED.
- 2 PROVIDE NEW GAS REGULATOR ON WATER HEATER TO ALLOW THE EXISTING BURNER TO REMAIN IN OPERATION WITH THE NEW BUILDING GAS PRESSURE.
- 3 EXTEND PAD AS NEEDED TO MATCH NEW AHU.
- 4 THE EXISTING STACK SHALL BE REMOVED AND A NEW STACK INSTALLED IN THE EXISTING LOCATION. THE STACK SHALL BE SIZED BASED ON WRITTEN INSTRUCTION MANUAL PROVIDED BY BOILER SUPPLIER.



**KEY PLAN**  
NO SCALE

**PETERSON ENGINEERING INC.**  
 (PROF. ENG. #: 3600)  
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 (850) 434-0513  
 PEI# 18116



REV #	DATE	DESCRIPTION

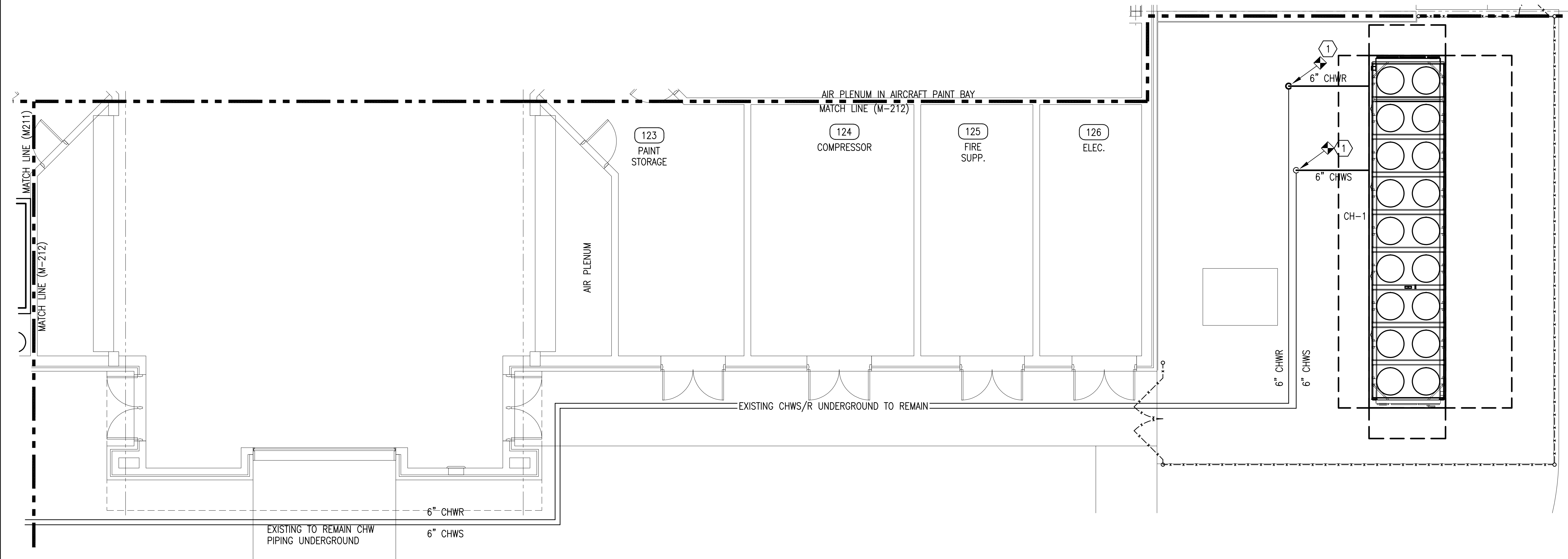
**REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225**

MECHANICAL NEW WORK PIPING PLAN - AREA D

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

DATE: **28 OCT 2019**  
 DESIGNED BY: **GDP**  
 DRAWN BY: **DJM**  
 BUILDING NUMBER: **90225**  
 PROJECT NUMBER: **CP1028800**  
 SHEET REFERENCE: **M-211**  
 SHEET NUMBER: **46 of 80**

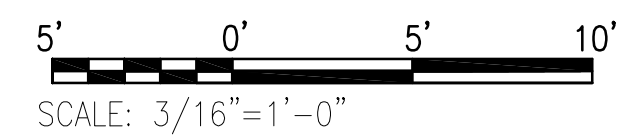
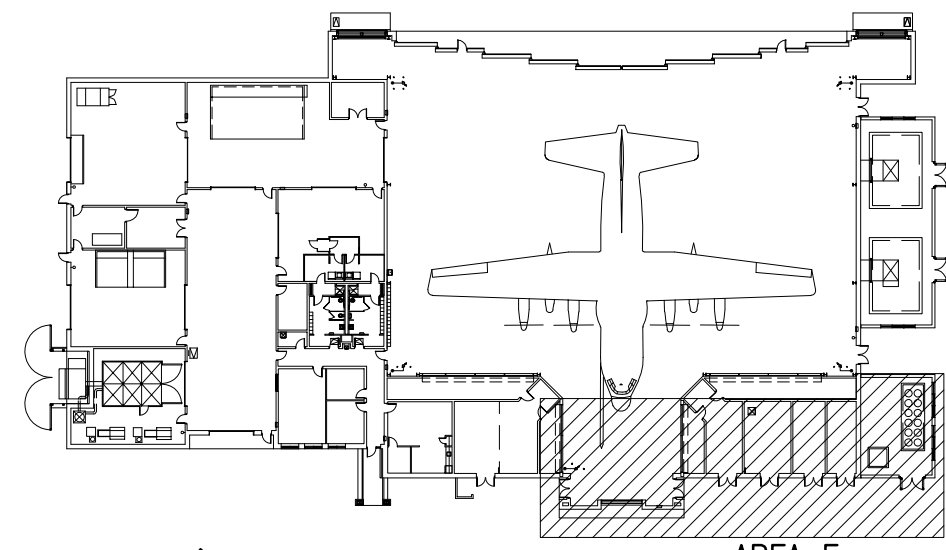
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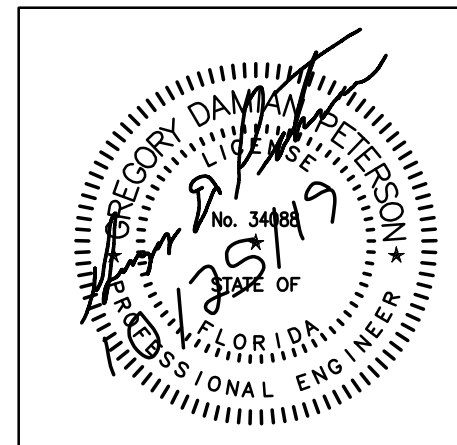
**MECHANICAL NEW WORK PIPING PLAN – AREA E**  
 SCALE: 3/16" = 1'-0"

**SHEET NOTES**

- 1 PROVIDE AND INSTALL NEW CHILLED WATER PIPING AS INDICATED AND CONNECT TO EXISTING PIPING. CHILLED WATER PIPING UNDERGROUND SHALL NOT BE REPLACED.



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DATE:	28 OCT 2019
DESIGNED BY:	GDP
DRAWN BY:	DJM
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	M-212
SHEET NUMBER:	47 of 80

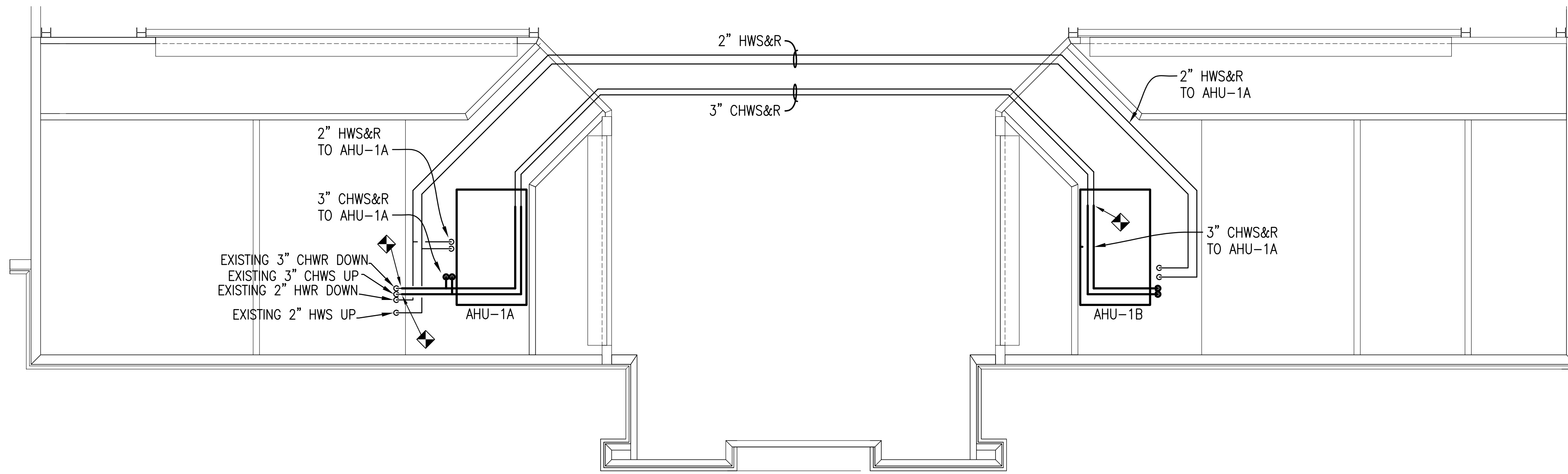
**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

**REPAIR CORROSION CONTROL FACILITY BUILDING 90225**  
 MECHANICAL NEW WORK PIPING PLAN – AREA E

REV #	DATE	DESCRIPTION



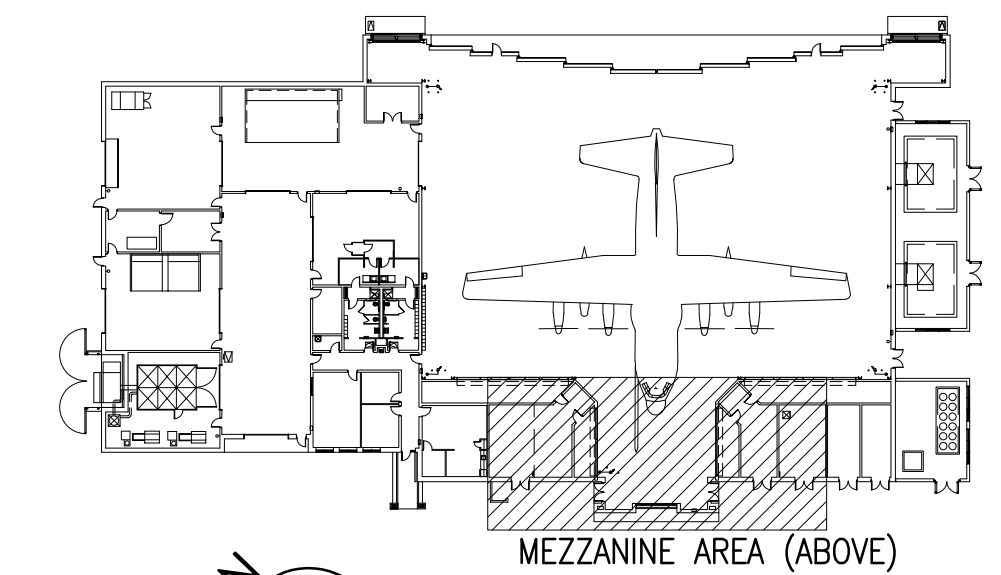
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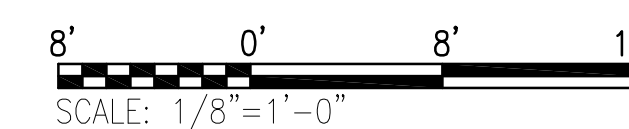
 MECHANICAL MEZZANINE NEW WORK PIPING PLAN  
SCALE: 1/8" = 1'-0"

SHEET NOTES

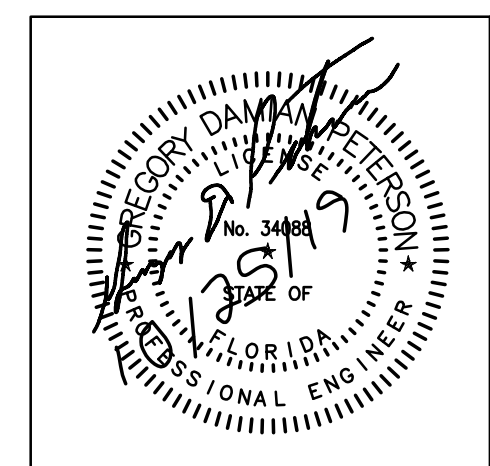
1 PROVIDE AND INSTALL NEW CHILLED WATER AND HOT WATER PIPING AS INDICATED.



 KEY PLAN  
NO SCALE



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(PROF. ENG. # 3600)  
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PEI# 18116



REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
MECHANICAL MEZZANINE NEW WORK PIPING PLAN

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: M-213  
SHEET NUMBER: 48 of 80

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PAINT BOOTH GENERAL NOTES

GENERAL

THIS SPECIFICATION COVERS THE REQUIREMENTS FOR THE INSTALLATION OF AN ENCLOSED PAINT BOOTH INSIDE THE CORROSION CONTROL FACILITY THAT MUST BE RETROFITTED TO THE EXISTING COMPONENTS AND BUILDING DESIGN. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND SPECIALIZED EQUIPMENT AS NECESSARY TO PERFORM THE WORK DESCRIBED HEREIN.

INSTALLATION

THE CONTRACTOR SHALL SUPPLY ALL PARTS, LABOR AND EQUIPMENT NECESSARY TO PERMANENTLY INSTALL A NEW PRESSURIZED, INDUSTRIAL DRY FILTER CROSS FLOW PAINT SPRAY BOOTH THAT IS FULLY OPERATIONAL IN ACCORDANCE WITH THE BELOW SPECIFICATIONS AND CONTRACT DRAWINGS. INSTALLATION SHALL INCLUDE SITE PREPARATION, CONNECTION TO ELECTRICAL POWER, AND OTHER SUPPORT ACTIVITIES TO ENSURE FULL OPERATIONAL CAPABILITY OF THE SYSTEM.

FILTRATION REQUIREMENTS

THE PAINT BOOTH MUST HAVE FILTRATION IN COMPLIANCE WITH OSHA, NFPA, ANSI, FEDERAL, STATE AND LOCAL REGULATIONS. THE FILTRATION SYSTEM SHALL BE A 3-STAGE FILTER SYSTEM DESIGNED FOR CHROMATE REMOVAL. THE FILTER SYSTEM SHALL EXCEED METHOD 319 EPA STANDARD FOR AEROSPACE MANUFACTURING AND REWORK. THE SYSTEM SHALL CONSIST OF: FIRST STAGE: ROLL MEDIA TYPE FILTER, SECOND STAGE: PANEL TYPE FILTER, AND THIRD STAGE: BAG TYPE FILTER. CLEAN AIR SHALL BE INTRODUCED INTO THE BOOTH THROUGH A FILTERED WALL AT THE FRONT OF THE ENCLOSURE, AND SHOULD BE EXHAUSTED THROUGH A PLENUM AT THE REAR OF THE BOOTH. AIR SHALL BE PULLED HORIZONTALLY FROM THE FRONT OF THE BOOTH THROUGH THE WORKING DEPTH AT AN AVERAGE VELOCITY OF APPROXIMATELY 100-125 FEET PER MINUTE. THE INTAKE AND EXHAUST FILTER LAYOUT SHALL BE DESIGNED FOR EVEN AIR VELOCITY THROUGHOUT THE WORKING AREA OF THE BOOTH AND THE FILTER WALL SHALL BE DESIGNED WITH HIGH EFFICIENCY INTAKE FILTERS TO REMOVE DUST AND DIRT BEFORE IT ENTERS THE PAINT BOOTH. MANOMETERS MUST BE INSTALLED IN ORDER TO DETERMINE WHEN THE FILTERS NEED TO BE CHANGED. EXHAUST FILTER WALL SHALL BE PROVIDED WITH A MEANS TO ACCESS THE INSIDE OF THE EXHAUST PLENUM. PROVIDE ACCESS TO EXHAUST PLENUM THROUGH EXHAUST FILTER WALL.

MODES OF OPERATION

**PAINT MODE:** PAINT MODE SHALL PROVIDE FULL AIR VELOCITY IN THE BOOTH TO REMOVE OVERSPRAY. THE AIRFLOW DURING PAINT MODE SHALL BE 100% EXHAUST. THE TEMPERATURE DURING PAINT MODE SHALL BE HELD BETWEEN 60-90 DEGREES FAHRENHEIT. THE HUMIDITY DURING PAINT MODE SHALL BE HELD BETWEEN 30-80% RELATIVE HUMIDITY.  
**CURE MODE:** THE TOTAL AIRFLOW DURING CURE MODE SHALL BE DESIGNED TO 30% OF THE THE OF TOTAL DESIGNED AIRFLOW. CURE MODE SHALL BE USED TO FORCE-DRY COATINGS BY PROVIDING AN ELEVATED TEMPERATURE OF 110 DEGREES FAHRENHEIT FOR A SET PERIOD OF TIME. HUMIDITY CONTROL SHALL NOT BE PROVIDED DURING CURE MODE.  
**PURGE MODE:** IF THERE IS UPSET OR ALARM CONDITION, SUCH AS A PID ALARM, THE AIR SOLENOID VALVES CLOSE TO STOP COMPRESSED AIR GOING TO THE SPRAY OPERATION AND FANS CONTINUE TO RUN TO REDUCE VOC LEVELS. THE SYSTEM SHALL REMAIN IN PURGE MODE UNTIL AN OPERATOR CHECKS THE CONDITIONS AND ALLOWS A RESET.

AIRFLOW REQUIREMENTS

THE PAINT BOOTH SHALL HAVE ADEQUATE AIRFLOW AND COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), FEDERAL, STATE AND LOCAL REGULATIONS. THE SYSTEM SHALL CONSIST OF VARIABLE FREQUENCY DRIVES THAT CONTROL THE EXHAUST FAN MOTORS. THE SYSTEM SHALL MONITOR THE STATIC PRESSURE AND SHALL ADJUST THE EXHAUST FANS RPM BASED ON FILTER LOADING.

ELECTRONIC CONTROL PANEL

THE CONTRACTOR SHALL INSTALL AN ELECTRONIC CONTROL PANEL ON THE EXTERIOR OF THE BOOTH. THERE SHALL BE A PRE-WIRED INDEPENDENT ELECTRICAL CONTROL PANEL (480V, 3PH, 3 WIRE) FEATURING SINGLE POINT POWER CONNECTION FOR QUICK AND EASY WIRING TO THE LINE SIDE OF THE MAIN DISCONNECTING DEVICE WITH NEMA-12 RATED ENCLOSURE. THIS SHALL INCLUDE: MAIN BREAKER DISCONNECT, MOTOR STARTER(S), CIRCUIT PROTECTION, LIGHTING CONTACTOR, LIGHTING FUSE PROTECTION, TERMINAL STRIPS FOR FIELD WIRING, SYSTEM OPERATING LIGHTS, AND UL INDUSTRIAL LISTING. THE CONTROLS MUST HAVE INTEGRATED TIMERS, AND IN BOOTH AND OUTDOOR TEMPERATURE GAUGES. THE CONTROLS MUST BE PROGRAMMABLE/CUSTOMIZABLE AND HAVE ALL INDUSTRY STANDARD FUNCTIONALITY. THE CONTROL PANEL SHALL CONTROL THE HEATING/COOLING/AIRFLOW OF THE PAINT BOOTH MAKE-UP AIR UNIT. THERE SHALL BE VISUAL INDICATORS FOR ALL OPERATING FUNCTIONS.

COMPRESSED AND BREATHING AIR

THE CONTRACTOR SHALL INTEGRATE THE BUILDINGS EXISTING COMPRESSED AIR SYSTEM AND BREATHING AIR SYSTEM INTO THE NEW BOOTH. THE COMPRESSED AIR LINES AND BREATHING AIR LINES SHALL DROP INTO THE BOOTH AT SIX DIFFERENT LOCATIONS AS SPECIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL INSTALL CONNECTION FITTINGS ON BOTH THE COMPRESSED AIR AND BREATHING AIR LINES. THE CONNECTIONS FOR THE COMPRESSED AIR AND THE BREATHING AIR SHALL BE OF DIFFERENT STYLES.

FIRE SUPPRESSION SYSTEM

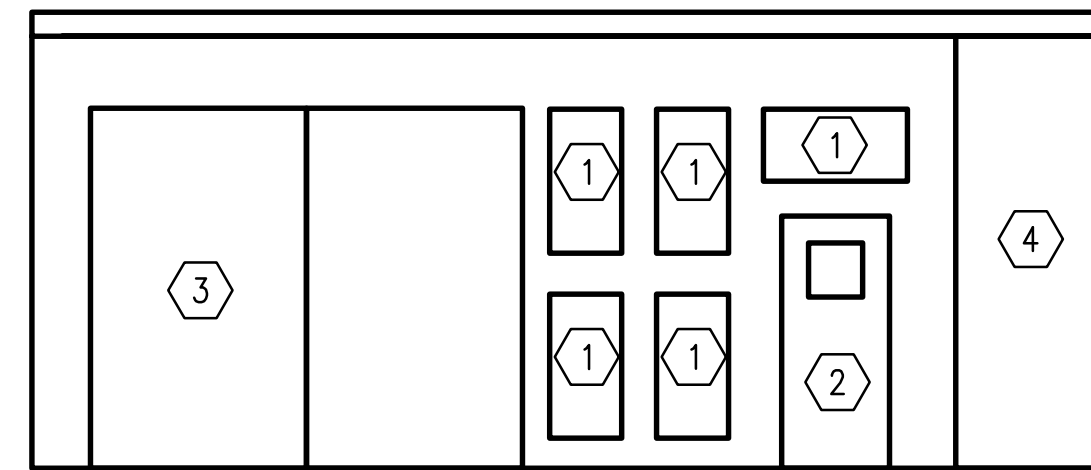
THE CONTRACTOR SHALL INTEGRATE THE BUILDINGS EXISTING FIRE SUPPRESSION SYSTEM INTO THE NEW BOOTH IAW ALL LOCAL, STATE, AND FEDERAL LAWS.

COMMISSIONING

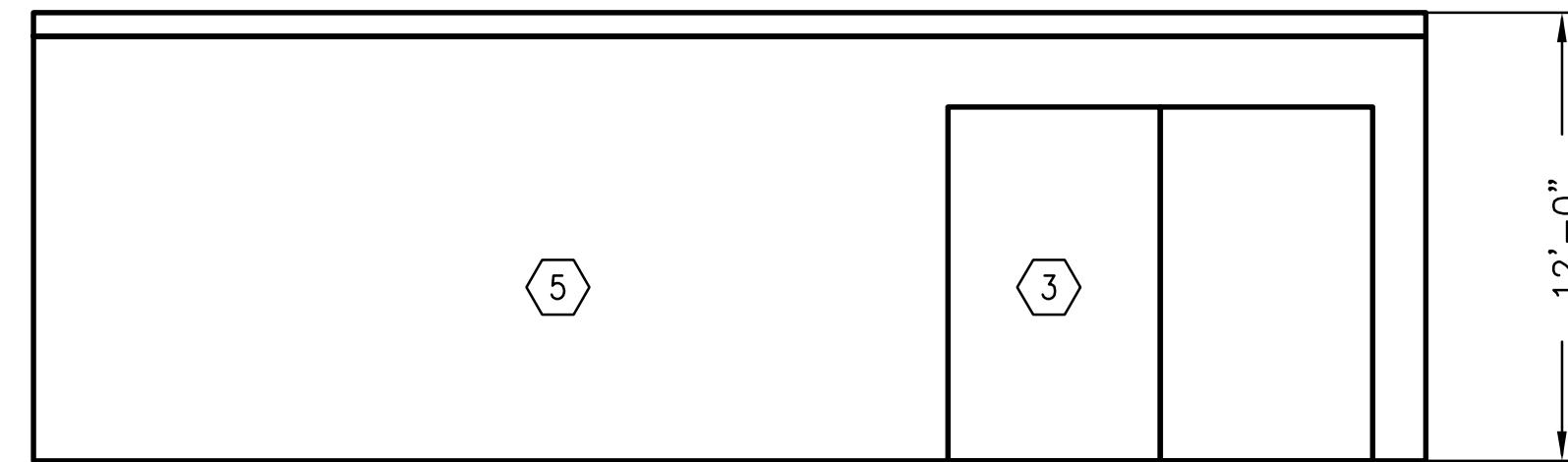
A WALK-THROUGH SHALL TAKE PLACE BEFORE COMPLETION OF THE PROJECT, WITH THE CONTRACTOR TO VERIFY THAT THE ENCLOSED PAINT BOOTH IS FULLY FUNCTIONAL. THE CONTRACTOR SHALL DEMONSTRATE FUNCTIONALITY AND COMPLIANCE AND THE CORROSION CONTROL FACILITY PERSONNEL SHALL OBSERVE. THE CONTRACTOR SHALL PROVIDE DATA ON PAINT BOOTH AIRFLOW PERFORMANCE (LINEAR FEET PER MINUTE AND AIR EXCHANGES), TEMPERATURE PERFORMANCE (CURING TEMPERATURE AND CURE CYCLE TIME), LIGHTING PERFORMANCE AND FILTER PERFORMANCE TO THE CCF PERSONNEL PRIOR TO ACCEPTANCE. THIS COMMISSIONING SHALL OCCUR PRIOR TO ACCEPTANCE. ALL DEFICIENCIES SHALL BE RECTIFIED BY THE CONTRACTOR AT NO EXTRA CHARGE TO THE GOVERNMENT. FULL SYSTEM START UP, AND OPERATIONAL TRAINING ON PROPER USE OF THE COMPONENTS, AS WELL AS, SERVICING/ROUTINE MAINTENANCE TRAINING SHALL BE PROVIDED FOR SHOP PERSONNEL.

SUBMITTAL

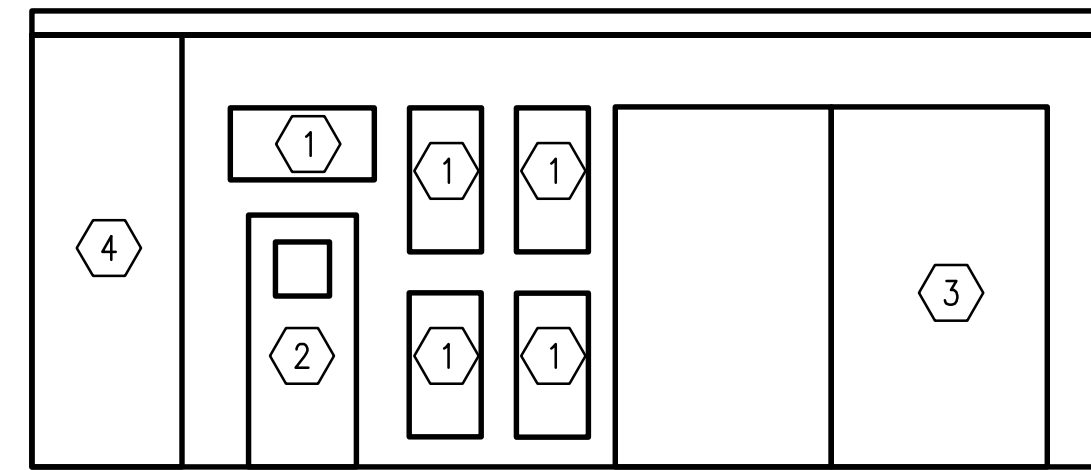
THE CONTRACTOR SHALL PROVIDE SCALED SHOP DRAWINGS WITH DETAILED CUT SHEETS OF ALL COMPONENTS FOR GOVERNMENT APPROVAL BEFORE EQUIPMENT IS ORDERED.



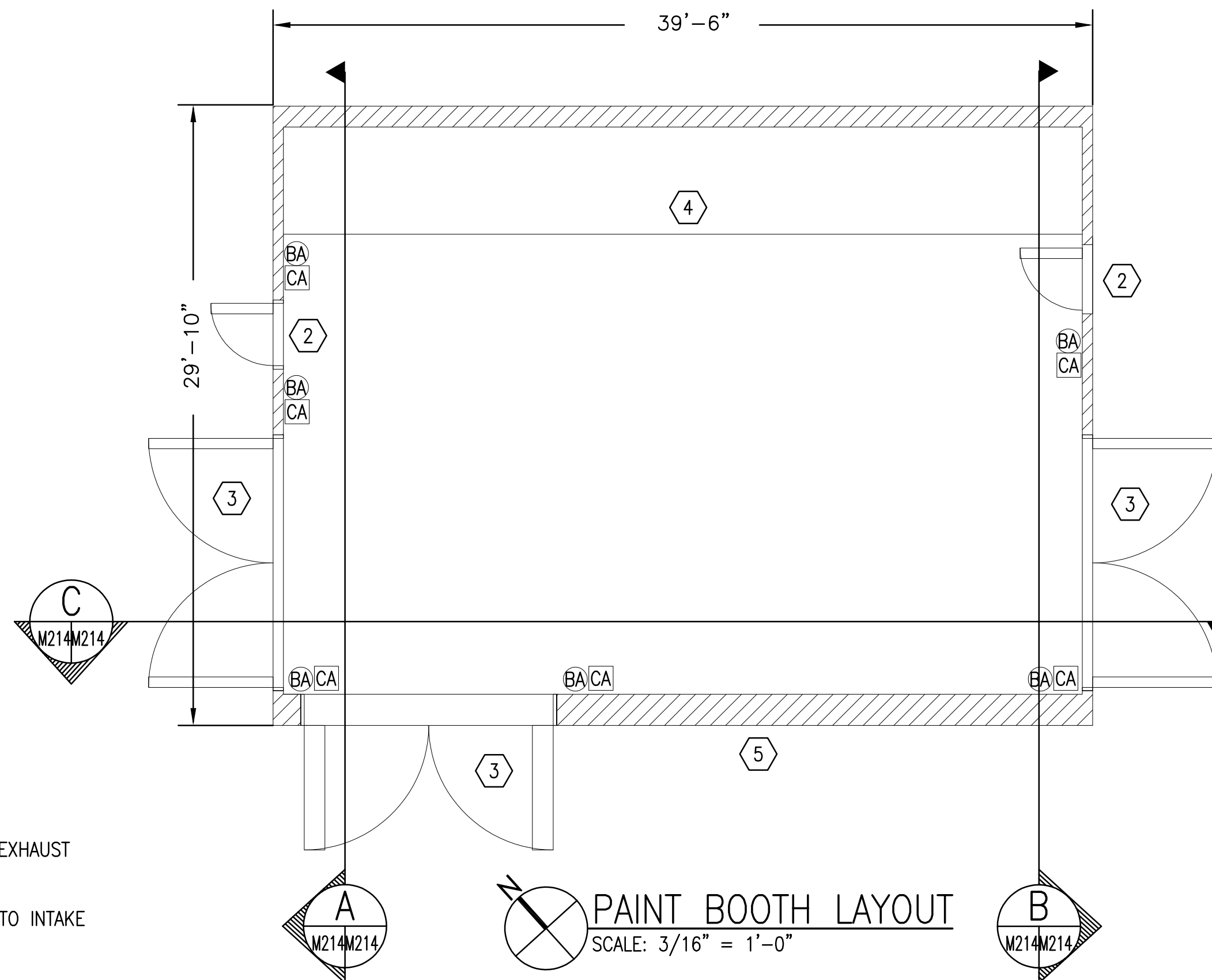
SECTION A  
SCALE: 3/16"=1'-0"  
211/211



SECTION C  
SCALE: 3/16"=1'-0"  
211/211



SECTION B  
SCALE: 3/16"=1'-0"  
211/211



PAINT BOOTH LAYOUT  
SCALE: 3/16" = 1'-0"

SHEET NOTES

- 1 4'x2' LED LIGHTING
- 2 MAN DOOR INTO PAINT MIXING ROOM
- 3 12'-0" WIDE BY 10'-0" TALL BI-FOLD DOOR
- 4 EXHAUST PLENUM FILTER WALL. PROVIDE MEANS OF ACCESS TO EXHAUST PLENUM WITHIN THE EXHAUST FILTER WALL.
- 5 INTAKE FILTER WALL, DUCTWORK FROM MAU-3 SHALL BE TIED INTO INTAKE FILTER WALL BY USE OF SUPPLY PLENUM.
- CA COMPRESSED AIR (EQUIPMENT)
- BA BREATHING AIR

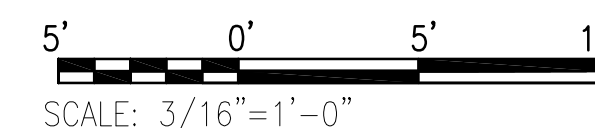
LIGHTING NOTE:  
 LIGHTING LOCATIONS ARE SHOWN ON THE WALLS OF THE PAINT BOOTH. LIGHTING IS REQUIRED IN THE CEILING OF THE PAINT BOOTH, BUT IS NOT SHOWN. LIGHTING LEVELS IN THE PAINT BOOTH SHALL BE 100 MAINTAINED HORIZONTAL FOOTCANDLES AT WORKPLANE HEIGHT (30" ABOVE FLOOR). VERTICAL LIGHTING LEVELS IN THE PAINT BOOTH ARE REQUIRED TO BE 70 MAINTAINED VERTICAL FOOTCANDLES.

PAINT BOOTH SCHEDULE

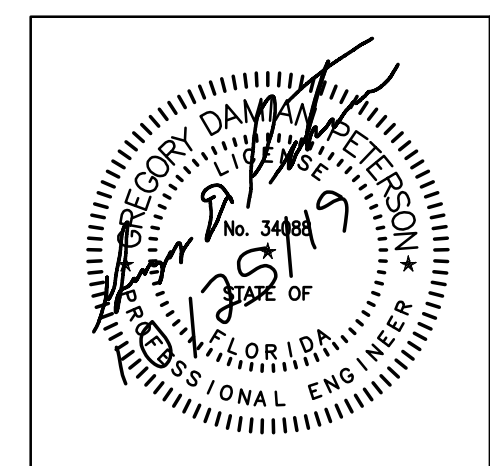
EQUIPMENT NAME	MAX OUTSIDE DIMENSIONS			DOOR OPENINGS		FILTRATION	BASIS OF DESIGN
	WIDTH	LENGTH	HEIGHT	BI-FOLD DOORS (QTY x W x H)	MAN DOORS (QTY x W x H)	3-STAGE FILTER SYSTEM, DESIGNED FOR CHROMATE REMOVAL	PRESSURIZED CROSS DRAFT CUSTOM BOOTH
PAINT BOOTH	29'-10"	39'-6"	12'-0"	3 x 12FT x 12FT	2 x 36IN x 80IN		

NOTES

- SEE GENERAL NOTES ON THIS SHEET.



**PETERSON ENGINEERING INC.**  
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 PENSACOLA, FLORIDA 32502  
 (850) 434-0513  
 PEI# 18116



REV #	DATE	DESCRIPTION
<b>REPAIR CORROSION CONTROL FACILITY                  BUILDING 90225</b>		
PAINT BOOTH LAYOUT		
<b>AIR FORCE SPECIAL                  OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA		
DATE: 28 OCT 2019		
DESIGNED BY: GDP		
DRAWN BY: DJM		
BUILDING NUMBER: 90225		
PROJECT NUMBER: CP1028800		
SHEET REFERENCE: M-214		
SHEET NUMBER: 49 of 80		

## SANDING BOOTH GENERAL NOTES

**GENERAL**

THIS SPECIFICATION COVERS THE REQUIREMENTS FOR THE INSTALLATION OF A ENCLOSED CARTRIDGE STYLE DUST COLLECTION SYSTEM INSIDE THE CCF. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND SPECIALIZED EQUIPMENT AS NECESSARY TO PERFORM THE WORK DESCRIBED HEREIN.

**INSTALLATION**

THE CONTRACTOR SHALL SUPPLY ALL PARTS, LABOR AND EQUIPMENT NECESSARY TO PERMANENTLY INSTALL A NEW CARTRIDGE STYLE DUST COLLECTION SYSTEM THAT IS FULLY OPERATIONAL IN ACCORDANCE WITH THE BELOW SPECIFICATIONS AND CONTRACT DRAWINGS. INSTALLATION SHALL INCLUDE SITE PREPARATION, CONNECTION TO ELECTRICAL POWER, AND OTHER SUPPORT ACTIVITIES TO ENSURE FULL OPERATIONAL CAPABILITY OF THE SYSTEM.

**DUST COLLECTION SYSTEM OVERVIEW**

THE SYSTEM SHALL BE A MINIMUM HEIGHT TO ACCOMMODATE 2 ROLL-UP DOORS THAT ARE A MINIMUM OF 12'H X 10'W. IT SHALL FILL THE AVAILABLE SPACE WITH EXCEPTION OF A 5 FOOT WIDE CORRIDOR ACROSS THE FRONT SIDE OF THE BOOTH. THE EXTERIOR DIMENSIONS SHALL BE CONSTRAINED BY THE AVAILABLE SPACE, AND THE 5 FOOT CORRIDOR. THE NEW SANDING BOOTH SHALL BE RETROFITTED WITH ALL EXISTING ELECTRICAL COMPONENTS, COMPRESSED AIR COMPONENTS, BREATHING AIR COMPONENTS, AND VENTILATION COMPONENTS.

**MODULE REQUIREMENTS**

THE NEW CARTRIDGE STYLE DUST COLLECTION SYSTEM SHALL HAVE 2-MODULE UNITS WITH 15 HP FANS TO DELIVER 26,000 CFM AT 3.5" TSP, 480 VOLT, 3-PHASE .FILTER SYSTEM SHALL BE 36- NANOFIBER CARTRIDGE FILTERS RATED AT 99.9% EFFICIENT ON .5 MICRON PARTICLES. FILTER ACCESS SHALL BE THRU FRONT DOOR PANELS AT FLOOR LEVEL WITH DIRECTIONAL LOUVERS. FILTERS SHALL BE LOCKED IN PLACE WITH A MECHANICAL DEVICE FOR EASY REMOVAL. DUST DRAWERS SHALL BE LOCATED UNDER FRONT DOOR PANELS.

**FILTRATION REQUIREMENTS**

THE NEW CARTRIDGE STYLE DUST COLLECTION SYSTEM SHALL HAVE FILTRATION IN COMPLIANCE WITH OSHA, NFPA, ANSI, FEDERAL, STATE AND LOCAL REGULATIONS. THE SYSTEM SHOULD HAVE 15 EA. HIGH EFFICIENCY DURABLE CARTRIDGE FILTERS WITH A 99.8% RATING, AT 5 MICRONS. THE CARTRIDGE FILTERS SHOULD BE HELD IN PLACE WITH A CRANK LEVER OPERATING MECHANISM. THIS UNIQUE PRODUCT, IN ADDITION TO PROVIDING EASY AND FAST CARTRIDGE REPLACEMENT, ALSO PROVIDES A POSITIVE SEAL TO MINIMIZE POSSIBLE LEAKAGE. THE SYSTEM SHOULD ALSO HAVE HEPA TYPE FINAL FILTERS. THE SYSTEM SHOULD HAVE AIR PULSE VALVES INCORPORATED WITH A VENTURI, WHICH INCREASES THE CLEANING EFFICIENCY OF THE CARTRIDGE FILTERS AND PROVIDES ADDED FILTER SERVICE LIFE. MANOMETER(S) SHALL BE INSTALLED IN ORDER TO DETERMINE WHEN THE FILTERS NEED TO BE CHANGED.

**AIRFLOW REQUIREMENTS**

THE SANDING BOOTH SHALL HAVE ADEQUATE AIRFLOW AND COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), FEDERAL, STATE AND LOCAL REGULATIONS. THE SYSTEM SHOULD OPERATE SO THAT AIR IS INTRODUCED INTO THE FRONT OF THE BOOTH AT A FILTERED WALL IN THE FRONT OF THE ENCLOSURE AND IS EXHAUSTED THROUGH COLLECTORS AT THE REAR OF THE SYSTEM. AIR SHOULD BE PULLED HORIZONTALLY FROM THE FRONT OF THE SYSTEM THROUGH THE WORKING DEPTH. THE SYSTEM SHOULD BE DESIGNED WITH THE MAXIMIZED FILTER QUANTITY TO ASSURE EFFICIENT PARTICULATE FILTRATION FROM THE CARTRIDGE FILTERS.

**ELECTRONIC CONTROL PANEL**

THE CONTRACTOR SHALL INSTALL AN ELECTRONIC CONTROL PANEL ON THE EXTERIOR OF THE SYSTEM. THERE SHOULD BE 1 EA. PRE-WIRED INDEPENDENT ELECTRICAL CONTROL PANEL (480V, 3PH, 3 WIRE) FEATURING SINGLE POINT POWER CONNECTION FOR QUICK AND EASY WIRING TO THE LINE SIDE OF THE MAIN DISCONNECTING DEVICE WITH NEMA-12 RATED ENCLOSURE. THIS SHOULD INCLUDE: MOTOR STARTER(S), CIRCUIT PROTECTION, TRANSFORMER, ADJUSTABLE SEQUENTIAL CONTROL BOARD FOR POWDER CLEANING OF CARTRIDGE FILTERS, PHOTOHELIC GAUGE, START OR STOP BUTTONS, LIGHT SWITCH, DOOR MOUNTED DISCONNECT SWITCH, AND PILOT LIGHTS. THERE SHALL BE VISUAL INDICATORS FOR ALL OPERATING FUNCTIONS RUNNING AND PULSATIONS AS WELL AS IDENTIFYING PLUGGED CARTRIDGE FILTERS. EACH CONTROL PANEL SHOULD BE DESIGNED FOR A SINGLE POINT WIRING FEEDER CONNECTION WITH BREAKER.

**COMPRESSED AND BREATHING AIR**

THE CONTRACTOR SHALL INTEGRATE THE BUILDINGS EXISTING COMPRESSED AIR SYSTEM AND BREATHING AIR SYSTEM INTO THE NEW BOOTH. THE COMPRESSED AIR LINES AND BREATHING AIR LINES SHALL DROP INTO THE BOOTH AT SIX DIFFERENT LOCATIONS AS SPECIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL INSTALL CONNECTION FITTINGS ON BOTH THE COMPRESSED AIR AND BREATHING AIR LINES. THE CONNECTIONS FOR THE COMPRESSED AIR AND THE BREATHING AIR SHALL BE OF DIFFERENT STYLES.

**FIRE SUPPRESSION SYSTEM**

THE CONTRACTOR SHALL INTEGRATE THE BUILDINGS EXISTING FIRE SUPPRESSION SYSTEM INTO THE NEW BOOTH IAW ALL LOCAL, STATE, AND FEDERAL LAWS.

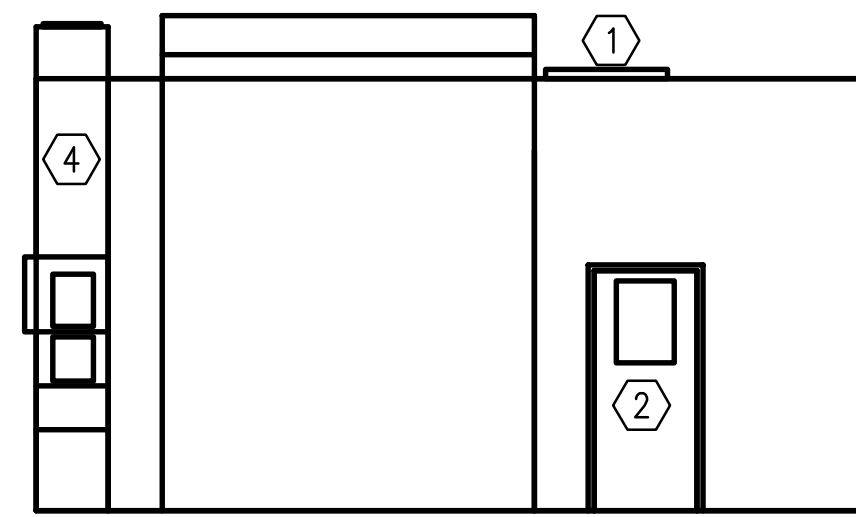
**COMMISSIONING**

A WALK-THROUGH SHALL TAKE PLACE BEFORE COMPLETION OF THE PROJECT, WITH THE CONTRACTOR TO VERIFY THAT THE CARTRIDGE STYLE DUST COLLECTION SYSTEM IS FULLY FUNCTIONAL. THE CONTRACTOR SHALL DEMONSTRATE FUNCTIONALITY AND COMPLIANCE AND THE CCF PERSONNEL SHALL OBSERVE. THE CONTRACTOR SHALL PROVIDE DATA ON DUST COLLECTION SYSTEM AIRFLOW PERFORMANCE (LINEAR FEET PER MINUTE AND AIR EXCHANGES), TEMPERATURE, LIGHTING PERFORMANCE AND FILTER PERFORMANCE TO THE CCF PERSONNEL PRIOR TO ACCEPTANCE. THIS COMMISSIONING SHALL OCCUR PRIOR TO ACCEPTANCE. ALL DEFICIENCIES SHALL BE RECTIFIED BY THE CONTRACTOR AT NO EXTRA CHARGE TO THE GOVERNMENT. FULL SYSTEM START UP, AND OPERATIONAL TRAINING ON PROPER USE OF THE COMPONENTS, AS WELL AS, SERVICING/ROUTINE MAINTENANCE TRAINING SHALL BE PROVIDED FOR SHOP PERSONNEL.

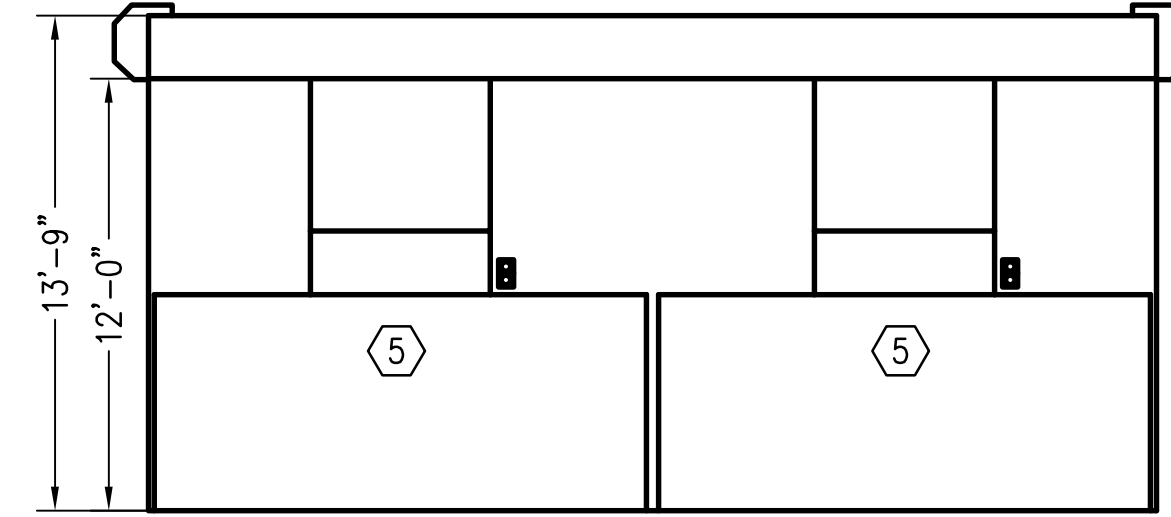
**SUBMITTAL**

THE CONTRACTOR SHALL PROVIDE SCALED SHOP DRAWINGS WITH DETAILED CUT SHEETS OF ALL COMPONENTS FOR GOVERNMENT APPROVAL BEFORE EQUIPMENT IS ORDERED.

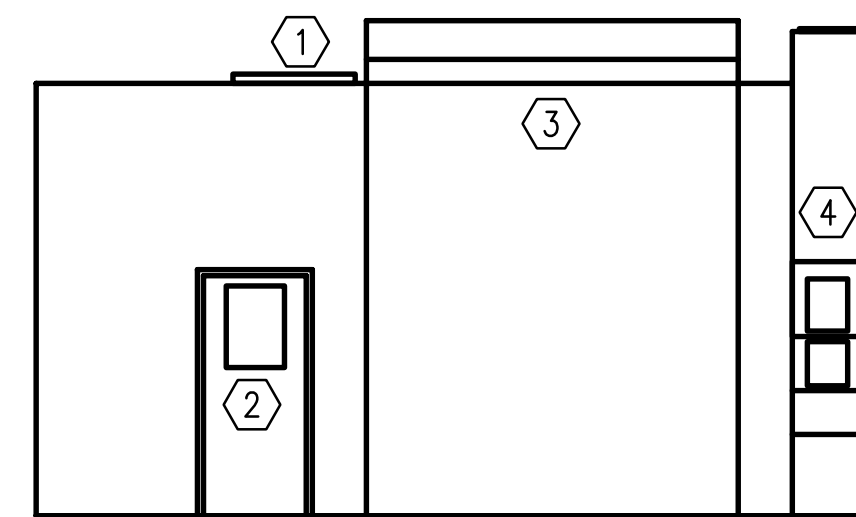
**LIGHTING NOTE:**  
LIGHTING FIXTURES ARE REQUIRED IN THE CEILING OF THE SANDING BOOTH ONLY. NO WALL MOUNTED FIXTURES ARE REQUIRED. LIGHTING LEVELS IN THE SANDING BOOTH SHALL BE 100 MAINTAINED HORIZONTAL FOOTCANDLES AT WORKPLANE HEIGHT (30" ABOVE FLOOR).



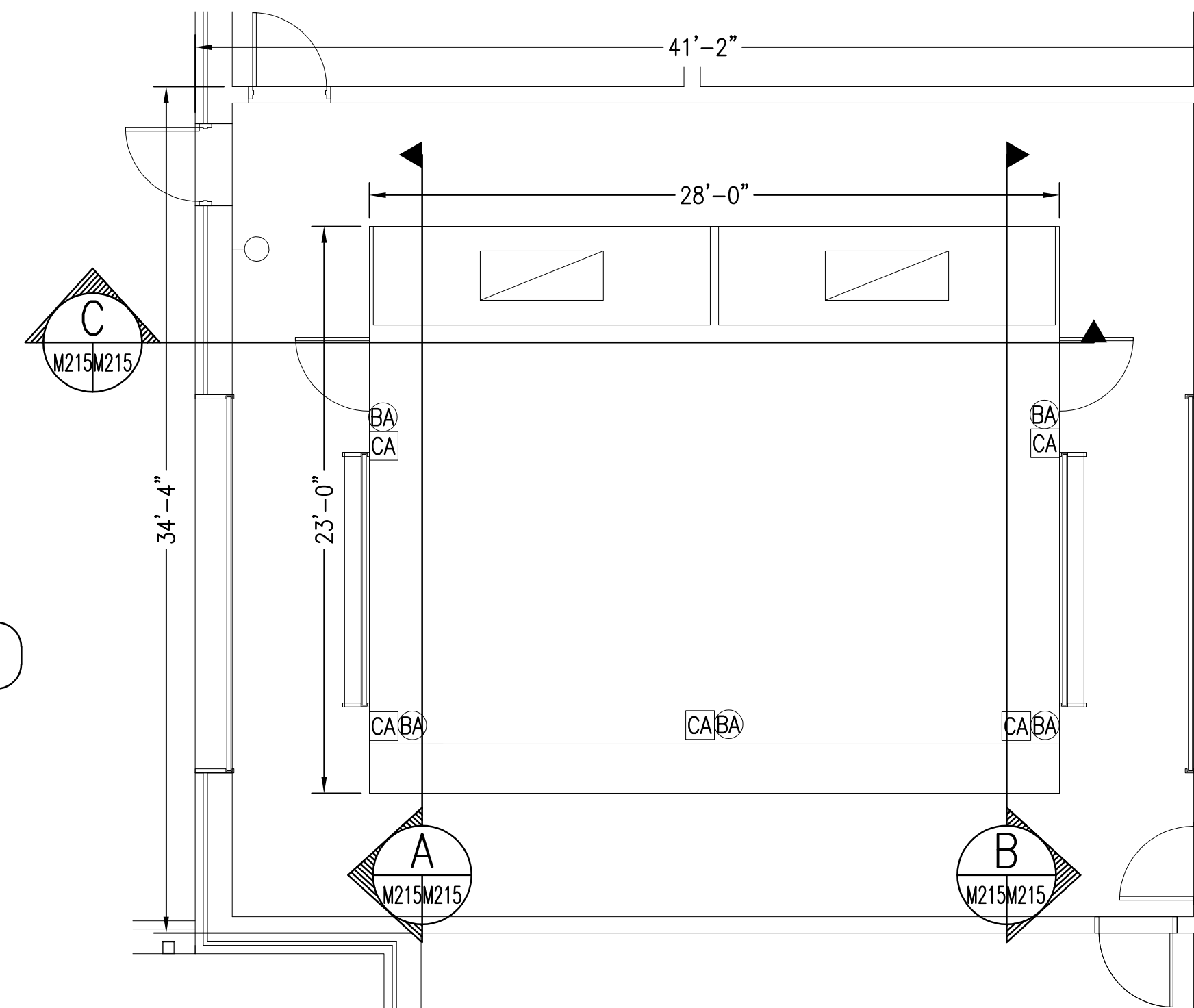
SECTION A  
SCALE: 3/16" = 1'-0"



SECTION C  
SCALE: 3/16" = 1'-0"



SECTION B  
SCALE: 3/16" = 1'-0"



SANDING BOOTH LAYOUT  
SCALE: 3/16" = 1'-0"

### SHEET NOTES

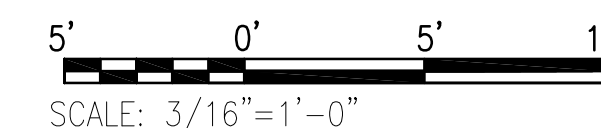
- ① 4'X2' LED LIGHTING
- ② MAN DOOR INTO SANDING BOOTH
- ③ 10'-0" WIDE BY 12'-0" TALL ROLL UP DOOR
- ④ EXHAUST PLENUM
- ⑤ INTAKE FILTER (3)

- CA COMPRESSED AIR (EQUIPMENT)
- BA BREATHING AIR

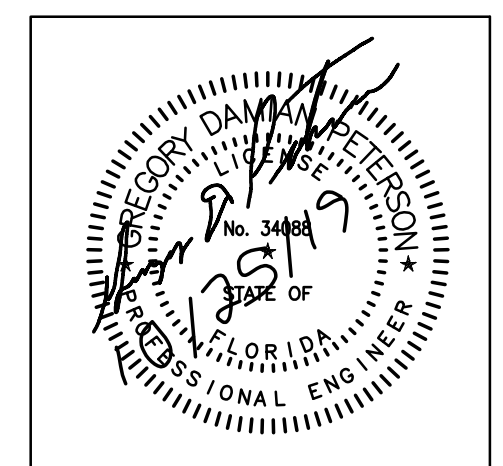
### SANDING BOOTH SCHEDULE

EQUIPMENT NAME	MAX OUTSIDE DIMENSIONS			DOOR OPENINGS		FAN MODULE UNITS					BASIS OF DESIGN
	WIDTH	LENGTH	HEIGHT	ROLL-UP (QTY x W x H)	MAN DOOR (QTY x W x H)	QTY	HP (EACH)	CFM (EACH)	TSP	ELEC. V/φ/Hz	
SANDING BOOTH	26FT	23FT	12FT	2 x 10FT x 12FT	2 x 36IN x 80IN	2	15	13,000	3.5"	480/3/60	FILTER-1, DUSTRON BOOTH, MODEL DB-26-36-2x15

NOTES  
- SEE GENERAL NOTES ON THIS SHEET.



**PETERSON ENGINEERING INC.**  
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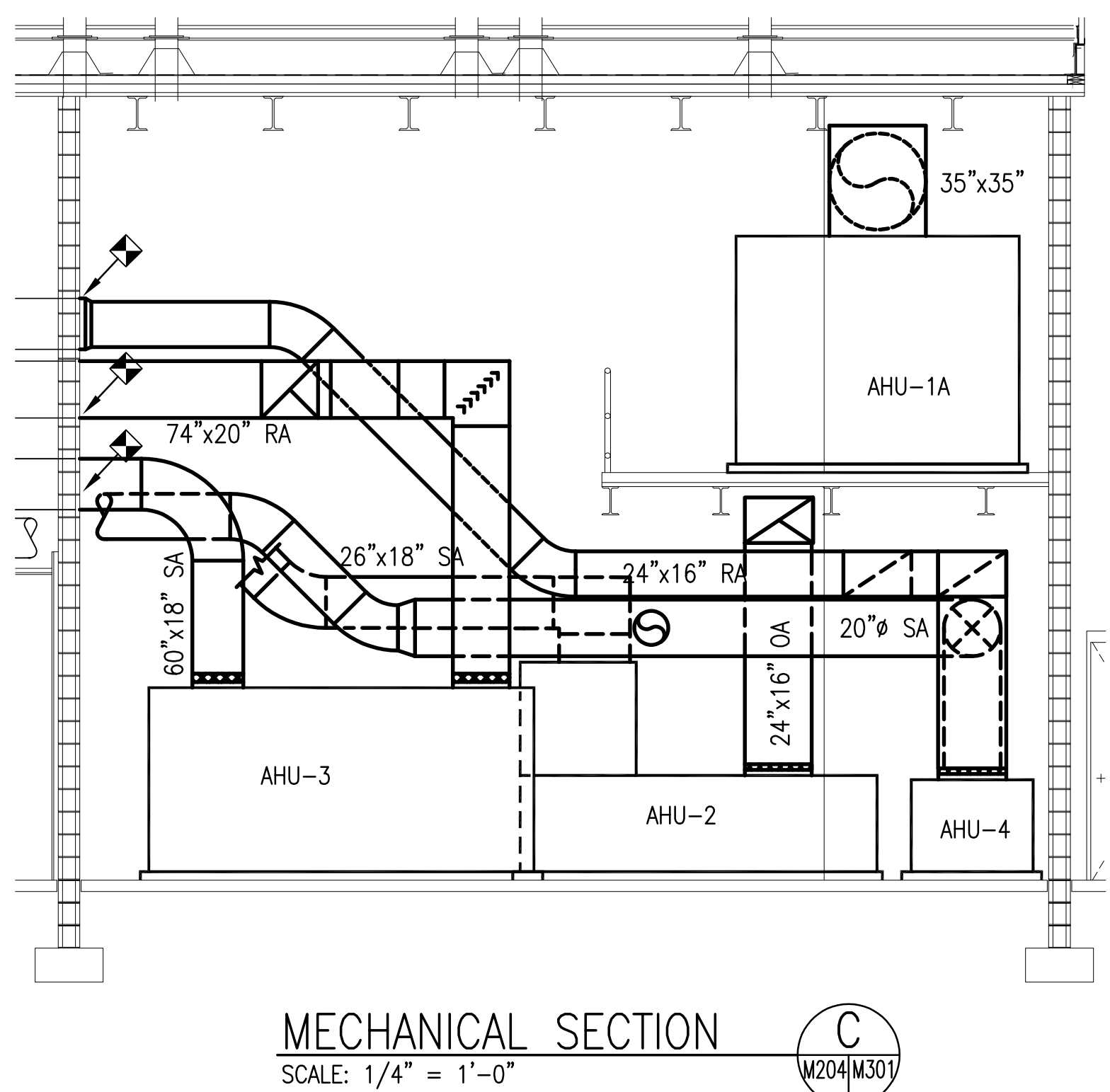
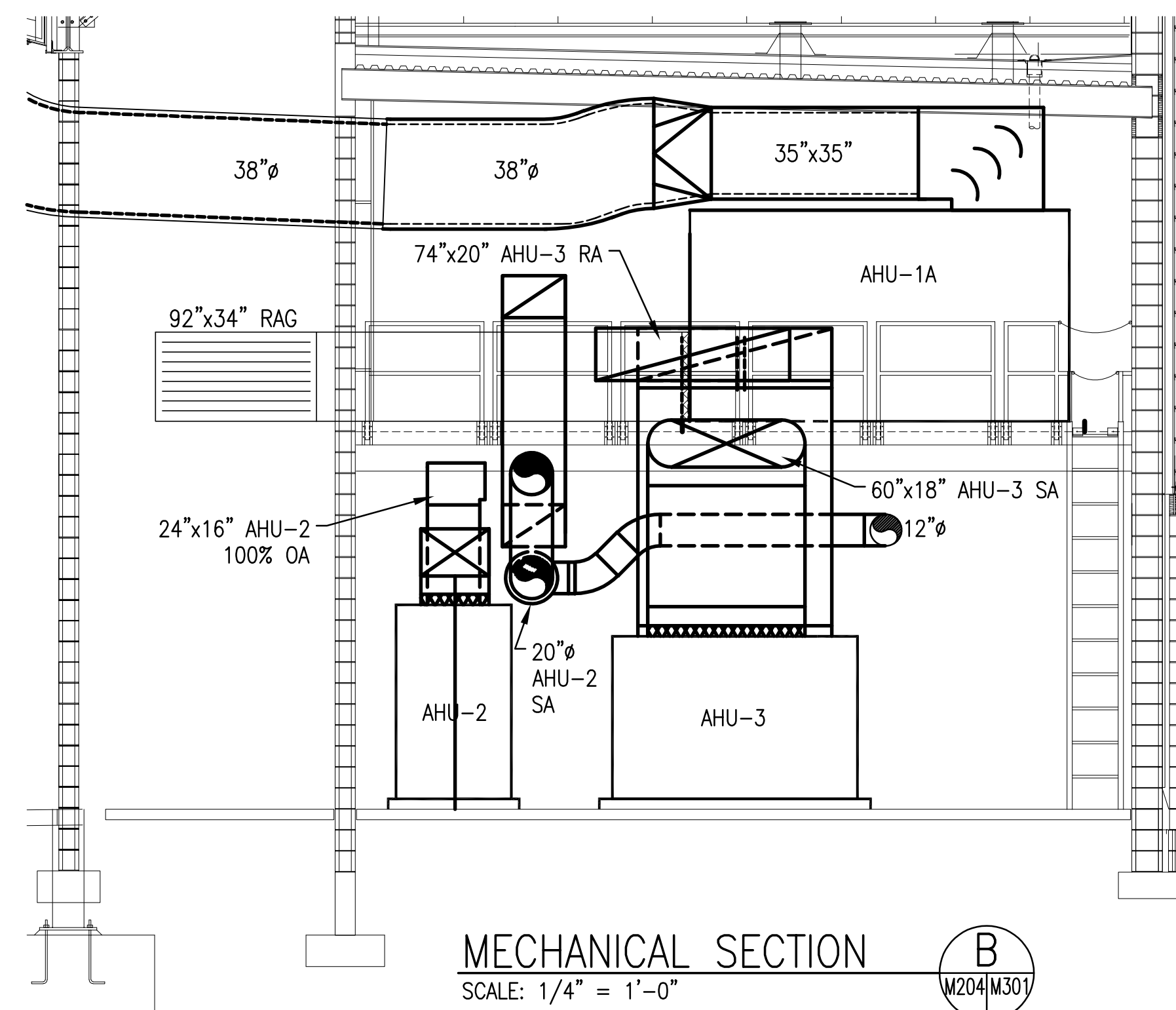
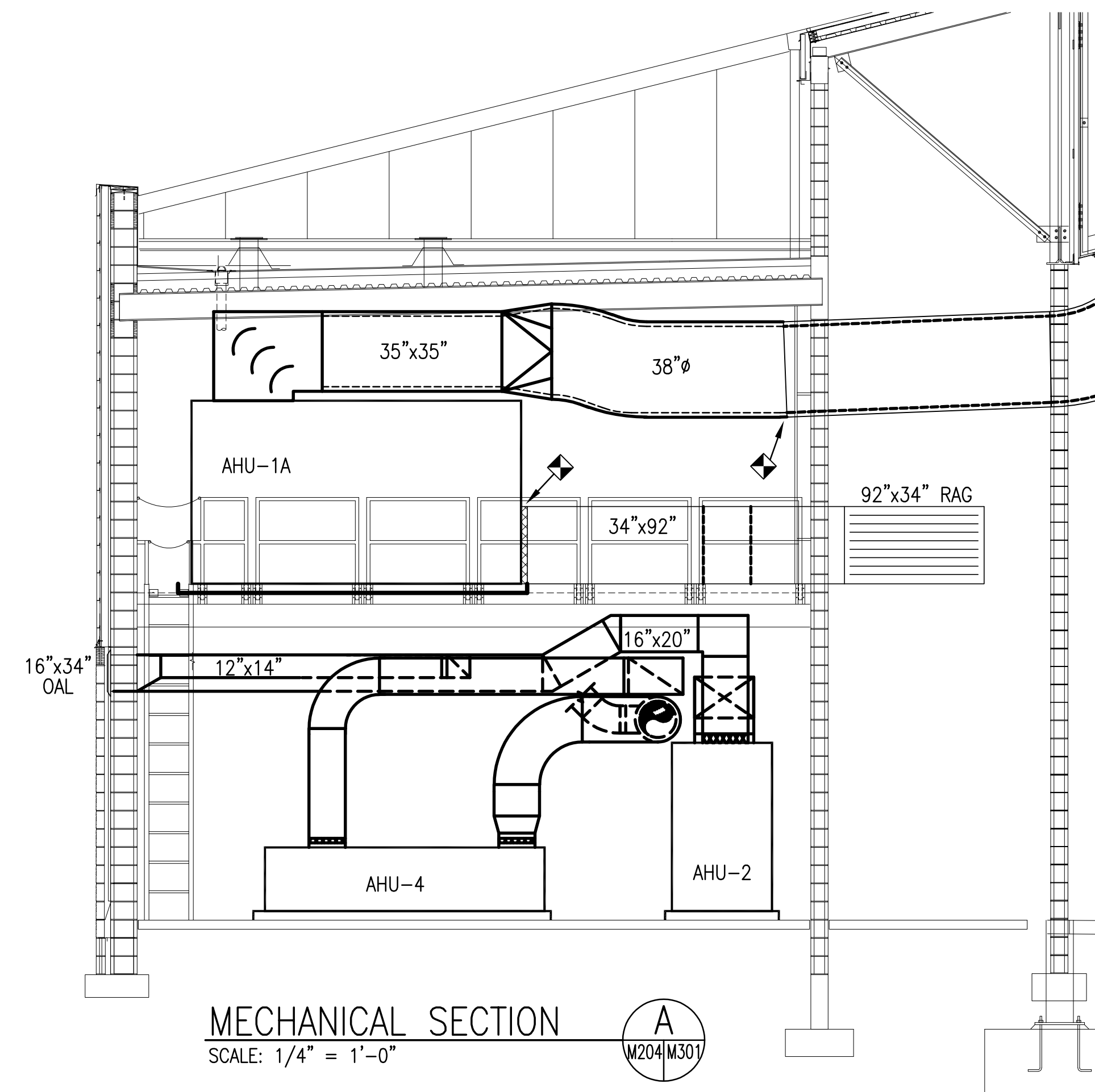


REV #	DATE	DESCRIPTION							
<b>REPAIR CORROSION CONTROL FACILITY</b> <b>BUILDING 90225</b> SANDING BOOTH LAYOUT									
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA									
DATE: 28 OCT 2019									
DESIGNED BY: GDP									
DRAWN BY: DJM									
BUILDING NUMBER: 90225									
PROJECT NUMBER: CP1028800									
SHEET REFERENCE: M-215									
SHEET NUMBER: 50 of 80									

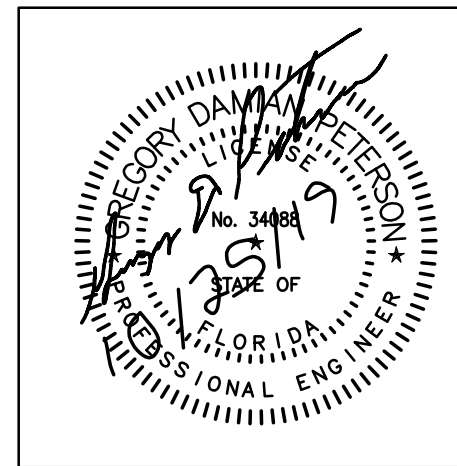
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10/30/2019 1:19:25 PM, djmarshhall, ANSI\_D\_(22.00\_x\_34.00\_inches)



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REPAIR CORROSION CONTROL FACILITY	DESCRIPTION
BUILDING 90225	DATE
MECHANICAL SECTIONS	REV #
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b>	<b>28 OCT 2019</b>
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON	DESIGNED BY: GDP
HURLBURT FIELD, FLORIDA	DRAWN BY: DJM
	BUILDING NUMBER: 90225
	PROJECT NUMBER: CP1028800
	SHEET REFERENCE: M-301
	SHEET NUMBER: 51 of 80

## BUILDING PRESSURE SETUP

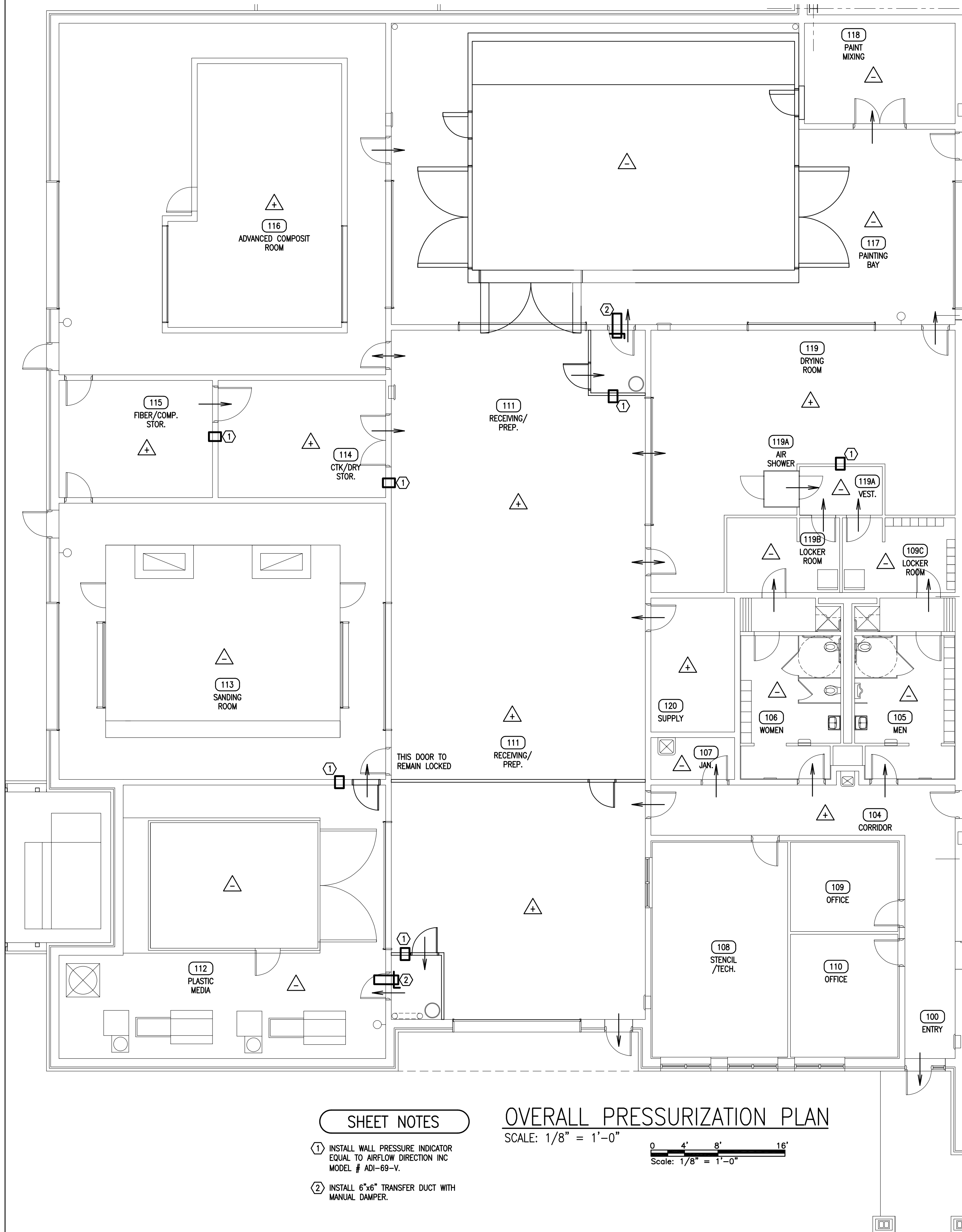
THE BUILDING IS EXISTING, THE TEST & BALANCE AND CONTROLS CONTRACTORS SHALL ADJUST THE AIR FLOWS AND BUILDING CONTROLS AS NEEDED TO PROVIDE THE REQUIRED PRESSURE RELATIONSHIPS, SHOWN IN THE DRAWING, UNDER ALL OPERATING CONDITIONS, EVEN IF THE EXACT PRESSURE VALUES ARE NOT OBTAINABLE IN ALL CASES.

FOR EACH COMBINATION THE FOLLOWING EIGHT READINGS SHALL BE RECORDED. THE READINGS SHALL BE APPROVED BY THE CONTRACTING OFFICER'S REPRESENTATIVE BEFORE THE FINAL TEST & BALANCE REPORT IS PREPARED.

THE FOLLOWING PRESSURE READING COMBINATIONS SHALL BE FIELD VERIFIED:

1. ALL BOOTHS/HOODS AND EQUIPMENT OFF.
2. PAINT BOOTH RUNNING, ALL OTHER EQUIPMENT OFF.
3. SANDING BOOTH RUNNING, ALL OTHER EQUIPMENT OFF.
4. PLASTIC MEDIA BOOTH RUNNING, ALL OTHER EQUIPMENT OFF.
5. PAINT BOOTH AND SANDING BOOTH RUNNING, ALL OTHER EQUIPMENT OFF.
6. PAINT BOOTH AND PLASTIC MEDIA BOOTH RUNNING, ALL OTHER EQUIPMENT OFF.
7. SANDING BOOTH AND PLASTIC MEDIA BOOTH RUNNING, ALL OTHER EQUIPMENT OFF.
8. ALL EQUIPMENT RUNNING.

READING	COMBINATION							
	1	2	3	4	5	6	7	8
1. PAINT TO RECEIVING								
2. SANDING TO PLASTIC								
3. PLASTIC TO RECEIVING								
4. VESTIBULE TO RECEIVING								
5. VESTIBULE TO WOMEN								
6. VESTIBULE TO MEN								
7. STORAGE TO RECEIVING								
8. SUPPLY TO RECEIVING								

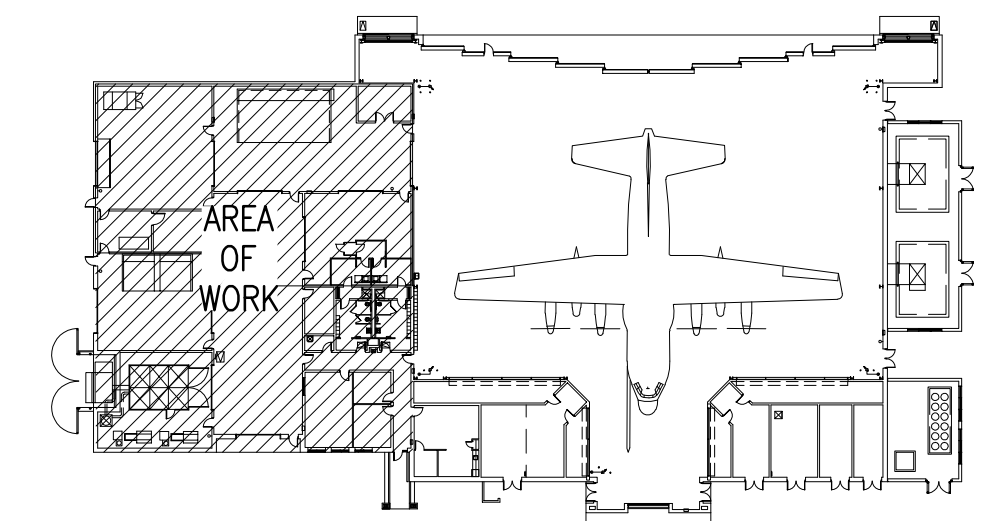


### SHEET NOTES

- ① INSTALL WALL PRESSURE INDICATOR EQUAL TO AIRFLOW DIRECTION INC MODEL # ADI-69-V.
- ② INSTALL 6"x6" TRANSFER DUCT WITH MANUAL DAMPER.

### LEGEND

- + - POSITIVE PRESSURE
- - NEGATIVE PRESSURE



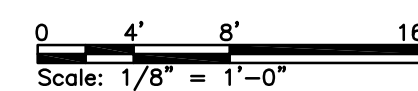
KEY PLAN  
NO SCALE

### SHEET NOTES

- ① INSTALL WALL PRESSURE INDICATOR EQUAL TO AIRFLOW DIRECTION INC MODEL # ADI-69-V.
- ② INSTALL 6"x6" TRANSFER DUCT WITH MANUAL DAMPER.

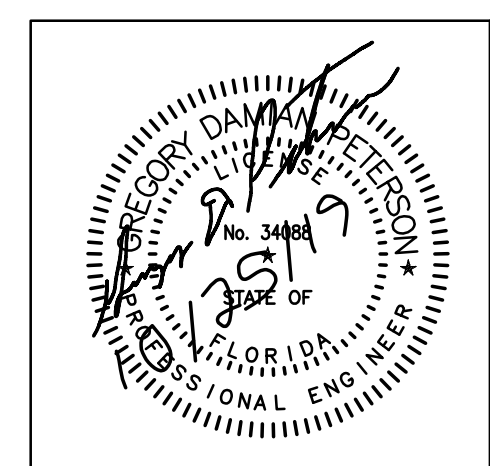
### OVERALL PRESSURIZATION PLAN

SCALE: 1/8" = 1'-0"



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REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
OVERALL PRESSURIZATION PLAN

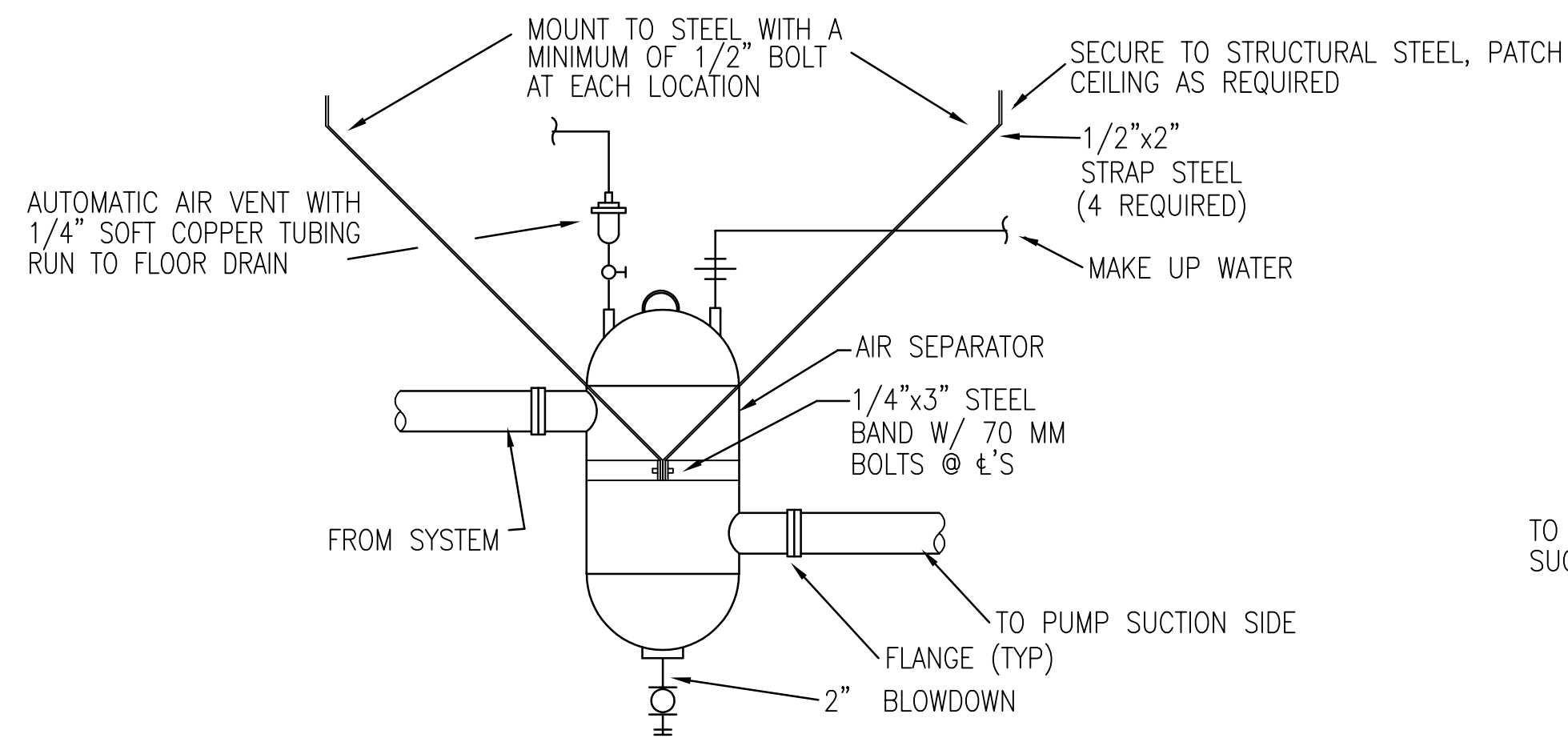
**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
DESIGNED BY: GDP  
DRAWN BY: DJM  
BUILDING NUMBER: 90225  
PROJECT NUMBER: CP1028800  
SHEET REFERENCE: M-302

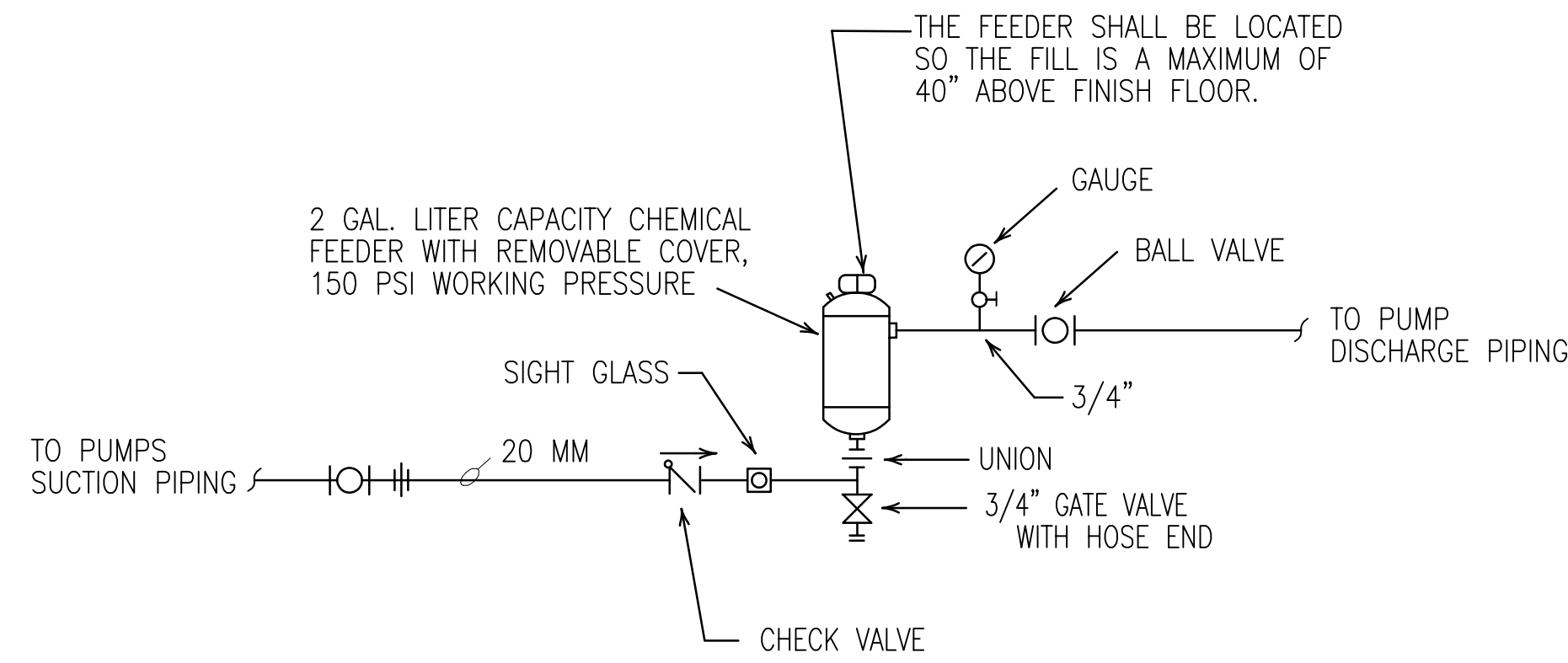
SHEET NUMBER: 52 of 80

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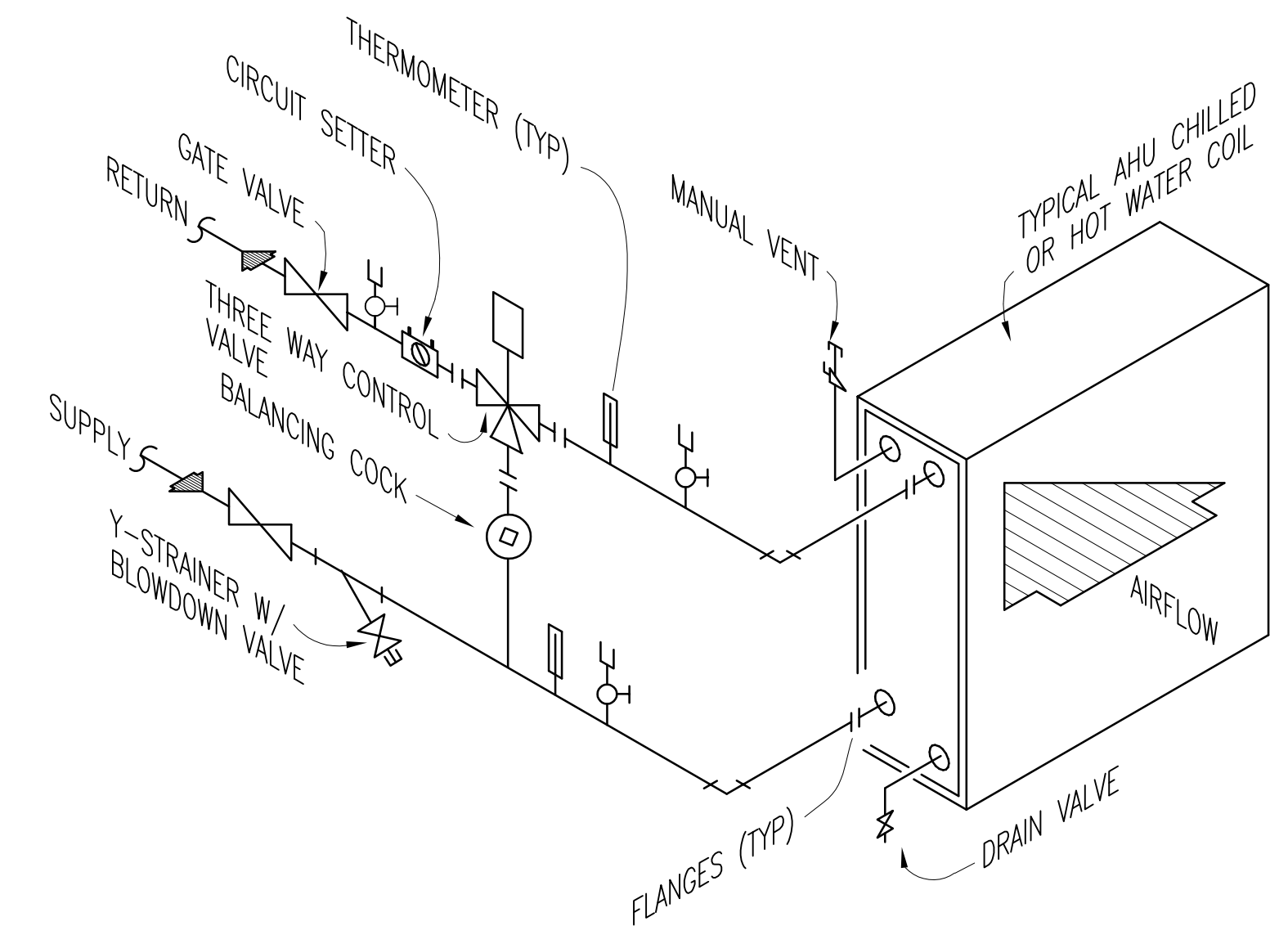
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**AIR SEPARATOR DETAIL**  
 NOT TO SCALE

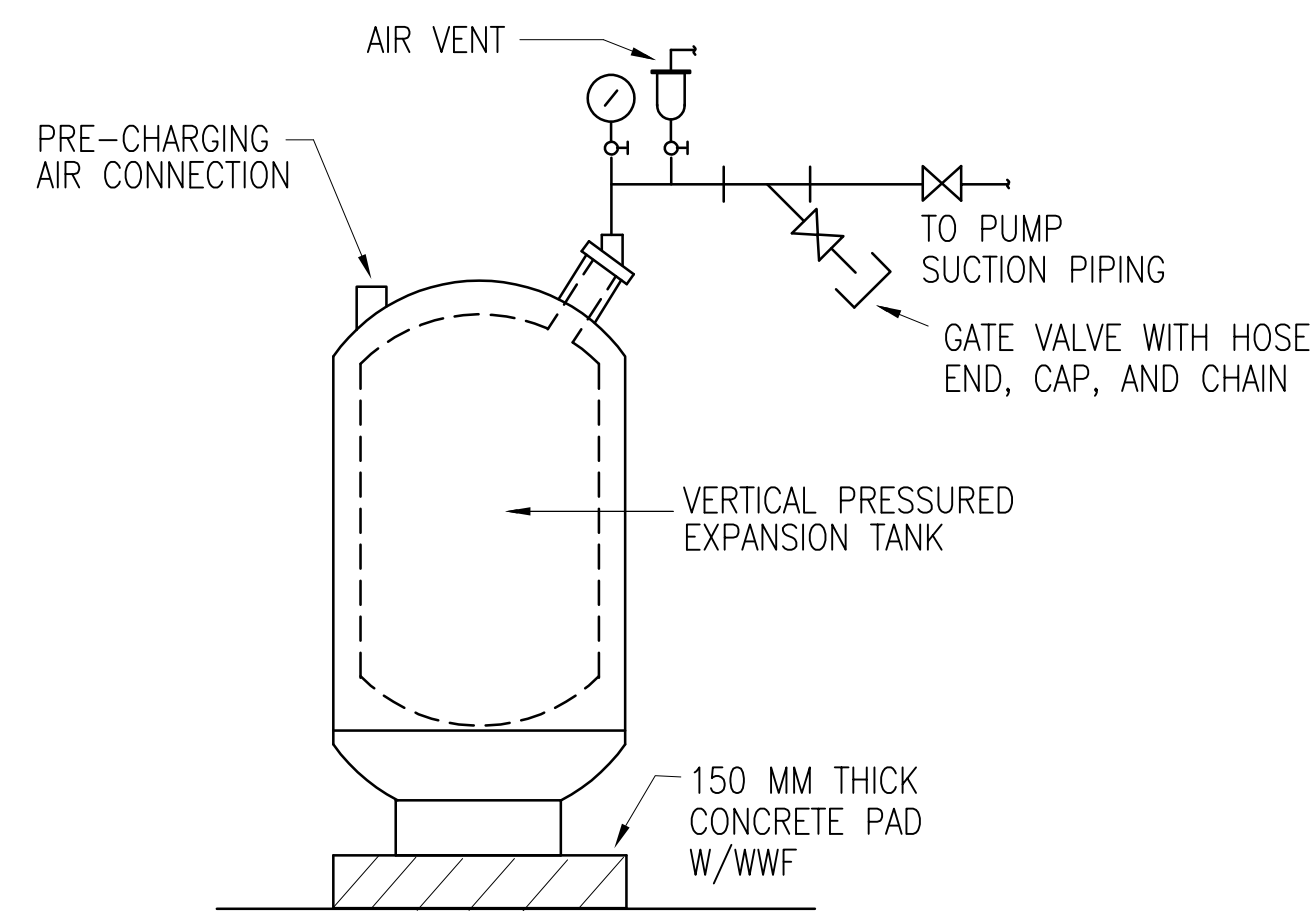


**TYPICAL CHEMICAL FEEDER CONNECTION DETAIL**  
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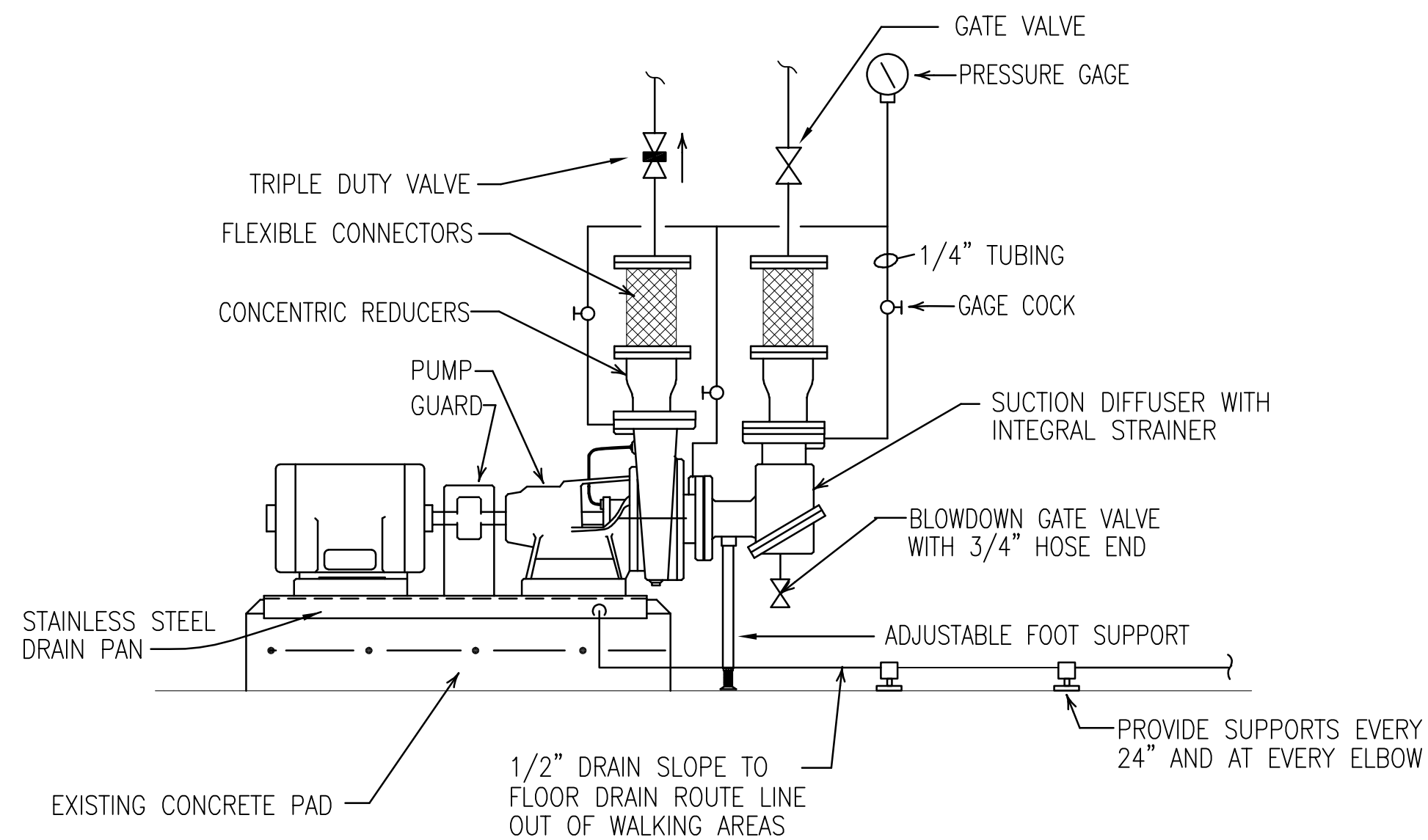


**NOTE:**  
 FOR COILS WITH PIPING 2" AND SMALLER USE P/T TEST PLUGS INSTEAD OF GAUGE COCKS. ALSO, USE BALL VALVES INSTEAD OF GATE VALVES. THE USE OF UNIONS INSTEAD OF FLANGES SHALL BE ACCEPTABLE WITH PIPING 2" AND SMALLER.

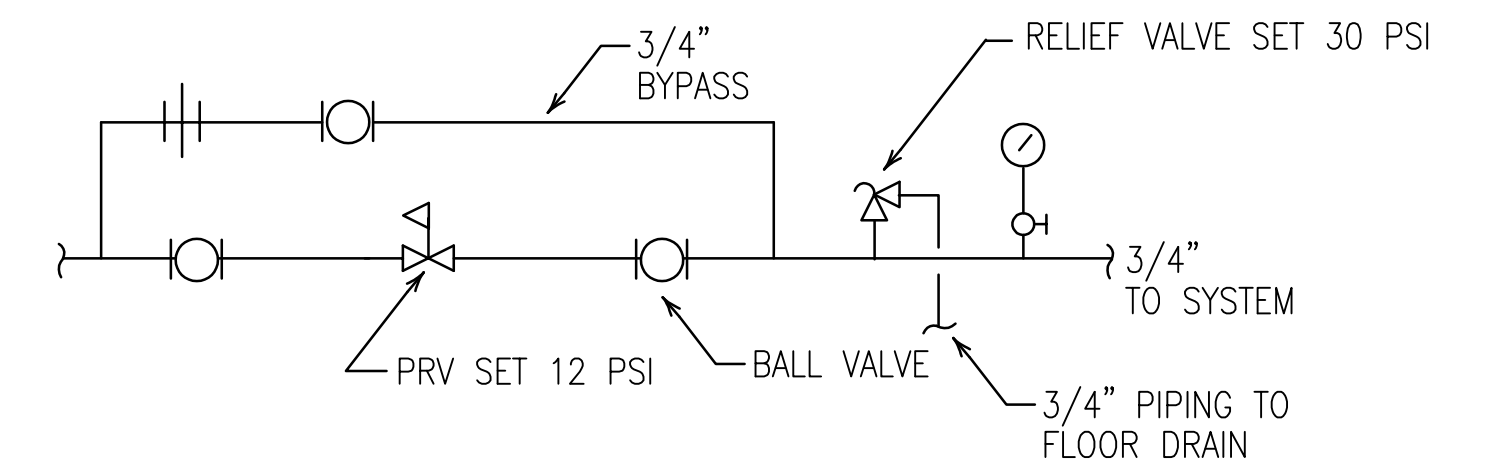
**TYPICAL AHU COIL CONNECTION DETAIL**  
 NOT TO SCALE



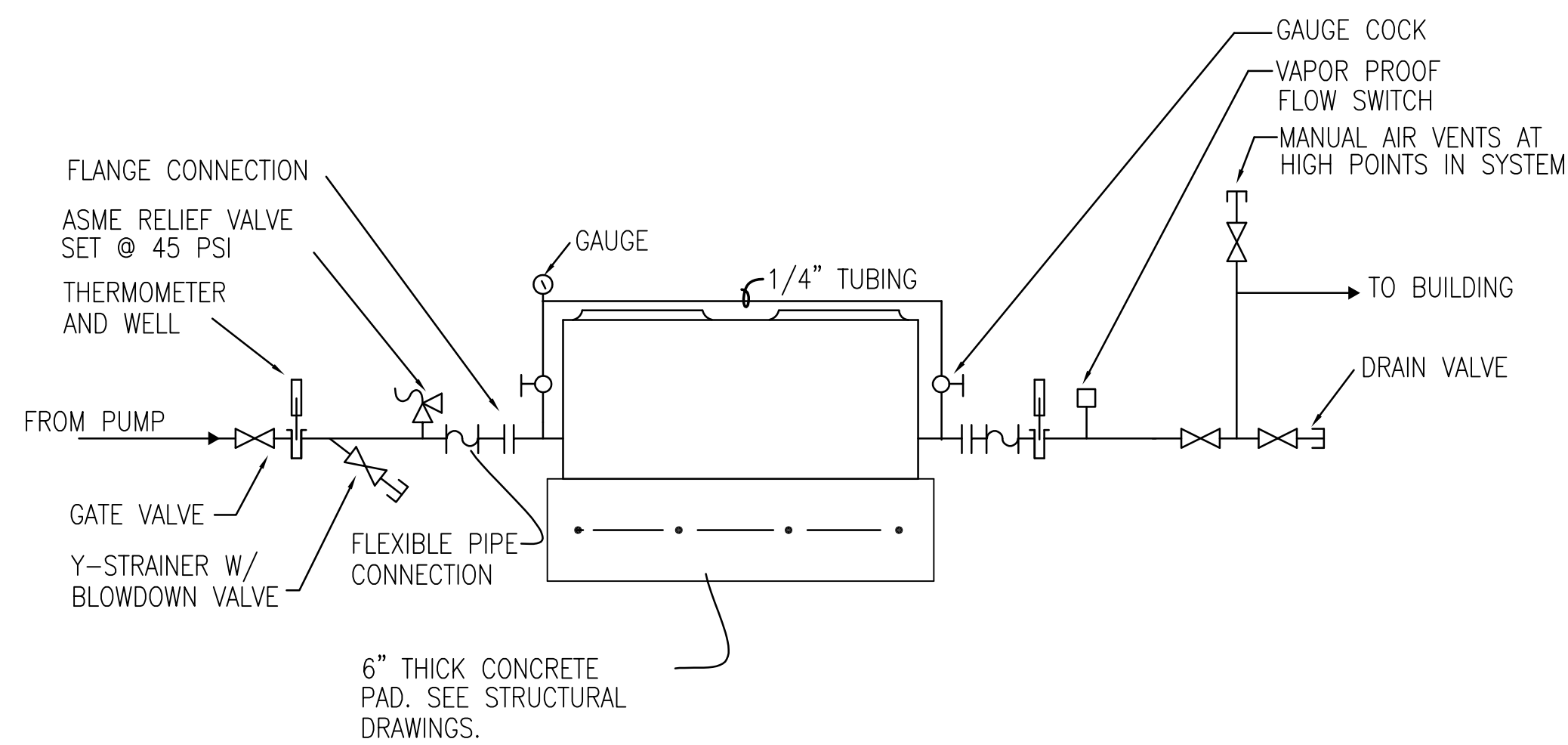
**EXPANSION TANK DETAIL**  
 NOT TO SCALE



**PUMP INSTALLATION DIAGRAM**  
 NOT TO SCALE



**MAKE UP WATER PIPING DIAGRAM**  
 NOT TO SCALE



**CHILLER PIPING DIAGRAM**  
 NOT TO SCALE

REV # DATE DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225  
 MECHANICAL DETAILS

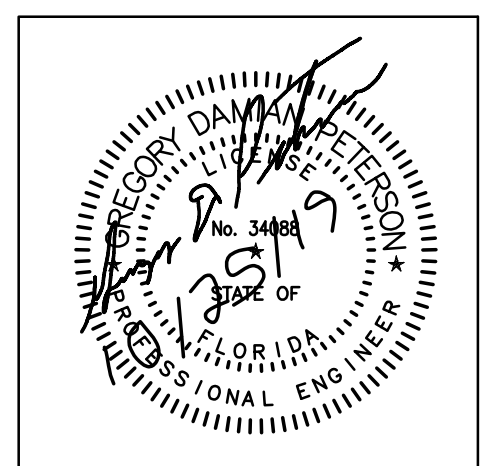
**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA



DATE: 28 OCT 2019  
 DESIGNED BY: GDP  
 DRAWN BY: DJM  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE:

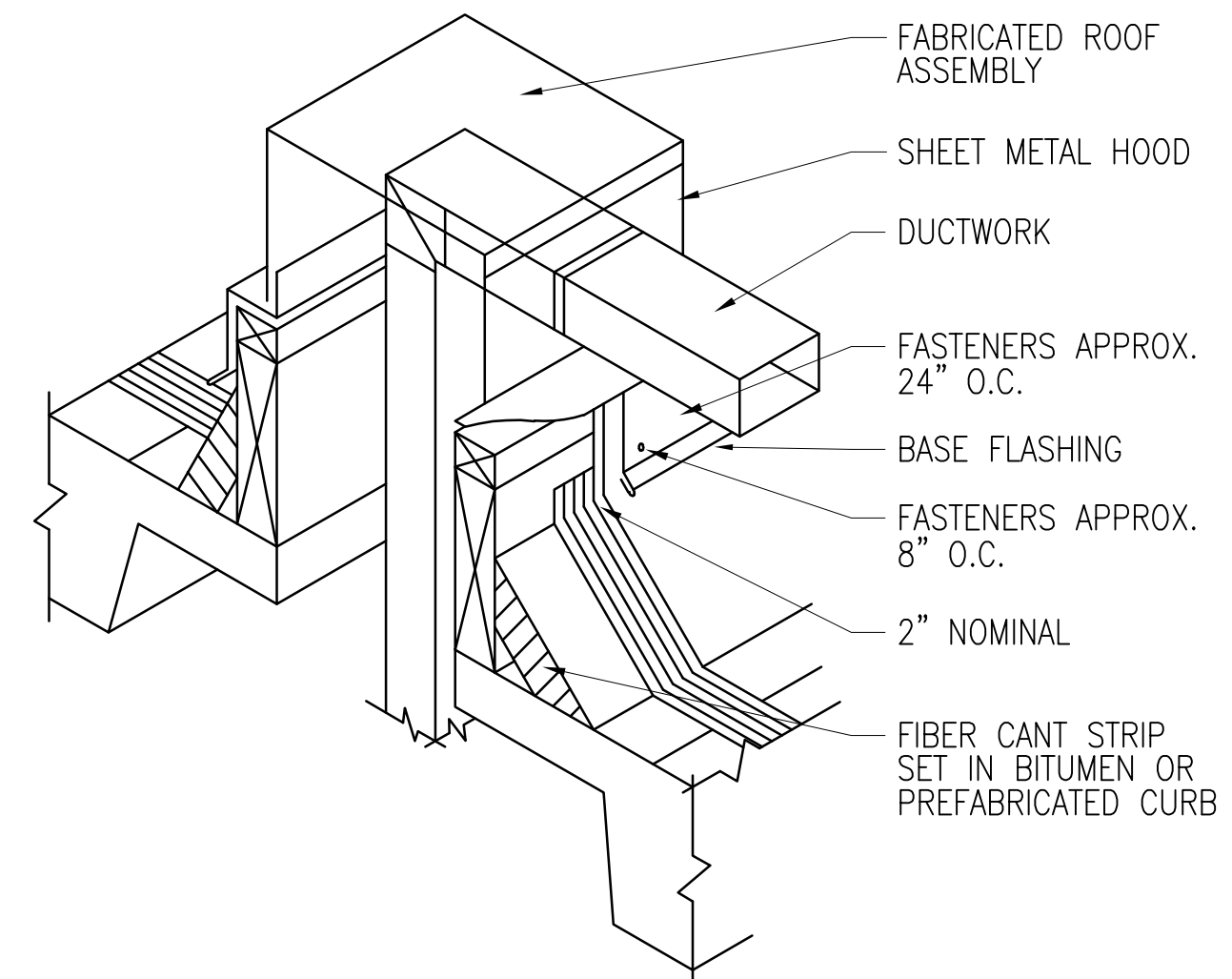
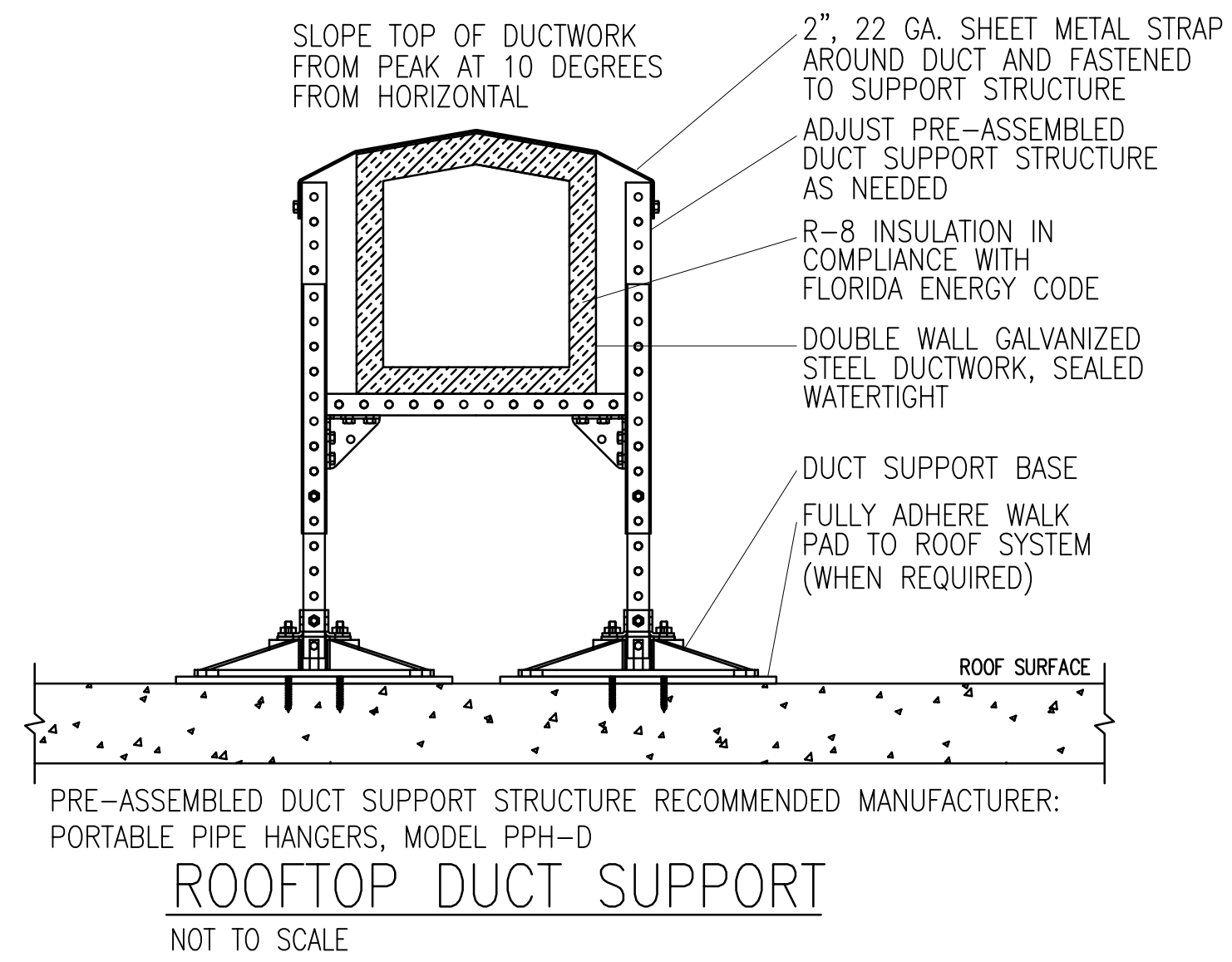
**M-501**  
 SHEET NUMBER: 53 of 80

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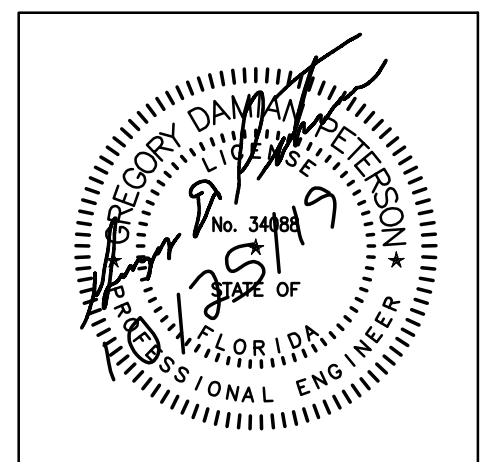




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 (850) 434-0513  
 PEI# 18116



REPAIR CORROSION CONTROL FACILITY BUILDING 90225 MECHANICAL DETAILS	DESCRIPTION	DATE	REV #
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA			
DATE: <b>28 OCT 2019</b>			
DESIGNED BY: <b>GDP</b>			
DRAWN BY: <b>DJM</b>			
BUILDING NUMBER: <b>90225</b>			
PROJECT NUMBER: <b>CP1028800</b>			
SHEET REFERENCE: <b>M-502</b>			
SHEET NUMBER: <b>54 of 80</b>			

## AIR HANDLING UNIT SCHEDULE

MARK	TYPE	FAN DATA						CHILLED WATER COOLING DATA										HOT WATER PREHEAT COIL DATA					HOT WATER REHEAT COIL DATA										
		TOTAL AIR CFM	OUTSIDE AIR CFM	EXTERNAL STATIC PRESSURE INCHES H <sub>2</sub> O	HORSEPOWER PER MOTOR	# OF FAN MOTORS	ELECTRICAL DATA			MAX. FACE VEL FPM	TOT. COOLING CAP. MBTU/HR	SENS. COOLING CAP. MBTU/HR	ENTERING AIR TEMP.		LEAVING AIR TEMP.		CHILLED WATER DATA		MAX WPD FT	CONTROL VALVE		MAX. FACE VEL. FPM	MIN. OUTPUT CAP. MBTU/HR	AIR TEMP. DATA °F ENT.	HOT WATER DATA		MAX WPD FT.	MAX. FACE VEL. FPM	MIN. OUTPUT CAP. MBTU/HR	AIR TEMP. DATA °F ENT.	HOT WATER DATA		MAX WPD FT.
							VOLTS	PHASE	HERTZ				°Fdb	°Fwb	°Fdb	°Fwb	GPM	°F ENT.		TYPE	Cv				GPM	°F ENT.					GPM	°F ENT.	
AHU-1A	HDT, VAV, SGZ	15,000	1,100	2.5	15	2	460	3	60	500	460.0	410.0	79.0	64.0	54.2	53.6	58	42	5	3-WAY	28	-	-	-	-	-	-	500	400.0	55	28	140	3
AHU-1B	HDT, VAV, SGZ	15,000	1,100	2.5	15	2	460	3	60	500	460.0	410.0	79.0	64.0	54.2	53.6	58	42	5	3-WAY	28	-	-	-	-	-	-	500	400.0	55	28	140	3
AHU-2	HDT, CAV, SGZ	2,200	2,200	2.5	5	1	460	3	60	360	213.2	103.2	95.0	80.0	53.0	52.9	27	42	5	3-WAY	18	360	170.0	20	10	140	5						
AHU-3	HDT, CAV, MTZ	13,500	5,900	4.25	15	2	460	3	60	500	743.7	472.9	84.0	70.0	53.0	52.9	98	42	14	3-WAY	46	-	-	-	-	-	-	-	-	-	-	-	
AHU-4	HDT, VAV, MTZ	2,300	650	3.25	5	1	460	3	60	500	98.8	68.4	80.0	67.0	53.0	52.9	13	42	10	3-WAY	6	-	-	-	-	-	-	-	-	-	-	-	

**NOTES:**  
 HDT - HORIZONTAL DRAW THROUGH  
 VDT - VERTICAL DRAW THROUGH  
 VAV - VARIABLE AIR VOLUME  
 CAV - CONSTANT AIR VOLUME  
 SGZ - SINGLE ZONE  
 MTZ - MULTI-ZONE  
 MANUFACTURER SHALL ALLOW A MINIMUM OF .5 INCHES EXTRA STATIC FOR DIRTY FILTERS. EXTERNAL STATIC DOES NOT INCLUDE PRESSURE DROP THROUGH CASING COILS, FILTERS, AND FILTER HOUSINGS.

MAXIMUM SOUND POWER LEVELS INDICATED ARE EXPRESSED IN DECIBELS REFERENCE TO 10 WATTS AT OCTAVE BANDS AND MID-FREQUENCIES INDICATED. MAXIMUM FAN DISCHARGE SOUND POWER LEVEL AT TOTAL AIR AND EXTERNAL STATIC PRESSURE SCHEDULE.  
 PROVIDE EXTENDED LUBE LINES TO OUTSIDE OF UNIT CASING ON THE SIDE WHICH IS ACCESSIBLE FOR SERVICING ON ALL UNITS.  
 PIPE ALL CONDENSATE FROM UNITS TO DRAIN WITH TRAP.

ADJUST LOCATION OF UNITS IN MECHANICAL ROOMS AS REQUIRED FOR SERVICE AS RECOMMENDED BY MANUFACTURER.  
 UNITS MAY REQUIRE SETTING BEFORE WALL ARE INSTALLED OR UNITS MAY NEED DISASSEMBLY AND REASSEMBLY IN MECHANICAL ROOM.

PROVIDE VARIABLE FREQUENCY DRIVES WITH PROTECTION FOR ALL AIR HANDLING UNITS.  
 AHU-1A AND 1B ALL COMPONENTS INSIDE THE UNITS EXPOSED TO THE AIRSTREAM SHALL BE SUITABLE FOR EXPLOSION PROOF AND SPARK PROOF SERVICE. INCLUDING BUT NOT LIMITED TO FANS, MOTORS, SENSORS, DAMPERS, ACTUATORS, WIRING, CONTROLS, ETC.

PROVIDE MERV 8 PRE-FILTERS AND MERV 13 FINAL FILTERS FOR ALL AIR HANDLING UNITS. PRE-FILTERS SHALL BE 2" THICK; FINAL FILTERS SHALL BE 12" THICK. MAX FACE VELOCITY: 500 FPM.

## GAS HOT WATER BOILER SCHEDULE

MARK	TYPE UNIT	BOILER RATINGS					BURNER DATA						WATER DATA				ELECTRICAL DATA		
		INPUT MBTU	NET OUTPUT MBTU	OPERATING PRESSURE PSIG	FIRING RATE CFH	EFFICIENCY PERCENT	GAS PRESSURE AVAILABLE	TYPE	FUEL	FLUE SIZE	COMBUSTION CONTROL	GPM	°F LVG.	°F ENT.	MAX WPD (FT)	VOLTS	PHASE	HERTZ	
B-1	CONDENSING	1,500	1,250	60	-	80	2	FORCED-DRAFT	NATURAL GAS	10"	MODULATING	180	140	110	10	120	1	60	

**GENERAL NOTES**  
 BOILERS AND BURNERS SHALL BE UL LISTED, AND FACTORY TESTED. BOILERS SHALL BE APPROVED BY AGA, ASME INSPECTED AND STAMPED FOR WORKING PRESSURE, COMPLETE WITH MANUFACTURERS DATA REPORT. BOILERS SHALL BE PROVIDED WITH RELIEF VALVES AS REQUIRED BY ASME CODE. THE EFFICIENCY IS STEADY STATE AT HIGH FIRE.

## PACKAGE AIR COOLED CHILLER SCHEDULE

MARK	MINIMUM CAPACITY TONS (NOMINAL)	REFRIG. TYPE	AMBIENT TEMP °F	MINIMUM COP	EVAPORATOR DATA					COMPRESSOR DATA				ELECTRICAL DATA			
					WATER FLOW GPM	ENTERING WATER TEMP. °F	LEAVING WATER TEMP. °F	MAX. WATER PRESS. DROP FEET H <sub>2</sub> O	FOULING FACTOR HR-FT <sup>2</sup> -°F/BTU	MIN. COMP. QUANT.	CAPACITY REDUCTION		TOTAL POWER INPUT MCA	VOLTS	PHASE	HERTZ	
											MINIMUM UNLOADING	APPROX. STEPS PERCENT					
CH-1	280	R-410A	95	2.6	400	58	42	37.5	.0001	2	10% -28 TON	10, 25, 50, 75, 100	544	460	3	60	

### PACKAGED AIR COOLED CHILLER SCHEDULE NOTES

EER - ENERGY EFFICIENCY RATIO. POWER INPUTS SHALL INCLUDE ALL COMPRESSORS, CONDENSER FANS AND CONTROL POWER AT FULL LOAD CONDITIONS.  
 PROVIDE CHILLER WITH TWO COMPLETELY INDEPENDENT REFRIGERANT CIRCUITS.  
 PROVIDE COIL GUARDS.

PROVIDE A SINGLE POINT POWER SOURCE FOR THE COMPRESSORS, FANS, AND CONTROLS AND HEAT TAPE.  
 PROVIDE FACTORY MOUNTED DISCONNECT SWITCH AND POWER SUPPLY MONITOR.  
 CHILLER SHALL BE TRANE RTAF AIR COOLED SCREW CHILLER

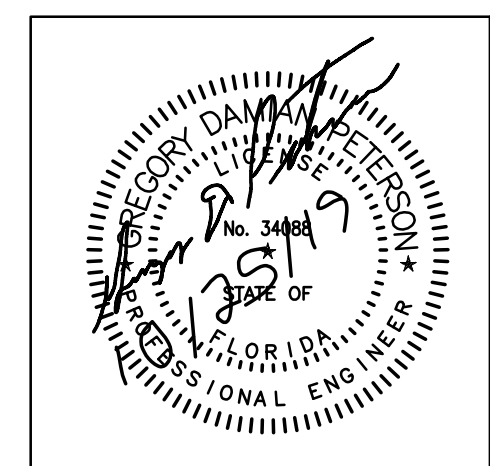
## PUMP SCHEDULE

MARK	SERVICE	TYPE	SIZE INCHES	PERFORMANCE DATA				ELECTRICAL DATA			
				CAPACITY GPM	HEAD FT. (H <sub>2</sub> O)	MAXIMUM SPEED - RPM	MINIMUM EFFICIENCY (%)	MAXIMUM MOTOR - H.P.	VOLTS	PHASE	HERTZ
CHWP-1	CHW	ESF	4X3	450	105	3600	55	20	460	3	60
HWP-1	HW	ESF	2.5X2	180	58	1800	55	5	460	3	60

**NOTES:**  
 PUMP SHALL BE NON OVER LOADING THROUGHOUT THE ENTIRE PUMP CURVE.  
 ALL PUMPS SHALL HAVE HIGH EFFICIENT TEFC MOTORS.  
 SUCTION AND DISCHARGE SIZES ARE THE MINIMUM ACCEPTABLE.

PROVIDE STAINLESS STEEL DRAIN PANS ON ALL BASE MOUNTED PUMPS. PIPE DRAINS TO FLOOR DRAIN.  
 PUMPS TO BE PROVIDED WITH MECHANICAL SEAL UNLESS NOTED OTHERWISE.  
 ESF - END SUCTION, FRAME MOUNTED CENTRIFUGAL PUMP

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 (PROF. ENG. #: 3600)  
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 PEI# 18116



DESCRIPTION									
DATE									
REV #									
<b>REPAIR CORROSION CONTROL FACILITY</b> <b>BUILDING 90225</b> MECHANICAL SCHEDULES									
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA									
DATE: 28 OCT 2019									
DESIGNED BY: GDP									
DRAWN BY: DJM									
BUILDING NUMBER: 90225									
PROJECT NUMBER: CP1028800									
SHEET REFERENCE: M-601									
SHEET NUMBER: 55 of 80									

### FAN SCHEDULE

MARK	LOCATION	TYPE	DRIVE	PERFORMANCE DATA				ELECTRICAL				CONTROL	BASIS OF DESIGN	NOTES
				AIR FLOW CFM	E.S.P. IN. H <sub>2</sub> O	MAX. RPM	MAX. SONES	MAX. HP	VOLTS	PHASE	Hz			
EF-1	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-2	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-3	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-4	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-5	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-6	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-7	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-8	ROOF	CB	BD	75,000	2.5	646	-	60	460	3	60	DDC	COOK CA SWSI	CB, BS, AF, SP, RI
EF-16	CEILING	CEF	DD	775	0.25	974	-	1/6	115	1	60	DDC		CB, BS, XP, RI
EF-17	CEILING	CEF	DD	2,125	0.25	1020	-	1/3	115	1	60	DDC		CB, BS
EF-18	CEILING	CEF	DD	400	0.25	790	-	1/6	115	1	60	DDC		CB, BS
EF-19	ROOF	CB	DD	2,500	1.25	1140	-	1.5	460	3	60	DDC		CB, BS, VFD, RI
EF-20	ROOF	CB	DD	800	1.0	2360	-	1/2	115	1	60	DDC		CB, BS, RI
EF-21	ROOF	CB	DD	3,050	1.5	1725	-	2	460	3	60	DDC		CB, BS, VFD, XP, RI
EF-22	ROOF	CB	DD	2,600	0.3	1753	-	1	460	3	60	DDC		CB, BS, VFD, RI
EF-23	PAINT BAY	CB	DD	26,000	3.6	1770	-	30	460	3	60	DDC		CB, BS, SP, VFD, XP, RI
EF-24	PAINT BAY	CB	DD	26,000	3.6	1770	-	30	460	3	60	DDC		CB, BS, SP, VFD, XP, RI

#### FAN SCHEDULE LEGEND

DD - DIRECT DRIVE  
 BD - BELT DRIVE  
 EF - EXHAUST FAN  
 SW - SIDE WALL CENTRIFUGAL  
 SWP - SIDE WALL PROPELLOR FAN  
 CF - CABINET FAN  
 FF - FLY FAN  
 SF - SUPPLY FAN  
 BS - BIRD SCREEN  
 XP - EXPLOSION PROOF  
 CB - CENTRIFUGAL BLOWER  
 ILC - INLINE CENTRIFUGAL FAN  
 RSF - ROOF SUPPLY FAN  
 ESP - EXTERNAL STATIC PRESSURE  
 SP - SPARK PROOF CONSTRUCTION  
 AF - AIR FOIL BLADES  
 VFD - VARIABLE FREQUENCY DRIVE  
 RI - RUN INDICATION

#### FAN NOTES

- ALL EXHAUST FANS SHALL BE INSTALLED WITH FLEXIBLE DUCT CONNECTION, VIBRATION ISOLATORS, AND FLEXIBLE CONDUIT. FAN SHALL NOT BE IN CONTACT WITH ANY OTHER DUCT, PIPING, CONDUIT, OR STRUCTURAL MEMBERS.
- THE FANS SHALL BE PROVIDED WITH BACKDRAFT DAMPERS.
- THE ROOF MOUNTED FANS SHALL BE PROVIDED WITH PREFABRICATED ROOF CURBS AND BACKDRAFT DAMPER.
- ALL DIRECT DRIVE FANS WITH MOTORS LESS THEN 1/2 HP SHALL BE PROVIDED WITH AN ADJUSTABLE ELECTRONIC SPEED CONTROLLER.
- MOUNT VFD ON ROOF FOR EF-19, 21, 22, 23, 24
- INTERLOCK EF-20 WITH AHU-4 AND AHU-4 OUTSIDE AIR DAMPER. EF-20 SHALL RUN CONTINUOUSLY WHEN AHU-4 IS ON AND AHU-4 OUTSIDE AIR DAMPER IS OPEN.
- INTERLOCK EF-19, EF-22 WITH AHU-3
- INTERLOCK EF-21 WITH AHU-2
- INTERLOCK EF-23, EF-24 WITH MAU-3

### EXPANSION TANK SCHEDULE

MARK	VOLUME (GAL)		CHARGE PRESSURE PSI.	NOTES
	TANK MIN.	ACCEPTANCE MIN.		
EX. TK. 1	8	5	12	FULL BLADDER, REPLACABLE
EX. TK. 2	57	57	12	FULL BLADDER, REPLACABLE

### AIR SEPARATOR SCHEDULE

MARK	FLOW		WORKING PRESSURE PSI	INLET SIZE INCHES	OUTLET SIZE INCHES
	RATE GPM	MAX WPD IN H <sub>2</sub> O			
AS-1	450	0.5	125	6	6
AS-2	180	0.5	125	3	3

### AIR DISTRIBUTION SCHEDULE

MARK	CFM	NECK SIZE	FACE SIZE LENGTH	DESCRIPTION
A	000-100 101-225 226-300 301-400 401-500	6" 8" 10" 12" 14"	24x24 (TYP)	SUPPLY DIFFUSER BASIS OF DESIGN: TITUS OMNI AA COLOR: WHITE MATERIAL: ALUMINUM OPPOSED BLADE DAMPERS: NO
B	000-110 111-220 221-350 351-530 531-730 731-970 971-1240 1241-1540 1541-1880	6x6 8x8 10x10 12x12 14x14 16x16 18x18 20x20 22x22	24x24 (TYP)	RETURN / EXHAUST GRILLE BASIS OF DESIGN: TITUS 350FS COLOR: WHITE MATERIAL: ALUMINUM OPPOSED BLADE DAMPERS: NO 1/2"x1/2"x1/2" GRID
C	000-160 161-250 251-330 331-500 501-890	6x6 8x6 12x6 18x6 18x10		SUPPLY SIDEWALL DIFFUSER BASIS OF DESIGN: TITUS 250AA COLOR: WHITE MATERIAL: EXTRUDED ALUMINUM OPPOSED BLADE DAMPERS: NO
D	000-160 161-250 251-330 331-500 501-890 891-1450	6x6 8x6 12x6 18x6 18x10 24x12	12x12 (TYP)	RETURN/EXHAUST SIDEWALL GRILLE BASIS OF DESIGN: TITUS 350FL COLOR: WHITE MATERIAL: EXTRUDED ALUMINUM OPPOSED BLADE DAMPERS: NO SINGLE DEFLECTION 3/4" SPACING
RB	REBALANCE TO AIR FLOW SHOWN			

### MAKE-UP AIR UNIT SCHEDULE

MARK	TYPE	FAN DATA					ELECTRICAL DATA			CHILLED WATER COOLING COIL DATA				PREHEAT COIL DATA			REHEAT COIL DATA			FILTER DATA		
		TOTAL AIR CFM	OUTSIDE AIR CFM	EXTERNAL STATIC PRESSURE INCHES H <sub>2</sub> O	# OF FANS	MOTOR HP PER FAN	VOLTS	PHASE	HERTZ	COOLING CAP. MBTU/HR	GPM	*F ENT.	CONTROL VALVE	CAPACITY (MBH)	FUEL	COMBUSTION CONTROL	CAPACITY (MBH)	FUEL	COMBUSTION CONTROL	TYPE	THICK IN, IN	CONTROL
MAU-1	V	150,000	150,000	1.5	1	150	460	3	60	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	-	35%, 85%	2, 24	DDC
MAU-2	V	150,000	150,000	1.5	1	150	460	3	60	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	-	35%, 85%	2, 24	DDC
MAU-3	V, H, C	50,000	50,000	1.5	4	15	460	3	60	TOTAL: 1,200 LATENT: 620	150	42	3-WAY	2,700	NATURAL GAS	MODULATING	240	NATURAL GAS	MODULATING	35%, 85%	2, 24	DDC
GMAU-1	V, H	18,000	18,000	1.5	2	7.5	460	3	60	N/A	N/A	N/A	N/A	1,200	NATURAL GAS	MODULATING	N/A	N/A	MODULATING	35%, 85%	2, 24	DDC

#### MAKE-UP AIR UNIT NOTES:

V - VENTILATING UNIT, DOUBLE-WALL ALUMINUM CONSTRUCTION SUITABLE FOR EXTERIOR INSTALLATION WITH FAN, FILTERS, AND INTAKE HOOD.  
 V, H, C - VENTILATING, HEATING, COOLING UNIT, DOUBLE-WALL ALUMINUM CONSTRUCTION SUITABLE FOR EXTERIOR INSTALLATION WITH FAN, FILTERS, AND INTAKE HOOD.  
 V, H - VENTILATING, HEATING UNIT, DOUBLE-WALL ALUMINUM CONSTRUCTION SUITABLE FOR EXTERIOR INSTALLATION WITH FAN, FILTERS, AND INTAKE HOOD.

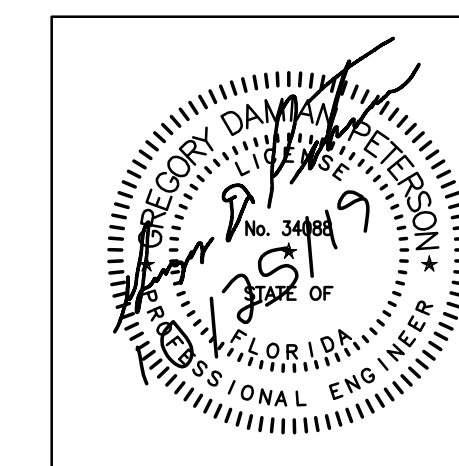
- PROVIDE 3 INCH THICK INSULATION INSIDE PANELS.
- PROVIDE VARIABLE FREQUENCY DRIVE FOR MAU-1.
- PROVIDE MOTOR STARTER FOR MAU-2.
- FAN WHEELS AND BLADES SHALL BE ALUMINUM CONSTRUCTION.
- EXTERIOR PANELS SHALL BE FACTORY PREFINISHED TO MATCH COLOR OF THE INSULATED METAL PANELS THAT FORM THE BUILDINGS EXTERIOR WALLS.
- PROVIDE RAIN HOOD AT EACH OA OPENING.
- PROVIDE VARIABLE FREQUENCY DRIVE FOR GMAU-1, LOCATED ON ROOF.
- PROVIDE VARIABLE FREQUENCY DRIVE FOR MAU-3, LOCATED ON ROOF.
- GMAU-1 SHALL BE PROVIDED WITH A MANUAL 0-4 HOUR TIMER AT THE BLASTING BOOTH FOR ACTIVATION OF UNIT.
- GMAU-1 SHALL BE INTERLOCKED WITH THE EXISTING DUCT COLLECTOR.

#### OPERATION NOTES:

UNITS TO RUN 2 MINUTES AFTER STOPPING WORK IN SPACE TO ALLOW FOR CONTAMINANTS TO BE EXHAUSTED FROM THE SPACE.

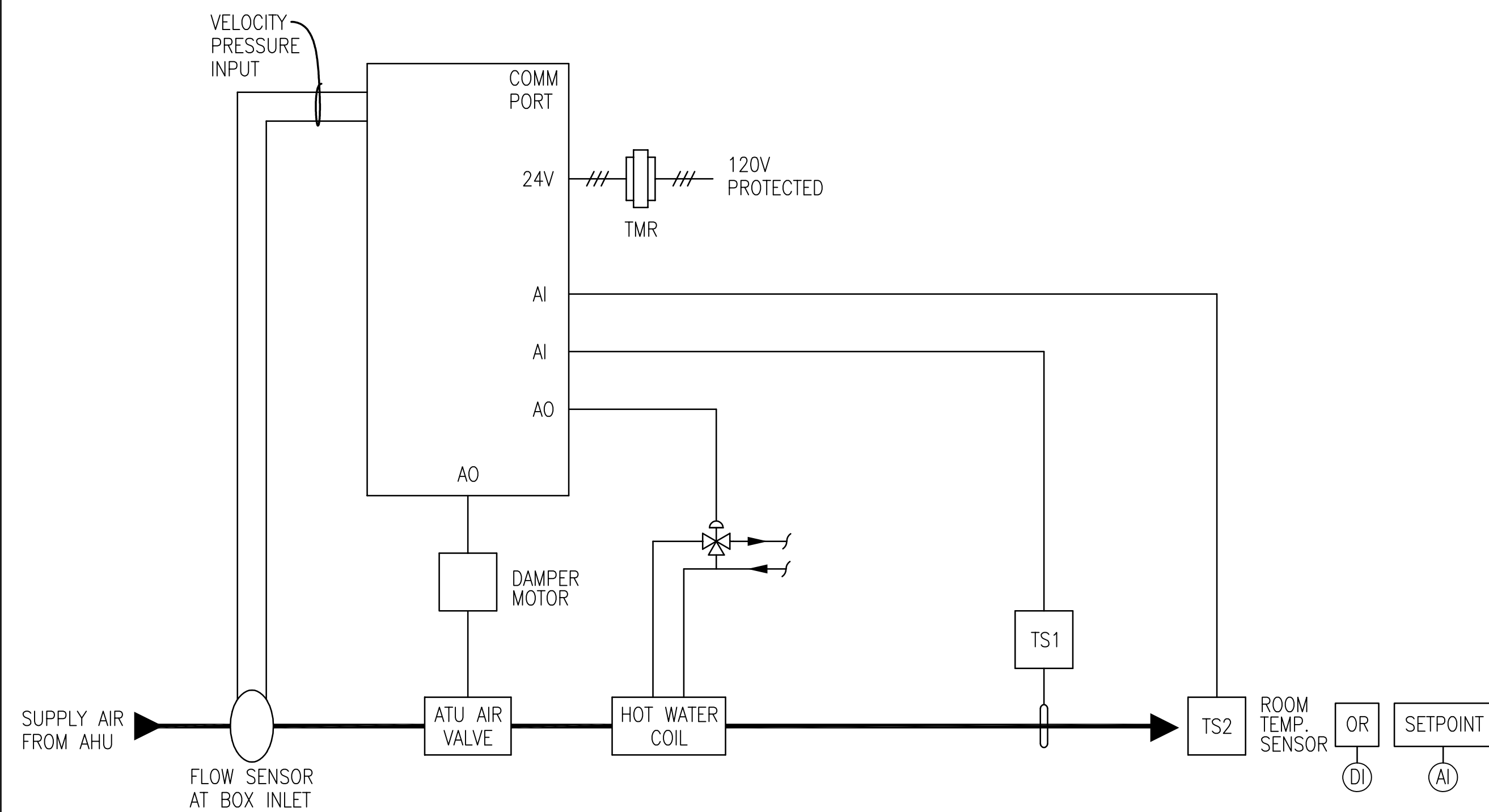
**PETERSON ENGINEERING INC.**

(PROF. ENG. # 3600)  
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 PEI# 18116



DESCRIPTION	
DATE	
REV #	
<b>REPAIR CORROSION CONTROL FACILITY</b>	
<b>BUILDING 90225</b>	
MECHANICAL SCHEDULES	
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b>	
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON	
<b>HURLBURT FIELD, FLORIDA</b>	
DATE:	28 OCT 2019
DESIGNED BY:	GDP
DRAWN BY:	DJM
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	M-602
SHEET NUMBER:	56 of 80

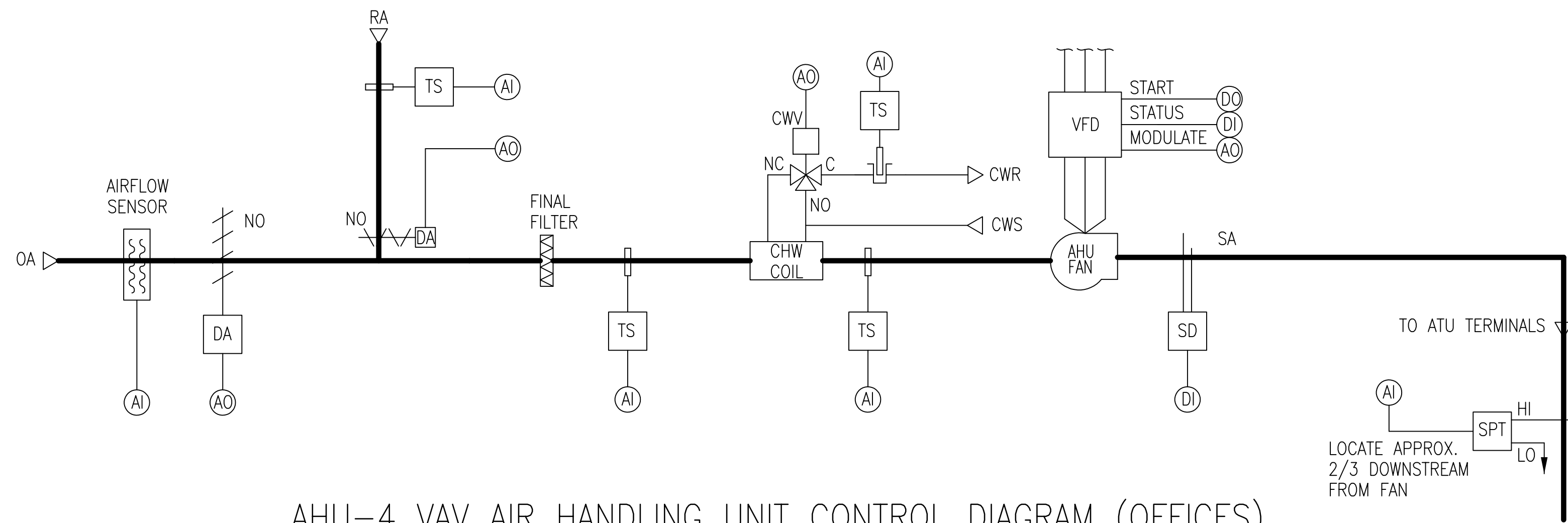
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STANDALONE DIRECT AIR TERMINAL CONTROL UNIT (ATU) SHALL MODULATE THE VAV DAMPER AND HOT WATER VALVE IN SEQUENCE TO MAINTAIN SPACE TEMPERATURE AT TS2 SET POINT.

ON A RISE IN SPACE TEMPERATURE ABOVE TS2 SET POINT CONTROLLER ATU SHALL MODULATE THE VAV DAMPER OPEN TO THE MAXIMUM CFM SETTING. AS SPACE TEMPERATURE DROPS BELOW SET POINT, ATU SHALL MODULATE THE VAV DAMPER CLOSED TO MINIMUM CFM SETTING. IF SPACE TEMPERATURE CONTINUES TO DROP BELOW SET POINT THROUGH IT'S HEATING DEADBAND THE HOT WATER VALVE SHALL BE MODULATED OPEN BASED ON SPACE TEMPERATURE. THE AIR FLOW WILL BE RESET TO THE HEATING CFM. THE ZONE SHALL HAVE A SETPOINT CONTROL AND OVERRIDE SWITCH, FOR A TWO HOUR PERIOD.

VARIABLE AIR TERMINAL UNIT FLOW DIAGRAM (ATU)

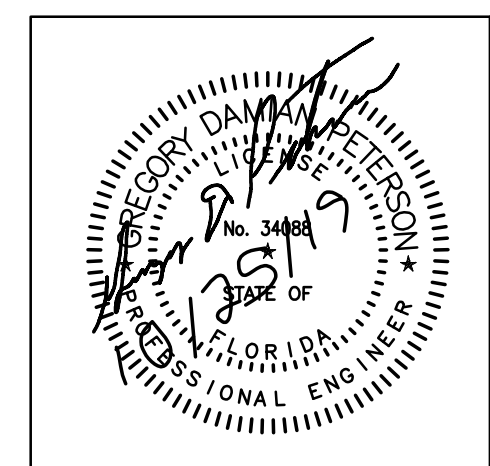


AHU-4 VAV AIR HANDLING UNIT CONTROL DIAGRAM (OFFICES)

**AIR HANDLING UNIT SEQUENCE OF OPERATION:**

1. THE SYSTEM SHALL BE AUTOMATICALLY STARTED AND STOPPED BY THE DDC SYSTEM WHENEVER THE HAND-OFF-AUTOMATIC SWITCH IS IN THE AUTOMATIC POSITION AND MANUALLY STARTED AND STOPPED IN THE HAND AND OFF POSITION RESPECTIVELY. THE AIR HANDLING UNIT SHALL BE SUBJECT TO THE SAFETIES AND INTERLOCKS.
2. THE DDC SYSTEM SHALL MODULATE THE CHILLED WATER VALVE TO MAINTAIN THE COLD DECK SUPPLY AIR TEMPERATURE SET POINT. THE SUPPLY AIR SET POINT SHALL BE 55°F.
3. THE DDC SYSTEM SHALL MODULATE THE AIR HANDLING FAN SPEED THROUGH THE VFD TO MAINTAIN THE MINIMUM STATIC PRESSURE AT 1" W.C. (ADJUSTABLE) AS SENSED BY STATIC PRESSURE TRANSMITTER (SPT). SEE NOTE 9.
4. THE DDC SYSTEM SHALL MONITOR THE OUTSIDE AIR QUANTITY AND MODULATE THE OUTSIDE AIR DAMPER TO MAINTAIN OA CFM CONSTANT. ONCE THE O.A. DAMPER IS AT THE FULLY OPEN POSITION, IF THE OA CFM IS BELOW SET POINT, THEN THE RA DAMPER SHALL BE MODULATED TOWARDS THE CLOSED POSITION. HOWEVER THE RA DAMPER SHALL INITIALLY PROGRAMMED TO AT LEAST 40% (ADJ.) OPEN.
5. THE DDC SYSTEM SHALL MONITOR THE MIXED AIR TEMPERATURE AND CLOSE THE OUTSIDE AIR DAMPER IF THE MIXED AIR TEMPERATURE DROPS BELOW 44°F.
6. THE DDC SYSTEM SHALL BE SETUP TO DISPLAY ALL ITEMS INDICATED ON THE FLOW DIAGRAMS.
7. OCCUPIED AND UNOCCUPIED MODES SHALL BE PROGRAMMABLE FOR A MINIMUM 14 DAY PERIOD. IN THE OCCUPIED MODE THE HVAC SYSTEM SHALL OPERATE TO SATISFY ALL SPACE T'STATS. T'STATS SHALL HAVE 2 HR OVERRIDE SWITCHES IN ORDER TO OVERRIDE THE UNOCCUPIED MODE.
8. THE DDC SYSTEM SHALL MONITOR THE ZONE TEMPERATURE SENSORS AND SHALL ACTIVATE THE SYSTEM IF THE ROOM TEMPERATURES RISE ABOVE 80°F (ADJ.) OR DROP BELOW 60°F (ADJ.) IN THE UNOCCUPIED MODE.
9. DURING TEST & BALANCE, THE STATIC REQUIRED FOR FULL AIR FLOW AT ALL ATUS WHEN ALL ATUS ARE AT 100% AIR FLOW IS THE VALUE TO BE USED AS THE STATIC PRESSURE SETPOINT.

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 PEI# 18116



DESCRIPTION	
DATE	
REV #	
REPAIR CORROSION CONTROL FACILITY BUILDING 90225 MECHANICAL CONTROLS	
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA	
DATE:	28 OCT 2019
DESIGNED BY:	GDP
DRAWN BY:	DJM
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	M-701
SHEET NUMBER:	57 of 80







# CONTROL SYSTEMS NOTE

ALL CONTROL SYSTEMS, DEVICES, AND SOFTWARE SHALL INTERFACE WITH THE EXISTING HURLBURT FIELD DDC ENERGY MANAGEMENT CONTROL SYSTEM (EMCS).

## DDC POINTS LIST

### CHILLER

- ENTERING WATER TEMPERATURE AI
- LEAVING WATER TEMPERATURE AI
- MOTOR AMPS AI
- UNIT WATTS AI
- REFRIGERANT SUCTION PRESSURE AI
- REFRIGERANT DISCHARGE PRESSURE AI
- WATER GPM AI
- ALARM STATUS DI
- CONTROL OUTPUT DO

### TYPICAL PUMP

- MOTOR AMPS AI
- CONTROL OUTPUT DO

### TYPICAL VALVES/DAMPERS

- CONTROL OUTPUT AO

### NOTE:

THE POINTS LISTED ABOVE TO MONITOR OR CONTROL ARE MINIMUM REQUIREMENTS. PROVIDE ADDITIONAL POINTS AS INDICATED ON CONTROL DIAGRAMS AND SPECIFICATIONS.

## HVAC OCCUPANCY SCHEDULE

OCCUPIED DAY & TIME:	UNOCCUPIED DAY & TIME:
MON-FRI 0500-2300	MON-FRI: 2300-0500 SAT-SUN: ALL HOURS

1. PROVIDE OVERRIDE ON ALL THERMOSTATS TO BE CONTROLLED BY USER AND DDC. OVERRIDE SEQUENCE SHALL ALLOW A 2 HOUR OVERRIDE OCCUPIED MODE BEFORE SWITCHING BACK TO UNOCCUPIED MODE.

## TYPICAL HAZARDOUS AREA VENTILATION SYSTEM

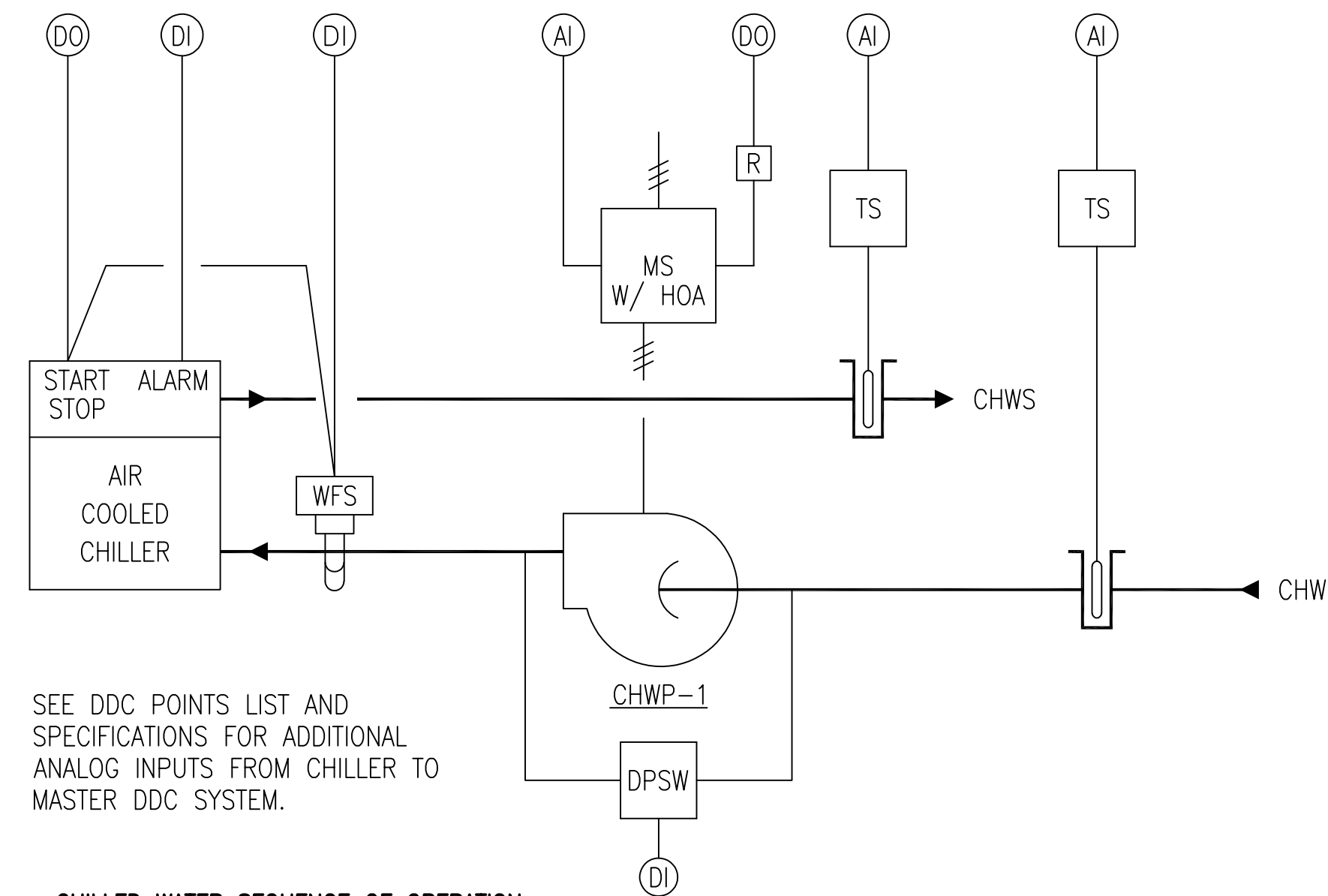
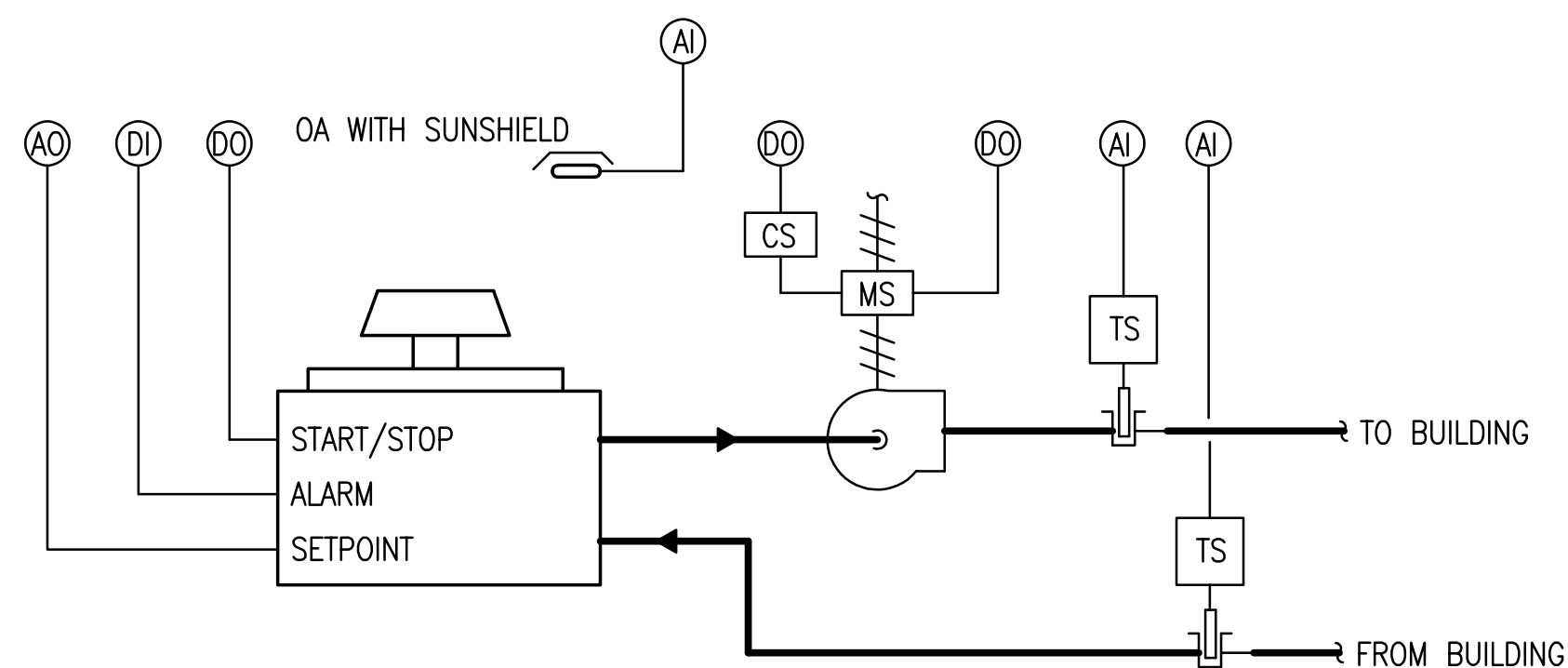
PAINTING BAY 117, SANDING ROOM 113, AND PLASTIC MEDIA 112

### SEQUENCE OF OPERATION:

1. THE RESPECTIVE EXHAUST FAN SERVING THE SPACE SHALL BE STARTED WHEN AN OCCUPANT ACTIVATES A KEY SWITCH LOCATED WITHIN THE SPACE. THE DDC SYSTEM SHALL START THE FAN AND SET THE RESPECTIVE ATU TO THE MAXIMUM PRIMARY AIRFLOW. THE KEY SWITCH SHALL BE EXPLOSION PROOF. LABEL SHALL READ "VENTILATION SYSTEM" AND SHALL HAVE CLEARLY MARKED "ON" POSITION INDICATION. A GREEN LED SHALL BE LOCATED NEXT TO THE "ON" POSITION LABEL. THERE SHALL ALSO BE A "FAULT" INDICATOR WITH A CORRESPONDING RED LED.
2. THE DDC SYSTEM SHALL MONITOR THE OPERATION OF THE RESPECTIVE EF AND ATU/AHU. IF ABNORMAL OPERATION IS DETECTED IN THAT THE EF FAILS OR ATU/AHU SA AIRFLOW IS NOT WITHIN 15% OF MAXIMUM PRIMARY AIRFLOW, A WARNING SIREN SHALL BE ACTIVATED WITHIN THE AIRCRAFT PAINT BAY AND THE "FAULT" LED SHALL BE LIT.
3. ALL DEVICES LOCATED WITHIN THE HAZARDOUS WORK AREAS SHALL BE EXPLOSION PROOF.
4. AHU-1A AND AHU-1B SHALL SHUTDOWN WHEN LARGE HANGAR DOORS ARE OPEN.

## BOILER HOT WATER SYSTEM SEQUENCE OF OPERATION

1. THE HOT WATER LOOP PUMP (HWP-1) SHALL HAVE A HOA SWITCH AT THE MOTOR STARTER. THE "HAND" POSITION SELECTED THE PUMP SHALL RUN CONTINUOUSLY. THE "OFF" POSITION SELECTED THE PUMP SHALL BE OFF CONTINUOUSLY. THE "AUTO" POSITION SELECTED THE PUMP SHALL BE STARTED AND STOPPED BY THE DDC SYSTEM. THE PUMP SHALL BE STARTED 30 SECONDS (ADJ) AFTER ANY OF THE AIR HANDLING UNITS ARE STARTED. THE PUMP'S MOTOR CURRENT DRAW SHALL BE MONITORED. SHOULD THE PUMP FAIL TO START WHEN COMMANDED AS SENSED BY THE CURRENT SENSING RELAY, THE DDC CONTROL SYSTEM SHALL AUTOMATICALLY POST AN ALARM.
2. THE BOILER SHALL MAINTAIN THE HOT WATER TEMPERATURE THROUGH ITS' FACTORY PROVIDED CONTROLS.
3. THE DDC SYSTEM SHALL MONITOR THE SUPPLY AND RETURN HOT WATER TEMPERATURES. HOT WATER SUPPLY TEMPERATURE SHALL BE 140°F (ADJ).



SEE DDC POINTS LIST AND SPECIFICATIONS FOR ADDITIONAL ANALOG INPUTS FROM CHILLER TO MASTER DDC SYSTEM.

### CHILLED WATER SEQUENCE OF OPERATION:

THE CHILLED WATER PUMP SHALL BE STARTED THROUGH A STARTER MOUNTED HAND-OFF-AUTO SWITCH. IN THE HAND POSITION THE PUMP SHALL RUN CONTINUOUSLY. IN THE AUTO POSITION, THE PUMP SHALL BE CYCLED BY THE MASTER DIRECT DIGITAL CONTROL PANEL AS PROGRAMMED. WHEN THE PUMP STARTS AND FLOW IS PROVEN, THE CHILLER CONTROL CIRCUIT SHALL BE ACTIVATED. THE CHILLER SHALL CYCLE THROUGH ITS' FACTORY PROVIDED CONTROLS TO MAINTAIN CHWS TEMPERATURE AT 42°F (ADJ). THE MASTER DDC PANEL SHALL MONITOR THE CHWS & CHWR TEMPERATURES, AND CHILLER SHALL ALARM CONDITIONS SUCH AS HIGH/LOW TEMPERATURE, HIGH/LOW PRESSURE, ETC. SEE DDC POINTS LIST AND SPECIFICATIONS. THE CHILLED WATER SETPOINT SHALL BE ADJUSTABLE THROUGH THE DDC SYSTEM REMOTE USER INTERFACE.

## CHILLED WATER SYSTEM CONTROL DIAGRAM

## CHILLED WATER CONTROL

THE DDC SYSTEM SHALL MONITOR THE CHILLED WATER SUPPLY TEMPERATURE. IF THE CHILLED WATER SUPPLY TEMPERATURE RISES 2°F (ADJ.) ABOVE SET POINT, THE CHILLED WATER CONTROL VALVE ON THE PAINT BOOTH SHALL BE LIMITED TO 50% (ADJ.) FLOW TO COIL. IF THE CHILLED WATER SUPPLY TEMPERATURE RISES TO 4°F (ADJ.) ABOVE SET POINT THE CHILLED WATER CONTROL VALVE ON THE PAINT BOOTH SHALL BE LIMITED TO 25% (ADJ.) FLOW TO COIL AND THE CHILLED WATER FLOW TO AHU-1A AND AHU-1B SHALL BE LIMITED TO 50% (ADJ.) FLOW TO THE COIL.

THE TEST & BALANCE AND CONTROLS CONTRACTORS SHALL TAKE ACTUAL READINGS OF THE FINAL SYSTEM OPERATION. THE READINGS SHALL BE INSERTED INTO THE TABLE BELOW AND ADDED IT TO THE "NOTES" PORTION OF THE CONTROLS PROGRAM ON THE MAIN DDC FRONT END. THE TEST & BALANCE CONTRACTOR SHALL INCLUDE THE READINGS THE THE FINAL TEST & BALANCE REPORT. THE "NOTES" WILL BE AVAILABLE FOR FUTURE REFERENCE BY ANYONE AUTHORIZED TO MAKE CONTROLS SOFTWARE UPDATES.

THIS TABLE SHALL BE FIELD POPULATED

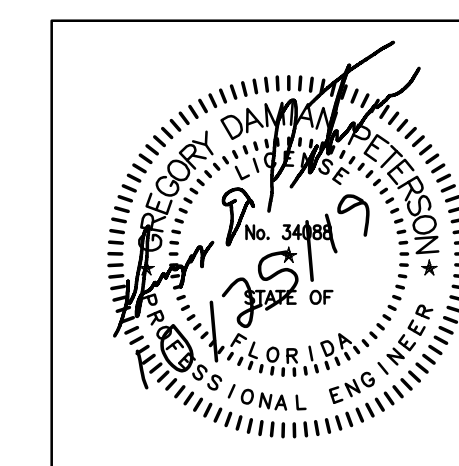
ACTUAL FIELD MEASURED GPM THRU CHW COIL													
% OF DDC VALVE POSITION	5%	10%	15%	20%	25%	30%	40%	50%	60%	70%	80%	90%	100%
PAINT BOOTH MAU-3													
AHU-1A													
AHU-1B													

THE CONTROLS CONTRACTOR SHALL SET UP THE SOFTWARE SO THAT THE USER CAN GO INTO THE SOFTWARE AND ENTER ANY VALVE POSITION IN PERCENTAGE BETWEEN 0 TO 100% TO LIMIT THE WATER FLOW TO THE COIL BASED ON THE AMOUNT THAT THE CHILLED WATER SUPPLY TEMPERATURE IS ABOVE SET POINT. CHILLED WATER TEMPERATURE READOUT ACCURACY SHALL BE WITHIN A TENTH OF A DEGREE.

THIS PROGRAM SHALL BE SET UP FOR PAINT BOOTH MAU, AHU-1A, AND AHU-1B.

**PETERSON ENGINEERING INC.**

(PROF. ENG. #: 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
MECHANICAL CONTROLS

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA



DATE: 28 OCT 2019

DESIGNED BY: GDP

DRAWN BY: DJM

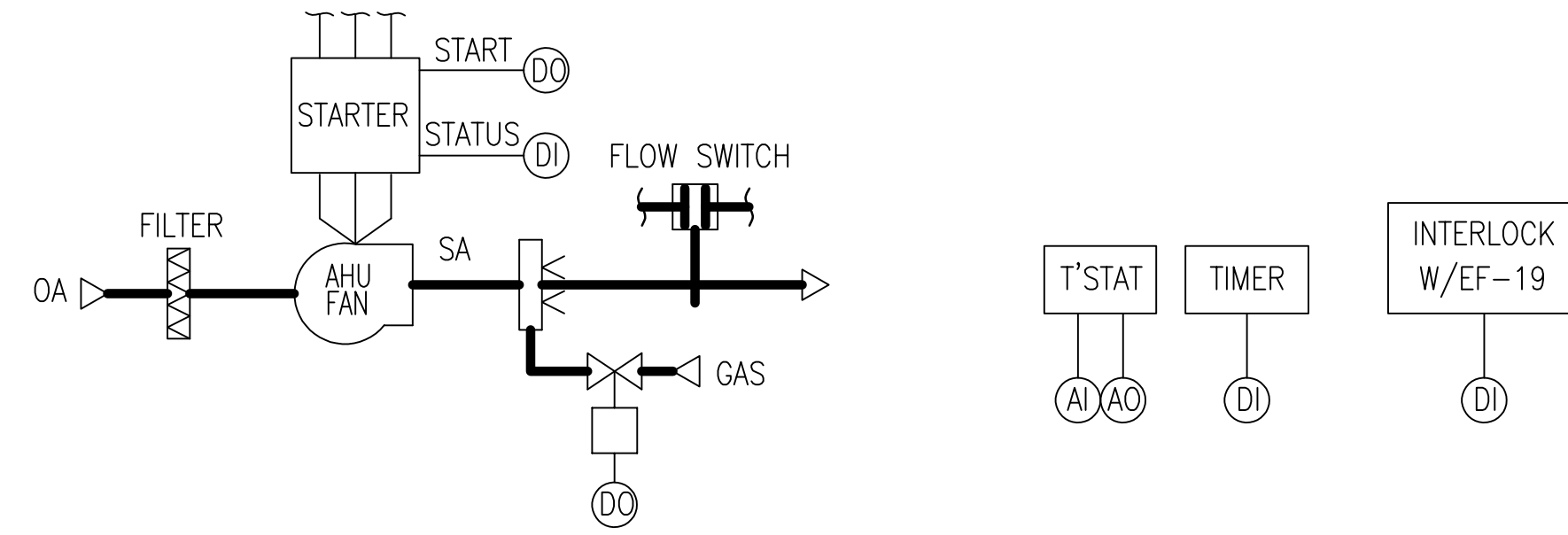
BUILDING NUMBER: 90225

PROJECT NUMBER: CP1028800

SHEET REFERENCE: M-704

SHEET NUMBER: 60 of 80

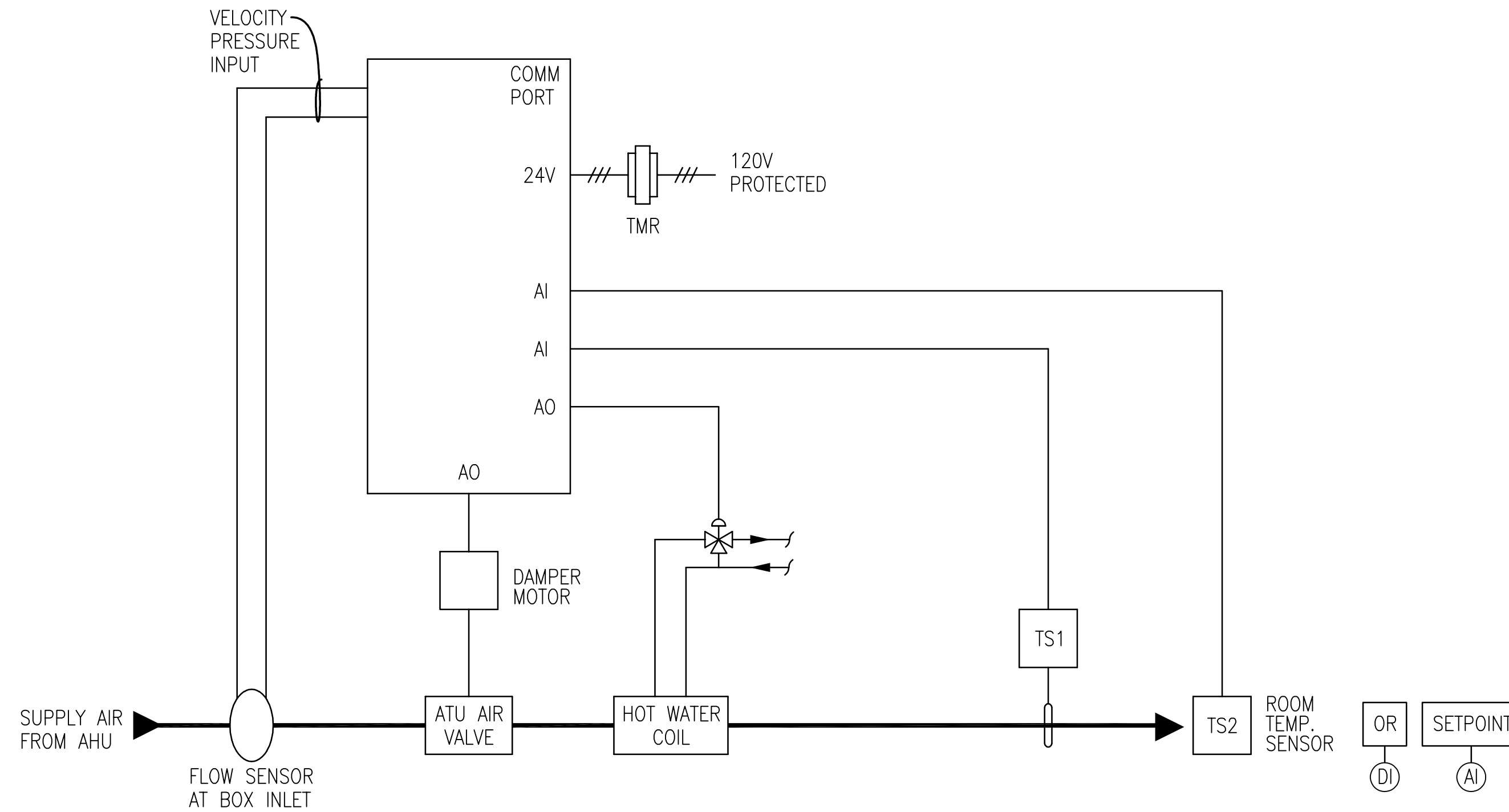
10/30/2019 1:20:09 PM, djmarshall, ANSI\_D\_(22.00\_x\_34.00\_inches)



GMAU-1 CV AHU CONTROL DIAGRAM (SAND BLAST ROOM 112)

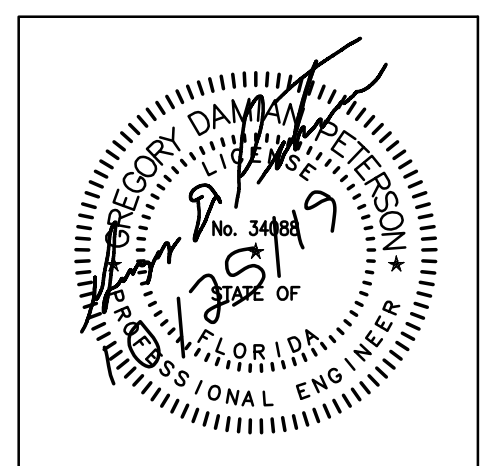
AIR HANDLING UNIT SEQUENCE OF OPERATION:

1. THE SYSTEM SHALL BE MANUALLY STARTED AND STOPPED IN THE HAND AND OFF POSITION RESPECTIVELY. THE AIR HANDLING UNIT SHALL BE SUBJECT TO THE SAFETIES AND INTERLOCKS.
2. THE UNIT SHALL INTERLOCK WITH EF-19. THE EXHAUST FAN SHALL BE IN OPERATION BEFORE THE GMAU IS STARTED.
3. THE DDC SHALL MONITOR SPACE CONDITIONS AND IF THE TEMPERATURE DROPS BELOW THE SET POINT, 65°F (ADJ.), THE GAS HEAT SHALL BE MODULATED.
4. THE UNIT SHALL HAVE A HARDWIRE AIR FLOW SAFETY SWITCH FOR THE BURNER.
5. THE UNIT SHALL OPERATE WHEN THE 0-4 HR TIMER IS IN THE ON POSITION.



ON A RISE IN SPACE TEMPERATURE ABOVE TS2 SET POINT CONTROLLER ATU SHALL MODULATE THE HOT WATER VALVE CLOSED. AS SPACE TEMPERATURE DROPS BELOW SET POINT ATU SHALL MODULATE THE HOT WATER VALVE OPEN.

CONSTANT AIR TERMINAL UNIT FLOW DIAGRAM (ATU)



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REV #	DATE	DESCRIPTION

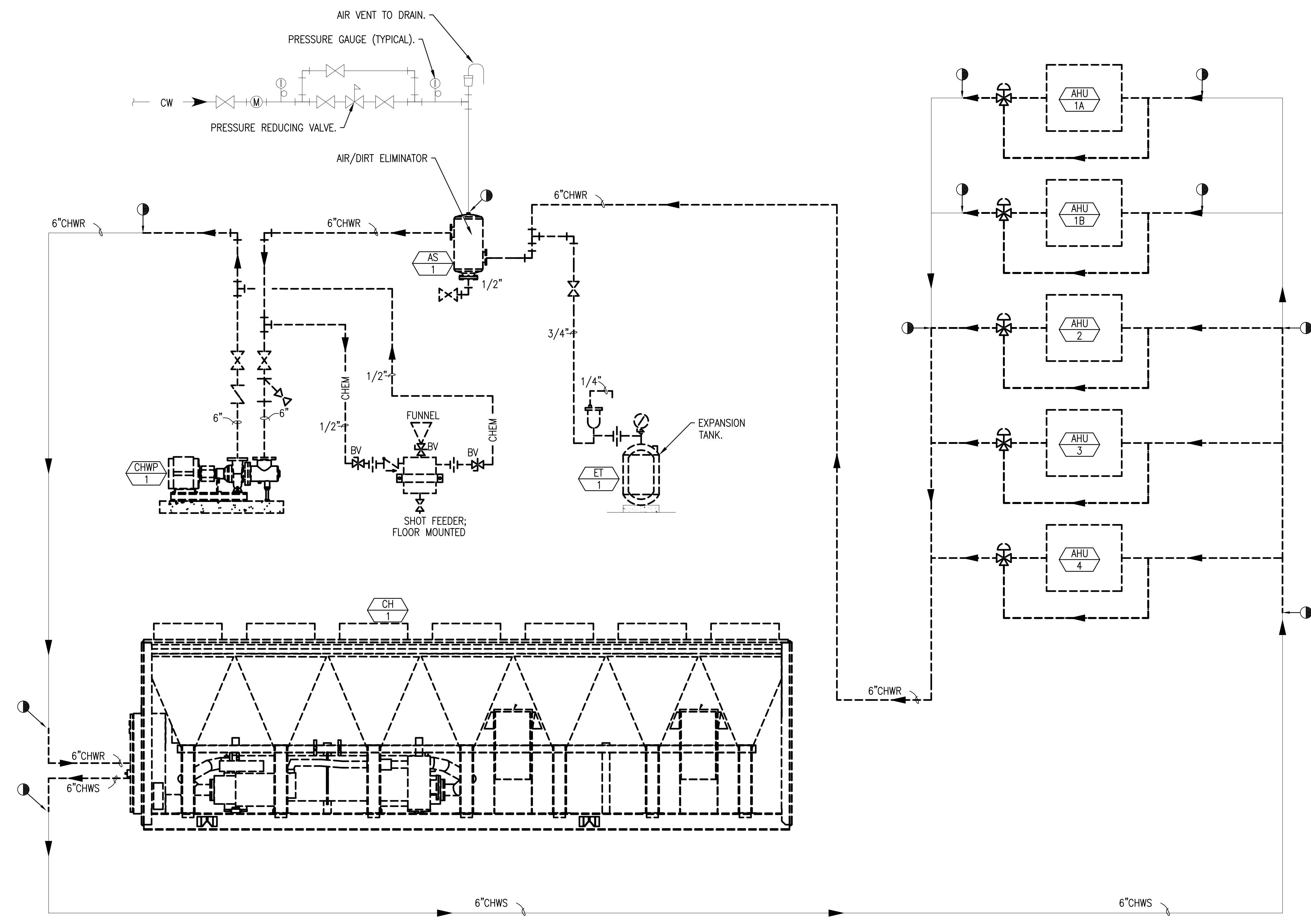
REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225  
 MECHANICAL CONTROLS

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA

DATE: 28 OCT 2019  
 DESIGNED BY: GDP  
 DRAWN BY: DJM  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE: M-705  
 SHEET NUMBER: 61 of 80



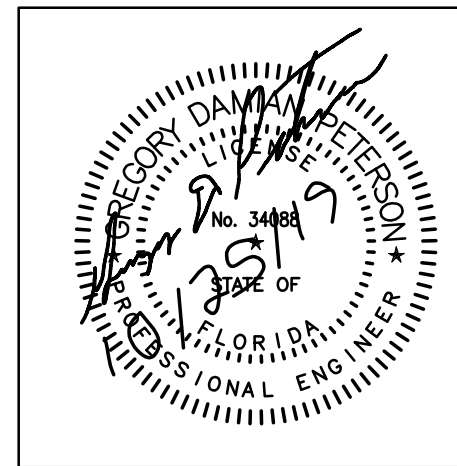
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**CHILLED WATER PIPING SCHEMATIC – DEMO**  
NO SCALE

NOTES:  
DEMO CHILLED WATER PIPING AND REPLACE WITH NEW AS INDICATED AND SHOWN ON FLOOR PLANS

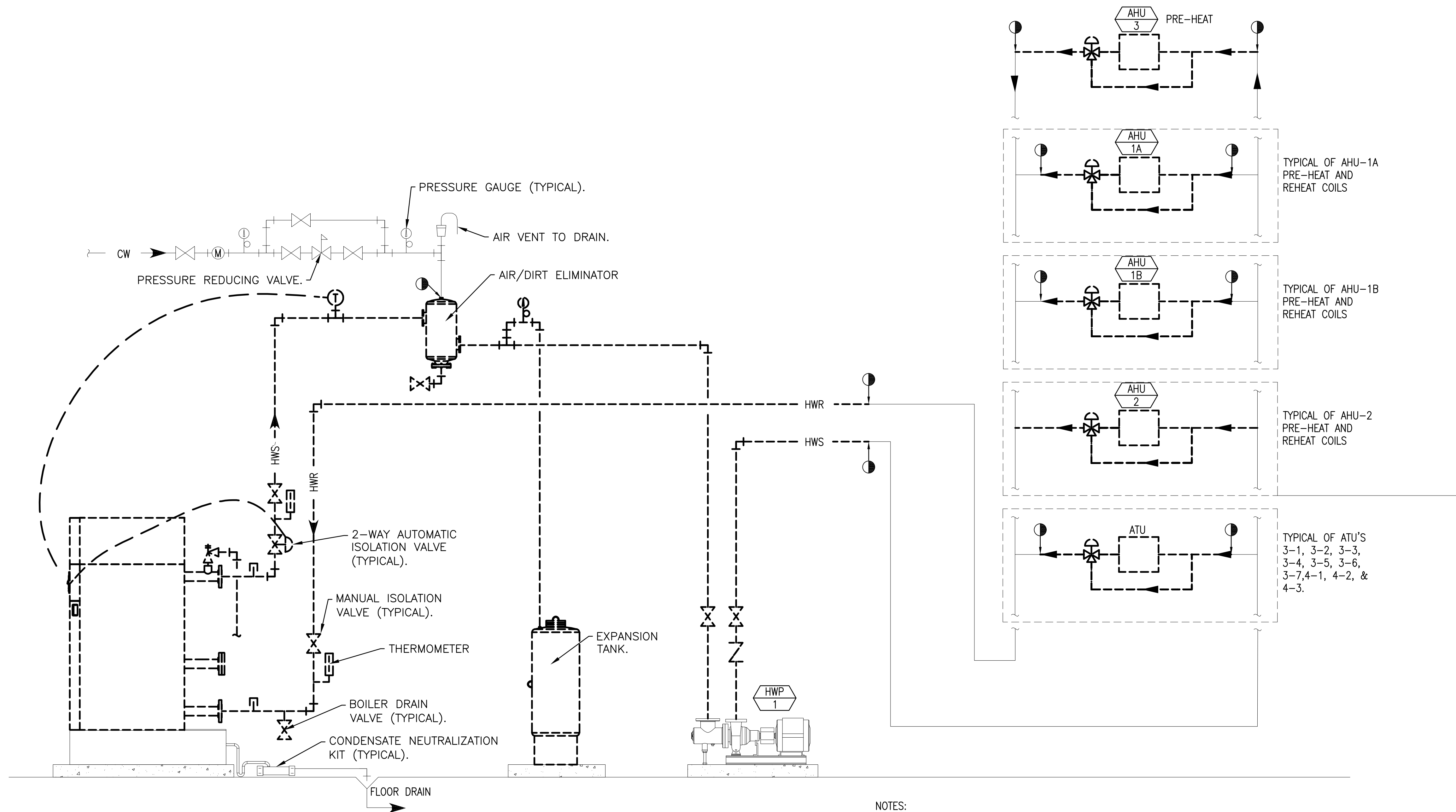
**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION
<b>REPAIR CORROSION CONTROL FACILITY BUILDING 90225</b> CHILLED WATER PIPING SCHEMATIC – DEMO		
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA		
DATE: <b>28 OCT 2019</b> DESIGNED BY: <b>GDP</b> DRAWN BY: <b>DJM</b> BUILDING NUMBER: <b>90225</b> PROJECT NUMBER: <b>CP1028800</b> SHEET REFERENCE: <b>M-706</b> SHEET NUMBER: <b>62 of 80</b>		

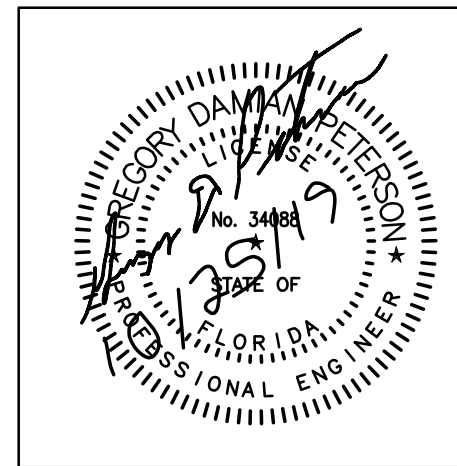


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NOTES:  
 DEMO HOT WATER PIPING AND REPLACE WITH NEW AS  
 INDICATED AND SHOWN ON FLOOR PLANS

**HOT WATER PIPING SCHEMATIC – DEMO**  
 NO SCALE



**PETERSON ENGINEERING INC.**  
 (PROF. ENG. # 3600)  
 75 SOUTH "F" STREET  
 PENSACOLA, FLORIDA 32502  
 (850) 434-0513  
 PEI# 18116

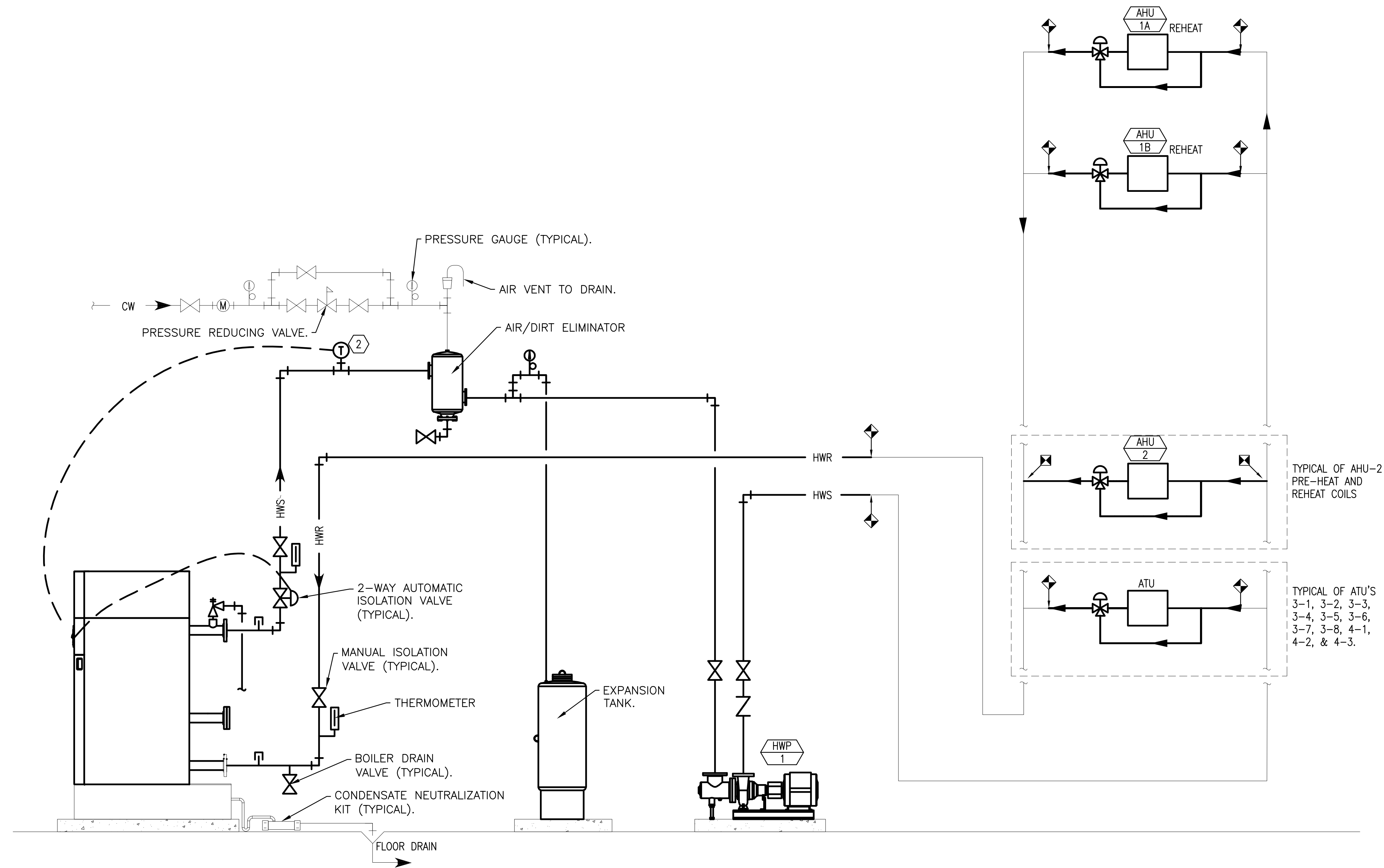
REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225  
 HOT WATER PIPING SCHEMATIC – DEMO**

**AIR FORCE SPECIAL  
 OPERATIONS COMMAND  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA**

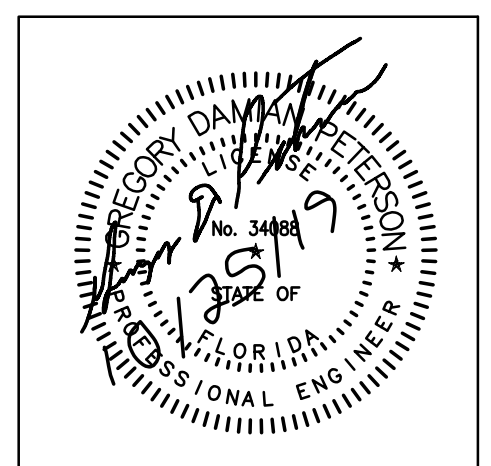
DATE: 28 OCT 2019  
 DESIGNED BY: GDP  
 DRAWN BY: DJM  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE: M-708  
 SHEET NUMBER: 64 of 80

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**HOT WATER PIPING SCHEMATIC - NEW**  
NO SCALE

**PETERSON ENGINEERING INC.**  
(PROF. ENG. # 3600)  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513  
PEI# 18116



REV #	DATE	DESCRIPTION



























**REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225  
HOT WATER PIPING SCHEMATIC - NEW**

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

DATE: **28 OCT 2019**  
DESIGNED BY: **GDP**  
DRAWN BY: **DJM**  
BUILDING NUMBER: **90225**  
PROJECT NUMBER: **CP1028800**  
SHEET REFERENCE: **M-709**  
SHEET NUMBER: **65 of 80**



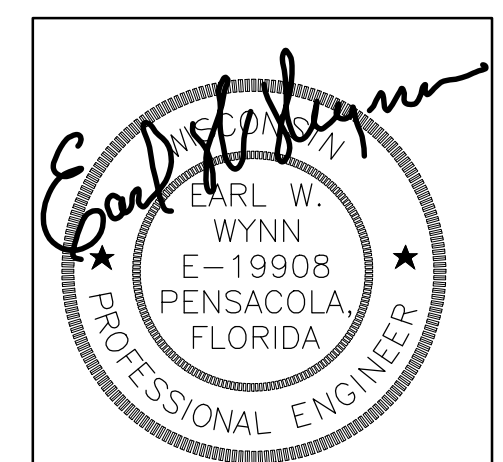
## ELECTRICAL LEGEND - DEMOLITION

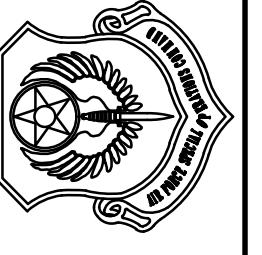
-  EXISTING LED LIGHTING FIXTURE - REMOVE.
  -  EXISTING LED LIGHTING FIXTURE - TO REMAIN.
  -  EXISTING FLUORESCENT LIGHTING FIXTURE - REMOVE.
  -  EXISTING EXIT LIGHTING FIXTURE - REMOVE.
  -  EXISTING COMBINATION EXIT/EMERGENCY LIGHTING FIXTURE - REMOVE.
  -  EXISTING EXIT LIGHT - TO REMAIN.
  -  EXISTING EMERGENCY LIGHTING FIXTURE - REMOVE.
  -  EXISTING EXPLOSION PROOF LIGHTING SWITCH - TO REMAIN.
  -  EXISTING MOTOR RATED SNAP SWITCH - TO REMAIN.
  -  EXISTING JUNCTION BOX - REMOVE.
  -  EXISTING JUNCTION BOX - TO REMAIN.
  -  EXISTING PANELBOARD - TO REMAIN.
  -  EXISTING DISCONNECT SWITCH - REMOVE.
  -  EXISTING VARIABLE FREQUENCY DRIVE - TO BE REMOVED BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION TO BE REMOVED BY ELECTRICAL CONTRACTOR.
  -  EXISTING MAGNETIC MOTOR STARTER - TO BE REMOVED BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION TO BE REMOVED BY ELECTRICAL CONTRACTOR.
  -  EXISTING MOTOR - TO BE REMOVED BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION TO BE REMOVED BY ELECTRICAL CONTRACTOR.
  -  EXISTING EXHAUST FAN - TO BE REMOVED BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION TO BE REMOVED BY ELECTRICAL CONTRACTOR.
  -  EXISTING DRY TYPE TRANSFORMER - REMOVE.
  -  EXISTING DRY TYPE TRANSFORMER - TO REMAIN.
  -  EXISTING EXPLOSION PROOF PUSHBUTTON - REMOVE.
- 
-  EXISTING CONDUIT & WIRING - REMOVE.
  -  EXISTING CONDUIT & WIRING - TO REMAIN.
  -  EXISTING CONDUIT & WIRING - CONCEALED BELOW GRADE - TO REMAIN, AS NOTED.
  -  EXISTING FLEXIBLE CONDUIT & WIRING CONNECTION - REMOVE.
  -  EXISTING FLEXIBLE CONDUIT & WIRING CONNECTION - TO REMAIN.
- 
-  EXISTING STATIC GROUND BUS BAR - REMOVE & REINSTALL - SEE NEW WORK PLANS.

## GENERAL DEMOLITION NOTES:

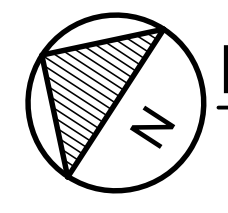
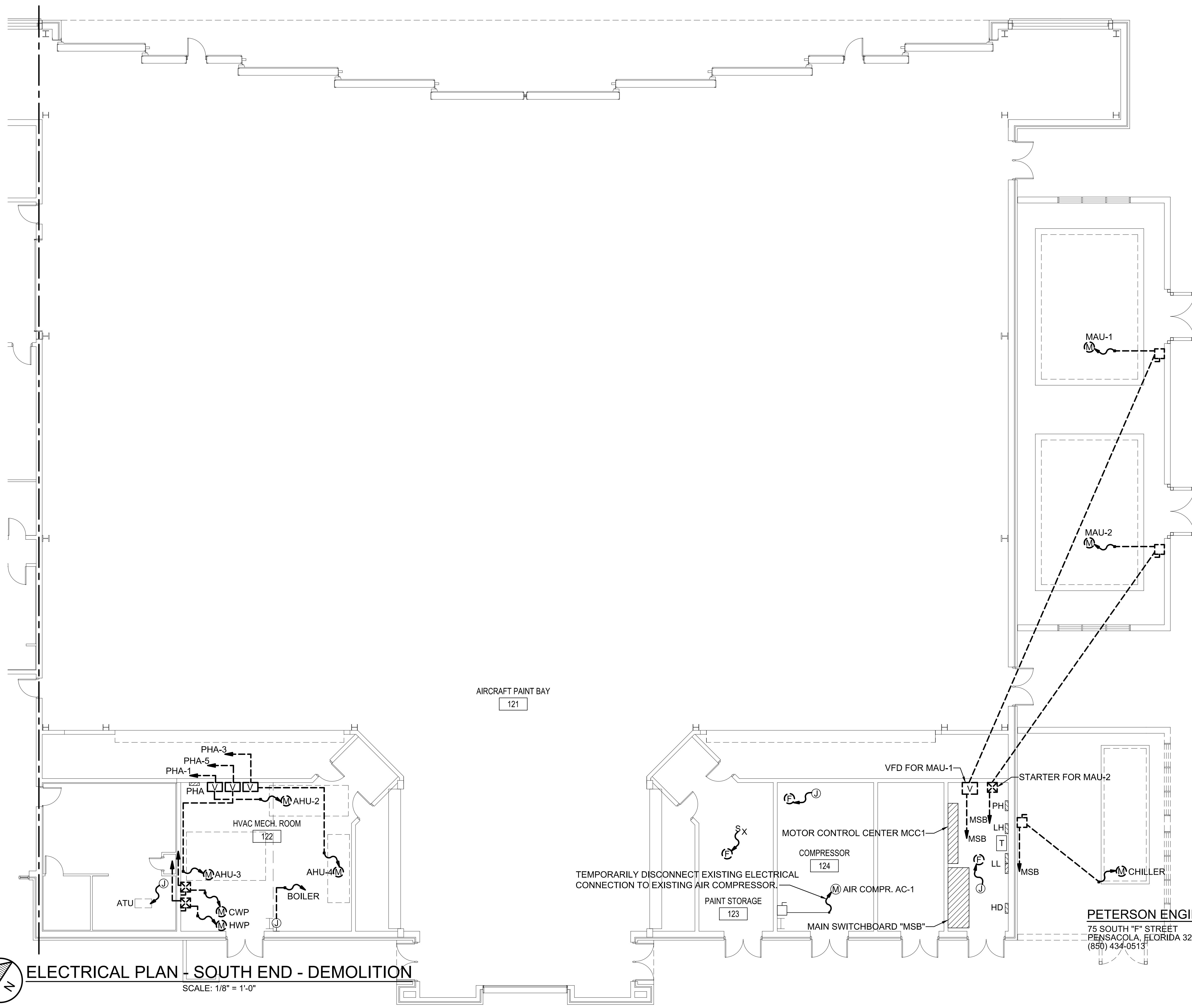
1. DEMOLITION SHOWN INDICATES THE GENERAL EXTENT OF ELECTRICAL DEMOLITION WORK. THE CONTRACTOR SHALL VISIT THE SITE AND DETERMINE ALL EXISTING CONDITIONS AND REMOVE ALL EXISTING EQUIPMENT, CONDUIT (WHERE ACCESSIBLE) AND CONDUCTORS (COMPLETE) IN AREAS TO BE RENOVATED. WHERE EXISTING EQUIPMENT OR WIRING AFFECTS AREAS BEYOND CONTRACTOR SHALL PROVIDE ADDITIONAL CONDUIT AND WIRING AS REQUIRED FOR CONTINUATION OF SERVICE.
2. ALL EXISTING DEVICES AND LIGHTING FIXTURES TO REMAIN OR BE RELOCATED SHALL BE EXAMINED PRIOR TO REUSE. ANY DEVICES OR LIGHTING DETERMINED TO BE INOPERABLE SHALL BE REPLACED WITH NEW.

**PETERSON ENGINEERING INC.**  
 75 SOUTH "F" STREET  
 PENSACOLA, FLORIDA 32502  
 (850) 434-0513



REV #	DATE	DESCRIPTION
<b>REPAIR CORROSION CONTROL FACILITY          BUILDING 90225</b>		ELECTRICAL LEGEND - DEMOLITION
<b>AIR FORCE SPECIAL          OPERATIONS COMMAND</b> <small>1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON          HURLBURT FIELD, FLORIDA</small>		
		
DATE: 28 OCT 2019		
DESIGNED BY: EWW/JRH		
DRAWN BY: JRH		
BUILDING NUMBER: 90225		
PROJECT NUMBER: CP1028800		
SHEET REFERENCE:		
<b>E-100</b>		
SHEET NUMBER: 66 OF 80		





**ELECTRICAL PLAN - SOUTH END - DEMOLITION**

SCALE: 1/8" = 1'-0"

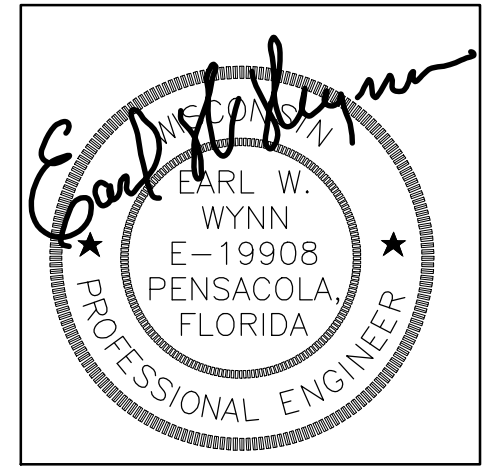
AIRCRAFT PAINT BAY  
121

HVAC MECH. ROOM  
122

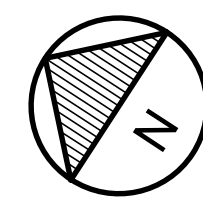
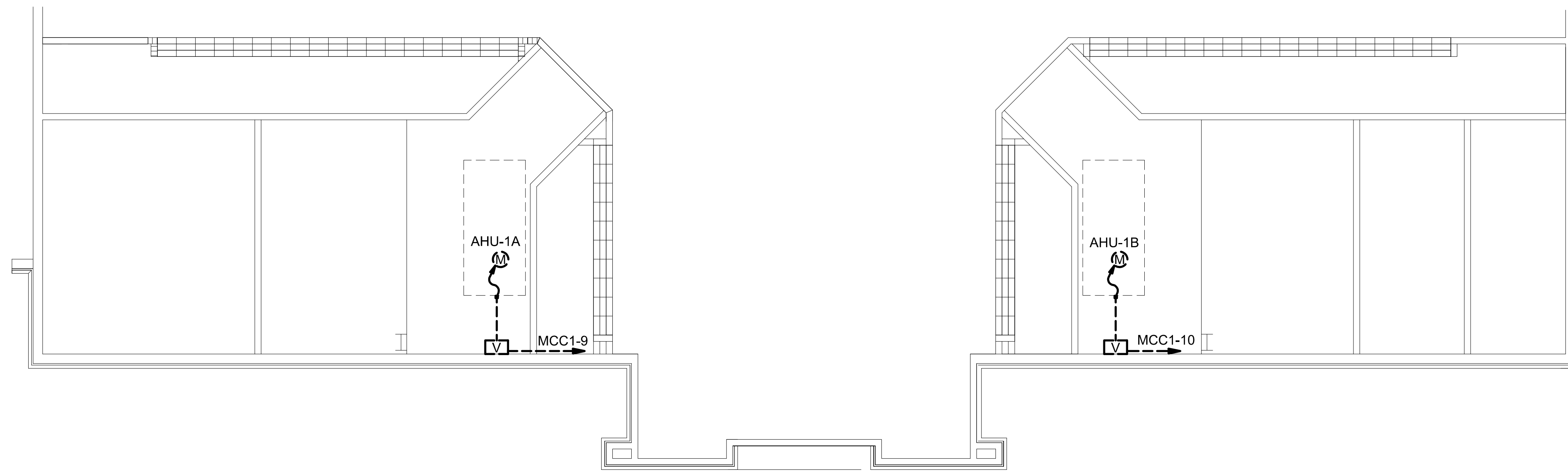
MOTOR CONTROL CENTER MCC1  
124

PAINT STORAGE  
123

**PETERSON ENGINEERING INC.**  
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PENSACOLA, FLORIDA 32502  
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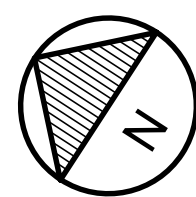
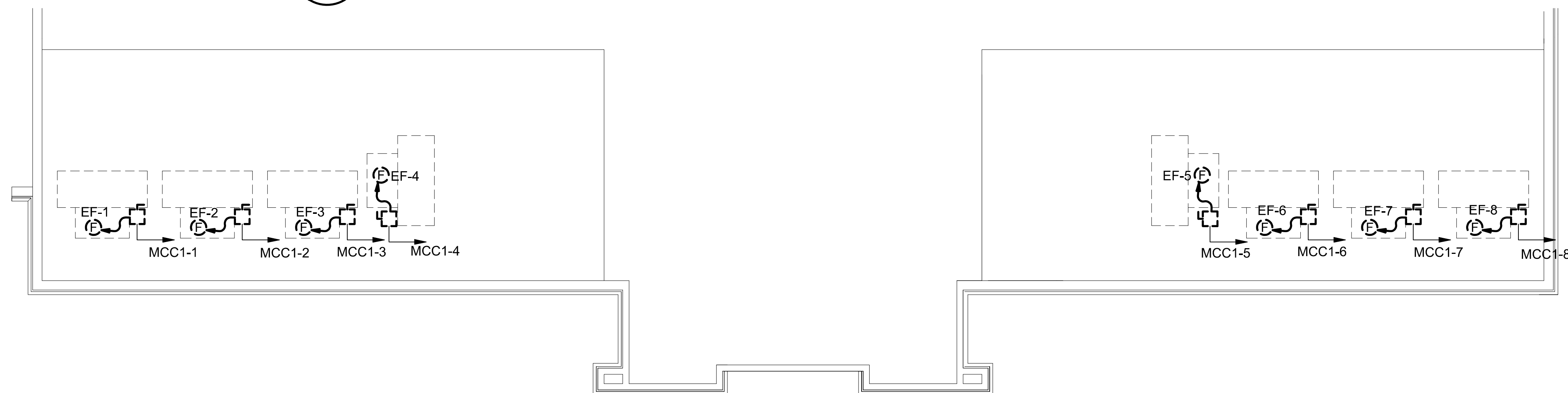


REV #	DATE	DESCRIPTION
<b>REPAIR CORROSION CONTROL FACILITY BUILDING 90225</b> ELECTRICAL PLAN - SOUTH END - DEMOLITION		
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b> 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA		
DATE: 28 OCT 2019 DESIGNED BY: EWW/JRH DRAWN BY: JRH BUILDING NUMBER: 90225 PROJECT NUMBER: CP1028800 SHEET REFERENCE:		
<b>E-102</b>		
SHEET NUMBER: 68 OF 80		



**ELECTRICAL PLAN - SOUTH END - MEZZANINE LEVEL - DEMOLITION**

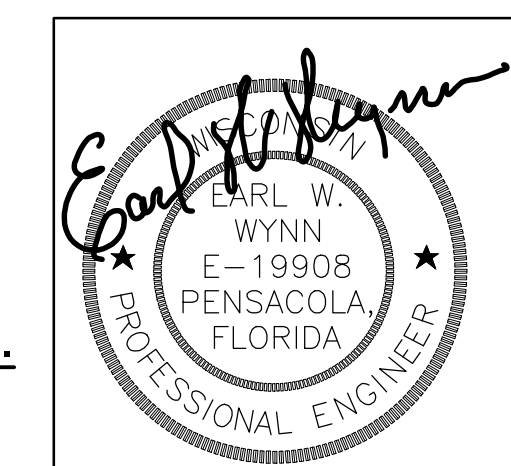
SCALE: 1/8" = 1'-0"



**ELECTRICAL PLAN - SOUTH END - ROOF LEVEL - DEMOLITION**

SCALE: 1/8" = 1'-0"

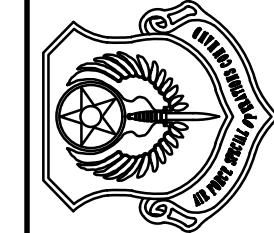
**PETERSON ENGINEERING INC.**  
 75 SOUTH "F" STREET  
 PENSACOLA, FLORIDA 32502  
 (850) 434-0513



REV #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY  
 BUILDING 90225**  
 ELECTRICAL PLAN - SOUTH END - MEZZANINE LEVEL - DEMOLITION

**AIR FORCE SPECIAL  
 OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA



DATE:  
28 OCT 2019  
 DESIGNED BY:  
EWW/JRH  
 DRAWN BY:  
JRH  
 BUILDING NUMBER:  
90225  
 PROJECT NUMBER:  
CP1028800  
 SHEET REFERENCE:

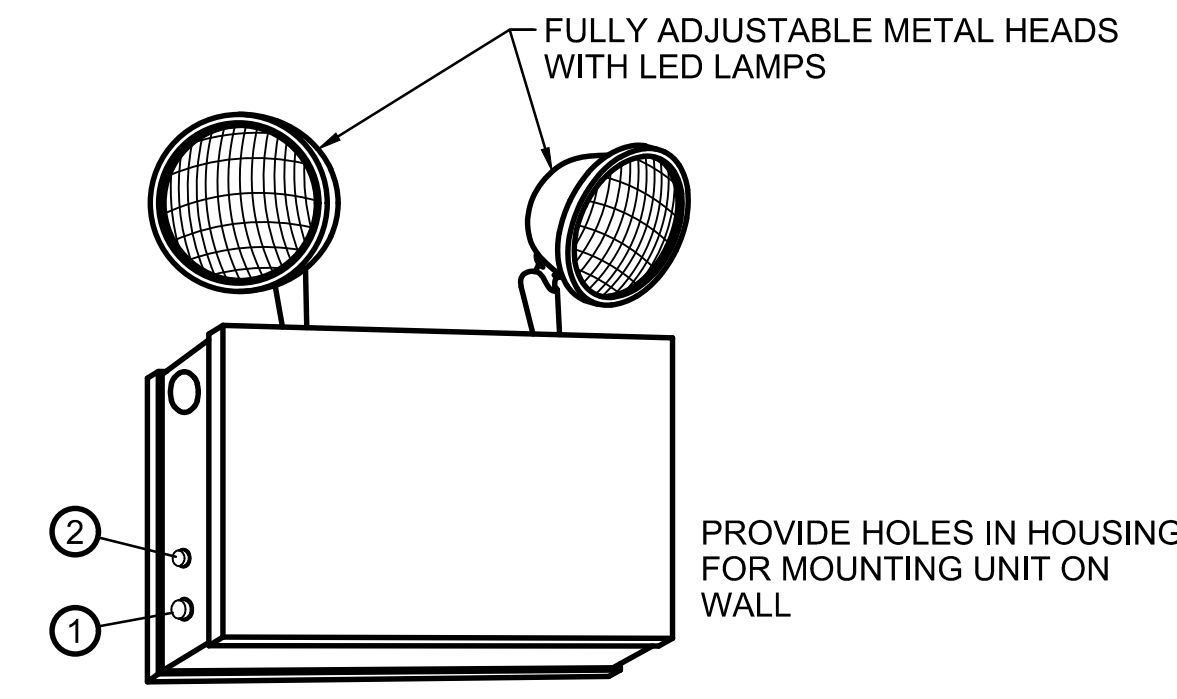
**E-103**

SHEET NUMBER:  
69 OF 80



# ELECTRICAL LEGEND - NEW WORK

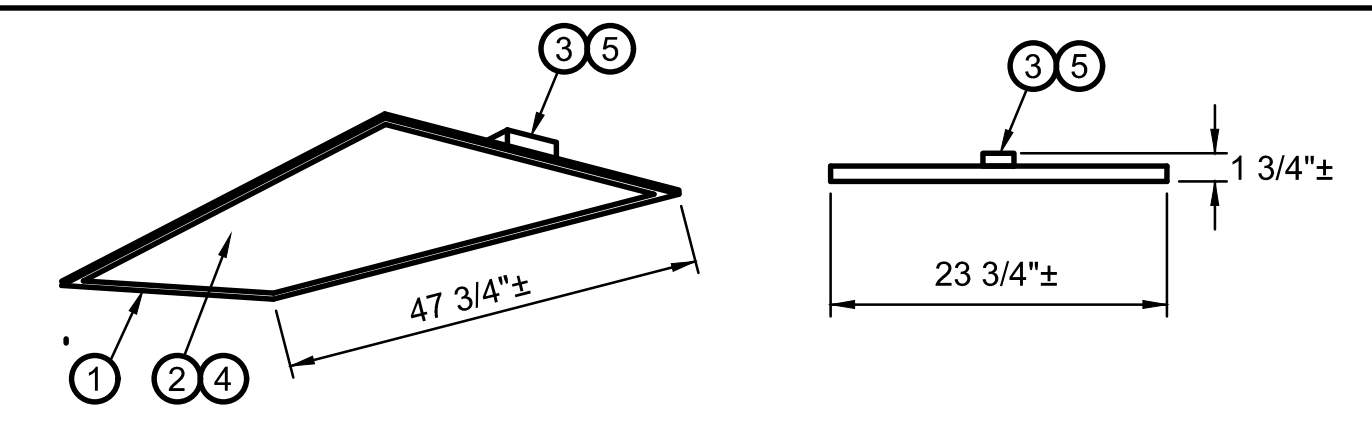
- EXISTING LED LIGHTING FIXTURE - TO REMAIN.
- RECESSED LED LIGHTING FIXTURE W/ EMERGENCY BATTERY BACKUP.
- ⊗ LED EXIT LIGHTING FIXTURE W/ EMERGENCY BATTERY.
- ⊕ EXISTING EXIT LIGHT - TO REMAIN.
- ⊖ LED EMERGENCY LIGHTING FIXTURE.
- S WALL SWITCH - QUIET TYPE - 20 A., 120/277 V., 1 POLE - MTD. 48" A.F.F. TO TOP OF BOX.
- S<sub>X</sub> EXISTING EXPLOSION PROOF LIGHTING SWITCH - TO REMAIN.
- S<sub>T</sub> EXISTING MOTOR RATED SNAP SWITCH - TO REMAIN.
- ⊕ JUNCTION BOX - SIZE AS REQUIRED.
- ⊕ EXISTING JUNCTION BOX - TO REMAIN.
- ▭ EXISTING PANELBOARD - TO REMAIN.
- DISCONNECT SWITCH - HEAVY DUTY - NON-FUSIBLE.
- ⊗ COMBINATION DISCONNECT SWITCH/MOTOR STARTER.
- ∇ VARIABLE FREQUENCY DRIVE - BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION BY ELECTRICAL CONTRACTOR.
- ⊗ MAGNETIC MOTOR STARTER - BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION BY ELECTRICAL CONTRACTOR.
- Ⓜ MOTOR - BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION BY ELECTRICAL CONTRACTOR.
- Ⓢ EXHAUST FAN - BY MECHANICAL CONTRACTOR - ELECTRICAL CONNECTION BY ELECTRICAL CONTRACTOR.
  
- Ⓢ EXISTING DRY TYPE TRANSFORMER - TO REMAIN.
- CONDUIT & WIRING - EXPOSED.
- - - - - EXISTING CONDUIT & WIRING - EXPOSED - TO REMAIN, AS NOTED.
- - - - - EXISTING CONDUIT & WIRING - CONCEALED BELOW GRADE - TO REMAIN, AS NOTED.
- ~ FLEXIBLE CONDUIT & WIRING CONNECTION.
- ~ EXISTING FLEXIBLE CONDUIT & WIRING CONNECTION - TO REMAIN.
  
- Ⓢ EXISTING GROUND BUS BAR - REINSTALL 36" A.F.F.
- BKR. BREAKER.
- CKT. CIRCUIT.
- WP WEATHERPROOF OR RAIN TIGHT.



MAINTENANCE-FREE LEAD CALCIUM BATTERY PROVIDES RATED CAPACITY FOR 2 HOURS, 24 HOUR RECHARGE AFTER 90 MINUTE DISCHARGE, CURRENT LIMITING CHARGER. MINIMUM 0.032" THICK STEEL HOUSING WITH BEIGE BAKED ENAMEL FINISH. DUAL INPUT VOLTAGE. LOW VOLTAGE, DEEP DISCHARGE DISCONNECT SWITCH. PROVIDE INTERNAL GREEN GROUNDING SCREW. THREE YEAR UNCONDITIONAL WARRANTY.

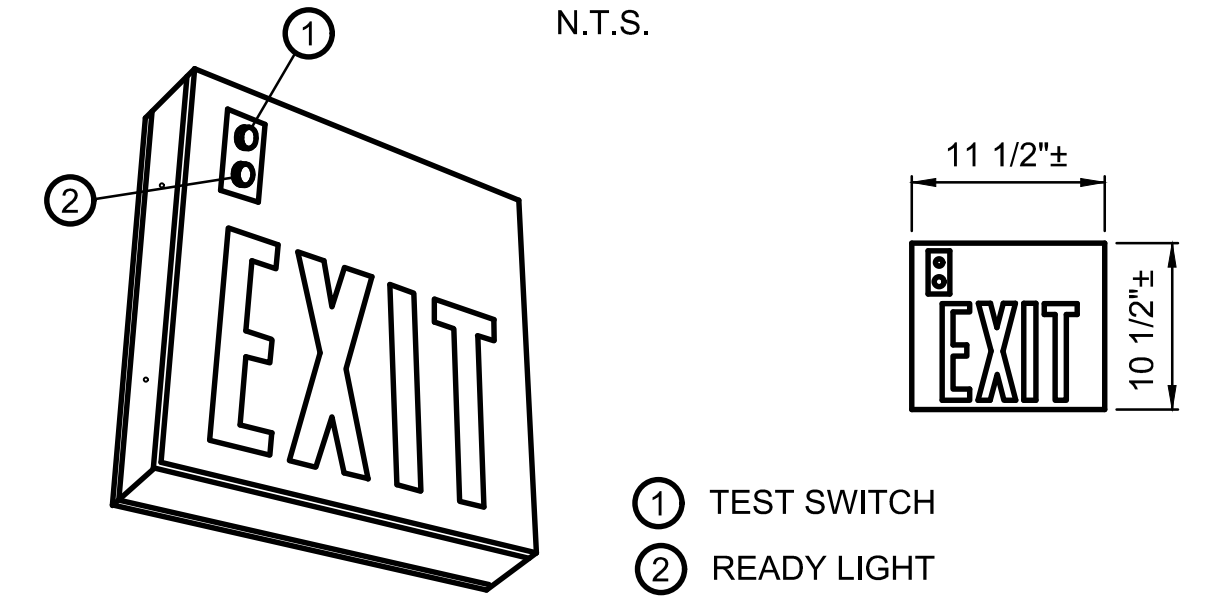
- ① TEST SWITCH
- ② READY LIGHT

**DETAIL - FIXTURE "E"**  
N.T.S.



- ① CODE GAUGE STEEL BACKPLATE W/ ALUMINUM BEZEL. FIXTURE SHALL BE SUITABLE FOR GRID TEE MOUNTING, AND SHALL INCLUDE GRID CLIPS AND SUSPENSION ANCHORS.
- ② IMPACT AND SCRATCH RESISTANT WHITE FROSTED LENS.
- ③ LED POWER DRIVER W/ INTEGRAL JUNCTION BOX FOR CONDUIT & WIRING CONNECTION. INPUT WATTS SHALL BE APPROXIMATELY 40.3, INPUT CURRENT SHALL BE APPROXIMATELY 0.15 AMPS AT 277 V., 1Ø.
- ④ 4800 LUMEN, 4000° KELVIN LED LAMP SYSTEM W/ 80 CRI (MINIMUM). PROJECTED LUMEN MAINTENANCE BASED ON TM21 SHALL BE L73 AT GREATER THAN 60,000 HOURS.
- ⑤ FIXTURE SHALL BE FURNISHED W/ 14 WATT EMERGENCY BATTERY BACKUP TO PROVIDE EMERGENCY ILLUMINATION FOR 90 MINUTES.

**DETAIL - FIXTURE "TE"**  
N.T.S.

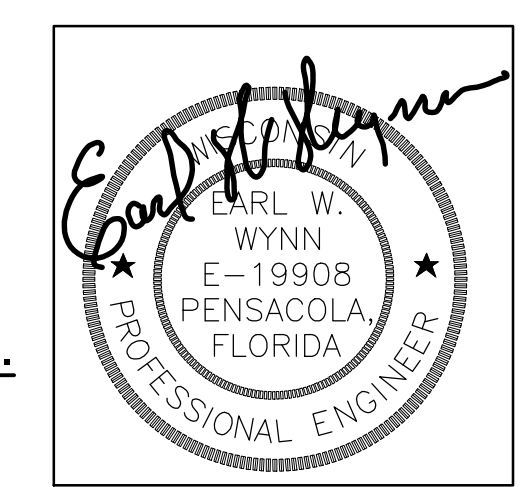


- ① TEST SWITCH
- ② READY LIGHT

UNIVERSAL CANOPY FOR TOP OR BACK MOUNTING. SELF-CONTAINED COMBINATION NORMAL AND EMERGENCY LIGHTING EXIT SIGN WITH AUTOMATIC 6-VOLT LED LAMPS OPERATING FROM LEAD ACID BATTERY PROVIDING 90 MINUTES OF CONTINUOUS SERVICE. DIE-CAST ALUMINUM HOUSING AND MOUNTING BRACKET WITH BRUSHED FINISH, RED LETTERS ON WHITE BACKGROUND, 120/277 VOLT OPERATION. HIGH INTENSITY LED LAMPS CONCEALED BEHIND A CLEAR PANEL AND OPTICAL DIFFUSER THAT PROVIDES UNIFORM ILLUMINATION AND BRIGHTNESS. THE PRONOUNCED "DOT EFFECT" FROM PROTRUDING LED'S WILL NOT BE ACCEPTED.

**DETAIL - FIXTURE "X"**  
N.T.S.

**PETERSON ENGINEERING INC.**  
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PENSACOLA, FLORIDA 32502  
(850) 434-0513



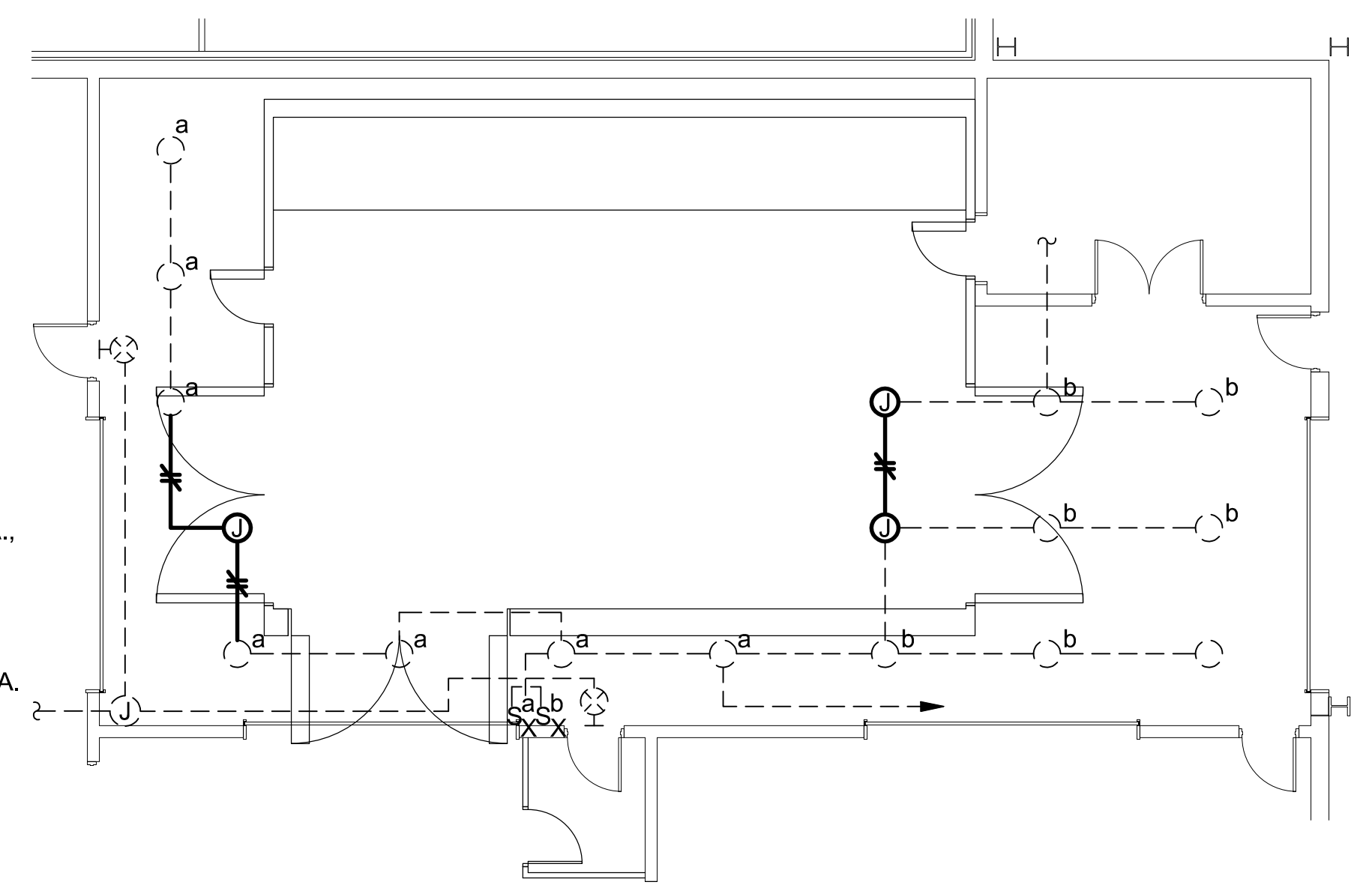
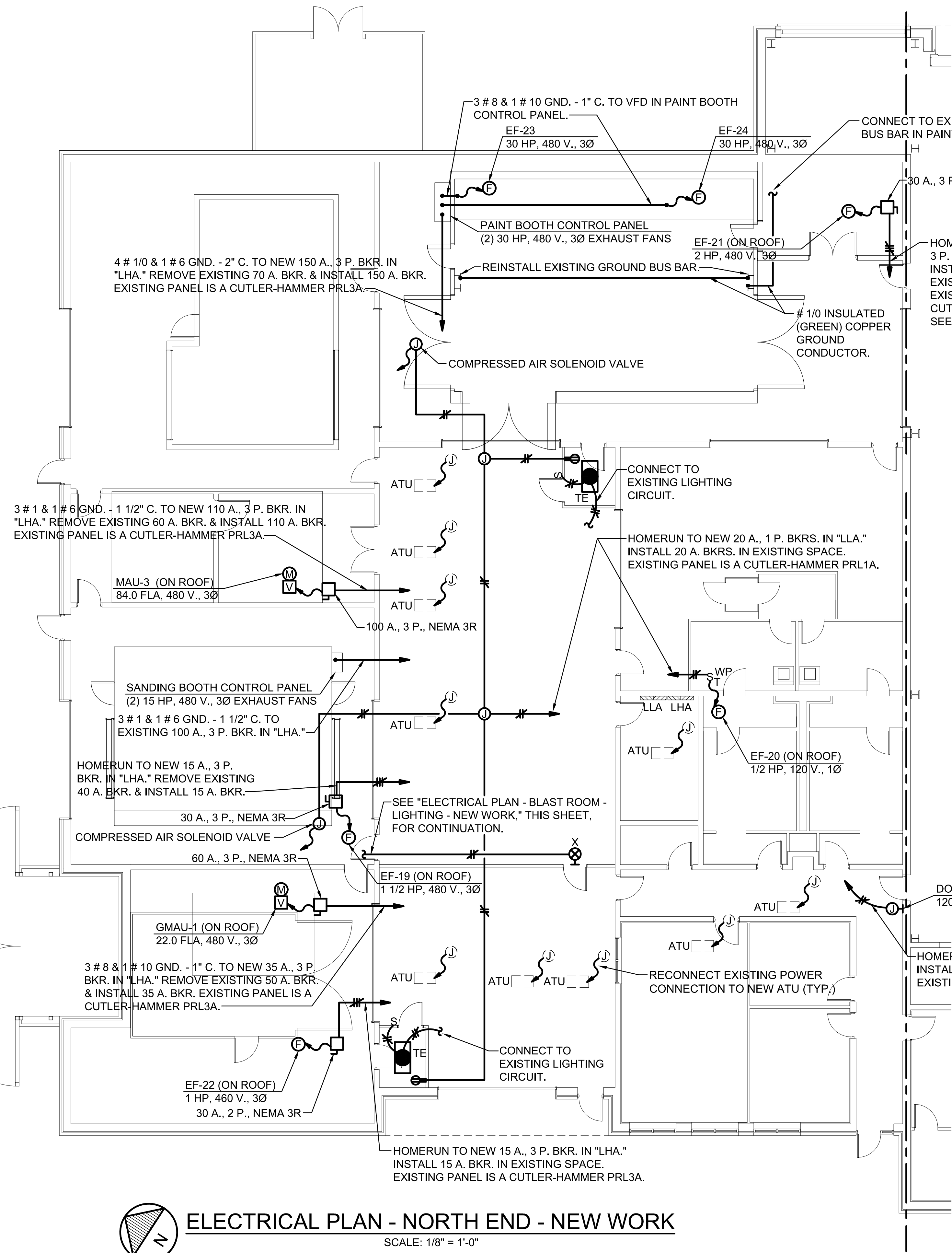
REV. #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
BUILDING 90225

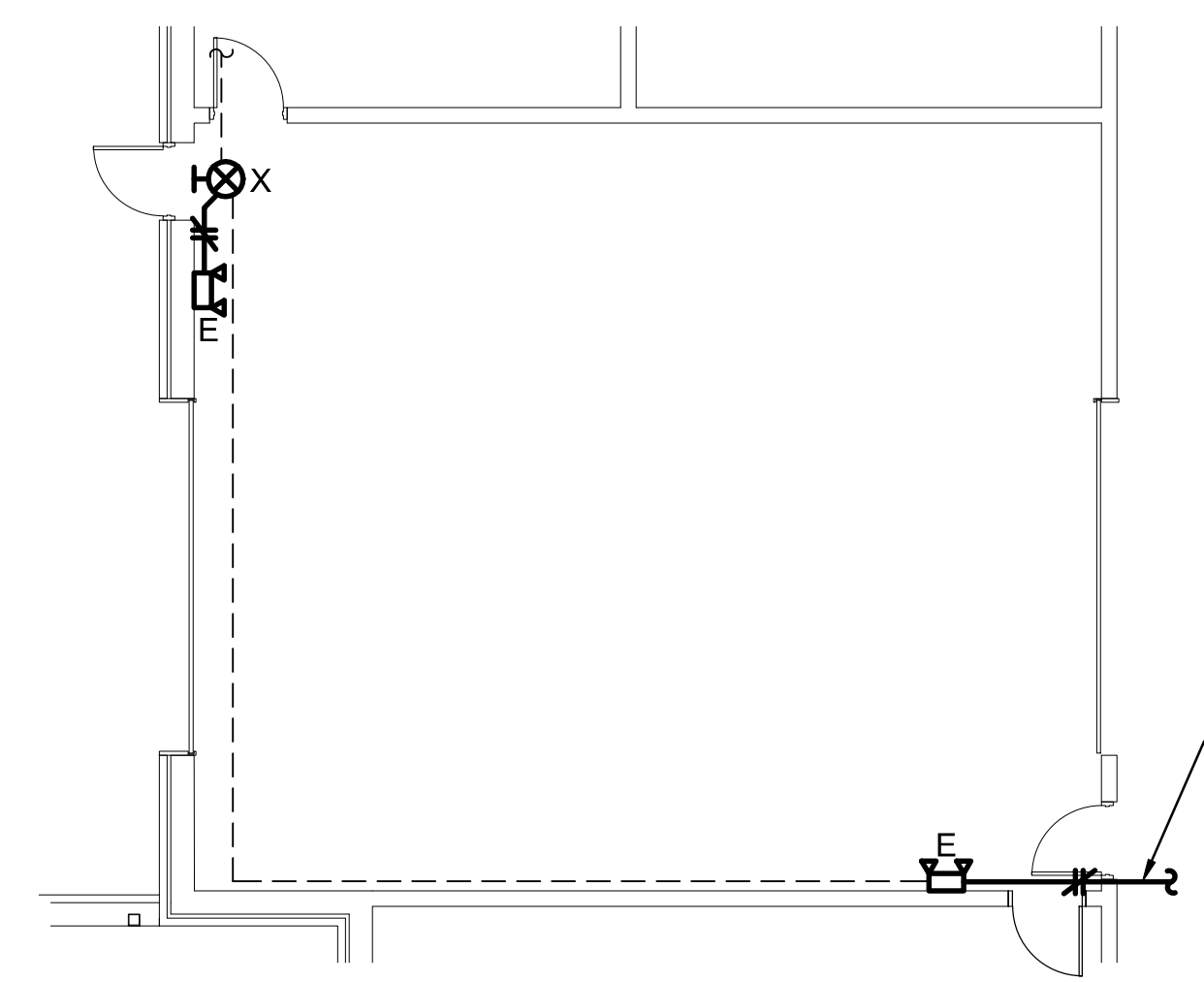
AIR FORCE SPECIAL OPERATIONS COMMAND  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

ELECTRICAL LEGEND - NEW WORK

DATE:	28 OCT 2019
DESIGNED BY:	EWV/JRH
DRAWN BY:	JRH
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	E-200
SHEET NUMBER:	70 OF 80



**ELECTRICAL PLAN - PAINTING BAY - LIGHTING - NEW WORK**  
SCALE: 1/8" = 1'-0"



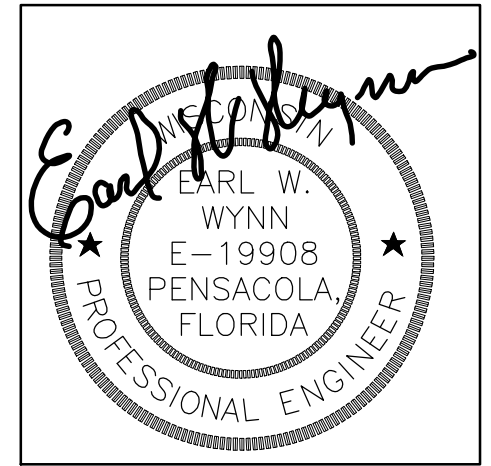
**ELECTRICAL PLAN - BLAST ROOM - LIGHTING - NEW WORK**  
SCALE: 1/8" = 1'-0"

**ELECTRICAL PLAN - NORTH END - NEW WORK**  
SCALE: 1/8" = 1'-0"

**NOTES:**

1. CONDUIT SHALL BE RIGID GALVANIZED STEEL IF INSTALLED IN BOOTHS. PROVIDE EXPLOSION PROOF CONDUIT SEALING FITTINGS ON RACEWAYS ENTERING CLASSIFIED ENVIRONMENTS.
2. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS IN WHICH CIRCUITS ARE ADDED OR DELETED REFLECTING NEW LOADS CONNECTED TO EXISTING PANEL. TURN ALL SPARE BREAKERS TO THE OFF POSITION.

**PETERSON ENGINEERING INC.**  
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PENSACOLA, FLORIDA 32502  
(850) 434-0513

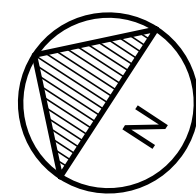
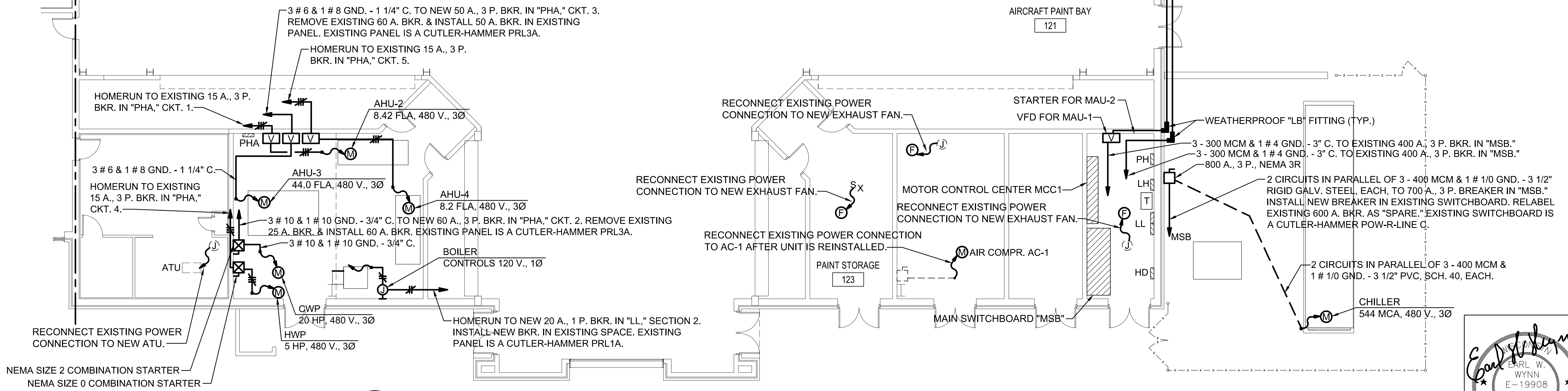


DESCRIPTION	REPAIR CORROSION CONTROL FACILITY
DATE	BUILDING 90225
REV. #	ELECTRICAL PLAN - NORTH END - NEW WORK
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b>	
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA	
DATE:	28 OCT 2019
DESIGNED BY:	EWV/JRH
DRAWN BY:	JRH
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	E-201
SHEET NUMBER:	71 OF 80

277/480V, 3Ø, 4W 250 AMP M.L.O.		PANEL SCHEDULE PHA										BREAKER INTERRUPTING CAPACITY: 18,000	
CKT	EQUIPMENT SERVED	BREAKER		KVA/PHASE			KVA/PHASE			BREAKER		EQUIPMENT SERVED	CKT
		TRIP	POLE	A	B	C	A	B	C	POLE	TRIP		
1	NEW AHU-2	15	3							3	60	NEW CHILLED WATER PUMP	2
3	NEW AHU-3	50	3							3	15	NEW HOT WATER PUMP	4
5	NEW AHU-4	15	3							1		SPACE	6
										1		SPACE	8
										1		SPACE	10
7	SURGE SUPPRESSOR	30	3							1		SPACE	12
										1		SPACE	14
										1		SPACE	16
9	SPACE									1		SPACE	18
11	SPACE									1		SPACE	20
13	SPACE									1		SPACE	22

**NOTES:**

- ① REMOVE EXISTING 60 A., 3 P. BREAKER & INSTALL 50 A., 3 P. BREAKER.
- ② REMOVE EXISTING 25 A., 3 P. BREAKER & INSTALL 60 A., 3 P. BREAKER.



**ELECTRICAL PLAN - SOUTH END - NEW WORK**

SCALE: 1/8" = 1'-0"

**PETERSON ENGINEERING INC.**

75 SOUTH "F" STREET  
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(850) 434-0513



DESCRIPTION	
DATE	
REV. #	
<b>REPAIR CORROSION CONTROL FACILITY BUILDING 90225</b>	
ELECTRICAL PLAN - SOUTH END - NEW WORK	
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b>	
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA	
DATE:	28 OCT 2019
DESIGNED BY:	EWV/JRH
DRAWN BY:	JRH
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	E-202
SHEET NUMBER:	72 OF 80





PANEL SCHEDULE LLA										BREAKER INTERRUPTING CAPACITY: 10,000			
120/208V, 3Ø, 4W 225 AMP M.L.O.													
CKT	EQUIPMENT SERVED	BREAKER		KVA/PHASE			KVA/PHASE			BREAKER		EQUIPMENT SERVED	CKT
		TRIP	POLE	A	B	C	A	B	C	POLE	TRIP		
1	RECEPTACLE ROOM 119	20	1							1	20	RECEPTACLE ROOM 108	2
3	RECEPTACLE ROOM 119	50	2							1	20	RECEPTACLE ROOM 110	4
5										1	20	RECEPTACLE ROOM 109	6
7	RECEPTACLE ROOM 119	20	1							1	20	RECEPTACLE 105,106,107	8
9	RECEPTACLE ROOM 119	20	1							1	20	WATER COOLER	10
11	RECEPTACLE ROOM 119	20	1							1	20	RECEPTACLE ROOM 111	12
13	RECEPTACLE ROOM 118	20	1							1	20	RECEPTACLE RM. 115,120	14
15	RECEPTACLE ROOM 117	20	1							1	20	RECEPTACLE ROOM 111	16
17	RECEPTACLE ROOM 116	20	1							1	20	RECEPTACLE ROOM 112	18
19	RECEPTACLE ROOM 116	20	1							1	20	RECEPTACLE ROOM 111	20
21	RECEPTACLE ROOM 116	20	1							1	20	LIGHTING ROOM 105, 106	22
23	RECEPTACLE ROOM 113	20	1							1	20	EMERGENCY LIGHTING	24
25	RECEPTACLE ROOM 113	20	1							1	20	ATU ROOM 120	26
27	RECEPTACLE ROOM 113	20	1							1	20	ATU ROOM 111	28
29	EF-11	20	1							1	20	MOTORIZED DOOR	30
31	EF-15	20	1							1	20	SECURITY	32
33	EF-12	20	1							1	20	DRY STR. CAB. LT. 112	34
35	EF-9	20	1							2	20	GERBER ROOM	36
37	LOCKER ROOM WASHER	20	1										38
39	LOCKER ROOM WASHER	20	1							1	20	ITS	40
41	LOCKER ROOM WASHER	20	1							1	20	RECEPTACLE RM. 114,115	42
43	FREEZER	20	1							3	20	AIR SHOWER	44
45	IDB6	20	1										46
47	LOCKER ROOM DRYER	30	2										48
49										1	20	NEW RECEPTACLES	50
51	LOCKER ROOM DRYER	30	2							1	20	NEW EF-20	52
53										1	20	NEW DOOR ALARM	54
55	RECEPTACLE ROOM 119	50	2							2	50	RECEPTACLE ROOM 119	56
57													58
59	SPACE		1							1		SPACE	60

**NOTES:**

- ① INSTALL 20 A., 1 P. BREAKER IN EXISTING SPACE.

PANEL SCHEDULE LL										BREAKER INTERRUPTING CAPACITY: 10,000			
120/208V, 3Ø, 4W 250 AMP MAIN BREAKER													
CKT	EQUIPMENT SERVED	BREAKER		KVA/PHASE			KVA/PHASE			BREAKER		EQUIPMENT SERVED	CKT
		TRIP	POLE	A	B	C	A	B	C	POLE	TRIP		
1	EMERGENCY LIGHTING	20	1							1	20	SPARE	2
3	RECEPTACLES	20	1							1	20	RECEPTACLES	4
5	RECEPTACLES	20	1							1	20	RECEPTACLES	6
7	RECEPTACLES	20	1							1	20	RECEPTACLES	8
9	RECEPTACLES	20	1							1	20	RECEPTACLES	10
11	RECEPTACLES	20	1							1	20	RECEPTACLES	12
13	RECEPTACLES	20	1							1	20	RECEPTACLES	14
15	RECEPTACLES	20	1							1	20	RECEPTACLES	16
17	RECEPTACLES	20	1							1	20	RECEPTACLES	18
19	RECEPTACLES	20	1							1	20	RECEPTACLES	20
21	RECEPTACLES	20	1							1	20	COFFEE MAKER	22
23	RECEPTACLES	20	1							1	20	MICROWAVE	24
25	RECEPTACLES	20	1							1	20	EF-16	26
27	CONSTANT VOLUME UNIT/ATU	20	1							1	20	EF-17	28
29	BREATHING AIR PURIFIER	20	1							1	20	EF-18	30
31	SPARE	20	2							1	20	HEAT TRACE TAPE	32
33										1	20	RECEPTACLES	34
35	SPARE	20	1							1	20	RECEPTACLES	36
37	UNKNOWN	20	1							1	20	WATER HEATER & PUMP	38
39	SPACE									1	20	IRRIGATION CONTROLLER	40
41	SPACE									1		SPACE	42
43	SPARE	20	1							1	20	SPARE	44
45	SUMP PUMP	20	1							1	20	SWITCH PILOT LIGHT	46
47	BREATHING AIR COMPR.	20	1							1	20	SPARE	48
49	AC UNIT FIRE SUPPRESSION	20	2							3	30	WELL PUMP	50
51	ROOM												52
53	UNKNOWN	20	1							1	20	NEW BOILER	54
55	UNKNOWN	20	1							1	20	SPACE	56
57	SPACE									1		SPACE	58
59	SPACE									1		SPACE	60
61	SPACE									1		SPACE	62
63	SPACE									1		SPACE	64
65	SPACE									1		SPACE	66
67	SPACE									3	30	SURGE SUPPRESSOR	68
69	SPACE												70
71	SPACE												72

**NOTES:**

- ① INSTALL 20 A., 1 P. BREAKER IN EXISTING SPACE.

PANEL SCHEDULE LHA										BREAKER INTERRUPTING CAPACITY: 25,000			
277/480V, 3Ø, 4W 400 AMP M.L.O.													
CKT	EQUIPMENT SERVED	BREAKER		KVA/PHASE			KVA/PHASE			BREAKER		EQUIPMENT SERVED	CKT
		TRIP	POLE	A	B	C	A	B	C	POLE	TRIP		
1	NEW MAU-3	110	3							3	150	NEW PAINT BOOTH	2
3		②								①			4
5													6
7	OVEN ROOM 116	100	3							1	20	SPARE	8
9										1	20	SPARE	10
11										1	20	LIGHTS ROOM 119	12
13	LIGHTS ROOM 117	20	1							1	20	LIGHTS ROOM 119	14
15	LIGHTS ROOM 117, 118	20	1							1	20	LIGHTS ROOM 111, 112	16
17	LIGHTS ROOM 105-110	20	1							1	20	LIGHTS ROOM 111	18
19	LIGHTS ROOM 113, 114	20	1							1	20	LIGHTS ROOM 116	20
21	LIGHTS ROOM 113	20	1							1	20	LIGHTS ROOM 116	22
23	SPARE	20	1							1		SPACE	24
25	NEW SANDING BOOTH	100	3							3	15	BLAST CABINET	26
27													28
29													30
31	NEW EF-19	15	3							3	15	BLAST CABINET	32
33		⑤											34
35													36
37	SURGE SUPPRESSOR	30	3							3	15	MOTORIZED DOOR	38
39													40
41													42
43	S/B LIGHTS	20	1							3	15	MOTORIZED DOOR	44
45	SPARE	20	1										46
47	SPARE	20	1										48
49	BATTERY CHARGER	30	2							3	15	MOTORIZED DOOR	50
51													52
53	LIGHTS LOCKER ROOM	20	1										54
55	PAINT BOOTH AHU	80	3							3	60	SPARE	56
57													58
59													60
61	NEW EF-21	15	3							3	35	NEW GMAU-1	62
63		③								④			64
65													66
67	NEW EF-22	15	3							1	20	LOCKER ROOMS	68
69		③								1		SPACE	70
71										1		SPACE	72

**NOTES:**

- ① REMOVE EXISTING 70 A., 3 P. BREAKER & INSTALL 150 A., 3 P. BREAKER.
- ② REMOVE EXISTING 60 A., 3 P. BREAKER & INSTALL 110 A., 3 P. BREAKER.
- ③ INSTALL 15 A., 3 P. BREAKER IN EXISTING SPACE.
- ④ REMOVE EXISTING 50 A., 3 P. BREAKER & INSTALL 35 A., 3 P. BREAKER.
- ⑤ REMOVE EXISTING 40 A., 3 P. BREAKER & INSTALL 15 A., 3 P. BREAKER.

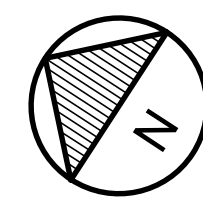
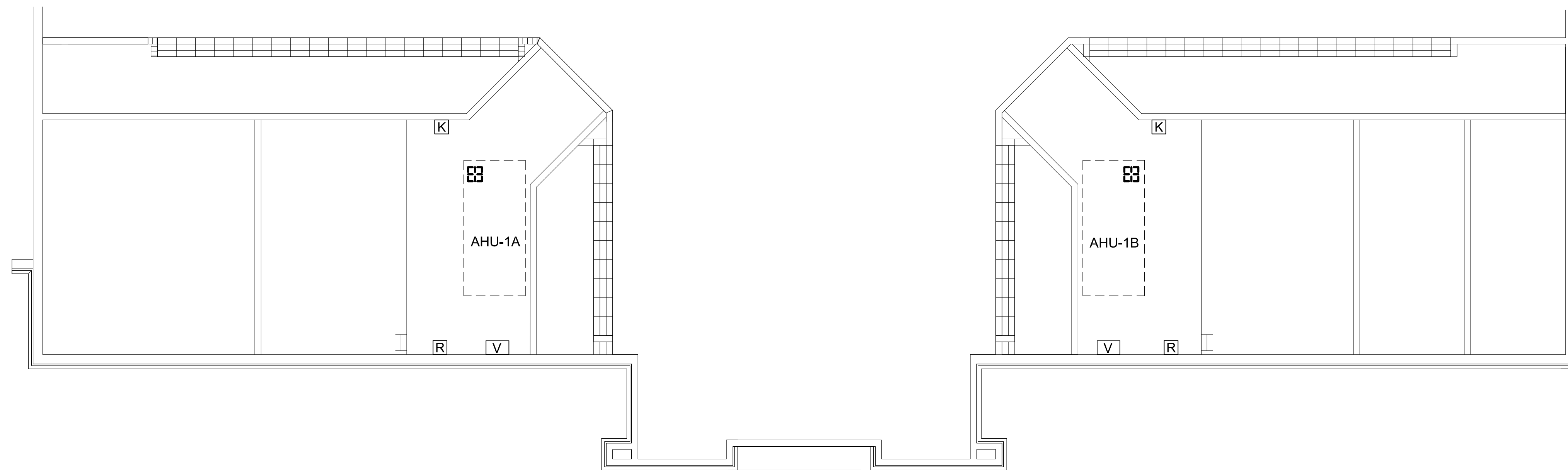
**PETERSON ENGINEERING INC.**  
75 SOUTH "F" STREET  
PENSACOLA, FLORIDA 32502  
(850) 434-0513



DESCRIPTION					
DATE					
REV. #					
<b>REPAIR CORROSION CONTROL FACILITY BUILDING 90225</b>					
PANELBOARD SCHEDULES					
<b>AIR FORCE SPECIAL OPERATIONS COMMAND</b>					
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON HURLBURT FIELD, FLORIDA					
DATE:	28 OCT 2019				
DESIGNED BY:	EWW/JRH				
DRAWN BY:	JRH				
BUILDING NUMBER:	90225				
PROJECT NUMBER:	CP1028800				
SHEET REFERENCE:	E-501				
SHEET NUMBER:	74 OF 80				







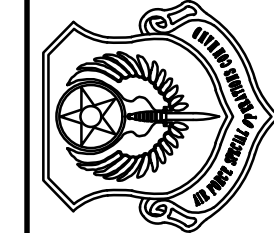
**FIRE ALARM PLAN - SOUTH END - MEZZANINE LEVEL - DEMOLITION**

SCALE: 1/8" = 1'-0"

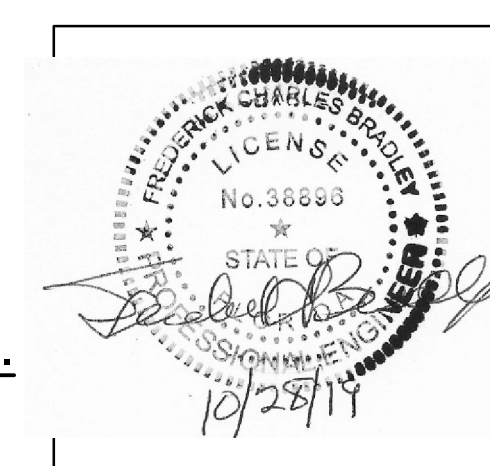
REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
**BUILDING 90225**  
 FIRE ALARM PLAN - SOUTH END - MEZZANINE LEVEL - DEMOLITION

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA



DATE: 28 OCT 2019  
 DESIGNED BY: FCB  
 DRAWN BY: JRH  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE:



**PETERSON ENGINEERING INC.**  
 75 SOUTH "F" STREET  
 PENSACOLA, FLORIDA 32502  
 (850) 434-0513

**FA-103**  
 SHEET NUMBER:  
 77 OF 80



## FIRE ALARM/ MASS NOTIFICATION LEGEND - NEW WORK

- FACP
- FIRE ALARM SYSTEM - EXISTING FIRE ALARM CONTROL PANEL - TO REMAIN.
- F FIRE ALARM SYSTEM - EXISTING SPEAKER/STROBE - TO REMAIN.
- ⊖ FIRE ALARM SYSTEM - EXISTING STROBE - EXPLOSION PROOF - TO REMAIN.
- ⊕ FIRE ALARM SYSTEM - NEW WHITE STROBE - EXPLOSION PROOF - CLASS 1, DIVISION 1, GROUP C & D.
- ⊖ M MASS NOTIFICATION SYSTEM - EXISTING AMBER STROBE - EXPLOSION PROOF.
- ⊕ M MASS NOTIFICATION SYSTEM - NEW AMBER STROBE - EXPLOSION PROOF - CLASS 1, DIVISION 1, GROUP C & D.
- S ■ FIRE ALARM SYSTEM - NEW DUCT SMOKE DETECTOR - "S" = SUPPLY.
- ⊖ K FIRE ALARM SYSTEM - EXISTING KEY OPERATED RESET SWITCH - RECONNECT TO NEW DUCT SMOKE DETECTOR.
- ⊖ R FIRE ALARM SYSTEM - EXISTING AHU SHUT DOWN RELAY - RECONNECT TO AHU VARIABLE FREQUENCY DRIVE.
- ⊖ R FIRE ALARM SYSTEM - NEW SHUT DOWN RELAY.
- ⊖ M FIRE ALARM SYSTEM - NEW MONITORING MODULE.
- F — FIRE ALARM SYSTEM - EXISTING CONDUIT & WIRING - TO REMAIN.
- F — FIRE ALARM SYSTEM - NEW CONDUIT & WIRING.
- H ⊖ EXISTING JUNCTION BOX.
- H ⊖ NEW JUNCTION BOX.
- ① WORK NOTE SYMBOL.

### BOOTH INTERLOCK & CONTROLS NOTE:

THE FIRE ALARM CONTROL PANEL SHALL NOT SHUT DOWN THE EXHAUST FANS OR MAKE UP AIR UNIT SERVING THE PAINT BOOTH. THE MASS NOTIFICATION SYSTEM LOCAL OPERATOR CONSOLE SHALL NOT SHUT DOWN THE EXHAUST FANS OR MAKE UP AIR UNIT SERVING THE PAINT BOOTH. THE PAINT BOOTH SHALL HAVE A SHUT DOWN SWITCH TO MANUALLY SHUT DOWN THE EXHAUST FANS AND MAKE UP AIR UNIT, AS LOCATED ON THE MECHANICAL DRAWINGS. BREATHING AIR COMPRESSORS SHALL NOT SHUT DOWN. COMPRESSED AIR SERVING TOOLS IN THE BOOTH SHALL BE SHUT DOWN VIA AN AIR VALVE IN THE COMPRESSED AIR LINES DURING A FIRE EVENT.

THE FIRE ALARM CONTROL PANEL SHALL NOT SHUT DOWN THE EXHAUST FANS SERVING THE SANDING BOOTH. THE MASS NOTIFICATION SYSTEM LOCAL OPERATOR CONSOLE SHALL NOT SHUT DOWN THE EXHAUST FANS SERVING THE SANDING BOOTH. THE SANDING BOOTH SHALL HAVE A SHUT DOWN SWITCH TO MANUALLY SHUT DOWN THE EXHAUST FANS, AS LOCATED ON THE MECHANICAL DRAWINGS. BREATHING AIR COMPRESSORS SHALL NOT SHUT DOWN. COMPRESSED AIR SERVING TOOLS IN THE BOOTH SHALL BE SHUT DOWN VIA AN AIR VALVE IN THE COMPRESSED AIR LINES DURING A FIRE EVENT.

THE FIRE ALARM CONTROL PANEL SHALL NOT SHUT DOWN THE EXHAUST FANS OR MAKE UP AIR UNITS SERVING THE HANGAR. THE MASS NOTIFICATION SYSTEM LOCAL OPERATOR CONSOLE SHALL NOT SHUT DOWN THE EXHAUST FANS OR MAKE UP AIR UNITS SERVING THE HANGAR. THE HANGAR SHALL HAVE EXISTING START-STOP SWITCHES TO MANUALLY SHUT DOWN THE EXHAUST FANS & MAKE UP AIR UNITS. BREATHING AIR COMPRESSORS SHALL NOT SHUT DOWN.

THE FIRE ALARM CONTROL PANEL SHALL NOT SHUT DOWN THE MAKE UP AIR UNIT SERVING THE BLASTING BOOTH. THE MASS NOTIFICATION SYSTEM LOCAL OPERATOR CONSOLE SHALL NOT SHUT DOWN THE MAKE UP AIR UNIT SERVING THE BLASTING BOOTH. THE BLASTING BOOTH SHALL HAVE A SHUT DOWN SWITCH TO MANUALLY SHUT DOWN THE MAKE UP AIR UNIT, AS LOCATED ON THE MECHANICAL DRAWINGS. BREATHING AIR COMPRESSORS SHALL NOT SHUT DOWN.

ALL OTHER AIR HANDLING UNITS AND EXHAUST FANS SHALL BE SHUT DOWN BY THE FIRE ALARM CONTROL PANEL OR THE MASS NOTIFICATION SYSTEM LOCAL HVAC SHUT DOWN SWITCH.

### NOTES:

1. CONDUIT SHALL BE RIGID GALVANIZED STEEL IN BOOTHS. PROVIDE EXPLOSION PROOF CONDUIT SEALING FITTINGS ON RACEWAYS ENTERING CLASSIFIED ENVIRONMENTS.
2. ALL CONDUITS, COUPLINGS, JUNCTION BOXES AND COVERS ASSOCIATED WITH FIRE ALARM CIRCUITS SHALL BE FACTORY PAINTED RED.
3. EXISTING SHUT DOWN RELAY FOR DDC CONTROL PANEL SHALL REMAIN. DDC CONTROL PANEL SHALL SHUT DOWN NEW EXHAUST FANS, EXCEPT FOR BOOTH FANS, AS NOTED ABOVE.

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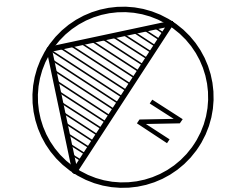
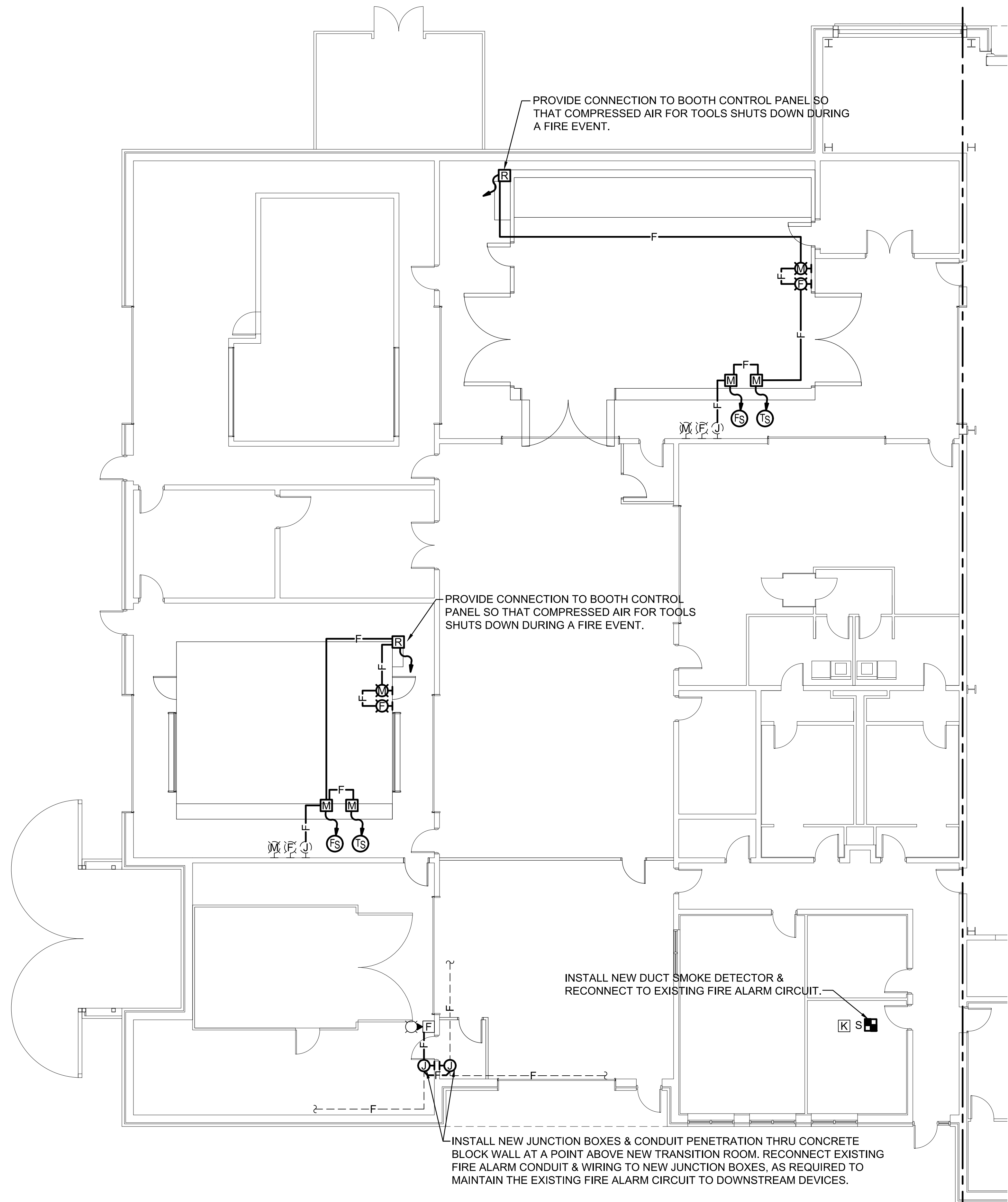
REV. #	DATE	DESCRIPTION

**REPAIR CORROSION CONTROL FACILITY**  
**BUILDING 90225**

FIRE ALARM PLAN - NORTH END - NEW WORK

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
HURLBURT FIELD, FLORIDA

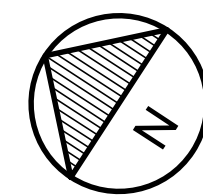
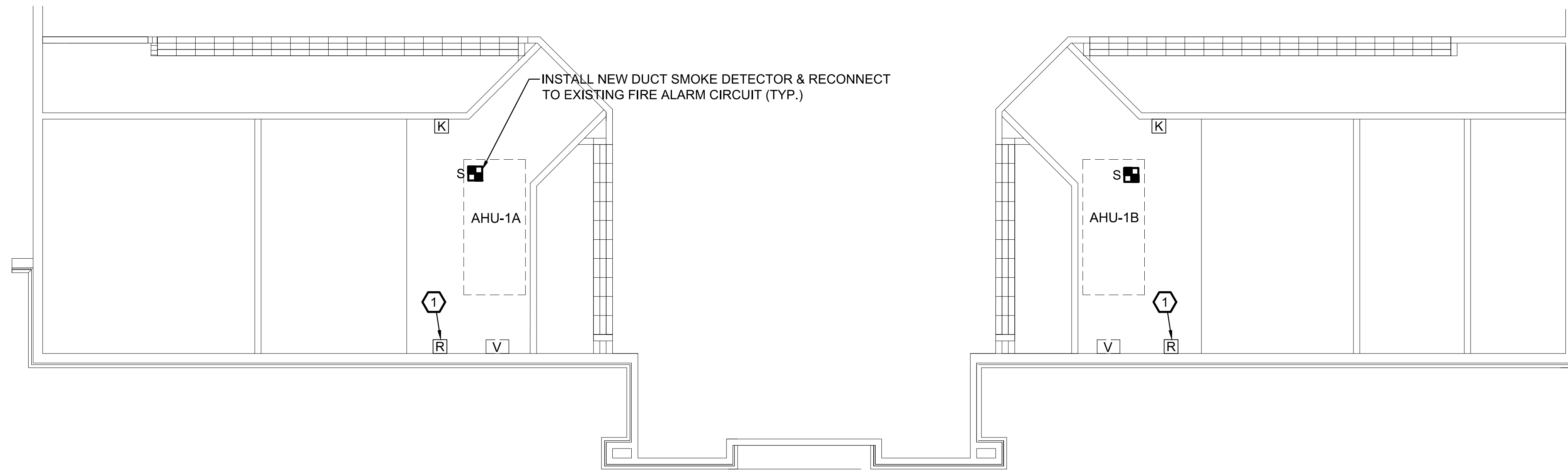
DATE:	28 OCT 2019
DESIGNED BY:	FCB
DRAWN BY:	JRH
BUILDING NUMBER:	90225
PROJECT NUMBER:	CP1028800
SHEET REFERENCE:	FA-201
SHEET NUMBER:	78 OF 80



## FIRE ALARM PLAN - NORTH END - NEW WORK

SCALE: 1/8" = 1'-0"





**FIRE ALARM PLAN - SOUTH END - MEZZANINE LEVEL - NEW WORK**

SCALE: 1/8" = 1'-0"

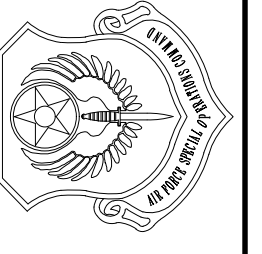
**WORK NOTES:**

- ① RECONNECT EXISTING AHU SHUT DOWN RELAY TO NEW AIR HANDLING UNIT VARIABLE FREQUENCY DRIVE.

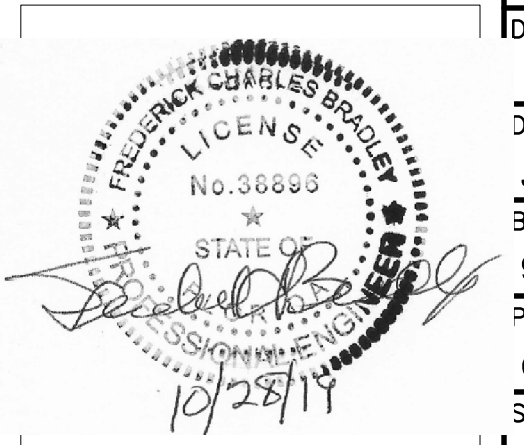
REV #	DATE	DESCRIPTION

REPAIR CORROSION CONTROL FACILITY  
**BUILDING 90225**  
 FIRE ALARM PLAN - SOUTH END - MEZZANINE LEVEL - NEW WORK

**AIR FORCE SPECIAL OPERATIONS COMMAND**  
 1 SPECIAL OPERATIONS CIVIL ENGINEER SQUADRON  
 HURLBURT FIELD, FLORIDA



DATE: 28 OCT 2019  
 DESIGNED BY: FCB  
 DRAWN BY: JRH  
 BUILDING NUMBER: 90225  
 PROJECT NUMBER: CP1028800  
 SHEET REFERENCE:



**PETERSON ENGINEERING INC.**  
 75 SOUTH "F" STREET  
 PENSACOLA, FLORIDA 32502  
 (850) 434-0513

**FA-203**  
 SHEET NUMBER:  
 80 OF 80