



PROJECT VICINITY MAP



PROJECT LOCATION MAP



Contract Drawings For

Fort Drum Military Reservation

FPBB162002

Construct MQ-9 Shops Launch & Recovery Element

NEW YORK AIR NATIONAL GUARD
B-3 SUBMITTAL

Contract No. W9133L-15-D-0004
Task Order No. W50S8N20F0014
HDR Project No. 10256943

Fort Drum, New York
August 2021

INDEX OF DRAWINGS

GENERAL

G-000 COVER SHEET
G-001 SHEET INDEX
G-002 LEGEND

DEMOLITION

X-101 DEMOLITION PLAN & ELEVATION
X-102 EXISTING SITE UTILITY DEMOLITION PLAN

CIVIL

C-101 SITE ACCESS, STAGING & HAUL ROUTE
C-102 EXISTING CONDITIONS
C-103 SITE PLAN AND SOIL EROSION & SEDIMENT CONTROL PLAN
C-501 SITE AND SE&SC DETAILS

STRUCTURAL

S-100 STRUCTURAL NOTES
S-101 FOUNDATION PLAN
S-501 TYPICAL CONCRETE DETAILS
S-502 FOUNDATION DETAILS

ARCHITECTURAL

A-101 FLOOR PLAN
A-102 REFLECTED CEILING PLAN
A-103 FURNITURE LAYOUT
A-104 ROOF PLAN
A-201 PROPOSED BUILDING ELEVATIONS
A-301 PROPOSED BUILDING SECTIONS
A-401 ENLARGED RESTROOM FLOOR PLAN
A-501 WALL SECTIONS AND DETAILS
A-502 PLAN DETAILS
A-503 PLAN DETAILS
A-601 PARTITION, DOOR AND FINISH SCHEDULES
A-602 BREAKROOM COUNTER ELEVATIONS AND DETAILS

MECHANICAL

M-101 MECHANICAL FLOOR PLAN
M-201 MECHANICAL SECTIONS
M-301 MECHANICAL SCHEDULES
M-401 MECHANICAL DETAILS
M-402 MECHANICAL DETAILS
M-403 MECHANICAL DETAILS

PLUMBING

P-101 DOMESTIC WATER PLUMBING FLOOR PLAN
P-102 SANITARY PLUMBING FLOOR PLAN
P-301 PLUMBING SCHEDULES

FIRE PROTECTION

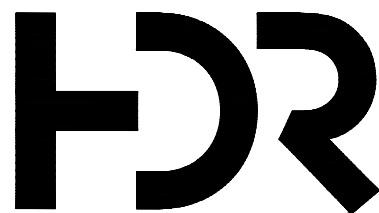
F-100 FIRE PROTECTION NOTES & LEGEND
F-101 FIRE PROTECTION & FIRE ALARM FLOOR PLAN

ELECTRICAL

E-001 ELECTRICAL NOTES & LEGEND
E-101 POWER PLAN
E-102 LIGHTING PLAN
E-501 ELECTRICAL DETAILS

TELECOMMUNICATIONS

ET-101 TELECOMMUNICATIONS PLAN

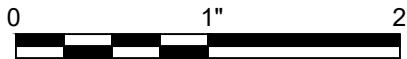


3	27 AUG 2021	B-3 SUBMISSION
2	8 JUN 2021	B-2 SUBMISSION
1	20 APR 2021	B-1 SUBMISSION
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CIVIL	A. BROZIER
STRUCTURAL	J. JAECKEL
ARCHITECTURAL	A. STANISCIA
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

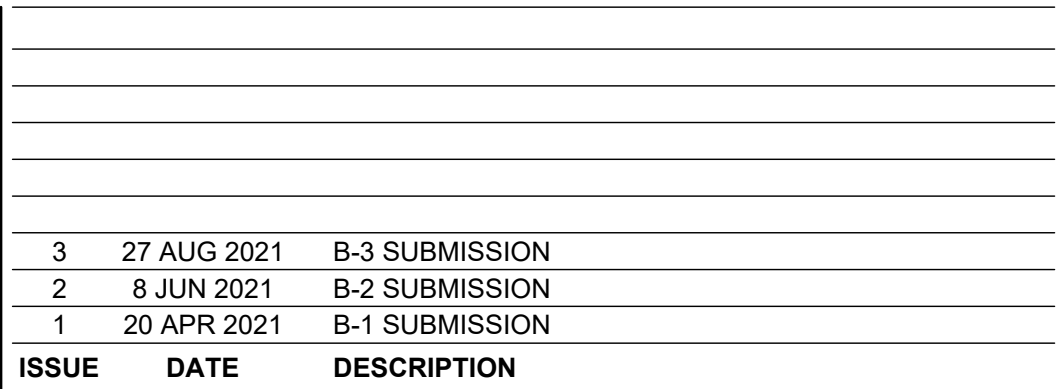


FPBB162002
SHEET INDEX

FILENAME | -
SCALE | 1" = 30'

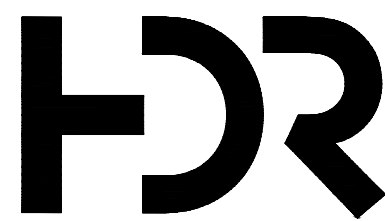
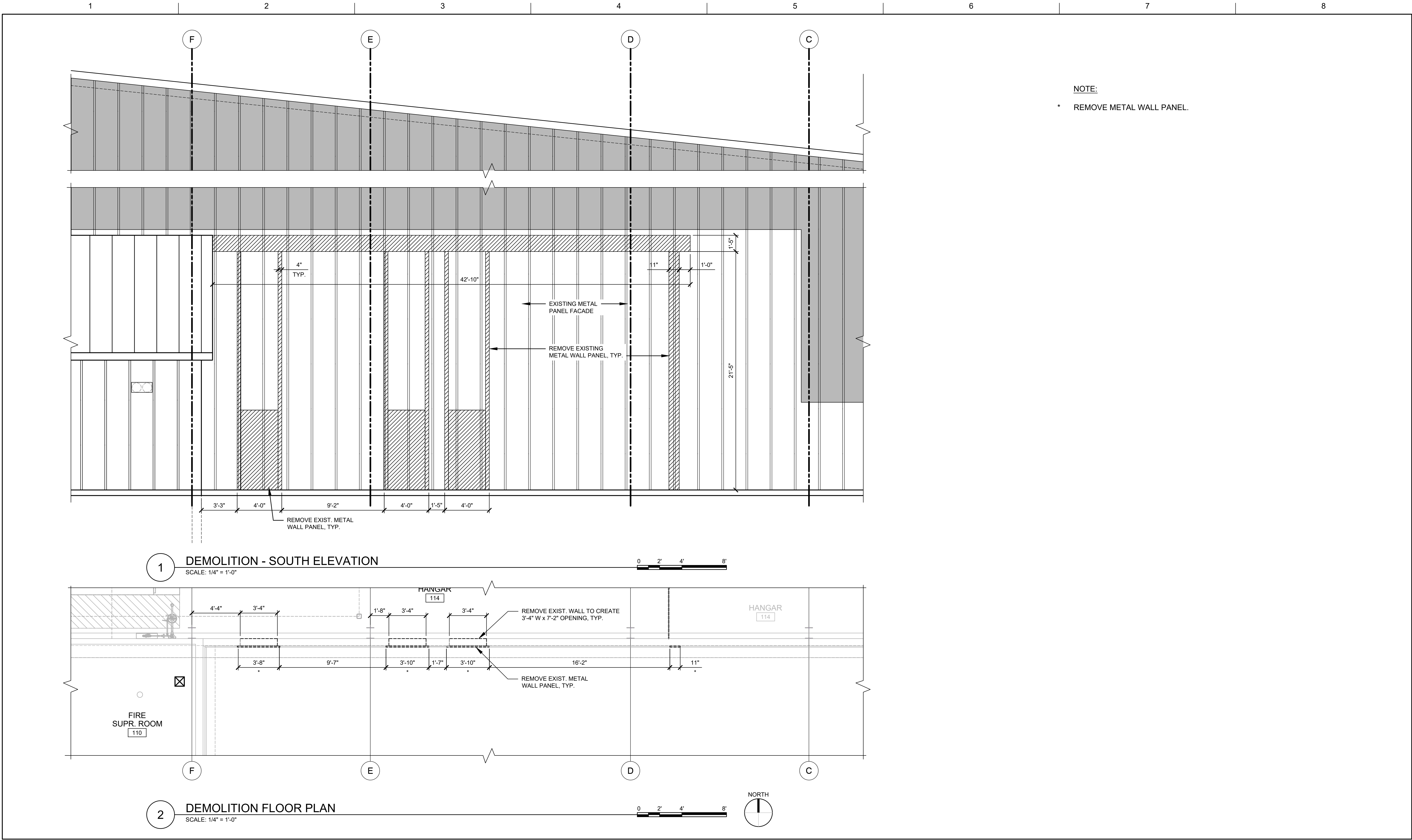
SHEET
G-001

A vertical number line with four tick marks. The tick marks are labeled A, B, C, and D from bottom to top. The line is a solid vertical line, and the labels are placed to the right of the tick marks.



FILENAME	-
SCALE	1" = 30'

SHEET
G-002



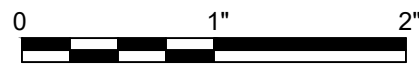
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FPBB162002
DEMOLITION PLAN AND ELEVATION



FILENAME
SCALE

SHEET
X-101



GENERAL NOTES:

1. PROPOSED AREA OF CONSTRUCTION LIMITS CONSISTS PRIMARILY OF GRASS COVER. SOME DEMOLITION OF THE EXISTING HANGAR WILL BE NECESSARY TO COMPLETE CONSTRUCTION. REFER TO SHEET X-101 FOR THE EXISTING HANGAR DEMOLITION PLAN & ELEVATION.

2. UTILITY, SURFACE, AND TOPOGRAPHIC SURVEY HAVE NOT BEEN PERFORMED IN CONJUNCTION WITH THIS DESIGN. THE UTILITY AND TOPOGRAPHIC DATA SHOWN ON THIS SHEET HAVE BEEN RE-USED FROM PREVIOUS PLANS:

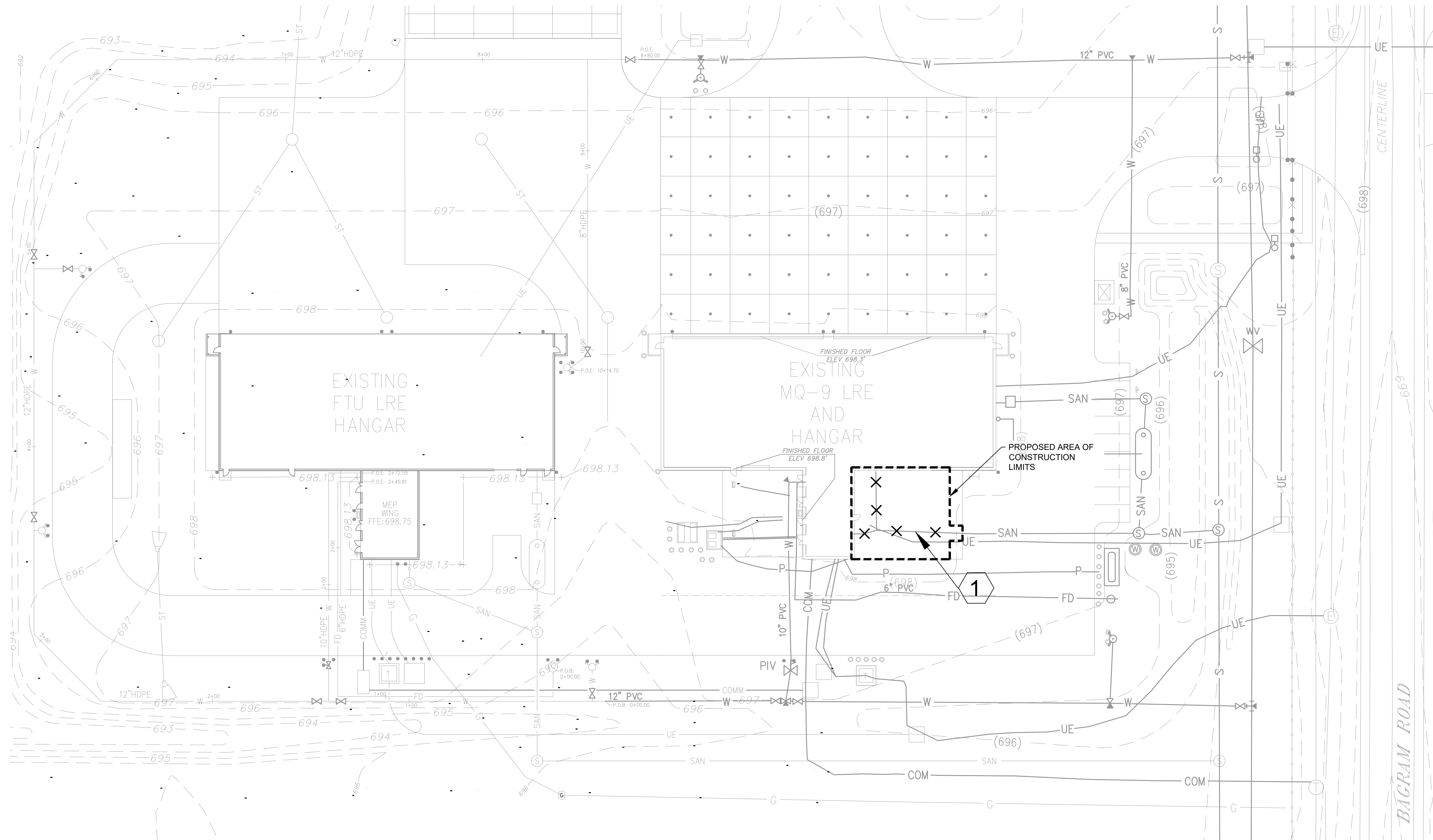
A. TOPOGRAPHY, SUB-SURFACE UTILITIES, AND ABOVE GROUND FEATURES ARE TAKEN FROM THE "OVERALL SITE GRADING, DRAINAGE, AND SWPPP PLAN & BLOWUP DETAIL" SHEET C-102 FROM THE MQ-9 FLIGHT TRAINING UNIT HANGAR PROJECT #FPBB129050 (FY14), SHEET DATED 07-07-14.

B. TOPOGRAPHY SHOWN IS A COMBINATION OF SURVEYED TOPOGRAPHY AND PROPOSED CONTOURS TAKEN FROM THE AFOREMENTIONED SHEET C-102. THE SURVEYED TOPOGRAPHY PORTION WAS PERFORMED BY BEARDSLEY DESIGN ASSOCIATES, L.S., P.C. THERESA BOONVILLE ROME, NY DATED 4/29/2010. ADDITIONAL SURVEY AND TOPOGRAPHIC INFORMATION PROVIDED BY LAFAVE, WHITE & MCGIVERN, L.S., DATED 6/5/2014.

3. BASED ON NOTE #1, EXISTING CONDITIONS UTILITY DATA SHOWN ON THIS SHEET MAY BE INCOMPLETE OR INCORRECT. OWNER AND A/E DO NOT CONFIRM THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN. CONTRACTOR SHALL PERFORM TOPOGRAPHIC AND UTILITY SURVEY PRIOR TO THE START OF CONSTRUCTION TO VERIFY LOCATIONS, ELEVATIONS AND INVERTS OF ALL EXISTING FEATURES, ABOVE AND BELOW GROUND.

KEY NOTES:

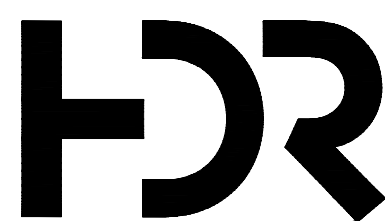
1 REMOVE SANITARY SEWER SERVICE TO ALLOW FOR NEW SANITARY SERVICE CONNECTION



1

EXISTING SITE UTILITY DEMOLITION PLAN

SCALE: 1" = 30'



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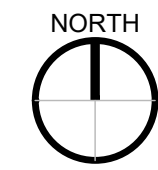
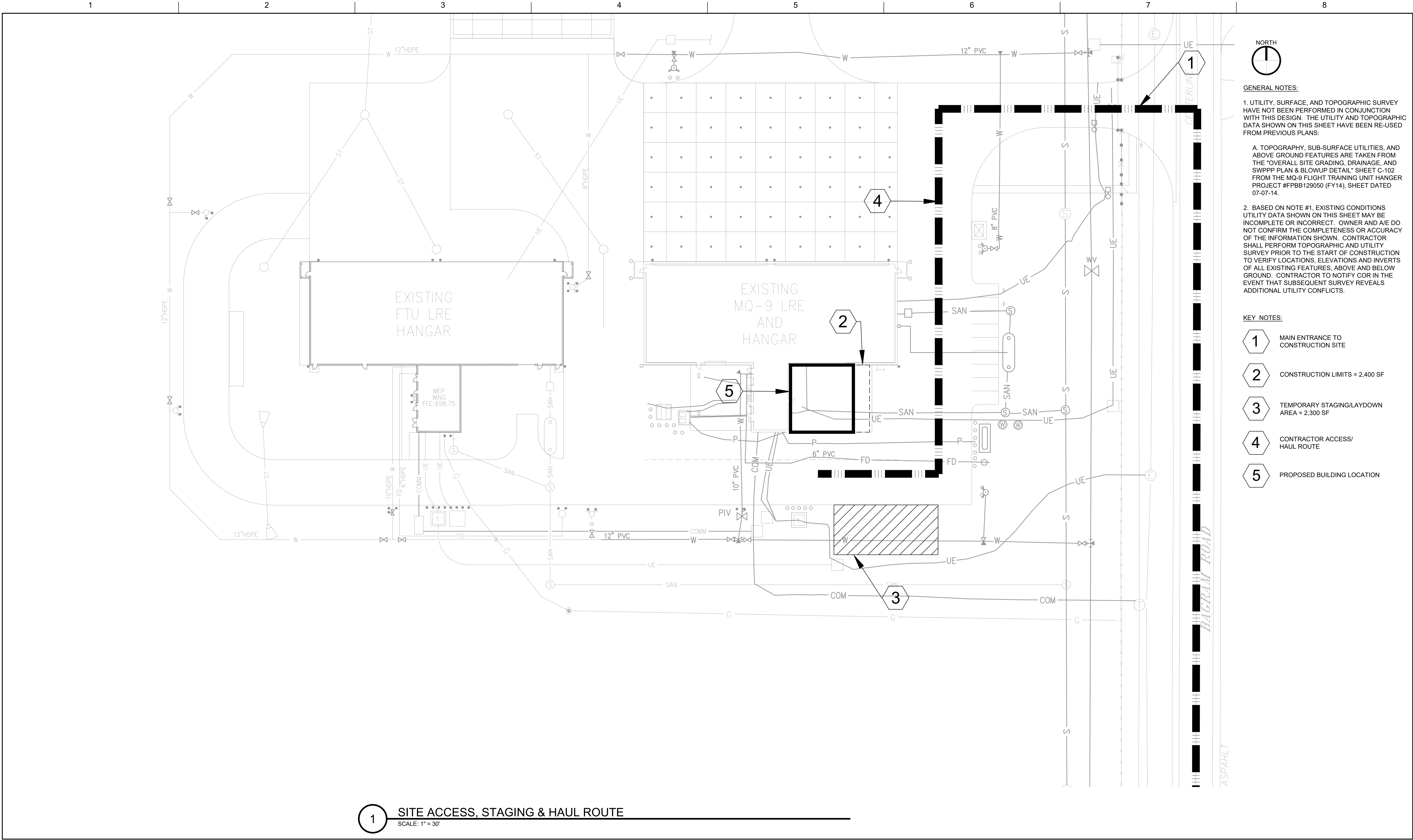
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
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FPBB162002
EXISTING SITE UTILITY DEMOLITION PLAN



FILENAME -
SCALE 1" = 30'

SHEET
X-102



GENERAL NOTES:

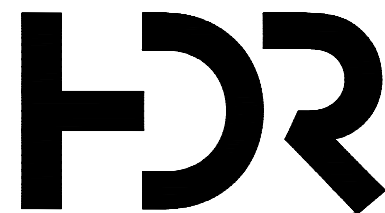
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- KEY NOTES:**
- 1 MAIN ENTRANCE TO CONSTRUCTION SITE
 - 2 CONSTRUCTION LIMITS = 2,400 SF
 - 3 TEMPORARY STAGING/LAYDOWN AREA = 2,300 SF
 - 4 CONTRACTOR ACCESS/HAUL ROUTE
 - 5 PROPOSED BUILDING LOCATION

1 SITE ACCESS, STAGING & HAUL ROUTE
SCALE: 1" = 30'

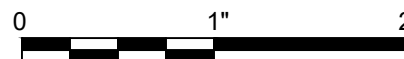


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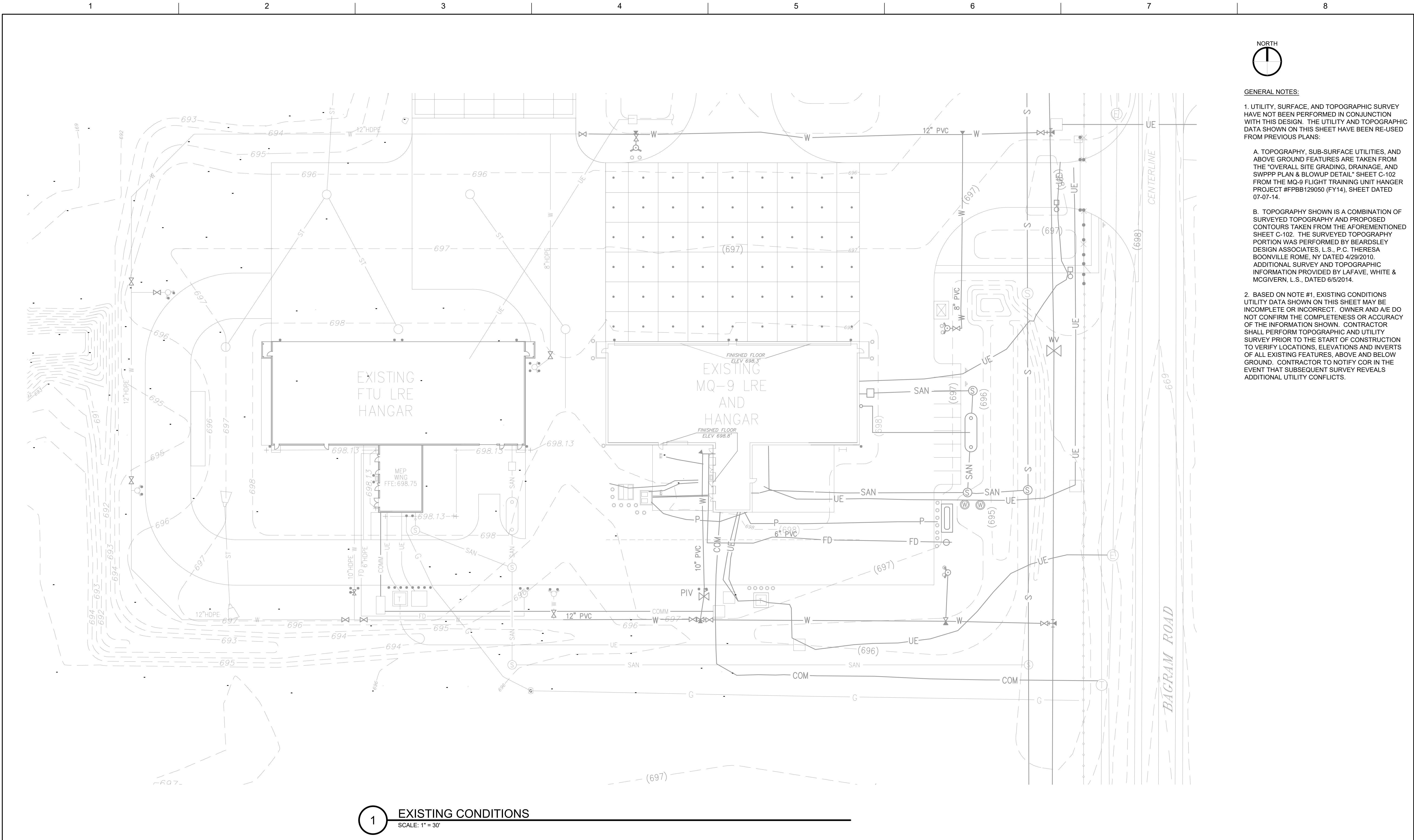
**FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY**



**FPBB162002
SITE ACCESS, STAGING & HAUL ROUTE**

FILENAME -
SCALE 1" = 30'

SHEET
C-101



GENERAL NOTES:

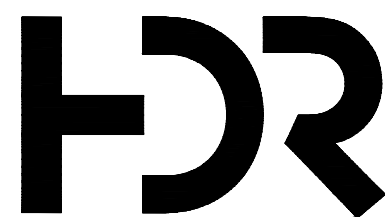
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1 EXISTING CONDITIONS
SCALE: 1" = 30'



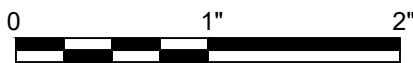
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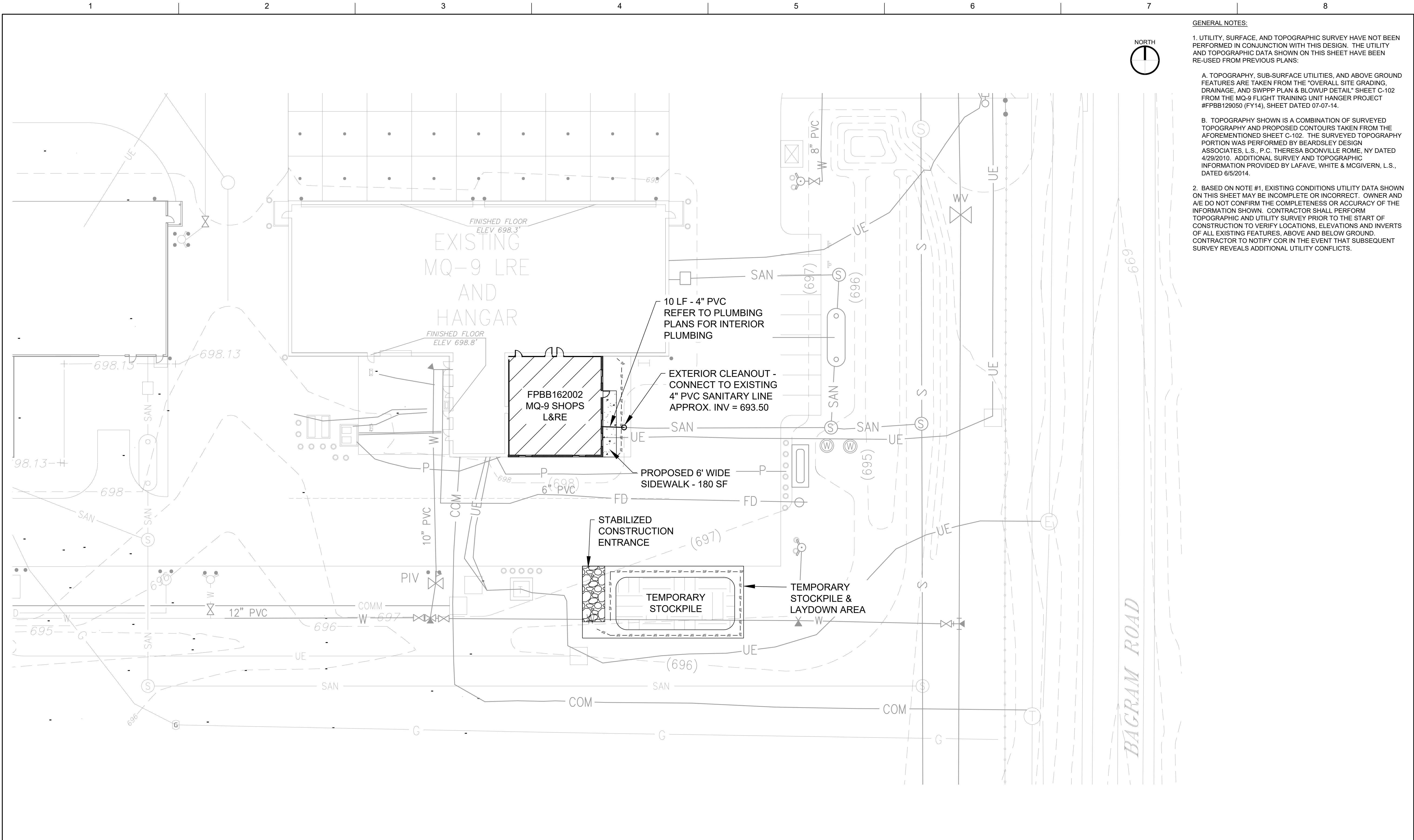
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
EXISTING CONDITIONS

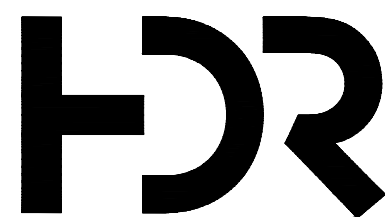


FILENAME -
SCALE 1" = 30'

SHEET
C-102



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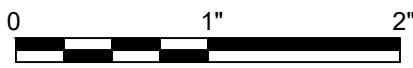
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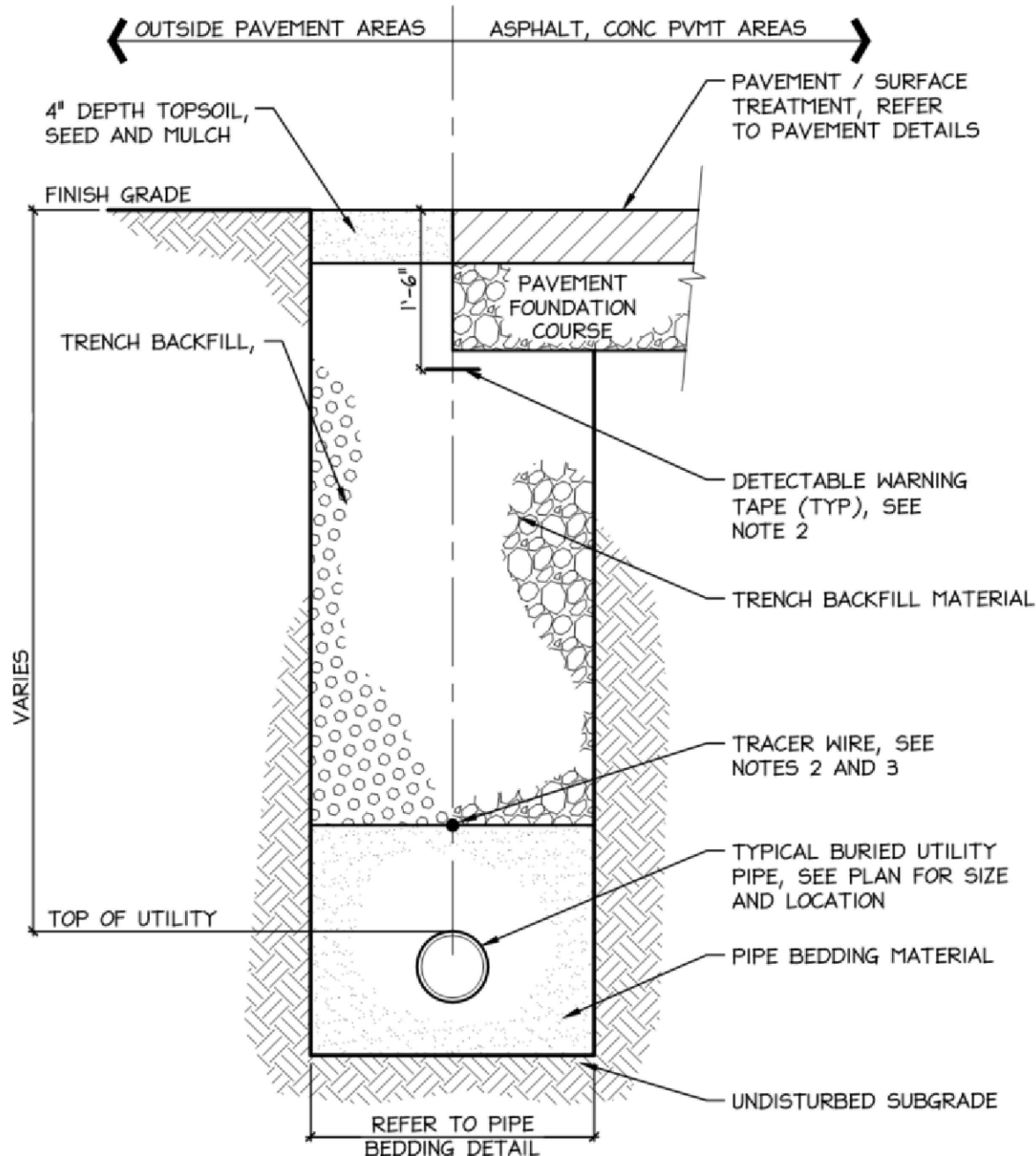
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
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FORT DRUM MILITARY RESERVATION, NY

FPBB162002
SITE PLAN AND
SEDIMENT & EROSION CONTROL PLAN



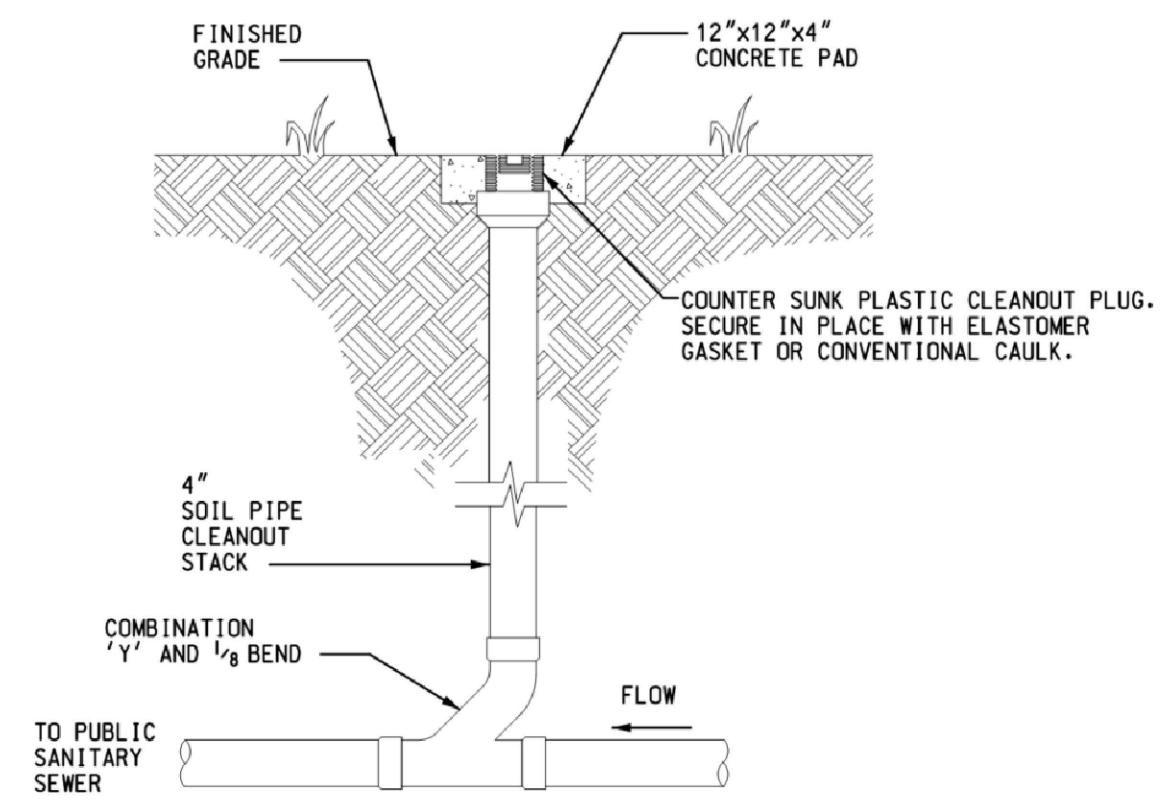
FILENAME -
SCALE 1" = 20'

SHEET
C-103

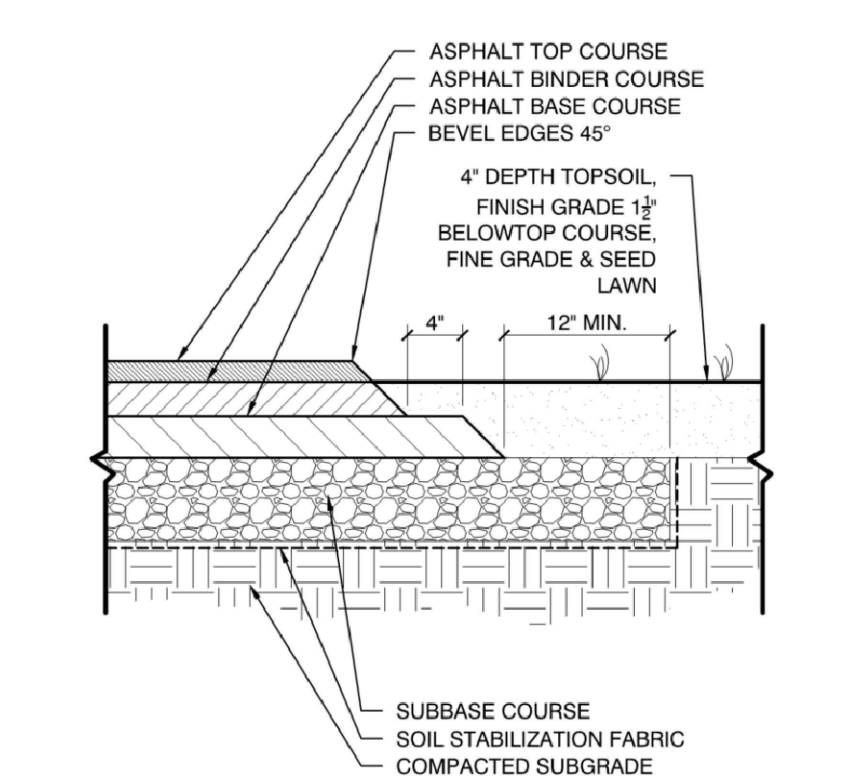


NOTES:
1. TRENCH DEPTHS, WIDTHS, SHEETING, SHORING, BRACING AND CUTBACK SLOPES TO BE DETERMINED BY THE CONTRACTOR AND SHALL COMPLY WITH OSHA, NEW YORK STATE DEPARTMENT OF LABOR, NEW YORK STATE INDUSTRIAL CODE AND ALL OTHER APPLICABLE SAFETY STANDARDS.
2. PROVIDE TRACER WIRE 1'-0" ABOVE OUTSIDE DIAMETER OF UTILITY AND DETECTABLE WARNING TAPE 1'-6" BELOW FINISHED GRADE.
3. PROVIDE TRACER WIRE TEST BOX EVERY 500 FEET EITHER FLUSH OR POLE MOUNTED.

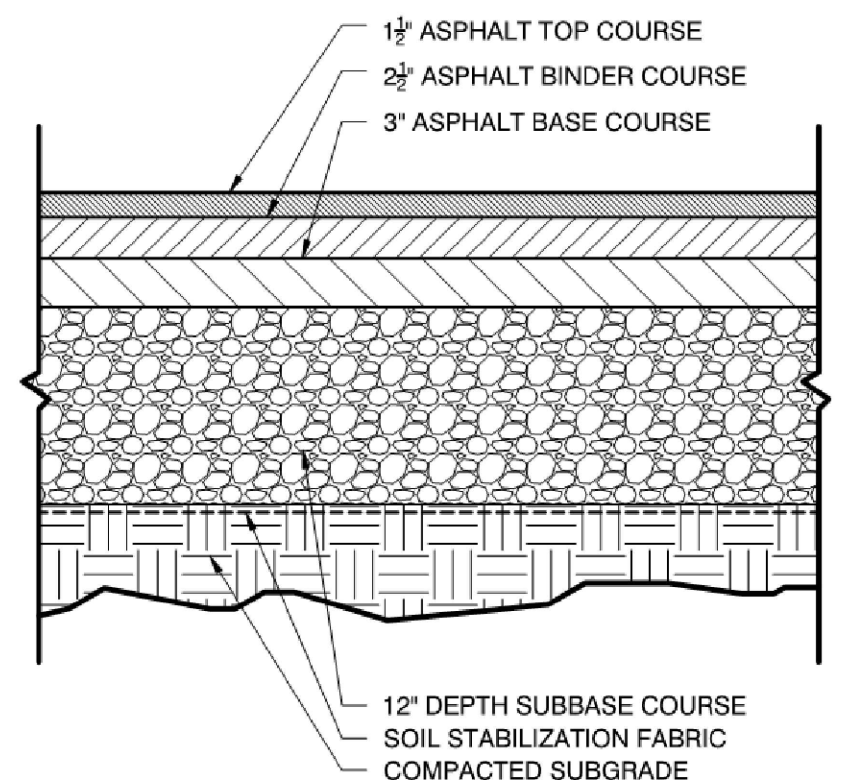
1 PIPE UTILITY TRENCH DETAIL
NOT TO SCALE



2 TYPICAL EXTERIOR CLEANOUT DETAIL
NOT TO SCALE

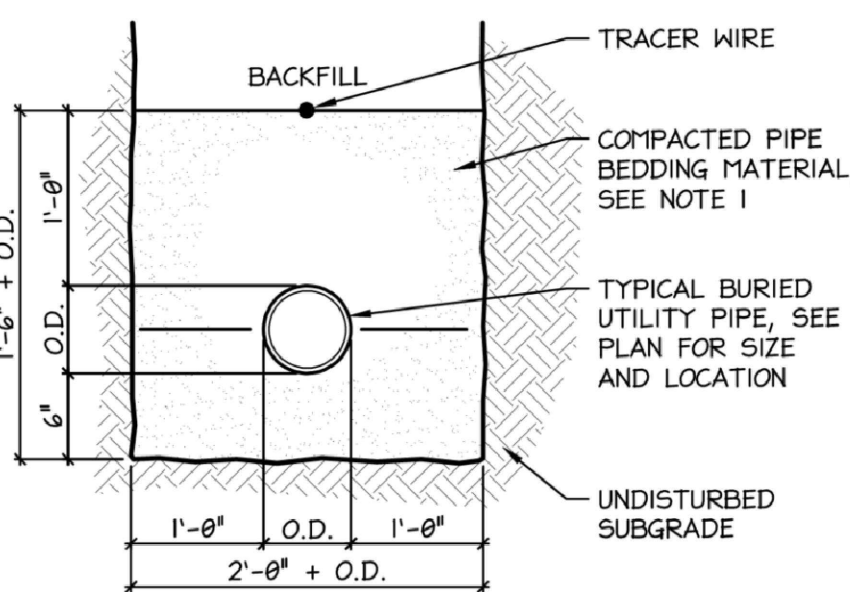


3 ASPHALT PAVEMENT EDGE DETAIL
NOT TO SCALE



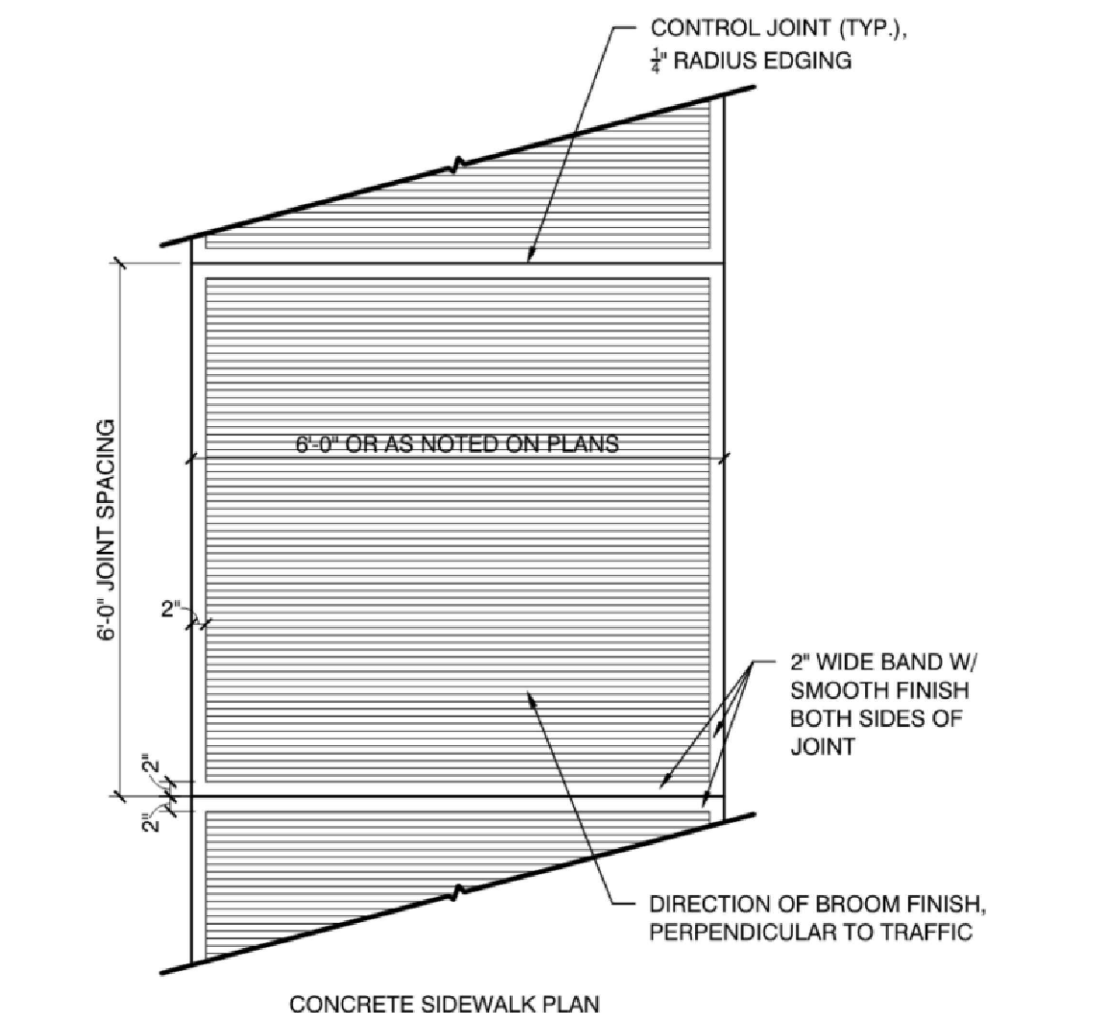
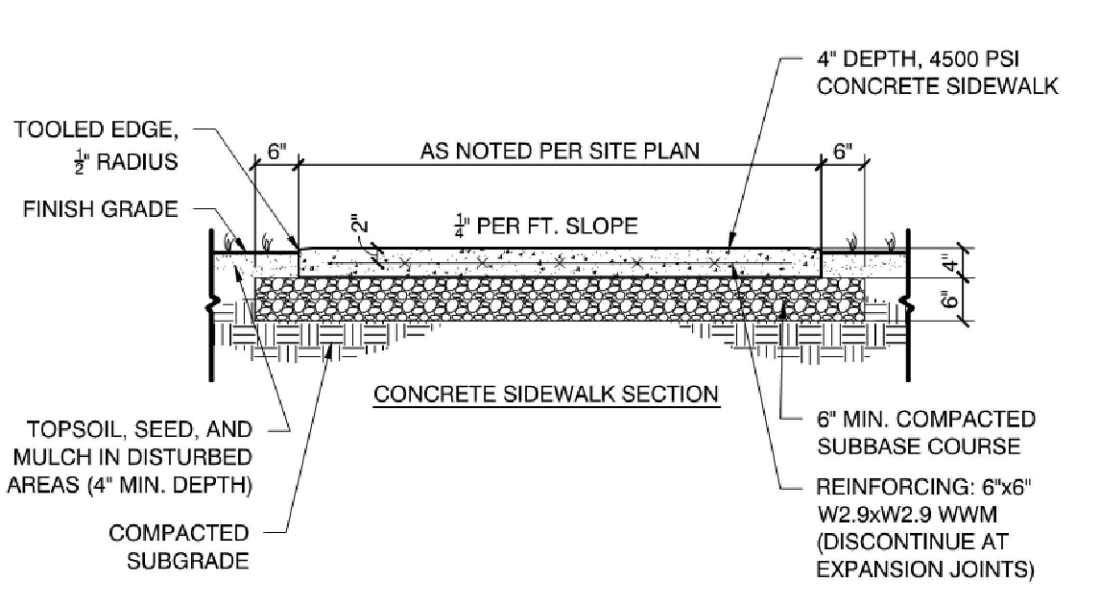
NOTES:
1. ALL DEPTHS OF PAVEMENT AND STONE ARE AFTER COMPACTION.
2. PROVIDE TACK COAT BETWEEN ASPHALT PAVEMENT LIFTS AND ALONG INTERFACE BETWEEN ASPHALT PAVEMENT AND STRUCTURES.

4 ASPHALT PAVEMENT DETAIL
NOT TO SCALE



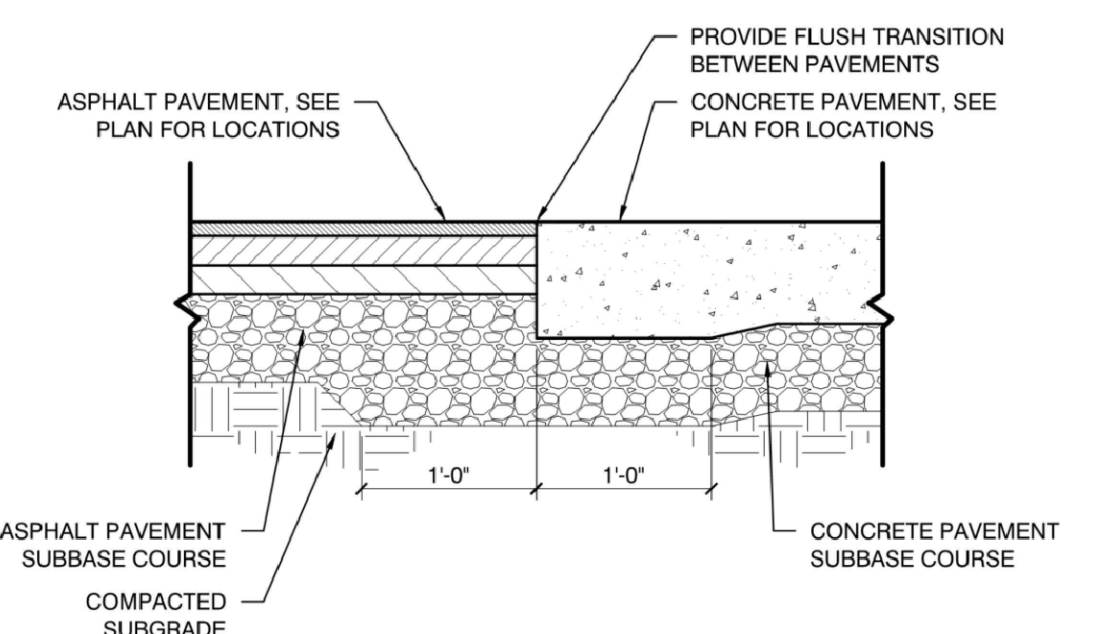
NOTES:
1. FOR EXCAVATION AND BEDDING MATERIAL, REFER TO EARTHWORK SPECIFICATION.

5 PIPE BEDDING DETAIL
NOT TO SCALE

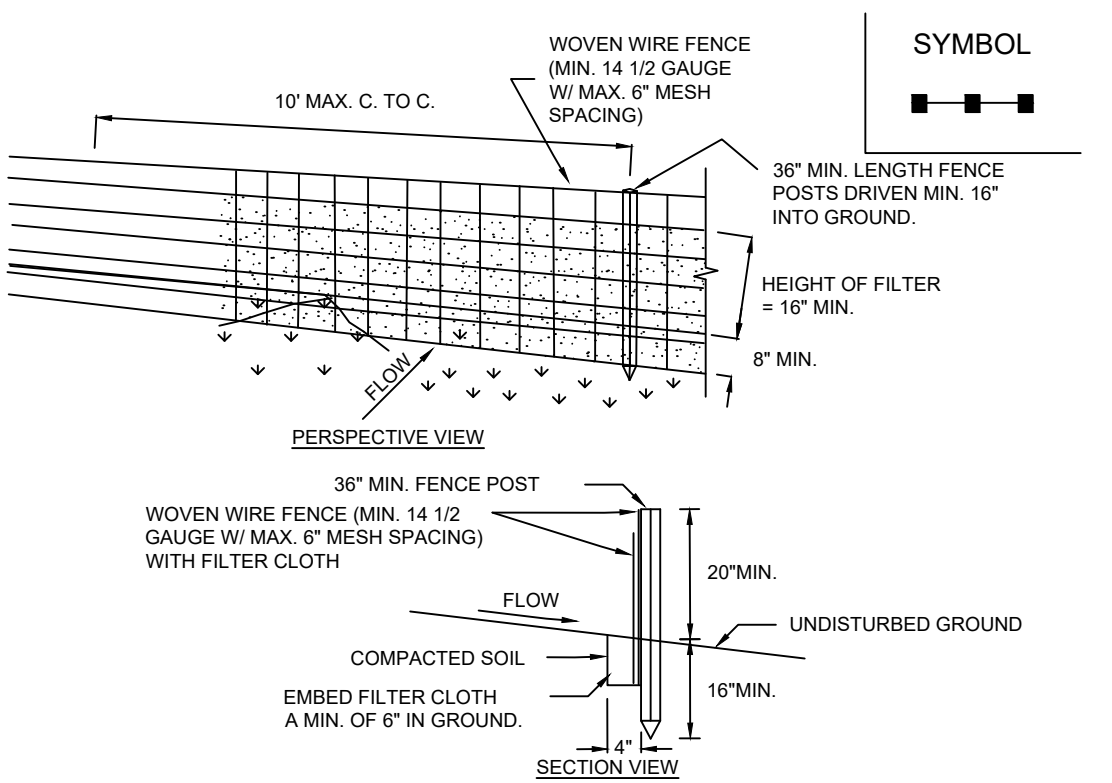


NOTES:
1. PROVIDE 1/2" WIDE CONTROL JOINTS TOOLED OR SAWN, 1-1/2" DEPTH AT SPACING EQUAL TO WIDTH OF SIDEWALK.
2. PROVIDE 1/2" WIDE EXPANSION JOINTS, FILLER AS SPECIFIED - RECESS AT 1/4" FILL WITH SEALANT. EXPANSION JOINT SPACING NOT TO EXCEED 30'0" IN ANY DIRECTION AND AT CONTACT WITH WALLS, DOORS, OR OTHER VERTICAL SURFACES.
3. PROVIDE STIFF BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAFFIC

6 SIDEWALK DETAIL
NOT TO SCALE



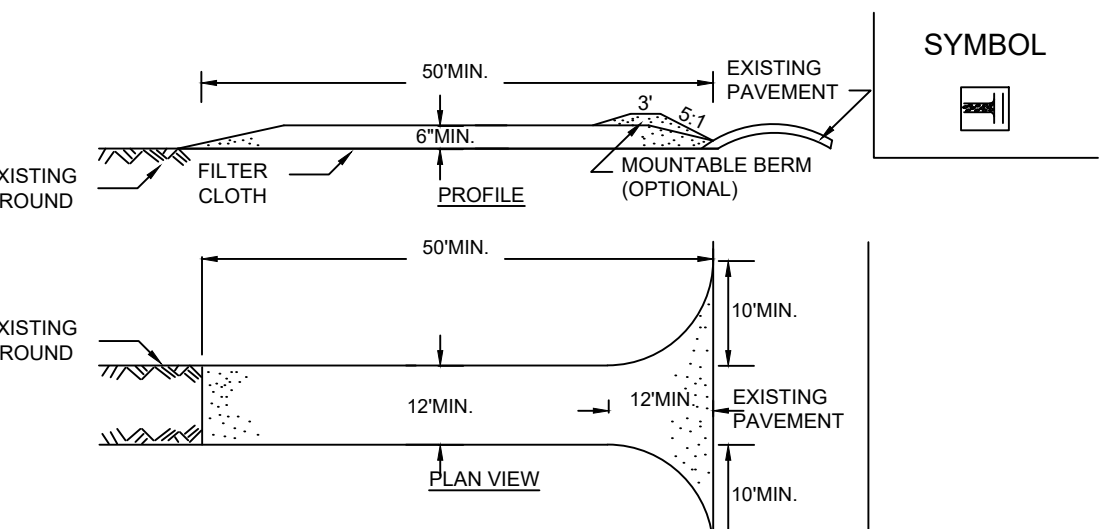
7 ASPHALT & SIDEWALK JOINT DETAIL
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12-1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE	SILT FENCE
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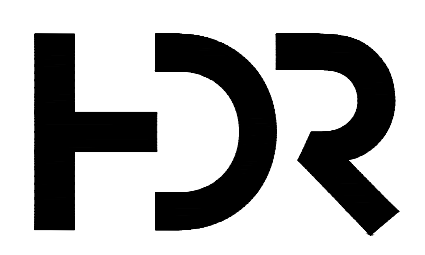
8 SILT FENCE DETAIL
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS
1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE	STABILIZED CONSTRUCTION ENTRANCE
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9 STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



ISSUE	DATE	DESCRIPTION
3	27 AUG 2021	B-3 SUBMISSION
2	8 JUN 2021	B-2 SUBMISSION
1	20 APR 2021	B-1 SUBMISSION

PROJECT MANAGER	ANTHONY BROZIER
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STRUCTURAL	J. JAECKEL
ARCHITECTURAL	A. STANISCIA
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
SITE AND SE&SC DETAILS

0 1" 2"	FILENAME	-
	SCALE	SEE DETAIL

SHEET
C-501

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FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY



FILENAME -
SCALE 1" = 30'

SHEET
S-100

GENERAL NOTES

DESIGN CRITERIA:

- APPLICABLE CODES AND STANDARDS:
- 2018 INTERNATIONAL BUILDING CODE
 - 2020 BUILDING CODE OF NEW YORK STATE
 - A.C.I. 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 - ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
 - A.I.S.C. 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (LRFD).
 - UFC 3-301-01 STRUCTURAL ENGINEERING
 - UFC 3-310-04 SEISMIC DESIGN FOR BUILDINGS
 - UFC 1-200-01 DOD GENERAL BUILDING CODE REQUIREMENTS
 - UFC 3-320-06A CONCRETE FLOOR SLABS SUBJECTED TO HEADY LOADS
 - UFC 3-301-02 DESIGN OF RISK CATEGORY V STRUCTURES, NATIONAL STRATEGIC MILITARY ASSETS
 - UFC 4-010-01 DOD MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGS
 - AISC 341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS

DEAD LOADS

- TRIBUTARY WEIGHT OF BUILDING MATERIALS
- COLUMN WEIGHT - 40 LB/FT
 - STANDING SEEM METAL ROOF - 2 PSF
 - ROOF PURLINS - 2 PSF
 - RIGID FRAMES - 5 PSF
 - MECHANICAL - 3 PSF
 - ELECTRICAL - 2 PSF
 - DROP CEILINGS - 1 PSF
 - ROOF INSULATION (15" THK) - 10 PSF
 - PROTECTION BOARD - 1 PSF
 - MISC - 5 PSF

FLOOR LIVE LOADS

- OFFICE SPACE - 50 PSF
- BRIEFING ROOM - 100 PSF
- RESTROOMS - 75 PSF

ROOF LIVE LOAD - 20 PSF

BUILDING RISK CATEGORY - V

WIND LOADS

- BASIC WIND SPEED - 146 MPH
- EXPOSURE CLASSIFICATION - B
- GUST EFFECT FACTOR - 0.85
- DIRECTIONALITY FACTOR - 1.0

SEISMIC LOADS

- SEISMIC DESIGN CATEGORY - B
- SPECTRAL RESPONSE COEFFICIENT SDS = 0.231
- SPECTRAL RESPONSE COEFFICIENT SD1 = 0.127
- SITE CLASSIFICATION - D
- IMPORTANCE FACTOR - 1.0

SNOW LOADS

- GROUND SNOW LOAD - 70 PSF
- IMPORTANCE FACTOR - 1.50
- ROOF SNOW LOAD (INC DRIFT) - 69 PSF

SOILS INVESTIGATION

- NO SOILS INVESTIGATION/TESTING WAS PROVIDED FOR THIS DESIGN
- ASSUMED BEARING PRESSURE
- STRIP FOOTINGS - 2500 PSF
- SPREAD/ISOLATED FOOTINGS - 2500 PSF
- COEFFICIENT OF FRICTION - 0.3

MATERIAL DATA:

CONCRETE & REINFORCING

- CONCRETE STRENGTH (F'C @ 28 DAYS) - 4000 PSI
- AIR ENTRAINMENT - 4-7%
- CEMENT TYPE - PORTLAND TYPE I
- AGGREGATES - REGULAR WT. HARDROCK TYPE _ ASTM C33
- REINFORCING STEEL - ASTM A615, GRADE 60

STEEL

- STRUCTURAL STEEL (WIDE FLANGES) - ASTM A992, GRADE 50
- STRUCTURAL STEEL TUBING - ASTM A500, GRADE B
- ANCHOR RODS - ASTM A1554, GRADE 55, WITH WELDABILITY SUPPLEMENT S1
- BOLTED CONNECTIONS - ASTM A325N
- WELDED CONNECTIONS - E70XX ELECTRODES E6010 OR E6011 ELECTRODES FOR GALVANIZED SURFACES

STRUCTURAL NOTES:

1. GENERAL:

- THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. APPLICATION OF ANY LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE
- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.
- CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY PHASE OF THE WORK.
- DETAILS ON THE DRAWINGS INDICATED AS "TYPICAL" APPLY IN ALL AREAS WHERE CONDITIONS SIMILAR TO THE DETAIL OCCUR.
- UNLESS SPECIFICALLY NOTED, THERE ARE NO PROVISIONS MADE FOR FUTURE FLOORS, ROOFS, OR OTHER LOADS.
- THE STRUCTURAL DRAWINGS ARE NOT INTENDED FOR USE AS SHOP ERECTION DRAWINGS. REPRODUCTION OF THESE DRAWINGS IN LIEU OF PREPARATION OF SHOP ERECTION DRAWINGS SIGNIFIES THE USERS' ACCEPTANCE THAT ALL INFORMATION SHOWN IS CORRECT AND APPROPRIATE FOR SHOP DRAWINGS AND THAT THE USER WILL BE FULLY RESPONSIBLE FOR EXPENSES THAT MAY OCCUR FROM SAID ACCEPTANCE.
- CONTRACTOR TO SUBMIT FOR REVIEW ALL EQUIPMENT SIZES, OPERATING WEIGHTS, VIBRATIONAL FORCES, SUPPORTED LOCATIONS, ALONG WITH ANY FLOOR OPENINGS, NOTCHES, AND RECESSED REQUIRED BY SUCH EQUIPMENT. CONCRETE SUPPORT PADS AND/OR FRAMING REQUIRED TO SUPPORT SLAB EUIPMENT SHALL NOT BE FABRICATED AND PLACED UNTIL THE CONCRETE SUPPORT PADS AND/OR FRAMING IS APPROVED TO SUPPORT THE EQUIPMENT.

2. CONCRETE / REINFORCING:

- CONCRETE BATCH DESIGN(S) SHALL BE PROPORTIONED AND PRODUCED IN ACCORDANCE WITH A.C.I. 318, IN PARTICULAR CHAPTER 5, AND A.C.I. 301. MIX AND DELIVER IN ACCORDANCE WITH ASTM C94.
SLUMP REQUIREMENTS:
SLOPING SURFACES - MAX. 3".
FOUNDATIONS - MIN. 1" / MAX. 4".
OTHER CONCRETE - MIN. 1" / MAX. 5".
AIR ENTRAINMENT - CONCRETE EXPOSED TO WEATHER _ 5% MIN.
ADMIXTURES - SUBMIT AS REQUIRED FOR APPROVAL

2.2. CONCRETE TEST CYLINDERS:

- SAMPLING IN FIELD - ASTM C172 & C31
- CYLINDER STRENGTH TESTS - ASTM C39
- FREQUENCY OF STRENGTH TESTS - ONE PER 150 CU. YDS.
- ONE STRENGTH TEST - AVG. STRENGTHS OF TWO CYLINDERS @ 28 DAYS.
- CYLINDERS TO BE TESTED - 1 @ 7 DAYS, 2 @ 28 DAYS.

2.3. MINIMUM CONCRETE CLEAR COVER:

FOOTINGS

- TOP - 2"
- BOTTOM - 3"
- SIDES - 3"

FOUNDATION WALLS

- TOP - 1 3/4"
- BOTTOM - 3"
- SIDES - 2"

OTHER COVER REQUIREMENTS SHALL BE AS NOTED IN APPLICABLE DETAILS

3. SPECIAL INSPECTIONS

SPECIAL INSPECTION SHALL BE PROVIDED FOR THE FOLLOWING WORK IN ACCORDANCE WITH NEW YORK CITY BUILDING CODE, CHAPTER 17. CONTRACTOR SHALL NOTIFY AND ACCOMMODATE THE APPLICABLE INSPECTOR DURING APPROPRIATE PHASES OF THE WORK AS REQUIRED FOR EACH TYPE OF INSPECTION. INSPECTION SHALL CONSIST OF VISUAL OBSERVATION OF THE WORK OUTLINED BELOW AND TESTING AS INDICATED BELOW OR IN SPECIFICATIONS.

CONCRETE WORK (NOT INCLUDING SITEWORK CONCRETE)

- INSPECT TAKING OF SPECIMENS: CONCRETE CYLINDERS, AIR ENTRAINMENT, AND SLUMP - PERIODIC
- INSPECT PLACEMENT OF REINFORCED CONCRETE - PERIODIC
- INSPECT PLACING OF FOUNDATION CONCRETE - PERIODIC

ANCHOR BOLTS INSTALLED IN CONCRETE.

- PRE-CONCRETE PLACEMENT INSPECTION
- INSPECT PLACEMENT OF CONCRETE - PERIODIC

REINFORCING STEEL

- INSPECT REINFORCING STEEL PRIOR TO CLOSING FORMS OR DELIVERY OF CONCRETE - PERIODIC

STRUCTURAL STEEL

- MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS - PERIODIC
- INSPECTION OF HIGH STRENGTH BOLTS - PERIODIC
- MATERIAL VERIFICATION OF STRUCTURAL STEEL - PERIODIC
- INSPECTION OF HIGH STRENGTH BOLTS - PERIODIC

SUBGRADE

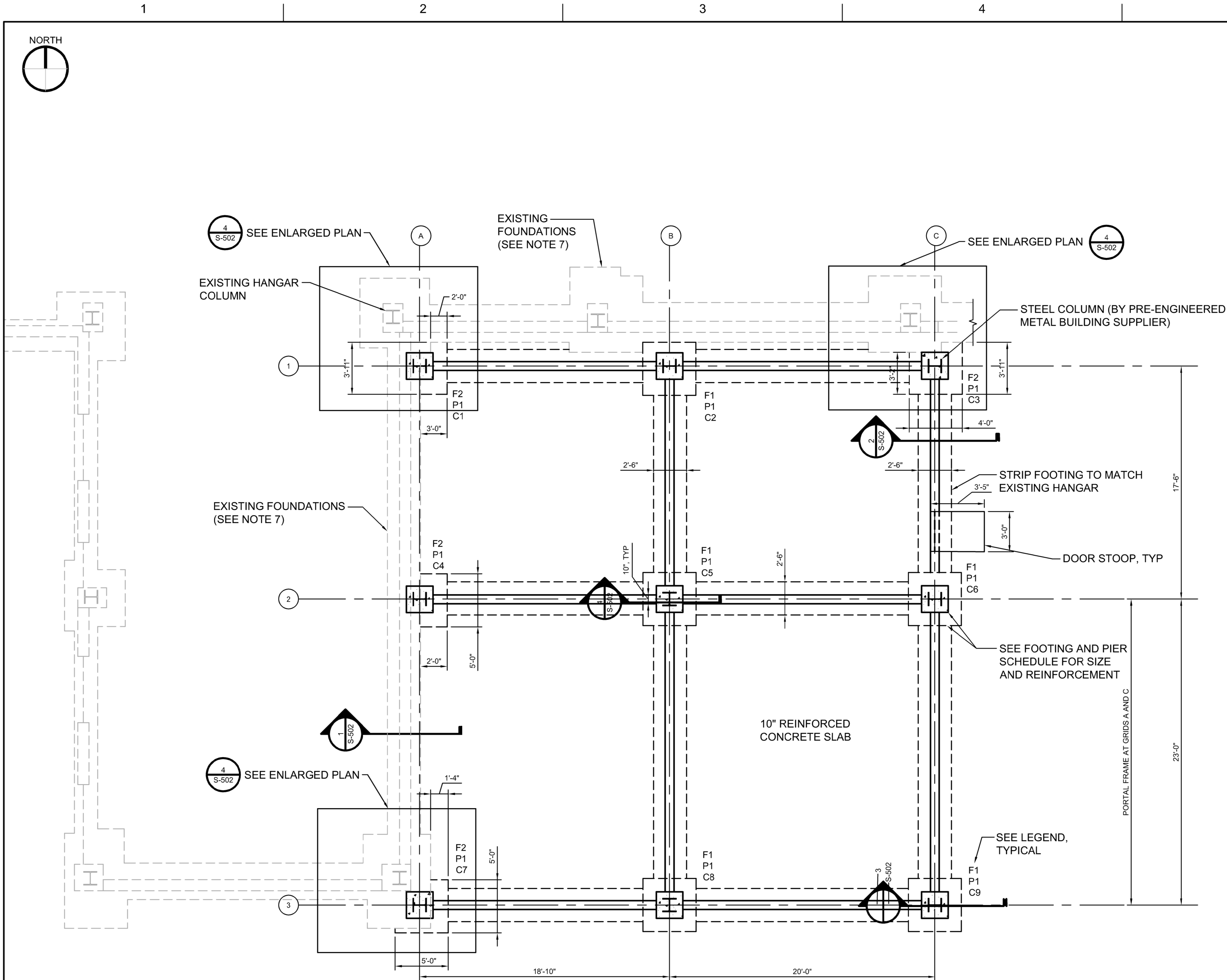
- INSPECT EXISTING SUBSURFACE CONDITIONS, DURING FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS - CONTINUOUS

PRE-ENGINEERED METAL BUILDING (PEMB) NOTES:

- RIGID FRAMES MUST BE SPACED AS INDICATED ON THE DRAWINGS, BUT OVERALL DIMENSIONS AND CONSTRUCTION DETAILS WAY VARY TO SUIT MANUFACTURER'S STANDARD DESIGN.
- THE BUILDING MUST BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE BUILDING CODE LISTED ABOVE AND CONTRACTOR SPECIFICATIONS.
- THE DESIGN OF THE ANCHOR ROD SIZES, QUANTITIES AND LOCATIONS AS WELL AS BASE PLATES MUST BE CALCULATED FOR A PINNED BASE SUPPORT.
- THE DIMENSIONS, TOLERANCES OUTLINED IN THE AWS CODE UNDER WORKMANSHIP AND TOLERANCES APPLICABLE TO HOT ROLLED UNDER THE AISC "STANDARD MILL PRACTICE" SECTION MUST BE REQUIRED IN THE FABRICATION OF THE STEEL BUILDING FRAMES.
- THE BUILDING FRAMES MUST BE DESIGNED FOR A MINIMUM LATERAL DEFLECTION OF H/400 AT THE HIGHEST BUILDING EAVE HEIGHT FOR THE BASIC WIND SPEED AND THE SEISMIC PARAMETERS LISTED ABOVE.
- A COMPLETE DESIGN ANALYSIS BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED MUST BE SUBMITTED FOR INFORMATION ONLY. THE DESIGN ANALYSIS MUST INCLUDE A LIST OF THE DESIGN LOADS, LOADS TRANSMITTED TO THE FOUNDATIONS, RIGID FRAME DESIGN, MISCELLANEOUS BRACING, ANCHOR ROD SIZES, ANCHOR ROD LAYOUT, LOCATION OF EMBEDDED ITEMS, AND ERECTION DRAWINGS.
- THE BUILDING MUST BE DESIGNED TO SUPPORT ALL MECHANICAL AND ELECTRICAL EQUIPMENT. ADDITIONAL GIRTS OR PURLINS MUST BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF MECHANICAL EQUIPMENT.
- DESIGN LOADS MUST CONFORM TO THE LIVE, WIND, AND SEISMIC LOAD PARAMETERS GIVEN ABOVE AND PER THE CONTRACT SPECIFICATIONS. THE ROOF DEAD LOAD MUST INCLUDE SELF WEIGHT PLUS A UNIFORM 20 PSF COLLATERAL LOAD. BUILDING DEAD LOADS ARE WEIGHTS OF THE BUILDING COMPONENTS. LOAD COMBINATIONS MUST BE IN ACCORDANCE WITH THE CODES LISTED ABOVE AND MBMA. THE BUILDING STRESSES MUST BE BY ALLOWABLE STRESS DESIGN (ASD) AND COMPLY WITH AISC SPECIFICATONS FOR STRUCTURAL STEEL STRUCTURES.
- RIGID FRAME ANCHOR ROD SIZES MUST BE DESIGNED BY THE METAL BUILDING MANUFACTURER AND FURNISHED BY THE CONTRACTOR. THE ANCHOR ROD SIZES AND LAYOUT MUST BE SUBMITTED FOR INFORMATION ONLY.
- THE FINAL COLUMN BASE REACTIONS, COLUMN LOCATIONS, ANCHOR ROD SIZES, AND ANCHOR ROD SPACING MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW. ALL FOUNDATIONS AND ANCHOR RODS HAVE BEEN DESIGNED BASED ON ASSUMED LOADINGS AND REACTIONS. FOOTINGS AND ANCHOR RODS MUST BE VERIFIED AND CONFIRMED BY THE CONTRACTOR'S STRUCTURAL ENGINEER. LOAD REACTIONS THAT EXCEED THE REACTIONS LISTED PER THE "COLUMN BASE REACTIONS" TABLES ON SHEET S-XXX MAY NECESSITATE FOUNDATION REDESIGN AND RELOCATIONS OF ANCHOR RODS. IF REDESIGN IS REQUIRED, THE REDESIGN OF THE FOOTINGS AND ANCHOR RODS MUST BE DONE AND PAID FOR BY THE CONTRACTOR. THE FOUNDATION SHOP DRAWINGS MUST NOT BE SUBMITTED UNTIL THE PRE-ENGINEERED METAL BUILDING SHOP DRAWINGS, THE COLUMN BASE REACTIONS, AND THE FOUNDATION VERIFICATION HAVE BEEN APPROVED.
- THE METAL BUILDING FRAMES AND ALL EXPOSED STRUCTURAL STEEL MUST BE GALVANIZED.
- SEE CONTRACT SPECIFICATION 13 34 19 FOR ADDITIONAL INFORMATION.

FUTURE EXPANSION PROVISIONS:

- NONE.



1 FOUNDATION PLAN

3/16" = 1'-0"

FOUNDATION PLAN NOTES:

- TOS FOUNDATION WALL ELE = 100.00'
- TOS STRIP FOOTING = 95.00'
- TOS SPREAD FOOTING ELE = 95.00'
- TOS CONCRETE SLAB ELE = 100.00'
- MAINTAIN FOOTING ELEVATIONS BELOW FROST DEPTH
- TOS EXISTING FOOTINGS 95.00' UNO.
- CONTRACTOR TO FIELD VERIFY EXISTING FOUNDATION LOCATIONS AND DIMENSIONS. IF NEW FOOTING THICKNESS DOES NOT MATCH EXISTING WHERE INTERACTION EXISTS, NOTIFY ENGINEER BEFORE PROCEEDING.
- REFERENCE ELEVATION = 100.00' = 698.50' AS PER CIVIL DRAWINGS.
- SEE S-502 FOR DETAILS OF NEW EXISTING PIERS AND FOOTING INTERACTION.
- 10" SLAB ON GRADE TO BE REINFORCED WITH #7 @ 8" OC EW T&B.

FOOTING SCHEDULE		
FOOTING NAME	SIZE	REINFORCEMENT
F1	5' X 5' X 16" THK	#6 @ 12" OC T&B EW
F2	SEE PLAN FOR DIMENSIONS (16" THK)	#6 @ 12" OC T&B EW

PIER SCHEDULE		
PIER NAME	SIZE	REINFORCEMENT
P1	2' X 2' X 16" THK	#4 TIES AT 16" OC WITH (8) #6 VERTICAL DOWEL BARS

2 FOOTING AND PIER SCHEDULE

NTS

FOOTING AND PIER SCHEDULE NOTES:

- (8) #6 VERTICAL BARS SHALL BE DOWELED INTO THE FOOTING BELOW.
- ALL NEW PIERS SHALL BE CENTERED ON NEW FOOTINGS, UNLESS THERE IS AN INTERACTION BETWEEN THE NEW/EXISTING FOOTING.
- SEE 9/S-501 FOR TYPICAL PIER DETAIL.
- PIERS AT PORTAL FRAMES TO BE SIZED ONCE PORTAL FRAMES AND LOADS ARE SUBMITTED TO ENGINEER.

COLUMN LOAD SCHEDULE				
COLUMN LABEL	DEAD	ROOF LIVE	SNOW	WIND
C1	3.0	1.1	7.8	9.0
C2	6.0	3.2	15.6	-0.4
C3	3.0	1.4	7.8	-2.7
C4	6.0	3.9	15.6	7.6
C5	12.0	11.6	32.4	-3.3
C6	6.0	5.0	15.6	-4.9
C7	3.0	1.7	7.8	7.3
C8	6.0	4.7	15.6	-5.4
C9	3.0	2.1	7.8	-7.3

LEGEND:

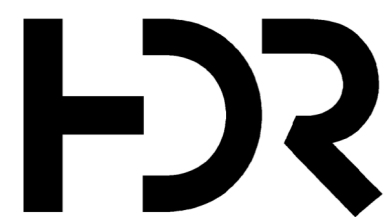
- F# - FOOTING NUMBER, SEE FOOTING SCHEDULE.
- P# - PIER NUMBER, SEE PIER SCHEDULE.
- C# - COLUMN NUMBER, SEE LOAD SCHEDULE.

3 COLUMN LOADS SCHEDULE

NTS

COLUMN LOAD SCHEDULE NOTES:

- ALL LOADS ARE SERVICE LOADS, IN KIPS.
- NEGATIVE WIND LOAD REPRESENTS UPLIFT. POSITIVE VALUES REPRESENT COMPRESSION.
- VALUES REPRESENT VERTICAL REACTION AT COLUMN BASE, FROM APPLIED LOAD.
- SUBMIT PORTAL FRAME DETAILS AND LOADS TO ENGINEER FOR REVIEW.



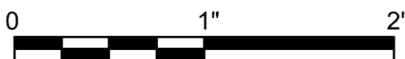
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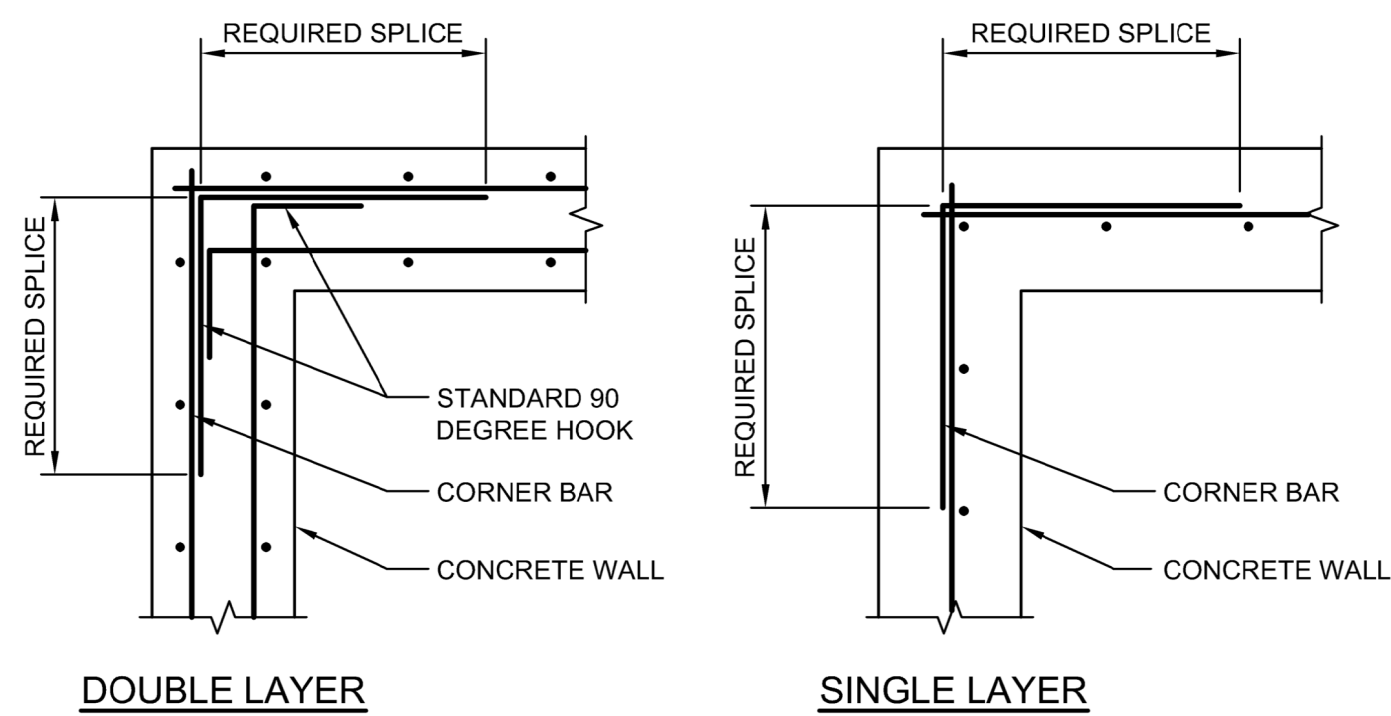
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FPBB162002
FOUNDATION PLAN



FILENAME -
SCALE 1" = 30'

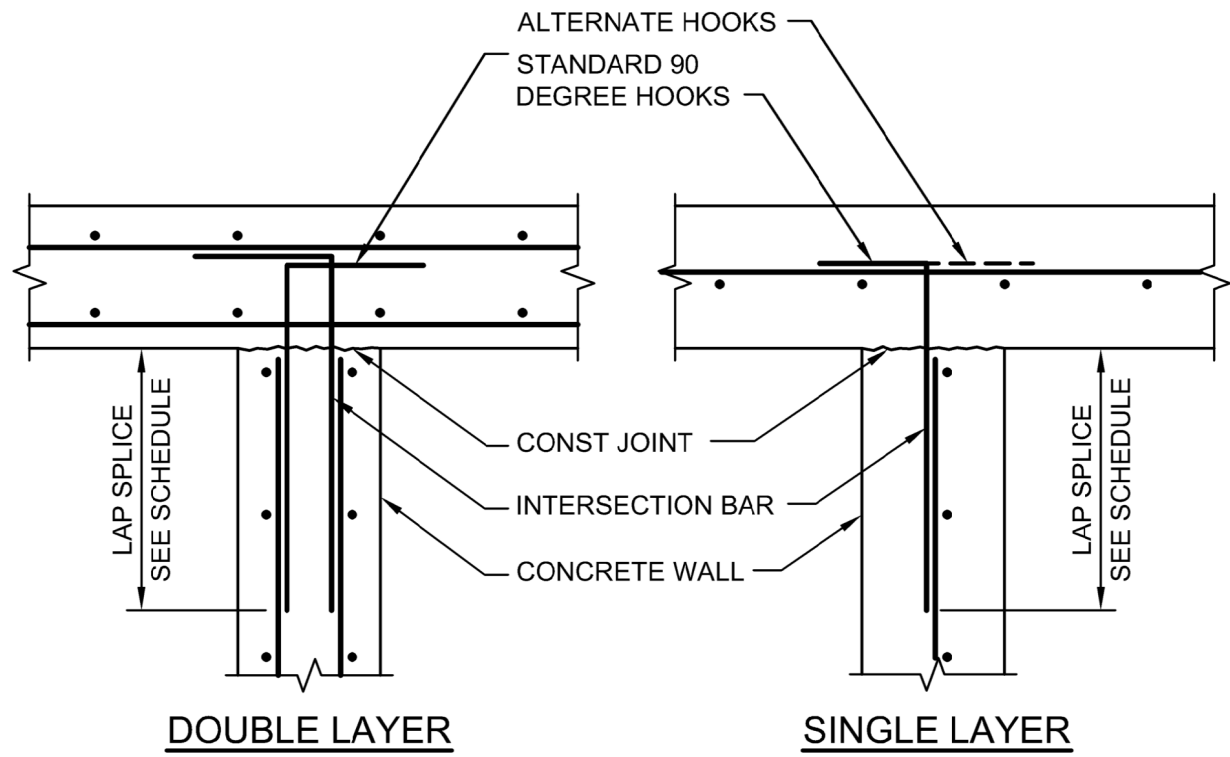
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DOUBLE LAYER

SINGLE LAYER

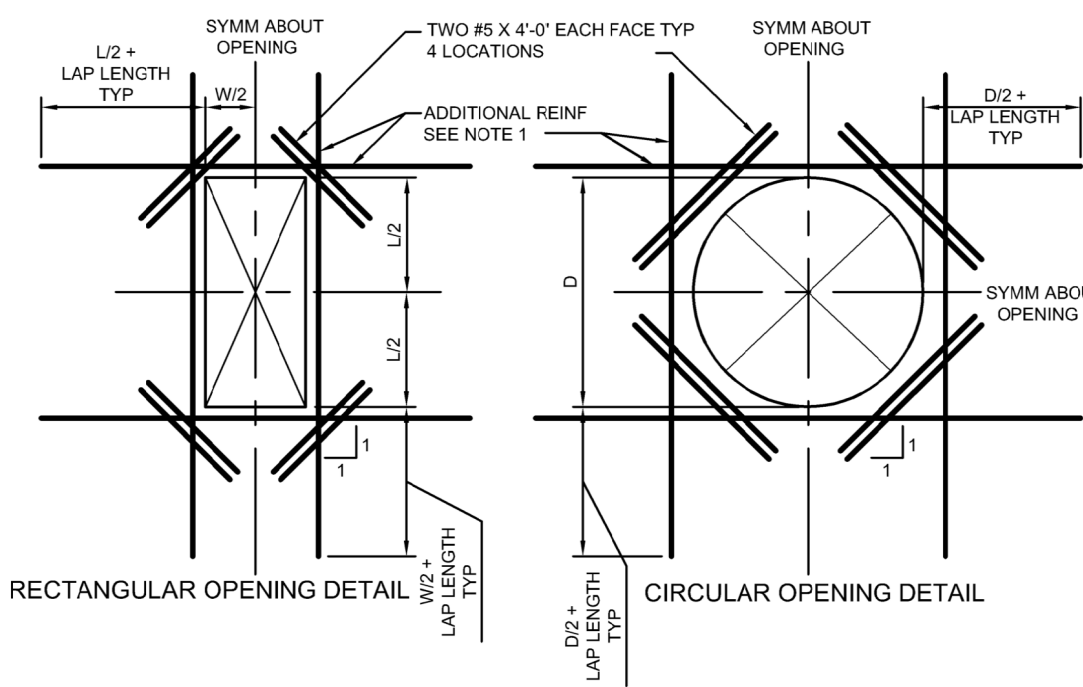
NOTE:
1. CORNER BARS TO BE SAME SIZE AND SPACING AS HORIZONTAL BARS.



DOUBLE LAYER

SINGLE LAYER

NOTE:
1. INTERSECTION BARS TO BE SAME SPACING AS HORIZONTAL BARS.



- NOTES:
1. PROVIDE ADDITIONAL REINFORCING THE SAME SIZE AS DISCONTINUOUS REINFORCEMENT AT OPENING. QUANTITY OF REINFORCING IN EACH DIRECTION SHALL BE EQUAL TO OR ONE GREATER THAN THE NUMBER OF DISCONTINUOUS BARS. PLACE 1/2 OF ADDITIONAL REINFORCING BARS EACH SIDE OF OPENING. PLACE ADDITIONAL REINFORCEMENT AT 3" O.C. (TYPICAL BOTH DIRECTIONS AND ALL LAYERS OF REINFORCEMENT). START FIRST BAR 2" CLEAR TO OPENING.
 2. EXTEND ADDITIONAL REINFORCING BEYOND EDGE OF OPENING AS SHOWN ABOVE. ADDITIONAL BARS MAY TERMINATE AT THE END OF THE WALL WITH A STANDARD HOOK WHERE THE LENGTH OF THE WALL WILL NOT PERMIT BARS TO EXTEND AS SHOWN ABOVE.
 3. TYPICAL WALL OR SLAB REINFORCING NOT SHOWN FOR CLARITY. TERMINATE TYPICAL REINFORCING 2" CLEAR TO OPENING.
 4. OPENINGS 12" OR LESS IN SLABS AND WALLS, NO EXTRA REBARS ARE REQUIRED UNLESS SHOWN OTHERWISE. TYPICAL REINFORCING SHALL BE RESPAECED (NOT CUT) TO ALLOW FOR OPENINGS TO BE MADE.
 5. UNLESS SHOWN OTHERWISE ON DRAWINGS, PROVIDE EXTRA REINFORCING AROUND OPENINGS AS SHOWN AND INDICATED ABOVE.
 6. PROVIDE ADDITIONAL DOWELS PER NOTE 1 ABOVE FOR ALL OPENINGS NEAR THE FLOOR SLAB, BASE SLAB, OR CORNERS.

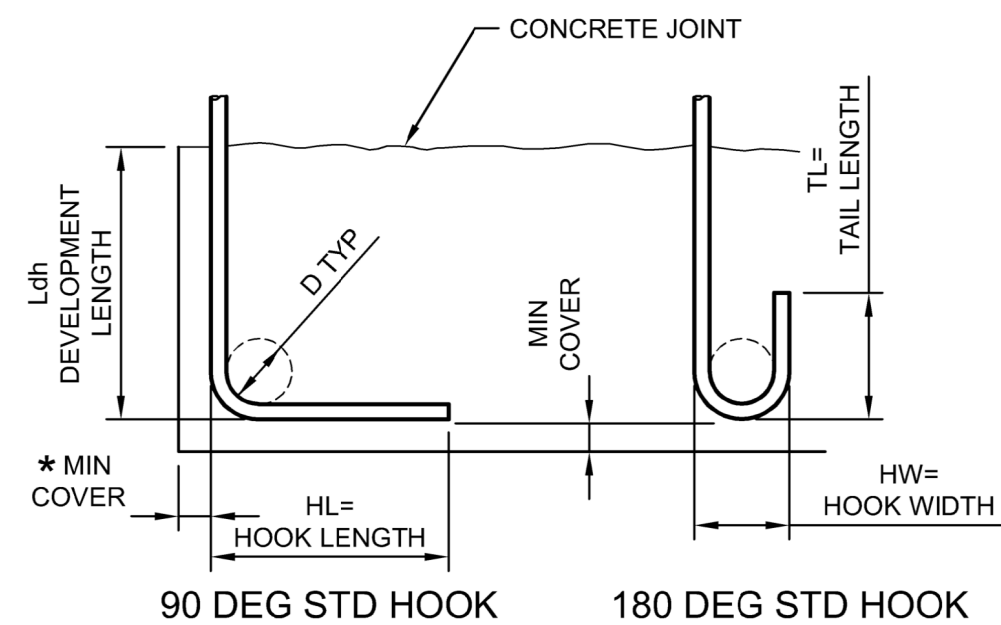
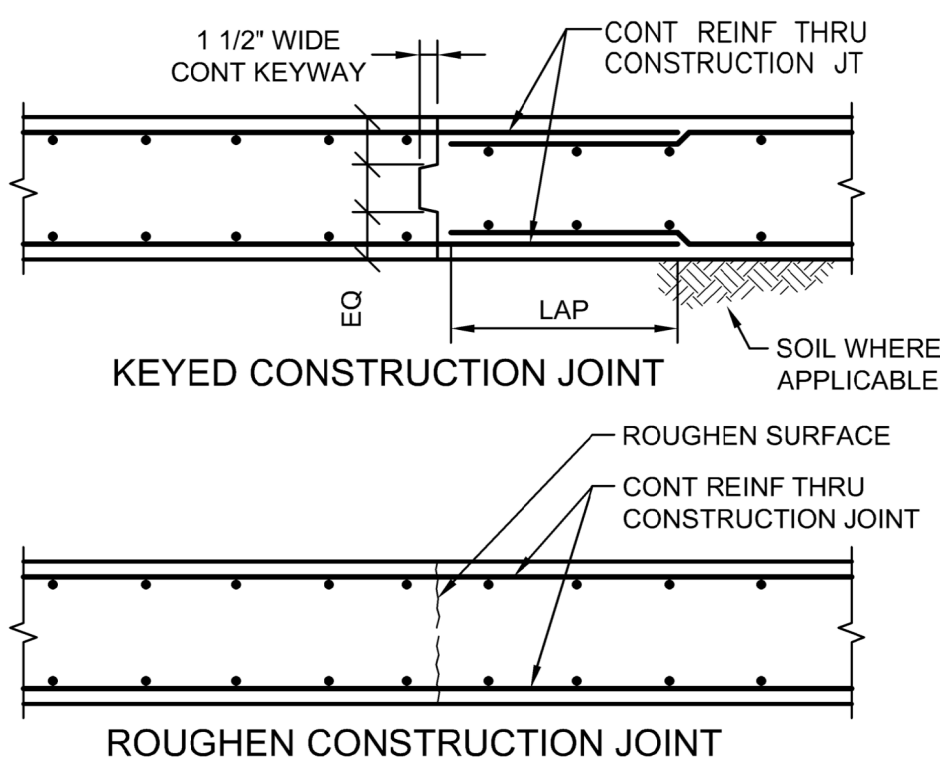
1 TYPICAL REINFORCING AT WALL CORNERS
3/4" = 1'-0"

2 TYPICAL REINFORCING AT WALL INTERSECTIONS
3/4" = 1'-0"

3 EXTRA REINFORCING AT OPENINGS
1/2" = 1'-0"

MINIMUM LAP SPLICE LENGTHS f _c = 4000 psi					
BAR	* MIN BAR SPACING	LAPS FOR BARS SPACED GREATER THAN MIN BAR SPACING		LAPS FOR BARS SPACED CLOSER THAN MIN BAR SPACING	
		VERTICAL	OTHER	VERTICAL	OTHER
#3	3"	1'-4"	1'-6"	1'-4"	1'-6"
#4	3"	1'-7"	2'-0"	1'-8"	2'-2"
#5	3"	1'-11"	2'-6"	2'-7"	3'-4"
#6	4"	2'-4"	3'-0"	3'-8"	4'-9"
#7	4"	3'-6"	4'-6"	4'-11"	6'-5"
#8	4"	4'-7"	5'-11"	6'-6"	8'-6"
#9	4 1/2"	5'-9"	7'-6"	8'-3"	10'-9"
#10	5"	7'-4"	9'-6"	10'-6"	13'-7"
#11	5 5/8"	9'-0"	11'-8"	12'-10"	16'-8"

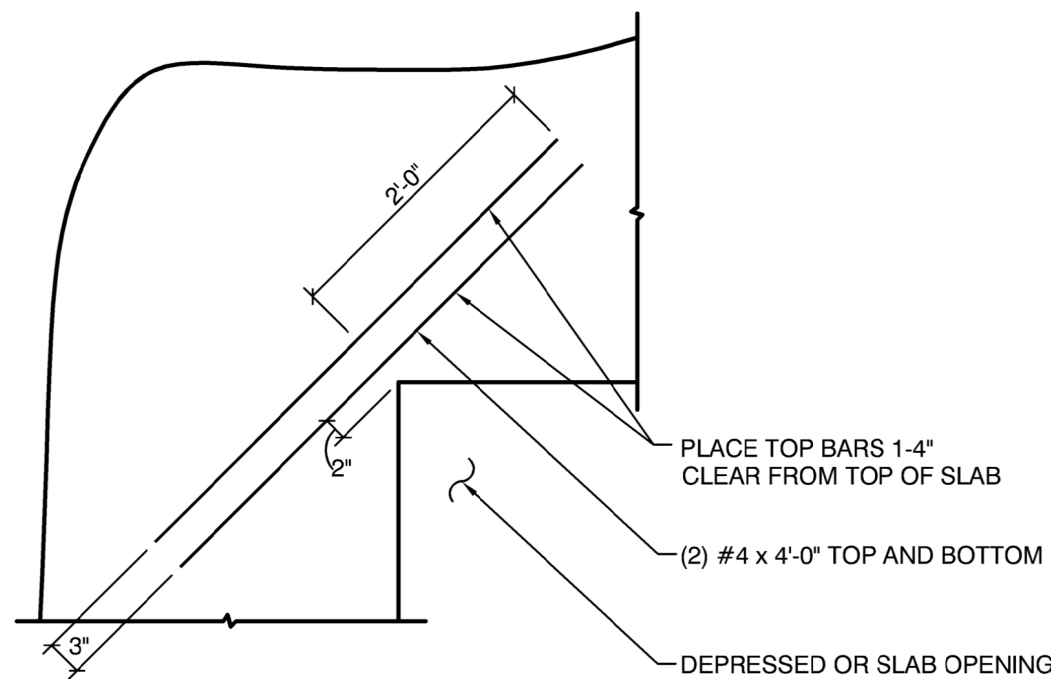
- NOTES:
1. ALL REBAR SPLICE LENGTHS SHALL BE AS SHOWN UNDER HEADING "VERTICAL" EXCEPT IF SPLICED BARS ARE HORIZONTAL BARS WITH 12" OR MORE CONCRETE BELOW. THEN SPLICE LENGTH SHALL BE AS SHOWN UNDER HEADING "OTHER".
 2. * AT SPLICES THE BAR SPACING IS THE CENTER TO CENTER DISTANCE BETWEEN ADJACENT REBARS.
 3. ALL SPLICES SHALL BE CONTACT SPLICES AND WIRED TOGETHER.
 4. NO WELDED OR MECHANICAL SPLICES ARE PERMITTED UNLESS INDICATED OTHERWISE.
 5. UNLESS OTHERWISE SHOWN, SPLICES FOR BOTTOM REINFORCING BARS IN BEAMS AND SLABS SHALL BE CENTERED OVER THE SUPPORTS. SPLICES FOR TOP REINFORCING BARS SHALL BE LOCATED ON CENTERLINE OF SPAN.



BAR SIZE GRADE 60	HL	HW	TL	D	f _c =4.0 OR 4.5 KSI
					L _{dh} *
#3	6"	3"	3"	2 1/4"	6"
#4	8"	4"	4 1/2"	3"	7"
#5	10"	5"	5"	3 3/4"	9"
#6	1'-0"	6"	6"	4 1/2"	10"
#7	1'-2"	7"	7"	5 1/4"	12"
#8	1'-4"	8"	8"	6"	14"
#9	1'-7"	11 3/4"	10 1/2"	9 1/2"	15"
#10	1'-10"	1'-1 1/4"	11 1/2"	10 3/4"	17"
#11	2'-0"	1'-2 3/4"	1'-1"	12"	19"

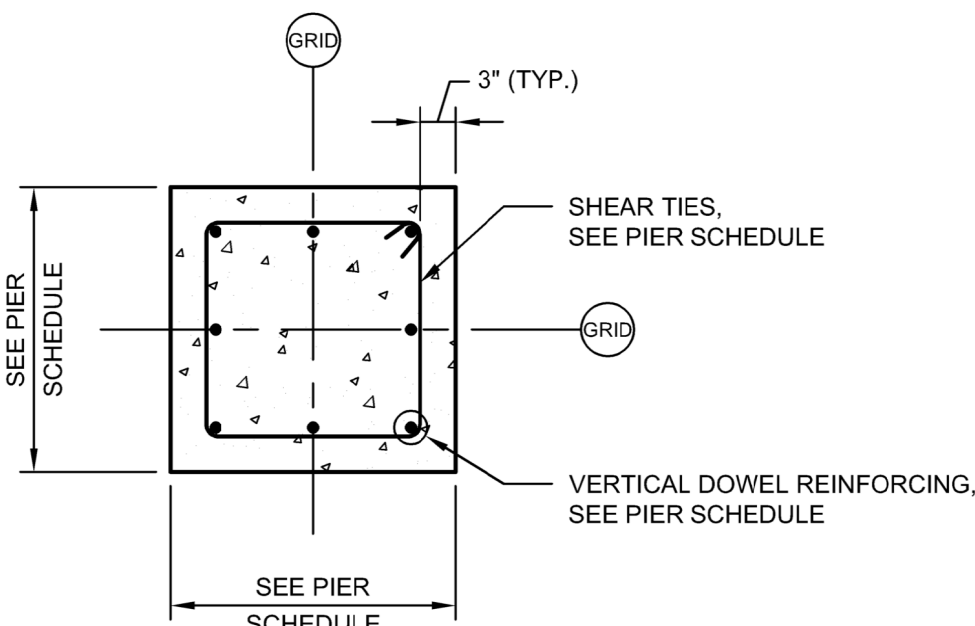
* COMPLYING WITH MINIMUM COVER REQUIREMENTS OF ACI 318, 12.5.3. OTHERWISE L_{dh} MUST BE RE-CALCULATED.

4 CONCRETE LAP SPLICE SCHEDULE
NTS



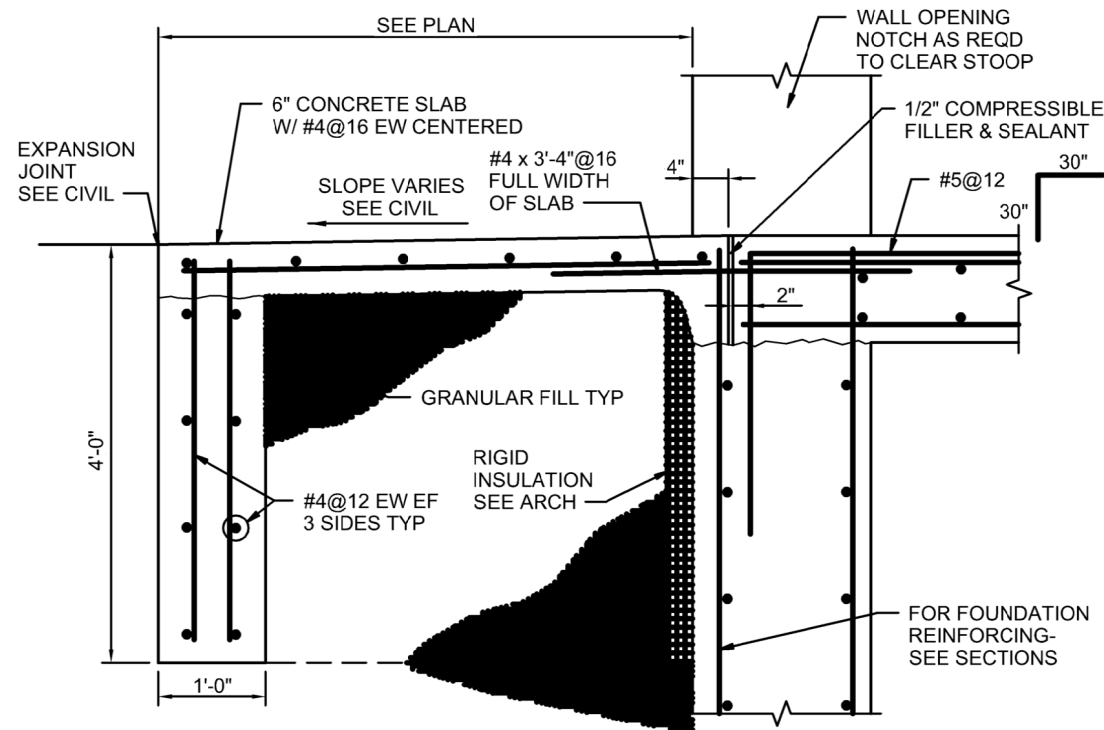
8 SLAB ON GRADE REINFORCING AT RE-ENTRANT CORNER
3/4" = 1'-0"

5 CONSTRUCTION JOINT (CJ)
3/4" = 1'-0"



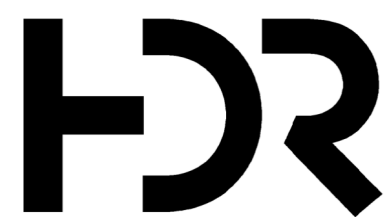
9 TYPICAL PIER DETIAL
3/4" = 1'-0"

6 TYPICAL REINFORCING HOOK
3/4" = 1'-0"



10 TYPICAL DOOR STOOP
NTS

7 REINFORCING HOOK SCHEDULE
NTS



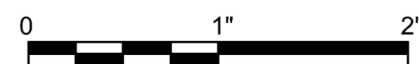
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CYBERSECURITY	J. MONFORTON
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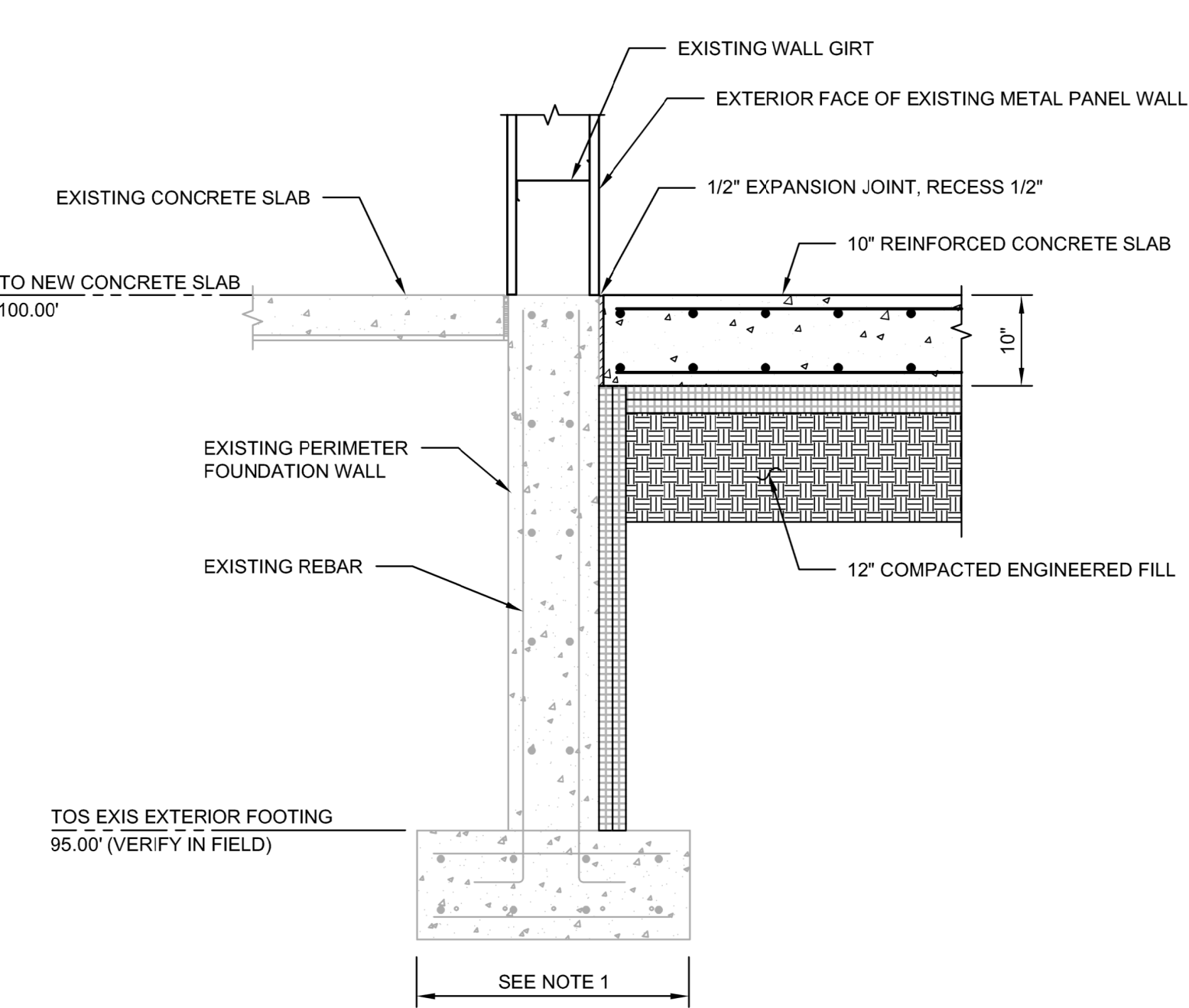
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
TYPICAL CONCRETE DETAILS

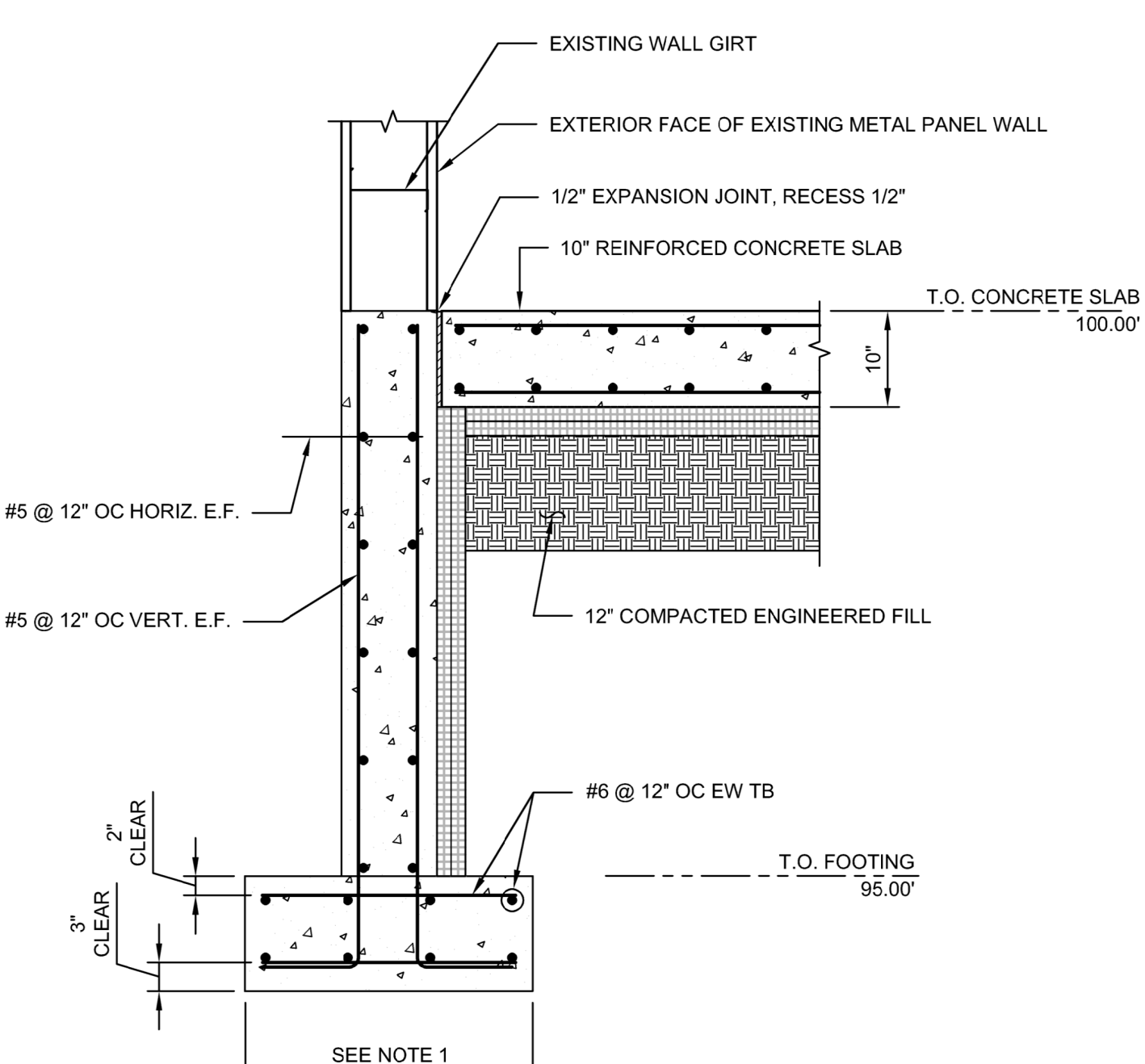


FILENAME -
SCALE VARIES

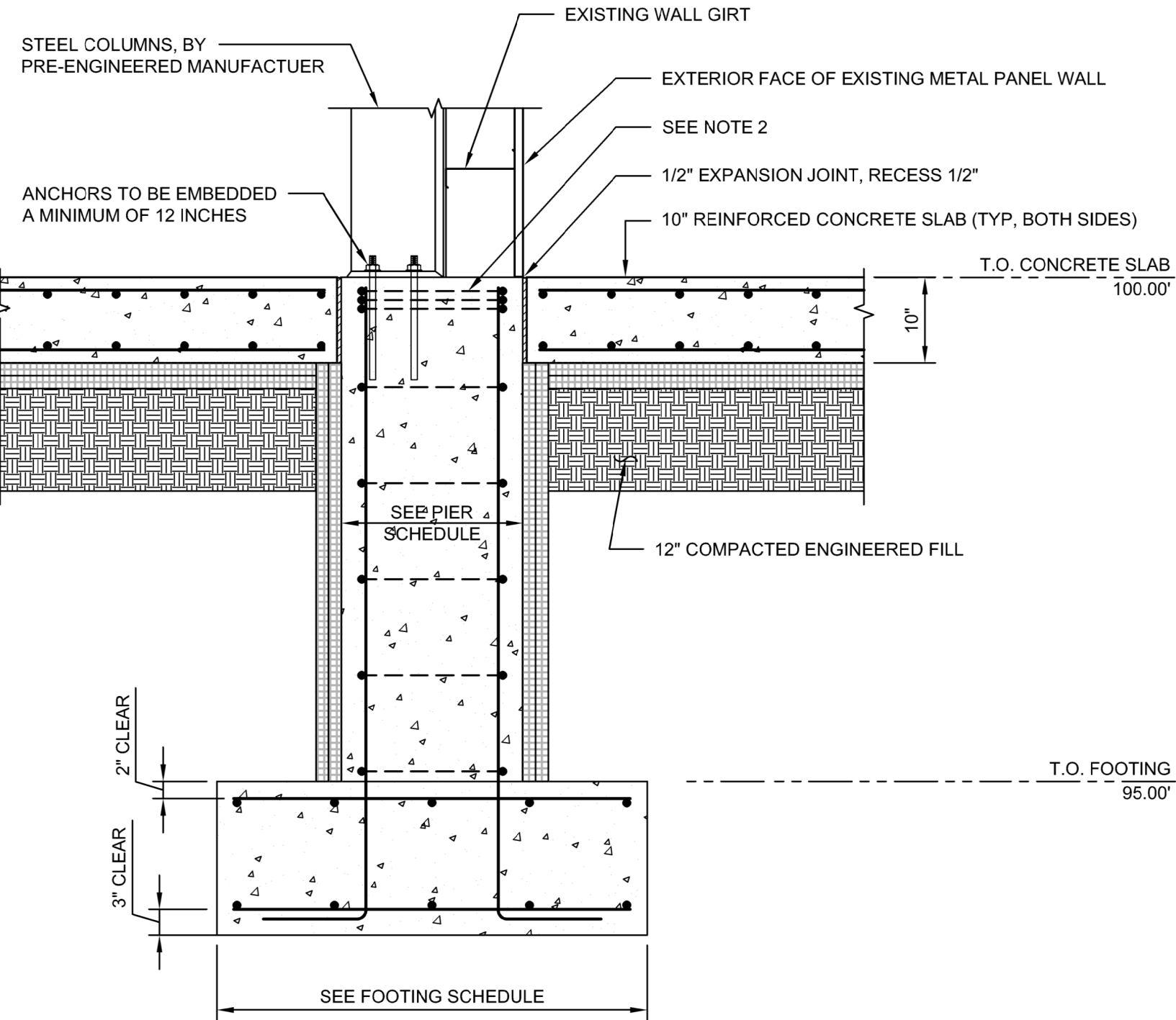
SHEET
S-501



- NOTES:
- SEE EXISTING DRAWINGS FOR FOOTING SCHEDULE AND REINFORCEMENT



- NOTES:
- STRIP FOOTING SHALL BE 2'-6" WIDE AS PER S-101 AND 12" THICK, TYPICAL.



- NOTES:
- CENTER COLUMN ON PIERS (TYPICAL, ALL LOCATIONS).
 - SPACE FIRST 3 SHEAR TIES AT 2.5' OC. FOLLOW STANDARD TIE SPACING AS PER PIER SCHEDULE ON S-101 AFTER THIRD TIE IS PLACED.

1
S-101
3/4" = 1'-0"

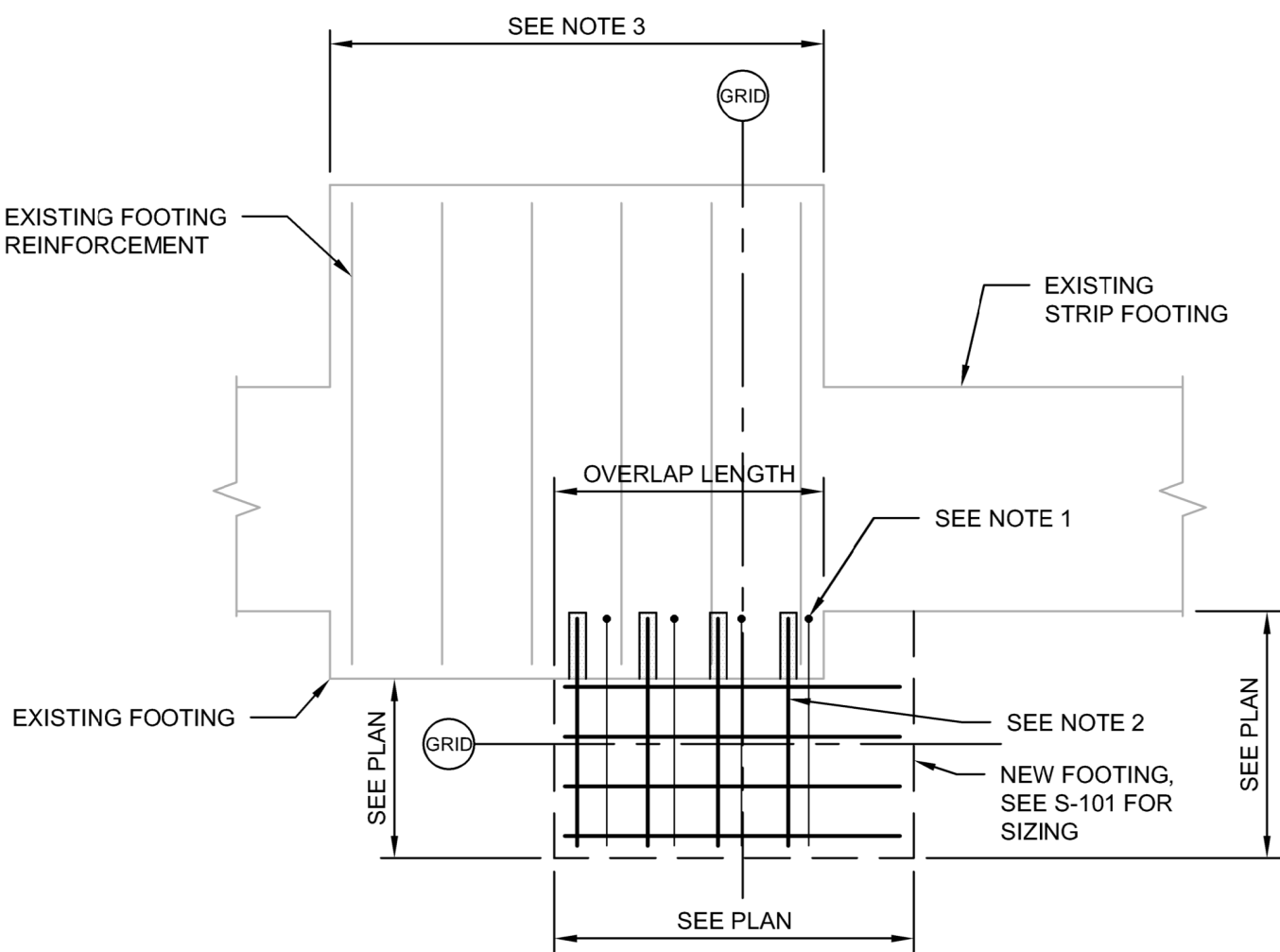
EXISTING FOUNDATION TO NEW CONCRETE SLAB

2
S-101
3/4" = 1'-0"

TYPICAL STRIP FOOTING DETAIL

3
S-101
3/4" = 1'-0"

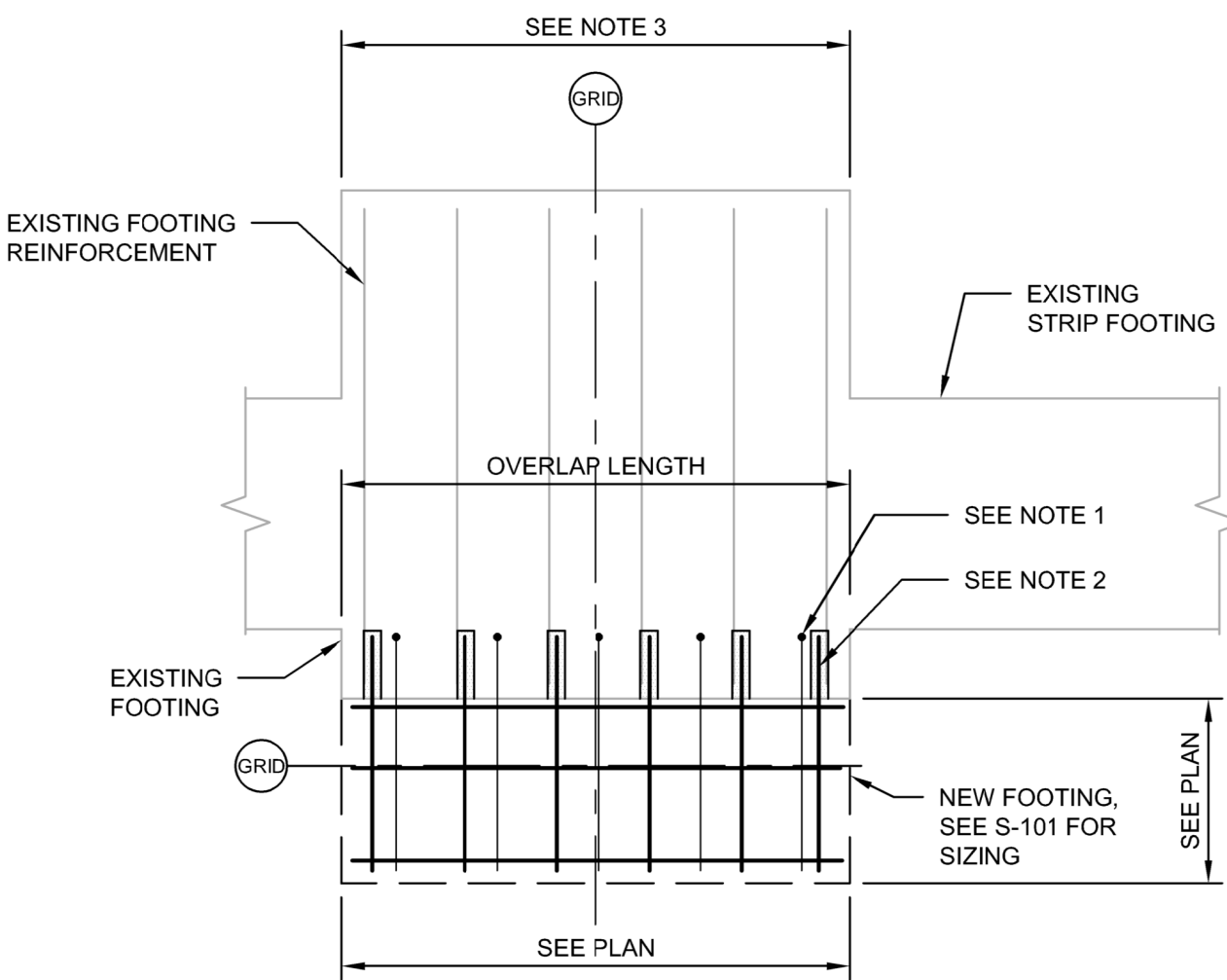
TYPICAL COLUMN FOUNDATION AT PERIMETER



- NOTES:
- PROVIDE #8 DOWEL BARS SPACED AT 8" OC. CONTRACTOR SHALL ACHIEVE A MINIMUM OF 5 DOWEL BARS AND 5 NEW REINFORCING BARS INSIDE OVERLAP LENGTH.
 - EPOXY NEW FOOTING REINFORCEMENT 8" (MIN) INTO EXISTING FOOTING.
 - CONTRACTOR TO FIELD VERIFY EXISTING FOUNDATION SIZES.

4
S-101
1/2" = 1'-0"

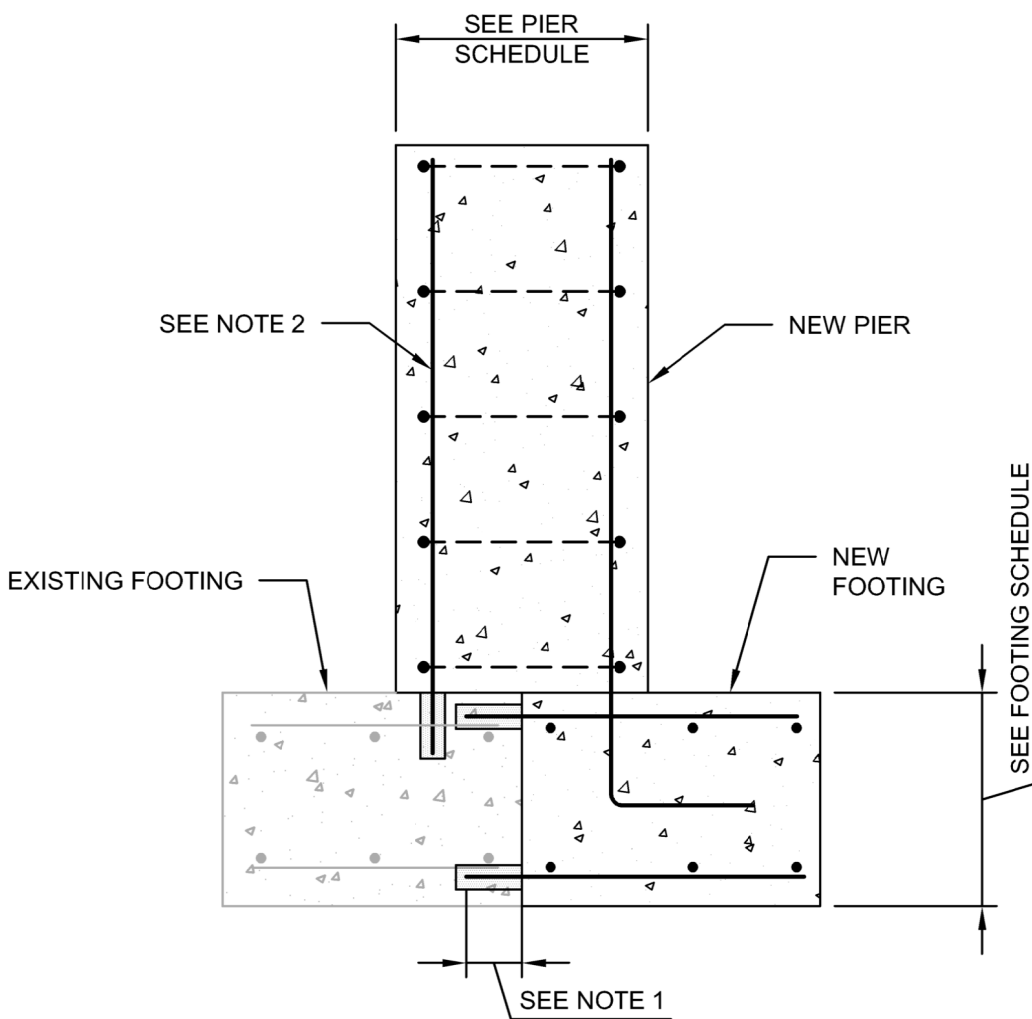
NEW FOOTING OFFSET ON EXISTING



- NOTES:
- PROVIDE #8 DOWEL BARS SPACED AT 8" OC. CONTRACTOR SHALL ACHIEVE A MINIMUM OF 5 DOWEL BARS AND 5 NEW REINFORCING BARS INSIDE OVERLAP LENGTH.
 - EPOXY NEW FOOTING REINFORCEMENT 8" (MIN) INTO EXISTING FOOTING.
 - CONTRACTOR TO FIELD VERIFY EXISTING FOUNDATION SIZES.

5
S-101
1/2" = 1'-0"

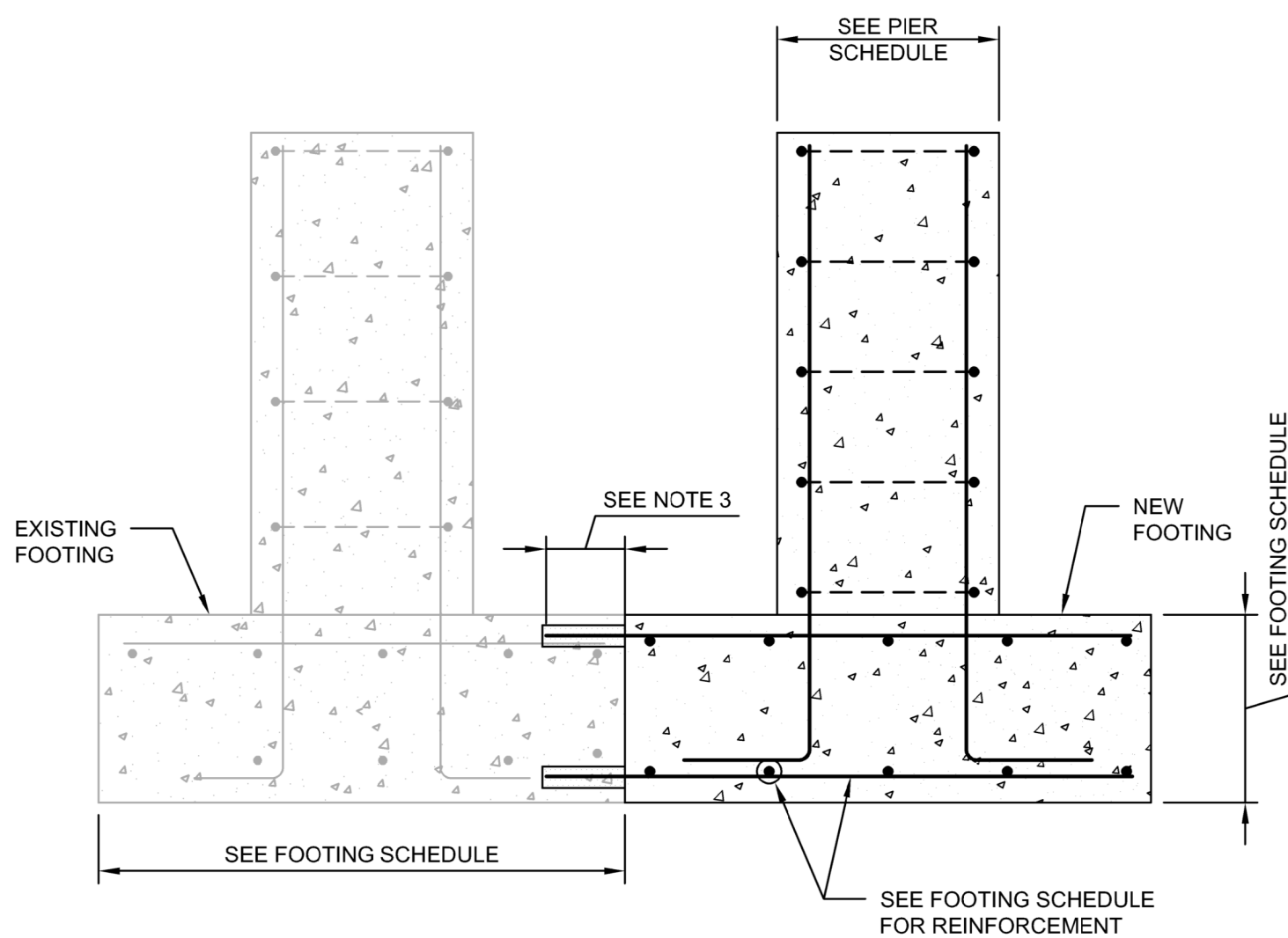
NEW FOOTING ALIGNED ON EXISTING



- NOTES:
- EPOXY NEW FOOTING REINFORCEMENT 8" (MIN) INTO EXISTING FOOTING.
 - DOWEL NEW PIER REINFORCING INTO EXISTING FOOTING 8" (MIN) DEPTH.

6
S-101
3/4" = 1'-0"

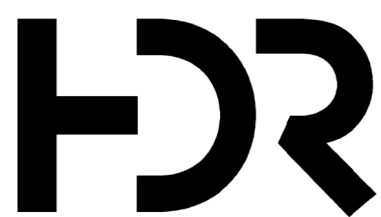
NEW PIER TO EXISTING FOOTING



- NOTES:
- FOR EXISTING PIER DETAILS, SEE AS-BUILT DRAWINGS.
 - EPOXY NEW FOOTING REINFORCEMENT 8" (MIN) INTO EXISTING FOOTING.

7
S-101
3/4" = 1'-0"

NEW FOOTING TO EXISTING FOOTING



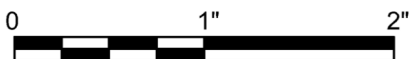
ISSUE	DATE	DESCRIPTION
3	27 AUG 2021	B-3 SUBMISSION
2	8 JUN 2021	B-2 SUBMISSION
1	20 APR 2021	B-1 SUBMISSION

PROJECT MANAGER	ANTHONY BROZIER
CIVIL	A. BROZIER
STRUCTURAL	J. JAECKEL
ARCHITECTURAL	A. STANISCHIA
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



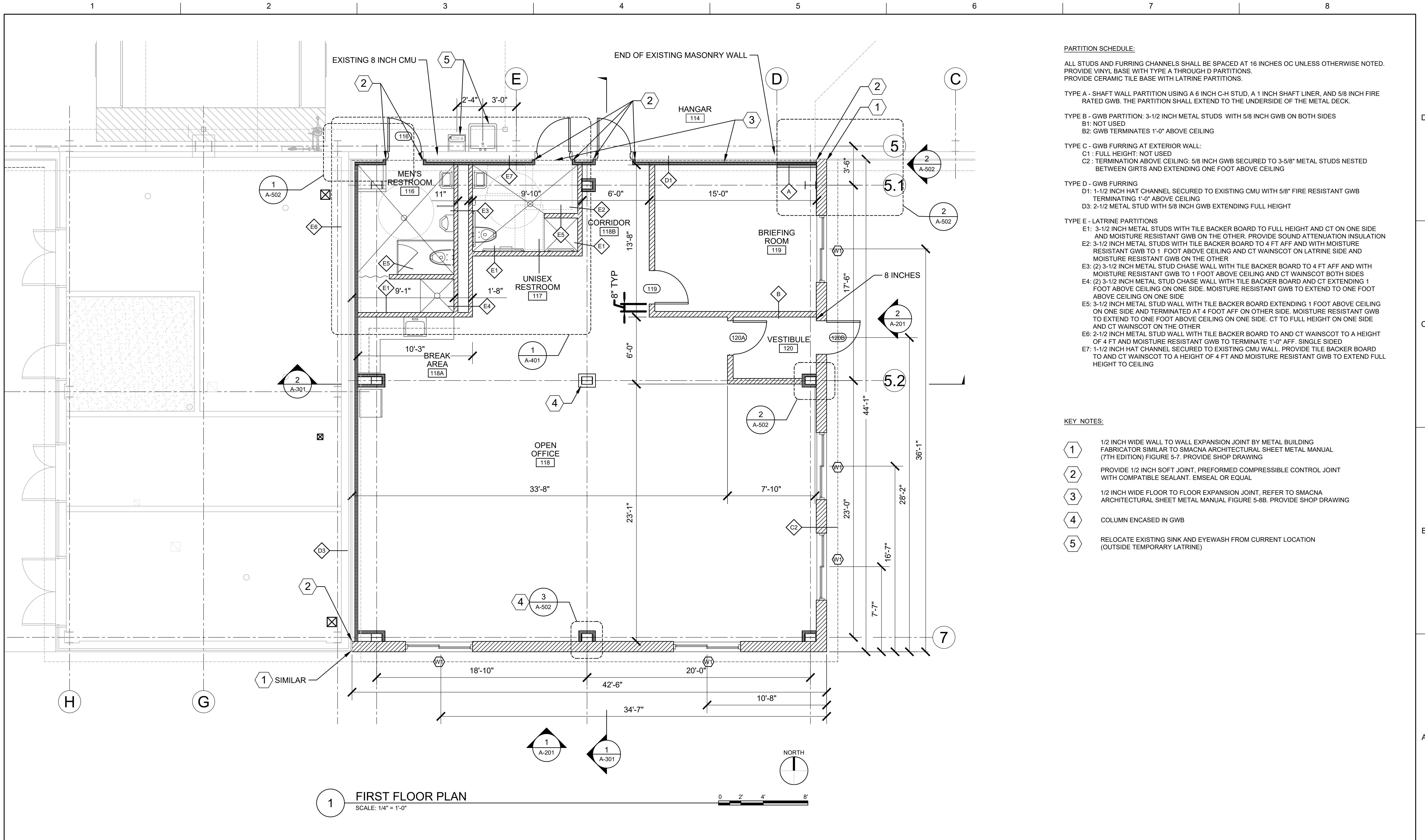
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
FOUNDATION DETAILS



FILENAME
SCALE
BY VIEW

SHEET
S-502



- PARTITION SCHEDULE:**
- ALL STUDS AND FURRING CHANNELS SHALL BE SPACED AT 16 INCHES OC UNLESS OTHERWISE NOTED. PROVIDE VINYL BASE WITH TYPE A THROUGH D PARTITIONS. PROVIDE CERAMIC TILE BASE WITH LATRINE PARTITIONS.
- TYPE A - SHAFT WALL PARTITION USING A 6 INCH C-H STUD, A 1 INCH SHAFT LINER, AND 5/8 INCH FIRE RATED GWB. THE PARTITION SHALL EXTEND TO THE UNDERSIDE OF THE METAL DECK.
- TYPE B - GWB PARTITION: 3-1/2 INCH METAL STUDS WITH 5/8 INCH GWB ON BOTH SIDES
B1: NOT USED
B2: GWB TERMINATES 1'-0" ABOVE CEILING
- TYPE C - GWB FURRING AT EXTERIOR WALL:
C1 : FULL HEIGHT; NOT USED
C2 : TERMINATION ABOVE CEILING: 5/8 INCH GWB SECURED TO 3-5/8" METAL STUDS NESTED BETWEEN GIRTS AND EXTENDING ONE FOOT ABOVE CEILING
- TYPE D - GWB FURRING
D1: 1-1/2 INCH HAT CHANNEL SECURED TO EXISTING CMU WITH 5/8" FIRE RESISTANT GWB TERMINATING 1'-0" ABOVE CEILING
D3: 2-1/2 METAL STUD WITH 5/8 INCH GWB EXTENDING FULL HEIGHT
- TYPE E - LATRINE PARTITIONS
E1: 3-1/2 INCH METAL STUDS WITH TILE BACKER BOARD TO FULL HEIGHT AND CT ON ONE SIDE AND MOISTURE RESISTANT GWB ON THE OTHER. PROVIDE SOUND ATTENUATION INSULATION
E2: 3-1/2 INCH METAL STUDS WITH TILE BACKER BOARD TO 4 FT AFF AND WITH MOISTURE RESISTANT GWB TO 1 FOOT ABOVE CEILING AND CT WAINSCOT ON LATRINE SIDE AND MOISTURE RESISTANT GWB ON THE OTHER
E3: (2) 3-1/2 INCH METAL STUD CHASE WALL WITH TILE BACKER BOARD TO 4 FT AFF AND WITH MOISTURE RESISTANT GWB TO 1 FOOT ABOVE CEILING AND CT WAINSCOT BOTH SIDES
E4: (2) 3-1/2 INCH METAL STUD CHASE WALL WITH TILE BACKER BOARD AND CT EXTENDING 1 FOOT ABOVE CEILING ON ONE SIDE. MOISTURE RESISTANT GWB TO EXTEND TO ONE FOOT ABOVE CEILING ON ONE SIDE
E5: 3-1/2 INCH METAL STUD WALL WITH TILE BACKER BOARD EXTENDING 1 FOOT ABOVE CEILING ON ONE SIDE AND TERMINATED AT 4 FOOT AFF ON OTHER SIDE. MOISTURE RESISTANT GWB TO EXTEND TO ONE FOOT ABOVE CEILING ON ONE SIDE. CT TO FULL HEIGHT ON ONE SIDE AND CT WAINSCOT ON THE OTHER
E6: 2-1/2 INCH METAL STUD WALL WITH TILE BACKER BOARD TO AND CT WAINSCOT TO A HEIGHT OF 4 FT AND MOISTURE RESISTANT GWB TO TERMINATE 1'-0" AFF. SINGLE SIDED
E7: 1-1/2 INCH HAT CHANNEL SECURED TO EXISTING CMU WALL. PROVIDE TILE BACKER BOARD TO AND CT WAINSCOT TO A HEIGHT OF 4 FT AND MOISTURE RESISTANT GWB TO EXTEND FULL HEIGHT TO CEILING

- KEY NOTES:**
- 1 1/2 INCH WIDE WALL TO WALL EXPANSION JOINT BY METAL BUILDING FABRICATOR SIMILAR TO SMACNA ARCHITECTURAL SHEET METAL MANUAL (7TH EDITION) FIGURE 5-7. PROVIDE SHOP DRAWING
- 2 PROVIDE 1/2 INCH SOFT JOINT, PREFORMED COMPRESSIBLE CONTROL JOINT WITH COMPATIBLE SEALANT. EMSEAL OR EQUAL
- 3 1/2 INCH WIDE FLOOR TO FLOOR EXPANSION JOINT, REFER TO SMACNA ARCHITECTURAL SHEET METAL MANUAL FIGURE 5-8B. PROVIDE SHOP DRAWING
- 4 COLUMN ENCASED IN GWB
- 5 RELOCATE EXISTING SINK AND EYEWASH FROM CURRENT LOCATION (OUTSIDE TEMPORARY LATRINE)

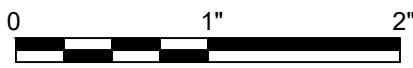


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3	27 AUG 2021	B-3 SUBMISSION
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PROJECT MANAGER	ANTHONY BROZIER
CIVIL	A. BROZIER
STRUCTURAL	J. JAECKEL
ARCHITECTURAL	A. STANISCIA
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



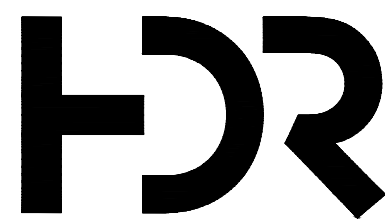
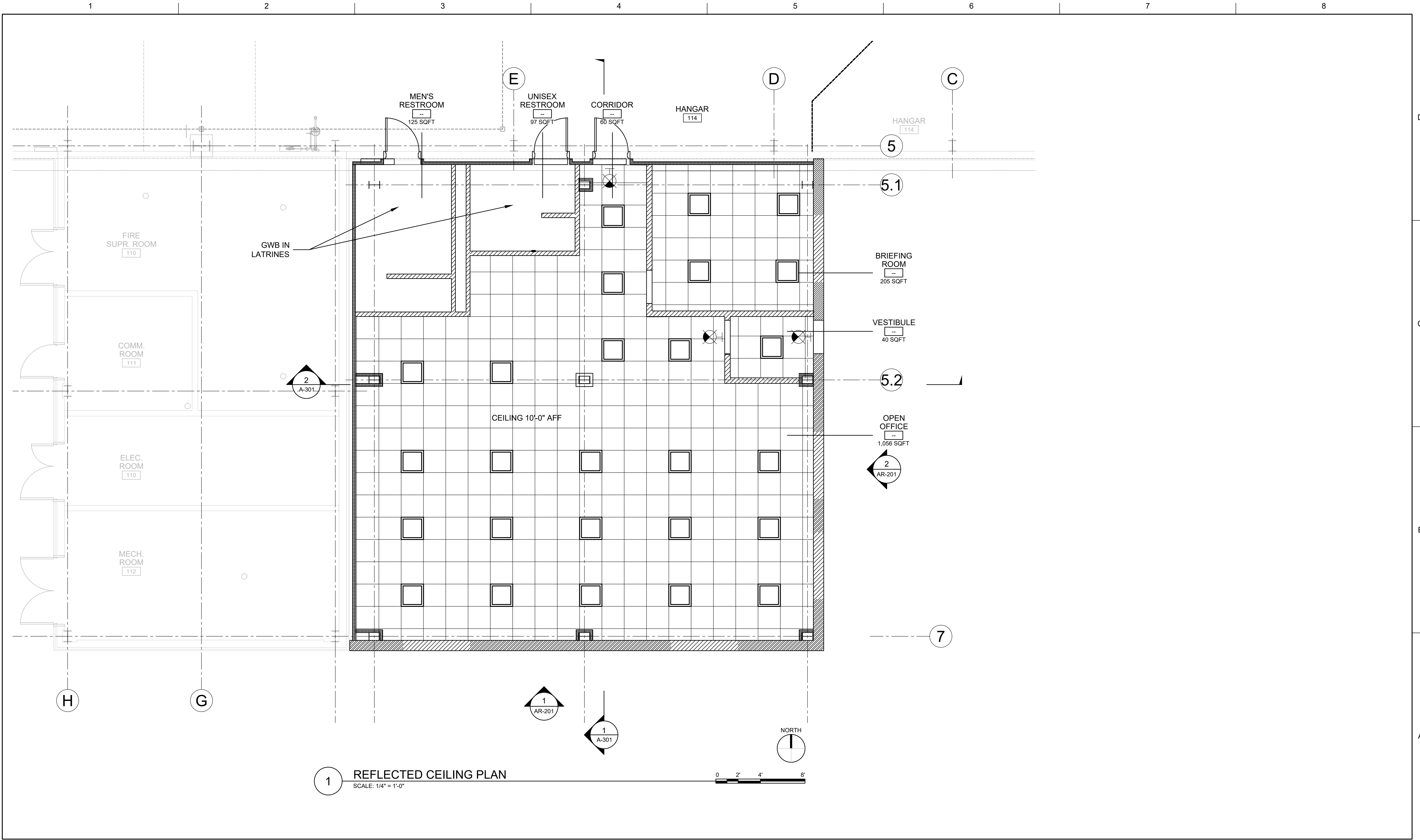
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY



FPBB162002
FLOOR PLAN

FILENAME
SCALE

SHEET
A-101



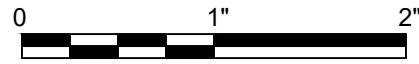
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PROJECT MANAGER	ANTHONY BROZIER
CIVIL	A. BROZIER
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ARCHITECTURAL	A. STANISCIA
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



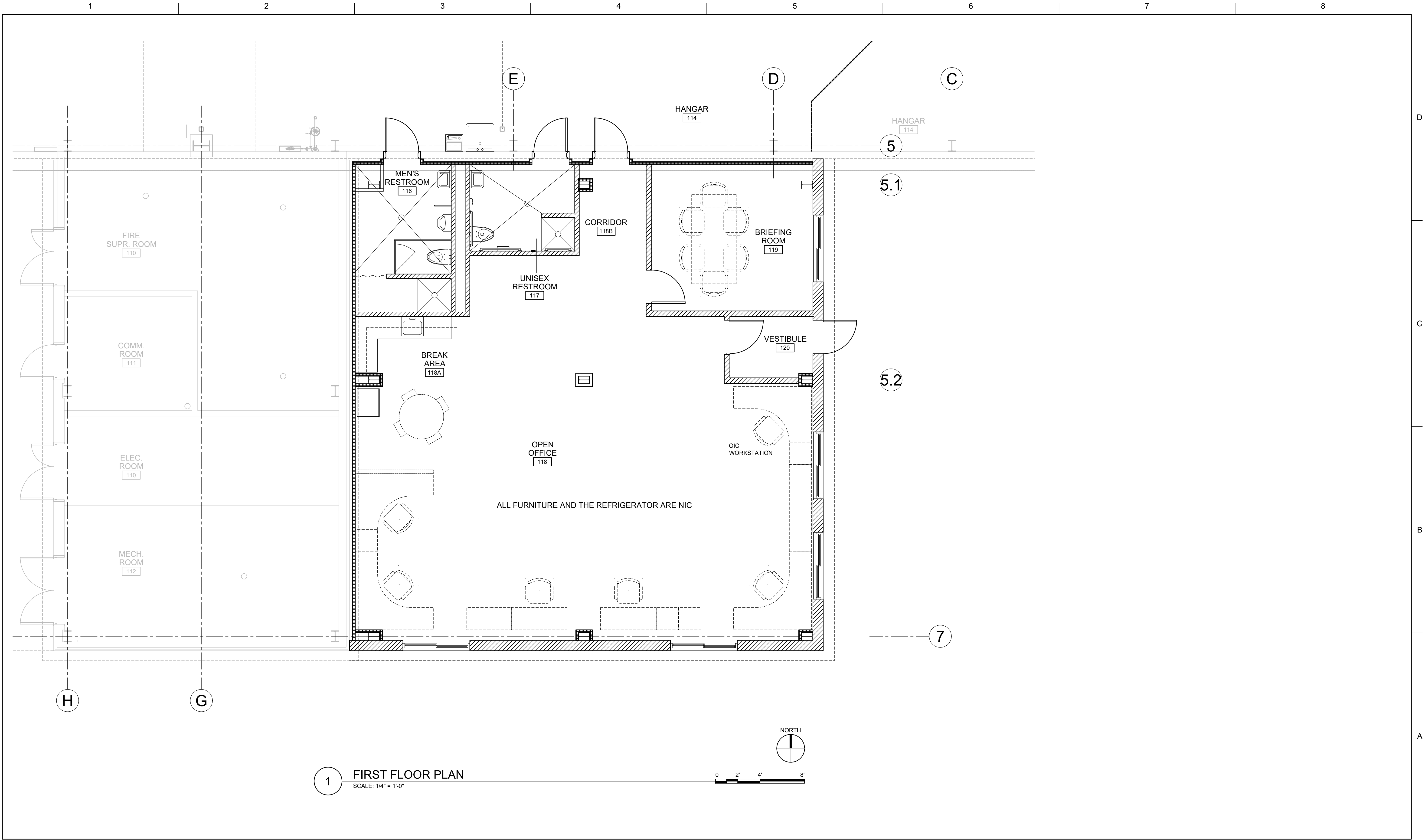
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
REFLECTED CEILING PLAN

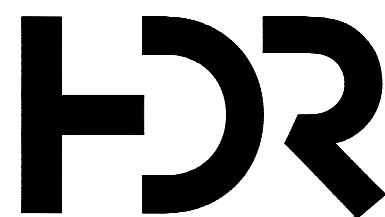


FILENAME
SCALE

SHEET
A-102



1 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



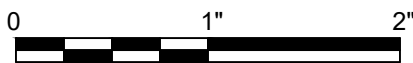
ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	ANTHONY BROZIER
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ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
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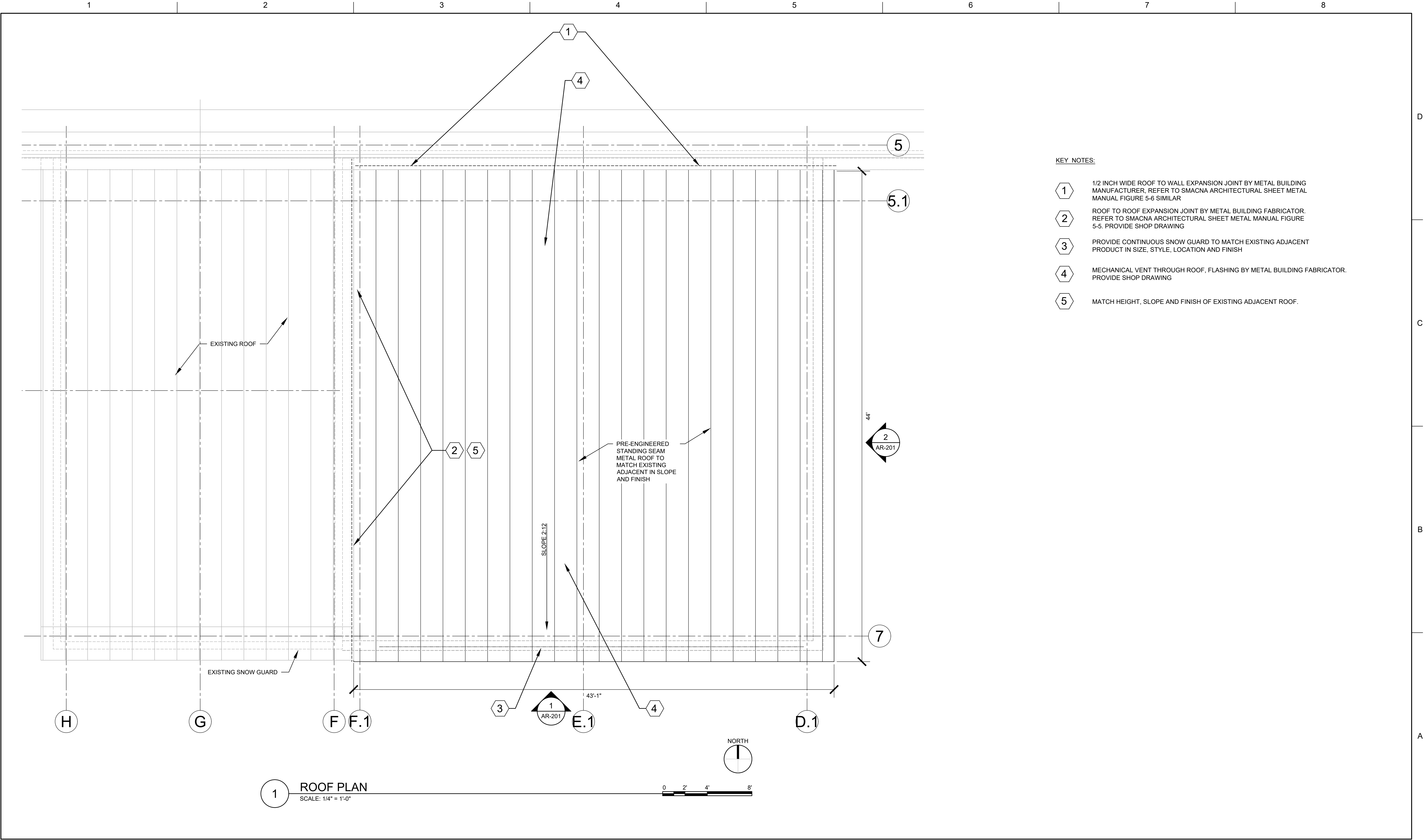
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
FURNITURE LAYOUT



FILENAME -
SCALE -

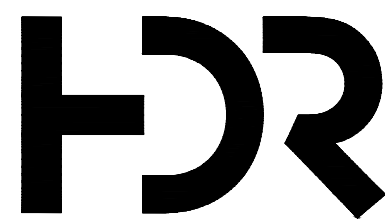
SHEET
A-103



KEY NOTES:

- 1 1/2 INCH WIDE ROOF TO WALL EXPANSION JOINT BY METAL BUILDING MANUFACTURER, REFER TO SMACNA ARCHITECTURAL SHEET METAL MANUAL FIGURE 5-6 SIMILAR
- 2 ROOF TO ROOF EXPANSION JOINT BY METAL BUILDING FABRICATOR. REFER TO SMACNA ARCHITECTURAL SHEET METAL MANUAL FIGURE 5-5. PROVIDE SHOP DRAWING
- 3 PROVIDE CONTINUOUS SNOW GUARD TO MATCH EXISTING ADJACENT PRODUCT IN SIZE, STYLE, LOCATION AND FINISH
- 4 MECHANICAL VENT THROUGH ROOF, FLASHING BY METAL BUILDING FABRICATOR. PROVIDE SHOP DRAWING
- 5 MATCH HEIGHT, SLOPE AND FINISH OF EXISTING ADJACENT ROOF.

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

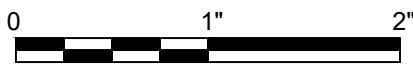


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PROJECT MANAGER	ANTHONY BROZIER
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MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
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PROJECT NUMBER	10256943



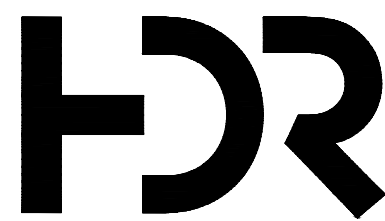
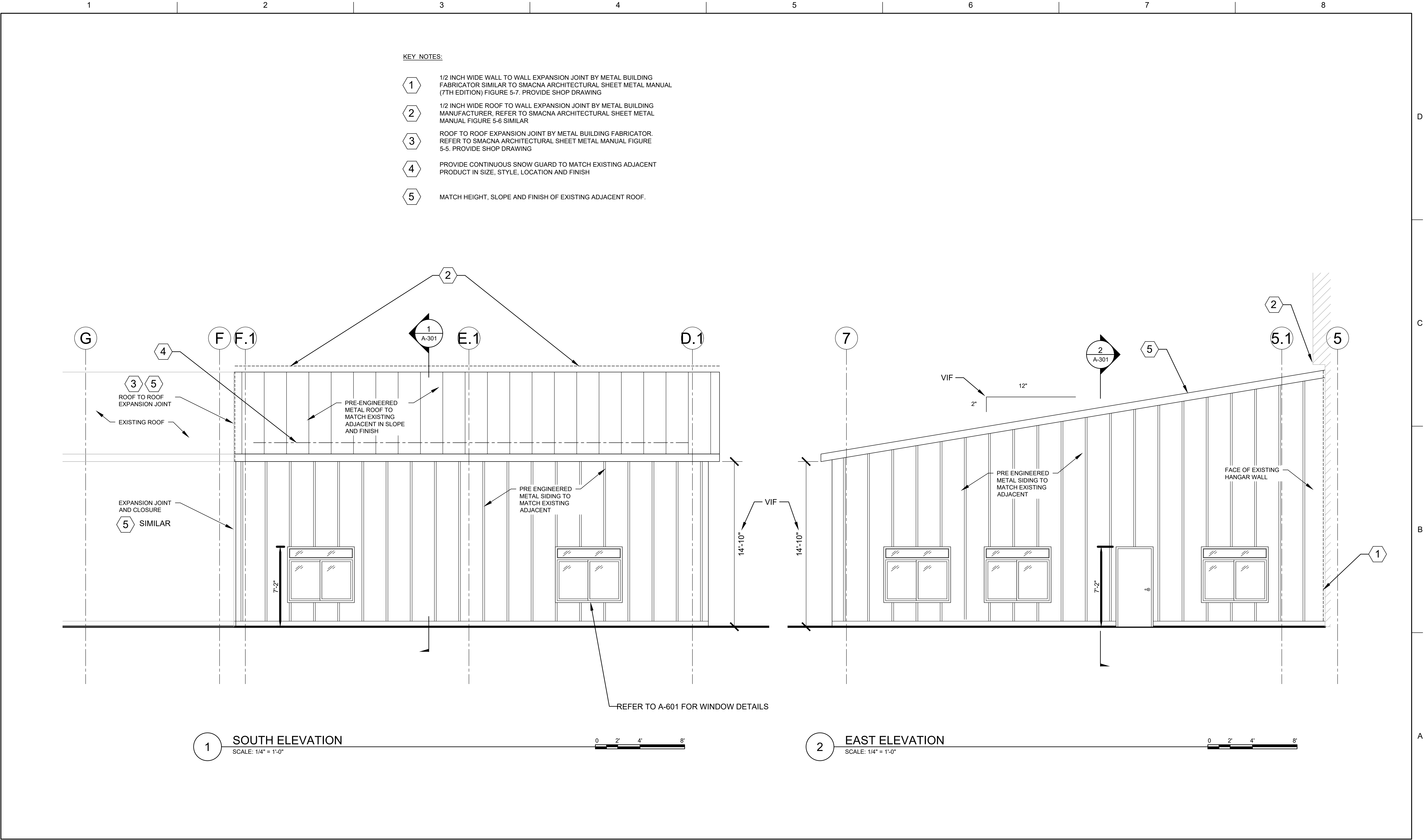
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY



FPBB162002
ROOF PLAN

FILENAME -
SCALE -

SHEET
A-104



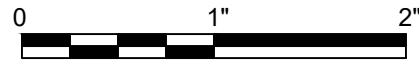
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PROJECT NUMBER	10256943



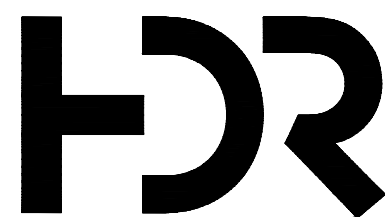
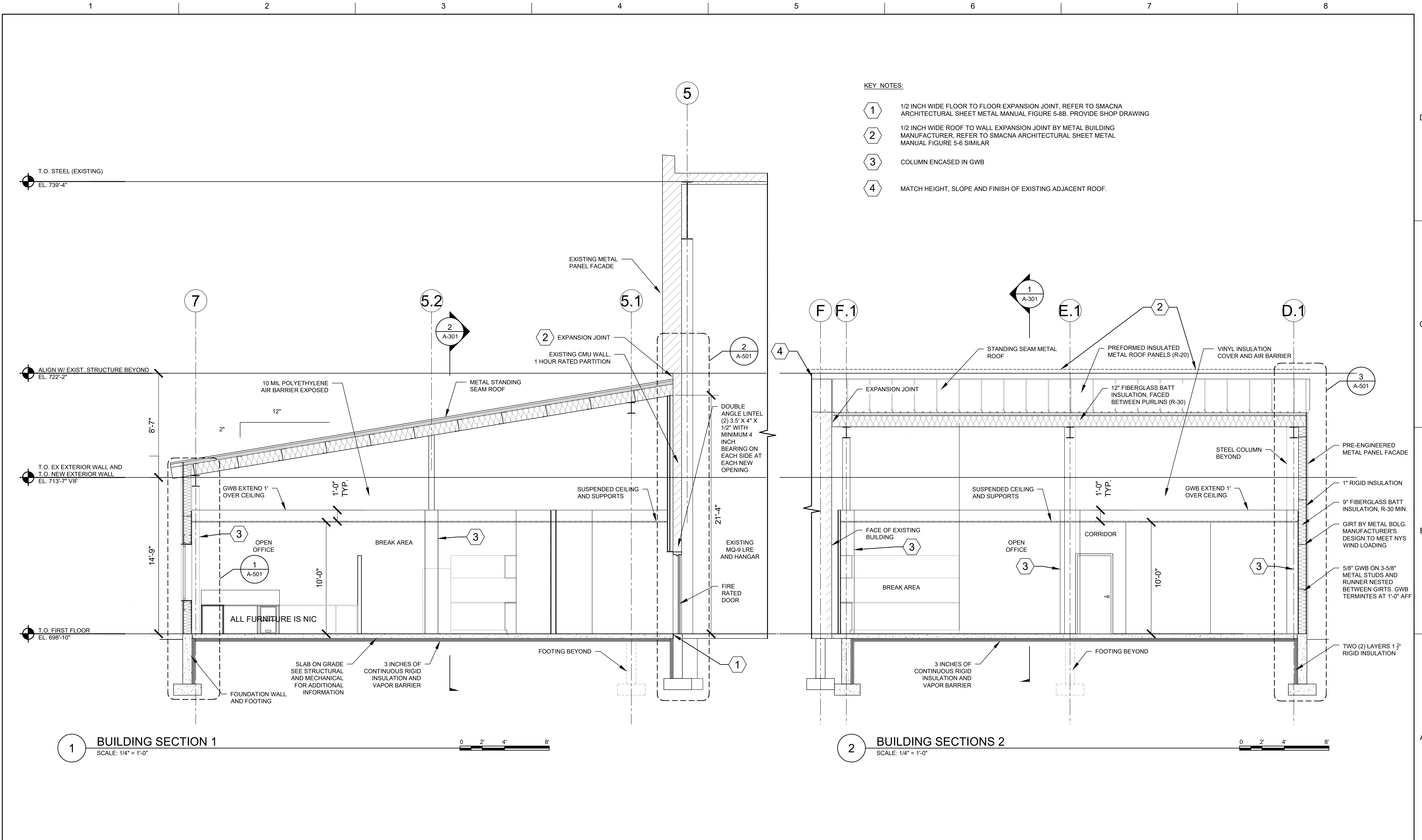
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
PROPOSED BUILDING ELEVATIONS



FILENAME
SCALE

SHEET
A-201



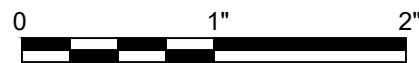
3	27 AUG 2021	B-3 SUBMISSION
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PROJECT MANAGER	ANTHONY BROZIER
CIVIL	A. BROZIER
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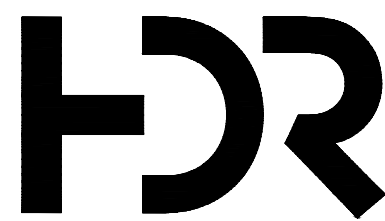
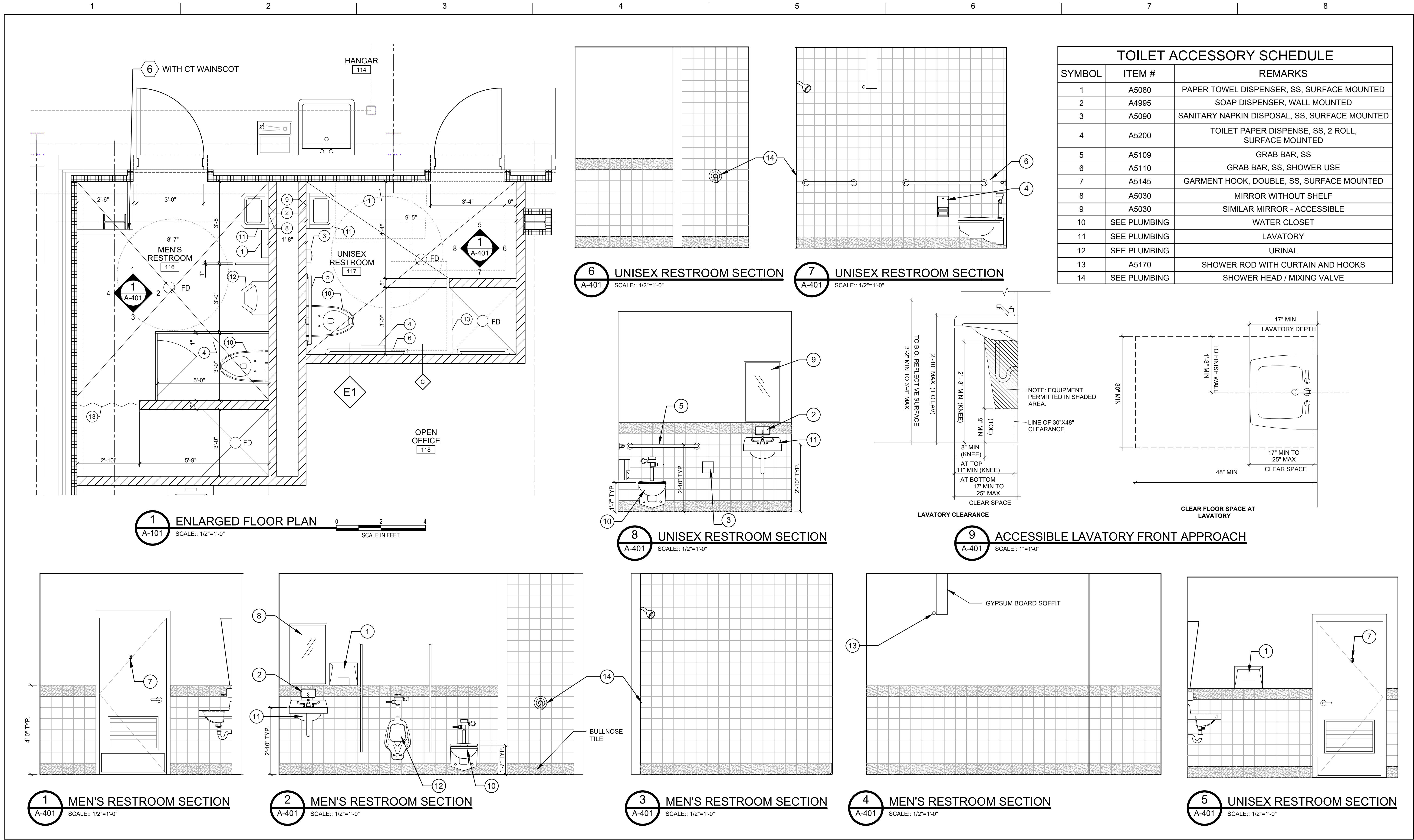
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
PROPOSED BUILDING SECTIONS



FILENAME
SCALE

SHEET
A-301



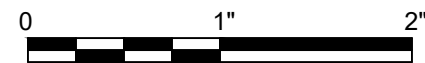
3	27 AUG 2021	B-3 SUBMISSION
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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	ANTHONY BROZIER
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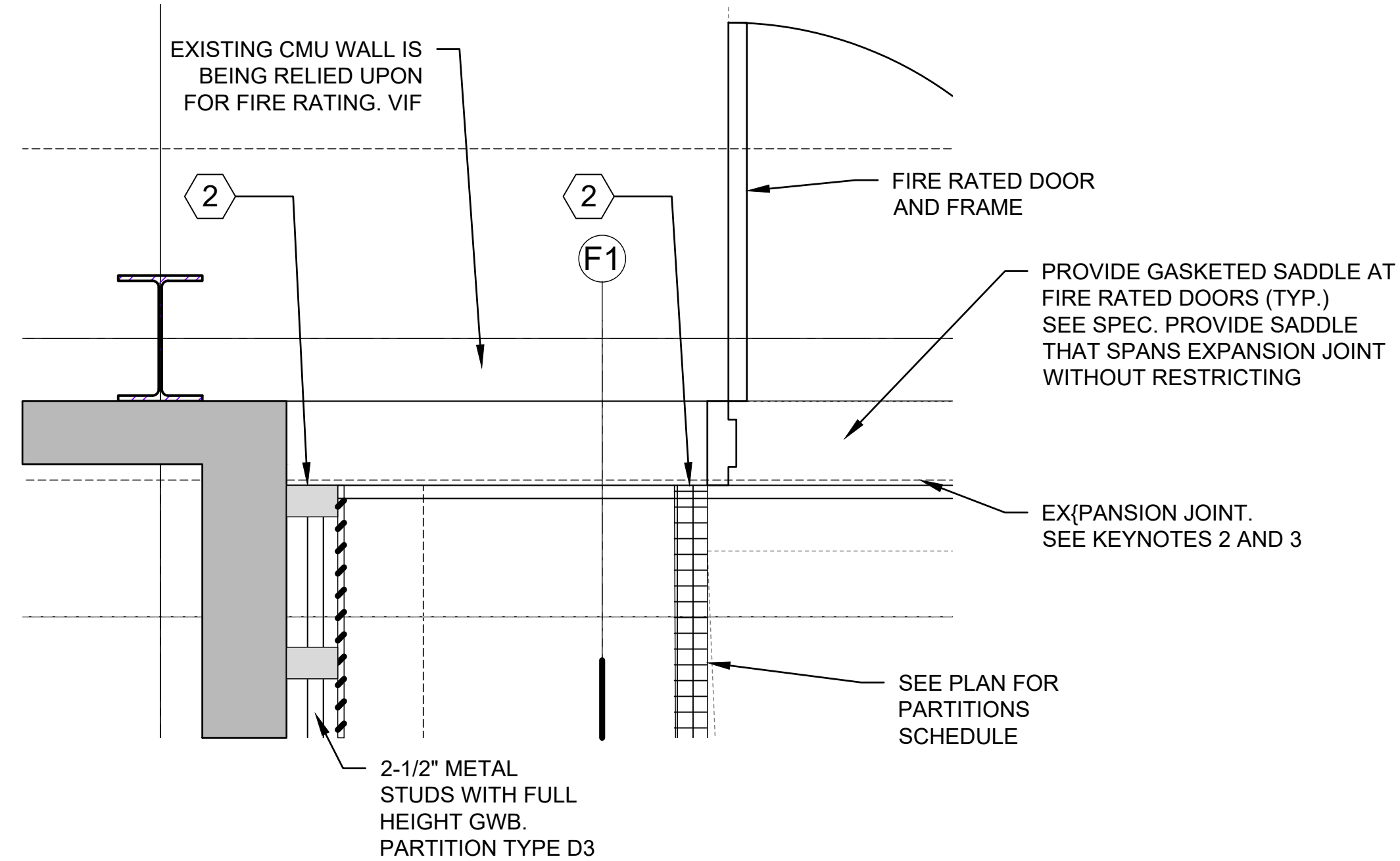
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
FLOOR PLAN
ENLARGED RESTROOM

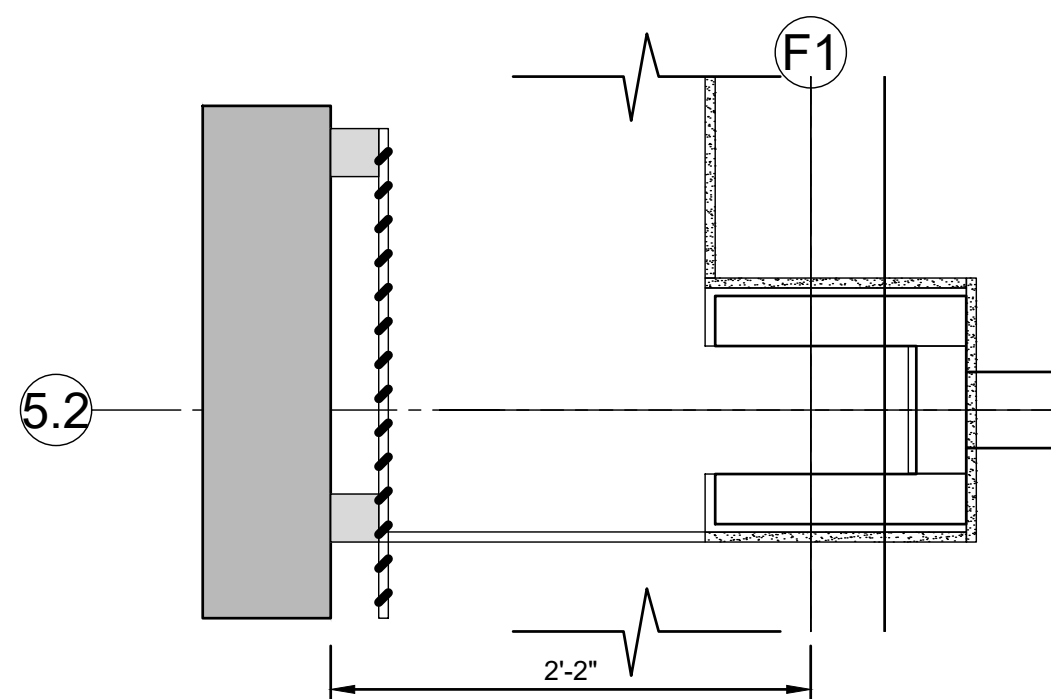


FILENAME
SCALE

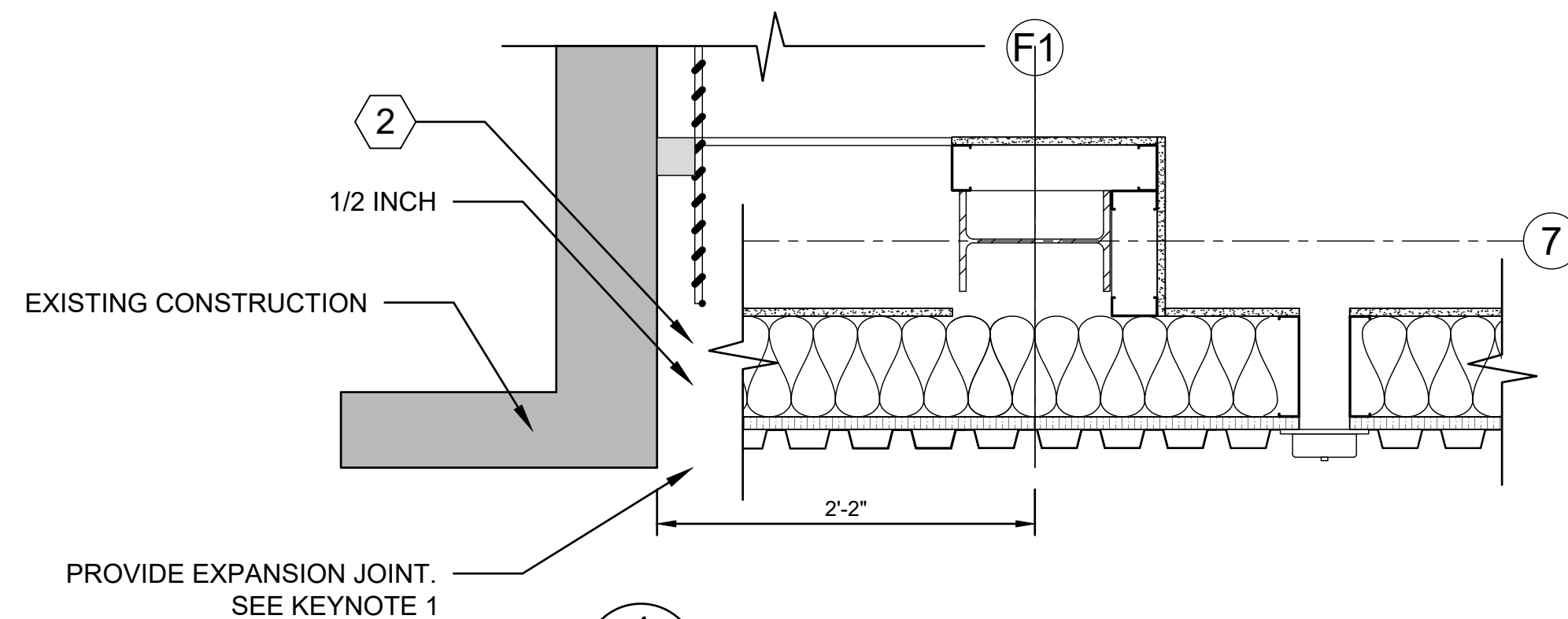
SHEET
A-401



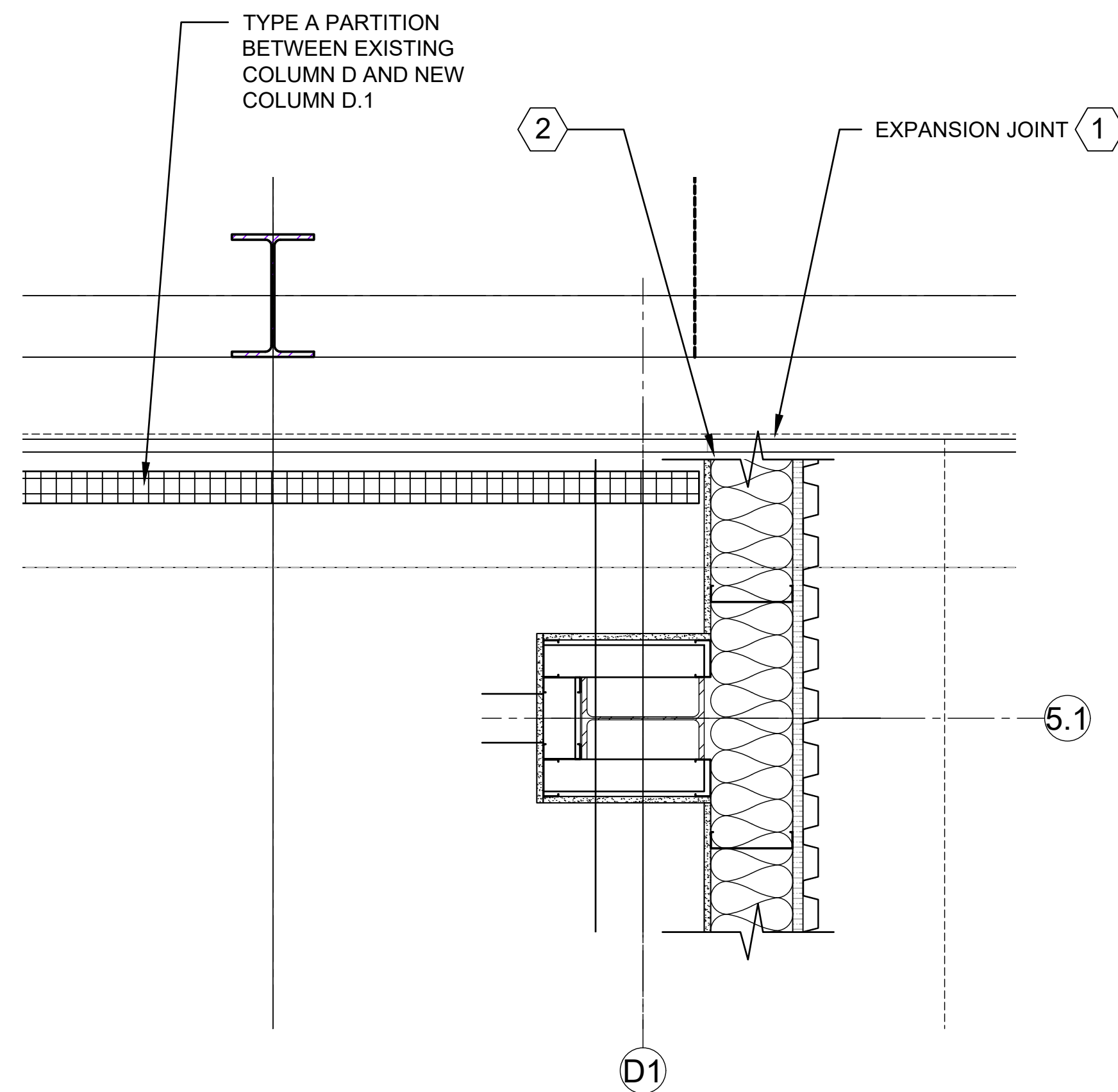
1 PLAN DETAIL
A-101 SCALE: 1"=1'-0"



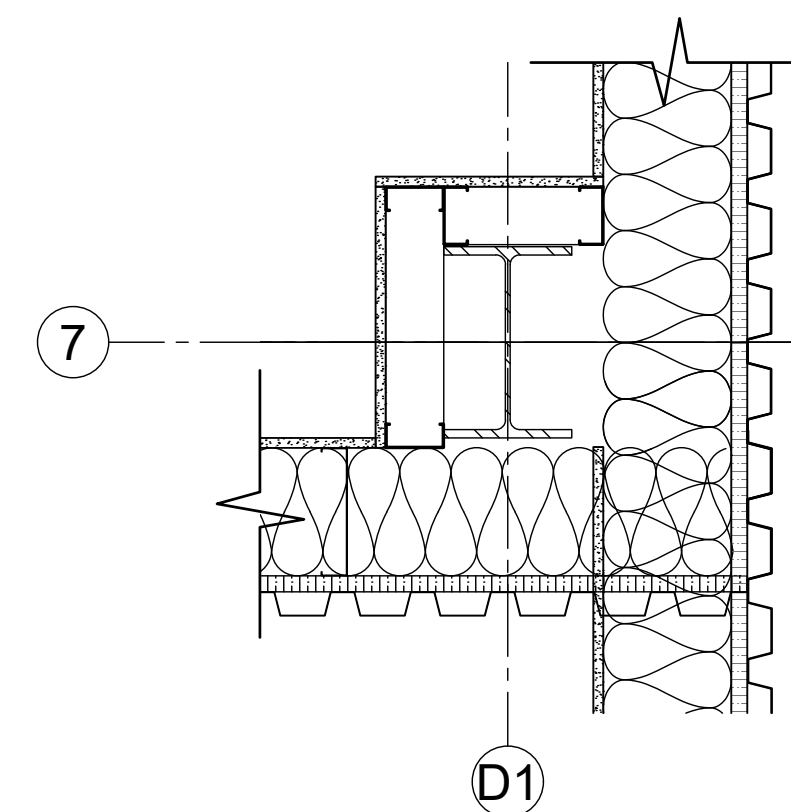
3 PLAN DETAIL
A-101 SCALE: 1"=1'-0"



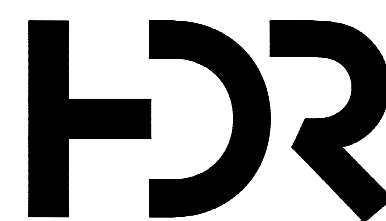
4 PLAN DETAIL
A-101 SCALE: 1"=1'-0"



2 PLAN DETAIL
A-101 SCALE: 1"=1'-0"



5 PLAN DETAIL
A-101 SCALE: 1"=1'-0"



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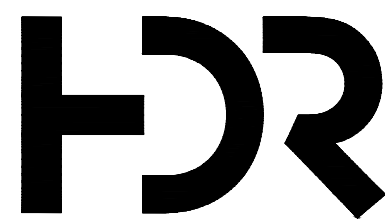
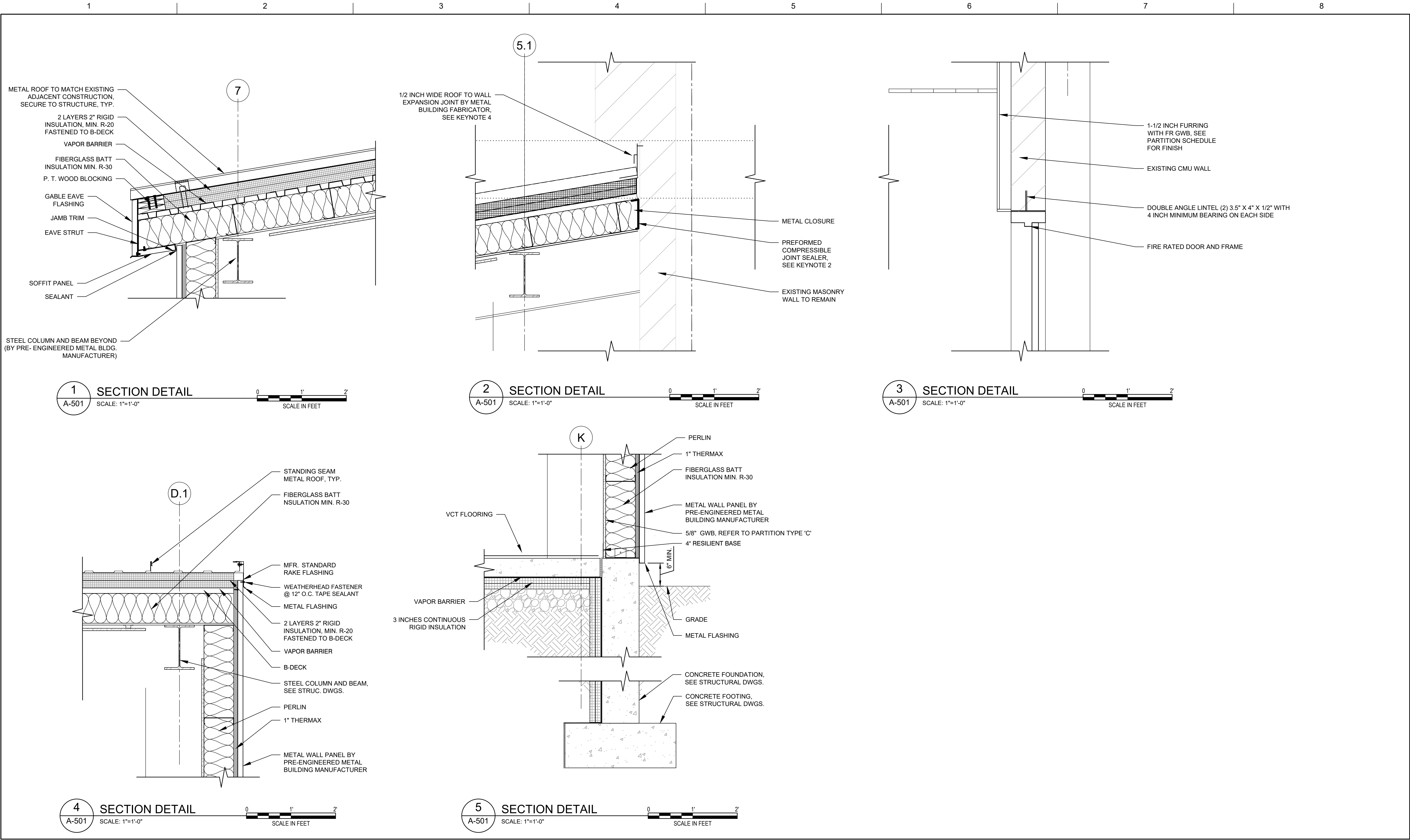
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
PLAN DETAILS



FILENAME
SCALE

SHEET
A-502



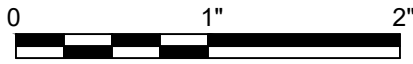
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FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

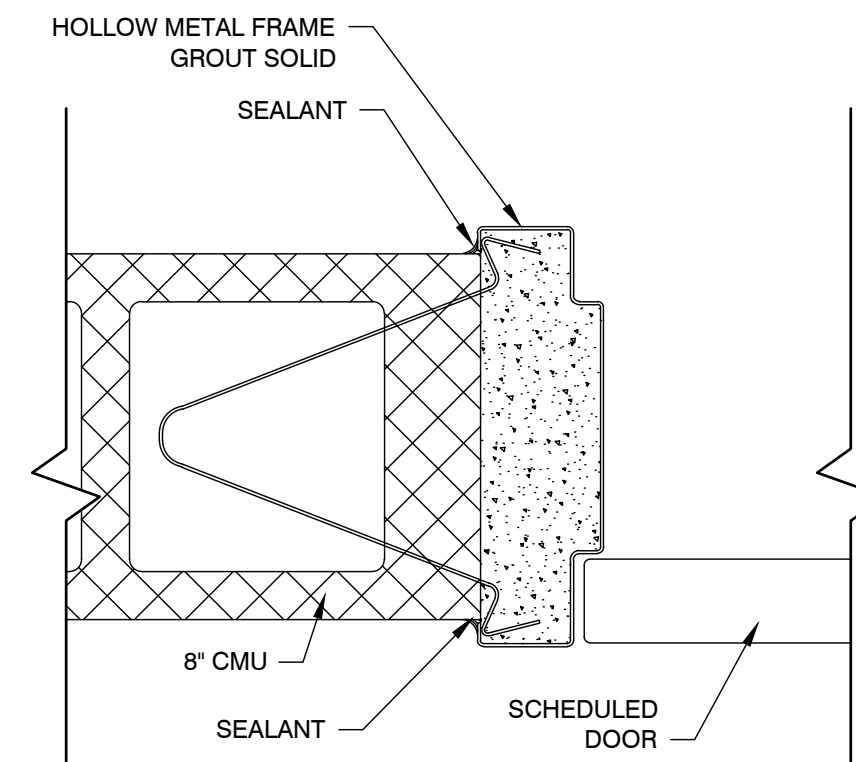
FPBB162002
PLAN DETAILS



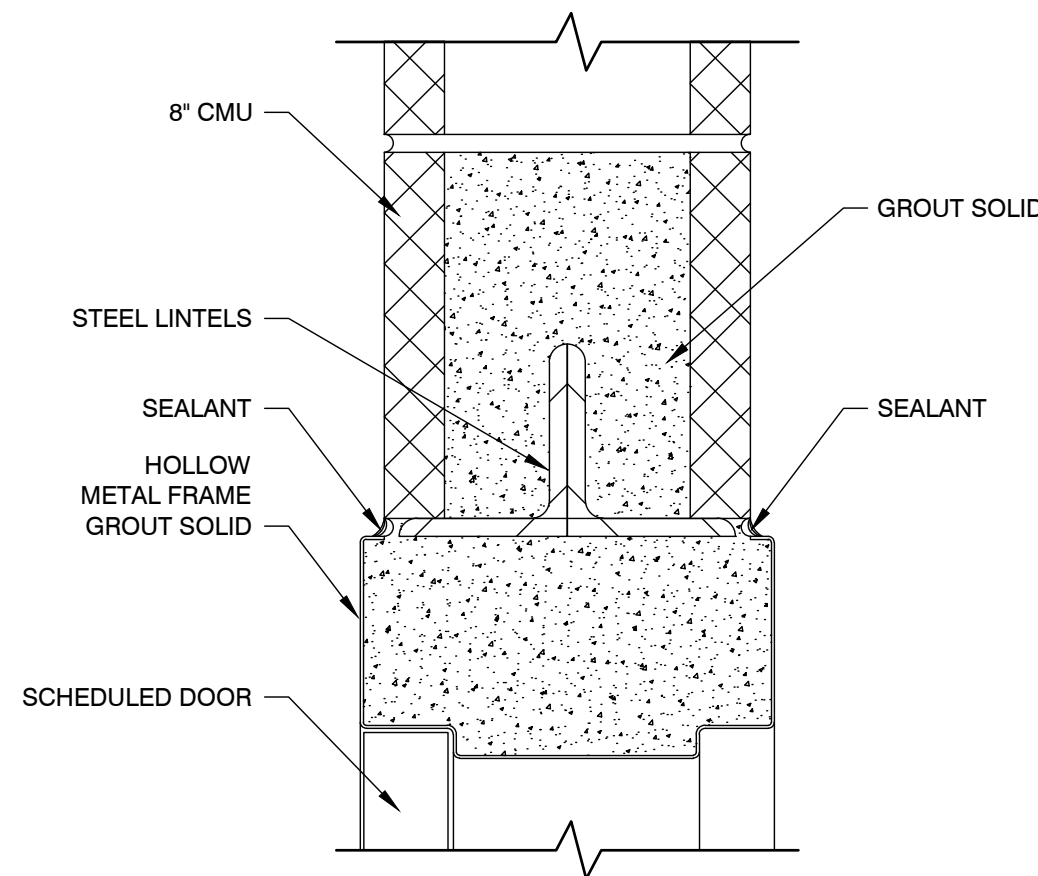
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SCALE

SHEET
A-503

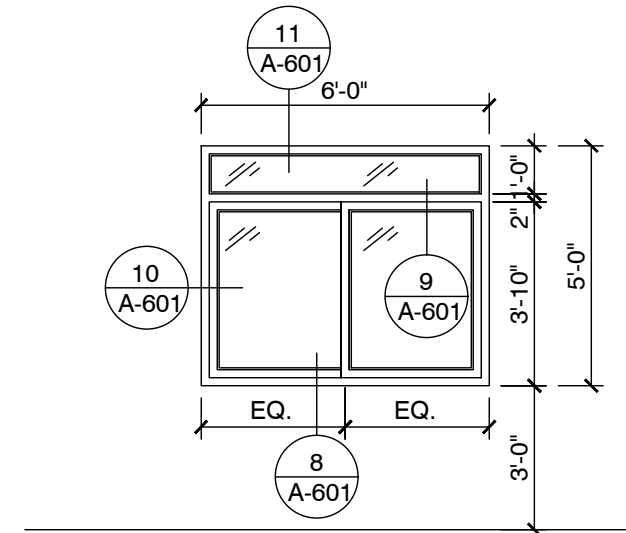
DOOR SCHEDULE																						
DOOR NO.	RM. NO.	ROOM NAME	INT./ EXT.	DOOR							FRAME							FIRE RATING	HDWR. SET ⁽⁶⁾	REMARKS		
				DOOR TYPE	DOOR MAT.	DOOR FINISH	DOOR WIDTH	DOOR HEIGHT	THICK.	OPENING NOMINAL SIZE		FRAME TYPE	FRAME MAT.	FRAME FINISH	GLASS TYPE	DETAILS						
										WIDTH	HEIGHT					JAMB	HEAD				SADDLE	
116	116	MEN'S RESTROOM	INT	FK	HM	PT-1	3'-0"	7'-0"	1 3/4"	3'-4"	7'-4"	SF	HM	PT-1	-	-	-	-	45 MIN	HW #3	(6) REFER TO SPECIFICATION SECTION 08 71 00.	
117	117	UNISEX RESTROOM	INT	FK	HM	PT-1	3'-0"	7'-0"	1 3/4"	3'-4"	7'-4"	SF	HM	PT-1	-	-	-	-	45 MIN	HW #4		
118	118	OPEN OFFICE	INT	F	HM	PT-1	3'-0"	7'-0"	1 3/4"	3'-4"	7'-4"	SF	HM	PT-1	-	-	-	-	45 MIN	HW #1		
119	119	BRIEFING ROOM	INT	F	HM	PT-1	3'-0"	7'-0"	1 3/4"	3'-4"	7'-2"	SF	HM	PT-1	-	-	-	-	0 HR	HW #5		
120A	120	VESTIBULE	INT	FK	HM	PT-1	3'-0"	7'-0"	1 3/4"	3'-4"	7'-2"	SF	HM	PT-1	-	-	-	-	0 HR	HW #3		
120B	120	VESTIBULE	EXT	FK	HM	PT-1	3'-0"	7'-0"	1 3/4"	3'-4"	7'-2"	SF	HM	PT-1	-	-	-	-	0 HR	HW #2		
LIST OF ABBREVIATIONS																						
DOOR TYPES			FRAME TYPES				MATERIAL TYPES				FINISH TYPES				EXAMPLE: FV1K = FLUSH/ONE VISION PANEL/KICK PLATE							
F	FLUSH DOOR		BL	BORROWED LIGHT			ALUM	ALUMINUM		PT	PAINTED											
K	KICK PLATE		SF	SINGLE FRAME			GALV	GALVANIZED		PT-1	WHITE - TO MATCH EXISTING											
R	FIRE RATED		DF	DOUBLE FRAME			HM	HOLLOW METAL		PT-2	GRAY - TO MATCH EXISTING											
ST	STORE FRONT		SL	SIDELIGHT			WD	WOOD														
V	VISION PANEL		T	TRANSOM ABOVE																		



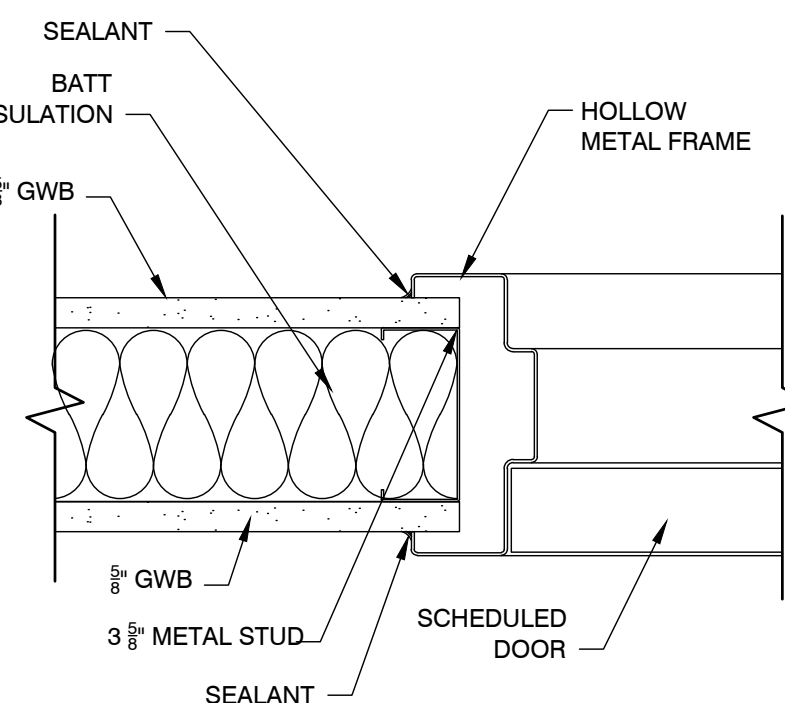
1 JAMB DETAIL
SCALE: 3"=1'-0"



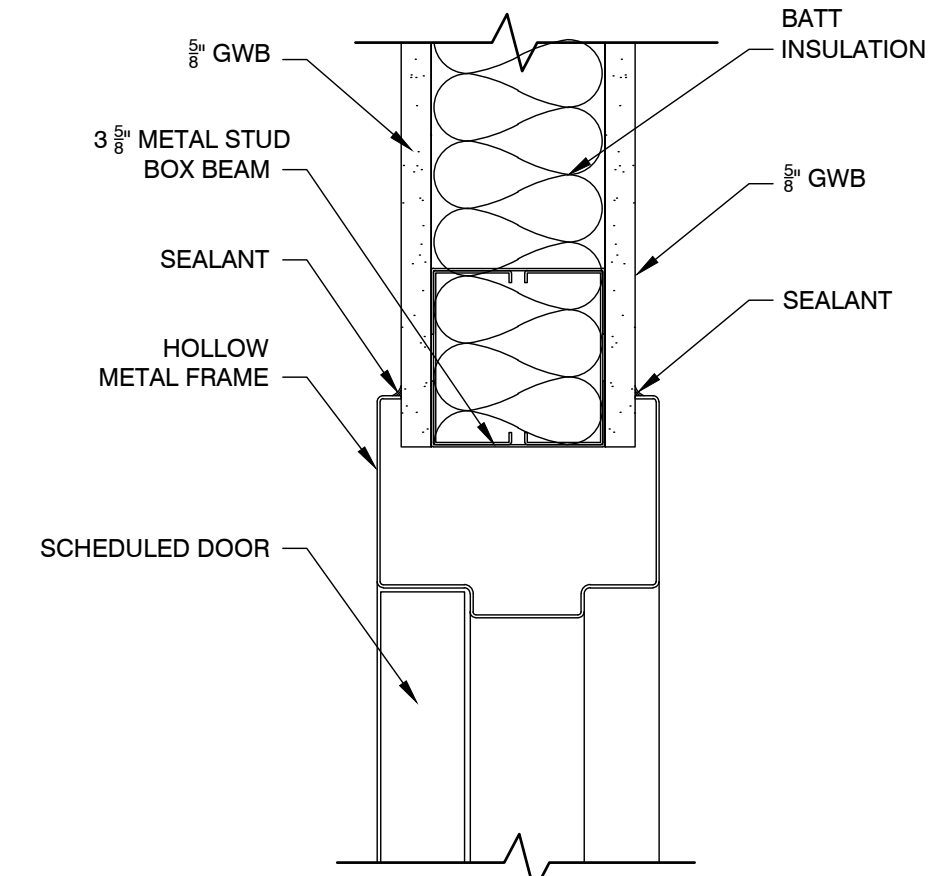
2 HEAD DETAIL
SCALE: 3"=1'-0"



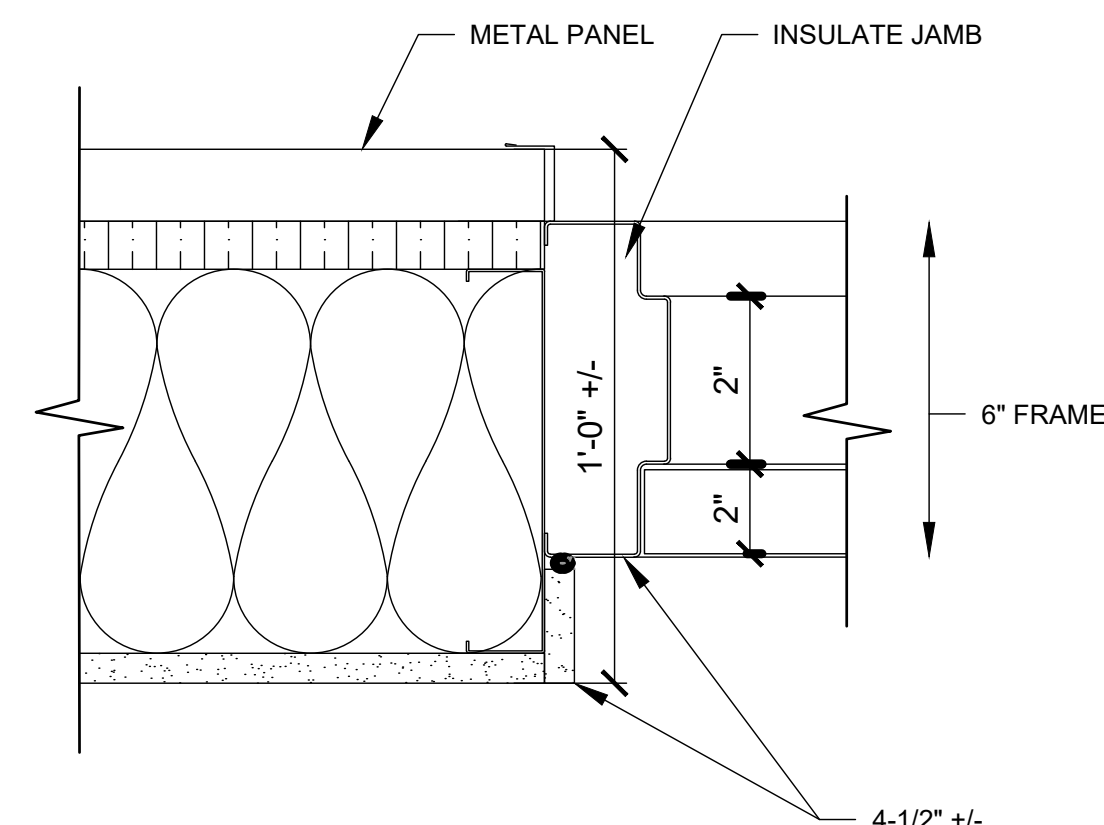
3 WINDOW TYPES
SCALE: 1/4"=1'-0"



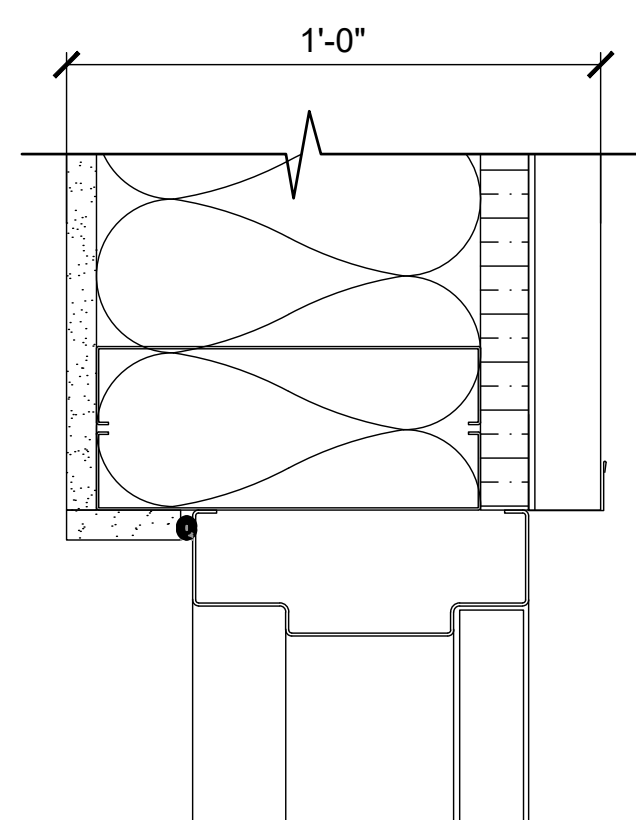
4 JAMB DETAIL
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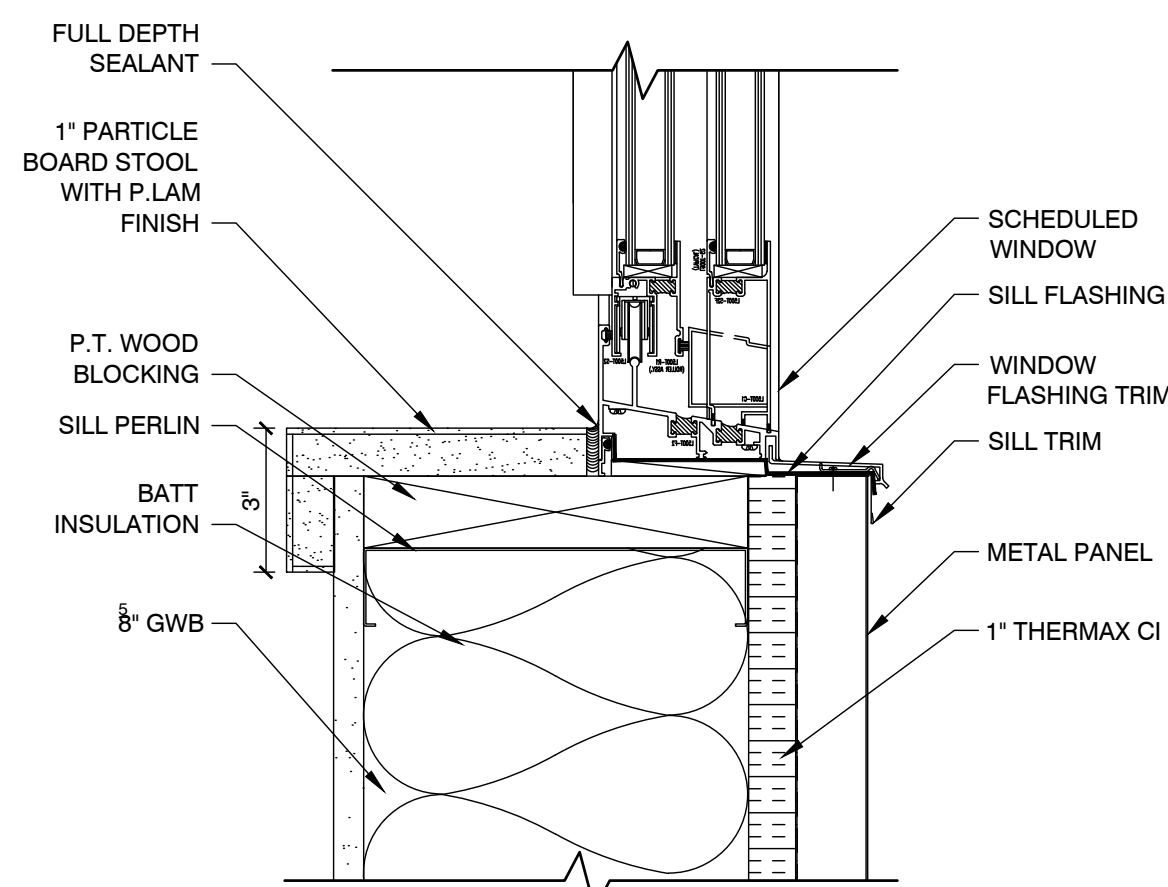
5 HEAD DETAIL
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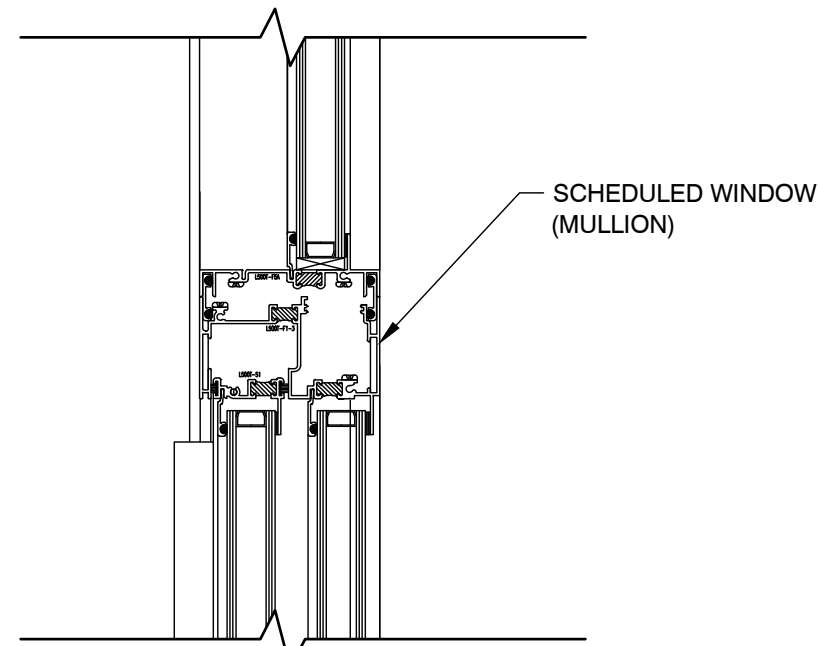
6 JAMB DETAIL
SCALE: 1"=1'-0"



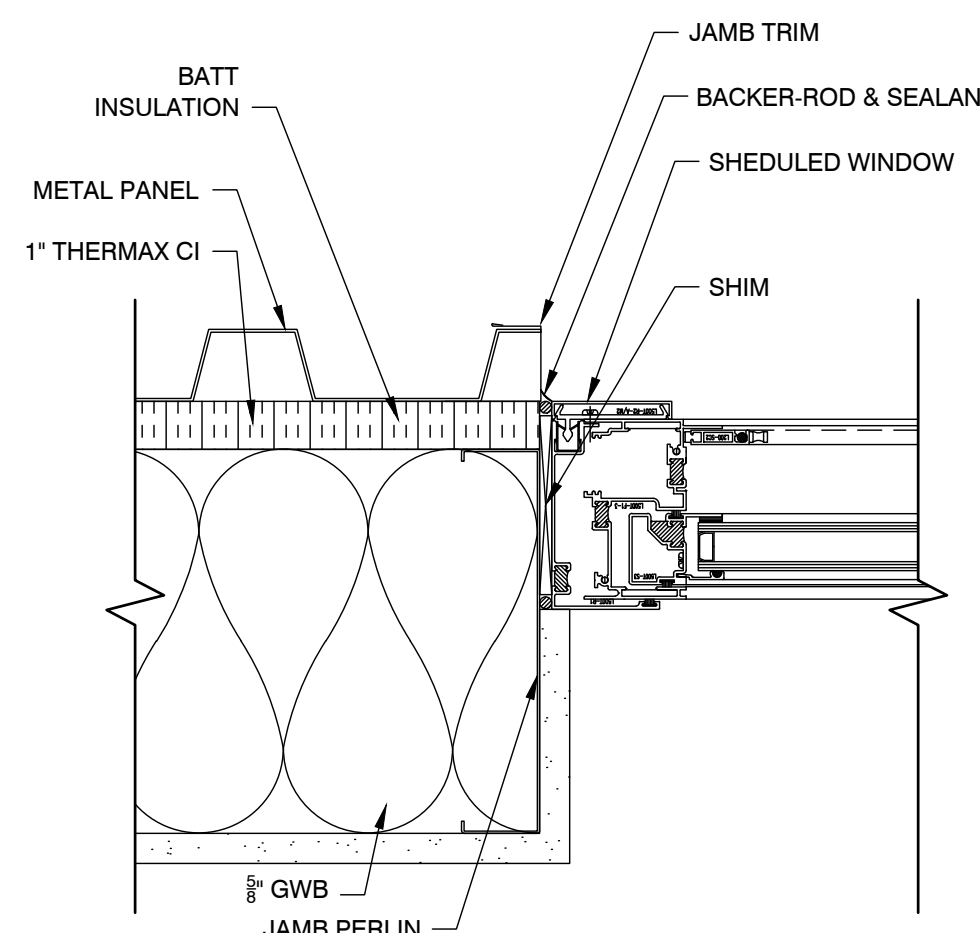
7 HEAD DETAIL
SCALE: 1"=1'-0"



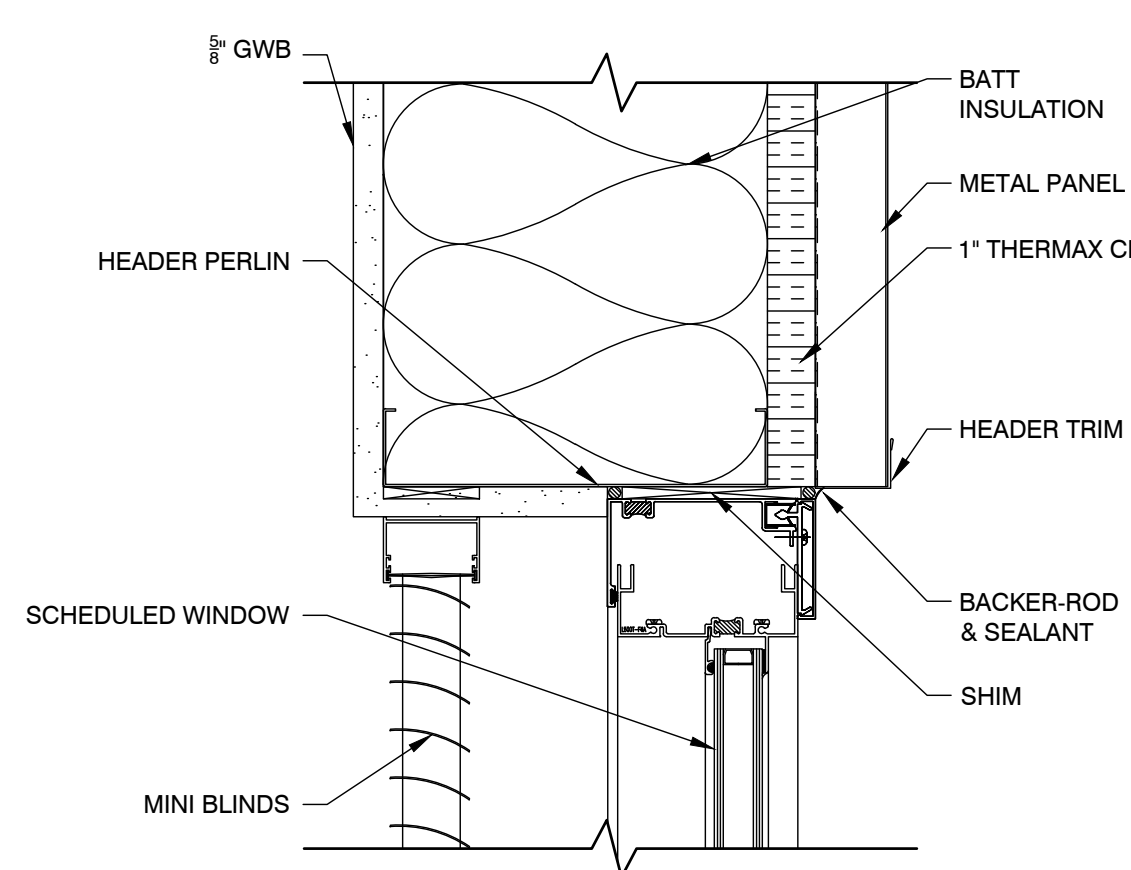
8 SILL DETAIL
SCALE: 3"=1'-0"



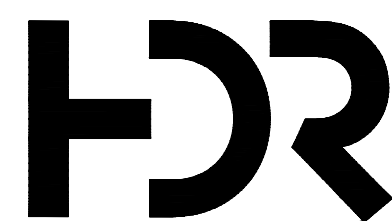
9 MULLION DETAIL
SCALE: 3"=1'-0"



10 JAMB DETAIL
SCALE: 3"=1'-0"



11 HEAD DETAIL
SCALE: 3"=1'-0"



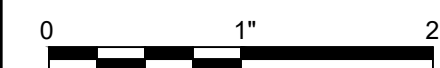
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ARCHITECTURAL	A. STANISCI
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



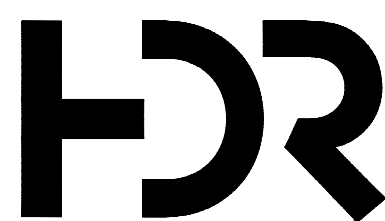
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
PARTITION, DOOR AND FINISH SCHEDULES



FILENAME
SCALE

SHEET
A-601



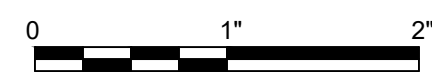
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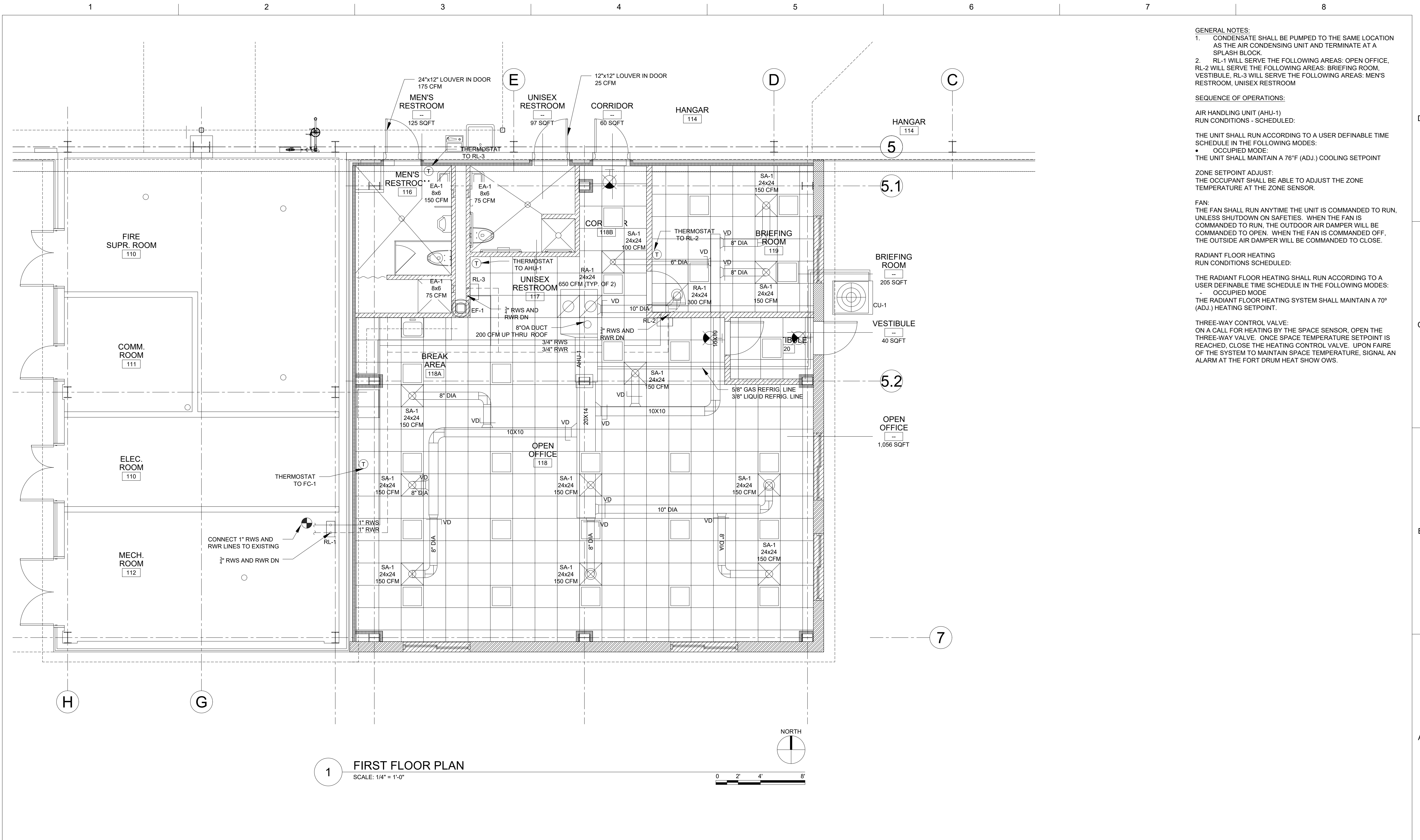
**FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY**

FPBB162002
BREAKROOM COUNTER ELEVATIONS & DETAILS



FILENAME	-
SCALE	-

SHEET
A-602



GENERAL NOTES:

- CONDENSATE SHALL BE PUMPED TO THE SAME LOCATION AS THE AIR CONDENSING UNIT AND TERMINATE AT A SPLASH BLOCK.
- RL-1 WILL SERVE THE FOLLOWING AREAS: OPEN OFFICE, RL-2 WILL SERVE THE FOLLOWING AREAS: BRIEFING ROOM, VESTIBULE, RL-3 WILL SERVE THE FOLLOWING AREAS: MEN'S RESTROOM, UNISEX RESTROOM

SEQUENCE OF OPERATIONS:

AIR HANDLING UNIT (AHU-1)
RUN CONDITIONS - SCHEDULED:

THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:

- OCCUPIED MODE:

THE UNIT SHALL MAINTAIN A 76°F (ADJ.) COOLING SETPOINT

ZONE SETPOINT ADJUST:

THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE AT THE ZONE SENSOR.

FAN:

THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. WHEN THE FAN IS COMMANDED TO RUN, THE OUTDOOR AIR DAMPER WILL BE COMMANDED TO OPEN. WHEN THE FAN IS COMMANDED OFF, THE OUTSIDE AIR DAMPER WILL BE COMMANDED TO CLOSE.

RADIANT FLOOR HEATING
RUN CONDITIONS SCHEDULED:

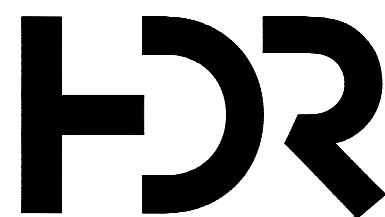
THE RADIANT FLOOR HEATING SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:

- OCCUPIED MODE

THE RADIANT FLOOR HEATING SYSTEM SHALL MAINTAIN A 70° (ADJ.) HEATING SETPOINT.

THREE-WAY CONTROL VALVE:

ON A CALL FOR HEATING BY THE SPACE SENSOR, OPEN THE THREE-WAY VALVE. ONCE SPACE TEMPERATURE SETPOINT IS REACHED, CLOSE THE HEATING CONTROL VALVE. UPON FAIRE OF THE SYSTEM TO MAINTAIN SPACE TEMPERATURE, SIGNAL AN ALARM AT THE FORT DRUM HEAT SHOW OWS.



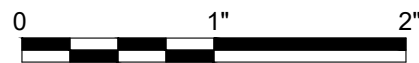
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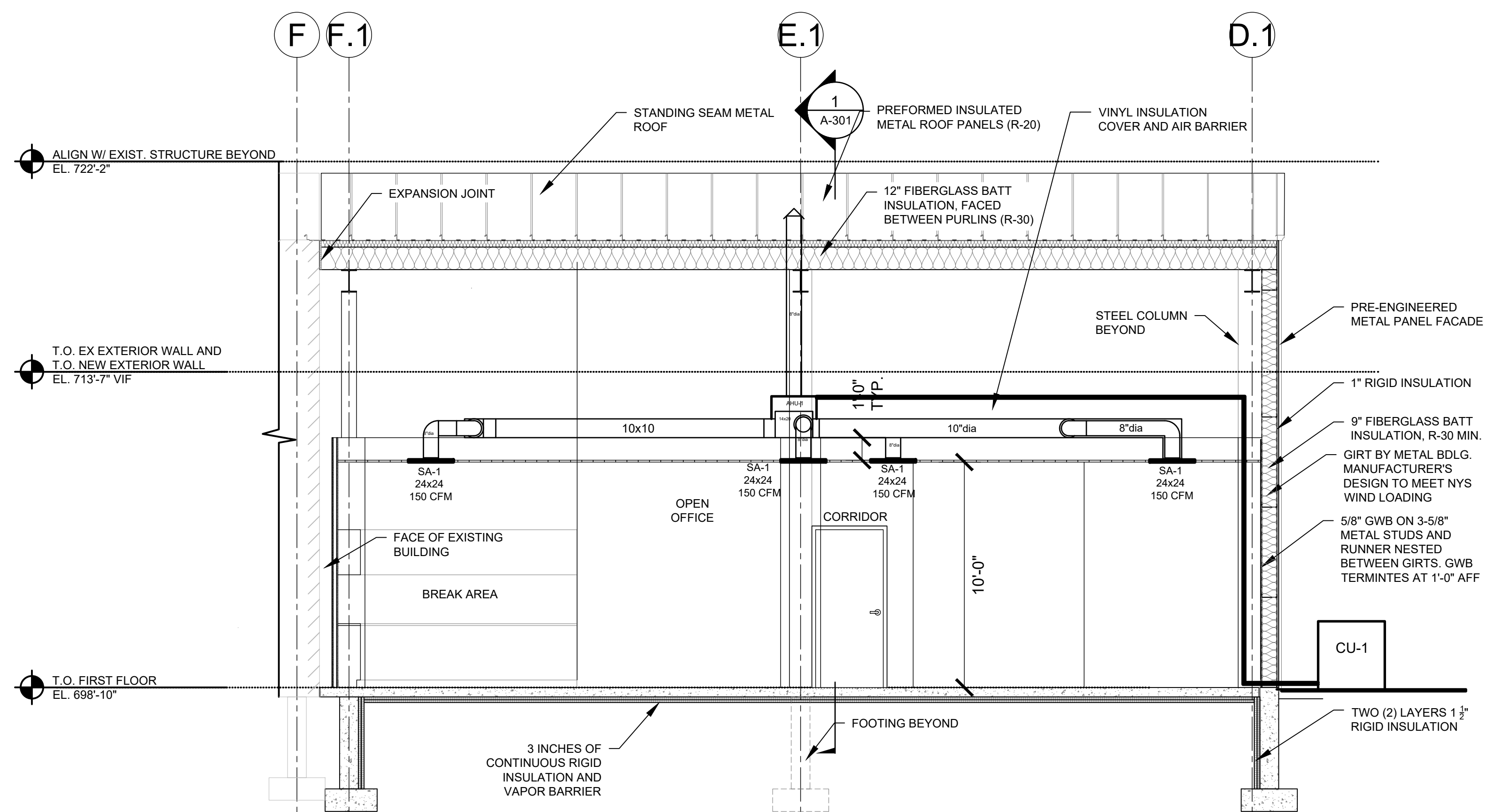
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
MECHANICAL FLOOR PLAN



FILENAME
SCALE

SHEET
M-101



INDOOR UNIT DATA													OUTDOOR UNIT DATA											MAX UNIT WEIGHT (LBS)	MIN SEER	MANUFACTURER	REMARKS		
MARK NO.	LOCATION	CFM/MIN .0A	EXTERNAL S.P. (IN. W.G.)	COOLING COIL DATA		FAN MOTOR			VOLTS/HZ PH	MAX UNIT WEIGHT (LBS)	MANUFACTURER	MARK NO.	LOCATION	AMBIENT (DEG F)	COOLING CAPACITY (MBTU)	REFRIG.	ELECTRICAL												
				AIRSIDE DATA		CAPACITY (TONS)	HP	MCA									MOCP	MCA	MOCP	VOLTS	HZ	PH							
				EAT (DEG F)	DB																		WB						
AHU-1	SEE PLANS	1600/300	0.4	80	68	4	1/2	4	15	208/60/3	150	GOODMAN ARUF048	CU-1	SEE PLANS	91	48.0	R-410A	26.2	45	208	60	1	220	14	GOODMAN GSX14048	1	2	3	
																									4	5			

REMARKS

1. REFRIGERANT LINES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS
2. PROVIDE UNIT MANUFACTURER DIGITAL ROOM THERMOSTAT AND INTEGRAL CONTROLS TO OPERATE AHU-1 AND CU-1. FAN COIL TIED AND CONTROLLED FROM CU-1.
3. EQUAL MANUFACTURER'S = CARRIER, LENNOX
4. PROVIDE 0 DEGREE LOW AMBIENT KIT
5. PROVIDE AN INTAKE HOOD ON OUTDOOR UNITS TO PREVENT THE ACCUMULATION OF SNOW

FAN SCHEDULE

MARK NO.	SERVES	FAN DATA						ELECTRICAL					MANUFACTURER	REMARKS				
		TYPE	LOCATION	CFM	EXT. SP. IN WG.	DIA. (IN)	DRIVE	RPM	HP	VOLT	PH	HZ						
EF-1	RESTROOMS	UPBLAST ROOF MOUNT	ROOF	300	0.125	17	DIRECT	1550	1/30	120	1	60	GREENHECK 070CUE	1	2	3	4	5

REMARKS

1. DISCONNECT SWITCH
2. BACKDRAFT DAMPER, DAMPER GUARD, BLADE GUARD, BELT GUARD.
3. COMBINATION STARTER/DISCONNECT SHALL INCLUDE H-O-A SWITCH.
4. WALL COLLAR, WEATHER HOOD, MOTORIZED INTAKE SHUTTER, BRIDSCREEN.
5. EQUAL MANUFACTURERS: GREENHECK, PENN BARRY

RADIANT FLOOR SCHEDULE

MARK NO.	SERVICE	# OF LOOPS	LENGTH OF LOOP	TOTAL GPM	PRESSURE DROP (FT. H2O)	EWT/LWT	BASIS OF DESIGN	NOTES
RL-1	OPEN OFFICE 118	7.00	250.0	4.50	3.9	125/105	REHAU PEX A	1,2,3
RL-2	BRIEFING ROOM 119	2.00	150.0	0.80	2.0	125/105	REHAU PEX A	1,2,3
RL-3	MEN'S/UNISEX BATHROOM	2.00	250.0	1.50	1.5	125/105	REHAU PEX A	1,2,3

NOTES

1. 1 1/2" PIPE SIZE FOR RADIANT FLOOR PIPING
2. 8" LOOP SPACING FOR RADIANT FLOOR PIPING
3. OR APPROVED EQUAL

DIFFUSER SCHEDULE

MARK NO.	TYPE	MOUNTING	NECK SIZE	SIZE	MANUF. AND MODEL
SA-1	SUPPLY AIR	LAY-IN	SEE NOTE 1	24"X24"	TITUS OMNI
RA-1	RETURN AIR	LAY-IN	SEE NOTE 1	24"X24"	TITUS PAR

NOTES

SCHEDULE DOES NOT INDICATE QUANTITIES. FOR QUANTITIES OF EACH ITEM SEE PLANS

1. NECK SIZE SHALL BE AS FOLLOWS
- 6" DIA NECK FOR CFM RANGE (0 CFM-100 CFM)
 - 8" DIA NECK FOR CFM RANGE (101 CFM-200 CFM)
 - 10" DIA NECK FOR CFM RANGE (201 CFM-400 CFM)
 - 12" DIA NECK FOR CFM RANGE (401 CFM-500 CFM)
 - 14" DIA NECK FOR CFM RANGE (501 CFM-600 CFM)
 - 6" DIA NECK FOR CFM RANGE (0 CFM-100 CFM)

EQUAL MANUFACTURERS:

-PRICE

-METAL AIRE

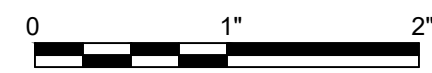
ACCESSORIES:

3	27 AUG 2021	B-3 SUBMISSION
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ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



**FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY**

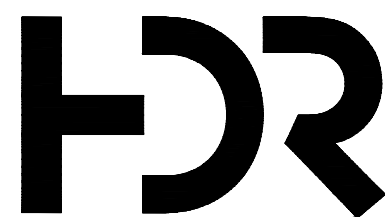
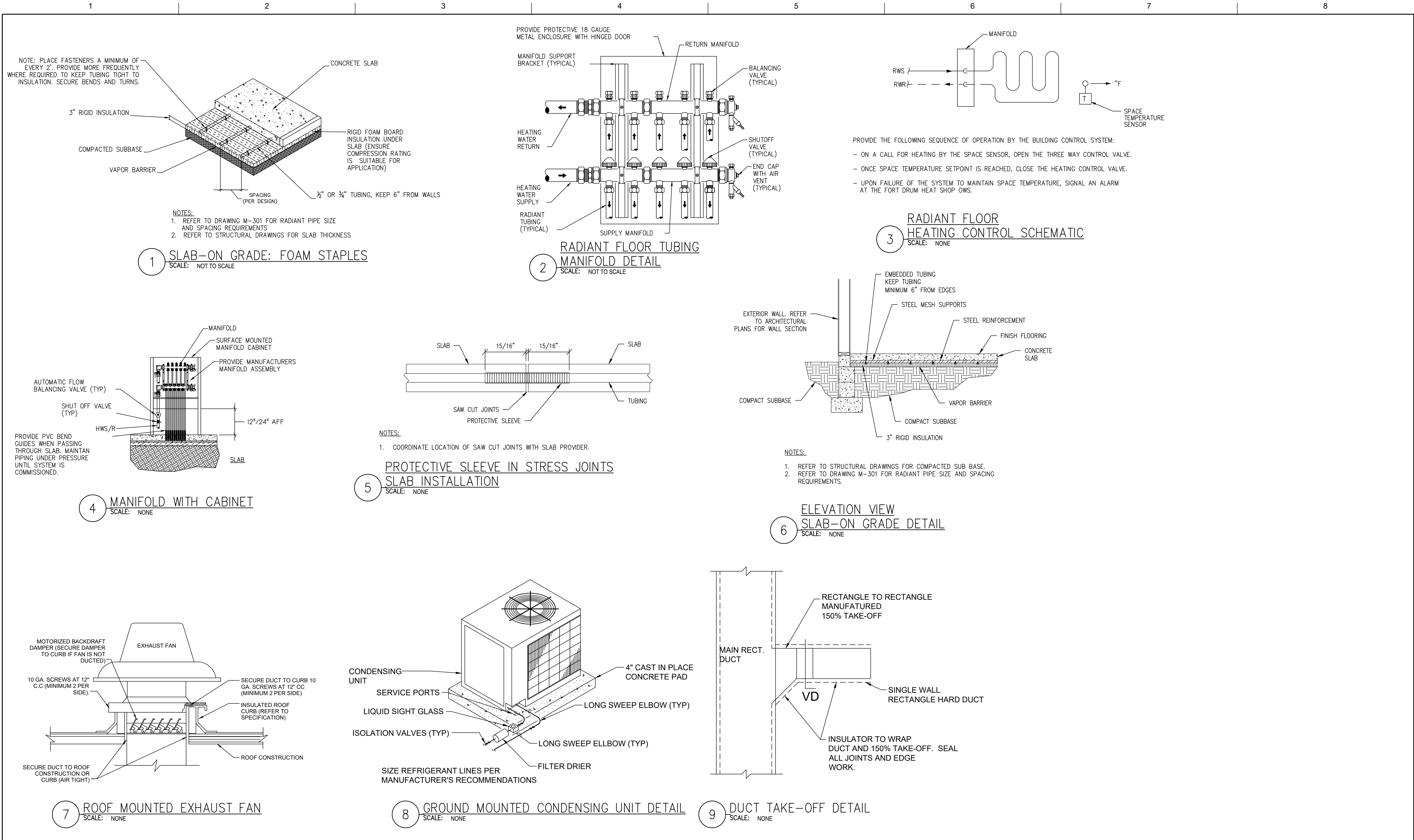


FPBB162002
MECHANICAL SCHEDULES

FILENAME	-
SCALE	-

SHEET

M-301



ISSUE	DATE	DESCRIPTION
3	27 AUG 2021	B-3 SUBMISSION
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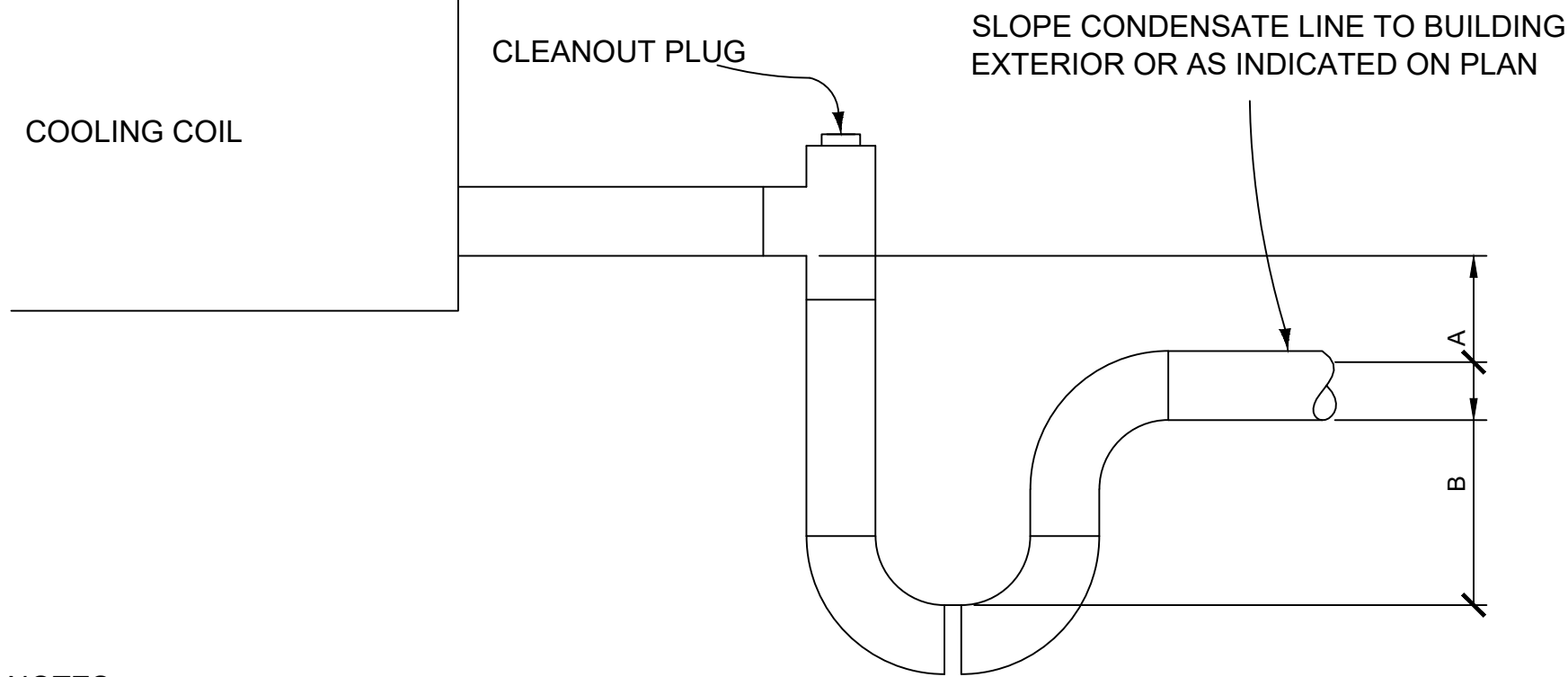
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY



FPBB162002
MECHANICAL DETAILS

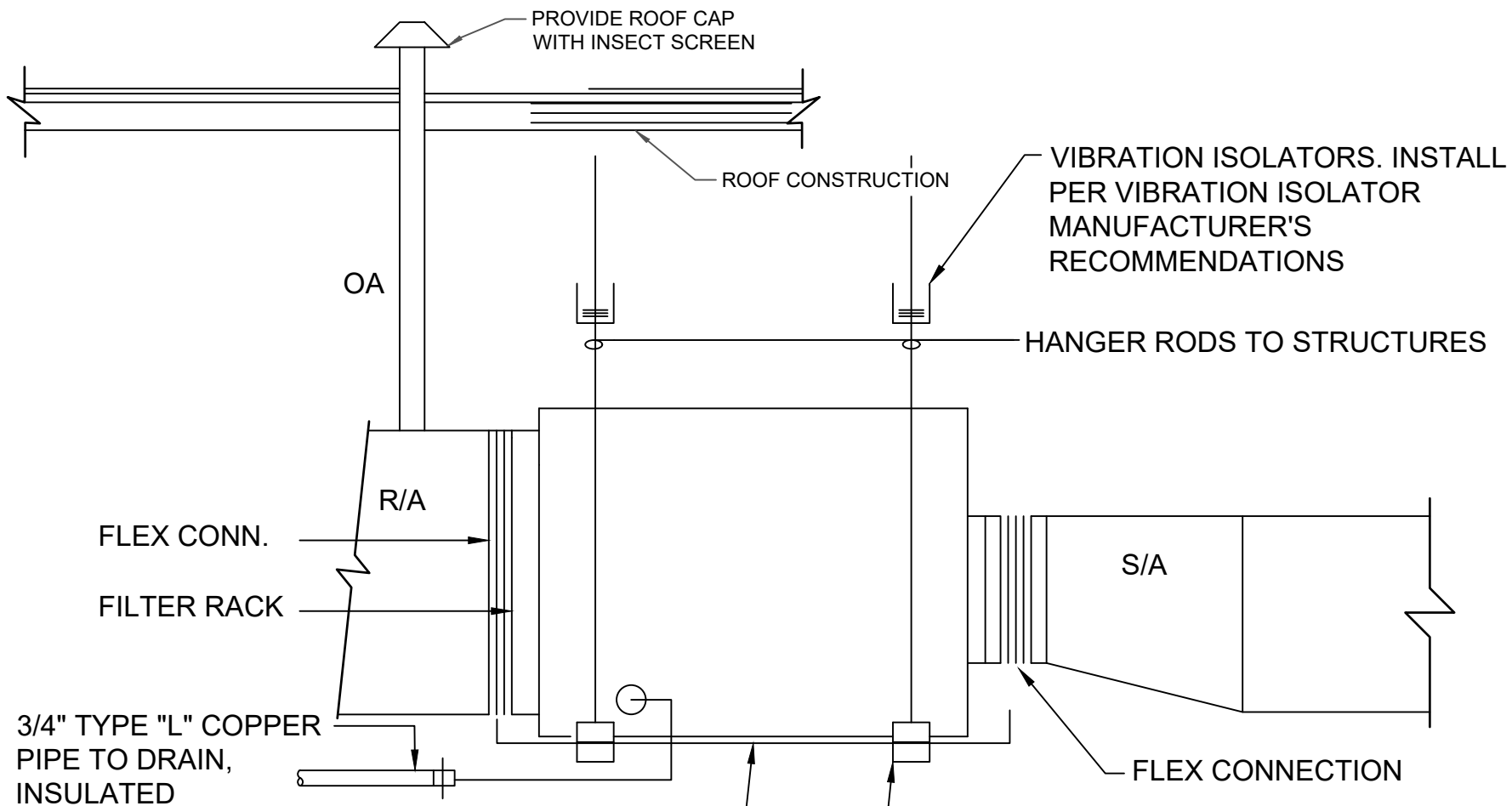
FILENAME
SCALE

SHEET
M-401



- NOTES:
- ON DRAW-THRU UNITS, THE (A) DIMENSION (IN INCHES) SHALL BE 1.5 TIMES THE AIR HANDLING UNITS SUCTION PRESSURE AT OPERATING CONDITIONS, BUT IN NO CASE LESS THAN 2-INCHES.
 - ON BLOW-THRU UNITS, THE (A) DIMENSION (IN INCHES) CAN BE AS SMALL AS 2 INCHES, BUT THE (B) DIMENSION (IN INCHES) SHALL BE 1.5 TIMES THE AIR HANDLING UNITS TOTAL STATIC PRESSURE BUT IN NO CASE LESS THAN 2 INCHES.
- A = DISTANCE BETWEEN THE DRAIN PAN
B = TRAP DEPTH

1 CONDENSATE DRAIN DETAIL
SCALE: NONE

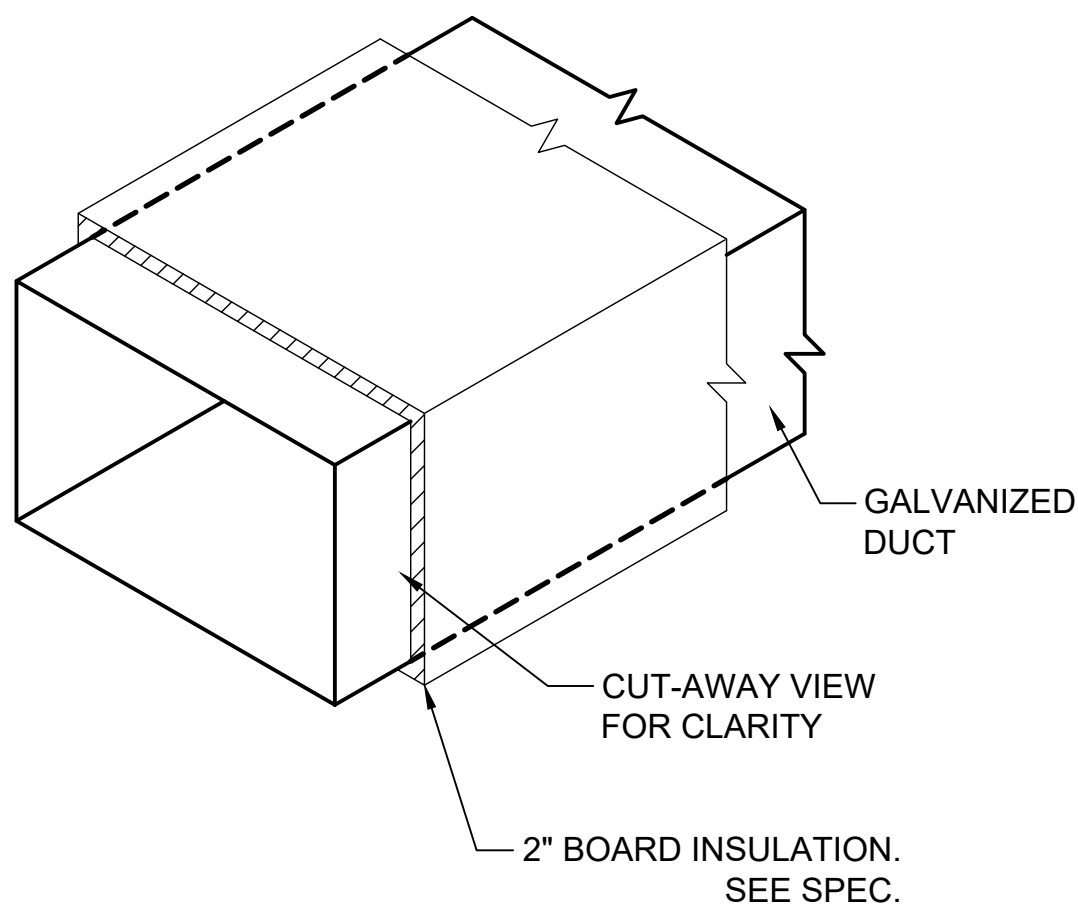


INSTALL A CONDENSATE OVERFLOW PAN BELOW THE UNIT. MINIMUM 6" LARGER THAN UNIT AND CONSTRUCTED OF 18GA STAINLESS STEEL SHEET METAL MINIMUM 2" DEEP. INSTALL CONDENSATE MOISTURE SENSOR IN BOTTOM OF PAN AND WIRE TO AHU-1. AHU-1 SHALL SHUTDOWN UPON DETECTION OF CONDENSATE OVERFLOW.

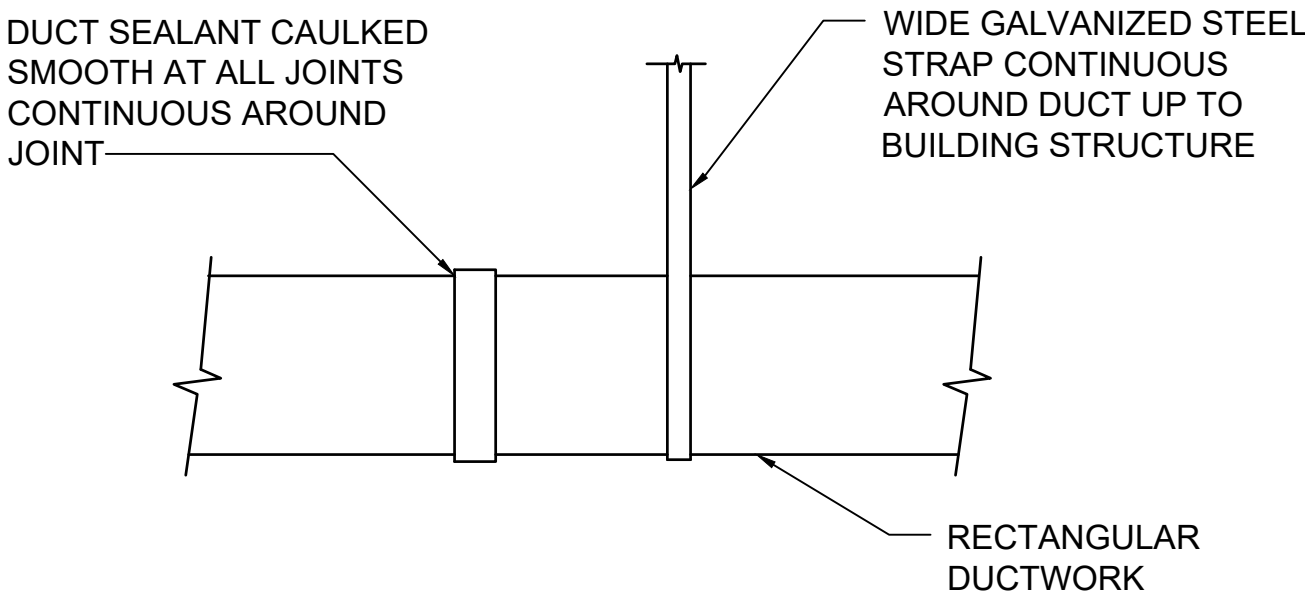
SUSPEND UNIT FROM CROSSBEAMS AT EACH JOINT BETWEEN UNIT COMPONENTS. SUPPORT MEMBERS SHALL ALSO BE PLACED ALONG THE AIRWAY LENGTH OF THE UNIT IN ORDER TO PREVENT BUCKLING.

INSTALL NO DUCTWORK, PIPING, CONDUIT, ETC. IN MANUFACTURER RECOMMENDED SERVICE AREA. COMPLETE ACCESS IS REQ'D. ROTATE FILTER BRACKETS FOR BOTTOM REMOVAL WHERE NECESSARY.

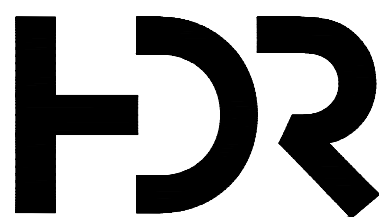
2 AIR HANDLER SUPPORT DETAIL
SCALE: NONE



3 DUCT INSULATION DETAIL
SCALE: NONE



4 DUCT SUPPORT DETAIL
SCALE: NONE



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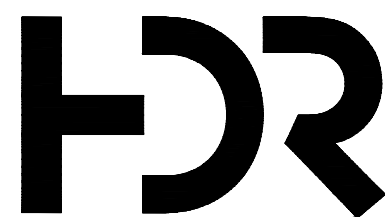
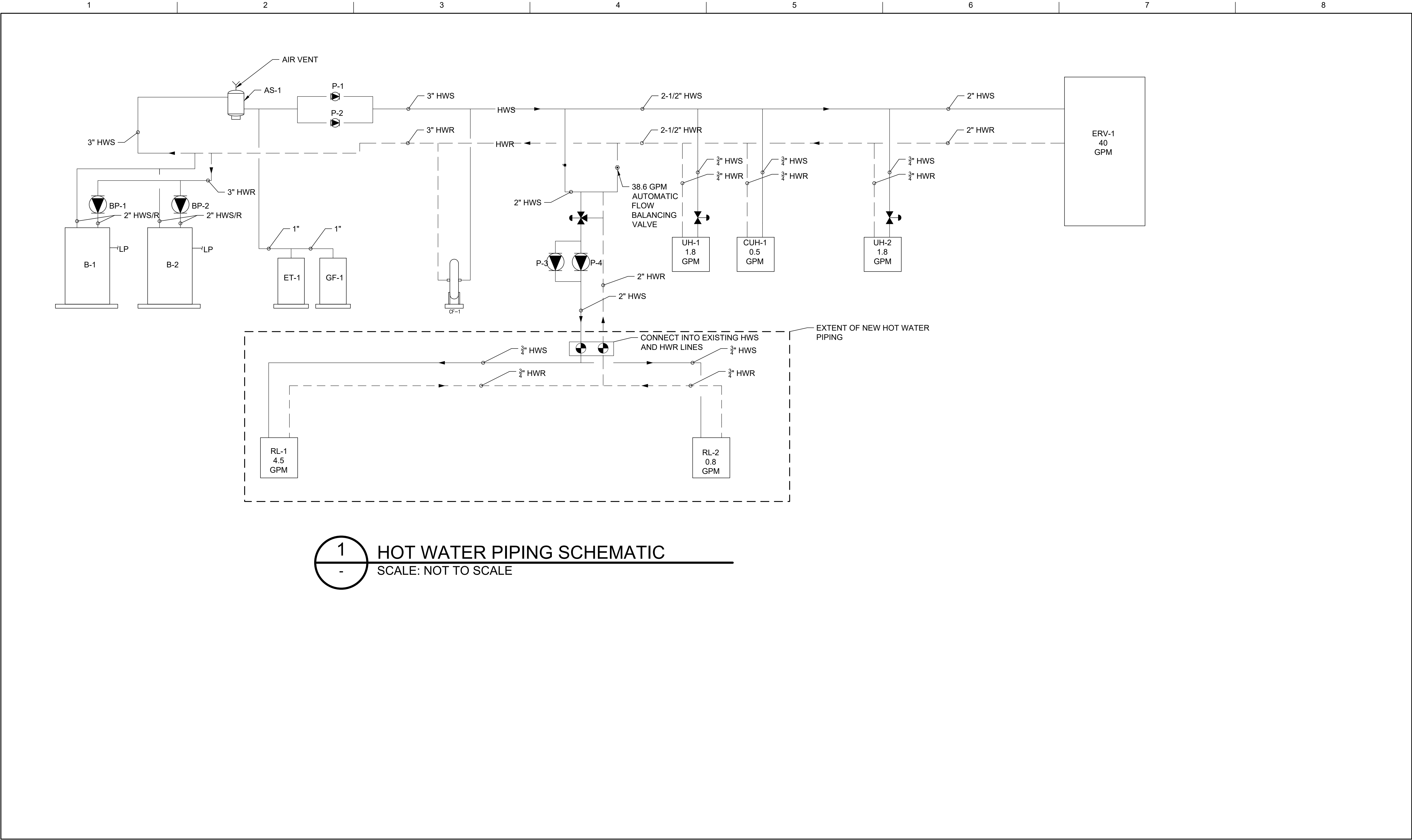
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FPBB162002
MECHANICAL DETAILS



FILENAME -
SCALE -

SHEET
M-402



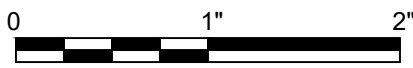
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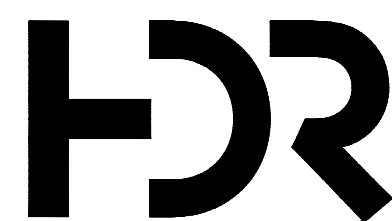
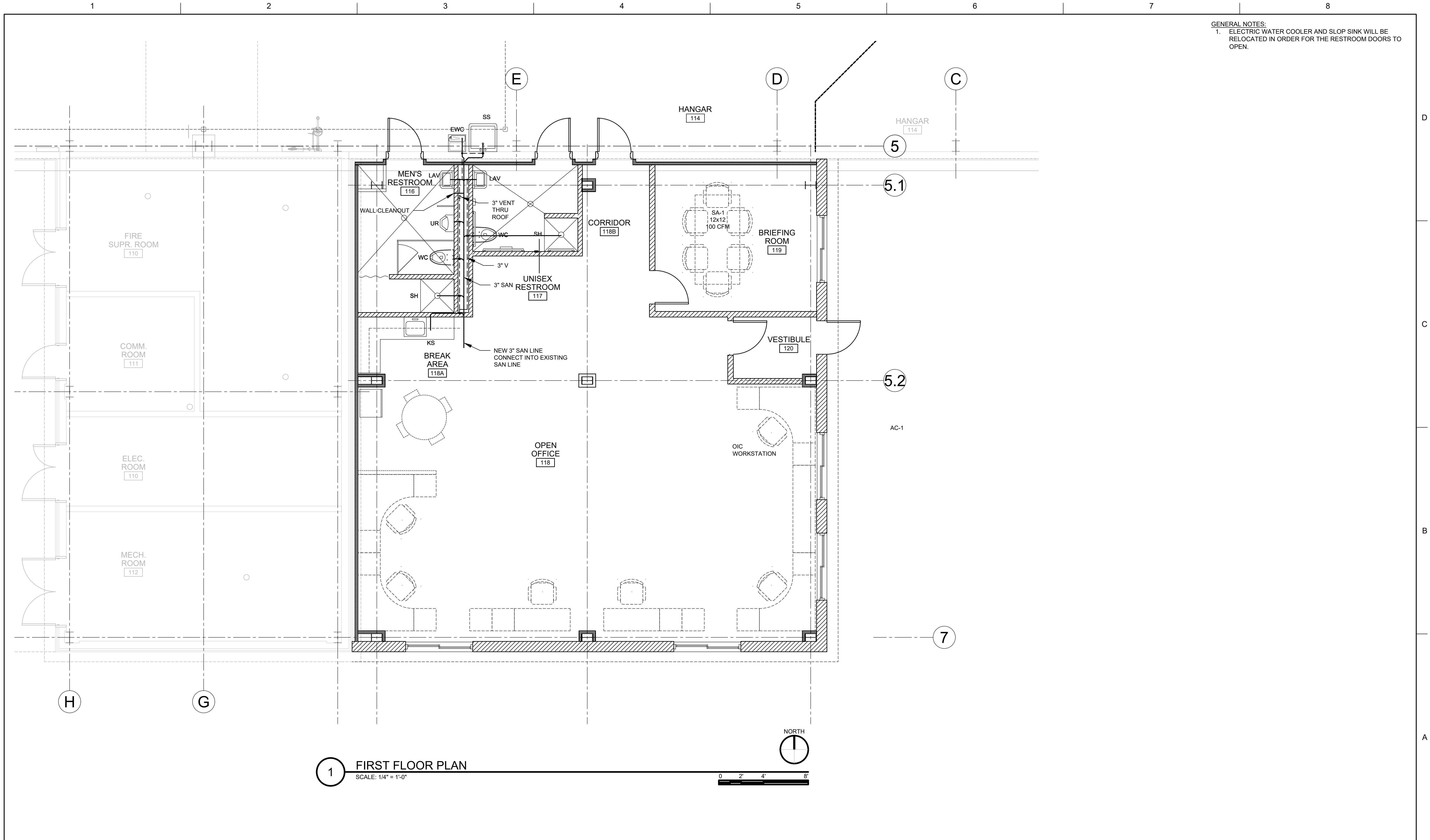
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FORT DRUM MILITARY RESERVATION, NY

FPBB162002
MECHANICAL DETAILS



FILENAME -
SCALE -

SHEET
M-403



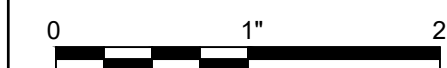
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FPBB162002
SANITARY PLUMBING FLOOR PLAN



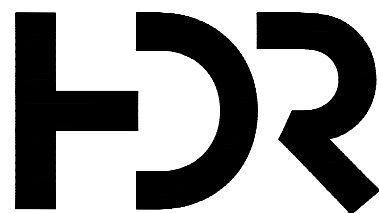
FILENAME -
SCALE -

SHEET
P-102

FIXTURE SCHEDULE

FIXTURE	MARK	HW CONN.	CW CONN.	WASTE CONN.	VENT	DESCRIPTION	# OF EACH
ADA LAVATORY	LAV	1/2"	1/2"	1-1/4"	1-1/4"	WALL HUNG AMERICAN STANDARD 0124.131 WITH 0.5 GPM 6055.205 BATTERY POWERED FAUCET AND 605XTMV MIXING VALVE, OR APPROVED EQUAL. 34" MOUNTING HEIGHT FOR ADA REQUIREMENTS	2
KITCHEN SINK	KS	1/2"	1/2"	1-1/2"	1-1/2"	ELKAY CR2521 WITH 1.5 GPM LOW FLOW FAUCET, OR EQUAL	1
ADA WATER CLOSET	WC	-	1"	4"	2"	AMERICAN STANDARD MADERA 3461.541 FLOOR MOUNT WITH 1.1 GALLON PER FLUSH ELECTRONIC BATTERY OPERATED FLUSH VALVE, OR APPROVED EQUAL. 17 INCHES TO TOP OF BOWL RIM.	2
ADA URINAL	UR	-	3/4"	2"	1-1/2"	AMERICAN STANDARD WASHBROOK URINAL 6063.013, OR APPROVED EQUAL; VITREOUS CHINA; WHITE; TOP SPUD, 0.125 GALLON PER FLUSH WITH AUTOMATIC BATTERY OPERATED FLUSH VALVE. 17 INCHES TO TOP OF RIM	1
SERVICE SINK	FD	1/2"	1/2"	2"	2"	ENAMELED CAST IRON, WALL HANGER, RIM GUARD, CAST IRON P-TRAP, ACID-RESISTING ENAMEL INSIDE. CHROME STRAINER. KOHLER K6719 OR APPROVED EQUAL.	1
SHOWER FLOOR DRAIN	SH	1/2"	1/2"	2"	2"	ONE PIECE MOLDED STONE WITH SLIP-RESISTANT SURFACE. FACTORY INSTALLED DRAIN STAINLESS STEEL WITH REMOVEABLE STAINLESS STEEL STRAINER PLATE.	2
ELECTRIC WATER COOLER	EWC	-	3/8"	1-1/2"	1-1/2"	ELKAY MODEL EZO8, SELF CONTAINED WALL SINGLE WATER COOLER WITH ADA HANDSFREE OPERATION	1

1. SUBMIT ALL CUT SHEETS OF PROPOSED TO ARCHITECT FOR APPROVAL
2. SUBMIT EQUALS OR SUBSTITUTIONS FOR ENGINEER'S REVIEW AND APPROVAL
3. ALL LAVATORY SINKS TO BE PROVIDED WITH MIXING VALVE.
4. ALL FIXTURES TO BE PROVIDED WITH LOCAL SHUT OFF VALVES.



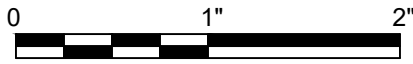
3	27 AUG 2021	B-3 SUBMISSION
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PROJECT MANAGER	ANTHONY BROZIER
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STRUCTURAL	J. JAECKEL
ARCHITECTURAL	A. STANISCIA
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
PLUMBING SCHEDULES



FILENAME -
SCALE -

FIRE PROTECTION/SUPPRESSION GENERAL NOTES

1.

THIS PROJECT INCLUDES THE COMPLETE INSTALLATION OF A NEW FIRE PROTECTION SYSTEM FOR THE NEW ADDITION TO THE HANGAR.
2.

IN THE NEW ADDITION, PROVIDE A COMPLETE FIRE SPRINKLER SYSTEM WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS. COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN AND LABOR REQUIRED FOR A COMPLETE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES (INCLUDING, BUT NOT LIMITED TO UFC 3-600 AND NFPA 13). CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
3.

FIRE PROTECTION SCOPE SHALL INCLUDE, BUT NOT LIMITED TO, FIRE SUPPRESSION SYSTEMS. CONTRACTOR SHALL REVIEW CONTRACT DRAWINGS AND SPECIFICATIONS FOR DETAILED REQUIREMENTS.
4.

THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE INSTALLATION DRAWINGS, HYDRAULIC CALCULATIONS, AND PRODUCT DATA SUBMITTALS AS A COMPLETE PACKAGE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
5.

ALL MATERIALS ARE TO BE UL LISTED OR FM APPROVED FOR USE IN FIRE PROTECTION SYSTEMS.
6.

PROVIDE HANGERS FOR COMPLETE FIRE PROTECTION SYSTEM. DESIGN AND INSTALL PIPE HANGER SUPPORTS IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13. HANGER TYPES SHALL BE SHOWN ON SHOP DRAWINGS WITH LOCATIONS IN THE NEW HANGER ADDITION.
7.

INSTALL SEMI-RECESSED SPRINKLER HEADS THROUGHOUT NEW ADDITION. SPRINKLER HEADS SHALL BE LOCATED IN THE CENTER OF CEILING TILES. SPRINKLER HEADS SHALL BE SYMMETRICALLY SPACED AND ALIGNED WITH OTHER CEILING MOUNTED EQUIPMENT TO THE GREATEST EXTENT POSSIBLE.
8.

PROVIDE FIRESTOPPING AT PENETRATIONS IN FIRE RATED CONSTRUCTION AND CAULKING AT PENETRATIONS OF FIRE OR SMOKE-RATED SEPARATIONS IN ACCORDANCE WITH SPECIFICATIONS.
9.

INSTALL AND ADJUST PRESSURE RELIEF VALVES ON ALL WET SYSTEMS.
10.

PROVIDE ACCESS DOORS AND SIGNAGE WHERE ACCESS IS REQUIRED TO CONCEALED SPRINKLER EQUIPMENT, VALVES, AND CONTROLS. LOCATIONS TO BE APPROVED BY ARCHITECT.
11.

THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR PROVISION OR CONNECTIONS BETWEEN THEIR RESPECTIVE SYSTEMS.
12.

WATER FLOW TEST INFORMATION (11/17/2020):

LOCATION:

SOUTH OF EXISTING HANGARS.

STATIC:

70 PSI.

RESIDUAL:

58 PSI.

PILOT:

24 PSI.

RESIDUAL FLOW:

1,579 GPM @ 20 PSI.
13.

CONTRACTOR RESPONSIBLE FOR PERFORMING FIRE HYDRANT FLOW TEST TO CONFIRM FLOW RATES.

FIRE ALARM GENERAL NOTES

1.

PROVIDE CODE COMPLIANT COMBINE FIRE ALARM AND MASS NOTIFICATION SYSTEM IN THE HANGAR ADDITION. INSTALL FIRE ALARM / MASS NOTIFICATION EQUIPMENT AS NEEDED TO CONNECT TO EXISTING SYSTEMS. PROVIDE MANUAL PULL STATIONS AT ALL EXITS. PROVIDE OCCUPANT NOTIFICATION COMPLYING WITH NFPA 72. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE EDITIONS OF NFPA 70, NFPA 72, NFPA 101, UFC 3-600-01 AND UFC 4-021-01. CERTIFICATE OF FINAL INSPECTION SHALL BE PROVIDED BY THE CONTRACTOR AT COMPLETION OF PROJECT AND PRESENTED TO THE CONTRACTING OFFICER.
2.

FURNISH AND INSTALL ALL COMPONENTS TO COMPLETE A FUNCTIONAL SYSTEM IN THE NEW ADDITION AS INDICATED ON CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND SCOPE OF WORK. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED ACCOMPLISHING THE FUNCTIONS INTENDED.
3.

COORDINATE WORK WITH THE WORK OF OTHER TRADES. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO COORDINATE WORK WITH OTHER TRADES SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION AND MAY RESULT IN REJECTION OF CONTRACTOR'S WORK.
4.

THE QUANTITY AND PLACEMENT OF VISUAL NOTIFICATION DEVICES IS DEPENDENT UPON CANDELA RATING. DEVICE PLACEMENT SHOULD BE BASED UPON NFPA 72 CHAPTER 18.5.5.4.
5.

FIRE ALARM / MASS NOTIFICATION CONTROL UNIT SHALL TRANSMIT SIGNALS AS CURRENTLY PROGRAMMED.
6.

MATERIALS SHALL BE NEW AND SUITABLE FOR THE APPLICATION INTENDED. MATERIALS SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO AUTHORITY HAVING JURISDICTION.
7.

CABLES SHOULD BE INSTALLED IN METAL RACEWAYS. METALLIC RACEWAYS, CONDUIT, BACK BOXES, AND JUNCTION BOXES SHALL BE PAINTED RED.
8.

RACEWAY SHALL BE CONCEALED IN FINISHED SPACES. RACEWAY SHALL BE RUN PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS. JUNCTION BOXES INSTALLATION SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES.
9.

CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER AND OTHER APPROPRIATE INFORMATION. JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION. WHERE EMPTY RACEWAY IS INSTALLED, IT SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
10.

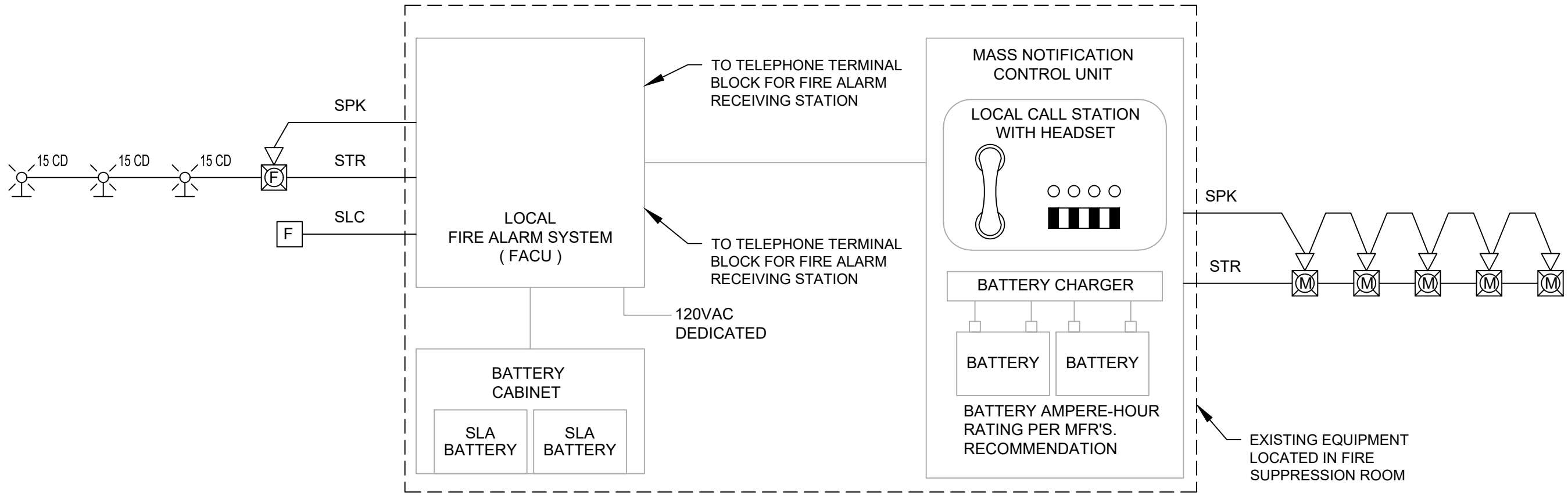
EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT.
11.

PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION PENETRATED. PROVIDE DOCUMENTATION ON SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
12.

ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
13.

WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. NFPA 72 AND 241 IMPAIRMENT PROCEDURE ARE TO BE FOLLOWED.
14.

THE OPERABLE PORTION OF PULL STATIONS SHALL BE LOCATED 44 TO 48 IN A.F.F AND WITHIN 5 FT OF EXIT DOOR. WALL MOUNTED NOTIFICATION APPLIANCES (VISUAL AND COMBINATION AUDIO/VISUAL) SHALL BE LOCATED SUCH THAT THE ENTIRE STROBE LENS IS BETWEEN 80 IN AND 96 IN A.F.F.



1 FIRE ALARM ONE-LINE DIAGRAM

NOT TO SCALE

NOTES:

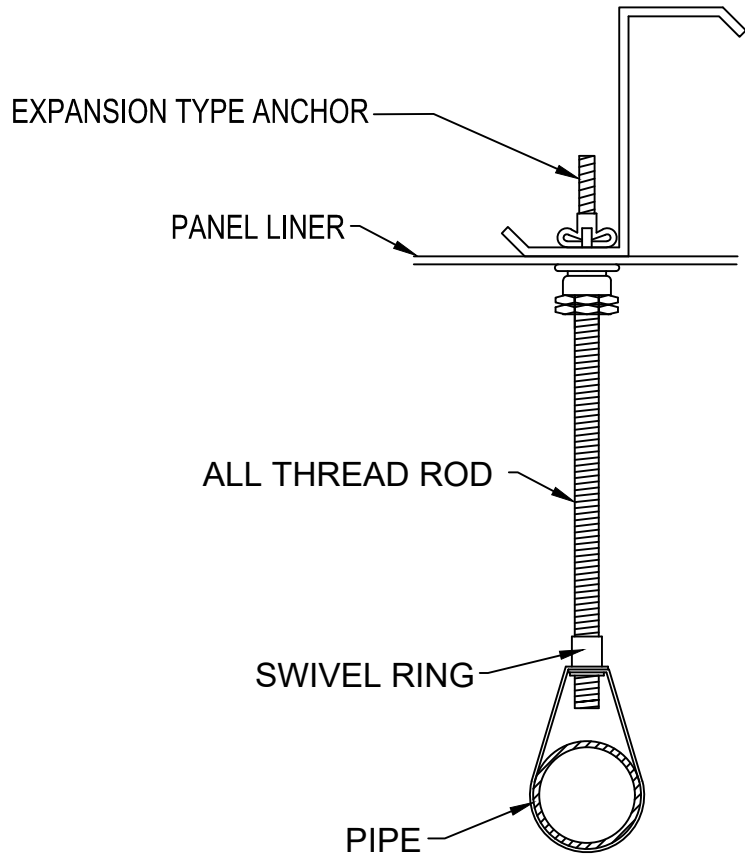
1. ONE-LINE DIAGRAM IS FOR DEVICES AND APPLIANCES IN THIS SCOPE OF WORK ONLY. CONTRACTOR TO VERIFY EXISTING DEVICES.

SYSTEM OUTPUTS	
CONTROL UNIT ANNUNCIATION	NOTIFICATION
FIRE ALARM LED	
FACP SUPERVISORY LED	
FACP TROUBLE LED	
FACP AUDIBLE ALARM	
FACP LCD MESSAGE	
AUDIBLE ALARM	
VISUAL ALARM	
VISUAL ALARM (FIRE ALARM)	
AUDIBLE ALARM (MASS NOTIFICATION)	
ACTIVATION OF SPECIAL SUPPRESSION SYSTEM (HEF)	
SHUTDOWN OF GAS FIRED EQUIPMENT IN BOILER ROOM	
NATURAL GAS VALVE	
CARBON MONOXIDE AV SIGNALING DEVICE	
OVERHEAD DOOR CLOSE SIGNAL	
HVAC SHUTDOWN	
REMARKS	
1	MANUAL PULL STATION (FIRE ALARM)

2 SEQUENCE OF OPERATION MATRIX

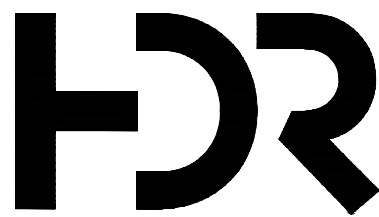
NOT TO SCALE

NOTE: SYSTEM I/O MATRIX IS FOR DEVICES IN THIS SCOPE OF WORK ONLY.



3 FIRE SPRINKLER HANGER DETAIL

NOT TO SCALE



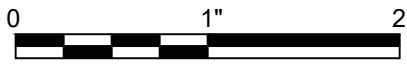
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PROJECT NUMBER	10256943



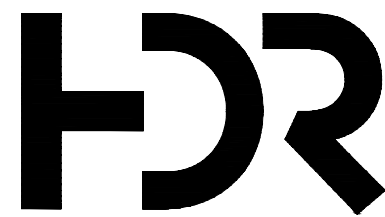
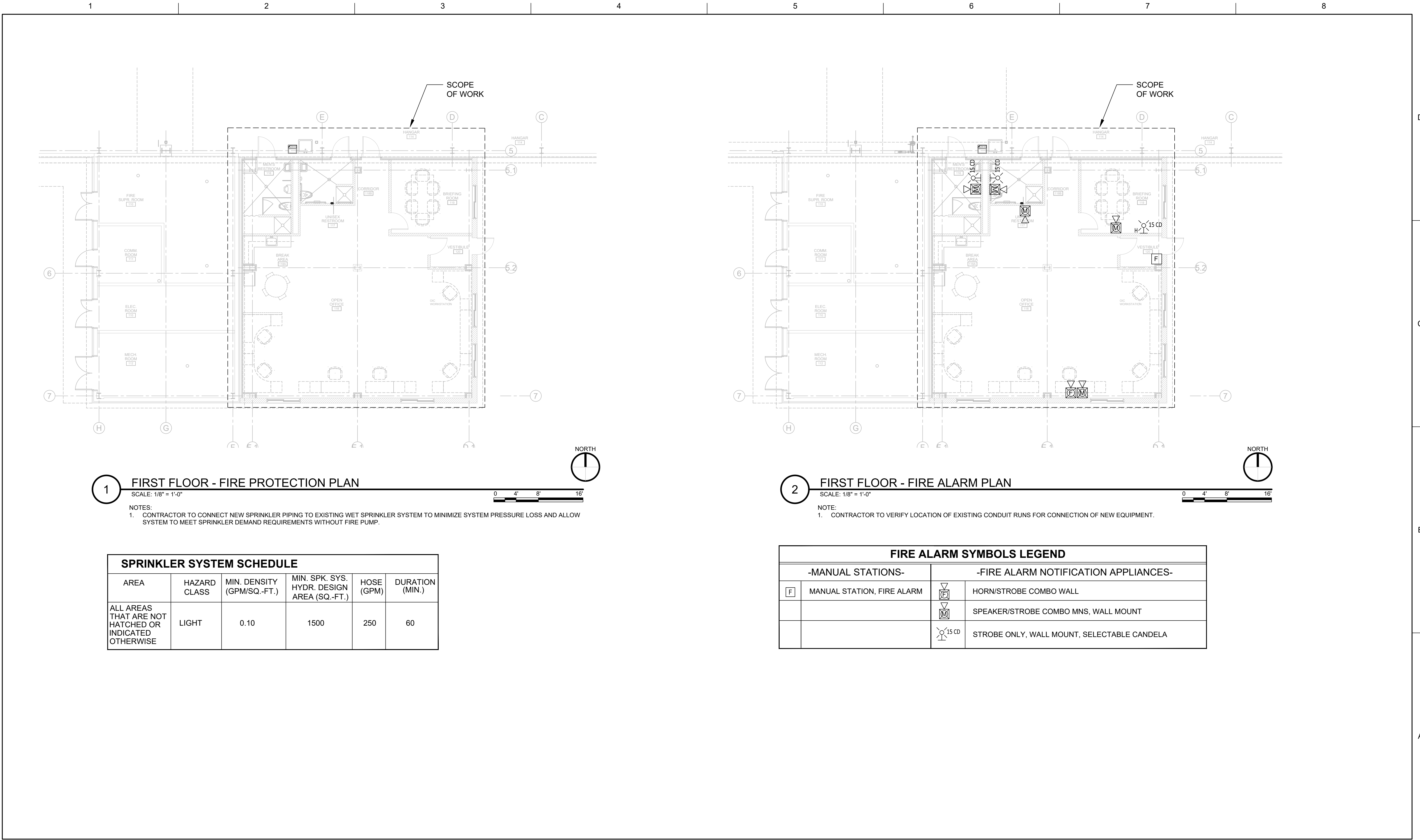
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH AND RECOVERY ELEMENT FORT DRUM MILITARY RESERVATION, NY

FPBB162002
FIRE PROTECTION NOTES & LEGEND



FILENAME -
SCALE NOT TO SCALE

SHEET
F-100



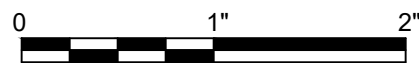
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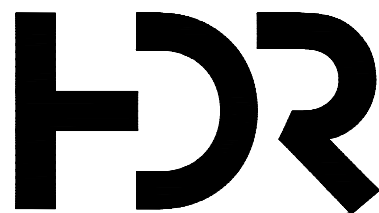
FPBB162002
FIRE PROTECTION & FIRE ALARM FLOOR PLAN



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

SHEET
F-101

ONE-LINE SYMBOLOGY		POWER SYMBOLOGY		LIGHTING SYMBOLOGY		ELECTRICAL NOTES	
<div><div><div><div><div></div><div>X</div><div>20A</div><div>3P</div></div></div><div></div></div><div>LOW VOLTAGE CIRCUIT BREAKER (CB). RATING AND NO. OF POLES AS SHOWN. WHEN SPECIFIC TYPE, OTHER THAN MCCB, IS REQUIRED, X INDICATES TYPE.</div><div>TYPES: MCCB - MOLDED CASE ICCB - INSULATED CASE LVP - LOW VOLTAGE POWER MCP - MOTOR CIRCUIT PROTECTOR (RATING PER CONNECTED LOAD)</div></div> <div><div><div></div></div><div>NON-FUSED SWITCH, CURRENT RATING, AND NUMBER OF POLES AS NOTED (3 POLE UON)</div></div> <div><div><div><div></div><div>7 1/2</div></div>OR<div><div></div><div>HP</div></div></div><div>MOTOR WITH DESIGN HORSEPOWER (WHEN INDICATED)</div></div> <div><div><div></div><div>G</div></div><div>GENERATOR</div></div> <div><div><div><div></div><div>ATS</div></div></div><div>TRANSFER SWITCH, CURRENT RATING, AND NUMBER OF POLES AS NOTED ATS - AUTOMATIC MTS - MANUAL</div></div> <div><div><div></div></div><div>TRANSFORMER Δ 3-PHASE, 3-WIRE DELTA CONNECTION Y 3-PHASE, 4-WIRE GROUNDED WYE CONNECTION</div></div> <div><div><div><div>LP100</div><div>208/120V</div><div>3φ, 4W</div></div></div><div>SWITCHBOARD OR PANELBOARD; NAME, VOLTAGE, PHASE, NUMBER OF WIRES WHEN INDICATED</div></div> <div><div><div>100</div><div>KVA</div></div><div>NON-MOTOR LOAD WITH DESIGN KVA, KW, OR AMP</div></div> <div><div><div></div></div><div>VOLTAGE TRANSFORMER (VT, PT, OR CPT)</div></div> <div><div><div></div></div><div>CURRENT TRANSFORMER (CT)</div></div> <div><div><div></div><div>WH</div></div><div>UTILITY WATT-HOUR METER PER UTILITY REQUIREMENTS</div></div> <div><div><div></div><div>DMP</div></div><div>DIGITAL METERING PACKAGE</div></div> <div><div><div></div></div><div>GROUND</div></div>		<div><div><div><div></div><div>J</div></div>OR<div><div></div><div>J</div></div></div><div>JUNCTION OR PULL BOX</div></div> <div><div><div></div></div><div>PANELBOARD (250V TO 600V)</div></div> <div><div><div></div></div><div>PANELBOARD (LESS THAN 250V)</div></div> <div><div><div></div><div>X</div></div><div>ELECTRICAL EQUIPMENT ENCLOSURE: SWITCHBOARD, MOTOR CONTROL CENTER, CONTROL PANEL, TRANSFORMER OR OTHER EQUIPMENT AS INDICATED. ESTIMATED SIZE AS INDICATED. WHEN USED X INDICATES EQUIPMENT TYPE.</div><div>EQUIPMENT TYPES: ATS - AUTOMATIC TRANSFER SWITCH CP - CONTROL PANEL MTS - MANUAL TRANSFER SWITCH MCC - MOTOR CONTROL CENTER UPS - UNINTERRUPTIBLE POWER SUPPLY VFD - VARIABLE FREQUENCY DRIVE SB - SWITCHBOARD SG - SWITCHGEAR T - TRANSFORMER</div></div> <div><div><div><div></div><div>X</div></div></div><div>NON-FUSED SAFETY SWITCH, 30A, 3P, X INDICATES AMP RATING GREATER THAN 30A</div></div> <div><div><div><div></div><div>X</div><div>Y</div></div></div><div>SPECIAL-PURPOSE RECEPTACLE AS DEFINED ON PLANS</div></div> <div><div><div><div></div><div>X</div><div>Y</div></div></div><div>TWO RECEPTACLES IN 2-GANG BOX UNDER COMMON COVER PLATE</div></div> <div><div><div><div></div><div>X</div><div>Y</div></div></div><div>DUPLEX RECEPTACLE</div></div> <div><div><div><div></div><div>X</div><div>Y</div></div></div><div>SIMPLEX RECEPTACLE</div></div> <div><div><div><div></div><div>X</div><div>Y</div></div></div><div>RECESSED FLOOR MOUNTED BOX, QUANTITY AND TYPE OF RECEPTACLES AS INDICATED</div><div>SUBSCRIPTS: X - INDICATES TYPE GFCI - GROUND FAULT CIRCUIT INTERRUPTER IG - ISOLATED GROUND TR - TAMPER RESISTANT PLH - PLUG LOAD HALF CONTROLLED PLD - PLUG LOAD DUAL CONTROLLED USB - USB CHARGING STATION SPD - SURGE PROTECTIVE DEVICE Y - INDICATES CIRCUIT NUMBER FROM PANELBOARD</div></div>		<div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>CEILING/PENDANT/BOLLARD MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>CEILING/PENDANT/BOLLARD MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>CEILING/PENDANT MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>CEILING/PENDANT MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, ALL OR PARTIAL EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, ALL OR PARTIAL EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>DOUBLE-FACED WALL MOUNTED EXIT LIGHT; DIRECTIONAL ARROWS (IF REQUIRED) AS INDICATED ON PLANS</div></div><div><div><div><div><div></div><div>X</div><div>Y</div></div></div><div>SINGLE-FACED WALL MOUNTED EXIT LIGHT; DIRECTIONAL ARROWS (IF REQUIRED) AS INDICATED ON PLANS</div><div>LIGHTING FIXTURE SUBSCRIPTS: X - INDICATES LUMINAIRE TYPE PER LUMINAIRE SCHEDULE Y - INDICATES CIRCUIT NUMBER FROM PANELBOARD Z - INDICATES CONTROLLING SWITCH (IF REQUIRED) NL - NIGHT LIGHT UNSWITCHED</div></div><div><div><div><div><div></div><div>Y</div><div>X</div></div></div><div>WALL SWITCH SUBSCRIPTS: X - INDICATES TYPE NONE - SINGLE POLE 2 - DOUBLE POLE 3 - THREE-WAY 4 - FOUR-WAY K - KEY SWITCH P - PILOT LIGHT L - LIGHTED HANDLE DM - DIMMING MC - MOMENTARY CONTACT T - TIMER Y - INDICATES CONTROLLING SWITCH (IF REQUIRED)</div></div><div><div><div><div></div><div>PC</div></div><div>PHOTOCELL</div></div><div><div><div><div></div><div>TC</div></div><div>TIME CLOCK</div></div><div><div><div><div></div><div>OSX</div></div><div>LIGHTING CONTROL OCCUPANCY SENSOR, WALL MOUNTED, X INDICATES SPECIFIC TYPE AS SPECIFIED</div></div><div><div><div><div></div><div>OSX</div></div><div>LIGHTING CONTROL OCCUPANCY SENSOR, CEILING MOUNTED, X INDICATES SPECIFIC TYPE AS SPECIFIED</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>		<div>GENERAL NOTES: 1. NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT. 2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.</div> <div>ABBREVIATIONS A, AMP AMPERE AFF ABOVE FINISH FLOOR AIC AMPS INTERRUPTING CAPACITY AWG AMERICAN WIRE GAGE CKT CIRCUIT FC FOOT-CANDLES GND GROUND HVAC HEATING, VENTILATING AND AIR CONDITIONING KCMIL THOUSAND CIRCULAR MILS KVA KILOVOLT AMPERES KW KILOWATT LED LIGHT-EMITTING DIODE LTG, LTS LIGHTING MAX MAXIMUM MIN MINIMUM MECH MECHANICAL MISC MISCELLANEOUS OCP OVER CURRENT PROTECTION PH PHASE P POLE PVC POLYVINYL CHLORIDE RGS RIGID GALVANIZED STEEL V VOLT VA VOLT AMPERE W WATT, WIRE</div>	
		COMMUNICATION SYMBOLOGY					
		<div><div><div><div></div></div><div>WALL MOUNTED TELEPHONE OUTLET</div></div><div><div><div><div></div></div><div>WALL MOUNTED DATA OUTLET</div></div><div><div><div><div></div></div><div>WALL MOUNTED COMBINATION TELEPHONE AND DATA OUTLET</div></div><div><div><div><div></div></div><div>RECESSED FLOOR MOUNTED TELEPHONE OUTLET</div></div><div><div><div><div></div></div><div>RECESSED FLOOR MOUNTED DATA OUTLET</div></div><div><div><div><div></div></div><div>RECESSED FLOOR MOUNTED COMBINATION TELEPHONE AND DATA OUTLET</div></div></div></div></div></div></div></div>					



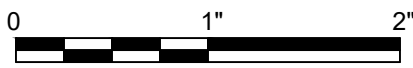
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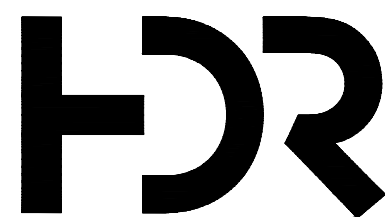
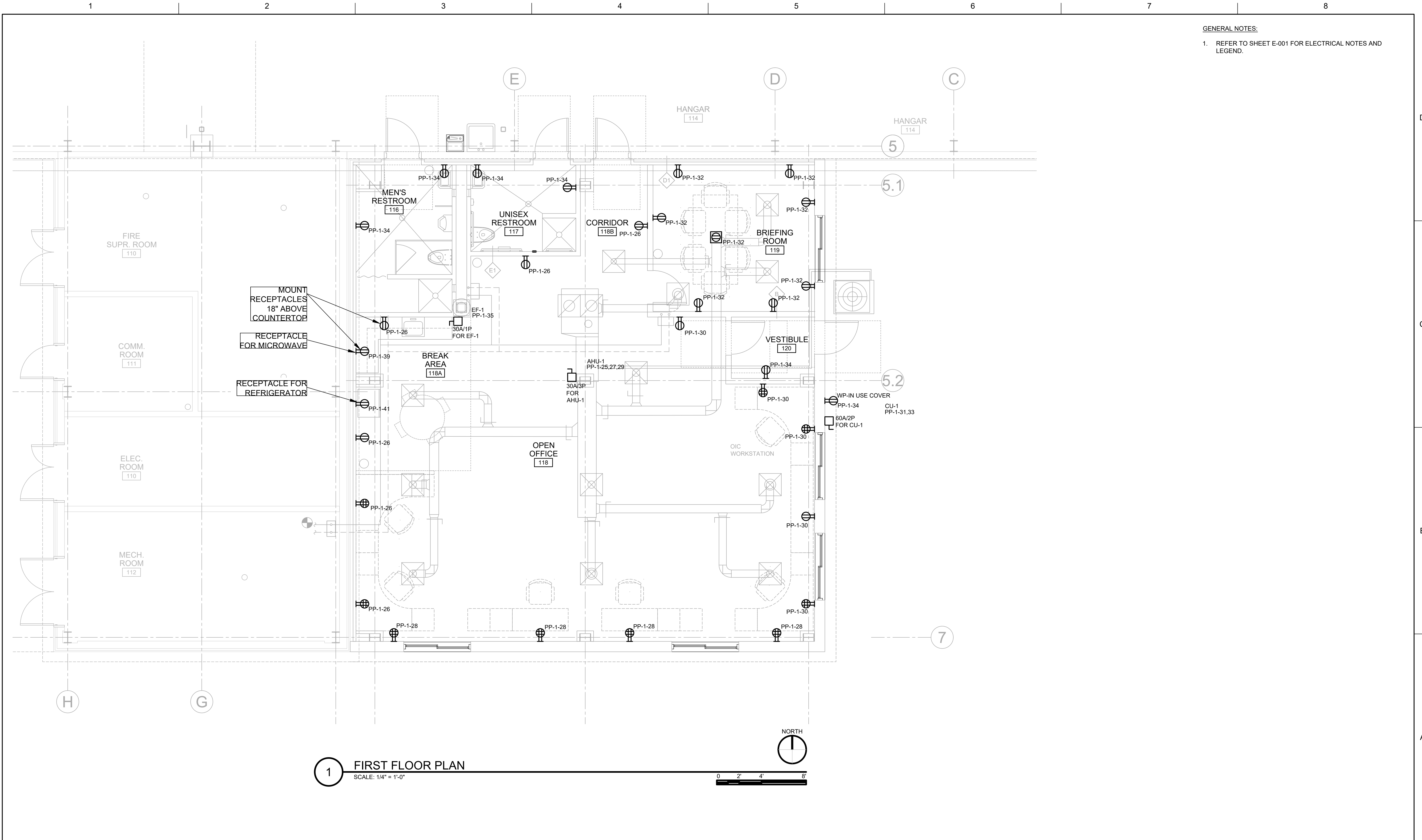
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
ELECTRICAL NOTES & LEGEND



FILENAME
SCALE

SHEET
E-001



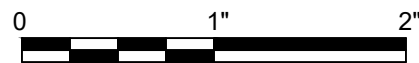
ISSUE9		
ISSUE8		
ISSUE7		
ISSUE6		
ISSUE5		
ISSUE4		
ISSUE3	27 AUG 2021	B-3 SUBMISSION
ISSUE2	8 JUN 2021	B-2 SUBMISSION
ISSUE1	20 APR 2021	B-1 SUBMISSION
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	ANTHONY BROZIER
CIVIL	A. BROZIER
STRUCTURAL	J. JAECKEL
ARCHITECTURAL	A. STANISCI
ELECTRICAL	I. DENHOLM
MEP	D. SPENCER
FIRE PROTECTION	E. SHOWALTER
CYBERSECURITY	J. MONFORTON
PROJECT NUMBER	10256943



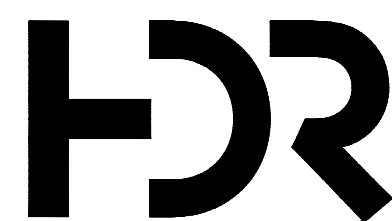
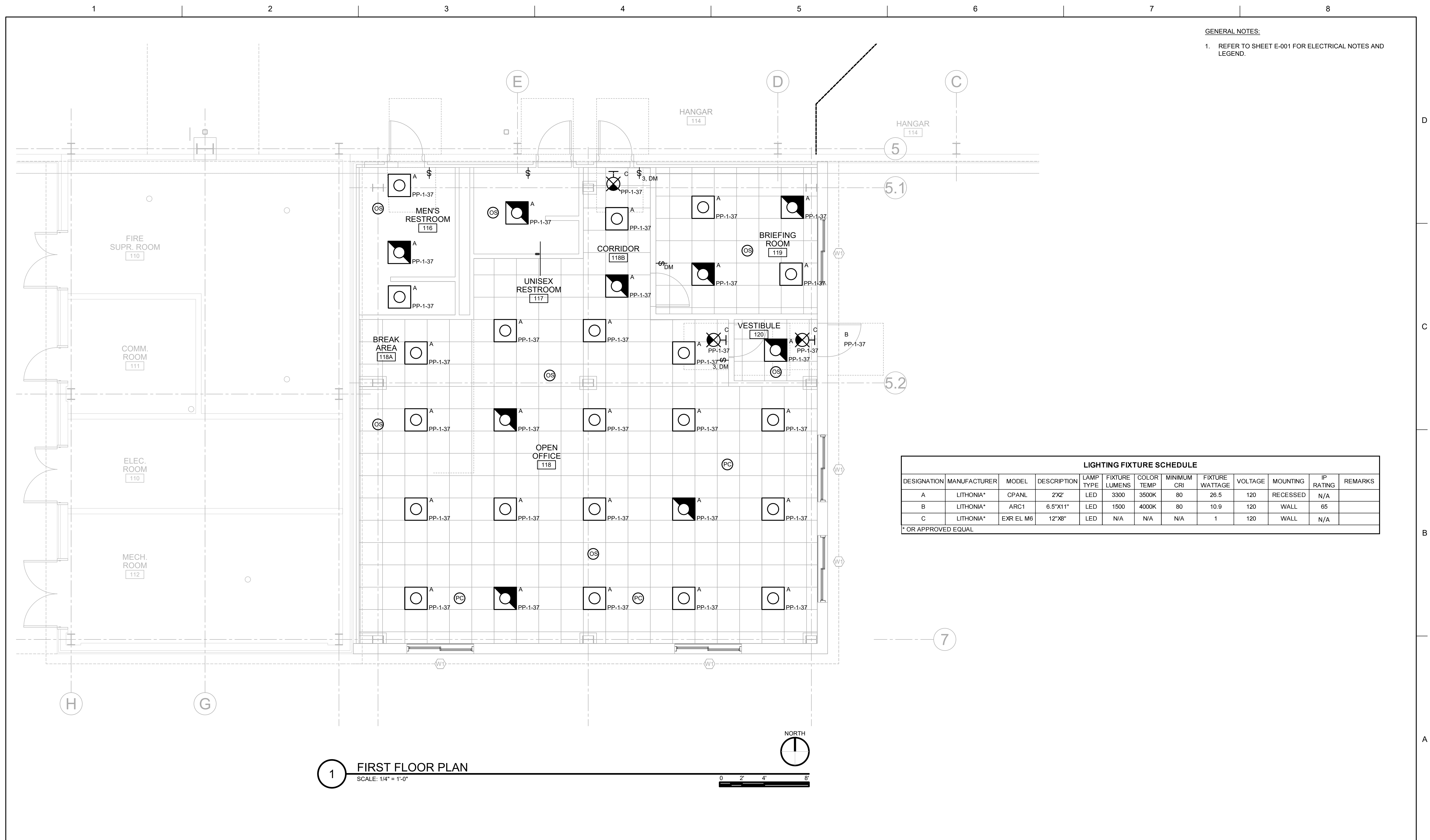
FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY

FPBB162002
POWER PLAN



FILENAME
SCALE

SHEET
E-101



3	27 AUG 2021	B-3 SUBMISSION
2	8 JUN 2021	B-2 SUBMISSION
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**FPBB162002 CONSTRUCT MQ-9 SHOPS LAUNCH
AND RECOVERY ELEMENT
FORT DRUM MILITARY RESERVATION, NY**



FILENAME	-
SCALE	-

SHEET
E-102

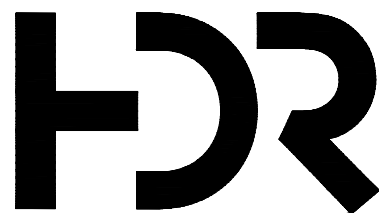
PANELBOARD NO:		PP-1 SECTION A														
VOLTAGE:		208/120		BUS RATING (A):		225		ENCLOSURE:								
PHASE:		3		MAIN OC DEVICE (A/PHASE):		225		MOUNTING:		SUFACE						
WIRE:		4+GND		INTERRUPTING RATING (KA):		14		LOCATION:		ELECTRIC ROOM						
200% NEUTRAL:		NO		SERVICE ENTRANCE LABEL:		NO										
CKT NO.	DESCRIPTION	CONNECTED LOAD (VA)				OCP		OCP		CONNECTED LOAD (VA)				DESCRIPTION	CKT NO.	
		LTS	REC	MECH	MISC	AMPS	P	AMPS	P	LTS	REC	MECH	MISC			
1	FIRE ALARM PANEL					20	1	A	20		1,260			FIRE PUMP ROOM RECEPT	2	
3	COMM/ELEC ROOM		1,260			20		B	20	1	360			COMM ROOM DEDICATED	4	
5	COMM ROOM DEDICATED		360			20		C	20		1,080			MECH ROOM/EXT	6	
7	ADMIN OFFICE		720			20	1	A	20	1	720			ADMIN OFFICE	8	
9	KITCHEN RECEPT		1,000			20	1	B	20	1	1,000			KITCHEN COUNTER	10	
11	KITCHEN COUNTER		1,000			20	1	C	20	1	1,000			REFRIGERATOR	12	
13	MEN'S ROOM RECEPT		1,000			20	1	A	20	1	1,000			WOMEN'S RM RECEPT	14	
15	ADMIN OFFICE		720			20		B	20		540			ADMIN EXTERIOR RECEPT	16	
17	ADMIN OFFICE		720			20		C	20		900			STORAGE ROOM RECEPT	18	
19	BREIFING #1		720			20		A	20		1,000			BRIEFING #1/ADMIN	20	
21	MASS NOTIFICATION					20		B	20					MONACO TRANSMITTER	22	
23	WATER HTR/SOLAR PNL							C	20					RELEASE PANEL	24	
25	AHU-1			480				A	20	1	1,440			RM 118 RECEPTS	26	
27				480		15	3	B	20	1	1,440			RM 118 RECEPTS	28	
29				480				C	20	1	1,440			RM 118 RECEPTS	30	
31	CU-1			2,725		45	2	A	20	1	1,440			RM 119 RECEPTS	32	
33				2,725				B	20	1	1,080			RM 116,117,120,EXT REC	34	
35	EF-1			13		15	1	C	15	1	3			EXIT LIGHTS	36	
37	LTS 116,117,118,119,120,EXT	807				20	1	A							38	
39	MICROWAVE		1,000			20	1	B						TVSS	40	
41	REFRIGERATOR		1,000			20	1	C						SEE NOTE 3	42	
LOAD SUMMARY																
		LTS	REC	MECH	MISC	SPARE	TOTAL					PHASE BALANCE				
CONNECTED LOAD (KVA)		0.8	25.2	6.9	0.0	---	32.9	208 LINE-TO-LINE VOLTS				PHASE A (KVA)				13
DEMAND FACTOR		1.25	NEC	1.00	1.00	20%	---					91 CONNECTED AMPS				PHASE B (KVA)
DESIGN LOAD (KVA)		1.0	17.6	6.9	0.0	6.6	32.1	89 DESIGN AMPS				PHASE C (KVA)				8

- GENERAL NOTES:
- REFER TO SHEET E-001 FOR ELECTRICAL NOTES AND LEGEND.
 - BOLD TEXT IS USED IN EXISTING PANEL SCHEDULES TO SHOW NEW WORK.
 - INSTALL OVERCURRENT PROTECTION DEVICE FOR TVSS PER MANUFACTURER'S RECOMMENDATION.

1

EXISTING PANEL PP-1 SECTION A

NOT TO SCALE

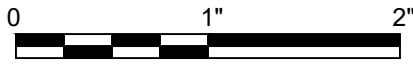


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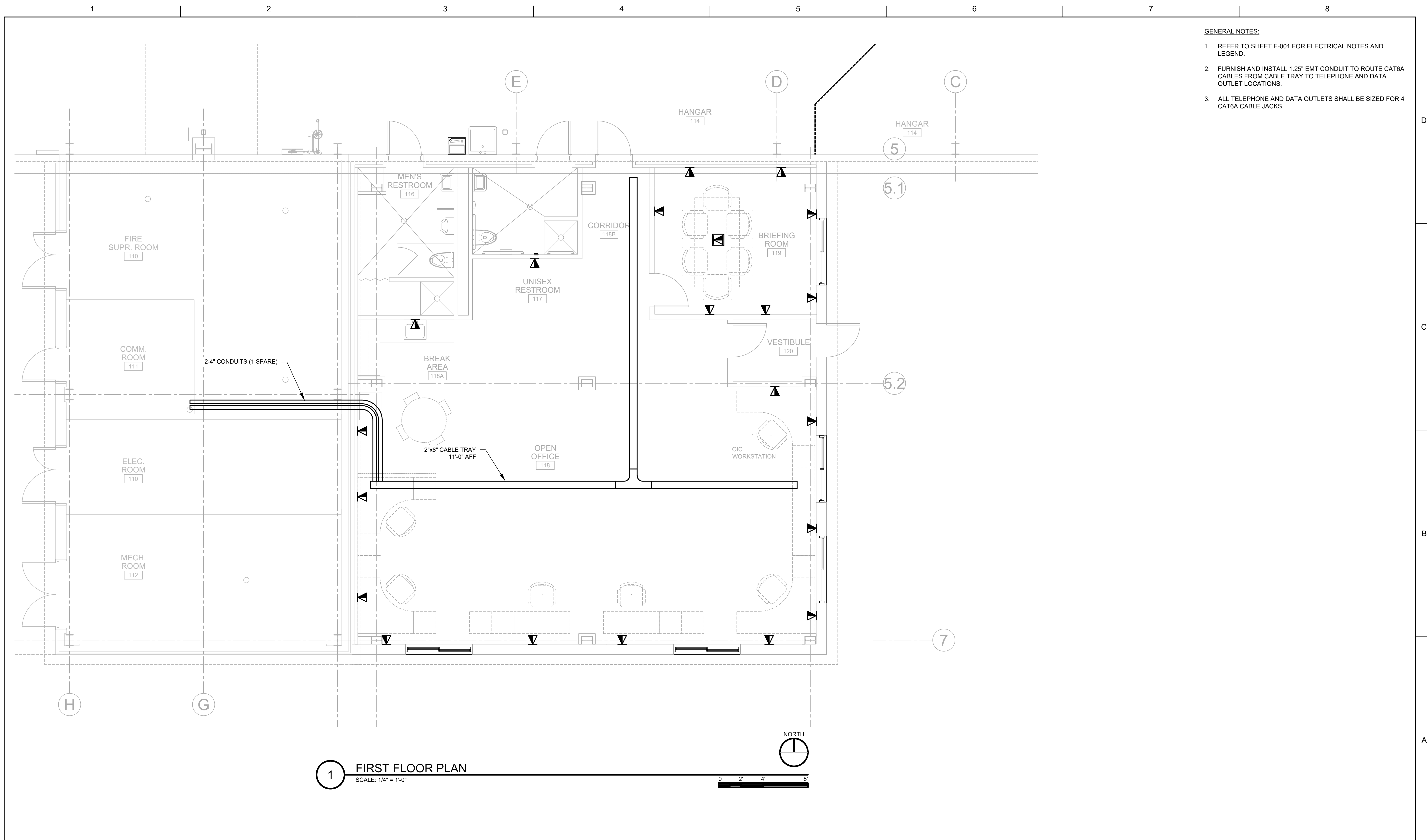


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FPBB162002
ELECTRICAL DETAILS



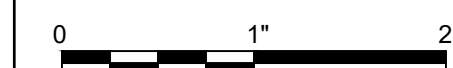
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FPBB162002
TELECOMMUNICATIONS PLAN



FILENAME	-
SCALE	-

ET-101