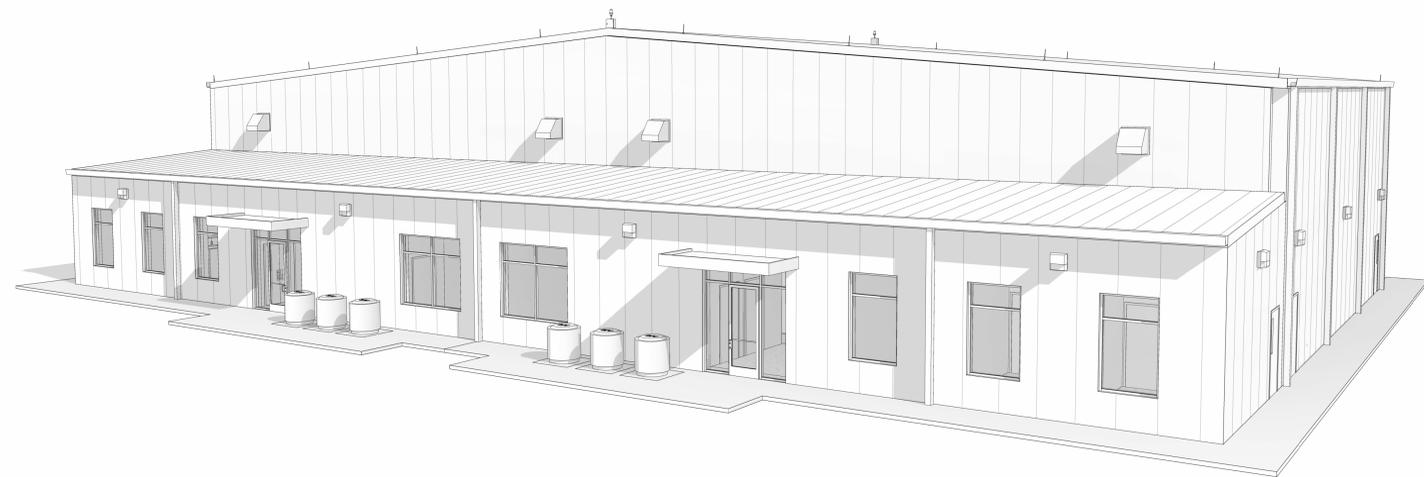




# Schedule 1: 2-Unit Box Hangar

Lumberton, NC  
28358

100% Construction Documents  
January 17, 2025



Schedule 1:  
2-Unit Box Hangar

Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**SCHEDULE 1  
COVER SHEET**

SHEET NUMBER  
**G-000**

# SHEET INDEX

## SCHEDULE 1: 2-UNIT BOX HANGAR

### GENERAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	G-000	SCHEDULE 1 COVER SHEET
		01/17/2025	G-001	SCHEDULE 1 SHEET INDEX
		01/17/2025	G-002	GENERAL NOTES
		01/17/2025	G-003	PARTITION DETAILS
		01/17/2025	G-004	APPENDIX E
		01/17/2025	LS-101	LIFE SAFETY PLAN

### CIVIL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	GA-001	CONSTRUCTION SAFETY PLAN (SCHEDULE 1)
		01/17/2025	GA-101	CONSTRUCTION PHASING PLAN (SCHEDULE 1)
		01/17/2025	VA-101	SURVEY CONTROL PLAN (SCHEDULE 1)
		01/17/2025	CA-101	EXISTING CONDITIONS AND REMOVAL PLAN (SCHEDULE 1)
		01/17/2025	CA-111	SITE LAYOUT PAVING AND MARKING PLAN (SCHEDULE 1)
		01/17/2025	CA-121	GRADING AND DRAINAGE PLAN (SCHEDULE 1)
		01/17/2025	CA-140	SEDIMENTATION & EROSION CONTROL PLAN - 1 (SCHEDULE 1)
		01/17/2025	CA-141	SEDIMENTATION & EROSION CONTROL PLAN - 2 (SCHEDULE 1)
		01/17/2025	CA-161	UTILITY PLAN (SCHEDULE 1)
		01/17/2025	CA-221	DRAINAGE PROFILES (SCHEDULE 1)
		01/17/2025	CA-401	TYPICAL PAVEMENT SECTIONS (SCHEDULE 1)
		01/17/2025	CA-510	PAVING DETAILS (SCHEDULE 1)
		01/17/2025	CA-520	DRAINAGE DETAILS (SCHEDULE 1)
		01/17/2025	CA-540	SEDIMENTATION & EROSION CONTROL DETAILS - 1 (SCHEDULE 1)
		01/17/2025	CA-541	SEDIMENTATION & EROSION CONTROL DETAILS - 2 (SCHEDULE 1)

### STRUCTURAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	S-001	GENERAL NOTES
		01/17/2025	S-002	ABBREVIATIONS AND SYMBOL LEGEND
		01/17/2025	S-101	FOUNDATION PLAN
		01/17/2025	S-301	PEMB SECTIONS AND DETAILS
		01/17/2025	S-302	PEMB PIER DETAILS

### ARCHITECTURAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	A-101	FIRST FLOOR PLAN
		01/17/2025	A-111	FIRST FLOOR CEILING PLAN
		01/17/2025	A-121	ROOF PLAN
		01/17/2025	A-201	BUILDING ELEVATIONS
		01/17/2025	A-301	BUILDING SECTIONS
		01/17/2025	A-311	WALL SECTIONS
		01/17/2025	A-321	SECTION DETAILS
		01/17/2025	A-401	ENLARGED PLANS
		01/17/2025	A-410	ENLARGED PLANS - ADD ALTERNATES
		01/17/2025	A-411	ENLARGED RESTROOM PLAN AND ELEVATIONS
		01/17/2025	A-412	ENLARGED CEILING PLANS - ADD ALTERNATES
		01/17/2025	A-501	PLAN DETAILS
		01/17/2025	A-601	DOOR SCHEDULE
		01/17/2025	A-602	WINDOW TYPES
		01/17/2025	A-701	FINISH PLAN

### PLUMBING

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	P-001	PLUMBING LEGEND, SCHEDULES, AND DETAILS
		01/17/2025	P-101	PLUMBING PLANS
		01/17/2025	P-401	ENLARGED PLUMBING- BASE BID
		01/17/2025	P-402	ENLARGED PLUMBING- ALTERNATE BID

### MECHANICAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	M-001	MECHANICAL LEGEND, NOTES AND ENERGY SCHEDULE
		01/17/2025	M-101	MECHANICAL PLAN
		01/17/2025	M-102	MECHANICAL ROOF
		01/17/2025	M-401	ENLARGED MECHANICAL PLANS
		01/17/2025	M-402	ENLARGED MECHANICAL PLANS- ADD ALTERNATE
		01/17/2025	M-601	MECHANICAL SCHEDULES
		01/17/2025	M-701	MECHANICAL CONTROL DIAGRAMS

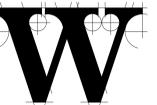
### ELECTRICAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	E-001	ELECTRICAL NOTES, LEGENDS AND SCHEDULES
		01/17/2025	E-101	ELECTRICAL BASE BID PLAN
		01/17/2025	E-102	ELECTRICAL POWER PLAN ALTERNATE AL-01
		01/17/2025	E-103	ELECTRICAL ENLARGED POWER PLANS ALTERNATE ALT-02
		01/17/2025	E-111	ELECTRICAL BASE BID LIGHTING PLAN
		01/17/2025	E-112	ELECTRICAL ALTERNATE ALT-01 LIGHTING PLANS
		01/17/2025	E-113	ELECTRICAL ENLARGED LIGHTING PLANS
		01/17/2025	E-501	ELECTRICAL DETAILS
		01/17/2025	E-502	ELECTRICAL DETAILS
		01/17/2025	E-601	ELECTRICAL PANEL SCHEDULE BASE BID
		01/17/2025	E-602	ELECTRICAL PANEL SCHEDULES ALTERNATE ALT-01
		01/17/2025	E-701	ELECTRICAL RISER



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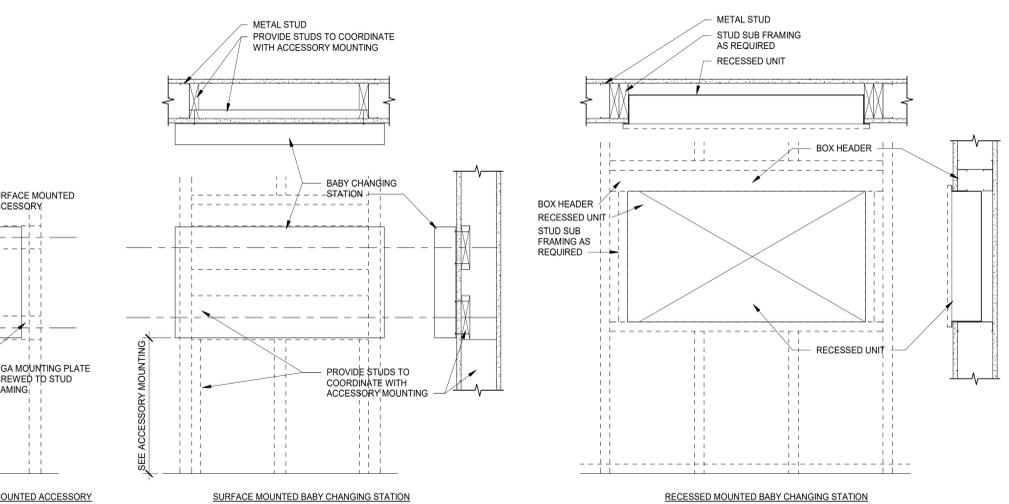
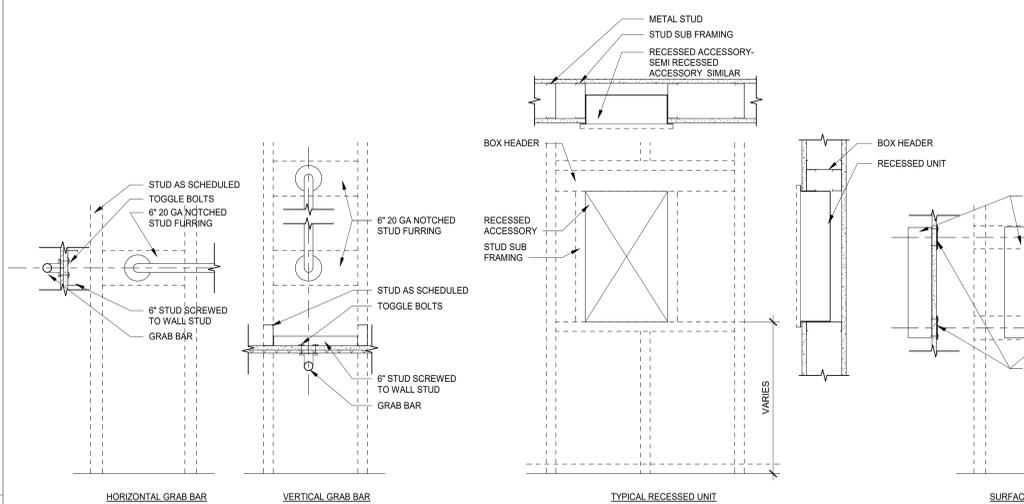
### REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

## SCHEDULE 1 SHEET INDEX

SHEET NUMBER

# G-001

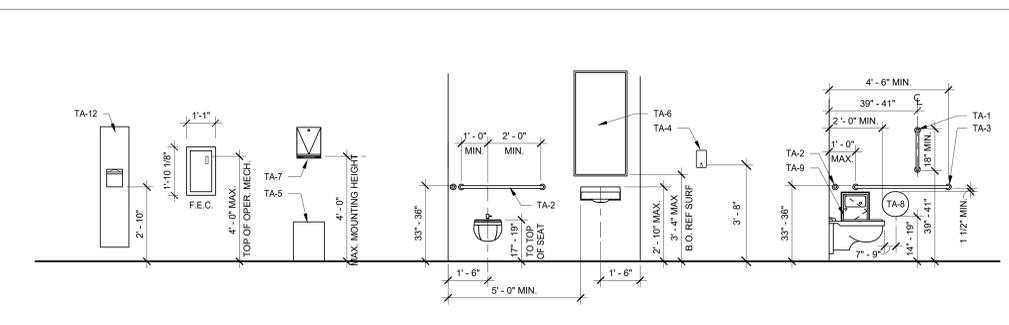
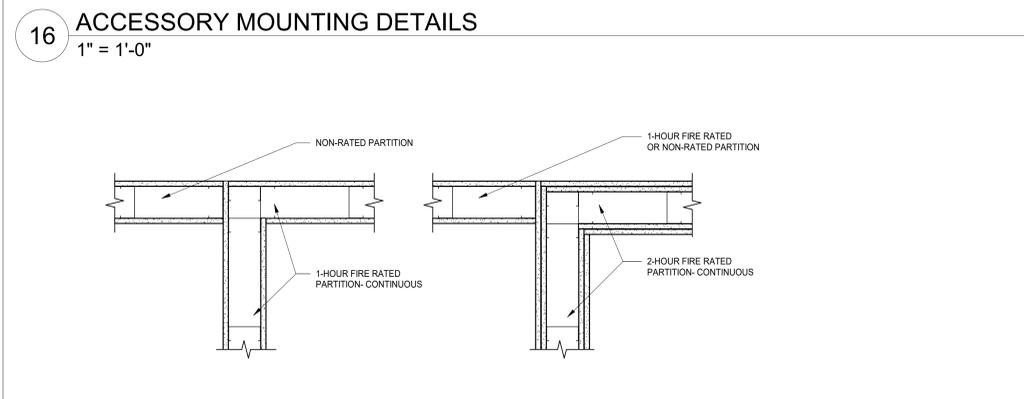


**SYMBOLS USED AS ABBREVIATIONS:**

<	ANGLE	LB./LBS.	POUND/POUNDS
∅	CENTERLINE	#	PLUS OR MINUS
Ø	DIAMETER (ROUND)	W/	WITH
#	NUMBER	W/O	WITHOUT

**ABBREVIATIONS:**

A/C	AIR CONDITIONING	MAINT	MAINTENANCE
ADMIN	ADMINISTRATION	MATL	MATERIAL
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
ALT	ALTERNATE	MECH	MECHANICAL
ALUM	ALUMINUM	MEZZ	MEZZANINE
APPROX	APPROXIMATE(LY)	MFG	MANUFACTURING
ARCH	ARCHITECT(URAL)	MFR	MANUFACTURER
AUTO	AUTOMATIC	MIN	MINIMUM
AUX	AUXILIARY	MISC	MISCELLANEOUS
AV	AUDIO/VISUAL	MO	MASONRY OPENING
BITUM	BITUMINOUS	MR	MOISTURE RESISTANT
BL	BUILDING LINE	MTD	MOUNTED
BLDG	BUILDING	MTG	MOUNTING
BN	BULL NOSE	MTL	METAL
BOS	BOTTOM OF STEEL	NORTH	NORTH
BOT	BOTTOM	NIC	NIC IN CONTRACT
CAB	CABINET	NOM	NOMINAL
CJ	CONTROL JOINT	NON COMB	NON-COMBUSTIBLE
CL	CENTER LINE	NTS	NOT TO SCALE
CLG	CEILING	OC	ON CENTER
CLG HT	CEILING HEIGHT	OD	OUTSIDE DIAMETER
CLO	CLOSET	OPP	OPPOSITE
CLR	CLEARANCE	OPT	OPTIONAL
CMU	CONCRETE MASONRY UNIT	PCF	POUNDS PER CUBIC FOOT
COL	COLUMN	PLAM	PLASTIC LAMINATE
CONC	CONCRETE	PLF	POUNDS PER LINEAR FEET
CONF	CONFERENCE	PLYWD	PLYWOOD
CONT	CONTINUE/CONTINUOUS	PNL	PANEL
CORR	CORRIDOR	PAIR	PAIR
CU FT	CUBIC FOOT	PREFAB	PREFABRICATED
CU YD	CUBIC YARD	PREFIN	PREFINISH
DEMO	DEMOLISH	PRKG	PARKING
DEPT	DEPARTMENT	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DF	DRINKING FOUNTAIN	PT	PAINT, POST-TENSIONED, PRE-TREATED
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE (PLASTIC)
DIAG	DIAGONAL	QUARTER	QUARTER
DIM	DIMENSION	QTY	QUANTITY
DIV	DIVISION	R	RADIUS, RISER
DS	DOWNSPOUT	RCP	REFLECTED CEILING PLAN
E	EAST	RD	ROOF DRAIN
EACH	EACH	REF	REFRIGERATOR, REFERENCE
EIPS	EXTERIOR INSULATION & FINISH SYSTEM	REQD	REQUIRED
EJ	EXPANSION JOINT	RL	ROOF LEADER
EL	ELEVATION	RM	ROOM
ELEC	ELECTRICAL	RO	ROUGH OPENING
ELEV	ELEVATOR	ROW	RIGHT OF WAY
ENCL	ENCLOSE(D)	S	SOUTH
EOS	EDGE OF SLAB	SC	SOLID CORE
EQU	EQUAL	SD	STORM DRAIN
EQUIP	EQUIPMENT	SECT	SECTION
EWC	ELECTRIC WATER COOLER	SF	SQUARE FEET
EXIST	EXISTING	SIM	SIMILAR
EXP JT	EXPANSION JOINT	SPEC	SPECIFICATION
EXT	EXTERIOR	SPKR	SPEAKER
EXT	FACE TO FACE	SQ	SQUARE
FD	FLOOR DRAIN	SS	STAINLESS STEEL
FE	FIRE EXTINGUISHER	STD	STANDARD
FEC	FIRE EXTINGUISHER CABINET	STOR	STORAGE
FF EL	FINISH FLOOR ELEVATION	SUSP	SUSPENDED
FHC	FIRE HOSE CABINET	SYS	SYSTEM
FIN FLR	FINISHED FLOOR	T	TREAD
FLR	FLOOR, FILLER	TEL	TELEPHONE
FOC	FACE OF CURB	TEMP	TEMPORARY
FOF	FACE OF FINISH	TOC	TOP OF CONCRETE, CURB
FOM	FACE OF MASONRY	TOF	TOP OF FOOTING
FOS	FACE OF SLAB	TOJ	TOP OF JOIST
FOW	FACE OF WALL	TOM	TOP OF MASONRY
FT	FOOT, FEET	TOP	TOP OF PARAPET
FTG	FOOTING	TOS	TOP OF SLAB
FURN	FURNISH, FURNITURE	TOW	TOP OF WALL
GA	GAGE	TRTD	TREATED
GALV	GALVANIZED	TV	TELEVISION
GC	GENERAL CONTRACTOR	TYP	TYPICAL
GYP BD	GYPSUM BOARD	UL	UNDERWRITERS LABORATORIES
GYP PLAS	GYPSUM PLASTER	UNO	UNLESS NOTED OTHERWISE
HC	HANDICAP	VERT	VERTICAL
HD	HEAVY DUTY	VEST	VESTIBULE
HDWR	HARDWOOD	VIF	VERIFY IN FIELD
HM	HARDWARE	W	WEST, WIDE
HM	HOLLOW METAL	W/	WITH
HORIZ	HORIZONTAL	W/O	WITHOUT
HT	HEIGHT	WW	WALL TO WALL
HVAC	HEATING, VENTILATION & AIR CONDITIONING	WC	WATER CLOSET
ID	INSIDE DIAMETER	WD	WOOD
INCL	INCLUDE(D), (ING)	WP	WORKING POINT, WATERPROOFING
INFO	INFORMATION	WR	WATER REPELLENT
INSUL	INSULATION	WT	WEIGHT
INT	INTERIOR	WWF	WELDED WIRE FABRIC
JAN CLO	JANITOR CLOSET	YD	YARD
KIT	KITCHEN		
KO	KNOCKOUT		
LAB	LABORATORY		
LAM	LAMINATE		
LAU	LAUNDRY		
LAV	LAVATORY		
LF	LINEAR FEET		
LVR	LOUVER		



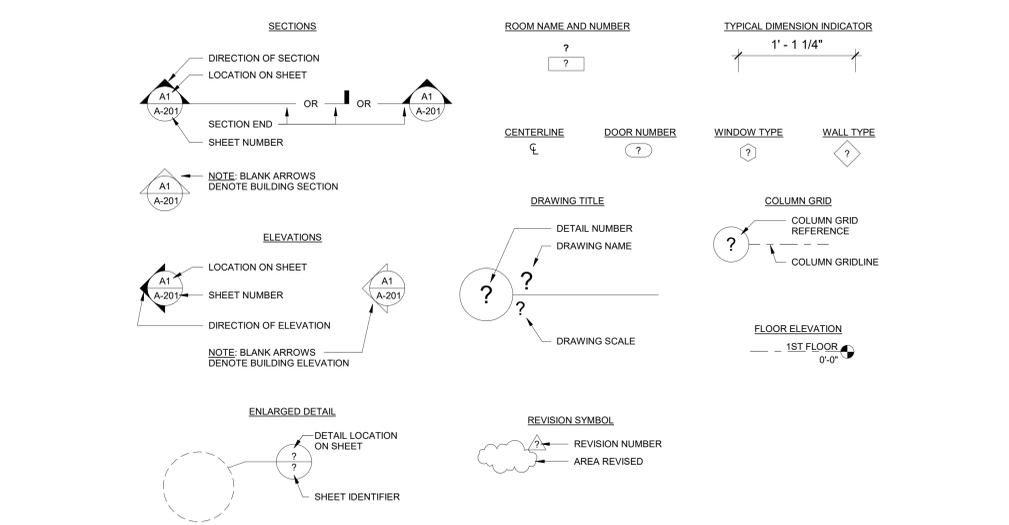
**8 MATERIAL LEGEND**  
 N.T.S.

	EARTH		PLASTER, CEMENT, SAND, GROUT		SPRAY-ON FIREPROOFING		BRICK
	POROUS FILL (STONE OR GRAVEL)		STEEL, IRON		BATTLOOSE FILL INSULATION		GLASS
	ROCK		ALUMINUM		EXTRUDED POLYSTYRENE		CONCRETE / PLASTER / STUCCO
	LIGHTWEIGHT CONCRETE (OR CONCRETE FILL)		WOOD (FINISH)		ACOUSTICAL TILE		SHINGLES / SIDING
	STRUCTURAL CONCRETE (CAST IN PLACE, ETC.)		WOOD (ROUGH)		GYPSUM WALL BOARD		
	BRICK (COMMON OR FACE)		WOOD BLOCKING		CARPET AND PAD		
	CONC. MASONRY UNITS (C.M.U.)		PLYWOOD				

(NOT ALL MATERIALS APPLICABLE)

**9 MATERIAL LEGEND**  
 1/8" = 1'-0"

	TYPICAL DIMENSION INDICATOR		WINDOW TYPE		WALL TYPE
	CENTERLINE		DOOR NUMBER		COLUMN GRID REFERENCE
	DRAWING TITLE		COLUMN GRIDLINE		FLOOR ELEVATION
	DETAIL NUMBER		DRAWING SCALE		
	REVISION SYMBOL				



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REVISIONS

DATE: 01/17/2025  
 PROJECT NUMBER: 2024  
 SHEET TITLE: GENERAL NOTES

SHEET NUMBER  
**G-002**

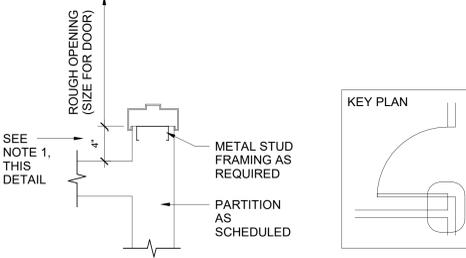
City of **LUMBERTON**  
 North Carolina

Schedule 1:  
**2-Unit Box Hangar**

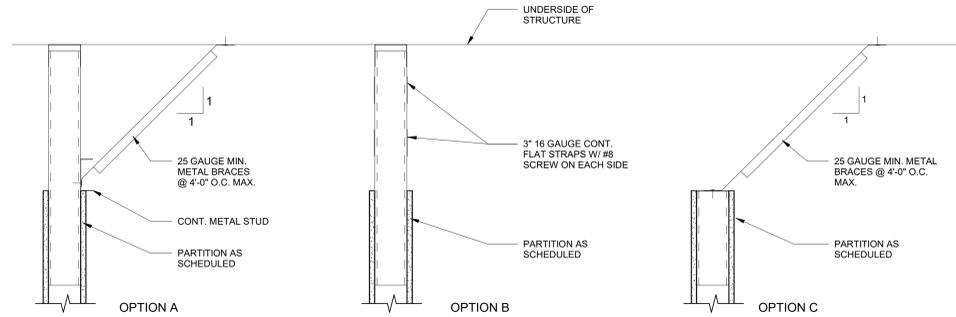
Lumberton, NC 28358

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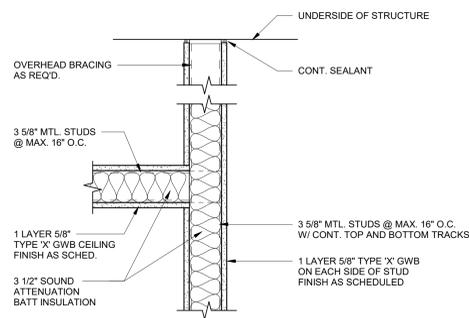
**NOTES:**  
 1. GC TO COORDINATE JAMB DEPTH WITH WIDTH OF TRIM.  
 2. GC TO COORDINATE DOOR LOCATION W/ JAMB DETAIL, TYP.



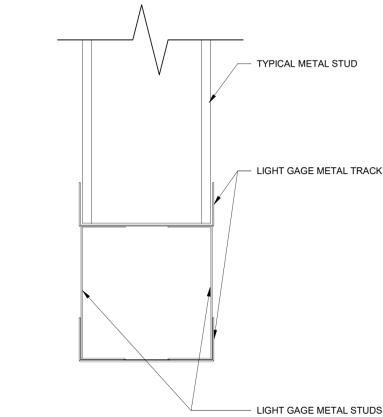
**16** TYPICAL DOOR OFFSET DETAIL  
 1 1/2" = 1'-0"



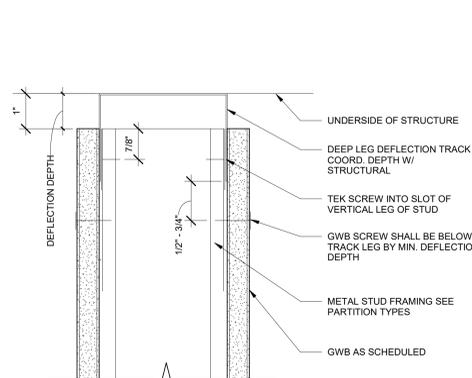
**17** ABOVE-CEILING STUD TERMINATION DETAILS  
 1 1/2" = 1'-0"



**11** TYPICAL GWB CEILING DETAIL  
 1 1/2" = 1'-0"



**12** TYPICAL STUD HEADER DETAIL  
 6" = 1'-0"



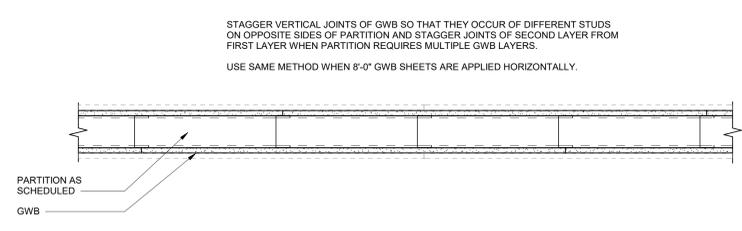
**13** DEFLECTION TRACK DETAIL  
 6" = 1'-0"

**PARTITION NOTES**

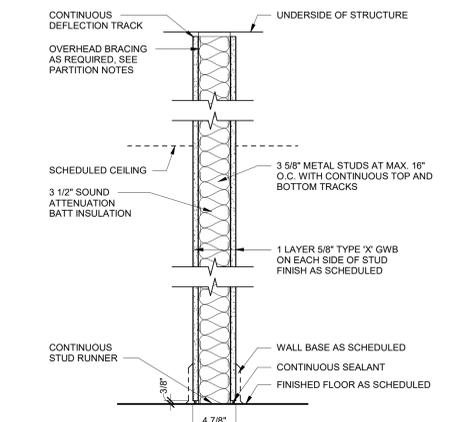
- ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
- UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
- HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
- ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
- ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
- ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFING MATERIAL ONLY. SAFING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
- ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
- STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-Self-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETS OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
- ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:  
 ATTACH A 3/8" OR 6" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 6" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3/8" OR 6" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
- KICKERS SHALL HAVE CLIP ANGLES (14 GA MIN) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
- DO NOT FASTEN TOP RUNNER TO STUDS; CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
- SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
- WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.
- WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
- PURSUANT TO NCSBC 803 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETS AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.
- WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
- ELECTRICAL AND TELECOM ROOMS: IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-0" AFF TO 8'-0" AFF, LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
- ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
- PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TVS, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
- USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
- SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
- ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNERGUARDS, SEE SPECIFICATIONS.

METAL STUD GAUGES:	LOCATION	LENGTH	GAUGE
	PARTITION	UP TO 6'-0"	20 GAUGE
	PARTITION	UP TO 10'-0"	18 GAUGE
	PARTITION	UP TO 12'-0"	16 GAUGE
	PARTITION	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
	BULKHEAD	UP TO 6'-0"	25 GAUGE
	BULKHEAD	UP TO 8'-0"	20 GAUGE
	BULKHEAD	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWGS.
	SOFFIT	UP TO 4'-0"	25 GAUGE
	SOFFIT	UP TO 6'-0"	20 GAUGE. SEE SPECIFIC DETAILS FOR SUPPORT SUSPENDED SYSTEM MUST BE USED
	SOFFIT	GREATER THAN 6'-0"	16 GA (2 STUDS AT ALL LOCATIONS)
	DOOR/ WINDOW HEAD AND JAMB	U.N.O.	

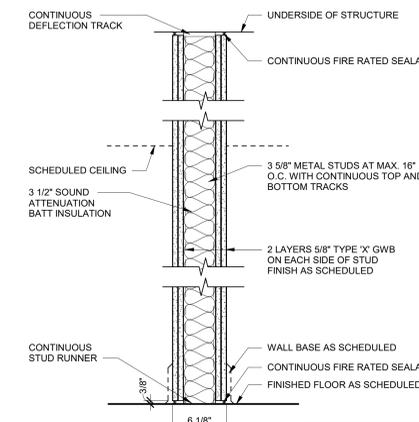
NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.



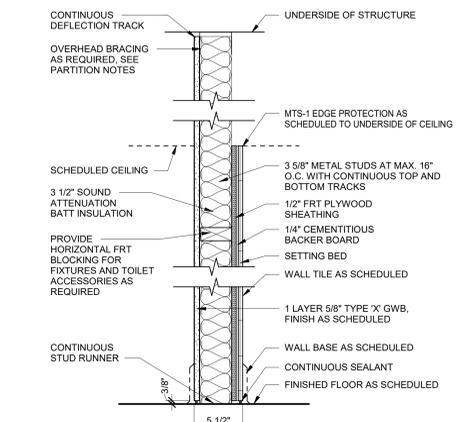
STAGGER VERTICAL JOINTS OF GWB SO THAT THEY OCCUR OF DIFFERENT STUDS ON OPPOSITE SIDES OF PARTITION AND STAGGER JOINTS OF SECOND LAYER FROM FIRST LAYER WHEN PARTITION REQUIRES MULTIPLE GWB LAYERS.  
 USE SAME METHOD WHEN 8'-0" GWB SHEETS ARE APPLIED HORIZONTALLY.



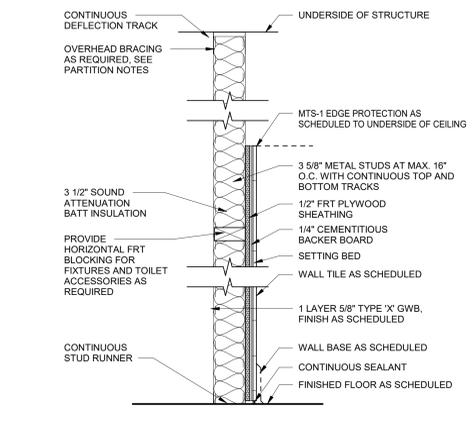
D1a	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A



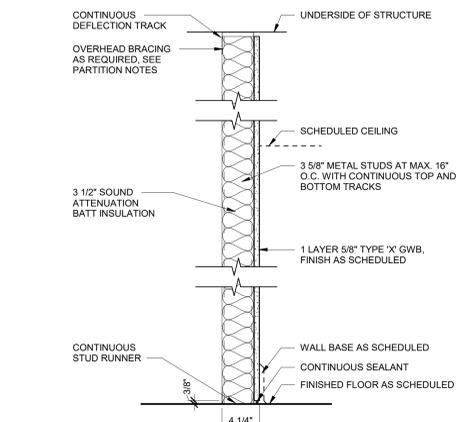
D1e	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	2 HR	U419	N/A	N/A



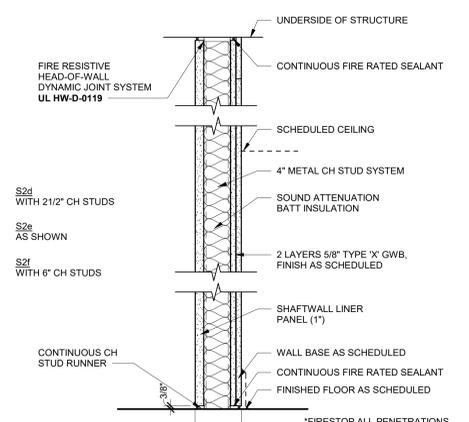
D3a	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A



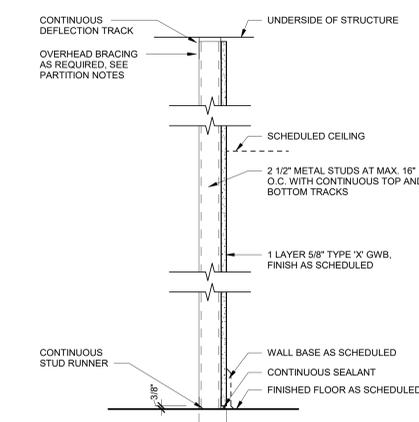
D3b	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A



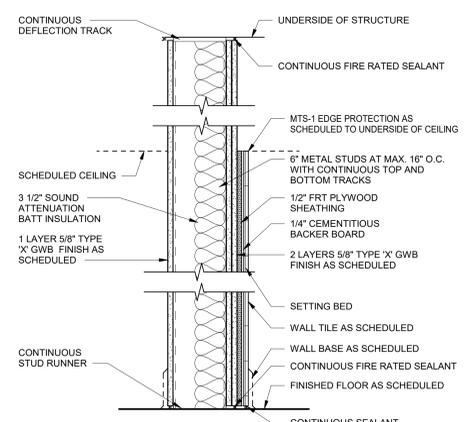
D4a	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A



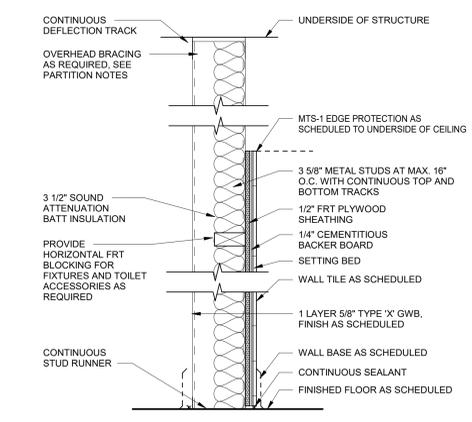
S2e	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	2 HR	U415	N/A	N/A



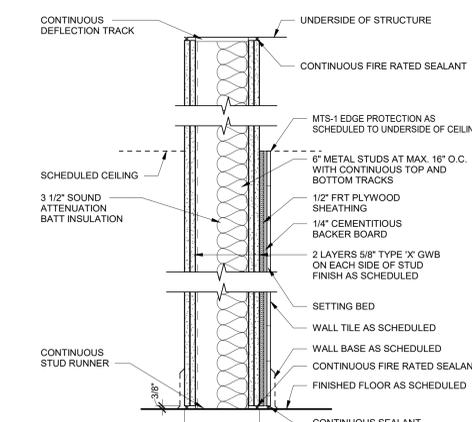
C4a	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A



E2e	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A



E3a	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A



E3e	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	2 HR	U419	N/A	N/A



**Schedule 1:  
 2-Unit Box Hangar**

Lumberton, NC 28358



PO BOX 5510  
 CHARLOTTE, NC 28299  
 (704) 331-9747  
 www.twgarchitects.com  
 NC Cert. No.: 51140

PROJECT MANAGER / CIVIL ENGINEER  
**TALBERT & BRIGHT, INC.**  
 4810 SHELLEY DRIVE  
 WILMINGTON, NC 28405  
 PHONE: 910-763-5350 NC LICENSE NO. C-0713  
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STRUCTURAL ENGINEER  
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WATER & SEWER ENGINEER  
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**REVISIONS**

DATE 01/17/2025  
 PROJECT NUMBER 2024  
 SHEET TITLE

**PARTITION DETAILS**

SHEET NUMBER  
**G-003**

**2018 APPENDIX B  
BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS  
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)**  
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: LBT Box Hangars with Office  
Address: [number, street, city, state, zip]  
Owner/Authorized Agent: [name, phone number, email]  
Owned By:  City/County  Private  State  
Code Enforcement Jurisdiction:  City: [city]  County: Robeson  State

CONTACT: [name, firm, phone number, email]

Discipline	Firm	Name	Lic. #	Phone	E-Mail
[add as required]					

\*Others should include firms and individuals such as: truss, precast, pre-engineered, interior designers, etc.)

**CODE CLASSIFICATION SUMMARY**

2018 NC Code For:  New Construction  Addition  Renovation  
 1<sup>st</sup> Time Interior  Shell/Core  Phased Construction - Shell/Core  
 2018 NC Existing Building Code:  Prescriptive  Repair  Chapter 14  
 Alteration:  Level I  Level II  Level III  
 Historic Property  Change of Use  
 Constructed: [date] Original Occupancy (Ch. 3): [type]  
 Renovated: [date] Current Occupancy (Ch. 3): [type]  
 Risk Category (T 1604.5): Current:  I  II  III  IV  
 Proposed:  I  II  III  IV

**BASIC BUILDING DATA**

Construction Type:  I-A  II-A  III-A  IV-A  V-A

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(Check all that apply)  I-B  II-B  III-B  IV-B  V-B  
 Sprinklers:  No  Partial  Yes (Identify type below):  
 NFPA 13  NFPA 13R  NFPA 13D  
 Standpipes:  No  Yes  
 Class (Identify below):  
 I  II  III  IV  
 Type: (Identify below):  
 Wet  Dry  
 Flood Hazard Area:  No  Yes  
 Fire District:  No  Yes (Primary)  
 SI Required:  No  Yes

**GROSS BUILDING AREA**

Story	Existing SF	New SF	Reno/Alter SF	Sub-Total
[edit]		11,050		
Total		11,050		11,050

**ALLOWABLE AREA**

Primary Occupancy Classification: (Select One)  
 Assembly:  A-1  A-2  A-3  A-4  A-5  
 B (Secondary Occupancy)  
 Educational:  E  
 Factory:  F-1 Moderate  F-2 Low  
 Hazardous:  H-1 Detonate  H-2  H-3  H-4  H-5  
 H-6  H-7  H-8  H-9  H-10  
 H-11  H-12  H-13  H-14  H-15  
 Institutional:  I-1 Condition:  1  2  3  4  
 I-2 Condition:  1  2  3  4  
 I-3 Condition:  1  2  3  4  
 I-4  
 Mercantile:  M  
 Residential:  R-1  R-2  R-3  
 Storage:  S-1 Moderate (Hangar)  S-2 Low  High-Piled  
 Parking Garage:  Open  Closed  Repair Garage  
 Utility and Miscellaneous:  U  
 Accessory Occupancy Classification(s):  
 Incidental Uses (T 509):

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Special Uses (Chapter 4 - List Code Sections):  
 Special Provisions (Chapter 5 - List Code Sections):  
 Mixed Occupancy:  No  Yes - Separation: 1 Hour Exception: [list]  
 Non-Separated Use (508.3): The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.  
 Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

[copy and paste this and change if required]  

$$\frac{\text{Actual Area of Occupancy A (8,466)}}{\text{Allowable Area of Occupancy A (70,000)}} + \frac{\text{Actual Area of Occupancy B (2,584)}}{\text{Allowable Area of Occupancy B (23,000)}} = 0.2333 + 0.00$$

Story	Description & Use	(A) Bldg. Area per Story (Actual)	(B) Table 506.2.1 Area	(C) Area for Frontage Increase <sup>1,2</sup>	(D) Allowable Area per Story or Unlimited <sup>2,3</sup>
1	SI Hangar	11,040	17,500	Not Used	

<sup>1</sup> Frontage area increases from Section 506.3 are computed thus:  
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F)  
 b. Total Building Perimeter (P)  
 c. Ratio (F/P) = (F/P)  
 d. W = Minimum width of public way = (W)  
 e. Percent of frontage increase = 1 + 100 [(F/P) - 0.25] x W/30 = (%)  
<sup>2</sup> Unlimited area applicable under conditions of Section 507.  
<sup>3</sup> Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).  
<sup>4</sup> The maximum area of open parking garages must comply with Table 406.5.4.  
<sup>5</sup> Frontage increase is based on the un sprinklered area value in Table 506.2.

**ALLOWABLE HEIGHT**

	Allowable (Table 503)	Shown on Plans	Code Reference
Building Height in Feet (Table 504.3)	55'-0"	32'-8"	
Building Height in Stories (Table 504.4)	2	1	

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<sup>1</sup> Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.  
<sup>2</sup> The maximum height of air traffic control towers must comply with Table 412.3.1  
<sup>3</sup> The maximum height of open parking garages must comply with Table 406.5.4

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**FIRE PROTECTION REQUIREMENTS**

Building Element	Fire Separation Distance (feet)	Rating	Notes
Struct. Frame, incl. cols, girders, trusses	0 hr		
Exterior			
North	>30'	0 hr	
East	>30'	0 hr	
West	>30'	0 hr	
South	>30'	0 hr	
Interior			
Nonbearing Walls and Partitions			
Exterior Walls			
North	>30'	0 hr	
East	>30'	0 hr	
West	>30'	0 hr	
South	>30'	0 hr	
Interior walls and partitions	0 hr		
Floor Const., incl. supp. beams & joists	0 hr		
Floor Ceiling Assembly	0 hr		
Column Supporting Floors	0 hr		
Roof Const., incl. supp. beams & joists	0 hr		
Roof Ceiling Assembly	0 hr		
Column Supporting Roof	0 hr		
Shaft Enclosures - Exit	N/A		
Shaft Enclosures - Other	N/A		
Corridor Separation	N/A		
Occupancy/Fire Barrier Separation	1 hr	2 hr	UL V433
Party/Fire Wall Separation	N/A		
Smoke Barrier Separation	N/A		
Smoke Partition	N/A		
Tenant/Dwelling Unit/Sleeping Unit Sep.	N/A		
Incidental Use Separation	N/A		

\* Indicate section number permitting reduction

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**PERCENTAGE OF WALL OPENING CALCULATIONS**

Fire Separation Distance (Feet from Property Lines)	Degrees of Opening Protection (Table 705.8)	Allowable Area (%)	Actual Shown on Plans (%)
>30'-40"	NS	No Limit	

**LIFE SAFETY SYSTEM REQUIREMENTS**

Emergency Lighting:  No  Yes  
 Exit Signs:  No  Yes  
 Fire Alarm:  No  Yes  
 Smoke Detection Systems:  No  Yes  Partial  
 Carbon Monoxide Detection:  No  Yes

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: \_\_\_\_\_ LS-101

Fire and/or smoke riser wall locations (Chapter 7)  
 Fire and/or smoke riser wall locations (if not on the site plan)  
 Assumed and real property line locations (if not on the site plan)  
 Exterior wall opening area with respect to distance to assumed property lines (705.8)  
 Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)  
 Occupant loads for each area  
 Exit access travel distances (1017)  
 Common path of travel distances (1006.2.1 & 2006.3.2(1))  
 Dead end lengths (1020.4)  
 Clear exit widths for each exit door  
 Maximum allocated occupant load capacity each exit door can accommodate based on egress width (1005.3)  
 Actual occupant load for each exit door  
 A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier fire partition/smoke barrier.  
 Location of doors with panic hardware (1010.1.10)  
 Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)  
 Location of doors with electromagnetic egress locks (1010.1.9.9)  
 Location of doors equipped with hold-open devices  
 Location of emergency escape windows (1039)  
 The square footage of each fire area (202)  
 The square footage of each smoke compartment for Occupancy Classification 1-2 (407.5)

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Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Tab/Note	Title

**ACCESSIBLE DWELLING UNITS - (SECTION 1107)**

Total Units	Accessible Units Required	Accessible Units Provided	Type A Units Required	Type A Units Provided	Type B Units Required	Type B Units Provided	Total Accessible Units Provided

**ACCESSIBLE PARKING - (SECTION 1106)**

Lot or Parking Area	Total Number of Parking Spaces		Total Number of Accessible Spaces		Accessible Space Summary			
	Required	Provided	Required	Provided	Regular	Van with Lift	Access	Van with Access
[edit]								
Total								

**PLUMBING FIXTURE REQUIREMENTS - (TABLE 2902.1)**

[adjust per occupancy]  
 Use: S-1 (Above Storage Hangar) - No requirement for Plumbing Fixtures  
 Use: B (Business) - 26 Occupants

Water Closets	Urinals	Lavatories	Showers / Tubs	Drinking Fountains	Other
Required	2	2	0	1	1
Provided	1	1	0	1	1

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	Male	Female	Male	Female	Regular	Accessible
Required	2	2	2	2	0	1
Provided	1	1	0	1	0	1

**SPECIAL APPROVALS**

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)

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**ENERGY SUMMARY**

**ENERGY REQUIREMENTS:**  
 The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code:  No  Yes (The remainder of this section is not applicable)

Exempt Building:  No  Yes (Provide Code or Statutory reference): \_\_\_\_\_

Climate Zone:  3A  4A  5A

Method of Compliance: Energy Code  Performance  Prescriptive  
 ASHRAE 90.1  Performance  Prescriptive  
 (If "Other" specify source here)

**THERMAL ENVELOPE** (Prescriptive method only)

**Roof/ceiling Assembly** (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Skylights in each assembly: \_\_\_\_\_  
 U-Value of skylight: \_\_\_\_\_  
 Total square footage of skylights in each assembly: \_\_\_\_\_

**Exterior Walls** (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Openings (windows or doors with glazing): \_\_\_\_\_  
 U-Value of assembly: \_\_\_\_\_  
 Solar heat gain coefficient: \_\_\_\_\_  
 Projection factor: \_\_\_\_\_  
 Door R-Values: \_\_\_\_\_

**Walls below grade** (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_

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**Floors over unconditioned space** (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_

**Floors slab on grade**  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Horizontal/Vertical requirement: \_\_\_\_\_  
 Slab Heated: \_\_\_\_\_

**2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
STRUCTURAL DESIGN  
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)**

**DESIGN LOADS:**

**Importance Factors:** Snow (Is) \_\_\_\_\_  
 Seismic (Is) \_\_\_\_\_

**Live Loads:** Roof \_\_\_\_\_ psf  
 Mezzanine \_\_\_\_\_ psf  
 Floor \_\_\_\_\_ psf

**Ground Snow Load:** \_\_\_\_\_ psf

**Wind Load:** Ultimate Wind Speed \_\_\_\_\_ mph (ASCE-7)  
 Exposure Category \_\_\_\_\_

**SEISMIC DESIGN CATEGORY:**  A  B  C  D

Provide the following Seismic Design Parameters:  
 Occupancy Category (Table 1604.5)  I  II  III  IV  
 Spectral Response Acceleration  $S_s$  \_\_\_\_\_ %g  $S_1$  \_\_\_\_\_ %g  
 Site Classification (ASCE 7)  A  B  C  D  E  F  
 Data Source:  Field Test  Presumptive  Historical Data  
 Basic structural system  Bearing Wall  Dual w/Special Moment Frame  
 Building Frame  Dual w/Intermediate R/C or Special Steel

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Analysis Procedure:  Moment Frame  Inverted Pendulum  Dynamic  
 Simplified  Equivalent Lateral Force  
 Architectural, Mechanical, Components anchored?  Yes  No

**LATERAL DESIGN CONTROL:** Earthquake  Wind

**SOIL BEARING CAPACITIES:**  
 Field Test (provide copy of test report) \_\_\_\_\_ psf  
 Presumptive Bearing capacity \_\_\_\_\_ psf  
 Pile size, type, and capacity: \_\_\_\_\_

**2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
MECHANICAL DESIGN  
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)**

**MECHANICAL SUMMARY**

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**  
 winter dry bulb: \_\_\_\_\_  
 summer dry bulb: \_\_\_\_\_  
 relative humidity: \_\_\_\_\_

**Interior design conditions**  
 winter dry bulb: \_\_\_\_\_  
 summer dry bulb: \_\_\_\_\_  
 relative humidity: \_\_\_\_\_

**Building heating load:** \_\_\_\_\_  
**Building cooling load:** \_\_\_\_\_

**Mechanical Spacing Conditioning System**  
 Unitary  
 description of unit: \_\_\_\_\_  
 heating efficiency: \_\_\_\_\_  
 cooling efficiency: \_\_\_\_\_  
 size category of unit: \_\_\_\_\_  
 Boiler  
 Size category, if oversized, state reason: \_\_\_\_\_  
 Chiller

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Size category, if oversized, state reason: \_\_\_\_\_

List equipment efficiencies: \_\_\_\_\_

**2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
ELECTRICAL DESIGN  
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)**

**ELECTRICAL SUMMARY**

**ELECTRICAL SYSTEM AND EQUIPMENT**

Method of Compliance: Energy Code  Prescriptive  Performance  
 ASHRAE 90.1  Prescriptive  Performance

**Lighting schedule** (each fixture type)  
 lamp type required in fixture \_\_\_\_\_  
 number of lamps in fixture \_\_\_\_\_  
 ballast type used in the fixture \_\_\_\_\_  
 number of ballasts in fixture \_\_\_\_\_  
 total wattage per fixture \_\_\_\_\_  
 total interior wattage specified vs. allowed (whole building or space by space)  
 total exterior wattage specified vs. allowed \_\_\_\_\_

**Additional Efficiency Package Options**  
 (When using the 2018 NCECC; not required for ASHRAE 90.1)  
 C406.2 More Efficient Mechanical Equipment  
 C406.3 Reduced Lighting Power Density  
 C406.4 Enhanced Digital Lighting Controls  
 C406.5 On-Site Renewable Energy  
 C406.6 Dedicated Outdoor Air System  
 C406.7 Reduced Energy Use in Service Water Heating

2018 NC Administrative Code and Policies Appendix B for Building



**Section 1: Project Information**

Energy Code: 2009 IECC  
 Project Title: Lumberton - LBT Box Hangar  
 Project Type: New Construction

Construction Site: \_\_\_\_\_ Owner/Agent: \_\_\_\_\_ Designer/Contractor: \_\_\_\_\_  
 Building Location (for weather data): Lumberton, North Carolina  
 Climate Zone: 3A Vertical Glazing / Wall Area Pct.: 5%  
 Building Use, Activity Type(s): \_\_\_\_\_ Floor Area: 11050  
 1-Transportation, 1-Residential

**Section 2: Envelope Assemblies and Requirements Checklist**

Envelope ASSES: Design 5% better than code.

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Orientation: NORTH					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt) [Bldg. Use 1 - Transportation]	3000	13.0	6.0	0.067	0.084
Orientation: EAST					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt) [Bldg. Use 1 - Transportation]	1905	13.0	6.0	0.067	0.084
Window: Metal Frame, Thermal Break, Perf. Specs., Product ID no. SHGC 0.30, [Bldg. Use 1 - Transportation] (0)	31	—	—	0.250	0.650
Door: Insulated Metal, Sliding, [Bldg. Use 1 - Transportation] (0)	72	—	—	0.300	0.700
Orientation: SOUTH					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt) [Bldg. Use 1 - Transportation]	3000	13.0	6.0	0.067	0.084
Window: Metal Frame, Thermal Break, Perf. Specs., Product ID no. SHGC 0.30, [Bldg. Use 1 - Transportation] (0)	391	—	—	0.250	0.650
Door: Glass over 20% glazing; Metal Frame, Entrance Door, Perf. Specs., Product ID no. SHGC 0.30, [Bldg. Use 1 - Transportation] (0)	172	—	—	0.250	0.900
Orientation: WEST					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt) [Bldg. Use 1 - Transportation]	1905	13.0	6.0	0.067	0.084
Door: Insulated Metal, Sliding, [Bldg. Use 1 - Transportation]	75	—	—	0.300	0.700
Orientation: UNSPECIFIED ORIENTATION					
Floor: Unheated Slab-On-Grade, [Bldg. Use 1 - Transportation]	400	—	—	—	—
Floor: Metal Building, Standing Seam, [Bldg. Use 1 - Transportation]	11050	19.0	11.0	0.028	0.050

U-Factor U-factors are used for software baseline calculations ONLY, and are not code requirements.  
 on fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

**Air Leakage, Component Certification, and Vapor Retarder Requirements:**

- All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- Windows, doors, and skylights certified as meeting leakage requirements.
- Component R-values & U-factors labeled as certified.
- No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- Other components have supporting documentation for proposed U-factors.
- Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the stated R-value without compressing the insulation.
- Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
- Cargo doors and loading dock doors are weather sealed.
- Recessed lighting fixtures installed in the building envelope are Type IC listed as meeting ASTM E2633, are sealed with gasket or caulk.
- Roofing entrance doors have a vestibule equipped with self-closing devices.
- Building entrances with revolving doors.  
 Doors not intended to be used as a building entrance.  
 Doors that open directly from a space less than 3000 sq. ft. in area.  
 Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.  
 Doors opening directly from a sleeping/working unit.

**Section 3: Compliance Statement**

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2009 IECC requirements in COMcheck-Web and to comply with the mandatory requirements in the Requirements Checklist.

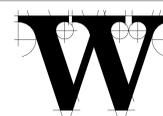
John H. Barker - Designer *John H. Barker* 11/07/2024  
 Signature Date



**Schedule 1:  
2-Unit Box Hangar**  
 Lumberton, NC 28358



PO BOX 5510  
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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

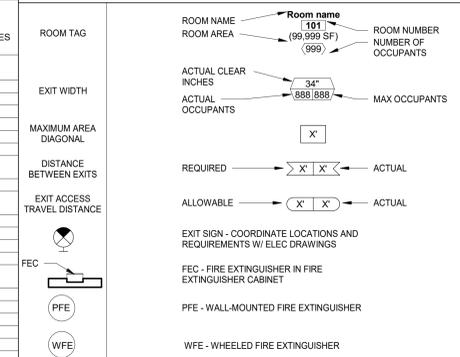
LIFE SAFETY  
PLAN

SHEET NUMBER  
**LS-101**

LIFE SAFETY PLAN CALCULATIONS

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
ROOM NUMBER	ROOM NAME	OCCUPANCY TYPE	AREA	AREA PER OCCUPANT	ACTUAL OCCUPANTS (D/E)	STAIR INCHES/OCC	STAIR INCHES REQ (F'G)	OTHER INCHES/OCC	OTHER INCHES REQ (F'I)
FLOOR LEVEL									
001	TUNISEX RESTROOM		57.92 SF						
002	TUNISEX RESTROOM		57.92 SF						
101	HANGAR BAY 1	AIRCRAFT AREA (GROSS)	4365.96 SF	500.00 SF	9			0.2	1.75'
105	ENTRY	INCIDENTAL	130.87 SF	0.00 SF				0.2	
106	CORRIDOR	INCIDENTAL	285.68 SF	0.00 SF				0.2	
107	STOR	N/A	22.36 SF	0.00 SF				0.2	
108	ELEC	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	48.16 SF	300.00 SF	1			0.2	0.03'
109	RESTROOM	N/A	50.01 SF	0.00 SF				0.2	
110	CONFERENCE	ASSEMBLY UNCONCENTRATED (TABLES AND CHAIRS)	217.52 SF	15.00 SF	15			0.2	2.90'
111	OFFICE / BREAK	BUSINESS AREA (GROSS)	110.25 SF	100.00 SF	2			0.2	0.22'
112	OFFICE	BUSINESS AREA (GROSS)	121.92 SF	100.00 SF	2			0.2	0.24'
113	OFFICE	BUSINESS AREA (GROSS)	122.15 SF	100.00 SF	2			0.2	0.24'
114	JAN	N/A	18.34 SF	0.00 SF				0.2	
115	IT	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	17.31 SF	300.00 SF	1			0.2	0.01'
116	STOR	N/A	27.68 SF	0.00 SF				0.2	
121	HANGAR BAY 2	AIRCRAFT AREA (GROSS)	4365.96 SF	500.00 SF	9			0.2	1.75'
125	ENTRY	INCIDENTAL	130.87 SF	0.00 SF				0.2	
126	CORRIDOR	INCIDENTAL	287.04 SF	0.00 SF				0.2	
127	STOR	N/A	22.58 SF	0.00 SF				0.2	
128	ELEC	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	50.88 SF	300.00 SF	1			0.2	0.03'
129	RESTROOM	N/A	50.01 SF	0.00 SF				0.2	
130	CONFERENCE	ASSEMBLY UNCONCENTRATED (TABLES AND CHAIRS)	217.52 SF	15.00 SF	15			0.2	2.90'
131	OFFICE / BREAK	BUSINESS AREA (GROSS)	110.24 SF	100.00 SF	2			0.2	0.22'
132	OFFICE	BUSINESS AREA (GROSS)	121.92 SF	100.00 SF	2			0.2	0.24'
133	OFFICE	BUSINESS AREA (GROSS)	122.15 SF	100.00 SF	2			0.2	0.24'
139	STOR	N/A	27.46 SF	0.00 SF				0.2	
140	JAN	N/A	18.34 SF	0.00 SF				0.2	
141	IT	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	17.31 SF	300.00 SF	1			0.2	0.01'
GRAND TOTALS					64		0.00'		10.80'
					64		0.00'		10.80'

LIFE SAFETY PLAN LEGEND

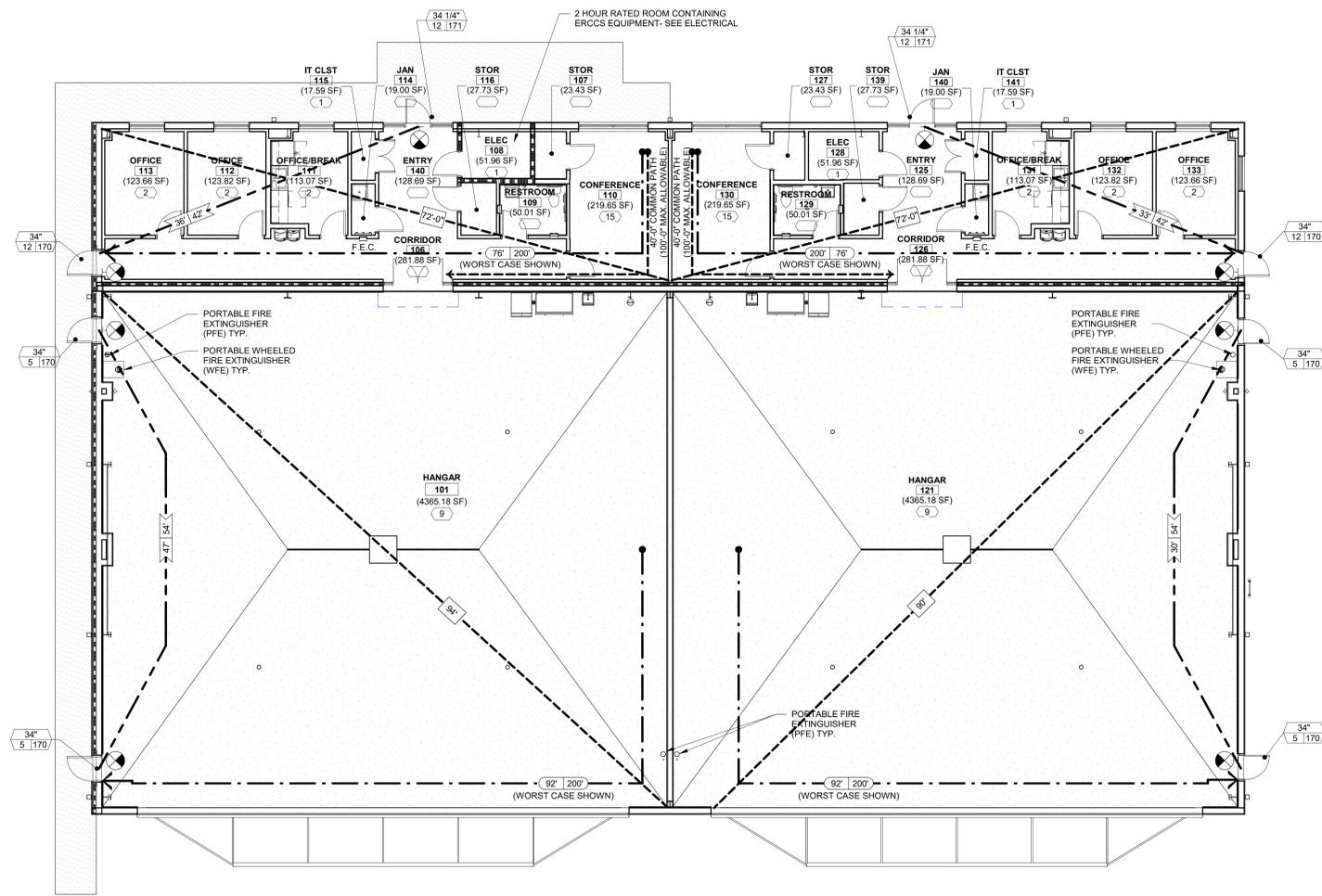


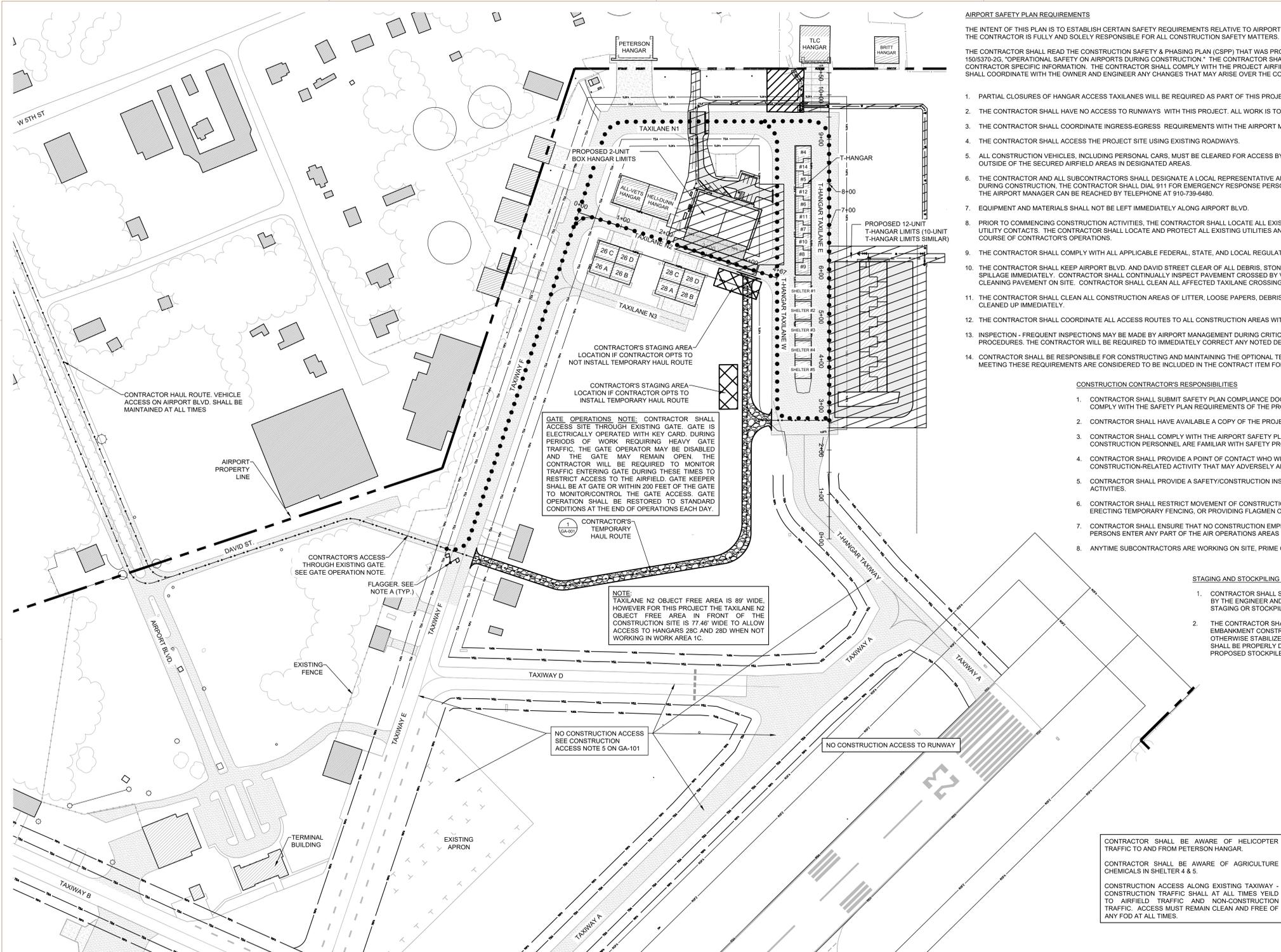
FIRE EXTINGUISHER CALCULATIONS - OFFICE

ACTUAL AREA SERVICED BY FE:	2,584 SF
HAZARD LEVEL:	ORDINARY CLASS ABC
MIN / SF / A:	1,500 SF
EXTINGUISHER TYPE:	PFE (2A:50B:C)
SF / EXTINGUISHER:	3,000 SF
NUMBER OF EXTINGUISHERS:	1 PFE
MAX SF OF AREA SERVED:	3,000 SF
MAX TRAVEL DISTANCE:	50' LF
ACTUAL MAX TRAVEL DISTANCE:	44' LF

FIRE EXTINGUISHER CALCULATIONS - OFFICE

ACTUAL AREA SERVICED BY FE:	8,466 SF
HAZARD LEVEL:	ORDINARY CLASS ABC
MIN / SF / A:	1,500 SF
EXTINGUISHER TYPE:	WFE (4A:60B:C)
SF / EXTINGUISHER:	6,000 SF
NUMBER OF EXTINGUISHERS:	2 WFE
MAX SF OF AREA SERVED:	12,000 SF
MAX TRAVEL DISTANCE:	50' LF
ACTUAL MAX TRAVEL DISTANCE:	40' LF





**AIRPORT SAFETY PLAN REQUIREMENTS**

THE INTENT OF THIS PLAN IS TO ESTABLISH CERTAIN SAFETY REQUIREMENTS RELATIVE TO AIRPORT OPERATIONS THAT MUST BE ADHERED TO BY THE CONTRACTOR DURING CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR ALL CONSTRUCTION SAFETY MATTERS. IT IS THE INTENT THAT THE AIRPORT WILL REMAIN OPEN DURING THE DURATION OF THIS PROJECT.

THE CONTRACTOR SHALL READ THE CONSTRUCTION SAFETY & PHASING PLAN (CSPP) THAT WAS PROVIDED WITH THE BID DOCUMENTS THAT FOLLOWS THE REQUIREMENTS IN FAA ADVISORY CIRCULAR 150/5370-2G, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION." THE CONTRACTOR SHALL PREPARE AND SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD), TO SUPPLEMENT THE CSPP WITH CONTRACTOR SPECIFIC INFORMATION. THE CONTRACTOR SHALL COMPLY WITH THE PROJECT AIRFIELD SAFETY REQUIREMENTS AS SHOWN ON THE PLANS, PROJECT SPECIFICATIONS, THE CSPP AND SPCD, AND SHALL COORDINATE WITH THE OWNER AND ENGINEER ANY CHANGES THAT MAY ARISE OVER THE COURSE OF THE PROJECT.

- PARTIAL CLOSURES OF HANGAR ACCESS TAXILANES WILL BE REQUIRED AS PART OF THIS PROJECT.
- THE CONTRACTOR SHALL HAVE NO ACCESS TO RUNWAYS WITH THIS PROJECT. ALL WORK IS TO BE ACCOMPLISHED OUTSIDE THE RUNWAY OBJECT FREE AREA (ROFA).
- THE CONTRACTOR SHALL COORDINATE INGRESS-EGRESS REQUIREMENTS WITH THE AIRPORT MANAGEMENT AND RESIDENT PROJECT REPRESENTATIVE.
- THE CONTRACTOR SHALL ACCESS THE PROJECT SITE USING EXISTING ROADWAYS.
- ALL CONSTRUCTION VEHICLES, INCLUDING PERSONAL CARS, MUST BE CLEARED FOR ACCESS BY THE AIRPORT MANAGEMENT AND RESIDENT PROJECT REPRESENTATIVE. PERSONAL CARS SHALL BE PARKED OUTSIDE OF THE SECURED AIRFIELD AREAS IN DESIGNATED AREAS.
- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL DESIGNATE A LOCAL REPRESENTATIVE AND ALTERNATE TO CONTACT ON A 24 HOUR BASIS IN CASE OF EMERGENCY. IN THE EVENT OF AN EMERGENCY DURING CONSTRUCTION, THE CONTRACTOR SHALL DIAL 911 FOR EMERGENCY RESPONSE PERSONNEL. THE CONTRACTOR SHALL ALSO NOTIFY THE AIRPORT MANAGER ONLY AFTER 911 HAS BEEN CALLED. THE AIRPORT MANAGER CAN BE REACHED BY TELEPHONE AT 910-738-6480.
- EQUIPMENT AND MATERIALS SHALL NOT BE LEFT IMMEDIATELY ALONG AIRPORT BLVD.
- PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES WITHIN PROJECT WORK AREAS. THIS EFFORT SHALL INCLUDE COORDINATING WITH LOCAL UTILITY CONTACTS. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE IMMEDIATE RESOLUTION OF ANY UTILITY FACILITIES DAMAGED IN THE COURSE OF CONTRACTOR'S OPERATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS IN REGARD TO CONSTRUCTION NOISE AND EROSION CONTROL DURING CONSTRUCTION.
- THE CONTRACTOR SHALL KEEP AIRPORT BLVD. AND DAVID STREET CLEAR OF ALL DEBRIS, STONES, ETC., DURING CONSTRUCTION. ALL PAVEMENTS SHALL BE CLEANED OF CONSTRUCTION DEBRIS AND SPILLAGE IMMEDIATELY. CONTRACTOR SHALL CONTINUALLY INSPECT PAVEMENT CROSSED BY VEHICLES DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL MAINTAIN SUITABLE EQUIPMENT FOR CLEANING PAVEMENT ON SITE. CONTRACTOR SHALL CLEAN ALL AFFECTED TAXILANE CROSSINGS AND TRAVEL AREAS AS NEEDED OR AS DIRECTED TO KEEP THE PAVEMENT CLEAN OF DEBRIS.
- THE CONTRACTOR SHALL CLEAN ALL CONSTRUCTION AREAS OF LITTER, LOOSE PAPERS, DEBRIS, ETC. ON A DAILY BASIS, OR AS DIRECTED BY THE ENGINEER. ALL SPILLAGE ON PAVED AREAS SHALL BE CLEANED UP IMMEDIATELY.
- THE CONTRACTOR SHALL COORDINATE ALL ACCESS ROUTES TO ALL CONSTRUCTION AREAS WITH RESIDENT PROJECT REPRESENTATIVE AND AIRPORT MANAGEMENT PRIOR TO BEGINNING WORK.
- INSPECTION - FREQUENT INSPECTIONS MAY BE MADE BY AIRPORT MANAGEMENT DURING CRITICAL PHASES OF THE WORK TO ENSURE THAT THE CONTRACTOR IS FOLLOWING RECOMMENDED SAFETY PLAN PROCEDURES. THE CONTRACTOR WILL BE REQUIRED TO IMMEDIATELY CORRECT ANY NOTED DEFICIENCIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING AND MAINTAINING THE OPTIONAL TEMPORARY HAUL ROUTE, AND REMOVAL AND RESTORATION TO EXISTING SITE CONDITIONS. PAYMENT FOR MEETING THESE REQUIREMENTS ARE CONSIDERED TO BE INCLUDED IN THE CONTRACT ITEM FOR "TEMPORARY CONSTRUCTION ITEMS" AND NO ADDITIONAL PAYMENT WILL BE MADE.

**CONSTRUCTION CONTRACTOR'S RESPONSIBILITIES**

- CONTRACTOR SHALL SUBMIT SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE AIRPORT OPERATOR ON HOW CONTRACTOR SHALL COMPLY WITH THE SAFETY PLAN REQUIREMENTS OF THE PROJECT.
- CONTRACTOR SHALL HAVE AVAILABLE A COPY OF THE PROJECT AIRPORT SAFETY PLAN ON SITE AT ALL TIMES.
- CONTRACTOR SHALL COMPLY WITH THE AIRPORT SAFETY PLAN ASSOCIATED WITH THE CONSTRUCTION PROJECT AND ENSURE THAT CONSTRUCTION PERSONNEL ARE FAMILIAR WITH SAFETY PROCEDURES AND REGULATIONS ON THE AIRPORT.
- CONTRACTOR SHALL PROVIDE A POINT OF CONTACT WHO WILL COORDINATE AN IMMEDIATE RESPONSE TO CORRECT ANY CONSTRUCTION-RELATED ACTIVITY THAT MAY ADVERSELY AFFECT THE OPERATIONAL SAFETY OF THE AIRPORT.
- CONTRACTOR SHALL PROVIDE A SAFETY/CONSTRUCTION INSPECTOR FAMILIAR WITH AIRPORT SAFETY TO MONITOR CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL RESTRICT MOVEMENT OF CONSTRUCTION VEHICLES TO CONSTRUCTION AREAS BY FLAGGING AND BARRICADING, ERECTING TEMPORARY FENCING, OR PROVIDING FLAGMEN OR ESCORTS AS APPROPRIATE.
- CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION EMPLOYEES, EMPLOYEES OF SUBCONTRACTORS OR SUPPLIERS, OR OTHER PERSONS ENTER ANY PART OF THE AIR OPERATIONS AREAS (AOA) UNLESS AUTHORIZED.
- ANYTIME SUBCONTRACTORS ARE WORKING ON SITE, PRIME CONTRACTOR SHALL HAVE SUPERVISORY PERSONNEL ONSITE.

**STAGING AND STOCKPILING NOTES**

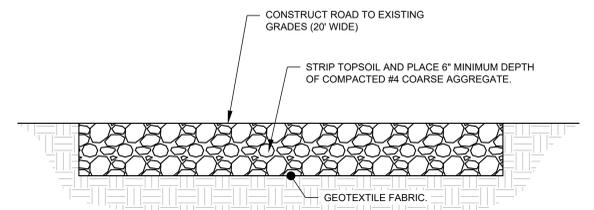
- CONTRACTOR SHALL SET UP STAGING AREAS IN LOCATIONS SHOWN ON THIS SHEET OR AS AUTHORIZED BY THE ENGINEER AND AIRPORT MANAGEMENT. NO ADDITIONAL CLEARING WILL BE ALLOWED FOR STAGING OR STOCKPILING EXCEPT AS SPECIFICALLY AUTHORIZED.
- THE CONTRACTOR SHALL STOCKPILE TOPSOIL SEPARATELY FROM SUBSOIL MATERIALS SUITABLE FOR EMBANKMENT CONSTRUCTION. TOPSOIL SHALL BE RE-SPREAD ON DISTURBED AREAS NOT PAVED OR OTHERWISE STABILIZED. ALL SURPLUS TOPSOIL AND SUBSOIL MATERIALS EXCAVATED ON THE PROJECT SHALL BE PROPERLY DISPOSED OF OFFSITE. AIRPORT MANAGEMENT SHALL APPROVE LOCATION OF PROPOSED STOCKPILES.

**NOTE:** CONTRACTOR WILL BE REQUIRED TO UTILIZE FLAGMEN AT TAXILANE CROSSING DURING CONSTRUCTION. FLAGMEN SHALL HAVE ALL CONSTRUCTION TRAFFIC STOP PRIOR TO ENTERING OR CROSSING TAXILANE/TAXILANE OBJECT FREE AREAS, AS SHOWN ON THE PLANS. CONTRACTOR SHALL VISUALLY MONITOR AIR TRAFFIC PRIOR TO VEHICLES ENTERING OR CROSSING ACTIVE TAXILANES/TAXILANES. DURING HEAVY HAULING OPERATIONS A FLAGGER WILL BE REQUIRED.

**ACTIVE AIR OPERATIONS AREA**  
ALL AIRFIELD AREAS SHALL BE CONSIDERED ACTIVE UNLESS SPECIFICALLY CLOSED AND BARRICADED IN ACCORDANCE WITH THE SAFETY & PHASING PLAN. ALL CROSSINGS OF ACTIVE AIR AREAS SHALL BE COMPLETED UNDER RADIO CONTROL WITH AIRPORT MANAGEMENT. IN ALL CASES, AIRCRAFT SHALL HAVE THE RIGHT OF WAY. ALL CONSTRUCTION TRAFFIC SHALL STOP CLEAR OF ACTIVE AIR AREAS AND ALLOW AIRCRAFT TO PASS UNIMPEDED. THE CONTRACTOR SHALL USE EXTREME CAUTION IN ACTIVE AIR AREAS. ANY SPILLAGE/DEBRIS ON PAVEMENTS SHALL BE CLEANED UP IMMEDIATELY AFTER EACH CROSSING.

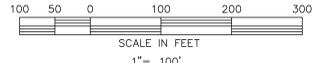
CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT ANY EXISTING PAVEMENT THAT CONSTRUCTION EQUIPMENT CROSSES OR TRAVELS ON. CONTRACTOR SHALL REPAIR ANY DAMAGE FROM HIS OPERATIONS IN ACCORDANCE WITH SPECIFICATIONS.

CONTRACTOR SHALL BE AWARE OF HELICOPTER TRAFFIC TO AND FROM PETERSON HANGAR.  
CONTRACTOR SHALL BE AWARE OF AGRICULTURE CHEMICALS IN SHELTER 4 & 5.  
CONSTRUCTION ACCESS ALONG EXISTING TAXIWAY - CONSTRUCTION TRAFFIC SHALL AT ALL TIMES YIELD TO AIRFIELD TRAFFIC AND NON-CONSTRUCTION TRAFFIC. ACCESS MUST REMAIN CLEAN AND FREE OF ANY FOD AT ALL TIMES.

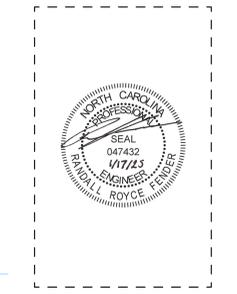


CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING HAUL ROUTE THROUGHOUT CONSTRUCTION AND SHALL REMOVE HAUL ROUTE AND RESTORE TO ORIGINAL CONDITIONS UPON COMPLETION OF CONSTRUCTION. EXCAVATED MATERIAL SHALL BE PILED TO THE SIDE OF THE ROAD TO BE USED TO RESTORE THE AREA AT THE END OF CONSTRUCTION. CONTRACTOR SHALL MAINTAIN THESE PILES THROUGHOUT CONSTRUCTION AS REQUIRED OR DIRECTED BY THE ENGINEER/RPR. MATERIAL REMOVED AT END OF CONSTRUCTION SHALL BE DISPOSED OF OFF AIRPORT PROPERTY. TOPSOIL EXCAVATED FOR ORIGINAL ROAD CONSTRUCTION SHALL BE USED TO RESTORE AREA TO PRE-CONSTRUCTION CONDITIONS. HAUL ROUTE AREA SHALL BE SEEDED AND STABILIZED USING EXCELSIOR MATTING FOLLOWING REMOVAL. ALL COSTS ASSOCIATED WITH THIS ITEM SHALL BE INCLUDED IN LUMP SUM PRICE FOR "TEMPORARY CONSTRUCTION ITEMS".

LEGEND	
	CONTRACTOR'S ACCESS ROUTE WITH TEMPORARY HAUL ROUTE OPTION
	CONTRACTOR'S ACCESS ROUTE WITHOUT TEMPORARY HAUL ROUTE OPTION
	WORK AREA LIMITS
	CONTRACTOR'S STAGING AREA
	AIRPORT PROPERTY LINE
	TOFA/TLOFA
	TAXIWAY/TAXILANE OBJECT FREE AREA



**Schedule 1:  
2-Unit Box Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



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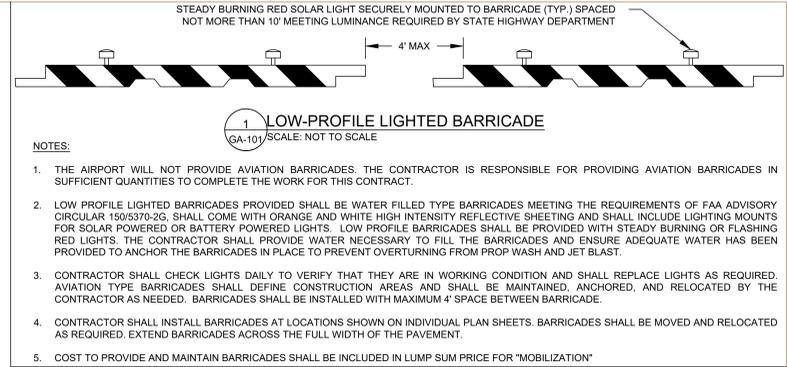
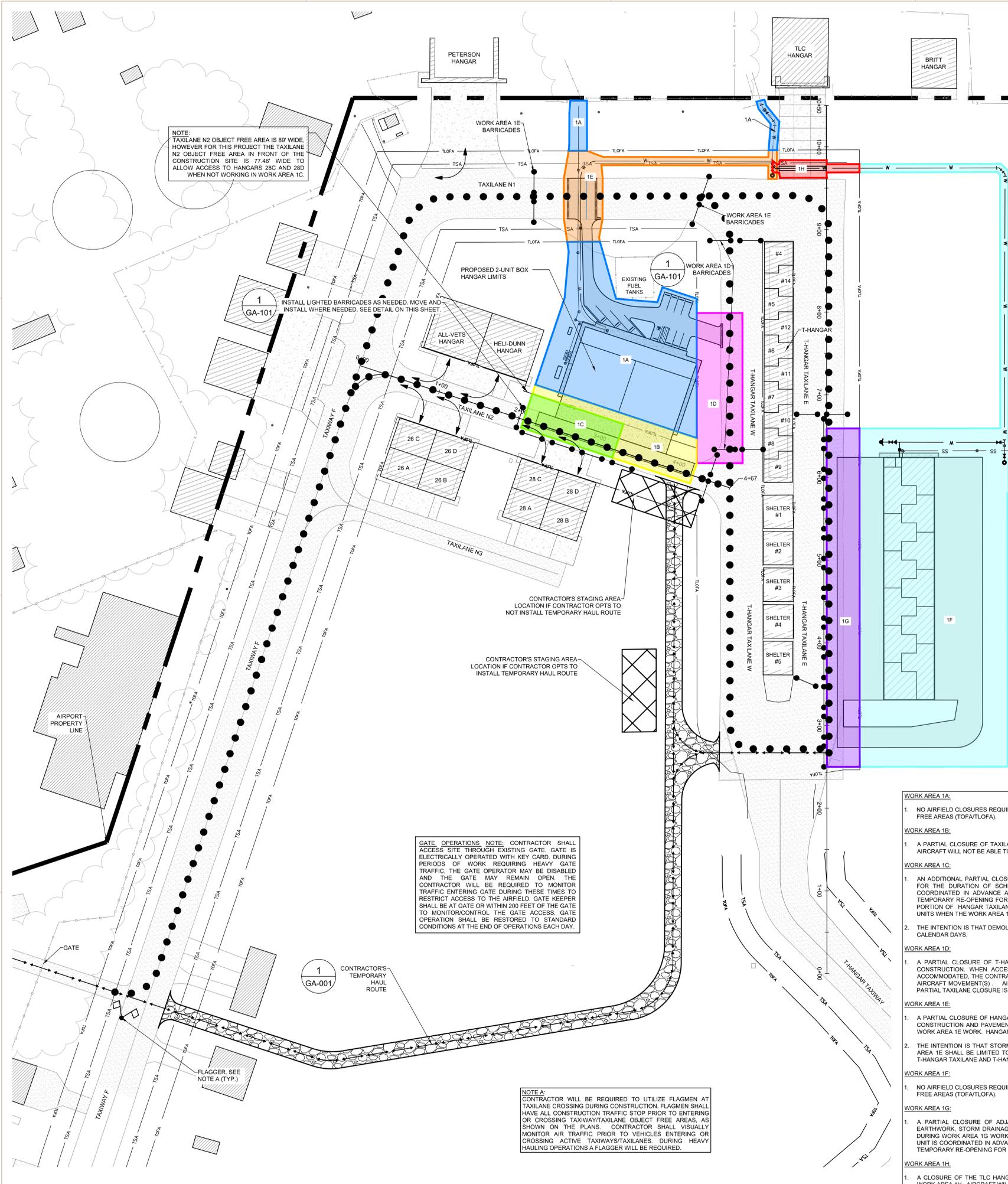
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**REVISIONS**

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**CONSTRUCTION SAFETY PLAN (ALL SCHEDULES)**

SHEET NUMBER  
**GA-001**

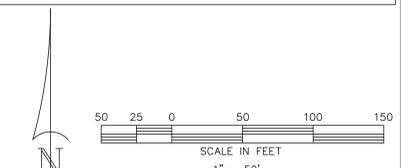


- NOTES:**
1. THE AIRPORT WILL NOT PROVIDE AVIATION BARRICADES. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AVIATION BARRICADES IN SUFFICIENT QUANTITIES TO COMPLETE THE WORK FOR THIS CONTRACT.
  2. LOW PROFILE LIGHTED BARRICADES PROVIDED SHALL BE WATER FILLED TYPE BARRICADES MEETING THE REQUIREMENTS OF FAA ADVISORY CIRCULAR 150/5370-2G. SHALL COME WITH ORANGE AND WHITE HIGH INTENSITY REFLECTIVE SHEETING AND SHALL INCLUDE LIGHTING MOUNTS FOR SOLAR POWERED OR BATTERY POWERED LIGHTS. LOW PROFILE BARRICADES SHALL BE PROVIDED WITH STEADY BURNING OR FLASHING RED LIGHTS. THE CONTRACTOR SHALL PROVIDE WATER NECESSARY TO FILL THE BARRICADES AND ENSURE ADEQUATE WATER HAS BEEN PROVIDED TO ANCHOR THE BARRICADES IN PLACE TO PREVENT OVERTURNING FROM PRO WASH AND JET BLAST.
  3. CONTRACTOR SHALL CHECK LIGHTS DAILY TO VERIFY THAT THEY ARE IN WORKING CONDITION AND SHALL REPLACE LIGHTS AS REQUIRED. AVIATION TYPE BARRICADES SHALL DEFINE CONSTRUCTION AREAS AND SHALL BE MAINTAINED, ANCHORED, AND RELOCATED BY THE CONTRACTOR AS NEEDED. BARRICADES SHALL BE INSTALLED WITH MAXIMUM 4' SPACE BETWEEN BARRICADE.
  4. CONTRACTOR SHALL INSTALL BARRICADES AT LOCATIONS SHOWN ON INDIVIDUAL PLAN SHEETS. BARRICADES SHALL BE MOVED AND RELOCATED AS REQUIRED. EXTEND BARRICADES ACROSS THE FULL WIDTH OF THE PAVEMENT.
  5. COST TO PROVIDE AND MAINTAIN BARRICADES SHALL BE INCLUDED IN LUMP SUM PRICE FOR "MOBILIZATION"

- TAXILANE CLOSURES AND HANGAR ACCESS NOTES:**
1. SECTIONS OF THE HANGAR TAXILANE NETWORK WILL BE CLOSED FOR VARIOUS PERIODS OF TIME TO ACCOMMODATE CONSTRUCTION OPERATIONS AND CONSTRUCTION ACCESS, AS SHOWN ON THIS PLAN. CLOSED TAXILANE AREAS SHALL BE DELINEATED USING LIGHTED LOW PROFILE AVIATION BARRICADES SUPPLIED, MAINTAINED, POSITIONED AND RE-POSITIONED BY THE CONTRACTOR. A MINIMUM OF FORTY (40) BARRICADES SHALL BE PROVIDED FOR SCHEDULE 1 AND AN ADDITIONAL FORTY (40) BARRICADES SHALL BE PROVIDED IF SCHEDULE 2A OR 2B IS AWARDED.
  2. A SECTION OF TAXILANE IN FRONT OF THE NEW 2-UNIT BOX HANGAR WILL BE CLOSED THROUGHOUT SCHEDULE 1 CONSTRUCTION. OTHER SEGMENTS WILL BE CLOSED FOR SHORTER DURATIONS WHEN SCHEDULE 1 AND/OR SCHEDULE 2A/2B CONSTRUCTION OR ACCESS REQUIRES WORK, PERSONNEL, VEHICLE TRAFFIC, MATERIALS AND/OR EQUIPMENT WITHIN THE ASSOCIATED OBJECT FREE AREA.
  3. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH AIRPORT MANAGEMENT TO AFFORD AIRCRAFT ACCESS TO AND FROM HANGAR UNITS AFFECTED BY TAXILANE CLOSURES. EFFECTIVE COMMUNICATION BETWEEN THE CONTRACTOR AND AIRPORT MANAGEMENT AND AFFECTED HANGAR TENANTS IS REQUIRED. GENERALLY, IF ACCESS IS NEEDED TO AND/OR FROM AN AFFECTED HANGAR UNIT, AIRPORT MANAGEMENT WILL GIVE ADVANCE NOTICE OF 24-HOURS OR MORE. WHEN FEASIBLE, THE CONTRACTOR SHALL PREPARE THE NECESSARY HANGAR TAXILANE AREAS FOR TEMPORARY RE-OPENING TO ACCOMMODATE THE PRE-SCHEDULED AIRCRAFT MOVEMENT(S) TO TEMPORARILY RE-OPEN THE AFFECTED TAXILANE SEGMENT SHALL BE PAVED, SWEEPED CLEAN OF DEBRIS, FOD AND SPILLAGE, AND THE OBJECT FREE AREA SHALL BE CLEAR OF ALL PERSONNEL, VEHICLE, EQUIPMENT, MATERIALS, OPEN EXCAVATIONS AND OTHER HAZARDS. THE CONTRACTOR SHALL NOTIFY AIRPORT MANAGEMENT WHEN THE TAXILANE IS READY SO THAT AN INSPECTION CAN BE MADE IN ADVANCE OF THE AIRCRAFT MOVEMENT. IF CONDITIONS SO WARRANT, THE AIRPORT MAY PROVIDE ONE OR MORE WING WALKER(S) TO ASSIST THE TENANT FOR THE AIRCRAFT MOVEMENT. DURING AIRCRAFT MOVEMENT, THE CONTRACTOR MUST CEASE ADJACENT OPERATIONS WHICH COULD VIOLATE THE OBJECT FREE AREA SUCH AS MATERIAL HANDLING WITH CRANES, EXCAVATORS AND LIFTS WHICH COULD SWING OR TRAVEL INTO THE OBJECT FREE AREA.
  4. HANGAR UNIT NUMBERS, TENANT NAMES AND TAXILANE DESIGNATION NOMENCLATURE ARE INCLUDED ON THIS PLAN TOP HELP FACILITATE CLEAR COMMUNICATION AS TO AREAS WHICH ARE CLOSED, AREAS WHICH ARE TEMPORARILY RE-OPENED AND THE INTENDED AIRCRAFT OPERATING PATH.
  5. WHEN CRITICAL CONSTRUCTION OPERATIONS SUCH AS STEEL ERECTION, TRENCH WORK OR TAXILANE PAVING, ARE PLANNED WHICH WILL MAKE IT DIFFICULT OR IMPOSSIBLE TO ACCOMMODATE PRE-SCHEDULED AIRCRAFT MOVEMENTS, THE CONTRACTOR SHALL SO ADVISE AIRPORT MANAGEMENT, SO THAT AFFECTED TENANTS CAN BE NOTIFIED AND AIRCRAFT MOVED TO THE TERMINAL APRON OR OTHER LOCATION IN ADVANCE OF THE CRITICAL CONSTRUCTION OPERATION.

- CONSTRUCTION ACCESS NOTES:**
1. THE CONTRACTOR SHALL ACCESS THE WORK SITE USING THE EXISTING AIRPORT GATE AS SHOWN ON THE PROJECT SAFETY AND PHASING PLAN SHEETS INCLUDED IN THE SCHEDULE 1 PLAN SET. THIS IS AN ELECTRICALLY OPERATED GATE WITH CARD READER ACCESS CONTROL. THE AIRPORT WILL FURNISH UP TO FOUR (4) ACCESS CARDS FOR THE CONTRACTOR'S USE. THESE CARDS SHALL BE HELD ONLY BY THE CONTRACTOR'S SUPERVISORY PERSONNEL AND DESIGNATED GATE KEEPER/ESCORT PERSONNEL. THE GATE SHALL REMAIN CLOSED AND SECURED EXCEPT WHEN MONITORED BY THE CONTRACTOR'S GATE KEEPER, WHO MUST REMAIN WITHIN 200 FEET OF THE GATE WHILE IT IS OPEN SO THE GATE KEEPER CAN MONITOR TRAFFIC AND PREVENT ENTRY TO UNAUTHORIZED VEHICLES AND PERSONNEL. THE GATE KEEPER SHALL BE PROVIDED WITH A CELL PHONE PRE-LOADED WITH THE CONTACT NUMBERS FOR CONTRACTOR ON-SITE SUPERVISORY AND HOME OFFICE PERSONNEL AND AIRPORT MANAGEMENT, AND SHALL BE INSTRUCTED TO CONTACT SUCH INDIVIDUALS IN THE EVENT OF UNAUTHORIZED GATE ACCESS, GATE MALFUNCTION OR ANY SORT OF EMERGENCY SITUATION.
  2. DURING PERIODS OF HIGHER VOLUME CONSTRUCTION TRAFFIC SUCH AS SHIFT CHANGES, CONSTRUCTION MATERIAL HAULING OPERATIONS AND CONCRETE PLACEMENTS, THE ELECTRIC GATE OPERATOR MAY BE DISABLED WITH THE GATE LEFT OPEN BUT MONITORED BY THE GATE KEEPER UNDER THE 200-FOOT LIMITATION NOTED ABOVE. OTHERWISE, THE GATE OPERATOR SHALL BE SET FOR NORMAL OPERATION.
  3. THE CONTRACTOR SHALL PROVIDE AN ESCORT INDIVIDUAL WITH AN APPROPRIATE VEHICLE TO ESCORT DELIVERY VEHICLES AND OTHERS NOT FAMILIAR WITH SITE TRAFFIC PATTERNS BETWEEN THE GATE AND THE VARIOUS WORK AREAS AND STAGING AREAS. THIS INDIVIDUAL MAY BE THE SAME AS THE GATE KEEPER, PROVIDED THAT THE GATE IS CLOSED AND SECURED WHILE THE INDIVIDUAL IS AWAY FROM THE GATE FOR ESCORT PURPOSES.
  4. THE CONTRACTOR IS NOT AUTHORIZED TO CONDUCT CONSTRUCTION ACCESS AND HAULING OPERATIONS ON OR ACROSS THE TERMINAL APRON, TAXIWAYS A, B, D, OR E AND/OR ANY RUNWAY WITHOUT THE EXPLICIT PRIOR APPROVAL OF AND REAL TIME COORDINATION WITH AIRPORT MANAGEMENT ON A CASE BY CASE BASIS.
  5. THE CONTRACTOR IS AUTHORIZED TO USE THE EXISTING AIRPORT HANGAR TAXILANES (INCLUDING TAXIWAY F) FOR RUBBER Tired VEHICLE TRAFFIC FOR ACCESS TO AND BETWEEN THE ACCESS GATE, WORK AREAS AND STAGING AREAS. ALL CONSTRUCTION TRAFFIC MUST YIELD THE RIGHT OF WAY (TAXILANE PAVEMENT AND ADJACENT OBJECT FREE AREAS) AT ALL TIMES TO MOVING AIRCRAFT. THIS INCLUDES FIXED WING AIRPLANES TAXIING BETWEEN HANGARS, THE TERMINAL APRON AND/OR THE TAXIWAY/RUNWAY ENVIRONMENT AND HELICOPTERS HOVER-TAXIING ALONG THE TAXILANE NETWORK. CONSTRUCTION TRAFFIC MUST ALSO YIELD TO OR READILY ACCOMMODATE NON-CONSTRUCTION VEHICULAR TRAFFIC, INCLUDING HANGAR TENANT VEHICLES, AIRPORT VEHICLES AND SERVICE VEHICLES.
  6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING PORTIONS OF THE TAXILANE NETWORK USED FOR CONSTRUCTION TRAFFIC CLEAR OF ANY AND ALL DEBRIS, SPILLAGE, FOD, SOIL MATERIALS, ETC. WHICH COULD BE DAMAGING TO AIRCRAFT. THE CONTRACTOR SHALL IMMEDIATELY CLEAN UP ANY SUCH MATERIALS AND SHALL MAINTAIN SWEEPING EQUIPMENT ON-SITE FOR THAT PURPOSE AT ALL TIMES.
  7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMELY REPAIR OF ANY PAVEMENT AND/OR SHOULDER AREA DAMAGE ALONG THE TAXILANES RESULTING FROM CONSTRUCTION ACCESS ALONG OR ACROSS THE TAXILANES. REPAIRS SHALL RESTORE THE AFFECTED AREAS TO EXISTING CONDITION OR BETTER TO THE SATISFACTION OF THE OWNER AND THE ENGINEER. NOTE THAT THE EXISTING TAXILANE PAVEMENTS ARE OLDER AND EXHIBIT VARIOUS FORMS AND LEVELS OF DISTRESS. THE CONTRACTOR SHALL PHOTO DOCUMENT PRE-CONSTRUCTION CONDITIONS AND AREAS OF PAVEMENT DISTRESS OR DAMAGE ALONG THE TAXILANES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSIDERING THE POTENTIAL EFFECTS OF HEAVIER VEHICLES ON THE PAVEMENT IN CONDUCTING CONSTRUCTION ACCESS AND HAULING OPERATIONS.
  8. THE CONTRACTOR MAY CONSTRUCT A HAUL ROAD, GENERALLY FOLLOWING THE ALIGNMENT AND GEOMETRY SHOWN ON THE PLANS, TO REDUCE THE POTENTIAL IMPACTS OF HAULING OPERATIONS AND CONSTRUCTION TRAFFIC ON THE TAXILANE NETWORK. THE CROSS SECTIONAL DETAIL ON THE PLANS IS CONSIDERED A MINIMUM SECTION. NO REPRESENTATION IS MADE AS TO THE ADEQUACY OF THAT SECTION FOR THE WEIGHTS, TYPES AND NUMBERS OF TRUCKS ANTICIPATED. THE CONTRACTOR IS ADVISED THAT MARGINAL SOIL CONDITIONS ARE LIKELY ALONG THE ALIGNMENT. IF THE CONTRACTOR ELECTS TO CONSTRUCT THE HAUL ROAD, HE SHALL BE FULLY RESPONSIBLE FOR DETERMINING THE ROADWAY CROSS SECTION AND FOR ALL WORK NECESSARY TO LAY OUT, CONSTRUCT, MAINTAIN, AND REMOVE THE HAUL ROUTE AND TO RESTORE THE ALIGNMENT FOLLOWING CONSTRUCTION TO THE SATISFACTION OF THE OWNER AND THE ENGINEER. FOLLOWING ROADWAY REMOVAL, THE AREA SHALL BE SMOOTHLY GRADED TO DRAIN, COVERED WITH TOPSOIL AND TURF ESTABLISHED BY SEEDING AND MULCHING, BUT WITH 20 FEET OF SOD ADJACENT TO TAXILANE PAVEMENTS.
  9. ALL COSTS FOR CONSTRUCTION ACCESS, INCLUDING BUT NOT LIMITED TO PRE-CONSTRUCTION PHOTOS, GATE KEEPING, ESCORTING, PAVEMENT SWEEPING, PAVEMENT REPAIRS, HAUL ROAD CONSTRUCTION AND MAINTENANCE AND SITE RESTORATION SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM FOR "TEMPORARY CONSTRUCTION ITEMS".

- WORK AREA 1A:**
1. NO AIRFIELD CLOSURES REQUIRED FOR WORK AREA 1A AS THE WORK IS LOCATED OUTSIDE ALL TAXIWAY/TAXILANE OBJECT FREE AREAS (TOFA/TLOFA).
- WORK AREA 1B:**
1. A PARTIAL CLOSURE OF TAXILANE N2 (WORK AREA 1B) IS PROVIDED FOR THE DURATION OF SCHEDULE 1 CONSTRUCTION. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE CLOSED PORTION OF HANGAR TAXILANE N2.
- WORK AREA 1C:**
1. AN ADDITIONAL PARTIAL CLOSURE OF HANGAR TAXILANE N2 (WORK AREA 1C) IS PROVIDED FOR INTERMITTENT CLOSURE FOR THE DURATION OF SCHEDULE 1 CONSTRUCTION. WHEN ACCESS TO/ FROM HANGAR UNITS 26 C OR 28 D IS COORDINATED IN ADVANCE AND CAN BE ACCOMMODATED, THE CONTRACTOR SHALL PREPARE WORK AREA 1C FOR TEMPORARY RE-OPENING FOR THE SCHEDULED AIRCRAFT MOVEMENT(S). AIRCRAFT WILL NOT BE ABLE TO UTILIZE THIS PORTION OF HANGAR TAXILANE N2 DURING WORK AREA 1C CLOSURES. NO ACCESS IS AVAILABLE TO THE TWO HANGAR UNITS WHEN THE WORK AREA 1C PARTIAL TAXILANE CLOSURE IS IN EFFECT.
  2. THE INTENTION IS THAT DEMOLITION AND RECONSTRUCTION OF PAVEMENT WITHIN WORK AREA 1C SHALL BE LIMITED TO 14 CALENDAR DAYS.
- WORK AREA 1D:**
1. A PARTIAL CLOSURE OF T-HANGAR TAXILANE W (WORK AREA 1D) IS PROVIDED FOR THE DURATION OF SCHEDULE 1 CONSTRUCTION. WHEN ACCESS TO/ FROM T-HANGAR UNITS 6, 7 OR 8 IS COORDINATED IN ADVANCE AND CAN BE ACCOMMODATED, THE CONTRACTOR SHALL PREPARE WORK AREA 1D FOR TEMPORARY RE-OPENING FOR THE SCHEDULED AIRCRAFT MOVEMENT(S). AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE ADJACENT TAXILANE WHEN THE WORK AREA 1D PARTIAL TAXILANE CLOSURE IS IN EFFECT.
- WORK AREA 1E:**
1. A PARTIAL CLOSURE OF HANGAR TAXILANE N1 (WORK AREA 1E) IS PROVIDED FOR STORM DRAIN, WATER AND SEWER LINE CONSTRUCTION AND PAVEMENT RESTORATION. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE CLOSED TAXILANE DURING WORK AREA 1E WORK. HANGAR ACCESS NEEDS SHALL BE DISCUSSED AND COORDINATED WITH THE CLOSURE SCHEDULE.
  2. THE INTENTION IS THAT STORM DRAIN, WATER AND SEWER CONSTRUCTION AND PAVEMENT RESTORATION WITHIN WORK AREA 1E SHALL BE LIMITED TO 21 CALENDAR DAYS. AIRCRAFT IN T-HANGARS AND SHELTERS WILL HAVE TO USE THE T-HANGAR TAXILANE AND T-HANGAR TAXIWAY.
- WORK AREA 1F:**
1. NO AIRFIELD CLOSURES REQUIRED FOR WORK AREA 1F AS THE WORK IS LOCATED OUTSIDE ALL TAXIWAY/TAXILANE OBJECT FREE AREAS (TOFA/TLOFA).
- WORK AREA 1G:**
1. A PARTIAL CLOSURE OF ADJACENT T-HANGAR TAXILANE E IS REQUIRED FOR WORK IN WORK AREA 1G, INCLUDING EARTHWORK, STORM DRAINAGE AND PAVING WORK. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE ADJACENT TAXILANE DURING WORK AREA 1G WORK. WHEN ACCESS TO/ FROM T-HANGAR UNITS 9 OR 10 OR EAST SIDE ACCESS TO A SHELTER UNIT IS COORDINATED IN ADVANCE AND CAN BE ACCOMMODATED, THE CONTRACTOR SHALL PREPARE WORK AREA 1G FOR TEMPORARY RE-OPENING FOR THE SCHEDULED AIRCRAFT MOVEMENT(S).
- WORK AREA 1H:**
1. A CLOSURE OF THE TLC HANGAR APRON IS REQUIRED FOR WATER MAIN AND PAVEMENT RESTORATION AND CURING IN WORK AREA 1H. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE HANGAR APRON DURING WORK AREA 1H WORK.



LEGEND	
	CONTRACTOR'S ACCESS ROUTE WITH TEMPORARY HAUL ROUTE OPTION
	CONTRACTOR'S ACCESS ROUTE WITHOUT TEMPORARY HAUL ROUTE OPTION
	CONTRACTOR'S STAGING AREA
	AIRPORT PROPERTY LINE
	TAXIWAY/TAXILANE OBJECT FREE AREA
	WORK AREA 1A LIMITS
	WORK AREA 1B LIMITS
	WORK AREA 1C LIMITS
	WORK AREA 1D LIMITS
	WORK AREA 1E LIMITS
	WORK AREA 1F LIMITS
	WORK AREA 1G LIMITS
	WORK AREA 1H LIMITS

**NOTE:**  
TAXILANE N2 OBJECT FREE AREA IS 88' WIDE, HOWEVER FOR THIS PROJECT THE TAXILANE N2 OBJECT FREE AREA IN FRONT OF THE CONSTRUCTION SITE IS 77.46' WIDE TO ALLOW ACCESS TO HANGARS 28C AND 28D WHEN NOT WORKING IN WORK AREA 1C.

**1 GA-101**  
INSTALL LIGHTED BARRICADES AS NEEDED. MOVE AND INSTALL WHERE NEEDED. SEE DETAIL ON THIS SHEET.

CONTRACTOR'S STAGING AREA LOCATION IF CONTRACTOR OPTS TO NOT INSTALL TEMPORARY HAUL ROUTE

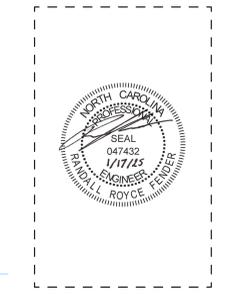
CONTRACTOR'S STAGING AREA LOCATION IF CONTRACTOR OPTS TO INSTALL TEMPORARY HAUL ROUTE

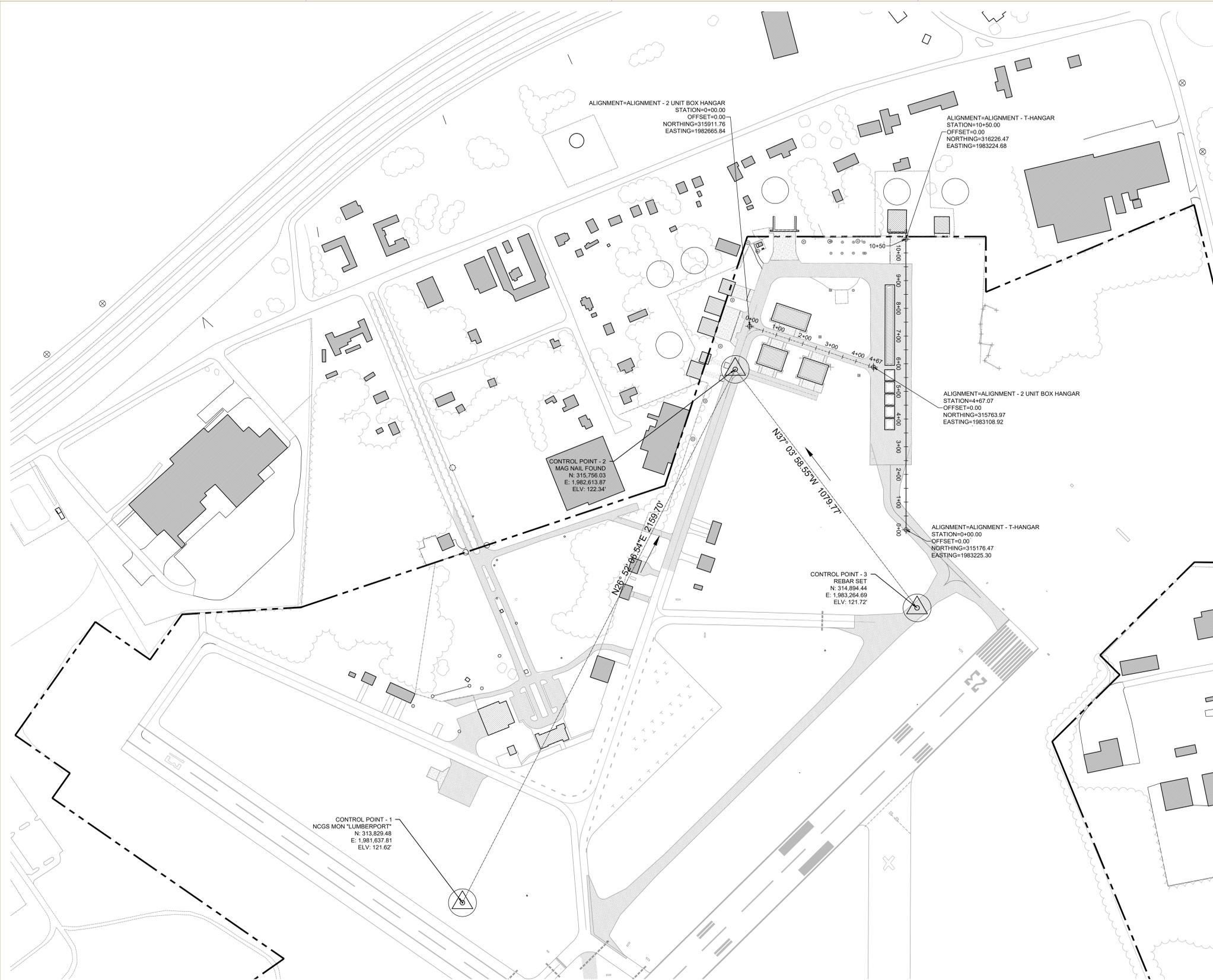
**GATE OPERATIONS NOTE:** CONTRACTOR SHALL ACCESS SITE THROUGH EXISTING GATE. GATE IS ELECTRICALLY OPERATED WITH KEY CARD. DURING PERIODS OF WORK REQUIRING HEAVY GATE TRAFFIC, THE GATE OPERATOR MAY BE DISABLED AND THE GATE MAY REMAIN OPEN. THE CONTRACTOR WILL BE REQUIRED TO MONITOR TRAFFIC ENTERING GATE DURING THESE TIMES TO RESTRICT ACCESS TO THE AIRFIELD. GATE KEEPER SHALL BE AT GATE OR WITHIN 200 FEET OF THE GATE TO MONITOR/CONTROL THE GATE ACCESS. GATE OPERATION SHALL BE RESTORED TO STANDARD CONDITIONS AT THE END OF OPERATIONS EACH DAY.

**1 GA-001**  
CONTRACTOR'S TEMPORARY HAUL ROUTE

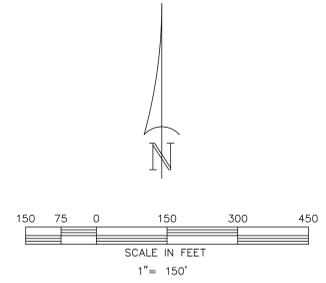
FLAGGER. SEE NOTE A (TYP.)

**NOTE A:**  
CONTRACTOR WILL BE REQUIRED TO UTILIZE FLAGMEN AT TAXILANE CROSSING DURING CONSTRUCTION. FLAGMEN SHALL HAVE ALL CONSTRUCTION TRAFFIC STOP PRIOR TO ENTERING OR CROSSING TAXIWAY/TAXILANE OBJECT FREE AREAS, AS SHOWN ON THE PLANS. CONTRACTOR SHALL VISUALLY MONITOR AIR TRAFFIC PRIOR TO VEHICLES ENTERING OR CROSSING ACTIVE TAXIWAYS/TAXILANES. DURING HEAVY HAULING OPERATIONS A FLAGGER WILL BE REQUIRED.





- NOTES:
1. SURVEY WAS PERFORMED BY COASTALGEOMATICS LAND SURVEYING, DATED AUGUST 2024.
  2. HORIZONTAL DATUM: NAD83 (2011), VERTICAL DATUM: NAVD88.
  3. CONTRACTOR SHALL BE REQUIRED TO CONFIRM CONTROL POINT DATA PRIOR TO USE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.
  4. COORDINATES SHOWN ARE GROUND COORDINATES. TO CONVERT GROUND TO GRID - MULTIPLY BY 0.99993499.
  5. CONTRACTOR SHALL PROTECT ALL CONTROL POINTS DURING CONSTRUCTION TO PREVENT DAMAGE. CONTRACTOR SHALL BE REQUIRED TO REINSTALL ANY CONTROL POINTS DAMAGED BY CONSTRUCTION ACTIVITIES THAT WILL BE REQUIRED FOR PROJECT COMPLETION.



SURVEY CONTROL POINTS NC GRID (NAD88/2011)			
NORTHING	EASTING	ELEVATION	DESCRIPTION
313,829.48'	1,981,637.81'	121.62'	NCGS MONUMENT "LUMBERPORT"
311,718.38'	1,980,318.55'	121.89'	NCGS MONUMENT "LUMBERPORT AZIMUTH"



**Schedule 1:**  
**2-Unit Box Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



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WATER & SEWER ENGINEER  
**WITHERSRAVENEL**  
219 STATION ROAD, SUITE 101  
WILMINGTON, NC 28405  
PHONE: 910-255-9277 LICENSE NO. F-1479

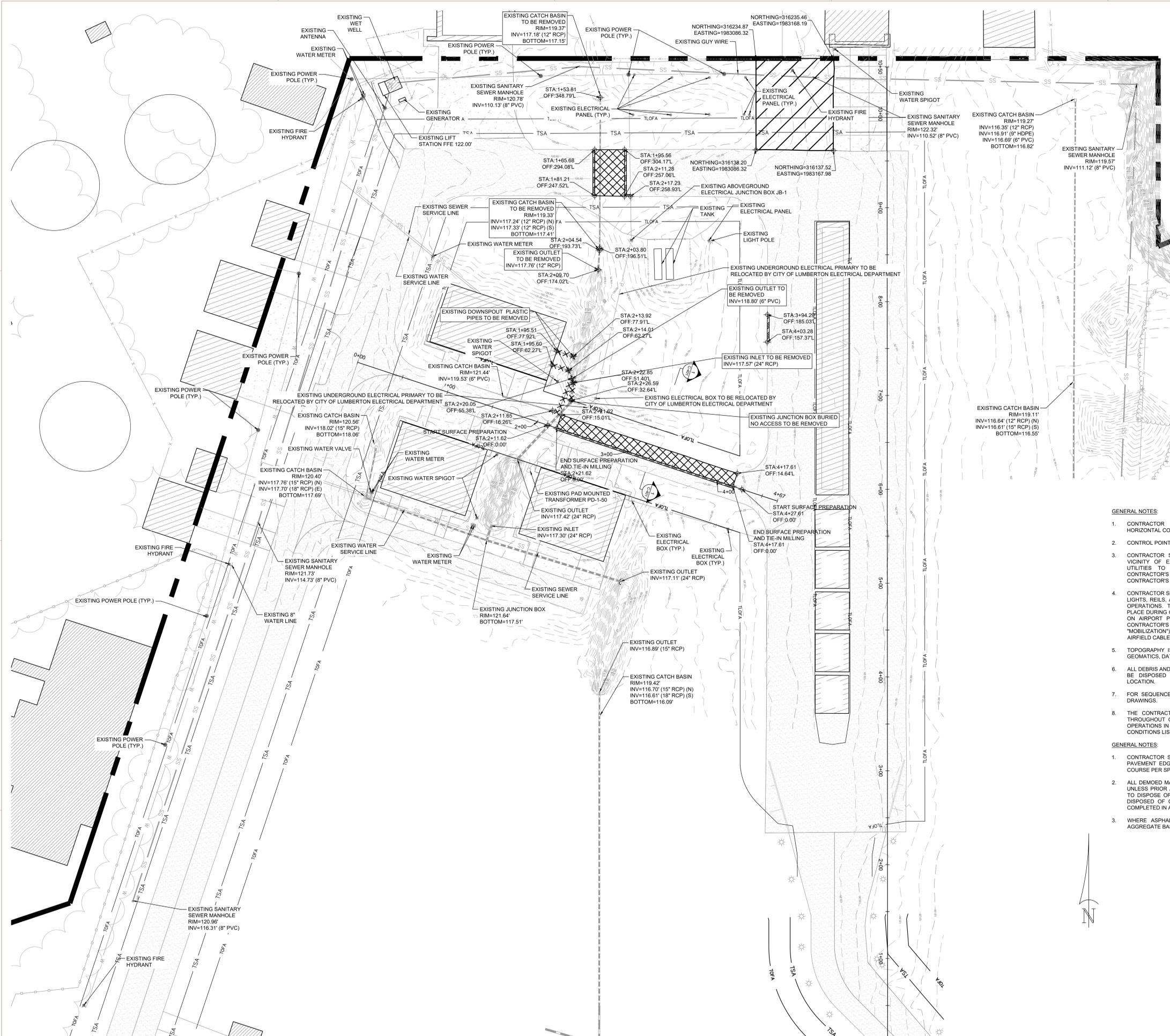
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REVISIONS

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**SURVEY CONTROL PLAN (SCHEDULE 1)**

SHEET NUMBER  
**VA-101**



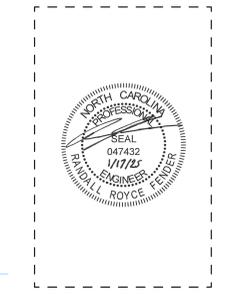
**LEGEND**

- ASPHALTIC PAVEMENT TO BE REMOVED (FULL-DEPTH)
- ASPHALTIC PAVEMENT TIE-IN MILLING, 1.5" DEPTH
- EXISTING AIRPORT BUILDINGS
- EXISTING CONCRETE PAVEMENT
- EXISTING BITUMINOUS PAVEMENT
- 122.5' EXISTING CONTOURS
- EXISTING FENCE
- EXISTING STORM SEWER TO BE REMOVED
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING OVERHEAD ELECTRICAL LINE
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING TAXIWAY LIGHTS
- TAXIWAY SAFETY AREA
- TAXIWAY/TAXILANE OBJECT FREE AREA
- SUE INVESTIGATION LIMITS

- GENERAL NOTES:**
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING VERTICAL AND HORIZONTAL CONTROL FOR THE DURATION OF THE PROJECT.
  - CONTROL POINTS AND BENCHMARKS ARE SHOWN ON SHEET VA-101.
  - CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES, TAXIWAY LIGHTS AND UTILITIES TO PREVENT DAMAGE. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
  - CONTRACTOR SHALL HAVE EXISTING ELECTRICAL LINES SERVICING RUNWAY LIGHTS, REELS, AND ALL OTHER UTILITIES LOCATED PRIOR TO EXCAVATION OPERATIONS. THESE ELECTRICAL SERVICE LINES SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION. THE SERVICE TO LOCATE AND MARK LINES ON AIRPORT PROPERTY WITHIN CONSTRUCTION LIMITS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS INCLUDED IN THE ITEM "MOBILIZATION". CONTRACTOR WILL BE RESPONSIBLE FOR MARKING ALL AIRFIELD CABLES WITHIN THE PROJECT LIMITS.
  - TOPOGRAPHY IS BASED ON GROUND SURVEY PERFORMED BY COASTAL GEOMATICS, DATED AUGUST 2024.
  - ALL DEBRIS AND EXCESS SOIL, AGGREGATE, ASPHALT, ETC. REMOVED SHALL BE DISPOSED OFF AIRPORT PROPERTY IN A PROPERLY PERMITTED LOCATION.
  - FOR SEQUENCE OF CONSTRUCTION AND PHASING, SEE GA-100 SERIES DRAWINGS.
  - THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS ON-SITE THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL OPERATIONS IN A MANNER CONSISTENT WITH THE PERMITS, INCLUDING ALL CONDITIONS LISTED THEREIN.
- GENERAL NOTES:**
- CONTRACTOR SHALL CUT BACK GRASS AND VEGETATION 10 FEET FROM PAVEMENT EDGES TO ALLOW PLACEMENT OF NEW ASPHALTIC SURFACE COURSE PER SPECIFICATION SECTION P-101.
  - ALL DEMOED MATERIALS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY UNLESS PRIOR APPROVAL IS GIVEN BY AIRPORT MANAGER AND ENGINEER TO DISPOSE OF CERTAIN MATERIALS ON AIRPORT PROPERTY. MATERIALS DISPOSED OF ON AIRPORT PROPERTY SHALL BE PLACED IN LIFTS AND COMPLETED IN ACCORDANCE WITH SPECIFICATION P-152.
  - WHERE ASPHALT IS CALLED OUT TO BE REMOVED, THE UNDERLYING AGGREGATE BASE COURSE SHOULD BE LEFT IN PLACE.



**Schedule 1:  
2-Unit Box Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



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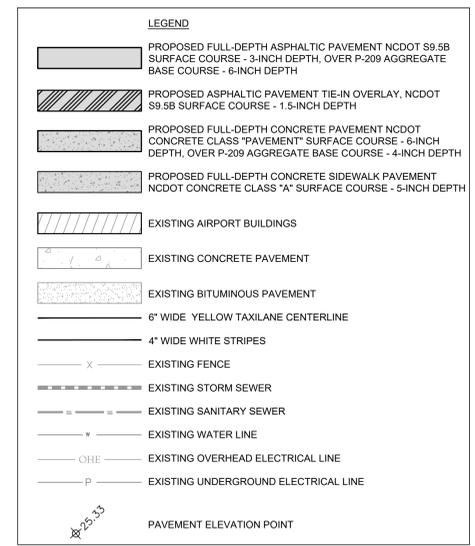
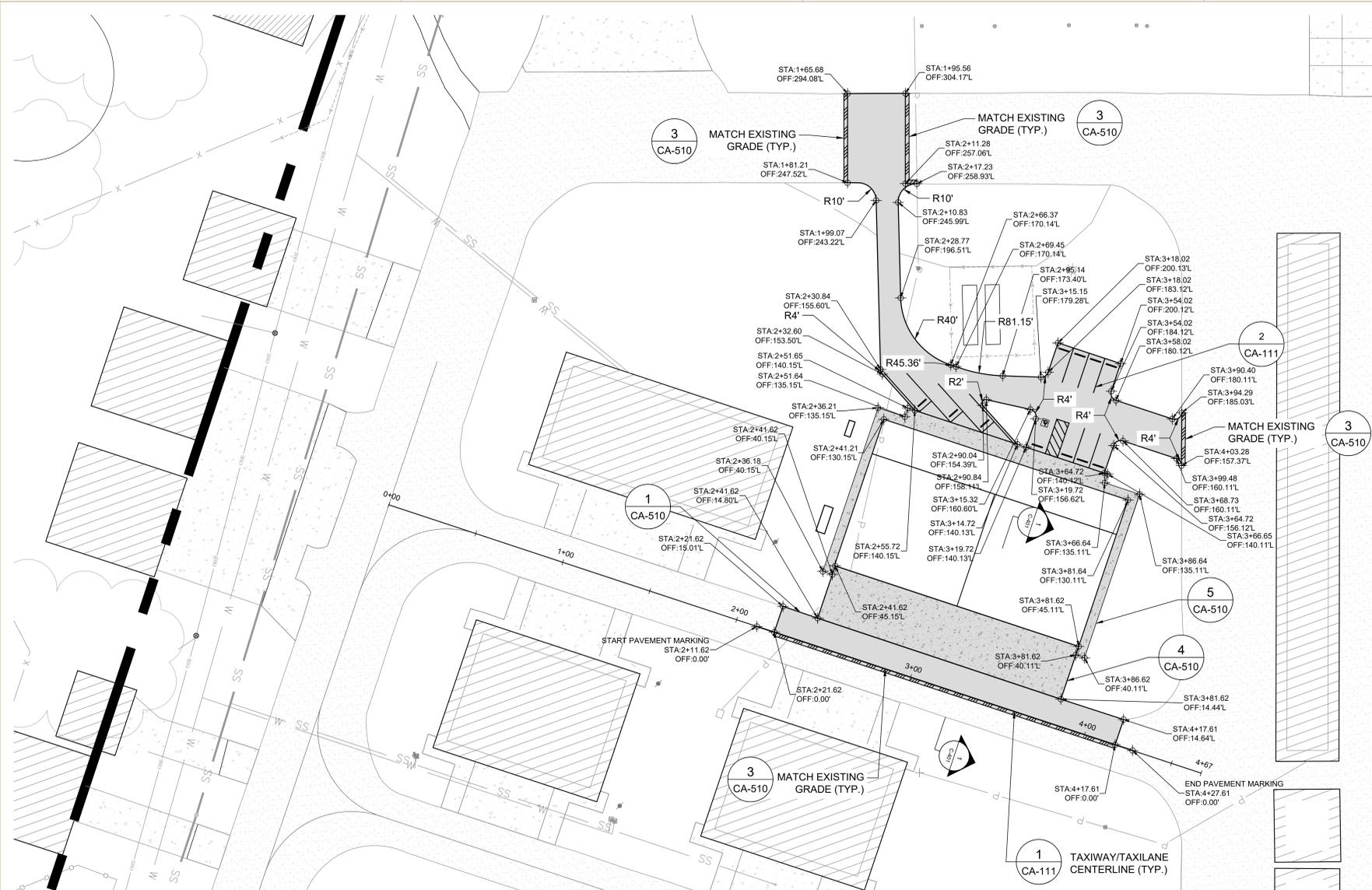
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REVISIONS

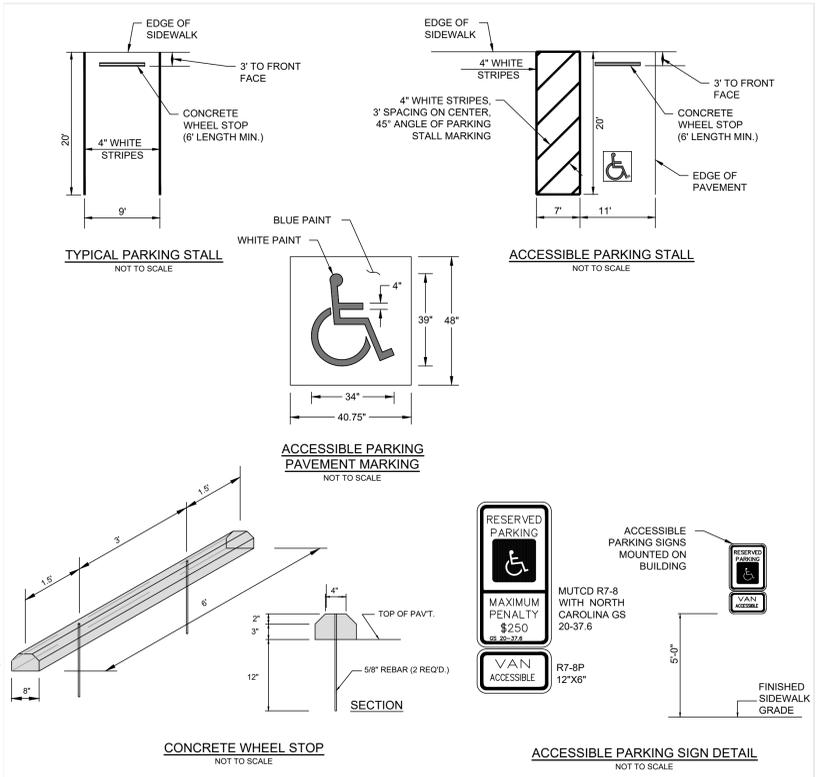
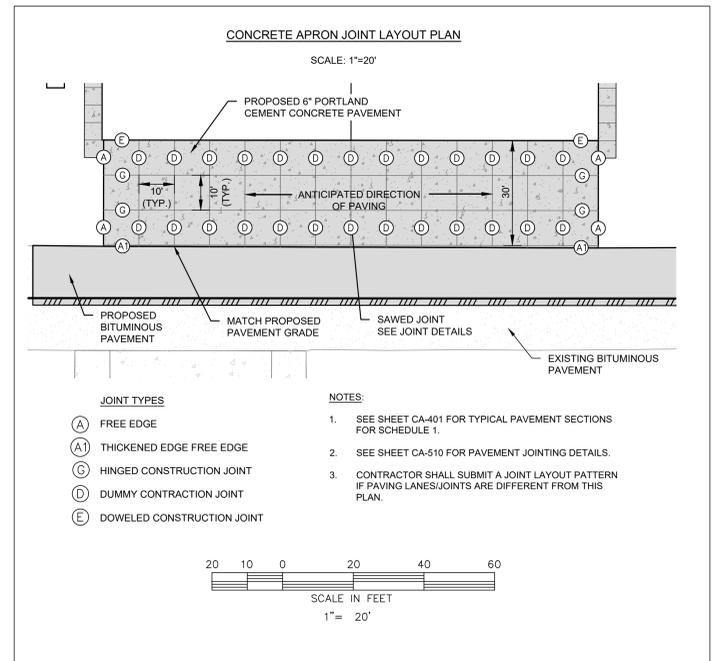
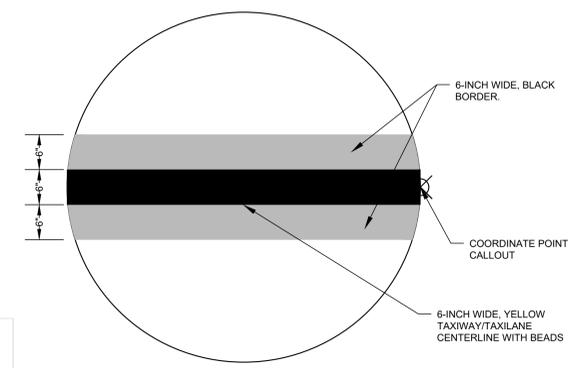
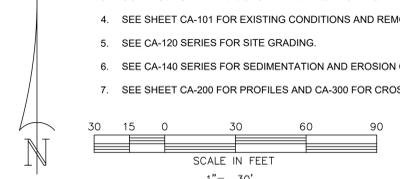
DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**EXISTING  
CONDITIONS AND  
REMOVAL PLAN  
(SCHEDULE 1)**

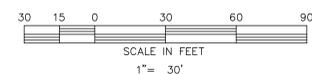
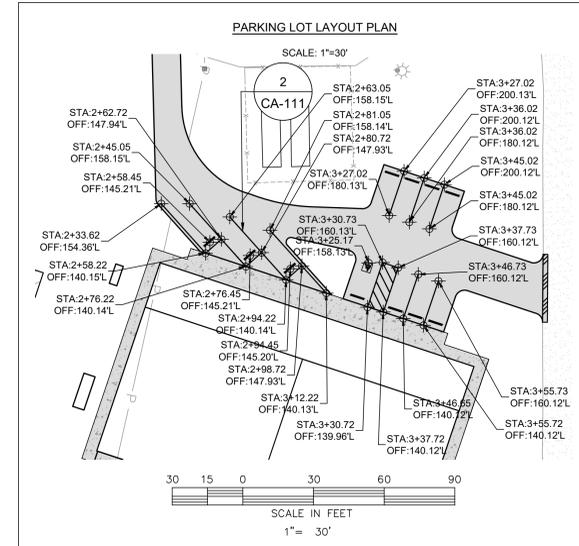
SHEET NUMBER  
**CA-101**

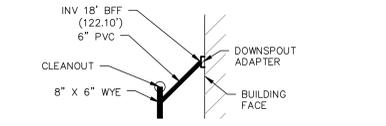
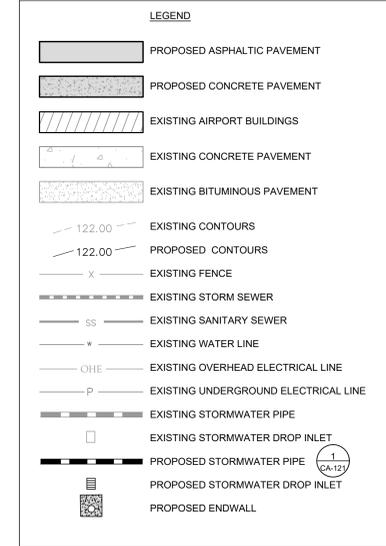
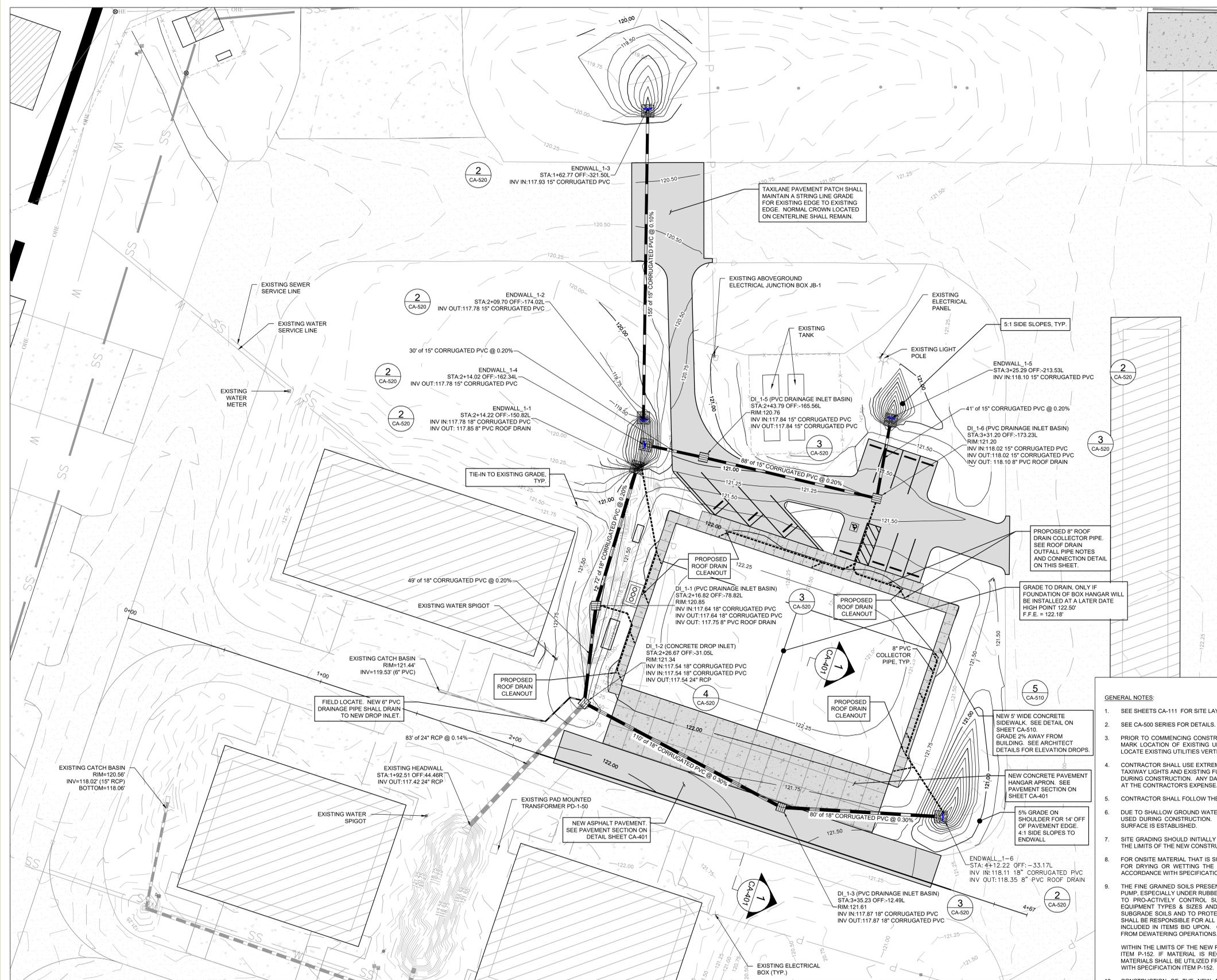


- GENERAL NOTES:**
- FOR SEQUENCE OF CONSTRUCTION AND PHASING, SEE GA-100 SERIES DRAWINGS.
  - SCHEDULE 1 WORK SHALL ONLY BE COMPLETED IF AWARDED.
  - CONTROL POINTS AND BENCHMARKS ARE SHOWN ON SHEET VA-101.
  - SEE SHEET CA-101 FOR EXISTING CONDITIONS AND REMOVAL ITEMS.
  - SEE CA-120 SERIES FOR SITE GRADING.
  - SEE CA-140 SERIES FOR SEDIMENTATION AND EROSION CONTROL PLAN.
  - SEE SHEET CA-200 FOR PROFILES AND CA-300 FOR CROSS-SECTIONS.



**2 PARKING LOT MARKING, WHEEL STOP, AND ACCESSIBLE SIGN DETAIL**  
NOT TO SCALE





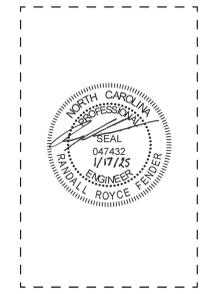
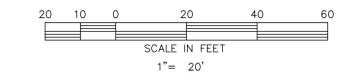
**ROOF DRAIN CONNECTION DETAIL**  
NOT TO SCALE

**\*\* ROOF DRAIN OUTFALL PIPE NOTES**

1. ROOF DRAINAGE FROM DOWNSPOUTS SHALL DRAIN INTO THE UNDERGROUND ROOF DRAIN COLLECTION SYSTEM DEPICTED ON THIS DRAWING. FINAL ALIGNMENT OF ROOF DRAIN LEADERS AND INVERTS TO BE COORDINATED IN THE FIELD TO AVOID OTHER UTILITIES IN THE AREA.
2. ROOF DRAIN UNDERGROUND COLLECTOR PIPES SHALL BE 8" PVC (SCH 40) AND SHALL BE INSTALLED TO MAINTAIN A MINIMUM 1% SLOPE ON THE COLLECTOR PIPE. ROOF DRAIN COLLECTOR PIPES SHALL CONNECT TO THE PROPOSED DRAINAGE INLET AS SHOWN.
3. UNDERGROUND ROOF DRAIN COLLECTION SYSTEM PIPE SHALL BE TURNED VERTICALLY AT EACH DOWNSPOUT LOCATION AND A DOWNSPOUT ADAPTER SHALL BE INSTALLED ABOVE THE SURFACE OF THE GROUND TO INTERCEPT EACH DOWNSPOUT WHERE IT ENTERS THE UNDERGROUND COLLECTION SYSTEM. A CLEANOUT SHALL BE INSTALLED AT THE END OF THE SYSTEM. THE COST FOR THE DOWNSPOUT ADAPTERS AND CLEANOUT SHALL BE INCLUDED IN THE PER LINEAR FOOT PRICE FOR 18" ROOF DRAIN OUTFALL PIPE.

**GENERAL NOTES:**

1. SEE SHEETS CA-111 FOR SITE LAYOUT PLAN.
2. SEE CA-500 SERIES FOR DETAILS.
3. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL CONTACT THE LOCAL UTILITY LOCATING COMPANIES TO MARK LOCATION OF EXISTING UNDERGROUND UTILITIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE EXISTING UTILITIES VERTICALLY AND HORIZONTALLY.
4. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES AND TAXIWAY LIGHTS AND EXISTING FUEL FARM TO PREVENT DAMAGE. CONTRACTOR SHALL PROTECT ALL UTILITIES IN PLACE DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
5. CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION DESCRIBED ON SHEET CA-140.
6. DUE TO SHALLOW GROUND WATER AND LOOSE OR SOFT SOILS, IT IS RECOMMENDED THAT WIDE TRACKED VEHICLES BE USED DURING CONSTRUCTION. HEAVY RUBBER-TIRE VEHICLES SHOULD BE KEPT OFF OF THE SITE UNTIL A STABLE SURFACE IS ESTABLISHED.
7. SITE GRADING SHOULD INITIALLY BEGIN WITH THE REMOVAL OF ANY TOPSOIL AND SURFACE VEGETATION FROM WITHIN THE LIMITS OF THE NEW CONSTRUCTION. THE ANTICIPATED DEPTH OF TOPSOIL AND VEGETATION IS 3 INCHES.
8. FOR ON-SITE MATERIAL THAT IS SUITABLE FOR USE IN PROJECT EMBANKMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR DRYING OR WETTING THE MATERIAL TO WITHIN 2% OF OPTIMUM MOISTURE AND COMPACT THE MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION P-152.
9. THE FINE GRAINED SOILS PRESENT IN THE PROJECT AREA ARE SENSITIVE TO EXCESSIVE MOISTURE, AND MAY RUT AND PUMP, ESPECIALLY UNDER RUBBER TIRE TRAFFIC LOADING WHEN WET. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRO-ACTIVELY CONTROL SURFACE RUNOFF AND GROUND WATER, TO EXERCISE DISCRETION IN SELECTING EQUIPMENT TYPES & SIZES AND TO SEQUENCE HIS OPERATIONS SO AS TO MINIMIZE DETERIORATION OF EXPOSED SUBGRADE SOILS AND TO PROTECT THE SUBGRADE UNTIL THE OVERLYING MATERIALS CAN BE PLACED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING OPERATIONS DURING CONSTRUCTION. COST FOR DEWATERING SHALL BE INCLUDED IN ITEMS BID UPON. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING ALL SEDIMENT PRODUCED FROM DEWATERING OPERATIONS.
10. CONSTRUCTION OF THE NEW ASPHALTIC PAVEMENT SHALL INCLUDE PLACEMENT OF THE ASPHALTIC PAVEMENT SURFACE COURSE IN TWO LIFTS. EACH LIFT OF PAVEMENT SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION. AFTER THE FIRST LIFT HAS BEEN PLACED AND HAD ADEQUATE TIME TO COOL, TACK COAT SHALL BE APPLIED TO THE PAVEMENT SURFACE. PRIOR TO PAVING THE NEXT LIFT.
11. UPON COMPLETION OF THE PAVING OPERATIONS, STOCKPILED TOPSOIL SHALL BE PLACED ON DISTURBED AREAS PRIOR TO SODDING OR SEEDING AND MULCHING. ALL EXCESS STOCKPILED TOPSOIL AND EXCAVATED SOIL PREVIOUSLY STOCKPILED SHALL BE DISPOSED OF OFF AIRPORT PROPERTY. THERE SHALL BE NO SEPARATE MEASUREMENT AND PAYMENT FOR STOCKPILED TOPSOIL AND PLACING THE TOPSOIL IN ITS FINAL LOCATION OR HAULING OFFSITE AND DISPOSAL OF EXCESS MATERIAL.
12. INSTALL SOD FOR ALL DISTURBED AREAS AROUND NEW HANGAR AND HANGAR INFIELD.



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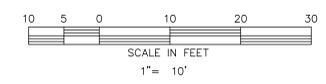
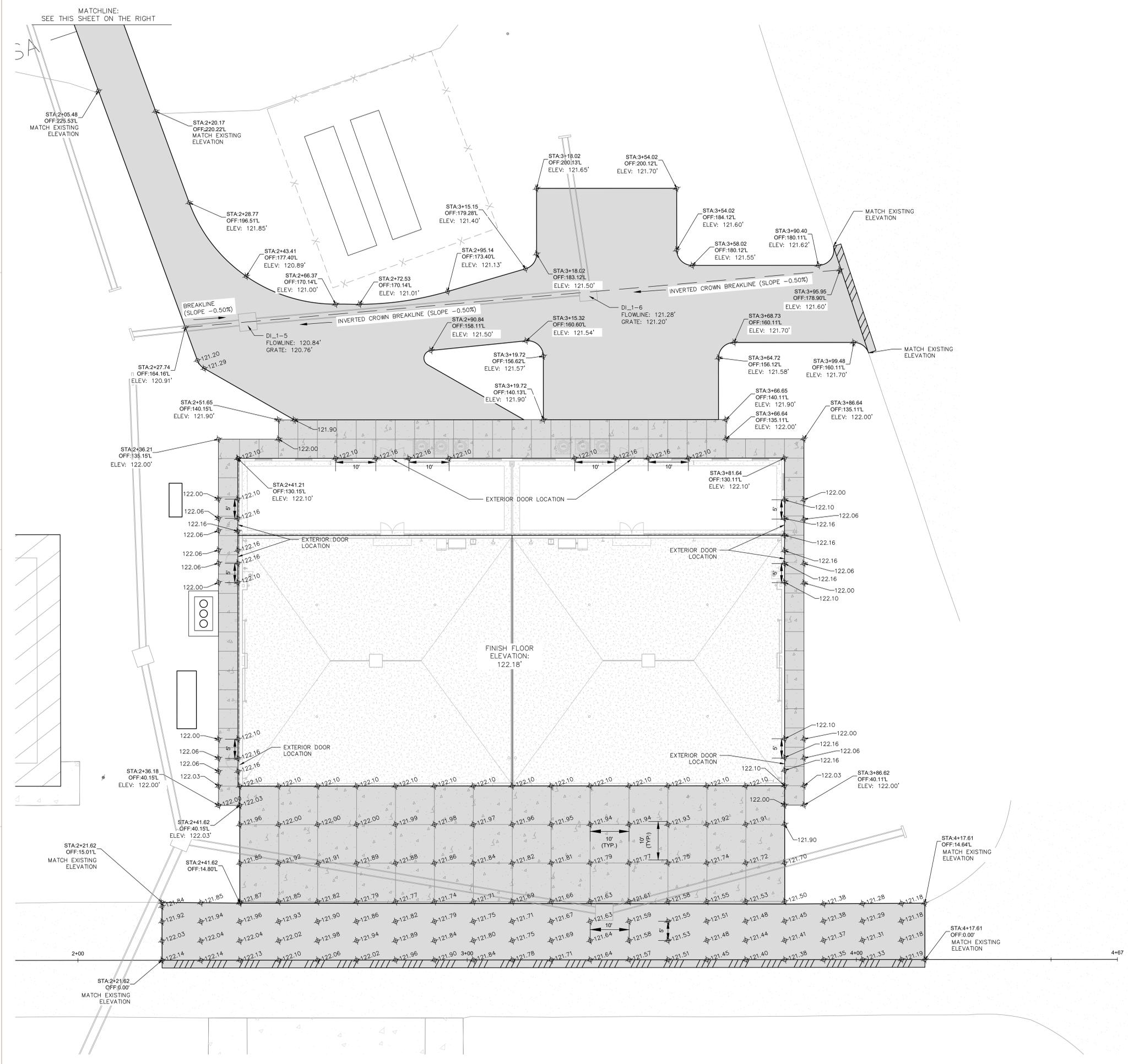
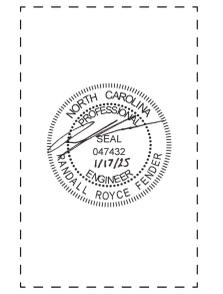
**REVISIONS**

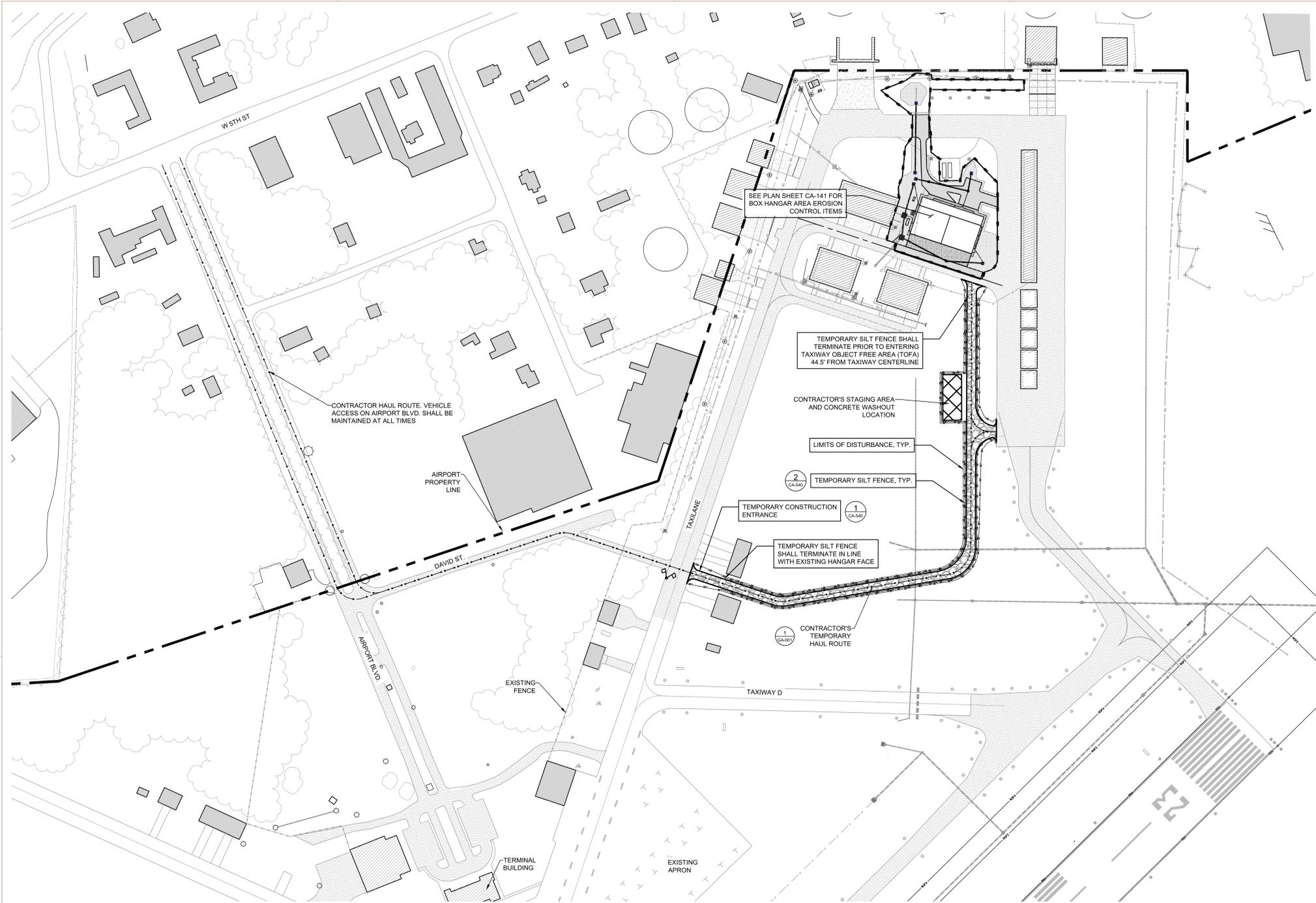
NO.	DATE	DESCRIPTION

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**GRADING & DRAINAGE PLAN (SCHEDULE 1)**

SHEET NUMBER  
**CA-121**





PERMANENT SEED MIXES SHALL BE APPLIED AS FOLLOWS:

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
COMMON BERMUDAGRASS (HULLED)	50	MAR. 1 - JUL. 31
COMMON BERMUDAGRASS (UNHULLED)	70	AUG. 1 - FEB. 28

TEMPORARY SEED MIXES SHALL BE APPLIED AS FOLLOWS:

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
RYE (GRAIN)	120	JAN. 1 - MAR. 31
KOBE LESPEDEZA	50	APR. 1 - AUG. 15
HULLED BERMUDA GRASS	50	APR. 1 - AUG. 15
RYE (GRAIN)	120	AUG. 16 - DEC. 31

FERTILIZER: FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 LBS/ACRE OF A 10-10-10 COMMERCIAL FERTILIZER. FERTILIZER SHALL BE APPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

LIME: LIME SHALL BE APPLIED AT THE RATE OF 3,000 LBS/ACRE. LIME SHALL BE APPLIED IN ACCORDANCE WITH SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

MULCH: MULCH SHALL CONSIST OF MANUFACTURED MULCH. MULCH SHALL BE EVENLY APPLIED AT THE RATE OF 2 TO 3 TONS PER ACRE TO PROVIDE A LOOSE DEPTH OF 1 1/2"-3". MANUFACTURED MULCH SHALL BE APPLIED AT THE RATE AS RECOMMENDED BY THE MANUFACTURER. MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-908 - MULCHING OF THE SPECIFICATIONS.

MAINTENANCE OF SEEDED AREAS: THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A GOOD STAND OF GRASS OF UNIFORM COLOR AND DENSITY TO THE SATISFACTION OF THE ENGINEER AND OWNER. THE CONTRACTOR SHALL WATER THE SEEDED AREAS AS REQUIRED FOR SEED GERMINATION AND AS REQUIRED TO MAINTAIN AREAS OF ESTABLISHED GRASS. THE CONTRACTOR SHALL MOW GRASS AREAS AND CONTROL THE PRESENCE OF INVASIVE SPECIES AS REQUIRED. CONTRACTOR WILL BE REQUIRED TO RESEED AND MULCH ALL AREAS WHERE SEEDING EMERGENCE IS POOR. ALL AREAS OF EROSION SHALL BE REPAIRED AND RESEEDED AS SOON AS POSSIBLE. CONTRACTOR SHALL PROTECT SEEDED AREAS FROM TRAFFIC AS MUCH AS POSSIBLE.

GENERAL SEQUENCE OF CONSTRUCTION:

THE FOLLOWING GENERAL SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED TO OUTLINE THE REQUIREMENTS FOR EROSION AND SEDIMENTATION CONTROL. IN ACCORDANCE WITH THE CONTRACT PROVISIONS, THE CONTRACTOR SHALL DEVELOP AND SUBMIT A DETAILED PROJECT CONSTRUCTION SCHEDULE.

SEQUENCE OF CONSTRUCTION - SEDIMENT AND EROSION CONTROL:

- PERFORM PROJECT LAYOUT (SURVEY), MARK UTILITIES AND FLAG CLEARING LIMITS FOR REVIEW BY ENGINEER.
- AIRPORT WILL HOLD PRECONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE.
- CLOSE CONSTRUCTION AREA FOR AIRPORT TRAFFIC WITH APPROPRIATE BARRICADES AND TAXIWAY CLOSURE CROSSES.
- INSTALL TEMPORARY SILT FENCE AND OTHER TEMPORARY EROSION CONTROL MEASURES.
- SET UP STAGING AND STOCKPILE AREAS.
- STRIP APPROXIMATELY 4 INCHES TO REMOVE TOPSOIL AND GRASS ROOTMATS.
- INSTALL NEW PIPE AND DRAINAGE STRUCTURES.
- BEGIN PLACING FILL TO BRING SITE TO PROPOSED GRADES.
- INSTALL TEMPORARY DROP INLET PROTECTION.
- COMPLETE WATER AND SANITARY SEWER UTILITIES INSTALLATION AND GRADING.
- COMPLETE FINAL GRADING.
- COMMENCE PLACEMENT OF STONE BASE COURSE, COMPACT, AND GRADE TO SPECIFIED ELEVATIONS AND GRADE.
- CONSTRUCT ASPHALTIC PAVEMENT AND CONCRETE PAVEMENT.
- COMPLETE SHOULDER GRADING OPERATIONS AS NECESSARY.
- BEGIN SODDING, SEEDING, AND MULCHING OPERATIONS FOR DISTURBED AREAS.
- REMOVE MISCELLANEOUS EQUIPMENT, STOCKPILES, DEBRIS, ETC., FROM PROJECT AND STAGING AREA TO DISPOSE OF OFF AIRPORT PROPERTY, AS REQUIRED.
- COMPLETE RESTORATION OF ALL DISTURBED AREAS AND COMPLETE SODDING, SEEDING AND MULCHING ON ALL AREAS THROUGHOUT THE PROJECT. FOLLOWING STABILIZATION OF THE SITE, INCLUDING ESTABLISHMENT OF A GOOD STAND OF GRASS IN ALL AREAS, THE CONTRACTOR SHALL REQUEST FINAL INSPECTION BY ENGINEER. REMOVE REMAINING TEMPORARY EROSION CONTROL MEASURES AS THE PROJECT IS COMPLETED OR GRASSED AREAS ARE REESTABLISHED AS DIRECTED BY THE ENGINEER.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED REPAIRS WILL BE MADE IMMEDIATELY. SEE MAINTENANCE REQUIREMENTS FOR EACH EROSION AND SEDIMENT CONTROL PRACTICE.

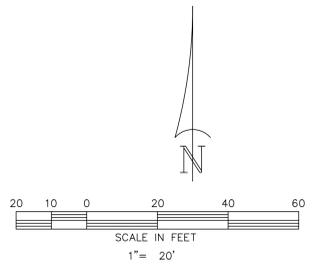
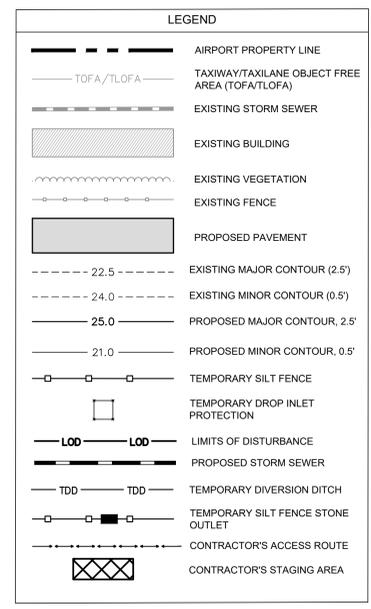
EROSION AND SEDIMENT CONTROL NOTES:

- ALL TEMPORARY OR PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES NECESSARY FOR RETAINING SEDIMENTS ON THE CONSTRUCTION SITE SHALL BE INSTALLED AT THE LOCATIONS AS SPECIFIED ON THE PLANS PRIOR TO ANY LAND CLEARING OR GRUBBING ACTIVITIES. A RAIN GAUGE PROVIDED BY CONTRACTOR MUST BE LOCATED ON SITE AT ALL TIMES.
- SUFFICIENT MATERIALS REQUIRED FOR STABILIZATION AND/OR REPAIR OF EROSION CONTROL MEASURES AND STORMWATER ROUTING AND TREATMENT SHALL BE ON SITE AT ALL TIMES.
- CRITICAL EROSION AREAS SHALL BE GIVEN SPECIAL ATTENTION PRIOR TO AND DURING CONSTRUCTION OF THE PROJECT AND UNTIL SUCH TIME AS STABILIZATION OF THE PROJECT HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL MAKE PERIODIC SITE INSPECTIONS OF THE EROSION AND SEDIMENT CONTROL MEASURES TO DETERMINE THEIR CONDITION AND PERFORMANCE. IF SEDIMENT HAS DEPOSITED IN A STREAM OR WETLAND, CONTRACTOR SHALL NOTIFY OWNER AND THE DIVISION OF WATER QUALITY OFFICE WITHIN 24 HOURS AND WRITTEN NOTICE MUST BE PROVIDED WITHIN 5 DAYS. SHOULD ANY ADJUSTMENTS OR REPAIRS NEED TO BE MADE, THE CONTRACTOR SHALL RESPOND IMMEDIATELY IN MAKING NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT. ANY SEDIMENT WHICH HAS BEEN TRANSPORTED BEYOND THE PROJECT LIMITS SHALL BE REMOVED AND/OR STABILIZED AS DIRECTED BY THE ENGINEER.
- TOPSOIL AND AGGREGATE STOCKPILES SHALL BE PLACED AT THE LOCATION AS DIRECTED BY THE ENGINEER. DEDICATED DEMOLITION AND OTHER WASTE AREAS AND EARTHEN MATERIAL STOCKPILES MUST BE LOCATED AT LEAST 50' FROM STORM DRAINS OR STREAMS UNLESS NO ALTERNATIVE IS FEASIBLE. SILT FENCE SHALL BE ERRECTED AT THE TOE OF THE STOCKPILES. SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICLES TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- CONTRACTOR SHALL MAINTAIN AND REPAIR EXISTING AGGREGATE BASE ON ACCESS ROADS, PARKING AREAS AND/OR OTHER VEHICLE TRANSPORTATION ROUTES AS REQUIRED OR AS DIRECTED BY THE ENGINEER.
- EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. THE MEASURES ARE TO BE KEPT CLEAR OF DEBRIS AND SEDIMENTS SHALL BE CLEANED OUT PERIODICALLY DURING AND AFTER CONSTRUCTION ACTIVITIES. ALL OTHER STORM WATER MANAGEMENT FACILITIES SHALL BE INSTALLED AND MADE OPERATIONAL AS SHOWN OR REQUIRED BY CONSTRUCTION ACTIVITIES.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DISTURBED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. PERMANENT VEGETATIVE COVER SHALL CONSIST OF LIMING, FERTILIZING, SEEDING, AND MULCHING TO ASSURE A FIRM STAND OF GRASS. TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED ONLY WHEN STABILIZATION HAS BEEN ESTABLISHED.

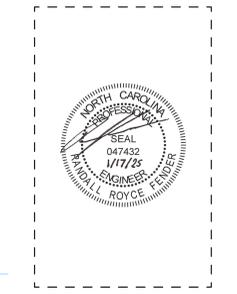
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE SCHEDULED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH RAINFALL PRODUCING RUNOFF DURING THE PROJECT. NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT SHALL BE PERFORMED IMMEDIATELY. RAINY SEASONS OR WET PERIODS WILL BE OF PARTICULAR CONCERN AND THE PROJECT SHALL BE INSPECTED DAILY BY THE CONTRACTOR.
- AIRBORNE SEDIMENTS (DUST) SHALL BE CONTROLLED IN ACCORDANCE WITH REQUIREMENTS OF THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- A PERMANENT GROUND COVER MUST BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER), FOLLOWING COMPLETION OF EACH PHASE OF CONSTRUCTION.
- ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY AND PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (1/2) INCH DURING THE PROJECT AND FINAL STABILIZATION OF PROJECT. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE NORTH CAROLINA SEDIMENTATION CONTROL LAW AND THE RELATED REGULATIONS, INCLUDING IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AND THE REQUIREMENTS OF THE NPDES GENERAL PERMIT.
- THE CONTRACTOR SHALL MAINTAIN ON SITE AT ALL TIMES A COPY OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, DATED MAY, 2013.

SITE AREA DESCRIPTION	STABILIZATION TIMEFRAMES	
	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.

- NOTES:
- EXCELSIOR MATTING SHALL BE INSTALLED ON ALL DISTURBED OR NEW SLOPES 5:1 OR GREATER. SEE DETAIL ON SHEET CB-541.
  - SEE SEDIMENTATION AND EROSION CONTROL NOTES AND DETAILS ON SHEETS CB-540 THROUGH CB-543.
  - FEDERAL REGULATIONS WILL NOT ALLOW MEASURES SUCH AS SILT FENCE TO BE PLACED WITHIN EXISTING TAXILANE OBJECT FREE AREAS THAT ARE OPEN FOR USE.
  - THERE MAY BE INSTANCES WHERE SHRUB AND TREE GROWTH NEXT TO THE FENCE MAKES IT IMPRACTICAL TO PLACE SILT FENCE WITHIN THE FENCE. IN THIS CASE, SILT FENCE SHALL BE INSTALLED ON THE OTHER SIDE OF THE FENCE WHILE ENSURING THE SILT FENCE IS STILL INSTALLED ON AIRPORT PROPERTY. IN TRANSITIONS FROM EITHER SIDE OF THE FENCE TO THE OTHER, SUFFICIENT OVERLAP SHOULD BE ADDED TO ENSURE SEDIMENT IS CONTAINED ON SITE.



Schedule 1:  
2-Unit Box Hangar  
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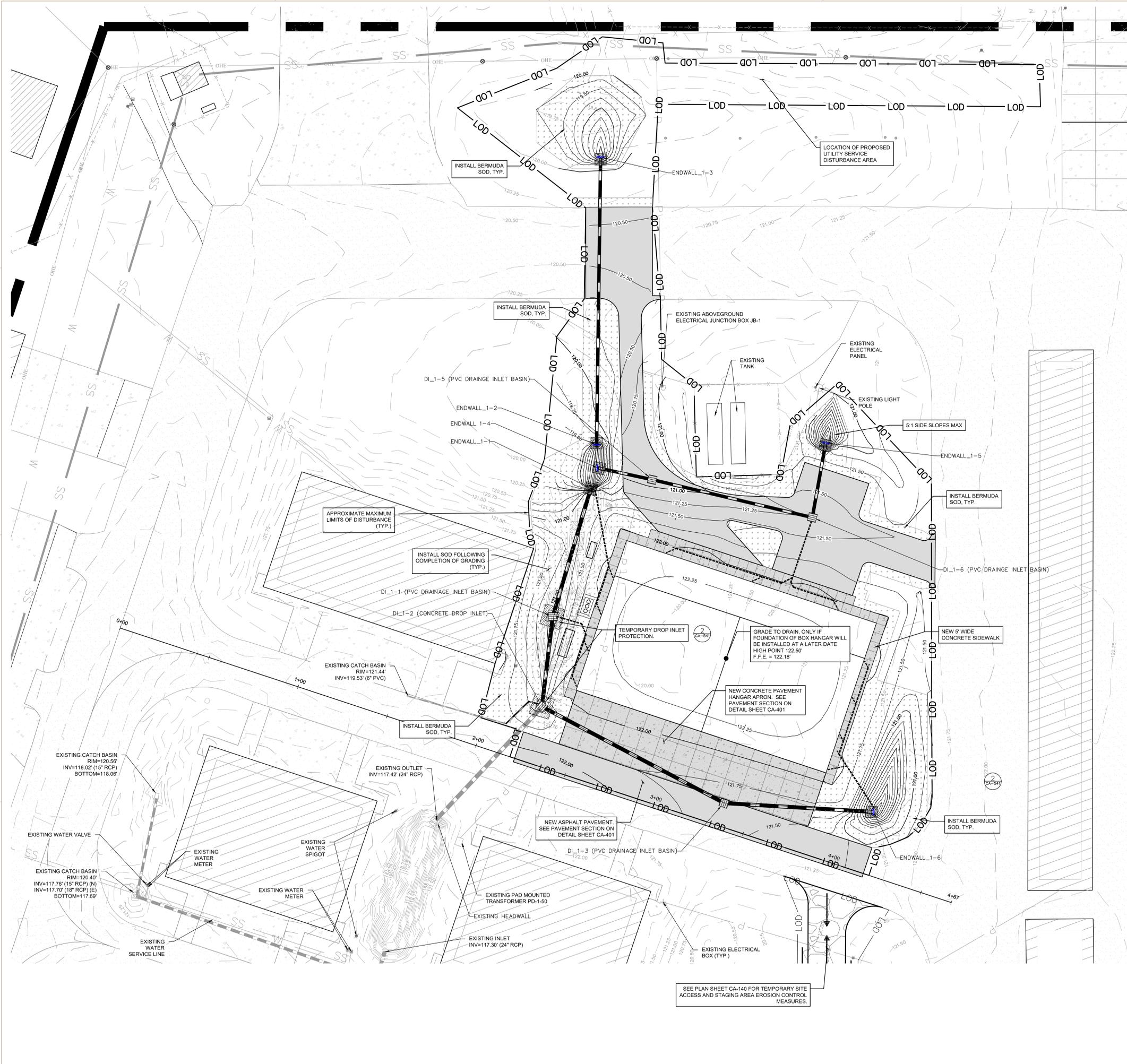
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REVISIONS

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**SEDIMENTATION & EROSION CONTROL PLAN - 1 (SCHEDULE 1)**

SHEET NUMBER  
**CA-140**



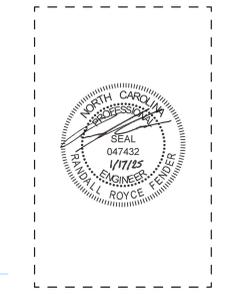
**LEGEND**

	AIRPORT PROPERTY LINE
	TAXIWAY/TAXILANE OBJECT FREE AREA (TOFATLOFA)
	EXISTING STORM SEWER
	EXISTING BUILDING
	EXISTING VEGETATION
	EXISTING FENCE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE PAVEMENT
	EXISTING SANITARY SEWER
	EXISTING WATER LINE
	EXISTING OVERHEAD ELECTRICAL LINE
	EXISTING UNDERGROUND ELECTRICAL LINE
	EXISTING MAJOR CONTOUR (2.5')
	EXISTING MINOR CONTOUR (0.5')
	PROPOSED MAJOR CONTOUR, 2.5'
	PROPOSED MINOR CONTOUR, 0.5'
	TEMPORARY SILT FENCE
	TEMPORARY DROP INLET PROTECTION
	LIMITS OF DISTURBANCE
	PROPOSED STORM SEWER
	TEMPORARY DIVERSION DITCH
	CONTRACTOR'S ACCESS ROUTE
	CONTRACTOR'S STAGING AREA
	BERMUDA SOD

- NOTES:**
- SEE SEDIMENTATION AND EROSION CONTROL NOTES AND DETAILS ON SHEETS CA-540 AND CA-541.
  - FEDERAL REGULATIONS WILL NOT ALLOW MEASURES SUCH AS SILT FENCE TO BE PLACED WITHIN EXISTING TAXILANE OBJECT FREE AREAS THAT ARE OPEN FOR USE.



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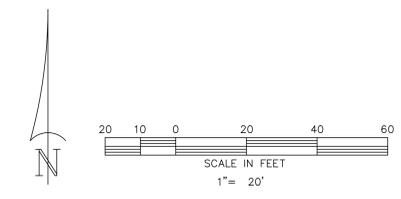
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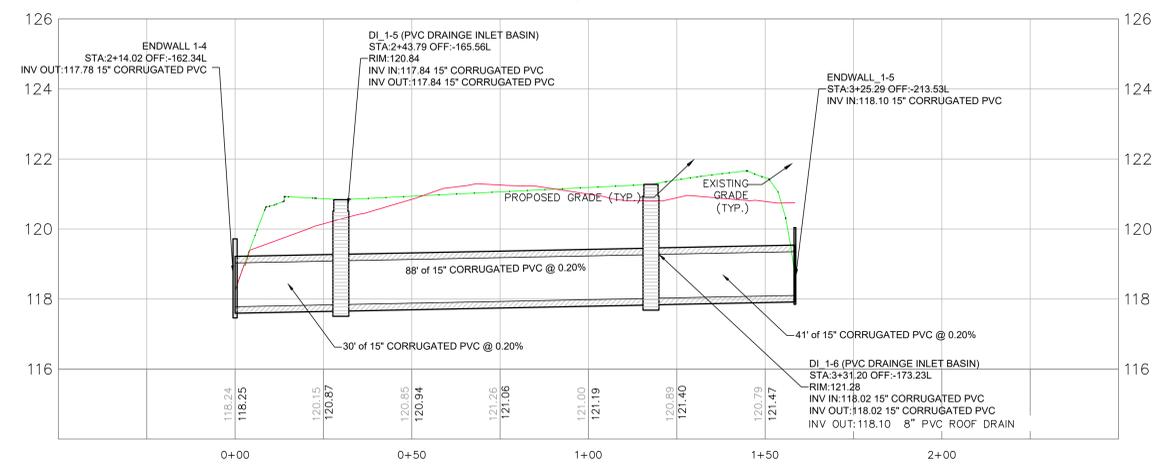
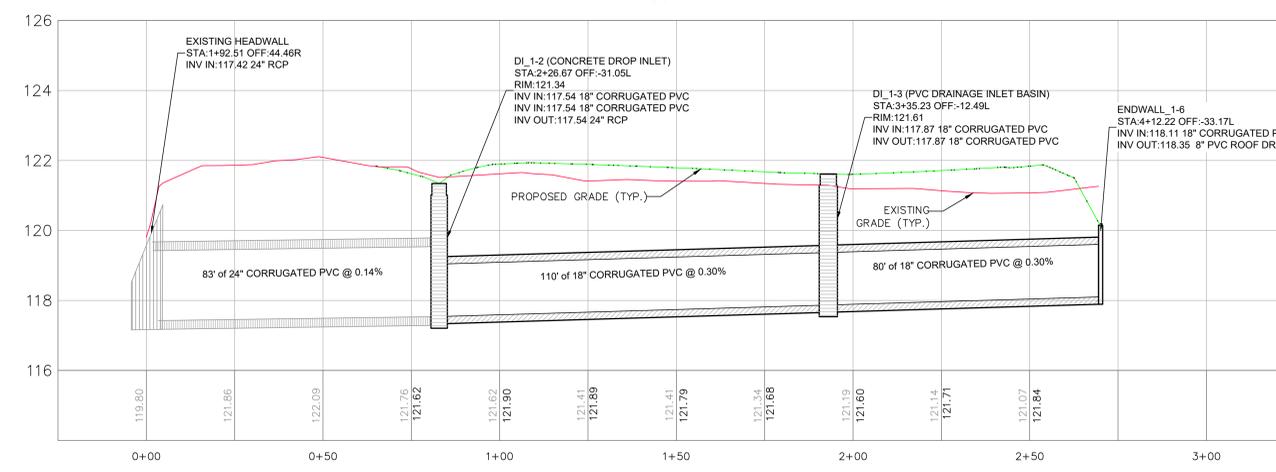
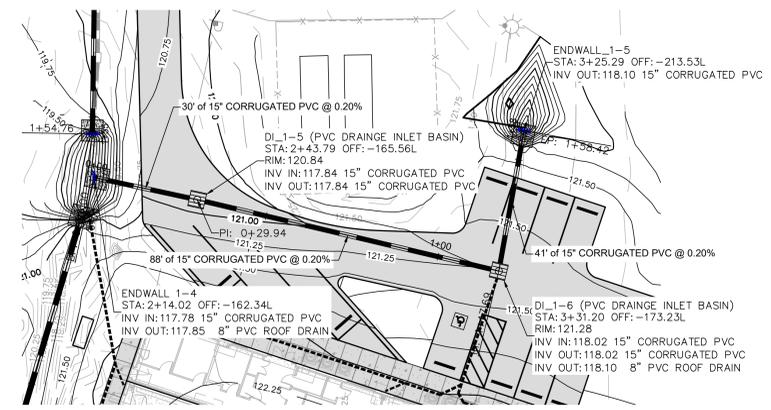
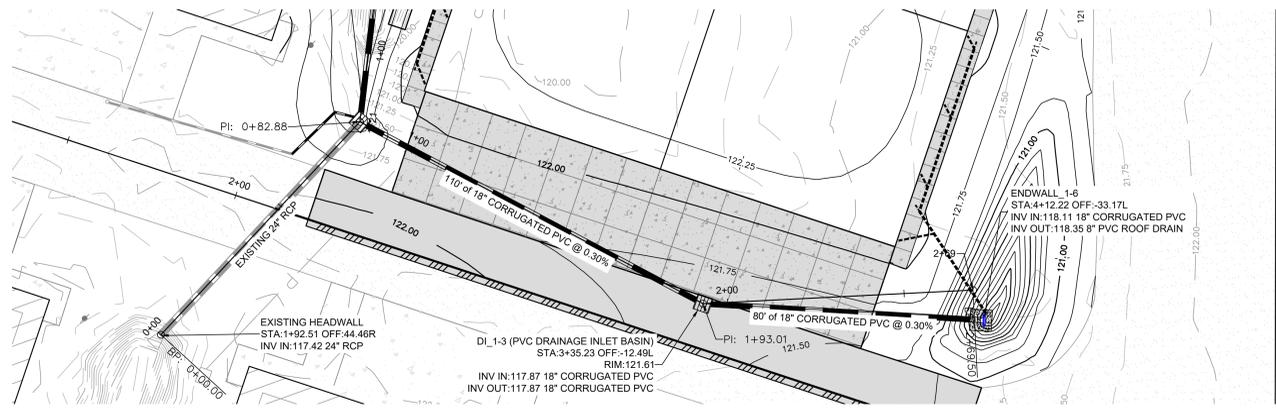
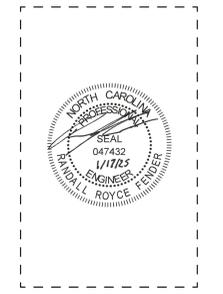
**REVISIONS**

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**SEDIMENTATION & EROSION CONTROL PLAN - 2 (SCHEDULE 1)**

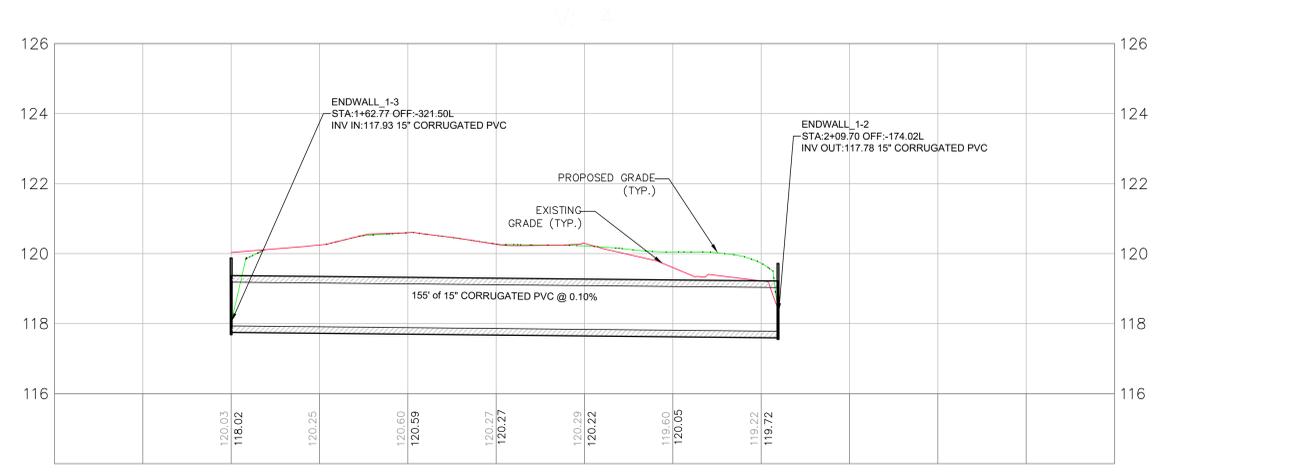
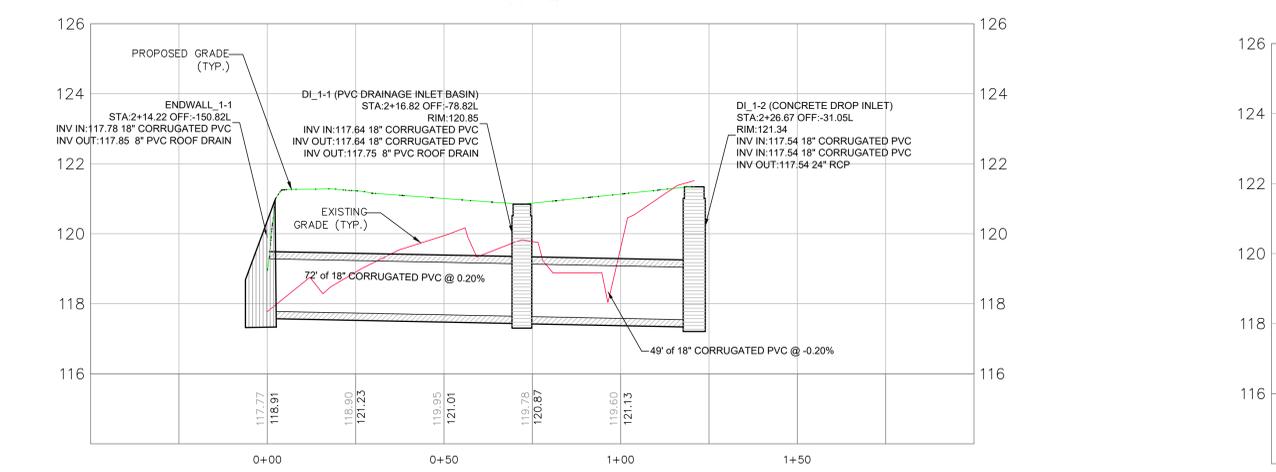
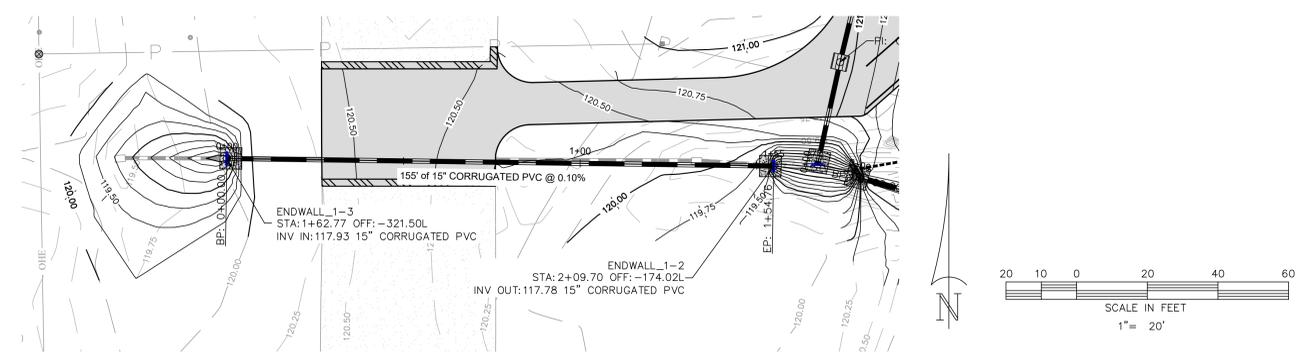
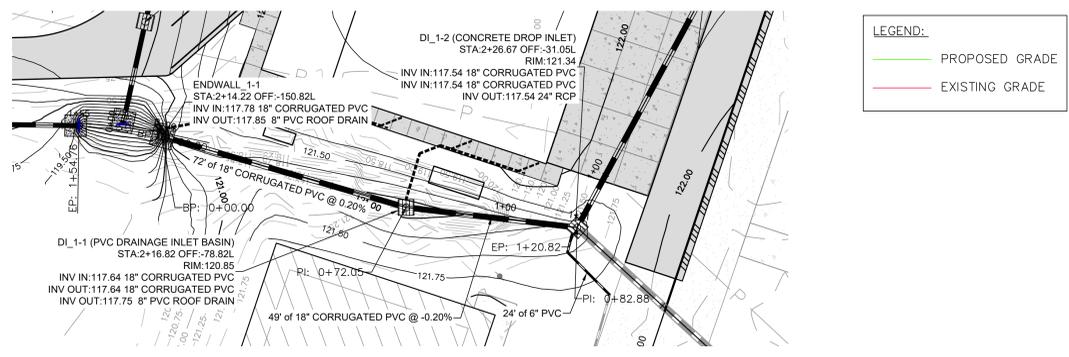
SHEET NUMBER  
**CA-141**





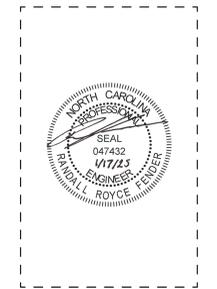
SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE ENDWALL 1-6 TO DL 1-2)  
H: 1"=20'  
V: 1"=2'

SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE ENDWALL 1-5 TO ENDWALL 1-4)  
H: 1"=20'  
V: 1"=2'



SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE FES 1-1 TO DL 1-2)  
H: 1"=20'  
V: 1"=2'

SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE ENDWALL 1-3 TO ENDWALL 1-2)  
H: 1"=20'  
V: 1"=2'



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DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**TYPICAL  
PAVEMENT  
SECTIONS  
(SCHEDULE 1)**

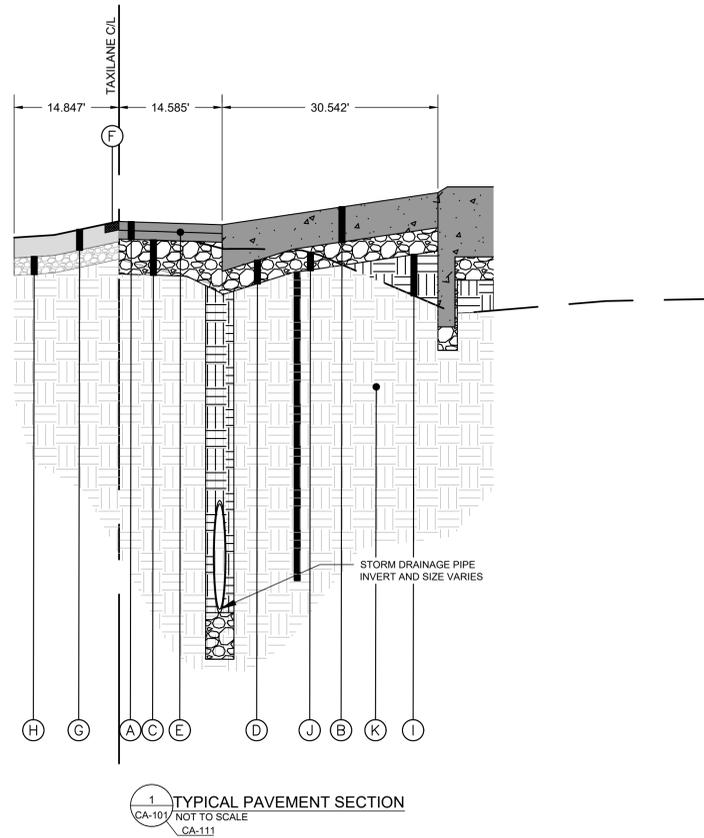
SHEET NUMBER  
**CA-401**

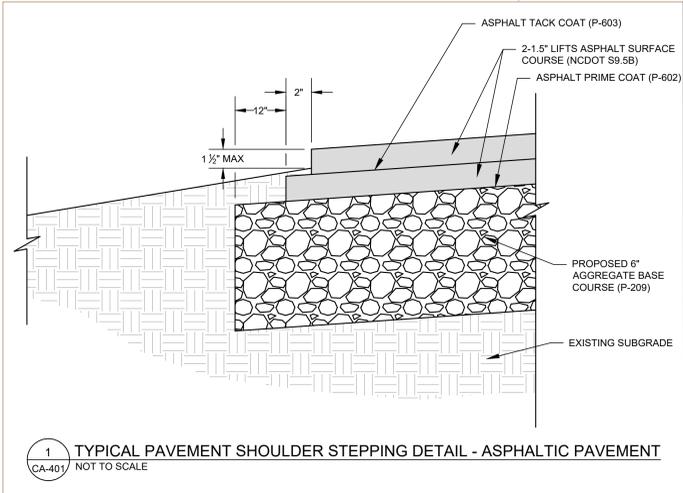
LEGEND:

- (A) PROPOSED HOT MIX ASPHALT SURFACE COURSE, 3-INCH DEPTH (2 - 1.5" LIFTS, S9.5B)
- (B) PROPOSED NCDOT CONCRETE CLASS "PAVEMENT" PAVEMENT, 6-INCH DEPTH
- (C) PROPOSED AGGREGATE BASE COURSE, 6-INCH DEPTH (P-209)
- (D) PROPOSED AGGREGATE BASE COURSE, 4-INCH DEPTH (P-209)
- (E) PROPOSED ASPHALTIC TACK COAT (P-603)
- (F) PROPOSED ASPHALTIC PAVEMENT MILLING AND OVERLAY, 1.5-INCH DEPTH
- (G) EXISTING ASPHALTIC SURFACE COURSE, 3.5-INCH DEPTH
- (H) EXISTING AGGREGATE BASE COURSE, 3-INCH DEPTH
- (I) FILL/UNCLASSIFIED EXCAVATION (P-152)
- (J) CUT/UNCLASSIFIED EXCAVATION (P-152)
- (K) EXISTING SUBGRADE

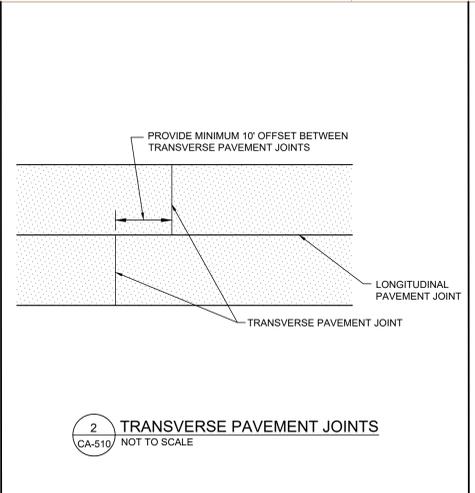
NOTES:

1. SEE SHEET CA-111 FOR SCHEDULE 1 PAVING LIMITS.
2. SEE THE CA-120 SERIES DRAWINGS FOR SCHEDULE 1 SITE GRADING.

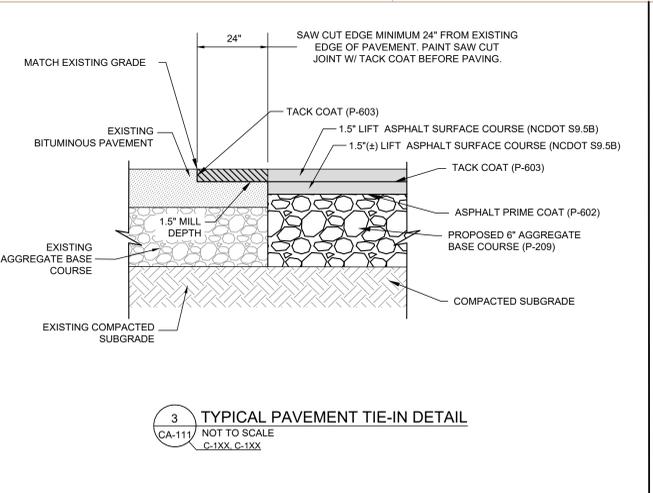




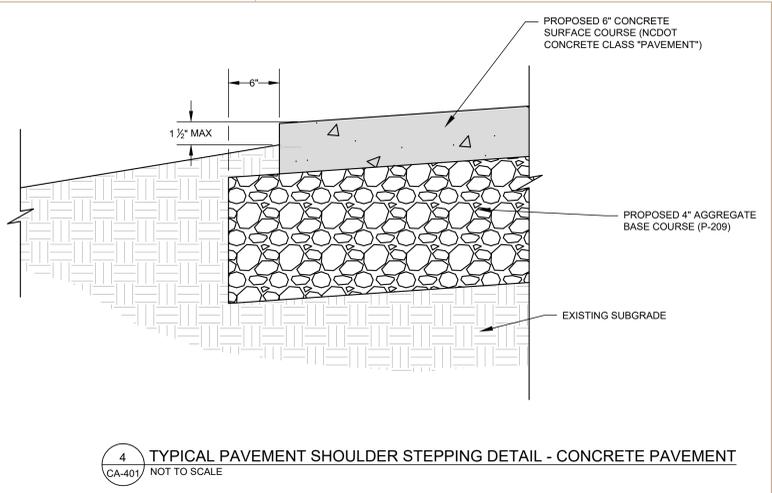
1 TYPICAL PAVEMENT SHOULDER STEPPING DETAIL - ASPHALTIC PAVEMENT  
CA-401 NOT TO SCALE



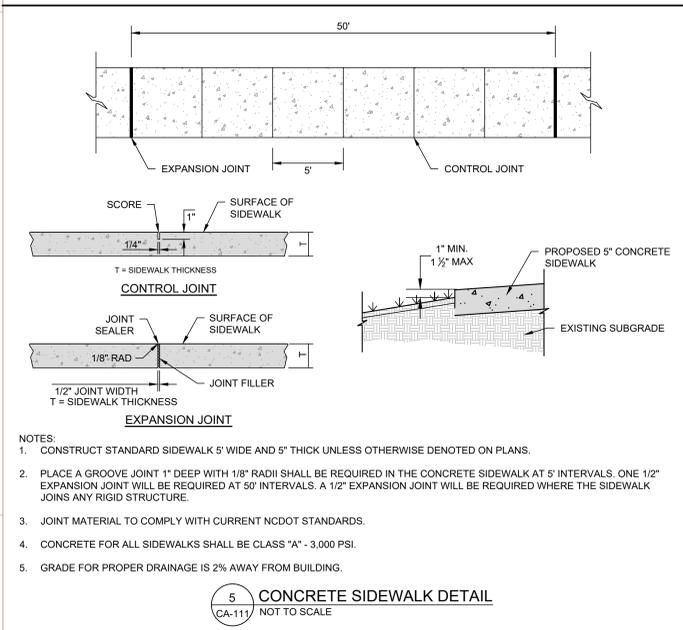
2 TRANSVERSE PAVEMENT JOINTS  
CA-510 NOT TO SCALE



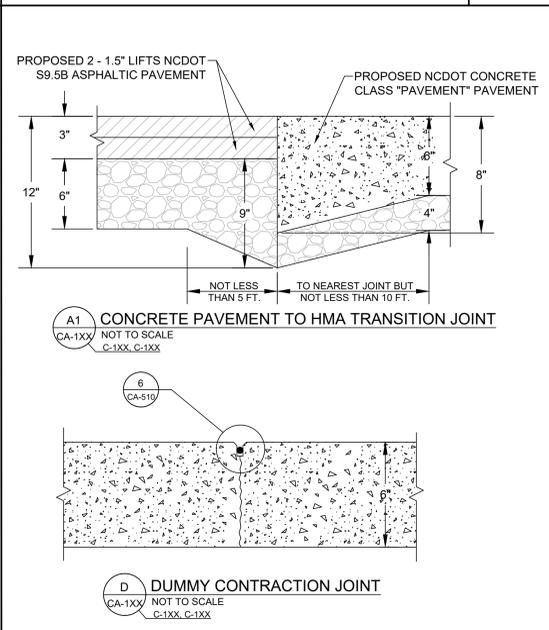
3 TYPICAL PAVEMENT TIE-IN DETAIL  
CA-111 NOT TO SCALE  
C-1XX, C-1XX



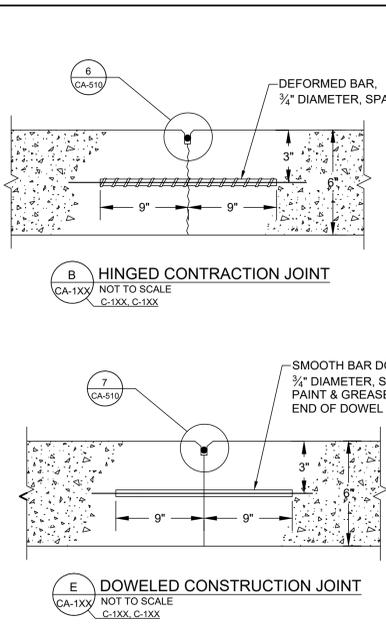
4 TYPICAL PAVEMENT SHOULDER STEPPING DETAIL - CONCRETE PAVEMENT  
CA-401 NOT TO SCALE



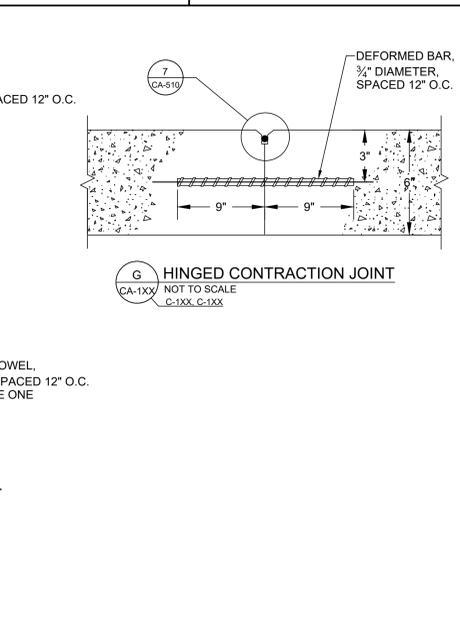
5 CONCRETE SIDEWALK DETAIL  
CA-111 NOT TO SCALE



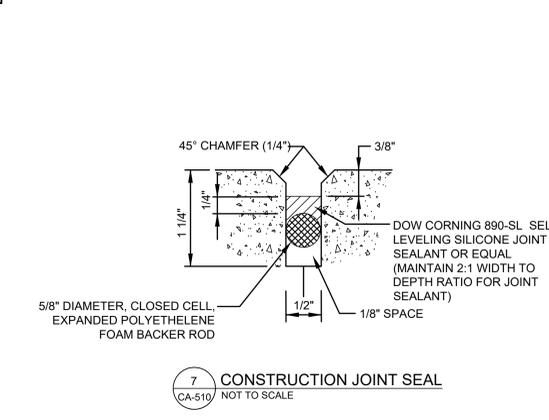
A1 CONCRETE PAVEMENT TO HMA TRANSITION JOINT  
CA-1XX NOT TO SCALE  
C-1XX, C-1XX



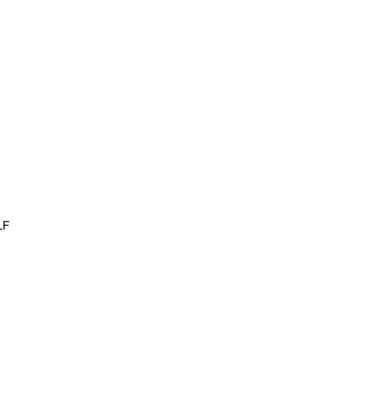
B HINGED CONTRACTION JOINT  
CA-1XX NOT TO SCALE  
C-1XX, C-1XX



G HINGED CONTRACTION JOINT  
CA-1XX NOT TO SCALE  
C-1XX, C-1XX

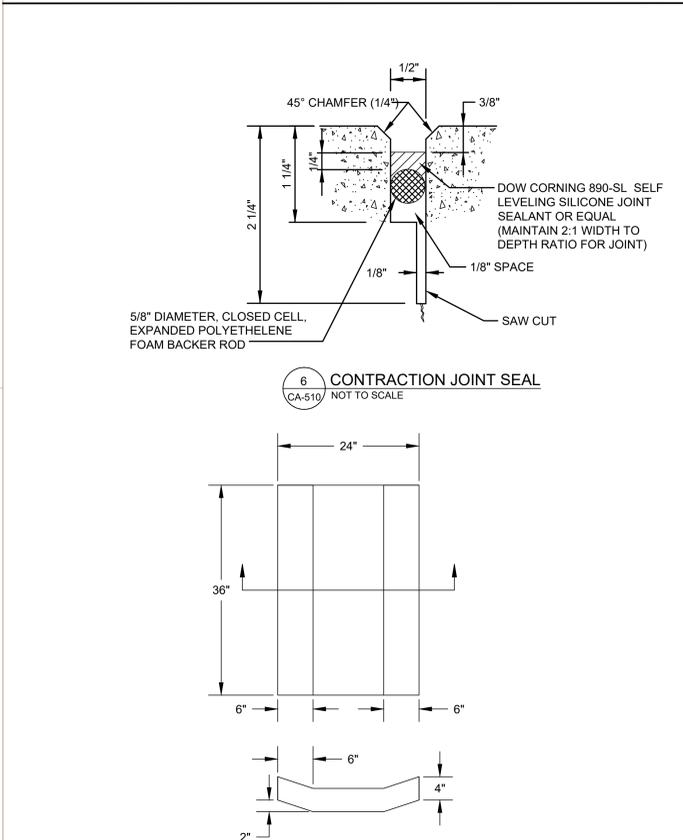


D DUMMY CONTRACTION JOINT  
CA-1XX NOT TO SCALE  
C-1XX, C-1XX

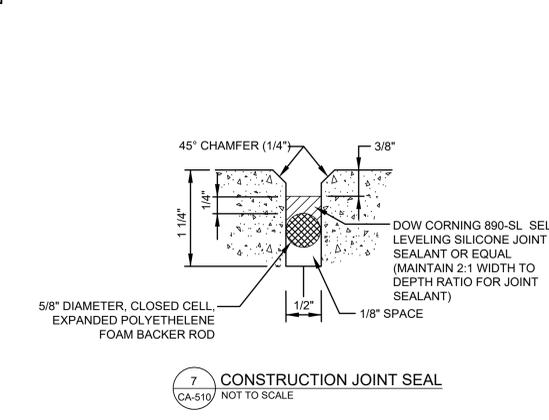


E DOWELED CONSTRUCTION JOINT  
CA-1XX NOT TO SCALE  
C-1XX, C-1XX

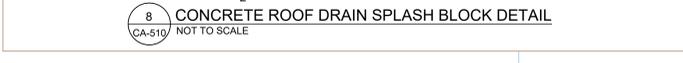
- JOINTING NOTES:**
- CONSTRUCTION AND CONTRACTION JOINTS MAY BE SUBSTITUTED FOR EACH OTHER AT THE CONTRACTOR'S DISCRETION BASED OFF PAVING OPERATIONS.
  - ALL DOWELS SHALL BE SET IN PLACE UTILIZING DOW BASKET ASSEMBLY CHAIRS.
  - ALL REINFORCEMENT STEEL SHALL BE TRIMMED 3\"/>



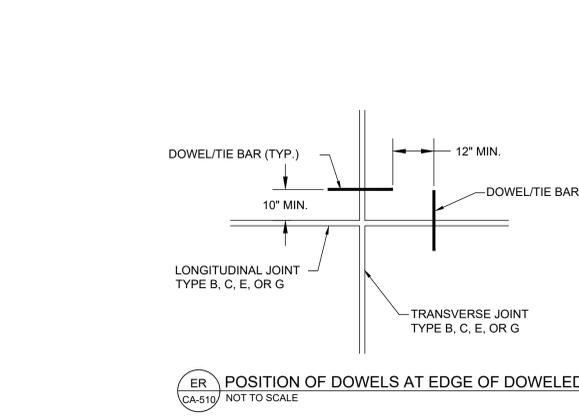
6 CONTRACTION JOINT SEAL  
CA-510 NOT TO SCALE



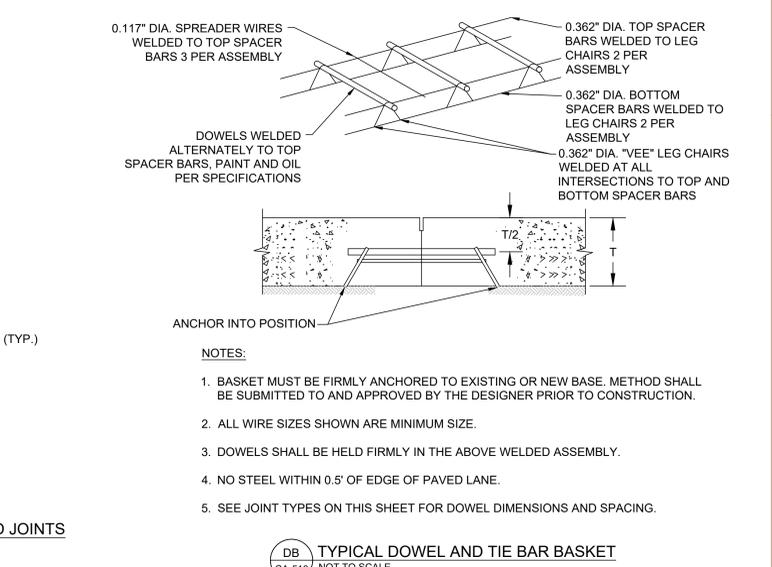
7 CONSTRUCTION JOINT SEAL  
CA-510 NOT TO SCALE



8 CONCRETE ROOF DRAIN SPLASH BLOCK DETAIL  
CA-510 NOT TO SCALE



ER POSITION OF DOWELS AT EDGE OF DOWELED JOINTS  
CA-510 NOT TO SCALE



DB TYPICAL DOWEL AND TIE BAR BASKET  
CA-510 NOT TO SCALE

- NOTES:**
- BASKET MUST BE FIRMLY ANCHORED TO EXISTING OR NEW BASE. METHOD SHALL BE SUBMITTED TO AND APPROVED BY THE DESIGNER PRIOR TO CONSTRUCTION.
  - ALL WIRE SIZES SHOWN ARE MINIMUM SIZE.
  - DOWELS SHALL BE HELD FIRMLY IN THE ABOVE WELDED ASSEMBLY.
  - NO STEEL WITHIN 0.5' OF EDGE OF PAVED LANE.
  - SEE JOINT TYPES ON THIS SHEET FOR DOWEL DIMENSIONS AND SPACING.

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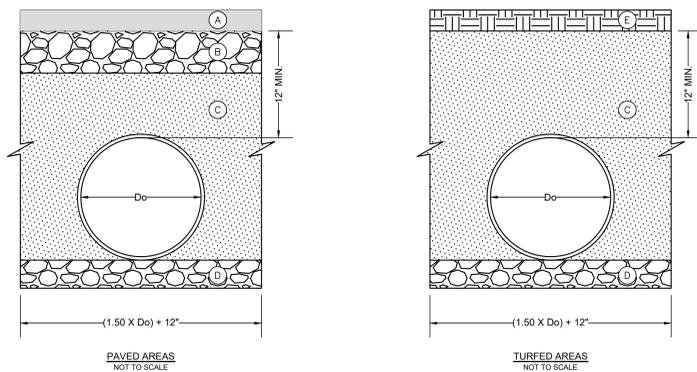
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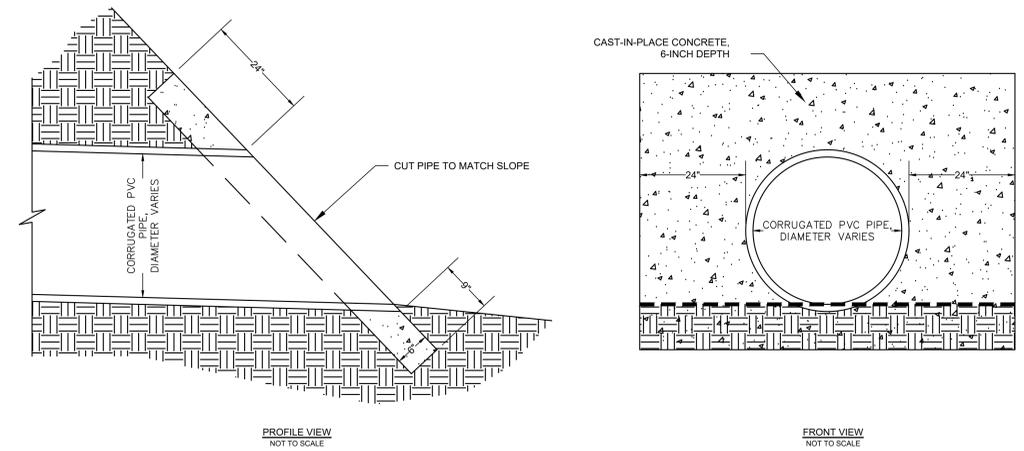
DATE	JANUARY 2025
PROJECT NUMBER	3105-2401
SHEET TITLE	PAVING DETAILS (SCHEDULE 1)

SHEET NUMBER  
**CA-510**

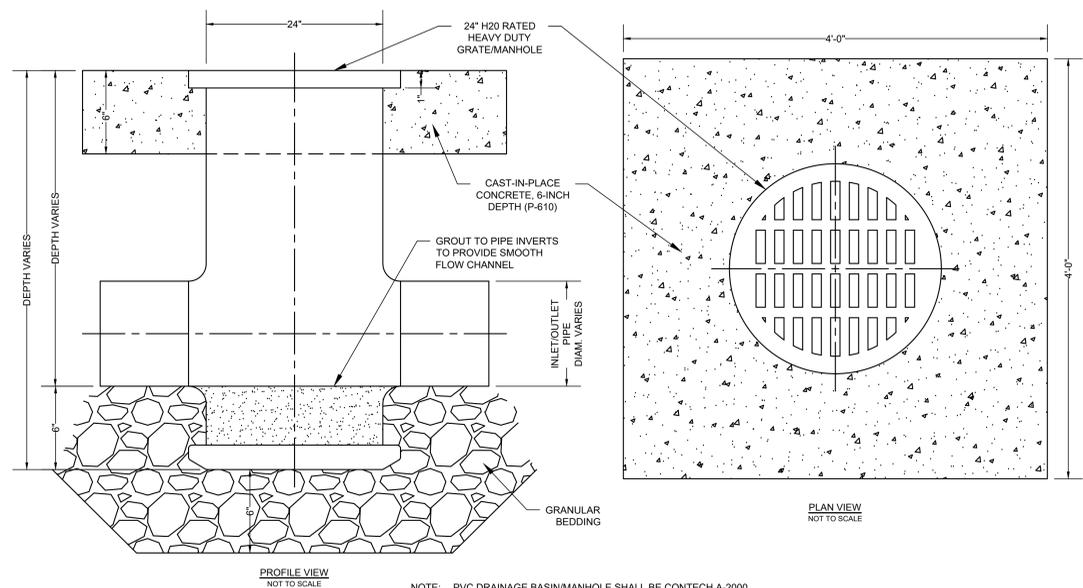


- TRENCH MATERIALS:**
- (A) PROPOSED PAVEMENT. SEE SHEET CA-401 FOR PAVEMENT SECTION AND SHEET CA-510 FOR PAVEMENT DETAILS.
  - (B) PROPOSED AGGREGATE BASE COURSE. SEE SHEET CA-401 FOR PAVEMENT SECTION AND SHEET CA-510 FOR PAVEMENT DETAILS.
  - (C) SELECT GRANULAR FILL MATERIAL TO BE ASTM D2321 CLASS I OR APPROVED EQUAL. COMPACTED TO DENSITIES SPECIFIED IN SPECIFICATION ITEM P-152. MAX. PARTICLE SIZE IS 1.5" +/-.
  - (D) RELATIVELY LOOSE GRANULAR BEDDING, ROUGHLY SHAPED TO FIT BOTTOM OF PIPE. 4" TO 6" IN DEPTH. (ASTM D2321 CLASS I OR OTHER SUITABLE GRANULAR MATERIAL.)
  - (E) 4" TOPSOIL. SOD OR SEEDMULCH.
- NOTES:**
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MANIPULATE WET SOILS FOR DRYING OR TO ADD WATER AS NECESSARY TO ACHIEVE THE SPECIFIED DENSITY.
  2. ALL MATERIALS SHALL BE COMPACTED IN 8" MAXIMUM LOOSE LIFTS.
  3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION SUPPORT AND DEWATERING.
  4. PIPE JOINTS SHALL HAVE ELASTOMERIC GASKETS MEETING ASTM F477.
  5. SELECT GRANULAR FILL MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE TO PREVENT SOIL MIGRATION.
  6. ALL EXCAVATION, BEDDING & BACKFILL (WHETHER FROM THE EXCAVATION OR FROM OFF-SITE SOURCES), DEWATERING, EXCAVATION SUPPORT, PIPE MATERIALS, FABRIC FOR WRAPPING JOINTS, INCIDENTALS AND LABOR SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAR FOOT OF PIPE.

1 TYPICAL PIPE TRENCH DETAIL - CORRUGATED PVC  
CA-121 NOT TO SCALE

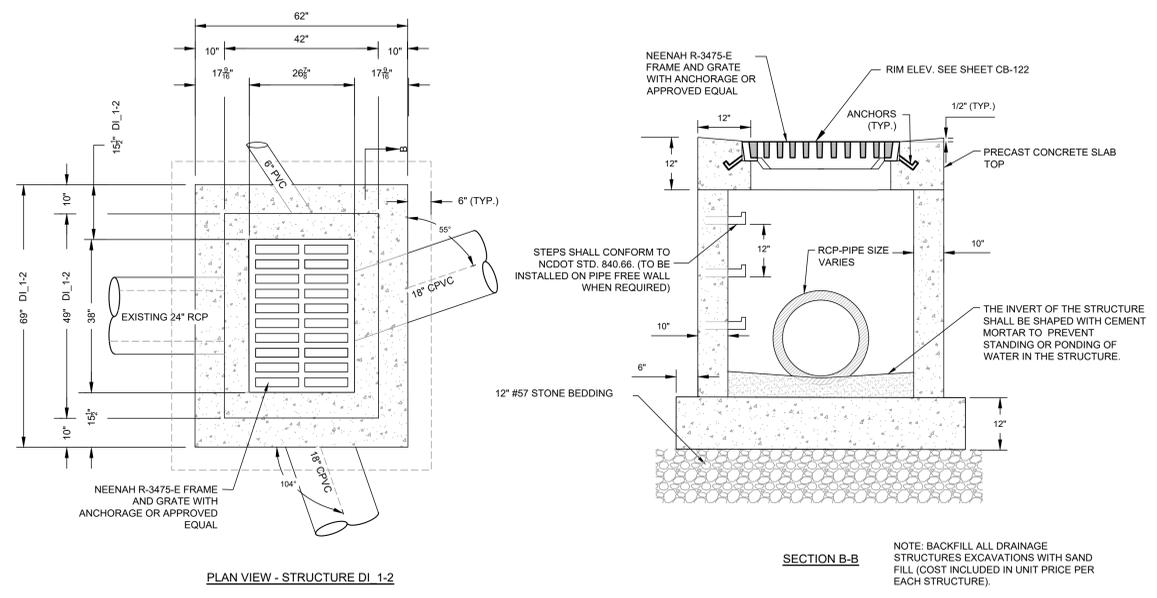


2 CONCRETE REINFORCED PIPE INLET/OUTLET  
CA-121 SCALE: NTS CA-141



NOTE: PVC DRAINAGE BASIN/MANHOLE SHALL BE CONTECH A-2000 OR APPROVED EQUAL.

3 PVC DRAINAGE INLET BASIN/MANHOLE DETAIL  
CA-121 NOT TO SCALE



NOTE: BACKFILL ALL DRAINAGE STRUCTURES EXCAVATIONS WITH SAND FILL (COST INCLUDED IN UNIT PRICE PER EACH STRUCTURE).

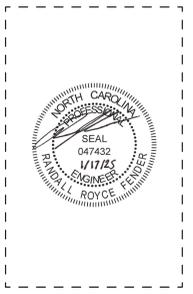
4 PRECAST CONCRETE DROP INLETS  
CA-121 NOT TO SCALE

**GENERAL NOTES FOR PRECAST CONCRETE DROP INLET**

1. THE DETAIL SHOWN FOR 'PRECAST CONCRETE DROP INLET' IS TO SHOW NOMINAL SIZE AND DIMENSIONS OF PROPOSED STRUCTURES ONLY AND MAY VARY BASED ON DESIGN. FOR ALL PRECAST CONCRETE STRUCTURES, THE CONTRACTOR WILL BE REQUIRED TO SUBMIT DESIGN CALCULATIONS, DETAILED SHOP DRAWINGS, AND DESIGN PREPARED AND SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER. PRECAST CONCRETE STRUCTURES SHALL BE DESIGNED TO CARRY ALL APPLICABLE LOADINGS, INCLUDING VERTICAL AND LATERAL EARTH PRESSURES, DEAD LOADS, LIFTING LOADS AND AIRCRAFT LIVE LOADS. AIRCRAFT LIVE LOADS SHALL BE TREATED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5320-5D, CHAPTER 7, USING A 26,500 POUND DUAL GEAR AIRCRAFT LOAD FOR DIRECT LOADING AND LOADING ON BURIED STRUCTURES.
2. ALL MATERIALS, DESIGN, MANUFACTURE, TESTING, AND PRODUCT PERFORMANCE FOR THE PRECAST CONCRETE COMPONENTS AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ASTM C913.
3. BASE SECTIONS SHALL HAVE A BOTTOM POURED MONOLITHICALLY WITH THE WALLS OR AN APPROVED WATER-STOP CAST INTO THE BOTTOM FOR THE JOINT TO THE WALLS.
4. JOINTS SHALL BE TONGUE AND GROOVE. JOINT SEALANT SHALL BE BUTYL RUBBER AND SHALL MEET THE REQUIREMENTS OF AASHTO M 198, TYPE B. SIZE AND AMOUNT OF SEALANT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
5. CONCRETE SHALL BE 4000 PSI COMPRESSIVE STRENGTH MEETING THE REQUIREMENTS OF SECTION P-610 OF THE PROJECT SPECIFICATIONS.
6. REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED AND PLAIN BARS FOR CONCRETE REINFORCEMENT, GRADE 60. WIRE AND WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
7. FLOW LINE OF BASE TO BE GROUTED TO OUTLET PIPE FLOW LINE TO MAINTAIN A CONTINUOUS FLOW. GROUT SHALL BE TYPE M MORTAR MATERIAL.
8. IF STRUCTURE DEPTH EXCEEDS 4'-6", STEPS ARE TO BE PLACED ON WALL. SEE NCDOT STANDARD DRAWING FOR STEP. STEPS SHALL BE ALIGNED IN ALL SECTIONS TO FORM A CONTINUOUS LADDER. STEPS SHALL BE ALIGNED WITH OPENING IN TOP OR FLAT SLAB ADAPTER SO AS TO PROVIDE REASONABLE ACCESS. STEP SPACING SHALL NOT EXCEED 1'-0".
9. LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. ALL LIFT HOLES SHALL BE GROUTED CLOSED PRIOR TO COMPLETION OF THE INSTALLATION. ALL LIFTING METHODS MUST MEET OSHA REGULATIONS.
10. AFTER PIPE IS SET INTO THE DRAINAGE STRUCTURE, THE REMAINING OPENING AROUND THE PIPE MUST BE SEALED WITH BRICK AND MORTAR OR CONCRETE FOR THE FULL WALL THICKNESS OF THE STRUCTURE.
11. THE CONTRACT UNIT PRICE PRECAST DROP INLETS SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS AND WORK INCIDENTAL TO THE CONSTRUCTION OF THE STRUCTURE COMPLETE IN PLACE AS SHOWN.



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**REVISIONS**

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**DRAINAGE DETAILS (SCHEDULE 1)**

SHEET NUMBER  
**CA-520**





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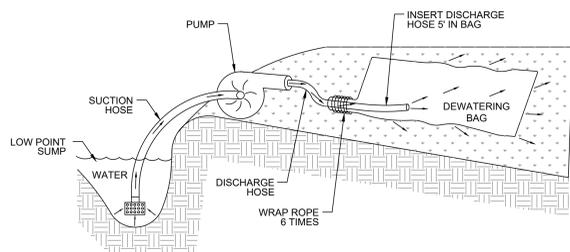
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DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**SEDIMENTATION & EROSION CONTROL DETAILS - 2**  
(SCHEDULE 1)  
SHEET NUMBER

**CA-541**



**NOTE:**

1. A SEDCATCH DEWATERING BAG OR APPROVED EQUAL SHOULD BE USED ANYTIME WATER IS PUMPED FROM EXCAVATED AREAS ON SITE.

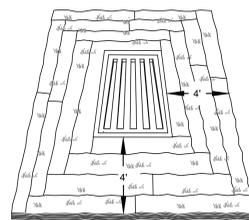
**INSTALLATION AND USE:**

2. PLACE DEWATERING BAG ON THE GROUND OR ON A TRAILER OVER A LEVEL STABILIZED AREA.
3. INSERT DISCHARGE PIPE A MINIMUM OF 5 FEET INSIDE DEWATERING BAG AND SECURE WITH A ROPE WRAPPED 6 TIMES AROUND THE SNOOT OVER A 6 INCH WIDTH OF THE BAG.
4. REPLACE DEWATERING BAG WHEN HALF FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL AMOUNT.

**MAINTENANCE AND DISPOSAL:**

1. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AWAY FROM WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS. SLIT OPEN SEDIMENT BAG AND REMOVE ACCUMULATED SEDIMENT AND DISPERSE IN GRADED AREAS AND STABILIZE. DISPOSE OF BAG AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY.

**1 DEWATERING BAG DETAIL**  
CA-541 NOT TO SCALE



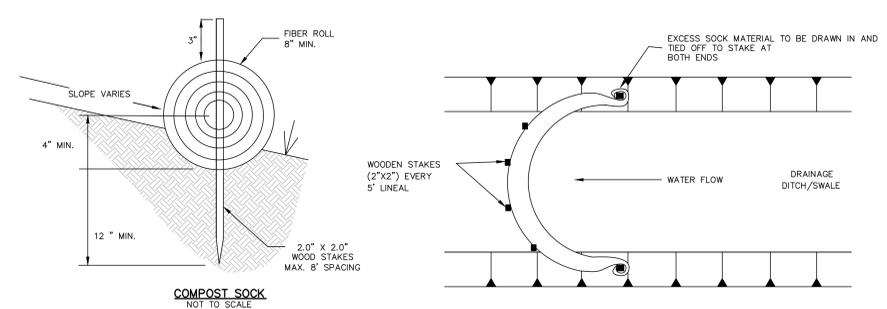
**CONSTRUCTION NOTES:**

1. BRING THE AREA TO BE SODDED TO FINAL GRADE ELEVATION WITH TOP SOIL. ADD FERTILIZER AND LIME, AND INSTALL SOD. SOD SHALL BE BERMUDA.
2. LAY ALL SOD STRIPS PERPENDICULAR TO THE DIRECTION OF FLOWS.
3. KEEP THE WIDTH OF THE SOD AT LEAST 4 FT IN THE DIRECTION OF FLOWS.
4. STAGGER SOD STRIPS SO THAT ADJACENT STRIP ENDS ARE NOT ALIGNED.

**MAINTENANCE:**

1. DURING THE FIRST 4 WEEKS, WATER SOD AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 2 INCHES.
2. MAINTAIN GRASS HEIGHT AT LEAST 2 INCHES WITH NO MORE THAN ONE-THIRD THE SHOOT HEIGHT (GRASS LEAF) REMOVED IN ANY MOWING.
3. APPLY FERTILIZER AS NECESSARY TO MAINTAIN THE DESIRED GROWTH AND SOD DENSITY. ADD LIME AS NEEDED TO MAINTAIN THE PROPER pH.

**2 TEMPORARY SOD INLET PROTECTION DETAIL**  
CA-141 NOT TO SCALE



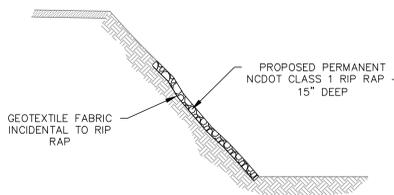
**COMPOST SOCK NOTES:**

1. COMPOST USED IN SOCK SHALL BE CERTIFIED BY THE US COMPOSTING COUNCILS SEAL OF TESTING PROGRAM (USCC-STA). COMPOST USED SHALL BE CONSIDERED MATURE AS DEFINED BY USCC-STA BIOLOGICAL ASSAYS SEEDLING EMERGENCE AND RELATIVE GROWTH TEST.
2. COMPOST SOCKS SHALL BE INSTALLED AT APPROXIMATE LOCATIONS SHOWN ON SHEET ECI.7.
3. PRIOR TO INSTALLATION, CLEAR ALL OBSTRUCTIONS INCLUDING ROCKS, CLODS AND OTHER DEBRIS GREATER THAN ONE INCH THAT MAY INTERFERE WITH PROPER FUNCTION OF THE COMPOST SOCK.
4. THE ENDS OF THE COMPOST SOCKS SHALL BE TURNED SLIGHTLY UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE END OF THE SOCKS.
5. FILL SOCK NETTING UNIFORMLY WITH COMPOST TO THE DESIRED LENGTH SUCH THAT THE COMPOST SOCKS DO NOT DEFORM.
6. ON LOCATIONS WHERE GREATER THAN 200' SECTION OF GROUND IS TO BE TREATED, THE SOCK LENGTH SHOULD BE SLEEVED. AFTER ONE SECTION (200 FT) IS FILLED AND TIED OFF (KNOTTED OR ZIP TIED), THE SECOND SECTION SHALL BE FILLED OVER THE FIRST 1-2 FEET AND SLEEVED CREATING AN OVERLAP. ONCE OVERLAPPED, THE SECOND SECTION IS FILLED STARTING AT THE SLEEVED AREA TO CREATE A SEAMLESS APPEARANCE.
7. OAK OR OTHER DURABLE HARDWOOD STAKES 2" X 2" IN CROSS SECTION SHOULD BE DRIVEN VERTICALLY PLUMB THROUGH THE CENTER OF THE COMPOST SOCK. STAKES SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 4 FEET, OR A MAXIMUM INTERVAL OF 8 FEET IF THE SOCK IS PLACED IN A 4 INCH TRENCH. THE STAKES SHOULD BE DRIVEN TO A MINIMUM DEPTH OF 12 INCHES, WITH A MINIMUM OF 3 INCHES PROTRUDING ABOVE THE COMPOST SOCK.
8. IN THE EVENT STAKING IS NOT POSSIBLE (I.E., WHEN SOCKS ARE USED ON PAVEMENT) HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SOCK TO HOLD IT IN PLACE DURING RUNOFF EVENTS.
9. COMPOST SOCKS ARE NOT TO BE USED IN PERENNIAL OR INTERMITTENT STREAMS.

**MAINTENANCE NOTES:**

INSPECT COMPOST SOCKS WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2 INCH OR GREATER). REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS. THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN. IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE. THE SOCK NEEDS TO BE REINSTALLED IF UNDERMINED OR DISLOADED. THE COMPOST SOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

**3 TEMPORARY SOD INLET PROTECTION DETAIL**  
CA-141 NOT TO SCALE  
CA-1XX



**NOTE 'A':**

CONTRACTOR TO INSTALL RIP RAP WITH UNDERLYING FILTER FABRIC ON SIDE SLOPE UP TO STORM WATER PIPE. ITEM TO BE PAID FOR UNDER "RIP RAP FOR SLOPE STABILIZATION" PER TON.

**4 RIP RAP FOR SLOPE STABILIZATION**  
CA-141 SCALE: NTS





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DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**ABBREVIATIONS  
AND SYMBOL  
LEGEND**

SHEET NUMBER

**S-002**

ABBREVIATIONS		ABBREVIATIONS	
@	AT	GT	GIRDER TRUSS
&	AND	HD	HEADED
Ø	DIAMETER	HI	HIGH
AB	ANCHOR BOLTS	HORIZ	HORIZONTAL
ACI	AMERICAN CONCRETE INSTITUTE	HSS	HOLLOW STRUCTURAL SECTION
ADDL	ADDITIONAL	INT	INTERIOR
ADH	ADHESIVE	JT	JOINT
AFF	ABOVE FINISHED FLOOR	K	KIP(S)
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	KB	KNEE BRACE
AISI	AMERICAN IRON AND STEEL INSTITUTE	KSI	KIPS PER SQUARE INCH
ALT	ALTERNATE	LB	LONG BAR
ARCH	ARCHITECT'S / ARCHITECTURAL	LBS	POUNDS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	LH	LONG LEG HORIZONTAL
AWS	AMERICAN WELDING SOCIETY	LLV	LONG LEG VERTICAL
B/ or BOT	BOTTOM	LO	LOW
BCX	BOTTOM CHORD EXTENSION	LOC	LOCATION
BFB	BOTTOM FLANGE BRACE	LSH	LONG SIDE HORIZONTAL
BFF	BELOW FINISHED FLOOR	LSV	LONG SIDE VERTICAL
BLDG	BUILDING	LWC	LIGHT WEIGHT CONCRETE
BM	BEAM	MAX	MAXIMUM
BOS	BOTTOM OF STEEL	MC	MOMENT CONNECTION
BRG	BEARING	MCJ	MASONRY CONTROL JOINT
BTWN	BETWEEN	MECH	MECHANICAL
CANT	CANTILEVER	MFR	MANUFACTURER
CJ	CONTROL JOINT	MID	MIDDLE
CL	CENTERLINE	MIN	MINIMUM
CLR	CLEAR	MISC	MISCELLANEOUS
CHU	CONCRETE MASONRY UNIT	MOW	MIDDLE OF WALL
COL	COLUMN	MP	MASONRY PILASTER
CONC	CONCRETE	No or #	NUMBER
CONN	CONNECTION	NS	NEAR SIDE
CONST JT	CONSTRUCTION JOINT	NTS	NOT TO SCALE
CONT	CONTINUOUS	NWC	NORMAL WEIGHT CONCRETE
CONTR	CONTRACTOR	OC	ON CENTER
COORD	COORDINATE	OPNG	OPENING
CTRD	CENTERED	OPP	OPPOSITE HAND
U	NAILS (PENNY)	PAF	POWDER ACTUATED FASTENER
DBA	DEFORMED BAR ANCHOR	PED	PEDESTAL
DEFL	DEFLECTION	PL	PLATE
DEPR	DEPRESSION / DEPRESSED	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DIAG	DIAGONAL	PT	PRESSURE TREATED
DIM	DIMENSION	P-T	POST-TENSIONED
DIST	DISTANCE	REF	REFERENCE
DWG(S)	DRAWING(S)	REINF	REINFORCING
DWL(S)	DOWEL(S)	REQD	REQUIRED
EA	EACH	SB	SHORT BAR
EE	EACH END	SCHD	SCHEDULE
EF	EACH FACE	SIM	SIMILAR
EJ	EXPANSION JOINT	SOG	SLAB ON GRADE
EL	ELEVATION	SPEC(S)	SPECIFICATION(S)
ELEV	ELEVATOR	SQ	SQUARE
EMBED	EMBEDDED / EMBEDMENT	STD	STANDARD
ENGR	ENGINEER	STIFF	STIFFENER
EOD	EDGE OF DECK	STIRR	STIRRUP(S)
EOS	EDGE OF SLAB	STL	STEEL
EQ	EQUAL	STR	STRUCTURAL
EQUIP	EQUIPMENT	T/	TOP
EW	EACH WAY	TCX	TOP CHORD EXTENSION
EXIST	EXISTING	TOC	TOP OF CONCRETE
EXP	EXPANSION	TOF	TOP OF FOOTING
EXT	EXTERIOR	TOS	TOP OF STEEL
FDN	FOUNDATION	TOW	TOP OF WALL
FIE	FINISHED FLOOR ELEVATION	TYP	TYPICAL
FOM	FACE OF MASONRY	UNO	UNLESS NOTED OTHERWISE
FOW	FACE OF WALL	VERT	VERTICAL
FS	FAR SIDE	VIF	VERIFY IN FIELD
FTG	FOOTING	W/	WITH
GA	GAUGE	WWF	WELDED WIRE FABRIC
GALV	GALVANIZED	WP	WORK POINT

SYMBOL LEGEND	
SYMBOL	MEANING
	SPOT ELEVATION. ELEVATION RELATIVE TO REFERENCE ELEVATION.
<No>	TOP OF FOOTING, GRADE BEAM, PILE CAP, OR DRILLED PIER. ELEVATION RELATIVE TO REFERENCE ELEVATION.
<No>   <No>	STEP IN TOP OF FOOTING ELEVATION, SEE "TYPICAL STEP IN WALL FOOTING" DETAIL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
[ No ]	DEPRESSED OR RAISED SLAB ELEVATION, SEE "TYPICAL STEP IN SLAB ON GRADE" DETAIL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
[No]	TOP OF WALL OR PEDESTAL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
(No)   [+No]	TOP OF STEEL/JOIST BEARING ELEVATION   TOP OF STEEL ABOVE STEEL/JOIST BEARING ELEVATION.
	SLOPED   STEPPED SLAB.
F#	SPREAD FOOTING TYPE, SEE SCHEDULE.
P#	CONCRETE PEDESTAL TYPE, SEE SCHEDULE.
PC#	PILE CAP TYPE, SEE SCHEDULE.
GB# WxD	CONCRETE GRADE BEAM TYPE, SEE SCHEDULE. "W" INDICATES BEAM WIDTH AND "D" INDICATES BEAM DEPTH (IN INCHES).



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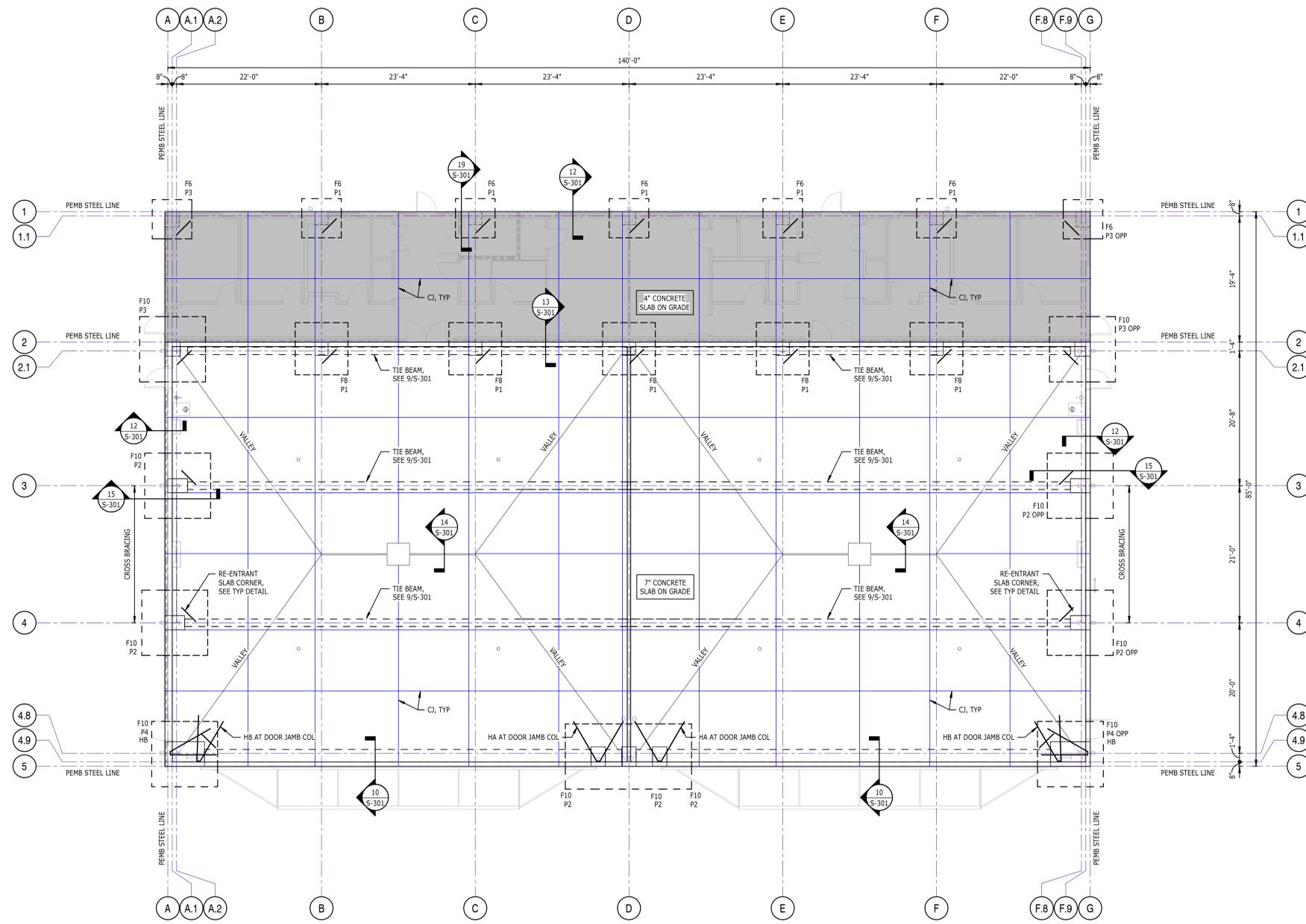
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DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**FOUNDATION  
PLAN**

SHEET NUMBER

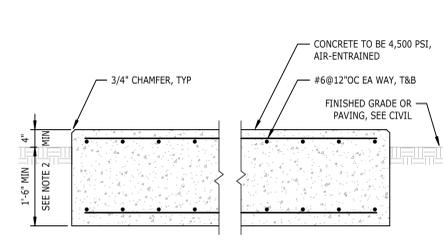
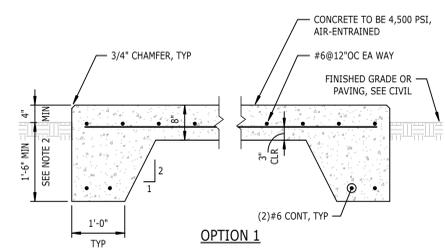
**S-101**



**1 FOUNDATION PLAN**  
S-101

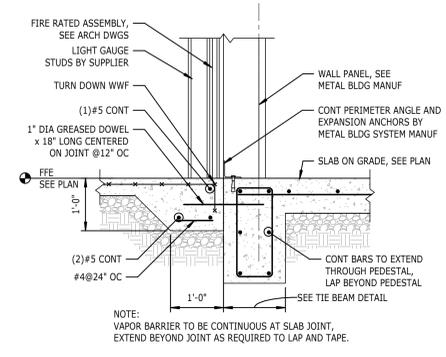
- 1/8" = 1'-0"
- FOUNDATION PLAN NOTES:
- SEE S0 SERIES FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOL LEGEND.
  - REFERENCE FINISHED FLOOR ELEVATION 0'-0". SEE CIVIL DRAWINGS FOR ACTUAL ELEVATION.
  - TOP OF FOOTING ELEVATION 2'-0" BELOW FINISHED FLOOR ELEVATION, UNO.
  - TOP OF PEDESTAL ELEVATION AT 0'-0", UNO.
  - FOR TYPICAL SLAB CONSTRUCTION DETAILS, SEE TYPICAL DETAILS.
  - SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR 4" DIA PVC CONDUIT STUB UPS CAST IN SLAB.
  - FOOTING SIZES ARE BASED ON PRELIMINARY REACTIONS. FINAL FOOTING SIZES WILL BE PROVIDED BASED ON THE SUBMITTED PEMB SHOP DRAWINGS. CONTRACTOR TO PROVIDE A UNIT PRICE AT BID FOR A BLENDED COST PER CUBIC YARD OF CONCRETE FOOTING ADDED OR REDUCED. BLENDED RATE TO INCLUDE ALL COST ASSOCIATED WITH THE CHANGE IN FOOTING SIZE INCLUDING CONCRETE, REINFORCING, AND EXCAVATION. REFER TO UNIT PRICE SCHEDULE 1 - No. 1.
  - REINFORCING SHOP DRAWINGS TO BE COMPLETED AFTER REVISED FOOTING SIZES ARE PROVIDED BASED ON FINALIZED PEMB SHOP DRAWINGS.
  - SLOPE EXTERIOR SLABS, SIDEWALKS, AND PAVING AS INDICATED ON THE ARCHITECTURAL OR CIVIL DRAWINGS.
  - LATERAL BRACING AND CONNECTIONS BY PEMB SUPPLIER, TYP. COORDINATE BRACING GEOMETRY WITH ARCHITECTURAL DRAWINGS TO AVOID EXPOSED MEMBERS.

MARK	SIZE			REINFORCEMENT (EACH WAY)	
	WIDTH	LENGTH	DEPTH	TOP	BOTTOM
F6	6'-0"	6'-0"	1'-0"	NA	(7)#5
FB	8'-0"	8'-0"	1'-5"	NA	(9)#7
F10	10'-0"	10'-0"	2'-6"	(11)#7	(11)#7

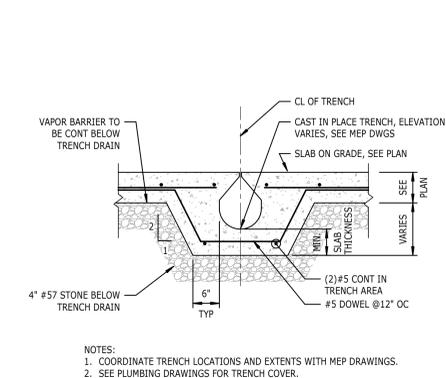


NOTES:  
1. THE EXACT SIZE, SHAPE, AND LOCATION OF EQUIPMENT PADS SHALL BE DETERMINED BY THE CONTRACTOR AFTER APPROVAL OF EQUIPMENT SHOP DRAWINGS. ANCHOR BOLTS WHERE REQUIRED SHALL BE SIZED AND LOCATED ACCORDING TO MANUFACTURER'S REQUIREMENTS.  
2. INCREASE DEPTH AS REQUIRED BY THE GEOTECHNICAL REPORT FOR AREA-SPECIFIC FREEZE-THAW DEPTHS.

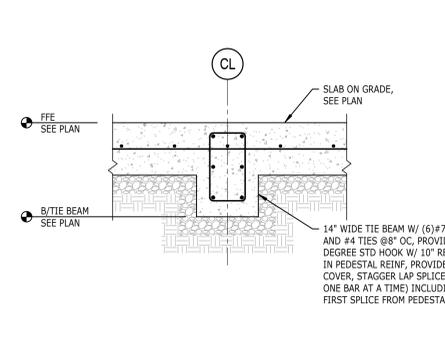
**17** TYPICAL EXTERIOR EQUIPMENT PAD  
S-301 3/4" = 1'-0"



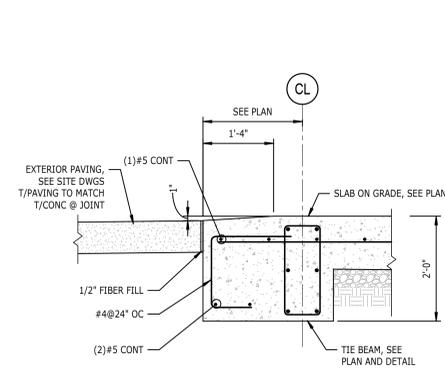
**13** AT SLAB ON GRADE TRANSITION  
S-301 3/4" = 1'-0"



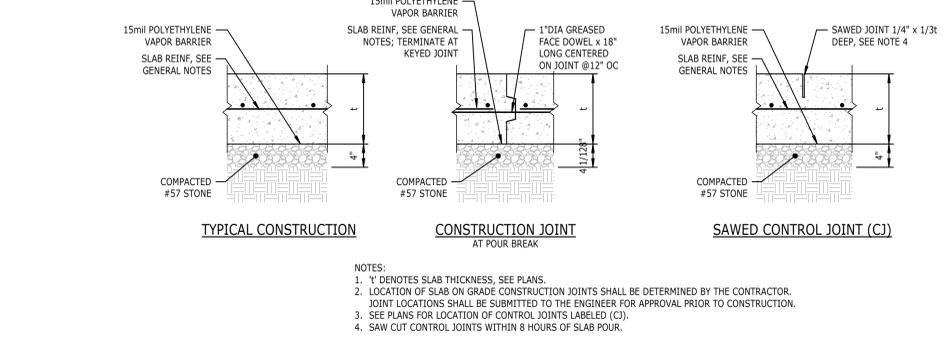
**14** SECTION AT TRENCH DRAIN  
S-301 3/4" = 1'-0"



**9** SECTION TYPICAL TENSION TIE BEAM  
S-301 NTS



**10** SECTION AT HANGAR DOOR  
S-301 NTS

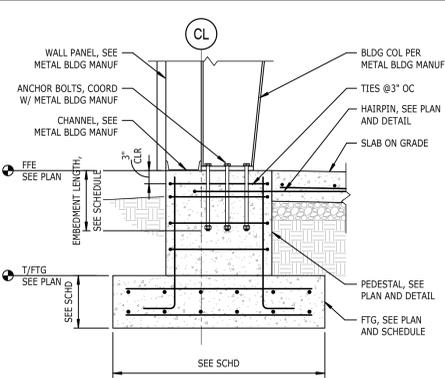


**1** TYPICAL SLAB ON GRADE  
S-301 NTS

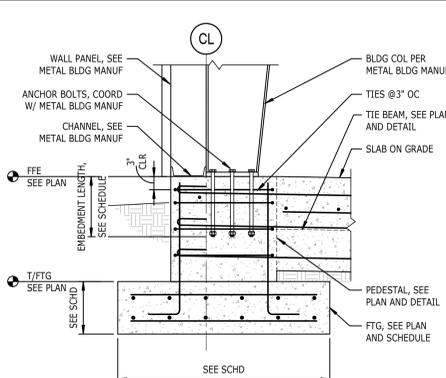
CONCRETE REINFORCING DOWEL EMBEDMENT				
BAR SIZE	LEG DIM, "L"	EMBEDMENT, "D"		
		$f_c = 3,000$ PSI	$f_c = 4,000$ PSI	$f_c = 5,000$ PSI
#3	6"	6"	6"	6"
#4	8"	8"	7"	6"
#5	10"	10"	9"	8"
#6	12"	12"	10"	9"
#7	14"	14"	12"	11"
#8	16"	16"	14"	12"
#9	19"	18"	15"	14"
#10	22"	20"	17"	15"
#11	24"	22"	19"	17"

NOTES:  
1. FOR CONCRETE STRENGTHS NOT PROVIDED, USE THE EMBEDMENT LENGTH FOR THE LOWER CONCRETE STRENGTH AS SHOWN IN THE TABLE.  
2. DOWEL LENGTHS BASED ON NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT, INCREASE DOWEL LENGTH "D" BY 30%.  
3. SIDE COVER ON BARS MUST BE GREATER THAN 2 1/2". END COVER ON 90° HOOKED BARS MUST BE GREATER THAN 2".  
4. FOR EPOXY-COATED BARS, INCREASE THE DOWEL LENGTH "D" BY 20%.

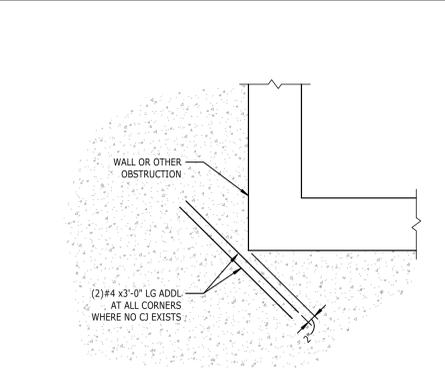
**2** DOWEL EMBEDMENT LENGTH SCHEDULE  
S-301 3/4" = 1'-0"



**19** SECTION TYPICAL COLUMN FTG AT STEEL COLUMN WITH PEDESTAL  
S-301 NTS



**15** SECTION TYPICAL COLUMN FTG AT STEEL COLUMN WITH PEDESTAL AND TIE BEAM  
S-301 NTS



**11** TYPICAL SLAB AT CORNERS  
S-301 3/4" = 1'-0"

ANCHOR BOLT EMBEDMENT SCHEDULE	
ANCHOR BOLT DIAMETER	FTG/PEDESTAL EMBEDMENT DEPTH (MIN)
5/8" DIA	18"
3/4" DIA	18"
1" DIA	20"
1 1/4" DIA	22"

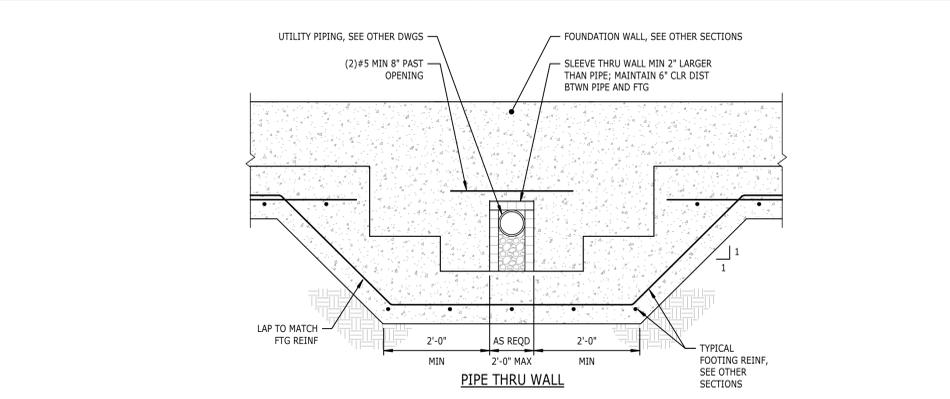
NOTE:  
1. ANCHOR BOLT DIA, GRADE, LOCATION, AND PROJECTION BY BLDG MANUF.

**7** STEEL COLUMN BASE PLATE SCHEDULE  
S-301 NTS

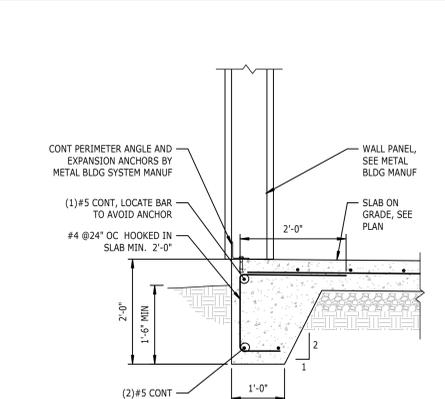
CONCRETE REINFORCING SPLICES			
BAR SIZE	$f_c$		
	3,000 PSI	4,000 PSI	5,000 PSI
#3	1'-10"	1'-7"	1'-5"
#4	2'-4"	2'-1"	1'-10"
#5	3'-0"	2'-7"	2'-4"
#6	3'-7"	3'-1"	2'-9"
#7	5'-2"	4'-6"	4'-1"
#8	5'-11"	5'-2"	4'-8"
#9	6'-6"	5'-10"	5'-3"
#10	7'-6"	6'-6"	5'-10"
#11	8'-4"	7'-3"	6'-6"

NOTES:  
1. FOR CLASS B LAP SPLICE, SPLICE LENGTH = 1.3 x DEVELOPMENT LENGTH.  
2. APPLIES TO BOTTOM BARS ONLY (LESS THAN 12" OF FRESH CONCRETE BELOW BAR).  
3. APPLIES WHERE THE CLEAR COVER IS GREATER THAN THE BAR DIAMETER.  
4. WHEN MORE THAN 12" OF FRESH CONCRETE BELOW SPLICE, THEN INCREASE SPLICE TO 1.3 x SPLICE LENGTH.

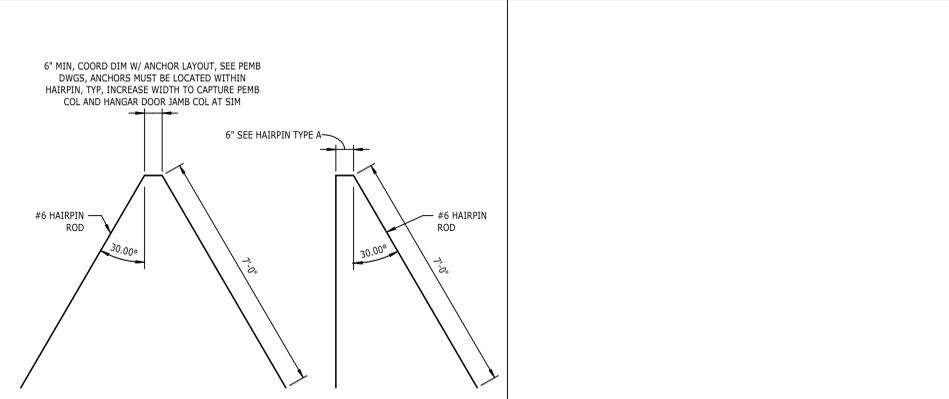
**3** CONCRETE REINFORCING SPLICE SCHEDULE  
S-301 3/4" = 1'-0"



**16** TYPICAL UTILITY BELOW FOOTING  
S-301 3/4" = 1'-0"



**12** SECTION AT EXTERIOR WALL  
S-301 NTS



**8** HAIRPIN DETAILS  
S-301 NTS



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**PEMB SECTIONS AND DETAILS**

SHEET NUMBER  
**S-301**



01/17/2025



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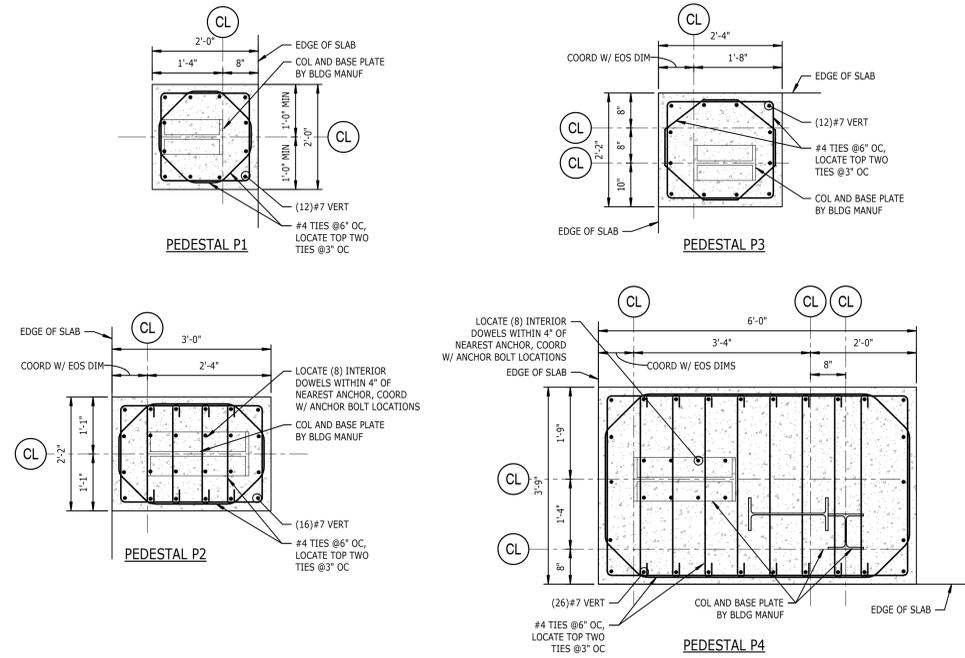
REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**PEMB PIER  
DETAILS**

SHEET NUMBER

**S-302**



- NOTES:  
1. COORDINATE PEDESTAL EXTENTS WITH METAL BUILDING SYSTEM MANUFACTURER. ADD ONE VERTICAL BAR EACH FACE FOR EACH 6" OR PARTIAL PEDESTAL EXTENSION.  
2. 8" CONCRETE WALLS AT BUILDING CORNERS NOT SHOWN ON PEDESTAL FOR CLARITY, SEE S-101.

**1** TYPICAL PEDESTAL PLANS  
S-302 3/4" = 1'-0"

**GENERAL NOTES - FLOOR PLAN**

- SEE ENLARGED PLANS FOR PARTITION TAGS NOT IDENTIFIED ON THIS SHEET.
- SEE SHEET G-003 FOR PARTITION TYPES AND ASSOCIATED PARTITION ITEMS.
- EDGE OF SLAB AT BUILDING PERIMETER TO ALIGN WITH OUTSIDE FACE OF STUD/ CMU U.N.O.
- SEE STRUCTURAL DRAWINGS FOR ALL E.O.S. DETAILS AND CONDITIONS.
- PROVIDE FR BLOCKING AS REQUIRED AT LOCATIONS WITH WALL-MOUNTED EQUIPMENT. (TVs, MONITORS, CASEWORK, ETC.)

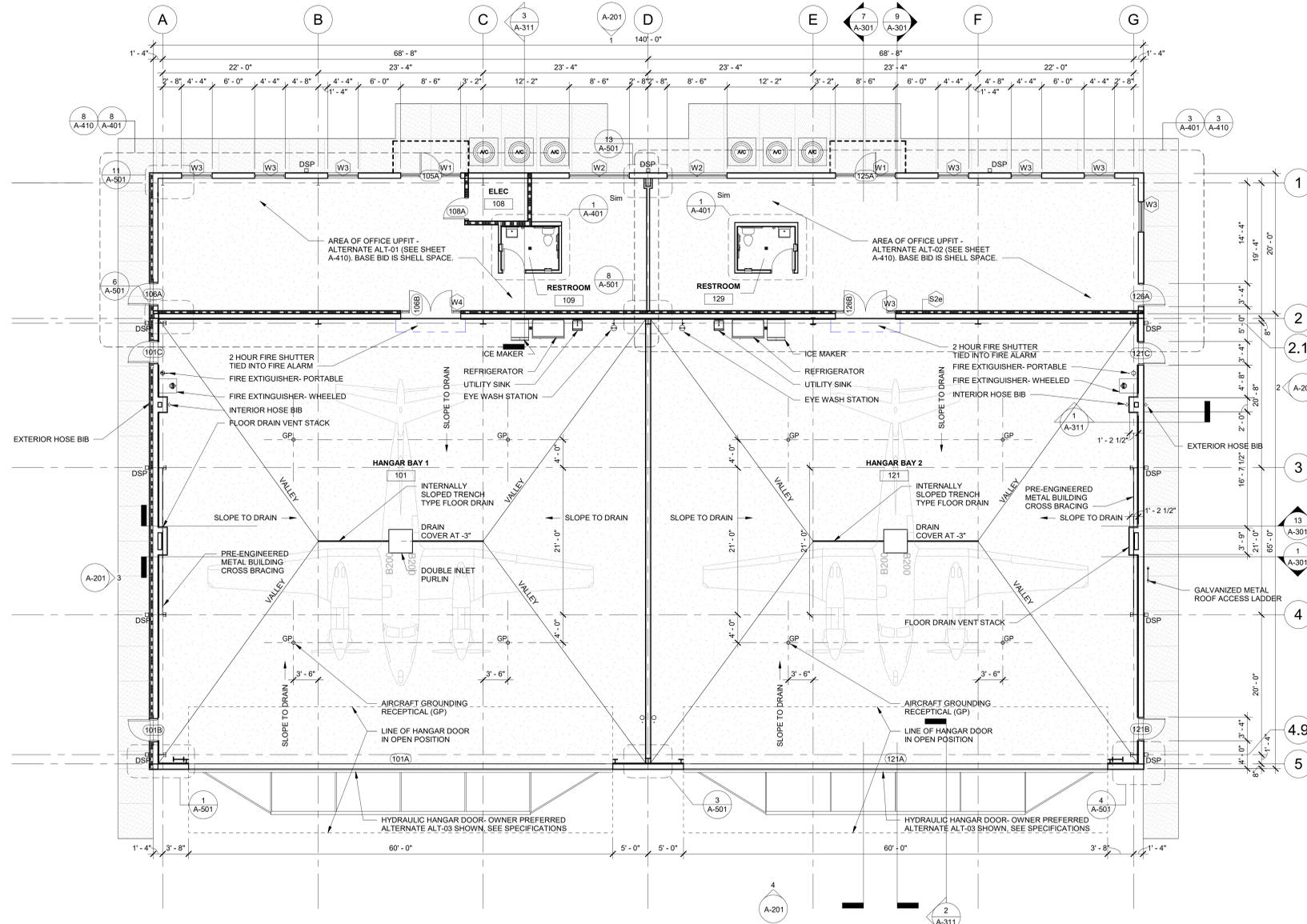
**PARTITION NOTES**

- ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
- UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
- HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
- ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
- ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
- ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFENING MATERIAL ONLY. SAFENING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL, ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
- ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
- STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETS OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
- ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILING. BRACING SHALL BE AS FOLLOWS:  
ATTACH A 3/8" OR 1/2" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 8" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3/8" OR 1/2" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
- KICKERS SHALL HAVE CLIP ANGLES (14 GA. MN.) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
- DO NOT FASTEN TOP RUNNER TO STUDS. CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
- SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
- WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE, AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.

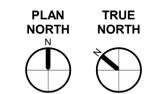
- WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
- PURSUANT TO NCSCB 603 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETS AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.
- WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
- ELECTRICAL AND TELECOM ROOMS, IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-6" AFF TO 8'-6" AFF, LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
- ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
- PROVIDE FR SOLID WOOD BLOCKING IN WALLS AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TVS, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
- USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
- SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
- ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNERGUARDS, SEE SPECIFICATIONS.

METAL STUD GAUGES	LOCATION	LENGTH	GAUGE
	PARTITION	UP TO 8'-0"	20 GAUGE
	PARTITION	UP TO 10'-0"	18 GAUGE
	PARTITION	UP TO 12'-0"	16 GAUGE
	PARTITION	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
	BULKHEAD	UP TO 6'-0"	25 GAUGE
	BULKHEAD	UP TO 8'-0"	20 GAUGE
	BULKHEAD	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWGS.
	SOFFIT	UP TO 4'-0"	25 GAUGE
	SOFFIT	UP TO 8'-0"	25 GAUGE. SEE SPECIFIC DETAILS FOR SUPPORT SUSPENDED SYSTEM MUST BE USED
	SOFFIT	GREATER THAN 8'-0"	16 GA (2 STUDS AT ALL LOCATIONS)
	DOOR / WINDOW HEAD AND JAMB	U.N.O.	

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

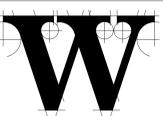


**1 FLOOR PLAN**  
1/8" = 1'-0"



**Schedule 1:  
2-Unit Box Hangar**

Lumberton, NC 28358



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DATE 01/17/2025  
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SHEET TITLE

**FIRST FLOOR PLAN**

SHEET NUMBER  
**A-101**



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**FIRST FLOOR  
CEILING PLAN**

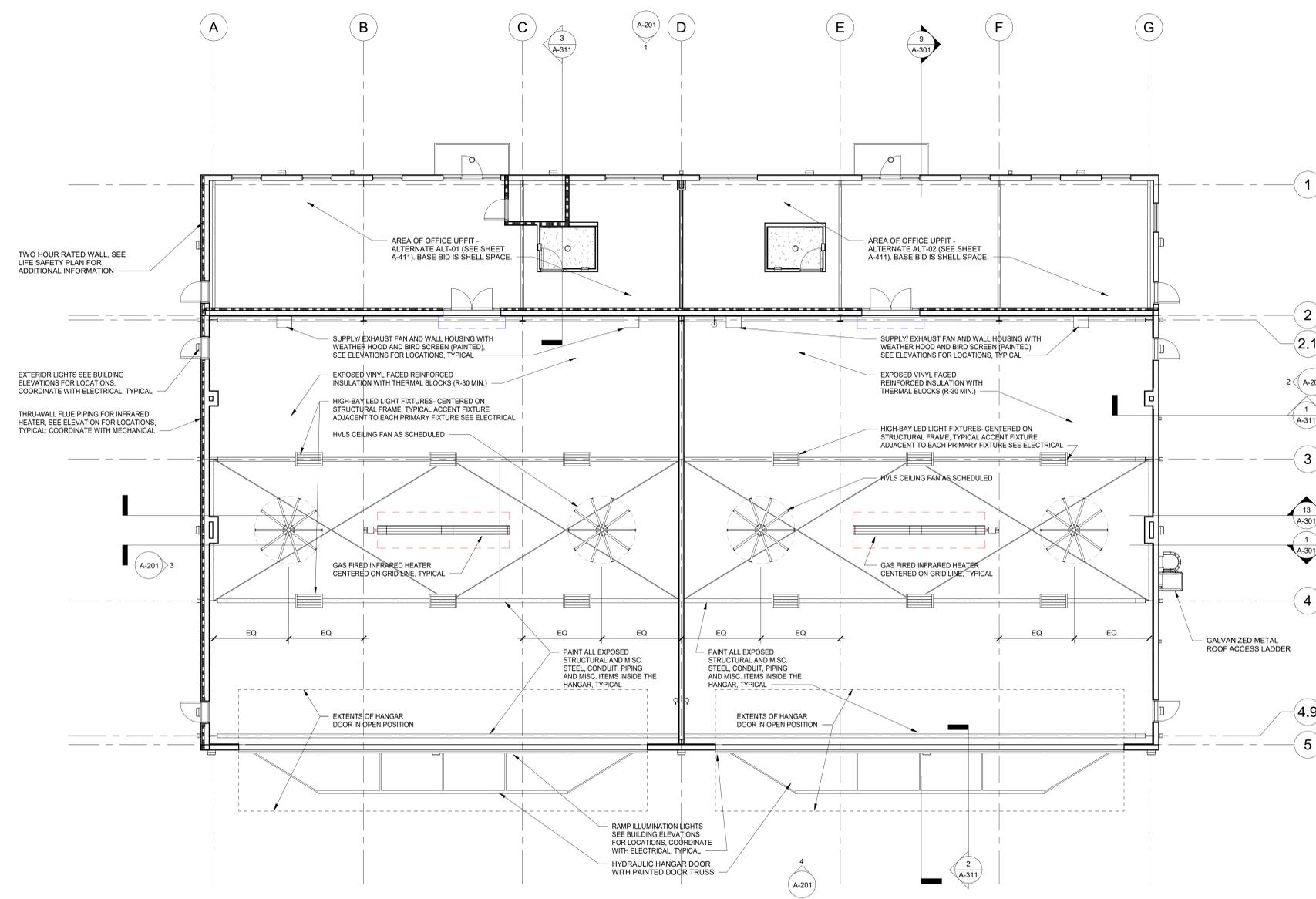
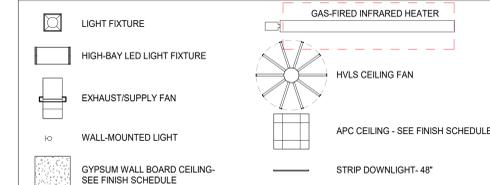
SHEET NUMBER

**A-111**

**GENERAL NOTES - CEILING**

- SEE MECHANICAL DRAWINGS FOR DIFFUSER LOCATIONS AND OTHER MECHANICAL CEILING DEVICES.
- SEE ELECTRICAL DRAWINGS FOR LIGHTING LOCATIONS AND OTHER ELECTRICAL CEILING DEVICES.
- ALL CEILING HEIGHTS ARE AT 10'-0" A.F.F. UNLESS NOTED OTHERWISE.
- ALL CEILING DEVICES, INCLUDING DOWNLIGHTS, SPRINKLER HEADS, HVAC GRILLES SMALLER THAN 2X2 FEET, ARE TO BE CENTERED IN CEILING TILE UNLESS NOTED OTHERWISE. CONTRACTOR TO REVIEW ALL CONFLICTS WITH ARCHITECT PRIOR TO INSTALLATION.
- CENTER EXIT SIGNS OVER DOORS UNLESS NOTED OTHERWISE.
- ARCHITECT AND ENGINEER OF RECORD TO REVIEW SPRINKLER HEAD LAYOUT LOCATIONS AND SPACING ON FIRE PROTECTION SHOP DRAWINGS FOR COORDINATION WITH DESIGN AND WALL AND CEILING SYSTEMS.
- CONTRACTOR SHALL COORDINATE WITH ALL TRADES INVOLVED, INCLUDING PREPARATION OF COORDINATION DRAWINGS, TO ENSURE CLEARANCES FOR FIXTURES, DUCTWORK, CEILINGS, ETC. AS NECESSARY TO MAINTAIN THE INDICATED FINISHED CEILING / FIXTURE MOUNTING HEIGHT.
- DIMENSIONS ARE TO CENTER LINE OF FIXTURES U.N.O.
- PERIMETER CEILING GRID ANGLE, WHERE IT OCCURS, SHALL BE TIGHT TO FINISHED FACE OF PARTITION SURFACES, FREE FROM CURVES, GAPS, BREAKS, AND OTHER IRREGULARITIES.
- SUSPENDED CEILING PANEL SIZE, NO SMALLER THAN 4 INCHES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS PRIOR TO INSTALLATION.
- CENTER CEILING SYSTEMS IN ROOMS BOTH DIRECTIONS UNLESS OTHERWISE NOTED.

**CEILING PLAN LEGEND**



**1 REFLECTED CEILING PLAN**  
1/8" = 1'-0"



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**ROOF PLAN**

SHEET NUMBER

**A-121**

**GENERAL NOTES - ROOF PLAN**

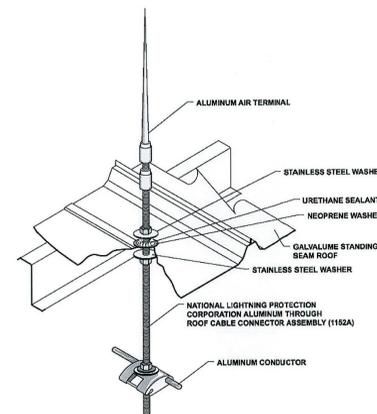
1. ROOF INSULATION SHALL MEET THE REQUIREMENTS OF SECTION 1508.1 OF THE NCSBC (2012).
2. ROOFTOP EQUIPMENT IS SHOWN FOR INTENT ONLY. SEE MECHANICAL DRAWINGS FOR SIZE, TYPE AND LOCATIONS.
3. CONTRACTOR TO PROVIDE SOUND/VIBRATION ISOLATION BASE FOR ALL ROOFTOP EQUIPMENT.
4. SEE DETAIL 19/A-121 FOR LIGHTNING ARREST MOUNTING DETAILS
5. ALL ROOF PENETRATIONS TO MATCH COLOR OF ROOF PANELS

**ROOF DRAINAGE CALCULATIONS**

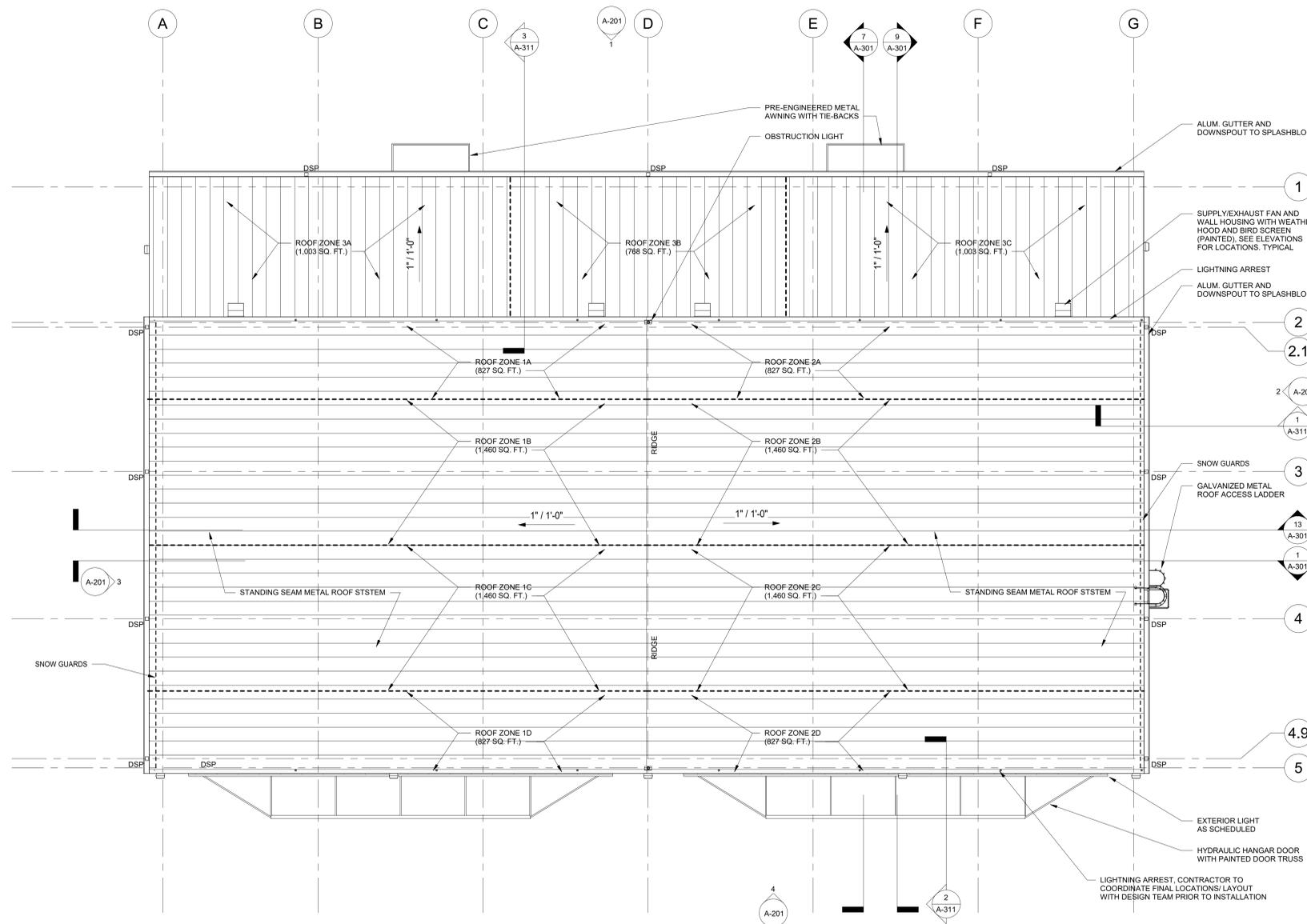
DRAINAGE AREA	GUTTER SIZE		DOWNSPOUT SIZE	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
1A/1C 1,003 SQ. FT.	6.5"Wx5.0"D (20'-0")	8"Wx8"D (20'-0")	3.75"x4.75"	6"x6"
1B 788 SQ. FT.	6.5"Wx5.0"D (20'-0")	8"Wx8"D (20'-0")	3.75"x4.75"	6"x6"
2A/2D 827 SQ. FT.	6.5"Wx5.0"D (20'-0")	8"Wx8"D (20'-0")	3.75"x4.75"	6"x6"
2B/2C 1,480 SQ. FT.	6.5"Wx5.0"D (20'-0")	8"Wx8"D (20'-0")	3.75"x4.75"	6"x6"
3A/3D 827 SQ. FT.	6.5"Wx5.0"D (20'-0")	8"Wx8"D (20'-0")	3.75"x4.75"	6"x6"
3B/3C 1,480 SQ. FT.	6.5"Wx5.0"D (20'-0")	8"Wx8"D (20'-0")	3.75"x4.75"	6"x6"

1. PRIMARY ROOF DRAIN 4"/HR PER P1105.1
2. SEE PLUMBING DRAWINGS FOR MORE INFORMATION.

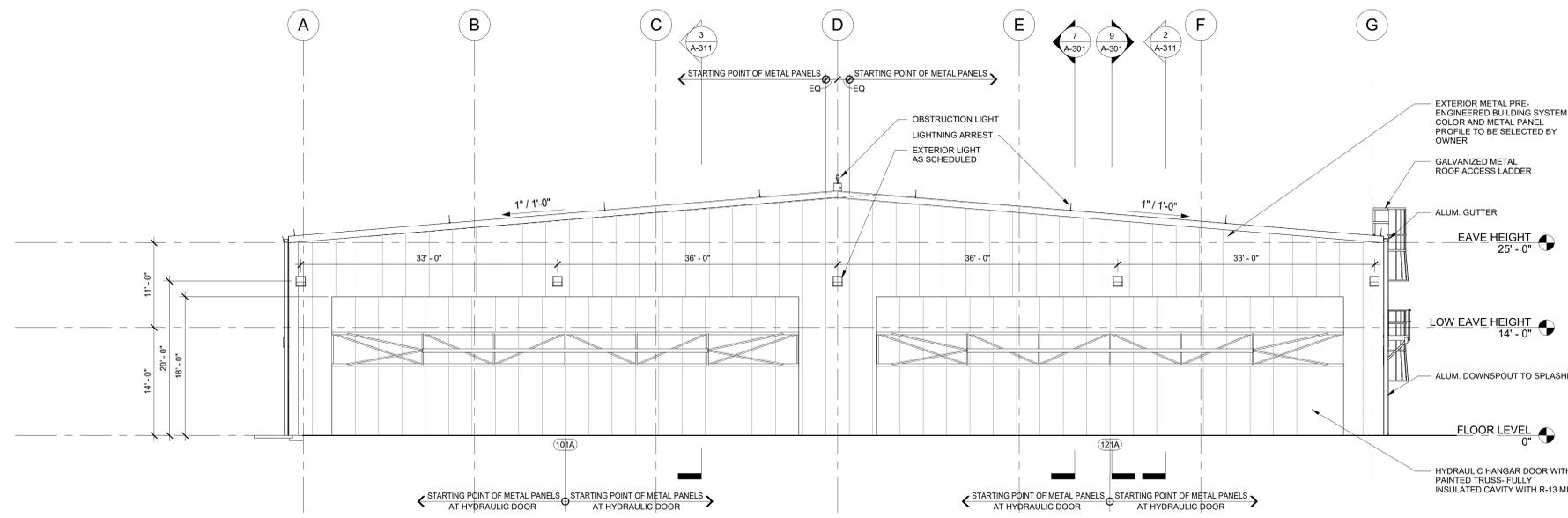
DSP- ALUM DOWNSPOUT



**19 LIGHTNING ARREST DETAIL**  
1" = 1'-0"



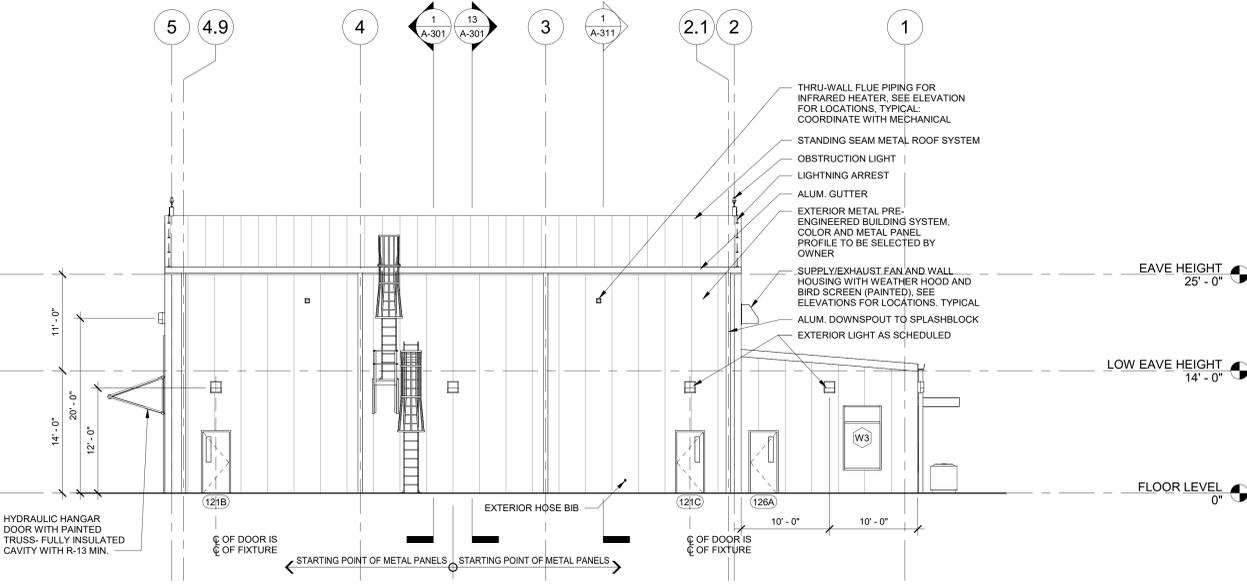
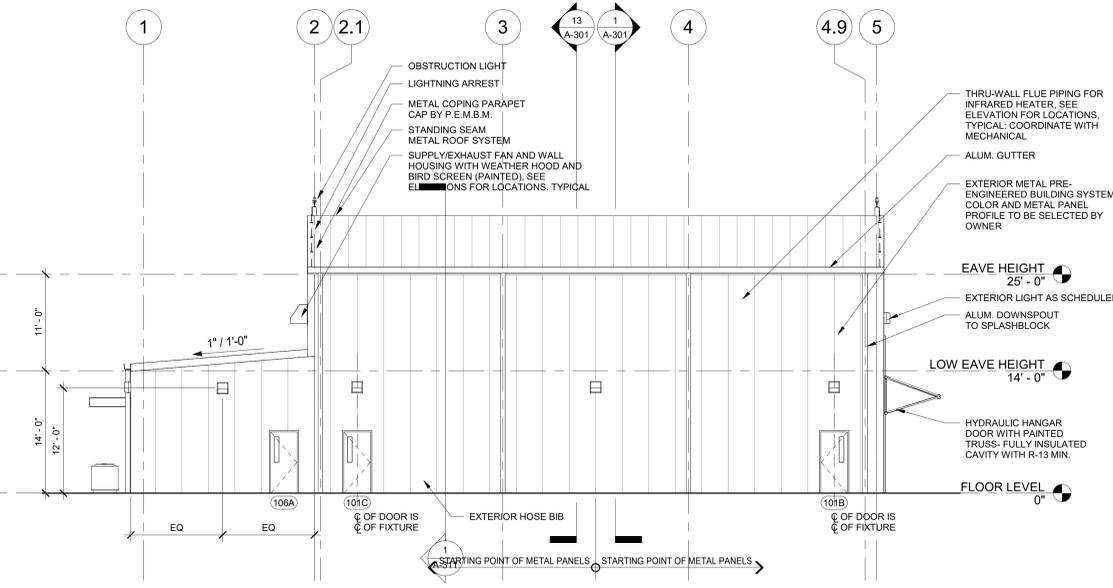
**1 ROOF PLAN**  
1/8" = 1'-0"



**GENERAL NOTES - ELEVATIONS**

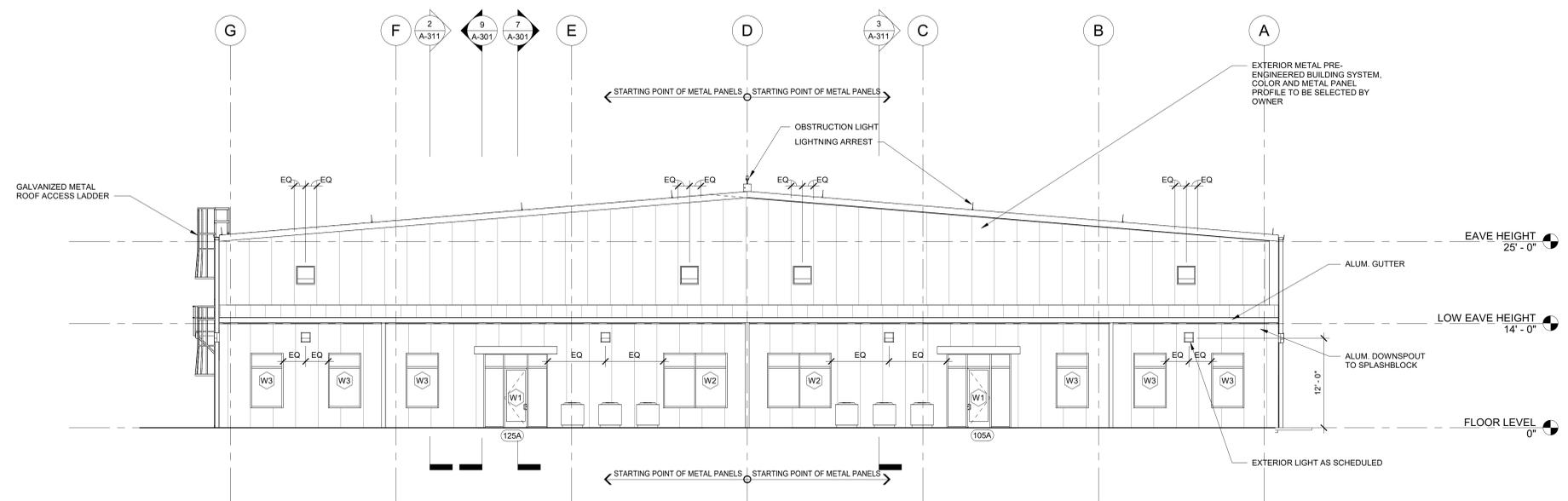
1. ALL EXTERIOR DEVICES ARE SHOWN WITH THE INTENT OF CENTERING ON METAL WALL PANEL RIBS. CONTRACTOR TO COORDINATE/ CONFIRM ALL EXTERIOR OPENING, DEVICES, PENETRATIONS, ETC. LOCATIONS WITH DESIGN TEAM PRIOR TO INSTALLATION.
2. METAL WALL PANEL RIB LOCATIONS ARE INTENTIONAL. SEE ELEVATIONS FOR SPRING POINT(S) OF PANEL RHYTHM.

**4 BUILDING ELEVATION- HANGAR DOOR**  
1/8" = 1'-0"



**3 BUILDING ELEVATION- SIDE**  
1/8" = 1'-0"

**2 BUILDING ELEVATION- SIDE**  
1/8" = 1'-0"



**1 BUILDING ELEVATION- OFFICE FRONT**  
1/8" = 1'-0"



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DATE 01/17/2025  
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SHEET TITLE

**BUILDING ELEVATIONS**

SHEET NUMBER  
**A-201**



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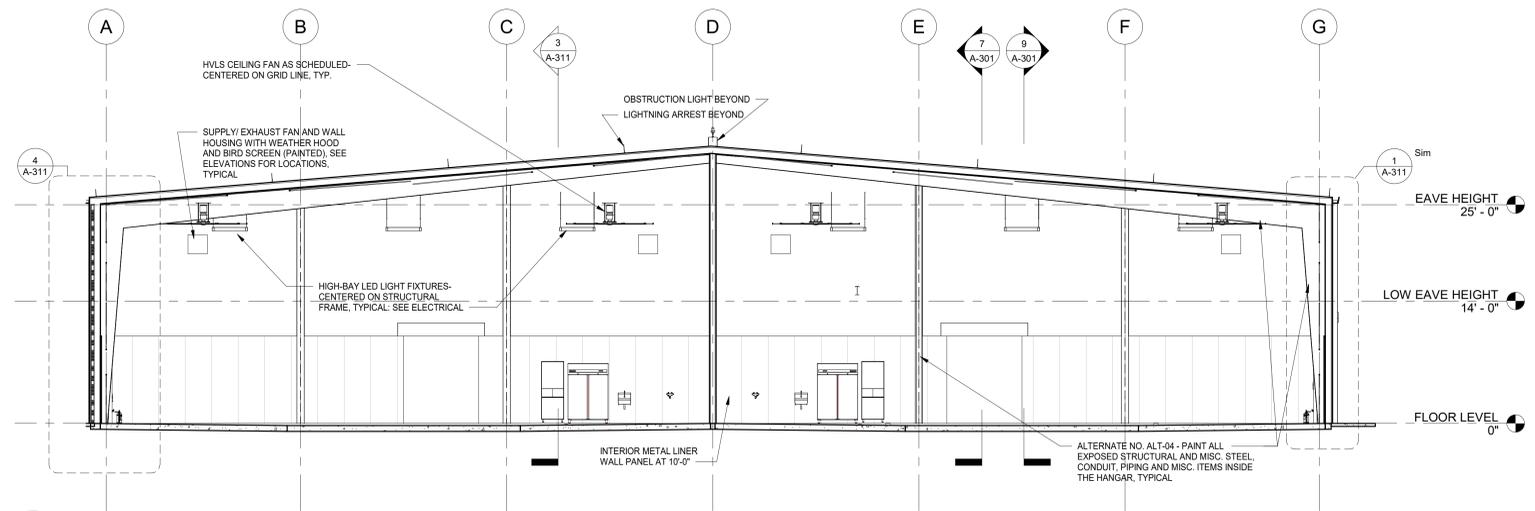
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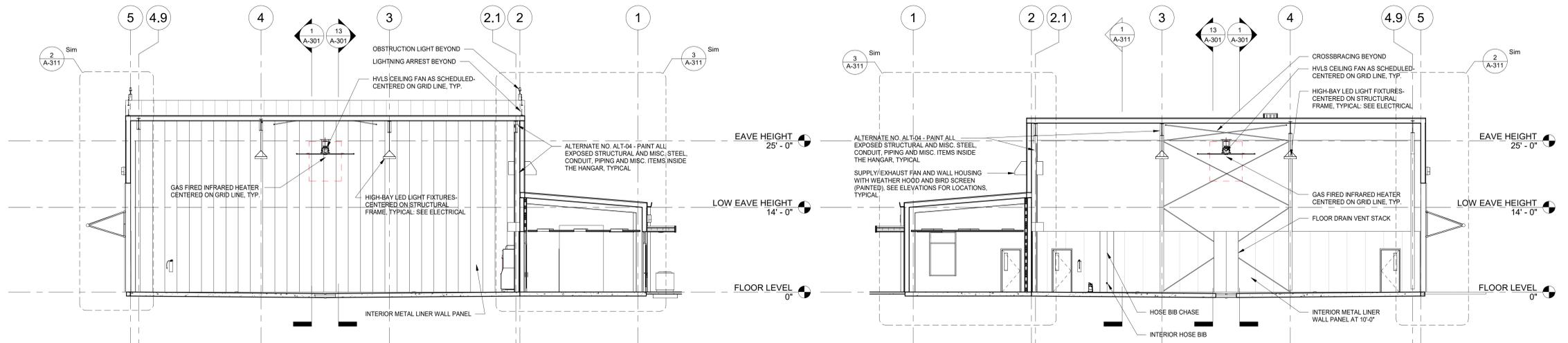
**BUILDING  
SECTIONS**

SHEET NUMBER

**A-301**

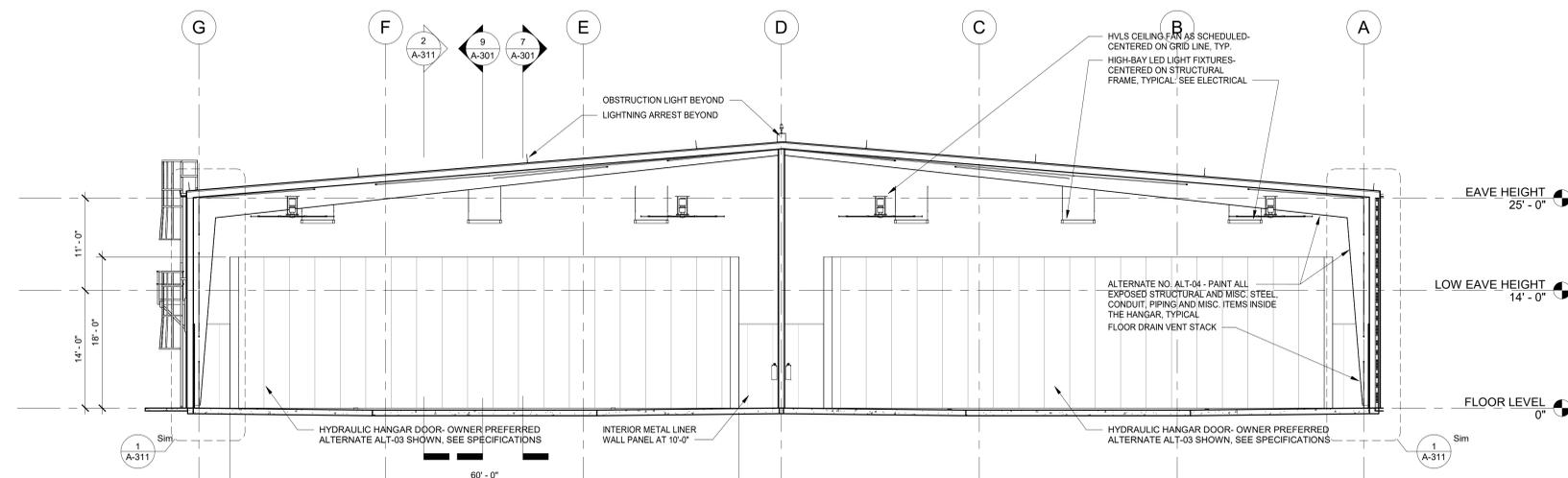


**13 LONGITUDINAL SECTION 2**  
1/8" = 1'-0"



**7 TRANSVERSE SECTION 2**  
1/8" = 1'-0"

**9 TRANSVERSE SECTION 1**  
1/8" = 1'-0"



**1 LONGITUDINAL SECTION 1**  
1/8" = 1'-0"



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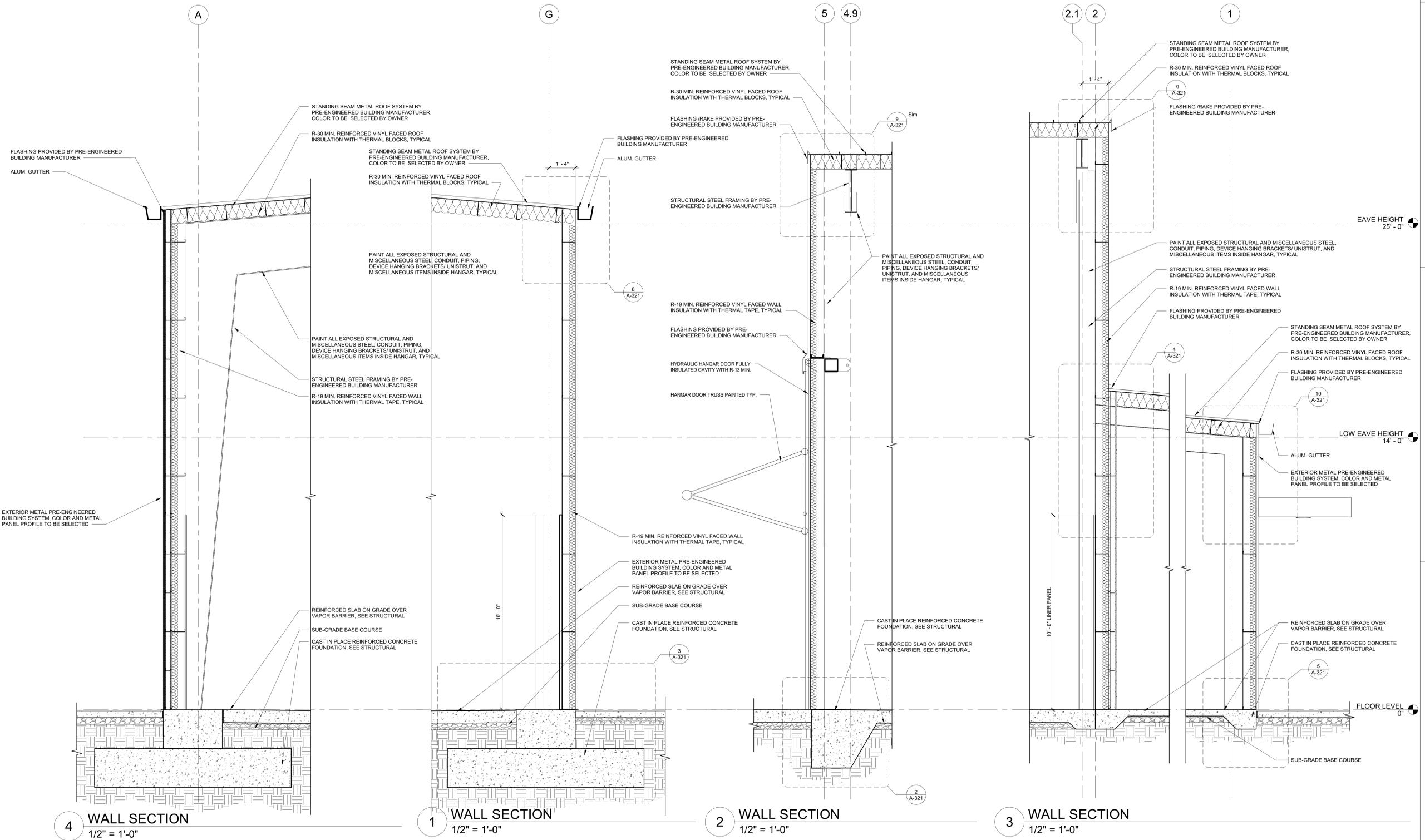
PROJECT NUMBER 2024

SHEET TITLE

**WALL SECTIONS**

SHEET NUMBER

**A-311**



4 WALL SECTION  
1/2" = 1'-0"

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

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

3 WALL SECTION  
1/2" = 1'-0"



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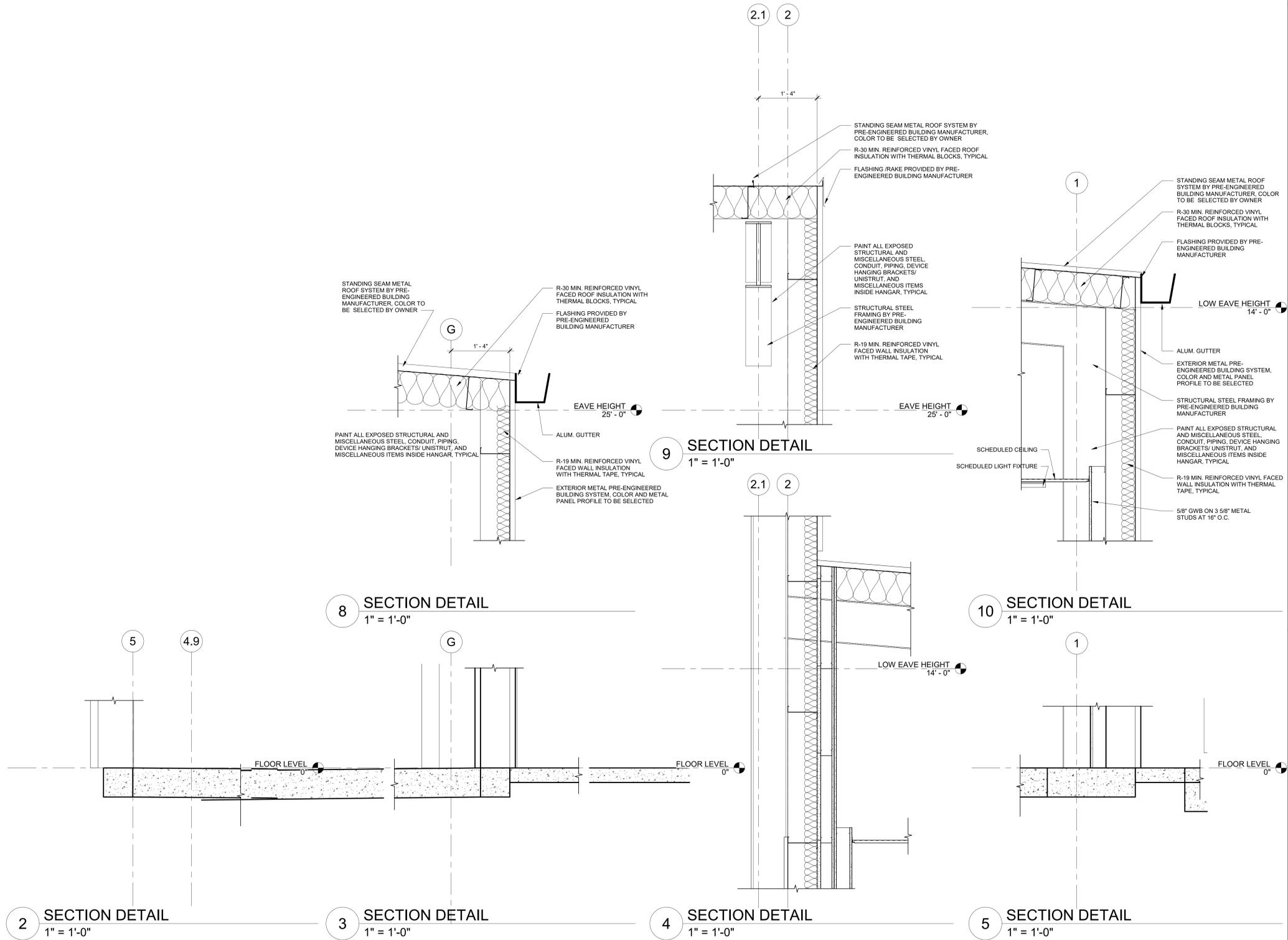
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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**SECTION  
DETAILS**

SHEET NUMBER  
**A-321**





**PARTITION NOTES**

1. ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
2. UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
3. HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
4. ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
5. ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
6. ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFING MATERIAL ONLY. SAFING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
7. ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
8. STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETRY OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
9. ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:  
ATTACH A 3/8" OR 6" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 6" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3/8" OR 6" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
10. KICKERS SHALL HAVE CLIP ANGLES (14 GA MIN.) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
11. DO NOT FASTEN TOP RUNNER TO STUDS; CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
12. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
13. WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE, AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.
14. WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
15. PURSUANT TO NC83C 603 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETRY AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.
16. WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
17. ELECTRICAL AND TELECOM ROOMS: IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-0" AFF TO 8'-0" AFF. LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
18. ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
19. PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TV'S, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
20. USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
21. SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
22. ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNERGUARDS, SEE SPECIFICATIONS.

**METAL STUD GAUGES**

LOCATION	LENGTH	GAUGE
PARTITION	UP TO 8'-0"	20 GAUGE
PARTITION	UP TO 10'-0"	18 GAUGE
PARTITION	UP TO 12'-0"	16 GAUGE
PARTITION	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
BULKHEAD	UP TO 6'-0"	25 GAUGE
BULKHEAD	UP TO 8'-0"	20 GAUGE
BULKHEAD	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWGS.
SOFFIT	UP TO 4'-0"	25 GAUGE
SOFFIT	UP TO 8'-0"	25 GAUGE. SEE SPECIFIC DETAILS FOR SUPPORT
SOFFIT	GREATER THAN 8'-0"	SUSPENDED SYSTEM MUST BE USED
DOOR / WINDOW HEAD AND JAMB	U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)

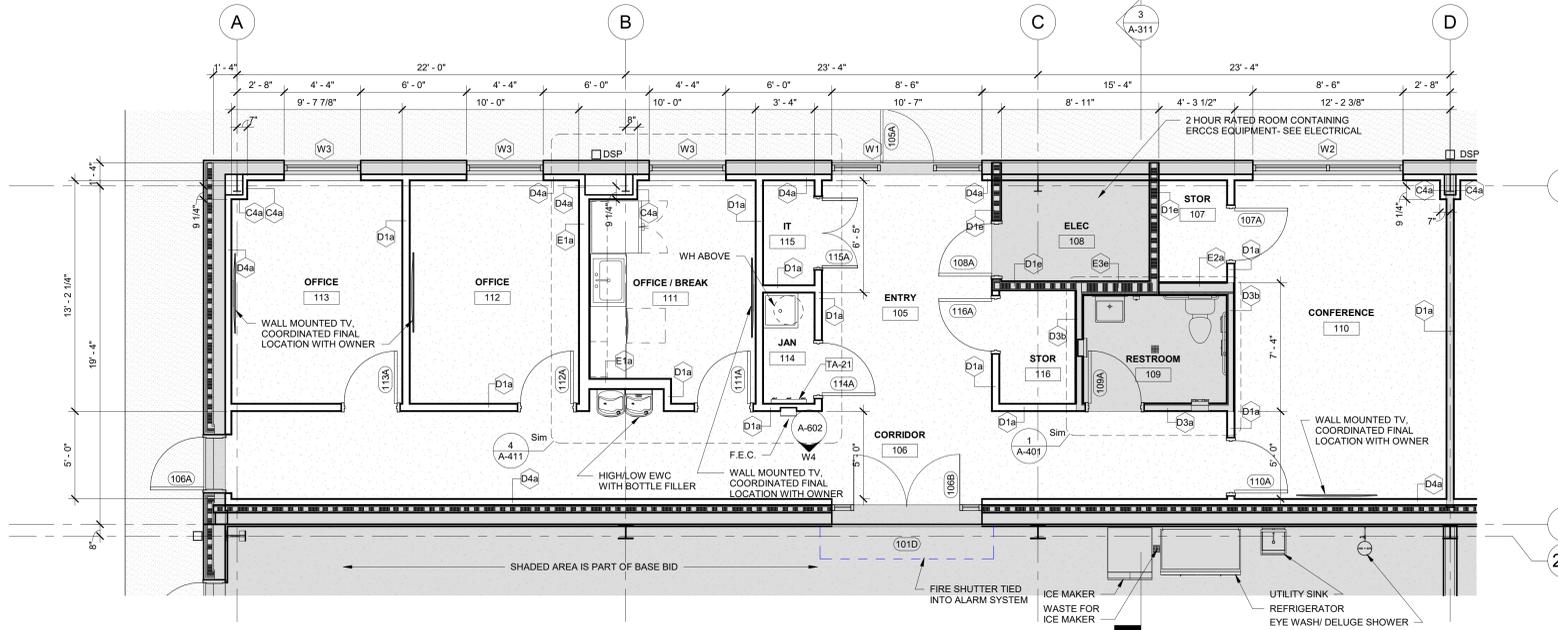
NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

**GENERAL NOTES - FLOOR PLAN**

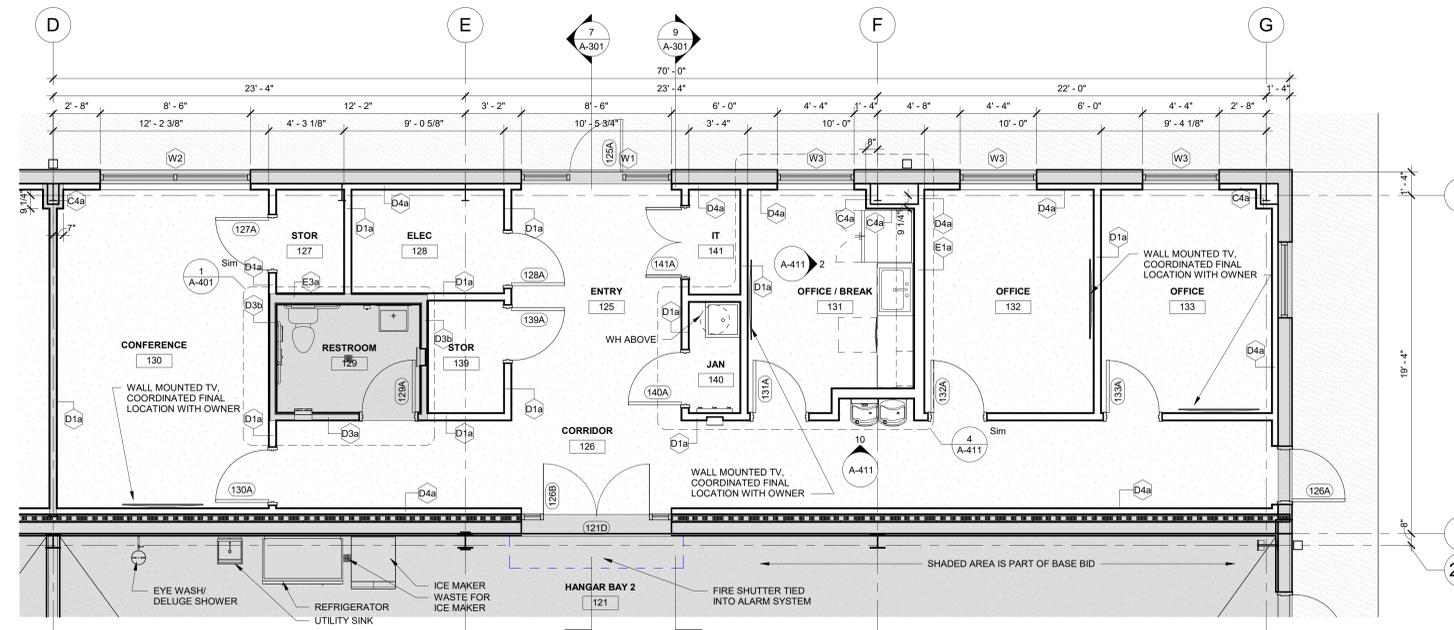
1. SEE ENLARGED PLANS FOR PARTITION TAGS NOT IDENTIFIED ON THIS SHEET.
2. SEE SHEET G-003 FOR PARTITION TYPES AND ASSOCIATED PARTITION ITEMS.
3. EDGE OF SLAB AT BUILDING PERIMETER TO ALIGN WITH OUTSIDE FACE OF STUD/ CMU U.N.O.
4. SEE STRUCTURAL DRAWINGS FOR ALL E.O.S. DETAILS AND CONDITIONS.
5. PROVIDE FR BLOCKING AS REQUIRED AT LOCATIONS WITH WALL-MOUNTED EQUIPMENT. (TV'S, MONITORS, CASEWORK, ETC.)

**FLOOR PLAN LEGEND**

- NON RATED WALL- SEE PARTITION TYPES
- 1 HOUR RATED WALL- SEE PARTITION TYPES
- 2 HOUR RATED WALL- SEE PARTITION TYPES



**8 ENLARGED OFFICE PLAN - ALT-01**  
1/4" = 1'-0"



**3 ENLARGED OFFICE PLAN - ALT-02**  
1/4" = 1'-0"



**Schedule 1:  
2-Unit Box Hangar**

Lumberton, NC 28358



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**REVISIONS**

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**ENLARGED PLANS - ADD ALTERNATES**

SHEET NUMBER  
**A-410**

**PARTITION NOTES**

- ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
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	DOOR/ WINDOW HEAD AND JAMB	U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

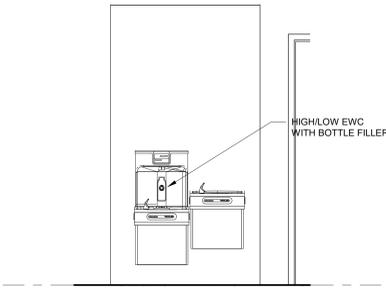
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- SEE ENLARGED PLANS FOR PARTITION TAGS NOT IDENTIFIED ON THIS SHEET.
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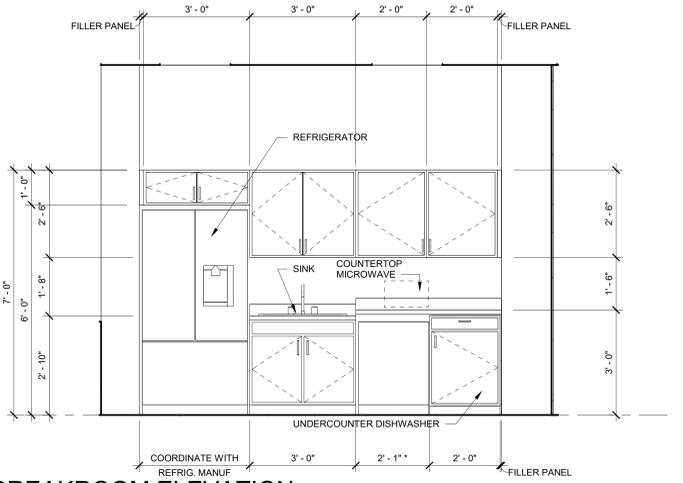
**TOILET ACCESSORY LEGEND AND NOTES**

SYMBOL	DESCRIPTION	MODEL
TA-1	18" GRAB BAR	BOBRICK B-5806.99X18
TA-2	36" GRAB BAR	BOBRICK B-5806.99X36
TA-3	42" GRAB BAR	BOBRICK B-5806.99X42
TA-4	SURFACE-MOUNTED HAND SOAP DISPENSER	BOBRICK B-2111
TA-5	WASTE RECEPTACLE	BOBRICK B-2179
TA-6	24" X 48" SIDE EDGE LIGHTED MIRROR. SEE ELECTRICAL.	MATRIX MIRRORS- L4 (2700K)
TA-7	PAPER TOWEL DISPENSER	BOBRICK B-262
TA-8	SURFACE-MOUNTED TOILET TISSUE DISPENSER	BOBRICK B-2890
TA-9	SURFACE-MOUNTED SANITARY NAPKIN DISPOSAL	BOBRICK B-254
TA-10	SURFACE-MOUNTED CLOTHES HOOK	
TA-11	INSULATED TAIL PIECE AND HOT WATER PIPE (CLASS C RATING)	BOBRICK B-5806.99X18
TA-12	SEMI RECESSED PAPER TOWEL DISPENSER/ DISPOSAL	BOBRICK B-38032
TA-13	SANITARY NAPKIN DISPENSER	BOBRICK B-3706
TA-14	SHOWER CURTAIN AND ROD	BOBRICK B-204
TA-15	PREFABRICATED ADA SHOWER WITH GRAB BARS, FOLDING SEAT AND ACCESSIBLE CONTROLS	COMFORT DESIGN SSS 3637BF 3P RRF
TA-16	COUNTER TOP MOUNTED CIRCULAR WASTE CHUTE	BOBRICK B-532
TA-17	DOUBLE ROBE HOOK	BOBRICK B-672
TA-18	TOILET SEAT COVER DISPENSER	BOBRICK B-221
TA-19	SHOWER GRAB BAR	BOBRICK B-5837.99
TA-20	ADA SHOWER SEAT- FOLDING	BOBRICK B-5181
TA-21	MOP/ BROOM HOLDER (24")	BOBRICK B-223x24

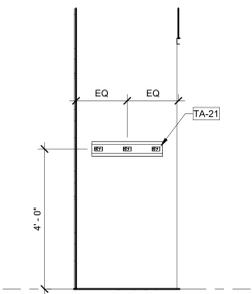
- ALL MODELS ARE BASIS OF DESIGN
- ALL WALLS/ PARTITIONS WITHIN 2'-0" FROM SINKS, URINALS AND WATER CLOSETS SHALL MEET THE REQUIREMENTS OF NCSBC SECTION 1210.2



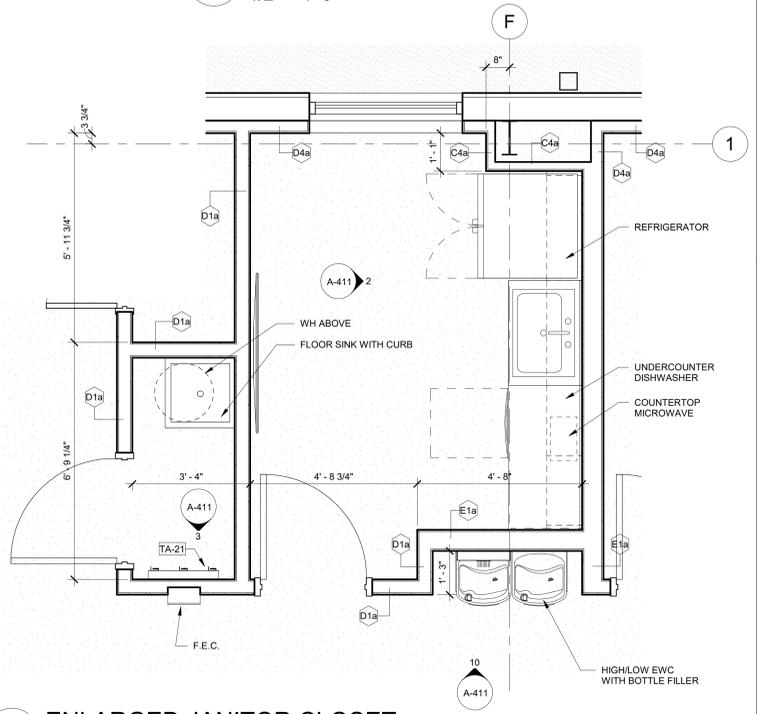
**10 EWC ELEVATION**  
1/2" = 1'-0"



**2 BREAKROOM ELEVATION**  
1/2" = 1'-0"



**3 JANITOR ELEVATION**  
1/2" = 1'-0"

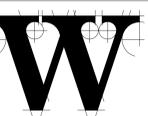


**4 ENLARGED JANITOR CLOSET**  
1/2" = 1'-0"



**Schedule 1:  
2-Unit Box Hangar**

Lumberton, NC 28358



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**REVISIONS**

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**ENLARGED RESTROOM PLAN AND ELEVATIONS**

SHEET NUMBER

**A-411**



**THE WILSON GROUP**  
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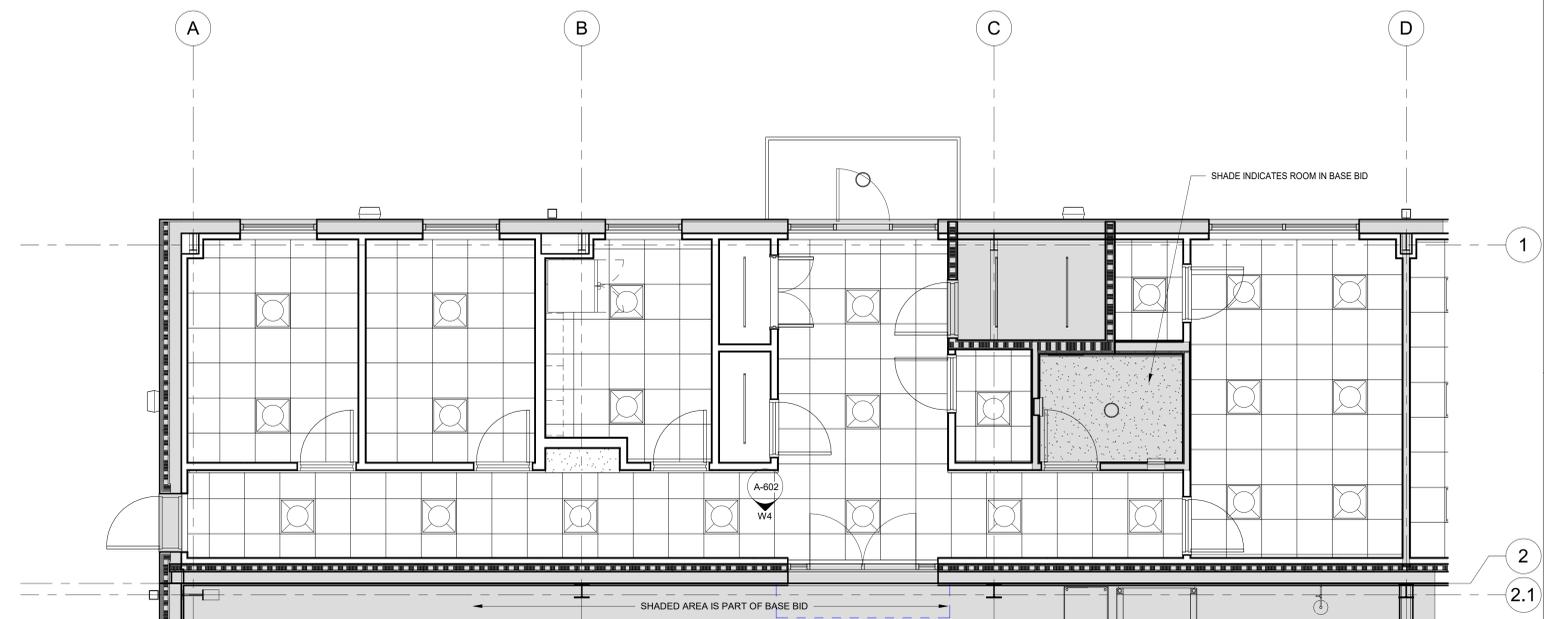
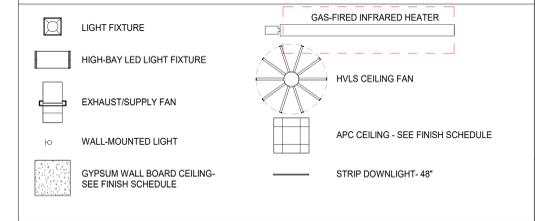
**ENLARGED  
CEILING PLANS -  
ADD  
ALTERNATES**

SHEET NUMBER  
**A-412**

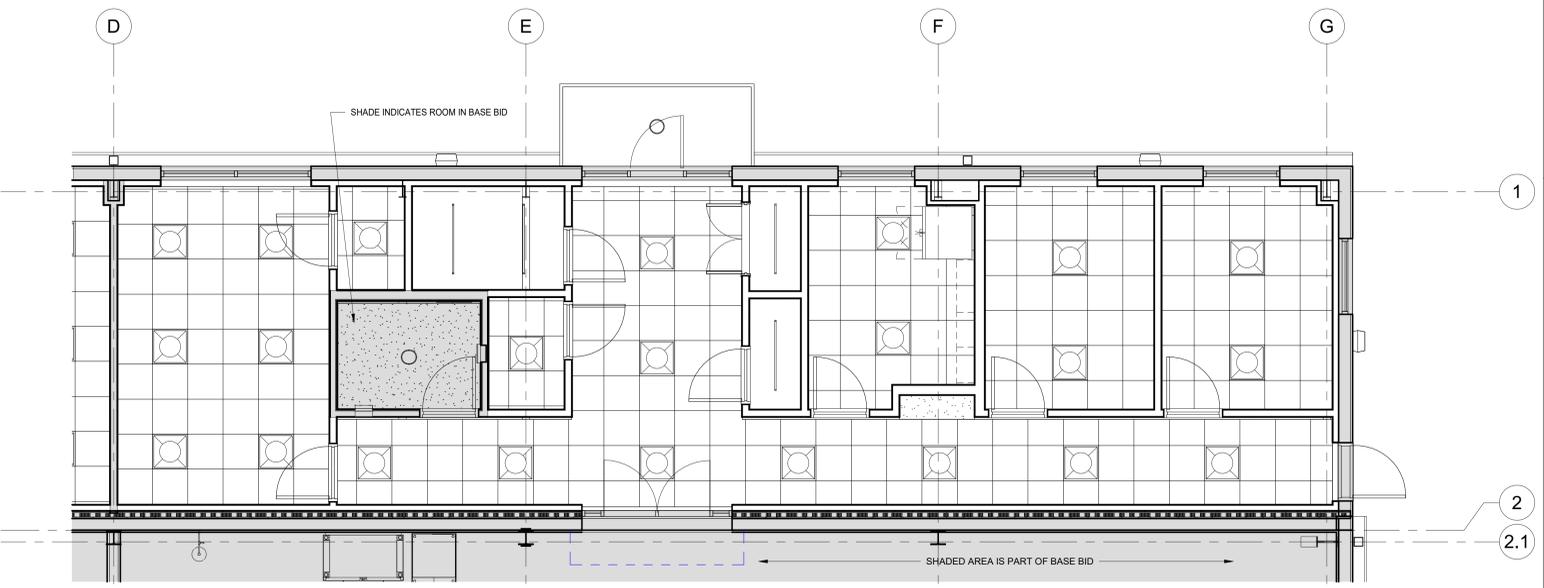
**GENERAL NOTES - CEILING**

1. SEE MECHANICAL DRAWINGS FOR DIFFUSER LOCATIONS AND OTHER MECHANICAL CEILING DEVICES.
2. SEE ELECTRICAL DRAWINGS FOR LIGHTING LOCATIONS AND OTHER ELECTRICAL CEILING DEVICES.
3. ALL CEILING HEIGHTS ARE AT 10'-0" A.F.F. UNLESS NOTED OTHERWISE.
4. ALL CEILING DEVICES, INCLUDING DOWNLIGHTS, SPRINKLER HEADS, HVAC GRILLES SMALLER THAN 2X2 FEET, ARE TO BE CENTERED IN CEILING TILE UNLESS NOTED OTHERWISE. CONTRACTOR TO REVIEW ALL CONFLICTS WITH ARCHITECT PRIOR TO INSTALLATION.
5. CENTER EXIT SIGNS OVER DOORS UNLESS NOTED OTHERWISE.
6. ARCHITECT AND ENGINEER OF RECORD TO REVIEW SPRINKLER HEAD LAYOUT LOCATIONS AND SPACING ON FIRE PROTECTION SHOP DRAWINGS FOR COORDINATION WITH DESIGN AND WALL AND CEILING SYSTEMS.
7. CONTRACTOR SHALL COORDINATE WITH ALL TRADES INVOLVED, INCLUDING PREPARATION OF COORDINATION DRAWINGS, TO ENSURE CLEARANCES FOR FIXTURES, DUCTWORK, CEILINGS, ETC. AS NECESSARY TO MAINTAIN THE INDICATED FINISHED CEILING / FIXTURE MOUNTING HEIGHT.
8. DIMENSIONS ARE TO CENTER LINE OF FIXTURES U.N.O.
9. PERIMETER CEILING GRID ANGLE, WHERE IT OCCURS, SHALL BE TIGHT TO FINISHED FACE OF PARTITION SURFACES, FREE FROM CURVES, GAPS, BREAKS, AND OTHER IRREGULARITIES.
10. SUSPENDED CEILING PANEL SIZE, NO SMALLER THAN 4 INCHES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS PRIOR TO INSTALLATION.
11. CENTER CEILING SYSTEMS IN ROOMS BOTH DIRECTIONS UNLESS OTHERWISE NOTED.

**CEILING PLAN LEGEND**



**8 ENLARGED CEILING PLAN - ALT-01**  
1/4" = 1'-0"



**3 ENLARGED CEILING PLAN - ALT-02**  
1/4" = 1'-0"



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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**PLAN DETAILS**

SHEET NUMBER

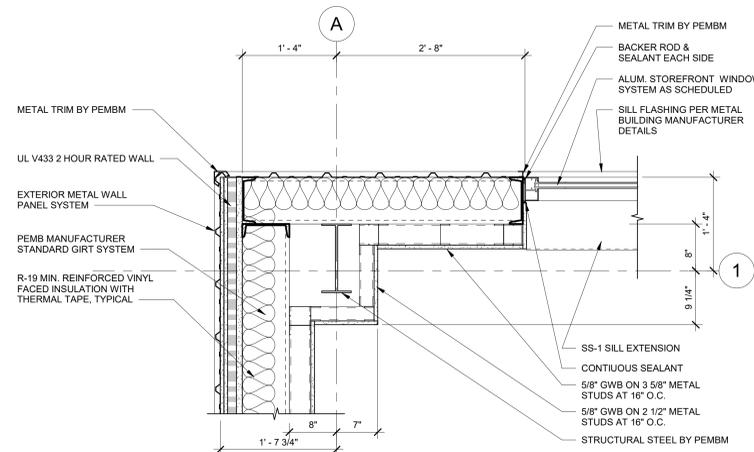
**A-501**

**PARTITION NOTES**

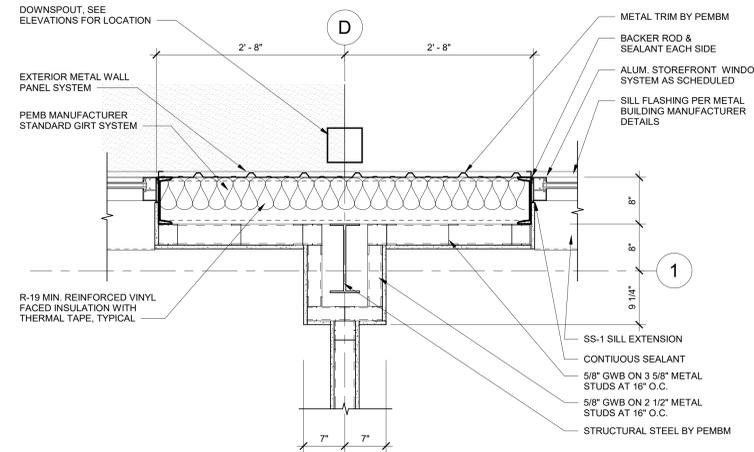
- ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
- UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWBSTUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
- HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
- ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
- ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
- ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFEGING MATERIAL ONLY. SAFEGING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL, ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
- ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
- STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETS OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
- ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:  
ATTACH A 3/8" OR 1/2" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 8" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3/8" OR 1/2" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
- KICKERS SHALL HAVE CLIP ANGLES (1/4 GA. MIN.) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
- DO NOT FASTEN TOP RUNNER TO STUDS. CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
- SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
- WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE, AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.
- WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
- PURSUANT TO NC SBC 603 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETS AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.
- WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
- ELECTRICAL AND TELECOM ROOMS, IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-6" AFF TO 8'-6" AFF, LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
- ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
- PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TVS, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
- USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
- SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
- ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNERGUARDS, SEE SPECIFICATIONS.

METAL STUD GAUGES	LOCATION	LENGTH	GAUGE
	PARTITION	UP TO 8'-0"	20 GAUGE
	PARTITION	UP TO 10'-0"	18 GAUGE
	PARTITION	UP TO 12'-0"	16 GAUGE
	PARTITION	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
	BULKHEAD	UP TO 6'-0"	25 GAUGE
	BULKHEAD	UP TO 8'-0"	20 GAUGE
	BULKHEAD	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWGS.
	SOFFIT	UP TO 4'-0"	25 GAUGE
	SOFFIT	UP TO 8'-0"	20 GAUGE. SEE SPECIFIC DETAILS FOR SUPPORT
	SOFFIT	GREATER THAN 8'-0"	SUSPENDED SYSTEM MUST BE USED
	DOOR / WINDOW HEAD AND JAMB	U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)

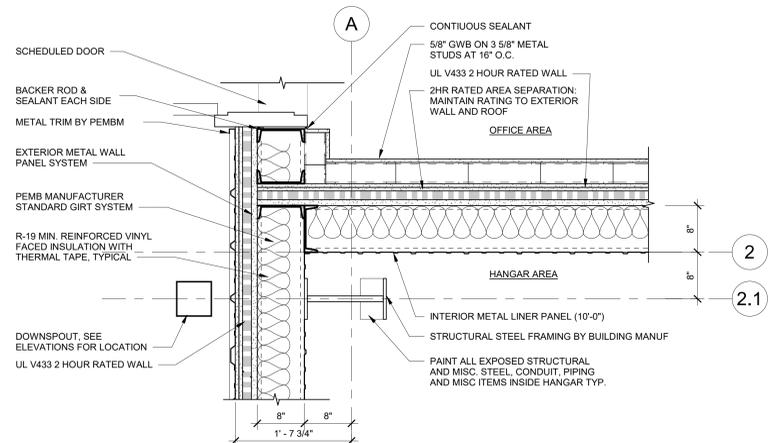
NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.



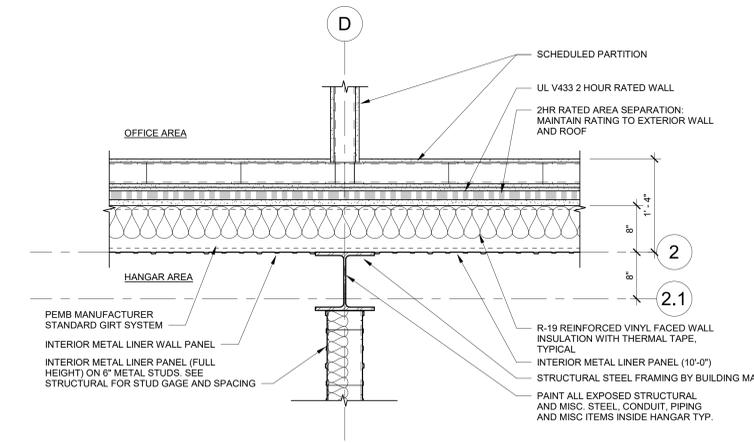
11 PLAN DETAIL  
1" = 1'-0"



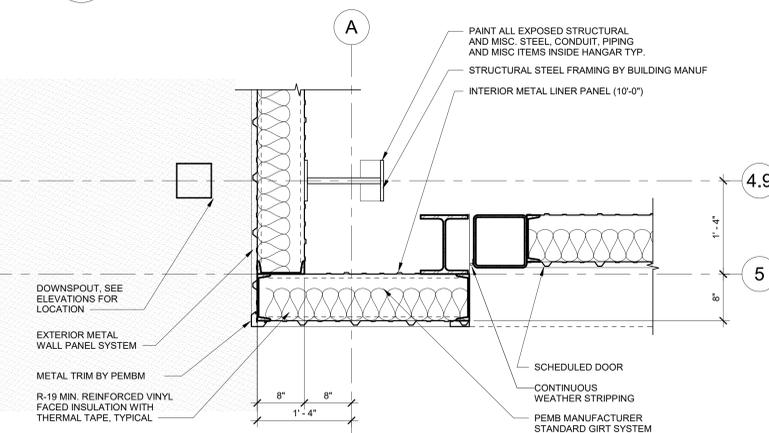
13 PLAN DETAIL  
1" = 1'-0"



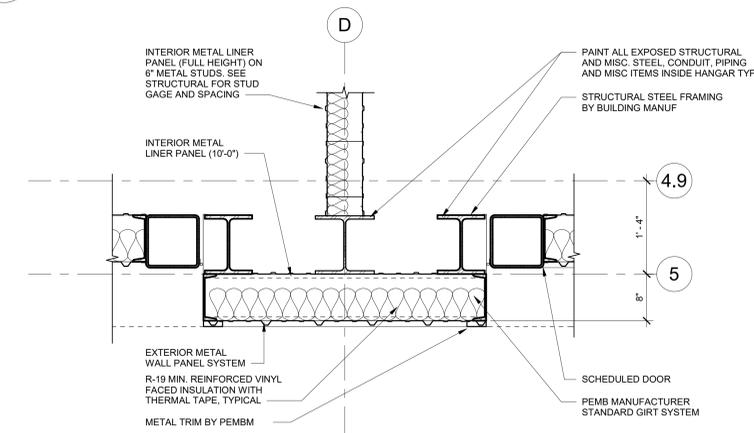
6 PLAN DETAIL  
1" = 1'-0"



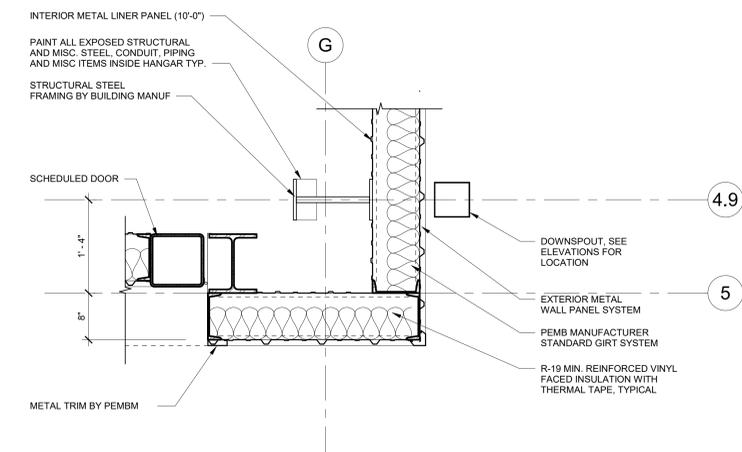
8 PLAN DETAIL  
1" = 1'-0"



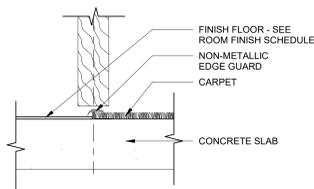
1 PLAN DETAIL  
1" = 1'-0"



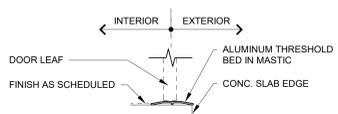
3 PLAN DETAIL  
1" = 1'-0"



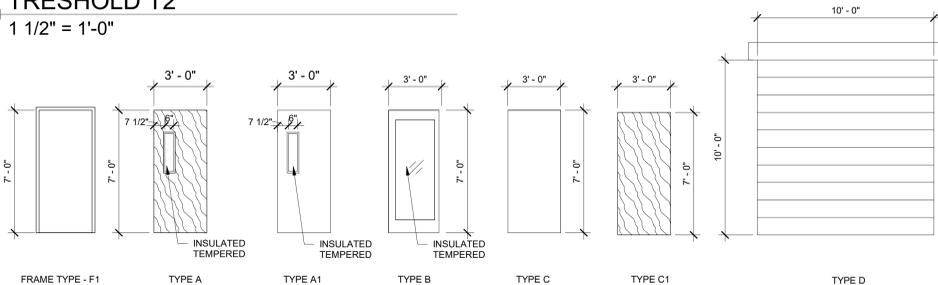
4 PLAN DETAIL  
1" = 1'-0"



17 THRESHOLD T1  
3" = 1'-0"



16 THRESHOLD T2  
1 1/2" = 1'-0"



**GLAZING LEGEND AND NOTES**

G1	INSULATED LOW E GLAZING - CLEAR
G2	INSULATED LOW E FULLY TEMPERED GLAZING - CLEAR
G3	GLAZING - CLEAR
G4	TEMPERED GLAZING - CLEAR
G5	SPANDREL GLASS

NOTES:  
 1. ALL DIMENSIONS ARE NOMINAL OF ROUGH OPENING AND ARE THE OVERALL SIZE. VERIFY IN FIELD PRIOR TO FABRICATION.  
 2. SEE WINDOW ELEVATIONS FOR GLAZING TYPE(S).  
 3. SEE WINDOW ELEVATIONS FOR DIMENSIONS/ LOCATIONS OF MULLIONS.  
 4. ALL EXTERIOR WINDOWS ARE TO RECEIVE WINDOW ROLLER SHADES AS SPECIFIED UNLESS NOTED OTHERWISE.  
 5. ALL GLAZING IN RESTROOM LOCATIONS SHALL BE FULLY TEMPERED (G2).  
 6. SEE PLANS FOR FROSTED GLASS LOCATIONS (I.E. RESTROOMS).

DOOR SECURITY NOTES:  
 1. ALL EXTERIOR DOOR FRAMES ARE TO BE MINIMUM 16 GA.  
 2. ALL EXTERIOR HM DOORS ARE TO BE STEEL- 16 GA. MINIMUM.  
 3. EXTERIOR LOCKSETS ARE TO BE GRADE 1 COMMERCIAL LOCKSETS WITH 3/4" LATCH THROW.  
 4. EXTERIOR DOORS TO BE EQUIPPED WITH A LATCH PROTECTOR.

**DOOR SCHEDULE**

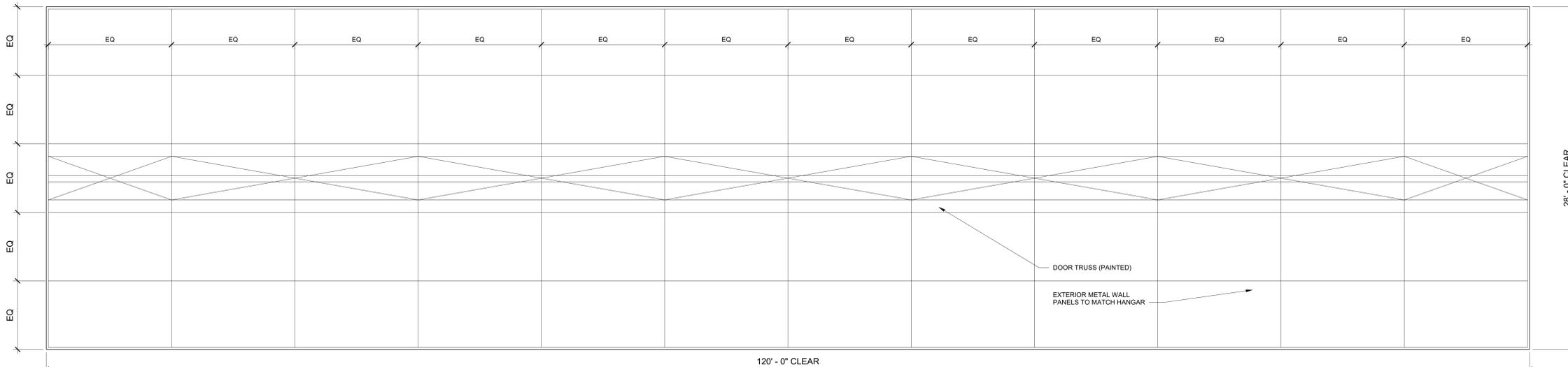
DOOR NUMBER	ROOM NAME	ROOM NUMBER	DOOR						FRAME			DETAILS			FIRE RATING	HARDWARE SET	COMMENTS		
			DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HEAD	JAMB	THRESHOLD					
101A				6'-0"	18'-0"	1 3/4"											N/A		DOOR DIMENSIONS ARE CLEAR DIMENSIONS
101B	HANGAR BAY 1	101		3'-0"	7'-0"	2"	HM	PAINT	F1	HM	PAINT	H3	J3				2 HR		
101C	HANGAR BAY 1	101		3'-0"	7'-0"	2"	HM	PAINT	F1	HM	PAINT	H3	J3				2 HR		
101D	HANGAR BAY 1	101		8'-6"	10'-0"	1 3/4"	*	FACTORY	*	FACTORY	*	*	*				2 HR		*FIRE SHUTTER TIED INTO ALARM SYSTEM
105A	ENTRY	105		3'-0"	8'-0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	*	*	SEE MANUF.	SEE MANUF.	99A-602			*FACTORY FINISH
106A	CORRIDOR	106		3'-0"	7'-0"	2"	HM	PAINT	F1	HM	PAINT	H2	J2						
106B	CORRIDOR	106		6'-0"	8'-0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	*	*	SEE MANUF.	SEE MANUF.	99A-602			*FACTORY FINISH
108A	ELEC	108		3'-0"	7'-0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H1	J1				2 HR		
109A	RESTROOM	109		3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
121A	HANGAR BAY 2	121		3'-0"	7'-0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H3	J3						DOOR DIMENSIONS ARE CLEAR DIMENSIONS
121C	HANGAR BAY 2	121		3'-0"	7'-0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H3	J3				2 HR		
121D	CORRIDOR	126		8'-6"	10'-0"	1 3/4"	*	FACTORY	*	*	*	*	*						
125A	ENTRY	125		3'-0"	8'-0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	*	*	SEE MANUF.	SEE MANUF.	99A-602			*FACTORY FINISH
126A	CORRIDOR	126		3'-0"	7'-0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H2	J2						
126B	CORRIDOR	126		6'-0"	8'-0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	*	*	SEE MANUF.	SEE MANUF.	99A-602			*FACTORY FINISH
129A	RESTROOM	129		3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		

**DOOR SCHEDULE - ALT-01**

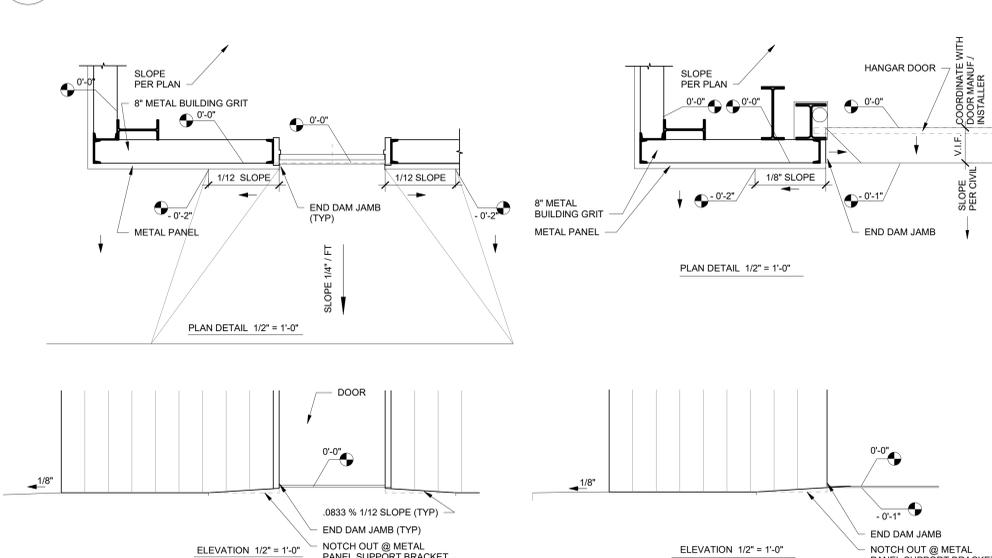
DOOR NUMBER	ROOM NAME	ROOM NUMBER	DOOR						FRAME			DETAILS			FIRE RATING	HARDWARE SET	COMMENTS		
			DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HEAD	JAMB	THRESHOLD					
107A	STOR	107	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
110A	CONFERENCE	110	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
111A	OFFICE / BREAK	111	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
112A	OFFICE	112	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
113A	OFFICE	113	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
114A	ENTRY	105	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
115A	ENTRY	105	C1	4'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
116A	STOR	116	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		

**DOOR SCHEDULE - ALT-02**

DOOR NUMBER	ROOM NAME	ROOM NUMBER	DOOR						FRAME			DETAILS			FIRE RATING	HARDWARE SET	COMMENTS		
			DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HEAD	JAMB	THRESHOLD					
127A	STOR	127	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
128A	ELEC	128	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
130A	CONFERENCE	130	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
131A	OFFICE / BREAK	131	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
132A	OFFICE	132	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
133A	OFFICE	133	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
139A	STOR	139	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
140A	JAN	140	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		
141A	IT	141	C1	4'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1				0 HR		



**DOOR TYPES**  
1/4" = 1'-0"



1 DOOR SLAB DETAIL  
1/2" = 1'-0"

2 HANGAR DOOR SLAB DETAIL  
1/2" = 1'-0"

3 HEAD/JAMB H4/J4  
1 1/2" = 1'-0"

4 HEAD/JAMB H2/J2  
1 1/2" = 1'-0"

5 JAMB J1  
1 1/2" = 1'-0"

8 HEAD/JAMB H5/J5  
1 1/2" = 1'-0"

9 HEAD/JAMB H3/J3  
1 1/2" = 1'-0"

10 HEADER H1  
1 1/2" = 1'-0"



Schedule 1:  
2-Unit Box Hangar

Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

DOOR SCHEDULE

SHEET NUMBER

A-601

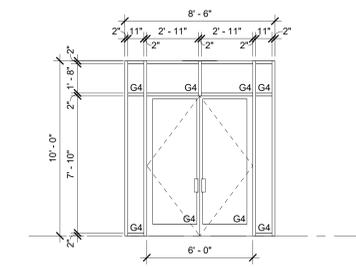
**GLAZING LEGEND AND NOTES**

G1	INSULATED LOW E GLAZING - CLEAR
G2	INSULATED LOW E FULLY TEMPERED GLAZING - CLEAR
G3	GLAZING - CLEAR
G4	TEMPERED GLAZING - CLEAR
G5	SPANDREL GLASS

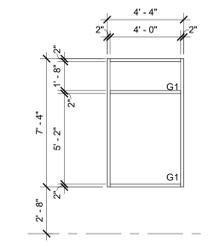
- NOTES:
1. ALL DIMENSIONS ARE NOMINAL OF ROUGH OPENING AND ARE THE OVERALL SIZE. VERIFY IN FIELD PRIOR TO FABRICATION.
  2. SEE WINDOW ELEVATIONS FOR GLAZING TYPE(S).
  3. SEE WINDOW ELEVATIONS FOR DIMENSIONS/ LOCATIONS OF MULLIONS.
  4. ALL EXTERIOR WINDOWS ARE TO RECEIVE WINDOW ROLLER SHADES AS SPECIFIED UNLESS NOTED OTHERWISE.
  5. ALL GLAZING IN RESTROOM LOCATIONS SHALL BE FULLY TEMPERED (G2).
  6. SEE PLANS FOR FROSTED GLASS LOCATIONS (I.E. RESTROOMS).

**WINDOW SCHEDULE**

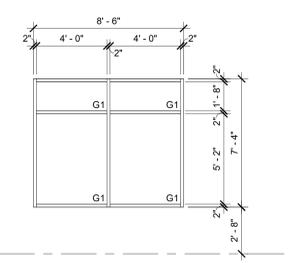
TYPE MARK	WIDTH	HEIGHT	HEAD HEIGHT	HEAD DETAILS	JAMB DETAILS	SILL DETAILS	COMMENTS
TYPE A	6'-0"	8'-0"	10'-0"	10a/A6.02	10a/A6.02	10a/A6.02	



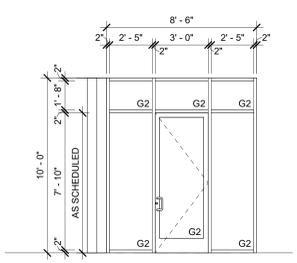
**W4 WINDOW TYPE W4**  
1/4" = 1'-0"



**W3 WINDOW TYPE W3**  
1/4" = 1'-0"



**W2 WINDOW TYPE W2**  
1/4" = 1'-0"

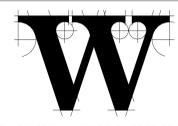


**W1 WINDOW TYPE W1**  
1/4" = 1'-0"



**Schedule 1:  
2-Unit Box Hangar**

Lumberton, NC 28358



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**REVISIONS**

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**WINDOW TYPES**

SHEET NUMBER

**A-602**

**FINISH LEGEND**

FLOORING (CPT = CARPET) (PT = PORCELAIN TILE) (LVT = LUXURY VINYL TILE) (SDT = STATIC DISSIPATIVE TILE)

CPT-1 SHAW CONTRACT GROUP; STYLE: 57451 IN COMMON TILE; COLOR: 50518 MERGE; ASHLAR PATTERN.  
 CPT-2 SHAW CONTRACT GROUP; STYLE: 57442 COLLECTIVE V TILE; COLOR: 38580 GRAY; ASHLAR PATTERN.  
 CPT-3 SHAW CONTRACT GROUP; STYLE: 57414 SWIFT TILE; COLOR: 14500 TROT; MONOLITHIC PATTERN. ENTRYWAY CARPET.  
 PT-1 DALTILE 6" X 48" PORCELAIN FLOOR TILE; EMERSON WOOD; BUTTER PECAN PLANK; SEE FINISH PLANS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.  
 PT-2 DALTILE 12"X24" PORCELAIN FLOOR TILE; SOCIETY CIVIC SAND SC46; SEE FINISH PLANS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.  
 SDT-1 ARMSTRONG; 51956 FOSSIL GRAY ELECTROSTATIC DISSIPATIVE 12"X12" TILE.

BASE (RB = RUBBER BASE) (PB = PORCELAIN TILE BASE)

RB-1 FLEXCO; 4" COVED VINYL WALL BASE; COLOR: 093 GRAPHITE.  
 PB-1 DALTILE; 12"X24" PORCELAIN TILE BASE; SOCIETY; MONUMENT WHITE S045; ALIGN W/ WALL TILE JOINTS U.N.O.; GROUT COLOR TO BE SELECTED BY ARCHITECT.  
 WB-1 1X8 NOMINAL (3/4" X 5 1/2") MDF TRIM W/ 3/4" OAK WOOD QUARTER ROUND SHOE TRIM; FINISH AS SCHEDULED OR INDICATED ON DRAWINGS.

WALL SURFACE (FRP = FIBERGLASS REINFORCEMENT PANEL) (WT = PORCELAIN WALL TILE) (GWB-2 = GYPSUM WALL BOARD AT UNFINISHED AREAS) (WPS = WALL PANEL SYSTEM)

WT-1 DALTILE; 12"X24" PORCELAIN WALL TILE; SOCIETY; MONUMENT WHITE S045; SEE ELEVATIONS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.  
 WT-2 AMERICAN OLEAN; 2"X8" GLOSSY PORCELAIN WALL ACCENT TILE; CONRAD BRICK; MARINE CB86; SEE ELEVATIONS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.  
 FRP-1 FRP TRIM ACCESSORIES TO MATCH PANEL COLOR.  
 GWB-2 5/8" TYPE 'X' GYPSUM WALL BOARD PARTITIONS (INCLUDING EXTERIOR); ONLY TAPE AND FLOAT GWB. SURFACE TO REMAIN UNFINISHED.  
 WPS-1 WALL PANEL SYSTEM 1: 1/2" GRADE 'A' SANDED PLYWOOD W/ BEECH VENEER ON EXPOSED SIDE. FINISH W/ STAIN ST-1 AS SCHEDULED. MOUNTED ON 1/4" ALUM. Z-CLIPS.

SOLID SURFACE (QS = QUARTZ SURFACE) (PLAM = PLASTIC LAMINATE)

QS-1 HANSTONE QUARTZ; SPECCHIO WHITE CT402.  
 PLAM-1 WILSONART; 8229K-79 FRISTON ASH; RIDGEWOOD TEXTURE FINISH W/ AEON STRATCH RESISTANCE. VERTICAL GRAIN ORIENTATION U.N.O.

PAINT (P = PAINT)

P-1 PPG 0965-3 SILVER BAND; EGGSHELL FINISH. FOR USE AT ALL INTERIOR WALLS U.N.O.  
 P-2 PPG 0963-5 SUPERHERO GRAY; SATIN FINISH. FOR USE AT WAINSCOT TRIM.  
 P-3 PPG 0965-1 SHADED WHISPER; SEMI-GLOSS FINISH. FOR USE AT ALL DOOR AND WINDOW CASINGS AND INTERIOR DOOR JAMBS U.N.O.  
 P-4 PPG 1002-1 SILVER FEATHER; FLAT FINISH. FOR USE AT ALL GWB CEILINGS AND SOFFITS U.N.O.  
 P-5 PPG 0965-1 SHADED WHISPER; FLAT FINISH. FOR USE AT ALL EXTERIOR FIBER CEMENT TRIM, BEADBOARD CEILINGS, FIBERGLASS COLUMNS U.N.O.  
 P-6 PPG 1076-5 LOCOMOTION; FOR USE AT EXTERIOR BRACKETS.  
 P-7 PPG COLOR TO MATCH ALUMINUM STOREFRONT FINISH FINISH. FOR USE AT EXTERIOR HM DOORS AND FRAMES U.N.O.  
 P-8 PPG 0965-7 STARLESS SKY; FLAT FINISH. FOR USE AT REVEAL JOINTS WHERE INDICATED U.N.O.  
 ST-1 ALL INTERIOR FLUSH WOOD DOORS; MASONITE ASPIRO SERIES; STAIN COLOR: HONEY.

MISCELLANEOUS (MTS = METAL TRANSITION STRIP; EP = EDGE PROTECTION)

MTS-1 SCHLUTER SYSTEMS; 1" PROFILE TRANSITION FLOOR TRIM; COORDINATE TRIM HEIGHT/DEPTH AS REQUIRED WITH FLOOR FINISH THICKNESSES.  
 EP-1 SCHLUTER SYSTEMS; ROUNDED EDGE. FOR USE AT TRANSITION FROM PB-1 TILE BASE TO GWB WALL AND WHERE INDICATED ON DRAWINGS.  
 EP-2 SCHLUTER SYSTEMS; ROUNDED OUTSIDE CORNER. FOR USE AT ALL OUTSIDE CORNERS AT WALL TILE U.N.O.

CEILING (GWB) = GYPSUM WALL BOARD (APC = ACOUSTICAL PANEL CEILING) (BBD = BEADBOARD CEILING)

APC-1 USG; MARS CLIMAPLUS; WHITE; 24"X24" LAY-IN ACOUSTICAL PANEL SYSTEM W/ WHITE DX SQUARE EDGE SUSPENSION GRID.  
 APC-2 USG; TRUE WOOD LINEAR PLANKS; 6" X 8"; ACOUSTICAL W/ 3/4" REVEALS BETWEEN PANELS; BEECH WOOD VENEER FINISH FROM MANUFACTURER'S FULL RANGE. SEE RCP'S FOR PLANK ORIENTATION AND COORDINATION WITH MEP DEVICES AND ACCESSORIES.  
 GWB-1 5/8" TYPE 'X' GYPSUM WALL BOARD CEILINGS AND SOFFITS; FINISH AS SCHED.  
 GWB-2 5/8" TYPE 'X' GYPSUM WALL BOARD CEILING; ONLY TAPE AND FLOAT GWB. SURFACE TO REMAIN UNFINISHED  
 BBD-1 FIBER CEMENT PANEL; BEADED SOFFIT PANEL; SEE DRAWINGS FOR ORIENTATION AND FINISH.

**FINISH SYMBOL LEGEND**

	FLOOR TILE		CARPET TILE - CPT-1
	FLOOR TILE - STATIC GUARD		CARPET TILE - CPT-2
	SEALED CONCRETE		CARPET TILE - CPT-3
			UNFINISHED - FUTURE

**GENERAL NOTES - FINISH PLAN**

- GO TO PROVIDE COMPLIANCE DATA THAT INTERIOR WALL AND CEILING FINISHES COMPLY WITH CLASSIFICATION B; FLAME SPREAD 26-75 AND SMOKE DEVELOPED 0-450 FOR VERTICAL EXITS, EXIT PASSAGEWAYS, EXIT ACCESS CORRIDORS AND OTHER EXITS.
- GO TO PROVIDE COMPLIANCE DATA THAT INTERIOR WALL AND CEILING FINISHES COMPLY WITH CLASSIFICATION C; FLAME SPREAD 76-200 AND SMOKE DEVELOPED 0-450 FOR ROOMS AND ENCLOSED SPACES.
- GO TO PROVIDE COMPLIANCE DATA FOR INTERIOR FLOOR FINISHES THAT SHOWS COMPLIANCE WITH NC 804.
- FLOOR FINISHES MUST MEET SLIP RESISTANCE REQUIREMENT OF 0.60 WET, AND BE A MINIMUM OF CLASS II PER NFPA 253.
- TRANSITION OF DIFFERING FLOORING MATERIALS BETWEEN ROOMS TO OCCUR AT THE CENTER OF THE DOOR LEAF.
- SEALANTS AND CAULKING ARE TO MATCH THE DOMINANT SURFACE IN WHICH THEY OCCUR U.N.O., SAMPLE OF SEALANTS ARE TO BE SUBMITTED TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- GO TO VERIFY ALL FINISHED WITH OWNER AND ARCHITECT PRIOR TO PROCUREMENT.
- IN AREAS WITH ANY PORTION OF EXPOSED STRUCTURAL ABOVE, THE WALL FINISHES SHALL EXTEND TO UNDERSIDE OF STRUCTURE.
- ALL UNIDENTIFIED COLORS AND FINISHES SHALL BE SELECTED AND APPROVED BY ARCHITECT THROUGH THE SUBMITTAL PROCESS.
- RECESSED WIREWAYS, ACCESS PANELS, GRILLES, ELECTRICAL PANELS, AND ALL OTHER SUCH ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DEVICES SHALL BE FINISHED TO MATCH ADJACENT WALL OR CEILING SURFACE, U.N.O.

**SCHEDULE 1 ROOM FINISH SCHEDULE**

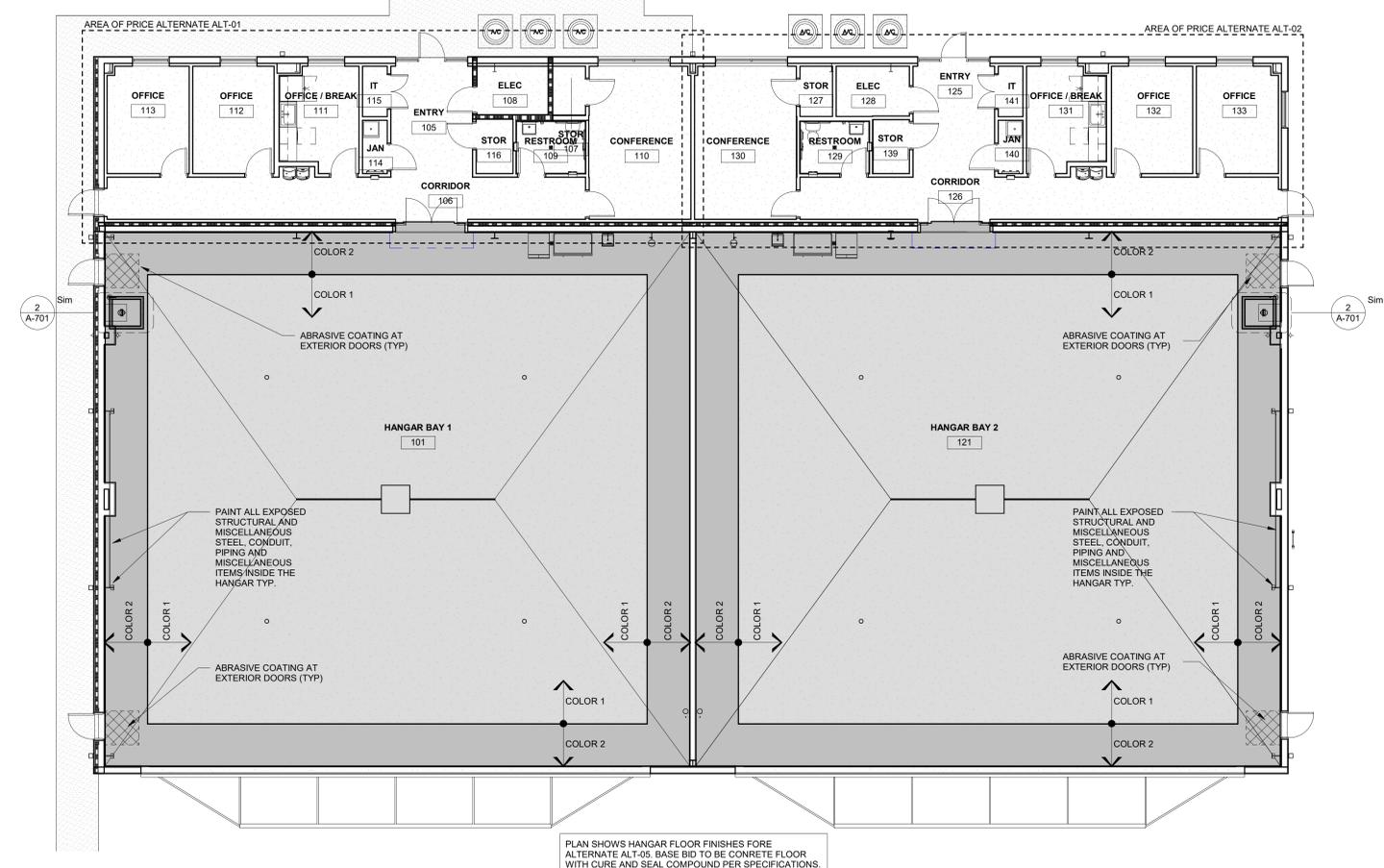
NUMBER	NAME	BASE	FLOORING	WALL FINISH			CEILING	REMARKS
				NORTH WALL	EAST WALL	SOUTH WALL		
101	HANGAR BAY 1							
108	ELEC							
109	RESTROOM							
121	HANGAR BAY 2							
129	RESTROOM							

**SCHEDULE 1 ROOM FINISH SCHEDULE - ALT-01**

NUMBER	NAME	BASE	FLOORING	WALL FINISH			CEILING	REMARKS
				NORTH WALL	EAST WALL	SOUTH WALL		
105	ENTRY							
106	CORRIDOR							
107	STOR							
110	CONFERENCE							
111	OFFICE / BREAK							
112	OFFICE							
113	OFFICE							
114	JAN							
115	IT							
116	STOR							

**SCHEDULE 1 ROOM FINISH SCHEDULE - ALT-02**

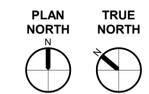
NUMBER	NAME	BASE	FLOORING	WALL FINISH			CEILING	REMARKS
				NORTH WALL	EAST WALL	SOUTH WALL		
125	ENTRY							
126	CORRIDOR							
127	STOR							
128	ELEC							
130	CONFERENCE							
131	OFFICE / BREAK							
132	OFFICE							
133	OFFICE							
139	STOR							
140	JAN							
141	IT							



2 W.F.E. FLOOR MARKING DETAIL  
1/4" = 1'-0"

1 FINISH PLAN - ALTERNATE ALT-05  
1/8" = 1'-0"

PLAN SHOWS HANGAR FLOOR FINISHES FOR ALTERNATE ALT-05. BASE BID TO BE CONCRETE FLOOR WITH CURE AND SEAL COMPOUND PER SPECIFICATIONS.



**Schedule 1:  
2-Unit Box Hangar**

Lumberton, NC 28358



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NC Cert. No.: 51140

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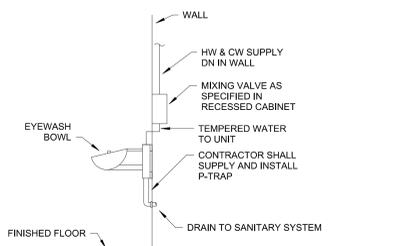
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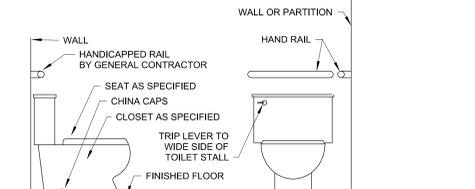
DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**FINISH PLAN**

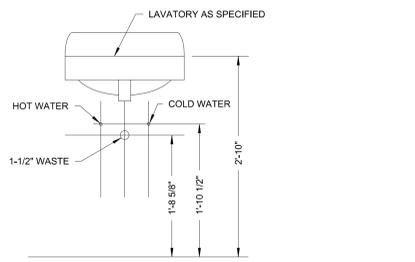
SHEET NUMBER  
**A-701**



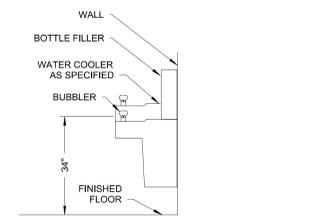
**A** EMERGENCY EYEWASH (EEW-1) DETAIL  
SCALE: NONE



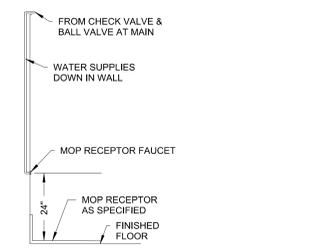
**B** ADULT ADA WATER CLOSET (WC-1) DETAIL  
SCALE: NONE



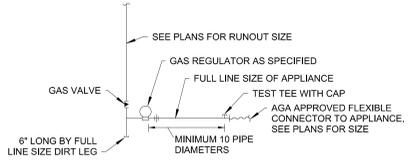
**C** ADULT ADA LAVATORY (L-1) DETAIL  
SCALE: NONE



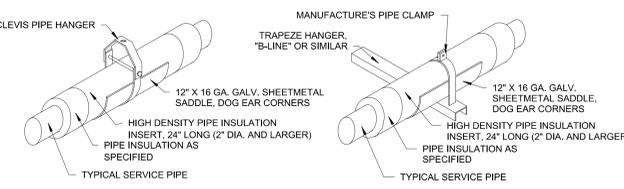
**D** ADULT DUAL HEIGHT EWC (EWC-1) DETAIL  
SCALE: NONE



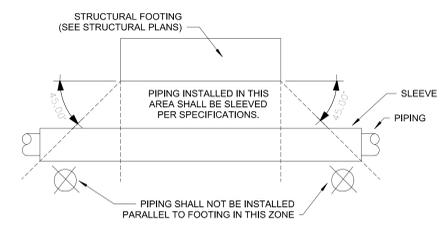
**E** MOP RECEPTOR (MR-1) DETAIL  
SCALE: NONE



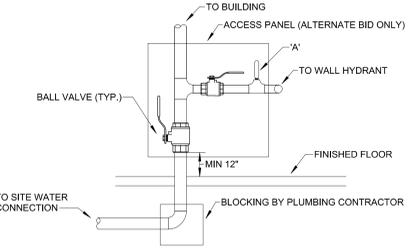
**F** TYPICAL GAS PIPING CONNECTION  
SCALE: NO SCALE



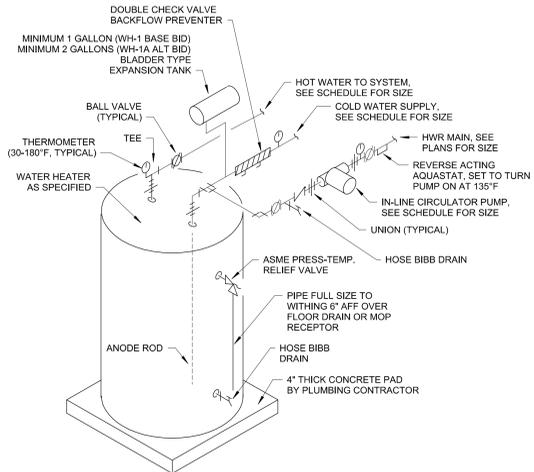
**G** PIPE HANGER DETAILS  
SCALE: NONE



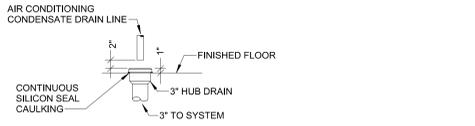
**H** PIPING UNDER FOOTINGS  
SCALE: NO SCALE



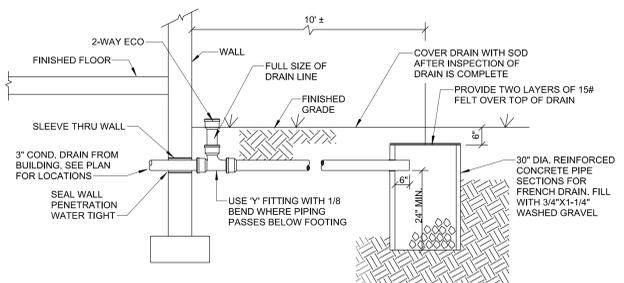
**J** DOMESTIC WATER ENTRANCE DETAIL  
SCALE: NONE



**L** WATER HEATER (WH-1 & WH-1A) PIPING DETAIL  
SCALE: NONE



**K** HUB DRAIN (HD-1) DETAIL  
SCALE: NONE



**M** CONDENSATE FRENCH DRAIN DETAIL  
SCALE: NONE

SYMBOL	DESCRIPTION	ROUGH-IN SIZES			REMARKS
		WASTE	C.W.	H.W.	
WC-1	WATER CLOSET	4"	1/2"	-	ADULT ADA/DETAIL B/P-001
L-1	LAVATORY	1-1/2"	1/2"	1/2"	ADULT ADA/DETAIL C/P-001
HB-1	WALL HYDRANT	-	3/4"	-	MOUNT 24" AFG
FB-2	HOSE BIBB	-	1/2"	-	MOUNT 12" AFF
FD-1	FLOOR DRAIN	2"	-	-	
FD-2	FLOOR DRAIN	4"	-	-	
FS-1	FLOOR SINK	3"	-	-	1/2 GRATE
TD-1	TRENCH DRAIN	4"	-	-	
SK-1	UTILITY SINK	1-1/2"	1/2"	1/2"	
SK-2*	BREAKROOM SINK	1-1/2"	1/2"	1/2"	UNDERMOUNT
CB-1	ICE MAKER CONNECTION BOX	-	1/2"	-	
EWC-1*	ELECTRIC WATER COOLER	1-1/2"	1/2"	-	DUAL HEIGHT, ADULT/DETAIL D/P-001
MR-1*	MOP RECEPTOR	3"	1/2"	1/2"	36"x36"/DETAIL E/P-001
HD-1	HUB DRAIN	3"	-	-	DETAIL K/P-001
EEW-1	EMERGENCY EYEWASH	1-1/4"	1/2"	1/2"	WALL MOUNTED/ DETAIL A/P-001

\* INDICATES FIXTURE IS PART OF ALTERNATE BID PACKAGE  
 \*\* INDICATES FIXTURE SHALL BE DISCHARGE TO FRENCH DRAIN, SEE DETAIL M/P-001  
 NOTE: MIXING VALVES SHALL BE PROVIDED AT ALL LAVATORIES AND SINKS. SEE SPECIFICATIONS.

SYMBOL	DESCRIPTION	ROUGH-IN SIZES		TEMP. SETTING	STORAGE CAPACITY	RECOVERY	FUEL	LOAD	ELEC.	DETAIL
		C.W.	H.W.							
WH-1	TANK TYPE ELECTRIC WATER HEATER	3/4"	3/4"	140°F	10 GAL.	8 GPH	ELECTRIC	2KW	120V, 1Ø	L/P-001
WH-1A*	TANK TYPE ELECTRIC WATER HEATER	3/4"	3/4"	140°F	30 GAL.	27 GPH	ELECTRIC	6KW	240V, 1Ø	L/P-001

\* INDICATES WATER HEATER IS PART OF ALTERNATE BID PACKAGE

SYMBOL	GPM	THD	ELECTRICAL		LOCATION	SERVICE	CONTROL
			HP	VOLTAGE			
CP-1*	1	6	1/4Ø	115 V., 1Ø	HANGAR BAY	HOT WATER RETURN	AQUASTAT/TIME CLOCK

\* INDICATES PUMP IS PART OF ALTERNATE BID PACKAGE

SYMBOL	LOCATION	SERVING	CAPACITY			REMARKS
			CFH	INLET PRESSURE	OUTLET PRESSURE	
REG 1	HANGAR BAY 1	IRH-1	100	2 PSIG	11" W.C.	LIMITED VENTING
REG 2	HANGAR BAY 2	IRH-2	100	2 PSIG	11" W.C.	LIMITED VENTING

\* INDICATES PUMP IS PART OF ALTERNATE BID PACKAGE

LEGEND	
W	WASTE PIPING
V	VENT PIPING
C	CONDENSATE PIPING
WO	WASTE OIL PIPING
CW	COLD WATER PIPING
HW	HOT WATER PIPING
HWR	HOT WATER RETURN PIPING
G	PROPANE GAS PIPING
⊘	BALL/UTTERFLY VALVE
⊘	CHECK VALVE
⊘	VALVE IN RISE
⊘	PIPE ELBOW TURNED DOWN
⊘	PIPE ELBOW TURNED UP
⊘	PIPE TEE TURNED DOWN
⊘	PIPE TEE TURNED UP
⊘	UNION
⊘	STRAINER
⊘	DOUBLE CHECK VALVE BACKFLOW PREVENTER
⊘	REDUCED PRESSURE BACKFLOW PREVENTER
⊘	SHOCK ARRESTER, 'A' INDICATES PLUMBING DRAINAGE INSTITUTE STANDARD SIZE
⊘	ASME PRESSURE TEMPERATURE RELIEF VALVE
VTR	VENT THRU ROOF
CO	CLEANOUT
ECO	EXTERIOR CLEANOUT
WCO	WALL CLEANOUT
HDFCO	HEAVY DUTY FLOOR CLEANOUT
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
INV.	INVERT ELEVATION
CONT.	CONTINUATION
CONTR.	CONTRACTOR
MECH	MECHANICAL
EQ	EQUIPMENT

NUMBER INDICATES PLAN OR SECTION  
 LETTER INDICATES ELEVATION OR DETAIL  
 SHEET NUMBER WHERE PLAN, SECTION, ELEVATION OR DETAIL IS DRAWN



**Schedule 1:**  
**2-Unit Box Hangar**  
 Lumberton Regional Airport  
 Lumberton, NC 28358



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DATE 01/17/2025  
 PROJECT NUMBER 3105-2401  
 SHEET TITLE

**PLUMBING LEGEND, SCHEDULES, AND DETAILS**

SHEET NUMBER  
**P-001**

TOTAL CONNECTED LOAD BASE BID		TOTAL CONNECTED LOAD ALTERNATE BID	
WASTE FIXTURE UNITS =	18 F.U.	WASTE FIXTURE UNITS =	27 F.U.
WASTE OIL FIXTURE UNITS =	4 F.U.	WASTE OIL FIXTURE UNITS =	4 F.U.
TOTAL WASTE FIXTURE UNITS =	22 F.U.	TOTAL WASTE FIXTURE UNITS =	31 F.U.
COLD WATER DEMAND =	27.7 GPM	COLD WATER DEMAND =	35 GPM
HOT WATER DEMAND =	10.7 GPM	HOT WATER DEMAND =	18.4 GPM
PROPANE GAS DEMAND =	200 CFH	PROPANE GAS DEMAND =	200 CFH



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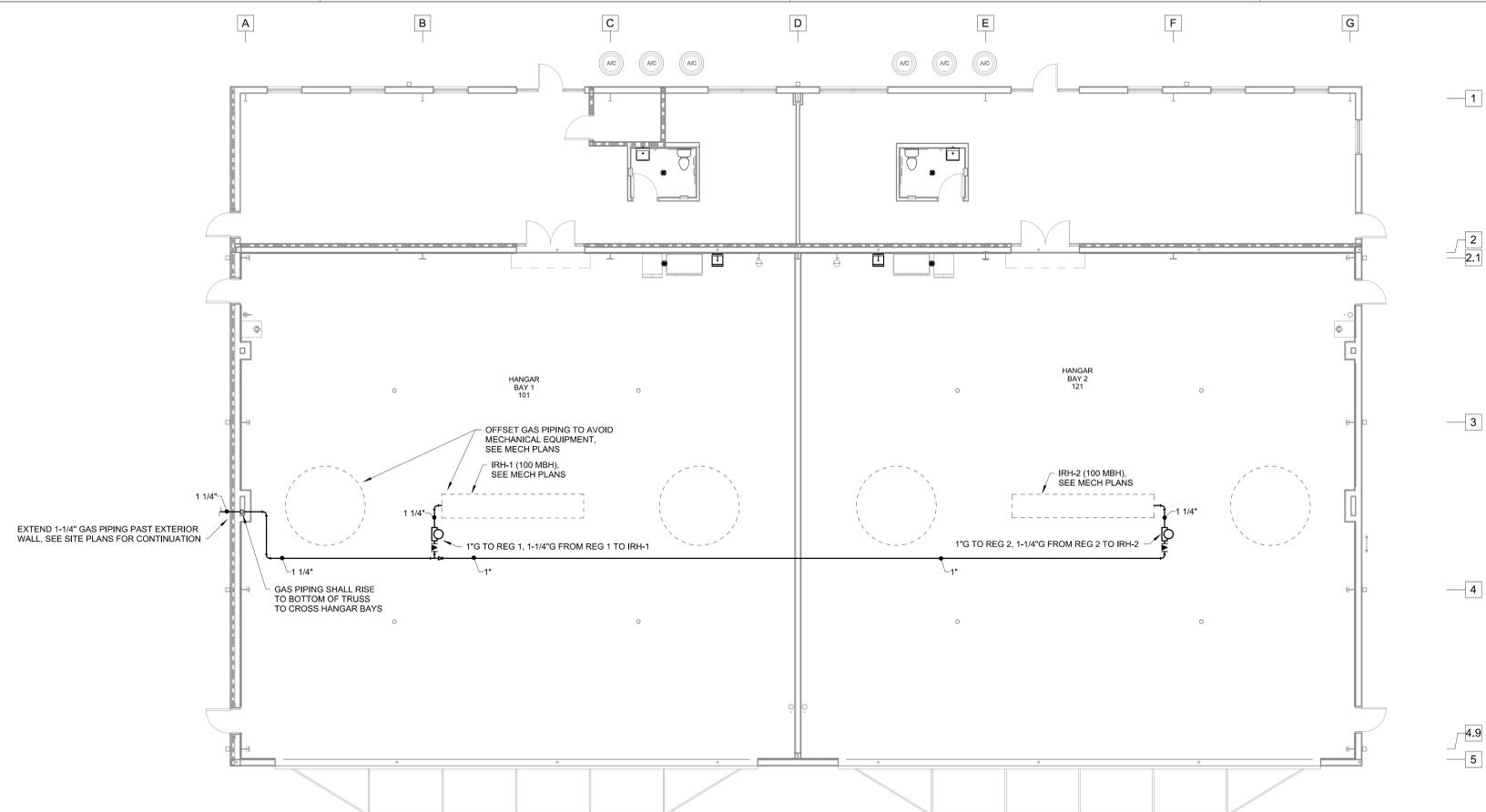
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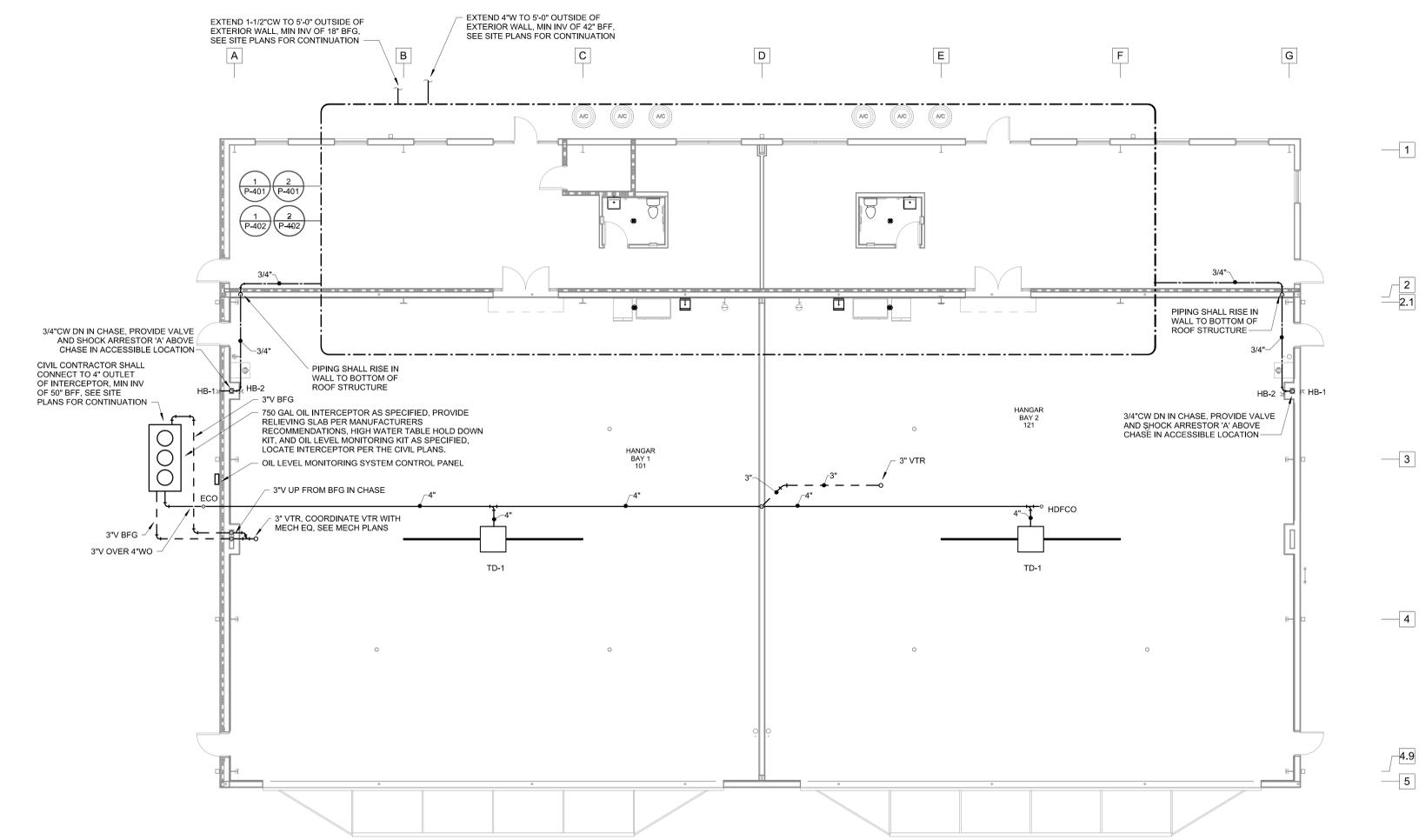
DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**PLUMBING PLANS**

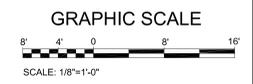
SHEET NUMBER  
**P-101**



**2 PLUMBING PLAN - GAS**  
SCALE: 1/8" = 1'-0"



**1 PLUMBING PLANS - WASTE, VENT & DOMESTIC WATER**  
SCALE: 1/8" = 1'-0"



**PARTITION LEGEND**

	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



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REVISIONS

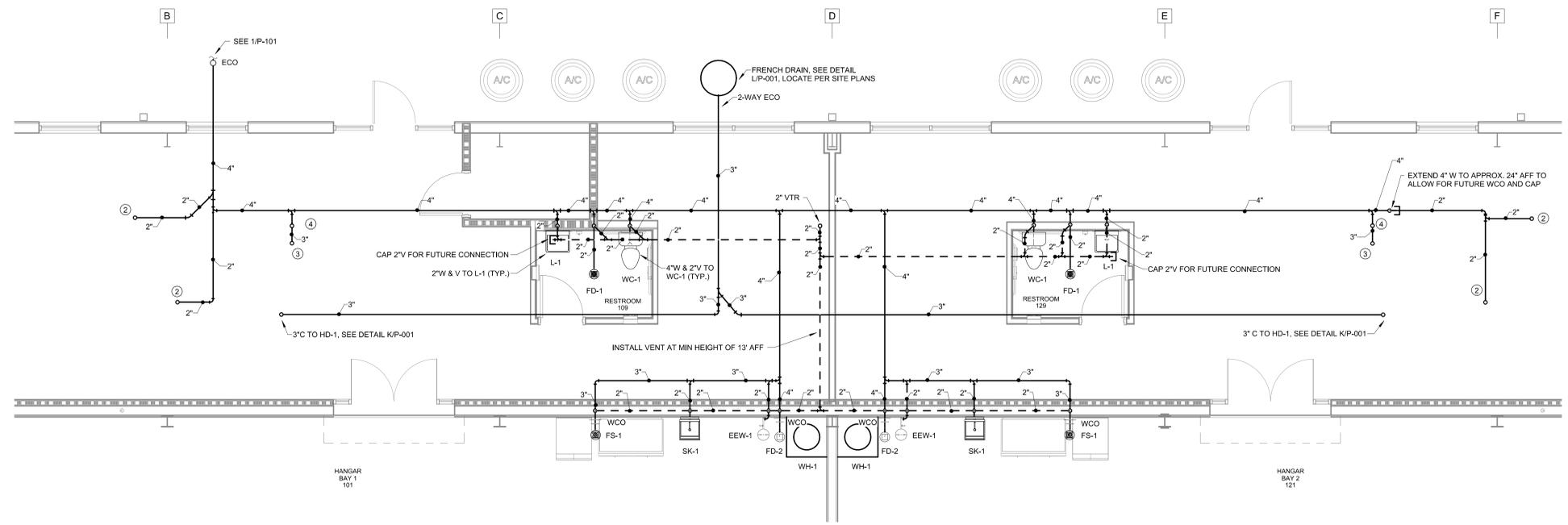
DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**ENLARGED  
PLUMBING - BASE  
BID**

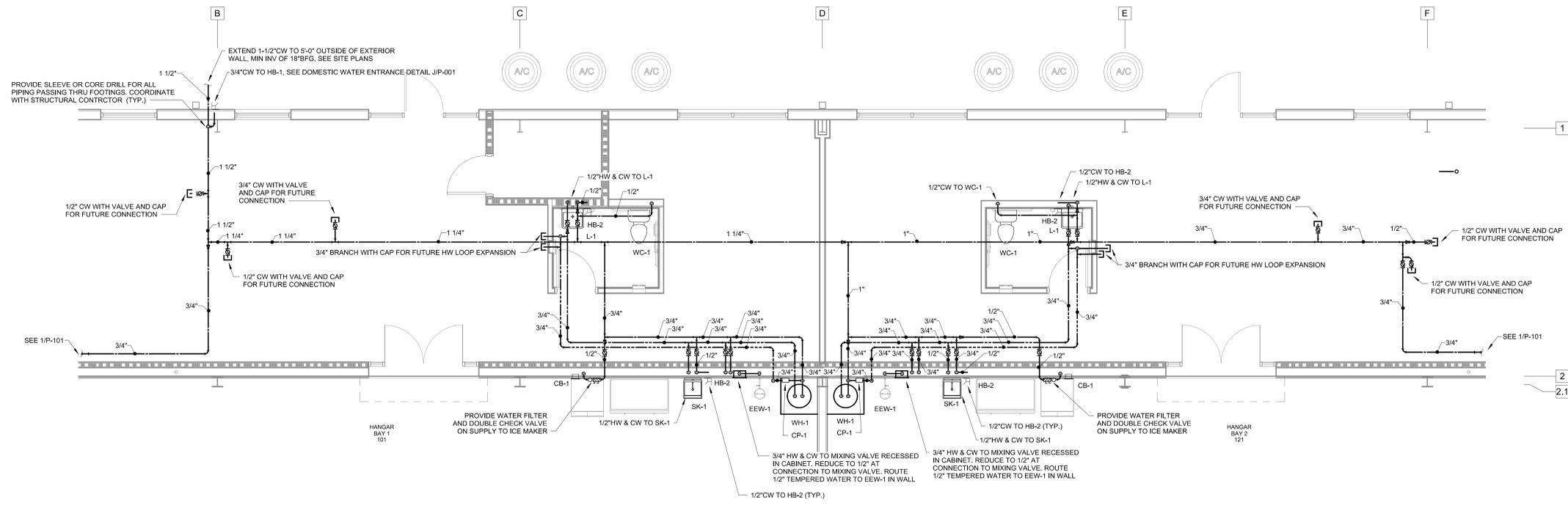
SHEET NUMBER  
**P-401**

**KEYED NOTES:** (THIS SHEET ONLY)

- ① CAP 4" W AFF FOR FUTURE WATER CLOSET CONNECTION.
- ② CAP 2" W AFF FOR FUTURE CONNECTION.
- ③ CAP 3" W AFF FOR FUTURE MOP RECEPTOR CONNECTION.
- ④ CAP 2" V AFF FOR FUTURE VENT CONNECTION.



**1 ENLARGED WASTE AND VENT - BASE BID**  
SCALE: 1/4" = 1'-0"



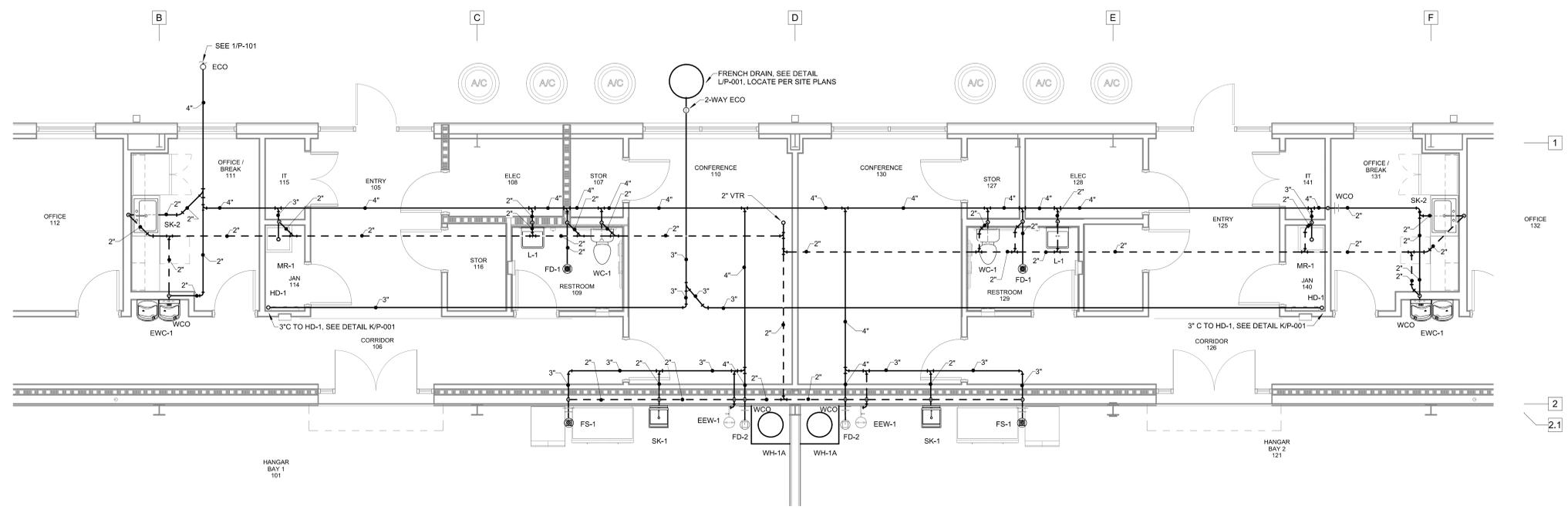
**2 ENLARGED DOMESTIC WATER - BASE BID**  
SCALE: 1/4" = 1'-0"



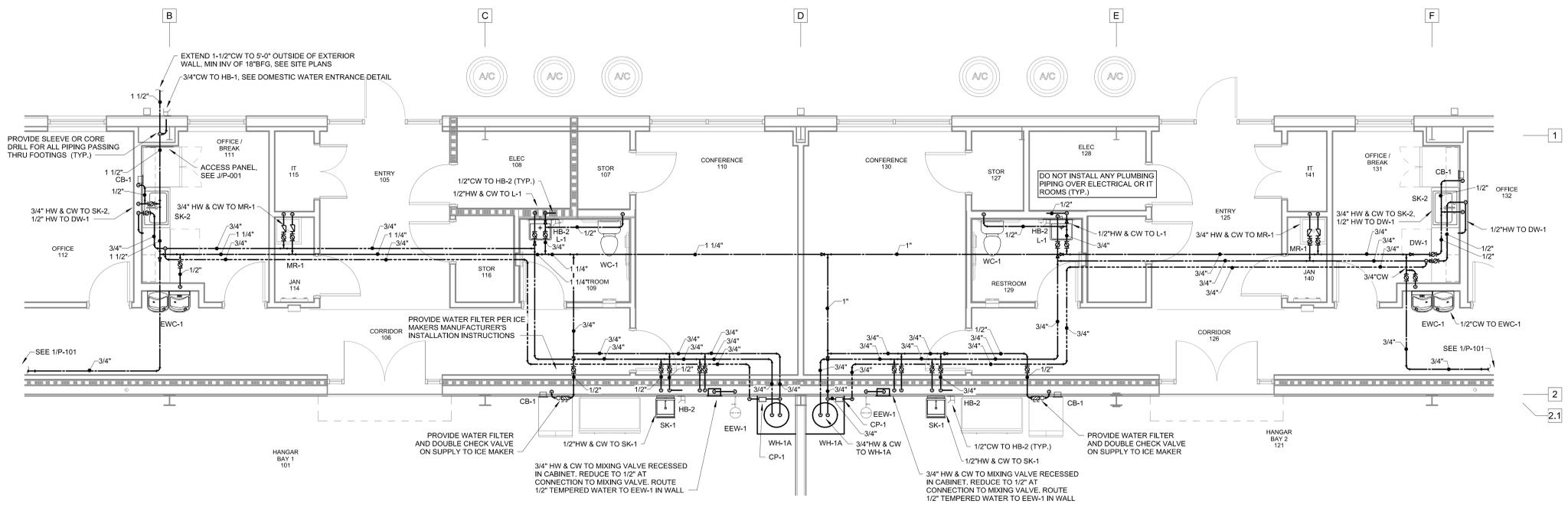
**PARTITION LEGEND**

	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

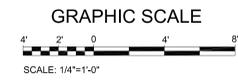
NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



**1 ENLARGED WASTE & VENT - ALTERNATE BID**  
SCALE: 1/4" = 1'-0"



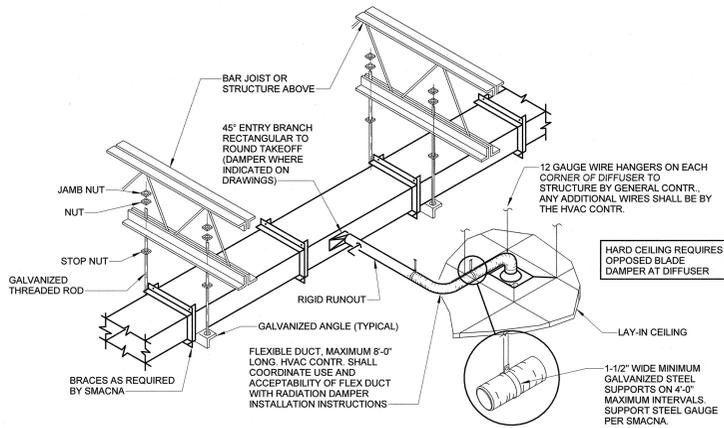
**2 ENLARGED DOMESTIC WATER - ALTERNATE BID**  
SCALE: 1/4" = 1'-0"



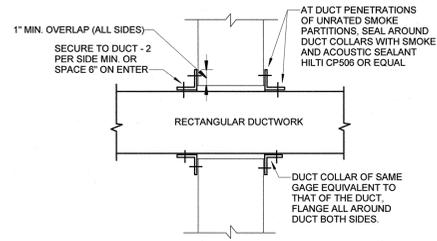
**PARTITION LEGEND**

	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

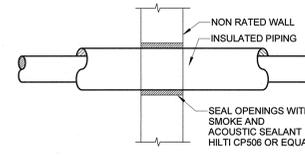
NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



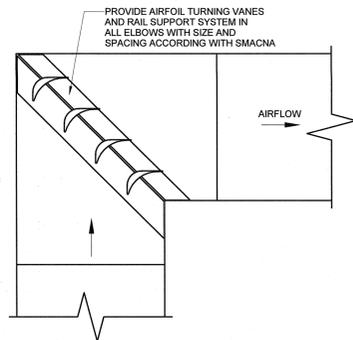
**A** TYPICAL SUPPLY DUCT DETAIL  
SCALE: NONE



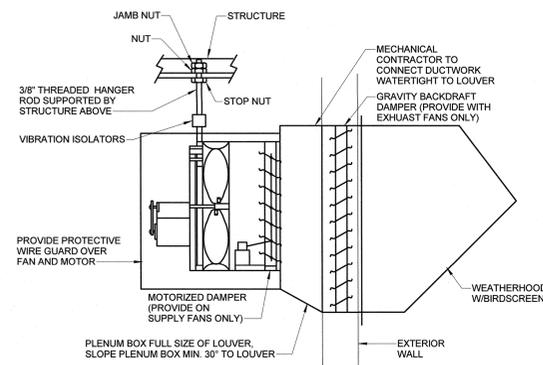
**B** DUCT PENETRATION DETAIL  
SCALE: NONE



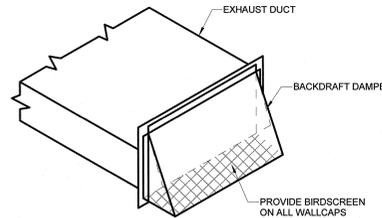
**C** PIPE PENETRATION DETAIL  
SCALE: NONE



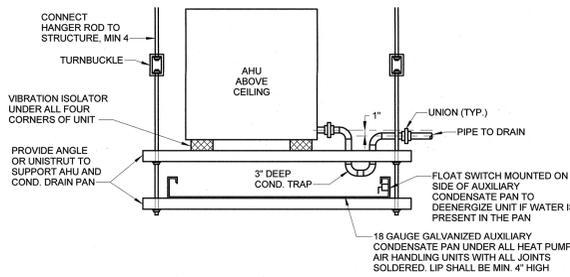
**D** TYPICAL DUCT ELBOW WITH TURNING VANES  
SCALE: NONE



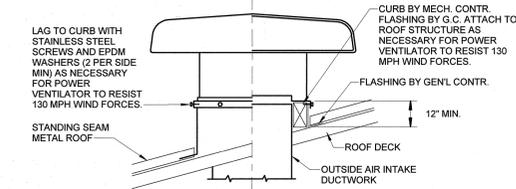
**E** SIDEWALL SUPPLY AND EXHAUST FAN DETAIL  
SCALE: NONE



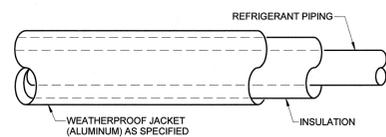
**F** WALL CAP DETAIL  
SCALE: NONE



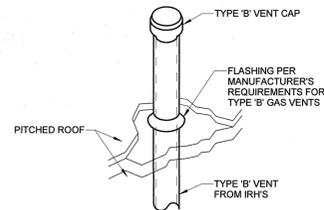
**G** AIR HANDLING UNIT SUPPORT AND CONDENSATE PIPING DETAIL  
SCALE: NONE



**H** GRAVITY VENTILATOR  
SCALE: NONE



**J** EXTERIOR REFRIGERANT PIPING DETAIL  
SCALE: NONE



**K** VENT OUTLET  
SCALE: NONE

**GENERAL NOTES:**

- HVAC CONTRACTOR SHALL FIELD VERIFY ALL RELEVANT DIMENSIONS, CLEARANCES, LOCATIONS AND ELEVATIONS PRIOR TO ORDERING, FABRICATION, AND INSTALLATION OF HIS WORK. DISCREPANCIES OR INTERFERENCE'S SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AS SOON AS POSSIBLE.
- THE DRAWINGS DIAGRAMMATICALLY INDICATE THE GENERAL LOCATION OF DUCTS, PIPING AND EQUIPMENT AND DO NOT SHOW ALL SUPPORTS, OFFSETS, FITTINGS, BOLTS, CONNECTIONS, ETC. REQUIRED FOR A COMPLETE SYSTEM. WHILE THE DRAWINGS ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE, IF IT IS FOUND NECESSARY TO CHANGE THE LOCATION OF ANY WORK TO ACCOMMODATE THE CONDITIONS AT THE BUILDING, SUCH CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER, AND AS DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL PROTECT EQUIPMENT AND SYSTEMS DURING CONSTRUCTION FROM MOISTURE, CONSTRUCTION DEBRIS, DUST AND OTHER FOREIGN MATERIALS BOTH BEFORE AND AFTER INSTALLATION. SELF-ADHESIVE 3-MIL POLYETHYLENE FILM SHALL BE INSTALLED OVER EQUIPMENT, CEILING EXHAUST FANS, DUCTLESS SPLIT SYSTEMS, AHUS, VRF AHUS, OPENINGS IN WALL BOXES, ETC. AND ALL OPEN ENDS OF DUCTWORK.
- PIPING, DUCTWORK, ETC., SHALL NOT BE SUPPORTED FROM BAR JOIST BRIDGING OR ROOF DECK. EQUIPMENT SUPPORTED BY BAR JOISTS SHALL HAVE SUPPORTS ATTACHED AS CLOSE AS POSSIBLE TO BAR JOIST PANEL POINTS. HVAC CONTRACTOR SHALL SUPPLY ANY AND ALL STRUCTURAL MEMBERS NECESSARY TO SUPPORT WORK BETWEEN BAR JOISTS, BEAMS, ETC. REFER TO STRUCTURAL DRAWINGS FOR DETAILS AND MAXIMUM SPACING REQUIREMENTS REGARDING HANGER ATTACHMENTS AND SUPPORTS TO STRUCTURE.
- ALL PIPING PENETRATIONS THROUGH RATED FLOORS AND WALLS SHALL BE FIRE STOPPED USING PIPE PENETRATIONS DETAILS AS SPECIFIED. ALL PIPING PENETRATIONS THROUGH NON RATED WALLS SHALL BE PROTECTED USING DETAILS SHOWN ON SHEET M-001. ALL DUCT PENETRATIONS THRU NON RATED WALLS SHALL BE PROTECTED USING DETAILS SHOWN ON SHEET M-001.
- IN AREAS WITH GYPBOARD CEILINGS, HVAC CONTRACTOR SHALL INSTALL EQUIPMENT, DUCTWORK AND PIPES PRIOR TO GYPBOARD INSTALLATION.
- ALL SUPPLY AND RETURN CONNECTIONS TO AHU SHALL BE MADE WITH A FLEXIBLE DUCT CONNECTION.
- ALL DUCT JOINTS SHALL BE SEALED AS SPECIFIED.
- ALL DUCTWORK DIMENSIONS ON THE DRAWINGS ARE FREE INSIDE DIMENSIONS.
- COORDINATE MECHANICAL DUCTWORK AND PIPING LOCATIONS TO AVOID ALL ELECTRICAL PANELS WITH THE ELECTRICAL CONTRACTOR.
- AIR CONDITIONING CONDENSATE LINES ARE MINIMAL SIZE. DO NOT INSTALL SMALLER THAN ACTUAL COIL CONNECTION SIZE.
- ALL THERMOSTATS AND SWITCHES FOR MECHANICAL SYSTEMS SHALL BE MOUNTED 44" AFF. BOTTOM OF CONTROL PANELS SHALL BE MOUNTED 44" AFF. MAXIMUM.
- REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR FINAL LOCATIONS OF REGISTERS, GRILLES, AND DIFFUSERS WITHIN CEILING GRID.

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE**

- COMPLIANCE PER CHAPTER 4 NORTH CAROLINA ENERGY CONSERVATION CODE - SECTIONS C403.2 (MANDATORY), C403.3 ECONOMIZERS (PRESCRIPTIVE) AND C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS.
  - C406.2 MORE EFFICIENT HVAC PERFORMANCE
  - C406.3 REDUCED LIGHTING POWER DENSITY
  - C406.4 ENHANCED LIGHTING CONTROLS
  - C406.5 ON-SITE RENEWABLE ENERGY
  - C406.6 DOAS PROVISION FOR CERTAIN HVAC
  - C406.7 HIGH ENERGY SERVICE WATER HEATING
- COMPLIANCE PER CHAPTER 4 NORTH CAROLINA ENERGY CONSERVATION CODE - SECTIONS C403.2 (MANDATORY), C403.3 ECONOMIZERS (PRESCRIPTIVE), C403.4 HYDRONIC AND MULTIPLE ZONE (PRESCRIPTIVE) AND C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS.
  - C406.2 MORE EFFICIENT HVAC PERFORMANCE
  - C406.3 REDUCED LIGHTING POWER DENSITY
  - C406.4 ENHANCED LIGHTING CONTROLS
  - C406.5 ON-SITE RENEWABLE ENERGY
  - C406.6 DOAS PROVISION FOR CERTAIN HVAC
  - C406.7 HIGH ENERGY SERVICE WATER HEATING
- COMPLIANCE PER CHAPTER 4 NORTH CAROLINA ENERGY CONSERVATION CODE - SECTIONS C402.5, C403.2, C404, C405.2, C405.3, C405.5, C405.6 AND C407 TOTAL BUILDING PERFORMANCE. THE BUILDING ENERGY COST SHALL BE EQUAL TO OR LESS THAN 85 PERCENT OF THE STANDARD REFERENCE DESIGN BUILDING.
- COMPLIANCE PER ANSI/ASHRAE/IESNA 90.1-2013.
- COMPLIANCE PER NORTH CAROLINA SPECIFIC COMCHECK OR ASHRAE 90.1-2013 COMCHECK.

CLIMATE ZONE 3A  
EXTERIOR DESIGN CONDITIONS  
winter dry bulb: 20.9°F  
summer dry bulb: 93.4°F DB/74.7°F WB

INTERIOR DESIGN CONDITIONS  
winter dry bulb: 70°F  
summer dry bulb: 75°F  
relative humidity: 55%

BUILDING HEATING LOAD: 89.3 MBH - EXCLUDING HANGAR  
BUILDING COOLING LOAD: 7.8 TONS - EXCLUDING HANGAR

MECHANICAL SPACING CONDITIONING SYSTEM  
Unitary:  
description of unit: SEE SCHEDULES ON SHEET M-001  
heating efficiency:  
cooling efficiency:  
heat output of unit:  
cooling output of unit:

Boiler: N/A  
total boiler output, if oversized, state reason.  
Chiller: N/A  
total chiller capacity, if oversized, state reason.

LIST EQUIPMENT EFFICIENCIES: SEE SCHEDULES ON SHEET M-001  
EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)  
motor horsepower:  
number of phases:  
minimum efficiency:  
motor type:  
# of poles:

**DESIGNER STATEMENT**

To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina Energy Conservation Code.

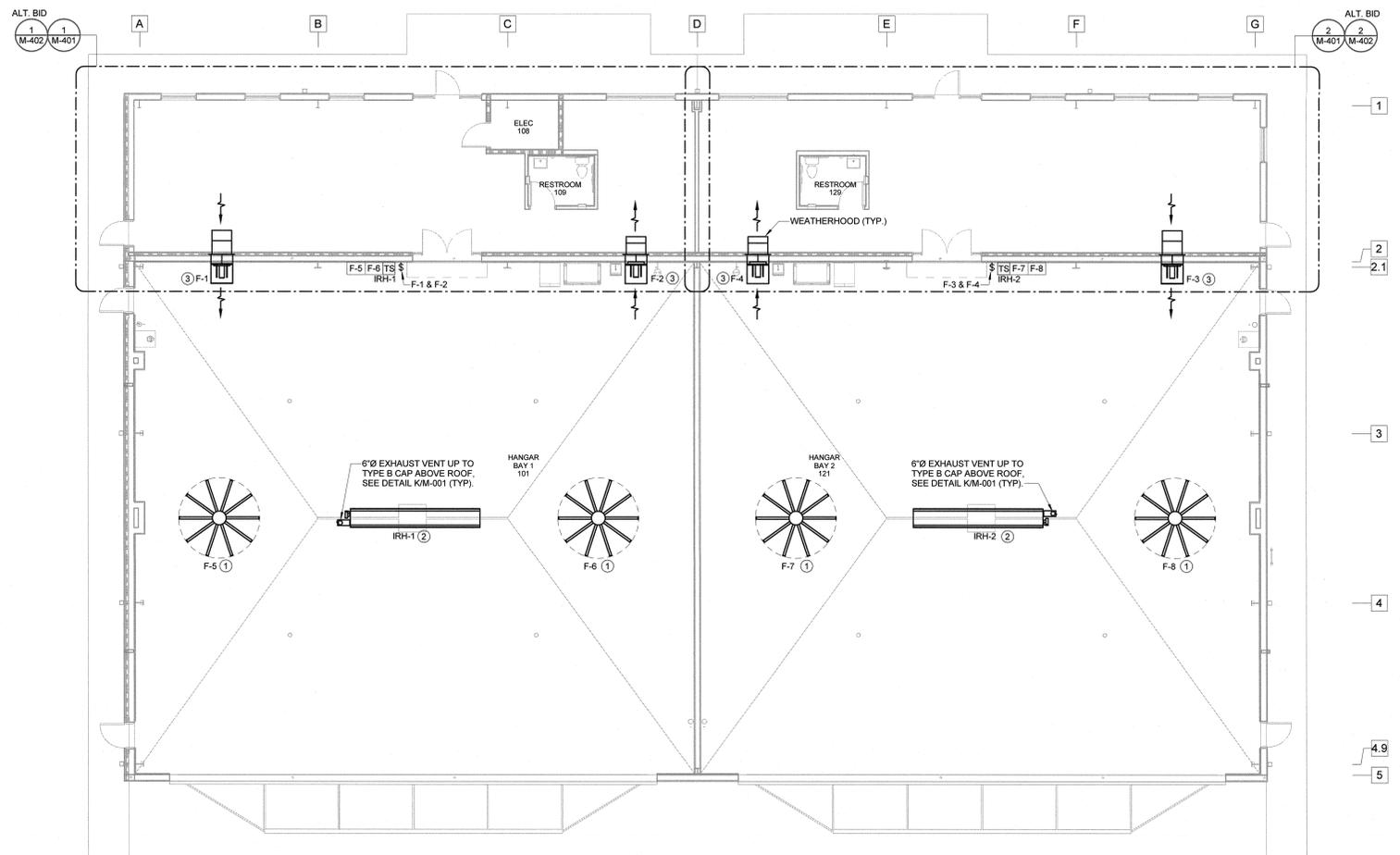
SIGNED: *Marioneth Lynn, P.E.*  
NAME: *Marioneth Lynn, P.E.*  
TITLE: *Professional Engineer*

**LEGEND**

	R	REFRIGERANT PIPING
	C	AIR CONDITIONING CONDENSATE PIPING
	PC	PUMPED CONDENSATE PIPING
		FLEXIBLE DUCTWORK
		RECTANGULAR DUCTWORK
		SUPPLY AIR DUCTWORK TURNED DOWN
		SUPPLY AIR DUCTWORK TURNED UP
		RETURN AIR/EXHAUST AIR TURNED DOWN
		RETURN AIR/EXHAUST AIR TURNED UP
		DUCT WITH RUNOUT (SPIN-IN TAKE OFF WITH DAMPER)
		CEILING RETURN AIR/EXHAUST AIR REGISTER
		CEILING SUPPLY AIR DIFFUSER
		REGISTER, GRILLE OR DIFFUSER SYMBOL
	TS#	HEATING AND COOLING THERMOSTAT WITH # INDICATING UNIT
	TS	COOLING THERMOSTAT
		HEAVY DUTY DISCONNECT SWITCH
		KEYED NOTE SYMBOL
	S	SUPPLY AIR
	RA	RETURN AIR
	OA	OUTSIDE AIR
	E.X.A.	EXHAUST AIR
	NO	NORMALLY OPEN
	NC	NORMALLY CLOSED
	MD	MANUAL DAMPER
	MOD	MOTOR OPERATED DAMPER
	AFF	ABOVE FINISHED FLOOR
	FIN. FL.	FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	CONC.	CONCRETE
	CONT.	CONTINUATION
	CONTR.	CONTRACTOR
	CO	CARBON MONOXIDE SENSOR
	HT	HUMIDITY SENSOR
	AD	ACCESS DOOR (MIN 16"x16")



**REVISIONS**



- KEYED NOTES:** (THIS SHEET ONLY)
- 1 BOTTOM OF HVLS VENTILATOR SHALL BE 22'-6" AFF. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  - 2 MOUNT RADIANT HEATERS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS, INCLUDING MINIMUM DISTANCE FROM COMBUSTIBLES.
  - 3 PROVIDE PROTECTIVE WIRE GUARD OVER FAN DAMPER AND ACUTATOR. SEE DETAIL EIM-001. FANS LOCATED ABOVE LOW ROOF OFFICE AREA.

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



**PARTITION LEGEND**

	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



**THE WILSON GROUP**  
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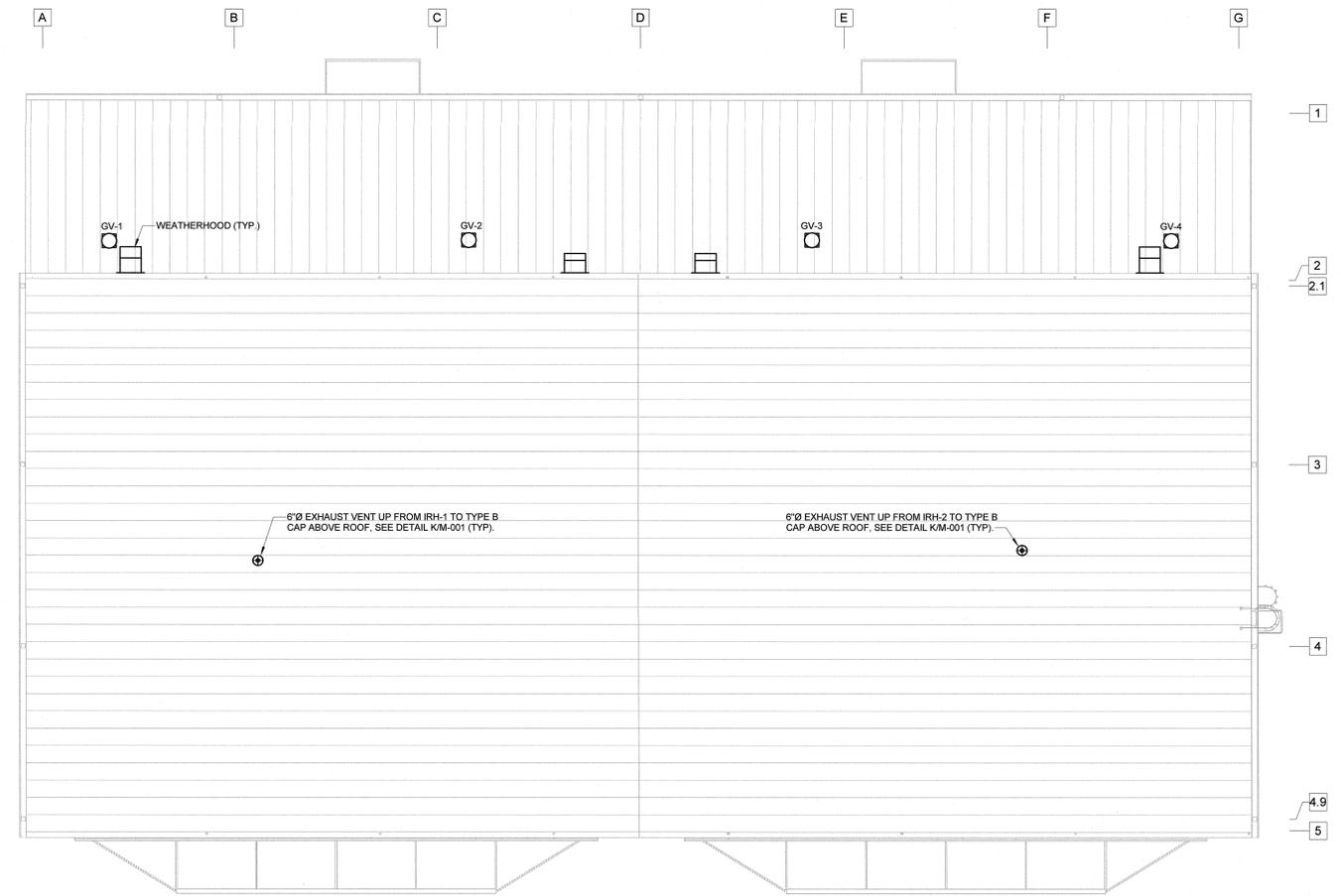
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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**MECHANICAL  
ROOF**

SHEET NUMBER  
**M-102**



GV-1 WEATHERHOOD (TYP.)

GV-2

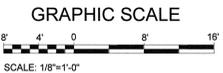
GV-3

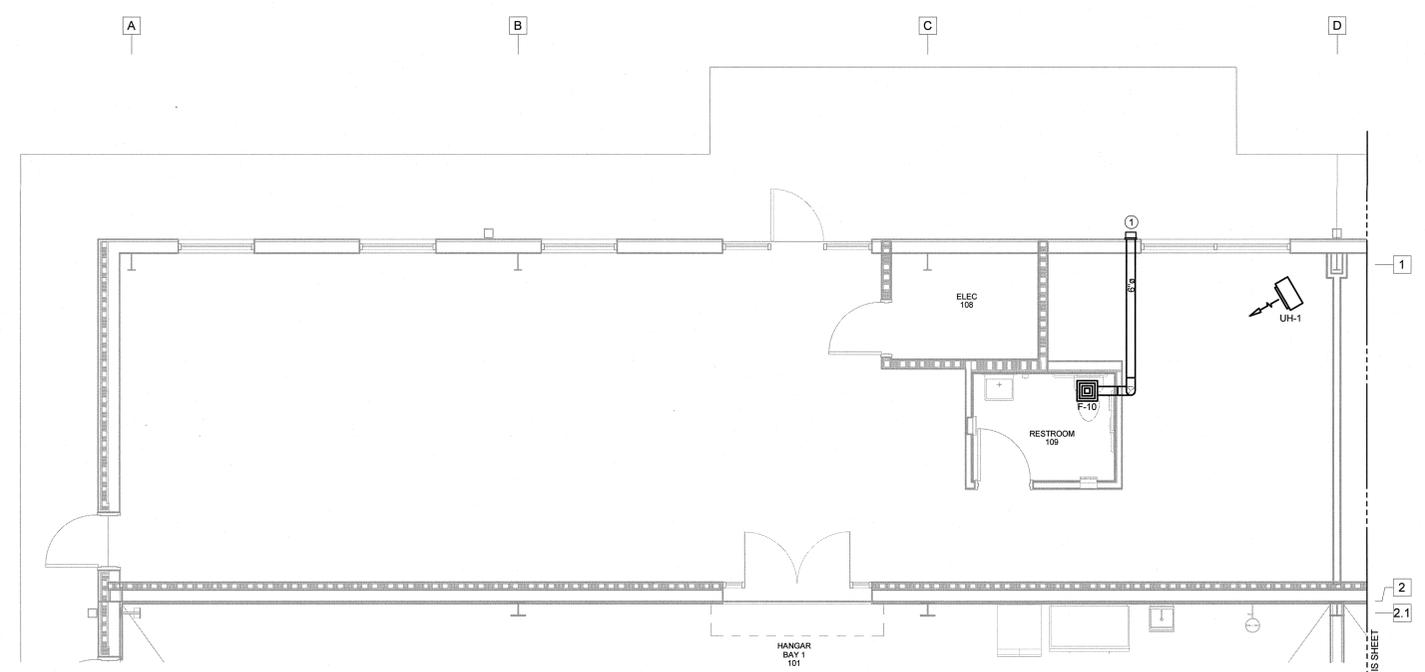
GV-4

6" Ø EXHAUST VENT UP FROM IRH-1 TO TYPE B  
CAP ABOVE ROOF. SEE DETAIL KM-001 (TYP.)

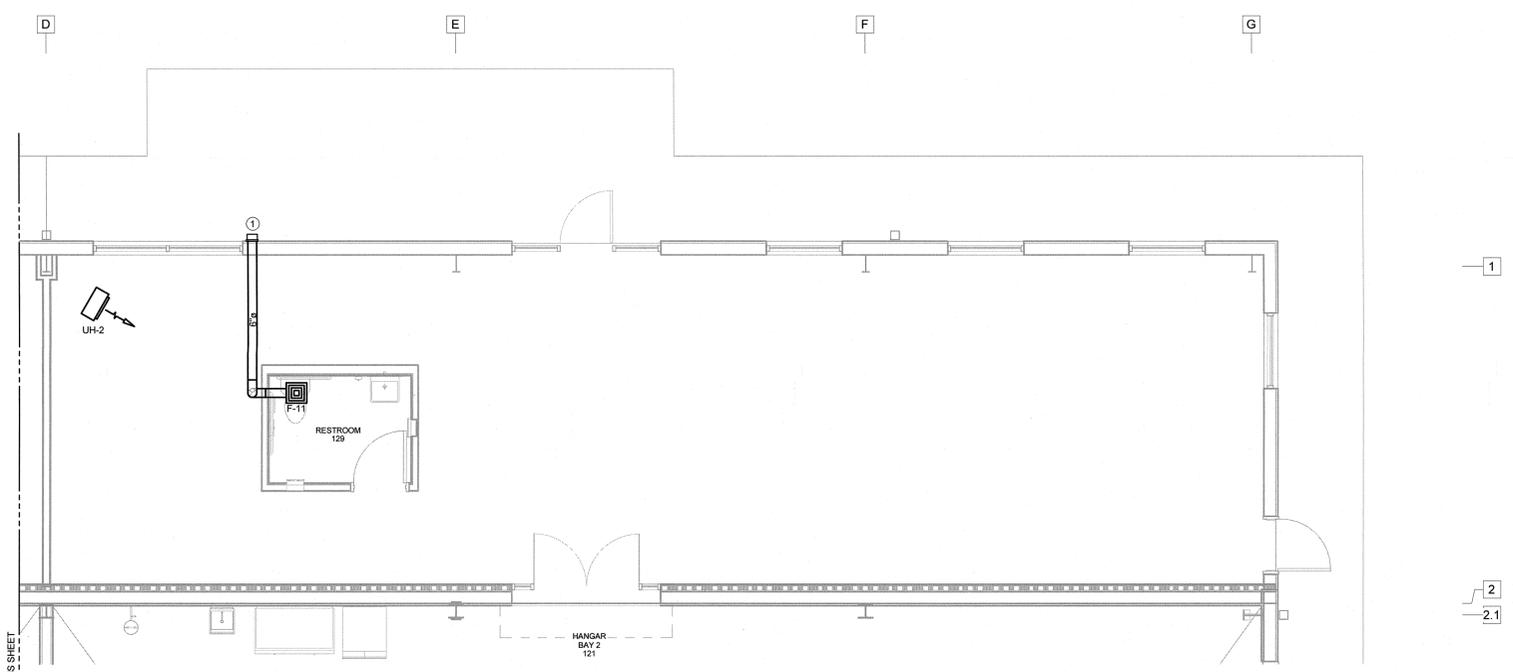
6" Ø EXHAUST VENT UP FROM IRH-2 TO TYPE B  
CAP ABOVE ROOF. SEE DETAIL KM-001 (TYP.)

**1**  
MECHANICAL ROOF  
M-102  
SCALE: 1/8" = 1'-0"





**1**  
M-401 ENLARGED MECHANICAL PLAN  
SCALE: 1/4" = 1'-0"



**2**  
M-401 ENLARGED MECHANICAL PLAN  
SCALE: 1/4" = 1'-0"

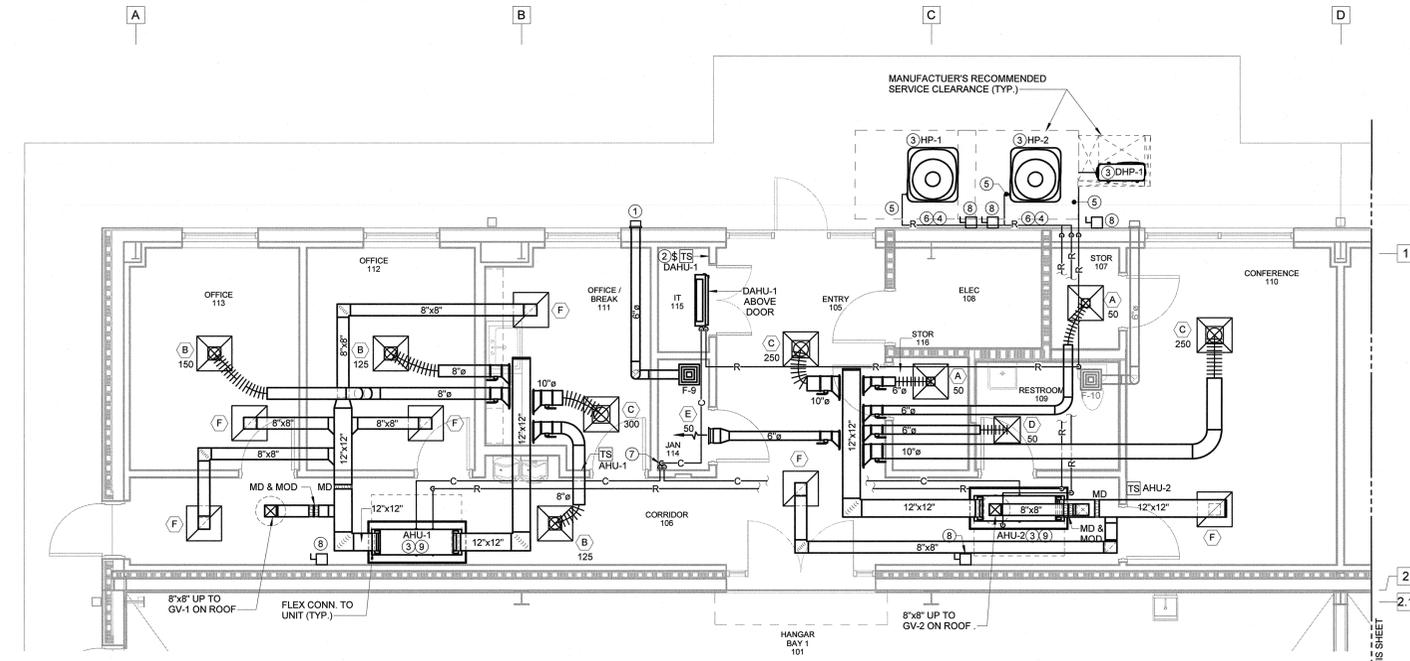
**KEYED NOTES:** (THIS SHEET ONLY)

- ① WALL CAP WITH BACKDRAFT DAMPER AND BIRD SCREEN. SEE DETAIL F/M-001.



**PARTITION LEGEND**

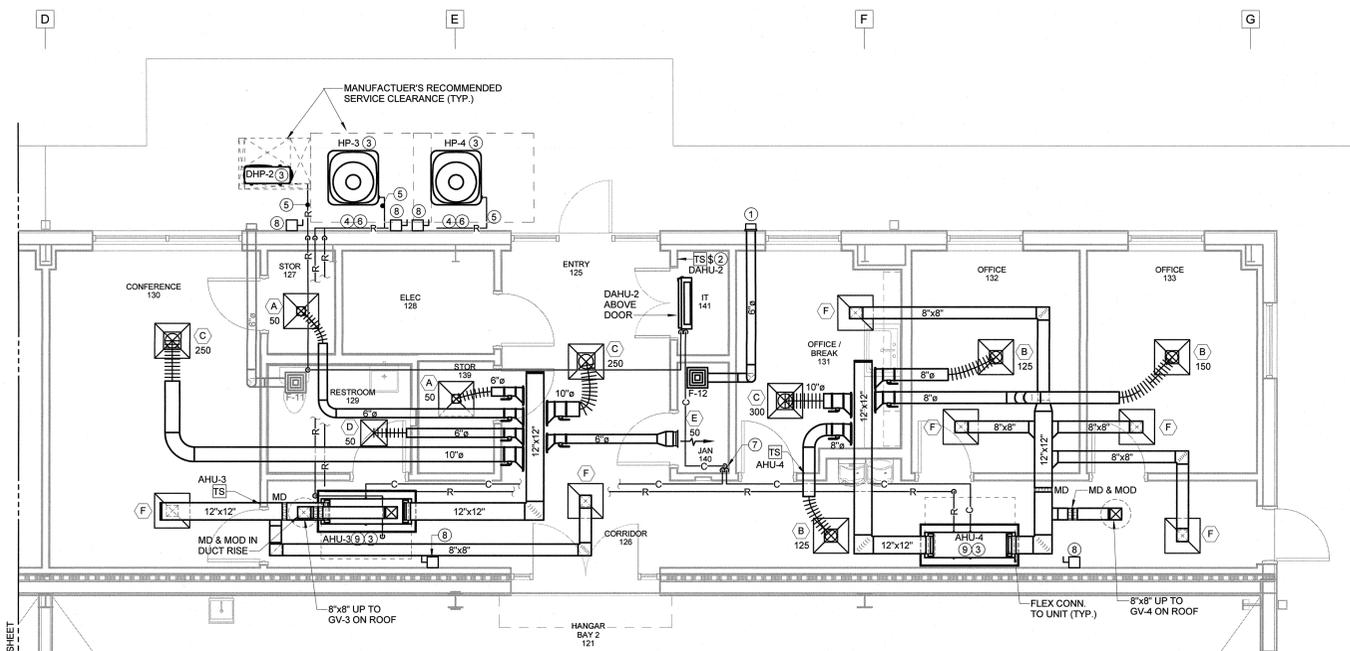
- NON RATED WALL
  - 1 HOUR RATED PARTITION
  - 2 HOUR RATED PARTITION
- NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



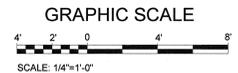
**1**  
M-402 **MECHANICAL OFFICE PLAN - ALT-01**  
SCALE: 1/4" = 1'-0"

**KEYED NOTES:** (THIS SHEET ONLY)

- 1 WALL CAP WITH BACKDRAFT DAMPER AND BIRD SCREEN. SEE DETAIL F1M-001.
- 2 PROVIDE TOGGLE TYPE DISCONNECT SWITCH WITH LOCKABLE COVER.
- 3 INSTALL UNITS WITH CLEARANCES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. TYP.
- 4 RACK REF. PIPING NEATLY ON WALL, BELOW DISCONNECT SWITCHES (TYP.).
- 5 SUPPORT REFRIGERANT PIPING ON CONCRETE PAD, TYP.
- 6 COVER ALL EXPOSED REF. PIPING WITH ALUMINUM JACKET. TYP. SEE DETAIL J1M-001.
- 7 SPILL 1" CONDENSATE PIPING INTO HUB DRAIN. SEE PLUMBING DRAWINGS.
- 8 DISCONNECT SWITCH, TYPICAL.
- 9 INSTALL AIR HANDLING UNIT IN COND. PAN ABOVE CEILING. SEE DETAIL G1M-001.



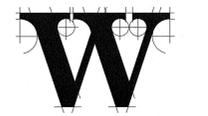
**2**  
M-402 **MECHANICAL OFFICE PLAN - ALT-02**  
SCALE: 1/4" = 1'-0"



**PARTITION LEGEND**

	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE																
AIR HANDLING UNIT SECTION					OUTDOOR HEAT PUMP SECTION					REMARKS						
SYMBOL	AIR QUANTITY		EXT SP "H20 (1)	ELECTRICAL				ELECTRICAL						COOLING CAPACITY BTUH (2)	HEATING CAPACITY BTUH (3)	SEER2
	TOTAL CFM	OUTSIDE CFM		MCA	MCCP	STRIP HEAT (KW)	FAN HP	VOLTAGE & PHASE	SYMBOL	MCA	MCCP	VOLTAGE & PHASE				
AHU-1	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-1	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-01
AHU-2	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-2	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-01
AHU-3	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-3	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-02
AHU-4	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-4	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-02

- (1) EXT. S.P. INCLUDES SUPPLY & RETURN AIR DUCTWORK. FILTERS IN UNIT ARE NOT INCLUDED IN THIS FIGURE.  
 (2) CAPACITY WHEN MATCHED WITH INDOOR HEAT PUMP SECTION AT AHRI CONDITIONS.  
 (3) CAPACITY AT 17° F OUTSIDE AIR TEMPERATURE.

POWER VENTILATOR SCHEDULE										
SYMBOL	CFM	ESP	RPM	TIP SPEED	ELECTRICAL		TYPE	DRIVE	CONTROL	REMARKS
					HP	VOLTAGE				
F-1	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER SUPPLY	BELT	(3)	HANGAR BAY 1 101
F-2	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER EXHAUST	BELT	(3)	HANGAR BAY 1 101
F-3	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER SUPPLY	BELT	(3)	HANGAR BAY 2 121
F-4	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER EXHAUST	BELT	(3)	HANGAR BAY 2 121
F-5	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 1 101
F-6	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 1 101
F-7	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 2 121
F-8	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 2 121
F-9	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	JAN 114 - ALTERNATE BID-01
F-10	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	RESTROOM 109
F-11	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	RESTROOM 129
F-12	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	JAN 140 - ALTERNATE BID-02

- (1) WATTS  
 (2) VIA LIGHTING CONTROL SYSTEM'S OCCUPANCY SENSOR.  
 (3) SWITCH ON WALL. NOTE THAT SUPPLY AND EXHAUST FANS IN SAME HANGAR ALWAYS OPERATE AT THE SAME TIME.  
 (4) VARIABLE SPEED/ON/OFF/FORWARD/REVERSE TOUCHSCREEN FACTORY CONTROLLER.  
 (5) BASIS OF DESIGN IS HUNTER ECO 10.

RADIANT HEATER SCHEDULE										
SYMBOL	BTU/HR INPUT	GAS INLET (1)		TYPE	ELECTRICAL		MOUNTING ANGLE ABOVE HORIZONTAL	MOUNTING HEIGHT	SYSTEM LENGTH	REMARKS
		SIZE	PRESSURE		AMPS	VOLTAGE & PHASE				
IRH-1	100,000	1/2"	11" WC	INFRA-RED TUBE	2.6	120V-1Ø	0°	22'-0" AFF	17'-6"	HANGAR BAY 1 101 (2)
IRH-2	100,000	1/2"	11" WC	INFRA-RED TUBE	2.6	120V-1Ø	0°	22'-0" AFF	17'-6"	HANGAR BAY 2 121 (2)

- (1) LP GAS.  
 (2) BASIS OF DESIGN SPACE-RAY LTU100-30-L5

DUCTLESS SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE														
SYMBOL	AIR QUANTITY			EXT SP "H20 (1)	ELECTRICAL		SYMBOL	ELECTRICAL			COOLING CAPACITY BTUH (2)	HEATING CAPACITY BTUH (3)	SEER2	REMARKS
	TOTAL CFM	OUTSIDE CFM	FAN FLA		VOLTAGE & PHASE	MCA		RECOMMENDED BREAKER SIZE	VOLTAGE & PHASE					
DAHU-1	350	-	-	1.0	230V-1Ø	DHP-1	11	15	230V-1Ø	5,600-18,000	13,600	20.2	IT 115 - ALTERNATE BID-01	
DAHU-2	350	-	-	1.0	230V-1Ø	DHP-2	11	15	230V-1Ø	5,600-18,000	13,600	20.2	IT 141 - ALTERNATE BID-02	

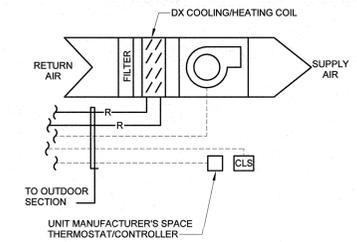
- (1) EXT. S.P. INCLUDES SUPPLY & RETURN AIR DUCTWORK. FILTERS IN UNIT ARE NOT INCLUDED IN THIS FIGURE.  
 (2) MINIMUM AND MAXIMUM CAPACITY WHEN MATCHED WITH INDOOR HEAT PUMP SECTION AT AHRI CONDITIONS.  
 (3) CAPACITY AT 17° F OUTSIDE AIR TEMPERATURE.

ELECTRIC UNIT HEATER SCHEDULE							
SYMBOL	CFM	BTU	ELECTRICAL		MOUNTING HEIGHT	DISCHARGE	REMARKS
			KW	VOLTAGE			
UH-1	700	25.6	7.5	240V-1Ø	8'-0" AFF	HORIZONTAL	AREA OF FUTURE OFFICE UPFIT (1)
UH-2	700	25.6	7.5	240V-1Ø	8'-0" AFF	HORIZONTAL	AREA OF FUTURE OFFICE UPFIT (1)

- (1) WITH BUILT-IN THERMOSTAT.

GRAVITY VENTILATOR SCHEDULE					
SYMBOL	CFM	MIN. THROAT SIZE	MAXIMUM AIR PRESS DROP "H20	TYPE	SERVING
GV-1	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-1 - ALTERNATE BID-01
GV-2	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-2 - ALTERNATE BID-01
GV-3	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-3 - ALTERNATE BID-02
GV-4	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-4 - ALTERNATE BID-02

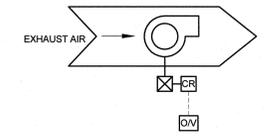
REGISTER, GRILLE & DIFFUSER SCHEDULE - ALTERNATE BID -01 & 02					
SYMBOL	C.F.M.	NECK SIZE	TYPE	RUNOUT SIZE	REMARKS
(A)	50-100	6"X6"	2'X2' LAY-IN CEILING SA DIFFUSER	6"Ø	
(B)	125-225	9"X9"	2'X2' LAY-IN CEILING SA DIFFUSER	8"Ø	
(C)	250-400	12"X12"	2'X2' LAY-IN CEILING SA DIFFUSER	10"Ø	
(D)	50-100	6"X6"	CEILING SA DIFFUSER	6"Ø	
(E)	25-150	10"X8"	SIDEWALL SA REGISTER	6"Ø - 8"Ø	
(F)	250-1000	22"X22"	2'X2' LAY-IN RA GRILLE	-	



DUCTLESS SPLIT SYSTEM HEAT PUMP

**SEQUENCE OF OPERATION**

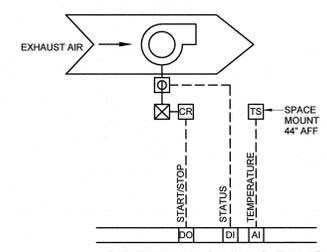
MANUFACTURER FURNISHED WALL MOUNTED HARD WIRED THERMOSTAT SHALL CONTROL UNIT.  
UNIT SHALL BE DEENERGIZED ON HIGH CONDENSATE LEVELS



CEILING EXHAUST FANS

**SEQUENCE OF OPERATION**

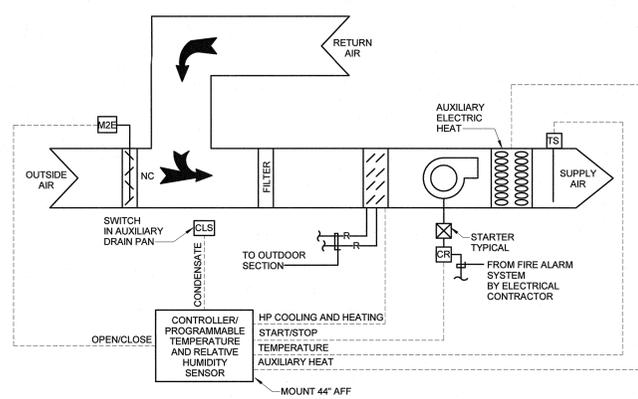
DESCRIPTION: CONSTANT AIR VOLUME EXHAUST FAN, AS SCHEDULED.  
FAN START/STOP CONTROL: START/STOP UNIT FAN BASED ON INTERLOCK WITH SPACES OCCUPANCY/VACANCY SENSORS.



SIDEWALL & HVLS FANS

**SEQUENCE OF OPERATION**

A. POWER VENTILATORS SHALL BE CONTROLLED BY LOCAL THERMOSTATS.  
B. SEE POWER VENTILATOR SCHEDULE FOR DEFINITION OF POWER VENTILATOR CONTROL.



SPLIT SYSTEM HEAT PUMP  
SEQUENCE OF OPERATION

- A. OCCUPIED:**
- INDOOR FAN SHALL OPERATE CONTINUOUSLY.
  - OUTSIDE AIR DAMPERS SHALL BE OPEN.
  - CONTROLLER/THERMOSTAT SHALL MONITOR SPACE TEMPERATURE AND CONTROL THE HEAT PUMP COMPRESSORS FOR COOLING (IN STAGES WHEN AVAILABLE) AND HEAT PUMP COMPRESSORS AND AUXILIARY ELECTRIC HEAT IN STAGES FOR HEATING TO MAINTAIN SPACE TEMPERATURE SETPOINT.
- B. UNOCCUPIED:** INDOOR FAN AND HEAT PUMP COMPRESSORS AND AUXILIARY ELECTRIC HEAT SHALL OPERATE IN STAGES, CYCLING ON AND OFF AS NECESSARY TO MAINTAIN SPACE TEMPERATURE AT UNOCCUPIED HEATING AND COOLING SETPOINTS. OUTSIDE AIR DAMPERS SHALL REMAIN CLOSED.
- C. DE-HUMIDIFICATION:** IF SPACE RELATIVE HUMIDITY RISES ABOVE A LIMIT OF 65% RH (ADJ.), HEAT PUMP COMPRESSORS SHALL OPERATE FOR COOLING (IN STAGES WHEN AVAILABLE). AUXILIARY ELECTRIC HEATING SHALL OPERATE AS NECESSARY TO MAINTAIN SPACE COOLING TEMPERATURE SETPOINT. WHEN SPACE RELATIVE HUMIDITY DROPS TO 50% RH (ADJ.), HEAT PUMP SYSTEM SHALL RETURN TO NORMAL MODE OF OPERATION.
- D. SAFETIES:**
- THE ELECTRICAL CONTRACTOR WILL PROVIDE A FIRE ALARM SYSTEM RELAY ADJACENT TO EACH FAN CONTROL THROUGH WHICH THE CONTRACTOR SHALL HARDWIRE POWER TO THE UNIT WHETHER OR NOT UNIT'S CONTROLS ARE IN AUTO OR MANUAL MODES. ANY SIGNAL FROM THE FIRE ALARM SYSTEM WILL MAKE RELAY BREAK OPERATING POWER FOR THE UNIT.
  - UPON HIGH LEVELS OF CONDENSATE IN PAN, COOLING SHALL BE DEENERGIZED.
- E. SYSTEMS USING A2L REFRIGERANTS:**
- SYSTEMS USING A2L WITH REFRIGERANT CHARGE > 4.0 LBS SHALL HAVE INTEGRAL FACTORY INSTALLED REFRIGERANT LEAK DETECTION SYSTEM MOUNTED IN THE AIR HANDLING UNIT SECTION DOWNSTREAM OF THE EVAPORATOR COIL WITH INTERNAL CONTROLS TO AUTOMATICALLY UPON REFRIGERANT DETECTED, UNIT COMMANDS COMPRESSORS AND ELECTRIC HEAT (IF PRESENT) OFF, AND COMMANDS AIR HANDLING UNITS FAN TO MAXIMUM AIRFLOW FOR AIR CIRCULATION. ONCE REFRIGERANT HAS NOT BEEN DETECTED FOR A MINIMUM OF 5 MINUTES, UNIT SHALL RETURN TO NORMAL OPERATION.
  - FOR SYSTEMS USING A2L REFRIGERANT, IF RELEASABLE REFRIGERANT CHARGE IN THE SYSTEM EXCEEDS THE LEVELS ALLOWED IN ANSI/ASHRAE STANDARD 15 - 2022 OR NEWER FOR THE EFFECTIVE DISPERSAL VOLUME, PROVIDE SAFETY ISOLATION VALVES IN BOTH REFRIGERANT LINES AS RELEASE MITIGATION CONTROLS. VALVES SHALL AUTOMATICALLY CLOSE UPON SIGNAL FROM THE UNIT INTEGRAL REFRIGERANT LEAK DETECTOR. VALVE LOCATIONS SHALL BE AS SUCH FOR RELEASABLE REFRIGERANT CHARGE TO BE LESS THAN THE LEVELS ALLOWED IN ANSI/ASHRAE STANDARD 15 - 2022 OR NEWER FOR THE EFFECTIVE DISPERSAL VOLUME.

CONTROL SYMBOL LEGEND	
TH	TEMPERATURE/RELATIVE HUMIDITY SENSOR
HT	HUMIDITY SENSOR
CR	CONTROL RELAY
MZE	MOTOR OPERATED 2-POSITION ELECTRIC
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
FAR	FIRE ALARM RELAY
CLS	CONDENSATE LEVEL SENSOR
OV	OCCUPANCY/VACANCY SENSOR
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
CS	CURRENT SENSOR
ST	STARTER

**ELECTRICAL NOTES**

- ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- PERMITS FOR ELECTRICAL WORK SHALL BE OBTAINED BY AND PAID BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PAY FOR ANY ADDITIONAL FEES FOR INSPECTIONS, TESTS, AND OTHER SERVICES AS REQUIRED FOR THE COMPLETION OF THE WORK.
- THE ELECTRICAL CONTRACTOR AND ANY OF HIS SUBCONTRACTORS SHALL VISIT THE PROJECT SITE TO WITNESS EXISTING CONDITIONS AND BECOME FAMILIAR WITH THE SCOPE OF THE WORK REQUIRED PRIOR TO SUBMITTING PROPOSALS. WORK REQUIRED BY EXISTING JOB CONDITIONS NOT INDICATED ON DRAWINGS SHALL BE INCLUDED IN THE PROPOSALS.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO RESULT IN THE PRODUCTION OF A COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND OTHER SERVICES AS NECESSARY TO COMPLETE THE WORK.
- DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS THAT WILL AFFECT THE WORK SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT, ENGINEER, AND/OR OWNER PRIOR TO SUBMITTING PROPOSALS.
- UNLESS NOTED OTHERWISE, ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND INCLUDE A 3RD PARTY LABEL (I.E.: UL, CSA, ETL, ETC.) LISTING APPROVAL FOR ITS INSTALLED APPLICATION.
- REVIEW PLANS OF OTHER TRADES FOR COORDINATION OF WORK AND FOR RELATED AND ADJOINING WORK.
- REVIEW COMPLETE PLAN SET FOR CONSTRUCTION TYPE, FINISHES, HEADROOM, ROOF FINISHES, CEILING, ETC. REVIEW COMPLETE PLAN SET FOR PROJECT PHASING AND STAGING. REVIEW COMPLETE PLAN SET FOR WORK COVERED BY ALTERNATE BID ITEMS. COORDINATE DEVICE AND EQUIPMENT MOUNTING HEIGHTS WITH OTHER DISCIPLINE DRAWINGS, CASEWORK DETAILS & SUBMITTALS, EQUIPMENT DETAILS & SUBMITTALS, ETC.
- PENETRATIONS OF FIRE-RATED WALLS, FLOORS, CEILING, AND PARTITIONS SHALL BE FIRE STOPPED IN ACCORDANCE WITH REQUIREMENTS OF THE STATE BUILDING CODE. COORDINATE WORK TO INSURE THAT FIRE STOPPING IS COMPLETED.
- PENETRATIONS OF EXTERIOR BUILDING WALLS, FLOORS, OR ROOFS SHALL BE SEALED WATERTIGHT. INTERIORS OF RACEWAY PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SEALED WITH NON-HARDENING ELECTRICAL PUTTY.
- CUTTING AND PATCHING TO INSTALL DEVICES AND EQUIPMENT SHALL BE PERFORMED WITH FINISHES RESTORED TO THEIR ORIGINAL CONDITION. SUCH WORK SHALL BE COMPLETED TO A DEGREE THAT IS ACCEPTABLE TO THE ARCHITECT, ENGINEER, AND/OR OWNER.
- COORDINATE PRECISE LOCATION OF HVAC EQUIPMENT WITH THE MECHANICAL CONTRACTOR.
- FOR HVAC EQUIPMENT, VERIFY CIRCUIT BREAKER RATINGS, FUSE RATINGS, AND WIRE SIZES. IF RATINGS DIFFER FROM THOSE INDICATED ON THE DRAWINGS, NOTIFY THE ARCHITECT, ENGINEER, AND OWNER FOR DIRECTION. PROVIDE OVERCURRENT PROTECTION IN ACCORDANCE WITH EQUIPMENT MANUFACTURER NAMEPLATE DATA. IF THE EQUIPMENT LISTING LABEL REQUIRES FUSED PROTECTION, ENSURE THAT FUSES IN A FUSED DISCONNECT SWITCH AT THE EQUIPMENT ARE SIZED AS INDICATED ON THE EQUIPMENT LABEL.
- VERIFY PROPER SIZING OF OVERLOAD DEVICES IN STARTERS BASED ON EQUIPMENT NAMEPLATE DATA.
- IF HORSEPOWER OR LOAD RATINGS OF EQUIPMENT DIFFER FROM THOSE INDICATED ON THE DRAWINGS, NOTIFY THE ARCHITECT, ENGINEER, AND OWNER FOR DIRECTION.
- PROVIDE NATIONAL ELECTRICAL CODE REQUIRED CLEARANCES FOR ALL ELECTRICAL EQUIPMENT. COORDINATE RESOLUTION OF CONFLICTS WITH OTHER TRADES.
- RECEPTACLE, SWITCH, DATA/TELEPHONE OUTLETS SHALL BE FLUSH MOUNTED IN FINISHED SPACES UNLESS OTHERWISE NOTED.
- PRIOR TO ORDERING LIGHT FIXTURES, CONTRACTOR SHALL VERIFY TYPE OF CEILING OR WALL BY REVIEW OF ARCHITECTURAL FINISH SCHEDULES AND PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT FIXTURES IN TYPE OF CEILING OR WALL INDICATED.
- RECESSED LIGHT FIXTURES INSTALLED IN CEILING WITH INSULATION (AS INDICATED IN ARCHITECTURAL PLANS, OR FOUND AS EXISTING CONDITIONS) SHALL BE U.L. RATED FOR DIRECT CONTACT WITH INSULATION.
- EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO THE NEAREST UNSWITCHED CIRCUIT THAT SERVES LIGHT FIXTURES WITHIN THE SAME SPACE.
- NO MOUNTING HARDWARE SHALL BE ATTACHED TO ROOF DECKS. ATTACHMENTS SHALL BE MADE TO THE ROOF SUPPORTING STRUCTURE.
- PANEL BUS MATERIAL: COPPER.
- SHARED NEUTRAL CONDUCTORS SHALL NOT BE USED UNLESS SPECIFICALLY INDICATED SO ON HOMERUN CIRCUITRY DESIGNATIONS.
- PANEL BREAKER CONFIGURATIONS SHALL BE INSTALLED AS INDICATED ON THE PANEL SCHEDULES OR AS NOTED. BREAKER POSITION REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.
- LOAD CIRCUITS SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS. CIRCUITRY REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.

**ABBREVIATIONS**

- |       |  |
|-------|--|
| ADA   | AMERICAN DISABILITIES ACT                |
| AFB   | ABOVE FINISHED FLOOR                     |
| AFG   | ABOVE FINISHED GRADE                     |
| AHU   | AIR HANDLER UNIT                         |
| AIC   | AMPS INTERRUPTING CAPABILITY             |
| ARA   | AREA OF RESCUE ASSISTANCE                |
| BKR   | BREAKER                                  |
| C     | CONDUIT                                  |
| C/B   | CIRCUIT BREAKER                          |
| CLG   | CEILING                                  |
| CKT   | CIRCUIT                                  |
| COMP  | COMPRESSOR                               |
| CU    | COPPER                                   |
| DAHU  | DUCTLESS AIR HANDLING UNIT               |
| DHP   | DUCTLESS HEAT PUMP                       |
| DIA   | DIAMETER                                 |
| DWG   | DRAWING                                  |
| EC    | ELECTRICAL CONTRACTOR                    |
| EMT   | ELECTRICAL METALLIC TUBING               |
| ENCL  | ENCLOSED                                 |
| EXSTG | EXISTING                                 |
| G     | EQUIPMENT GROUND                         |
| GECC  | GROUNDING ELECTRODE CONDUCTOR            |
| LTS   | LIGHTS                                   |
| MCB   | MAIN CIRCUIT BREAKER                     |
| MFR   | MANUFACTURER                             |
| MLO   | MAIN LUG ONLY                            |
| N/A   | NOT APPLICABLE                           |
| NEC   | NATIONAL ELECTRICAL CODE                 |
| NEMA  | NATIONAL ELECTRICAL MANUFACTURERS ASSOC. |
| NTS   | NOT TO SCALE                             |
| PH    | PHASE OR POLE                            |
| PNL   | PANEL                                    |
| REC   | RECEPTACLE                               |
| RECP  | RECEPTACLE                               |
| REQD  | REQUIRED                                 |
| RGC   | RIGID GALVANIZED CONDUIT                 |
| RGS   | RIGID GALVANIZED STEEL                   |
| S.S.  | STAINLESS STEEL                          |
| SYS   | SYSTEM                                   |
| S/N   | SOLID NEUTRAL                            |
| TYP   | TYPICAL                                  |
| UL    | UNDERWRITERS LABORATORY                  |
| UNO   | UNLESS NOTED OTHERWISE                   |
| UON   | UNLESS OTHERWISE NOTED                   |
| V     | VOLTS                                    |
| VA    | VOLT-AMPS                                |
| W     | WATTS                                    |
| W     | WIRE                                     |
| W     | WITH                                     |
| WP    | WEATHERPROOF                             |
| XFMR  | TRANSFORMER                              |

**LUMINAIRE SCHEDULE**

CALLOUT	SYMBOL	DESCRIPTION	LAMP	BALLAST	VOLTS	MOUNTING	MANUFACTURER / MODEL	NOTES	CALLOUT
B2M		2x2, ARCHITECTURAL LENSED, INDIRECT	(1) 40W LED	LED DIMMABLE DRIVER	120V 1P 2W	RECESSED	COLUMBIA #LCAT SERIES DAYBRITE #FCX SERIES METALUX #Z2CZ SERIES	4400 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. SMOOTH, ROUND LENSE.	B2M
EG		EMERGENCY EGRESS, BATTERY	(2) 7W MR 16 LED	BATTERY	120V 1P 2W	WALL; MTD 8'-0" AFF	EMERGLITE #COMPACT PREMIER SERIES BEHELLI #E000 LUNA LED SERIES LIGHTALARMS #COMPACT GRANDE SERIES	CONNECT TO NEAREST UNSWITCHED LIGHT CIRCUIT IN SAME SPACE. THESE FIXTURES ARE NOT TAGGED WITH "EG" ON THE DRAWINGS; ONLY THE SYMBOL IS USED. DESIGN CRITERIA: 70 FT SPACING, UTILIZING 1 FC AVG AND 0.2 FC MINIMUM.	EG
H		HIGH BAY	(1) 147W LED	LED DIMMABLE DRIVER	120V 1P 2W	PENDANT; MTD 20'-0" AFF	COLUMBIA #CLH-LSCS SERIES DAY-BRITE #FBX SERIES METALUX #0HB SERIES	19,000 NOMINAL LUMENS. 4000K COLOR TEMPERATURE, 80 CRI. WIRE GUARD. POLYCARBONATE LENS.	H
IM		4' INDUSTRIAL	(1) 44W LED	LED DRIVER	120V 1P 2W	PENDANT/SURFACE	COLUMBIA #CLL SERIES DAYBRITE #FSS SERIES METALUX #SNLED SERIES	5300 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. WIRE GUARD. FROSTED LENS.	IM
IV1		INVERTER, EGRESS LIGHTING	N/A	BATTERY	120V 1P 2W	SURFACE	EMERGI-LITE #EMIU SERIES LIGHTALARMS #MIU SERIES	INVERTER FOR BATTERY BACKUP OF EGRESS LIGHTING; 100W FOR 90 MINUTES (MINIMUM). INCLUDE SELF-DIAGNOSTIC OPTION. LOCATE ON WALL OR ABOVE CEILING WHERE APPLICABLE - PROVIDE "LIGHTING INVERTER" LABEL ON CEILING GRID BELOW INSTALLED LOCATION. STANDARD LIGHTING CONTROL OVERRIDE FOR 0-10V DIMMING SYSTEM.	IV1
P4W		PARKING LOT LIGHT	(1) 122W LED	LED DRIVER	120V 1P 2W	POLE	BEACON #VIPER SERIES LUMARK #PREVAIL LED SERIES GARDCO #ECF SERIES	TYPE 4 WIDE DISTRIBUTION; 4000K; 18000 LUMENS; FINISH SELECTION BY ARCHITECT. 25' ROUND TAPERED ALUMINUM POLE SUITABLE FOR 110 MPH WIND TO MEET NC BUILDING CODE.	P4W
R6		6" RECESSED CAN	(1) 25W LED	LED DIMMABLE DRIVER	120V 1P 2W	RECESSED	PRESOLITE #LFR6RD SERIES LIGHTOLIER #Z6RDL SERIES PORTFOLIO #D6A SERIES	2500 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. SELF-FLANGED LENSED REFLECTOR TRIM; LOW IRIDESCENT CLEAR FINISH.	R6
R6XE		6" RECESSED CAN, EXTERIOR, EGRESS	(1) 18W LED	LED DRIVER	120V 1P 2W	RECESSED	PHILIPS LIGHTOLIER #L6R SERIES WILLIAMS #RDR SERIES ATLANTIC #LED6C SERIES	DAMP LOCATION. 2000 NOMINAL LUMENS. 4000K COLOR TEMP; SELF-FLANGED OPEN REFLECTOR TRIM, LOW IRIDESCENT CLEAR FINISH. IC RATED, AIRTIGHT CONSTRUCTION. GASKET BETWEEN FIXTURE & SOFFIT; SEE SPECIFICATIONS FOR ENERGY CODE REQUIREMENTS.	R6XE
W1		HALF CYLINDER WALL PACK	(1) 30W LED	LED DRIVER	120V 1P 2W	WALL; MTD 12' AFG	HUBBELL #RD2 SERIES GARDCO #104L SERIES MCGRAW-EDISON #SC SERIES	3100 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. TYPE IV DISTRIBUTION. FINISH SELECTION BY ARCHITECT.	W1
W2		LED FLOOD LIGHT	(1) 206W LED	LED DRIVER	120V 1P 2W	WALL; MTD 23' AFG	VIPER #MICRO STRIKE LUMARK #PREVAIL SERIES GARDCO #ECF-S SERIES	29000 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. TYPE IV DISTRIBUTION. FINISH SELECTION BY ARCHITECT.	W2
WB		HALF CYLINDER WALL PACK, EGRESS	(1) 20W LED (1) 20W LED	LED DRIVER LED DRIVER	120V 1P 2W	WALL	HUBBELL #RD2 SERIES GARDCO #104L SERIES MCGRAW-EDISON #SC SERIES	5300 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. TYPE IV DISTRIBUTION. DUAL LED DRIVERS AND DUAL LED ARRAYS FOR EGRESS REQUIREMENTS. DOWNLIGHT ONLY. FINISH SELECTION BY ARCHITECT.	WB
X		EXIT SIGN, BATTERY BACKUP	(2) 1W LED	BATTERY	120V 1P 2W	UNIVERSAL	EMERGLITE #PREMIER SERIES BEHELLI #FACO PX SERIES LIGHTALARMS #GRANDE SERIES	CONNECT TO NEAREST UNSWITCHED LIGHT CIRCUIT IN SAME SPACE. THESE FIXTURES ARE NOT TAGGED WITH "X" ON THE DRAWINGS; ONLY THE SYMBOL IS USED.	X

**SWITCH LEGEND**

SYMBOL	DESCRIPTION	NOTES
	DIMMER SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 1200W, MTD 42" AFF UNO
	4-WAY SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO; WHERE SHOWN PAIRED, PROVIDE DUAL LEVEL SWITCHING; SEE DUAL LEVEL SWITCHING NOTES AT THE STANDARD SWITCH SYMBOL IN THIS LEGEND.
	OCCUPANCY SENSOR WALL SWITCH, SINGLE CKT, DUAL TECHNOLOGY	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO
	OCCUPANCY SENSOR, LOW VOLTAGE, DUAL DIAGRAMS	INCORPORATE POWER PACK FOR CIRCUITRY SWITCHING, SEE WIRING DIAGRAMS
	PHOTOCELL, EXTERIOR	MOUNT ON NORTH FACE OF BLDG, FACING NORTH
	TOGGLE SWITCH, SINGLE POLE	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO; WHERE INDICATED, WHERE USED AS AN EQUIPMENT DISCONNECT, PROVIDE LOCKABLE TYPE COVER.
	3-WAY SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO

**FIRE ALARM LEGEND**

SYMBOL	DESCRIPTION	MOUNTING
	FIRE ALARM CONTROL PANEL	WALL
	MONITOR MODULE FOR MONITORING A DRY CONTACT CLOSURE DEVICE	
	PULL STATION	WALL
	SMOKE DETECTOR	CEILING

**RECEPTACLE LEGEND**

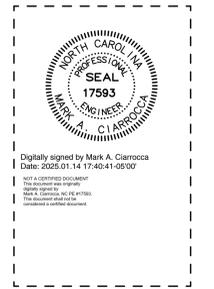
SYMBOL	NEMA	VOLTS	DESCRIPTION
	5-20R	120V 1P 2W	DUPLEX, MTD 18" AFF UNO
	5-20R	120V 1P 2W	POWER FOR GENERATOR BLOCK HEATER
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 6" ABOVE COUNTER OR 6" ABOVE BACKSPLASH IF APPLICABLE. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL BACKSPLASH DETAILS.
	5-20R	120V 1P 2W	DISHWASHER OUTLET, DUPLEX, MTD 12" AFF UNO. SUPPLY FROM GFCI TYPE C/B.
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 18" AFG UNO; LISTED WEATHER-RESISTANT TYPE; PROVIDE CAST ALUMINUM WEATHERPROOF IN-USE COVER WITH CAST ALUMINUM FD WEATHERPROOF BOX
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 18" AFF UNO
	5-20R	120V 1P 2W	POWER FOR ICE MACHINE; MTD 24" AFF UNO
	5-20R	120V 1P 2W	DUPLEX FOR REFRIGERATOR; MOUNT 48" AFF UNO. SUPPLY FROM GFCI TYPE C/B.
		120V 1P 2W	POWER FOR EMERGENCY RESPONDER COMMUNICATION COVERAGE SYSTEM
		120V 1P 2W	POWER FOR FIRE ALARM CONTROL PANEL
	5-20R	120V 1P 2W	QUAD, MTD 18" AFF UNO
	5-20R	120V 1P 2W	POWER FOR GENERATOR BATTERY CHARGER, BATTERY HEATER, & WINDING HEATER
	5-20R	120V 1P 2W	QUAD, MTD IN FLUSH FLOOR BOX; SEE AUX SYS PLANS FOR SHARED BOX; PROVIDE DIVIDER FOR POWER SEPARATION FROM VOICE/DATA
		120V 1P 2W	EXHAUST FAN; SEE MECHANICAL SCHEDULE. PROVIDE POWER PACK FOR SWITCHING WITH LIGHTING CEILING OCCUPANCY SENSOR.

**MISC. ELECTRICAL SYMBOL LEGEND**

	ENCLOSED CIRCUIT BREAKER, NEMA 3R OUTSIDE. AMPERAGE AS INDICATED OR BASED ON SUPPLY CIRCUIT RATING.
	PANELBOARD, SEE PANEL SCHEDULE
	GROUND ROD, 3/4" X 10' COPPER CLAD, WHERE TWO RODS ARE INDICATED, SPACE A MINIMUM OF 22' APART.
	PUSH BUTTON SWITCH CONTROLLER FOR HANGAR DOOR. MOUNT 42" AFF.
	EQUIPMENT CONNECTION
	HOMERUN DESIGNATION, #12 CONDUCTORS UNLESS NOTED OTHERWISE.
	EQUIPMENT GROUND CONDUCTOR PHASE CONDUCTOR NEUTRAL CONDUCTOR
	LETTER INDICATES ELEVATION OR DETAIL; NUMBER INDICATES PLAN OR SECTION
	SHEET NUMBER WHERE PLAN, SECTION, ELEVATION OR DETAIL IS DRAWN
	2 HOUR RATED PARTITION



**Schedule 1:  
2-Unit Box Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



PROJECT MANAGER | CIVIL ENGINEER  
**TALBERT & BRIGHT, INC.**  
4810 SHELLEY DRIVE  
WILMINGTON, NC 28405  
PHONE: 910-763-5353 | NC LICENSE NO. C-0713  
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STRUCTURAL ENGINEER  
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PHONE: 910-256-9277 | LICENSE NO. E-1479

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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**ELECTRICAL NOTES, AND LEGENDS**

SHEET NUMBER  
**E-001**



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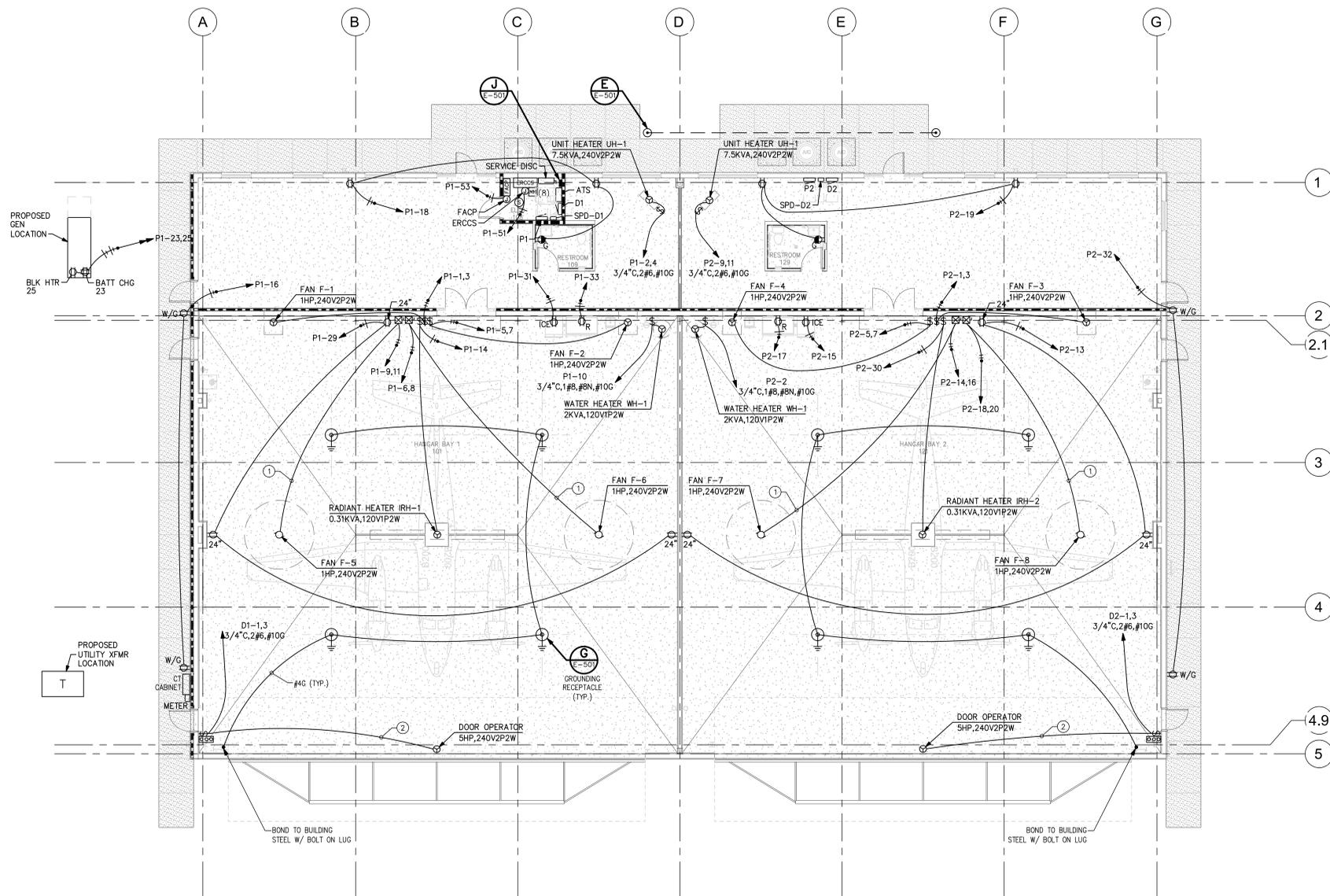
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DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
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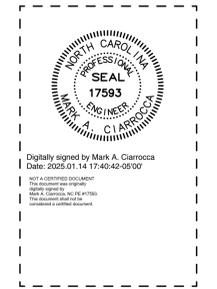
**ELECTRICAL  
BASE BID  
PLAN**

SHEET NUMBER  
**E-101**



**1 ELECTRICAL BASE BID POWER AND AUXILIARY SYSTEMS PLAN**  
SCALE: 1/8" = 1'-0"  
GRAPHIC SCALE: 1" = 1'-0"  
TRUE NORTH

- KEYED NOTES:
- ① COORDINATE FAN CIRCUITRY REQUIREMENTS WITH FAN VENDOR/INSTALLER.
  - ② COORDINATE CONTROL COMPONENTS AND CIRCUITRY REQUIREMENTS WITH DOOR VENDOR/INSTALLER.



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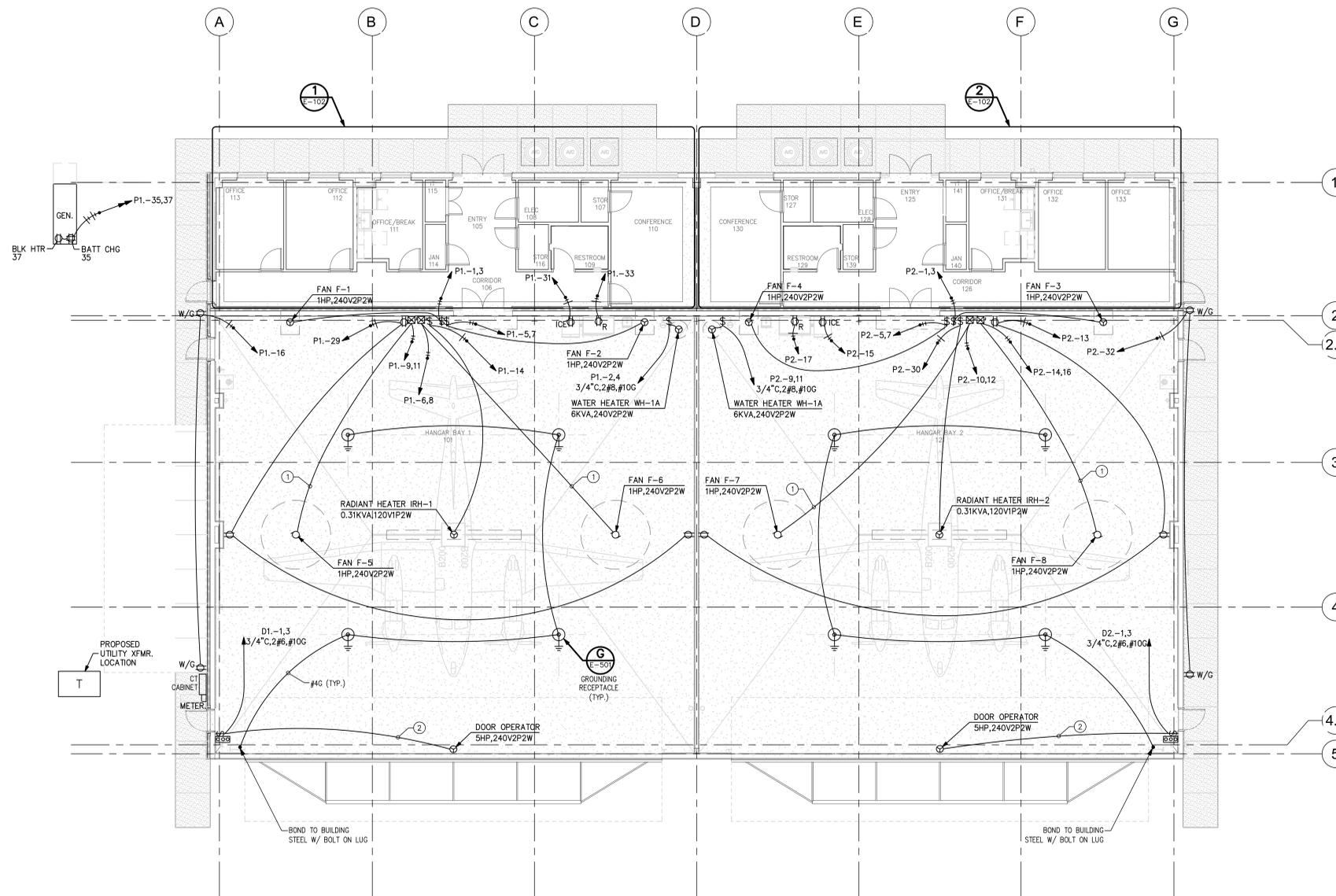
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DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**ELECTRICAL  
POWER PLAN  
ALTERNATE AL-01**

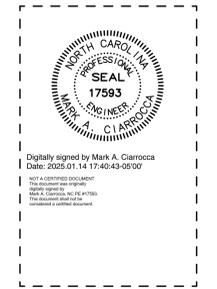
SHEET NUMBER  
**E-102**



**1** ELECTRICAL ALTERNATE ALT-01 POWER PLAN  
SCALE: 1/8" = 1'-0"



- KEYED NOTES:
- COORDINATE FAN CIRCUITRY REQUIREMENTS WITH FAN VENDOR/INSTALLER.
  - COORDINATE CONTROL COMPONENTS AND CIRCUITRY REQUIREMENTS WITH DOOR VENDOR/INSTALLER.



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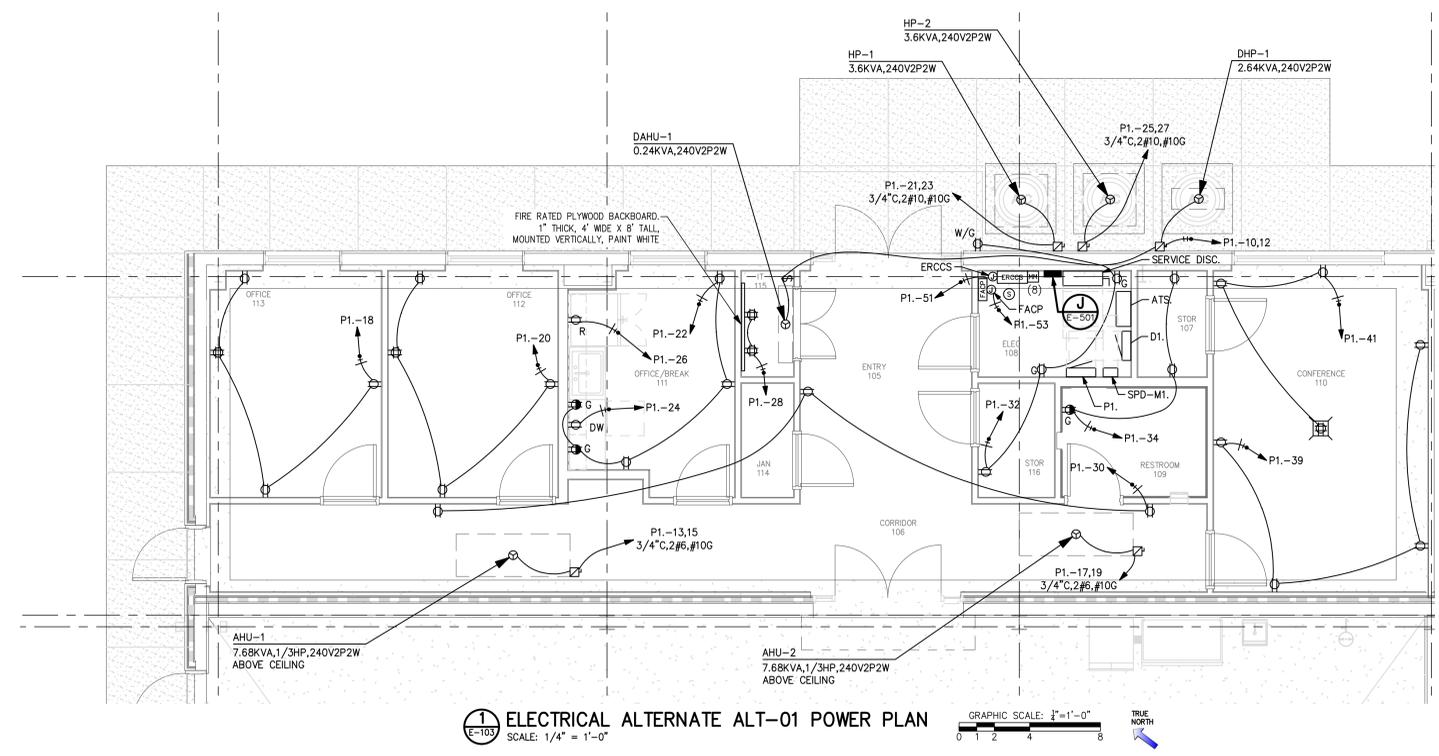
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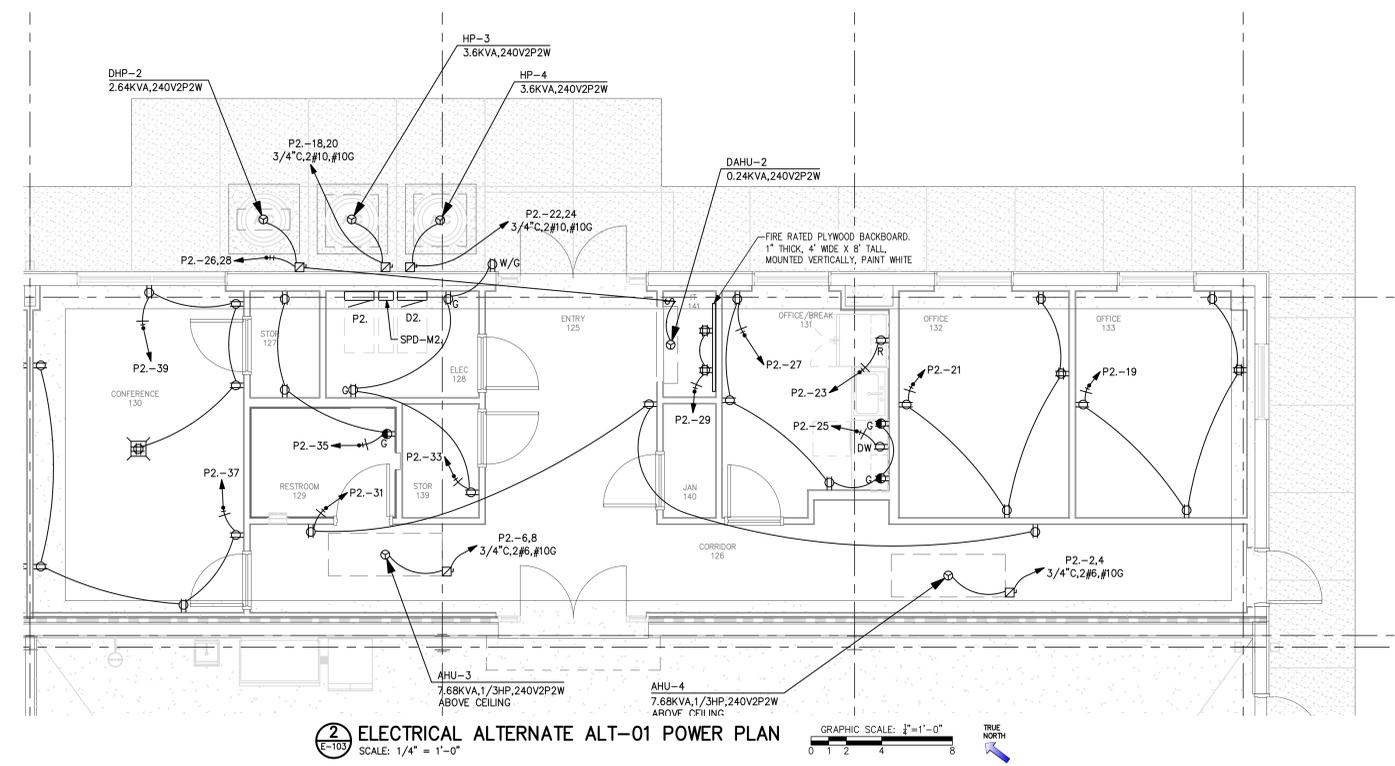
DATE 01/17/2025  
 PROJECT NUMBER 3105-2401  
 SHEET TITLE

**ELECTRICAL  
 ENLARGED  
 POWER PLANS  
 ALTERNATE ALT-01**

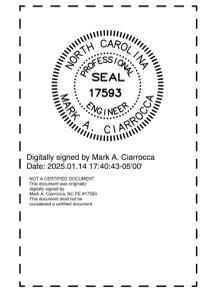
SHEET NUMBER  
**E-103**



**1 ELECTRICAL ALTERNATE ALT-01 POWER PLAN**  
 SCALE: 1/4" = 1'-0"  
 GRAPHIC SCALE: 1" = 1'-0"  
 TRUE NORTH



**2 ELECTRICAL ALTERNATE ALT-01 POWER PLAN**  
 SCALE: 1/4" = 1'-0"  
 GRAPHIC SCALE: 1" = 1'-0"  
 TRUE NORTH



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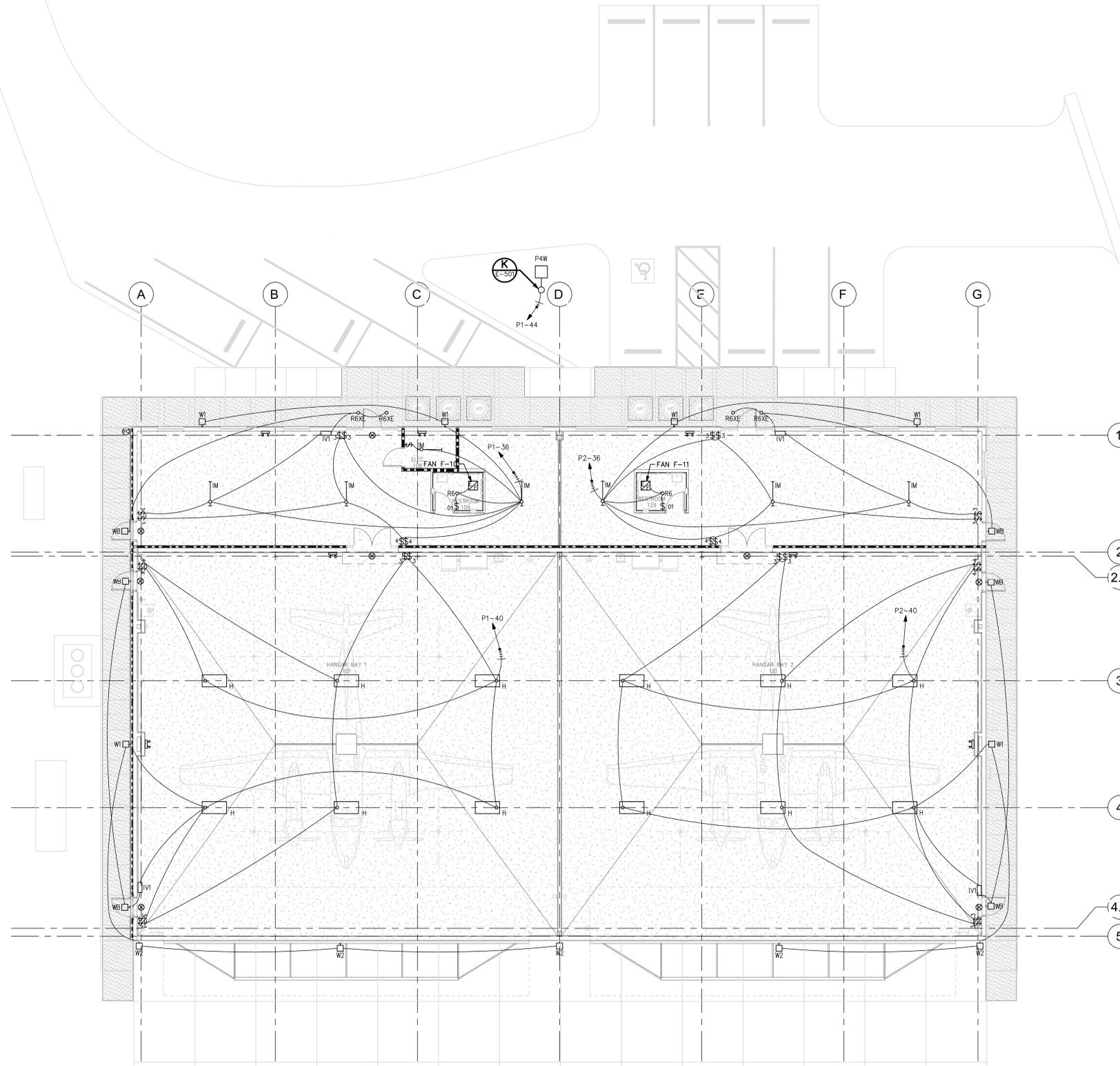
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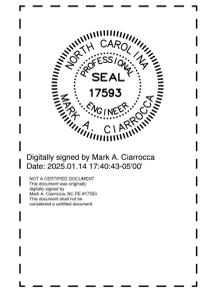
DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**ELECTRICAL  
BASE BID  
LIGHTING  
PLAN**

SHEET NUMBER  
**E-111**



**ELECTRICAL BASE BID LIGHTING PLAN**  
SCALE: 1/8" = 1'-0"  
GRAPHIC SCALE: 1" = 1'-0"  
TRUE NORTH



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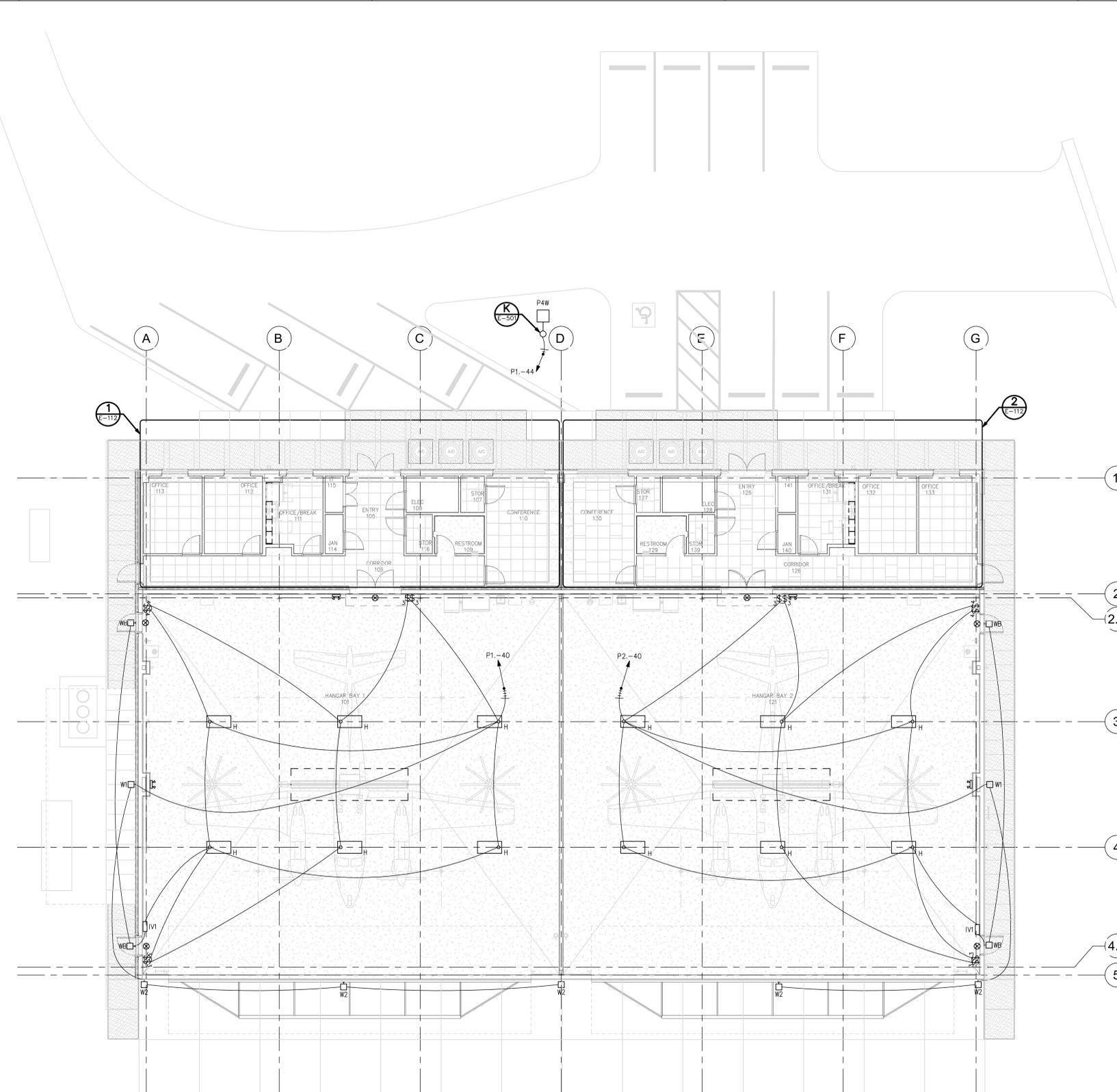
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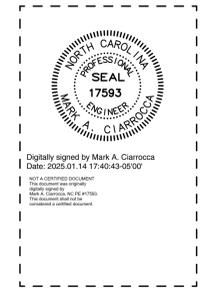
DATE 01/17/2025  
 PROJECT NUMBER 3105-2401  
 SHEET TITLE

**ELECTRICAL  
 ALTERNATE ALT-01  
 LIGHTING PLANS**

SHEET NUMBER  
**E-112**



**1 ELECTRICAL ALTERNATE ALT-01 LIGHTING PLAN**  
 SCALE: 1/8" = 1'-0"  
 GRAPHIC SCALE: 1" = 1'-0"  
 TRUE NORTH



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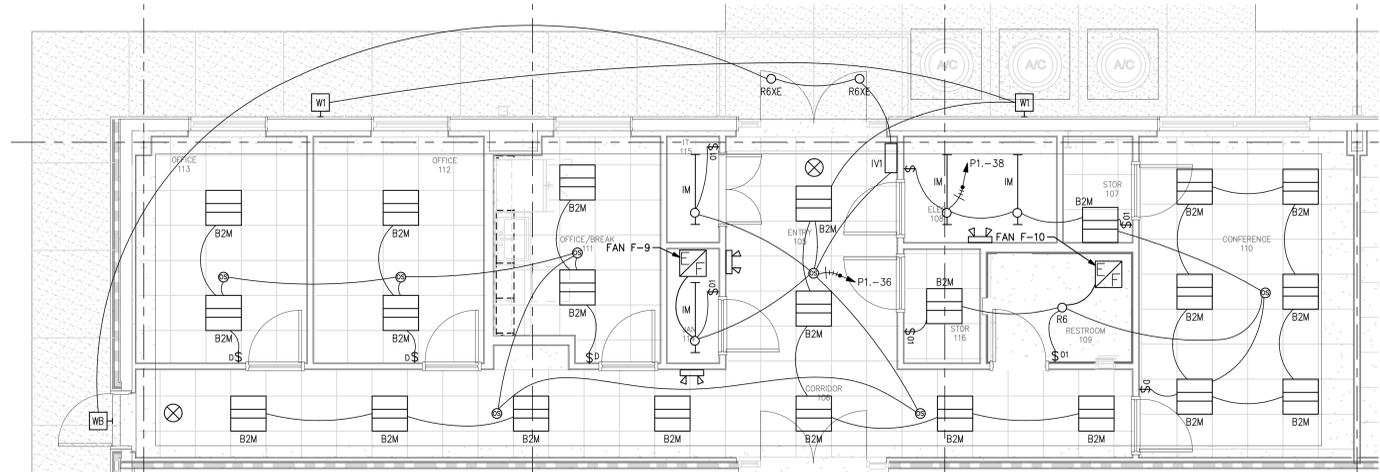
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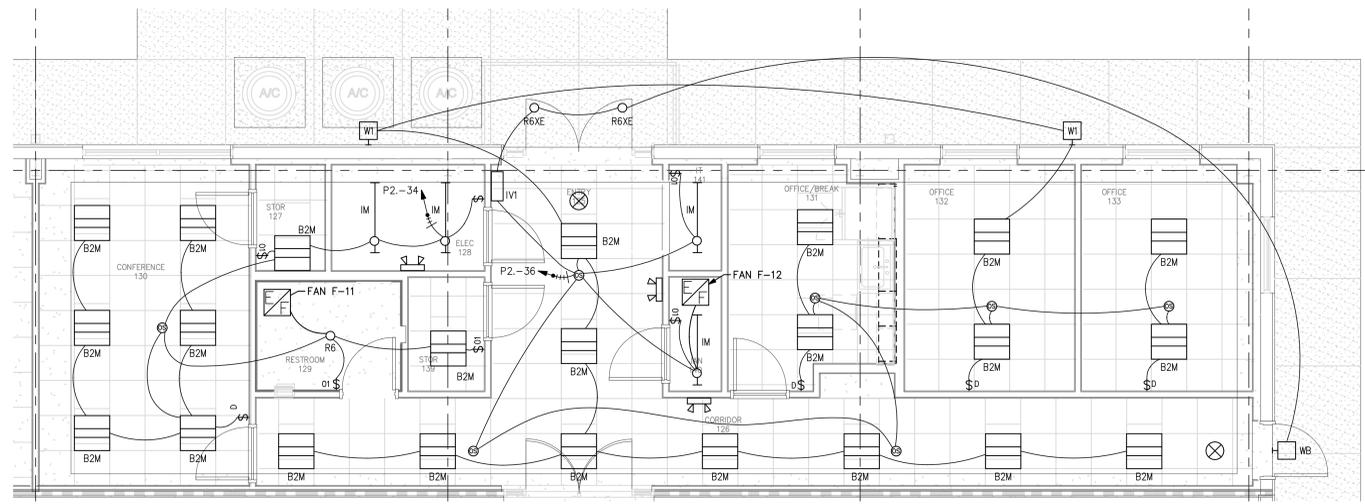
DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**ELECTRICAL  
ENLARGED  
LIGHTING  
PLANS**

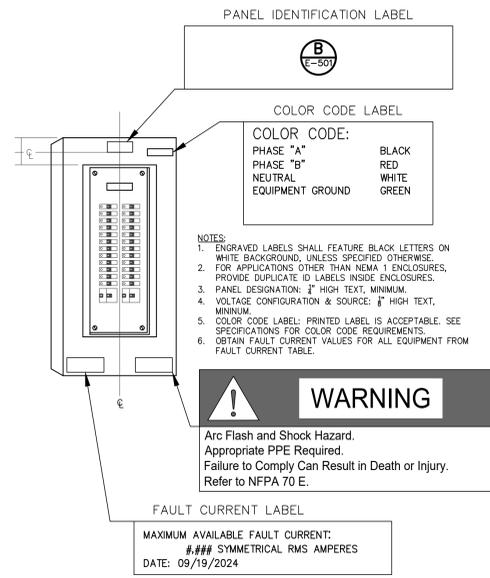
SHEET NUMBER  
**E-113**



**1 ELECTRICAL ALTERNATE ALT-01 LIGHTING ENLARGED PLAN**  
SCALE: 1/4" = 1'-0" GRAPHIC SCALE: 1"=1'-0" TRUE NORTH



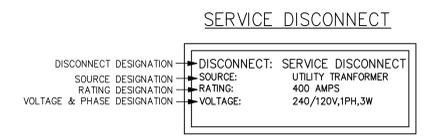
**2 ELECTRICAL ALTERNATE ALT-01 LIGHTING ENLARGED PLAN**  
SCALE: 1/4" = 1'-0" GRAPHIC SCALE: 1"=1'-0" TRUE NORTH



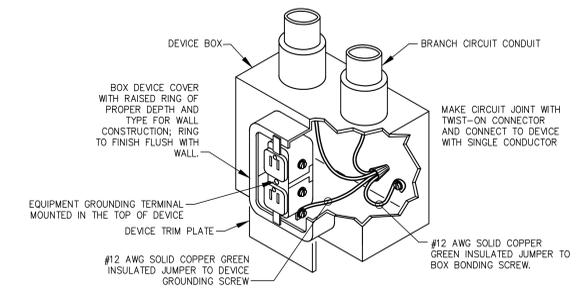
**A** TYPICAL PANELBOARD IDENTIFICATION  
NO SCALE

**FAULT CURRENT SCHEDULE**

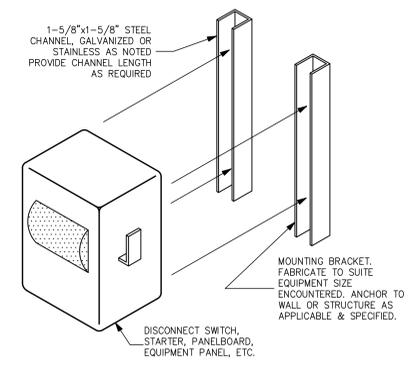
DEVICE	L-L FAULT
SERVICE DISC	11,752
ATS	14,773
D1	14,243
D2	11,021
P2	10,442
SPD-M2	5,501
P1	13,205
SPD-M1	5,976



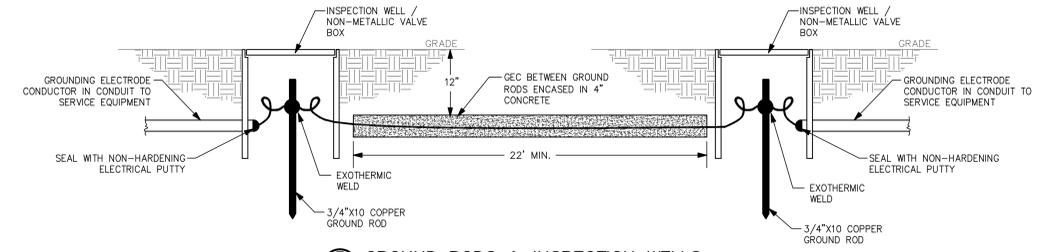
**B** TYPICAL NAMEPLATE DETAILS  
NO SCALE



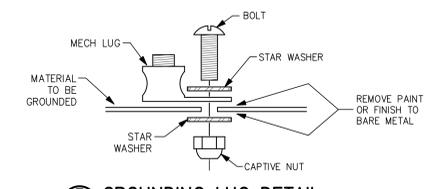
**C** OUTLET GROUNDING DETAIL  
NO SCALE



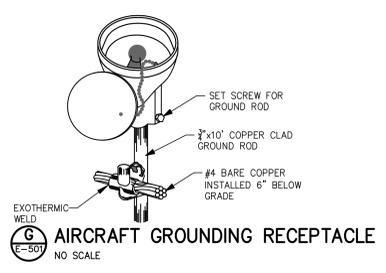
**D** EQUIPMENT MOUNTING DETAIL  
NO SCALE



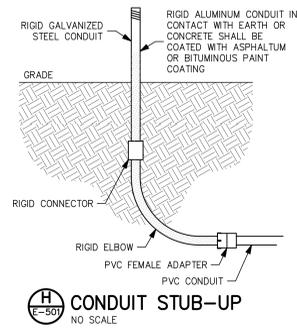
**E** GROUND RODS & INSPECTION WELLS  
NO SCALE



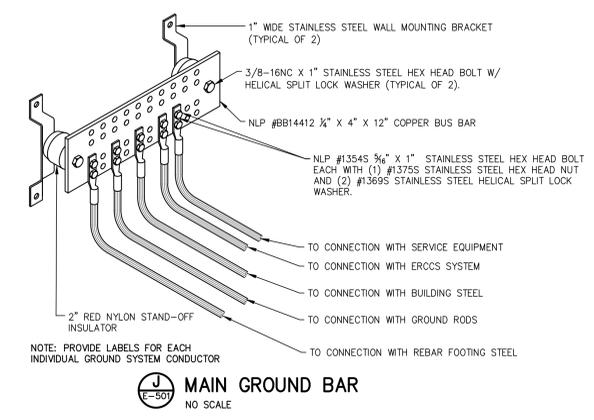
**F** GROUNDING LUG DETAIL  
NO SCALE



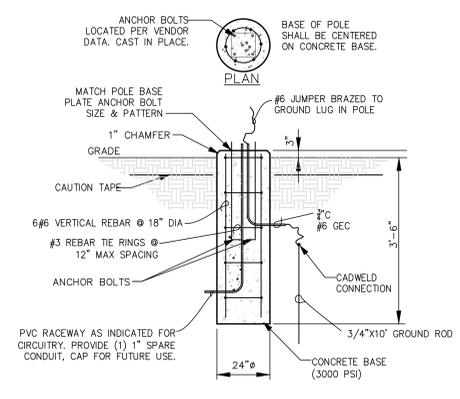
**G** AIRCRAFT GROUNDING RECEPTACLE  
NO SCALE



**H** CONDUIT STUB-UP  
NO SCALE



**J** MAIN GROUND BAR  
NO SCALE



**K** POLE BASE DETAIL, AREA LIGHT  
NO SCALE



**Schedule 1:**  
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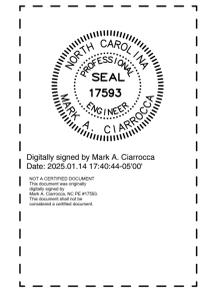
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DATE: 01/17/2025  
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SHEET TITLE:

**ELECTRICAL DETAILS**

SHEET NUMBER  
**E-501**



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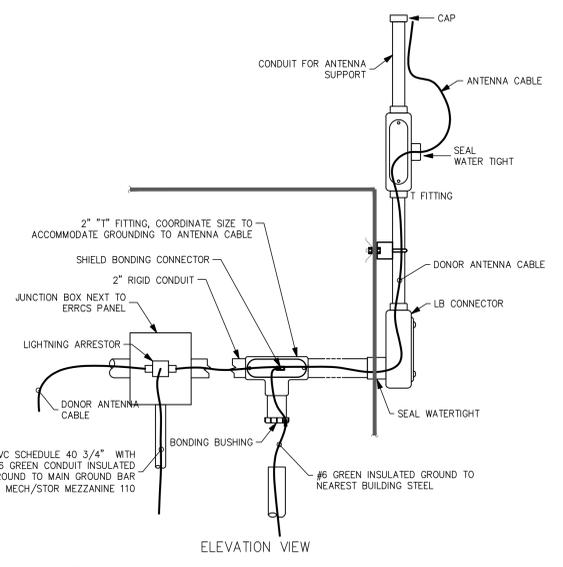
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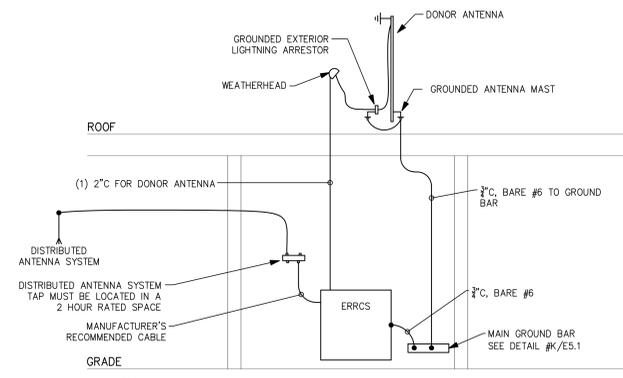
DATE: 01/17/2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**ELECTRICAL  
DETAILS**

SHEET NUMBER  
**E-502**



**A** ERCCS ANTENNA MAST MOUNTING DETAIL  
NO SCALE



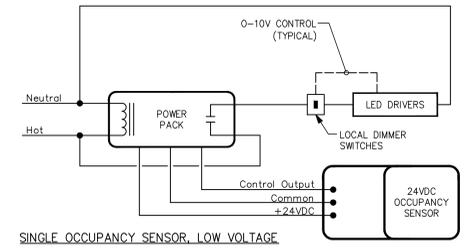
**B** ERCCS COMMUNICATIONS RISER  
NO SCALE

**WARNING**

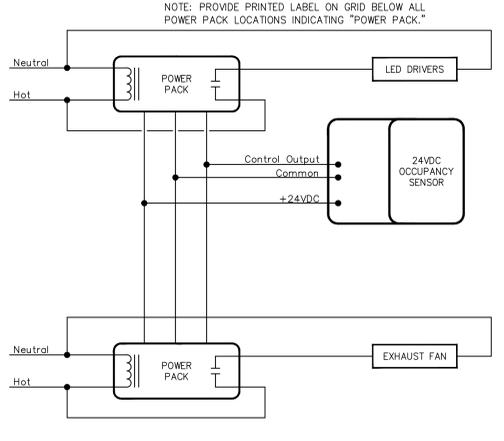
Maximum Available Fault Current:  
11,752 Symmetrical RMS Amperes L-L  
Date: 11/20/2024  
Based on:  
Utility Transformer: 150 kVA (Maximum)  
Utility Transformer: 1.7% Impedance (Minimum)  
Service Feeder: #300kcmil (2 SETS)(Maximum) Copper  
Service Feeder Length: 170' (Minimum)  
Motor Load: 59.4 kVA (Maximum)

NOTE:  
THE CONTRACTOR SHALL OBTAIN INSTALLED SERVICE TRANSFORMER DATA AND AVAILABLE FAULT CURRENT DATA FROM THE UTILITY COMPANY. FORWARD INFORMATION TO THE ENGINEER FOR ASSESSMENT OF REVISIONS TO THE LABEL DATA.

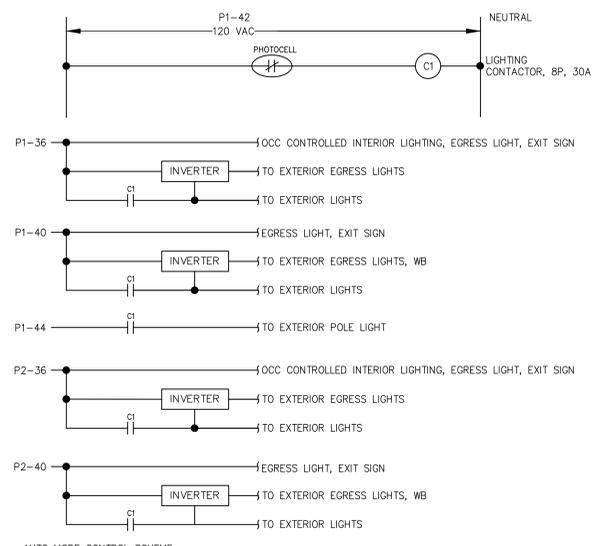
**C** FAULT CURRENT LABEL FOR SERVICE EQUIPMENT  
NO SCALE



**E** OCCUPANCY SENSOR WIRING FOR DIMMING LEVEL LIGHTING CONTROL  
NO SCALE



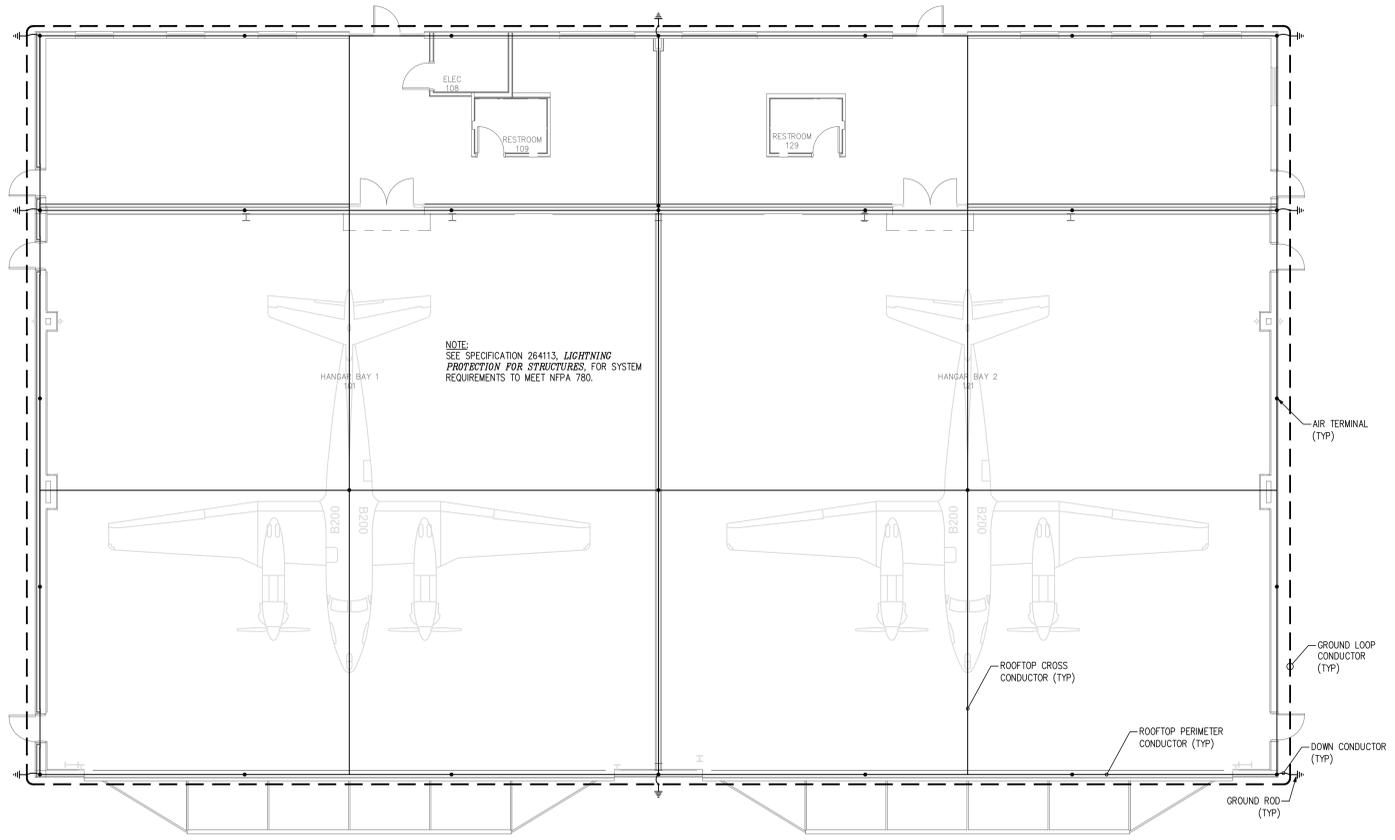
**F** OCCUPANCY SENSOR WIRING FOR LIGHTING AND EXHAUST FAN CONTROL  
NO SCALE



**AUTO MODE CONTROL SCHEME**

- INTERIOR LIGHTS THAT ARE NOT UNDER OCCUPANCY SENSOR CONTROL, IN ELEC 108 OR ELEC 128 SHALL TURN ON/OFF VIA ONE TOGGLE SWITCH OVERRIDE ON EACH HANGAR SIDE.
- EXTERIOR LIGHTS TURN ON/OFF VIA PHOTOCELL.
- EXTERIOR EGRESS LIGHTS SHALL REMAIN ENERGIZED DURING POWER OUTAGES THROUGH THE INVERTERS AFTER DARK. THE SWITCHED INPUT TO THE INVERTER FROM THE PHOTOCELL RELAY PREVENTS OPERATION OF THE INVERTER DURING DAYLIGHT.

**G** LIGHTING CONTROL SCHEMATIC  
NO SCALE



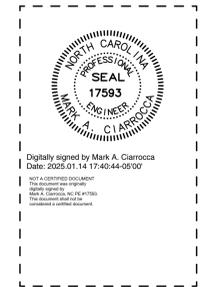
NOTE:  
SEE SPECIFICATION 264113, LIGHTNING PROTECTION FOR STRUCTURES, FOR SYSTEM REQUIREMENTS TO MEET NFPA 780.

**H** LIGHTNING PROTECTION SYSTEM LAYOUT  
SCALE: 1/8" = 1'-0"





**Schedule 1:**  
**2-Unit Box Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



**THE WILSON GROUP**  
- ARCHITECTS -

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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**ELECTRICAL  
PANEL  
SCHEDULES  
BASE BID**

SHEET NUMBER  
**E-601**

D1												
ROOM: ELEC 108			VOLTS: 240/120V 2P 3W			AIC: 18,000						
MOUNTING: SURFACE			BUS AMPS: 600			MAIN BKR: MLO						
FED FROM: ATS			NEUTRAL: 100%			LUGS: STANDARD						
NOTE:												
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		A	B	
			A	B				A	B			
1	60/2	DOOR OPERATOR	3.36		2	70/2	SPD-D1	0				
3				3.36	4					0		
5	-/2	SPACE	0		6	400/2	PANEL D2	14.9		14.7		
7					8							
9	-/2	SPACE	0		10	400/2	PANEL P1	14.2		13.6		
11					12							
13	-/2	SPACE	0		14	-/2	SPACE	0		0		
15					16	-/2	SPACE	0		0		
17	-/2	SPACE	0		18	-/2	SPACE	0		0		
19					20					0		
21	-/2	SPACE	0		22	-/2	SPACE	0		0		
23					24					0		
25	-/2	SPACE	0		26	-/2	SPACE	0		0		
27					28					0		
29	-/1	SPACE	0		30	-/1	SPACE	0		0		
TOTAL CONNECTED KVA BY PHASE									32.4	31.7		
TOTAL CONNECTED AMPS BY PHASE									270	264		
			CONN KVA	CALC KVA				CONN KVA	CALC KVA			
LIGHTING			3.99	4.99	(125%)	RECEPTACLES	2.88	2.88	(50%>10)			
LARGEST MOTOR			6.72	1.68	(25%)	NONCONTINUOUS	8.5	8.5	(100%)			
MOTORS			33.7	33.7	(100%)	HEATING	15	15	(100%)			
TOTAL LOAD									66.8			
BALANCED LOAD									278	A		

D2												
ROOM: SHELL SPACE			VOLTS: 240/120V 2P 3W			AIC: 14,000						
MOUNTING: SURFACE			BUS AMPS: 400			MAIN BKR: MLO						
FED FROM: D1			NEUTRAL: 100%			LUGS: STANDARD						
NOTE:												
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		A	B	
			A	B				A	B			
1	60/2	DOOR OPERATOR	3.36		2	70/2	SPD-D2	0				
3				3.36	4					0		
5	-/2	SPACE	0		6	400/2	PANEL P2	11.5		0		
7					8					11.4		
9	-/2	SPACE	0		10	-/2	SPACE	0		0		
11					12					0		
13	-/2	SPACE	0		14	-/2	SPACE	0		0		
15					16	-/2	SPACE	0		0		
17	-/2	SPACE	0		18	-/2	SPACE	0		0		
19					20					0		
21	-/2	SPACE	0		22	-/2	SPACE	0		0		
23					24					0		
25	-/2	SPACE	0		26	-/2	SPACE	0		0		
27					28					0		
29	-/1	SPACE	0		30	-/1	SPACE	0		0		
TOTAL CONNECTED KVA BY PHASE									14.9	14.7		
TOTAL CONNECTED AMPS BY PHASE									124	123		
			CONN KVA	CALC KVA				CONN KVA	CALC KVA			
LIGHTING			1.8	2.25	(125%)	RECEPTACLES	1.44	1.44	(50%>10)			
LARGEST MOTOR			6.72	1.68	(25%)	NONCONTINUOUS	2	2	(100%)			
MOTORS			16.9	16.9	(100%)	HEATING	7.5	7.5	(100%)			
TOTAL LOAD									31.7			
BALANCED LOAD									132	A		

P1												
ROOM: ELEC 108			VOLTS: 240/120V 2P 3W			AIC: 14,000						
MOUNTING: SURFACE			BUS AMPS: 400			MAIN BKR: MLO						
FED FROM: D1			NEUTRAL: 100%			LUGS: STANDARD						
NOTE:												
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		A	B	
			A	B				A	B			
1	15/2	FAN F-1	0.96		2	50/2	UNIT HEATER UH-1	3.75		3.75		
3				0.96	4					0		
5	15/2	FAN F-2	0.96		6	15/2	FAN F-6	0.96		0.96		
7				0.96	8							
9	15/2	FAN F-5	0.96		10	40/1	WATER HEATER WH-1	2		0		
11				0.96	12	20/1	SPARE			0		
13	20/1	SPARE	0		14	15/1	RADIANT HEATER IRH-1	0.312		0		
15	20/1	SPARE	0		16	20/1	REC-EXT GFCI			0.36		
17	20/1	SPARE	0		18	20/1	REC	0.54		0		
19	20/1	SPARE	0		20	20/1	SPARE			0		
21	20/1	SPARE	0		22	20/1	SPARE	0		0		
23	20/1	REC-BATTERY CHARGER	0		24	20/1	SPARE	0		0		
25	20/1	REC-BLOCK HEATER	1.5		26	20/1	SPARE	0		0		
27	20/1	SPARE	0		28	20/1	SPARE	0		0		
29	20/1	REC	0.54		30	20/1	SPARE	0		0		
31	20/1	ICE MACHINE	1		32	20/1	SPARE	0		0		
33	20/1	(*) REC-REFRIGERATOR	1		34	20/1	SPARE	0		0		
35	20/1	SPARE	0		36	20/1	EGRESS, EXH FAN, EXIT, INVERTER, LTG, LTG-WALLPACK	0		0.439		
37	20/1	SPARE	0		38	20/1	SPARE	0		0		
39	20/1	SPARE	0		40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK	0		1.68		
41	20/1	SPARE	0		42	20/1	LTG CONTROL	0.1		0		
43	20/1	SPARE	0		44	20/1	LTG-SITE			0.124		
45	20/1	SPARE	0		46	20/1	SPARE	0		0		
47	20/1	SPARE	0		48	20/1	SPARE	0		0		
49	20/1	SPARE	0		50	20/1	SPARE	0		0		
51	20/1	(#) EMERGENCY RESPONDER RADIO	0		52	20/1	SPARE	0		0		
53	20/1	(#) FIRE ALARM PANEL	1		54	20/1	SPARE	0		0		
TOTAL CONNECTED KVA BY PHASE									14.2	13.6		
TOTAL CONNECTED AMPS BY PHASE									118	113		
			CONN KVA	CALC KVA				CONN KVA	CALC KVA			
LIGHTING			2.19	2.74	(125%)	RECEPTACLES	1.44	1.44	(50%>10)			
LARGEST MOTOR			2	0.5	(25%)	NONCONTINUOUS	6.5	6.5	(100%)			
MOTORS			10.1	10.1	(100%)	HEATING	7.5	7.5	(100%)			
TOTAL LOAD									28.8			
BALANCED LOAD									120	A		

(\*) INDICATES GFCI C/B  
(#) INDICATES BREAKER WITH BREAKER LOCK

P2											
ROOM: SHELL SPACE			VOLTS: 240/120V 2P 3W			AIC: 10,000					
MOUNTING: SURFACE			BUS AMPS: 400			MAIN BKR: MLO					
FED FROM: D2			NEUTRAL: 100%			LUGS: STANDARD					
NOTE:											
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		A	B
			A	B				A	B		
1	15/2	FAN F-3	0.96		2	40/1	WATER HEATER WH-1	2		0	
3				0.96	4	20/1	SPARE			0	
5	15/2	FAN F-4	0.96		6	20/2	SPARE	0		0	
7				0.96	8						
9	50/2	UNIT HEATER UH-1	3.75		10	20/2	SPARE	0		0	
11				3.75	12					0	
13	20/1	REC	0.54		14	15/2	FAN F-7	0.96		0	
15	20/1	ICE MACHINE	1		16					0.96	
17	20/1	(*) REC-REFRIGERATOR	1		18	15/2	FAN F-8	0.96		0.96	
19	20/1	REC	0		20					0	
21	20/1	SPARE	0		22	20/2	SPARE	0		0	
23	20/1	SPARE	0		24					0	
25	20/1	SPARE	0		26	20/2	SPARE	0		0	
27	20/1	SPARE	0		28					0	
29	20/1	SPARE	0		30	15/1	RADIANT HEATER IRH-2	0.312		0.36	
31	20/1	SPARE	0		32	20/1	REC-EXT GFCI			0	
33	20/1	SPARE	0		34	20/1	SPARE	0		0	
35	20/1	SPARE	0		36	20/1	EGRESS, EXH FAN, INVERTER, LTG, LTG-WALLPACK	0		0.477	
37	20/1	SPARE	0		38	20/1	SPARE	0		0	
39	20/1	SPARE	0		40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK	0		1.47	
41	20/1	SPARE	0		42	20/1	SPARE	0		0	
43	20/1	SPARE	0		44	20/1	SPARE	0		0	
45	20/1	SPARE	0		46	20/1	SPARE	0		0	
47	20/1	SPARE	0		48	20/1	SPARE	0		0	
49	20/1	SPARE	0		50	20/1	SPARE	0		0	
51	20/1	SPARE	0		52	20/1	SPARE	0		0	
53	20/1										



**Schedule 1:  
2-Unit Box Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



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REVISIONS

DATE: 01/17/2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**ELECTRICAL  
PANEL  
SCHEDULES  
ALTERNATE  
ALT-01**  
SHEET NUMBER  
**E-602**

**D1. (ALTERNATE ALT-01)**

ROOM: ELEC 108      VOLTS: 240/120V 2P 3W      AIC: 22,000  
MOUNTING: SURFACE      BUS AMPS: 600      MAIN BKR: MLO  
FED FROM: ATS.      NEUTRAL: 100%      LUGS: STANDARD  
NOTE:

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	60/2	DOOR OPERATOR	3.36		2	30/2	SPD-D1.	0	
3				3.36	4				0
5	-/2	SPACE	0		6	400/2	PANEL D2.	30.3	32.5
7					8				
9	-/2	SPACE	0		10	400/2	PANEL P1.	30.1	
11					12				30.6
13	-/2	SPACE	0		14	-/2	SPACE	0	
15					16	-/2	SPACE	0	0
17	-/2	SPACE	0		18	-/2	SPACE	0	0
19					20				0
21	-/2	SPACE	0		22	-/2	SPACE	0	0
23					24				0
25	-/2	SPACE	0		26	-/2	SPACE	0	0
27					28				0
29	-/1	SPACE	0		30	-/1	SPACE	0	0
TOTAL CONNECTED KVA BY PHASE								63.8	66.4
TOTAL CONNECTED AMPS BY PHASE								532	554
		CONN KVA	CALC KVA	(125%)			CONN KVA	CALC KVA	(50%>10)
LIGHTING		6.07	7.59	(125%)	RECEPTACLES		15.3	12.7	(50%>10)
LARGEST MOTOR		6.72	1.68	(25%)	NONCONTINUOUS		12.5	12.5	(100%)
MOTORS		42	42	(100%)	HEATING		54.3	54.3	(100%)
					COOLING		23.6	0	(0%)
					TOTAL LOAD			131	
					BALANCED LOAD			545 A	

**D2. (ALTERNATE ALT-01)**

ROOM: ELEC 128      VOLTS: 240/120V 2P 3W      AIC: 22,000  
MOUNTING: SURFACE      BUS AMPS: 400      MAIN BKR: MLO  
FED FROM: D1.      NEUTRAL: 100%      LUGS: STANDARD  
NOTE:

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	60/2	DOOR OPERATOR	3.36		2	30/2	SPD-D2.	0	
3				3.36	4				0
5	-/2	SPACE	0		6	400/2	PANEL P2.	27	29.1
7					8				
9	-/2	SPACE	0		10	-/2	SPACE	0	0
11					12				0
13	-/2	SPACE	0		14	-/2	SPACE	0	0
15					16	-/2	SPACE	0	0
17	-/2	SPACE	0		18	-/2	SPACE	0	0
19					20				0
21	-/2	SPACE	0		22	-/2	SPACE	0	0
23					24				0
25	-/2	SPACE	0		26	-/2	SPACE	0	0
27					28				0
29	-/1	SPACE	0		30	-/1	SPACE	0	0
TOTAL CONNECTED KVA BY PHASE								30.3	32.5
TOTAL CONNECTED AMPS BY PHASE								253	271
		CONN KVA	CALC KVA	(125%)			CONN KVA	CALC KVA	(50%>10)
LIGHTING		2.88	3.6	(125%)	RECEPTACLES		7.74	7.74	(50%>10)
LARGEST MOTOR		6.72	1.68	(25%)	NONCONTINUOUS		4	4	(100%)
MOTORS		21	21	(100%)	HEATING		27.2	27.2	(100%)
					COOLING		11.8	0	(0%)
					TOTAL LOAD			65.2	
					BALANCED LOAD			272 A	

**P1. (ALTERNATE ALT-01)**

ROOM: ELEC 108      VOLTS: 240/120V 2P 3W      AIC: 22,000  
MOUNTING: SURFACE      BUS AMPS: 400      MAIN BKR: MLO  
FED FROM: D1.      NEUTRAL: 100%      LUGS: STANDARD  
NOTE:

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	15/2	FAN F-1	0.96		2	35/2	WATER HEATER WH-1A	3	3
3				0.96	4				0.96
5	15/2	FAN F-2	0.96		6	15/2	FAN F-6	0.96	0.96
7				0.96	8				
9	15/2	FAN F-5	0.96		10	15/2	DAHU-1, DHP-1	1.44	1.44
11				0.96	12				
13	45/2	AHU-1	4.27		14	15/1	RADIANT HEATER IRH-1	0.312	1.44
15				4.27	16	20/1	REC-EXT GFCI		0.36
17	45/2	AHU-2	4.27		18	20/1	REC	0.9	0.9
19				4.27	20	20/1	REC		
21	25/2	HP-1	1.8		22	20/1	REC	0.9	0.9
23				1.8	24	20/1	(*) REC-DISHWASHER		1
25	25/2	HP-2	1.8		26	20/1	(*) REC-REFRIGERATOR		1
27				1.8	28	20/1	REC		0.72
29	20/1	REC	0.54		30	20/1	REC	0.54	0.54
31	20/1	ICE MACHINE		1	32	20/1	REC, REC-EXT GFCI, REC-GFCI		0.72
33	20/1	(*) REC-REFRIGERATOR		1	34	20/1	REC	0.54	0.72
35	20/1	REC-BATTERY CHARGER		1	36	20/1	EGRESS, EXH FAN, EXIT, INVERTER, LTG, LTG-WALLPACK		1.08
37	20/1	REC-BLOCK HEATER		1.5	38	20/1	EGRESS, EXH FAN, LTG		0.634
39	20/1	REC		0.72	40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK		1.68
41	20/1	REC, REC-FLOOR		0.72	42	20/1	LTG CONTROL		0.1
43	20/1	SPARE		0	44	20/1	SPARE		0
45	20/1	SPARE		0	46	20/1	SPARE		0
47	20/1	SPARE		0	48	20/1	SPARE		0
49	20/1	SPARE		0	50	20/1	SPARE		0
51	20/1	(#) EMERGENCY RESPONDER RADIO		1	52	20/1	SPARE		0
53	20/1	(#) FIRE ALARM PANEL		1	54	20/1	SPARE		0
TOTAL CONNECTED KVA BY PHASE								30.1	30.6
TOTAL CONNECTED AMPS BY PHASE								251	255
		CONN KVA	CALC KVA	(125%)			CONN KVA	CALC KVA	(50%>10)
LIGHTING		3.19	3.99	(125%)	RECEPTACLES		7.56	7.56	(50%>10)
LARGEST MOTOR		6	1.5	(25%)	NONCONTINUOUS		8.5	8.5	(100%)
MOTORS		14.3	14.3	(100%)	HEATING		27.2	27.2	(100%)
					COOLING		11.8	0	(0%)
					TOTAL LOAD			63	
					BALANCED LOAD			263 A	

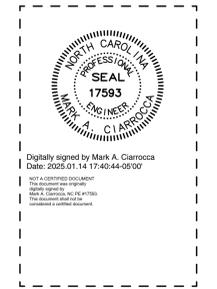
(\*) INDICATES GFCI C/B  
(#) INDICATES BREAKER WITH BREAKER LOCK

**P2. (ALTERNATE ALT-01)**

ROOM: ELEC 128      VOLTS: 240/120V 2P 3W      AIC: 18,000  
MOUNTING: SURFACE      BUS AMPS: 400      MAIN BKR: MLO  
FED FROM: D2.      NEUTRAL: 100%      LUGS: STANDARD  
NOTE:

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	15/2	FAN F-3	0.96		2	45/2	AHU-4	4.27	4.27
3				0.96	4				
5	15/2	FAN F-4	0.96		6	45/2	AHU-3	4.27	4.27
7				0.96	8				
9	35/2	WATER HEATER WH-1A	3		10	15/2	FAN F-7	0.96	0.96
11				3	12				
13	20/1	REC	0.54		14	15/2	FAN F-8	0.96	0.96
15	20/1	ICE MACHINE		1	16				0.96
17	20/1	(*) REC-REFRIGERATOR		1	18	25/2	HP-3		1.8
19	20/1	REC		0.9	20				
21	20/1	REC		0.9	22	25/2	HP-4		1.8
23	20/1	(*) REC-REFRIGERATOR		1	24				1.8
25	20/1	(*) REC-DISHWASHER		1	26	15/2	DAHU-2, DHP-2		1.44
27	20/1	REC		0.9	28				1.44
29	20/1	REC		0.72	30	15/1	RADIANT HEATER IRH-2		0.312
31	20/1	REC		0.54	32	20/1	REC-EXT GFCI		0.36
33	20/1	REC, REC-EXT GFCI, REC-GFCI		0.72	34	20/1	EGRESS, EXH FAN, LTG		0.634
35	20/1	REC		0.54	36	20/1	EGRESS, EXH FAN, EXIT, INVERTER, LTG, LTG-WALLPACK		1.08
37	20/1	REC		0.72	38	20/1	SPARE		0
39	20/1	REC, REC-FLOOR		0.9	40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK		1.47
41	20/1	SPARE		0	42	20/1	SPARE		0
43	20/1	SPARE		0	44	20/1	SPARE		0
45	20/1	SPARE		0	46	20/1	SPARE		0
47	20/1	SPARE		0	48	20/1	SPARE		0
49	20/1	SPARE		0	50	20/1	SPARE		0
51	20/1	SPARE		0	52	20/1	SPARE		0
53	20/1	SPARE		0	54	20/1	SPARE		0
TOTAL CONNECTED KVA BY PHASE								27	29.1
TOTAL CONNECTED AMPS BY PHASE								225	243
		CONN KVA	CALC KVA	(125%)			CONN KVA	CALC KVA	(50%>10)
LIGHTING		2.88	3.6	(125%)	RECEPTACLES		7.74	7.74	(50%>10)
LARGEST MOTOR		6	1.5	(25%)	NONCONTINUOUS		4	4	(100%)
MOTORS		14.3	14.3	(100%)	HEATING		27.2	27.2	(100%)
					COOLING		11.8	0	(0%)
					TOTAL LOAD			58.3	
					BALANCED LOAD			243 A	

(\*) INDICATES GFCI C/B



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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

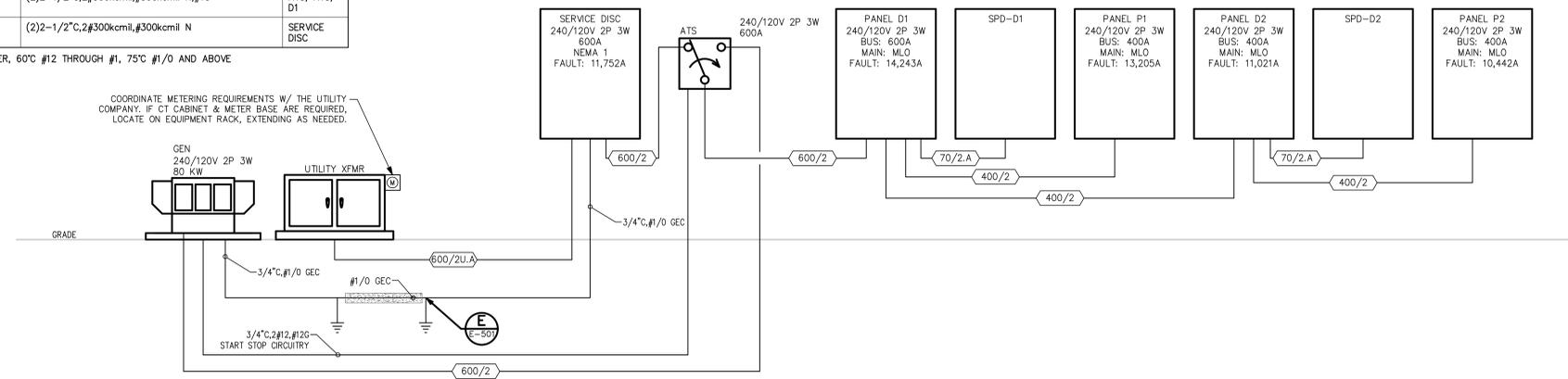
**ELECTRICAL  
RISERS**

SHEET NUMBER  
**E-701**

**FEEDER SCHEDULE**

ID	FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
70/2A	70	1" C, 2#4, #4N, #4G	SPD-D1, SPD-D2
400/2	400	3" C, 2#500kcmil, #500kcmil N, #3G	D2, P1, P2
600/2	600	(2) 2-1/2" C, 2#300kcmil, #300kcmil N, #1G	ATS, ATS, D1
600/2U.A	600	(2) 2-1/2" C, 2#300kcmil, #300kcmil N	SERVICE DISC

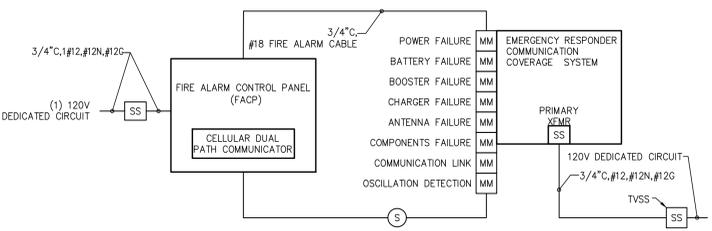
SIZING METHOD: COPPER, 60°C #12 THROUGH #1, 75°C #1/0 AND ABOVE



**A** ELECTRICAL POWER RISER  
NO SCALE

**FIRE ALARM OPERATION MATRIX**

	ALARM						TROUBLE	SUPERVISORY	CONTROL
	A	B	C	D	E	F			
ACTIVATE COMMON ALARM SIGNAL INDICATOR AT FACP									
ACTIVATE AUDIBLE ALARM SIGNAL AT FACP									
ACTIVATE COMMON TROUBLE SIGNAL INDICATOR AT FACP									
ACTIVATE AUDIBLE TROUBLE SIGNAL AT FACP									
ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR AT FACP									
ACTIVATE AUDIBLE SUPERVISORY SIGNAL AT FACP									
SHUTDOWN AIR HANDLERS									
SYSTEM INPUTS									
1 SMOKE DETECTOR	X	X						X	1
2 FIRE ALARM SYSTEM LOW BATTERY			X	X					2
3 OPEN CIRCUIT			X	X					3
4 NOTIFICATION CIRCUIT FAULT			X	X					4
5 GROUND FAULT			X	X					5
6 FIRE ALARM SYSTEM POWER FAILURE (60 MINUTES)			X	X					6
7 AHU SHUTDOWN RESET SWITCH								X	7
8 ERCS ANTENNA MALFUNCTION					X	X			8
9 ERCS BDA FAILURE					X	X			9
10 ERCS LOW BATTERY					X	X			10
11 ERCS AC POWER LOSS					X	X			11
12 ERCS SYSTEM COMPONENTS FAILURE					X	X			12
13 ERCS BATTERY CHARGER FAILURE					X	X			13
14 ERCS COMMUNICATION LINK TO FACP					X	X			14
15 ERCS OSCILLATION DETECTION					X	X			15



**B** ELECTRICAL FIRE ALARM RISER  
NO SCALE