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COVER SHEET & INDEX TO DRAWINGS

BUILDING CODE SUMMARY

BUILDING LIFE SAFETY - EGRESS PLAN

BUILDING FLOOR PLAN

FOUNDATION AND FRAMING PLAN

BUILDING ELEVATIONS & SECTIONS

MECHANICAL & ELECTRICAL PLAN

PLUMBING - WASTE & WATER PLAN

PROJECT:

AN ADDITION FOR HARNETT REGIONAL AIRPORT HANGAR

497 AIRPORT ROAD ERWIN, NORTH CAROLINA 28339

PROJECT TEAM:

BUILDING DEPARTMENT:

HARNETT COUNTY INSPECTION DEPARTMENT 420 MCKINNEY PARKWAY LILLINGTON, NC 27546 910-893-2793

PROJECT DESIGNER:

JENKINS CONSULTING ENGINEERS, P.A. OFFICE in EUREKA SPRINGS, NC KELLY J. DODSON, PE DOUGLAS L. JENKINS, PE 1606 MCARTHUR ROAD FAYETTEVILLE, NC 28311-1002 910-822-1724

CODE REVIEW:

APPLICABLE CODES INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

2018 NC EXISTING BUILDING CODE BUILDING

2018 NC BUILDING CODE

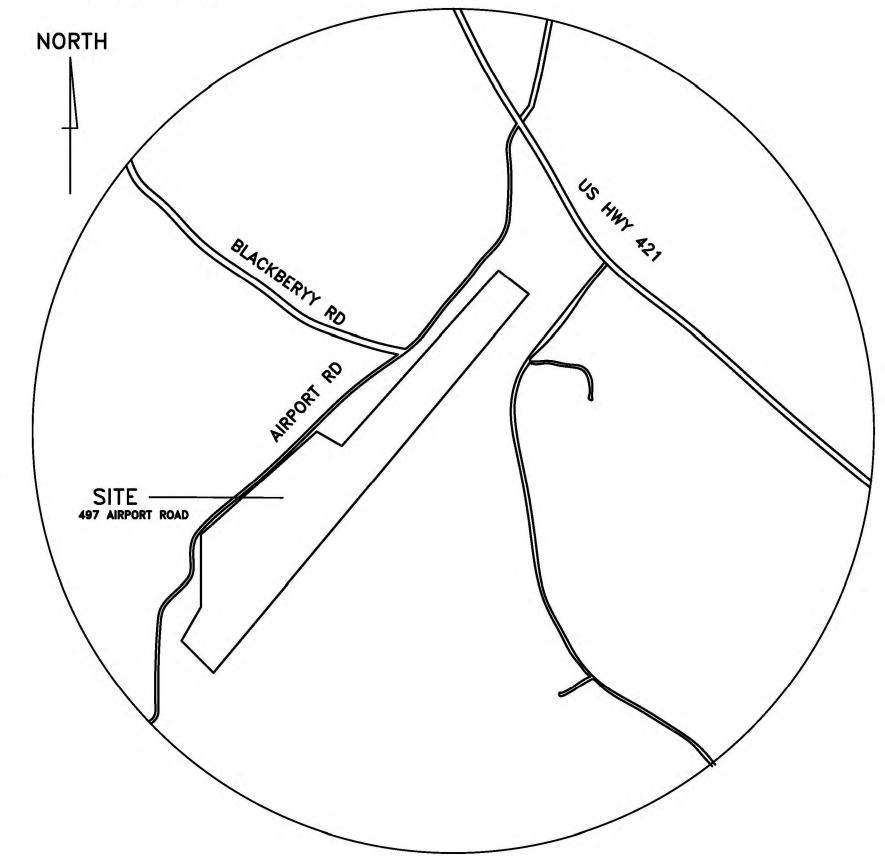
FIRE PREVENTION 2018 NC FIRE CODE

ENERGY 2018 NC ENERGY CONSERVATION CODE

PLUMBING 2018 NC PLUMBING CODE MECHANICAL 2018 NC MECHANICAL CODE

ELECTRICAL 2020 NATIONAL ELECTRICAL CODE (NFPA-70)

VICINITY PLAN NOT TO SCALE



BUILDING DATA: THE PROJECT SCOPE IS TO CONSTRUCT A LOUNGE ADDITION TO AN EXISTING HANGAR BUILDING

19 A	1 S	AROLINA SSIONE EAL 1009 NEEP SS	025
ESIGNED / CHECKED BY: KJD	RAWN BY:	ROJECT #: 2025-06-04	ATE: 19 AUGUST 2025

2018 NORTH CAROLINA BUILDING CODE: ☐ Shell / Core ☐ First Time Interior Completions □ New Building ✓ Addition ☐ Phased Construction — Shell Core 2018 NORTH CAROLINA EXISTING BUILDING CODE: ☐ Historic Property □ Prescriptive Alteration Level I Alteration Level II □ Change of Use (check all that apply) ☐ Chapter 14 Alteration Level III CURRENT USE (S) (Ch. 3): AIRCRAFT HANGAR (GROUP III - NFPA 409) CONSTRUCTED: (date) ______2024 PROPOSED USE (S) (Ch. 3): AIRCRAFT HANGAR (GROUP III - NFPA 409) RENOVATED: (date) N/A OCCUPANCY RISK CATEGORY (Table 1604.5): Current: _____N/A___

BASIC BUILDING DATA □ V–A Construction Type: ☑ II–B □ III−B □ I−B (check all that apply) Partial ☐ NFPA 13 ■ NFPA 13R ■ NFPA 13D Sprinklers: Mo □ || □ ||| □ Wet □ Dry ✓ No ☐ Yes (APPENDIX D) Flood Hazard Area: 🗹 No 🗆 Yes Primary Fire District: ✓ No ☐ Yes Special Inspections Required:

GROSS BUILDING AREA TABLE

FLOOR	EXISTING (sq ft)	NEW (sq ft)	SUBTOTAL
GROUND LEVEL	9,000	192	9,192
TOTAL SPACE AREA	9,000	192	9,192

				ALLOWABLE	AREA			
Primary Occupancy Classification(s):								
Assembly		A-1		□ A-2		□ A-3	□ A-4	□ A-5
Business								
Educational								
Factory		F-1	Moderate	□ F-2 L	OW			
Hazardous		H-1	Detonate	□ H-2 [)eflagrate	☐ H-3 Combust	☐ H-4 Health	☐ H-5 HPM
Institutional		I - 1		□ I-2		□ I-3	□ I-4	
I-1 Condition		1	□ 2					
I-2 Condition		1	□ 2					
I-3 Condition		1	□ 2	□ 3	□ 4	□ 5		
Mercantile								
Residential		R-1		□ R-2		□ R-3	□ R-4	
Storage		S-1	Moderate		□ S-2 L	_OW	☐ High-piled	
		Parki	ng Garage	Open	Enclos	ed	Repair Garage	
Utility and Miscellaneous								
Accessory Occupancy Classification(s)	:			NONE				

Incidental Uses (Table 509): This separation is not exempt as a Non-separated Use (see exceptions).

Special Uses (Chapter 4): □ 402 □ 403 □ 404 □ 405 □ 406 □ 407 □ 408 □ 409 □ 410 □ 411 ■ 412 □ 413 □ 414 □ 415 □ 416 □ 417 □ 418 □ 419 □ 420 □ 421 □ 422 □ 423 □ 424 □ 425 □ 426 □ 427 □ 428 □ 429 □ 430

Special Provisions (Chapter 5):

□ 510.2 □ 510.3 □ 510.4 □ 510.5 □ 510.6 □ 510.7 □ 510.8 □ 510.9 □ No □ Yes Separation: <u>0 Hr.</u> Exception:

Allowable Area of Occupancy A

☐ Non-separated Use (508.3) (508.3.1) ☐ 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 of each use shall not exceed 1. Separated Use Formula 508.4.2: Actual Area of Occupancy A Allowable Area of Occupancy B ≤ 1

		N/A N/A	+ - N/A N/A	= -	_≤ 1.00
STORY NUMBER	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 4 AREA	(C) AREÀ FOR FRONTAGE INCREASE ^{1, 5}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2, 3}

14613

1 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 = ____120___

FRONTAGE INCREASE WORKSHEET for CALCULATIONS:

	THOUSE HOLD BE WORKED TO GEODETHOUS.											
EXTERIOR WALL	(F) OPEN LENGTH (feet)	(P) TOTAL LENGTH (feet)	(W) (weighted average) WIDTH OF PUBLIC WAY OR OPEN SPACE (feet)	(%) FROM CALC. ABOVE	(B) FROM TABLE ABOVE	AREA INCREASE FOR COLUMN (C) ABOVE (% * TABLE AREA)						
North	75	390	30									
South	75	390	30									
East	120	390	30									
West	120	390	26									
TOTAL	75	390	240	71	8500	(71*8500 =6113)						
EXAMPLE	75	100	25	42	23,500	(.42*23,500 = 9,870)						

2 Unlimited area applicable under conditions of Sections 507

3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (Section 506.2).

4 The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1

⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

BUILDING CODE SUMMARY (continued)

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	65	31' - 0"	N/A
Building Height in Stories (Table 504.4)	3	1	N/A

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING ** (REQ'D II-B	PROVIDED (w/ * REDUCTION	Detail # And Sheet #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET FOR RA JOINT
Structural Frame, including columns, girders, trusses	N/A	0	0	N/A	N/A	N/A	N//
Bearing Walls Exterior	N/A	0	0	N/A	N/A	N/A	N//
North	N/A	0	0	N/A	N/A	N/A	N/A
East	N/A	0	0	N/A	N/A	N/A	N/A
West	N/A	0	0	N/A	N/A	N/A	N/A
South	N/A	0	0	N/A	N/A	N/A	N/A
Interior	N/A	0	0	N/A	N/A	N/A	N/A
Nonbearing walls and partitions Exterior walls	N/A	0	0	N/A	N/A	N/A	N/A
North	N/A	0	0	N/A	N/A	N/A	N/A
East	N/A	0	0	N/A	N/A	N/A	N/A
West	N/A	0	0	N/A	N/A	N/A	N/A
South	N/A	0	0	N/A	N/A	N/A	N/A
Interior Non-Bearing Walls	N/A	0	0	N/A	N/A	N/A	N/A
Floor construction including supporting beams and joi	sts	0	0	N/A	N/A	N/A	N/A
Floor Ceiling Assembly		0	0	N/A	N/A	N/A	N/A
Columns Supporting Floors		0	0	N/A	N/A	N/A	N/A
Roof construction including supporting beams and joi	sts	0	0	N/A	N/A	N/A	N/A
Roof Ceiling Assembly		0	0	N/A	N/A	N/A	N/A
Columns Supporting Roof		0	0	N/A	N/A	N/A	N/A
Shaft Enclosures — Exit		0	0	N/A	N/A	N/A	N/A
Shaft Enclosures — Other		0	0	N/A	N/A	N/A	N/A
Corridor Separation		0	0	N/A	N/A	N/A	N/A
Occupancy / Fire Barrier Separation		0	0	N/A	N/A	P1	N/A
Party/Fire Wall Separation		0	0	N/A	N/A	N/A	N/A
Smoke Barrier Separation		0	0		<u> </u>		
Smoke Partition		0	0	N/A	N/A	N/A	N/A
OWNER/Dwelling Unit/ Sleeping Unit Separation		0	0	N/A	N/A	N/A	N/A
Incidental Use Separation		0	0	N/A	N/A	N/A	N/A

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

EXTERIOR WALL	FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINE	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
North	N/A	N/A	N/A	N/A
South	N/A	N/A	N/A	N/A
East	N/A	N/A	N/A	N/A
West	N/A	N/A	N/A	N/A

	LIL OVELLI	WEITI O		
Emergency Lighting:	Yes	□ No		
Exit Signs:	¥Yes	□ No		
Fire Alarm:	Yes	■ No		
Smoke Detection Systems:	☐ Yes	■ No	Partial 🛚	Duct Detectors
Carbon Monoxide Detection:	Yes	■ No		
Life Safety Systems Generator:	Yes	✓ No		

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: LS

☐ Fire and/or smoke rated wall locations (Chapter 7)

☐ 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 Use 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 & 1006.3.2(1)]

☐ Dead end lengths (1020.4) Clear exit widths for each exit door

Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)

☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation

☐ 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 (1030) ☐ The square footage of each fire area (903)

☐ The square footage of each smoke compartment for Occupancy Classification I—II (407.5) ☐ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107)

	Control Contro										
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				
NONE REQUIRED											

	AC	CESSIBLE PARKIN	IG (SECTION 1106)			
107.00	TOTAL # OF PARKING SP	ACES	# OF ACCESSIBLE	TOTAL		
LOT OR PARKING AREA	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES 132" ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED	
EXISTING TO REMAIN						
TOTAL						

BUILDING CODE SUMMARY (continued)

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE	W	ATER CLOS	ETS	URINALS	LAVATORIES		SHOWERS/	DRINKING FOUNTAINS		SERVICE	
03L	MALE	FEMALE	UNISEX	UNINALS	MALE	FEMALE	UNISEX	TUBS	REGULAR	ACCESSIBLE	SINK
UTILITY (U)	0	0			0	0					0
PROVIDED (TOTAL)	0	0	1		0	0	1				0

***NOTE: THIS BUSINESS HAS OCCUPANT LOADS LESS THAN 25. NO HI-LOW DRINKING FOUNTAIN IS REQUIRED.

SPECIAL APPROVALS:

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

ENERGY SUMMARY

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy 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

Existing building envelope complies with code:

Exempt Building: Provide code or statutory reference:

Climate Zone:

3A

4A

5A HARNETT COUNTY

Energy Code: Performance Prescriptive

Value of total assembly: -ASHRAE 90.1: ☐ Performance ☐ Prescriptive Other:

Performance (specify source)

THERMAL ENVELOPE: (Prescriptive method only)

Roof/ceiling Assembly (each assembly) METAL ROOF PANEL + METAL FRAME CEILING Description of assembly: U-Value of total assembly: R- Value of insulation: R-38 (FOOTNOTE "e") Skylights in each assembly:

U-Value of skylight: Total square footage of skylights in each assembly: Exterior Walls (each assembly)

METAL WALL PANEL + 1.5" XPS INSULATION + SHEATHING + METAL STUD Description of assembly: U-Value of total assembly: R- Value of insulation: R-19 + R-7.5Openings (windows or doors with glazing)

U- Value of assembly: 0.31 (0.32 MAX) Solar heat gain coefficient: 0.23 (0.25 MAX) Projection factor: Door R-Values:

Walls below grade (each assembly) Description of assembly: U-Value of total assembly:

R— Value of insulation: Description of assembly: U-Value of total assembly:

R— Value of insulation: Description of assembly: 4" CONCRETE SLAB U-Value of total assembly: R-Value of insulation: Horizontal/vertical requirement:

MECHANICAL SUMMARY (SEE DRAWING SHEET ___N/A_) ELECTRICAL SUMMARY (SEE DRAWING SHEET __N/A__)

slab heated:

HARNETT COUNTY BUILDING CODE SUMMARY for:

LOUNGE ADDITION TO HARNETT REGIONAL AIRPORT HANGAR

497 AIRPORT RD ERWIN, NORTH CAROLINA, 28339





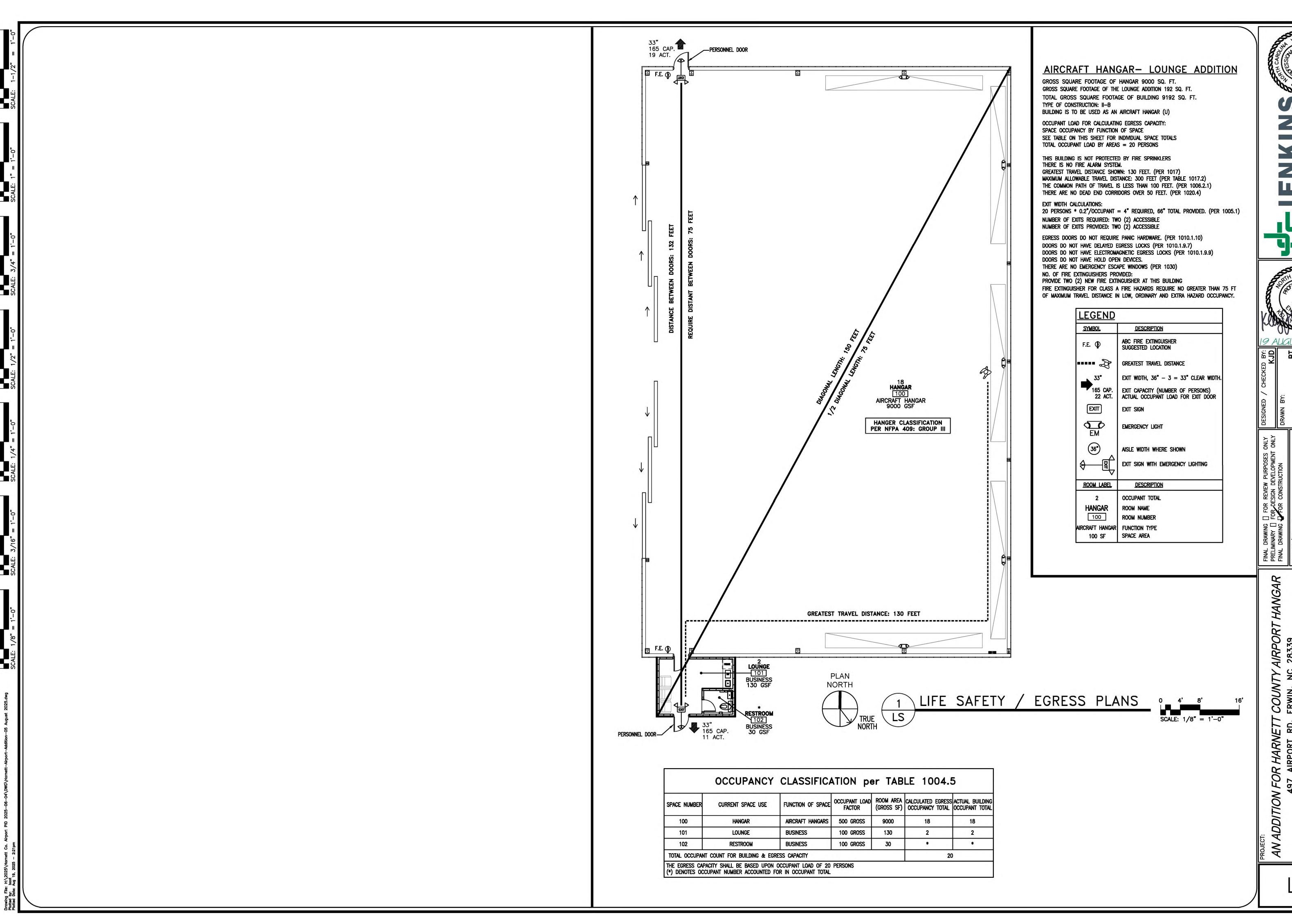


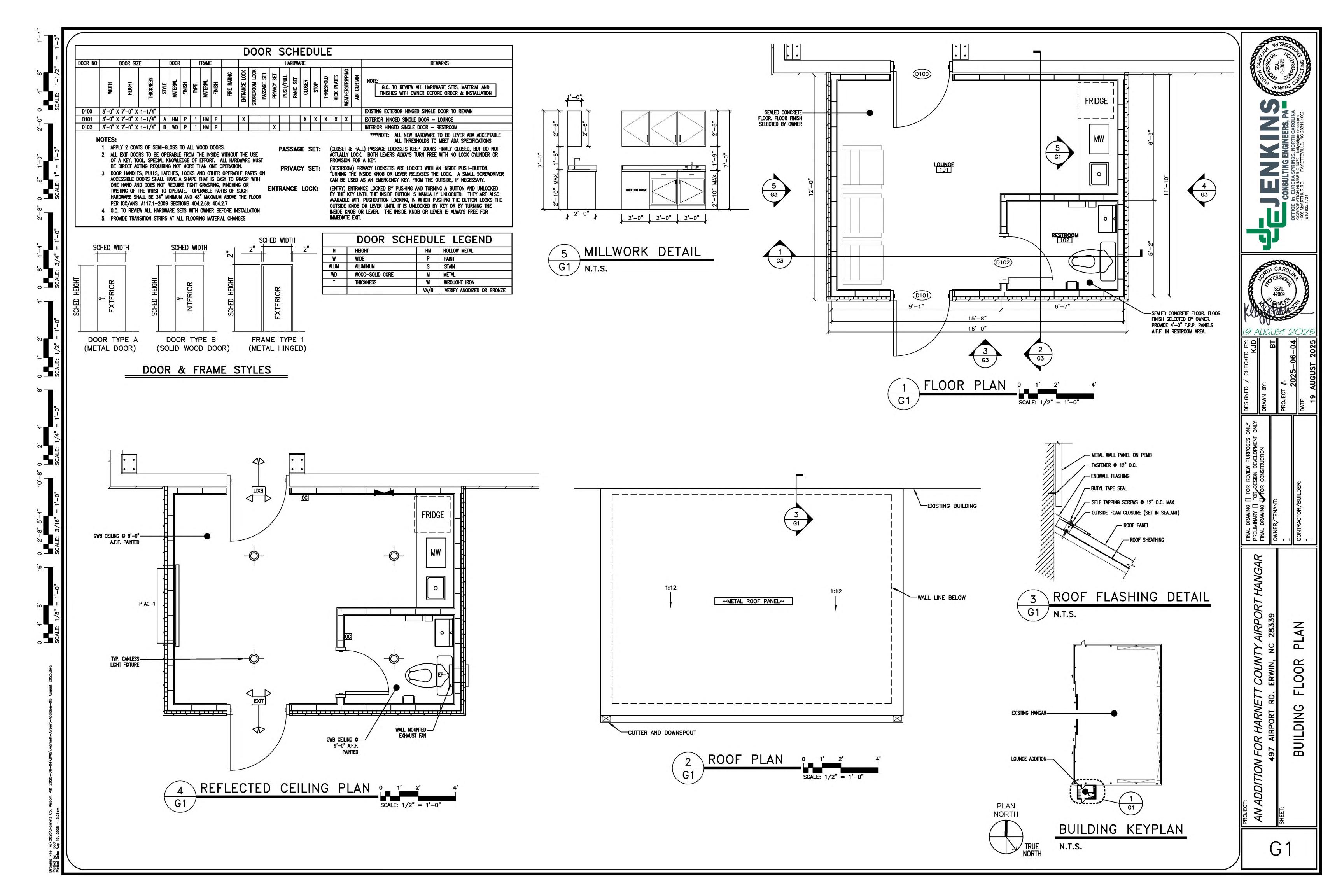
HARNETT COUNTY AIRPORT HANGAR RPORT RD. ERWIN, NC 28339

 $\sum_{i=1}^{\infty}$

FOR 97 All ' ADDITION ,

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ALL REINFORCING STEEL SHALL BE DEFORMED STEEL BARS CONFORMING TO A.S.T.M. ALL REINFORCING STEEL SHALL BE MANUFACTURED, DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH A.C.I. 315R, 318R AND A.C.I. SP 66.

WELDED WIRE FABRIC SHALL CONFORM TO A.S.T.M. A185, IN AS LONG A LENGTH AS IS PRACTICAL. WELDED WIRE FABRIC SHALL BE LAPPED AT LEAST ONE GRID WIDTH PLUS 2".

REINFORCEMENT SHALL BE BENT COLD AND SHALL NOT BE WELDED.

REINFORCEMENT IN CONCRETE AND MASONRY SHALL HAVE LAP LENGTHS AS FOLLOWS, UNLESS OTHERWISE

SPECIFIED ON DRAWINGS: BAR SIZE: IN CONCRETE: IN MASONRY: 2'-6"

REINFORCEMENT SHALL BE ACCURATELY PLACED AND SUPPORTED BY CONCRETE, METAL, OR OTHER APPROVED CHAIRS, SPACERS OR TIES, AND SECURED AGAINST DISPLACEMENT DURING CONCRETE OR GROUT PLACEMENT.

EXCEPT WHERE OTHERWISE NOTED, REINFORCEMENT SHALL HAVE CONCRETE COVER AS

CONCRETE DEPOSITED AGAINST EARTH FORMED CONCRETE AGAINST EARTH EXTERIOR FACES OF WALLS TO TOP OF SLABS-ON-GRADE

ALL SCALES, LOOSE RUST, GREASE OR DIRT SHALL BE REMOVED FROM THE REINFORCING BEFORE IT IS PLACED. PROVIDE #5 "HAIRPIN" X 20' LONG AT EXTERIOR COLUMN LINES. ANCHOR BOLTS SHALL BE (A-3077) HIGH STRENGTH.

ADMINISTRATION AS ACCEPTABLE

GENERAL CONDITIONS
THE GENERAL CONTRACTOR SHALL MAKE ADEQUATE SANITARY PROVISIONS.
THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SAFETY AND COMPLIANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT AS IT MAY REGARD ANY PHASE OF THE WORK ON THIS PROJECT.

SOIL COMPACTION AND TESTING
THE GENERAL CONTRACTOR SHALL OBTAIN THE SERVICES OF A TESTING LABORATORY, SUCH AS S&ME OR LAW ENGINEERING FOR THE PURPOSE OF DETERMINING THE SUITABILITY OF THE SUBSURFACE CONDITIONS AND THE

BEARING CAPACITIES OF ALL AREAS BELOW CONCRETE (2000psf ASSUMED).. THE SOIL AND BEARING REPORT SHALL BE SUBMITTED PRIOR TO EXCAVATING, WHERE POSSIBLE, BUT PRIOR TO PLACEMENT OF ANY REINFORCING AND CONCRETE.

1. ALL CONCRETE FOR THE PROJECT SHALL BE "READY MIX" AND SHALL COMPLY WITH ASTM C-94. ALL SECTIONS OF THE CONCRETE WORK SHALL COMPLY WITH

ALL A.S.T.M. AND A.C.I. REQUIREMENTS. FORM WORK — ALL FORMS TO BE CAREFULLY BUILT AND SECURED IN PLACE IN SUCH A MANNER AS TO HAVE SUFFICIENT STRENGTH TO CARRY THE DEAD WEIGHT OF THE CONSTRUCTION AS A LIQUID, WITHOUT DEFLECTION OR VIBRATION. FORMS TO BE BUILT TIGHT, TRUE TO POSITION AND DIRECTION, THOROUGHLY BRACED, WIRED AND SPIKED OR OTHERWISE FASTENED TOGETHER.

CONCRETE - MINIMUM OF 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, MINIMUM OF FIVE SACKS OF CEMENT PER CUBIC YARD OF CONCRETE, MAXIMUM

4. FINISHING - IN ACCORDANCE WITH THE LATEST A.C.I. CODE, PLUMB, LEVEL, TRUE IN LINE, FREE OF HONEYCOMB. BUILDING SLAB SHALL HAVE A HARD STEEL TROWEL FINISH. WALKS SHALL HAVE BROOMED FINISH AND EXPANSION JOINTS AT APPROXIMATELY 50'-0" O.C. AND DUMMY JOINTS AS SHOWN ON THE SITE PLAN. REMOVAL OF FORMS - FORMS SHALL BE CAREFULLY REMOVED SO AS NOT TO IMPAIR THE FACE OF THE

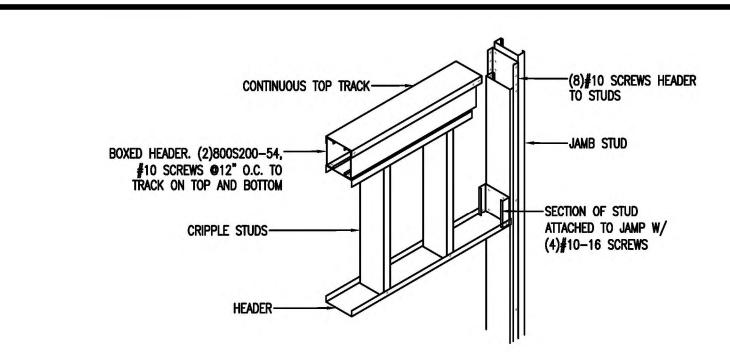
CONCRETE. IMMEDIATELY AFTER THE FORMS ARE REMOVED ALL DAMAGE OF IMPERFECT WORK SHALL BE

PATCHED IN A NEAT AND WORKMANLIKE MANNER OR IF BADLY DAMAGED, IN THE OPINION OF THE OWNER, THE WORK SHALL BE REBUILT. THE MINIMUM TIME BEFORE ANY FORMS CAN BE REMOVED IS SEVEN (7) DAYS FOR SUCH MEMBERS AS ARE SUBJECT TO BENDING STRESSES, SUCH AS SLABS.

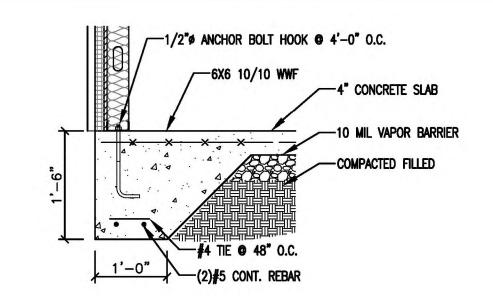
6. CURING - USE MEMBRANE CURING METHOD. USE MFG. RATE, SPRAY IMMEDIATELY PROTECT FROM FREEZING WEATHER, CURE A TOTAL OF 28 DAYS USING A.C.I.

SILL GASKET AS REQUIRED— -(4)#8 SCREWS THRU EACH FLANGE —STUD BLOCKING INSIDE WALL TRACK -ANCHOR BOLT AS REQUIRED -CONCRETE FOUNDATION

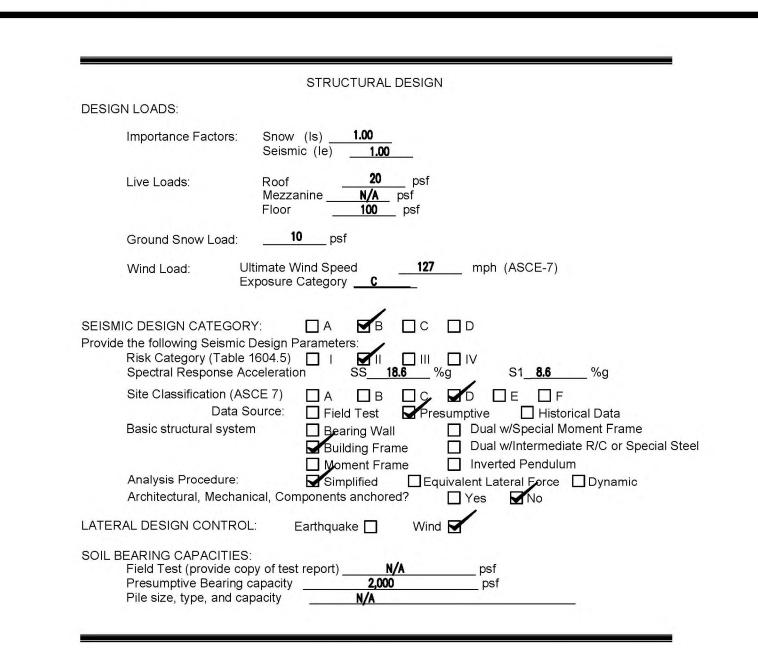
EXTERIOR WALL TO FOUNDATION CONNECTION G2 / N.T.s.

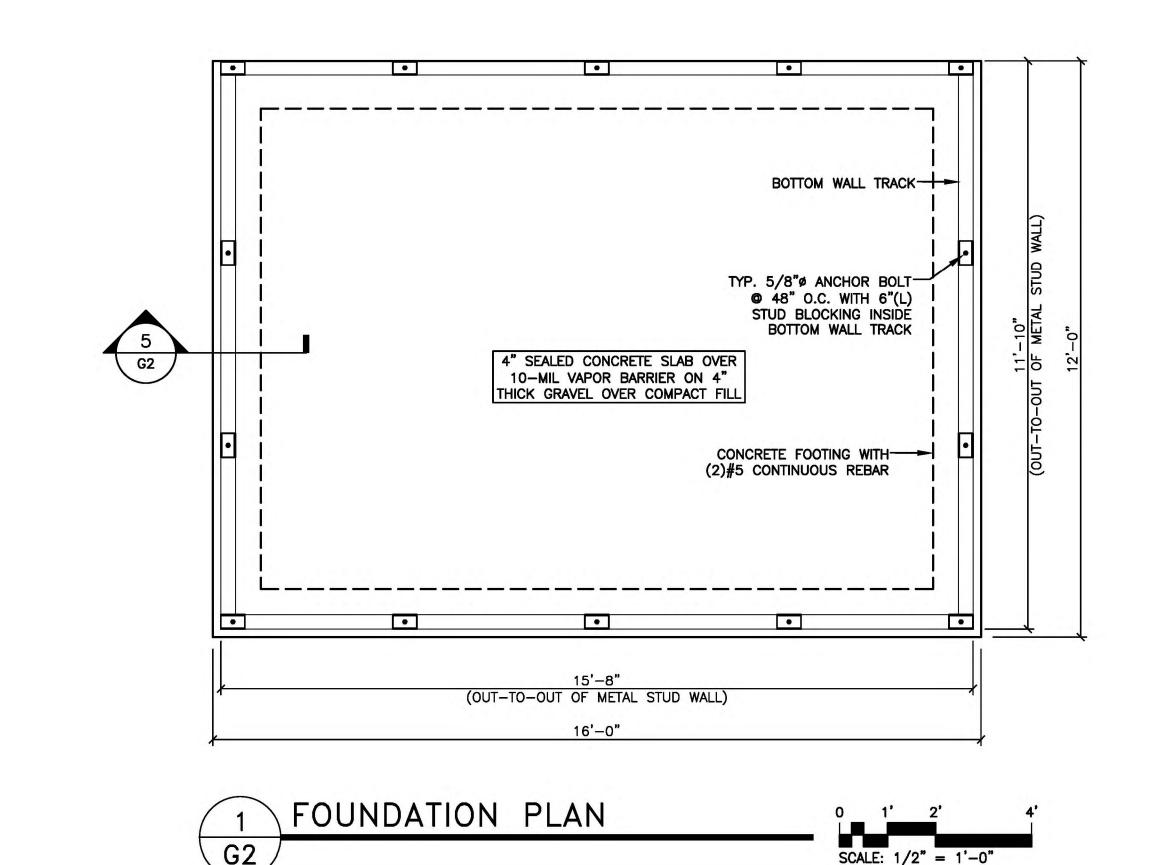


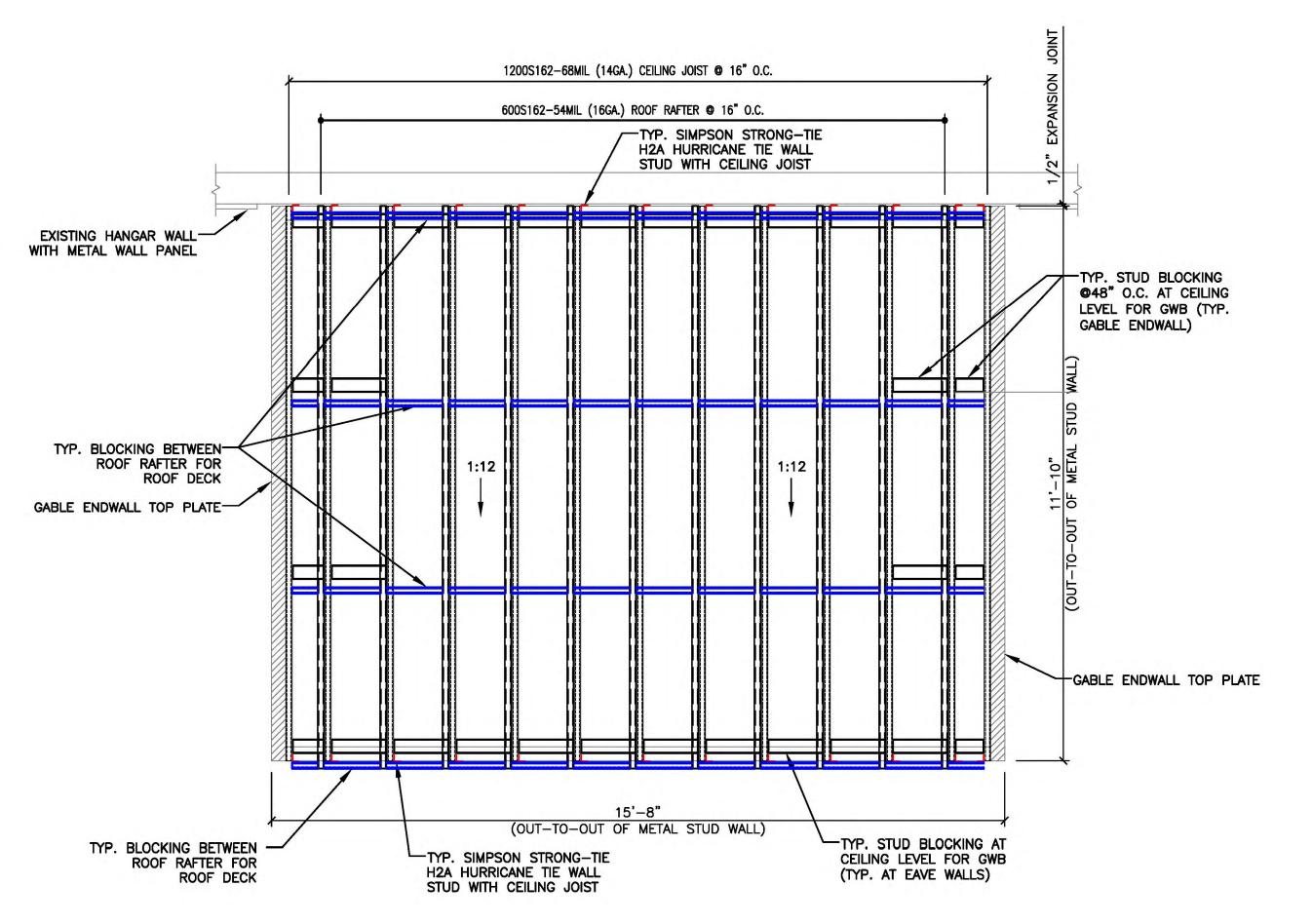
LOAD BEARING JAMB AND HEADER DETAIL



TYP. FOOTING DETAIL

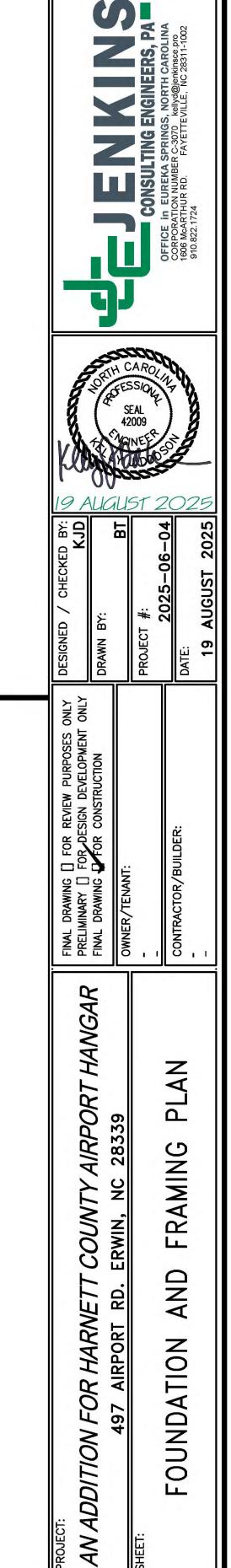




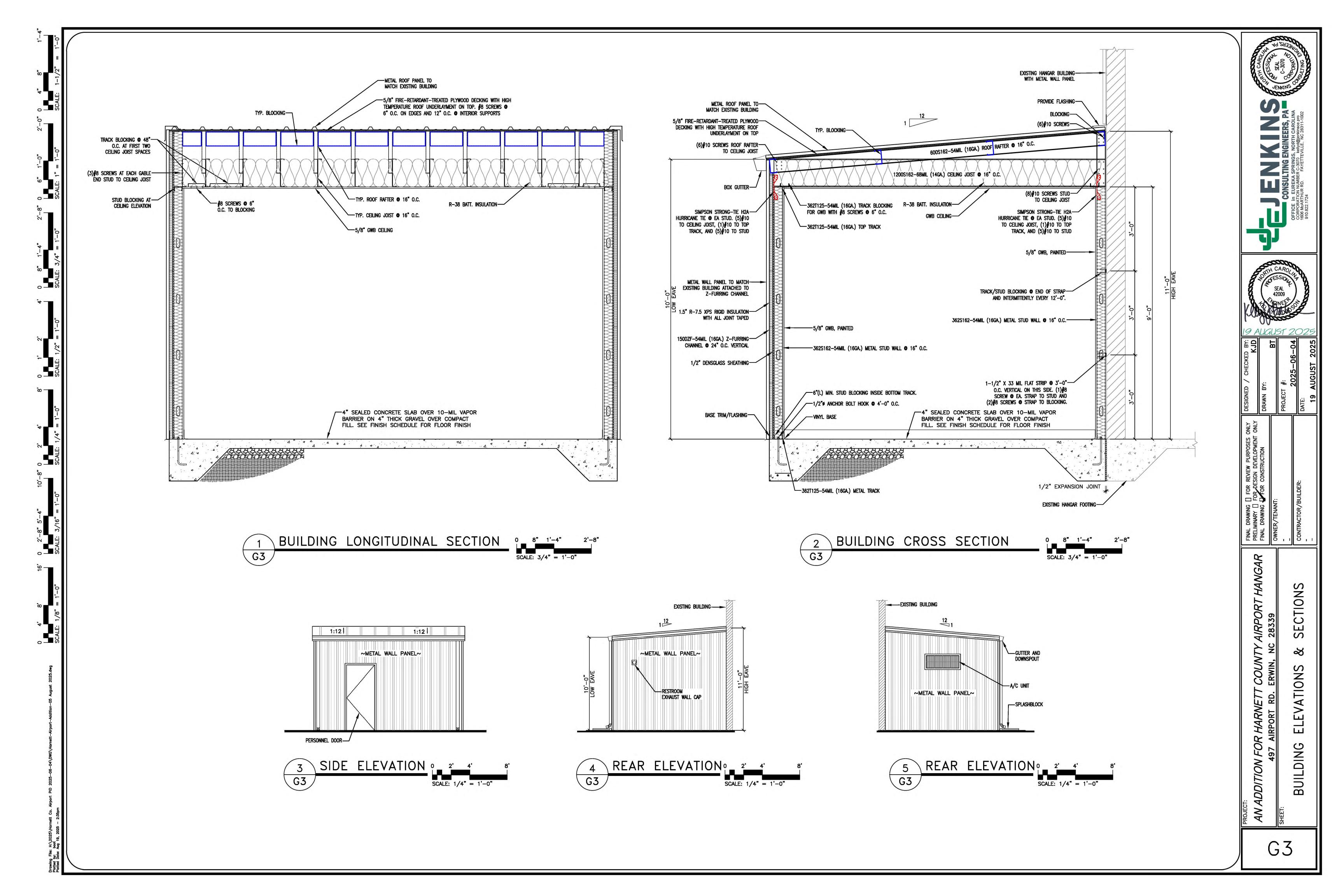


ROOF-CEILING FRAMING PLAN 1 2'

SCALE: 1/2" = 1'-0"



GZ



ALL WORK SHALL BE IN ACCORDANCE WITH 2020 NEC.

WIRE AND CABLE SHALL BE INSULATED, TYPE THHN, 600 VOLTS, WITH COPPER CONDUCTORS, CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTOR SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED.

ROMEX CAN NOT BE USED IN THIS PROJECT. MC CAN BE USED. EMT SHALL BE GALVANIZED STEEL TUBING 1/2-INCH MINIMUM SIZE. EQUAL TO ELECTRUNITE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSION FITTINGS. MC CABLE MAY BE SUBSTITUTED FOR COMPRESSION FITTINGS. AND APPROVED BY OWNER

FLEXIBLE METAL CONDUIT SHALL BE 1/2-INCH MINIMUM SINGLE STRIP. STEEL. HOT DIPPED GALVANIZED INSIDE AND OUTSIDE. MAXIMUM LENGTH OF 72 INCHES FOR LIGHTING. AND 36 INCHES FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUID TIGHT OR WATER TIGHT WITH PVC JACKET WHERE USED IN DAMP, WET, OR OUTSIDE AREAS, AND LIQUID TIGHT OR WATER TIGHT CONNECTORS SHALL BE USED.

NO RECEPTACLES OR TELEPHONE OUTLETS ARE TO BE MOUNTED BACK TO BACK. KEEP AT LEAST 1 1/2 INCHES BETWEEN RECEPTACLES AND

ALL CONDUCTORS SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA REQUIREMENTS.

CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT.
BEFORE ORDERING WIRE, BREAKERS, FIXTURES, CONDUIT, AND ETC. FOR
THIS PROJECT: THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH
THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA
FOR THE EQUIPMENT THAT WILL BE ACTUALLY INSTALLED, RECOMPUTE
WIRE AND BREAKER SIZES IF REQUIRED BY THE NEC.

ALL LIGHT SWITCHES. RECEPTACLES. WALL PLATES. TELEPHONE/COMPUTER OUTLET BOXES. AND. CABLE OUTLET BOXES SHALL BE WHITE. EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES
AND EQUIPMENT PROVIDED IN HIS CONTRACT AND SHALL SUPPORT SUCH
EQUIPMENT PER APPROVED GOVERNING CODES. UNACCEPTABLE
WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE ELECTRICAL

CONTRACTORS EXPENSE. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE DRAWINGS FOR FLOOR PLAN AND BUILDING ELEVATION DIMENSIONS.

THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO INSTALLATION OF HIS EQUIPMENT. SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE. THINK OF OTHER CONTRACTORS AND THEIR REQUIREMENTS IN VERTICAL CHASES AND WALL MOUNT SPACE. ALL CONTRACTORS TO FOLLOW THIS ORDER OF PRIORITY:

- . STORM AND SANITARY SEWER LINES 2. DUCTWORK AND HVAC SYSTEMS
- 3. HOT AND COLD WATER LINES
- 4. RIGID CONDUIT

5. CABLE THE ELECTRICAL CONTRACTOR TO ORGANIZE HIS CONDUIT, WIRE, AND

THE ELECTRICAL CONTRACTOR TO ORGANIZE HIS CONDUIT, WIRE, AND CABLE RUNS IN ATTIC SPACES AND ABOVE CEILINGS. MAKE RUNS PARALLEL, PERPENDICULAR, AND GROUPED TOGETHER WHERE POSSIBLE. LOCATE MAJOR GROUPINGS OVER HALLWAYS AND AREAS OF PUBLIC ACCESS, FREE RUNS OF PHONE, TELEVISION, SECURITY, ALARM, AND OTHER CABLES IS NOT ACCEPTABLE.

ALL DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT, KITCHEN EQUIPMENT, AND ETC. SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.

WHERE EQUIPMENT PENETRATES EXTERIOR WALLS OR ROOF, THEY SHALL BE PROPERLY SEALED.

BE PROPERLY SEALED.

EXHAUST FANS ARE TO BE PROVIDED AND INSTALLED BY THE

MECHANICAL CONTRACTOR. AND ELECTRICAL WIRING BY THE ELECTRICAL

THE ELECTRICAL CONTRACTOR SHALL PROVIDE NAMEPLATES FOR IDENTIFICATION OF ALL EQUIPMENT. SWITCHES. PANELS. ETC. THE NAMEPLATES SHALL BE LAMINATED PHENOLIC PLASTIC. BLACK FRONT AND

BACK WITH WHITE CORE. WHITE ENGRAVED LETTERS (1/4 INCH MINIMUM)
ETCHED INTO THE WHITE CORE. NAME TAGS TO BE MOUNTED WITH
SELF—TAPPING SHEET METAL SCREWS.
THE ELECTRICAL CONTRACTOR IS NOT TO SCALE THE DRAWINGS FOR
RECEPTACLES AND LIGHT FIXTURES TO BE INSTALLED. THE DRAWINGS
ARE FOR DIAGRAMMATIC PURPOSES ONLY TO SHOW GENERAL LOCATION.
THE ELECTRICAL CONTRACTOR TO COORDINATE EXACT LOCATION OF
RECEPTACLES AND LIGHT FIXTURES WITH THE GENERAL CONTRACTOR
AND OR CASEWORK DRAWINGS AND/OR CASEWORK DRAWINGS.
ALL LIGHT SWITCHES AND RECEPTACLES SHALL BE RATED FOR 20 AMP UNLESS NOTED OTHERWISE.

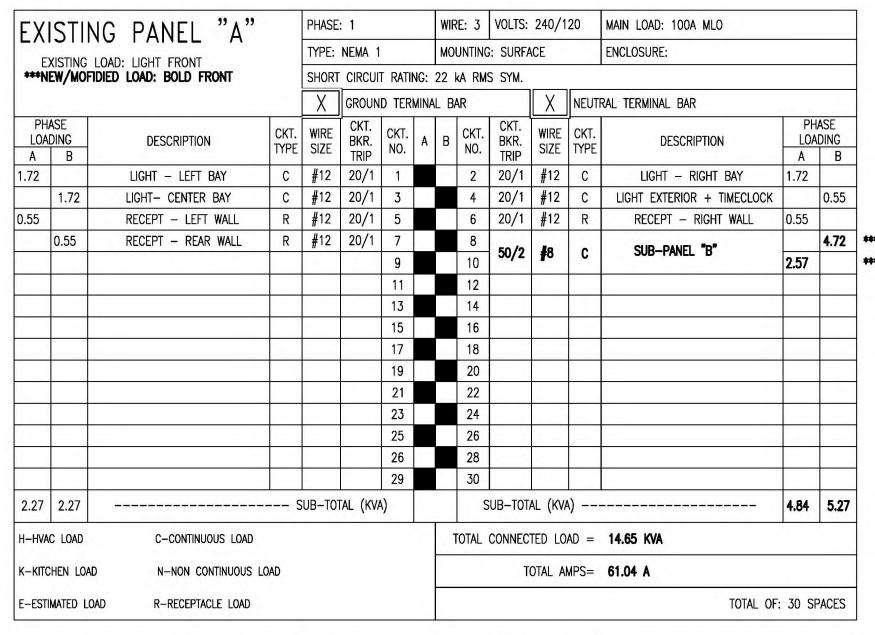
OUTSIDE AIR CALCULATION	NC
OCCUPANCY TYPE:	BUSINESS
ACTUAL NUMBER OF OCCUPANTS (Pz)	2 PEOPLE
NET SQUARE FOOTAGE OF HEATED BUILDING: (Az)	130 SQ/FT
BUILDING EXHAUST REQUIRE	MENTS
TOILET EXHAUST REQUIRED (1 FLUSHING FIXTURES * 70 CFM EACH))	70 CFM
TOTAL BUILDING EXHAUST AIR REQUIRED	70 CFM
BUILDING & PEOPLE VENTILATION REQUIRE	EMENTS
BUILDING VENTILATION (Az*Ra) (130 * 0.06)	7.8 CFM
PEOPLE * 5 CFM TABLE 403.3.1.1: 2018 NC MECH CODE	
PEOPLE (Pz*Rp) 2 PEOPLE * 5 CFM/PERSON	10 CFM
OUTSIDE AIR SUB-TOTAL	17.8 CFM
BUILDING EXHAUST PROVIDED	
EF-1	70 CFM

	LIGHT FIXTURE SCHEDULE												
TAG	DESCRIPTION	SIZE	MOUNTING	LENS	COLOR	LUMENS	BULB	BALLAST TYPE	HOUSING	VOLTAGE	WATTAGE	MANU/MODEL NUMBER	REMARKS
A	LED RECESSED DOWNLIGHT	8 " ø	RECESSED	N/A	4000 K	1850	LED	LED DRIVER	STEEL	120	20	LITHONIA NO. WF8 LEF 40K MVOLT 90 CRI OR EQUAL	
EM	EMERGENCY	N/A	WALL	N/A	N/A	N/A	(2) LAMPS	ELECTRONIC	POLYCARBONATE	120/240		LITHONIA ELM2L OR EQUAL LITHONIA EU2L OR EQUAL (FOR RESTROOMS/UTILITY ROOMS)	6 VOLT NICAD BATTERY TEST SWITCH, POWER INDICATOR
EX	EXIT SIGN	N/A	WALL	SINGLE	N/A	N/A	LED LIGHT	LED DRIVER	POLYCARBONATE	120/240		LITHONIA LHQM S W 3 R 120/240 EL N OR EQUAL	6 VOLT NICAD BATTERY, (2) REMOTE HEADS

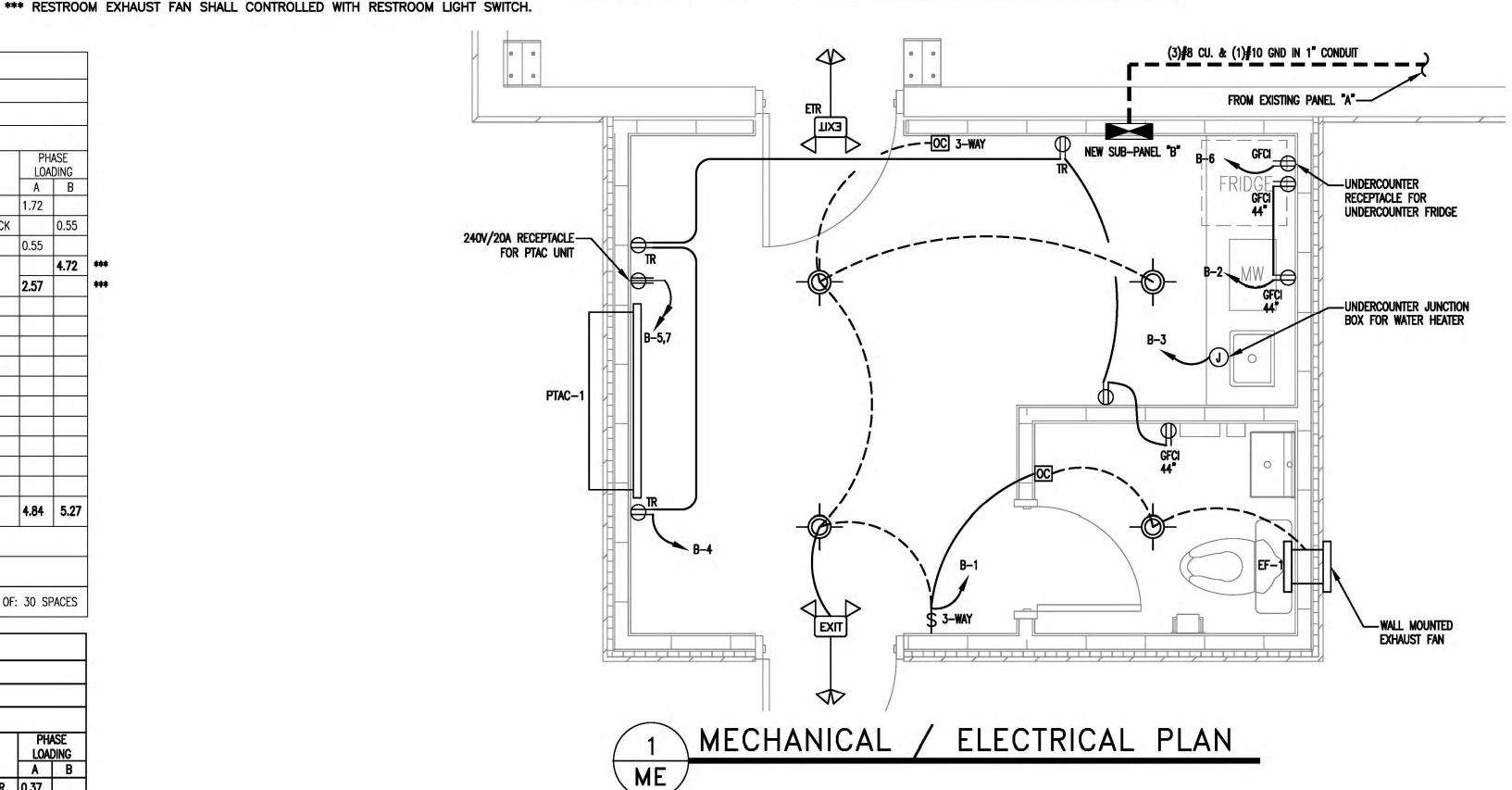
PACKAGED TERMINAL									1AL	AIF	₹ C	100	1DI.	TIONE	R SCHED	ULE	
	EQUIPMENT INFO	COOLING CAPACITIES				HEATING C	APACITIES)	ELEC	TRICAL I	NFORMAT	ION	MISCELLANEOUS INFORMATION				
TAG	TYPE	LOCATION	NOM. TONS	TOTAL COOLING	MIN. EER	MIN. COP		UNIT CAPACITY	MIN. HSPF2	UNIT VOLTS	UNIT PHASE	MCA	МОСР	WIRE SIZE (CU. 75 C)	MANUFACTURER/MODEL	UNIT SIZE (H)X(W)X(D)	UNIT WEIGHT
PTAC-1	PTAC HEAT PUMP	WALL MOUNTED	N/A	7,000	12.0	3.4	18 CFM	6,000	N/A	240	1	15	20	#12	HOTPOINT/ AHHS07D2XXA	16"X42"X21"	81 LBS

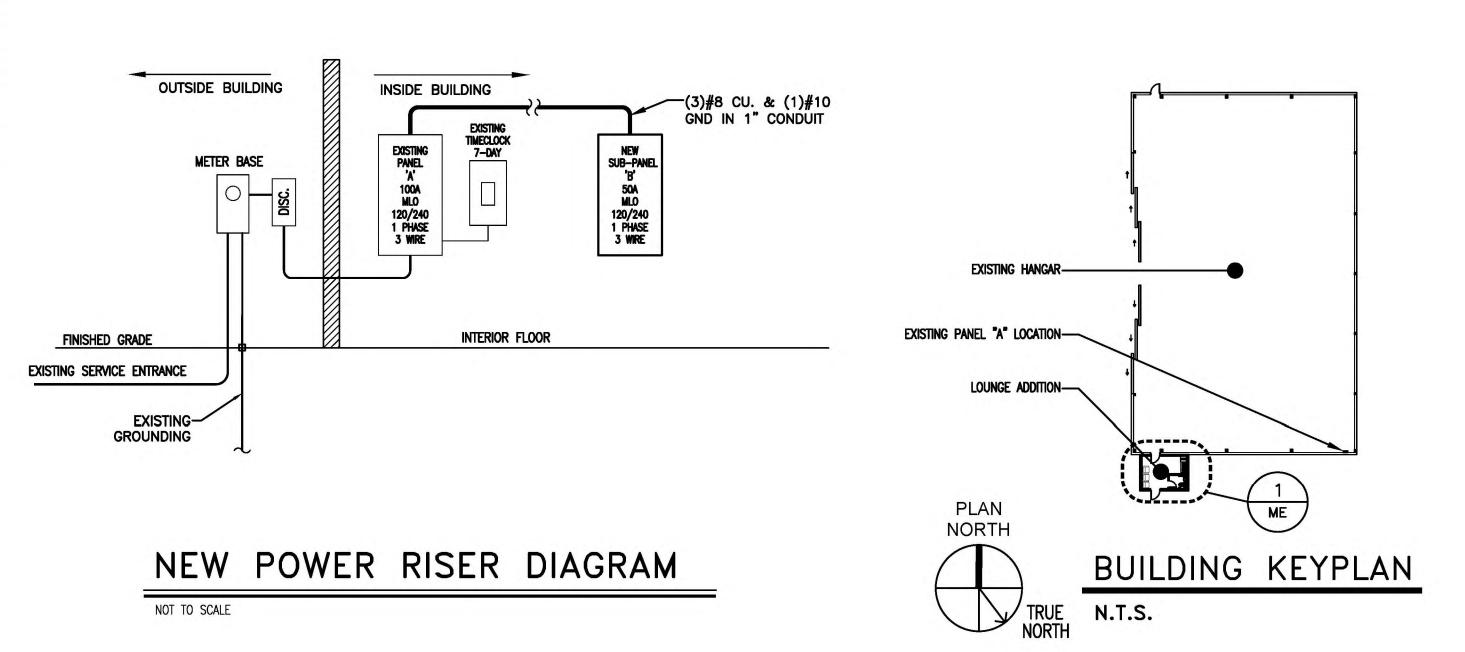
***BASIS OF DESIGN: HOTPOINT EQUIPMENT. SIMILAR AND EQUAL EQUIPMENT BY CARRIER, AMANA, AND FRIEDRICH MAY BE SUBSTITUTED FOR THE HOTPOINT EQUIPMENT. PROVIDE FRESH AIR KIT (RAKVENTH) FOR OUTSIDE AIR INTAKE.

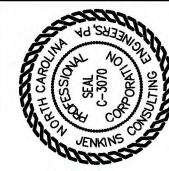
						EXH	:UAH	ST	FA	N	SCH	HED	ULE	•		
	EQUIPMENT INFO FAN INFORMATION				ELECTRICAL INFORMATION											
TAG	QTY.	TYPE	LOCATION	EXHAUST CFM	AREA SERVED	ESP IN WG	FAN DRIVE	SONES	RPM	FAN WATT	UNIT VOLTS	UNIT PHASE	HP	WIRE SIZE (DU. 75 C)	MFG & MODEL	
EF-1	1	EXHAUST	WALL	70	RESTROOM	N/A	DIRECT	N/A	N/A	17	120	1	N/A		GREENHECK / SP-LP0511-1 PROVIDE WALL CAP WITH BACKDRAFT DAMPER	



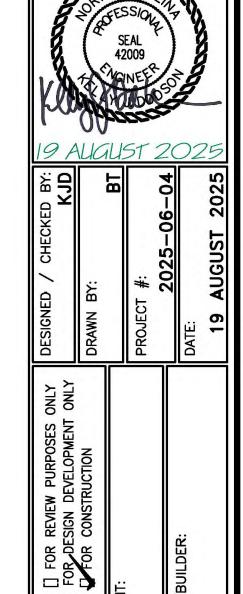
FEI	יז ע	ROM PANEL "A			YPE: NEMA 1 MOUNTING: SURFACE ENCLOSURE: HORT CIRCUIT RATING: 10 KA RMS SYM.										
				SHURI	1		200			5 51M.		7.2			
				X	GROUN	D TER	MINA	L B	AR		X	NEUT	RAL TERMINAL BAR		
PHASE LOADING		DESCRIPTION	CKT. TYPE		CKT. BKR.	CKT. NO.	A	В	CKT. NO.	CKT. BKR.	WIRE			PHASE LOADIN	
A	В		HE	SIZE	TRIP	NO.			NO.	TRIP	SIZE	TYPE		Α	В
0.15		LIGHT— LOUNGE	C	# 12	20/1	1			2	20/1	#12	R	RECEPT — LOUNGE COUNTER	0.37	
	2.00	WATER HEATER	E	# 12	20/1	3			4	20/1	# 12	R	RECEPT - LOUNGE ROOM		0.92
1.80	+ -	PTAC	11	# 12	20/2	5			6	20/1	#12	R	RECEPT — UNDERCOUNTER FRIDGE	0.25	
	1.80	PIAC	Н	#12	20/2	7			8	-	-	_	-		
		-	-). = 1.	-	9			10	1-	-	_	-		
1.95	3.80		s	UB-TO	TAL (KV/	4)			S	UB-TOT	AL (KV/	A)		0.62	0.9
H-HVA	C LOAD	C-CONTINUOUS LOAD							TOTAL	CONNEC	TED LO	AD =	7.29 KVA		
	HEN LOAD	N-NON CONTINUOUS L											30.38 A		











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PLUMBING GENERAL NOTES:

PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA PLUMBING CODE 2018 EDITION AND LOCAL CODES.

ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE GENERAL CONTRACTOR AND OWNER TO SUIT THE OWNER'S OPERATING CONDITIONS.

PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE GENERAL CONTRACTOR OF ANY DEVIANCIES FROM THE CONTRACT DRAWINGS PRIOR TO STARTING ANY WORK.

THE PLUMBING CONTRACTOR SHALL COORDINATE WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE. THINK OF OTHER CONTRACTORS AND THEIR REQUIREMENTS IN VERTICAL CHASES AND WALL MOUNT SPACE. ALL CONTRACTORS TO FOLLOW THIS ORDER OF PRIORITY:

1. STORM AND SANITARY SEWER LINES
2. DUCTWORK AND HVAC SYSTEMS

3. HOT AND COLD WATER LINES
4. RIGID CONDUIT

THE PLUMBING CONTRACTOR TO ORGANIZE HIS PIPING IN ATTIC SPACES, CRAWL SPACES, AND ABOVE CEILINGS. MAKE RUNS PARALLEL, PERPENDICULAR, AND GROUPED TOGETHER WHERE POSSIBLE. LOCATE MAJOR GROUPINGS OVER HALLWAYS AND AREAS OF PUBLIC ACCESS IF POSSIBLE. FREE RUNS OF PIPING IS NOT ACCEPTABLE.

THE PLUMBING CONTRACTOR SHALL LAY OUT AND INSTALL HIS WORK IN ADVANCE OF POURING CONCRETE FLOORS OR WALLS. HE SHALL FURNISH ALL SLEEVES TO THE GENERAL CONTRACTOR FOR OPENINGS THROUGH POURED MASONRY FLOORS, OR WALLS, ABOVE GRADE REQUIRED FOR PASSAGE OF ALL PIPES TO SUPPORT HIS EQUIPMENT.

HORIZONTAL DRAINAGE AND WASTE PIPE SHALL HAVE A MINIMUM SLOPE OR FALL OF 1/8 INCH PER FOOT. ALL CHANGE OF HORIZONTAL DIRECTIONS IN SOIL WASTE PIPE SHALL BE MADE WITH LONG RADIUS FITTINGS WITH "Y" BRANCHES AND 1/8 OR 1/16 BENDS.

COLD AND HOT WATER PIPING ABOVE GRADE SHALL CAN BE CAN BE PEX PIPING (WITH OWNERS APPROVAL).

ALL HOT WATER PIPING SHALL BE INSULATED WITH 1 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE.

ALL COLD WATER PIPING SHALL BE INSULATED WITH 1/2 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE.

SANITARY HORIZONTAL WASTE, VENT PIPING, AND FITTINGS ABOVE GRADE SHALL BE SCHEDULE 40 PVC-DWV PIPE-CELLULAR CORE FROM CHARLOTTE PIPE AND FOUNDRY COMPANY OR APPROVED EQUAL, AND MUST MEET OR EXCEED THE REQUIREMENTS OF ASTM F-891, NSF STANDARD NO. 14, AND IAPMO UPC.

ALL WASTE STACK PIPING SHALL BE CAST IRON AND INSULATED FOR SOUND IN WALLS.

ALL WASTE AND STORM PIPING ABOVE CEILING, VERTICAL CHASES, WALLS SHALL BE INSULATED WITH 1/2 INCH THICK SECTIONAL INSULATION OR FIBROUS GLASS MATERIALS WITH FACTORY APPLIED COVER. COVER SHALL BE EMBOSSED VAPOR BARRIER, LAMINATED WITH PRESSURE SEALING CAP ADHESIVE. NO INSULATION REQUIRED IN CRAWL SPACE OR BELOW FLOOR SLAB OF ANY WASTE AND STORM PIPING.

IN LIEU OF FIBERGLASS INSULATION, THE PLUMBING CONTRACTOR IS ALLOWED TO USE CLOSED CELL INSULATION, 1/2 INCH THICK ARMSTRONG/ARMAFLEX II ON ALL COLD WATER PIPES. RIGID URETHANE FOAM INSULATION, 1 INCH THICK ARMSTRONG/ARMALOK II ON ALL HOT WATER PIPING.

ALL PLUMBING EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

ALL FIXTURES, DRAINS, TRAPS, ETC. SHALL BE SET PLUMB AND LEVEL.

ALL HANDICAPPED FIXTURES AND TRIM SHALL BE INSTALLED IN ACCORDANCE WITH THE NORTH CAROLINA PLUMBING CODE 2018 EDITION.

CHROME PLATED ESCUTCHEONS SHALL BE PROVIDED AT EACH WALL PENETRATION.

ESCUTCHEONS SHALL BE CHROME PLATED, SPRING TYPE, ON ALL PIPES PASSING THROUGH WALLS AND CEILINGS IN FINISHED AREAS. FLOOR ESCUTCHEONS SHALL BE CAST BRASS, CHROME PLATED, WITH SET SCREW.

ESCUTCHEONS SHALL BE OF SUFFICIENT SIZE TO COVER OUTSIDE DIAMETER OF THE PIPE OR THE INSULATION OF THE PIPE.

FLASHING FOR VENTS THROUGH THE ROOF SHALL BE TWO-PIECE TYPE, 16 OUNCE COPPER COUNTER FLASHING AND BASE FLASHING, OR A TWO-PIECE TYPE, 4 POUND LEAD COUNTER FLASHING AND BASE FLASHING. THE BASE FLASHING SHALL BE INSTALLED BY THE GENERAL CONTRACTOR WITH THE ROOF SYSTEM.

VENT FLASHING SHALL EXTEND DOWN AT LEAST 4 INCHES FROM THE TOP OF THE PIPE. FLASHING SHALL EXTEND AT LEAST 12 INCHES IN ALL DIRECTIONS FROM THE PIPE AND SHALL BE PARALLEL TO THE ROOF LINE.

ALL EQUIPMENT AND INSTALLED MATERIALS SHALL BE THOROUGHLY CLEAN AND FREE OF ALL DIRT, OIL, GRIT, GREASE, AND ETC.

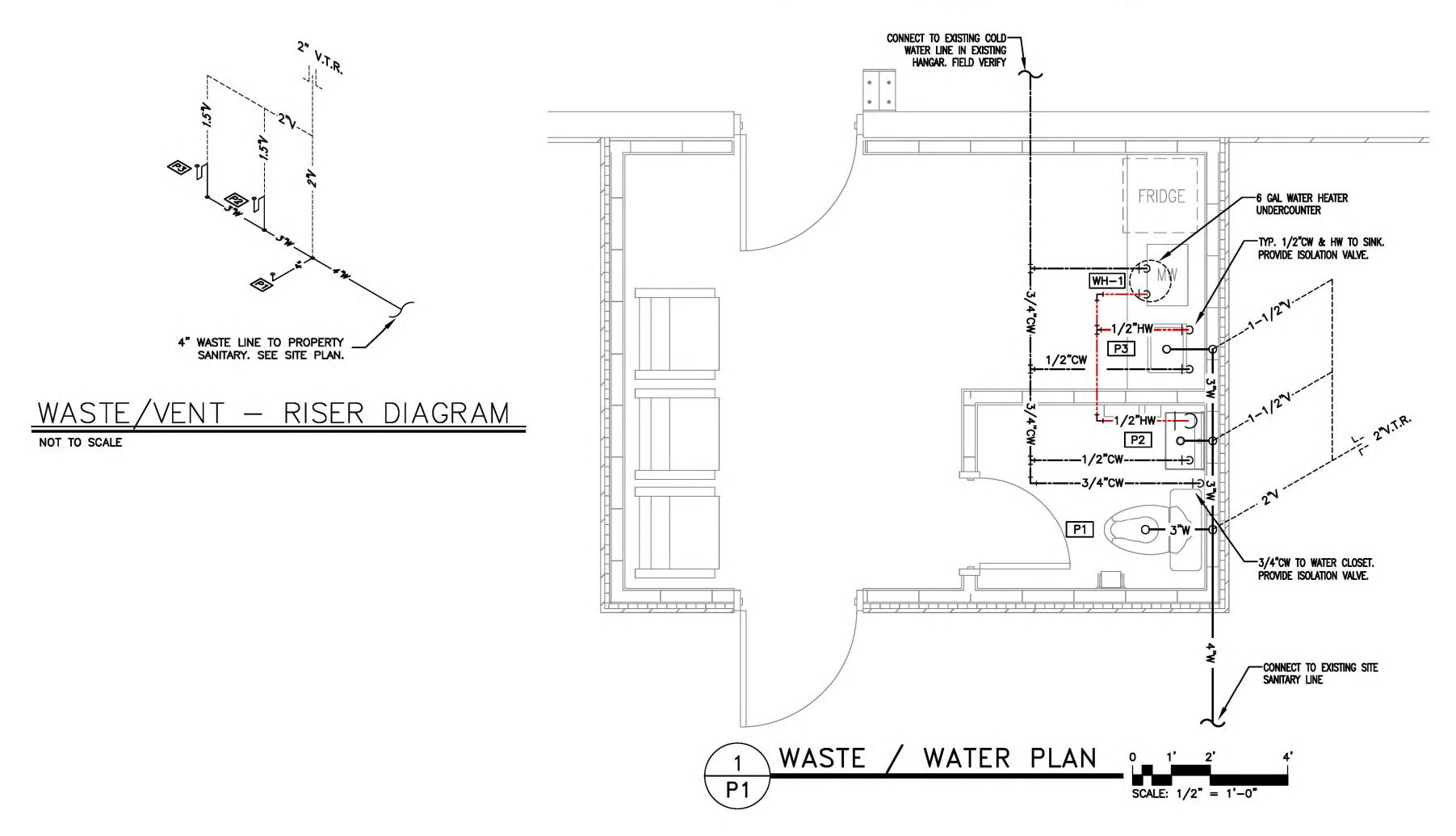
ALL PLUMBING SYSTEMS AND EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE BUILDING FROM

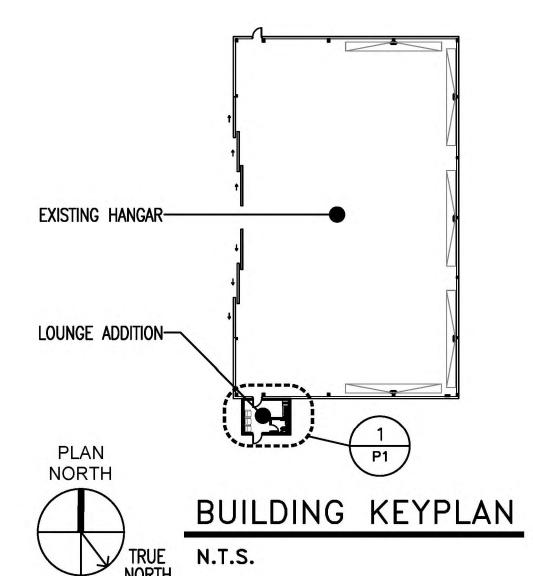
	PLUMBING FIXTURE SCHEDULE									
SYMBOL	MANUFACTURER	MODEL #	FIXTURE DESCRIPTION	FIXTURE MOUNTING	ACCESSORIES	SUPPLY	WASTE	VENT	ELECTRICAL	REMARKS
P1	AMERICAN STANDARD	CADET ADA/ 215AA.104	ELONGATED BOWL; FLUSH TANK TOILET	FLOOR MOUNTED	SEAT: AMERICAN STANDARD / 5901.100	3/4" C.W.	4"	2"		SELECTED MODEL OR EQUAL
P2	HOROW	HR-WS4531W	RECTANGULAR WALL-MOUNT SINK	WALL MOUNTED	SINGLE HOLE FAUCET	1/2" C.W. & H.W.	2"	1-1/2"		SELECTED MODEL OR EQUAL
Р3	TBD	TBD	BAR SINK	DROP-IN	PROVIDE BAR SINK FAUCET, DRAIN CONNECTION	1/2" C.W. & H.W.	2"	1-1/2"		SELECTED BY OWNER
WH-1	RHEEM	PROE6 1 RH POU	6 US GAL. WATER HEATER, 2.0kW	UNDERCOUNTER	3/4" T & P RELIEF VALVE; PROVIDE DRAIN PAN	3/4" C.W. & H.W.			120V 2.0KW	SELECTED MODEL OR EQUAL 120°F OUTLET TEMPERATURE MINIMUM.

	WATER CALCULATIONS											
QTY.	ITEM		C.W. FIXTURE UNITS	The second secon	WATER SUPPLY FIXTURE UNITS TOTAL							
1	WATER CLOSET		5.0	5.0	5.0							
1	LAVATORY		1.5	2.0	2.0							
1	BAR SINK		1.5	2.0	2.0							
	TOTAL WATER SUPPLY	FIXTURE	UNITS		9							

	DRAINAGE CA	LCULA	TIONS
QTY.	ITEM	DRAINAGE FIXTURE UNITS	DRAINAGE FIXTURE UNITS TOTAL
1	WATER CLOSET	4.0	4.0
1	LAVATORY	1.0	1.0
-1	BAR SINK	2.0	2.0
	TOTAL DRAINAGE FIXTURE UN	IITS	7.0

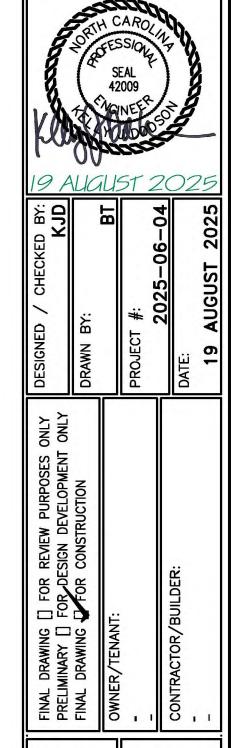
PLUMBING	SYMBOL LEGEND
	HOT WATER LINE
	COLD WATER LINE
ō	PIPE TURNS UP
Ū	PIPE TURNS DOWN
烃	SHUT OFF VALVE
) (SANITARY WASTE
***************************************	VENT LINE











AN ADDITION FOR HARNETT COUNTY AIRPORT HAN
497 AIRPORT RD. ERWIN, NC 28339
SHEET:
PLUMBING - WASTE & WATER PLAN

P1