

CS

1'-4" 1'-0" 8" 1'-1/2" 2'-0" 0 4" 2'-0" 0 6" 1'-0" 2'-8" 0 8" 1'-4" 4" 1'-0" 0 8" 1'-4" 2'-0" 0 4" 1'-0" 0 8" 1'-4" 10'-8" 0 2' 4" 1'-0" 0 2'-8" 5'-4" 16' 0 4" 8" 1'-0" 1/8" = 1'-0" SCALE: 3/16" = 1'-0" SCALE: 1/8" = 1'-0" SCALE: 1/4" = 1'-0" SCALE: 1/2" = 1'-0" SCALE: 3/4" = 1'-0" SCALE: 1" = 1'-0"

Drawn By: JKD
Checked By: BT
Printed Date: Aug 19, 2025
Project: 2025-06-04
Sheet: 1 of 1

2018 NORTH CAROLINA BUILDING CODE SUMMARY: APPENDIX B

Name of Project: LOUNGE ADDITION FOR HARNETT REGIONAL AIRPORT HANGAR
Address: 497 AIRPORT ROAD
Proposed Use: AIRCRAFT HANGAR (U)
Owner or Authorized Agent: BRIAN RAYNOR
City/County: ERWIN
Code Enforcement Jurisdiction: ERWIN

CONTACT: KELLY J. DODSON

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	N/A	N/A	N/A	N/A	N/A
Civil	N/A	N/A	N/A	N/A	N/A
Electrical	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyj@jenkins.com
Fire Alarm	N/A	N/A	N/A	N/A	N/A
Plumbing	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyj@jenkins.com
Mechanical	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyj@jenkins.com
Sprinkler-Standpipe	N/A	N/A	N/A	N/A	N/A
Structural	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyj@jenkins.com
INTERIOR WALLS	N/A	N/A	N/A	N/A	N/A
Retaining Walls >5' High	N/A	N/A	N/A	N/A	N/A
Building	JCE	KELLY J. DODSON	NC PE 42009	(910) 822-1724	kellyj@jenkins.com

2018 NORTH CAROLINA BUILDING CODE: ☒ New Building ☐ Shell / Core ☐ First Time Interior Completions
☒ Addition ☐ Phased Construction ☐ Shell Core

2018 NORTH CAROLINA EXISTING BUILDING CODE: ☐ Prescriptive ☐ Alteration Level I ☐ Historic Property
(check all that apply) ☐ Repair ☐ Alteration Level II ☐ Change of Use
☐ Chapter 14 ☐ Alteration Level III

CONSTRUCTED: (date) 2024 CURRENT USE (S) (Ch. 3): AIRCRAFT HANGAR (GROUP III - NFPA 409)
RENEWED: (date) N/A PROPOSED USE (S) (Ch. 3): AIRCRAFT HANGAR (GROUP III - NFPA 409)
OCCUPANCY RISK CATEGORY (Table 1604.5): Current: N/A Proposed: I

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☒ II-B ☐ III-B ☐ V-B
Sprinklers: ☒ No ☐ Partial ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Primary Fire District: ☒ No ☐ Yes (APPENDIX D) Flood Hazard Area: ☒ No ☐ Yes
Special Inspections Required: ☒ No ☐ Yes

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 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ 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 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☒

Accessory Occupancy Classification(s): NONE
Incidental Uses (Table 509): NONE
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
Mixed Occupancy: ☐ No ☐ Yes Separation: 0 Hr. Exception:
☐ 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:
$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$
$$\frac{N/A}{N/A} + \frac{N/A}{N/A} = \frac{N/A}{N/A} \leq 1.00$$

STORY NUMBER	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE 1, 5	(D) ALLOWABLE AREA PER STORY (OR UNLIMITED 2, 3)
1	AIRCRAFT HANGAR	9,192	8500	6113	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 (F)
b. Total Building Perimeter = 390 (P)
c. Ratio (F/P) = 31
d. W = minimum width (weighted average) of public way = 150 (W) where $W = (L + XW + L \cdot YW) / 2$ (Equation 5-4)
e. Percent of frontage increase = $100 [(F/P - 0.25) \times W/30] = 71$ (%) (Equation 5-5)

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	25			
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 un sprinklered area value in Table 506.2.

BUILDING CODE SUMMARY (continued)

	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.

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	FIRE PROTECTION REQUIREMENTS		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		RAT'G II-B	PROVIDED (w/ REDUCTION)				
Structural Frame, including columns, girders, trusses	N/A	0	0	N/A	N/A	N/A	N/A
Bearing Walls	N/A	0	0	N/A	N/A	N/A	N/A
Exterior	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	N/A	0	0	N/A	N/A	N/A	N/A
Nonbearing walls and partitions	N/A	0	0	N/A	N/A	N/A	N/A
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 joists	0	0	N/A	N/A	N/A	N/A	N/A
Floor Ceiling Assembly	0	0	N/A	N/A	N/A	N/A	N/A
Columns Supporting Floors	0	0	N/A	N/A	N/A	N/A	N/A
Roof construction including supporting beams and joists	0	0	N/A	N/A	N/A	N/A	N/A
Roof Ceiling Assembly	0	0	N/A	N/A	N/A	N/A	N/A
Columns Supporting Roof	0	0	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Exit	0	0	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Other	0	0	N/A	N/A	N/A	N/A	N/A
Corridor Separation	0	0	N/A	N/A	N/A	N/A	N/A
Occupancy / Fire Barrier Separation	0	0	N/A	N/A	P1	N/A	N/A
Party/Fire Wall Separation	0	0	N/A	N/A	N/A	N/A	N/A
Smoke Barrier Separation	0	0					
Smoke Partition	0	0	N/A	N/A	N/A	N/A	N/A
OWNER/Dwelling Unit/ Sleeping Unit Separation	0	0	N/A	N/A	N/A	N/A	N/A
Incidental Use Separation	0	0	N/A	N/A	N/A	N/A	N/A

* Indicate section number permitting reduction

EXTERIOR WALL	FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINE	DEGREE OF OPENINGS PROTECTION (TABLE 705.6)	ALLOWABLE AREA (sq)	ACTUAL SHOWN ON PLANS (sq)
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

LIFE SAFETY SYSTEM REQUIREMENTS
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 (705.6)
☒ 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)
☒ 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
☐ 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-8 (407.5)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

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
NONE REQUIRED							

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 13' ACCESS AISLE	98' ACCESS AISLE	
EXISTING TO REMAIN						
TOTAL						

BUILDING CODE SUMMARY (continued)

PLUMBING FIXTURE REQUIREMENTS (TABLE 2802.1)											
USE	WATER CLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS	DRINKING FOUNTAINS		SERVICE SINK
	MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE	
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, DHS, ICC, etc., describe below)
N/A

ENERGY SUMMARY
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 proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)
Exempt Building: ☐ Provide code or statutory reference:
Climate Zone: ☐ 3A ☒ 4A ☐ 5A HARNETT COUNTY
Method of Compliance: ☐ Performance ☒ Prescriptive
Energy Code: ☐ Performance ☒ Prescriptive
ASHRAE 90.1: ☐ Performance ☐ Prescriptive
Other: ☐ Performance (specify source)
Value of total assembly: -

THERMAL ENVELOPE: (Prescriptive method only)
Roof/Ceiling Assembly (each assembly)
Description of assembly: METAL ROOF PANEL + METAL FRAME CEILING
U-Value of total assembly: NONE
R-Value of insulation: R-38 (FOOTNOTE *)
Skylights in each assembly: NONE
U-Value of skylight:
Total square footage of skylights in each assembly:
Exterior Walls (each assembly)
Description of assembly: METAL WALL PANEL + 1.5" XPS INSULATION + SHEATHING + METAL STUD
U-Value of total assembly:
R-Value of insulation: R-19 + R-7.5
Openings (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: 2.7
Walls below grade (each assembly)
Description of assembly: N/A
U-Value of total assembly:
R-Value of insulation:
Floors over unconditioned space (each assembly)
Description of assembly: N/A
U-Value of total assembly:
R-Value of insulation:
Floors slab on grade
Description of assembly: 4" CONCRETE SLAB
U-Value of total assembly:
R-Value of insulation:
Horizontal/vertical requirement:
slab heated:

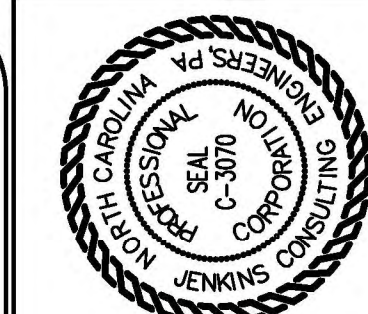
MECHANICAL SUMMARY (SEE DRAWING SHEET N/A)

ELECTRICAL SUMMARY (SEE DRAWING SHEET N/A)

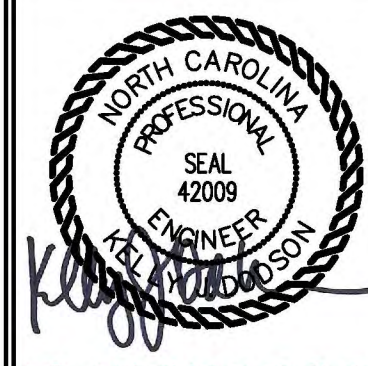
CUMBERLAND COUNTY
BUILDING CODE SUMMARY
for:

497 AIRPORT RD
ERWIN, NORTH CAROLINA, 28339

LOUNGE ADDITION TO
HARNETT REGIONAL AIRPORT HANGAR



JENKINS
CONSULTING ENGINEERS, P.A.
OFFICE IN EUREKA SPRINGS, NORTH CAROLINA
CORPORATION NUMBER C-3073
1000 W. FAIRVIEW RD. FAYETTEVILLE, NC 28411-1022
910.822.1724



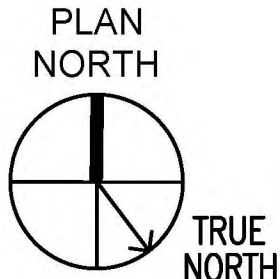
19 AUGUST 2025

DESIGNED / CHECKED BY: KJD
DRAWN BY: BT
PROJECT #: 2025-06-04
DATE: 19 AUGUST 2025

FINAL DRAWING ☐ FOR REVIEW PURPOSES ONLY
PRELIMINARY ☐ FOR DESIGN DEVELOPMENT ONLY
FINAL DRAWING ☒ FOR CONSTRUCTION
OWNER/TENANT:
CONTRACTOR/BUILDER:

PROJECT: AN ADDITION FOR HARNETT COUNTY AIRPORT HANGAR
497 AIRPORT RD. ERWIN, NC 28339
SHEET: BUILDING CODE SUMMARY

BCS



THE EGRESS CAPACITY SHALL BE BASED UPON OCCUPANT LOAD OF 20 PERSONS
(*) DENOTES OCCUPANT NUMBER ACCOUNTED FOR IN OCCUPANT TOTAL

0 4' 8' 16'

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

PROJECT: **AN ADDITION FOR HARNETT COUNTY AIRPORT HANGAR**

SHEET: **497 AIRPORT RD. ERWIN, NC 28339**

BUILDING LIFE SAFETY – EGRESS PLAN

FINAL DRAWING ☐ FOR REVIEW PURPOSES ONLY

PRELIMINARY ☐ FOR DESIGN DEVELOPMENT ONLY

FINAL DRAWING ☒ FOR CONSTRUCTION

OWNER/TENANT: _____

CONTRACTOR/BUILDER: _____

DESIGNED / CHECKED BY: **KJD**

DRAWN BY: _____

PROJECT #: **2025-06-04**

DATE: _____

19 AUGUST 2025

19 AUGUST 2025



SPICES:
REINFORCEMENT IN CONCRETE AND MASONRY SHALL HAVE LAP LENGTHS AS FOLLOWS,
UNLESS OTHERWISE
SPECIFIED ON DRAWINGS:

BAR SIZE:	IN CONCRETE:	IN MASONRY:
#3	1'-6"	2'-0"
#4	2'-0"	2'-6"
#5	2'-6"	3'-0"

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 FOLLOWS:

CONCRETE DEPOSITED AGAINST EARTH	3"
FORMED CONCRETE AGAINST EARTH	2"
EXTERIOR FACES OF WALLS	1"
TO TOP OF SLABS-ON-GRADE	3/4"

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.~~

SOIL TREATMENT:
ADMINISTRATION AS ACCEPTABLE

GENERAL CONDITIONS

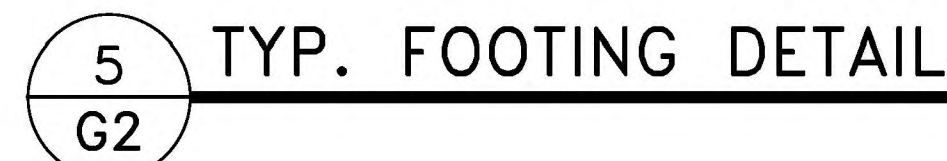
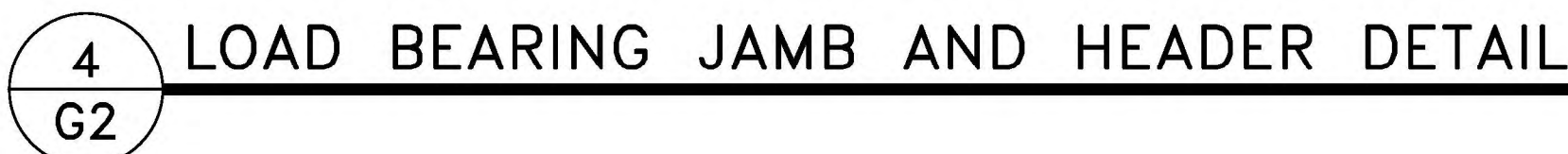
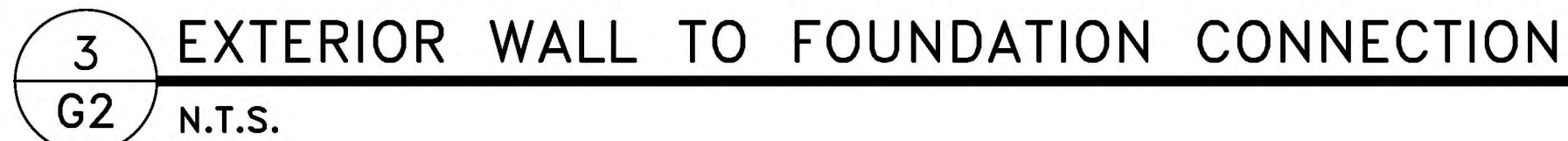
THE GENERAL CONTRACTOR SHALL MAKE ADEQUATE SANITARY PROVISIONS.
THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SAFETY AND COMPLIANCE
WITH THE REQUIREMENTS
OF THE OCCUPATIONAL SAFETY AND HEALTH ACT AS IT MAY REGARD ANY PHASE OF
THE WORK ON THIS PROJECT.

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.

CONCRETE WORK

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.
2. FORM WORK SHALL 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.
3. CONCRETE - MINIMUM OF 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, MINIMUM OF FIVE SACKS OF CEMENT PER CUBIC YARD OF CONCRETE, MAXIMUM OF 4" SLUMP.
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.
5. 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 FOLLOWING FINISHING.
7. PROTECT FROM FREEZING WEATHER, CURE A TOTAL OF 28 DAYS USING A.C.I. METHODS.



STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors: Snow (Is) 1.00
Seismic (Ie) 1.00

Live Loads: Roof 20 psf
Mezzanine N/A psf
Floor 100 psf

Ground Snow Load: 10 psf

Wind Load: Ultimate Wind Speed 127 mph (ASCE-7)
Exposure Category C

SEISMIC DESIGN CATEGORY: ☐ A ☒ B ☐ C ☐ D

Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) ☐ I ☒ II ☐ III ☐ IV
Spectral Response Acceleration SS 18.6 %g S1 8.6 %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
☐ Moment Frame ☐ Inverted Pendulum

Analysis Procedure: ☒ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☒ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☒

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) N/A psf
Presumptive Bearing capacity 2000 psf
Pile size, type, and capacity N/A



DESIGNED / CHECKED BY:	KJD
DRAWN BY:	BT
PROJECT #:	2025-06-04
DATE:	

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PROJECT: ***AN ADDITION FOR HARNETT COUNTY AIRPORT HANGAR***
497 AIRPORT RD. ERWIN, NC 28339

497 AIRPORT RD. ERWIN, NC 28339

FOUNDATION AND FRAMING PLAN

G2



1'-4" 1'-0" 8" 4" 2'-0" 0 4" 1'-1/2" = 1'-0" 2'-8" 0 6" 1'-0" = 1'-0" 4' 0 8" 1'-4" = 1'-0" 2'-8" 0 2' 1'-0" = 1'-0" 10'-8" 0 2' 4" = 1'-0" 16' 0 2'-8" 5'-4" = 1'-0" 0 4" 8" 1'-0" = 1'-0" 16' 0 4" 8" 1'-0" = 1'-0" 0 4" 8" 1'-0" = 1'-0" 16' 0 4" 8" 1'-0" = 1'-0"

ELECTRICAL LEGEND	
	DUPLEX RECEPTACLE; MOUNT AT 18" A.F.F.
	DUPLEX RECEPTACLE; MOUNT AT 18" A.F.F.; TAMPER RESISTANT
	DUPLEX RECEPTACLE; GROUND FAULT CIRCUIT INTERRUPTER
	QUAD RECEPTACLE; MOUNT AT 18" A.F.F.
	2 POLE 208/240V RECEPTACLE
	SINGLE POLE POWER/LIGHTING HOMERUN
	2-POLE POWER HOMERUN
	DISCONNECT
	JUNCTION BOX
	POWER PANEL
	SWITCH
	3-WAY SWITCH
	OCCUPANCY SENSOR WITH MANUAL OVERRIDE
	CAN LIGHT
	EMERGENCY LIGHT
	EXIT/EMERGENCY COMBO
	EXIT LIGHT
	REMOTE HEAD FOR EXIT LIGHTING

ELECTRICAL NOTES:
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 ECTRUNITTE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSION FITTINGS. MC CABLE MAY BE SUBSTITUTED FOR CONDUIT RACEWAYS WHERE PERMITTED BY THE CODE 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 TELEPHONE OUTLETS.

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:

1. 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 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. EXHAUST FANS ARE TO BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR, AND ELECTRICAL WIRING BY THE ELECTRICAL CONTRACTOR.

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. ALL LIGHT SWITCHES AND RECEPTACLES SHALL BE RATED FOR 20 AMP UNLESS NOTED OTHERWISE.

OUTSIDE AIR CALCULATION

OCCUPANCY TYPE:	BUSINESS
ACTUAL NUMBER OF OCCUPANTS (Pz)	2 PEOPLE
NET SQUARE FOOTAGE OF HEATED BUILDING: (Az)	130 SQ/FT
BUILDING EXHAUST REQUIREMENTS	
TOILET EXHAUST REQUIRED (1 FLUSHING FIXTURES * 70 CFM EACH))	70 CFM
TOTAL BUILDING EXHAUST AIR REQUIRED	70 CFM
BUILDING & PEOPLE VENTILATION REQUIREMENTS	
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

EXISTING PANEL "A"

EXISTING LOAD: LIGHT FRONT
***NEW/MODIFIED LOAD: BOLD FRONT

PHASE 1		WIRE: 3		VOLTS: 240/120		MAIN LOAD: 100A MLO	
TYPE: NEMA 1		MOUNTING: SURFACE		ENCLOSURE:			
SHORT CIRCUIT RATING: 22 kA RMS SYM.							
X GROUND TERMINAL BAR		X NEUTRAL TERMINAL BAR					
PHASE LOADING	DESCRIPTION	CKT. TYPE	WIRE SIZE	CKT. BKR. TRIP	CKT. NO.	A	B
1.72	LIGHT - LEFT BAY	C	#12	20/1	1		
1.72	LIGHT - CENTER BAY	C	#12	20/1	3		
0.55	RECEPT - LEFT WALL	R	#12	20/1	5		
0.55	RECEPT - REAR WALL	R	#12	20/1	7		
					9		
					11		
					13		
					15		
					17		
					19		
					21		
					23		
					25		
					26		
					29		
2.27							
SUB-TOTAL (kVA)		SUB-TOTAL (kVA)		4.84		5.27	
H-HVAC LOAD	C-CONTINUOUS LOAD	TOTAL CONNECTED LOAD =		14.65 KVA			
K-KITCHEN LOAD	N-NON CONTINUOUS LOAD	TOTAL AMPS=		61.04 A			
E-ESTIMATED LOAD	R-RECEPTACLE LOAD	TOTAL OF: 30 SPACES					

NEW SUB-PANEL "B" FED FROM PANEL "A"

PHASE 1		WIRE: 3		VOLTS: 240/120		MAIN LOAD: 50A MLO	
TYPE: NEMA 1		MOUNTING: SURFACE		ENCLOSURE:			
SHORT CIRCUIT RATING: 10 kA RMS SYM.							
X GROUND TERMINAL BAR		X NEUTRAL TERMINAL BAR					
PHASE LOADING	DESCRIPTION	CKT. TYPE	WIRE SIZE	CKT. BKR. TRIP	CKT. NO.	A	B
0.15	LIGHT- LOUNGE	C	#12	20/1	1		
2.00	WATER HEATER	E	#12	20/1	3		
1.80					5		
1.80	PTAC	H	#12	20/2	7		
					9		
					10		
1.95							
SUB-TOTAL (kVA)		SUB-TOTAL (kVA)		0.82		0.92	
H-HVAC LOAD	C-CONTINUOUS LOAD	TOTAL CONNECTED LOAD =		7.29 KVA			
K-KITCHEN LOAD	N-NON CONTINUOUS LOAD	TOTAL AMPS=		30.38 A			
E-ESTIMATED LOAD	R-RECEPTACLE LOAD	TOTAL OF: 10 SPACES					

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"	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 AIR CONDITIONER SCHEDULE

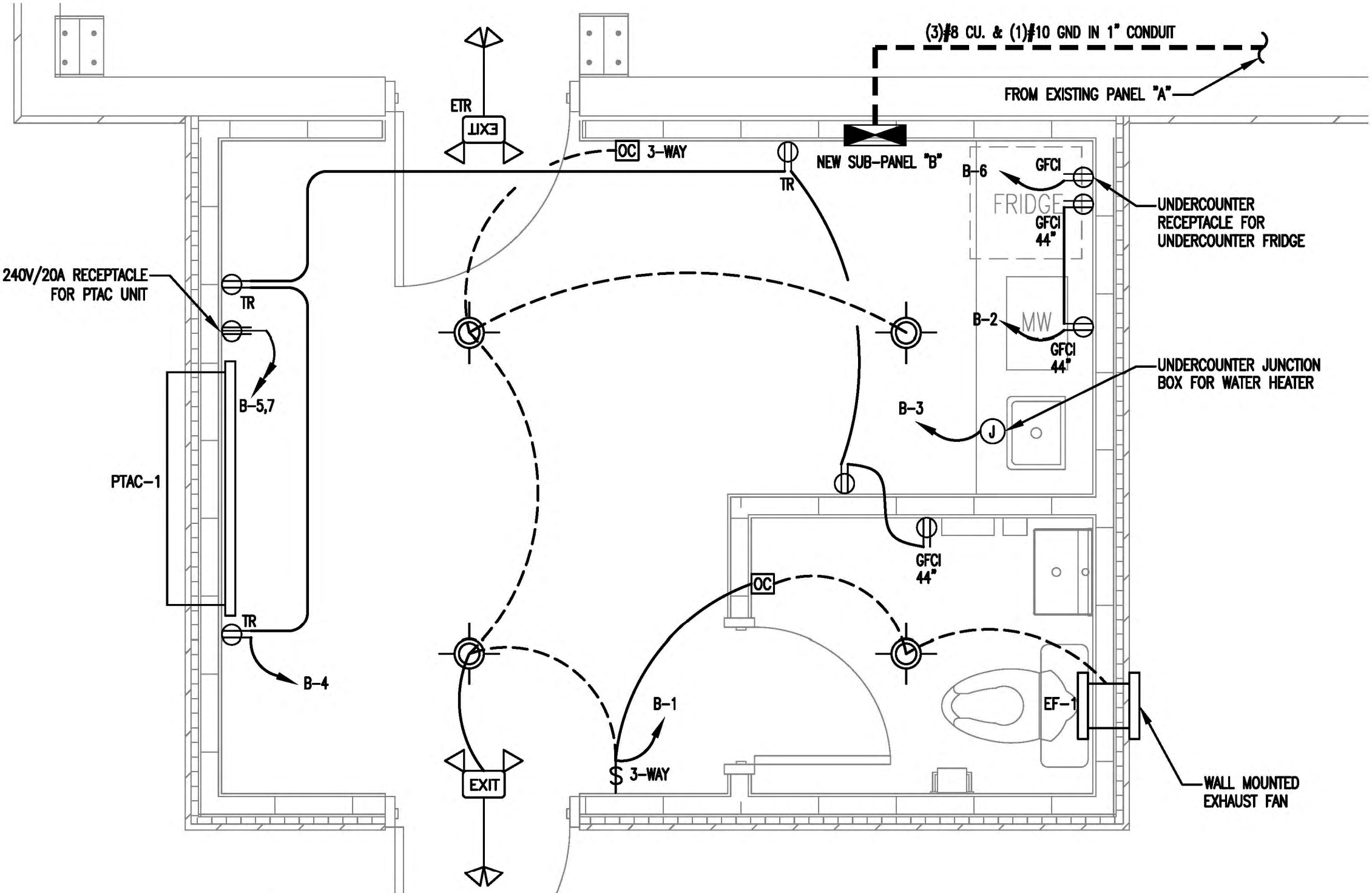
EQUIPMENT INFO			COOLING CAPACITIES			HEATING CAPACITIES			ELECTRICAL INFORMATION			MISCELLANEOUS INFORMATION		
TAG	TYPE	LOCATION	NOM. TONS	TOTAL COOLING	MIN. EER	MIN. COP	MIN. O/A INTAKE	UNIT CAPACITY	MIN. HSPF2	UNIT VOLTS	UNIT PHASE	MCA	MOCP	WIRE SIZE (CU. 75 C)
PTAC-1	PTAC HEAT PUMP	WALL MOUNTED	N/A	7,000	12.0	3.4	18 CFM	6,000	N/A	240	1	15	20	#12

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

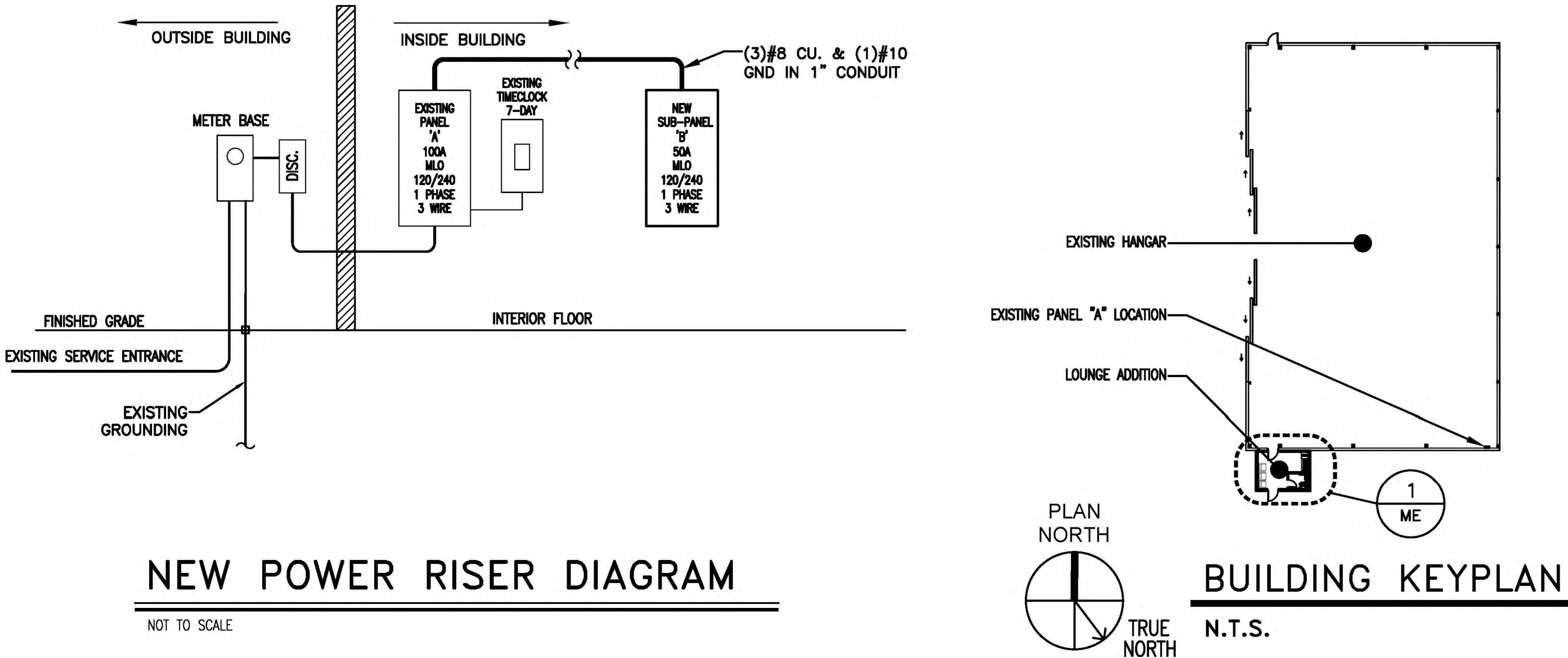
EXHAUST FAN SCHEDULE

EQUIPMENT INFO				FAN INFORMATION					ELECTRICAL INFORMATION					MFG & MODEL	
TAG	QTY.	TYPE	LOCATION	EXHAUST CFM	AREA SERVED	ESP IN WG	FAN DRIVE	SONES	RPM	FAN WATT	UNIT VOLTS	UNIT PHASE	HP		
EF-1	1	EXHAUST	WALL MOUNTED	70	RESTROOM	N/A	DIRECT	N/A	N/A	17	120	1	N/A	#12	GREENHECK / SP-1P0511-1 PROVIDE WALL CAP WITH BACKDRAFT DAMPER

*** RESTROOM EXHAUST FAN SHALL CONTROLLED WITH RESTROOM LIGHT SWITCH.



1 ME MECHANICAL / ELECTRICAL PLAN



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DESIGNED / CHECKED BY: KJD
DRAWN BY: BT
OWNER/TEENANT: _____
CONTRACTOR/BUILDER: _____

PROJECT #: 2025-06-04
DATE: 19 AUGUST 2025

PROJECT: AN ADDITION FOR HARNETT COUNTY AIRPORT HANGAR
497 AIRPORT RD. ERWIN, NC 28339

SHEET: ELECTRICAL - RISER & NOTES

ME

PLUMBING FIXTURE SCHEDULE








WASTE/VENT – RISER DIAGRAM

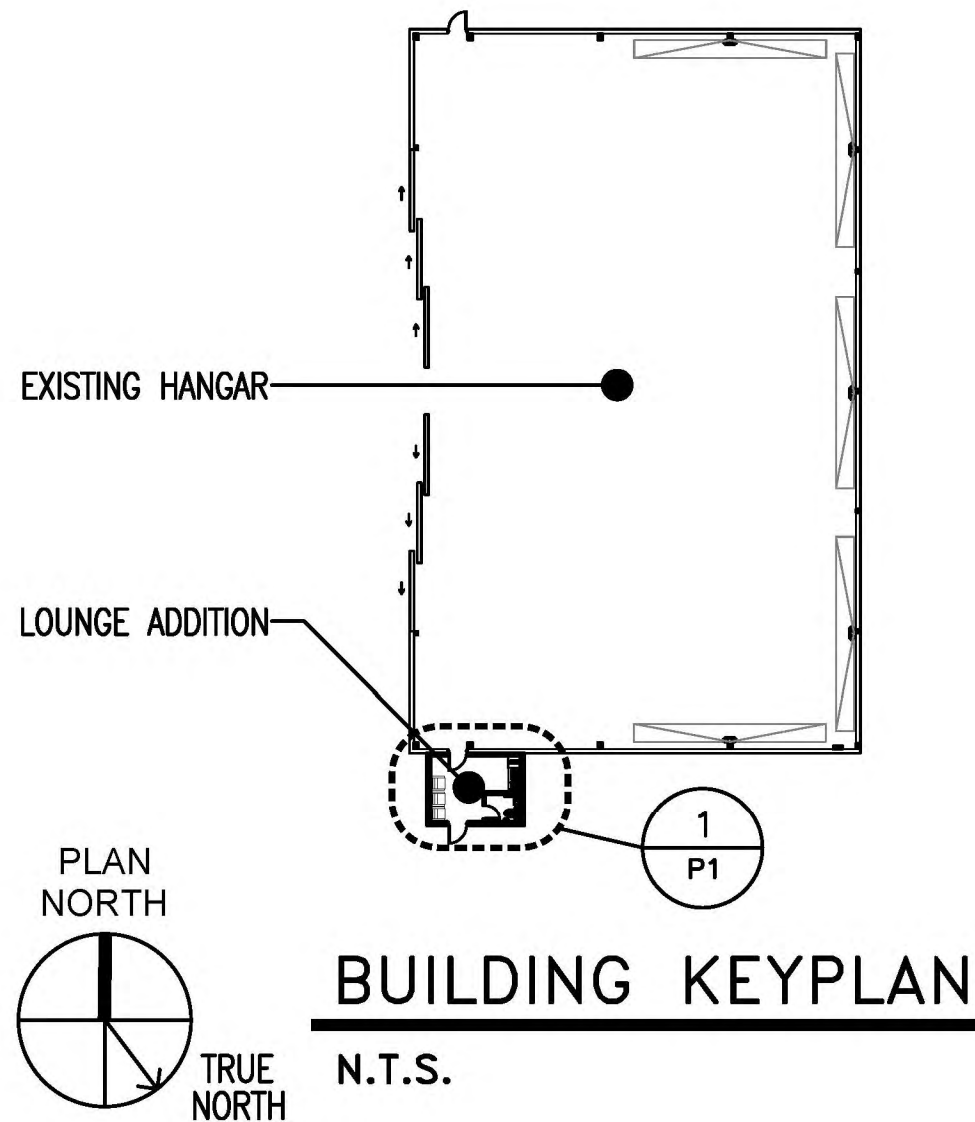
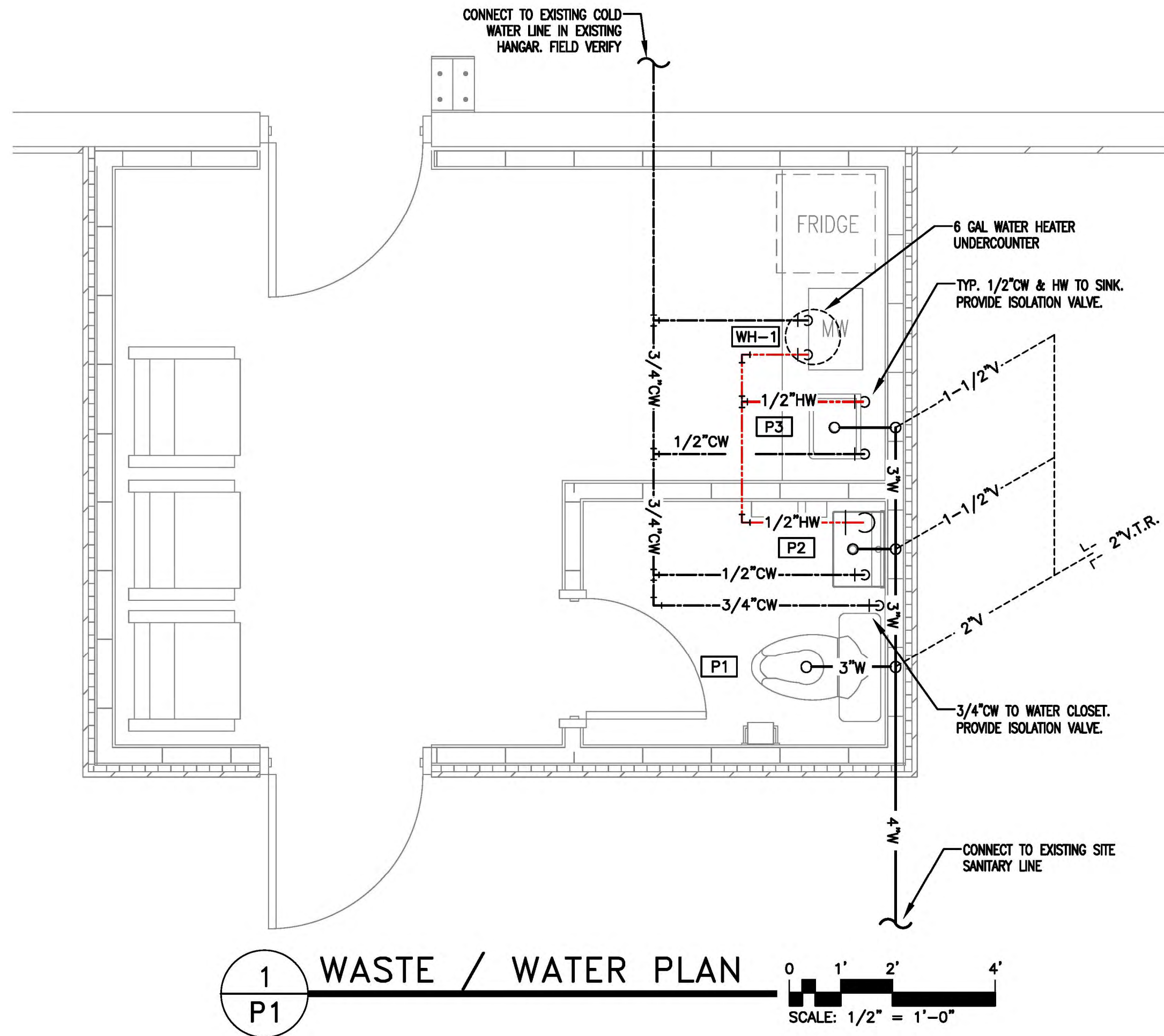
NOT TO SCALE

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
P3	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	WATER SUPPLY FIXTURE UNITS EACH	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 CALCULATIONS			
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 UNITS			7.0

PLUMBING SYMBOL LEGEND	
	HOT WATER LINE
	COLD WATER LINE
	PIPE TURNS UP
	PIPE TURNS DOWN
	SHUT OFF VALVE
	SANITARY WASTE
	VENT LINE



DESIGNED / CHECKED BY: **KJD**

DRAWN BY: **BT**

PROJECT #: **2025-06-04**

DATE:

FINAL DRAWING ☐ FOR REVIEW PURPOSES ONLY
PRELIMINARY ☐ FOR DESIGN DEVELOPMENT ONLY
FINAL DRAWING ☒ FOR CONSTRUCTION

OWNER/TENANT:

CONTRACTOR/BUILDER:

PROJECT: **AN ADDITION FOR HARNETT COUNTY AIRPORT HANGAR**
497 AIRPORT RD. ERWIN, NC 28339

SHEET: **PLUMBING – WASTE & WATER PLAN**

P 1