BLADEN COUNTY DSS LOBBY ADDITION

208 E. MCKAY STREET, ELIZABETHTOWN, NORTH CAROLINA

2012 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: Bladen County DSS Lobby Addition
Address: 208 E. McKay Street, Elizabethtown, NC Zip Code 28337
Proposed Use: Business Lobby
Owner/Authorized Agent: Robert Mazur Phone # (910) 876-3490 E-Mail
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City ☒ County Bladen ☐ State

LEAD DESIGN PROFESSIONAL: Robert P. Armstrong, Jr., P.E.

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				( )	
Civil				( )	
Electrical	Summit Design Group	R Armstrong	025488	(910)876-0376	rarmstrongjr@bellsouth.net
Fire Alarm				( )	
Plumbing				( )	
Mechanical	Summit Design Group	R Armstrong	025488	(910)876-0376	
Sprinkler-Standpipe				( )	
Structural	Summit Design Group	R Armstrong	025488	(910)876-0376	
Retaining Walls >5' High				( )	
Other				( )	

2012 EDITION OF NC CODE FOR: ☐ New Construction ☒ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair ☐ Renovation
CONSTRUCTED:(date) 1974 **ORIGINAL USE(S)** (Ch. 3): Business
RENOVATED: (date) **CURRENT USE(S)** (Ch. 3): Business
PROPOSED USE(S) (Ch. 3): Business

BASIC BUILDING DATA
Construction Type: (check all that apply) ☐ I-A ☐ I-B ☐ II-A ☒ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes (Primary) **Flood Hazard Area:** ☒ No ☐ Yes
Building Height: (feet) 23'
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor	20,049	685	20,734
Basement			
TOTAL	20,049	685	20,734

ALLOWABLE AREA

Occupancy:
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-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 Occupancies:
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-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 ☐

Incidental Uses (Table 508.2.5):
☐ Furnace room where any piece of equipment is over 400,000 Btu per hour input
☐ Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
☐ Refrigerant machine room
☐ Hydrogen cutoff rooms, not classified as Group H
☐ Incinerator rooms
☐ Paint shops, not classified as Group H, located in occupancies other than Group F
☐ Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy
☐ Laundry rooms over 100 square feet
☐ Group I-3 cells equipped with padded surfaces
☐ Group I-2 waste and linen collection rooms
☐ Waste and linen collection rooms over 100 square feet
☐ Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
☐ Rooms containing fire pumps
☐ Group I-2 storage rooms over 100 square feet
☐ Group I-2 commercial kitchens
☐ Group I-2 laundries equal to or less than 100 square feet
☐ Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses: ☐ 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

Special Provisions: ☐ 509.2 ☐ 509.3 ☐ 509.4 ☐ 509.5 ☐ 509.6 ☐ 509.7 ☐ 509.8 ☐ 509.9

Mixed Occupancy: ☐ No ☐ Yes Separation: ____ Hr. Exception: _____
☐ Incidental Use Separation (508.2.5)

This separation is not exempt as a Non-Separated Use (see exceptions).
☐ 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.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

_____ + _____ + ... = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503[3] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR ENLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
1	Business	20,734	23,000			23,000	

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (E)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30$ = _____ (%)
[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent
b. Single story building I_s = 300 percent
[3] Unlimited area applicable under conditions of Section 507.
[4] Maximum Building Area = total number of stories in the building x E (506.4).
[5] The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic control towers must comply with Table 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type _____ II-B _____		Type ___II-B___	
Building Height in Feet	55	Feet = H + 20' = _____	18	
Building Height in Stories	1	Stories + 1 = _____	1	

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (w/ _____ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses							
Bearing Walls							
Exterior							
North	>30						
East	>30						
West	>30						
South	>30						
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Roof Construction Including supporting beams and joists							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy Separation							
Partyfire Wall Separation							
Smoke Barrier Separation							
Tenant Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☒ Yes
Exit Signs: ☐ No ☒ Yes
Fire Alarm: ☒ No ☐ Yes
Smoke Detection Systems: ☒ No ☐ Yes ☐ Partial _____
Panic Hardware: ☐ No ☒ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: C-1
☐ Fire and/or smoke rated wall locations (Chapter 7)
☒ Assumed and real property line locations
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☐ Existing structures within 30' of the proposed building
☒ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)
☒ Occupant loads for each area
☒ Exit access travel distances (1016)
☒ Common path of travel distances (1014.3 & 1028.8)
☐ Dead end lengths (1018.4)
☒ Clear exit widths for each exit door
☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
☒ 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 (1008.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
☐ Location of doors with electromagnetic egress locks (1008.1.9.8)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1029)
☐ The square footage of each fire area (902)
☐ The square footage of each smoke compartment (407.4)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors: Wind (I_w) 1.15; Snow (I_s) 1.15; Seismic (I_e) 1.50

Live Loads: Roof 20 psf; Mezzanine _____ psf; Floor 100 psf

Ground Snow Load: 10 psf

Wind Load: Basic Wind Speed 110 mph (ASCE-7); Exposure Category B; Wind Base Shears (for MWFRS) Vx = _____ Vy = _____

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 (Table 1613.5.2) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F
Data Source: ☐ Field Test ☒ Presumptive ☐ Historical Data
Basic structural system (check one)
☒ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum
Seismic base shear: V_S = V_V =
Analysis Procedure: ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☐ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☒

Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity 2,000 psf
File size, type, and capacity _____

SPECIAL INSPECTIONS REQUIRED: ☒ Yes ☐ No

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 proposed design.

Climate Zone: ☒ 3 ☐ 4 ☐ 5

Method of Compliance:
☒ Prescriptive (Energy Code)
☐ Performance (Energy Code)
☐ Prescriptive (ASHRAE 90.1)
☐ Performance (ASHRAE 90.1)

THERMAL ENVELOPE

Roof/ceiling Assembly (each assembly)
Description of assembly: Metal Frame
U-Value of total assembly: _____
R-Value of insulation: R-38
Skylights in each assembly: _____
U-Value of skylight: NA
total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly: Metal Stud w/ Brick Veneer
U-Value of total assembly: _____
R-Value of insulation: R13+7.5
Openings (windows or doors with glazing)
U-Value of assembly: 0.50
Solar heat gain coefficient: 0.8
projection factor: _____
Door R-Values: R20

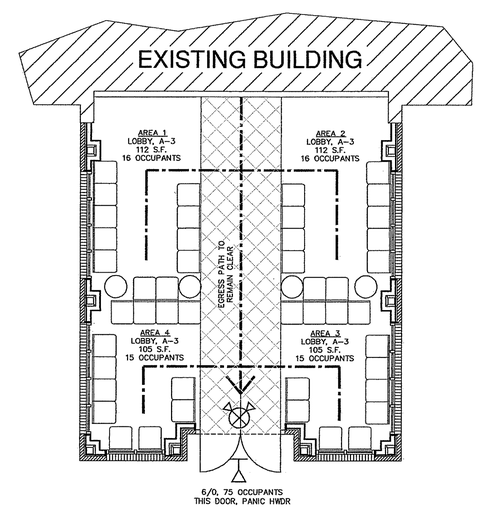
Walls below grade (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

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: Concrete slab on grade
U-Value of total assembly: _____
R-Value of insulation: R13 Perimeter
Horizontal/vertical requirement: _____
slab heated: _____

DRAWING LIST

DWG. NO.	DWG. TITLE
CS-1	LIFE SAFETY PLAN & APPENDIX-B
C-1	SITE PLAN
GC-1	FLOOR & PLAN, ELEVATIONS
S-1	FOUNDATION & FRAMING PLAN
S-2	SECTION
S-3	DETAILS & NOTES
ME-1	MECHANICAL & ELECTRICAL PLAN



LIFE SAFETY PLAN
(SCALE: 1/4" = 1'-0")

SUMMIT DESIGN GROUP, INC
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910-876-0376

ENGINEER
ROBERT P. ARMSTRONG JR. SEAL 025488

DRAWING DATA
DATE: 1/2/16
SCALE: 1/4" = 1'-0"
DRAWN BY: RPA
DESIGNED BY: RPA
CHECKED BY: RPA
PLOT SCALE: N/A
CAD FILE NO: CS-1

BLADEN COUNTY DSS
MAIN LOBBY ADDITION
208 E. MCKAY STREET, ELIZABETHTOWN, NC
APPENDIX B & LIFE SAFETY PLAN

NO.	REVISION

SHEET
CS-1

A PARTIAL TOPOGRAPHIC SURVEY FOR

THE COUNTY OF BLADEN, NC

" DEPARTMENT OF SOCIAL SERVICES "
- 208 EAST McKAY STREET -

FOR: SUMMIT DESIGN GROUP, INC.

ELIZABETHTOWN TOWNSHIP
NOVEMBER 20, 2015

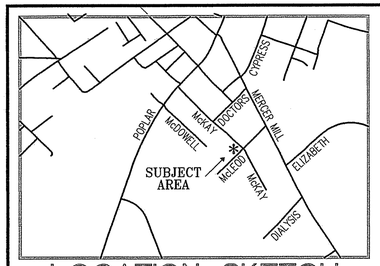
BLADEN COUNTY, N.C.
SCALE: 1" = 20'

GRAPHIC SCALE

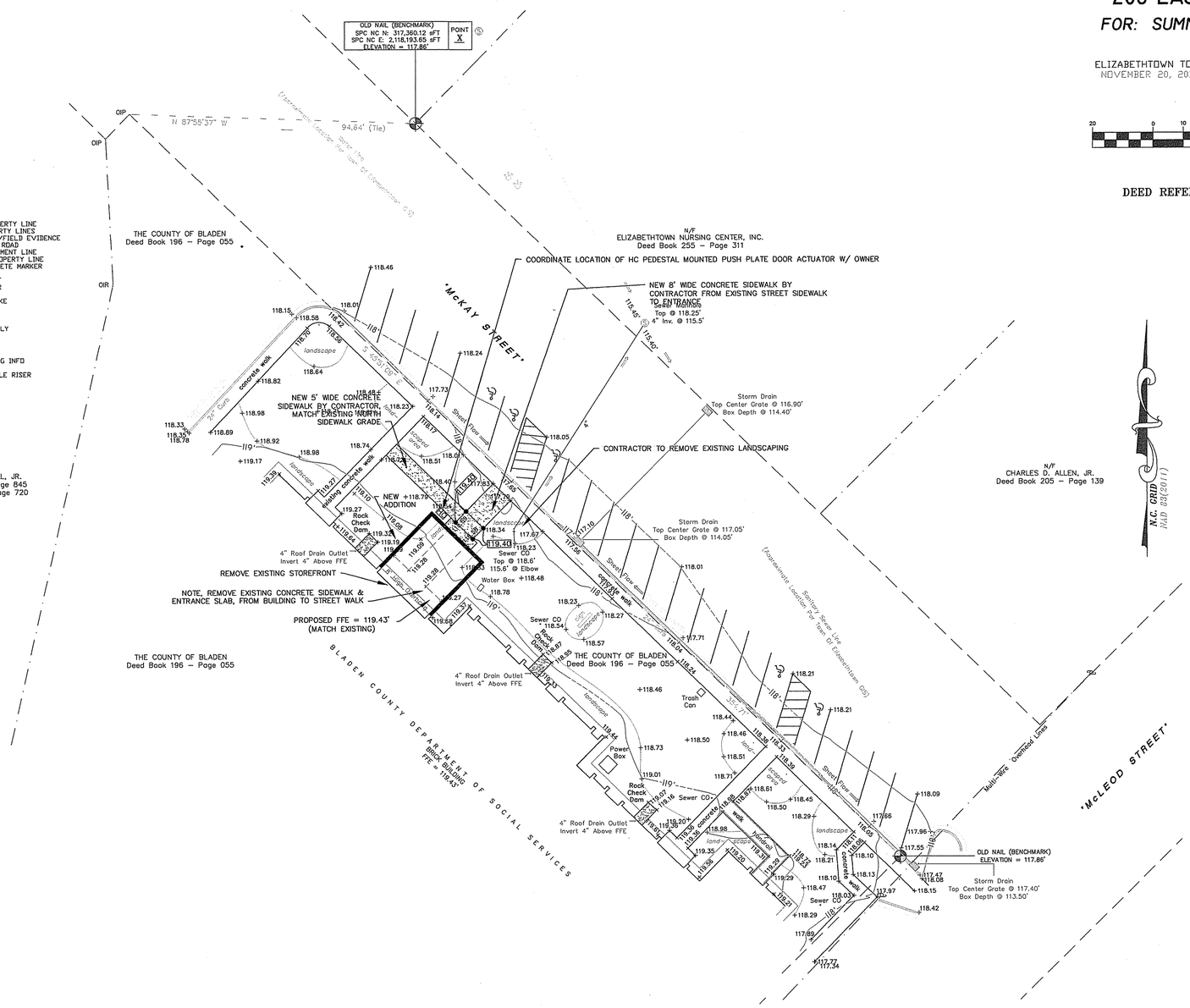
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DEED REFERENCES: AS NOTED HEREON



LOCATION SKETCH
(NOT TO SCALE)



LEGEND:

	SURVEYED PROPERTY LINE
	PLOTTED PROPERTY LINES
	FROM DOCUMENT/FIELD EVIDENCE
	CENTERLINE OF ROAD
	SURVEYED EASEMENT LINE
OML	OLD MARKED PROPERTY LINE
ECM	EXISTING CONCRETE MARKER
R/W	RIGHT OF WAY
IRS	IRON REBAR SET
OIR	OLD IRON REBAR
OIP	OLD IRON PIPE
LWS	LIGHTWOOD STAKE
LM	LINE MARKER
℄	CENTER LINE
℄	PROPERTY LINE
N/F	NOW OR FORMERLY
S	MINIMUM BLDG.
	SETBACK LINE
	UTILITY POLE
	PARKING/SMOKING INFO
	SIGN POSTS
	TELEPHONE CABLE RISER

SURVEY PROVIDED BY

SURVEYING AND MAPPING
205 CYPRESS STREET
ELIZABETHTOWN, N.C. 28337
TEL/FAX: 910.862.2047
FIRM: C-0385

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SEAL 025488
ROBERT P. ARMSTRONG JR.

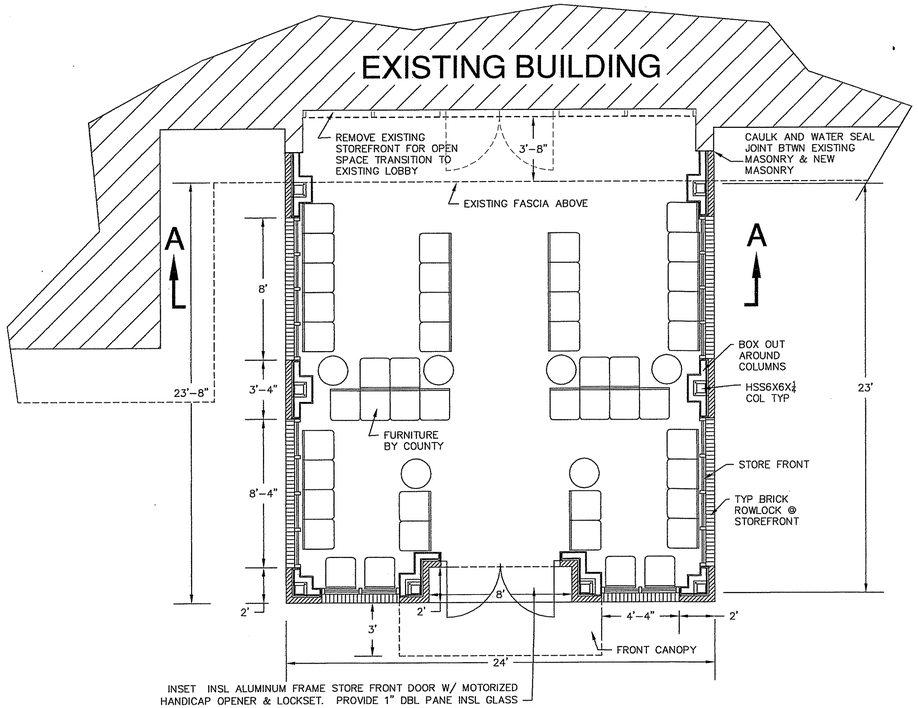
DRAWING DATA
DATE: 1/2/16
SCALE: 1/4" = 1'-0"
DRAWN BY: RPA
DESIGNED BY: RPA
CHECKED BY:
PLOT SCALE: N/A
CAD FILE NO: C-1

BLADEN COUNTY DSS
MAIN LOBBY ADDITION
208 E. MCKAY STREET, ELIZABETHTOWN, NC

SITE PLAN

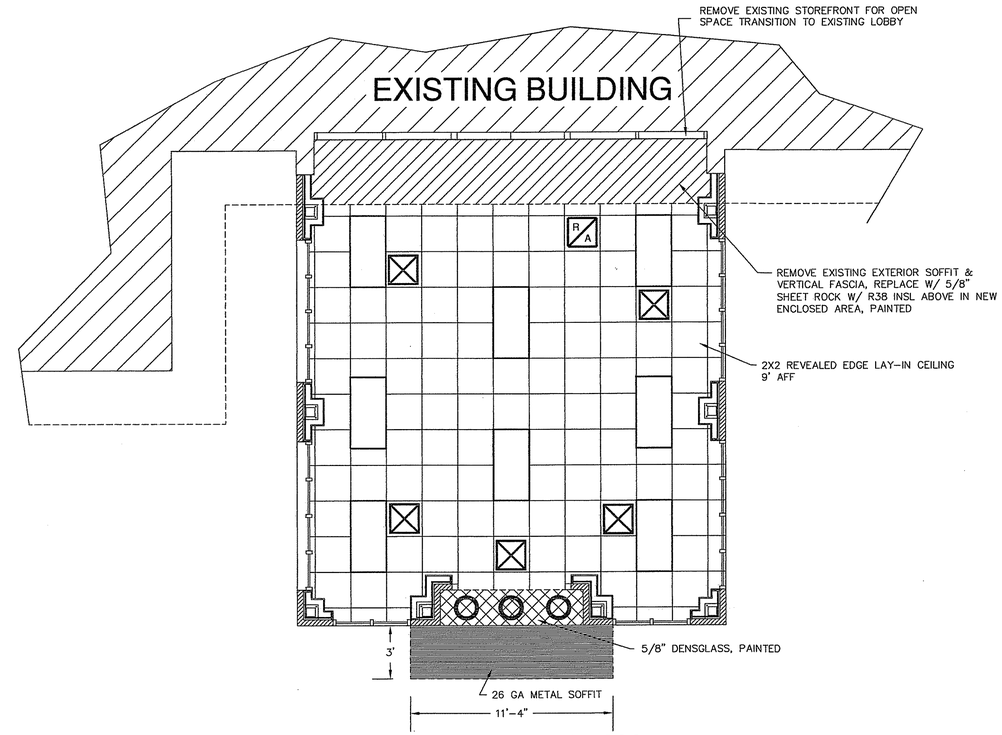
NO.	REVISION

SHEET
C-1



FLOOR PLAN

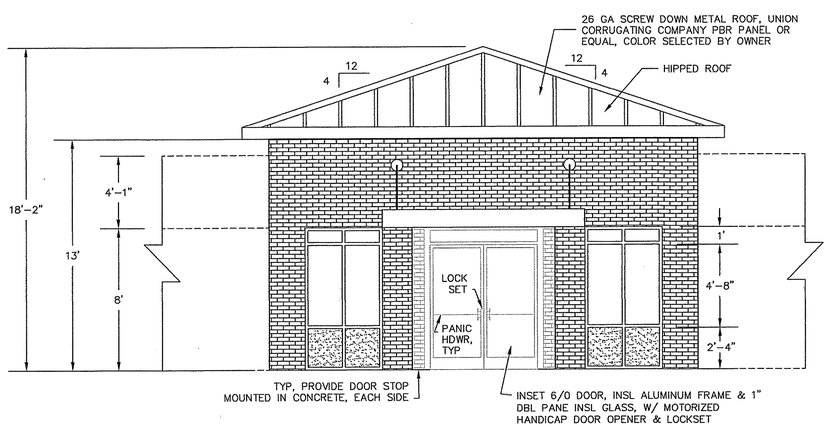
(SCALE: 1/4" = 1'-0")



CEILING PLAN

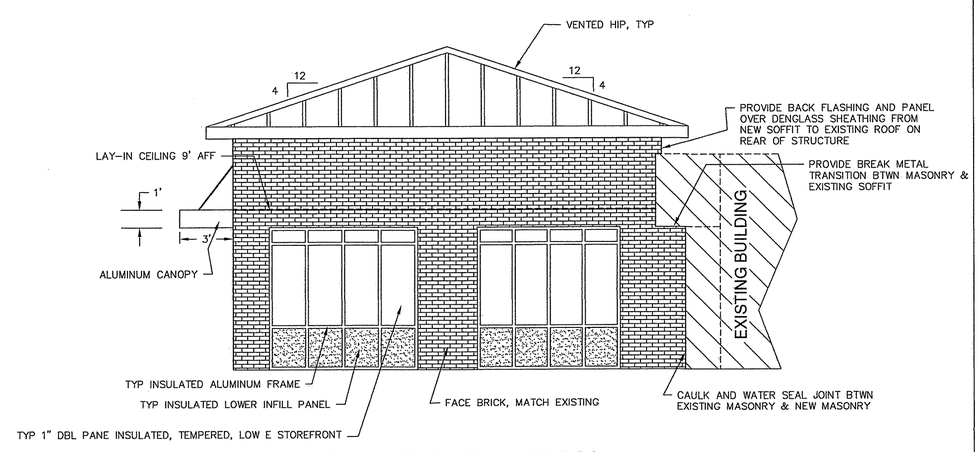
(SCALE: 1/4" = 1'-0")

ROOM FINISH SCHEDULE					
ROOM NAME	FLOORS	WALLS		CEILING	
		MATERIAL	FINISH	MATERIAL	HEIGHT
LOBBY	VCT W/ VINYL BASE AROUND PERIMETER	5/8" SHEETROCK	1 COAT PRIME 2 COAT FINISH	LAY-IN	9'-0"



FRONT ELEVATION

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



RIGHT ELEVATION

LEFT SIDE IS MIRROR IMAGE

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

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ENGINEER

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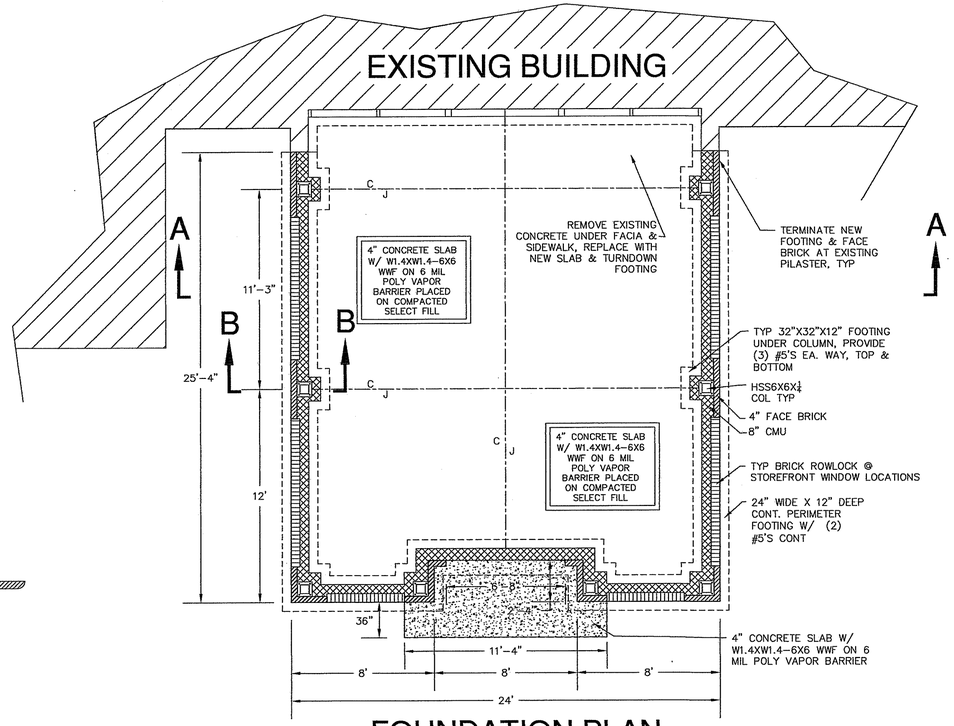
PLOT SCALE: N/A
CAD FILE NO: GC-1

BLADEN COUNTY DSS
MAIN LOBBY ADDITION
208 E. MCKAY STREET, ELIZABETHTOWN, NC

FLOOR PLAN & ELEVATIONS

NO.	REVISION

SHEET
GC-1



FOUNDATION PLAN

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

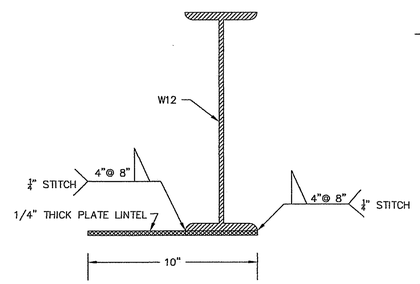
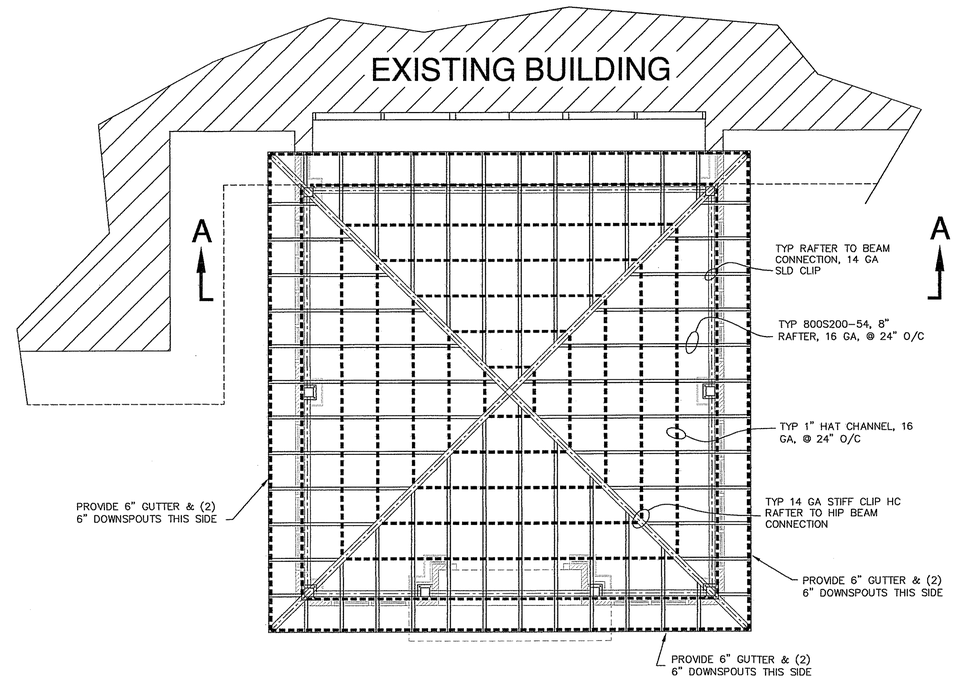
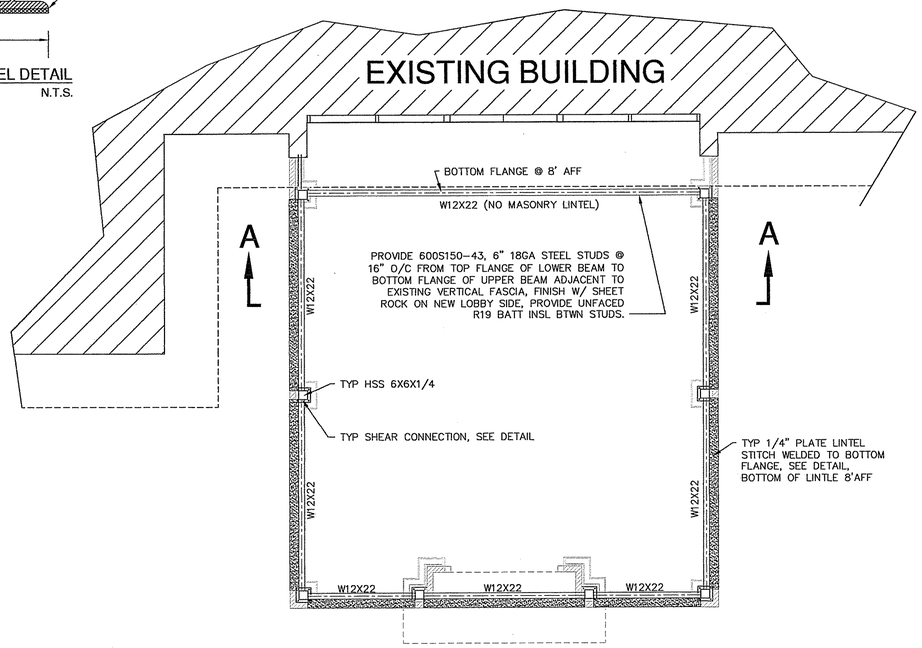


PLATE LINTEL DETAIL
N.T.S.



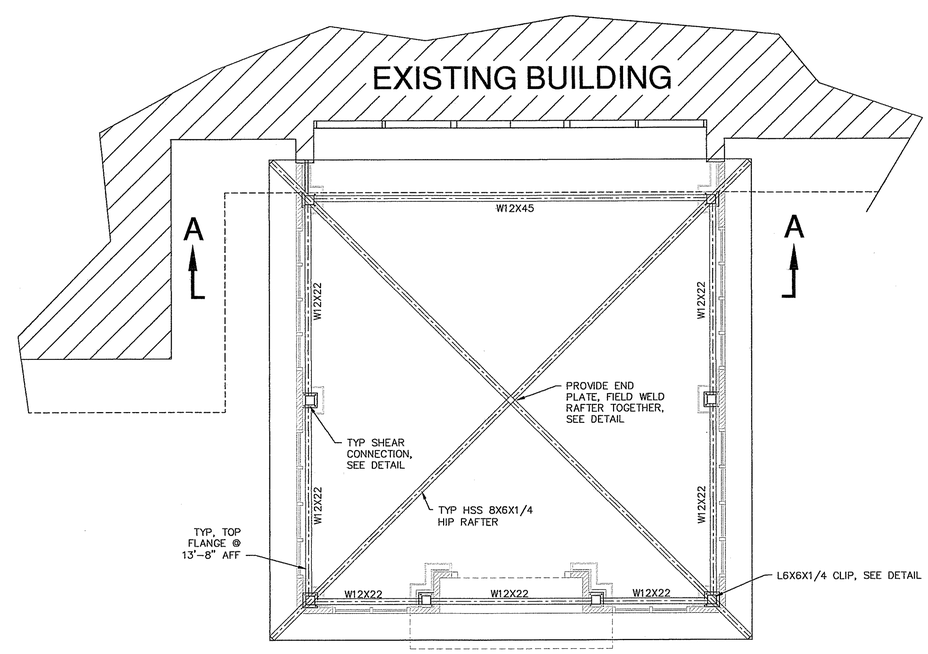
ROOF RAFTER PLAN

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



MASONRY LINTEL PLAN

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



ROOF PRIMARY FRAMING PLAN

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

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ROBERT P. ARMSTRONG JR.

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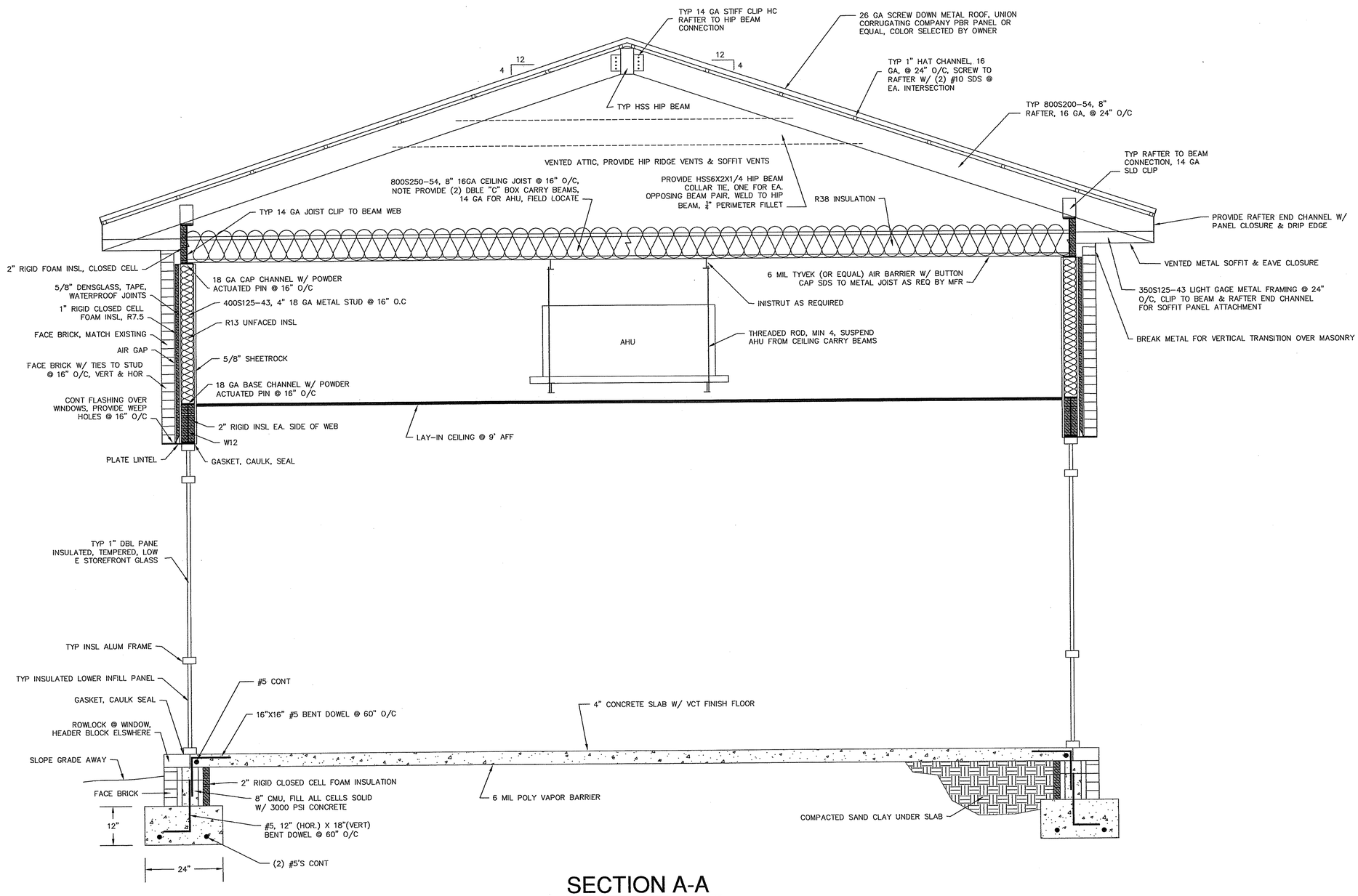
PLOT SCALE: N/A
CAD FILE NO: S-1

BLADEN COUNTY DSS
MAIN LOBBY ADDITION
208 E. MCKAY STREET, ELIZABETHTOWN, NC

FOUNDATION & STEEL FRAMING PLAN

NO.	REVISION

SHEET
S-1



SECTION A-A

(SCALE: 3/4" = 1'-0")

SUMMIT DESIGN GROUP, INC
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ENGINEER

SEAL 025488 ENGINEER ROBERT P. ARMSTRONG JR.

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BLADEN COUNTY DSS
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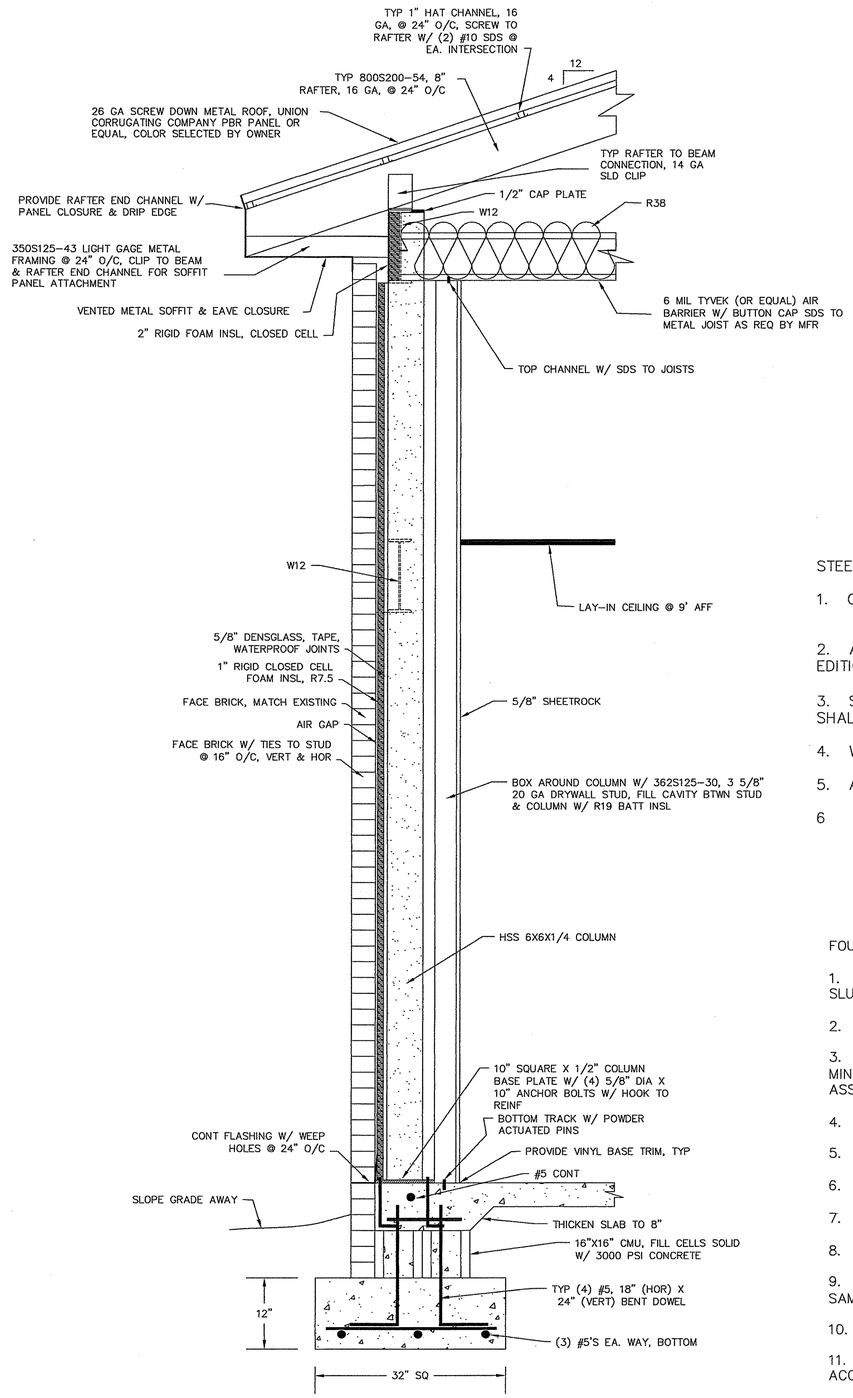
BUILDING SECTION A-A

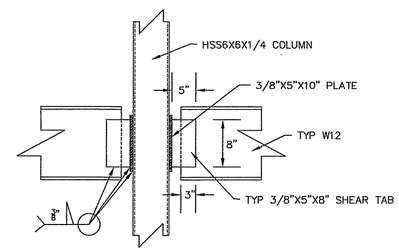
NO.	REVISION

SHEET
S-2



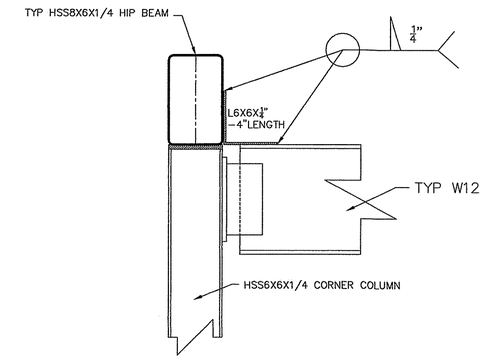
TYP SECTION B-B THRU COLUMN

(SCALE: 1" = 1'-0")



TYP SHEAR CONNECTION DETAIL

NOT-TO-SCALE



TYP HIP BEAM CLIP DETAIL

NOT-TO-SCALE

STEEL NOTES:

1. CONTRACTOR TO VERIFY PROPOSED DIMENSIONS AND NOTIFY ENGINEER OF CONFLICTS

2. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION LATEST EDITION AND THE 2012 NORTH CAROLINA BUILDING CODE.

3. STRUCTURAL STEEL BEAMS/COLUMNS/PLATES SHALL BE ASTM A50 (50 KSI), STRUCTURAL STEEL TUBES SHALL BE ASTM A500 GRADE B.

4. WELDING ELECTRODES: E70XX, MINIMUM ALLOWABLE SHEAR STRESS, 21 KSI.

5. A325 BOLTS SHALL INCLUDE NUT & WASHER

6 DESIGN LOADS
ROOF LIVE LOAD: 20 PSF
GROUND SNOW LOAD: 10 PSF
WIND SPEED: 110 MPH, 3 SEC GUST, EXPOSURE B, WIND IMPORTANCE FACTOR = 1.25

FOUNDATION NOTES:

1. ALL CONCRETE TO HAVE MIN. 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI, 4" MAX SLUMP, 5% AIR.

2. CONTRACTOR TO VERIFY ALL DIMENSIONS W/ FIELD CONDITIONS & W/ OWNER

3. CONCRETE FOOTINGS AND SLAB TO BE PLACED ON COMPACTED SELECT MATERIAL MIN. 98% DENSITY – SELECT FILL PLACED & COMPACTED IN 6" LIFTS. ASSUMED SOIL BEARING CAPACITY = 2000 PSF.

4. CONTROL JOINTS TO BE SAW CUT, SPACED MAX. 12' O/C.

5. REINFORCING STEEL SHALL BE 60 KSI., ASTM A 615.

6. FIELD VERIFY FRAMED OPENING LOCATIONS W/ OWNER.

7. CONT. REINFORCING STEEL SHALL HAVE 24 BAR DIA LAP OR MIN. 12".

8. CLEAR DISTANCE FOR ALL REINFORCING SHALL BE 3", UON.

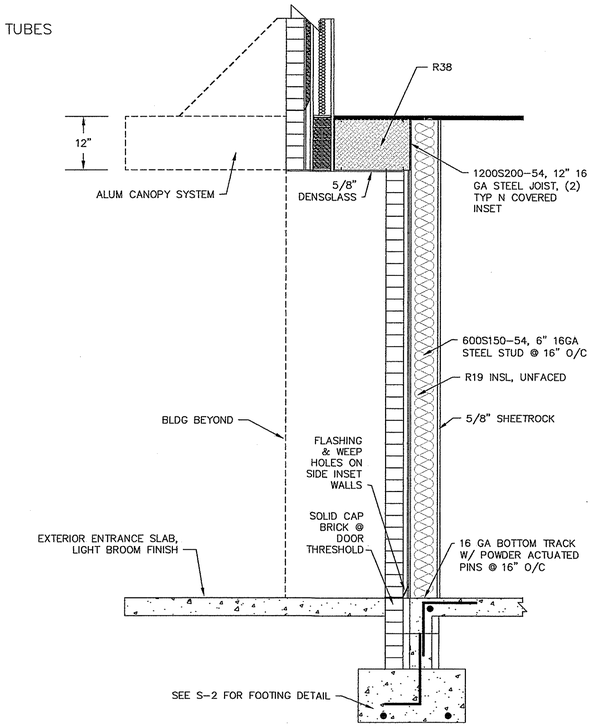
9. PROVIDE CORNER BARS AT ALL FOOTING CORNERS. CORNER BARS SHALL HAVE THE SAME SIZE AND SPACING AS MAIN REINFORCING AND SHALL HAVE A MIN 48" LAP.

10. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 & A 82.

11. FLOOR LIVE LOAD DESIGN = 100 PSF, DESIGN WIND SPEED = 110 MPH, 3 SEC GUST IN ACCORDANCE WITH THE 2012 NORTH CAROLINA BUILDING CODE.

12. FOOTING AND SLAB SHALL BE POURED SEPARATELY

13. INTERIOR SLAB: SMOOTH TROWEL FINISH, FLATNESS AND LEVELNESS IN ACCORDANCE W/ ACI 117 FF35/FL25, EXTERIOR ENTRANCE SLAB: LIGHT BROOM FINISH



FRONT INSET ENTRY SECTION

NOT-TO-SCALE

SUMMIT DESIGN GROUP, INC
STRUCTURAL • CIVIL • MECHANICAL • ELECTRICAL
PO BOX 995
BLADENBORO, NC 28320
910-876-0376

ENGINEER

ROBERT R. PRINCE SEAL 025486 2-3-16 NORTH CAROLINA

DRAWING DATA	
DATE: 1/2/16	
SCALE: 1/4" = 1'-0"	
DRAWN BY:	RPA
DESIGNED BY:	RPA
CHECKED BY:	
PLOT SCALE:	N/A
CAD FILE NO:	S-3

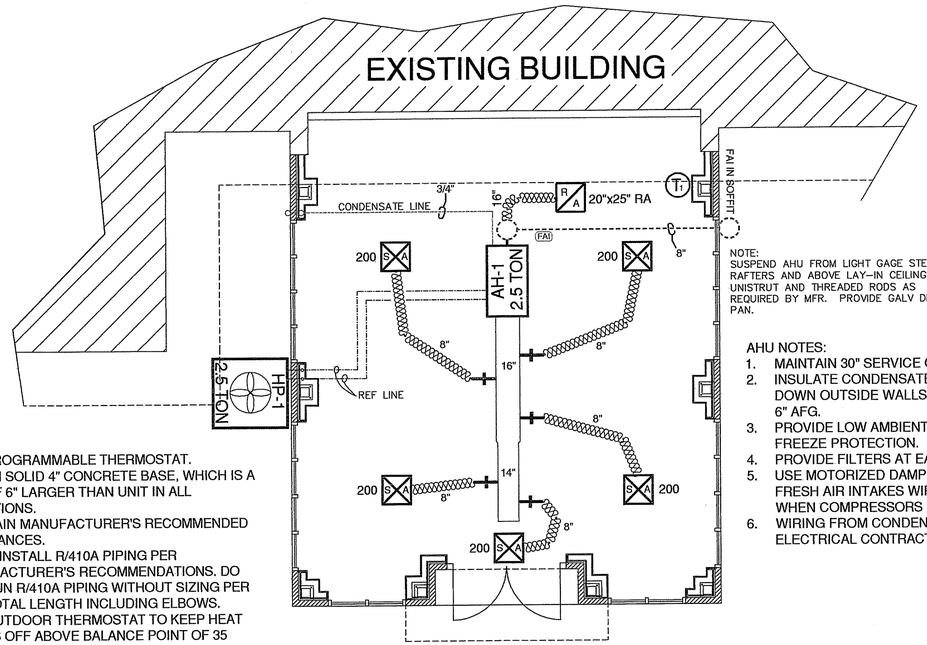
BLADEN COUNTY DSS
MAIN LOBBY ADDITION
208 E. MCKAY STREET, ELIZABETHTOWN, NC

SECTIONS, DETAILS & NOTES

NO.	REVISION

SHEET

S-3



NOTE:
SUSPEND AHU FROM LIGHT GAGE STEEL RAFTERS AND ABOVE LAY-IN CEILING W/ UNISTRUT AND THREADED RODS AS REQUIRED BY MFR. PROVIDE GALV DRAIN PAN.

HP NOTES:
1. USE PROGRAMMABLE THERMOSTAT.
2. SET ON SOLID 4" CONCRETE BASE, WHICH IS A MIN. OF 6" LARGER THAN UNIT IN ALL DIRECTIONS.
3. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.
4. SIZE & INSTALL R/410A PIPING PER MANUFACTURER'S RECOMMENDATIONS. DO NOT RUN R/410A PIPING WITHOUT SIZING PER THE TOTAL LENGTH INCLUDING ELBOWS.
5. USE OUTDOOR THERMOSTAT TO KEEP HEAT STRIPS OFF ABOVE BALANCE POINT OF 35 DEGREES.

AHU NOTES:
1. MAINTAIN 30" SERVICE CLEARANCE.
2. INSULATE CONDENSATE PIPING, RUN DOWN OUTSIDE WALLS AND TERMINATE 6" AFG.
3. PROVIDE LOW AMBIENT CONTROL FOR FREEZE PROTECTION.
4. PROVIDE FILTERS AT EACH UNIT.
5. USE MOTORIZED DAMPERS ON ALL FRESH AIR INTAKES WIRED TO OPEN WHEN COMPRESSORS RUN.
6. WIRING FROM CONDENSER TO AH BY ELECTRICAL CONTRACTOR.

HVAC PLAN

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

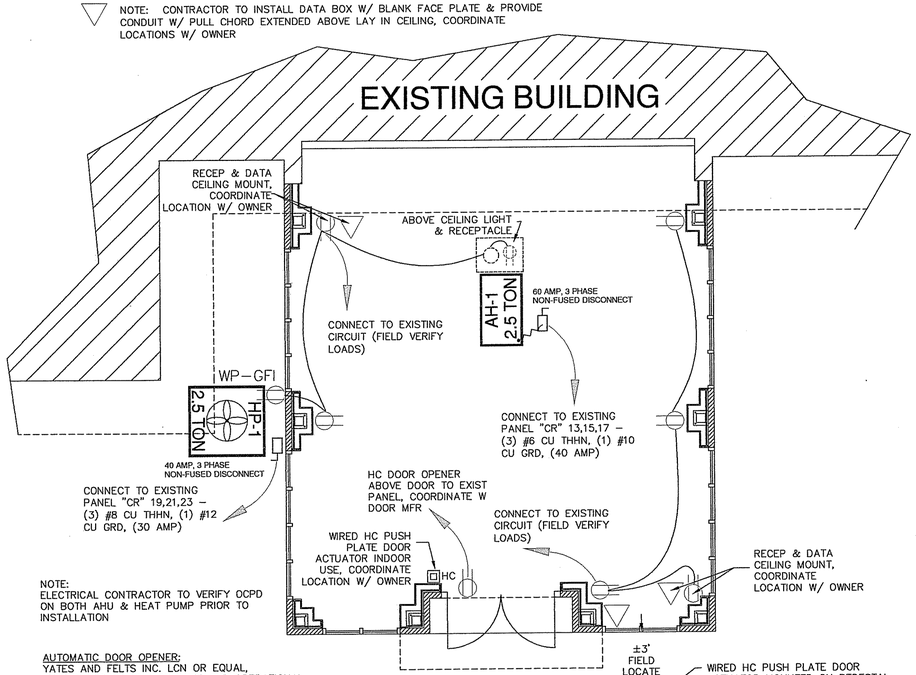
HVAC GENERAL NOTES:

1. CONTRACTOR IS TO REVIEW ALL DRAWINGS FOR BUILDING CONSTRUCTION WHICH MAY AFFECT HIS WORK AND BE GOVERNED BY THESE SPECIFICATIONS.
2. ALL WORK SHALL CONFORM TO ALL STATE AND LOCAL CODES FOR THIS CLASS OF WORK, INCLUDING ALL SERVICE CHARGES, FEES AND PERMITS.
3. ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE IBC, THE 2012 NORTH CAROLINA ENERGY CODE AND THE 2012 NORTH CAROLINA MECHANICAL CODE.
4. CONTRACTOR SHALL VERIFY ALL CONDITIONS ABOVE AND BELOW THE CEILING WHICH MAY INTERFERE WITH THE DUCT SYSTEM AND NOTIFY THE ENGINEER OR OWNER OF ANY CONFLICT, AND MAKE OFFSETS IN THE DUCT SYSTEM AS REQUIRED WITHOUT ADDITIONAL COST TO THE OWNER.
5. ALL SHEET METAL DUCT CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS.
6. CONTRACTOR IS TO PROVIDE FLEXIBLE NEOPRENE IMPREGNATED GLASS FABRIC CONNECTIONS AT THE INLET AND OUTLET OF AIR HANDLING EQUIPMENT.
7. ALL DUCTWORK INSTALLED IN NON-CONDITIONED AREAS SHALL BE INSULATED. THE MINIMUM THERMAL RESISTANCE VALUE OF THE INSULATING MATERIAL SHALL BE R-8.
8. ALL ROUND DUCT IS TO BE INSULATED WITH DUCT WRAP HAVING A VAPOR PROOF JACKET.
9. ALL INSULATION AND ACCESSORIES ARE TO BE UL LABELED FOR FIRE AND SMOKE RATINGS. ADDITIONAL COMPONENTS TO BE INSULATED INCLUDE:
   A. INTERIOR CONDENSATE DRAIN PIPING.
   B. REFRIGERANT PIPING (1½" CLOSED CELL FOAM INSULATION).
   C. COMPONENT HANGERS.
10. AIR HANDLING EQUIPMENT CONDENSATE LINES ARE TO HAVE "P" TRAPS. ROUTE LINES TO NEAREST DRAIN, SLOPE FOR SUFFICIENT DRAINAGE AND SECURE.
11. ALL CONDENSATE PIPING SHALL BE TYPE L COPPER OR SCH. 40 PVC. INSULATE INTERIOR PIPING WITH ½" CLOSED CELL FOAM INSULATION.
12. ALL DUCTS SHALL BE ADEQUATELY SUPPORTED.
13. INDICATED LOCATIONS OF DIFFUSERS AND GRILLS ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL SUPPLY AND RETURN REGISTERS, DUCTS, GRILLS AND DIFFUSERS WITH LIGHTING AND CEILING PATTERN.
14. AIR HANDLING UNITS TO BE SET IN 2" DEEP GALVANIZED OR LEXAN DRAIN PANS PIPED TO THE EXTERIOR. USE FLOAT SWITCH TO CUT OFF UNIT IN CASE OF CONDENSATE OVERFLOW.
15. WARRANTY AND GUARANTY INFORMATION REQUIRED ON COMPRESSORS, LOGIC MODULES AND HEAT EXCHANGERS.
16. ALL FRESH AIR INTAKES TO HAVE MOTORIZED DAMPERS, AND BE SIZED AS SHOWN ON PLANS.
17. ELECTRIC HEAT STRIPS TO HAVE OUTDOOR THERMOSTATS.
18. A GASKET SEAL SHALL BE PROVIDED WHEREVER THE DUCTS PENETRATE THE THERMAL ENVELOPE.

SPLIT SYSTEM HEAT PUMP SCHEDULE

INDOOR UNIT						OUTDOOR UNIT					
MARK	GOODMAN MODEL #	ARRANGEMENT	SUPP. HEAT @ 240V	VOLT / PHASE	COOLING CAPACITY	MARK	GOODMAN MODEL #	VOLT / PHASE	MCA	MOPD	SEER
AH-1	ARUF30B14	HORIZONTAL	10 KW	120/208/3 PH	30,000 BTU	HP-1	GSX160301	208/3 PH	26.2	35	14

NOTE: CONTRACTOR TO INSTALL DATA BOX W/ BLANK FACE PLATE & PROVIDE CONDUIT W/ PULL CHORD EXTENDED ABOVE LAY IN CEILING, COORDINATE LOCATIONS W/ OWNER



NOTE:
ELECTRICAL CONTRACTOR TO VERIFY OCPD ON BOTH AHU & HEAT PUMP PRIOR TO INSTALLATION

AUTOMATIC DOOR OPENER:
YATES AND FELTS INC. LON OR EQUAL, ELECTROHYDRAULIC, COMPLETE AND OPERATIONAL INCLUDING PUSH PLATE ACTUATORS, WIRING, AND ALL APPURTENANCES REQUIRED. PUSH SIDE MOUNT, DESIGNED TO OPEN BOTH OUT SWING DOORS, COORDINATE W/ DOOR PROVIDER.

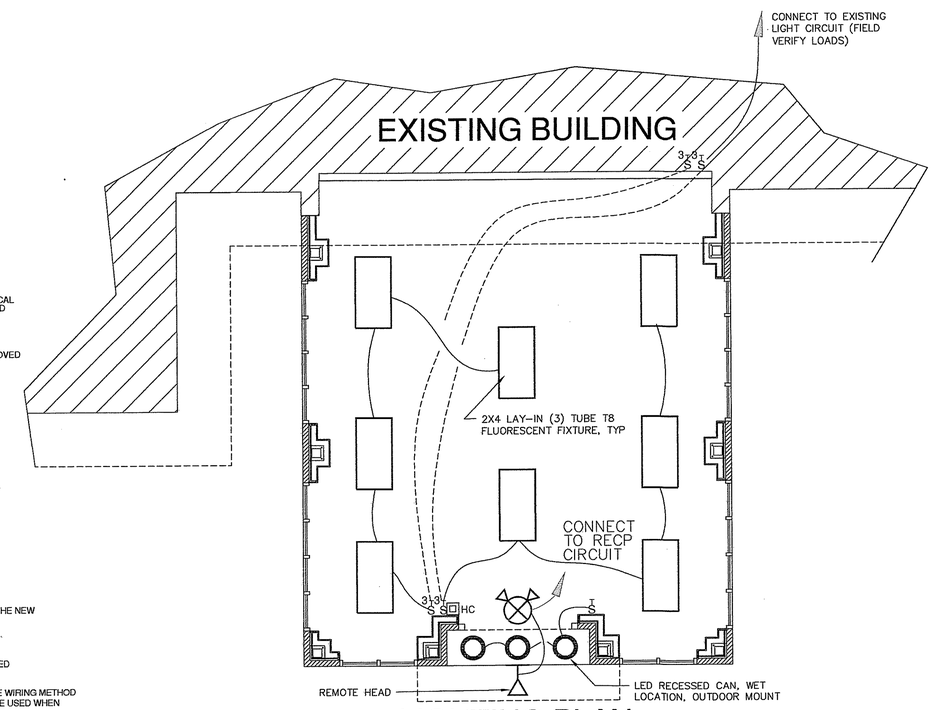
WIRED HC PUSH PLATE DOOR ACTUATOR MOUNTED ON PEDESTAL 34" ABOVE GRADE, WEATHER PROOF OUTDOOR USE, COORDINATE LOCATION W/ OWNER DURING CONSTRUCTION

POWER PLAN

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

ELECTRICAL GENERAL NOTES

1. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMINSIONS. DO NOT SCALE THESE DRAWINGS.
2. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THE PROJECT, PRIOR TO THE INSTALLATION OF HIS EQUIPMENT SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND TO ALLOW OPTIMUM MAINTENANCE AND WORKING SPACE.
3. USE OF THE CONDUIT SYSTEM FOR EQUIPMENT GROUNDING SHALL NOT BE ACCEPTABLE. A SEPERATE GREEN GROUND WIRE SHALL BE RUN WITH THE CIRCUIT CONDUCTORS IN EACH CONDUIT.
4. ALL FUSES, DISCONNECT SWITCHES, AND BREAKERS SIZES, SHOWN FOR MECHANICAL EQUIPMENT, SHALL BE VERIFIED BEFORE THE PURCHASE OR INSTALLATIONOF SAID EQUIPMENT, WITH THE SUPPLIER AND THE MECHANICAL CONTRACTOR.
5. ALL WORK AND MATERIAL SHALL BE PROVIDED IN ACCORDANCE WITH THE STATE, LOCAL AND NATIONAL CODES AND ORDINANCES AND 2011 NEC.
6. EACH CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BT HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTORS EXPENSE.
7. THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE COORDINATED WITH THE OWNER, PRIOR TO INSTALLATION FOR USE WITH THE ACTUAL EQUIPMENT, CASEWORK AND MILLWORK TO BE FURNISHED.
8. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DISCONNECTS, SWITCHES AND RECEPTACLES UNDER THE ELECTRICAL BID AND SHALL INCLUDE ALL NECESSARY CIRCUITS TO AND FINAL CONNECTIONS TO THE EQUIPMENT PROVIDE BY ALL SUPPLIERS, UNLESS NOTED OTHERWISE BY OTHER DISIPLINES. CORDINATE CLOSELY.
9. WHERE ELECTRICAL EQUIPMENT PENETRATES EXTERIOR WALLS, THE SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ENGINEER. SUBMIT DETAIL OF PROPOSED SEALING METHODS.
10. ALL PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID BY THE ELECTRICAL CONTRACTOR.
11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR.
12. THE CONTRACTOR SHALL PROVIDE COMPLETE UPDATED PANEL SCHEDULES FOR ALL PANELBOARDS.
13. AS BUILT DRAWINGS SHALL BE GIVEN TO THE OWNER AT THE COMPLETION OF THE CONTRACT.
14. THE CONTRACTOR SHALL VERIFY THE CEILING TYPES WITH THE GENERAL CONTRACTOR PRIOR TO THE PURCHASE OF ANYLIGHT FIXTURES SO THAT THE PROPER TRIM WILL BE PROVIDE FOR ALL FIXTURES. ANY DIFFERENCES WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
15. THE ELECTRICAL CONTRACTOR SHALL FIELD CCORDINATE THE INSTALLATION OF THE NEW UNDERGROUND ELECTRICAL SERVICE WITH THE LOCAL UTILITY.
16. THE ELECTRICAL CONTRACTOR SHALL FIELD COORDINATE THE LOCATION OF HIS TELEPHONE CONDUIT STUB OUTS WITH THE LOCAL TELEPHONE COMPANY PRIOR TO HIS INSTALLING ANY CONDUITS.
17. ALL WIRE SIZES INDICATED ON THE PANEL SCHEDULES ARE BASED ON 75 DEGREE COPPER THHN/THWN WIRE. ALL WIRE TERMINALS AND EQUIPMENT SHALL BE LISTED AND APPROVED FOR 75° C.
18. MIN. CONDUIT SIZE SHALL BE 1/2" AND MIN. WIRE SIZE SHALL BE #12 AWG.
19. METAL-CLAD CABLE (TYPE MC) AND ARMORED CABLE (TYPE AC) IS AN ACCEPTABLE WIRING METHOD SUBJECT TO RESTRICTIONS OF THE NEC. TYPES "MC OR AC" CABLE SHALL NOT BE USED WHEN PENETRATING RATED WALLS.
20. THE MAX. NUMBER OF HOMERUNS IN A CONDUIT SHALL NOT EXCEED 3.
21. PROVIDE ATTIC LIGTHS & RECEPTACLES PER NEC CODE
    PROVIDE SWITCH AT ACCESS POINT



LIGHTING PLAN

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

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ENGINEER
ROBERT P. ARMSTRONG JR.
SEAL 025488
NORTH CAROLINA PROFESSIONAL ENGINEER
2-23-16

DRAWING DATA
DATE: 1/14/16
SCALE: 1/4" = 1'-0"
DRAWN BY: RPA
DESIGNED BY: RPA
CHECKED BY:
PLOT SCALE: N/A
CAD FILE NO: ME-1

NO.	REVISION

SHEET
ME-1

BLADEN COUNTY DSS
MAIN LOBBY ADDITION
208 E. MCKAY STREET, ELIZABETHTOWN, NC

HVAC & ELECTRICAL PLAN