

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: **DRIVE-THRU ENCLOSURE FOR TOTAL SYSTEMS HEATING - COOLING**
Address: **13341 NC HIGHWAY 210, SPRING LAKE, NC** Zip Code: **28380**
Proposed Use: **OFFICES**
Owner or Authorized Agent: **WILLIAM T. ALLEN** Phone: **(910) 923-0141** E-Mail: _____
Owned By: City/County Private State
Code Enforcement Jurisdiction: City **FAYETTEVILLE** County _____ State **NORTH CAROLINA**

CONTACT: **GEORGE M. ROSE, P.E.**

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #
Architectural	GEORGE M. ROSE, P.E.	GEORGE M. ROSE, P.E.	11315	910-411-5822
Civil	N/A	N/A	N/A	george@gmrpe.com
Electrical	N/A	N/A	N/A	
Fire Alarm	N/A	N/A	N/A	
Plumbing	N/A	N/A	N/A	
Mechanical	N/A	N/A	N/A	
Sprinkler-Standpipe	N/A	N/A	N/A	
Structural	N/A	N/A	N/A	
Precast	N/A	N/A	N/A	
Retaining Walls >5' High	N/A	N/A	N/A	
Building	GEORGE M. ROSE, P.E.	GEORGE M. ROSE, P.E.	11315	910-411-5822

2018 NC CODE FOR: New Construction 1st Time Interior Completion Shell/Core Phased Construction - Shell/Core Renovation

2018 NC EXISTING BUILDING CODE: Prescriptive Repair Chapter 14 Level I Level II Level III Historic Property Change of Use

ALTERATION: Original Occupancy(S) (Ch. 3): _____ Current Occupancy(S) (Ch. 3): _____ Proposed: I II III IV

BASIC BUILDING DATA

Construction Type: 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

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	RENOVATED (SQ FT)	SUB-TOTAL
6th Floor				
5th Floor				
4th Floor				
3rd Floor				
2nd Floor				
Mezzanine				
1st Floor	1,763	360 (ENCLOSURE AREA)		
Basement				
TOTAL		360		

TOTAL EXISTING + PROPOSED = 2/23 SQUARE FEET

Primary Occupancy Classification: **SELECT ONE**

Assembley A-1 A-2 A-3 A-4 A-5

Business B-1 B-2 B-3 B-4 B-5

Educational E-1 E-2 E-3 E-4 E-5

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 CONDITION I-2 I-3 CONDITION I-4

Mercantile M-1 M-2 M-3 M-4

Residential R-1 R-2 R-3 R-4

Storage S-1 Moderate S-2 Low High-piled

Utility and Miscellaneous U-1 U-2 U-3 U-4 U-5

Accessory Occupancy Classification(s): _____

Incidental Uses (Table 509): _____

Special Uses (Chapter 4 - List Code Sections): _____

Special Provisions (Chapter 5 - List Code Sections): _____

Mixed Occupancy: No Yes Separation: 2 Hr. Exception: _____

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.

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

STORY NO.	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	BUSINESS	2,123	4,000		

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 = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase = $100 [F/P - 0.25] \times W/30 = \text{_____} (\%)$

2 Unlimited area applicable under conditions of Section 507.

3 Maximum Building Area = Total number of stories in the building x D (minimum 3 stories) (506.2).

4 The maximum area of open parking garages must comply with Table 406.5.4.

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

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 504.3)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40'	13' +/-	
Building Height in Stories (Table 504.4)	2	1	

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

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		0					
Bearing walls Exterior							
North			N/A				
East			N/A				
West			N/A				
South			N/A				
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							
Roof construction including supporting beams and joists							
Roof ceiling Assembly							
Column supporting roof							
Shafts Enclosures - Exit							
Shafts Enclosures - Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Tenant/Dwelling Unit/Sleeping Unit Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENINGS CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS

- Life Safety Plan Sheet #: 01
- 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 types for each area as it relates to occupant load calculation (Table 1004.1.2)
 - Occupant loads for each area
 - Exit access travel distance (1017)
 - Common path of travel distances (1006.2.1 & 2006.3.2(1))
 - Dead end lengths (1020.4)
 - Clear exit widths for each exit door
 - Maximum calculated occupant load capacity each exit door accommodate based on egress width (1005.3)
 - Actual occupant load for each exit door
 - A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.
 - Location of doors with panic hardware (1010.1.10)
 - Location of doors with electromagnetic egress locks (1010.1.9.9)
 - Location of emergency escape windows (1030)
 - The square footage of each fire area (202)
 - The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
 - Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

ACCESSIBLE DWELLING UNITS (SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING (SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 13'2" ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE	SPACE	EXISTING	WATER CLOSETS			URINALS			LAVATORIES			SHOWERS/TUBS		DRINKING FOUNTAINS	
			MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	REGULAR	ACCESSIBLE		
		NEW													
		REQUIRED													

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, 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 North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs. annual energy cost for the proposed design.

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

Existing building: No Yes (Provide Code or Statute reference)

Existing building: No Yes (Provide Code or Statute reference)

Climate Zone: 3A 4A 5A

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

THERMAL ENVELOPE (Prescriptive method only)

Roof/Ceiling Assembly (each assembly)

Description of assembly: **EXISTING UNCHANGED**

U-Value of total assembly: -

R-Value of insulation: -

Openings (windows or doors with glazing)

U-Value of assembly: **0.24**

Solar heat gain coefficient: **0.20**

UA-Value of assembly: **0.07**

Projection factor: **0.44**

Door R-Values: **0.5**

Exterior Walls (each assembly)

Description of assembly: **WOOD STUD WALLS WITH BRICK VENEER**

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: **N/A**

R-Value of insulation: **N/A**

Floor slab on grade

Description of assembly: **MONOLITHIC SLAB**

U-Value of total assembly: **0.17**

R-Value of insulation: -

Horizontal/Vertical requirement: -

R-Value of insulation: -

Slab Heated: -



SHELL VARIABLE FORM (for all spaces - see plan)

(THIS SECTION REQUIRED FOR ALL SHELL ALTERATIONS TO SHELL AND INTERIOR COMPLETION PROJECTS)

Check each applicable line to match scope of work. Edit as necessary to provide clear detail of installation.

Mechanical

- No work
- Equipment sets with without power
- Trunk line installed with without outlets
- Gas Line
- Install complete operational system

Other: _____

Plumbing

- No work
- Install water service and sewer
- Install building drain add or water distribution main with without branches
- Install complete plumbing system

Other: ROUGH-INS ARE INCOMPLETE, ADD IN-SLAB WORK IS REQUIRED. WATER SERVICE IS EXISTING (PRESENTLY INSTALLED).

Sprinkler

- Install complete sprinkler system

Building

- Install slab or partial complete
- Install interior partitioning a partial complete
- Install Ceilings
- White box (additional interior completion permits are required for Certificate of Occupancy and power)

Other: _____

Electrical

- House panel
- Service laterals to meter centers/panels located on buildings
- Demise wall and ceilings only
- Conduit, duct, raceway in slab
- Power and lighting circuits to "J" Box
- Install light fixtures
- Install Heat/Air Elevator Generators Parking lot lighting
- Install complete system

Other: SUITE PANEL AND SERVICE ARE EXISTING (PRESENTLY INSTALLED). Please provide full information on any alternate methods and means incorporated into the design of this project. Provide specific details and incorporate into plan submittal any supporting documents or agreement

SPECIAL INSTRUCTIONS (CHAPTER 17)
SPECIAL INSPECTIONS SHALL BE CONDUCTED ON ALL PROJECTS THAT FALL WITHIN BUILDING CATEGORIES AND/OR CONTAIN ELEMENTS SUBJECT TO SPECIAL INSPECTIONS AS PRESCRIBED BY REVISED SECTION 1704.

To schedule a required pre-construction meeting with the City of Fayetteville, please call Doug Maples at (910) 433-1703. The main line number for the Development Services Center is (910) 433-1701.

List whom will inspect the required special inspections:
Fabricator of load bearing components

Soil tests
Concrete, caissons, piles, piers, pre-cast
Post tension concrete
Modular construction

Steel and connections, welds, bolts, anchors
Fire spray tests
Smoke control
Seismic, wind designs, Quality Assurance

Retaining walls
Masonry
Wood
Alternate Methods
EIFS

Other (describe)
Other (describe)
Owner or agent _____

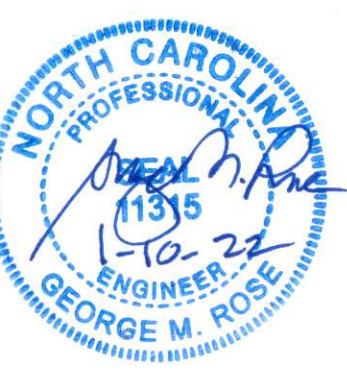
SPECIAL APPROVALS:
Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

NONE

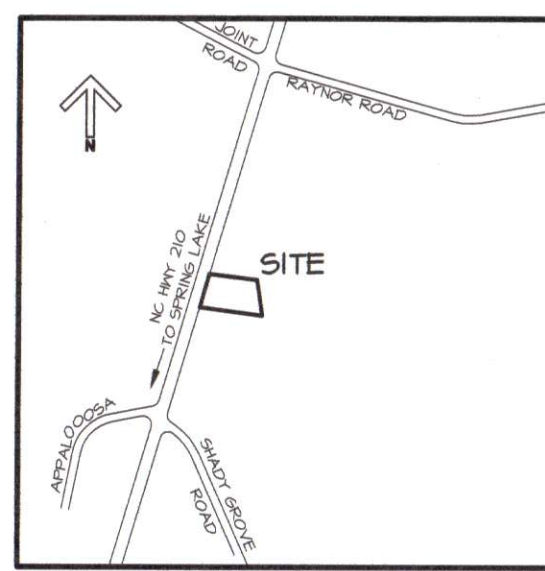
COUNTY OF HARNETT
2018 APPENDIX B
BUILDING CODE SUMMARY
for:

DRIVE-THRU ENCLOSURE
TOTAL SYSTEMS
HEATING - COOLING

13341 NC HIGHWAY 210
SPRING LAKE, NORTH CAROLINA
28390



BC

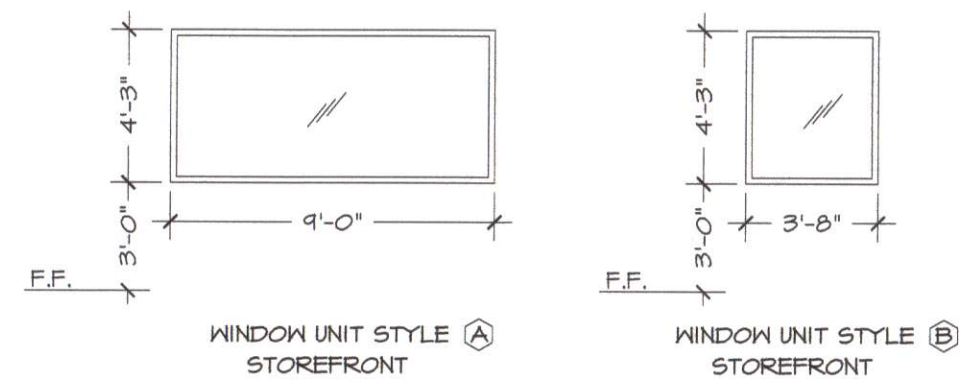


LEGEND

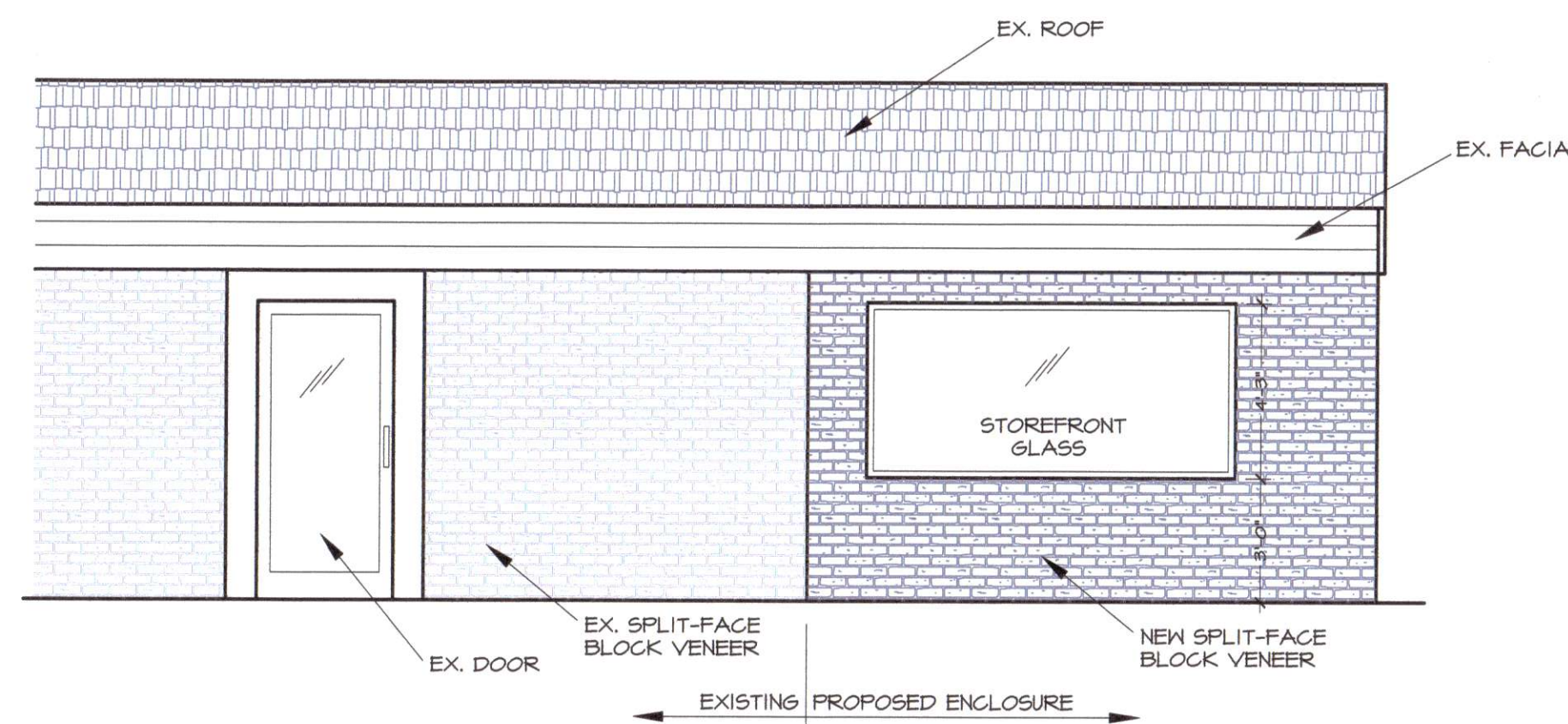
- CLF CHAIN LINK FENCE
- EXISTING EXTERIOR WALL
3.5" WOOD STUDS, SHEATHING, 4" BLOCK VENEER
WOOD PANELING ON INSIDE FACE
R-15 BATT INSULATION
- NEW EXTERIOR WALL
3.5" WOOD STUDS AT 16" O.C.
ONE LAYER 5/8" SHEETROCK INTERIOR SIDE
R-15 BATT INSULATION
1/2" EXTERIOR SHEATHING
1" AIR SPACE
4" BLOCK VENEER
- EXIT ROUTE
- EXIT WIDTH

NOTES

1. OWNER: H AND H COMMERCIAL INVESTMENTS, LLC
BUILDING OCCUPANT: TOTAL SYSTEMS HEATING-COOLING
13341 NC HIGHWAY 210
SPRING LAKE, NC 28390
910-436-3450
2. REFERENCE: DB 3023 PG 345
3. PIN: 0514-90-9177.000



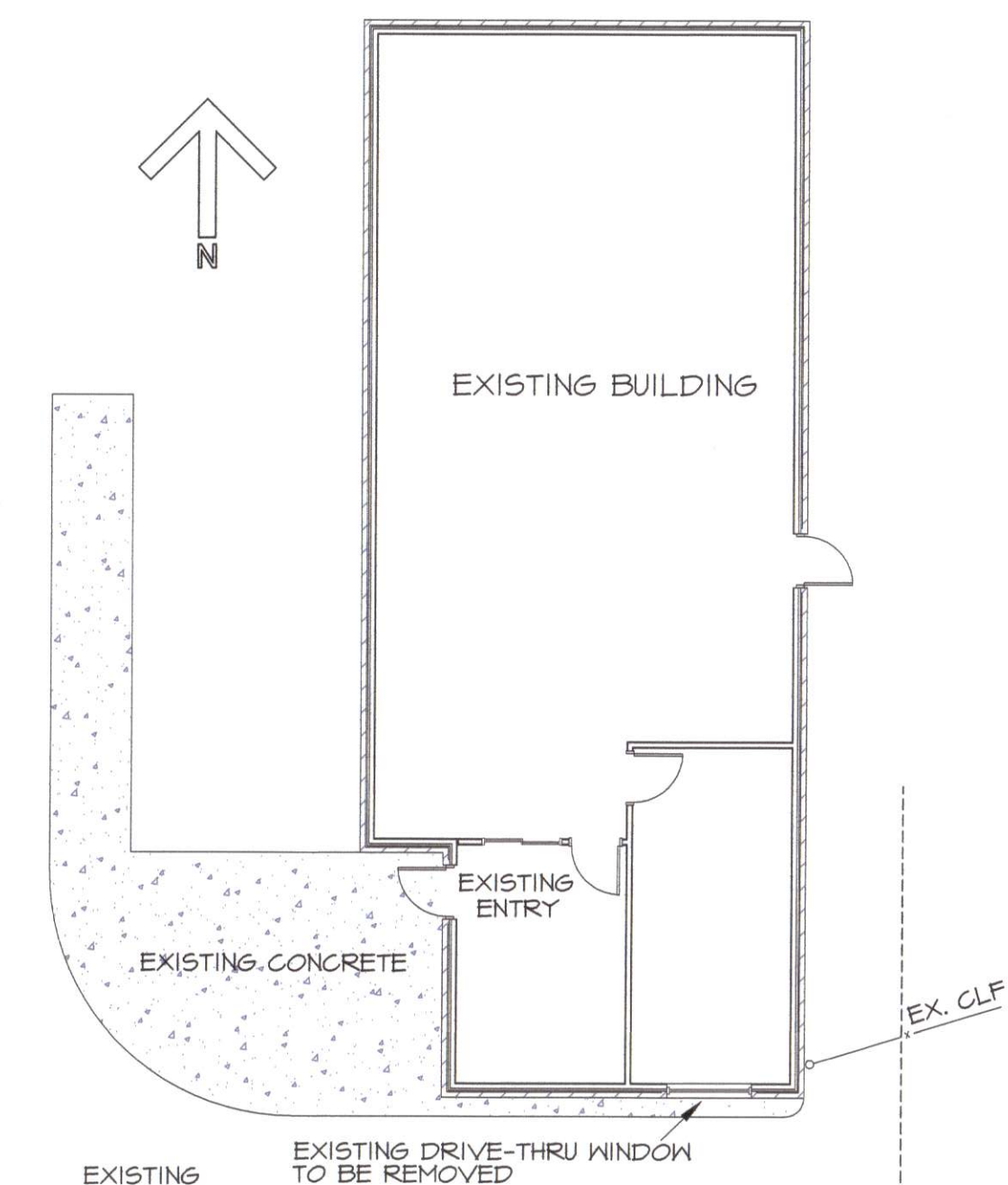
WINDOW STYLES
3/16" = 1' - 0"



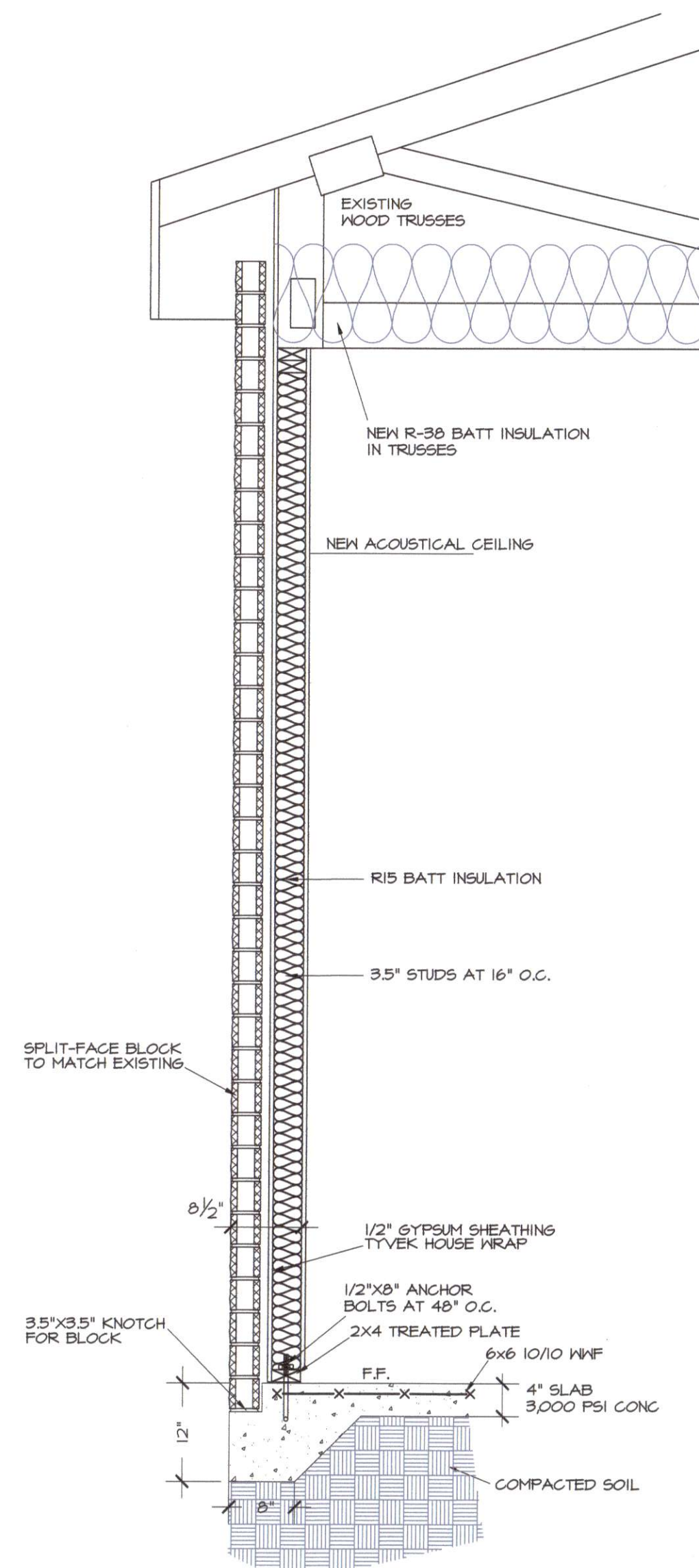
FRONT ELEVATION
1/4" = 1' - 0"



EXISTING FRONT VIEW
NO SCALE



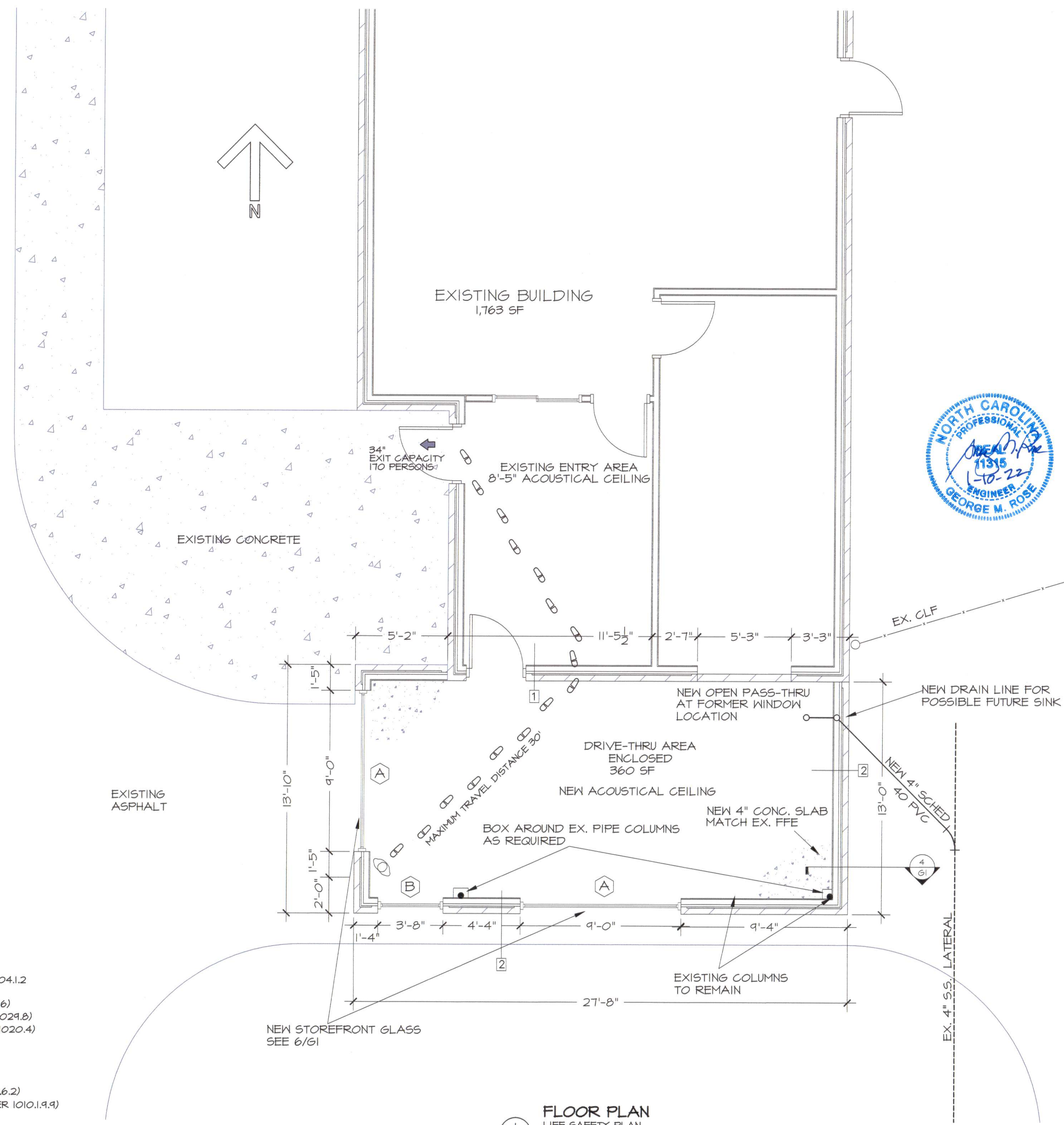
EXISTING CONDITIONS
3/32" = 1' - 0"



FOOTING/WALL SECTION
3/4" = 1' - 0"

OCCUPANCY AND LIFE SAFETY INFORMATION

GROSS SQUARE FOOTAGE OF EXISTING BUILDING = 1,763 SF
 GROSS SQUARE FOOTAGE OF ENCLOSURE = 360 SF
 TOTAL GROSS SQUARE FOOTAGE = 2,123 SF
 TYPE OF CONSTRUCTION: V-B
 SPACE OCCUPANCY BY GROSS EXTERIOR SF USING TABLE 1004.1.2
 BUSINESS: 2123 SF/100 SF PER PERSON = 22 PERSONS
 MAXIMUM ALLOWABLE TRAVEL DISTANCE: 200 FEET (PER 1016)
 THE COMMON PATH OF TRAVEL IS LESS THAN 75 FEET. (PER 1029.6)
 THERE ARE NO DEAD END CORRIDORS OVER 20 FEET. (PER 1020.4)
 MIN. NO. OF EXITS REQ'D: ONE (PER TABLE 1006.2.1)
 NUMBER OF EXITS PROVIDED: TWO (EXISTING)
 MAXIMUM PATH OF TRAVEL = 30 FEET
 DOORS DO NOT PANIC HARDWARE. (PER 1010.1.10)
 DOORS DO NOT HAVE DELAYED EGRESS LOCKS (PER 1010.1.9.6.2)
 DOORS DO NOT HAVE ELECTROMAGNETIC EGRESS LOCKS (PER 1010.1.9.9)
 DOORS DO NOT HAVE HOLD OPEN DEVICES.
 THERE ARE NO EMERGENCY ESCAPE WINDOWS (PER 1030)
 THIS SPACE IS NOT PROTECTED BY FIRE SPRINKLERS.



FLOOR PLAN LIFE SAFETY PLAN
1/4" = 1' - 0"



REVISIONS

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DRIVE-THRU ENCLOSURE
TOTAL SYSTEMS HEATING - COOLING
 13341 NC HIGHWAY 210
 SPRING LAKE, NC
FLOOR PLAN, ELEVATIONS AND DETAILS

DATE: JAN 2022
 DRAWN BY: GMR
 CHECKED: GMR
 SCALE: NOTED

SHEET NO.
G1