

# Code Summary

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

Name of Project: Building S1 Baucum Business Plaza  
 Address: 11132 US 401 N., Fuquay-Varina, NC Zip Code 27526  
 Owner/Authorized Agent: Thaddeus C. McLean Phone # 919-601-1402 E-Mail tmclean0520@gmail.com  
 Owned By:  City/County  Private  State  
 Code Enforcement Jurisdiction:  City  County Harnett  State

### CONTACT: Steve Hall, AIA

DESIGNER FIRM	NAME	LICENSE	TELEPHONE	E-MAIL
Architectural	Steve Hall Architecture	Steve Hall	919-685-7874	steve@stevehallarchitecture.com
Civil	ECL&S Civil, Inc.	Jack Hobbs	919-877-3277	jack@eclandcivil.com
Electrical	Sharpe Engineering & Cons.	Daniel Sharpe	336-425-5815	dsharpe@sharpeengineers.com
Fire Alarm	Sharpe Engineering & Cons.	Daniel Sharpe	336-425-5815	dsharpe@sharpeengineers.com
Plumbing	Sharpe Engineering & Cons.	Daniel Sharpe	336-425-5815	dsharpe@sharpeengineers.com
Mechanical	Sharpe Engineering & Cons.	Daniel Sharpe	336-425-5815	dsharpe@sharpeengineers.com
Sprinkler-Standpipes	Centerline Structural Engineering	Coleman D. Larsen	402-429-4347	cole.larsen@centerlineinc.com
Structural	Centerline Structural Engineering	Coleman D. Larsen	402-429-4347	cole.larsen@centerlineinc.com
Retaining Walls >5' High				
OTHER _____				

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

2018 NC BUILDING CODE:  New Building  Addition  Renovation  
 1st Time Interior Completion  
 Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements  
 Phased Construction - Shell/Core - Contact the local inspection jurisdiction procedures and requirements

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

CONSTRUCTED: (new) CURRENT OCCUPANCY(S) (Ch. 3): Storage  
 RENOVATED: \_\_\_\_\_ PROPOSED OCCUPANCY(S) (Ch. 3): \_\_\_\_\_

RISK CATEGORY (Table 1604.5): Current:  I  II  III  IV  
 Proposed:  I  II  III  IV

### BASIC BUILDING DATA

Construction Type:  I-A  II-A  III-A  IV  V-A  
 I-B  II-B  III-B  V-B  
 (check all that apply)  
 Sprinklers:  No  Partial  Yes NFPA 13  NFPA 13R  NFPA 13D  
 Standpipes:  No  Yes Class  I  II  III  Wet  Dry  
 Fire District:  No  Yes Flood Hazard Area:  No  Yes  
 Special Inspections Required:  No  Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

### Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
2nd		23,505	
1st Floor		23,505	

### 2018 NC Administrative Code and Policies

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
2nd		23,505	
1st Floor		23,505	
TOTAL		47,010	

### 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 Condition 1  2  
 I-2 Condition 1  2  
 I-3 Condition 1  2  3  4  5  
 I-4  
 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): \_\_\_\_\_

Incidental Uses (Table 509): \_\_\_\_\_

Special Uses (Chapter 4 - List Code Sections): \_\_\_\_\_

Special Provisions: (Chapter 5 - List Code Sections): \_\_\_\_\_

Mixed Occupancy:  No  Yes Separation: \_\_\_\_\_ Hr. Exception: \_\_\_\_\_

Non-Separate 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. 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.  
 Separated Use (508.4) -

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

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} + \dots \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2* AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1,5</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2</sup>
Level 1	Storage	23,505	52,500	39,375	91,875
Level 0	Storage	23,505	52,500	39,375	91,875
<b>TOTAL</b>		<b>47,010</b>	<b>105,000</b>	<b>78,750</b>	<b>183,750</b>

<sup>1</sup> Frontage area increases from Section 506.3 are computed thus:  
 a. Perimeter which fronts a public way or open space having 20 feet minimum width =  $\frac{640}{W}$  (F)  
 b. Total Building Perimeter =  $\frac{640}{P}$  (P)  
 c. Ratio (F/P) =  $\frac{1}{P}$  (F/P)  
 d. W = Minimum width of public way =  $\frac{30}{W}$  (W)  
 e. Percent of frontage increase  $I = 100[F/P - 0.25] \times W/30$  =  $\frac{75}{W}$  (%)

<sup>2</sup> Unlimited area applicable under conditions of Section 507.  
<sup>3</sup> Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).

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<sup>4</sup> The maximum area of open parking garages must comply with Table 406.5.4.  
<sup>5</sup> Frontage increase is based on the unsprinklered area value in Table 506.2.

### ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3) <sup>1</sup>	75'	30'-2"	
Building Height in Stories (Table 504.4) <sup>2</sup>	3	2 (both on-grade exits)	

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

### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (W/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		0					
Bearing Walls		0					
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions		0					
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction		0					
Including supporting beams and joists							
Floor Ceiling Assembly		0					
Columns Supporting Floors		0					
Roof Construction, including supporting beams and joists		0					
Roof Ceiling Assembly		0					
Columns Supporting Roof		0					
Shaft Enclosures - Exit		N/A					
Shaft Enclosures - Other		N/A					
Corridor Separation		N/A					
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		N/A					
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant/Dwelling Unit/Sleeping Unit Separation		N/A					
Incidental Use Separation		N/A					

\* Indicate section number permitting reduction

### PERCENTAGE OF WALL OPENING CALCULATIONS

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

### LIFE SAFETY SYSTEM REQUIREMENTS

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

### LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A1  
 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 (Tables 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 (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

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### 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 REQUIRED	PROVIDED	# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
			REGULAR WITH 5' ACCESS AISLE	132" ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

### PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

Not required: NC Plumbing Code table 403.1 notes  
 m. Self-service mini-storage facilities without an office area are exempt.  
 n. Unheated storage buildings that are used periodically are not required to have toilet rooms.

SPACE	USE	WATERCLOSETS			URINALS			LAVATORIES			SHOWERS		DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	TUBS	REGULAR	ACCESSIBLE				
EXIST'G	NEW													
	REQ'D													

### SPECIAL APPROVALS

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

### 2018 NC Administrative Code and Policies

### 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.

Existing building envelope complies with code:  No  Yes Provide code or statutory reference: \_\_\_\_\_

Exempt Building:  No  Yes Provide code or statutory reference: \_\_\_\_\_

Climate Zone:  3A  4A  5A

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

### THERMAL ENVELOPE (Prescriptive method only)

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

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

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

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

Floors slab on grade  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Horizontal/vertical requirement:  
 slab heated: \_\_\_\_\_

### 2018 NC Administrative Code and Policies

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

### DESIGN LOADS:

Importance Factors: Snow (Is)  Select one  
 Seismic (Ie)  Select one

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

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

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

### SEISMIC DESIGN CATEGORY: Select one

Provide the following Seismic Design Parameters:

Risk Category (Table 1604.5)  Select one

Spectral Response Acceleration  $S_s$  \_\_\_\_\_ %g  $S_1$  \_\_\_\_\_ %g

Site Classification (ASCE 7)  Select one

Data Source:  Select one

Basic structural system  Select one

Analysis Procedure:  Select one

Architectural, Mechanical, Components anchored?  Select one

### LATERAL DESIGN CONTROL: Select one

### SOIL BEARING CAPACITIES: \_\_\_\_\_ psf

Select one  
 Pile size, type, and capacity \_\_\_\_\_

### 2018 NC Administrative Code and Policies

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

### MECHANICAL SUMMARY

### MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone  
 winter dry bulb: \_\_\_\_\_  
 summer dry bulb: \_\_\_\_\_

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

Building heating load: \_\_\_\_\_

Building cooling load: \_\_\_\_\_

### Mechanical Spacing Conditioning System

Unitary  
 description of unit: \_\_\_\_\_  
 heating efficiency: \_\_\_\_\_  
 cooling efficiency: \_\_\_\_\_  
 size category of unit: \_\_\_\_\_

Boiler  
 Size category. If oversized, state reason: \_\_\_\_\_

Chiller  
 Size category. If oversized, state reason: \_\_\_\_\_

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

### 2018 NC Administrative Code and Policies



465 Cedar Rock Trl  
 Fuquay Varina, NC 27526

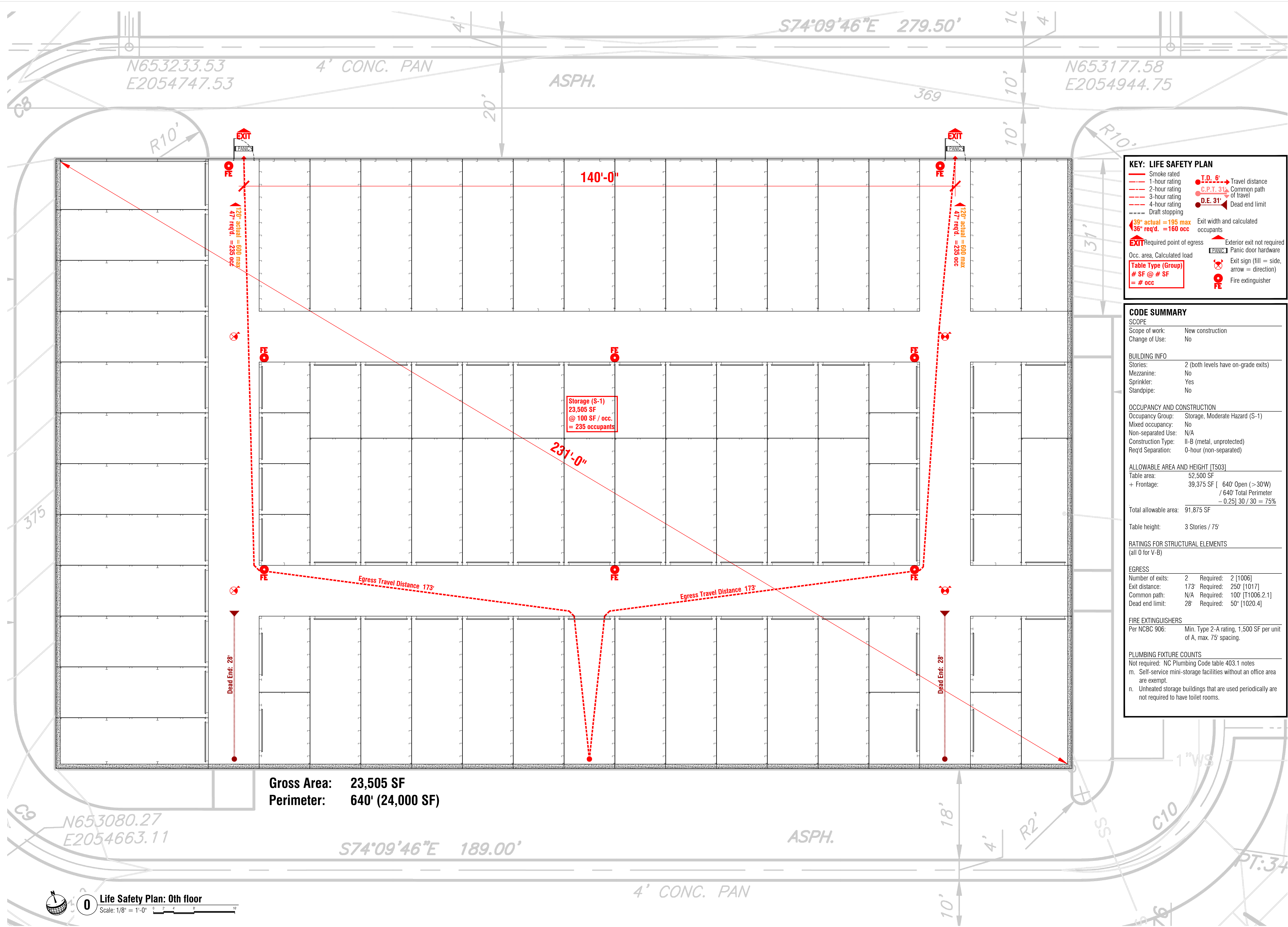
### Building S1 Baucum Business Plaza

11132 US 401 N  
 Fuquay-Varina, NC 27526

ARCHITECT'S SCOPE OF WORK IS LIMITED TO THE life safety plan and building code summary "Appendix B", and was not employed for any portions of design, documentation, coordination, or activities during construction beyond this scope.



465 Cedar Rock Trl  
Fuquay Varina, NC 27526



**KEY: LIFE SAFETY PLAN**

- Smoke rated
- 1-hour rating
- 2-hour rating
- 3-hour rating
- 4-hour rating
- Draft stopping
- 39" actual = 195 max req'd. = 160 occ
- EXIT Required point of egress
- Occ. area, Calculated load
- Table Type (Group)  
# SF @ # SF  
= # occ
- T.D. 6'
- C.P.T. 31'
- D.E. 31'
- Exit width and calculated occupants
- Exterior exit not required
- Panic door hardware
- Exit sign (fill = side, arrow = direction)
- Fire extinguisher

**CODE SUMMARY**

SCOPE  
Scope of work: New construction  
Change of Use: No

BUILDING INFO  
Stories: 2 (both levels have on-grade exits)  
Mezzanine: No  
Sprinkler: Yes  
Standpipe: No

OCCUPANCY AND CONSTRUCTION  
Occupancy Group: Storage, Moderate Hazard (S-1)  
Mixed occupancy: No  
Non-separated Use: N/A  
Construction Type: II-B (metal, unprotected)  
Req'd Separation: 0-hour (non-separated)

ALLOWABLE AREA AND HEIGHT [T503]  
Table area: 52,500 SF  
+ Frontage: 39,375 SF [ 640' Open (>30W) / 640' Total Perimeter - 0.25] 30 / 30 = 75%  
Total allowable area: 91,875 SF

Table height: 3 Stories / 75'

RATINGS FOR STRUCTURAL ELEMENTS  
(all 0 for V-B)

EGRESS  
Number of exits: 2 Required: 2 [1006]  
Exit distance: 173' Required: 250' [1017]  
Common path: N/A Required: 100' [1006.2.1]  
Dead end limit: 28' Required: 50' [1020.4]

FIRE EXTINGUISHERS  
Per NCBC 906: Min. Type 2-A rating, 1,500 SF per unit of A, max. 75' spacing.

PLUMBING FIXTURE COUNTS  
Not required: NC Plumbing Code table 403.1 notes  
m. Self-service mini-storage facilities without an office area are exempt.  
n. Unheated storage buildings that are used periodically are not required to have toilet rooms.

Gross Area: 23,505 SF  
Perimeter: 640' (24,000 SF)

Building S1  
Baucum Business Plaza

11132 US 401 N  
Fuquay-Varina, NC 27526  
ARCHITECT'S SCOPE OF WORK  
The architect's scope of work is limited to the life safety plan and building code summary "Appendix B", and was not employed for any portions of design, documentation, coordination, or activities during construction beyond this scope.



Revisions

Issued 2024-10-05  
for Construction

Project Number 11560  
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• Life Safety Plan: 0th Floor



465 Cedar Rock Trl  
Fuquay Varina, NC 27526

Building S1  
Baucom Business Plaza

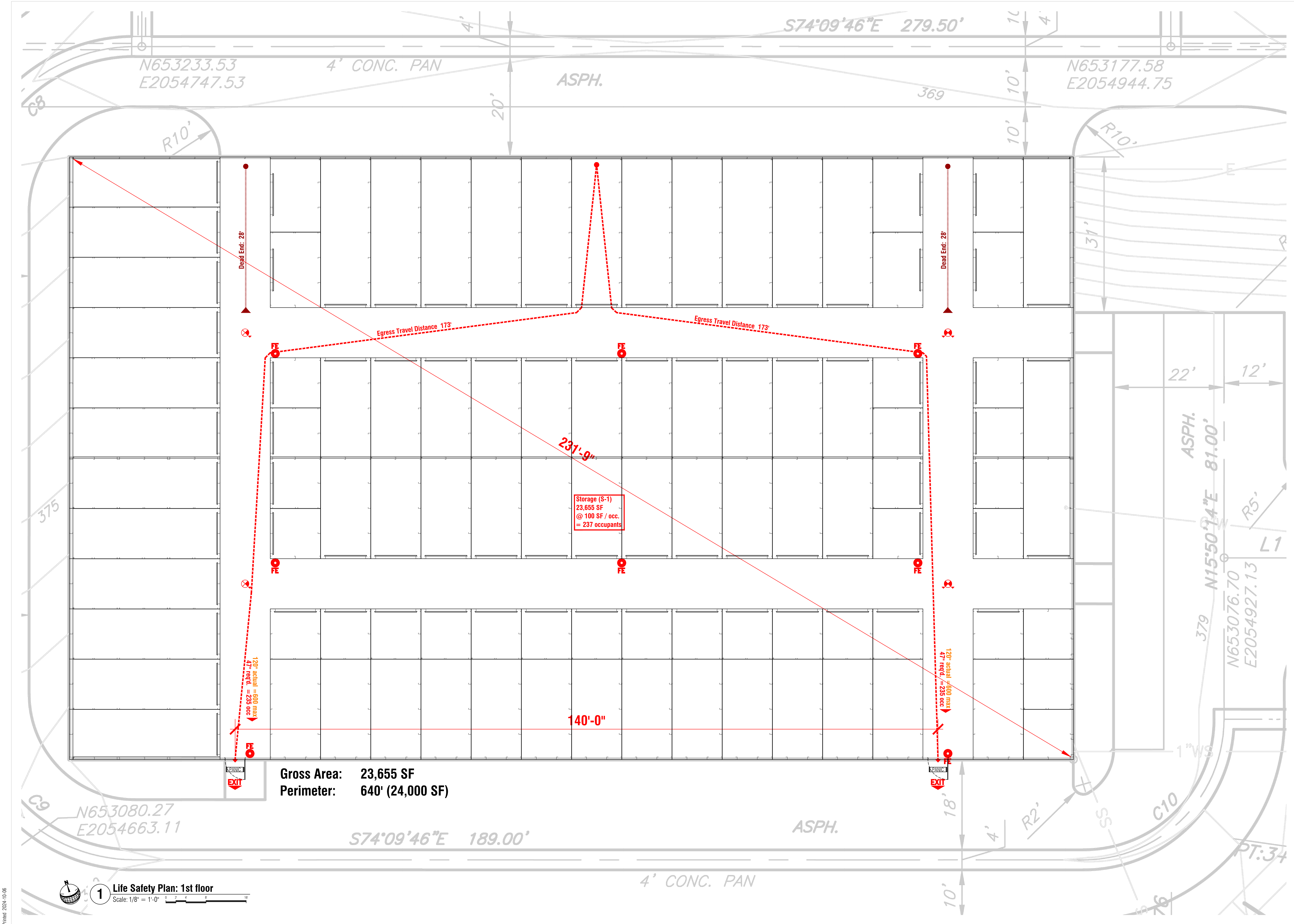
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Revisions

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Project Number 11560  
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• Life Safety Plan: 1st Floor



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**1** Life Safety Plan: 1st floor  
Scale: 1/8" = 1'-0"