#### 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: Jeffrey Way Building

Jeffrey Way / Youngsville, NC Zip Code 27596

Owner/Authorized Agent: Perry Cox Phone # 919.363.5411 E-Mail: perry@pcoxdesign.com Owned By: Private

Code Enforcement Jurisdiction: City

**CONTACT:** Perry Cox

TELEPHONE # E-MAIL 919.363.5411 perry@pcoxdesign.com Architectural Perry Cox Architect, PA Perry Cox Gettle Engineering & Design Keith Gettle, PE 30913 919.210.3934 stuart@jonescnossen.com Kilian Engineering, Inc Jacob Hamilton 48012 252.438.8778 jhamilton@kilanengineering.com Electrical Fire Alarm Kilian Engineering, Inc Jacob Hamilton 48012 252.438.8778 jhamilton@kilanengineering.com Plumbing Kilian Engineering, Inc Jacob Hamilton 48012 252.438.8778 jhamilton@kilanengineering.com Mechanical

Sprinkler-Standpipe Harris Structural Design Thomas Harris 29465 919.556.6032 thomas-hsd@nc.rr.com Structural Retaining Walls >5' High \_\_\_\_\_ \_\_\_

("Other" should include firms and individuals such as truss, pre-engineered, interior designers, etc.)

**2018 NC BUILDING CODE:** New Building

**2018 NC EXISTING BUILDING CODE:** N/A N/A N/A

**CONSTRUCTED:** (date) N/A **CURRENT OCCUPANCY(S)** (Ch. 3):

PROPOSED OCCUPANCY(S) (Ch. 3): B & S-1 **RENOVATED:** (date) N/A

OCCUPANCY CATEGORY (Table 1604.5): Current: II Proposed:  $\underline{II}$ 

Flood Hazard Area: No

SUB-TOTAL

20,000

**Gross Building Area Table** 

NEW (SQ FT)

BASIC BUILDING DATA

Construction Type: II-B Sprinklers: N/A N/A

Basement

Standpipes: N/A **Primary Fire District:** No

**Special Inspections Required: No** 

EXISTING (SQ FT) 3<sup>rd</sup> Floor

2<sup>nd</sup> Floor Mezzanine 1st Floor

TOTAL

ALLOWABLE AREA

Primary Occupancy Classification(s): Business Storage - S-2 <u>N/A</u> <u>N/A</u> Accessory Occupancy Classification(s): S-1 Commercial Vehicle Repair Garage

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**Incidental Uses** (Table 509):

**Special Uses (Chapter 4 – List Code Sections): Special Provisions: (Chapter 5 – List Code Sections):** 

Mixed Occupancy: Yes Separation: 1 Hr.

Non-Separated Use (508.3)

 $\frac{Actual\ Area\ of\ Occupancy\ A}{Actual\ Area\ of\ Occupancy\ B} + \frac{Actual\ Area\ of\ Occupancy\ B}{Actual\ Area\ of\ Occupancy\ B} \le 1$ 

Allowable Area of Occupancy A Allowable Area of Occupancy B

DESCRIPTION AND BLDG AREA PER TABLE 506.24 AREA FOR FRONTAGE ALLOWABLE AREA PER INCREASE<sup>1,5</sup> STORY (ACTUAL) AREA STORY OR UNLIMITED<sup>2,3</sup> 20,000 92,000 92,000 Business 92,000 92,000 20.000 N/A S-2 Storage 20,000 104,000 104,000

<sup>1</sup> 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 = 190'-10" (F) =381'-8''(P)

b. Total Building Perimeter

c. Ratio (F/P) = .50 (F/P)d. W = Minimum width of public way = 30' (W)

e. Percent of frontage increase  $I_f = 100[F/P - 0.25] \times W/30 = 25 (\%)$ 

<sup>2</sup> Unlimited area applicable under conditions of Section 507.

 $^{3}$  Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).

<sup>4</sup> 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. <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)	75'	24'-2"					
Building Height in Stories (Table 504.4) 4 1							
<sup>1</sup> Provide code reference if the "Shown on Plans" quant	ity is not based on Table 504.3 a	or 504 4					

#### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE		RATING	DETAIL#	DESIGN#	SHEET # FOR	SHEET #
	SEPARATION	REQ'D	PROVIDED	AND	FOR	RATED	FOR
	DISTANCE		(W/* REDUCTION)	SHEET #	RATED	PENETRATION	RATED
	(FEET)		REDUCTION)		ASSEMBLY		JOINTS
Structural Frame,	N/A						
including columns, girders,							
trusses							
Bearing Walls	N/A						
Exterior	N/A						
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions							
Exterior walls							

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North				
East				
West				
South				
Interior walls and partitions				
Floor Construction				
Including supporting beams				
and joists				
Floor Ceiling Assembly				
Columns Supporting Floors				
Roof Construction, including				
supporting beams and joists				
Roof Ceiling Assembly				
Columns Supporting Roof				
Shaft Enclosures - Exit				
Shaft Enclosures - Other				
Corridor Separation				
Occupancy/Fire Barrier Separation	on			
Party/Fire Wall Separation				
Smoke Barrier Separation				
Smoke Partition				
Tenant/Dwelling Unit/				
Sleeping Unit Separation				
Incidental Use Separation				
Indicate section number permit	tting 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 (%)
N/A			

#### LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: Exit Signs: Fire Alarm: Smoke Detection Systems: Carbon Monoxide Detection: No

#### LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A3

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

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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

#### ACCESSIBLE DWELLING UNITS (SECTION 1107)

TOTAL	Accessible	Accessible	Түре А	TYPE A	Түре В	Түре В	TOTAL
Units	Units	Units	Units	Units	Units	Units	ACCESSIBLE UNITS
	Required	Provided	Required	Provided	REQUIRED	Provided	PROVIDED

#### ACCESSIBLE PARKING (SECTION 1106)

LOT OR PARKING	TOTAL # OF PA	RKING SPACES	# OF AC	# OF ACCESSIBLE SPACES PROVIDED				
AREA	REQUIRED	PROVIDED	REGULAR WITH	VAN SPACES WITH		ACCESSIBLE		
			5' ACCESS AISLE	132" ACCESS	8' ACCESS	PROVIDED		
				AISLE	AISLE			
front	27	27			1	2		
TOTAL		27			1	2		

#### PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) N/A - SHELL BUILDING

USE		W	ATERCLOSE	ETS	URINALS		LAVATORIE	S	SHOWERS	DRINKING	FOUNTAINS
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX	/TUBS	REGULAR	ACCESSIBLE
SPACE	EXIST'G			1				1			
	NEW			1				1		0	0
	REQ'D			1				1		0	0

#### **SPECIAL APPROVALS**

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

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#### **ENERGY SUMMARY**

#### (BUILDING IS EXEMPT PER 2018 NCECC, SECTION C101.2 EXCEPTION 2)

**ENERGY REQUIREMENTS:** 

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the

**Existing building envelope complies with code:** Select one

**Exempt Building:** Yes Provide code or statutory reference: NCECC Section C101.2 (exception 2)

Climate Zone: 4A

Method of Compliance: Energy Code - Prescriptive (If "Other" specify source here)

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)

Description of assembly: Opti-Liner U-Value of total assembly: 0.37 R-Value of insulation: R-30 Continuous +

Skylights in each assembly: N/A U-Value of skylight: total square footage of skylights in each assembly:

Exterior Walls (each assembly) Description of assembly: 6" metal studs w/ batt insulation, Brick U-Value of total assembly: 0.59 R-Value of insulation: R-19 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: N/A

U-Value of total assembly: R-Value of insulation: N/A 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: N/A U-Value of total assembly: R-Value of insulation: Horizontal/vertical requirement: \_\_\_\_\_

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slab heated:

#### 2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

STRUCTURAL DESIGN

(SEE STRUCTURAL DRAWINGS) **DESIGN LOADS:** 

> **Importance Factors:** Snow (I<sub>S</sub>) Select one Seismic (I<sub>E</sub>) <u>Select one</u> Live Loads:

**Basic Wind Speed** \_\_\_\_\_ mph (ASCE-7) Exposure Category Select one

**SEISMIC DESIGN CATEGORY:** Select one

SOIL BEARING CAPACITIES:

Provide the following Seismic Design Parameters: Risk Category (Table 1604.5) Select one Spectral Response Acceleration S<sub>S</sub>\_\_\_\_\_\_%g  $S_1$ \_\_\_\_\_\_\_\_%g Site Classification (ASCE 7) Select one Data Source: <u>Select one</u>

Basic structural system Select one **Analysis Procedure:** Select one Architectural, Mechanical, Components anchored? Select one

LATERAL DESIGN CONTROL: Select one

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

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#### 2018 APPENDIX B

#### BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN (SHELL BUILDING - SEE MECHANICAL DRAWINGS)

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:** 

**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:

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#### 2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN

(SHELL BUILDING - SEE ELECTRICAL DRAWINGS)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

**Method of Compliance:** Select one **Lighting schedule** (each fixture type) lamp type required in fixture number of lamps in fixture ballast type used in the fixture

number of ballasts in fixture total wattage per fixture total interior wattage specified vs. allowed (whole building or space by space) total exterior wattage specified vs. allowed

**Additional Efficiency Package Options** (When using the 2018 NCECC; not required for ASHRAE 90.1)

C406.2 More Efficient HVAC Equipment Performance C406.3 Reduced Lighting Power Density C406.4 Enhanced Digital Lighting Controls C406.5 On-Site Renewable Energy C406.6 Dedicated Outdoor Air System

C406.7 Reduced Energy Use in Service Water Heating

# Index to Drawings

			1
NO.	DRAWING	NO.	DRAWING
A0.1	BUILDING CODE SUMMARY	FA1	FIRE ALARM PLANS
A1	BUILDING ELEVATIONS	_	_
A2	BUILDING PLAN		
A3	WALL SECTIONS		
P1	PLUMBING PLANS		
M 1	MECHANICAL PLANS		
E1	ELECTRICAL NOTES		
E2	POWER & LIGHTING PLAN		

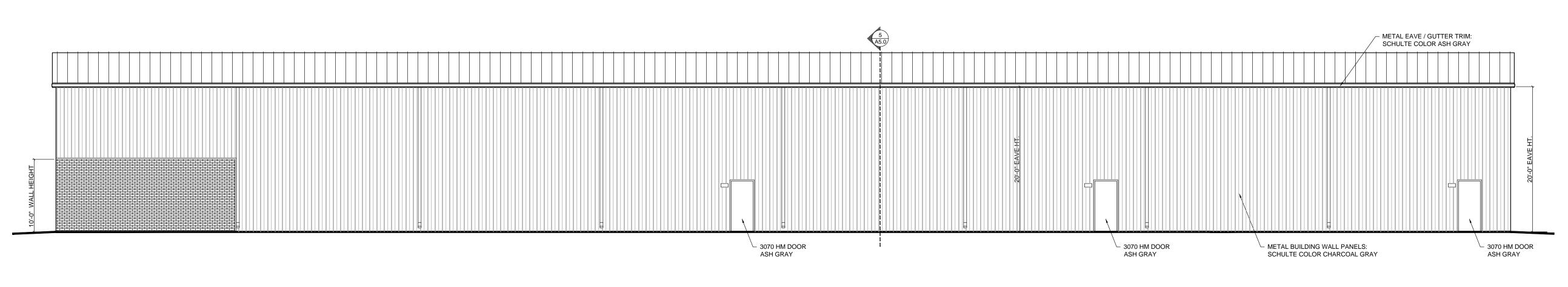






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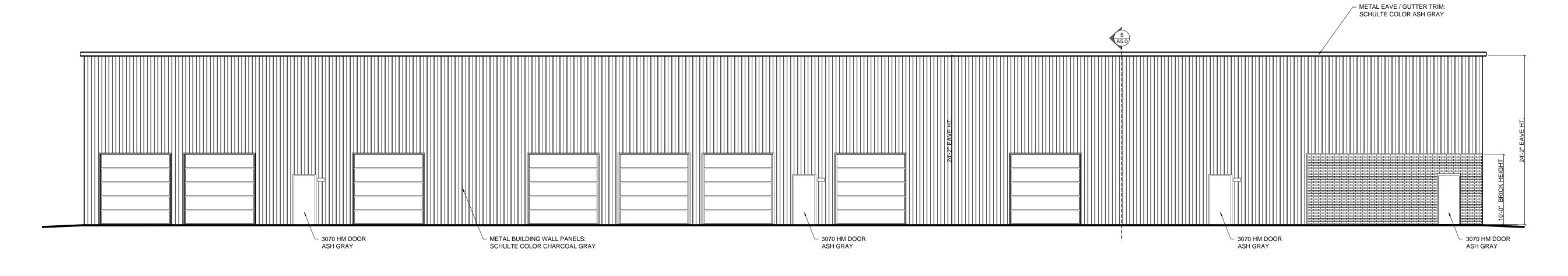
01 Front / East Elevation

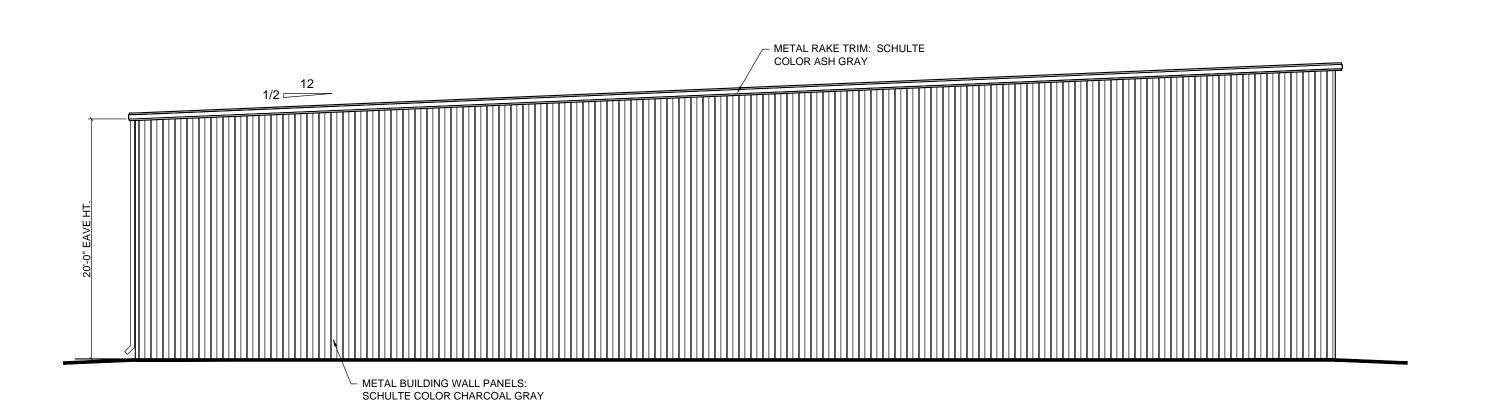


EXTERIOR FINISH LEGEND M1 WALL PANELS: SCHULTE COLOR CHARCOAL GRAY M2 RAKE & EAVE TRIM: SCHULTE COLOR ASH GRAY

**04** North Elevation

Scale: 1/8'' = 1'-0''





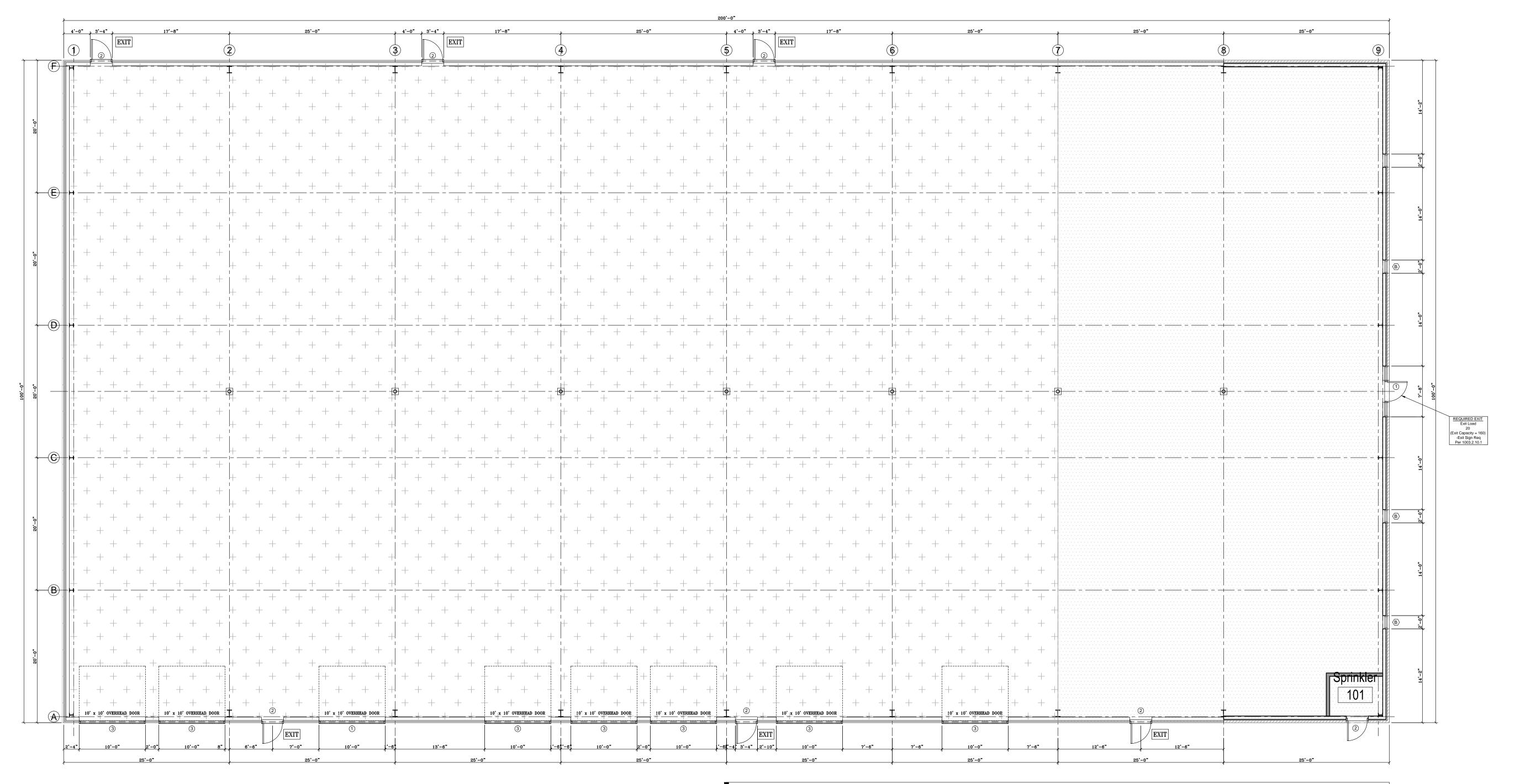
**03** South Elevation

Scale: 1/8" = 1'-0"

(S-1) STORAGE AREA (PROJECTED) 15,000 SF 1 OCCUPANT / 500 GROSS SF = 30 OCCUPANTS

Area Data
(S-1) STORAGE AREA 15,000
(B) BUSINESS AREA 5,000
TOTAL BUILDING AREA 20,000

(B) BUSINESS AREA (PROJECTED)
5,000 SF
1 OCCUPANT / 100 GROSS SF =
50 OCCUPANTS
80 TOTAL OCCUPANTS



01 Floor Plan

**Scale:** 1/8" = 1'-0"

7

1 1 1

DOOR FRAME ELEVATIONS SEE DOOR SCHEDULE DOOR ELEVATIONS

D5

F2

	DOOR SCHEDULE								
DOOR					FRAME				
NO.	SIZE	MTRL.	FIN.	ELEV	MTRL.	FIN.	ELEV	HARDWARE	
Е	EXISTING DOOR								
1	3'-0" x 7'-0" x 1-3/4"	ALUM	FACT	D2	ALUM	FACT	F2	LH,CYL,CL,WS	
2	3'-0" x 7'-0" x 1-3/4"	HM	PTD	D2	MTL	PTD	F2	LH,CYL,CL,WS	
3	10'-0" x 10'-0"	SS	FACT	D5	MTL	FACT		MO,LS,WS	
4	3'-0" x 7'-0" x 1-3/4"	SCW	STAIN	D3	MTL	PTD	F2	LH,CYL,CL,WS	

D4

F3	
Δ	6'-4" 1'-4" 3'-0" 1'-4"
5,-6	
10'-0"	
2,-8,,	

### GLASS TYPE "A"

GLASS TYPE "B"

## DOOR FINISH SCHEDULE ABBREVIATIONS:

ALUM	ALUMINUM	MO
$\operatorname{CL}$	CLOSER	MT
CYL	CYLINDRICAL LOCKSET	PA
FACT	FACTORY	SC
LH	LEVER HANDLE	PL
LS	LOCKSET	PP

D2

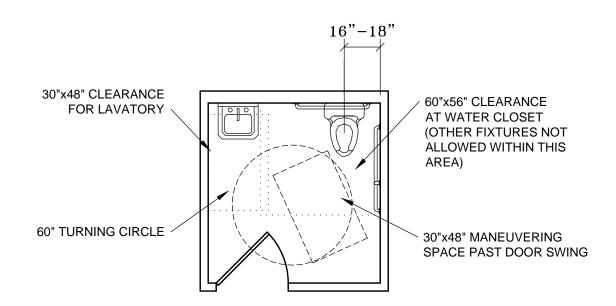
METAL PULL LEVER PUSH PLATE

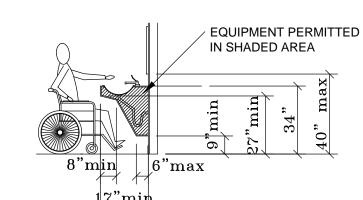
MANUALLY OPERATED PASSAGE LOCKSET SOLID CORE WOOD

## GENERAL NOTES

D1

1. INTERIOR DOOR #13 SHALL RECEIVE 3"x 33" VIEW GLASS



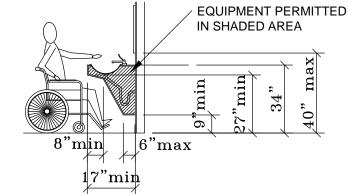


## TYP. TOILET PLAN VIEW SCALE: 1/4"=1'-0"

39"-41" 12" 42"		36"min. 24"min. 12" 6"
3914 TOP OF SE	113	98 FFL 16"-18"

TYP. TOILET ELEVATION

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

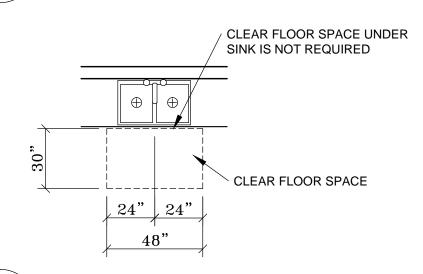


PRIVACY LOCKSET

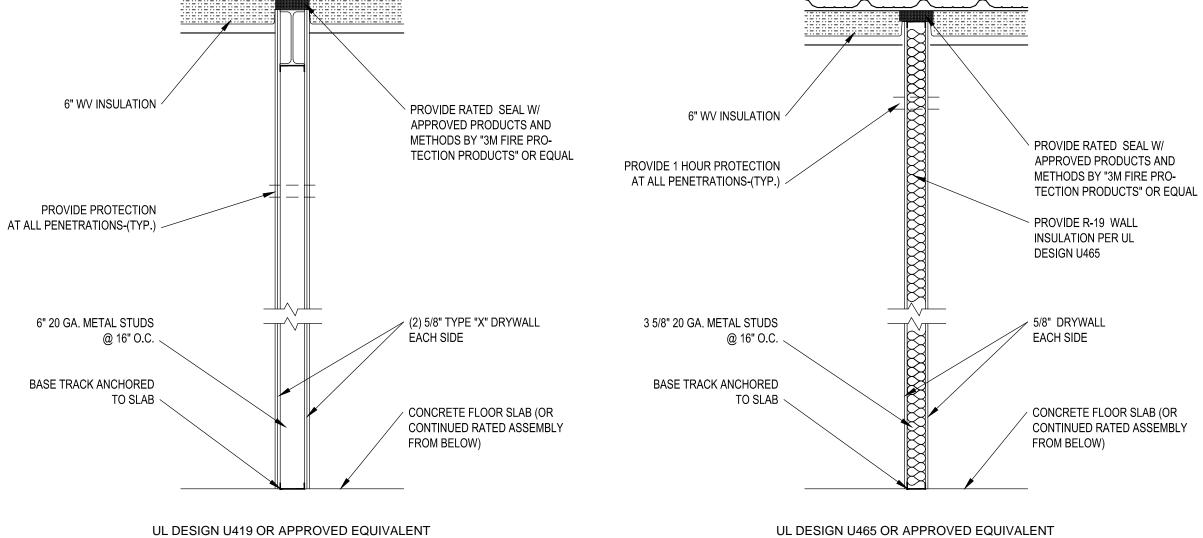
PAINTED SECTIONAL STEEL

WEATHERSTRIPPING

### TYP. LAVATORY CLEARANCES SCALE: 1/4"=1'-0"







STANDARD METAL GUTTER

12 1/2" GIRT COND. (VERIFY)

6" 20 GA. METAL STUDS @ 16" O.C. WITH 6" (R-19) BATTS INSULATION

1/2" GYP. SHEATHING

ADJUSTABLE METAL BRICK

SPLIT FACE BLOCK VENEER

6 MIL. MASONRY FLASHING

TIES @ 24" VERTICAL

& 16" HORIZONTAL

SEE STRUCTURAL DWGS ~

6" WV INSULATION

> ENDWALL FRAME

ENDWALL COLUMN

6 MIL. POLY VAPOR BARRIER

METAL STANDING SEAM ROOF

METAL RAKE TRIM .

METAL WALL PANEL <

4" WV INSULATION \

METAL BASE FLASHING /

04 ENDWALL PANEL DETAIL
Scale: 1"=1'-0"

SEE STRUCTURAL DWGS

THERMAL BLOCK (TYP.)

MEATAL STANDING SEAM ROOF

2x2 LAY-IN CEILING SEE PLANS FOR LOCATION

WALL BASE

(SEE FINISH SCHEDULE)

(SEE FINISH SCHEDULE)

→ 6 MIL POLY VAPOR BARRIER





