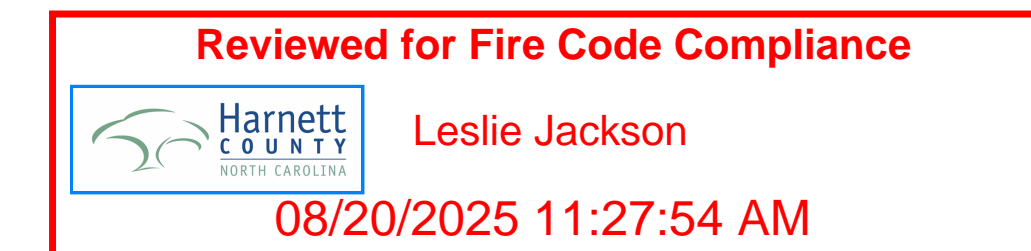


BUILDING PLAN  
FOR  
*SMALL ENGINE REPAIR ANGIER*  
**189 PROGRESSIVE PARKWAY**  
ANGIER, NORTH CAROLINA



PREPARED FOR

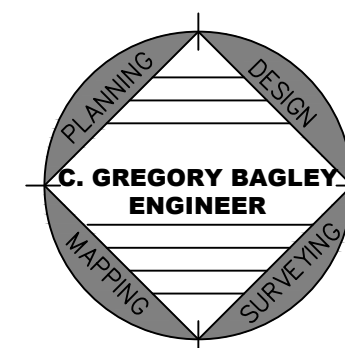
SMALL ENGINE REPAIR ANGIER  
189 PROGRESSIVE PARKWAY  
ANGIER, NC 27501

ENGINEER

C. GREGORY BAGLEY  
805 COKESBURY ROAD  
FUQUAY VARINA, NC 27526  
PHONE: (919) 609-300

SHEET INDEX

COVER  
CODE  
LIFE SAFETY  
FLOOR PLAN  
ELEVATIONS  
FOUNDATION PLAN  
PLUMBING PLAN  
MECHANICAL PLAN  
ELECTRICAL PLAN



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: SMALL ENGINE REPAIR ANGER  
Address: 189 PROGRESSIVE PARKWAY Zip Code: \_\_\_\_\_  
Owner/Authorized Agent: GREG BAGLEY Phone # ( 919 ) 929 -0300 E-Mail: GREG.BAGLEY@NCMAIL.COM  
Owned By: Select One SMALL ENGINE REPAIR ANGER  
Code Enforcement Jurisdiction: Select One ANGER, NC

CONTACT: FIRM NAME LICENSE # TELEPHONE # E-MAIL  
DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL  
Architectural C. Gregory Bagley, Engineer Creg Bagley 12276 (919) 929-0300 GREG.BAGLEY@NCMAIL.COM  
Civil C. Gregory Bagley, Engineer Creg Bagley 12276 (919) 929-0300 GREG.BAGLEY@NCMAIL.COM  
Electrical C. Gregory Bagley, Engineer Creg Bagley 12276 (919) 929-0300 GREG.BAGLEY@NCMAIL.COM  
Fire Alarm C. Gregory Bagley, Engineer Creg Bagley 12276 (919) 929-0300 GREG.BAGLEY@NCMAIL.COM  
Plumbing C. Gregory Bagley, Engineer Creg Bagley 12276 (919) 929-0300 GREG.BAGLEY@NCMAIL.COM  
Mechanical C. Gregory Bagley, Engineer Creg Bagley 12276 (919) 929-0300 GREG.BAGLEY@NCMAIL.COM  
Sprinkler-Standpipe \_\_\_\_\_  
Structural \_\_\_\_\_  
Retaining Walls >5' High \_\_\_\_\_  
Other \_\_\_\_\_  
(\*Other\* should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: Select one new construction  
2018 NC EXISTING BUILDING CODE: Select one Select one Select one Select one Select one  
CONSTRUCTED (date) \_\_\_\_\_ CURRENT OCCUPANCY(S) (Ch. 3): VACANT  
RENOVATED: (date) \_\_\_\_\_ PROPOSED OCCUPANCY(S) (Ch. 3): BUSINESS  
RISK CATEGORY (Table 1604.5): Current: Select one Proposed: Select one

BASIC BUILDING DATA  
Construction Type: Select one I  
Sprinklers: Select one no Select one  
Standpipes: Select one NONE  
Primary Fire District: Select One no Flood Hazard Area: Select one no  
Special Inspections Required: Select one N/A

Gross Building Area Table			
FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		6000	6000
Basement			
TOTAL			6000

2018 NC Administrative Code and Policies

ALLOWABLE AREA

Primary Occupancy Classification(s): Select one Select one Select one Select one Select one A-2

Accessory Occupancy Classification(s): \_\_\_\_\_

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

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

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

Mixed Occupancy: Select one Separation: Select one Exception: \_\_\_\_\_

Select one  
Actual Area of Occupancy A + Actual Area of Occupancy B ≤ 1  
Allowable Area of Occupancy A Allowable Area of Occupancy B

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA FOR FRONTAGE INCREASE IS	(C) ALLOWABLE AREA PER STORY OR UNLIMITED	(D) ALLOWABLE AREA PER STORY OR UNLIMITED
1	BUSINESS	6000	23,500	N/A	23,500

- 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 = N/A (F)  
b. Total Building Perimeter = N/A (P)  
c. Ratio (F/P) = N/A (F/P)  
d. W = Minimum width of public way = N/A (W)  
e. Percent of frontage increase If =  $100[F/P - 0.25] \times W/30 =$  N/A (%)  
2 Unlimited area applicable under conditions of Section 507.  
3 Maximum Building Area = total number of stories in the building x D (maximum 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	SHOWN ON PLANS	CODE REFERENCE 1
Building Height in Feet (Table 504.3) 2	55	15	
Building Height in Stories (Table 504.4) 3	3	1	

- 1 Provide code reference if the "Shown 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.

2018 NC Administrative Code and Policies

FIRE PROTECTION REQUIREMENTS									
BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REDO	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									
Roofing Walls									
Exterior									
North									
East									
West									
South									
Interior									
Nonbearing Walls and Partitions									
Exterior walls									
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									
Pantry/Fire Wall Separation									
Smoke Barrier Separation									
Smoke Partition									
Tenant/Dwelling Unit/Sleeping Unit Separation									

1 indicate section number permitting reduction

2018 NC Administrative Code and Policies

PERCENTAGE OF WALL OPENING CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 706.5)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
20'	UP, 5	70%	70%

LIFE SAFETY SYSTEM REQUIREMENTS			
Emergency Lighting:	<u>Select one</u> <u>no</u>		
Exit Signs:	<u>Select one</u> <u>yes</u>		
Fire Alarm:	<u>Select one</u> <u>no</u>		
Smoke Detection Systems:	<u>Select one</u> <u>yes</u>		
Carbon Monoxide Detection:	<u>Select one</u> <u>no</u>		

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: \_\_\_\_\_

- ☐ 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 be utilized regarding the items above

2018 NC Administrative Code and Policies

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
1	1	1	1				1

ACCESSIBLE PARKING (SECTION 1106)					
LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE
	REQUIRED	PROVIDED	REGULAR WITH 8' ACCESS AISLE	VAN SPACES WITH 12' ACCESS AISLE	
	16	18			2
TOTAL	16	18			2

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)					
USE	WATERCLOSETS		URINALS		SHOWER / TUBS
	MALE	FEMALE	MALE	FEMALE	
SPACE					
EXIST'G					
NEW	1				1
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: Select one

Exempt Building: Select one Provide code or statutory reference:

Climate Zone: 4

Method of Compliance: Select one (If "Other" specify source here) PERSCRPTIVE

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)

Description of assembly: METAL ROOFING

U-Value of total assembly: .029

R-Value of insulation: COMBINE R-30+

Openings (windows or doors with glazing)

U-Value of assembly: \_\_\_\_\_

Solar heat gain coefficient: \_\_\_\_\_

projection factor: \_\_\_\_\_

Door R-Values: \_\_\_\_\_

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 be utilized regarding the items above

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 .87  
Seismic (IE) Select one .8

Live Loads: Roof 20 psf  
Mezzanine 50 psf  
Floor 50 psf 100 PSF FOR COMMON PORCHES

Ground Snow Load: 15 psf

Wind Load: Ultimate Wind Speed 110 mph (ASCE-7)  
Exposure Category Select one C

SEISMIC DESIGN CATEGORY: Select one  
Provide the following Seismic Design Parameters: A  
Risk Category (Table 1604.5) Select one I  
Spectral Response Acceleration SS 2.7 %g S1 3.7 %g  
Site Classification (ASCE 7) Select one E  
Data Source: Select one PRESUMPTIVE  
Basic structural system Select one BUILDING FRAME  
Analysis Procedure: Select one SIMPLIFIED  
Architectural, Mechanical, Components anchored? Select one

LATERAL DESIGN CONTROL: Select one

SOIL BEARING CAPACITIES: Select one 2000 psf  
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: 20

summer dry bulb: 92

Interior design conditions

winter dry bulb: 20

summer dry bulb: 92

relative humidity: 70

Building heating load: 42050

Building cooling load: 51325

Mechanical Spacing Conditioning System

Unitary description of unit: (2) SPLIT SYSTEMS

heating efficiency: 13 SEERS

cooling efficiency: 42

size category of unit: 58000

Boiler Size category: If oversized, state reason: N/A

Chiller Size category: If oversized, state reason: N/A

List equipment efficiencies: 44 %

2018 NC Administrative Code and Policies

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

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Select one PERSCRPTIVE

Lighting schedule (each fixture type) PER DRAWINGS

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

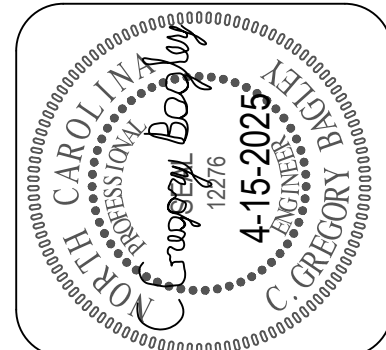
☐ C406.7 Reduced Energy Use in Service Water Heating

2018 NC Administrative Code and Policies

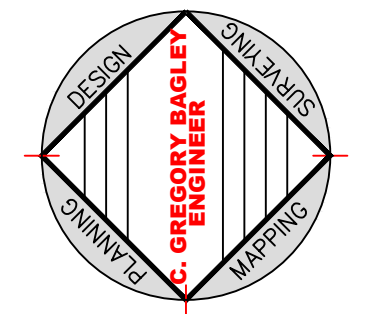
Project #:  
Date:  
Drawn/Design By:  
Scale:

REVISIONS

No.	Date:	Remarks
1		
2		
3		
4		



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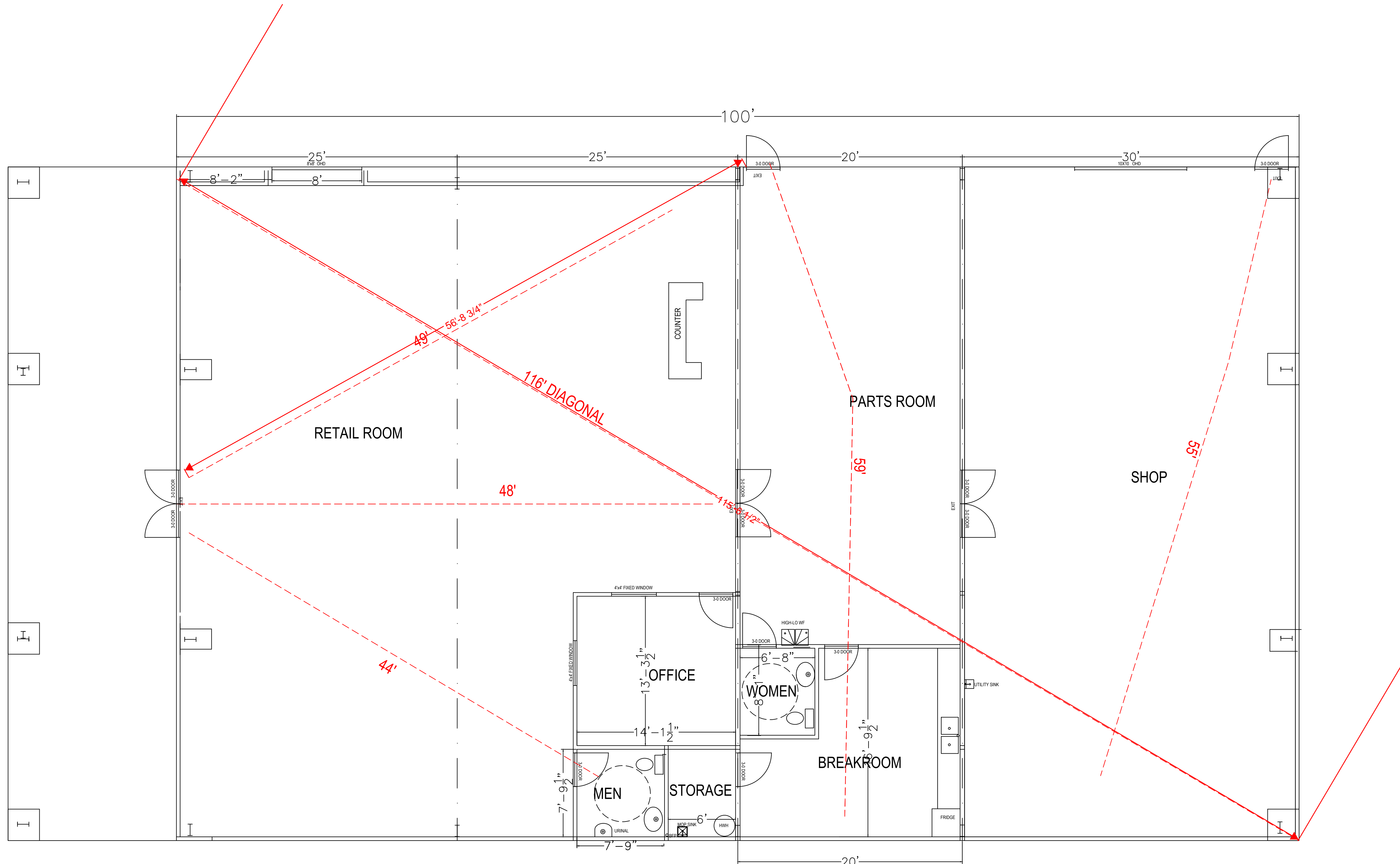


CODE SHEET

FACILITIES FOR  
SMALL ENGINE REPAIR ANGER  
189 PROGRESSIVE PARKWAY  
ANGER, NC 27501

Sheet Number  
CODE  
of 1





DIAGONAL IS 119'  
DISTANCE BETWEEN EXIT MAX  
=59.5' OR 1/2 DIAGONAL  
4 EXIT DOOR AT 35"/.32  
= 437 OCCUPANTS CAN  
BE EVACUATED.

**LIFE SAFETY**

$\frac{3}{16}" = 1'-0"$

**OCCUPANT LOAD**

LOCATION	TYPE	AREA	REQ. SQ FT	OCCUPANCY
RETAIL AREA	BUSINESS	2660 SQ FT	100 SQ FT	27
PARTS AREA	BUSINESS	828 SQ FT	100 SQ FT	8
SHOP AREA	BUSINESS	1758 SQ FT	100 SQ FT	18
STORAGE (EMPLOYEE)	BUSINESS	48 SQ FT	100 SQ FT	1
TOTAL		5294 SQ FT		54

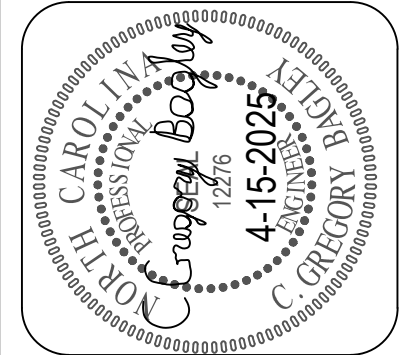
**DOOR SCHEDULE**

TYPE	LOCATION	KEYED/Y/N	RH/LH	DESCRIPTION	SIZE
LEVER	INTERIOR	3 Y/12 N	3/12	SOLID CORE HMF	36"
LOCK	INTERIOR BATH	3 Y/12 N		SOLID CORE HMF	36"
PANIC	EXTERIOR	2 Y		STORE FRNT	72"

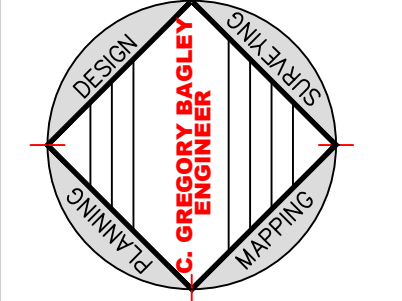
- LIFE SAFETY PLAN REQUIREMENTS**
- Life Safety Plan Sheet #: \_\_\_\_\_
- ☐ Fire and/or smoke rated wall locations (Chapter 7)
  - ☒ Assumed and real property line locations (if not on the site plan)
  - ☒ Exterior wall opening area with respect to distance to assumed property lines (706.2.1)
  - ☒ Occupancy Use for each area as it relates to occupant load calculation (Table 1006.2.1)
  - ☒ Occupant loads for each area
  - ☒ Exit access travel distances (1010.1.6)
  - ☒ 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 width
  - ☒ Actual occupant load for each exit door
  - ☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is required for occupancy separation
  - ☐ Location of doors with panic hardware (1010.1.10)
  - ☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.2)
  - ☐ 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
  - ☒ Note any code exceptions or table notes that may have been utilized regarding the plan

Project #:		
Date:		
Drawn/Design By:		
Scale:		

REVISIONS		
No.	Date:	Remarks
1		
2		
3		
4		

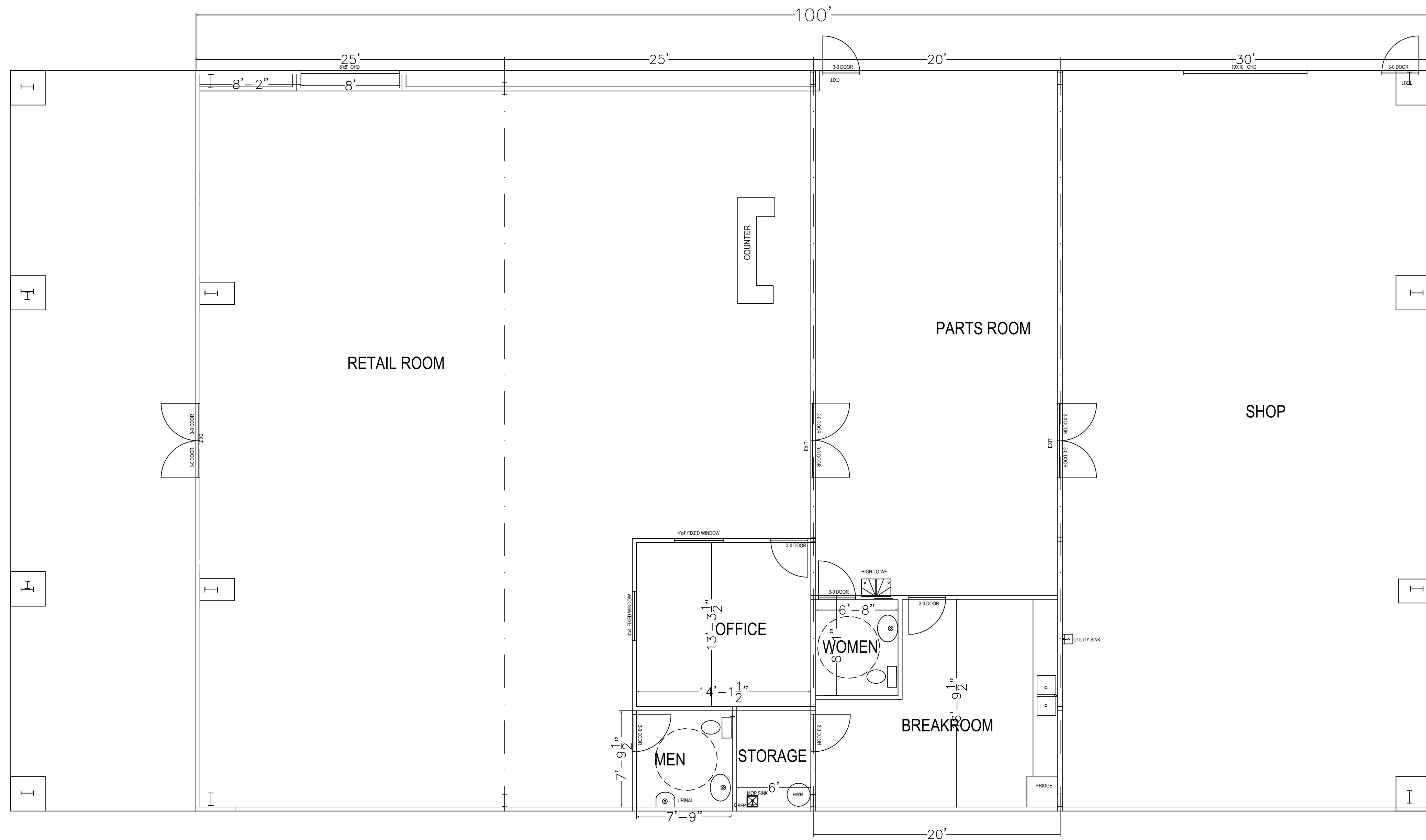


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**LIFE SAFETY**

**FACILITIES FOR  
SMALL ENGINE REPAIR ANGIER  
189 PROGRESSIVE PARKWAY  
ANGIER, NC 27501**



OCCUPANT LOAD

LOCATION	TYPE	AREA	REQ. SQ FT	OCCUPANCY
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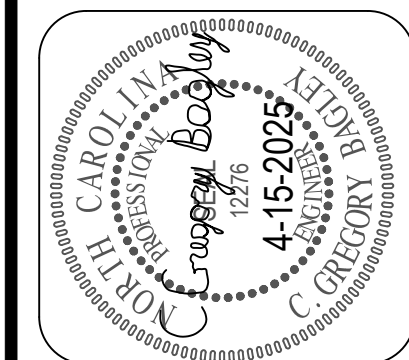
DOOR SCHEDULE

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LEVER	INTERIOR	3 Y/12 N	3/12	SOLID CORE HMF	36"
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LOCK	EXTERIOR	2 Y		STORE FRNT	72"

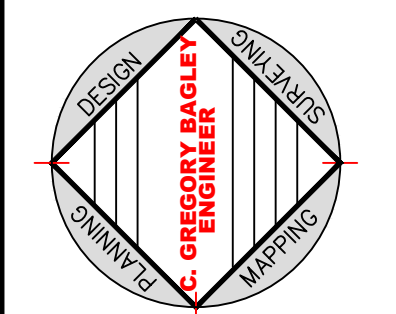
FLOOR PLAN  
1/4" = 1'-0"

Project #:	
Date:	
Drawn/Design By:	
Scale:	

REVISIONS		
No.	Date:	Remarks
1		
2		
3		
4		



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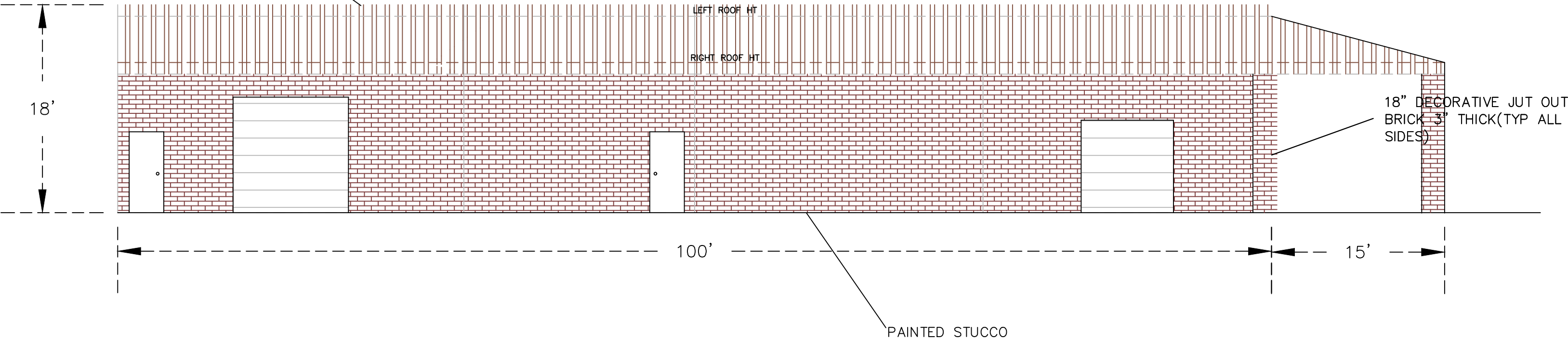


FLOOR PLAN

FACILITIES  
FOR  
SMALL ENGINE REPAIR ANGIER  
189 PROGRESSIVE PARKWAY  
ANGIER, NC 27501

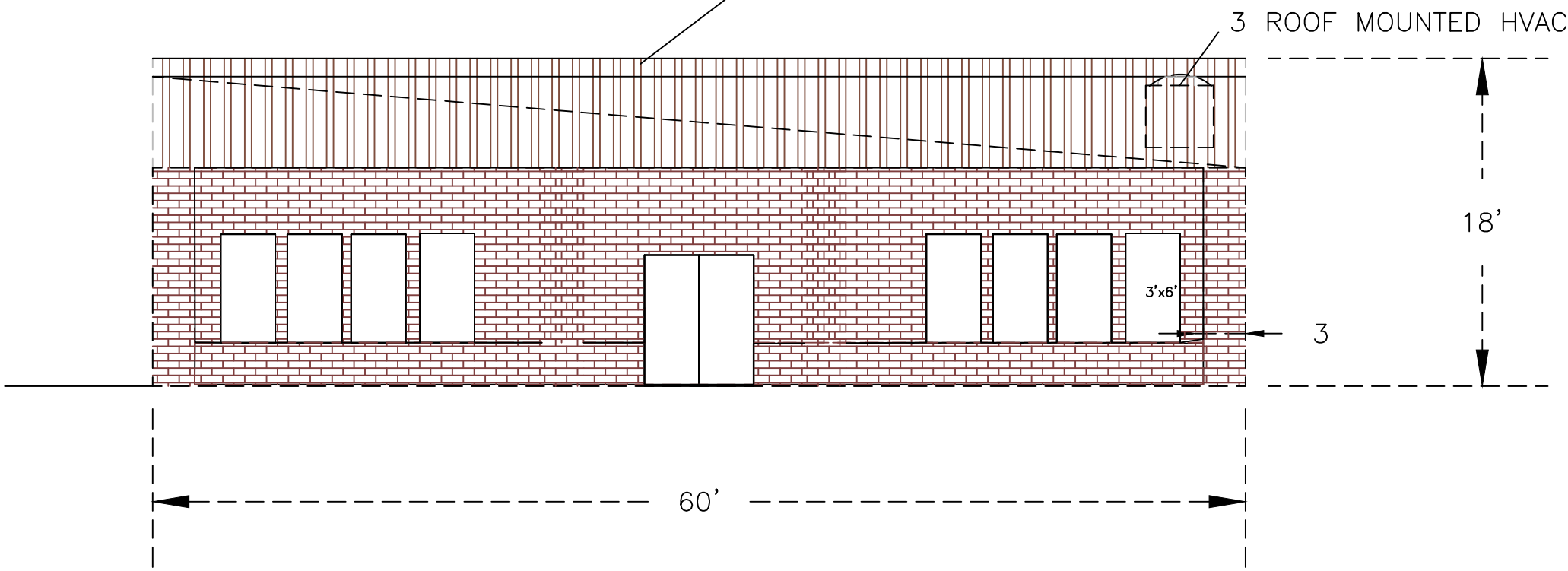
BRICK = BROWNSTONE TRIANGLE MID  
ROOFING = GALVALUME STANDING SEAM  
PARAPET WALL= STANDING SEAM BEIGE

PARAPET WALL



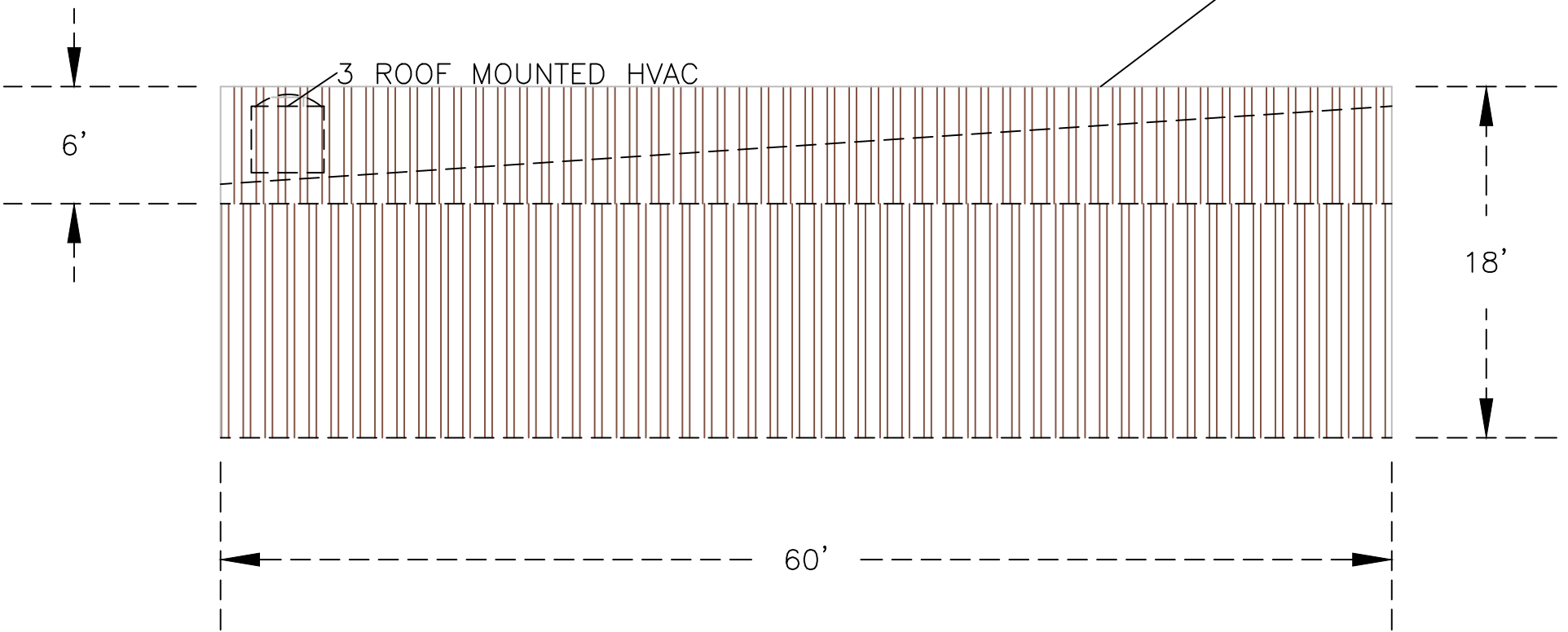
LEFT SIDE

PARAPET WALL



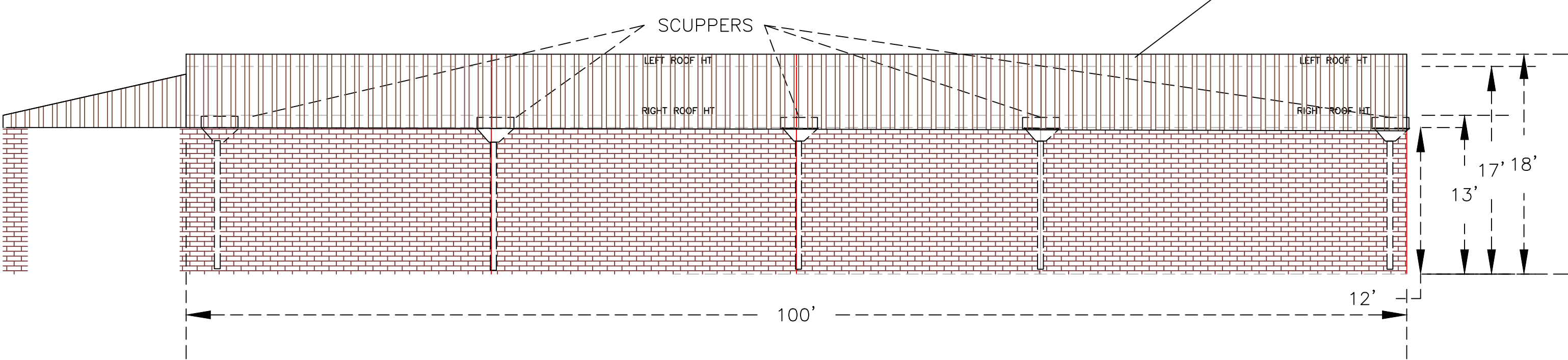
FRONT

PARAPET WALL



REAR

PARAPET WALL

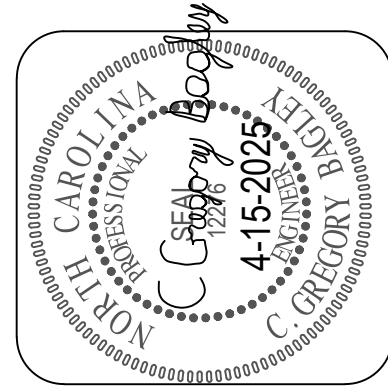


RIGHT SIDE

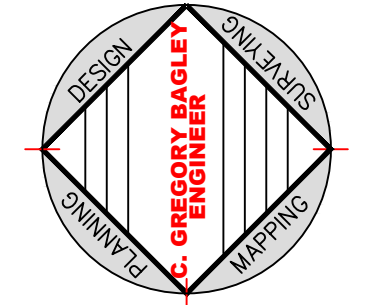
ELEVATIONS  
1/8" = 1'-0"

Project #:	
Date:	
Drawn/Design By:	
Scale:	

REVISIONS		
No.	Date:	Remarks
1		
2		
3		
4		



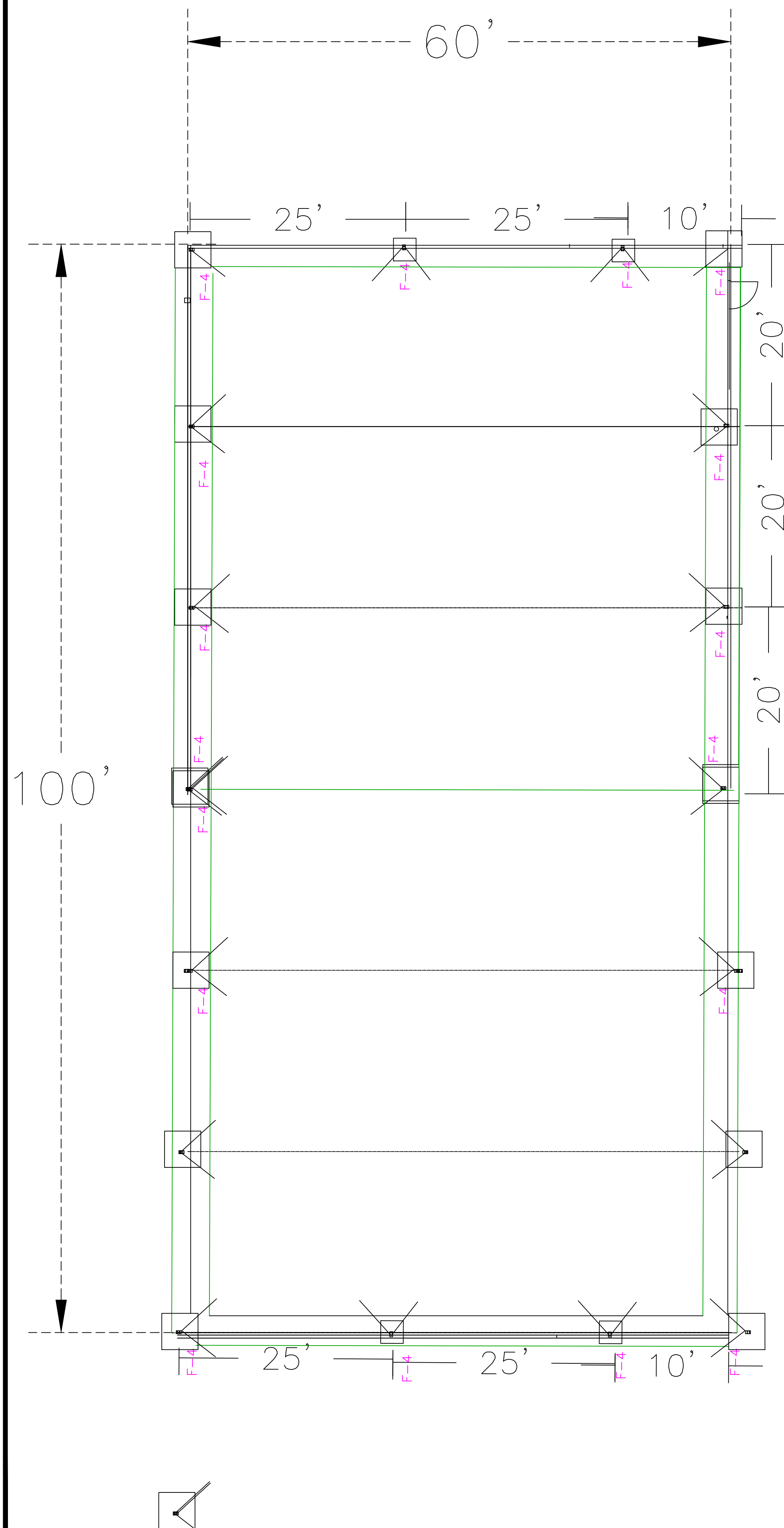
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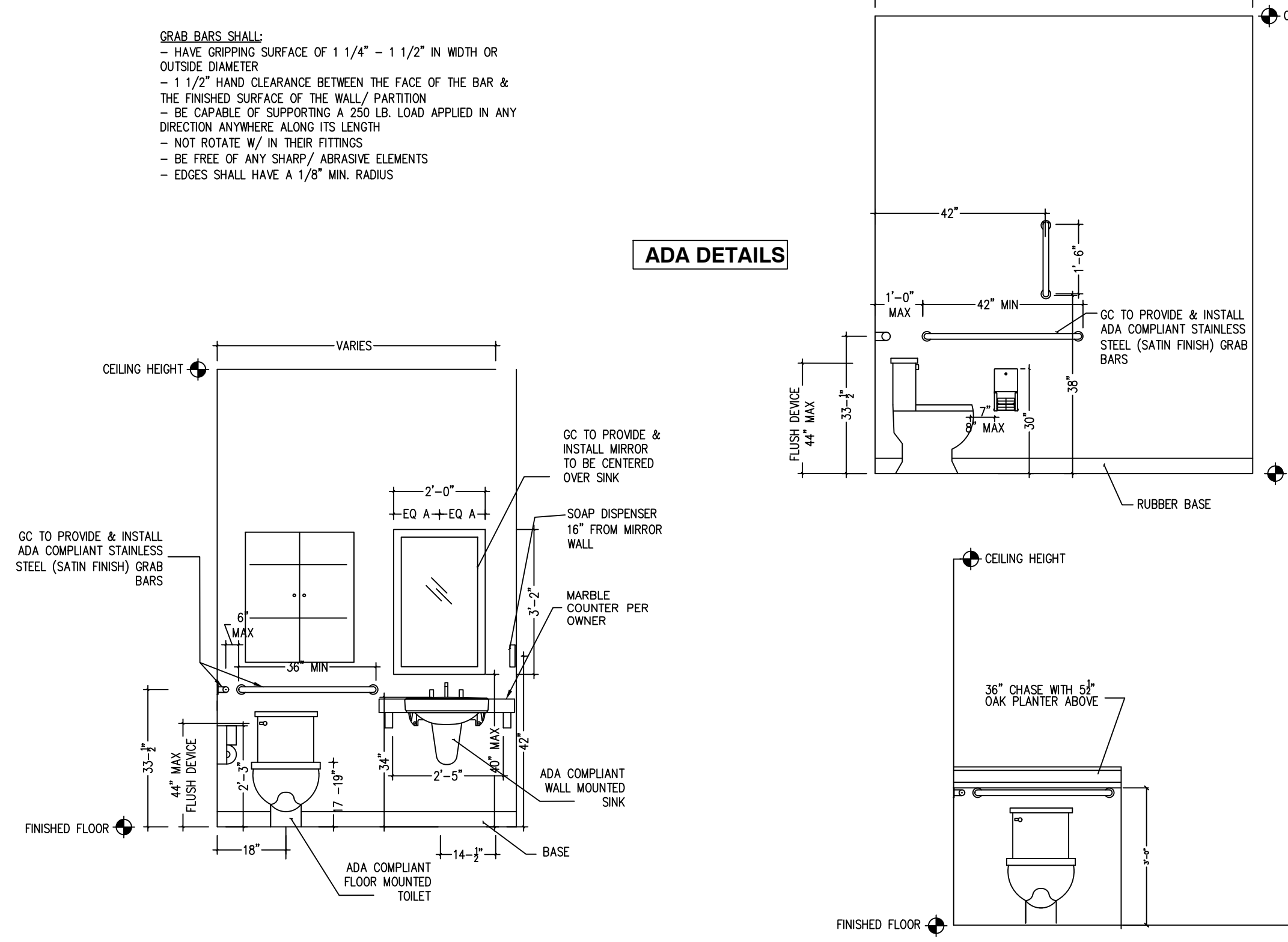
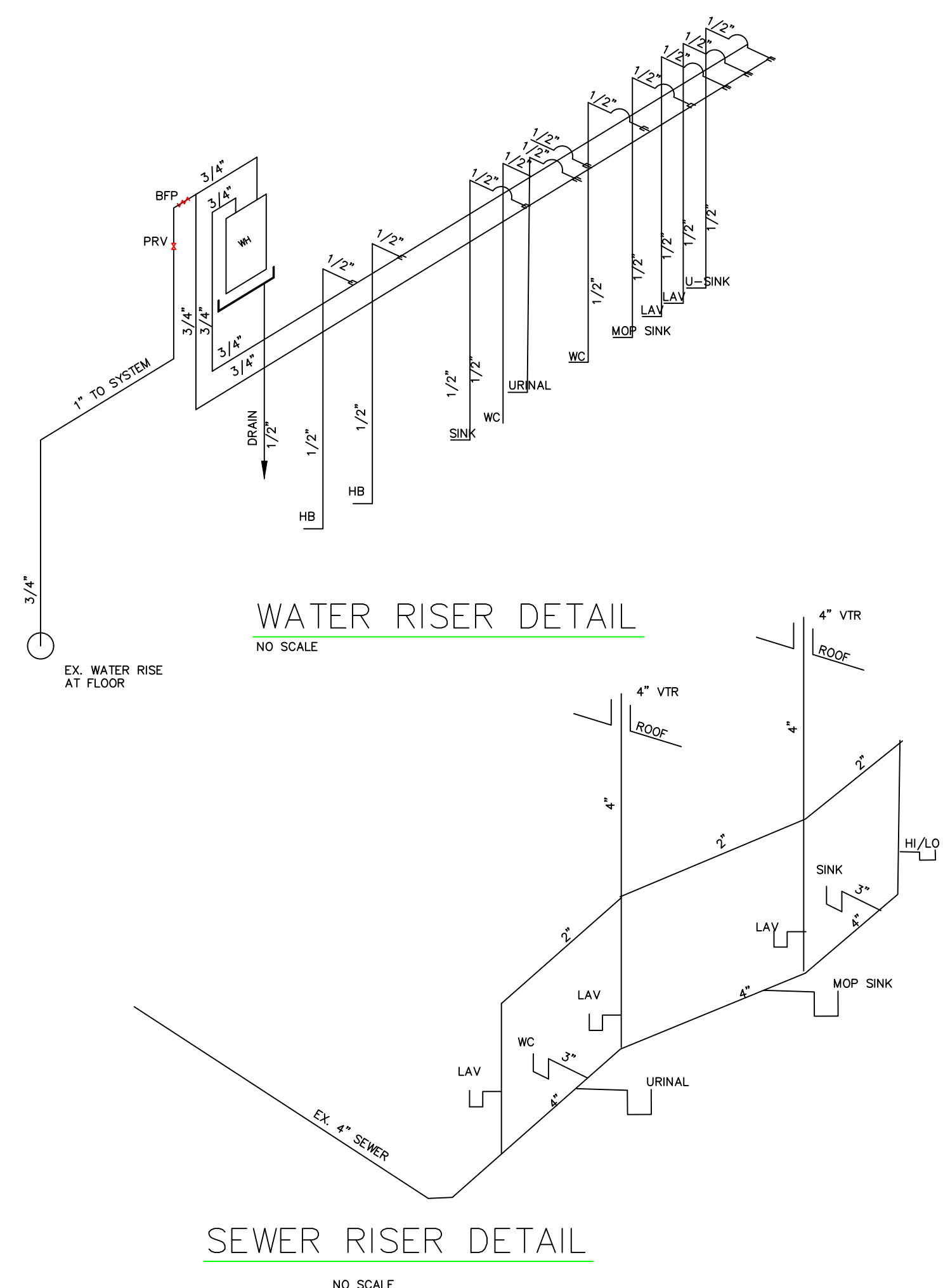
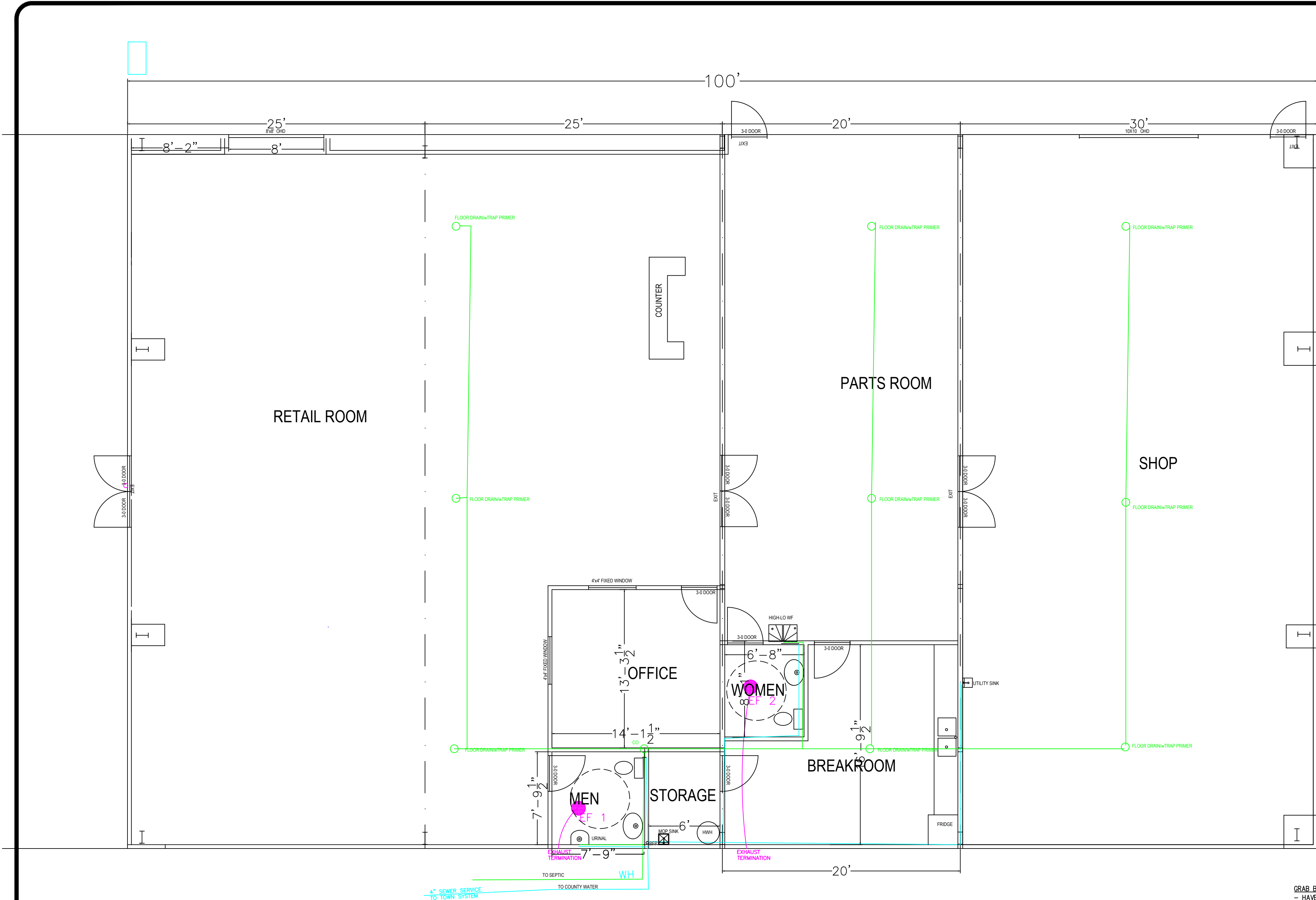


ELEVATIONS

FACILITIES  
FOR  
SMALL ENGINE REPAIR ANGLIER  
189 PROGRESSIVE PARKWAY  
ANGLIER, NC 27501







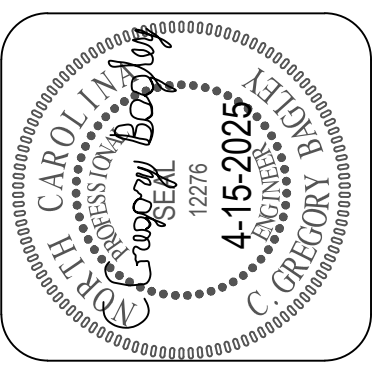
PLUMBING NOTES

- 1. ALL VENTS SHALL SIZED AS SHOWN.
- 2. BACKFLOW PREVENTER SHALL BE LOCATED IN STORAGE ROOM NEXT TO HOT WATER HEATERS.
- 3. AIRFLOW CHAMBERS ARE NOT REQUIRED.

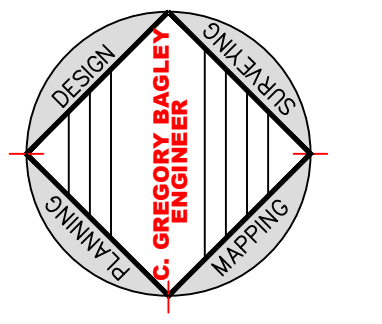
PLUMBING  
1/8" = 1'-0"

Project #:  
Date:  
Drawn/Design By:  
Scale:

REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

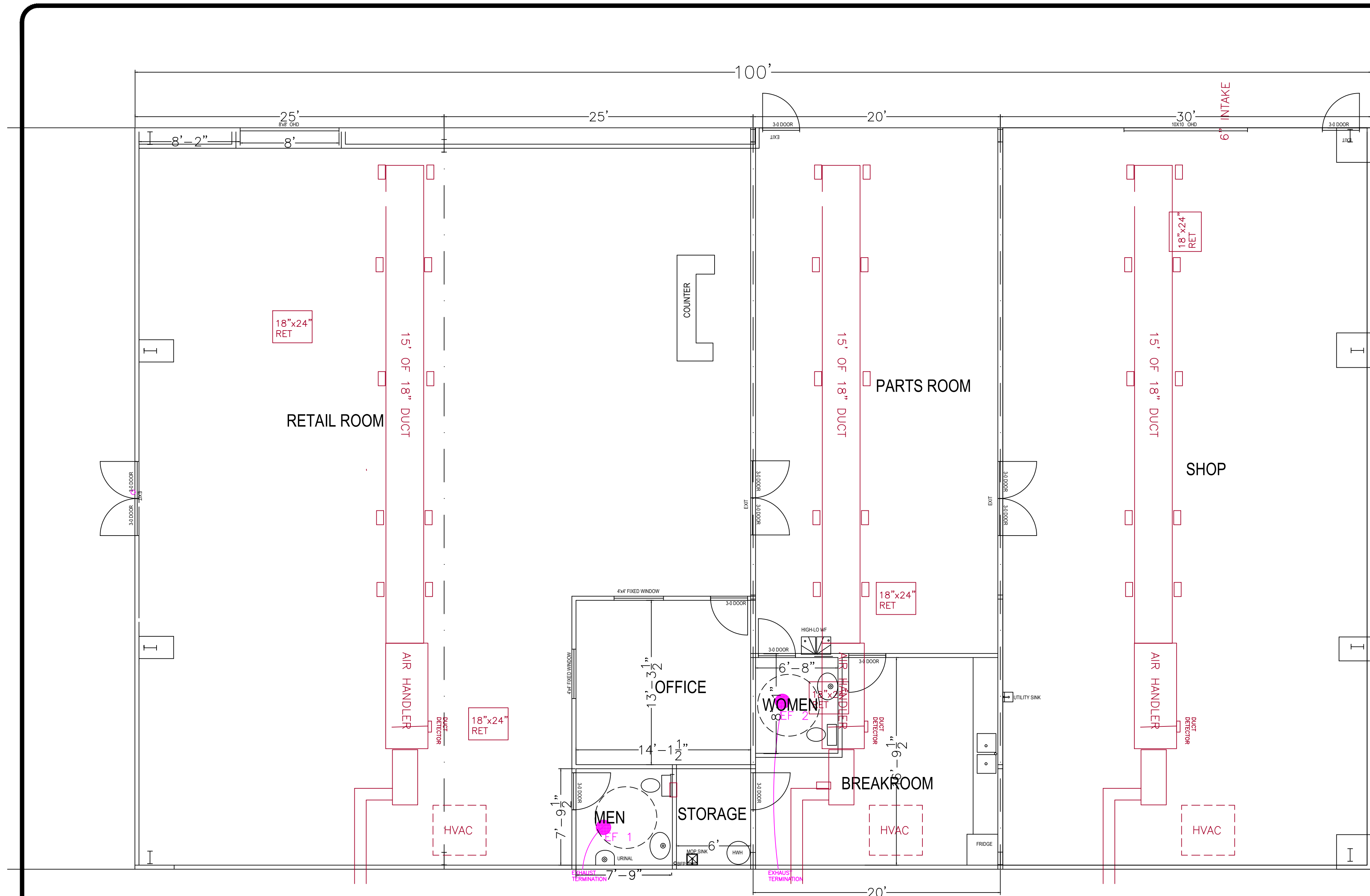


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PLUMBING

FACILITIES FOR  
SMALL ENGINE REPAIR ANGIER  
189 PROGRESSIVE PARKWAY  
ANGIER, NC 27501



HVAC

MECHANICAL SYSTEMS, SERVICE SYSTEMS, AND EQUIPMENT

METHOD OF COMPLIANCE	PREScriptive
THERMAL ZONE	IV
EXTERIOR DESIGN CONDITIONS	
winter dry bulb	18 F
summer dry bulb	92 F
INTERIOR DESIGN CONDITIONS	
winter dry bulb	70 F
summer dry bulb	74 F
relative humidity	50 %
BUILDING HEATING LOAD	75000/150000 BTU
BUILDING COOLING LOAD	123000 BTU
MECHANICAL SPACE CONDITIONING SYSTEMS	
Unitary	
description of unit	DX COOLING/HEAT
heating efficiency	12.2 IEER
cooling efficiency	12.2 IEER
heating output of units	60750 BTU
cooling output of units	119,000 BTU
LIST EQUIPMENT EFFICIENCIES	SEE SCHEDULE
EQUIPMENT SCHEDULES WITH MOTORS	SEE SCHEDULE

OUTSIDE AIR CALCULATION		
50 CLIENTS	CFM/PERSON	TOTAL CFM
	5	250
USE 8" FLEX FOR OUTSIDE DUCT TO EACH UNIT		

TOTAL CFM PRODUCED = 7200  
(30) 8" VENTS  
30 VENTS @ 220 CFM / VENT  
= 6600 CFM OUTPUT  
STATIC PRESSURE = 0.1in-wg

HVAC EQUIPMENT NOTES

USE 3-5 TON 14 SEER UNITS HEAT PUMPS.  
UNIT TO BE ON CONC SLAB OUTSIDE BUILDING.  
3/4" CONDENSATE LINE WITH P-TRAP ROUTED TO OUTSIDE AND FASTENED TO WALL.  
OUTSIDE AIR INTAKE TO BE ROUTED UP WALL FRAMING AND TERMINATED ABOVE ROOF.  
INTAKE MUST BE A MINIMUM OF 10' FROM OUTLET OR EXHAUST.  
MOUNT PROGRAMMABLE THERMOSTAT ON WALL 48" AFF. AS PER ADA REQUIREMENTS  
BATHROOM FANS TO BE 125 CFM WITH 4" DUCT.  
DISCHARGE EXHAUST OUTSIDE OF BUILDING.  
USE 8" FLEX FOR OUTSIDE AIR INTAKE DUCT

GENERAL HVAC NOTES

PROVIDE ELECTRIC HEAT PUMP - SEE BELOW  
MIN REQUIREMENTS TO BE MET AS NOTED ABOVE MET FROM NOTES ABOVE  
LOCATE PROGRAMMABLE THERMOSTATS AS NEEDED FOR PROPER EFFECT  
FANS SHALL RUN CONTINUOUSLY DURING OCCUPANCY TO PROVIDE OUTSIDE AIR.  
DUCT DETECTORS REQUIRED ON ALL UNITS  
REMOTE ALARM INDICATOR DEVICES (RAIDS) REQUIRED FOR EACH UNIT AND TO BE INSTALLED  
NEAR UNIT NO MORE THAN 72" AFF  
DUCT SMOKE DETECTORS TO OPERATE GLOBALLY, ie WHEN ONE DETECTOR ACTIVATES,  
ALL AIR HANDLING UNITS SHUT DOWN.

HVAC EQUIPMENT SCHEDULE

UNIT

2-5 TON UNITS ON GROUND  
RUUD UNITS # RKKL-B120CL15E  
GAS HEAT PACKAGE UNITS

SMOKE DETECTOR

USE D-41-20 INDORE SYSTEM  
SMOKE DETECTORS EACH UNIT

ECONOMISERS

USE AXR-RDCN13 ECONOMISERS  
ON EACH UNIT PER CODE

CALCULATE UNIT INPUT

Total Power Input = 88,610 + 1,650  
= 10,511 Watts

GAS PIPING TABLE

CHAPTER 4 OF NC FUEL GAS CODE TABLE 4.02.4(3)

MECHANICAL  
3/16" = 1'-0"

MECHANICAL SCHEDULE

HEAT PUMP AND AIR HANDLER

TYPE	RATING	TON	MODEL NO	MCA	MOCP
CARRIER HP	14 SEER	3-5	25HBRxxxxxxx	27.6	40 AMPS
CARRIER AHU		10 KW	FC4DNFxxxxx	57.5	60 AMPS

LIGHTING SCHEDULE

TYPE	LOCATION	MANUF	MODEL NO	QUANTITY
LED	GYM	LITHONIA	LE 2174X	10
LED	OFFICE	LITHONIA	DLE 135X	1/150 SQ FT

THERE SHALL BE NO HAZARDOUS MATERIAL PER NEC 500  
STORED, USED ,HANDLED OR MFG. IN THIS FACILITY.

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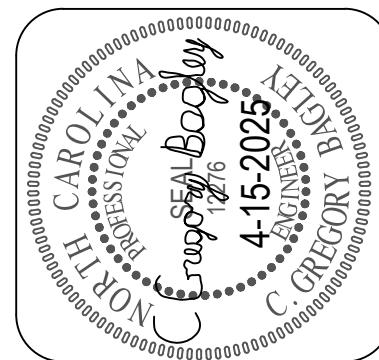
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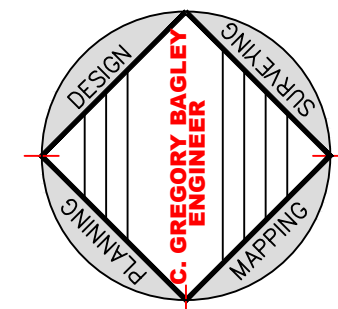
Scale:

REVISIONS

No.	Date:	Remarks
1		
2		
3		
4		



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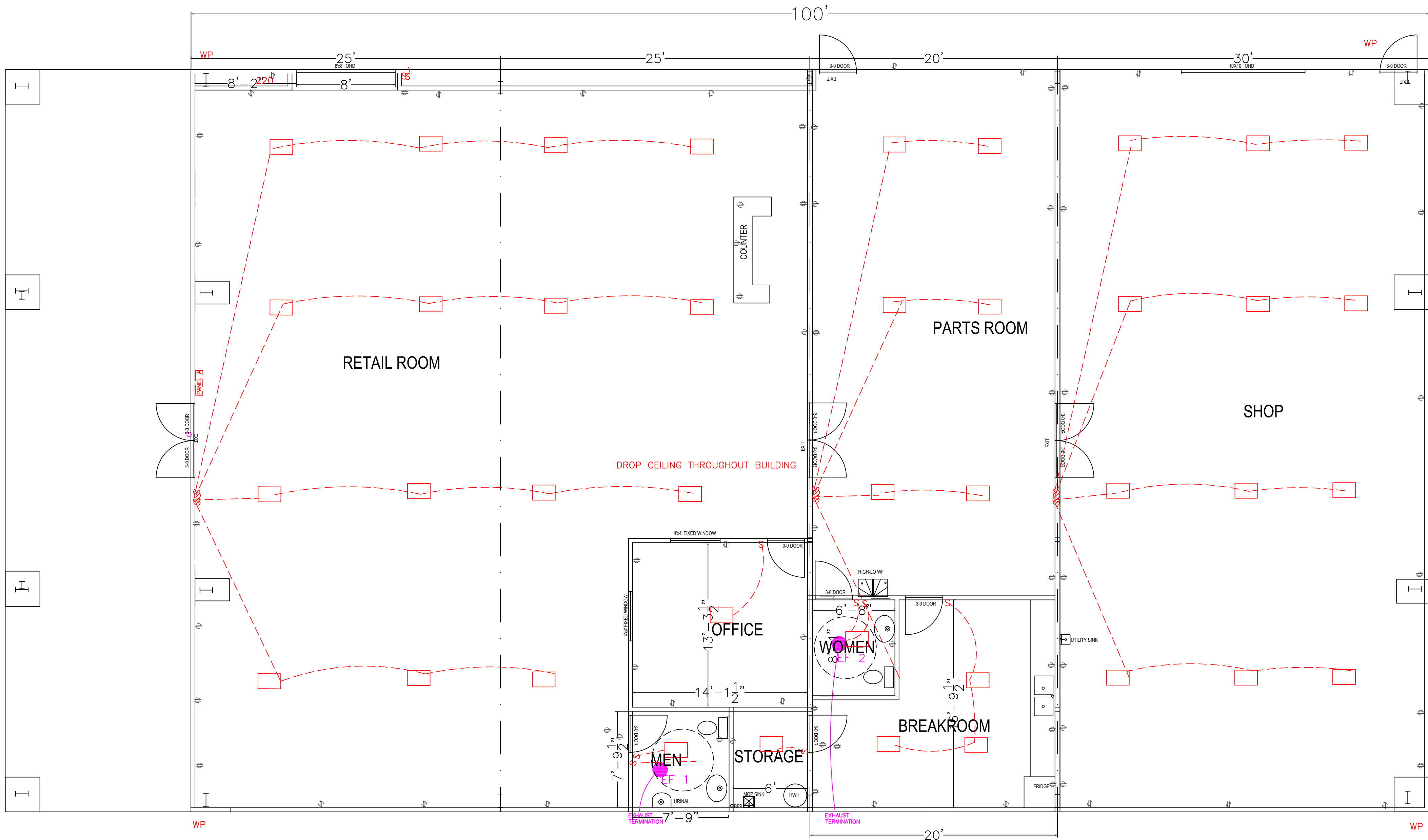
MECHANICAL

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Sheet Number

MECH 1  
of 1

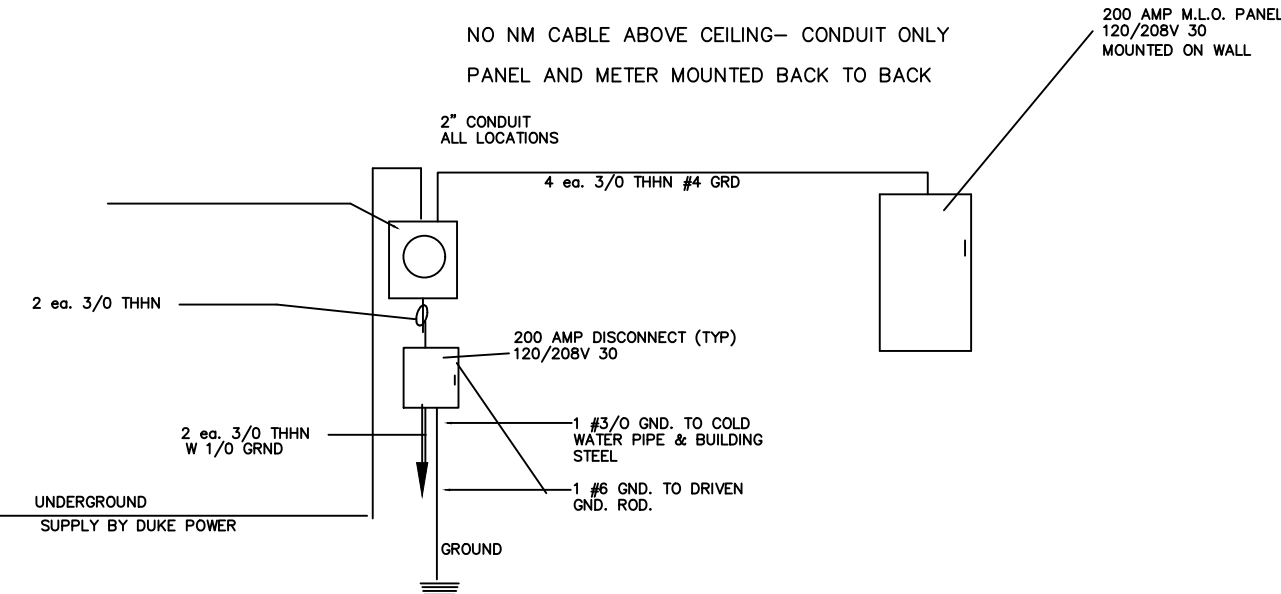




ARE , AHU, AI TO BE SINGLE PHASE

ELECTRICAL

200 AMP SERVICE																
VOLTAGE 208/120V 1 PHASE : 4 WIRE																
SIZE	DEVICE		BRANCH CIRCUIT				BRANCH CIRCUIT				DEVICE		TRIP			
	AMPS	POLES	DESCRIPTION			PH A	PH B	PH C	PH A	PH B	PH C	DESCRIPTION		POLES	AMPS	
12	20	1	RECEPT	1					10	2	RECEPT	1	20	12		
10	20	1	RECEPT	3	37				10	4	RECEPT	1	20	12		
10	20	1	LIGHTING	5		32			10	6	RECEPT. BATH GFI	1	20	12		
12	40	1	RECEPT. 220	7	7				11	11	RECEPT. 220	1	40	12		
12	20	1	LIGHTING BATH	9	7				11	10	BATH FAN	1	40	10		
12	20	1	EXIT	11	7				11	7	12	WATER HTR.	1	40	10	
12	20	1	DRYER	13	7				7	14	WASHER	1	20	12		
12	20	1	SIGN	15						16	LIGHTING WALL PK	1	20	12		
10	60	1		17						18		2	30	10		
10	60	1		19						20		2	30	10		
TOTAL				.51	48	0	28	21	21							
TOTAL CONNECTED AMPS A				-79 B-69 C- 21												



ELECTRICAL DIAGRAM

NOT TO SCALE

LOAD CALCS.			
LOAD	CONN. (KVA)	DEMAND FACTOR	DEMAND LOAD
LIGHTING	5	100% ***	5
RECEPT.	8.4	100% REM - 50%	8.4
HVAC	42.5	100%	42.5
SIGN	1.2	100% ***	1.2
WT	30	100%	30
TOTAL		87.1	96.5

LIGHTING LOAD CALCS.			
AREA TYPE	MIN. WATTS	REQUIRED	PROVIDED
BATH	3.5	64	224
STORAGE	1.5	1936	2904

OCCUPANCY SENSORS AT ALL LOCATIONS  
RECEPTACLES SHOWN ON PLAN ABOVE.

LIGHTING SCHEDULE

TYPE	LOCATION	MANUF	MODEL NO	COVERAGE	QUANTITY
LED	GYM	LITHONIA	LE 2174X	1/200 sq ft	20
LED	OFFICE	LITHONIA	DLE 135X	1/150 sq ft	7
LED	OFFICE	LITHONIA	DLE 135X	1/150 sq ft	2

ELECTRICAL DETAILS AND NOTES FOR HEALTHCARE FACILITY

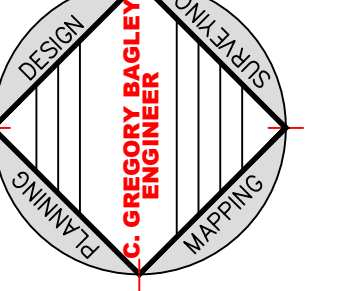
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