Coastal Architecture

PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

COVER SHEET

21014

ISSUED: 4-25-22
DWG BY: MES
CKD BY: LDD
REVISIONS

SHEET NO.
CS-1
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APPENDIX B

2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: PEPPERTREE BUILDING 34
Address: ATLANTIC BEACH, NORTH CAROLINA Zip Code 28557
Owner/Authorized Agent: MARCEL LOPEZ Phone # (843) 602-1180 E-Mail MARCEL@CRMSERVICES.US
Owned By: ☐ City/County ☒ Private ☐ State
Code Enforcement Jurisdiction: ☒ City ATLANTIC BEACH ☐ County _____ ☐ State _____

CONTACT: _____

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	Coastal Architecture	Lee Dixon	6419	(252) 247-2127	lee@coastalarchitecture.net
Civil	-	-	-	( )	-
Electrical	Burke Design Group	Ben Burke	22038	(919)771-1916	beburke@ncrr.com
Fire Alarm				( )	
Plumbing	Burke Design Group	Ben Burke	22038	(919)771-1916	beburke@ncrr.com
Mechanical	Burke Design Group	Ben Burke	22038	(919)771-1916	beburke@ncrr.com
Sprinkler-Standpipe				( )	
Structural	FDR	Heath Hendrick		(919)427-0501	HHendrick@fdr-eng.com
Retaining Walls > 5 feet High				( )	
Other				( )	

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

2018 NC BUILDING CODE: ☒ New Building ☐ Addition ☐ Shell/Core ☐ Phased Construction—Shell Core ☐ 1st Time Interior Completions

2018 NC EXISTING BUILDING CODE: (check all that apply)
☐ Prescriptive ☐ Repair ☐ Chapter 14 ☐ Alteration Level I ☐ Alteration Level II ☐ Alteration Level III ☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) _____ CURRENT USE(S) (Ch. 3): _____
RENOVATED: (date) _____ PROPOSED USE(S) (Ch. 3): _____
OCCUPANCY CATEGORY (Table 1604.5): Current: _____ Proposed: _____

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 ☐ NFPA 13 ☒ NFPA 13R ☐ NFPA 13D
Standpipes: ☐ No Class ☒ I ☐ II ☐ III
Primary Fire District: ☒ No ☐ Yes
Flood Hazard Area: ☒ No ☐ Yes ☐ Wet ☐ Dry
Special Inspections Required: ☒ No ☐ Yes

GROSS BUILDING AREA TABLE

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor		8,155	8,155
2nd Floor		8,155	8,155
Mezzanine			
1st Floor		8,155	8,155
Basement AUTO PARK LEVEL		8,293	8,293
TOTAL		32,758	32,758

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 versus the annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)

Exempt Building: ☐ Provide code or statutory reference: _____

Climate Zone: ☒ 3A ☐ 4A ☐ 5A

Method of Compliance:
Energy Code: ☐ Performance ☒ Prescriptive
ASHSAE 90.1: ☐ Performance ☐ Prescriptive
Other: ☐ Performance (specify source) _____

THERMAL ENVELOPE: (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: METAL ROOF, PLYWD, R-34 INSUL, GWB CEILING
U-Value of total assembly: _____
R-Value of insulation: R-34
Skylights in each assembly: _____
U-Value of skylight: _____
total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly 2X6 STUDS W/ PLYWD, R-19 INSUL, AND GWB
U-Value of total assembly: _____
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: _____

Floors over unconditioned space (each assembly)
Description of assembly: TOPPING SLAB ON HOLLOW CORE PLANK W/R-19 INSULATION AND HARDIE PANEL
U-Value of total assembly: CEILING
R-Value of insulation: R-19

Floors slab on grade
Description of assembly: 6" CONC. SLAB ON VAPOR BARRIER ON COMPACTED FILL
U-Value of total assembly: _____
R-Value of insulation: N/A
Horizontal/vertical requirement: _____
slab heated: _____

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 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2
I-2 Condition ☐ 1 ☐ 2
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 Occupancy Classification(s): _____
Incidental Uses (Table 509): _____
This separation is not exempt as a Nonseparated Use (see exceptions).
Special Uses (Chapter 4 – List Code Sections): _____
Special Provisions: (Chapter 5 – List Code Sections): _____
Mixed Occupancy: ☐ No ☒ Yes Separation: 1 Hr. Exception: _____
Non-separated Use (508.3)

✖ 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.

Select one

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

_____ + _____ = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.24 AREA	(C) AREA FOR FRONTAGE INCREASE(1, 5	(D) ALLOWABLE AREA PER STORY OR UNLIMITED(2, 3
1	S-2 PARKING	7616	54000	33480	87480
2	OFFICE-2	8,155	7,000	4340	11,340
3	R-2	8,155	7,000	4340	11,340
4	R-2	8,155	7,000	4340	11,340

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 = 385 (F)
b. Total Building Perimeter = 441 (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = 30 (W) I=0.62
2. Unlimited area applicable under conditions of Section 507.
3. Maximum Building Area = total number of stories in the building × D (maximum 3 stories) (506.2).
4. 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.
5. Frontage increase is based on the unsprinklered area value in Table 506.2.

STRUCTURAL DESIGN

DESIGN LOADS:
Importance Factors: Wind (IW) _____ SEE ALSO S-1
Snow (IS) _____
Seismic (IE) _____

Live Loads: Roof 20 psf
Mezzanine _____ psf
Floor _____ psf
Ground Snow Load: 10 **psf**

Wind Load: Basic Wind Speed 144 mph (ASCE-7)
Exposure Category C

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 SS 0.118 %g S1 0.006 %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F
Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data
Basic structural system (check one)
☒ Bearing Wall ☐ Building Frame ☐ Moment Frame ☐ Dual w/Special Moment Frame ☐ Dual w/Intermediate R/C or Special Steel ☐ Inverted Pendulum
Analysis Procedure: ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ **Yes** ☐ **No**

LATERAL DESIGN CONTROL: ☐ Earthquake ☒ Wind

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity 2000 psf
Pile size, type, and capacity _____

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	60	53'-6"	T504.3
Building Height in Stories (Table 504.4)	R2=3 / S2=3	3+1	T504.4

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4. T504.2, 508.4.2

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING 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	0				
Bearing Walls							
Exterior							
North	> 30	0	0				
East	> 10	0	0				
West	> 30	0	0				
South	> 30	0	0				
Nonbearing walls and partitions							
Exterior walls							
North	——	——	——				
East	——	——	——				
West	——	——	——				
South	——	——	——				
Interior walls and partitions	——	——	——				
Floor Construction Including supporting beams and joists		0	0				
Floor Ceiling Assembly		1, 1/2	1, 1/2	G5	U301	L528	
Columns Supporting Floors		0	0				
Roof Construction, including supporting beams and joists		0	0				
Roof Ceiling Assembly		0	0				
Columns Supporting Roof		0	0				
Shaft Enclosures—Exit		N/A	N/A				
Shaft Enclosures—Other		2	2	G5	U305		
Corridor Separation		N/A	N/A				
Occupancy/Fire Barrier Separation		1	1	G5	L528		
Party/Fire Wall Separation		——	——				
Smoke Barrier Separation		-					
Smoke Partition		-					
Tenant/Dwelling Unit/ Sleeping Unit Separation		1/2	1/2	G5	U305		
Incidental Use Separation		-					

* Indicate section number permitting reduction

MECHANICAL DESIGN

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: _____
summer humidity: _____
Building heating load: _____

SEE MECHANICAL

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: _____

ELECTRICAL DESIGN

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:
Energy Code: ☐ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance

Lighting schedule (each fixture type)
lamp type required in fixture
number of lamps
ballast type used in fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified versus allowed (whole building or space by space)
total exterior wattage specified versus allowed

SEE ELECTRICAL

Additional Prescriptive Compliance
☐ 506.2.1 More Efficient Mechanical Equipment
☐ 506.2.2 Reduced Lighting Power Density
☐ 506.2.3 Energy Recovery Ventilation Systems
☐ 506.2.4 Higher Efficiency Service Water Heating
☐ 506.2.5 On-Site Supply of Renewable Energy
☐ 506.2.6 Automatic Daylighting Control Systems

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 (%)
> 30	UP. S	NO LIMIT	——
> 10 < 15	UP. S	45%	¢ 45%

LIFE SAFETY SYSTEM REQUIREMENTS

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

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: G-2, G-3, G-4

N/A 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
N/A 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)
N/A Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
N/A Location of doors with electromagnetic egress locks (1010.1.9.9)
N/A Location of doors equipped with hold-open devices
N/A Location of emergency escape windows (1030)
N/A The square footage of each fire area (202)
N/A 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 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
12	-	-	0	0	12	12	12

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		
				132" ACCESS AISLE	5' ACCESS AISLE	
	SEE SITE/CIVIL					
TOTAL						

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
REQ'D										
PROVIDED	NOT APPLICABLE									

SPECIAL APPROVALS

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

NOT APPLICABLE

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ATLANTIC BEACH, NORTH CAROLINA

CERT. NO. C-1792 — COASTAL ARCHITECTURE, INC. — REGISTERED ARCHITECTURAL CORPORATION — NORTH CAROLINA

LEE D. DIXON, JR. — SEAL 6419 — REGISTERED ARCHITECT — NORTH CAROLINA

GENERAL DATA

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ISSUED: 4-25-22
DWG BY: MES
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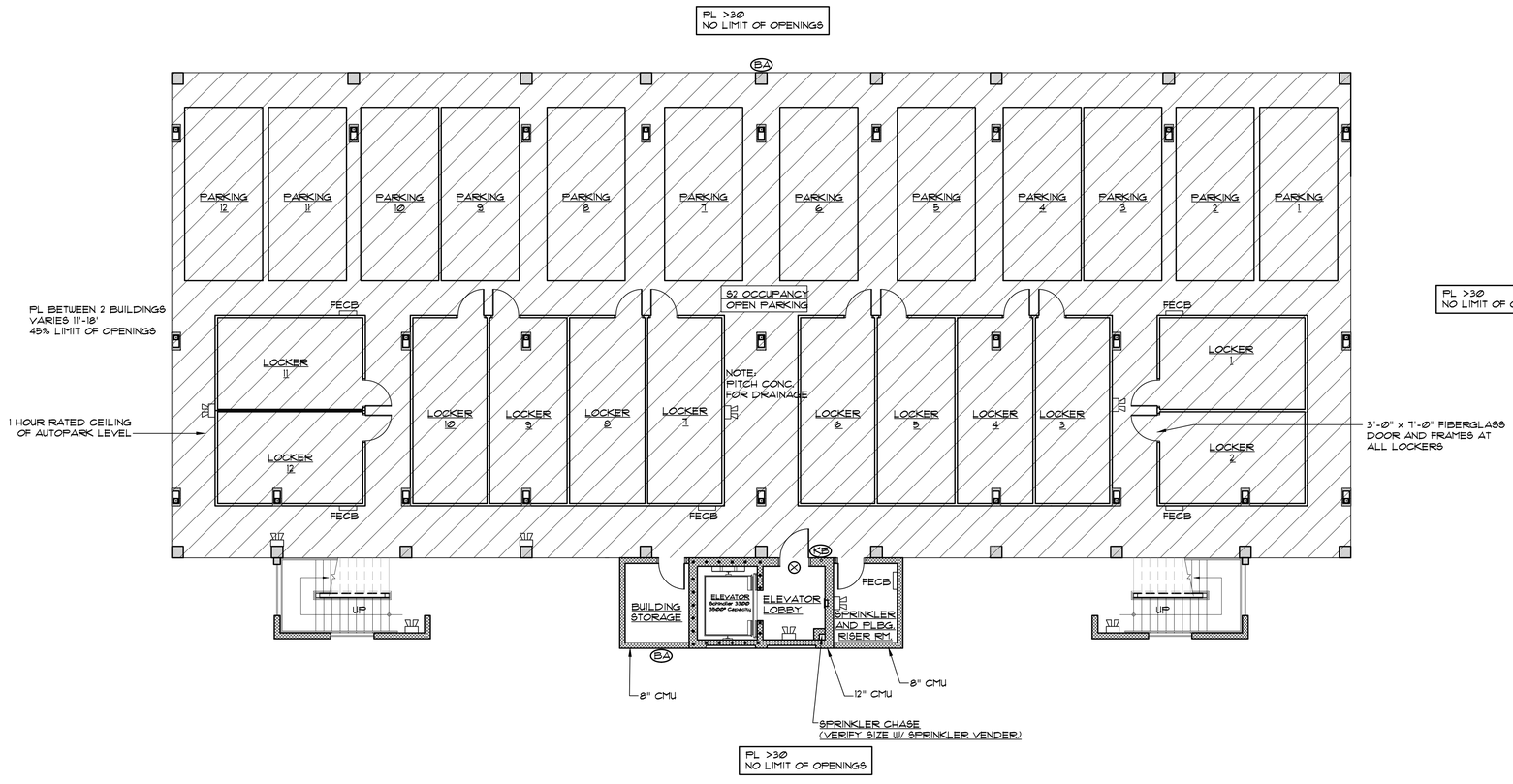

LEGEND

- 1/2 HOUR RATED WALL (RUN TO ROOF DECK)
- 2 HOUR RATED WALL
- 1 HOUR RATED CEILING
- 1/2 HOUR RATED CEILING
- FECB — SIMI RECESSED FIRE EXTINGUSHER / CABINET
- EXIT
- EMERGENCY LIGHT EXIT
- KB — KNOX BOX (VERIFY LOCATION W/ FIRE DEPT.)
- BA — BUILDING ADDRESS (VERIFY LOCATION W/ BUILDING INSPECTOR)

1 / G-2 AUTO-PARK LEVEL - LIFE SAFETY PLAN

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

NOTE: BUILDING TO BE FULLY SPRINKLERED

BUILDING NORTH

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LEE D. DIXON, JR. — REGISTERED ARCHITECT — 6419 — MOREHEAD CITY, NC

AUTO-PARK LEVEL
LIFE SAFETY PLAN

21014

ISSUED: 4-25-22
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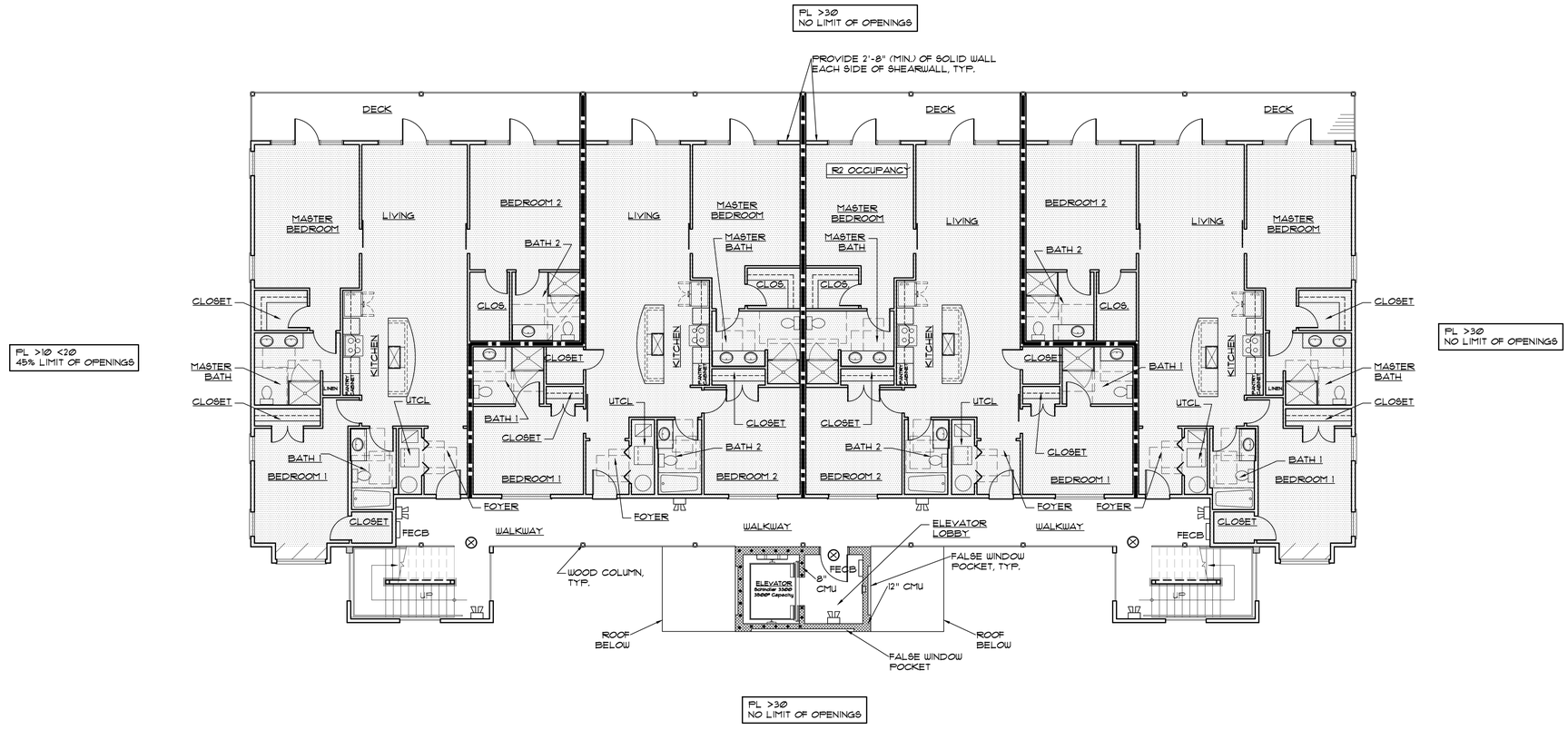

LEGEND

- 1/2 HOUR RATED WALL (RUN TO ROOF DECK)
- 2 HOUR RATED WALL
- 1 HOUR RATED CEILING
- 1/2 HOUR RATED CEILING
- FECB — SEMI RECESSED FIRE EXTINGUSHER / CABINET
- EXIT
- EMERGENCY LIGHT EXIT

1 / G-3 1ST & 2ND FLOOR PLAN - LIFE SAFETY PLAN

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

NOTE: BUILDING TO BE FULLY SPRINKLERED

BUILDING NORTH

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FIRST AND SECOND FLOOR PLAN
LIFE SAFETY PLAN

21014

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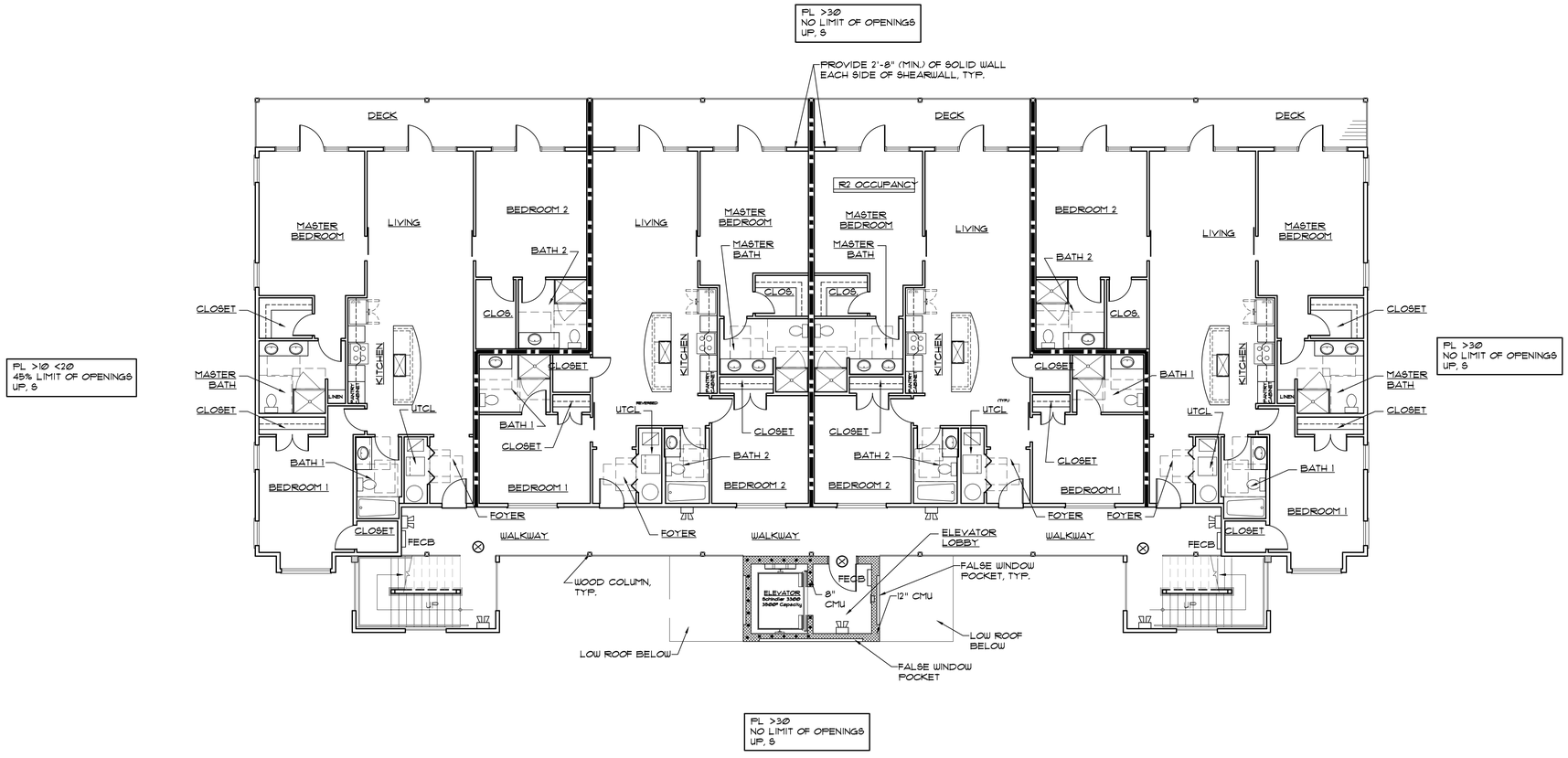

LEGEND

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1 / G-4 THIRD FLOOR PLAN - LIFE SAFETY PLAN

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

NOTE: BUILDING TO BE FULLY SPRINKLERED

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

COASTAL ARCHITECTURE, PLLC
CERT. NO. 5792
MOREHEAD CITY, NC

LEE D. DIXON, JR.
6419
MOREHEAD CITY, NC

THIRD FLOOR PLAN
LIFE SAFETY PLAN

21014

ISSUED: 4-25-22
DWG BY: MAF
CKD BY: LDD
REVISIONS

SHEET NO.
G-4
OF

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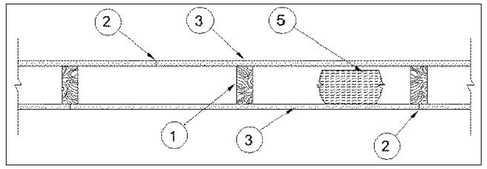
Design No. U305

June 05, 2007

Bearing Wall Rating -- 1 HR.

Finish Rating -- See Items 3, 3A, 3D, 3E and 3F.

STC Rating - 56 (See Item 9)



1. **Wood Studs --** Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

2. **Joints and Nail-Heads --** Exposed or covered with fiber tape and joint compound, except where required for specific edge configuration. For tapered, rounded-edge gypsum board, joints covered with joint compound or fiber tape and joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Nailheads exposed or covered with joint compound.

3. **Gypsum Board* --** 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Item 6 or 6A, Steel Framing Members*.
When Item 6, Steel Framing Members*, is used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.
When Item 6A, Steel Framing Members*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.
When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

AMERICAN GYPSUM CO -- Types AGX-1 (finish rating 23 min.), Type AGX-11 (finish rating 26 min) or Type AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC

LTD CO -- Type DBX-1 (finish rating 24 min).

BPB AMERICA INC -- Type 1, Type SF3 (finish rating 20 min) or FRPC, ProRoc Type C or ProRoc Type X (finish rating 26 min), Type EGRG (finish rating 23 min)

BPB CANADA INC -- ProRoc Type C, ProRoc Type X or ProRoc Type Abuse-Resistant (finish rating 26 min)

CANADIAN GYPSUM COMPANY -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min) .

G-P GYPSUM CORP, SUB OF

GEORGIA-PACIFIC CORP -- Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), DA.

LAFARGE NORTH AMERICA INC -- Type LGFC2 (finish rating 20 min), Type LGFC3 (finish rating 20 min), Type LGFC6 (finish rating 26 min), Type LGFC-C (finish rating 20 min), Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A.

NATIONAL GYPSUM CO -- Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C.

PABCO BUILDING PRODUCTS L L C, DBA

PABCO GYPSUM -- Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min) or Type PG-C.

PANEL REY S A -- Type PRX.

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD -- Type EX-1 (finish rating 26 min)

TEMPLE-INLAND FOREST PRODUCTS CORP -- Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X.

UNITED STATES GYPSUM CO -- Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

USG MEXICO S A DE C V -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

3A. **Gypsum Board* --** (As an alternate to Item 3) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

AMERICAN GYPSUM CO -- Types AGX-1 (finish rating 25 min.), Type AG-C (finish rating 25 min.).

CANADIAN GYPSUM COMPANY -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FCV (finish rating 24 min) , Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min).

UNITED STATES GYPSUM CO -- Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

USG MEXICO S A DE C V -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

3B. **Gypsum Board* --** (As an alternate to Item 3) -- Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A.

CANADIAN GYPSUM COMPANY -- Types AR, IP-AR.

UNITED STATES GYPSUM CO -- Types AR, IP-AR.

USG MEXICO S A DE C V -- Types AR, IP-AR.

3C. **Gypsum Board* --** (As an alternate to Items 3, 3A and 3B) - 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not required.

CANADIAN GYPSUM COMPANY -- Type SHX.

UNITED STATES GYPSUM CO -- Type SHX.

USG MEXICO S A DE C V -- Type SHX.

3D. **Wall and Partition Facings and Accessories* --** (As an alternate to Items 3, 3A, 3B and 3C, not shown) - Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 5E. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber, Sprayed.

QUIET SOLUTION INC -- Type QuietRock QR-530 (finish rating 23 min).

3E. **Gypsum Board* --** (As an alternate to Items 3, 3A, 3B, 3C, or 3D -not shown) For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

RAY-BAR ENGINEERING CORP -- Type RB-LBG (finish rating 24 min).

3F. **Gypsum Board* --** (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) -- 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed horizontally. Joints and nail heads treated as described in Item 2.

TEMPLE-INLAND FOREST PRODUCTS CORP -- StructGlass Type X (finish rating 23 min).

4. **Steel Corner Fasteners -- (Optional) --** For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. **Batts and Blankets* --** (Optional - Required when Item 6A is used) Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be placed to completely fill the stud cavities and shall be secured to the studs 24 in. OC with staples, nails or screws.

CERTAINTEED CORP

GUARDIAN FIBERGLASS INC

JOHNS MANVILLE INTERNATIONAL INC

KNAUF INSULATION GMBH

OWENS CORNING HT INC, DIV OF OWENS CORNING -- Corning Fiberglas Corp.

ROCK WOOL MANUFACTURING CO -- Delta Board.

ROXUL INC

THERMAFIBER INC -- Type SAFB.

5A. **Fiber, Sprayed* --** (Not shown - Not for use with Item 6A) As an alternate to Batts and Blankets (Item 5) -- Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft3. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft3.

U S GREENFIBER L L C -- Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)

5B. **Fiber, Sprayed* --** (Not shown - Not for use with Item 6A) As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

NU-WOOL CO INC -- Cellulose Insulation

5C. **Batts and Blankets* --** Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 4 in. face of the studs with staples placed 24 in. OC.

THERMAFIBER INC -- Type SAFB

5D. **Glass Fiber Insulation --** (As an alternate to Item 5C) -- 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall, attached to the 4 in. face of the studs with staples placed 24 in. OC. See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

5E. **Batts and Blankets* --** (Required for use with Wall and Partition Facings and Accessories, Item 3D) -- Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

6. **Steel Framing Members (Optional, Not Shown)* --** Furring channels and Steel Framing Members as described below:

a. **Furring Channels --** Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* --** Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC -- Types RSIC-1, RSIC-V.

6A. **Steel Framing Members (Optional, Not Shown)* --** Furring channels and Steel Framing Members on one side of studs as described below:

a. **Furring Channels --** Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* --** used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.

KINETICS NOISE CONTROL INC -- Type Isomax.

7. **Furring Channel --** Optional - Not Shown - For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.

8. **Caulking and Sealants --** (not shown, optional) A bead of acoustical sealant applied around the partition perimeter for sound control.

9. **STC Rating --** The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except:

A. Item 2, above - Nailheads Shall be covered with joint compound.

B. Item 2, above - Joints As described, shall be covered with fiber tape and joint compound.

C. Item 5, above - Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.

D. Item 6, above - Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly.

E. Item 8, above - Caulking and Sealants (not shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.

F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.

10. **Wall and Partition Facings and Accessories* --** (Optional, Not shown) -- Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

QUIET SOLUTION INC -- Type QuietRock QR-510.

11. **Cementitious Backer Units* --** (Optional Item Not Shown - For Use On Face Of 1 Hr Systems With All Standard Items Required) - 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide.- Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing.

NATIONAL GYPSUM CO -- Type PermaBase

*Bearing the UL Classification Mark

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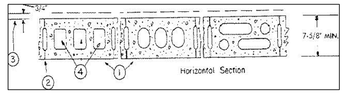
Design No. U905

September 30, 2010

Bearing Wall Rating — 2 HR.
Nonbearing Wall Rating — 2 HR



1. Concrete Blocks* — Various designs. Classification D—2 (2 hr).
See Concrete Blocks category for list of eligible manufacturers.

2. Mortar — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2—1/4 and not more than 3—1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. Portland Cement Stucco or Gypsum Plaster — Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1—1/2 hr. Attached to concrete blocks (Item 1).

4. Loose Masonry Fill — If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.

5. Foamed Plastic* — (Optional—Not Shown) — 1—1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel and Thermax Heavy Duty Plus (HDP)

*Bearing the UL Classification Mark
Filename = BXUV.U905
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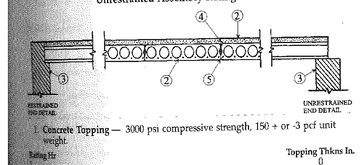
Design No. J901

Restrained Assembly Ratings — 1-1/2, 2, and 3 Hr.
Unrestrained Assembly Rating — 1 Hr.



1. Concrete Topping — 3000 psi compressive strength, 150 + or -3 pcf unit weight.

Rating Hr	Topping Thkns In.
1	0
1-1/2	0
2	1
3	2

2. Precast Concrete Units* — Carbonate aggregate, cross-section similar to the above illustration.
See Precast Concrete Units category for names of manufacturers.
3. Minimum Bearing — 1-1/2 in.
4. Grout — Sand cement grout, 3500 psi. Grout stop used to keep grout from bottom 3-3/8 in. of joint. Weld tie plates instead of or in conjunction with grout.
5. Clearance — Between slabs at bottom full length of joint, 1/16 in. min, 1/4 in. max.

*Bearing the UL Classification Marking

1 G-5 UL CODES
SCALE: N.T.S.

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Coastal Architecture PLLC
- Architectural Design
- Planning
- Interiors

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS — CERTIFICATE OF AUTHORIZATION — CERT. NO. C-1584 — REGISTERED

LICENSED ARCHITECTURE — CERT. NO. 5792 — REGISTERED

LEE D. DIXON, JR. — REGISTERED LANDSCAPE ARCHITECT — 6419 — NORTH CAROLINA — REGISTERED — MOREHEAD CITY

UL CODES

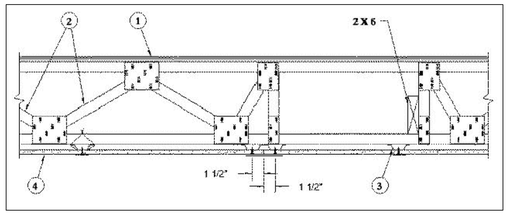
21014

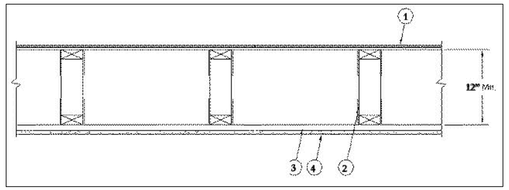
ISSUED: 4-25-22
DWG BY: MES
CKD BY: LDD

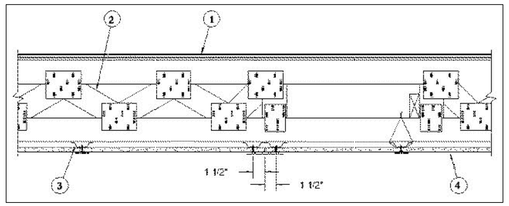
REVISIONS

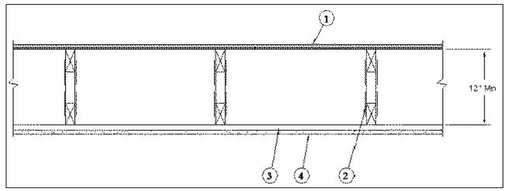
SHEET NO.
G-5
OF

Design No. I.528
September 09, 2008
Unrestrained Assembly Rating - 1 Hr.
Finish Rating - 22 Min.









1. **Flooring System --** The flooring system shall consist of one of the following:

System No. 1
Subflooring -- Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

System No. 2
Subflooring -- Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring -- Min 3/4 in. thickness of lightweight insulating concrete with **Perlite Aggregate*** or **Vermiculite Aggregate***, or gypsum concrete.
See **Perlite Aggregate** (CFFX) and **Vermiculite Aggregate** (CJZZ) categories for names of manufacturers.

System No. 3
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Floor Mat Materials* -- (Optional)-- Nom 6 mm thick floor mat material adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of floor-topping mixture. When floor mat material is used, min thickness of floor topping mixture is 1 in.
HACKER INDUSTRIES INC -- Type Hacker Sound-Mat.
Alternate Floor Mat Materials* -- (Optional) -- Floor mat material nom 10 mm thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/2 in. of floor-topping mixture.
HACKER INDUSTRIES INC -- Type Hacker Sound-Mat II.
Alternate Floor Mat Materials* -- (Optional) -- Floor mat material nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in.
HACKER INDUSTRIES INC -- Type Quiet Qurl 55/025
Alternate Floor Mat Materials* -- (Optional) -- Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in.
HACKER INDUSTRIES INC -- Type Quiet Qurl 60/040
Alternate Floor Mat Materials* -- (Optional) -- Floor mat material nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in.
HACKER INDUSTRIES INC -- Type Quiet Qurl 65/075
Metal Lath (Optional) -- For use with 3/8 in. or 10 mm floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.
Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.
HACKER INDUSTRIES INC -- Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

System No. 4
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional)-- Commercial asphalt saturated felt, 0.030 in. thick.
Floor Mat Materials* -- (Optional) - Min 3/8 in. to max 3/4 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture.
UNITED STATES GYPSUM CO -- Levelrock Brand Sound Reduction Mat
Alternate Floor Mat Materials* -- (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under **Floor Topping Mixture.**
UNITED STATES GYPSUM CO -- Levelrock Brand Floor Underlayment SRM-25
Alternate Floor Mat Materials* -- (Optional) - Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under **Floor Topping Mixture.**
SOLUTIA INC -- Type SC50
Alternate Floor Mat Material* -- (Optional) - Floor mat material nominal 3/8 in. thick loose laid over the subfloor. Floor topping shall be a min 3/4 in. thick.
OWENS CORNING -- Type QuietZone Acoustical Floor Mat
Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1200 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
UNITED STATES GYPSUM CO -- Type LRK

System No. 5
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier-(Optional) -- Commercial asphalt saturated felt, 0.030 in. thick.
Finish Flooring - Floor Topping Mixture* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.
ELASTIZELL CORP OF AMERICA -- Type FF

System No. 6
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier-(Optional) -- Commercial asphalt saturated felt, 0.030 in. thick.
Finish Flooring - Floor Topping Mixture* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.
CELLULAR CONCRETE L L C -- Floor Topping Mixture

System No. 7
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Finish Flooring - Floor Topping Mixture* -- Min 1 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 62.5 lbs of Pea Gravel, 312.5 lbs of sand with 5-1/2 gal of water.
LITE-CRETE INC -- Type I

System No. 8
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional) -- Commercial asphalt saturated felt, 0.030 in. thick.
Floor Mat Materials* -- (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. When floor mat material is used, min thickness of floor topping mixture is 1 in.
MAXXON CORP -- Type Acousti-Mat II
Alternate Floor Mat Materials* - (Optional) - Nom 0.8 in. thick floor mat material loose laid over the subfloor with Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping mixture shall be min 1-1/2 in.
MAXXON CORP -- Type Acousti-Mat 3, Crack Suppression Mat (CSM)
Metal Lath (Alternate to Crack Suppression Mat (CSM)) - 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material. Floor topping mixture shall be min 1-1/2 in.
Alternate Floor Mat Materials* - (Optional) -- Nom 0.4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping mixture shall be min 1-1/2 in.
MAXXON CORP -- Type Enkasonic 9110
Metal Lath (Optional) -- For use with floor mat materials, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd or Maxxon Corp. UL Classified Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping mixture shall be min 1 in.
MAXXON CORP -- Type Crack Suppression Mat (CSM)
Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 3 to 7 gal of water to 80 lbs of floor topping mixture to 1.0 to 2.1 cu ft of sand.
MAXXON CORP -- Types D-C, GC, GC2000, L-R, T-F, CT

System No. 9
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.
ULTRA QUIET FLOORS -- UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 10
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Floor Mat Materials* -- (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. When floor mat material is used, min thickness of floor topping mixture is 1 in.
MAXXON CORP -- Type Acousti-Mat II
Alternate Floor Mat Materials* - (Optional) - Nom 0.8 in. thick floor mat material loose laid over the subfloor with Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping mixture shall be min 1-1/2 in.
MAXXON CORP -- Type Acousti-Mat 3, Crack Suppression Mat (CSM)
Metal Lath (Alternate to Crack Suppression Mat (CSM) - 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material. Floor topping mixture shall be min 1-1/2 in.
Alternate Floor Mat Materials* - (Optional) -- Nom 0.4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping mixture shall be min 1-1/2 in.
MAXXON CORP -- Type Enkasonic 9110
Metal Lath (Optional) -- For use with floor mat materials, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd or Maxxon Corp. UL Classified Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping mixture shall be min 1 in.
MAXXON CORP -- Type Crack Suppression Mat (CSM)
Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1200 psi. Mixture shall consist of 4 to 7 gal of water mixed with 80 lbs of floor topping mixture and 1.4 to 1.9 cu ft of sand.
RAPID FLOOR SYSTEMS -- Types RF, RFP, RFU, RFR, Ortecrete

System No. 11
Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick plywood or min 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.
Finish Floor - Mineral and Fiber Board* -- Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.
HOMASOTE CO -- Type 440-32 Mineral and Fiber Board

System No. 12
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Floor Mat Materials* -- (Optional) - Min 3/8 in. to max 3/4 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture.
UNITED STATES GYPSUM CO -- Levelrock Brand Sound Reduction Board
Alternate Floor Mat Materials* -- (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under **Floor Topping Mixture.**
UNITED STATES GYPSUM CO -- Levelrock Brand Floor Underlayment SRM-25
Alternate Floor Mat Materials* -- (Optional) - Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under **Floor Topping Mixture.**
SOLUTIA INC -- Type SC50
Finish Flooring - Floor Topping Mixture* -- Min 1/2 in. thickness of floor topping mixture having a min compressive strength of 3000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
UNITED STATES GYPSUM CO -- Type HSLRK

System System No. 13
Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
ALLIED CUSTOM GYPSUM PLASTERWORKS LLC -- Accu-Crete, AccuRadiant
Alternate Floor Mat Material* - (Optional) - Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.
ALLIED CUSTOM GYPSUM PLASTERWORKS LLC -- Type AccuQuiet P80, Type AccuQuiet C40, Type AccuQuiet RSM 20, Type AccuQuiet RSM 32, Type AccuQuiet RSM 48, Type AccuQuiet RSM 64, and Type AccuQuiet RSM 120

System No. 14
Subflooring -- Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.
Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring -- Min 3/4 in. thickness of lightweight insulating concrete with **Perlite Aggregate*** or **Vermiculite Aggregate***, or gypsum concrete.
See **Perlite Aggregate** (CFFX) and **Vermiculite Aggregate** (CJZZ) categories for names of manufacturers.
Floor Mat Materials* -- (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025
Alternate Floor Mat Materials* -- (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040

System No. 15
Subflooring -- Min 3/4 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Long edges may be T & G or square.
Finish Flooring -- Floor Topping Mixture* -- Compressive strength to be 2500 psi min. Thickness to be 3/4 in. min. Refer to manufacturer's instructions accompanying the material for specific mix design.
ALPHA 7 GYPSUM L L C -- EarthSmart Gypsum Cement Commercial Floor Topping
Floor Mat Materials* -- (Optional)-- Floor mat material nom 1/4 in. thick adhered to subfloor with Alpha 7 Gypsum Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.
ALPHA 7 GYPSUM L L C -- Type EarthSmart SCM WL.
Floor Mat Materials* -- (Optional)-- Floor mat material nom 6 mm thick adhered to subfloor with Alpha 7 Gypsum Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.
ALPHA 7 GYPSUM L L C -- Type EarthSmart SCM RT.
2. **Trusses --** Parallel chord trusses, spaced a max 24 in. OC, fabricated from nom 2 by 4 in. lumber with lumber oriented vertically or horizontally. Min truss depth is 12 in. Truss members secured together with min No. 20 MSG galv steel truss plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split-tooth-type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx 7/8 in. centers with four rows of teeth per in. of plate width.
3. **Furring Channels --** Furring channels, 7/8 in. deep by 2-11/16 in. wide at the base and 1-7/16 in. wide at the face, formed from No. 25 ga galv steel, spaced 24 in. OC perpendicular to trusses. Channels secured to trusses with double strand of No. 18 SWG galv steel wire spaced 48 in. OC. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Two furring channels used at end joints of gypsum board (Item 4), each extending a min of 6 in. beyond both side edges of the board.
3A. **Resilient Channels --** (Not Shown) - As an alternate to Item 3, resilient channel formed from No. 26 MSG galv steel, spaced 16 in. OC perpendicular to trusses. Channels secured to each truss with 1-1/4 in. long No. 6 Type S bugle head steel screw. Channels overlapped at splices 4 in. Two resilient channels used at end joints of gypsum board (Item 4), each extending a min of 6 in. beyond both side edges of the board.
3B. **Steel Framing Members* --** (Optional, Not Shown) - Used as an alternate method to attach furring channels to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 clips secured to the bottom chord of alternating trusses with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. RSIC-V clips secured to the bottom chord of alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 3. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two min 7/16 in. long No. 6 self-tapping framing screws, at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. When Fiber, Sprayed (Item 6) is used, furring channel spacing reduced to 16 in. OC and two layers of nom 5/8 in. thick, 4 ft wide gypsum board shall be installed as described in Item 4.
PAC INTERNATIONAL INC -- Types RSIC-1, RSIC-V.
3C. **Steel Framing Members* --** (Optional, Not Shown) - Used as an alternate method to attach furring channels to trusses. Clips spaced 48 in. OC., and secured to the bottom chord to alternating trusses with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. Two layers of gypsum board required as described in Item 4. Not evaluated for use with Item 6. When Item 3C is used and Batts and Blankets* are added per Section III Item 18 Blanket Insulation in the General Information of this Directory (BXUV), clips spaced 48 in. OC, furring channels spaced 16 in. OC max, 3-1/2 in. max. Batts and Blankets* secured to plywood subfloor with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC, and two layers of gypsum board required as described in Item 4A. When the Batts and Blankets* are draped over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses, the furring channel spacing shall be reduced to 12 in. OC, and two layers of gypsum board required as described in Item 4A.
KINETICS NOISE CONTROL INC -- Type Isomax.
3D. **Steel Framing Members* --** (Optional, Not Shown) - Used as an alternate method to attach min. 1/2 in. deep resilient channels (Item 3A) to trusses (Item 2). Resilient channels are friction fitted into clips, and then clips are secured to the bottom chord of each truss with a 1-3/4 in. long No. 6 Type S bugle head steel screw through the center hole of the clip and the resilient channel flange. Adjoining resilient channels are overlapped 4 in. under trusses. The clip flange is opened slightly to accommodate the two overlapped channels. Additional clips required to hold resilient channel that supports the gypsum board butt joints, as described in Item 4.
KEENE BUILDING PRODUCTS CO INC -- Type RC Assurance.
3E. **Steel Framing Members* --** (Optional, Not Shown) - Used as an alternate method to attach furring channels to trusses. Clips spaced 48 in. OC. and secured to the bottom chord to alternating trusses with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. Two layers of gypsum board required as described in Item 4. Not evaluated for use with Item 6.
PLITEQ INC -- Type Genie Clip
4. **Gypsum Board* --** One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to furring or resilient channels. Gypsum board secured with 1 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. End joints secured to both resilient channels as shown in the end joint detail. When **Steel Framing Members**

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

CERTIFICATE OF AUTHORIZATION FOR ENGINEERING CORPORATION NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS CERT. NO. C-1762

REGISTERED ARCHITECT LEE D. DIXON, JR. 6419 NORTH CAROLINA

UL CODES

21014

ISSUED: 4-25-22
DWG BY: MES
CKD BY: LDD

REVISIONS

SHEET NO.
G-5.1
OF

1 G-5.1 UL CODES
SCALE: N.T.S.

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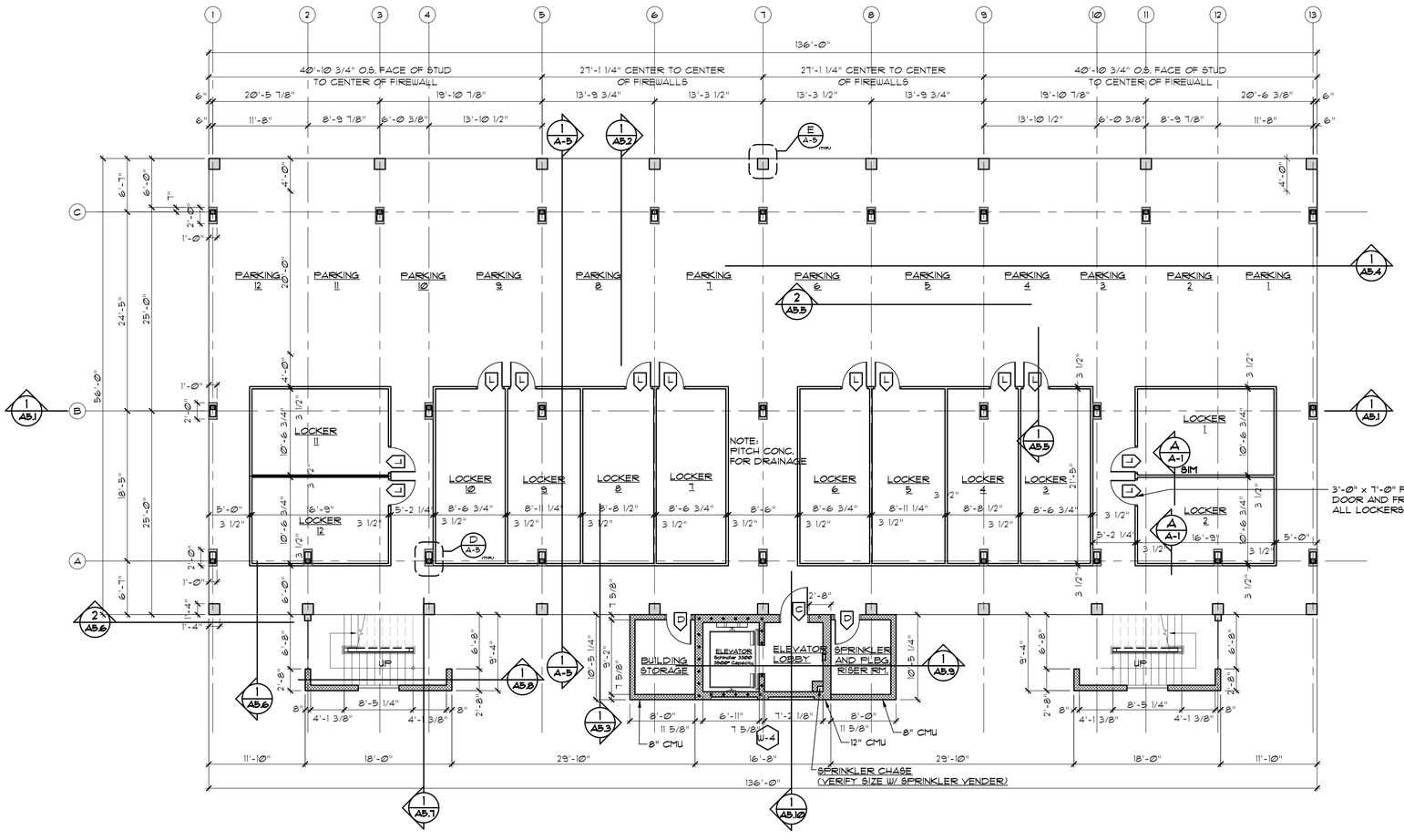
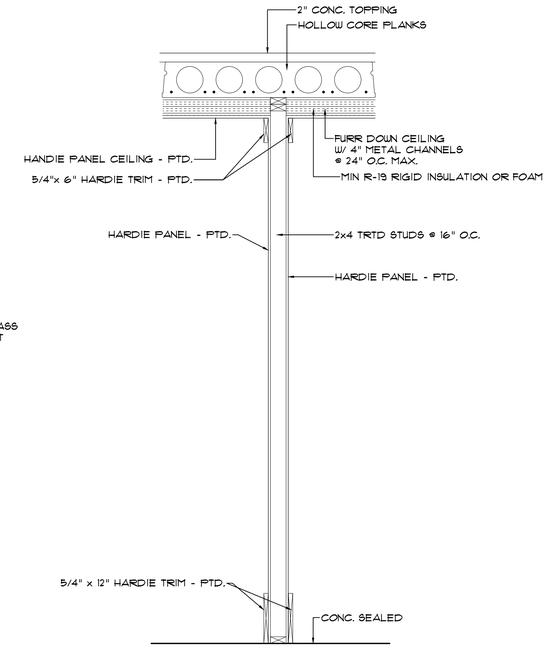


LEGEND
- • • • • 2 HOUR WALL
- — — — 1 HOUR WALL

1 / A-1 AUTO-PARK LEVEL
SCALE: 1/8"=1'-0"



A / A-1 TYP. LOCKER WALL
SCALE: 3/4"=1'-0"

Coastal Architecture PLLC

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

LEE D. DIXON, JR. REGISTERED ARCHITECT 6419 NORTH CAROLINA

AUTO-PARK LEVEL FLOOR PLAN

21014

ISSUED:	4-25-22
DWG BY:	MAF
CKD BY:	LDD

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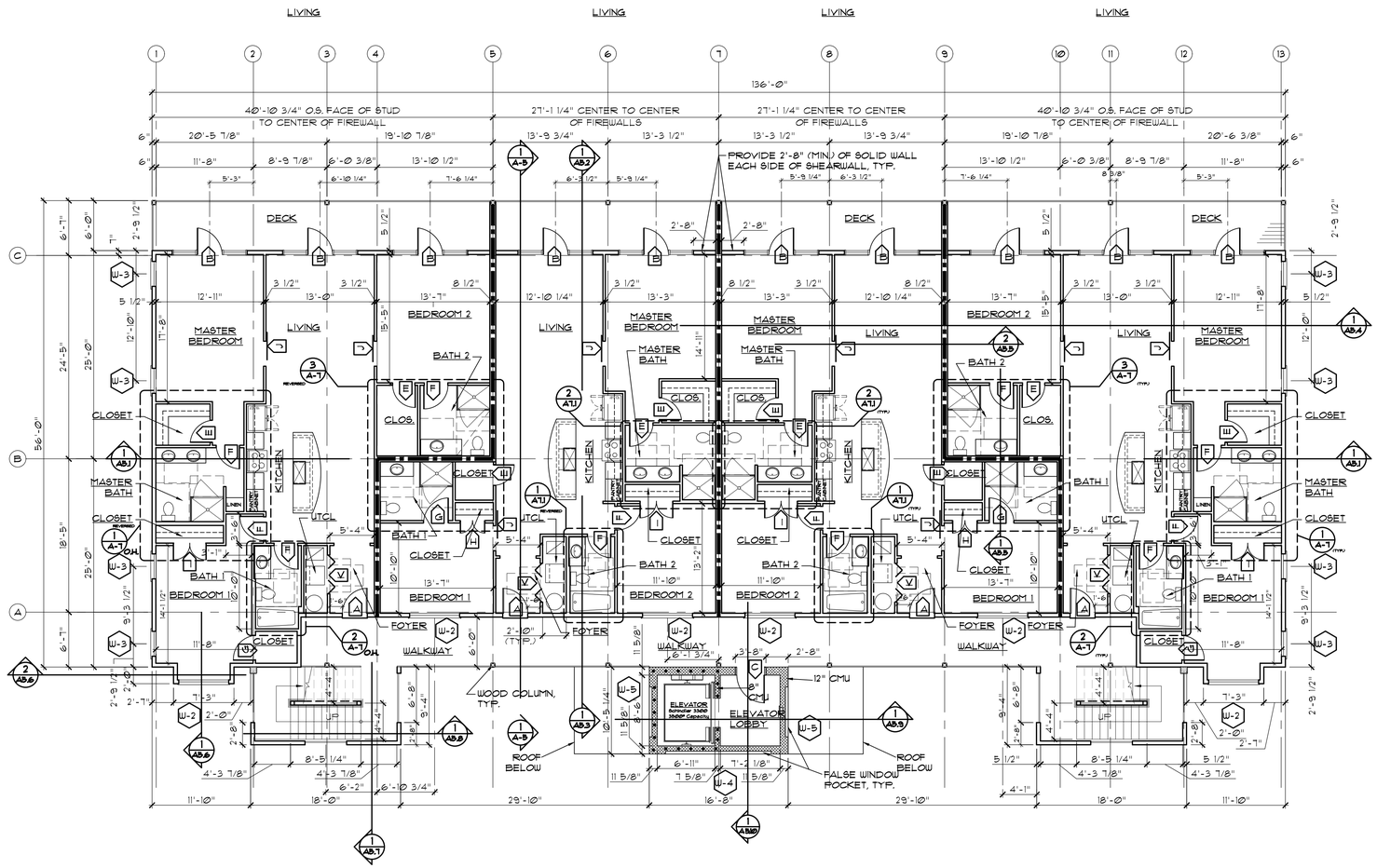

1 A-1.1 1ST & 2ND FLOOR PLAN BUILDING 34
SCALE: 1/8"=1'-0"

LEGEND
• • • • • 2 HOUR WALL
— — — 1 HOUR WALL

Coastal Architecture PLLC
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• Planning
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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

COASTAL ARCHITECTURE, PLLC
CERT. NO. 57792
MOREHEAD CITY, NC

LEE D. DIXON, JR.
REGISTERED ARCHITECT
6419
NORTH CAROLINA

FIRST AND SECOND FLOOR PLAN

21014

ISSUED: 4-25-22
DWG BY: MAF
CKD BY: LDD
REVISIONS

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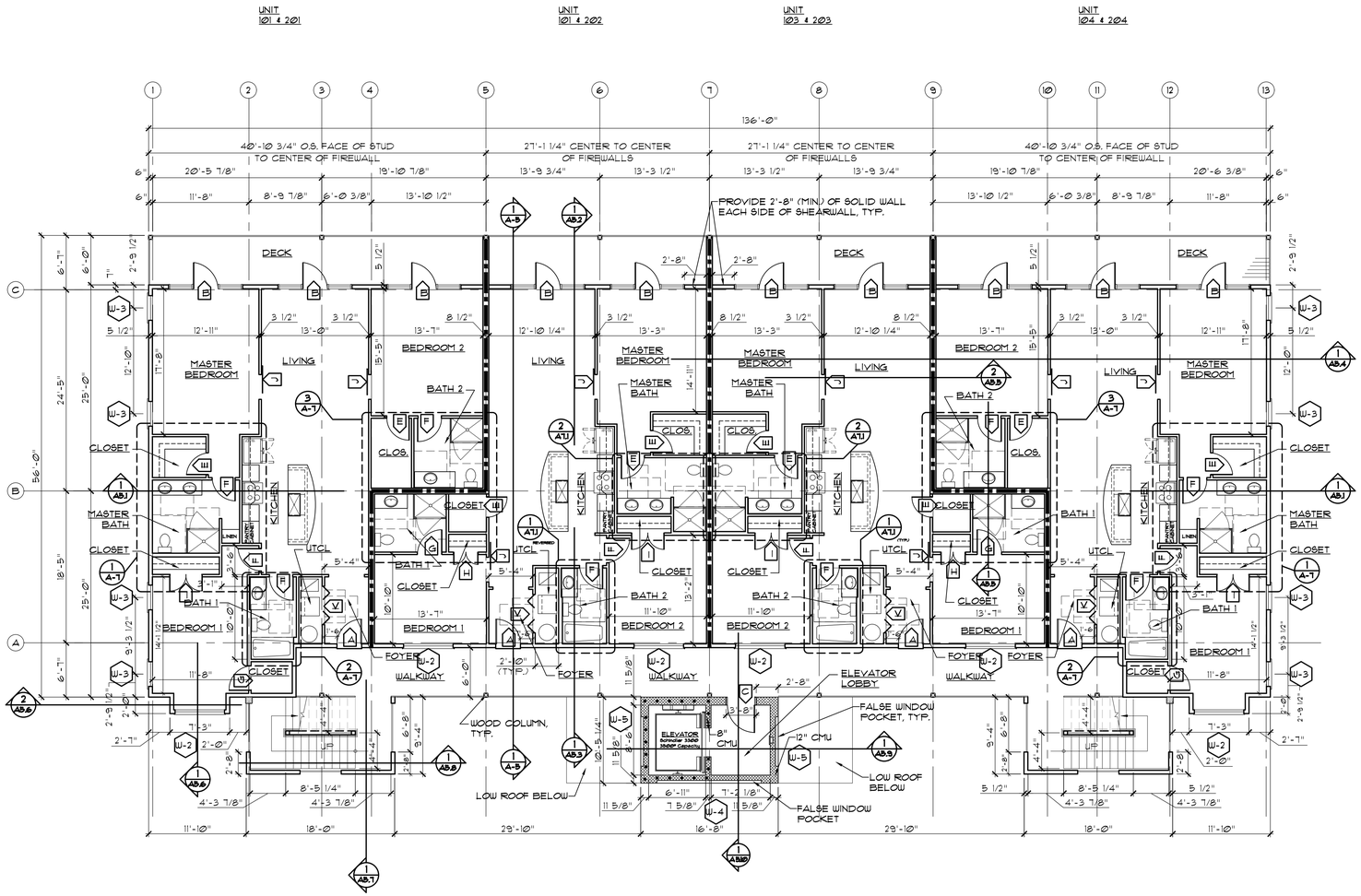

1 / A-1.2 THIRD FLOOR PLAN
SCALE: 1/8"=1'-0"

LEGEND
- 2 HOUR WALL
- 1 HOUR WALL

SEE A-1.1 FOR EXTERIOR WINDOW DIMENSIONS

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- Interiors

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

CERTIFICATE OF AUTHORIZATION NO. C-1392 — REGISTERED ARCHITECTURAL CORPORATION — MOREHEAD CITY, NC

LEE D. DIXON, JR. — REGISTERED ARCHITECT — 6419 — NORTH CAROLINA — MOREHEAD CITY

THIRD FLOOR PLAN

21014

ISSUED: 4-25-22
DWG BY: MAF
CKD BY: LDD
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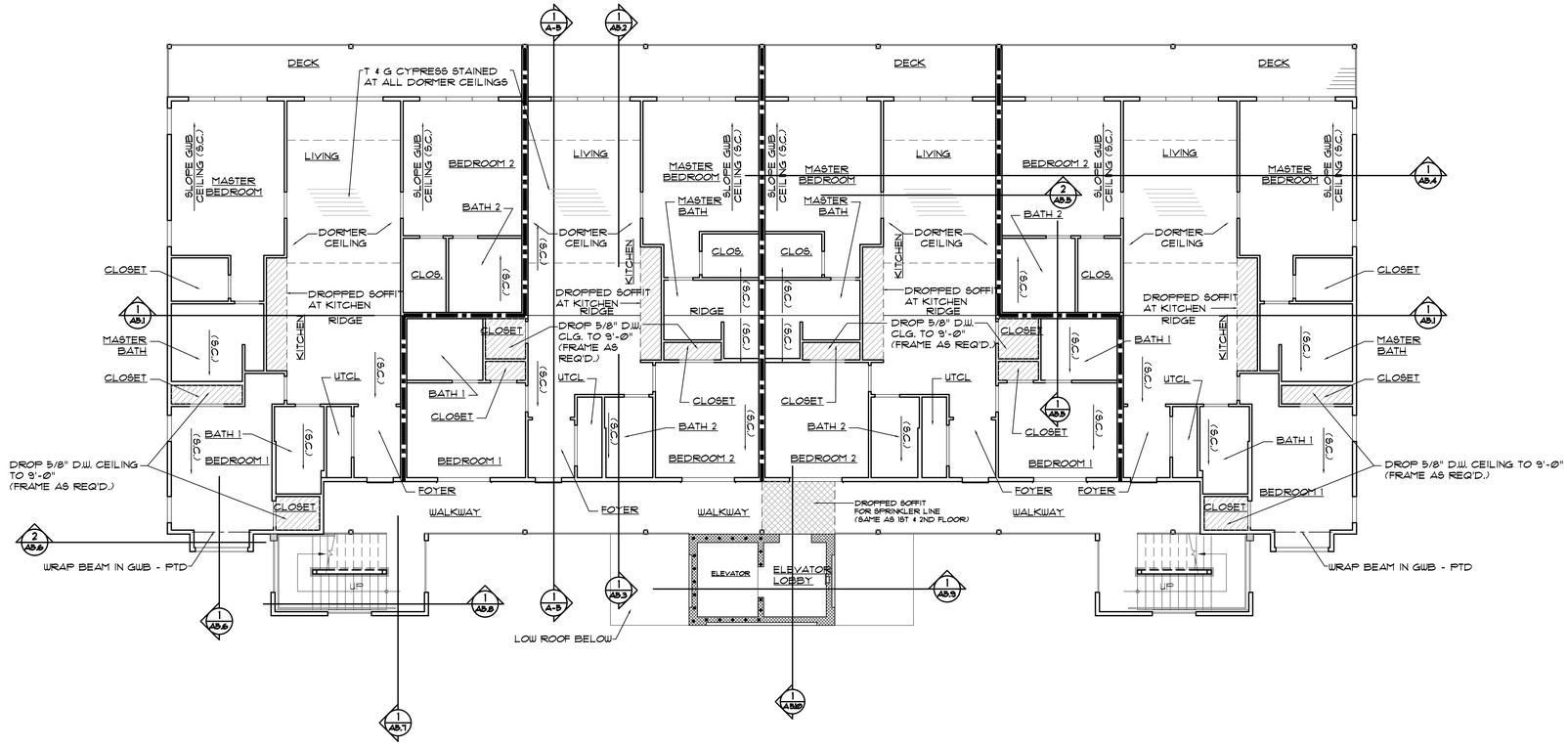

1 / A-1.3 THIRD FLOOR CEILING PLAN

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

SEE PME FOR LIGHT FIXTURES AND CEILING REGISTERS ETC.

Coastal Architecture PLLC

- Architectural Design
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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

COASTAL ARCHITECTURE PLLC — CERT. NO. C-2792 — NORTH CAROLINA — MOREHEAD CITY

LEE D. DIXON, JR. — REGISTERED ARCHITECT — 6419 — NORTH CAROLINA — MOREHEAD CITY

THIRD FLOOR CEILING PLAN

21014

ISSUED:	4-25-22
DWG BY:	BLS
CKD BY:	LDD

REVISIONS

SHEET NO.
A-2
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WINDOW SCHEDULE

MARK	SIZE (WxH)	TYPE	MAT.	GLASS	REMARKS
W	3'-0"W x 6'-10"H	FIXED	VINYL OR ALUM.	IMPACT RESISTANT	SIDELIGHTS
W2	6'-0"W x 4'-5"H	CASEMENT	VINYL OR ALUM.	IMPACT RESISTANT	FIXED CENTER GLASS
W3	3'-0"W x 4'-5"H	CASEMENT	VINYL OR ALUM.	IMPACT RESISTANT	
W4	12'-8"W x 6'-0"H	FIXED	VINYL OR ALUM.	IMPACT RESISTANT	SPANDREL GLASS WINDOW
W5	6'-0"W x 6'-0"H	FIXED	VINYL OR ALUM.	IMPACT RESISTANT	SPANDREL GLASS WINDOW
W6	4'-6"W x 1'-6"H	FIXED	VINYL OR ALUM.	IMPACT RESISTANT	

ALL WINDOWS TO MEET WIND LOADS 144 MPH

DOOR SCHEDULE

DOOR DATA				FRAME DATA		
MARK	SIZE (WxH)	TYPE	MAT.	MAT.	MFR/STYLE	REMARKS
A	3'-0" x 7'-0"	SINGLE	F.G.	F.G.	AS SELECTED BY DEVELOPER	EXTERIOR
B	3'-0" x 7'-0"	SINGLE	ALUM.	ALUM.	AS SELECTED BY DEVELOPER	EXTERIOR W/ SIDELIGHTS
C	3'-0" x 7'-0"	SINGLE	ALUM.	ALUM.	AS SELECTED BY DEVELOPER	EXTERIOR W/ 1" TEMP. GLASS, PROVIDE PANIC HARDWARE AND CLOSURES
D	3'-0" x 7'-0"	SINGLE	GLASS.	F.G.	AS SELECTED BY DEVELOPER	EXTERIOR, PROVIDE CLOSURE
E	2'-8" x 7'-0"	SINGLE	WOOD	WOOD	AS SELECTED BY DEVELOPER	
F	2'-10" x 7'-0"	SINGLE	WOOD	WOOD	AS SELECTED BY DEVELOPER	
G	3'-0" x 7'-0"	SINGLE	WOOD	WOOD	AS SELECTED BY DEVELOPER	
H	(2) 1'-6" x 7'-0"	DOUBLE	WOOD	WOOD	AS SELECTED BY DEVELOPER	
I	(2) 2'-0" x 7'-0"	DOUBLE	WOOD	WOOD	AS SELECTED BY DEVELOPER	
J	3'-0" x 7'-0"	BARN	WOOD	WOOD	AS SELECTED BY DEVELOPER	
K	(4) 1'-2" x 7'-0"	BIFOLD	WOOD	WOOD	AS SELECTED BY DEVELOPER	
L	3'-0" x 7'-0"	SINGLE	F.G.	F.G.	AS SELECTED BY DEVELOPER	LOCKERS (AUTOPARK LEVEL)

NOTE:
- PROVIDE STORM DOORS AT EXTERIOR FRONT DOORS TO UNITS W/ CLOSURES.
- ALL WOOD DOORS AND FRAMES TO BE PAINTED.

ROOM FINISH SCHEDULE

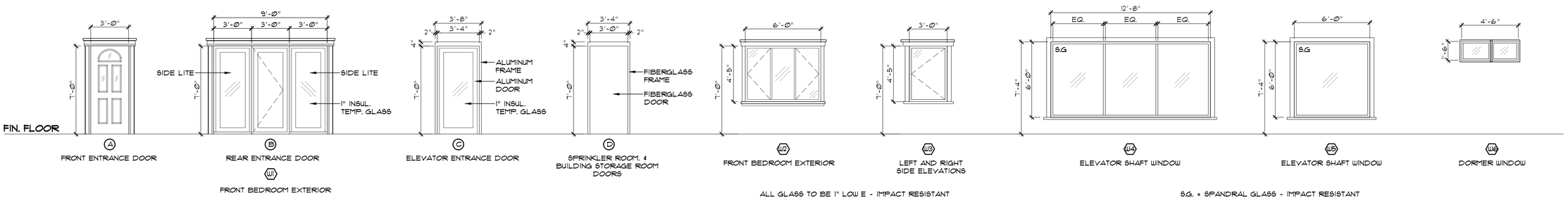
NOTE: SEE PLAN LOCATIONS FOR ADDITIONAL INFORMATION.

NO.	ROOM	FLOOR	BASE	WALLS (PLAN NORTH) NORTH	EAST	SOUTH	WEST	CEILING	NOTES
	LIVING/DINING	LVP	WD. PTD.	-	GWB. PTD.	SLAP	GWB. PTD.	GWB. PTD.	T & G CYPRESS STAINED AT DORMER CEILINGS
	KITCHEN	LVP	WD. PTD.	GWB. PTD.	GWB. PTD.	-	GWB. PTD.	GWB. PTD.	
	LAUNDRY	TILE	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	FOYER	TILE	WD. PTD.	SLAP	SLAP	-	SLAP	GWB. PTD.	
	BEDROOM 1	CARPET	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	BATH 1	LVP	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	TILE BATH SURROUND
	CLOSET 1	CARPET	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	BEDROOM 2	CARPET	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	BATH 2	LVP	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	CLOSET 2	CARPET	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	MASTER BEDROOM	CARPET	WD. PTD.	GWB. PTD.	"SLAP"	GWB. PTD.	"SLAP"	GWB. PTD.	"SEE NOTE ON FLOOR PLAN"
	MASTER BATHROOM	LVP	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	MASTER CLOSET	CARPET	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	
	CLOSET FOR VALUABLES	LVP/CARPET	WD. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	GWB. PTD.	CLOSET LOCATION DICTATES FLOOR TYPE
	DECK	TREX.	-	HRD.	-	-	-	HRD.	
	WALKWAY	TREX.	-	-	HRD.	HRD.	HRD.	HRD.	
	RISER ROOM	S.CONC.	-	CMU. PTD	CMU. PTD	CMU. PTD	CMU. PTD	GWB. PTD.	
	BUILDING STORAGE	S.CONC.	-	CMU. PTD	CMU. PTD	CMU. PTD	CMU. PTD	GWB. PTD.	
	ELEVATOR LOBBY	TILE	TILE	CMU. PTD	CMU. PTD	CMU. PTD	CMU. PTD	GWB. PTD.	

TILE - CERAMIC TILE.
LVP - LUXURY VINYL PLANK.
CARPET - ROLL OUT CARPET
S.CONC - SEALED CONCRETE.

WD. PTD. - WOOD PAINTED
GWB. PTD. - GYPSUM BOARD PAINTED
SLAP. PTD. - SHIPLAP PAINTED
CMU. PTD. - MASONRY BLOCK PAINTED

TREX. - TRANSCEND DECKING
HRD. - HARDIE PANELS, WALL OR CEILING



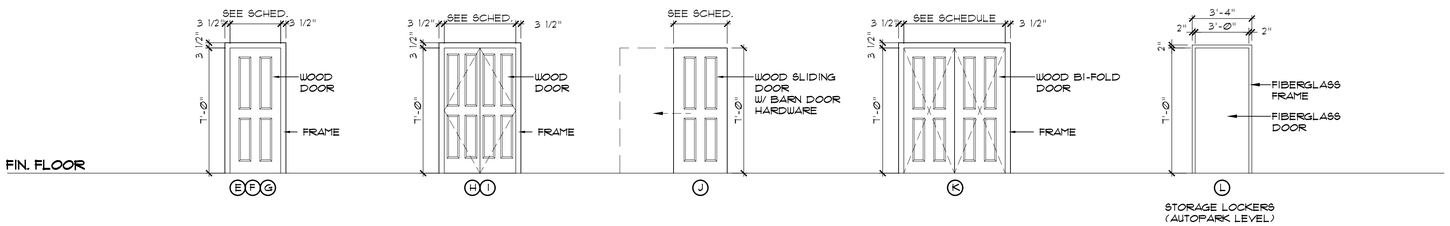
ALL GLASS TO BE 1" LOW E - IMPACT RESISTANT

S.G. = SPANDRAL GLASS - IMPACT RESISTANT

1 A-3 EXTERIOR DOOR & WINDOW ELEVATIONS

NOTE: ALL GLASS IS TEMPERED

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



2 A-3 INTERIOR DOOR ELEVATIONS

NOTE: ALL GLASS IS TEMPERED

NOTE:
CONTRACTOR SHALL FIELD VERIFY ALL DOOR AND WINDOW ROUGH OPENING DIMENSIONS PRIOR TO ORDERING UNITS.

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

DOOR, WINDOW, AND ROOM FINISH SCHEDULES

21014

ISSUED: 4-25-22
DWG BY: MAF
CKD BY: LDD
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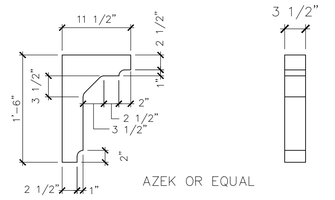
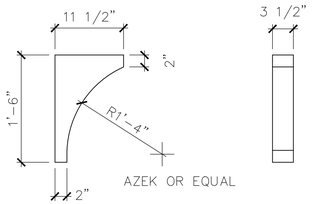


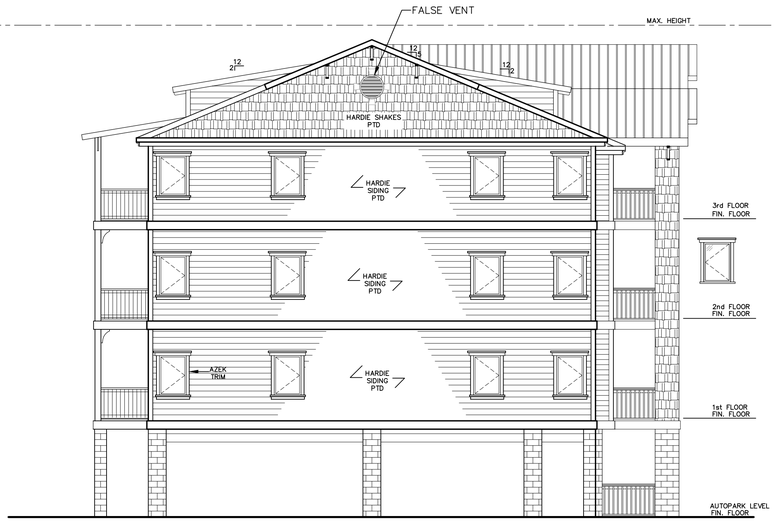
A/A-4 BRACKET DETAIL
SCALE: 1"=1'-0"



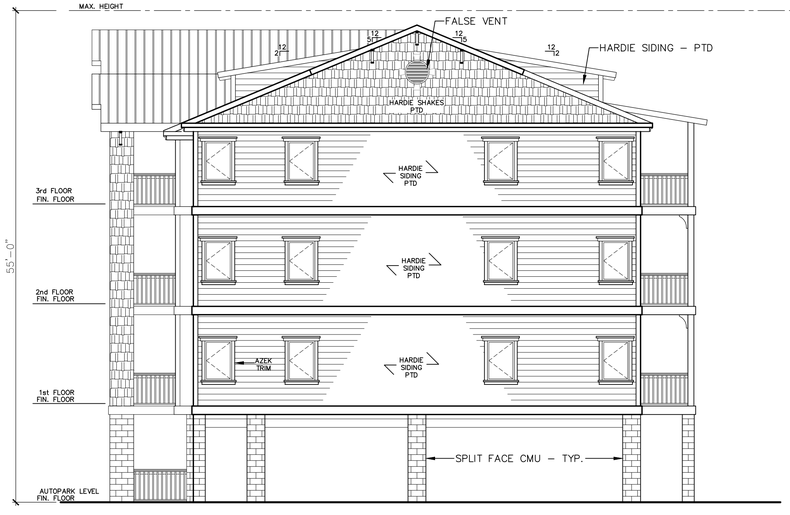
B/A-4 BRACKET DETAIL
SCALE: 1"=1'-0"



4/A-4 REAR ELEVATION
SCALE: 1/8"=1'-0"



3/A-4 LEFT SIDE ELEVATION
SCALE: 1/8"=1'-0"



2/A-4 RIGHT SIDE ELEVATION
SCALE: 1/8"=1'-0"



1/A-4 FRONT ELEVATION
SCALE: 1/8"=1'-0"

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA REGISTERED ARCHITECTURAL CORPORATION COASTAL ARCHITECTURE PLLC CERT. NO. C-2782

LEE D. DIXON, JR. REGISTERED ARCHITECT 6419 NORTH CAROLINA

ELEVATIONS

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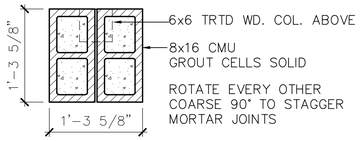
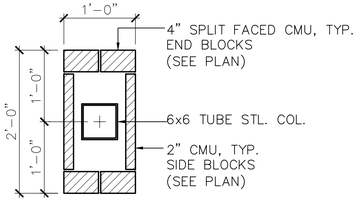
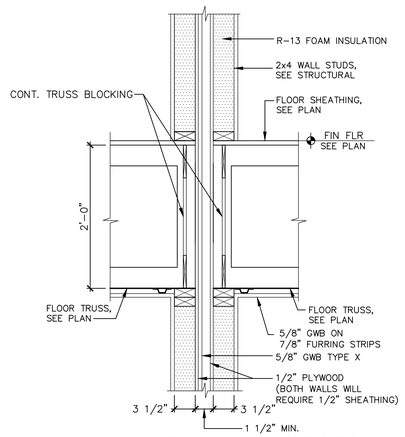


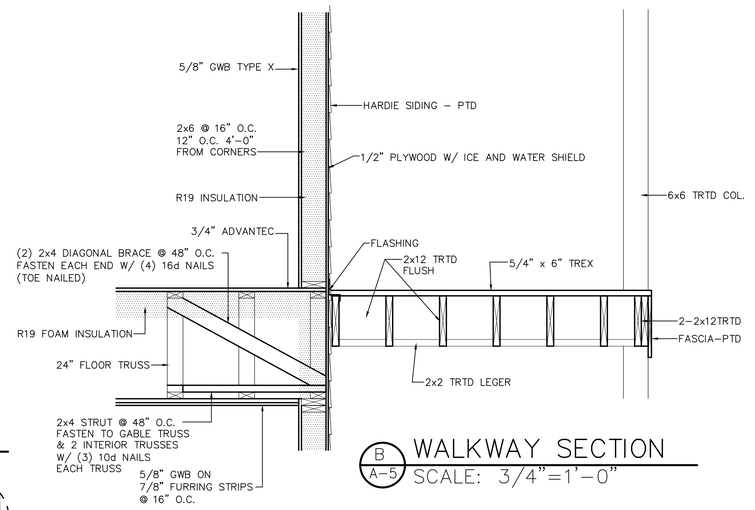
E / A-5 COLUMN SECTION
SCALE: 1"=1'-0"



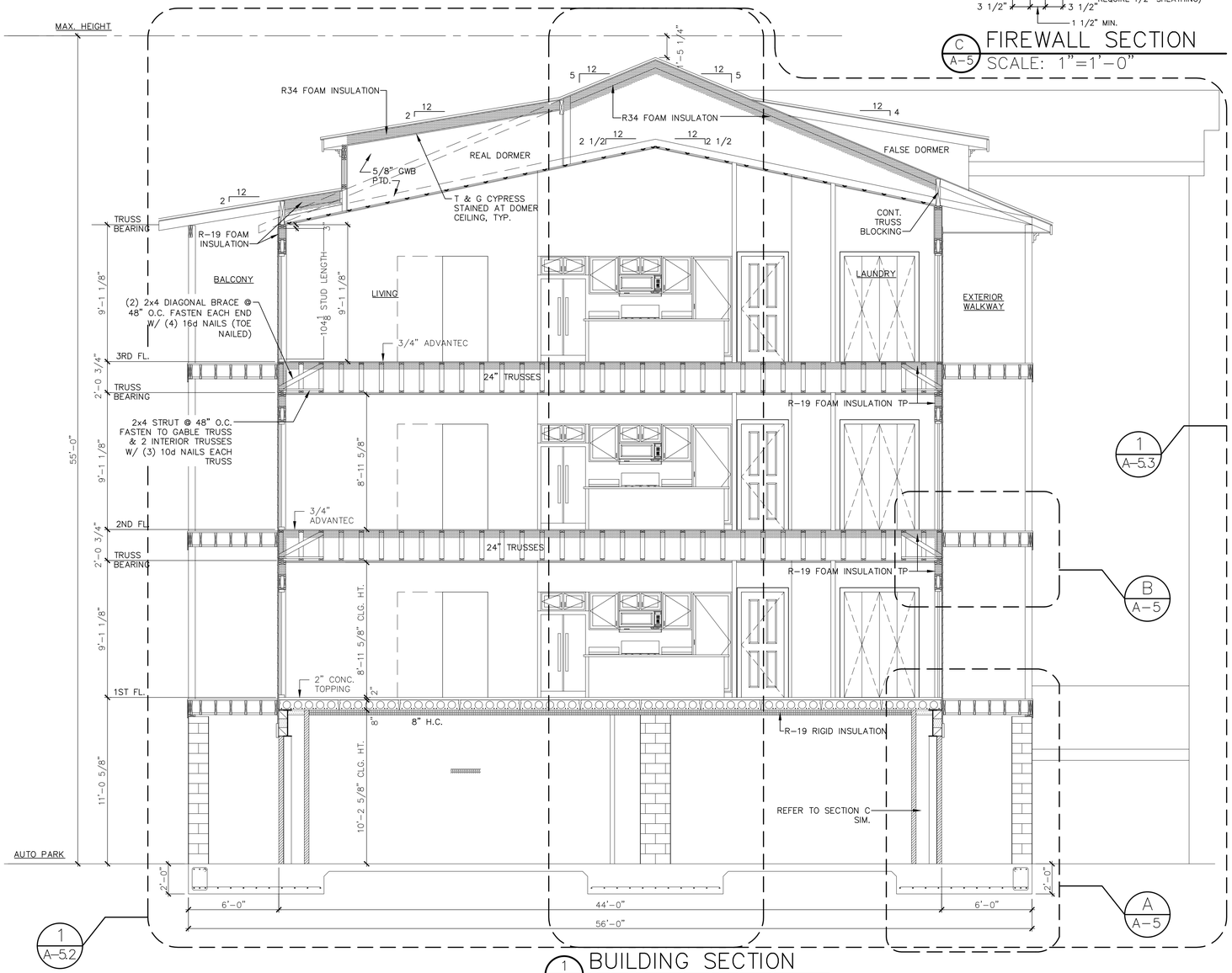
D / A-5 COLUMN SECTION
SCALE: 1"=1'-0"



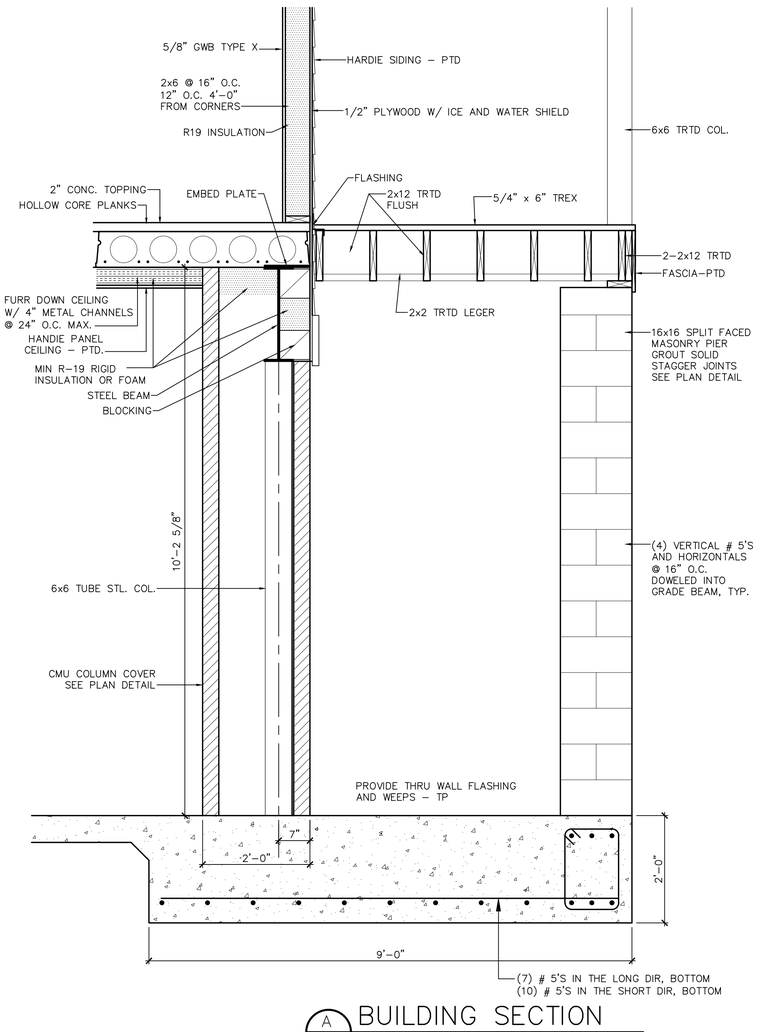
C / A-5 FIREWALL SECTION
SCALE: 1"=1'-0"



B / A-5 WALKWAY SECTION
SCALE: 3/4"=1'-0"



1 / A-5 BUILDING SECTION
SCALE: 1/4"=1'-0"



A / A-5 BUILDING SECTION
SCALE: 3/4"=1'-0"

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

COASTAL ARCHITECTURE PLLC CERT. NO C-2962 NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERING AND SURVEYING LICENSED

LEE D. DIXON JR. 6419 REGISTERED ARCHITECT NORTH CAROLINA MOREHEAD CITY

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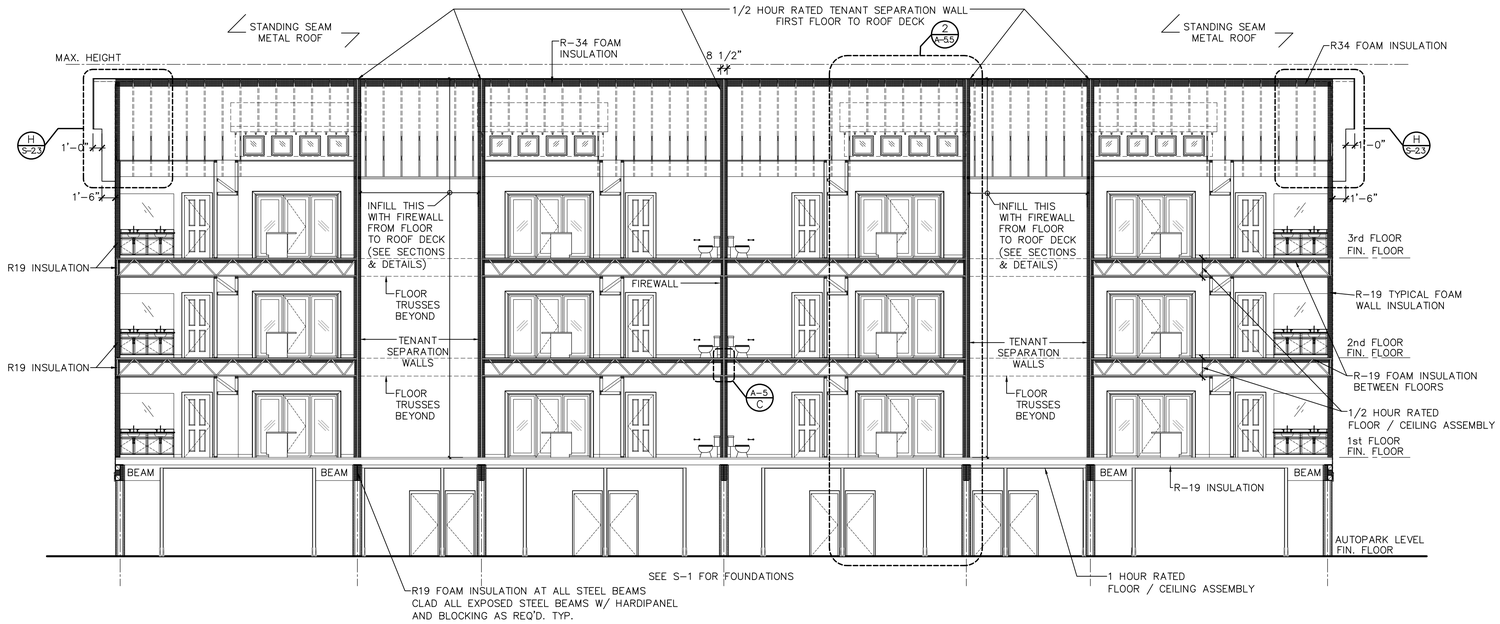

1 / A5.1 LONGITUDINAL BUILDING SECTION
SCALE: 1/8"=1'-0"

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

COASTAL ARCHITECTURE PLLC CERTIFICATE OF AUTHORIZATION NO. C-2782 CERT. NO 5782

LEE D. DIXON, JR. REGISTERED ARCHITECT 6419 MOREHEAD CITY, N.C.

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MAX. HEIGHT

ALIGN

5'-11 7/8" | 4'-6" | 14'-6" | 6'-0" | 1'-5 3/16"

5 12 | 12 5 | 2 12 | 12 | 2 1/2 12 | 12 2 1/2

STANDING SEAM METAL ROOF ON ICE AND WATER SHIELD ON 5/8" PLYWOOD

GALV. JOIST HANGER

HURRICANE TIE EACH RAFTER

2x8 @ 16" O.C.

R-34 FOAM INSULATION

PRE-ENGINEERED TRUSSES

FLASHING

REAL DORMER

T & G CYPRESS STAINING AT DORMER CEILING

WINDOW TRIM - PTD

1'-6"

5/8" GWB - PTD

HURRICANE TIE EA. TRUSS

BLOCKING AT FRAME AS REQ'D.

1/2" PLYWOOD W/30# FELT

6"±

TRUSS HEADER

5/8" GWB - PTD ON 7/8" FURRING STRIPS

HURRICANE TIE AT EACH RAFTER

2x6 @ 24" O.C.

(2) 1 3/4"x11 1/4" LVL HANG TO GIRDER TRUSS

1/2" PLYWOOD

ROOF TRUSS BEARING

2x6 @ 24" O.C.

3/4"

3"

SEE PLAN AND DETAIL C FOR TRIM, BASE ETC.

LIVING

AZEK FASCIA, PTD

TYP. CROWN MOULDING

(2) 2" x 6" PLATES

HEAD FLASHING, TYP.

2" x 6" STUDS @ 16" O.C. S.P.F.

2 1/4 CONT. SOFFIT VENT AT BALCONY

HARDIE PANEL CEILING PTD.

R-19 FOAM INSULATION

AZEK TRIM, PTD.

5/8" GWB

(2) 2x12 TRTD (SEE STRUCTURAL)

(2) 2x10 HEADER

WINDOW

9'-1 1/8"

6x6 TRTD COL - PTD. (CLAD COLS OPTION, TYP.)

BALCONY

7'-0" WINDOW R.O. (VERIFY)

104 5/8" STUD LENGTH

9'-1 1/8"

KITCHEN

TYP. WD BASE -PTD

2x12 @ 12" O.C. TRTD

3/4" ADVANTEC GLUED AND SCREWED

1 1/2"

MIN. 1/2 HOUR RATED FLOOR/ CEILING

5/4"x 6" TREX

FLASHING, TYP.

3RD FL.

2'-0 3/4"

1x TRIM - PTD

DBL 2x12 TRTD - CONT.

R-19 FOAM INSULATION

2x2 TRTD. LEDGER

FLOOR TRUSS BEARING

3"

24" ENGINEERED FLOOR TRUSSES @ 16" O.C.

(2) 1/2" GALV. BOLTS COUNTERSINK, TYP.

TYP. CROWN MOULDING

HEAD FLASHING, TYP.

(2) 2" x 6" PLATES

2" x 6" STUDS @ 16" O.C. S.P.F.

5/8" GWB ON 7/8" FURRING STRIPS @ 16" O.C.

AZEK TRIM, PTD.

R-19 FOAM INSULATION

5/8" GWB

(2) 2x10 HEADER

WINDOW

55'-0"

9'-1 1/8"

6x6 TRTD COL. - PTD.

104 5/8 STUD LENGTH

7'-0" WINDOW R.O. (VERIFY)

104 5/8" STUD LENGTH

8'-11 5/8"

ALIGN

NOTE: COLUMN SPLICE TO OCCUR AT DECK STRUCTURE

2x12 @ 12" O.C. TRTD

TYP. WD BASE -PTD

3/4" ADVANTEC GLUED AND SCREWED

1 1/2"

MIN. 1/2 HOUR RATED FLOOR/ CEILING

5/4"x 6" TREX

FLASHING, TYP.

2ND FL.

2'-0 3/4"

1x TRIM - PTD

DBL 2x12 TRTD - CONT.

R-19 FOAM INSULATION

2x2 TRTD. LEDGER

FLOOR TRUSS BEARING

3"

24" ENGINEERED FLOOR TRUSSES @ 16" O.C.

HARDIE PLANK BEADED SIDING AS SELECTED

TYP. CROWN MOULDING

(2) 2" x 6" PLATES

1/2" PLYWOOD 30# FELT W/ 50% LAP (ICE AND WATER SHIELD FROM ALL CORNERS)

2" x 6" STUDS @ 16" O.C. S.P.F.

5/8" GWB ON 7/8" FURRING STRIPS @ 16" O.C.

6x6 TRTD COL. - PTD.

R-19 FOAM INSULATION

5/8" GWB

(2) 2x10 HEADER

HEAD FLASHING, TYP.

WINDOW

AZEK TRIM, PTD.

GUARDRAIL AS SELECTED BY DEVELOPER (SUBMIT FOR APPROVAL) PROVIDE INTERMEDIATE SUPPORT AS REQ'D.

9'-1 1/8"

104 5/8 STUD LENGTH

7'-0" WINDOW R.O. (VERIFY)

104 5/8" STUD LENGTH

8'-11 5/8" CLG. HT.

3'-6"

2x12 @ 12" O.C. TRTD

TYP. WD BASE -PTD

2" CONC. TOPPING

MIN. 1 HOUR RATED FLOOR

EMBED PLATE

5/4"x 6" TREX

EMBED PLATE

1 1/2"

2"

1ST FL.

1x TRIM - PTD

DBL 2x12 TRTD - CONT.

2x6 TRTD - CONT. ANCHOR TO MASONRY W/ (2) 1/2" GALV. ANCHOR BOLTS

2x2 TRTD. LEDGER

FLASHING

12" HARDIE TRIM

STL. BEAM SEE STRUCTURAL

R-19 FOAM INSULATION AT STEEL BEAM

WD BLOCKING T&B AS REQ'D

8" HOLLOW CORE PLANKS

FURR DOWN CEILING W/ 4" METAL CHANNELS @ 24" O.C. MAX.

MIN R-19 RIGID INSULATION OR FOAM

HANDIE PANEL CEILING - PTD.

STL. BEAM SEE STRUCTURAL

R-19 FOAM INSULATION AT BEAM

11'-0 5/8"

(4) VERTICAL # 5'S AND HORIZONTAL @ 16" OC. DOWELED INTO GRADE BEAM, TYP.

8" SPLIT FACE CONC. BLOCK 16"x16" SQ. GROUT SOLID, SEE DETAILS E/A-5.

8" SPLIT FACE CONC. BLOCK - TYP. COLUMN COVER 12"x24" SEE DETAILS

10'-2 5/8" CLG. HT.

STL. COL. SEE STRUCTURAL

STL. COL. SEE STRUCTURAL

8" SPLIT FACE CONC. BLOCK COLUMN COVER 12"x24" SEE DETAILS

6" CONC. FLOOR SEE FOUNDATION PLAN (SLOPE FOR DRAINAGE)

AUTO PARK

2'-0"

SEE FOUNDATION PLAN

SEE FOUNDATION PLAN

6'-0" | 7" | 24'-5" | 25'-0"

1 A-5.1 BUILDING SECTION

SCALE: 1/2"=1'-0"

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PEPPERTREE
BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

LEE D. DIXON, JR. REGISTERED ARCHITECT 6419 NORTH CAROLINA MOREHEAD CITY, N.C.

COASTAL ARCHITECTURE INC REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CERT. NO. 51792 MOREHEAD CITY, NC

ENLARGED BUILDING SECTION

21014

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REVISIONS

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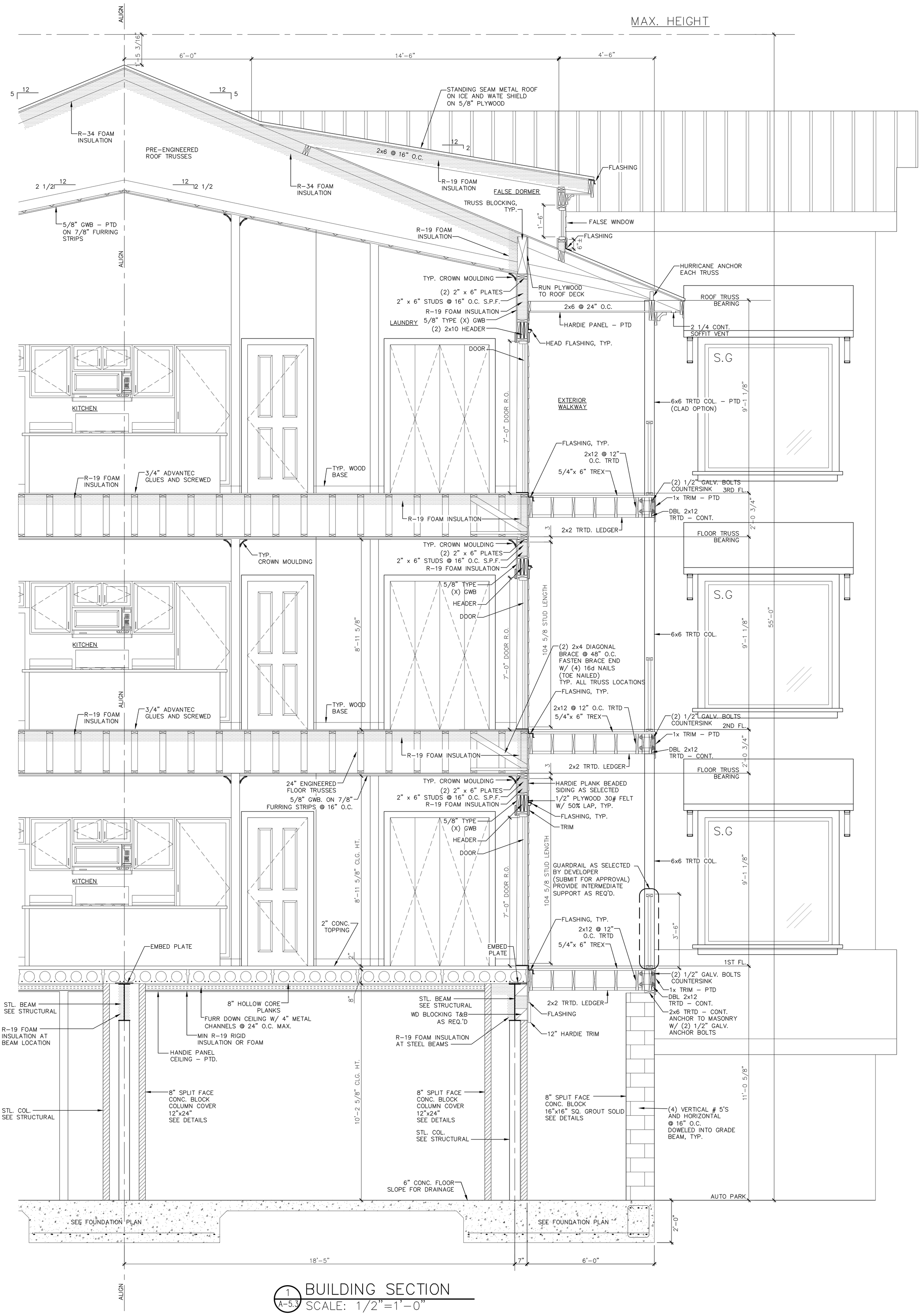

1 A-5.3 BUILDING SECTION
SCALE: 1/2"=1'-0"

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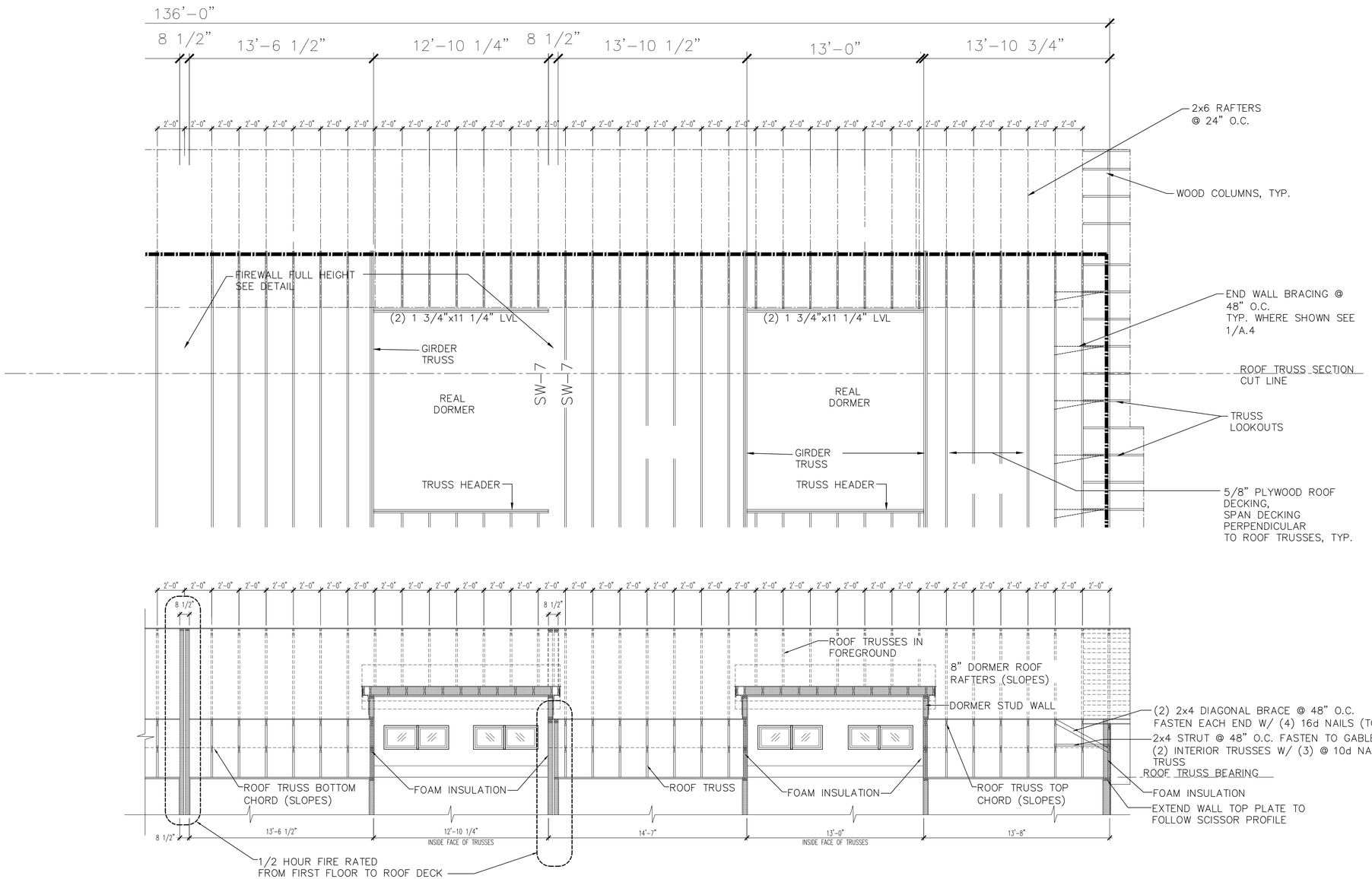

1 A-5.4 ROOF TRUSS SECTION
SCALE: 1/4"=1'-0"

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ROOF TRUSS SECTION

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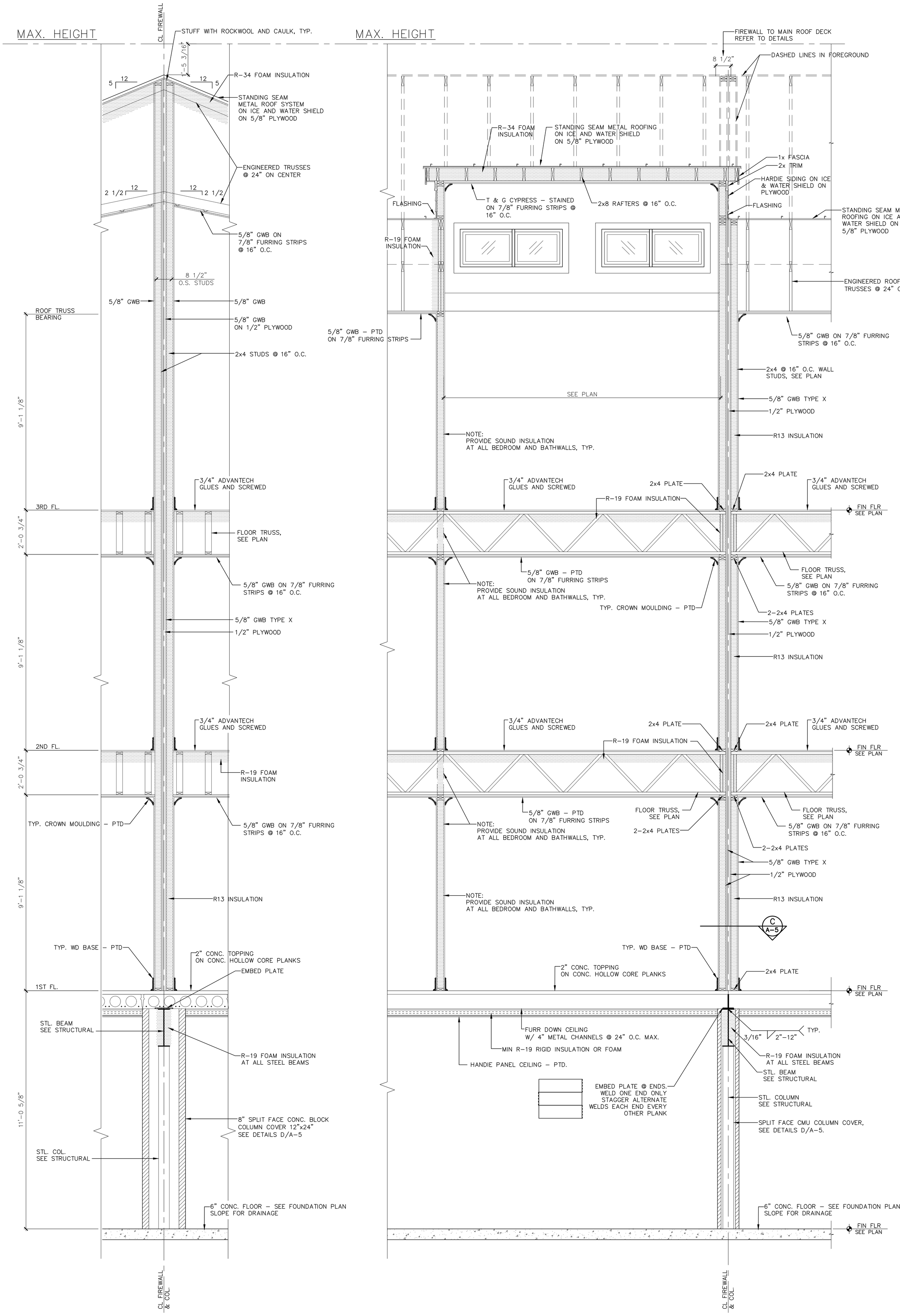

1 A-5.5 TENANT SEPARATION SECTION AT RIDGE
SCALE: 1/2"=1'-0"

2 A-5.5 TENANT SEPARATION SECTION AT DORMER
SCALE: 1/2"=1'-0"

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FIREWALL SECTIONS

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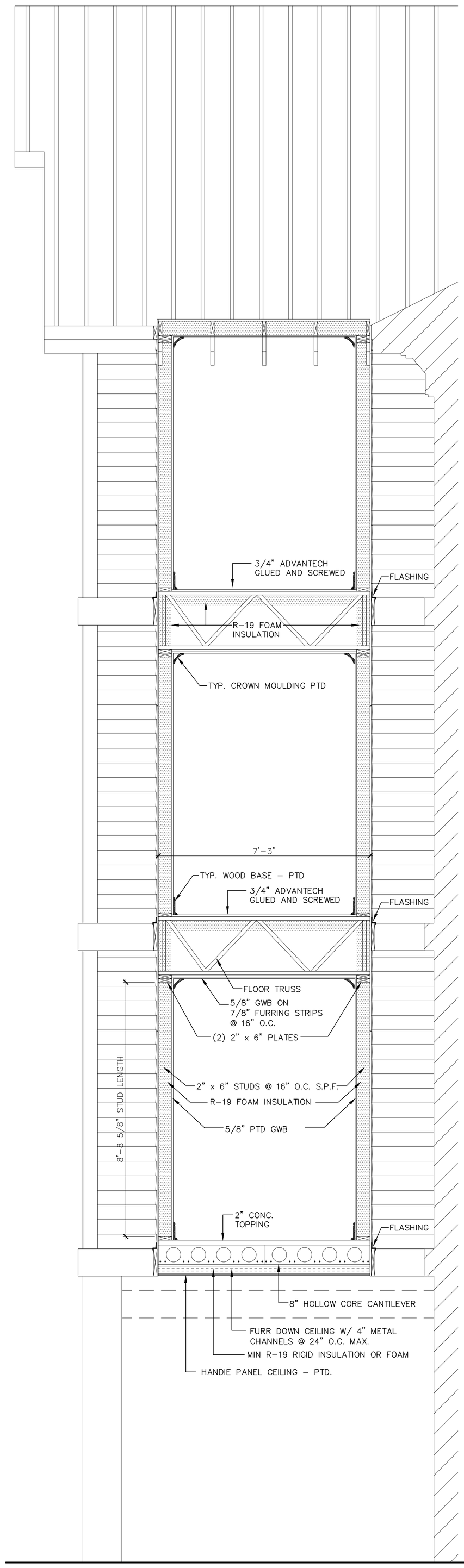

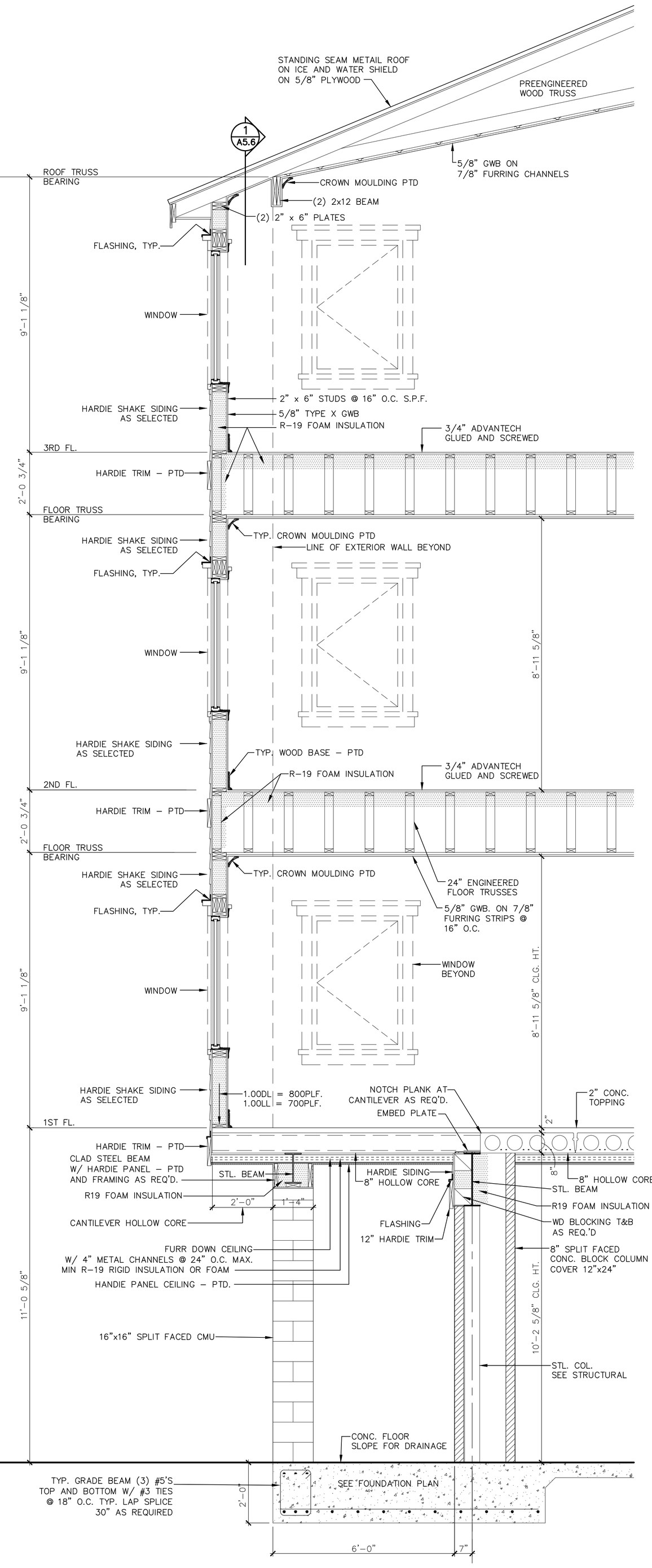

2 A-5.6 WALL SECTION
SCALE: 1/2"=1'-0"

1 A-5.6 WALL SECTION
SCALE: 1/2"=1'-0"

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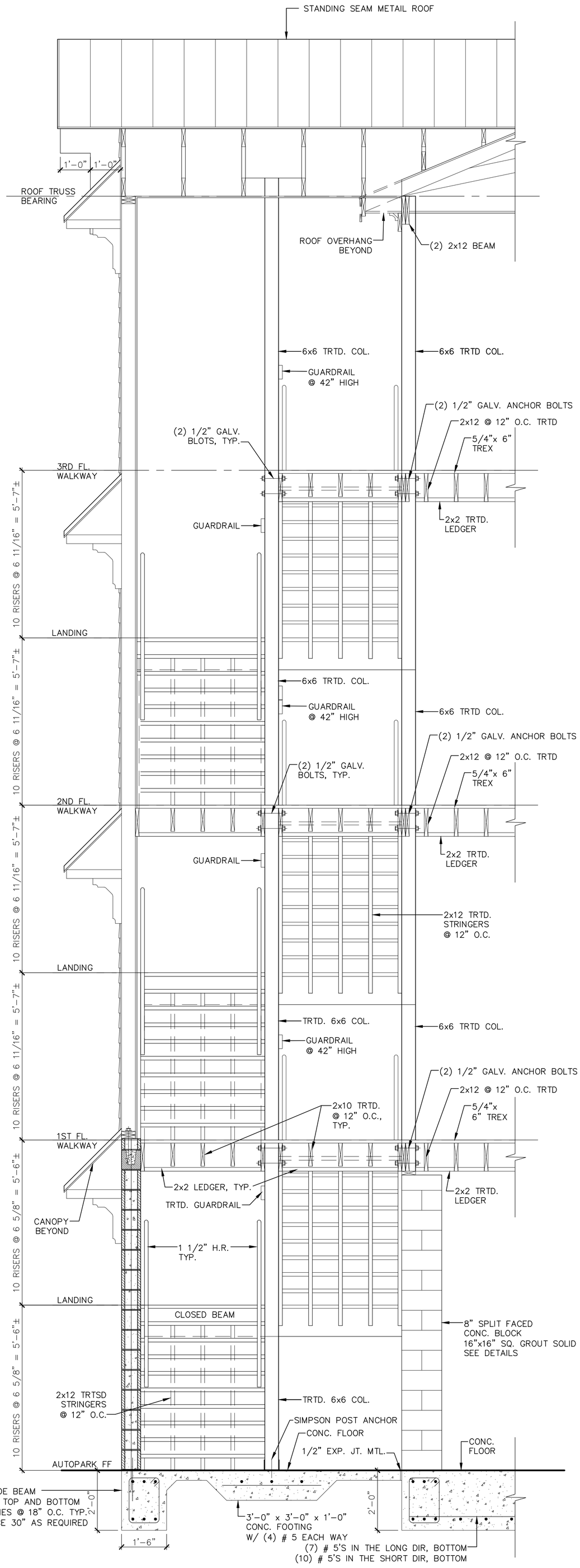

1 / A-5.7 STAIR SECTION

SCALE: 1/2"=1'-0"

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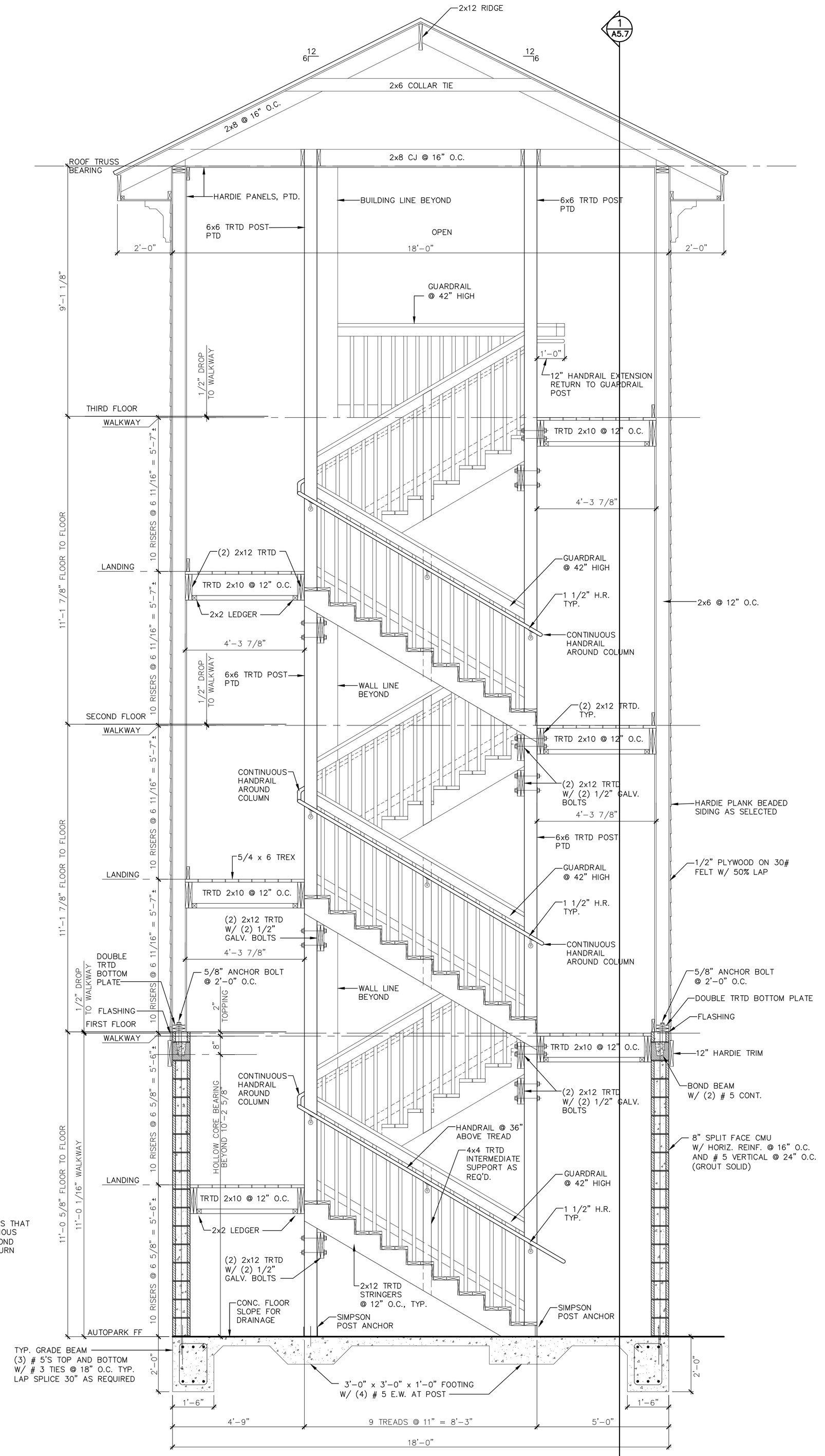

1 A-5.8 STAIR SECTION
SCALE: 1/2"=1'-0"

NOTE:
RAILS ON OUTSIDE PERIMETER OF STAIRS THAT DO NOT RUN CONTINOUS TO EXTEND 12" BEYOND TOP RISER AND RETURN TO WALL

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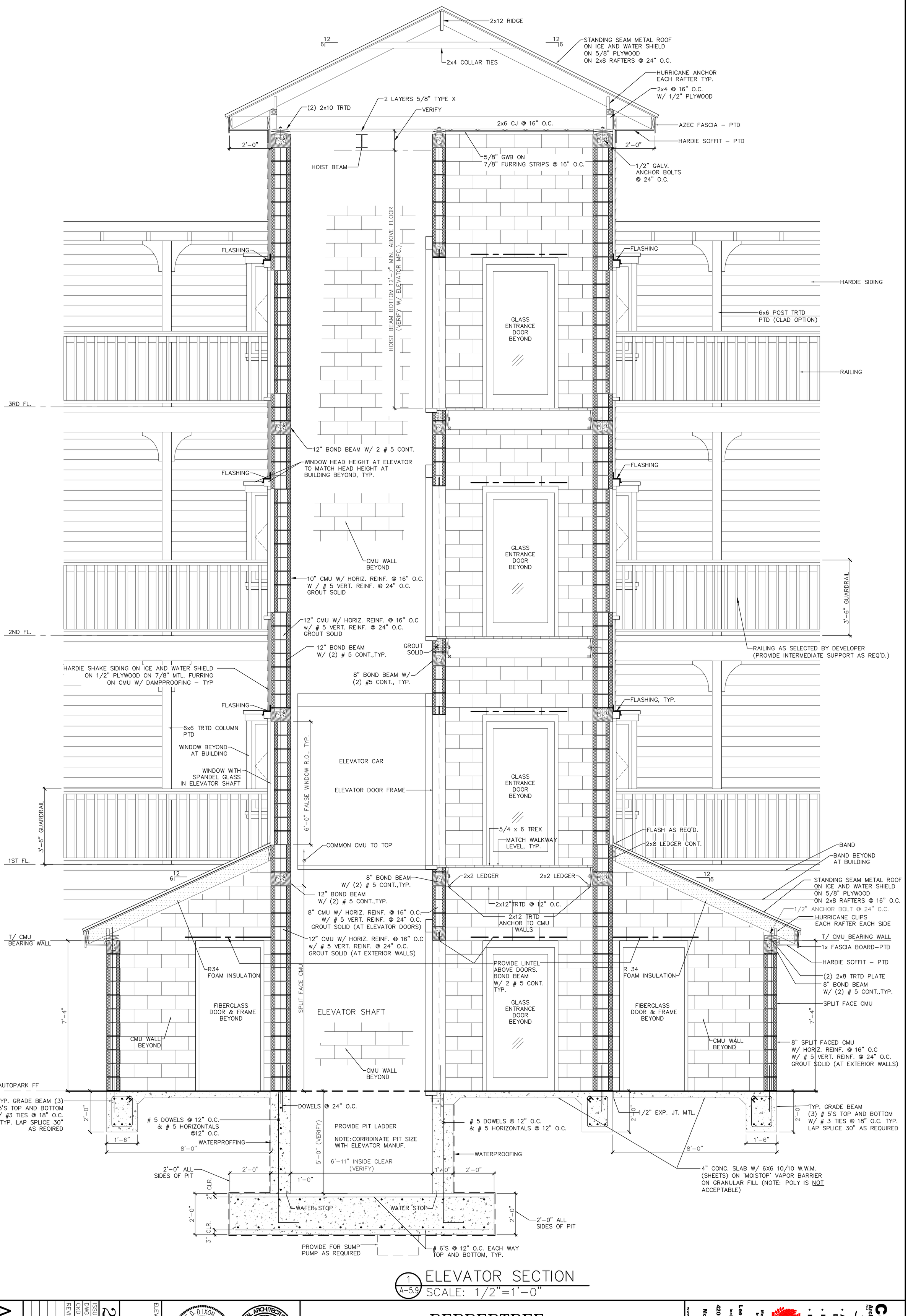

1 / A-5.9 ELEVATOR SECTION
SCALE: 1/2"=1'-0"

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ELEVATOR SECTION

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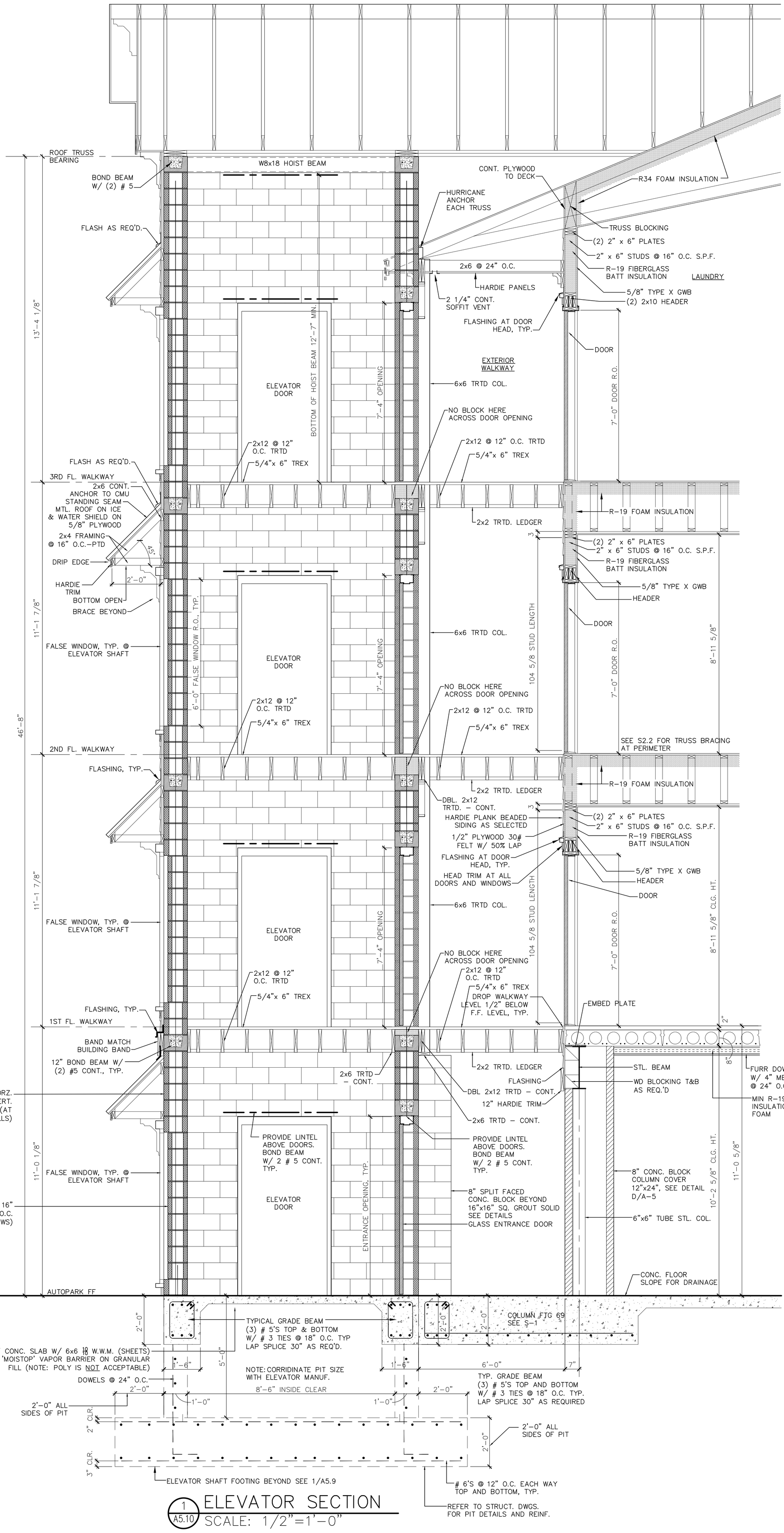

1 / A5.10 ELEVATOR SECTION
SCALE: 1/2"=1'-0"

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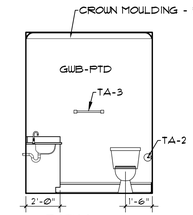
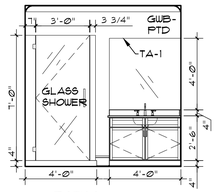
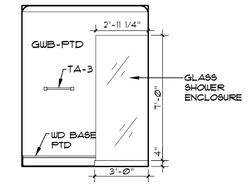
P A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



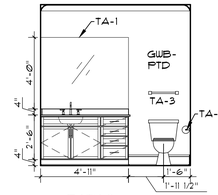
O A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



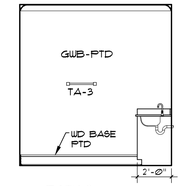
N A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



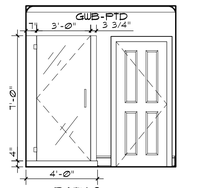
M A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



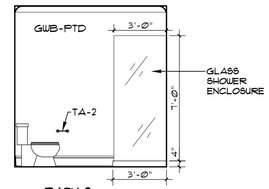
L A-7 BATH 2 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



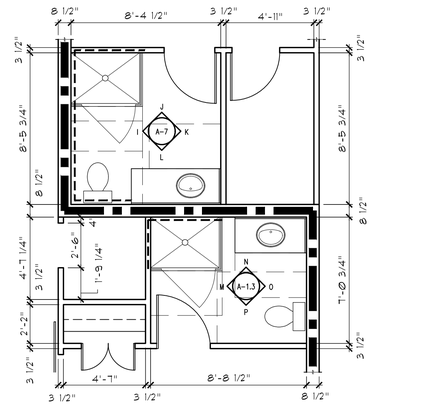
K A-7 BATH 2 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



J A-7 BATH 2 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



I A-7 BATH 2 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



3 A-7 BATH 1 & 2 ENLARGED PLAN
SCALE: 1/4"=1'-0"

UNITS 101, 201, & 301 O.H.
UNITS 104, 204, & 304

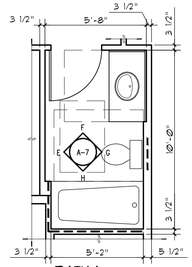
NOTE: SEE FLOOR PLAN FOR OPPOSITE HAND LAYOUT
NOTE: 3RD FLOOR UNIT CEILING SLOPE

H A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"

G A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"

F A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"

E A-7 BATH 1 INTERIOR ELEVATION
SCALE: 1/4"=1'-0"

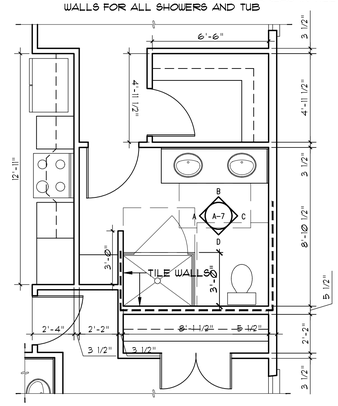


2 A-7 BATH 1 ENLARGED PLAN
SCALE: 1/4"=1'-0"

UNITS 101, 201, & 301 O.H.
UNITS 104, 204, & 304

NOTE: SEE FLOOR PLAN FOR OPPOSITE HAND LAYOUT
NOTE: 3RD FLOOR UNIT CEILING SLOPE

NOTE: PROVIDE RECESSED SOAP AREAS IN TILE WALLS FOR ALL SHOWERS AND TUB

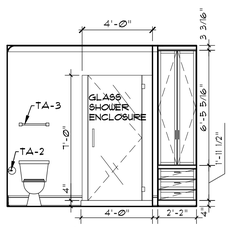


1 A-7 MASTER BATH ENLARGED PLAN
SCALE: 1/4"=1'-0"

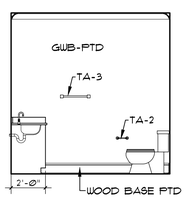
UNITS 101, 201, & 301 O.H.
UNITS 104, 204, & 304

NOTE: SEE FLOOR PLAN FOR OPPOSITE HAND LAYOUT
NOTE: 3RD FLOOR UNIT CEILING SLOPE

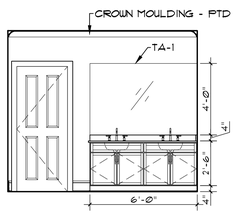
LEGEND
BLOCKING FOR FUTURE GRAB BARS



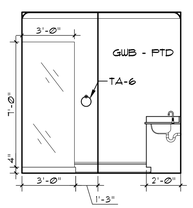
D A-7 MASTER BATH INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



C A-7 MASTER BATH INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



B A-7 MASTER BATH INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



A A-7 MASTER BATH INTERIOR ELEVATION
SCALE: 1/4"=1'-0"

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

COASTAL ARCHITECTURE, PLLC — CERT. NO. C-2792 — NORTH CAROLINA REGISTERED CORPORATION

LEE D. DIXON, JR. — REGISTERED ARCHITECT — 6419 — NORTH CAROLINA

ENLARGED TOILET PLANS

21014

ISSUED: 4-25-22
DWG BY: BLS
CKD BY: LDD
REVISIONS

SHEET NO.
A-7
OF

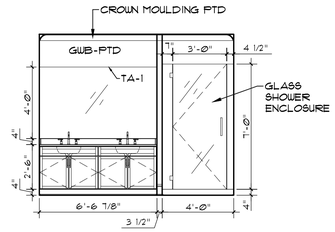
TOILET ACCESSORIES SCHEDULE

MARK	ITEM	SIZE	MT.HT.	REMARKS
TA-1	FRAMELESS MIRROR	SEE ELEV.	3'-2"	HT. TO BOTTOM
TA-2	TOILET PAPER HOLDER		2'-0"	HT. TO ℄
TA-3	TOWEL BAR			PROVIDE HAND HELD SHOWER HEAD
TA-4	SHOWER SYSTEM			
TA-5	RECESSED SOAP DISH			
TA-6	TOWEL RING			

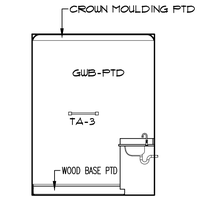
NOTE:
1. ALL MOUNTING HEIGHTS ARE AS SHOWN UNLESS OTHERWISE NOTED.
2. PROVIDE BLOCKING FOR ALL TOILET ACCESESORIES.
3. SUBMIT ALL ACCESSORIES FOR APPROVAL & FINAL SELECTION BY OWNER.

CABINET & VANITY NOTES:

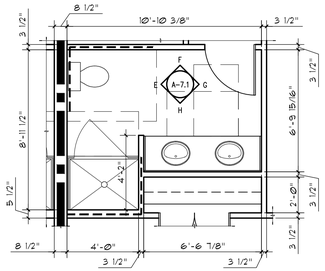
- CABINET STYLE MARSH 'GEORGETOWN' (VERIFY W/ DEVELOPER) ALL CABINETS W/ SOLID WOOD DOVETAIL DRAWERS AND UNDER MOUNT GUIDES.
- KITCHEN COUNTERS TO BE SOLID SURFACE. COLORS TO BE SELECTED FROM STANDARD SELECTIONS.
- PULLS: TO BE SELECTED
- CULTURED MARBLE VANITY TOPS W/ INTEGRAL RECESS OVAL BOWL AND BACKSPLASH. COLOR TO BE SELECTED. COORDINATE FAUCET BORING AS REQUIRED.
- SHOP DRAWINGS ARE REQUIRED TO BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.
- CONTRACTOR TO PROVIDE CUTOUTS AND REMOVABLE FRONT VANITIES WHERE REQUIRED.



H A-7.1 **MASTER BATH INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"



G A-7.1 **MASTER BATH INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"

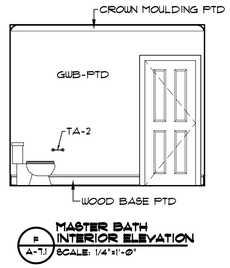


2 A-7.1 **MASTER BATH ENLARGED PLAN**
SCALE: 1/4"=1'-0"

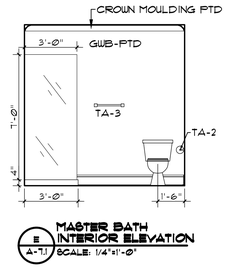
UNITS 102, 202, & 302 O.H.
UNITS 103, 203, & 303

NOTE: 3RD FLOOR CEILINGS SLOPE

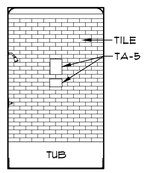
NOTE: SEE FLOOR PLAN FOR OPPOSITE HAND LAYOUT



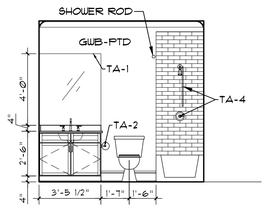
F A-7.1 **MASTER BATH INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"



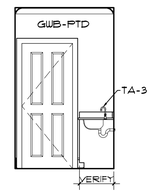
E A-7.1 **MASTER BATH INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"



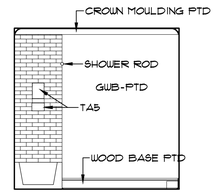
D A-7.1 **BATH 2 INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"



C A-7.1 **BATH 2 INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"

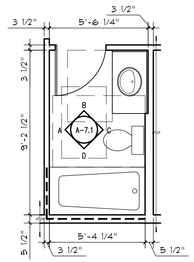


B A-7.1 **BATH 2 INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"



A A-7.1 **BATH 2 INTERIOR ELEVATION**
SCALE: 1/4"=1'-0"

NOTE: PROVIDE RECESSED SOAP AREAS IN TILE WALLS FOR ALL SHOWERS AND TUB



1 A-7.1 **BATH 2 ENLARGED PLAN**
SCALE: 1/4"=1'-0"

UNITS 102, 202, & 302 O.H.
UNITS 103, 203, & 303

NOTE: 3RD FLOOR CEILINGS SLOPE

NOTE: SEE FLOOR PLAN FOR OPPOSITE HAND LAYOUT

NOTE: PROVIDE RECESSED SOAP AREAS IN TILE WALLS FOR ALL SHOWERS AND TUB

LEGEND

BLOCKING FOR FUTURE GRAB BARS

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

COASTAL ARCHITECTURE, P.L.L.C. CERT. NO. C-2792 REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA REGISTERED

LEE D. DIXON, JR. 6419 REGISTERED ARCHITECT NORTH CAROLINA

ENLARGED TOILET PLANS

21014

ISSUED:
DWG BY: BLS
CKD BY: LDD
REVISIONS

SHEET NO.
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OF

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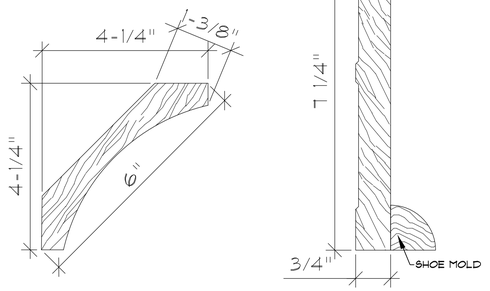
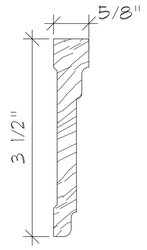


O.B.WILLIAMS #1230
TYP. CROWN MOULDING

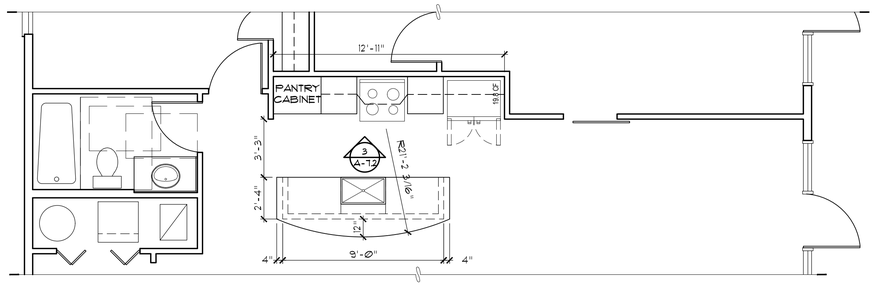
O.B.WILLIAMS #1092
TYP. BASE



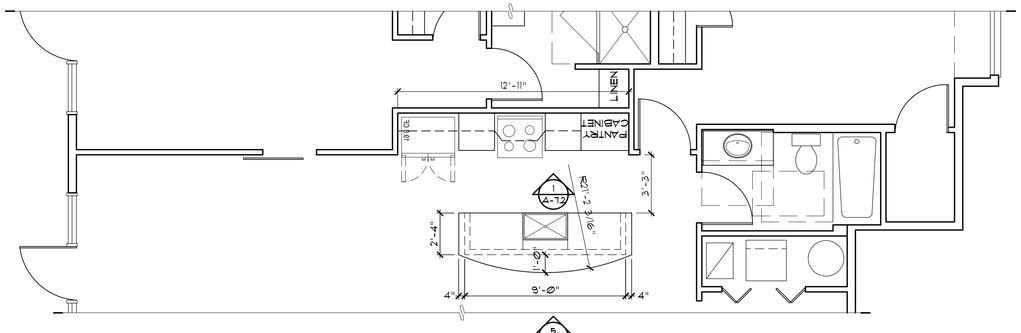
O.B.WILLIAMS #1188
TYP. CASING
(TYP. CASING @ ALL INTERIOR DOORS & ALL WINDOWS)

6 A-7.2 TYP. CROWN MOULDING, BASE & CASING
SCALE: N. T. S.

CROWN MOULDING BASE & CASING NOTES:
PROVIDE NONCOMBUSTIBLE OR FIRE RETARDANT BLOCKING AS REQUIRED.
ALL CROWN MOULDING/BASE/CASING TO BE SANDED AND PAINTED.
ALL CROWN MOULDING/BASE/CASING TO BE NO. 1 POPLAR.
ALL NUMBERS CALLED ARE EAST COAST MOULDINGS



4 A-7.2 INSIDE UNITS PLAN
SCALE: 1/4"=1'-0"



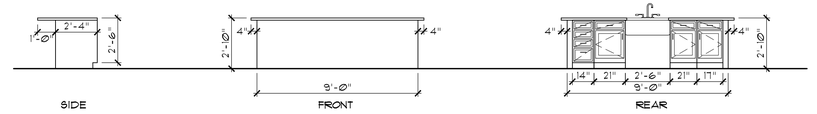
2 A-7.2 OUTSIDE UNITS PLAN
SCALE: 1/4"=1'-0"

CABINET & VANITY NOTES:
- CABINET STYLE MARSH 'GEORGETOWN' (VERIFY W/ DEVELOPERS) ALL CABINETS W/ SOLID WOOD DOVETAIL DRAWERS AND UNDER MOUNT GUIDES.
- KITCHEN COUNTERS TO BE SOLID SURFACE. COLORS TO BE SELECTED FROM STANDARD SELECTIONS.
- PULLS: TO BE SELECTED
- CULTURED MARBLE VANITY TOPS W/ INTEGRAL RECESS OVAL BOWL AND BACKSPLASH. COLOR TO BE SELECTED. COORDINATE FAUCET BORING AS REQUIRED.
- SHOP DRAWINGS ARE REQUIRED TO BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.
- CONTRACTOR TO PROVIDE CUTOUTS AND REMOVABLE FRONT VANITIES WHERE REQUIRED.

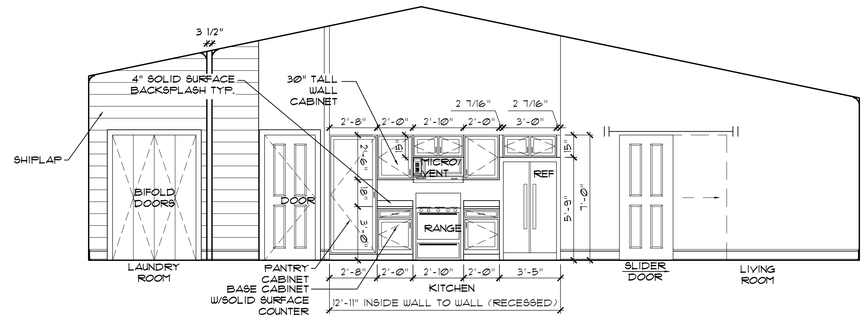
APPLIANCE NOTES:
- REFRIGERATOR: AS SELECTED BY DEVELOPER
- WASHER/DRYER: MAYTAG L5E7800A
- RANGE: AS SELECTED BY DEVELOPER
- MICRO/RECIRCULATION VENT COMBINATION: DISHWASHER: AS SELECTED BY DEVELOPER
- CONTRACTOR TO SUBMIT APPLIANCES NOT TO EXCEED
- BID ALLOWANCE FOR ARCHITECTS REVIEW.

NOTE:
PROVIDE ALL POWER CORDS.
COORDINATE ALL CABINET OPENING DIMENSIONS.
COORDINATE ALL RECEPTACLE LOCATIONS W/ SELECTED APPLIANCE.

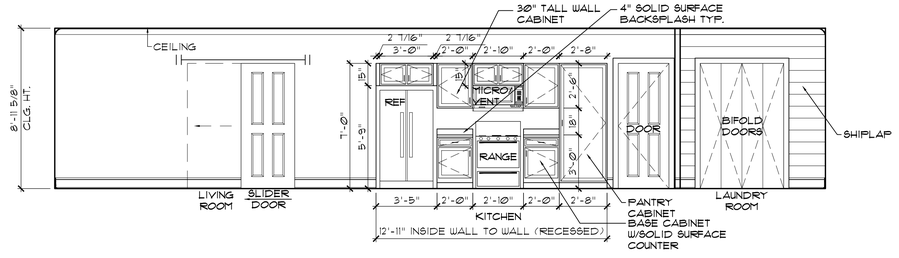
NOTE:
COORDINATE ALL DROPPED SOFFIT FRAMING MEMBER LOCATIONS W/ HVAC REGISTERS FOR SYMMETRICAL INSTALLATION



5 A-7.2 TYPICAL KITCHEN BAR
SCALE: 1/4"=1'-0"



3 A-7.2 3RD FLOOR KITCHEN INTERIOR ELEVATION
SCALE: 1/4"=1'-0"



1 A-7.2 1ST AND 2ND FLOOR KITCHEN INTERIOR ELEVATION
SCALE: 1/4"=1'-0"

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PEPPERTREE BUILDING 34
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CERT. NO. 5792 — CORPORATION — REGISTERED ARCHITECTURE P.C. — NORTH CAROLINA

6419 — REGISTERED LANDSCAPE ARCHITECT — NORTH CAROLINA

INTERIOR ELEVATIONS

21014

ISSUED:	4-25-22
DWG BY:	BLS
CKD BY:	LDD
REVISIONS	

SHEET NO.
A-7.2
OF

GENERAL NOTES:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

2. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD AND WITH ALL OTHER DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

3. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING AND ACCOMPANYING FOOTINGS, AND GUYS OR TIEDOWNS.

4. ADDITIONAL OBSERVATIONS AS A RESULT OF REJECTION OF WORK COMPLETED AND/OR ADDITIONAL OBSERVATIONS DUE TO THE DEFICIENCIES IN WORK OBSERVED WILL BE AT THE EXPENSE OF THE CONTRACTOR.

5. ALL STRUCTURAL SHOP DRAWINGS TO BE REVIEWED BY JOB SUPERINTENDENT IN ADDITION TO ALL PERSONNEL DEEMED NECESSARY BY CONTRACTOR PRIOR TO SUBMITTAL TO ENGINEER FOR APPROVAL.

6. ALL SHOP DRAWING RESUBMITTALS SHALL INCLUDE A WRITTEN DETAILED LIST OF LOCATIONS AND DESCRIPTIONS OF ALL CHANGES MADE FROM PREVIOUS SUBMITTAL. LIST SHALL BE SPECIFIC AND GENERAL NOTES SUCH AS "DIMENSIONS CORRECTED" ARE NOT ACCEPTABLE.

DESIGN CODES:

2015 INTERNATIONAL BUILDING CODE AND ASCE/SEI 7-10.

ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY.

AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN.

DESIGN CRITERIA:

Wind Load	
basic wind speed	144 mph
Ve	0.85
exposure	C
Kzt	1

Snow Load	
ground snow load	10 psf
exposure	B
Ce	0.9
Ct	1.1
importance factor	1.0

Seismic Load	
site class	D
Ss	0.18
S1	0.06
importance factor	1.0
Sds	0.192
Sd1	0.096
seismic design category	B
seismic force resisting system	bearing wall with light-frame wood walls with shear panels, ordinary steel light-frame or ordinary steel truss

COMPONENTS & CLADDING:

ALL BUILDING COMPONENTS AND CLADDING ENGINEERED BY THE COMPONENT MANUFACTURER ARE TO BE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR WIND LOADS DETERMINED PER THE INTERNATIONAL BUILDING CODE FOR THE BASIC DESIGN WIND VELOCITY, IMPORTANCE FACTOR, AND EXPOSURE LISTED ABOVE.

FOUNDATION NOTES:

1. Foundation design is based on the soil investigation by ECS Southeast, LLP project No. 22-06555. All subgrade preparation, fill placement and compaction installation shall be in strict accordance with the Soil Report Section 5.0 Site Construction Recommendations.

2. Spread and continuous footings shall bear a minimum of 24 inches below lowest adjacent finished grade on properly compacted subgrades and select fill with a net allowable bearing capacity of 2,000 PSF.

3. Contractor shall provide for dewatering at excavations from either surface water or seepage.

4. Contractor shall provide adequate shoring to prevent cave-ins.

5. All foundation excavations and subgrade preparation shall be inspected by a representative of the Geotechnical Engineer prior to placement of reinforcing steel or concrete.

PLUMBING SLEEVES:

MINIMUM SLEEVE SPACING SHALL BE TWO DIAMETERS CENTER TO CENTER TO THE LARGER SLEEVE OR 6" CLEAR BETWEEN SLEEVES, WHICHEVER IS GREATER. PRIOR TO CONSTRUCTION SLEEVE LOCATIONS AND SIZES SHALL BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.

CHEMICAL ANCHORS:

SHALL BE A POLYMER INJECTION SYSTEM SUCH AS RAMSET "TPCON", MOLLY "PARAMOUNT HDP", HILTI "HY-200", SIMPSON SET-XP "HIGH STRENGTH EPOXY", OR APPROVED EQUAL. INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. INSTALLERS SHALL BE TRAINED BY THE MANUFACTURER'S REPRESENTATIVE.

SPECIAL INSPECTION AND TESTING:

1. SPECIAL INSPECTION AND MINIMUM TESTING SHALL BE PERFORMED IN ACCORDANCE WITH 2015 IBC, TABLES 1704.3 (STEEL), 1704.4 (CONCRETE).

2. INSPECTION & TESTING SHALL BE PROVIDED BY AN INDEPENDENT TESTING AGENCY HIRED AT THE OWNER'S EXPENSE. AGENCY INSPECTION PERSONNEL SHALL MEET THE INSPECTOR QUALIFICATIONS FOR EACH MATERIAL ITEM AS INDICATED IN THE SPECIFICATIONS. ALL RE-TESTING DUE TO FAILURE OF ORIGINAL TEST SHALL BE PAID FOR BY THE GENERAL CONTRACTOR.

3. ANY MATERIAL OR PLACEMENT DEVIATIONS FROM MINIMUMS SHOWN ON THE DRAWINGS OR IN SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

CONCRETE TESTING:

1. CONCRETE TESTING SHALL BE PAID FOR BY THE OWNER. TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST-IN-PLACE CONCRETE:

A) ASTM C143 – "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE."

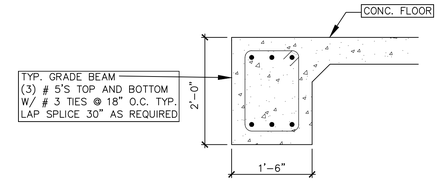
B) ASTM C39 – "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS (OR FRACTION THEREOF), PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:

1 AT 7 DAYS
2 AT 28 DAYS

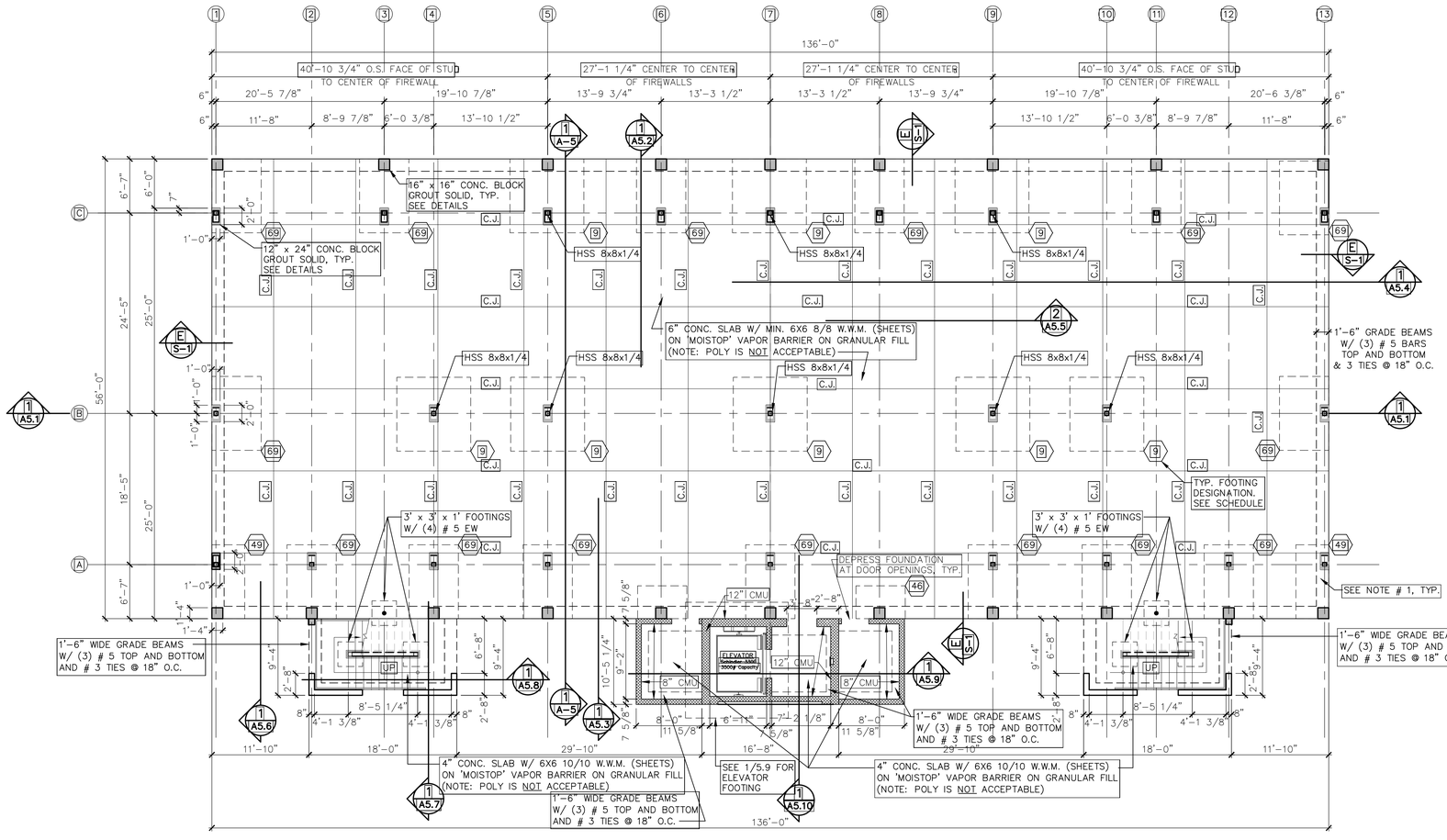
PROVIDE ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER IF REQUIRED. IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

PENETRATIONS:

NO PENETRATIONS SHALL BE MADE IN ANY STRUCTURAL MEMBERS OTHER THAN THOSE LOCATED ON THESE DRAWINGS WITHOUT PREVIOUS APPROVAL OF THE ENGINEER.



E S-1 TYPICAL GRADE BEAM DETAIL
SCALE: 3/4"=1'-0"



1 S-1 FOUNDATION PLAN
SCALE: 1/8"=1'-0"

FOOTING SCHEDULE

#	SIZE	FOOTING THICKNESS	FOOTING REINFORCING
46	4'-0" x 6'-0"	24"	(7) #5 IN SHORT DIR., BOT. (5) #5 IN LONG DIR., BOT.
49	4'-0" x 9'-0"	24"	(10) #5 IN SHORT DIR., BOT. (4) #5 IN LONG DIR., BOT.
69	6'-0" x 9'-0"	24"	(10) #5 IN SHORT DIR., BOT. (7) #5 IN LONG DIR., BOT.
9	9'-0" x 9'-0"	24"	(10) #5 IN EACH WAY, BOTT.

DRAWING NOTES:
1. WIDEN GRADE BEAMS AS SHOWN AT EXTERIOR FOOTINGS. SEE SCHEDULE FOR MIN. REINFORCING. CONTINUE PERIMETER GRADE BEAM REINFORCING THROUGH GRADE BEAMS. USE CORNER BARS AT ALL GRADE BEAM INTERSECTIONS.
2. COLUMN BASE PLATES AND ANCHORS AS FOLLOWS:
HSS8x8x1/4 = 1 1/4" THICK PLATE W/(4) 1"ø ANCHOR RODS (18) EMBEDDMENT.
HSS6x6x1/4" = 3/4" THICK PLATE W/(4) 3/4"ø ANCHOR RODS (15") EMBEDDMENT.
3. FOR ELEVATOR PIT NOTES SEE 1/A5.8

CONCRETE MIX DESIGN:

1. SHALL BE MIX DESIGNED BY A RECOGNIZED TESTING LABORATORY TO ACHIEVE A STRENGTH AT 28 DAYS AS LISTED BELOW WITH A PLASTIC AND WORKABLE MIX.

3,000 psi –GRADE BEAMS, FOOTINGS, AND SLABS

2. SUBMIT PROPOSED MIX DESIGN WITH RECENT FIELD CYLINDER OR LAB TESTS FOR REVIEW PRIOR TO USE. MIX SHALL BE UNIQUELY IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION. CONCRETE SHALL COMPLY WITH ASTM C94 REQUIREMENTS FOR ANY STANDARD MIX FILE OR EXPOSURE CLASS. TRANSPORTING ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1-1/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE. ALL SLABS SHALL BE CURED USING COMPOUND MEETING ASTM STANDARD C309 TYPE 1 AND SHALL HAVE A FUGITIVE DYE. THE CURING COMPOUND SHALL BE APPLIED AS SOON AS THE FINISHING OPERATIONS ARE COMPLETED AND AS SOON AS THE WATER HAS LEFT THE FINISHED CONCRETE. ALL MOISTURE BARRIER AREAS IN THE CURING MEMBRANE SHALL BE REPAIRED DAILY. VACUUM DRY SLABS SHALL NOT BE UTILIZED. OTHER ALTERNATIVES MAY BE USED ONLY WITH THE APPROVAL OF THE ENGINEER.

3. CONCRETE SHALL UTILIZE TYPE I/II CEMENT UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER OR GEOTECHNICAL REPORT.

4. THE CONCRETE STRENGTHS SHOWN IN THE SECTION ABOVE AND IN THE SPECIFICATIONS ARE MINIMUM COMPRESSIVE STRENGTHS. THE ENGINEER SHALL DETERMINE IF THE CONCRETE IS ACCEPTABLE OR TO BE REMOVED, OR TO RECEIVE SPECIAL CURING IF THE COMPRESSIVE STRENGTHS ARE LESS THAN SPECIFIED.

5. ALL CONCRETE EXPOSED TO WEATHER OR EARTH SHALL BE AIR ENTRAINED 5% TO 7%.

6. WATER REDUCING AGENTS MAY BE USED IN THE CONCRETE MIX. PLASTICIZERS AND SUPERPLASTICIZERS MAY BE USED ONLY WHEN WRITTEN PERMISSION OF THE ENGINEER IS GIVEN.

7. NO SALTS OF ANY KIND MAY BE USED IN CONCRETE BEFORE OBTAINING THE ENGINEER'S WRITTEN PERMISSION FOR THEIR USE.

8. CONCRETE FOR TROWEL-FINISHED INTERIOR CONCRETE FLOORS SHALL NOT INCLUDE AN AIR-ENTRAINING ADMIXTURE. THE MAXIMUM AIR CONTENT IN THESE SLABS SHALL NOT EXCEED 3%.

CONCRETE AND REINFORCING PLACEMENT:

1. ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 301 AND ACI 117 EXCEPT AS MODIFIED BELOW:

ACI 117 ITEM 4.5.1.3
ELEVATIONS OF SLABS-ON-GRADE TOP OF SLAB ELEVATION SHALL BE WITHIN A 3/8" ENVELOPE EITHER SIDE OF THE THEORETICAL DESIGN SURFACE.

ACI 117 ITEM 4.5.7
FLOOR FINISH TOLERANCES AS MEASURED BY PLACING A FREESTANDING (UNLEVELED) 10 FT. STRAIGHTEDGE ANYWHERE ON THE SLAB AND ALLOWING IT TO ROLL UNDER ITS OWN WEIGHT. WITHIN 24 HOURS AFTER WINDING IT IS RUN FROM TWO SUCCESSIVE POSITIONS. WITHIN 48 HOURS AFTER STRAIGHTEDGE AND THE FLOOR SHALL NOT EXCEED 1/4".

2. ALL REINFORCING STEEL TO BE ASTM A615, GRADE 60 (#4 AND LARGER), EXCEPT WHERE NOTED OTHERWISE. REINFORCING SHALL NOT BE WELDED.

3. WELDED WIRE FABRIC TO CONFORM TO ASTM A185 AND SHALL BE FREE FROM OIL, SCALE AND RUST. PLACE WWF IN ACCORDANCE WITH THE TYPICAL DETAILS OF ACI STANDARDS AND THE SPECIFICATIONS. MINIMUM LAPS SHALL BE ONE SPACE PLUS 6".

4. ALL REINFORCING STEEL BARS TO BE DETAILED AND PLACED IN ACCORDANCE WITH THE LATEST ACI MANUALS.

5. LAP ALL REINFORCING SPLICES IN CONCRETE A MINIMUM OF 48 BAR DIAMETERS OR 24 INCHES, WHICHEVER IS GREATER, UNLESS NOTE OTHERWISE ON DRAWINGS (CLASS B SPLICE).

6. PROVIDE CORNER BARS OF SAME BAR DIAMETER AS SPECIFIED FOR HORIZONTAL REINFORCING, PROVIDE MINIMUM 24" x 40 BAR DIAMETER LAP FOR ALL CORNER BARS, UNLESS NOTED OTHERWISE.

7. PROVIDE FOUNDATION DOWELS AS SHOWN. MINIMUM SIZE DOWELS TO BE #4 UNLESS OTHERWISE NOTED. ALL VERTICAL REINFORCING STEEL IN COLUMNS AND PIERS, OR VERTICAL REINFORCING IN WALLS, SHALL BE DOWELED INTO THE FOOTINGS WITH SAME SIZE AND QUANTITY DOWEL AS THE VERTICAL REINFORCING.

8. WHERE SHOWN ON THE DRAWINGS, PROVIDE WELD PLATES, WELDMENTS, OR CONCRETE INSERTS FOR FASTENING AND BRACING OTHER COMPONENTS. CONCRETE INSERTS SHALL BE FURNISHED BY THE CONTRACTOR REQUIRING THEM AND INSTALLED BY THE CONTRACTOR CASTING THE CONCRETE AROUND THEM. ANGLES SHALL BE FURNISHED BY THE CONTRACTOR REQUIRING THEM.

9. REINFORCING STEEL SHALL RECEIVE CONCRETE COVER AS FOLLOWS:

DESCRIPTION	MINIMUM COVER
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
EXPOSED TO EARTH OR WEATHER #6 THROUGH #18 BARS	2"
#5 BARS OR SMALLER	1 1/2"
NOT EXPOSED TO EARTH OR WEATHER OR IN CONTACT WITH THE GROUND: SLABS AND WALLS	3/4"
#11 BARS OR SMALLER	3/4"
#14 AND #18	1 1/2"
BEAMS AND COLUMNS	1 1/2"

10. PROVIDE TWO (2) #5'S, ONE AT EACH FACE, UNLESS NOTED OTHERWISE, AROUND ALL OPENINGS NOT GREATER THAN 12"x12" IN CAST-IN-PLACE CONCRETE, EXTEND IN REINFORCING 2'-0" FROM OPENING IN BOTH DIRECTIONS. CONTACT ENGINEER FOR ALL OPENINGS GREATER THAN 12"x12" FOR DESIGN.

11. COLD WEATHER AND HOT WEATHER PROVISIONS OF ACI 306 AND 305 (CURRENT EDITIONS), RESPECTIVELY, SHALL BE MAINTAINED.

12. CONTRACTOR TO FURNISH AND INSTALL 500 LINEAR FT. EACH OF ADDITIONAL #4 & #5 REINFORCING STEEL TO BE USED AT ENGINEER'S DISCRETION.

FORMWORK AND SHORING:

NO STRUCTURAL CONCRETE SHALL BE STRIPPED UNTIL IT HAS REACHED AT LEAST TWO-THIRDS OF THE 28 DAY DESIGN STRENGTH. DESIGN, ERECTION AND REMOVAL OF ALL FORMWORK, SHORES AND SUPPORTS SHALL MEET THE REQUIREMENTS SET FORTH IN ACI STANDARDS 301 AND 347.

ANCHOR RODS:

1. The building manufacturer shall be responsible for anchor rod size (i.e., diameter), spacing, and location.

2. All anchor rods shall be fabricated in accordance with ASTM F1554 grade 36, class 2A.

3. Anchor rod nuts shall conform to ASTM A563, heavy hex, grade A. All washers shall conform to ASTM F436, type 1.

3. Anchor rods shall have a plain finish.

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PEPPERTREE
BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

FOUNDATION PLAN

21014

ISSUED:	4-25-22
DWG BY:	BLS
CKD BY:	LDD
REVISIONS	

SHEET NO.
S-1
OF

NORTH CAROLINA PROFESSIONAL SEAL 035655 ENGINEER HEATH M. HENDRICK
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NORTH CAROLINA PROFESSIONAL P-1418 CORPORATION OF ENGINEERS

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STRUCTURAL STEEL:

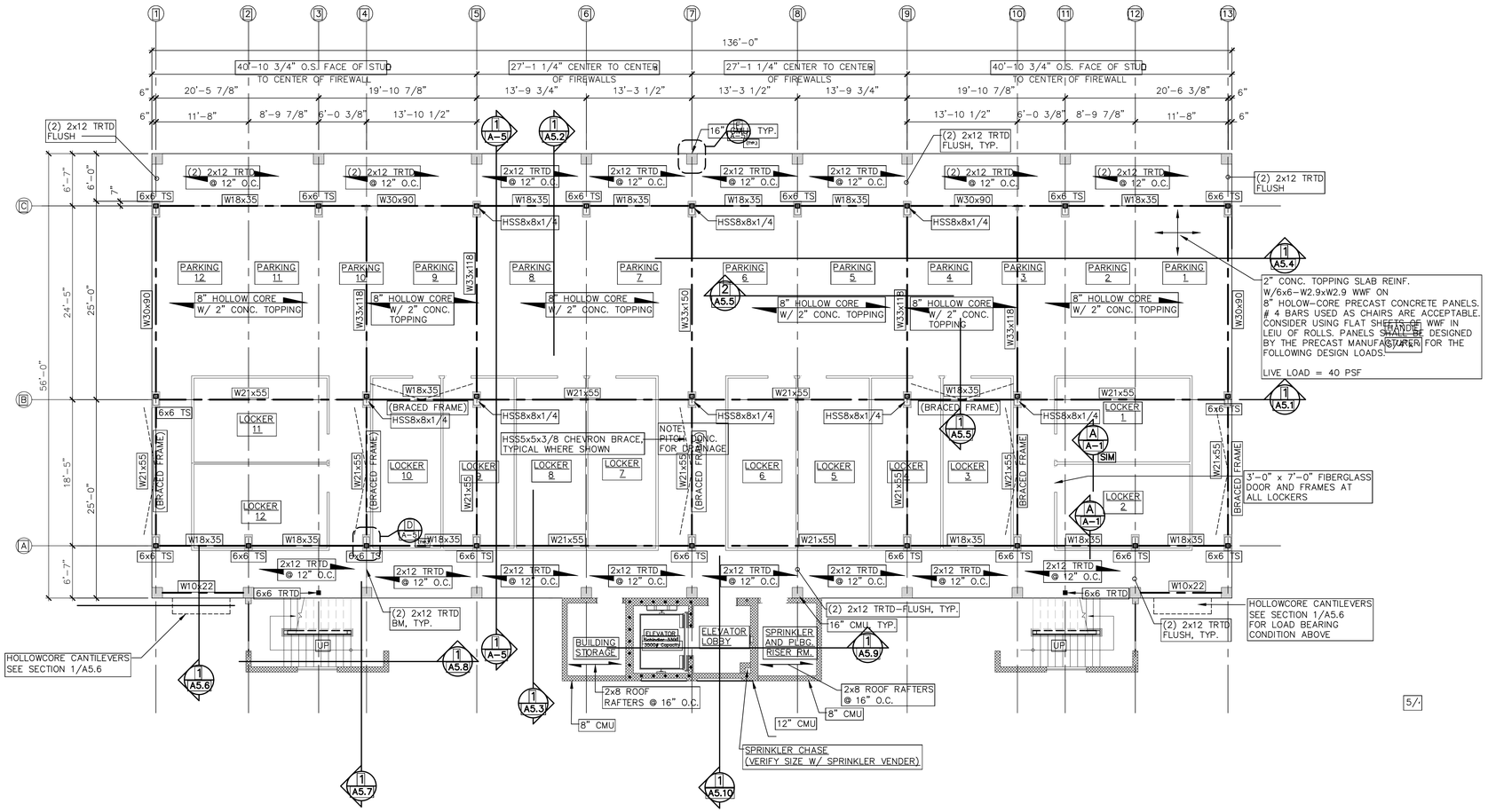
1. STEEL SHALL CONFORM TO ASTM A992 (Fy=50 ksi) FOR ALL W-SHAPES, AND ASTM A36 (Fy=36 ksi) FOR ALL OTHER MISCELLANEOUS SHAPES AND PLATES. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B (Fy=46 ksi). STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, GRADE B, TYPE 'E' OR 'S' (Fy=42 ksi).
2. STEEL SHALL CONFORM TO THE LATEST EDITION OF "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC (AISC).
3. ALL STRUCTURAL STEEL EXPOSED TO EXTERIOR SHALL BE HOT-DIPPED GALVANIZED.
4. ALL SHOP CONNECTIONS TO BE WELDED, CUTLIZING E70XX ELECTRODES) AND FIELD CONNECTIONS TO BE BOLTED, UNLESS OTHERWISE NOTED. STEEL TO RECEIVE ONE SHOP COAT AND ONE FIELD TOUCH UP COAT OF APPROVED PAINT, EXCEPT WHERE GALVANIZED IS INDICATED ON THE DRAWINGS.
5. WELDS FOR ALL EXPOSED STRUCTURAL STEEL SHALL BE GROUND SMOOTH, UNLESS NOTED OTHERWISE.
6. ALL BOLTED CONNECTIONS SHALL CONSIST OF 3/4" DIAMETER (MIN.) ASTM A325 HIGH STRENGTH BOLTS, UNLESS NOTED OTHERWISE.

MASONRY NOTES:

1. All concrete block units shall conform to ASTM C 90.
2. All concrete block above grade shall be light weight with a minimum ultimate compressive strength (f'm) of 1500 PSI.
3. Mortar shall conform with ASTM C 270, type S, with a minimum compressive strength of 1800 PSI @ 28 days.
4. Grout shall be classified as fine grout and have a slump of nine (9) inches and a minimum compressive strength of 2500 PSI and shall conform to ASTM C 476. All blocks with vertical reinforcing shall be grouted full height. All bond beams shall be grouted full. The maximum grout pour height shall not exceed five (5) feet.
5. All top of walls shall have bond beams with two (2) #4's continuous unless noted otherwise. Install #4 corner bars at all bondbeam intersections and corners.
6. All concrete block wall intersections and corners shall be built integrally of use '3012' wall anchors by Dur-O-Wall (or equivalent) @ 16" o.c. vertical spacing.

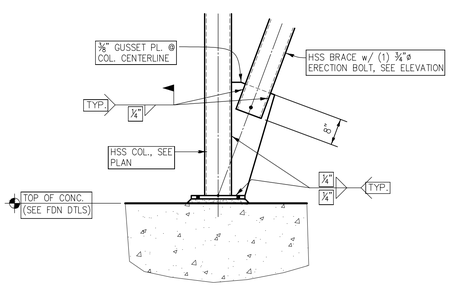
PRECAST HOLLOW-CORE CONCRETE PANELS:

1. Manufacturer shall be a firm specializing in providing prestressed concrete products and shall have a proven background of experience and record of performance in fabrication of prestressed hollow-core panels in scope, minimum for projects of this size and scope. Manufacturer shall be a PCI certified plant and must have a record of maintaining an active membership with the Prestressed Concrete Institute.
2. Design calculations shall be performed by an engineer licensed in the State of North Carolina and shall be signed and sealed prior to the manufacture of the panels. Specific design calculations shall be performed for areas with special loads and/or penetrations. Shop drawings shall be performed under the guidance of a registered engineer and shall include the layout of the area to be covered, schedule of materials required showing identifying marks for each unit, openings that will require steel hangers supplied by the mfr., and anchorage details.
3. Prestressing concrete strands shall be uncoated, 3-wire or 7-wire, stress relieved strands, graded 250k or 270k, ASTM A416.
4. Concrete bearing pads shall be korolath plastic bearing strips (1/8"x3") and shall be non-leaching and support construction loads with no visible overall expansion.
5. Concrete shall be batched to a zero slump consistency without the use of calcium chloride, chloride ions, or other salts. The minimum compressive strength prior to release of the strands shall be 3000 psi with the 28-day compressive strength of the concrete to be a minimum of 5000 psi.
6. Hollow-core panels shall be machine extruded in one single operation at a nominal width of 4'-0". The top and bottom surface shall be smooth with a chamfered edge located on the bottom of the panel, parallel with the cores/strands. Slabs shall be free of honeycombing.
7. All penetrations through precast panels shall be a part of the design and submittal process. An itemized drawing and schedule shall be submitted to the panel engineer prior to fabrication. Openings requiring hanger-type steel members, shall be engineered by the panel mfr.
8. All precast hollow-core concrete panels shall be delivered, erected, stored, and handled in strict accordance with manufacturer's written specifications.
9. A minimum cure time of 72 hours will be required for concrete bearing surfaces. True, level bearing surfaces shall be provided to the precast panel erector. Installation of the panels shall be performed by a manufacturer approved erector.
10. All items that must be attached to hollow-core panels by mechanical means shall be approved by the manufacturer. Should spalling of concrete occur, patching shall be performed by the trade performing the attachment. In no case shall any cut be made to the precast material without consulting the manufacturer for approval.
11. Hollow-core panels shall be thoroughly cleaned and saturated with water prior to the placement of the topping slab, to insure an adequate bond. The overall thickness of the topping slab will vary due to camber - the minimum thickness of 2-inches shall occur over the highest camber point. Grouted keyways between planks shall be fully filled with grout consisting of 1-part Portland Cement to 3-parts clean sand.



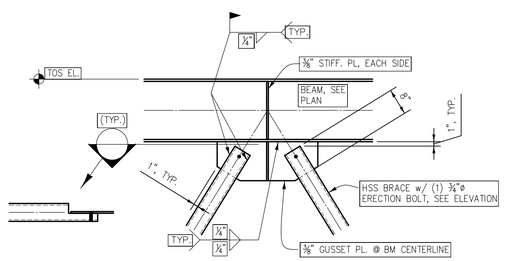
FIRST FLOOR FRAMING PLAN BUILDING 34

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



FRAMING-TYP BRACING TO BASEPLATE

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



FRAMING-TYP BRACING CHEVRON

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

DRAWING NOTES:

1. FOR HOLLOWCORE ATTACHEMNT TO STEEL BEAMS SEE 2/A5.5
2. W30 & LARGER BEAMS TO HSS COL. ATTACHEMENT W/ 3/8" SHEAR TAB (SHOP WELDED 1/4" FILLET EACH SIDE) & MAX NUMBER OF 1"ø BOLTS.
3. BEAMS SMALLER THAN W30 TO HSS COL. ATTACHMENT W/ 3/8" SHEAR TAB (SHOP WELDED 1/4" FILLET EACH SIDE) AND MAX NUMBER OF 3/8"ø BOLTS.
4. WIDE FLANDE BEAM TO BEAM ATTACHMENT W/ DOUBLE 3/8" STEEL ANGLES EACH SIDE OF WEB AND MAX NUMBER OF 1"ø BOLTS.
5. PROVIDE 1/2" CAP PLATES ON STEEL COLUMNS.

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 035855 HEATH M HENDRICK
Digitally signed by Heath M. Hendrick
Date: 2022.05.27 11:56:58 -04'00'

NORTH CAROLINA PROFESSIONAL CORPORATION FOR ENGINEERS P-1418

FIRST FLOOR FRAMING PLAN

21014

ISSUED:	4-25-22
DWG BY:	BLS
CKD BY:	LDD
REVISIONS	

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TIMBER FRAMING NOTES:

1. Sawn timber members shall conform to the requirements of the American Institute of Timber Construction Standards, AITC 117 & A190.1, latest edition.

2. Sawn lumber shall be #2 K.D. spruce-pine-fir (SPF), moisture content 15 percent with the following allowable stresses for a 2x4:

F(b) = 975 psi, F(t) = 450 psi, F(c)(parallel to grain) = 1,150 psi
F(c)(perpendicular to grain) = 425 psi, F(v) = 135 psi,
E = 1,400,000 psi

3. Provide columns built-up of multiple studs, two (2) studs minimum, at the ends of all beams, headers, and girder trusses unless noted otherwise. Use (2) 2x jamb studs at all headers. Use (1) 2x bearing jack stud below (2) 2x8 header at openings less than 5'-6". Use (2) 2x bearing jack stud below (2) 2x12 header at openings 5'-6" and greater. Utilize Simpson HH4 Header Hanger at all 2x12 headers and attach per manufacturer's recommendations.

4. All roof trusses (24" o.c.) shall be designed by the fabricator to support 10 PSF dead load on the top chord and 5 PSF dead load on the bottom chord plus 20 psf live load on the top chord, plus all other code loads which apply to the specific geographic region.

5. All floor trusses (16" o.c.) shall be designed by the fabricator to support 20 PSF dead load on the top chord and 5 PSF dead load on the bottom chord plus 40 psf live load on the top chord.

6. Truss fabricator shall be responsible for engineering all connections to load bearing walls.

7. Contractor shall provide additional bridging and bracing for truss chords and web members beyond what is shown as required by the truss fabricator's design, net uplift, and temporary bracing for during erection. The floor and roof systems are not stable until sheathing and permanent bracing is in place.

8. The truss fabricator shall submit calculations with shop drawings stamped by a professional engineer registered in the State of North Carolina to the Architect for review prior to fabrication of trusses. The shop drawings must include truss bracing drawings for both the roof and floor trusses.

9. Truss manufacturer shall design and provide truss hangers where trusses are supported by other trusses.

10. Plywood for roof decking shall conform to the requirements in DOC PS 1 or PS 2. Each panel shall be identified for grade and glue type by the trademarks of an approved testing and grading agency. Roof decking shall be 5/8 inch, 5-ply, C-D INT-APA with exterior glue, Exposure 1 (span index 48/24). Plyclips shall be used at all free edges, one at mid-point between all supports. Roof Zone 1/2/3 nailing for plywood roof sheathing shall be 8d nails at 4/4/6 inches on center along plywood edges respectively and 12 inches on center along intermediate members (Ref. ASCE 7-10 Components and Cladding).

11. All sawn lumber members in contact with concrete or masonry shall be pressure treated with a water borne treatment to a net retention of 0.3 PCF.

12. Fasten 3/4" Advantech floor decking to trusses with 10d nails or equivalent at 6 inches on center at panel edges and diaphragm boundaries and at 12 inches on center along intermediate members.

SHEAR WALL NOTES:

1. SHEARWALLS (SW) ARE SHOWN AS DASHED LINES AND TO EXTEND THE FULL LENGTH AS INDICATED BY:

2. SHEATH ALL SHEARWALLS WITH STRUCTURAL-I RATED (15/32" NOMINAL) SHEATHING MINIMUM ON ONE FACE. ALL EDGES AND JOINTS OF SHEATHING SHALL BE BLOCKED WITH 2X FRAMING.
3. SHEATHING FASTENING SHALL BE AS FOLLOWS:
   1st FLOOR – 8d NAILS 4" O.C. @ PANEL EDGES // 12" O.C. @ INTERMEDIATE MEMBERS
   2nd FLOOR – 8d NAILS 6" O.C. @ PANEL EDGES // 12" O.C. @ INTERMEDIATE MEMBERS
   3rd FLOOR – 8d NAILS 6" O.C. @ PANEL EDGES // 12" O.C. @ INTERMEDIATE MEMBERS
4. PROVIDE (2) STUDS FULL HEIGHT OF WALL AT EACH END OF SHEARWALL, TYP. FASTEN SHEATHING TO ALL (2) STUDS WITH NAILS STAGGERED IN ACCORDANCE WITH THE SHEARWALL FASTENER SPACING.
4. HOLDDOWNS AT SHEARWALL END STUDS SHALL BE AS FOLLOWS AND ATTACHED TO FRAMING PER MANUFACTURERS RECOMMENDATIONS:
   1st FLOOR TO BASE: SEE DETAIL THIS SHEET
   1st FLOOR TOP TO 2nd FLOOR BASE – (2) SIMPSON HD5B's w/ (1) 5/8"ø BOLT (HOLDDOWN-TO-HOLDDOWN)
5. 2nd FLOOR TOP TO 3rd FLOOR BASE – (2) SIMPSON HD3B's w/ (1) 5/8"ø BOLT (HOLDDOWN-TO-HOLDDOWN)

LOAD BEARING WALL NOTES:

1. Exterior load bearing wall studs shall be 2x6's @ 16" O.C. with blocking mid-height. Interior load bearing wall studs shall be 2x4's @ 12" O.C. for the first floor and 16" O.C. for the second and third floors with blocking mid-height.
2. All load bearing walls shall have (1) continuous 2x bottom plate, and (2) continuous 2x top plates. Fasten bottom plate to truss w/ (2) 10d nails @ 16" O.C.. At First floor sill to with embedded Simpson MASA Mudsill Anchors @ 4'O.C. or equivalent.
3. Stud alignment shall be from floor-to-floor at all load bearing walls. Install Simpson CS16 Coiled Strap anchors (End Length = 14" each stud) @ 48" O.C at exterior load bearing wall studs and fasten to studs above and below each floor level per manufacturer's recommendations.

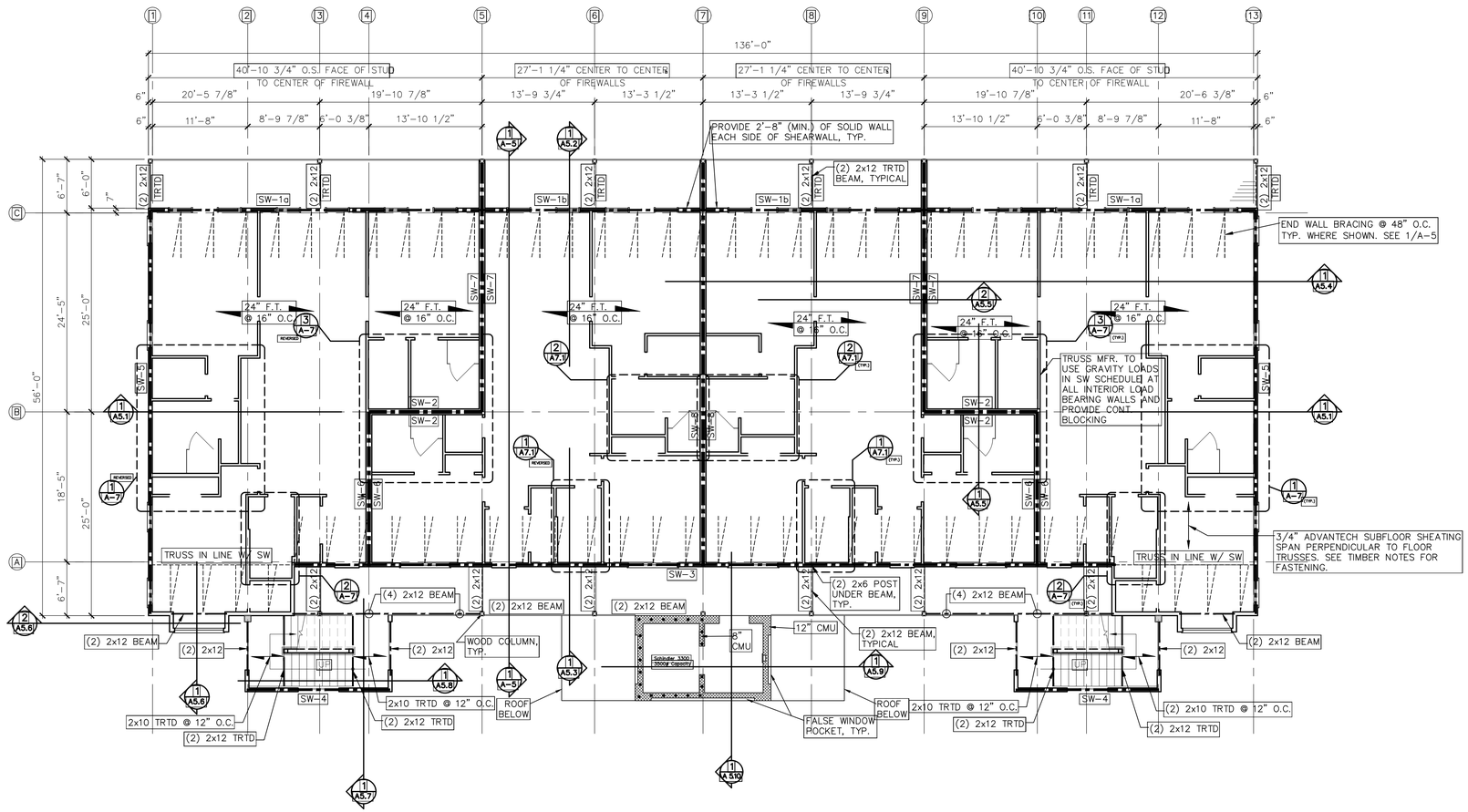
NAILING SCHEDULE (UNLESS NOTED OTHERWISE)

CONNECTION	NAILING TYPE	COMMON NAILS
truss to top plate	toe nail	(4) 8d
bridging to truss	toe nail	(2) 8d, each end
top plate to stud	face nail	(2) 16d
stud to bottom plate	toe nail	(4) 8d
multiple studs	face nail	16d @ 16" o.c., staggered
double top plates	face nail	16d @ 16" o.c., staggered
multi-ply header	face nail	(2) rows of 16d @ 16" o.c., staggered
header to jamb studs	toe nail	(4) 16d, each side

DRAG TRUSSES / BLOCKING / BRACING LOADING

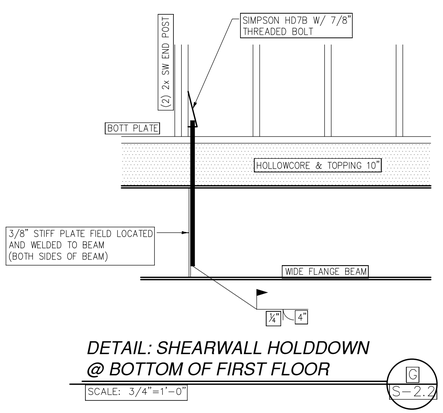
SW	2ND FLOOR (1.0DL / 1.0LL / 1.0W) [plf]	3RD FLOOR (1.0DL / 1.0LL / 1.0W) [plf]	ROOF (1.0DL / 1.0LL / 1.0W) [plf]
1a / 1b	700 / 700 / 175	650 / 600 / 125	0 / 0 / 75
2	N/A	N/A	0 / 0 / 150
3	700 / 700 / 100	650 / 600 / 100	0 / 0 / 75
4	N/A	N/A	0 / 0 / 100
5	225 / 100 / 500	125 / 100 / 300	0 / 0 / 75
6	925 / 1,300 / 900	475 / 700 / 550	N/A
7	925 / 1,300 / 700	475 / 700 / 400	N/A
8	925 / 1,300 / 500	475 / 700 / 300	N/A

NOTES:
1. DEAD AND LIVE LOADS ARE SUPERIMPOSED GRAVITY LOADS WHICH ARE TO BE APPLIED IN ADDITION TO LOADS GIVEN IN TIMBER NOTES.
2. WIND LOADS ARE UNFACTORED DRAG LOADS.
3. LOAD INDICATED AS "N/A" IS WHERE WALL AND SHEATING EXTENDS TO DECK



SECOND AND THIRD FLOOR FRAMING PLAN BUILDING 34

1/S-2.2 SCALE: 1/8"=1'-0"



DETAIL: SHEARWALL HOLDDOWN @ BOTTOM OF FIRST FLOOR

SCALE: 3/4"=1'-0" C/S-2.2

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 039562 CERT. NO. C-2374 CORPORATION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 6419 CERT. NO. C-2374 CORPORATION

SECOND AND THIRD FLOOR FRAMING PLAN

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 035655 HEATH M. HENDRICK

Digitally signed by Heath M. Hendrick
Date: 2022.05.27 13:59:20 -04'00'

NORTH CAROLINA PROFESSIONAL ENGINEER P-1418 CORPORATION PLLC

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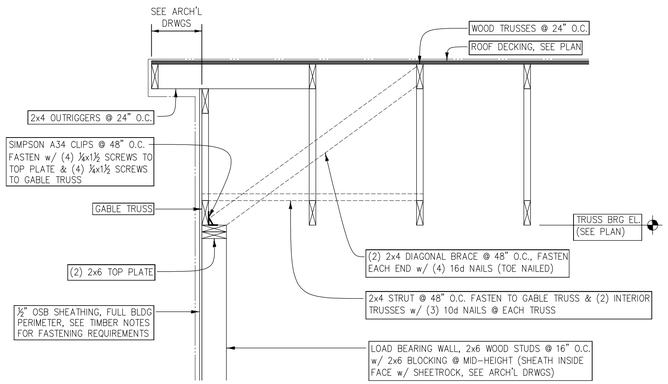
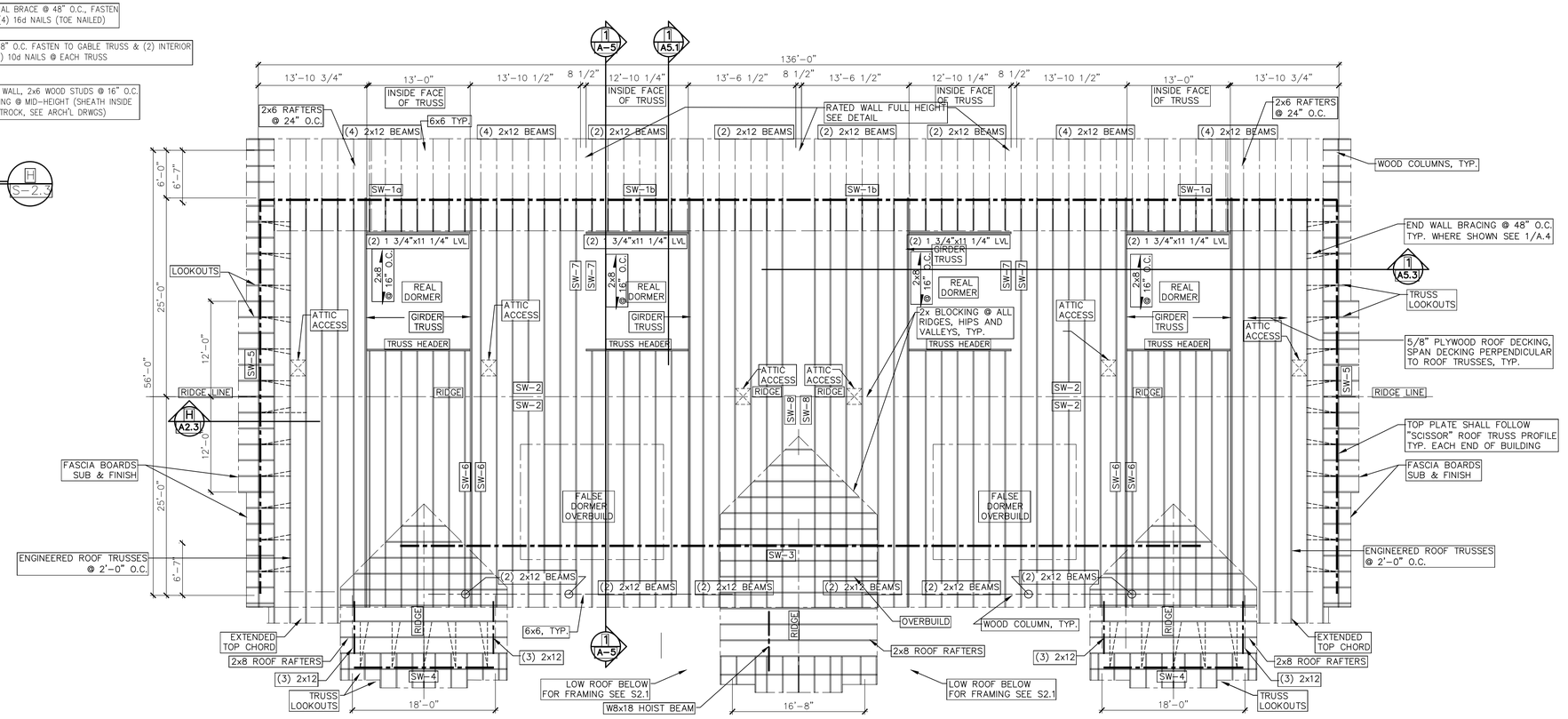


SECTION

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

H / S-2.3



ROOF FRAMING PLAN BUILDING 34

S-2.3 SCALE: 1/8"=1'-0"

FOR ADDITIONAL NOTES SEE S-2.2

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 035655 HEATH M. HENDRICK
Digitally signed by Heath M. Hendrick
Date: 2022.05.27 08:04:04 -04'00'

NORTH CAROLINA PROFESSIONAL ENGINEERS P.L.L.C. CERTIFICATE OF AUTHORIZATION P-1418

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT CERT. NO. 6419

ROOF FRAMING PLAN

21014

ISSUED:	4-25-22
DWG BY:	BLS
CKD BY:	LDD
REVISIONS	

SHEET NO.
S-2.3
OF

DIVISION 15A – PLUMBING

1.1 DESCRIPTION OF THE WORK

A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
   1. Plumbing fixtures, water heaters, and any other equipment necessary.
   2. Cold and hot water piping and insulation.
   3. DWV piping.
   4. Connection of all equipment; drain, vent, water.

B. All work under this contract shall be installed in compliance with the latest edition of the following codes and standards insofar as they apply.
   1. The National Electrical Code.
   2. 2018 N.C. Building Code: Plumbing, and all applicable category codes.
   3. American Society of Sanitary Engineering Standard 1010.
   4. All local codes and ordinances.

C. These codes are minimum standards. If codes require a more stringent method of construction than the specifications require, the codes shall govern.

D. The Plumbing Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work.

E. Obtain all permits, licenses, inspections, etc., required for the work, and pay for the same.

1.2 INTENT

A. The intent of these specifications and accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Plumbing Contractor shall take this into consideration and include in his base bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.

B. Locations shown are approximate. The Plumbing Contractor shall refer to the architectural drawings for placement of equipment, fixtures, etc. Where locations are not clear, the Contractor shall obtain the exact locations from the Architect.

C. Coordinate all exterior piping connections w/Architect, site contractor/plans. Verify manhole elevations and provide backwater valves as required if flood level rims are below next upstream manhole cover elevation. Fixtures with flood level rims above upstream manhole shall not discharge thru bw valve. Notify engineer of backwater valve requirement, any issue prior to bid.

1.4 SHOP DRAWINGS

A. Shop drawings shall be submitted for plumbing fixtures and for pipe. These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified.

PART 2 – PRODUCTS

2.1 FIXTURES

A. Each fixture shall be properly supported from the building structure as required to the end effect that all fixtures and accessories will be held rigidly in place. Water pipes supplying the fixtures must also be held rigidly in place.

B. Provide loose key angle stops and chrome plated supply pipe water supplies to fixtures.

C. All exposed piping traps and accessories for fixtures shall be chrome plated. Provide chrome plated escutcheon plates where pipes enter walls.

D. Provide shutoff valves for all sinks, water heaters, toilets, washing machines, refrigerator icemaker, exterior hose bibbs and all other plumbing fixtures.

E. Provide trap primers for all floor drains in areas not served by hose bibbs.

2.2 PIPING

A. Drain–Waste–Vent: All DWV piping shall be Schedule 40 PVC–DWV u.o.n., with the following exceptions: Use cast iron piping in all return air plenums, penetrations of rated walls/floors/ceilings, and in areas/walls adjacent to cooking equipment exhaust hoods. Review Arch. and Mech. drawings. ABS or cast iron piping shall be used for drainage/discharge with a temperature greater than 140 deg. F for a minimum distance of 10'–0".

B. Hot and cold water piping above grade: Type "L" copper w/solder joints (ASTM–B88), hard drawn with wrought copper fittings (ANSI B16.22). PEX piping with copper fittings may be used with owner/tenant approval and as allowed per code. Copper piping shall be used in areas/walls adjacent to cooking equipment exhaust hoods. Review Arch. and Mech. drawings.

C. Cold water piping below grade: Type "K" copper (ASTM–B8A) soft drawn.

D. Hangers: Use pipe hangers where required on 8–foot centers with saddles to avoid crushing insulation.

E. Solder: 95/5. Lead free.

F. Unions: Provide unions where indicated on drawings, in long runs of piping (except drainage) and at equipment to provide convenient disassembly. Provide dielectric unions when connecting copper tubing to equipment and piping made of ferrous materials.

2.3 CLEANOUTS

A. Hex plugs in rough areas: Recessed plugs with cover plates in exposed locations.

2.4 SHOCK ARRESTERS

A. Provide shock arresters as required by codes, manufacturer's recommendations and accepted industry standards for quality construction. Provide for all quick closing valves.

PART 3 – EXECUTION

3.1 CONNECTIONS

A. This contract includes complete connection of cold water, hot water, drainage, and vent piping as required. All fittings, valves, accessories, cutoffs, drains, etc., required to complete such connections shall be included.

B. The connection to water closets shall be made watertight with gasket and wax ring. Floor flanges shall be caulked into position. Plastic caps shall be provided on the tie down bolts, and shall be secured in place by screwing down on threaded brass washers.

C. Where water pipes connect to exposed chrome plated trim, use proper chrome plated escutcheons.

3.2 SERVICE ACCESS

A. All valves and accessories shall be insulated so that they can be properly serviced. In no case shall the Plumbing Contractor install equipment or other components in situations that do not meet code requirements or manufacturer's requirements. Provide access doors as required to access valves, etc.

3.3 ROUTING OF PIPING

A. Coordinate routing of piping with others, line up work true to or at right angle to adjacent surfaces and in a workmanlike manner. Support all interior piping from building structure by means of hanger or inserts to maintain pitch of lines, to prevent vibration, and to secure piping place.

B. Space pipe hangers 8'–0" on center for one inch and smaller pipe, 4'–0" on center for 1–1/4 inch and larger pipe. Provide expansion loops as required.

C. Pipe hangers for insulated lines shall have suitable saddles to protect insulation.

3.4 INSULATION

A. All H/W and C/W piping shall be insulated with a min. of 1" inch elastomeric insulation (R–6.5 min.) in unconditioned areas. See NCSBC–Plumbing Sect. 305 for all protection requirements. All H/W piping of circulating systems shall be insulated with 1" insulation per Sect. C404.4 of the NCSBC 2018 Energy Conservation Code.

B. Provide pre–fabricated insulation kits for all sink and lavatory exposed drain and supply piping.

3.5 INSPECTIONS AND TESTS

A. Before being concealed, all water, soil and vent piping shall be tested to determine if they are water– and air–tight.

B. Prior to placing into service, entire system shall be tested for leaks in strict accordance with state and local codes.

3.6 STERILIZATION OF PIPING

A. Sterilize the new water piping thoroughly with a solution containing not less than 50 parts per million of available chlorine, using liquid chlorine, or sodium hydrochloride solution, introduced into the system in an approved manner. The sterilizing solution shall remain in the system in an approved manner. The sterilizing solution shall remain in the system for a period of 24 hours. After sterilization, flush the solution from the system with clean water until the residual chlorine content is not greater than 0.2 parts per million, unless otherwise directed.

3.7 SERVICE PRESSURE

A. Provide approved water–pressure reducing valve (PRV) if service pressure exceeds 80 psi to reduce pressure to 80 psi static or less and as required per NCSBC–Plumbing Sect. 604.8.

3.8 DRAINDOWN

A. Contractor to provide for complete plumbing system drain down.

3.9 CLEAN UP

A. During construction, keep the site clear of debris and upon completion, and before final inspection, clean up the premises to remove all evidence of his work. In addition, upon completion of construction, clean, wash, and/or polish all fixtures, equipment and exposed material and leave them bright and clean.

3.10 GUARANTEES

A. Guarantee all materials and labor included in the plumbing work for a period of one year from date of final acceptance by the Owner.

B. Any defects in the system which become evident during the guarantee period shall be corrected without cost to the Owner. This shall include the replacing of defective materials where required, and the repair of damage caused by leaking pipes, etc., and damage to building surfaces caused in making repairs.

GENERAL NOTES – PLUMBING

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE, ALL LOCAL AND OTHER APPLICABLE CODES.
2. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN. THE PLUMBING CONTRACTOR (PC) SHALL COORDINATE ALL OF HIS WORK WITH THE GENERAL CONTRACTOR (GC).
3. THE PLUMBING PLANS AND SPECIFICATIONS SHALL BE THOROUGHLY REVIEWED PRIOR TO PURCHASING MATERIALS AND INSTALLATION AND ALL DISCREPANCIES OR INTERFERENCES BROUGHT TO THE ENGINEERS ATTENTION.
4. THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. THE PC SHALL PROVIDE ALL MISC. ITEMS NEEDED FOR A COMPLETE SYSTEM REGARDLESS IF NOTED ON THE DRAWINGS OR NOT. FOR DIMENSIONS REFER TO ARCHITECTURAL PLANS.
5. THE GC SHALL PROVIDE ALL WALL, FLOOR AND ROOF OPENINGS OF THE SIZE AND LOCATION REQUIRED BY THE PC AND SHALL BE RESPONSIBLE FOR PAINTING AND FLOOR FINISHES. THE PC SHALL PROPERLY SEAL ALL PENETRATIONS AND PROVIDE ESCUTCHEON PLATES AT ALL FINISHED LOCATIONS.
6. ALL NEW WATER PIPING SHALL BE INSTALLED TIGHT TO STRUCTURE, ADEQUATELY SUPPORTED AND PROTECTED AND PROPERLY PITCHED TO ALLOW TOTAL DRAINAGE.
7. ALL WATER PIPING SHALL BE HYDROSTATICALLY TESTED FOR 2 – HOURS AT 150 PSIG BEFORE COVERING AND ALL LEAKS CORRECTED. THE ENTIRE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PRIOR TO PLACING IN SERVICE.
8. PROVIDE MIN. 18" SHOCK ABSORBERS WITH STOPS ON ALL HOT AND COLD WATER FIXTURE RUNS AS REQUIRED BY CODE.
9. VENT LINES SHALL SLOPE UP TO ALL STACKS AND TERMINATE A MIN. OF 12" ABOVE ROOF LINE.
10. PROVIDE CUT SHEETS ON ALL PLUMBING FIXTURES FOR ARCHITECT AND OWNER APPROVAL PRIOR TO ORDERING ANY FIXTURES.
11. PROVIDE/VERIFY HIGH TEMPERATURE HOT WATER (HTHW) AT 120 DEGREES (MAX.) F, PROVIDE/VERIFY LOW TEMPERATURE HOT WATER (LTHW) AT 110 DEGREES (MAX.) F, PROVIDE/VERIFY LTHW FROM ALL LAVATORY FAUCETS, ANY OTHER REQUIRED FIXTURES. PROVIDE ASSE 1017 AND/OR ASSE 1070 (LAVATORY) AND ASSE 1016 (SHOWER, TUB) THERMOSTATIC MIXING VALVES (NOT SHOWN ON PLANS) PER CODE AND AS REQUIRED.
12. PROVIDE CLEANOUTS AS REQUIRED BY CODE. NOT MORE THAN 100 FEET FOR 4" DRAIN.
13. PROPERLY SEAL ALL PIPING PENETRATIONS PER APPLICABLE PENETRATION SYSTEM DETAIL (THIS SHEET) THROUGH FIRE BARRIER WALLS/FLOORS/CEILINGS.– ALL MAY NOT BE SHOWN, VERIFY RATINGS WITH ARCHITECT. PROVIDE CAST IRON PIPING FOR ALL DWV PIPING THROUGH FIRE BARRIERS.

LOAD SUMMARY – PLUMBING

AREA (ALL FLOORS TYP)	WASTE DEMAND (FU)	WATER DEMAND (FU)	WATER DEMAND (GPM)
DWELLING UNIT (TYP)	22.0	14.3	17.1
TOTAL (FOR BLDG./QTY OF 12 UNITS)	264.0	171.6	59.3

SYMBOL LEGEND – PLUMBING

SYMBOL	DESCRIPTION (U.O.N.)
	WASTE PIPING (W)
	VENT PIPING (V)
	COLD WATER PIPING (CW)
	HOT WATER PIPING (HW)
HTHW	HIGH TEMPERATURE HW PIPING (HTHW) 120 DEG. F
LTHW	LOW TEMPERATURE HW PIPING (LTHW) 110 DEG. F
	SHUT–OFF VALVE
	DIELECTRIC UNION
COFF	CLEANOUT FINISH FLOOR
WCO/HCO	WALL/HORIZONTAL CLEANOUT
COFG	CLEANOUT FINISH GRADE–PROVIDE FLUSH CONCRETE COLLAR AND BRONZE COVER
	VENT THRU ROOF (VTR)
A.A.V.	AIR ADMITTANCE VALVE
A.F.F.	ABOVE FINISHED FLOOR
U.O.N.	UNLESS OTHERWISE NOTED

FIXTURE SCHEDULE – PLUMBING *

ET * EXPANSION TANK
AMTROL MODEL ST–12, 4.4 GALLON, STEEL CONSTRUCTION, NON–ASME CODE RATED.

EWH * ELECTRIC WATER HEATER
A.O. SMITH MODEL DEN–52, 50 GALLON, 4,500 WATT, 208 V, 1 PH.
28 GPH RECOVERY AT 70 DEGREE (F) TEMP. RISE. 3/4" INLET/OUTLET,
PROVIDE DRAIN PAN, EXPANSION TANK AND PRESSURE RELIEF VALVE.
VERIFY INSTALLATION CLEARANCES PRIOR TO ORDERING.

FDR * FLOOR DRAIN W/FLANGE, RECESSED INTO FLOOR
ZURN MODEL Z415–1, 5" DRAIN, 2" CONNECTION. PROVIDE RAISED FLANGE W/NICKEL BRONZE GRATE, CAST IRON BODY. PROVIDE TRAP PRIMER CONNECTION IF REQUIRED. RECESS INTO FLOOR/SLAB, TOP OF FLANGE TO BE FLUSH W/FINISH FLOOR.

FDRL * LARGE FLOOR DRAIN W/FLANGE, RECESSED INTO FLOOR
ZURN MODEL Z415–1, 8" DRAIN, 4" CONNECTION. PROVIDE RAISED FLANGE W/NICKEL BRONZE GRATE, CAST IRON BODY. PROVIDE TRAP PRIMER CONNECTION IF REQUIRED. RECESS INTO FLOOR/SLAB, TOP OF FLANGE TO BE FLUSH W/FINISH FLOOR.

FPHB * FREEZE PROOF HOSE BIBB
WOODFORD MODEL #19, FREEZE PROOF HOSE BIBB WITH BACKFLOW PREVENTER. COORDINATE MOUNTING W/OWNER. PROVIDE TEE KEY OR LOCK SL–17 IF REQUIRED. VERIFY STEM LENGTH PER WALL THICKNESS.

HB * WALL HOSE BIBB
WOODFORD MODEL #24 ANTI–SIPHON HOSE BIBB W/TEE KEY. COORDINATE MOUNTING W/TENANT. PROVIDE STEM LOCK SL–24 IF REQUIRED.

LAV * LAVATORY (VARIOUS COUNTERTOP)
COORDINATE EXACT UNIT WITH OWNER, ARCHITECT, AND GENERAL CONTRACTOR. COORDINATE SIZE WITH CABINETRY PRIOR TO ORDERING. PROVIDE DWV, SUPPLY LINES/SHUT–OFF VALVES AS REQUIRED.

RPZ * 2" REDUCED PRESSURE BACKFLOW PREVENTER
WATTS MODEL #LF009M2QT, 2" REDUCED PRESSURE BACKFLOW PREVENTER, 'LEAD FREE' CONSTRUCTION. VERIFY INSTALLATION LOCATION/CLEARANCES.

S1 * DOUBLE BASIN KITCHEN SINK
COORDINATE EXACT UNIT WITH OWNER, ARCHITECT, AND GENERAL CONTRACTOR. COORDINATE SIZE WITH CABINETRY PRIOR TO ORDERING. PROVIDE DWV, SUPPLY LINES/SHUT–OFF VALVES AS REQUIRED.

SHR * TUB AND/OR SHOWER STALL W/FAUCET (VARIOUS CONFIGURATIONS)
COORDINATE UNITS AND LOCATIONS WITH OWNER, ARCHITECT, AND G.C. PROVIDE DWV/SUPPLY, VERIFY/ROUTE HW AND CW LINES PER UNIT HANDING AS REQUIRED. PROVIDE FLOOR DRAIN (VERIFY MODEL W/OWNER) IF CUSTOM BUILT/TILED UNIT.

SP * ELEVATOR SUMP PUMP
STANCOR MODEL SE–40 MULTI–OPTION ELEVATOR OIL MINDER SYSTEM. 0.5 HP, 115 V, 11' TOTAL DYN. HEAD AT 3000 GPH, 2" DISCHARGE CONNECTION. INCLUDES REMOTE ALARM–VERIFY LOCATION. VERIFY MIN. PIT SIZE REQUIREMENTS. COORDINATE ALARM/CONTROL PANEL LOCATION WITH ARCH., G.C., BLDG. OWNER.

VB * ICE MAKER VALVE BOX
OATEY VALVE BOX WITH 3/8" BRONZE SHUT–OFF VALVE. FLUSH TO WALL.

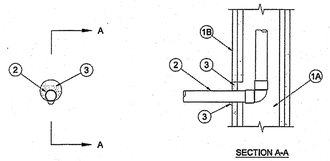
WB * WASHING MACHINE WALL BOX
SUPPLY AND DRAIN FIXTURE: POLYSTYRENE BOX WITH 2" DRAIN, 1/4 TURN BRASS BALL VALVES. OATEY OR APPROVED EQUAL.

WC * WATER CLOSET (FLUSH TANK)
COORDINATE EXACT UNIT WITH OWNER, ARCHITECT, AND GENERAL CONTRACTOR. PROVIDE DWV, SUPPLY LINES/SHUT–OFF VALVES AS REQUIRED.

* OR APPROVED EQUAL. SUBMIT ALL ITEMS FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.
ANY OTHER PLUMBING FIXTURES SHOWN ARE PROVIDED BY THE OWNER AND INSTALLED BY THE PLUMBING CONTRACTOR. SEE PLANS FOR NUMBER AND LOCATION. COORDINATE ALL REQUIREMENTS WITH EQUIPMENT SERVED.

System No. W-L-1527
August 24, 2016

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 1 and 2 Hr (See Item 1)	FT Ratings — 1 and 2 Hr (See Item 1)
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating At 400 F — Less Than 1 CFM/sq ft	FTH Ratings — 1 and 2 Hr (See Item 1)
	L Rating At Ambient — Less Than 5.1 L/s/m^2
	L Rating At 400 F — Less Than 5.1 L/s/m^2



SECTION A-A

1. **Wall Assembly** — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

   A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.

   B. **Gypsum Board*** — One or two layers of nom 5/8 in. (16 mm) thick gypsum board as specified in the individual Wall and Partition Design. Max diam of opening is 6 in. (127 mm).

   The hourly F, T, FT, FH and FTH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Metallic Penetrant** — One metallic pipe, conduit or tube to be installed either concentrically or eccentrically, penetrating wall assembly on one side of wall. The annular space between the pipe, conduit or tubing and the periphery of opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm). Pipe, conduit or tubing shall be rigidly supported within the wall and on the penetrated side of the wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

   A. **Steel Pipe** — Nom 3 in. (76 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.

   B. **Iron Pipe** — Nom 3 in. (76 mm) diam (or smaller) cast or ductile iron pipe.

   C. **Conduit** — Nom 3 in. (76 mm) diam (or smaller) steel electrical metallic tubing (EMT), nom 3 in. (76 mm) diam steel conduit or nom 1 in. (25 mm) diam (or smaller) flexible steel conduit.

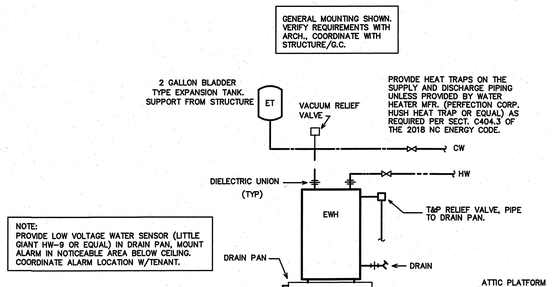
   D. **Copper Tubing** — Nom 1 in. (25 mm) diam (or smaller) Type L (or heavier) copper tubing.

   E. **Copper Pipe** — Nom 1 in. (25 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. **Fill, Void or Cavity Material*** — **Sealant** — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with surface of wall assembly. At point contact location, min 3/8 in. (10 mm) diam bead of fill material to be applied at the penetrant/gypsum board interface.
SPECIFIED TECHNOLOGIES INC — SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2016-08-24



2 / P–1 EWH DETAIL
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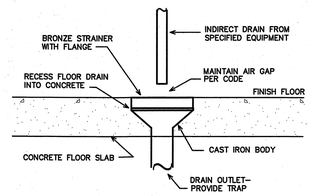

1 / P–1 FDR/FDRL DETAIL
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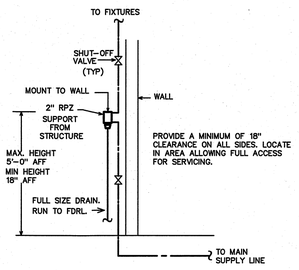

3 / P–1 RPZ MOUNTING DETAIL
SCALE: NTS

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E BURKE

PLUMBING SPECIFICATIONS

21014

ISSUED:	11/02/2021
DWG BY:	DS
CKD BY:	BEB

REVISIONS

SHEET NO. P-1

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Peppertree 34 P2

WALL LEGEND

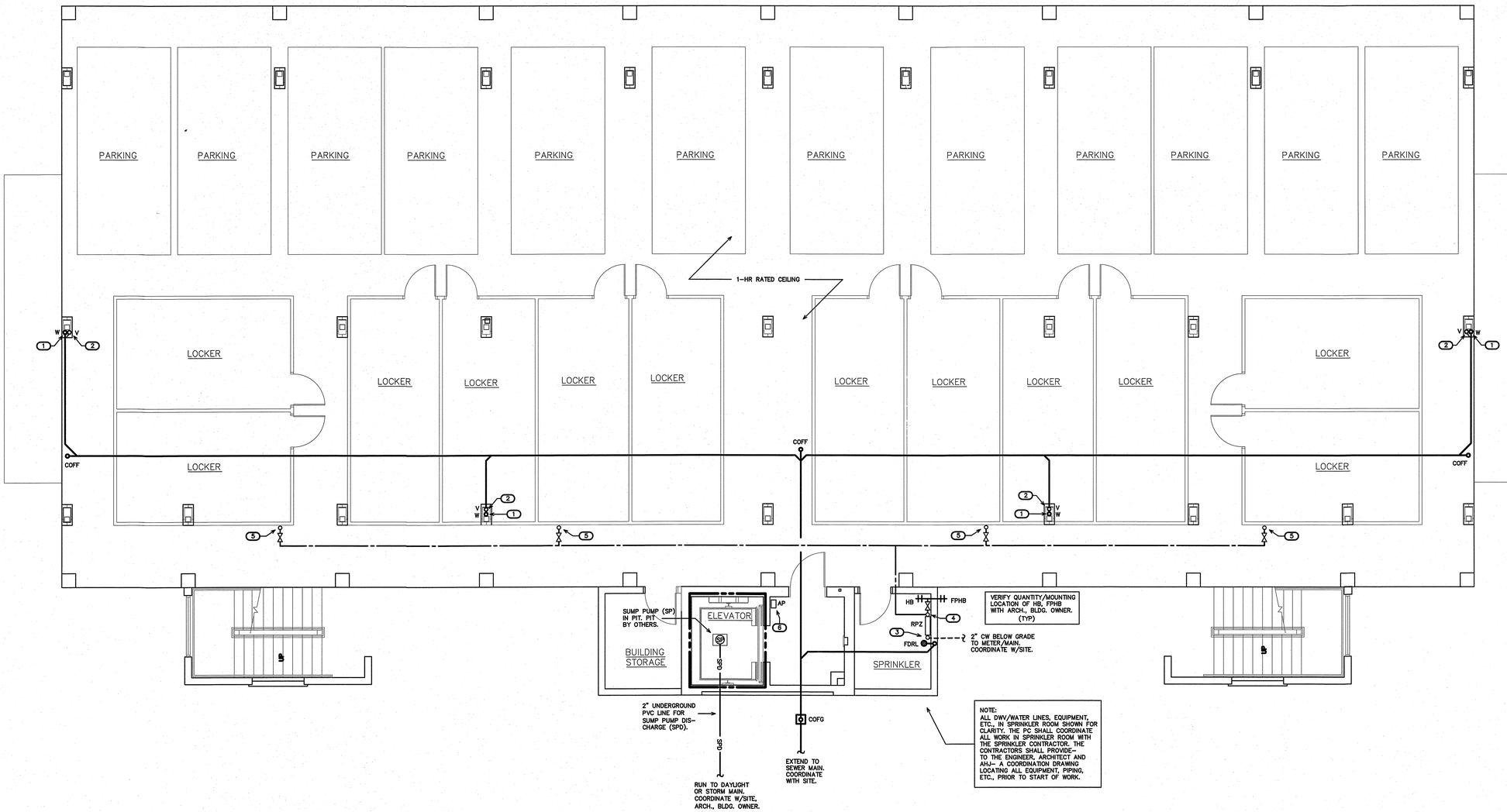
2-HOUR FIRE BARRIER

NOTE:
PIPING FOR SANITARY WASTE STACKS SHALL BE CAST IRON THRU ALL FLOORS. ALL HORIZONTAL/VERTICAL ROOF DRAIN CONDUCTORS SHALL BE CAST IRON AND PROPERLY INSULATED THRU ALL FLOORS. PROVIDE INSULATION ON ALL EXPOSED PIPING PER CODE AND BLDG. STANDARD. VERIFY ROUTING OF ALL PIPING THRU ALL FLOORS. COORDINATE W/STRUCTURE, ALL TRADES, ETC. COORDINATE ALL EXPOSED PIPING, CLEANOUTS (LOCATIONS, ROUTING, LABELING/INSULATION/PAINTING, ETC.), WITH ARCHITECT, OWNER, GC. (TYP)

KEY NOTES FOR SHEET P-3

1. 4" SANITARY WASTE STACK (W) UP. PROVIDE WCO/HCO (NOT SHOWN) AT BASE OF STACK, AND A.F.F. VERIFY ACCESSIBLE LOCATION, GC TO PROVIDE ACCESS PANEL WHERE REQUIRED IF WCO IN FINISHED WALL. WASTE STACKS SHALL BE CAST IRON.
2. 3" VENT STACK (V) UP. CONNECT TO SANITARY WASTE STACK AS REQUIRED- VERIFY BELOW FLOOR OR ABOVE CEILING/ BELOW FIRST LEVEL ROOF STRUCTURE)- AT OR BELOW THE LOWEST HORIZONTAL BRANCH DRAIN CONNECTION. VENT STACK BELOW FLOOR CONNECTION TO SANITARY WASTE MAIN SHOWN, VERIFY ACTUAL LOCATION AS NOTED ABOVE.
3. RISE FROM BELOW GRADE TO RPZ. VERIFY LOCATION. SEE DETAIL ON SHEET P-1.
4. PROVIDE BRANCH LINE FOR HB/FPHB, RISE TO RUN ABOVE CEILING/BELOW UPPER LEVEL. VERIFY LOCATION/ROUTING.
5. CW RISE THRU BLDG. TO UPPER LEVELS. VERIFY LOCATION/ROUTING THRU STRUCTURE.
6. PROVIDE SP ALARM PANEL (AP) TO BE ACTIVATED WHEN SP RUNS AND/OR INDICATES OIL. VERIFY MOUNTING LOCATION WITH ARCH., BLDG. OWNER. COORDINATE WITH LOCAL AHJ. PROVIDE LABELING (TYPE PER OWNER): "ELEVATOR SUMP PUMP".

NOTE:
PROPERLY INSULATE WATER PIPING IN UNCONDITIONED AREAS. (TYP)



AUTO-PARK LEVEL PLUMBING PLAN

1/P-2 SCALE: 3/16"=1'-0"

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E BURKE

AUTO-PARK LEVEL PLUMBING PLAN

21014

ISSUED 11/02/2021
DWG BY: DS
CKD BY: BEB

REVISIONS

SHEET NO. P-2

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Peppertree 34 P3

WALL LEGEND

1/2-HOUR FIRE BARRIER

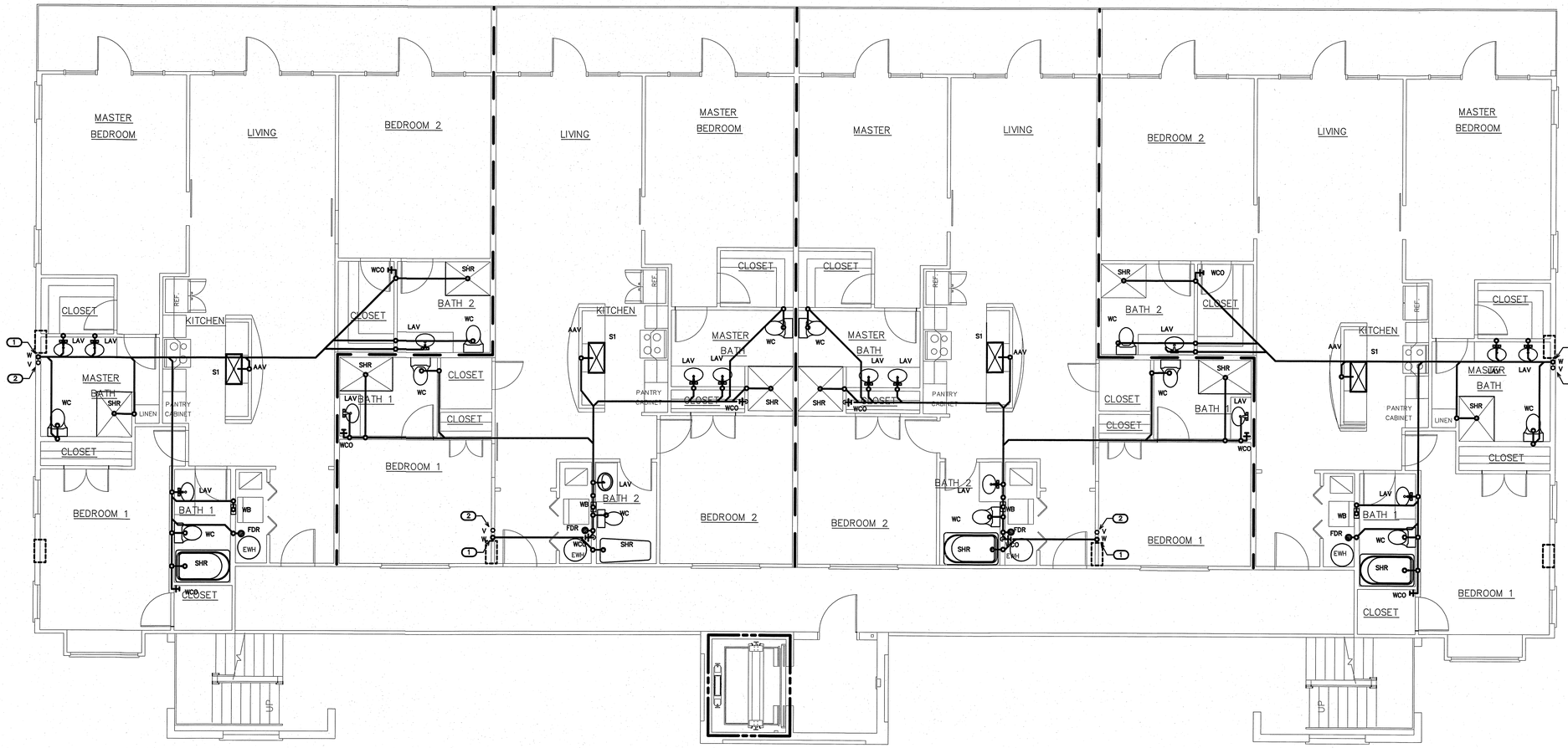
2-HOUR FIRE BARRIER

NOTE:
PIPING FOR SANITARY WASTE STACKS SHALL BE CAST IRON THRU ALL FLOORS. VERIFY PIPING MATERIAL FOR ALL DRAIN PIPING BELOW FLOORS WITH BLDG. OWNER. PROVIDE CAST IRON PIPING IF REQUIRED. PROVIDE INSULATION ON ALL EXPOSED PIPING PER CODE AND BLDG. STANDARD. VERIFY ROUTING OF DWV PIPING THRU ALL FLOORS. COORDINATE W/STRUCTURE, ALL TRADES, ETC. COORDINATE ALL EXPOSED PIPING, CLEANOUTS (LOCATIONS, ROUTING, LABELING/INSULATION/PAINTING, ETC.), WITH ARCHITHECT, OWNER, GC.
(TYP)

NOTE:
VERIFY QUANTITY AND LOCATION OF ALL FLOOR DRAINS W/OWNER, ARCH. PROVIDE TRAP PRIMERS (NOT SHOWN) FOR ALL FLOOR DRAINS.
(TYP)

KEY NOTES FOR SHEET P-3

1. 4" SANITARY WASTE STACK DN AND UP (3RD FLOOR DN ONLY). VERIFY LOCATION. UNIT BRANCH CONNECTION BELOW FLOOR.
2. 3" VENT STACK DN AND UP (UP TO VTR FOR 3RD FLOOR). VERIFY LOCATION. UNIT BRANCH CONNECTION ABOVE CEILING.



1/P-3 IST/2ND/3RD FLOOR DWV PLAN
SCALE: 3/16"=1'-0"

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

6/2/22
NORTH CAROLINA PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E BURKE

IST/2ND/3RD FLOOR DWV PLAN

21014

ISSUED: 11/02/2021
DWG BY: DS
CKD BY: BEB
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P-3

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Peppertree 34 P4

WALL LEGEND

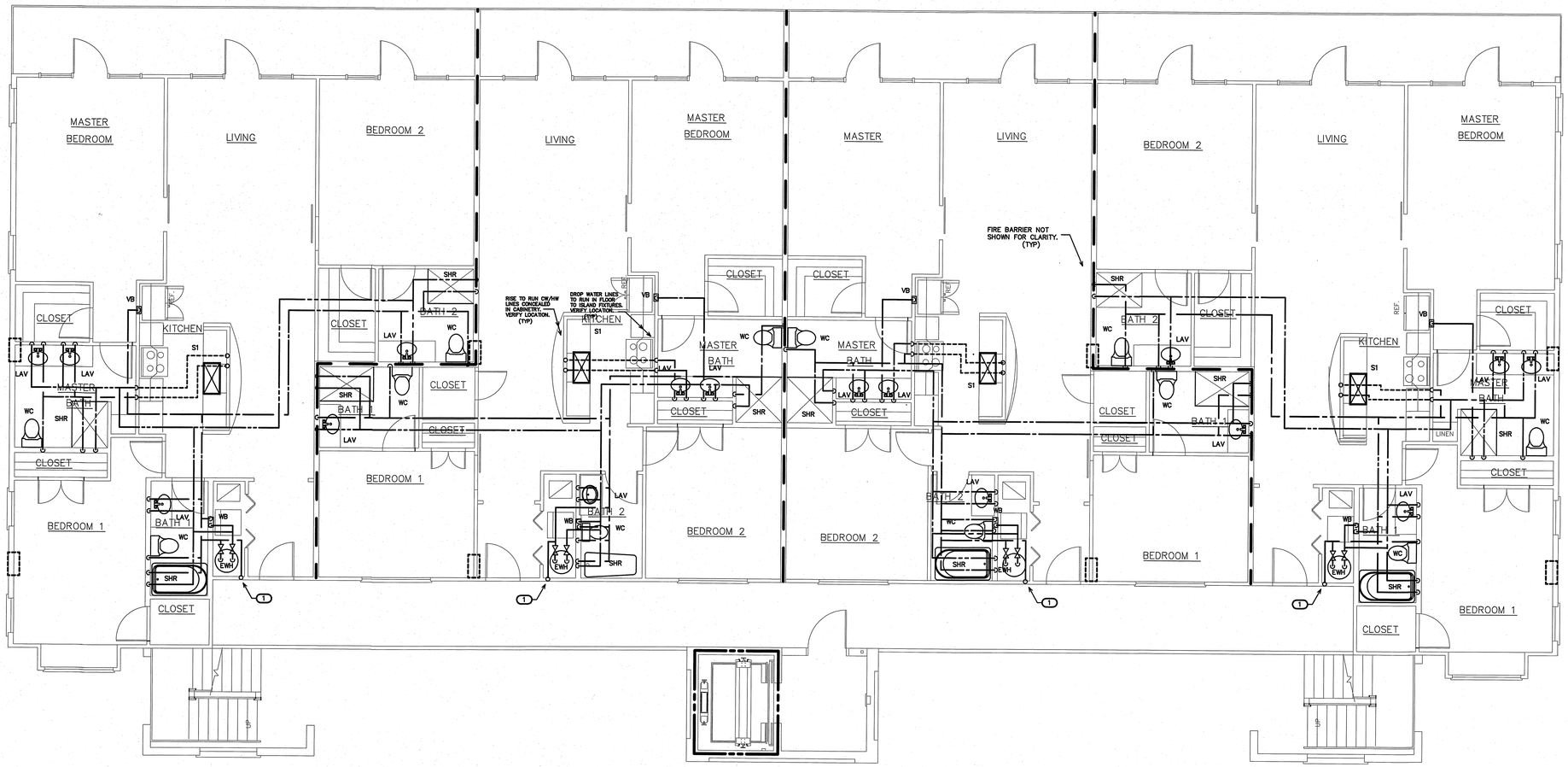
1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER

NOTE:
COORDINATE WITH DWW PLANS, PROVIDE TRAP PRIMERS (NOT SHOWN) FOR FLOOR DRAINS.

KEY NOTE FOR SHEET P-4

(1) CW DN AND UP TO ABOVE CEILING. VERIFY LOCATION/ROUTING. PROVIDE DWELLING UNIT MAIN SHUT-OFF VALVE IN AN ACCESSIBLE LOCATION, PROVIDE ACCESS DOOR IF REQUIRED. (TYP FOR ALL FLOORS)



1 P-4 WATER PLAN
SCALE: 3/16"=1'-0"

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 42038 BENJAMIN E. BURKE

1ST/2ND/3RD FLOOR WATER PLAN

21014

ISSUED:	11/02/2021
DWG BY:	DS
CKD BY:	BEB
REVISIONS	

SHEET NO.
P-4

RISER NOTES:
REPRESENTATIVE SIZES ARE GIVEN FOR EACH TYPE OF FIXTURE. SEE PIPE SIZING SCHEDULE.
MINIMUM 2" DRAIN LINE SIZE UNDER SLAB.
MAINTAIN PIPE SIZES SHOWN UNTIL LARGER SIZE IS REACHED.
PIPE SIZES ARE MINIMUMS FOR INDIVIDUAL FIXTURES U.O.N.

NOTE:
PROVIDE PROPER VENT THRU ROOF (VTR). RUN HORIZONTALLY AS REQUIRED TO MAINTAIN 10'-0" CLEARANCE FROM ANY INTAKES. PROPERLY FLASH ANY ROOF PENETRATION. (TYP)

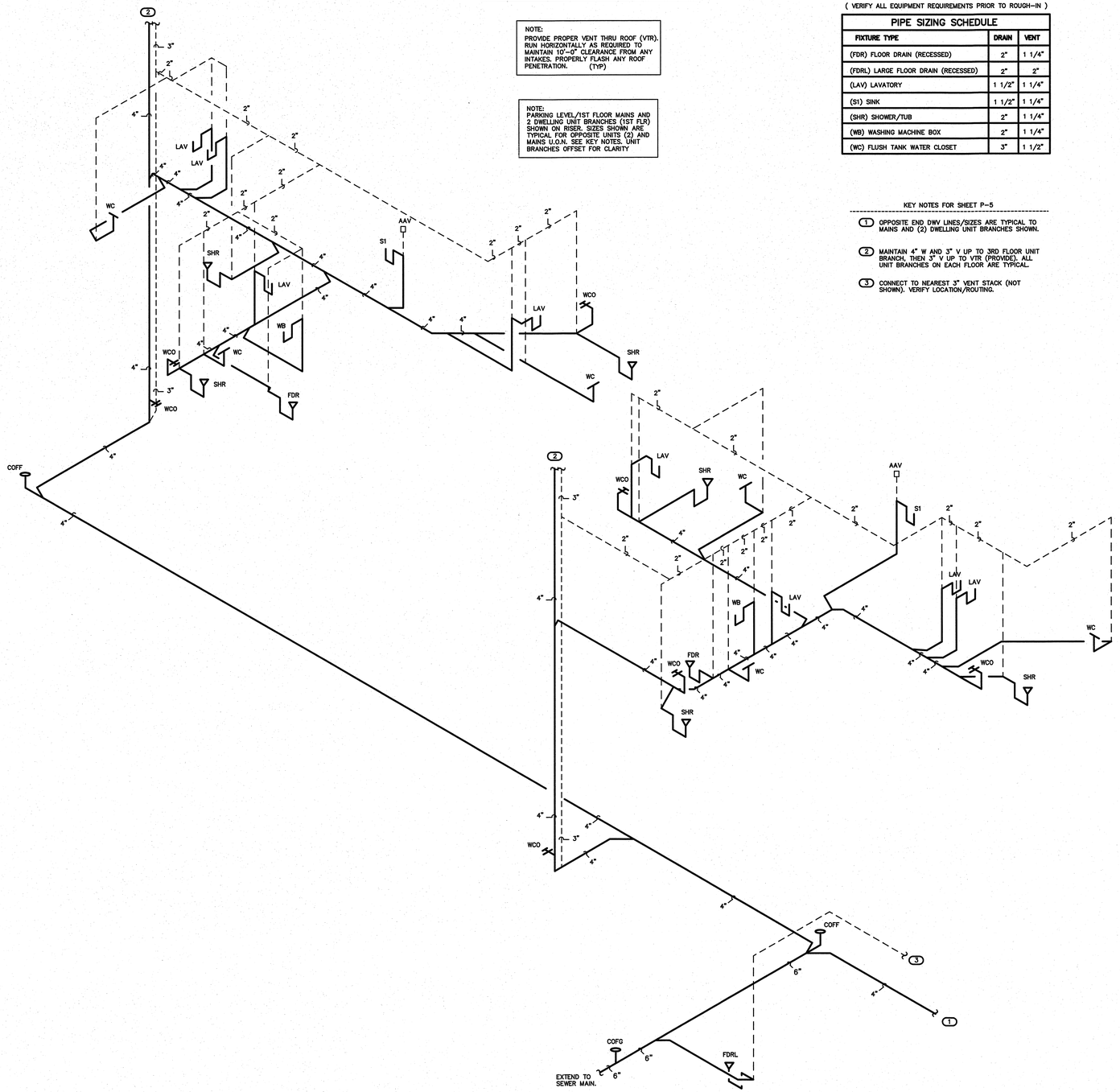
NOTE:
PARKING LEVEL/1ST FLOOR MAINS AND 2 DWELLING UNIT BRANCHES (1ST FLR) SHOWN ON RISER. SIZES SHOWN ARE TYPICAL FOR OPPOSITE UNITS (2) AND MAINS U.O.N. SEE KEY NOTES. UNIT BRANCHES OFFSET FOR CLARITY

(VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO ROUGH-IN)

PIPE SIZING SCHEDULE		
FIXTURE TYPE	DRAIN	VENT
(FDR) FLOOR DRAIN (RECESSED)	2"	1 1/4"
(FDRL) LARGE FLOOR DRAIN (RECESSED)	2"	2"
(LAV) LAVATORY	1 1/2"	1 1/4"
(S1) SINK	1 1/2"	1 1/4"
(SHR) SHOWER/TUB	2"	1 1/4"
(WB) WASHING MACHINE BOX	2"	1 1/4"
(WC) FLUSH TANK WATER CLOSET	3"	1 1/2"

KEY NOTES FOR SHEET P-5

1. OPPOSITE END DWV LINES/SIZES ARE TYPICAL TO MAINS AND (2) DWELLING UNIT BRANCHES SHOWN.
2. MAINTAIN 4" W AND 3" V UP TO 3RD FLOOR UNIT BRANCH, THEN 3" V UP TO VTR (PROVIDE). ALL UNIT BRANCHES ON EACH FLOOR ARE TYPICAL.
3. CONNECT TO NEAREST 3" VENT STACK (NOT SHOWN). VERIFY LOCATION/ROUTING.



1/P-5 DWV RISER
SCALE: NTS

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 42038 BENJAMIN E. BURKE

DWV/WATER RISERS

21014

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SHEET NO.
P-5

RISER NOTES:

REPRESENTATIVE SIZES ARE GIVEN FOR EACH TYPE OF FIXTURE. SEE PIPE SIZING SCHEDULE.

MAINTAIN PIPE SIZES SHOWN UNTIL LARGER SIZE IS REACHED. PIPE SIZES ARE MINIMUMS FOR INDIVIDUAL FIXTURES U.O.N.

NOTE:
SEE PLAN FOR SHUT-OFF VALVE LOCATIONS. COORDINATE LOCATION AND NUMBER WITH LOCAL INSPECTIONS DEPARTMENT. PROVIDE ACCESS DOORS IF REQUIRED.

NOTE:
PARKING LEVEL/1ST FLOOR MAINS AND 2 DWELLING UNIT BRANCHES (1ST FLR) SHOWN ON RISER. SIZES SHOWN ARE TYPICAL FOR OPPOSITE UNITS (2) AND MAINS U.O.N. SEE KEY NOTES. UNIT BRANCHES OFFSET FOR CLARITY

(VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO ROUGH-IN)

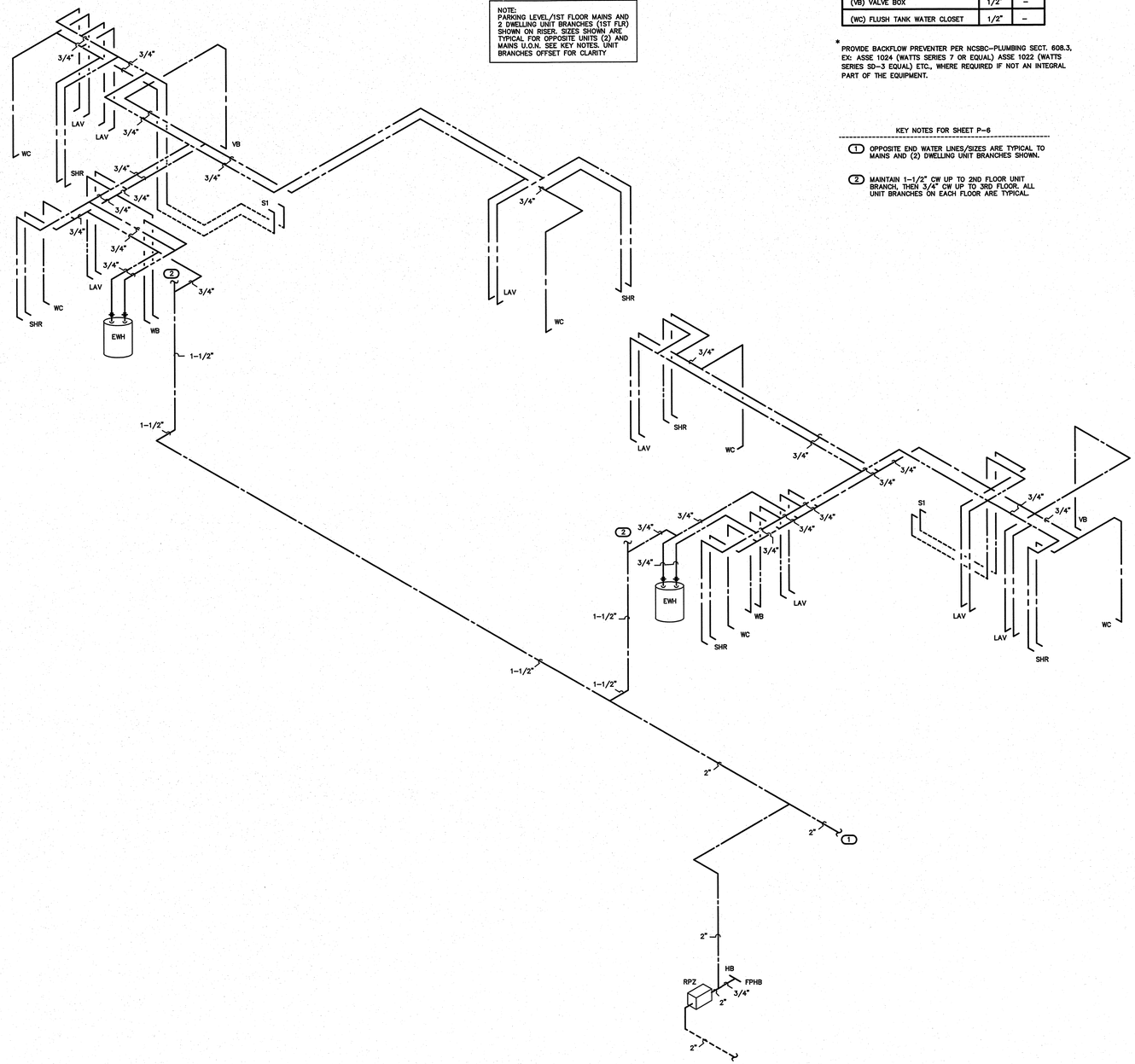
PIPE SIZING SCHEDULE		
FIXTURE TYPE	CW	HW
(FPHB) FREEZE PROOF HOSE BIBB	1/2"	–
(HB) HOSE BIBB	1/2"	–
(LAV) LAVATORY	1/2"	1/2"
(SI) SINK	1/2"	1/2"
(SHR) SHOWER/TUB	1/2"	1/2"
(WB) WASHING MACHINE BOX	1/2" *	1/2" *
(VB) VALVE BOX	1/2" *	–
(WC) FLUSH TANK WATER CLOSET	1/2"	–

* PROVIDE BACKFLOW PREVENTER PER NCSBC-PLUMBING SECT. 608.3, EX: ASSE 1024 (WATTS SERIES 7 OR EQUAL) ASSE 1022 (WATTS SERIES SD-3 EQUAL) ETC., WHERE REQUIRED IF NOT AN INTEGRAL PART OF THE EQUIPMENT.

KEY NOTES FOR SHEET P-6

(1) OPPOSITE END WATER LINES/SIZES ARE TYPICAL TO MAINS AND (2) DWELLING UNIT BRANCHES SHOWN.

(2) MAINTAIN 1-1/2" CW UP TO 2ND FLOOR UNIT BRANCH, THEN 3/4" CW UP TO 3RD FLOOR. ALL UNIT BRANCHES ON EACH FLOOR ARE TYPICAL.



1 P-6 WATER RISER
SCALE: NTS

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BUILDING 34
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6/21/22
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WATER RISER

21014

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REVISIONS

SHEET NO.
P-6

Peppertree 34 M1

HVAC EQUIPMENT SCHEDULE

HVAC SYSTEM #1	
AHU #1 DIRECT EXPANSION FAN COIL UNIT	• CARRIER MODEL #FX4DNB031, 4 WAY, MULTIPOISE FAN COIL UNIT. 8 KW HEATER. NOMINAL CAPACITY = 30,000 BTUH. 1000 CFM NOMINAL. PROVIDE HARD SHUT-OFF TXV VALVE. 2.5 TON NOMINAL. PROVIDE PROGRAMMABLE THERMOSTAT AND FILTER RACK WITH HINGED DOOR. 1/2HP, 4.1A MOTOR FLA, 32.0A HEAT FLA, 240V, 1 PH, 48.5A MCA, 50A MOCP AHU & HEAT.
HP #1 OUTDOOR HEAT PUMP UNIT	• CARRIER MODEL #25HCC530A0030, 2.5 TON OUTDOOR HEAT PUMP UNIT, 15 SEER, PROVIDE CYCLE PROTECTOR, LOW PRESSURE SWITCH, CRANKCASE HEATER, 240 VOLT, 1 PHASE. COMP 14.1A RLA, FAN 1.2A FLA, OUTDOOR HEAT PUMP 18.1A MCA, 30A MOCP.
HVAC SYSTEM #2	
AHU #2 DIRECT EXPANSION FAN COIL UNIT	• CARRIER MODEL #FX4CNF037, 4 WAY, MULTIPOISE FAN COIL UNIT. 8 KW HEATER. NOMINAL CAPACITY = 36,000 BTUH. 1200 CFM NOMINAL. PROVIDE HARD SHUT-OFF TXV VALVE. 3 TON NOMINAL. PROVIDE PROGRAMMABLE THERMOSTAT AND FILTER RACK WITH HINGED DOOR. 1/2HP, 4.1A MOTOR FLA, 32A HEAT FLA, 240V, 1 PH, 48.5A MCA, 50A MOCP AHU & HEAT.
HP #2 OUTDOOR HEAT PUMP UNIT	• CARRIER MODEL #25HCC536A0030, 3 TON OUTDOOR HEAT PUMP UNIT, 15 SEER, PROVIDE CYCLE PROTECTOR, LOW PRESSURE SWITCH, CRANKCASE HEATER, 240 VOLT, 1 PHASE. COMP 16.7A RLA, FAN 1.2A FLA, OUTDOOR HEAT PUMP 22.1A MCA, 35A MOCP.

* OR APPROVED EQUAL

AHU CONTROL NOTE:

FOR EACH SYSTEM PROVIDE "SIMPLE ENGINEERED SOLUTIONS" MODEL #HPDM-XX HEAT PUMP DEHUMIDIFICATION CONTROL MODULE. PROVIDE PROGRAMMABLE ELECTRONIC THERMOSTAT WITH AUTO CHANGEOVER AND HUMIDISTAT FUNCTION. THERMOSTAT SHALL BE COMPATIBLE WITH DEHUMIDIFICATION CONTROL MODULE. PURPOSE OF DEHUMIDIFICATION CONTROL MODULE IS TO INITIATE COOLING MODE WHEN HUMIDISTAT SENSES HUMIDITY OVER SETPOINT AND ENERGIZE AND CONTROL ELECTRIC HEAT TO MAINTAIN SPACE TEMPERATURE. CONTACT SIMPLE ENGINEERED SOLUTIONS FOR INFORMATION ON DEHUMIDIFICATION CONTROL MODULE: (910) 231-9929. email: jmsuggs@yahoo.com.

Peppertree 34 M1

DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE

DHP-1 OUTDOOR HEAT PUMP UNIT	* MITSUBISHI MODEL #MXZ-4C36NA2, 3 TON OUTDOOR HEAT PUMP UNIT, 20 SEER. 208 VOLT, 1 PHASE, CONDENSING UNIT 21.1A MCA, 25A MOCP. FAN COIL UNIT IS POWERED VIA FIELD PROVIDED WIRING FROM OUTDOOR UNIT. SERVES (4) INDOOR FAN-COIL UNITS (DFC-1.1, DFC-1.2, DFC-1.3, & DFC-1.4).
DFC-1.1 DIRECT EXPANSION FAN COIL UNIT	* MITSUBISHI MODEL #MSZ-FS06NA FAN COIL UNIT. NET COOLING CAPACITY = 6,000 BTUH, 137 CFM LO TO 381 CFM HI. 0.5 TON NOMINAL. PROVIDE WIRED PROGRAMMABLE THERMOSTAT, AND CONDENSATE PUMP. FAN MOTOR 0.65, FLA 208 VOLT. SINGLE PH.
DFC-1.2 DIRECT EXPANSION FAN COIL UNIT	* MITSUBISHI MODEL #MSZ-FS06NA FAN COIL UNIT. NET COOLING CAPACITY = 6,000 BTUH, 137 CFM LO TO 381 CFM HI. 0.5 TON NOMINAL. PROVIDE WIRED PROGRAMMABLE THERMOSTAT, AND CONDENSATE PUMP. FAN MOTOR 0.65, FLA 208 VOLT. SINGLE PH.
DFC-1.3 DIRECT EXPANSION FAN COIL UNIT	* MITSUBISHI MODEL #MSZ-FS06NA FAN COIL UNIT. NET COOLING CAPACITY = 6,000 BTUH, 137 CFM LO TO 381 CFM HI. 0.5 TON NOMINAL. PROVIDE WIRED PROGRAMMABLE THERMOSTAT, AND CONDENSATE PUMP. FAN MOTOR 0.65, FLA 208 VOLT. SINGLE PH.
DFC-1.4 DIRECT EXPANSION FAN COIL UNIT	* MITSUBISHI MODEL #MSZ-FS06NA FAN COIL UNIT. NET COOLING CAPACITY = 6,000 BTUH, 137 CFM LO TO 381 CFM HI. 0.5 TON NOMINAL. PROVIDE WIRED PROGRAMMABLE THERMOSTAT, AND CONDENSATE PUMP. FAN MOTOR 0.65, FLA 208 VOLT. SINGLE PH.

* OR APPROVED EQUAL

ELECTRIC WALL HEATER SCHEDULE

ELECTRIC WALL HEATER (EH-1)	* QMARK MODEL #CWH1208DSAF ELECTRIC FAN-FORCED WALL HEATER, 2000 WATTS, 9.6 AMPS 208 VOLT, 1 PHASE PROVIDE WALL MOUNTING BOX, DISCONNECT SWITCH AND INTEGRAL THERMOSTAT.

* OR APPROVED EQUAL

Peppertree 34 M1

EXHAUST FAN SCHEDULE

EXHAUST FAN #1 (EF-1)	* CARNES MODEL# VCDDD10C EXHAUST FAN, 93 CFM @ 1/4" SP, 640 RPM, 1.1 AMPS, 120V. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE SWITCH AND WIRE THE UNIT. THE HVAC CONTRACTOR SHALL PROVIDE UNIT, 6" RIGID DUCT TO WALL CAP OR ROOF CAP AS INDICATED ON PLANS. LOCATE EXHAUST TERMINATION A MINIMUM OF 10'-0" FROM ANY INTAKES.

* OR APPROVED EQUAL

NOTE: ALL EXHAUST FANS ON THE FIRST AND SECOND FLOOR SHALL HAVE CEILING RADIATION DAMPERS.

AIR DISTRIBUTION SCHEDULE

MARK	* MANUFACTURER	MODEL NO.	NECK SIZE	FACE SIZE	MATERIAL	SERVICE	NOTES
A	CARNES	RTDBH	12" X 4"	13" X 6"	STEEL	SUPPLY	CEILING MOUNTED, WHITE
B	CARNES	RTDBH	9" X 4"	11" X 6"	STEEL	SUPPLY	CEILING OR SIDE WALL MOUNTED, WHITE
RA	GRAINGER	4MJT8	24" X 24"	26.5" X 26.5"	STEEL	RETURN	WHITE, FILTER GRILLE, SIDEWALL MOUNTED

* OR APPROVED EQUAL

COORDINATE BORDER TYPE WITH THE CEILING TYPE. SEE ARCH SHEETS
PROVIDE CUT SHEETS TO OWNER/ARCH. PRIOR TO ORDERING.

GENERAL NOTES - MECHANICAL

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE AND ALL LOCAL AND OTHER APPLICABLE CODES.
2. ANY PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID FOR BY THE MECHANICAL CONTRACTOR (MC).
3. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN. THE MC SHALL COORDINATE ALL OF HIS WORK WITH THE GENERAL CONTRACTOR (GC) AND OTHER TRADES.
4. THE LOCATION OF ALL DUCT, PIPING AND EQUIPMENT SHALL BE ADJUSTED TO ACCOMMODATE ANTICIPATED OR ENCOUNTERED INTERFERENCES.
5. THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS REFER TO THE ARCHITECTURAL PLANS.
6. THE MC SHALL BE RESPONSIBLE FOR ALL ELECTRICAL STARTERS INTERLOCKS, CONTROL WIRING CONDUIT AND POWER WIRING FROM DISCONNECTS TO HIS EQUIPMENT, USING A LICENSED ELECTRICIAN.
7. THE MC SHALL USE FIRE DAMPERS FOR PROTECTION OF THE OPENING IN ACCORDANCE WITH STATE AND LOCAL CODES IN ALL LOCATIONS WHERE PENETRATIONS OF RATED WALLS AND FLOORS OCCUR. SEE ARCHITECTURAL PLANS FOR RATED WALL AND FLOOR LOCATIONS. PROVIDE ACCESS DOORS AT ALL DAMPER LOCATIONS. LOCATE DOORS FOR EASY ACCESS.
8. INSTALL FLEXIBLE CONNECTORS ON SUPPLY AND RETURN DUCTWORK AHU. ALL MECHANICAL EQUIPMENT SHALL OPERATE FREE OF OBJECTIONAL NOISE AND VIBRATION.
9. INSTALL TURNING VANES IN SUPPLY DUCTS AT ALL ELBOWS AND SPLITTER DAMPERS. PROVIDE BALANCING DAMPERS IN ALL DUCTS WHERE SHOWN OR REQUIRED FOR SYSTEM BALANCING.
10. DUCT DIMENSIONS ARE SHOWN INSIDE CLEAR.
11. THE MC SHALL KEEP THE PREMISES CLEAR OF DEBRIS FROM HIS WORK DURING CONSTRUCTION AND LEAVE THE AREA AND BUILDING CLEAN AT THE COMPLETION OF HIS WORK. HE SHALL ALSO LEAVE CLEAN ALL EXPOSED EQUIPMENT IN HIS CONTRACT.
12. PROVIDE ALL REQUIRED ROOF PENETRATIONS FOR THE INSTALLATION OF THE NEW EQUIPMENT. ALL FLASHINGS ARE BY THE MECHANICAL CONTRACTOR. ALL ROOFING WORK SHALL BE DONE BY A LICENSED ROOFING CONTRACTOR SO AS TO MAINTAIN ORIGINAL WARRANTY.
13. THE M.C. SHALL COORDINATE WITH AND PROVIDE EQUIPMENT SPEC. SHEETS TO THE GENERAL AND ELECTRICAL CONTRACTORS FOR REVIEW PRIOR TO ORDERING EQUIPMENT.
14. PROPERLY SUPPORT ALL DUCT WORK, AND EQUIP FROM STRUCTURE. PROVIDE ALL STRUCTURAL SUPPORTS FOR THE LOADS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.

LEGEND - MECHANICAL

- 12 X 8 — RECTANGULAR DUCTWORK. INSIDE CLEAR DIMENSION INDICATED (WIDTH X HEIGHT)
- FLEXIBLE DUCTWORK
- 12" DIA. — ROUND GALVANIZED STEEL EXHAUST DUCT. INSIDE CLEAR DIMENSION INDICATED.
- SIDE WALL SUPPLY REGISTER
- SUPPLY REGISTER
- SIDE WALL RETURN GRILLE
- T / AHU-1 — WALL MOUNTED THERMOSTAT (UNIT SERVED IS INDICATED)
- X / XXX — GRILLE TYPE / MIN. CFM
- 2 HOUR FIRE BARRIER
- D D — CONDENSATE PIPING
- R R — REFRIGERANT PIPING

(EACH END UNIT)
APPENDIX B

2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)
MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEM AND EQUIPMENT

Thermal Zone

winter dry bulb	16F
summer dry bulb	93F

Interior Design Conditions

winter dry bulb	72F
summer dry bulb	75F
relative humidity	50%

Building Heating Load (One end unit only) — 21,000TU/hr

Building Cooling Load (One end unit only) — 35,600 BTU/hr

Mechanical Spacing Conditioning System

Unitary — The tenant space is served the following systems:
(1) 3 Ton split system heat pump unit.

Boiler — Not applicable to this project.

Chiller — Not applicable to this project.

Equipment efficiencies

Efficiencies and outputs are listed on equipment schedules — See drawings.

(EACH MIDDLE UNIT)
APPENDIX B

2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)
MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEM AND EQUIPMENT

Thermal Zone

winter dry bulb	16F
summer dry bulb	93F

Interior Design Conditions

winter dry bulb	72F
summer dry bulb	75F
relative humidity	50%

Building Heating Load (One middle unit only) — 21,000TU/hr

Building Cooling Load (One middle unit only) — 35,600 BTU/hr

Mechanical Spacing Conditioning System

Unitary — The tenant space is served the following systems:
(1) 2.5 Ton split system heat pump unit.

Boiler — Not applicable to this project.

Chiller — Not applicable to this project.

Equipment efficiencies

Efficiencies and outputs are listed on equipment schedules — See drawings.

FLEXIBLE DUCTWORK SIZES
MAXIMUM CFM'S

SIZES	SUPPLY	RETURN
6"	90	90
8"	115	115
10"	250	250
12"	400	350
14"	550	500
16"	NA	900

FLEXIBLE DUCTWORK NOTES

1) INSTALL FLEXIBLE DUCTWORK RUNS AS STRAIGHT AS POSSIBLE.
2) DO NOT ALLOW FLEXIBLE DUCT TO SAG BETWEEN SUPPORTS.
3) DO NOT STRETCH A SHORT SECTION TO FIT A SLIGHTLY LONGER SECTION. THIS DISTORTS THE DUCT SHAPE AND IMPEDES AIR FLOW.
4) DO NOT CRUSH DUCTWORK TO FIT IN A SPACE SMALLER THAN ITS ORIGINAL OUTSIDE DIAMETER. MAXIMUM ALLOWABLE DEFORMATION IS 15% OF ORIGINAL VOLUME.
5) USE RIGID 90 DEGREE ELBOWS AT ANY LOCATION WHERE THE DUCTWORK BECOMES DISTORTED.
6) EXTREME CARE SHALL BE TAKEN TO ELIMINATE ANY REDUCTION IN FLOW WITHIN THE FLEXIBLE DUCTS. THE MECH. CONTRACTOR WILL BE REQUIRED TO REPLACE THE FLEXIBLE DUCT WITH RIGID IF PROPER FLOW IS NOT OBTAINED.
7) SIZE ALL FLEXIBLE DUCT SO AS NOT TO EXCEED MAXIMUM CFM'S GIVEN IN TABLE.

OUTDOOR AIR CALCULATIONS
(FOR EACH END UNIT)

OUTSIDE AIR PROVIDED BY NATURAL VENTILATION PER NCSBC: MECHANICAL CODE, SECTION 402. 1540 SQ.FT. TOTAL X 0.04 = 62 SQ.FT. REQUIRED FREE AREA.
OPERABLE DOORS AND WINDOWS TO EXTERIOR PROVIDE 82 SQ.FT. OF FREE AREA.

OUTDOOR AIR CALCULATIONS
(FOR EACH MIDDLE UNIT)

OUTSIDE AIR PROVIDED BY NATURAL VENTILATION PER NCSBC: MECHANICAL CODE, SECTION 402. 1380 SQ.FT. TOTAL X 0.04 = 54 SQ.FT. REQUIRED FREE AREA.
OPERABLE DOORS AND WINDOWS TO EXTERIOR PROVIDE 78 SQ.FT. OF FREE AREA.

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PEPPERTREE BUILDING 34
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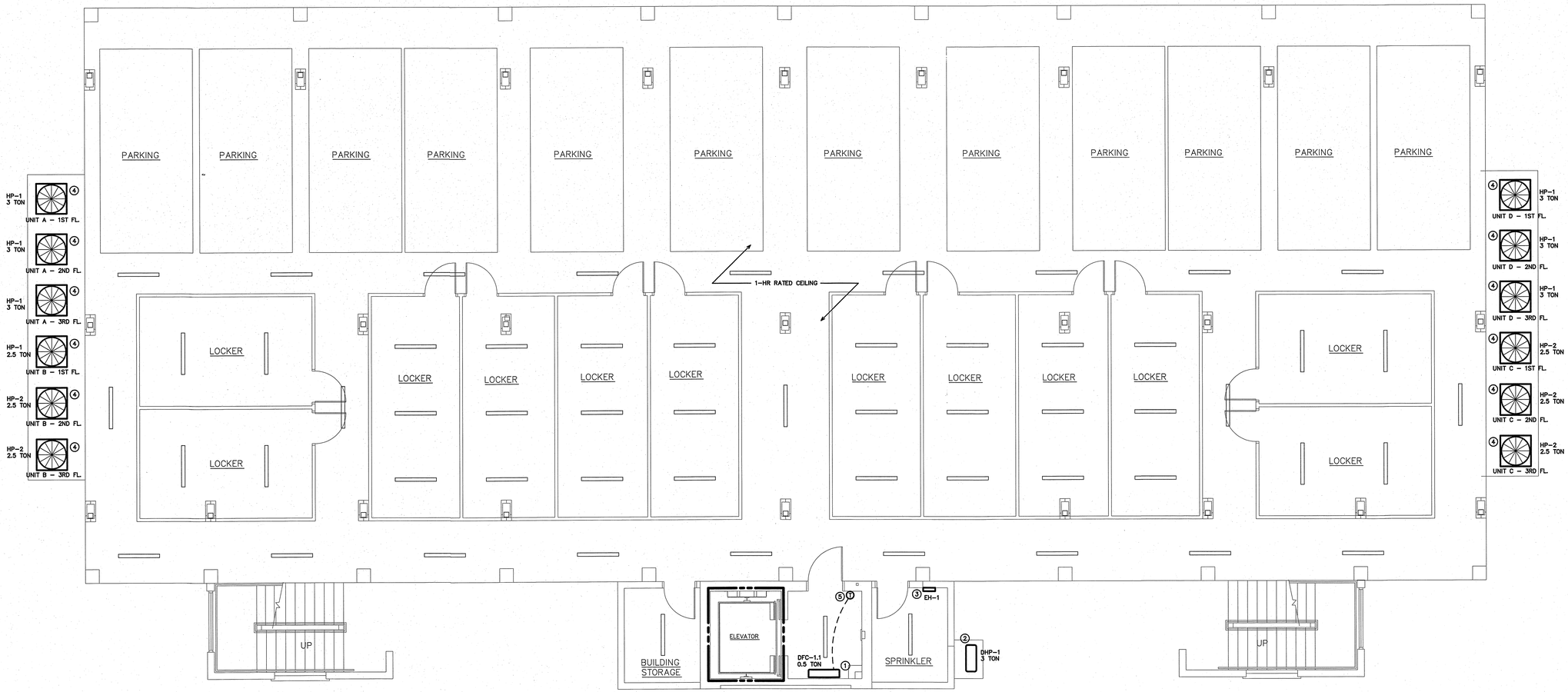
6/22/22
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E BURKE

HVAC SCHEDULES

21014

ISSUED: 10-27-2021
DWG BY: --
CKD BY: BEB
REVISIONS

SHEET NO.
M1



Peppertree 34 M2.0

WALL LEGEND

2-HOUR FIRE BARRIER

1 / M2.0 AUTOPARK LEVEL HVAC PLAN

SCALE: 3/16"=1'-0"

KEY NOTES FOR M-2.0

1. WALL MOUNTED DUCTLESS SPLIT SYSTEM FAN-COIL UNIT. MOUNT WITH BOTTOM AT 7'-0" AFF. RUN REFRIGERANT PIPING CONCEALED ABOVE CEILING AND WITHIN WALLS TO OUTDOOR HEAT PUMP UNIT. RUN PUMPED CONDENSATE DOWN CONCEALED IN WALL. STUB-OUT AT 8" ABOVE FINISH GRADE. TERMINATE WITH ELBOW TURNED DOWN IN PLANTED AREA.
2. DUCTLESS SPLIT SYSTEM OUTDOOR HEAT PUMP UNIT MOUNTED ON WOODEN PLATFORM. PLATFORM BY GENERAL CONTRACTOR. UNIT SERVES (4) INDOOR FAN-COIL UNITS IN ELEVATOR LOBBIES. PROVIDE ALL MANUFACTURER'S REQUIRED CLEARANCES AROUND UNIT.
3. ELECTRIC WALL HEATER. MOUNT WITH BOTTOM AT 8" AFF.
4. OUTDOOR HEAT PUMP UNIT MOUNTED ON WOODEN PLATFORM. PLATFORM BY GENERAL CONTRACTOR. PROVIDE ALL MANUFACTURER'S REQUIRED CLEARANCES AROUND UNIT. RUN REFRIGERANT PIPING TO INDOOR UNIT CONCEALED IN WALLS AND ABOVE CEILINGS.
5. MOUNT THERMOSTAT AT 48" AFF.

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

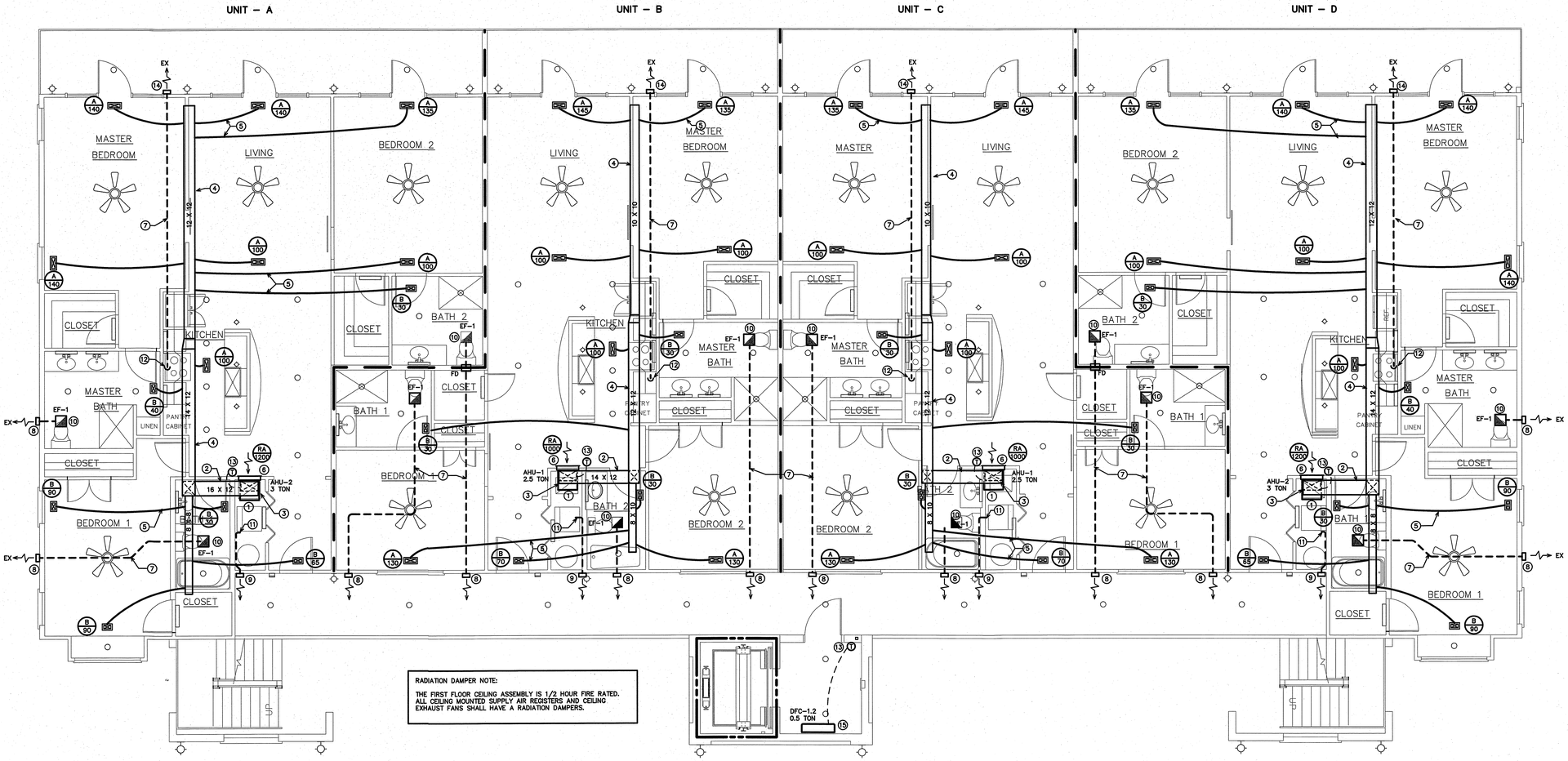
6/21/22
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E. BURKE

AUTOPARK LEVEL HVAC PLAN

21014

ISSUED:	10-18-2021
DWG BY:	WBE
CKD BY:	BEB
REVISIONS	

SHEET NO.
M-2.0



1 / M-2.1 IST FLOOR HVAC PLAN
SCALE: 3/16"=1'-0"

Peppertree 34 M2.1
WALL LEGEND

- 1/2-HOUR FIRE BARRIER
- 2-HOUR FIRE BARRIER

KEY NOTES FOR M-2.1

1. VERTICAL AIR HANDLING UNIT MOUNTED ON CLOSET FLOOR. SEE DETAIL 1/M-3.
2. RUN SUPPLY AIR DUCT IN LOWER CEILING AREA BELOW FLOOR JOIST FOR FLOOR ABOVE.
3. DUCT SHALL RISE THROUGH CEILING TO RUN IN DUCT CHASE IN CENTER OF FLOOR JOIST ABOVE. INSTALL RADIATION DAMPER AT PENETRATION OF CEILING.
4. RUN SUPPLY AIR DUCT ABOVE CEILING IN DUCT CHASE PROVIDED IN CENTER OF FLOOR JOIST FOR FLOOR ABOVE.
5. RUN FLEXIBLE DUCTS ABOVE CEILING BETWEEN FLOOR JOIST FOR FLOOR ABOVE AND THROUGH WEBS OF JOIST AS REQUIRED. (TYPICAL).
6. LOW SIDE WALL MOUNTED RETURN AIR FILTER GRILLE. MOUNT WITH BOTTOM AT 8" AFF.
7. RUN EXHAUST DUCTWORK ABOVE CEILING THROUGH WEBS AND BETWEEN FLOOR JOIST FOR FLOOR ABOVE. (TYPICAL).
8. WALL EXHAUST CAP EQUAL TO CARNES MODEL VXCBWK, 6" DIA. DUCT CONNECTION ALUMINUM WITH BACKDRAFT DAMPER AND BIRDSCREEN.
9. WALL EXHAUST CAP FOR DRYER VENT, ALUMINUM WITH 4" DIA. DUCT CONNECTION, BACKDRAFT DAMPER. WALL CAP SHALL BE LOW ON WALL AT 8" AFF.
10. TOILET EXHAUST FAN SHALL HAVE CEILING RADIATION DAMPER.
11. 4" DIA. RIGID STEEL DRYER VENT DUCT. RUN DUCT EXPOSED LOW ON WALL TO WALL EXHAUST CAP.
12. CONNECT 4" DIA. RIGID STEEL DUCT TO DUCT COLLAR ON RANGE HOOD. RUN DUCT UP TO ABOVE CEILING.
13. MOUNT THERMOSTAT AT 48" AFF.
14. WALL EXHAUST CAP FOR RANGE HOOD VENT, ALUMINUM WITH 4" DIA. DUCT CONNECTION, BACKDRAFT DAMPER.
15. WALL MOUNTED DUCTLESS SPLIT SYSTEM FAN-COIL UNIT. MOUNT WITH BOTTOM AT 7'-0" AFF. RUN REFRIGERANT PIPING CONCEALED ABOVE CEILING AND WITHIN WALLS TO OUTDOOR HEAT PUMP UNIT. RUN PUMPED CONDENSATE DOWN CONCEALED IN WALL. STUB-OUT AT 8" ABOVE FINISH GRADE. TERMINATE WITH ELBOW TURNED DOWN IN PLANTED AREA.

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

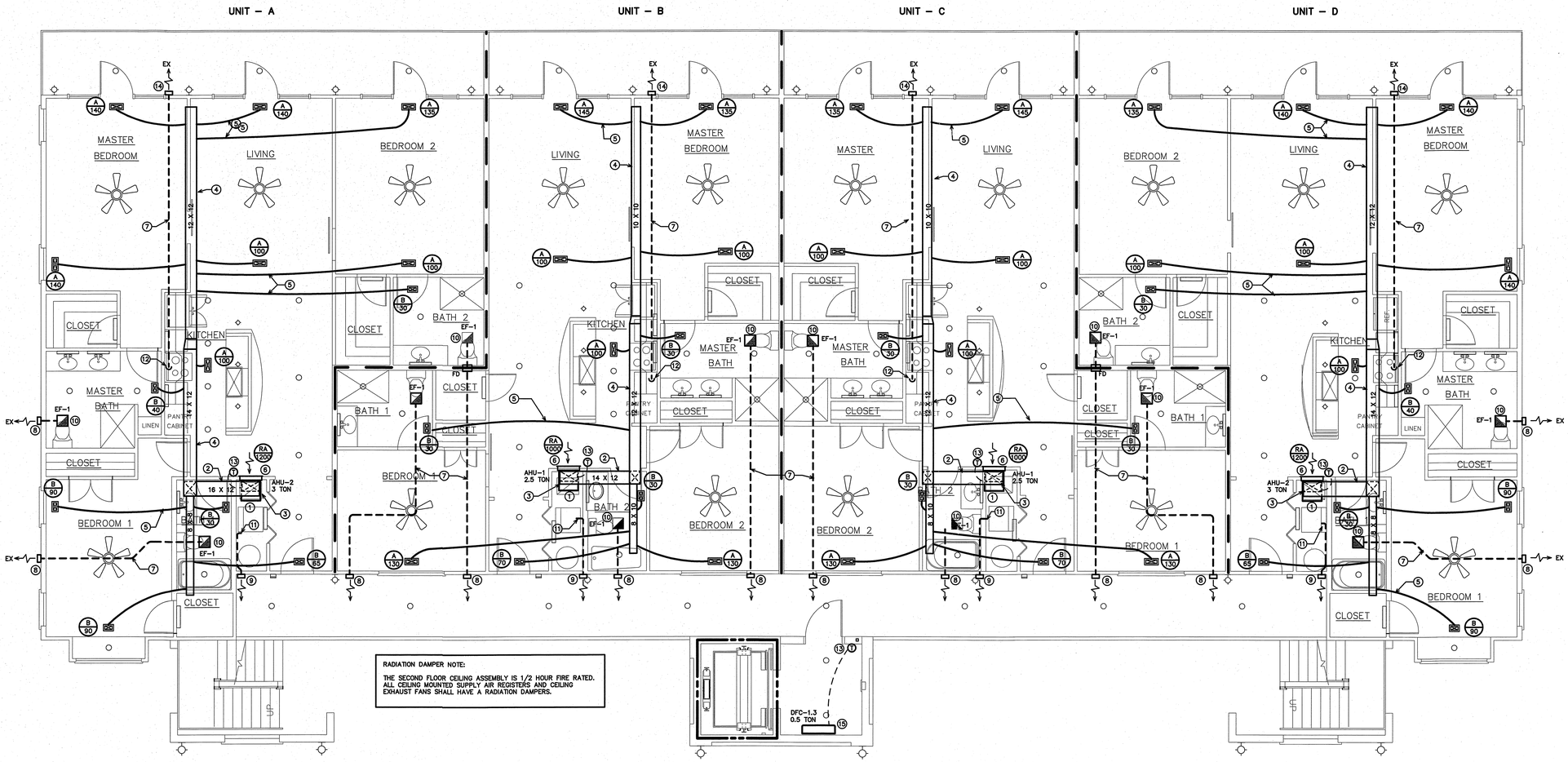
6/21/22
NORTH CAROLINA PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E BURKE

IST FLOOR HVAC PLAN

21014

ISSUED: 10-29-2021
DWG BY: WBE
CKD BY: BEB
REVISIONS

SHEET NO.
M-2.1



RADIATION DAMPER NOTE:

THE SECOND FLOOR CEILING ASSEMBLY IS 1/2 HOUR FIRE RATED. ALL CEILING MOUNTED SUPPLY AIR REGISTERS AND CEILING EXHAUST FANS SHALL HAVE A RADIATION DAMPERS.

1 M-2.2 2ND FLOOR HVAC PLAN

SCALE: 3/16"=1'-0"

Peppertree 34 M2.2

WALL LEGEND

1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER

KEY NOTES FOR M-2.2

1. VERTICAL AIR HANDLING UNIT MOUNTED ON CLOSET FLOOR. SEE DETAIL 1/M4.
2. RUN SUPPLY AIR DUCT IN LOWER CEILING AREA BELOW FLOOR JOIST FOR FLOOR ABOVE.
3. DUCT SHALL RISE THROUGH CEILING TO RUN IN DUCT CHASE IN CENTER OF FLOOR JOIST ABOVE. INSTALL RADIATION DAMPER AT PENETRATION OF CEILING.
4. RUN SUPPLY AIR DUCT ABOVE CEILING IN DUCT CHASE PROVIDED IN CENTER OF FLOOR JOIST FOR FLOOR ABOVE.
5. RUN FLEXIBLE DUCTS ABOVE CEILING BETWEEN FLOOR JOIST FOR FLOOR ABOVE AND THROUGH WEBS OF JOIST AS REQUIRED. (TYPICAL).
6. LOW SIDE WALL MOUNTED RETURN AIR FILTER GRILLE. MOUNT WITH BOTTOM AT 8" AFF.
7. RUN EXHAUST DUCTWORK ABOVE CEILING THROUGH WEBS AND BETWEEN FLOOR JOIST FOR FLOOR ABOVE. (TYPICAL).
8. WALL EXHAUST CAP EQUAL TO CARNES MODEL VXCBWK, 6" DIA. DUCT CONNECTION ALUMINUM WITH BACKDRAFT DAMPER AND BIRDSCREEN.
9. WALL EXHAUST CAP FOR DRYER VENT, ALUMINUM WITH 4" DIA. DUCT CONNECTION, BACKDRAFT DAMPER. WALL CAP SHALL BE LOW ON WALL AT 8" AFF.
10. TOILET EXHAUST FAN SHALL HAVE CEILING RADIATION DAMPER.
11. 4" DIA. RIGID STEEL DRYER VENT DUCT. RUN DUCT EXPOSED LOW ON WALL TO WALL EXHAUST CAP.
12. CONNECT 4" DIA. RIGID STEEL DUCT TO DUCT COLLAR ON RANGE HOOD. RUN DUCT UP TO ABOVE CEILING.
13. MOUNT THERMOSTAT AT 48" AFF.
14. WALL EXHAUST CAP FOR RANGE HOOD VENT, ALUMINUM WITH 4" DIA. DUCT CONNECTION, BACKDRAFT DAMPER.
15. WALL MOUNTED DUCTLESS SPLIT SYSTEM FAN-COIL UNIT. MOUNT WITH BOTTOM AT 7'-0" AFF. RUN REFRIGERANT PIPING CONCEALED ABOVE CEILING AND WITHIN WALLS TO OUTDOOR HEAT PUMP UNIT. RUN PUMPED CONDENSATE DOWN CONCEALED IN WALL. STUB-OUT AT 8" ABOVE FINISH GRADE. TERMINATE WITH ELBOW TURNED DOWN IN PLANTED AREA.

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

6/21/22

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E BURKE

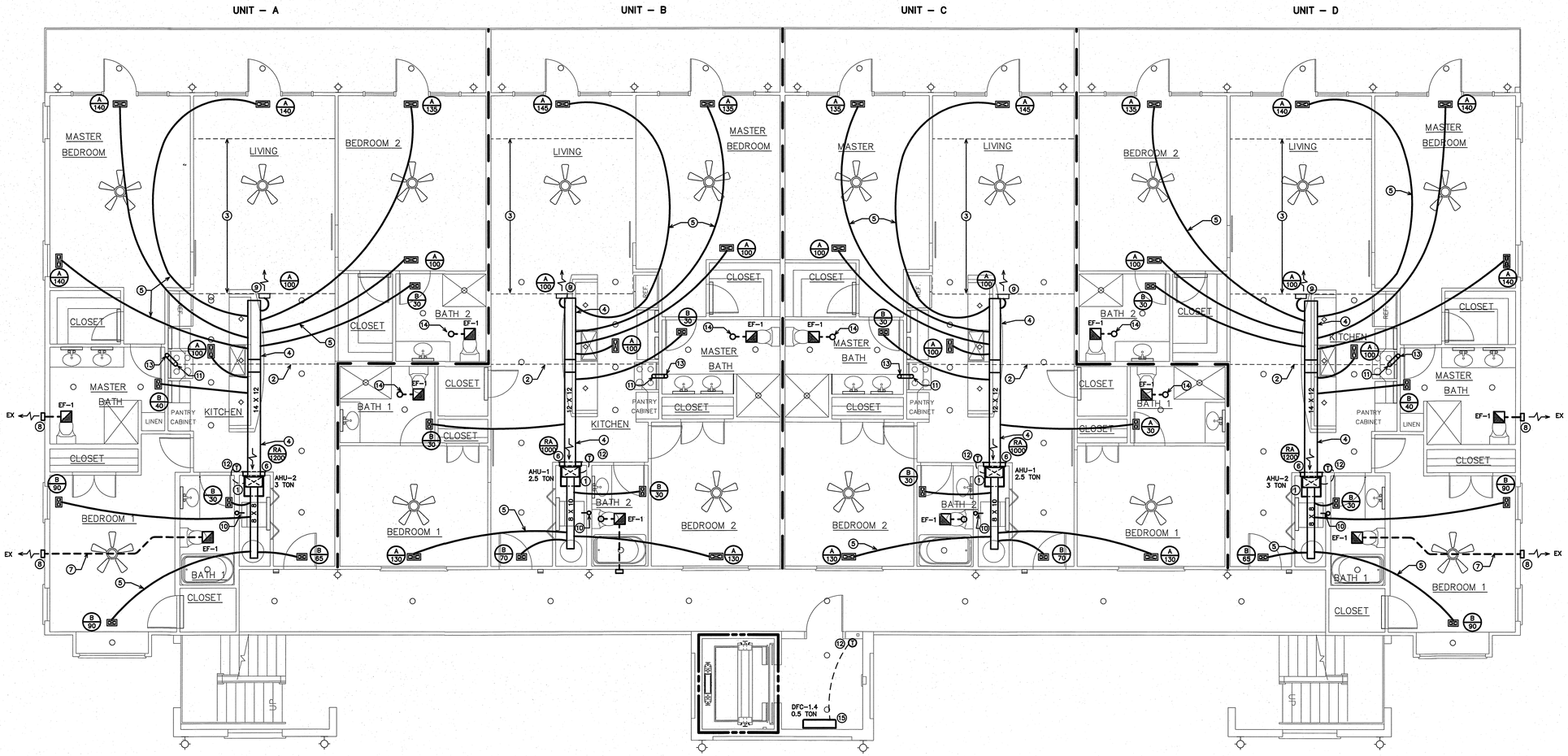
2ND FLOOR HVAC PLAN

21014

ISSUED:	10-29-2021
DWG BY:	WBE
CKD BY:	BEB

REVISIONS

SHEET NO.
M-2.2



3RD FLOOR HVAC PLAN

SCALE: 3/16"=1'-0"

Peppertree 34 M2.3

WALL LEGEND

1/2–HOUR FIRE BARRIER

2–HOUR FIRE BARRIER

KEY NOTES FOR M–2.3

1. VERTICAL AIR HANDLING UNIT MOUNTED ON CLOSET FLOOR. SEE DETAIL 1/M–3.
2. RIDGE LINE IN CEILING.
3. AREA OF DORMER IN CEILING. NO DUCTWORK CAN BE IN THIS AREA.
4. RUN SUPPLY AIR MAIN DUCT ABOVE CEILING, BETWEEN AND PARALLEL TO ROOF TRUSSES.
5. RUN FLEXIBLE DUCTS ABOVE CEILING BETWEEN ROOF TRUSSES AND THROUGH WEBS OF ROOF TRUSSES AS REQUIRED. (TYPICAL).
6. LOW SIDE WALL MOUNTED RETURN AIR FILTER GRILLE. MOUNT WITH BOTTOM AT 8" AFF.
7. RUN EXHAUST DUCTWORK ABOVE CEILING THROUGH WEBS OF ROOF TRUSSES. (TYPICAL)
8. WALL EXHAUST CAP EQUAL TO CARNES MODEL VXCBWK, 6" DIA. DUCT CONNECTION ALUMINUM WITH BACKDRAFT DAMPER AND BIRDSCREEN.
9. SUPPLY AIR REGISTER MOUNTED ON VERTICAL WALL IN DORMER AREA.
10. STUB–OUT 4" DIA. RIGID STEEL DUCT FOR DRYER DUCT AT 8" ABOVE FINISH FLOOR. RUN 4" DIA. RIGID STEEL UP IN WALL TO ROOF MOUNTED LOW PROFILE DRYER VENT EXHAUST CAP, ALUMINUM, WITH BACKDRAFT DAMPER.
11. CONNECT 4" DIA. RIGID STEEL DUCT TO DUCT COLLAR ON RANGE HOOD. RUN DUCT UP TO ABOVE CEILING.
12. MOUNT THERMOSTAT AT 48" AFF.
13. LOW PROFILE ROOF EXHAUST CAP FOR RANGE HOOD VENT, ALUMINUM WITH 4" DIA. DUCT CONNECTION, BACKDRAFT DAMPER.
14. 6" DIA. RIGID EXHAUST DUCT UP TO ROOF MOUNTED LOW PROFILE EXHAUST CAP WITH ALUMINUM CONSTRUCTION, BIRDSCREEN AND BACKDRAFT DAMPER EQUAL TO CARNES MODEL VXCBRK.
15. WALL MOUNTED DUCTLESS SPLIT SYSTEM FAN–COIL UNIT. MOUNT WITH BOTTOM AT 7'–0" AFF. RUN REFRIGERANT PIPING CONCEALED ABOVE CEILING AND WITHIN WALLS TO OUTDOOR HEAT PUMP UNIT. RUN PUMPED CONDENSATE DOWN CONCEALED IN WALL. STUB–OUT AT 8" ABOVE FINISH GRADE. TERMINATE WITH ELBOW TURNED DOWN IN PLANTED AREA.

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

6/21/22

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E. BURKE

3RD FLOOR FLOOR HVAC PLAN

21014

ISSUED:	10–29–2021
DWG BY:	WBE
CKD BY:	BEB

REVISIONS

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SHEET NO.

M–2.3

DIVISION 15 B – HEATING, VENTILATING AND AIR CONDITIONING

1.1 DESCRIPTION OF THE WORK

A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:

1. Heating, ventilation, and air conditioning equipment.
2. Ductwork.
3. Grilles and diffusers.
4. Controls and control wiring.
5. Condensate piping.

B. All work under this contract shall be installed in compliance with the latest edition of the following codes and standards insofar as they apply:

1. ASHRAE Guide
2. National Electric Code.
3. 2018 NC State Building Code: Mech Code.
4. The Electrical Specifications for this project.
5. SMACNA HVAC Duct Construction Standards.
6. All local codes and ordinances.
7. ARI rating.
8. 2018 NC State Building Code: Energy Conservation Code.

C. These codes are minimum standards. If codes require a more stringent method of construction than the specifications require, the codes shall govern.

D. The HVAC Contractor shall be licensed in North Carolina and have all local licenses required for the work.

1.2 INTENT

A. The intent of these specification and the accompanying drawing is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The HVAC Contractor shall take this into consideration and include in his bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

A. Coordinate work with other contractors. Notify Owner of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Owner for a decision before resuming operations.

B. Locations shown are approximate. The HVAC Contractor shall verify with owner, the placement of equipment, fixtures, outlets, etc. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required.

C. Changes in duct or piping design caused by obstructions shall be submitted to Engineer in sketch form for study and comment prior to execution. Additional cost will not be allowed for this type of work.

1.4 SHOP DRAWINGS

A. Shop drawings shall be submitted for all major items of equipment. These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified. Shop drawings shall include but are not limited to the following:

1. All equipment and accessories.
2. Grilles and diffusers.
3. Unit sizes and requirements.

PART 2 –PRODUCTS

2.1 EQUIPMENT

A. All air handling devices must have the manufacturer's recommended filter rack, for 1" thick filters.

2.2 PIPING

A. Condensate drain piping shall be PVC pipe. Provide tee and plug at changes in direction. Route pipe to proper termination point. All condensate piping shall be insulated with flexible elastomeric insulation. Provide copper piping in plenum areas.

2.3 DUCTWORK

A. Ductwork shall be built in accordance with SMACNA HVAC Duct construction standards. Furnish and install all supply, return, and ventilation ductwork shown, together with splitters, deflectors, dampers, etc. This work shall be constructed of new galvanized prime grade steel sheets. The gauges of metal to be used and the construction and bracing of joints shall be in accordance with the SMACNA recommendations.

B. Seal all sheet metal joints with fiber impregnated mastic.

C. Support from building structure on strap hangers not over 8 feet apart.

D. Use manufactured turning vanes in each elbow where required or where indicated on drawings.

E. Flexible connectors shall be 3 inches wide, of fireproof material and used to isolate noise between equipment and ductwork on supply and return side of all units.

F. Round runouts, where used, shall be built in accordance with the above standards, and each runout shall also have manufactured side take off, adjustable quadrant damper at all accessible locations and shall be of Owens Corning INL–25 flexible duct with UL label. Flex duct lengths allowed up to 14 feet. Duct must be supported with sufficient hangers in order to prevent sags. Serpentine routing will not be permitted. Quadrant damper to be 22 gauge easily adjustable manually with exterior handle (similar to H&C Kwik–set) and is not to be mounted in side take–off.

2.4 DUCT INSULATION (LOW PRESSURE)

A. All insulation, linings, coverings and adhesives shall have a flame spread classification of 25 or less and a smoke developed rating of not more than 50, exposed exterior piping.

B. All duct insulation shall comply with Section 604, of the N. C. Building Code: Mechanical Code

C. All supply and return ductwork shall be completely insulated, either internally or externally.

D. Rectangular ductwork shall be lined with two–inch thick, 1.5 lb. per cubic foot density, duct liner, Armstrong, CSG Ultraliner, Johns Manville or approved equal.

E. As an alternative to duct liner rectangular duct may be wrapped with Class 1 – 2", 3/4 lb. density (R–6.5) thick reinforced foil back fiberglass insulation, Owens–corning Series ED or equal. Tape shall be Kraft reinforced foil tape or equal.

F. Insulate all exhaust ductwork with with duct wrap insulation.

G. Insulation shall be held inplace with adhesive and welding pins 18" on center.

H. Duct dimensions shown on the drawings are Net Inside Dimensions

2.5 THERMOSTATS

A. Provide programmable electronic thermostats.
B. Submit proposed thermostats for approval.

2.6 ROOF PENETRATIONS

A. Provide pre–manufactured roof flashings compatible with equipment served.
B. Coordinate roof work with roof system used. Provide proper flashing as required.
C. Provide 1 year warranty on all roof work performed.

2.7 DUCT SMOKE DETECTORS

A. Duct detectors are not required since units air flows are 2000 cfm or less per NCSBC: Mechanical Code, Section 606.2.

PART 3 – EXECUTION

3.1 PIPING

A. The HVAC Contractor shall coordinate such routing with others, to line his work true to adjacent spaces and in a workmanlike manner and to use only short radius 90 degree elbows. Where required, piping to be sturdily supported and separated in a manner satisfactory to the Engineer.

B. The HVAC Contractor shall paint all exterior refrigerant piping. with UV resistant paint as recommended by the closed cell insulation manufacturer.

C. Insulate all condensate lines for their entire length with 1/2" closed cell insulation. Install insulation per the manufacturers recommendations.

3.2 ELECTRICAL WORK

A. The electrical contractor shall provide all switches, starters, wire conduit for the air conditioning, heating and ventilation equipment. Control wiring shall be by the heating and air conditioning contractor.

B. HVAC Contractor is responsible for verifying that power terminals have been properly grounded prior to operating equipment and must find connections to all equipment including control wiring.

C. All materials and workmanship shall be in accordance with the electrical specifications for the project. All wiring shall be color coded, and as–built wiring diagram prepared showing all connections and colors of wiring and delivered to the Owner.

D. Furnish certification for acceptance of control wiring from local electrical inspector prior to acceptance.

3.3 CLEAN UP

A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.

B. Furnish one box of clean filters, for each size required, at the time of final inspection to the owner.

3.4 OPERATOR'S MANUAL AND DIAGRAM

A. The HVAC Contractor shall prepare in one copy a manual describing the proper maintenance and operation of the systems. This manual shall not consist of standard factory instructions (although these may be included) but shall be prepared to describe this particular job.

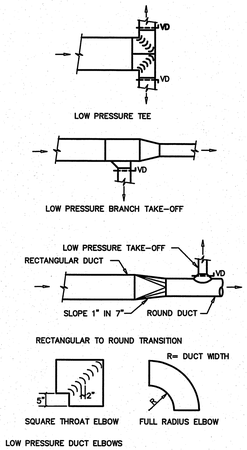
B. The manual shall be bound, indexed, dated and signed by the HVAC Contractor.

C. Qualified representative of the HVAC contractor shall meet with the designated representatives of the Owner and the Owner's representative shall be instructed in the proper operation and maintenance of the control system and other systems.

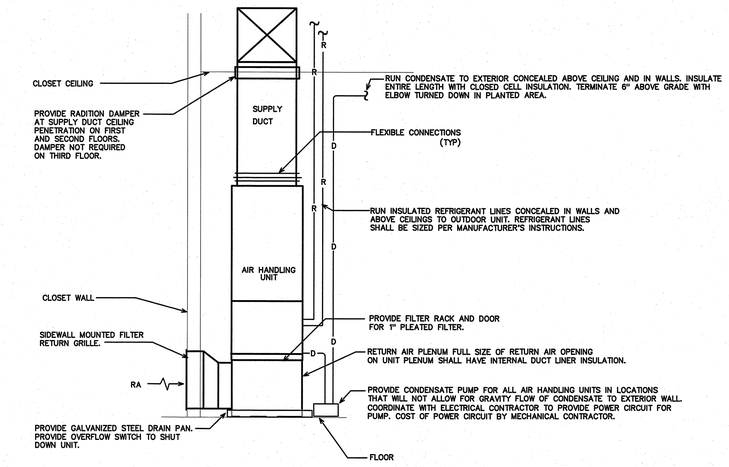
3.5 GUARANTEE

A. Guarantee all materials and labor included in the HVAC work for a period of one year from date of final acceptance by the owner. In addition, motor compressors shall be a nonprorated five year warranty. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the owner or tenant.

B. All air flows must be measured and balanced to within 10% of design airflows. All equipment used must have a current certification. Provide two copies of the balance report to the owner at closeout. The HVAC contractor shall return and re–balance to occupant comfort after 90 days from close–out
Provide all balance dampers needed for satisfactory operation regardless if shown on the drawings or not, and shift location of thermostats thermostats if required for occupancy comfort.



3 / M-3 DUCT CONSTRUCTION DETAILS
SCALE: NOT TO SCALE



1 / M-3 TYPICAL VERTICAL AIR HANDLING UNIT DETAIL
SCALE: NOT TO SCALE

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA REGISTERED PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E BURKE

HVAC SPECIFICATIONS & DETAILS

21014

ISSUED:	10–27–2021
DWG BY:	WBE
CKD BY:	BEB

REVISIONS

SHEET NO.
M-3

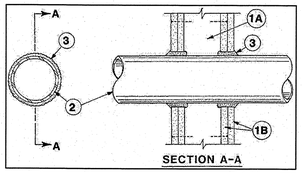
Sytem No. W-L-1001

F Ratings --- 1, 2, 3 and 4 Hr (See Items 2 and 3)

T Ratings --- 0, 1, 2, 3, and 4 Hr (See Item 3)

L Rating At Ambient – less than 1 CFM/sq ft

L Rating At 400 F – less than 1 CFM/sq ft



SECTION A-A

1. **Wall Assembly ---** The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

   A. **Studs ---** Wall framing may consist of either wood studs (max 2 h fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide by 1-3/8 in. deep channels spaced max 24 in. OC.

   B. **Gypsum Boards ---** Nom 1/2 or 5/8 in. thick, 4 ft. wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in.

2. **Through-Penetrant ---** One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit, or tubing and periphery of opening shall be min of 0 in. (point contact) to max 2 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

   A. **Steel Pipe ---** Nom 24 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

   B. **Iron Pipe ---** Nom 24 in. diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.

   C. **Conduit ---** Nom 6 in. diam (or smaller) steel conduit or nom 4 in. diam (or smaller) steel electrical metallic tubing.

   D. **Copper Tubing ---** Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.

   E. **Copper Pipe ---** Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.

   F. **Through Penetrating Products --- Flexible Metal Piping ---** The following types of steel flexible metal gas piping may be used:

   1. Nom 2 in. diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

   OMEGA FLEX INC

   2. Nom 1 in. diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

   GASTITE, DIV OF TITEFLEX

   3. Nom 1 in. diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

   WARD MFG LLC

Fill, Void or Cavity Materials --- Caulk or Sealant --- Min 5/8, 1-1/4, 1-7/8 and 2-1/2 in. thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

Max Pipe or Conduit Diam in	F RATING Hr	T RATING Hr
1	1 or 2	0+, 1 or 2
1	3 or 4	3 or 4
4	1 or 2	0
6	3 or 4	0
12	1 or 2	0

+When copper pipe is used, T Rating is 0 hr.

3M COMPANY --- CP 25WB+ or FB-3000 WT.

*Bearing the UL Classification Mark

DIVISION 16 – ELECTRICAL

PART 1 – GENERAL

1.1 DESCRIPTION OF THE WORK

A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
   1. Electrical service and service equipment.
   2. Lighting and power distribution system.
   3. Provide lighting fixtures selected by owner with lamps to match.
   4. Wiring devices, boxes, cover plates, etc.
   5. Source of power for all items of equipment.
   6. Grounding.
   7. Other requirements and/or systems where shown.

B. All work shall be complete and items, equipment, etc., shall be electrically connected for proper and correct operation.

C. All work under this contract shall be installed in accordance with the latest edition of the following codes and standards insofar as they apply:
   1. The 2017 National Electrical Code.
   2. The National Electrical Safety Code.
   3. Underwriter's Laboratories, Inc., Standards and approved listings.
   4. Electrical Testing Labatories standards.
   5. North Carolina Building Code, Latest Edition and Revisions.
   6. All local codes and ordinances.

D. The Electrical Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work.

E. Obtain all permits, licenses, inspections, etc., required for the work and pay for the same. Furnish final certificate of inspection and approval from the electrical inspector having jurisdiction prior to acceptance of the work.

F. All work shall be done by skilled mechanics and shall present a neat, trim, workmanlike condition when complete.

1.2 INTENT

A. The intent of these specifications and the accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Electrical Contractor shall take this into consideration and include in his base bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.

B. Locations shown are approximate. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required. Coordinate all locations with architect before any rough-in.

1.4 SHOP DRAWINGS

A. Shop drawings shall be submitted for panels and service equipment, lighting, wiring devices, and cover plates. These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified.

PART 2 – PRODUCTS AND MATERIALS

2.1 GENERAL

A. All material shall be new and shall bear the manufacturer's name, trade name, and UL label where such standard has been established for the particular material. Materials shall be the standard products of manufacturer's regularly engaged in the manufacturer of the required type of equipment and the manufacturer's latest approved design.
   1. Boxes installed in concealed locations shall be set flush with the finished surfaces.
   2. Provide rated boxes in all fire barriers & walls installed per code.

2.2 NOT USED

2.3 CONDUCTORS

A. Conductors shall be color coded, sizes #8 and larger may be color taped on the job. Color coding shall be: Standard Practice.

B. Conductors shall be manufactured by Dodge, Southwire or approved equal. Conductors shall meet the latest requirements of NEMA and IPCEA and shall be UL approved.

C. Metallic sheathed "MC" cable may be used where allowed by N.E.C.

D. Conductors shall be spliced and taped as follows:
   1. Size #10 and #12, use Ideal "Wing Nuts" or T&B "Piggy" connectors. Connectors shall be rated for 150 degrees C for use in recessed lighting fixtures.
   2. Size #8 and larger shall be solderless screw and screw-clamping type, smoothly covered and shaped with rubber gum type with final cover vinyl plastic electrical type. In lieu of rubber gum and vinyl plastic type, factory fabricated approved preformed insulating covers may be used. All connectors shall be UL approved.
   3. No split-bolt type connectors may be used.

E. All branch wire and connections shall be copper and sized per National Electric Code.

F. All conductors shall be continuous without splice between junction, outlet, device boxes, etc. No splicing will be permitted in panelboard cabinets, safety switches, etc.

G. All wiring in mechanical spaces shall be plenum rated.

H. Provide GFI protection within 6'-0" of any sink.

I. All multi-wire branch circuits shall comply with 2017 NEC, 210.4(B).

J. All wiring at medical facilities shall comply with 2017 NEC, 517.1.

2.4 PANELBOARDS, SAFETY SWITCHES

A. Panelboards shall comply with NEMA Standard PB 1 – Latest Edition and as manufactured by Square D or ITE-Siemens.

B. The contractor shall be responsible for correctly phasing the circuits in the panelboards.

C. Safety switches shall be general duty type, size and rating as required for load service. Safety switches shall be fused or unfused as shown and/or as required. Safety switches serving motor loads shall be horsepower rated for load served.

2.5 NOT USED

2.6 WIRING DEVICES

A. Wiring devices shall be commercial grade by Bryant, Leviton, or approved equal. With matching cover. Color by Architect.

B. Wiring devices installed under a Kitchen Hood shall have stainless steel covers.

C. Wiring devices installed over counters shall comply with ANSI A117.1.

2.7 NOT USED

2.8 CONDUIT

A. PVC conduit will be allowed where N.E.C. approved.

B. All service conduit shall be rigid where exposed below 8'-0" AFF or exposed to the elements or hazardous conditions.

PART 3 – EXECUTION

3.1 CIRCUIT GROUNDING

A. All circuits shall contain an insulated, green, copper grounding conductor, sized in accordance with Table 250-95 of the NEC. Grounding conductors shall be connected to equipment grounding bus in panelboard and securely attached and grounded to the device or enclosure at the other end.

3.2 GROUNDING TYPE CONVENIENCE OUTLETS AND SWITCHES

A. Outlets and switches shall be solidly grounded to equipment grounding system with a green colored insulated conductor. Electrical connections shall be continuous from equipment ground bus in panelboard to the hex nut on the convenience outlet or switch.

3.3 MOTORS

A. All motors shall be connected to conduit system with short length (minimum length 24" and maximum length 36") of flexible liquidtight conduit.

3.4 NOT USED

3.5 EQUIPMENT LABELING

A. Provide permanent name plates for all panelboards, safety switches, wiring troughs, etc., for identification of equipment controlled, services, etc. Nameplates shall be securely and permanently attached to equipment with stainless steel screws. Nameplates shall include the name of the equipment and where it is fed from.

B. All switch plates, receptacle plates and outlet covers shall be labeled with machine printed vinyl labels identifying the circuit(s) within.

C. All empty conduit runs shall be identified and indicated where they terminate.

D. Provide typewritten directory in each panelboard to clearly identify each circuit, service, etc.

3.6 NOT USED

3.7 NOT USED

3.8 JUNCTION AND/OR PULL BOXES

A. Boxes shall be installed where necessary to avoid excessive runs and/or too many bends between outlets.

3.9 PULL WIRE

A. Leave pull wire in each empty conduit run.

3.10 NOT USED

3.11 GROUNDING

A. All grounding shall be in accordance with Article 250 of the NEC. In addition, the following requirements shall be met:
   1. Grounding conductors shall be installed as to permit the shortest and most direct path from equipment to ground. All connections to grounding conductors shall be accessible.
   2. Equipment ground continuity shall be maintained through flexible metal conduit.
   3. All wiring devices equipped with grounding connection shall be solidly grounded to ground system with grounding conductors.
   4. The frame of all lighting fixtures shall be securely grounded to the equipment ground system with grounding conductors.
   5. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately bonded to ground.
   6. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately bonded to ground.

3.12 ELECTRICAL WORK IN CONNECTION WITH OTHER WORK

A. PLUMBING WORK: The Electrical Contractor shall furnish and install switches and devices as shown and electrically connect electric water heaters, etc. All other electrical work required will be performed by the PLUMBING CONTRACTOR.

B. HEATING AND AIR CONDITIONING WORK: The Electrical Contractor shall provide all disconnect switches, starters, and associated hardware for the equipment furnished including all line and load side wiring and conduit. Final connections to the equipment will be by the HVAC contractor. All control wiring will be accomplished by the HVAC contractor. Coordinate all work associated with the HVAC contractor.

3.13 CLEAN UP

A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.

3.14 GUARANTEE

A. Guarantee all materials and labor included in the electrical work for a period of one year from date of final acceptance by the Owner. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the Owner.

GENERAL NOTES

1 ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES HAVING JURISDICTION.

2 ALL BRANCH CIRCUIT CONDUCTORS TO BE COPPER (SERVICE CONDUCTORS MAY BE ALUMINUM WITH SAME AMPACITY AS COPPER CONDUCTORS. RE-SIZE CONDUCTERS AND CONDUIT PER NEC.)

3 ALL CIRCUITS TO BE 2 #12, 1 #12 GND IN 1/2" EMT CONDUIT AS A MINIMUM. PROVIDE WIRING FOR LARGER CIRCUITS AS REQUIRED BY NEC. RIGID CONDUIT IS REQUIRED WHERE EXPOSED BELOW 8'-0" A.F.F.

4 ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FEET SHALL BE PROVIDED WITH A PULL WIRE OR FISH TAPE/CORD.

5 CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.

6 ALL BRANCH CIRCUIT CONDUCTORS FROM THE PANEL TO THE FIRST OUTLET SHALL BE INCREASED TO THE NEXT LARGER SIZE WHERE THE LENGTH OF THE HOME RUN EXCEEDS 120 FEET ON 120V AND 208V CIRCUITS.

7 THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON DRAWINGS OR NOT.

8 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELBOARDS.

9 THE ELECTRICAL CONTRACTOR SHALL VERIFY THE TYPE OF CEILING SYSTEM WITH THE GENERAL CONTRACTOR TO INSURE THAT ALL LIGHTING FIXTURES ARE COMPATIBLE WITH THE CEILING SYSTEM BEING INSTALLED. LIGHTING FIXTURES SHOULD NOT BE ORDERED UNTIL TYPE OF CEILING HAS BEEN VERIFIED.

10 ELECTRICAL REQUIREMENTS INDICATED ON DRAWINGS MAY DIFFER FROM ACTUAL EQUIPMENT FURNISHED. IF FURNISHED EQUIPMENT DIFFERS FROM RATINGS ON DRAWINGS CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER FOR APPROPRIATE ACTION TO BE TAKEN.

11 IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE EXACT BREAKER REQUIREMENTS FOR ALL EQUIPMENT PRIOR TO ORDERING PANEL. ADJUST BREAKER AND WIRE SIZES AS REQUIRED.

12 PROVIDE BOXES, JACKS, WIRING AND CONDUIT FROM LOCATIONS SHOWN TO MTP LOCATION. VERIFY EXACT REQUIREMENTS WITH OWNER.

13 ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS FOR MECHANICAL & PLUMBING EQUIPMENT. DISCONNECTS SHALL BE PER MANUFACTURES RECOMMENDATIONS AND FUSED PER NAME PLATE. PROVIDE NEMA 3R ENCLOSURES ON EXTERIOR. COORDINATE FUSE SIZES.

14 THE EC SHALL MEET WITH THE ARCHITECT AND TENANT PRIOR TO INSTALLING OUTLET BOXES TO VERIFY LOCATIONS AND MOUNTING HEIGHTS OF RECEPTACLES AND TELEPHONE OUTLETS.

ELECTRICAL LEGEND

- X — LIGHT FIXTURE: LETTER DENOTES FIXTURE TYPE (REFER TO LIGHTING PLAN AND FIXTURE SCHEDULE). NL = NIGHT LIGHT (NOT SWITCHED/ALWAYS ON)
- U, WP/GFI — DUPLEX RECEPTACLE – 120V; MOUNT 18" TO CENTER AFF UNLESS NOTED OTHERWISE; "WP" INDICATES WEATHER PROOF, "GFI" INDICATES GROUND FAULT CURRENT INTERRUPT PROTECTED. 'U' INDICATES RECEPTACLE WITH (2) USB PORTS.
- QUADRAPLEX RECEPTACLE – 120V
- FLOOR OR CEILING OUTLET (AS NOTED) – 120V
- SPECIAL PURPOSE RECEPTACLE – REFER TO POWER PLAN AND PANEL SCHEDULE
- S — LIGHT SWITCH
- S_M — SWITCH WITH INTEGRAL PIR/US MOTION SENSOR FOR AUTOMATIC SHUT-OFF WITH UP TO 2 HOUR ADJUSTABLE DELAY.
- S_D — DIMMABLE LIGHT SWITCH
- (S) — MOTOR RATED SWITCH
- (J) — JUNCTION BOX
- TELE/DATA OUTLET – PROVIDE JUNCTION BOX WITH CONDUIT BACK TO MTP. PROVIDE (1) TELEPHONE JACK AND (1) CAT 5 DATA JACK
- SINGLE-POLE HOMERUN TO PANELBOARD
- TWO-POLE OR 3-POLE HOMERUN TO PANELBOARD
- EXIT — EXIT LIGHT
- EMERGENCY EGRESS FIXTURE
- PC — PHOTOCELL (LED COMPLIANT)
- BRANCH CIRCUIT WIRING
- SWITCH LEG
- GROUND CONNECTION
- PANEL A — DISTRIBUTION PANELBOARD
- DISCONNECTING MEANS AS REQUIRED BY CODE
- SD — 120V SMOKE DETECTORS IN UNITS INTERCONNECT TO ALL SD'S IN EACH UNIT FOR COMMON ALARM. BATTERY BACK-UP.

APPENDIX B

2018 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

Energy Code: Prescriptive [X] Energy Cost Budget [ ]

ASHRAE 90.1: Prescriptive [ ] Energy Cost Budget [ ]

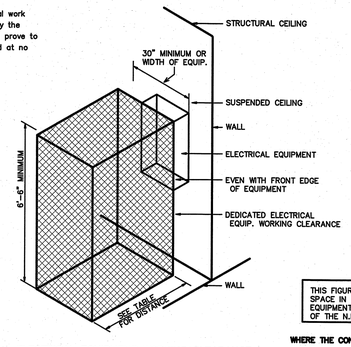
Lighting Schedule

lamp type required in fixture
number of lamps in fixture
ballast type used in fixture
number of ballasts in fixture
total wattage in fixture
→ See Light Fixture Schedule

total interior wattage specified vs. allowed 13943VA / 14580VA
total exterior wattage specified vs. allowed 727VA / 750VA

Additional Prescriptive Compliance

- [ ] 506.2.1 More Efficient Mechanical Equipment
- [ ] 506.2.2 Reduced Lighting Power Density
- [ ] 506.2.3 Energy Recovery Ventilation Systems
- [ ] 506.2.4 Higher Efficiency Service Water Heater
- [ ] 506.2.5 On-Site Supply of Renewable Energy
- [ ] 506.2.6 automatic Daylighting Control System



ELECTRICAL EQUIPMENT WORKING CLEARANCE PER ARTICLE 110-26 OF N.E.C.

WORKING CLEARANCES			
VOLTAGE TO GROUND NOMINAL	MIN. CLEAR DISTANCE IN FEET		
CONDITION:	1	2	3
0-150	3	3	3
151-600	3	3-1/2	4

THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF THE ELECTRICAL EQUIPMENT REQUIRED BY SECTION 110-16 OF THE N.E.C.

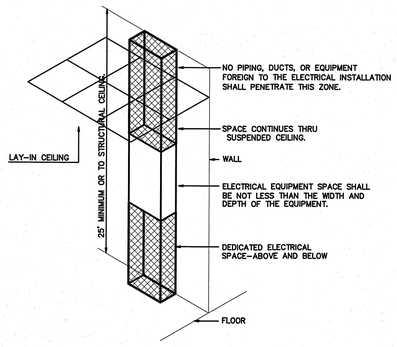
WHERE THE CONDITIONS ARE AS FOLLOWS:

1 EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR INSULATED BUSBARS OPERATING AT NOT OVER 300V SHALL NOT BE CONSIDERED LIVE PARTS.

2 EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.

3 EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

1 E-1 ELECTRICAL CLEARANCES
SCALE: NTS



ELECTRICAL EQUIPMENT DEDICATED SPACE PER ARTICLE 110.26.F.1 OF N.E.C.

2 E-1 DEDICATED SPACE
SCALE: NTS

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 23030 BENJAMIN E. BURKE

ELECTRICAL SPECIFICATIONS

21014

ISSUED: 5-17-22
DWG BY: JQ
CKD BY: BEB

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SHEET NO.
E1

Peppertree 34 E2.0

WALL LEGEND

2-HOUR FIRE BARRIER

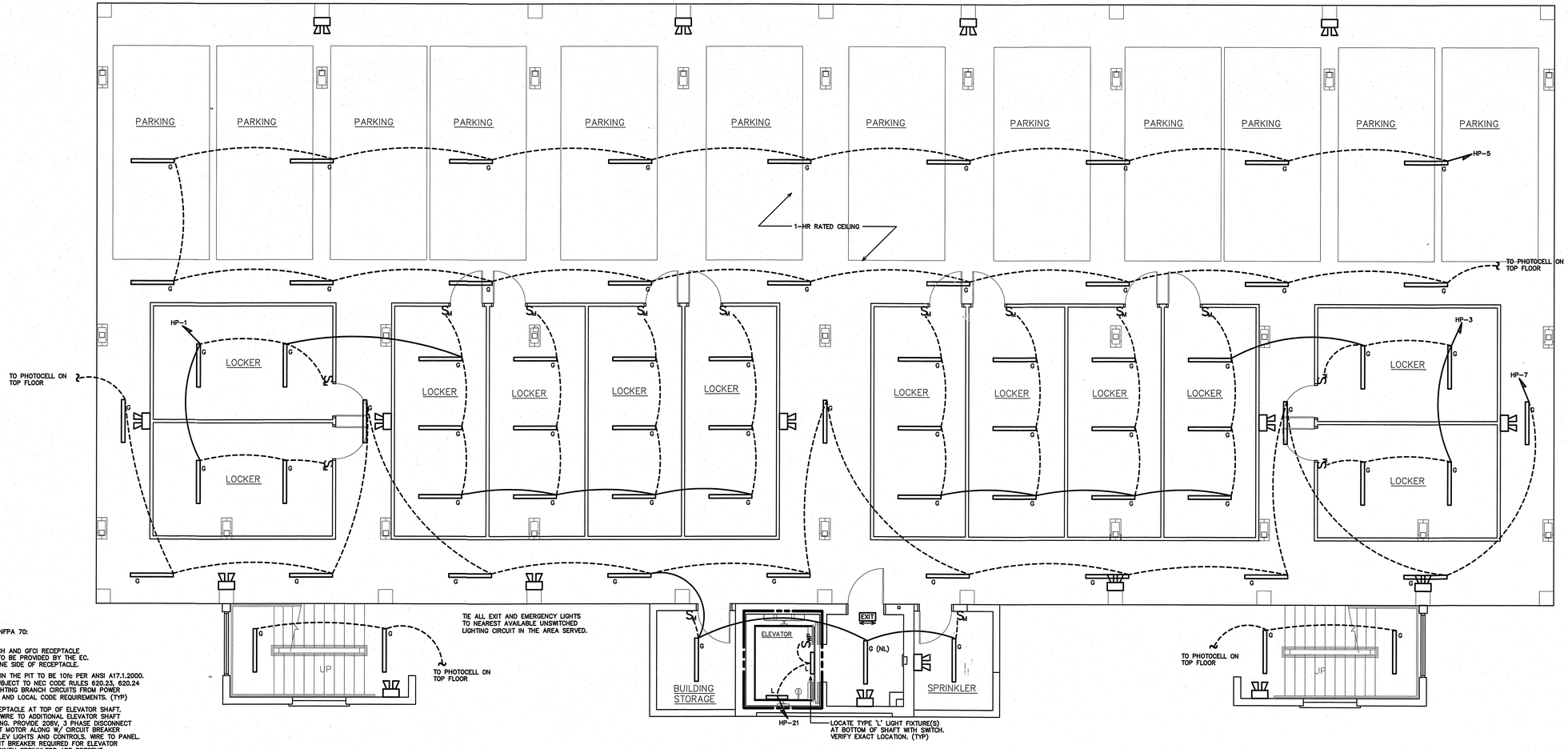
Peppertree 34 E2.0

LIGHTING SCHEDULE *

MARK	MANUFACTURER	CATALOG NO.	VOLT.	LAMPS NO.	LAMPS TYPE	LAMPS W	BALLAST TYPE	W/ FIXTURE	REMARKS	
G	LARSON	HAL-48-2L-ITG-LED-BMSW-2XSL	120	–	LED	–	–	80	4' LED STRIP FIXTURE (CORROSION RESISTENT)	*
L	SYLVANIA	STRIP1A/032UNVD840/48S/WH	120	–	LED	–	–	32	LED LINEAR STRIP (ELEVATOR), WL W/ GUARD	*
EXIT	COMPASS	CER	120	–	LED	–	–	2	LED EXIT SIGN, COLOR BY ARCH	*
EM	COMPASS	CU2	120	–	LED	–	–	10	EMERGENCY LIGHT, BATTERY BACKUP, BATTERY DIAGNOSTICS, COLOR BY ARCH	*

* OR APPROVED EQUAL. PROVIDE CUT SHEETS FOR OWNER APPROVAL PRIOR TO ORDERING FIXTURES.
CATALOG NUMBERS ARE FOR REFERENCE ONLY, ACTUAL NUMBERS MAY VARY.

THE EMERGENCY LIGHTS AND EXIT SIGNS MUST HAVE INTEGRAL BATTERIES, CHARGERS AND TEST SWITCHES.



1 E-2.0 AUTOPARK LEVEL LIGHTING PLAN
SCALE: 3/16" = 1'-0"

PER NEC 620.23, NFPA 70:

ELEVATOR NOTES:
LIGHT, LIGHT SWITCH AND GFCI RECEPTACLE IN ELEVATOR PIT TO BE PROVIDED BY THE EC. WIRE LIGHTS ON LINE SIDE OF RECEPTACLE.

MINIMUM LIGHTING IN THE PIT TO BE 10fc PER ANSI A17.1.2000. PIT LIGHTING IS SUBJECT TO NEC CODE RULES 620.23, 620.24 FOR SEPARATE LIGHTING BRANCH CIRCUITS FROM POWER BRANCH CIRCUITS, AND LOCAL CODE REQUIREMENTS. (TYP)

PROVIDE GFCI RECEPTACLE AT TOP OF ELEVATOR SHAFT. VERIFY LOCATION. WIRE TO ADDITIONAL ELEVATOR SHAFT POWER AND LIGHTING. PROVIDE 208V, 3 PHASE DISCONNECT FOR ELEVATOR LIFT MOTOR ALONG W/ CIRCUIT BREAKER ENCLOSURE FOR ELEV LIGHTS AND CONTROLS. WIRE TO PANEL. SHUNT TRIP CIRCUIT BREAKER REQUIRED FOR ELEVATOR MAIN LINE POWER WHEN SPRINKLERS ARE PRESENT.

ELEVATOR ELECTRICAL EQUIPMENT AND WIRING MUST COMPLY WITH SECTION 620 OF NEC ANSI NFPA 70. ALL WORK MUST MEET NC DEPARTMENT OF LABOR GUIDELINES FOR TRACTION ELEVATORS. SEE OTHER ELECTRICAL SHEETS FOR ADDITIONAL WORK.

PROVIDE TELE/DATA CONDUIT FOR EACH ELEVATOR. WIRE BACK TO MAIN TELEPHONE PANEL.

PROVIDE A 120V, 1 PHASE MOTOR-CIRCUIT SWITCH OR CIRCUIT BREAKER THAT IS LOCKABLE OPEN IN ACCORDANCE W/ NFPA 70/CEC FOR VISUAL COMM DEVICE (CAMERA) IN ELEVATOR.

A DRAIN OR SUMP PUMP SHALL BE PROVIDED IF REQUIRED. THE SUMP PUMP/DRAIN SHALL HAVE THE CAPACITY TO REMOVE A MINIMUM OF 3,000 GAL/H PER ELEVATOR. PROVIDE DEDICATED 120V, 1 PHASE RECEPTACLE IN PIT.

VERIFY HEIGHT/LOCATION OF ALL EQUIP. SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

PROVIDE (AFI) ARC FAULT PROTECTION FOR ALL 120V RECEPTACLE AND LIGHTING CIRCUITS. EXCEPT FOR (GFI) PROTECTED CIRCUITS IN THE KITCHEN. (TYP)

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E. BURKE 6/21/22

AUTOPARK LEVEL LIGHTING PLAN

21014

ISSUED:	5-17-22
DWG BY:	JQ
CKD BY:	BEB

REVISIONS

SHEET NO.
E2.0

Peppertree 34 E2.1

WALL LEGEND

1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER

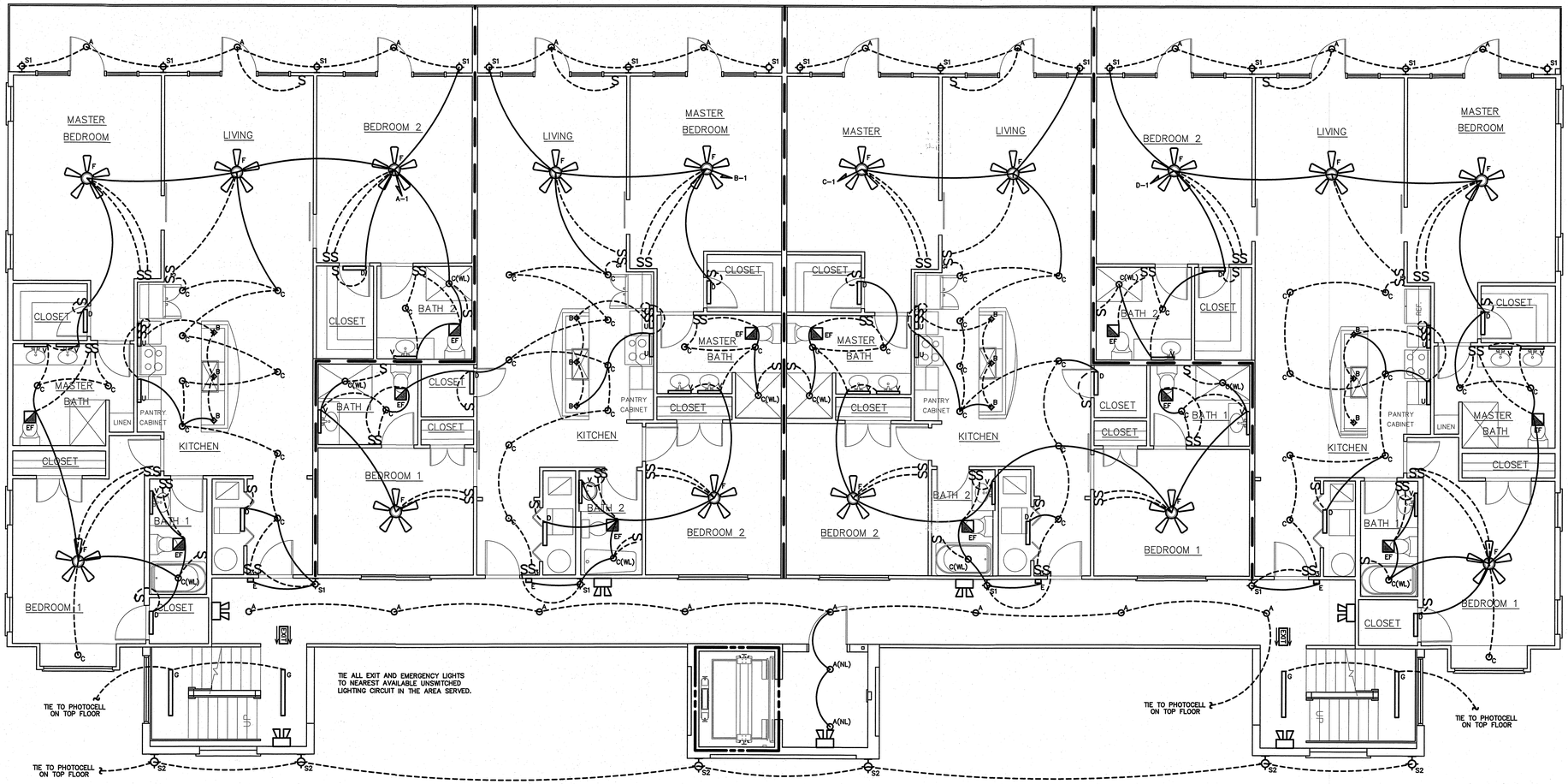
Peppertree 34 E2.1

LIGHTING SCHEDULE *

MARK	MANUFACTURER	CATALOG NO.	VOLT.	LAMPS NO.	LAMPS TYPE	LAMPS W	BALLAST TYPE	W/ FIXTURE	REMARKS	
A	TREX	45868	120	–	LED	–	–	5	TREX SURFACE MOUNT DOWNLIGHT	*
B	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	25	DECORATIVE KITCHEN PENDANT ($150 ALLOWANCE EA.)	*
C	JUNO	IC22LED-G4-14LM-35K	120	–	LED	–	–	20	6" LED DOWNLIGHT (FOR RATED CEILINGS)	*
D	COLUMBIA	MPS2-35LW-EDU	120	–	LED	–	–	20	2' LED STRIP	*
E	ASD	ASD-OLWS-23-MV-8N12CC-BZ	120	–	LED	–	–	12	EXTERIOR WALLMOUNT LED FIXTURE	*
F	BIG ASS	HAIKU W/ LED PACKAGE	120	–	LED	–	–	100	52" DIAMETER FAN WITH INTEGRATED LED LIGHT	*
L	SYLVANIA	STRIP1A/D32UNVD840/48S/WH	120	–	LED	–	–	32	LED LINEAR STRIP (ELEVATOR), WL W/ GUARD	*
S1	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	25	SCONCE ON WALKWAYS ($350 ALLOWANCE EA.)	*
S2	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	50	SCONE ON BUILDING FRONT ($500 ALLOWANCE EA.)	*
U	COLUMBIA	CUC2-ED120	120	–	LED	–	–	14	UNDERCABINET LIGHT	*
V	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	60	VANITY LIGHT FIXUTRE ($250 ALLOWANCE EA.)	*
EXIT	COMPASS	CER	120	–	LED	–	–	2	LED EXIT SIGN, COLOR BY ARCH	*
	COMPASS	CU2	120	–	LED	–	–	10	EMERGENCY LIGHT, BATTERY BACKUP, BATTERY DIAGNOSTICS, COLOR BY ARCH	*

* OR APPROVED EQUAL. PROVIDE CUT SHEETS FOR OWNER APPROVAL PRIOR TO ORDERING FIXTURES. CATALOG NUMBERS ARE FOR REFERENCE ONLY, ACTUAL NUMBERS MAY VARY.

THE EMERGENCY LIGHTS AND EXIT SIGNS MUST HAVE INTEGRAL BATTERIES, CHARGERS AND TEST SWITCHES.



1/E-2.1 1ST FLOOR LIGHTING PLAN

SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP, SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

PROVIDE (AFI) ARC FAULT PROTECTION FOR ALL 120V RECEPTACLE AND LIGHTING CIRCUITS, EXCEPT FOR (GFI) PROTECTED CIRCUITS IN THE KITCHEN. (TYP)

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22058 BENJAMIN E BURKE

FIRST FLOOR LIGHTING PLAN

21014

ISSUED:	5-17-22
DWG BY:	JQ
CKD BY:	BEB

REVISIONS

SHEET NO.
E2.1

Peppertree 34 E2.2

WALL LEGEND

1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER

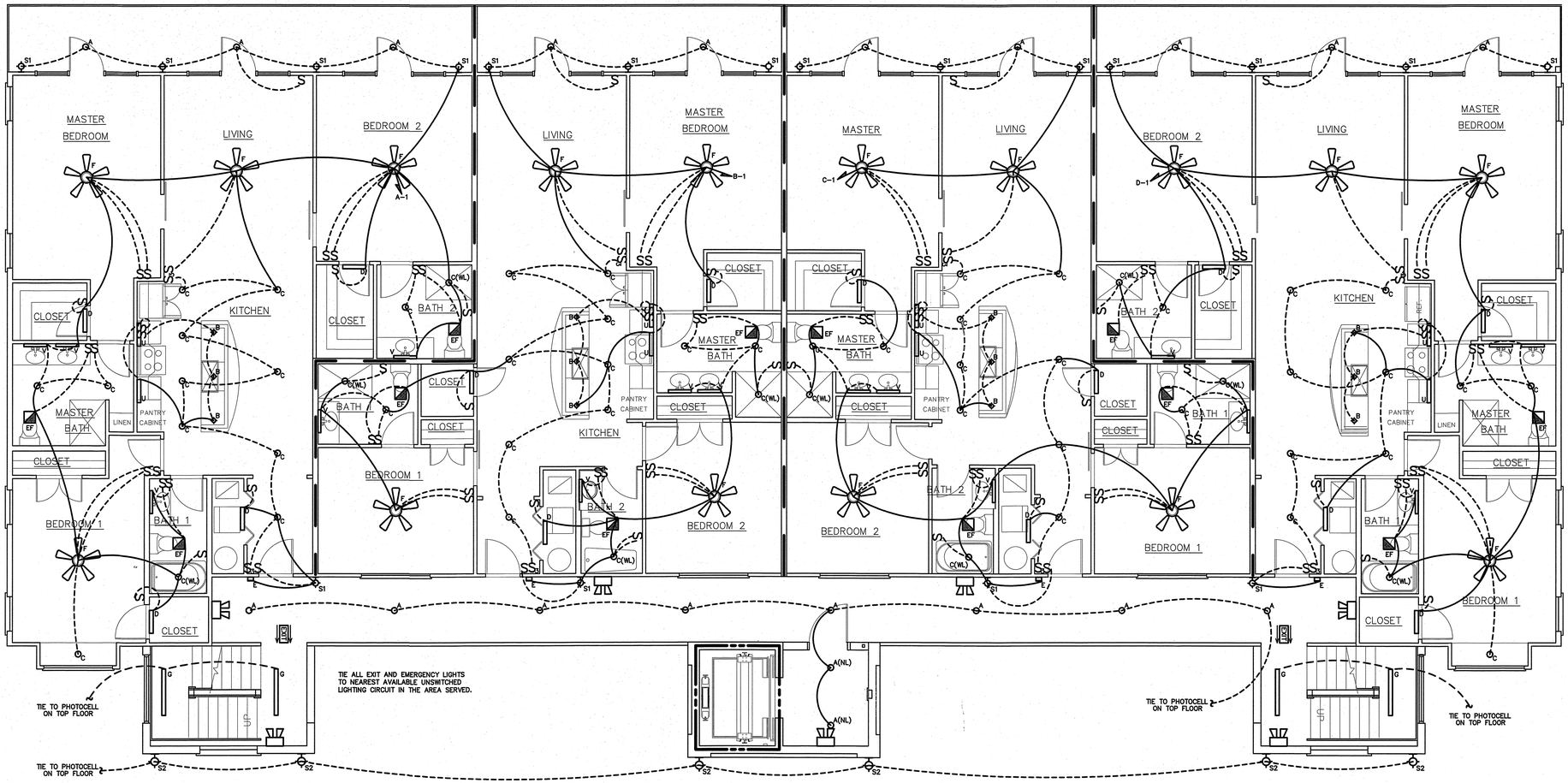
Peppertree 34 E2.2

LIGHTING SCHEDULE *

MARK	MANUFACTURER	CATALOG NO.	VOLT.	LAMPS NO.	LAMPS TYPE	LAMPS W	BALLAST TYPE	W/ FIXTURE	REMARKS	
A	TREX	45868	120	–	LED	–	–	5	TREX SURFACE MOUNT DOWNLIGHT	*
B	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	25	DECORATIVE KITCHEN PENDANT ($150 ALLOWANCE EA.)	*
C	JUNO	IC22LED-G4-14LM-35K	120	–	LED	–	–	20	6" LED DOWNLIGHT (FOR RATED CEILINGS)	*
D	COLUMBIA	MPS2-35LW-EDU	120	–	LED	–	–	20	2' LED STRIP	*
E	ASD	ASD-OLWS-23-MV-8N12CC-BZ	120	–	LED	–	–	12	EXTERIOR WALLMOUNT LED FIXTURE	*
F	BIG ASS	HAIKU W/ LED PACKAGE	120	–	LED	–	–	100	52" DIAMETER FAN WITH INTEGRATED LED LIGHT	*
L	SYLVANIA	STRIP1A/032UNVD840/48S/WH	120	–	LED	–	–	32	LED LINEAR STRIP (ELEVATOR), WL W/ GUARD	*
S1	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	25	SCONCE ON WALKWAYS ($350 ALLOWANCE EA.)	*
S2	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	50	SCONE ON BUILDING FRONT ($500 ALLOWANCE EA.)	*
U	COLUMBIA	CUC2-ED120	120	–	LED	–	–	14	UNDERCABINET LIGHT	*
V	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	60	VANITY LIGHT FIXUTRE ($250 ALLOWANCE EA.)	*
EXIT	COMPASS	CER	120	–	LED	–	–	2	LED EXIT SIGN, COLOR BY ARCH	*
	COMPASS	CU2	120	–	LED	–	–	10	EMERGENCY LIGHT, BATTERY BACKUP, BATTERY DIAGNOSTICS, COLOR BY ARCH	*

* OR APPROVED EQUAL. PROVIDE CUT SHEETS FOR OWNER APPROVAL PRIOR TO ORDERING FIXTURES. CATALOG NUMBERS ARE FOR REFERENCE ONLY, ACTUAL NUMBERS MAY VARY.

THE EMERGENCY LIGHTS AND EXIT SIGNS MUST HAVE INTEGRAL BATTERIES, CHARGERS AND TEST SWITCHES.



1/E-22 2ND FLOOR LIGHTING PLAN
SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP, SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

PROVIDE (AFI) ARC FAULT PROTECTION FOR ALL 120V RECEPTACLE AND LIGHTING CIRCUITS. EXCEPT FOR (GFI) PROTECTED CIRCUITS IN THE KITCHEN. (TYP)

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

6/21/22

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E BURKE

SECOND FLOOR LIGHTING PLAN

21014

ISSUED:	5-17-22
DWG BY:	JQ
CKD BY:	BEB
REVISIONS	

SHEET NO.
E2.2

Peppertree 34 E2.3

WALL LEGEND

1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER

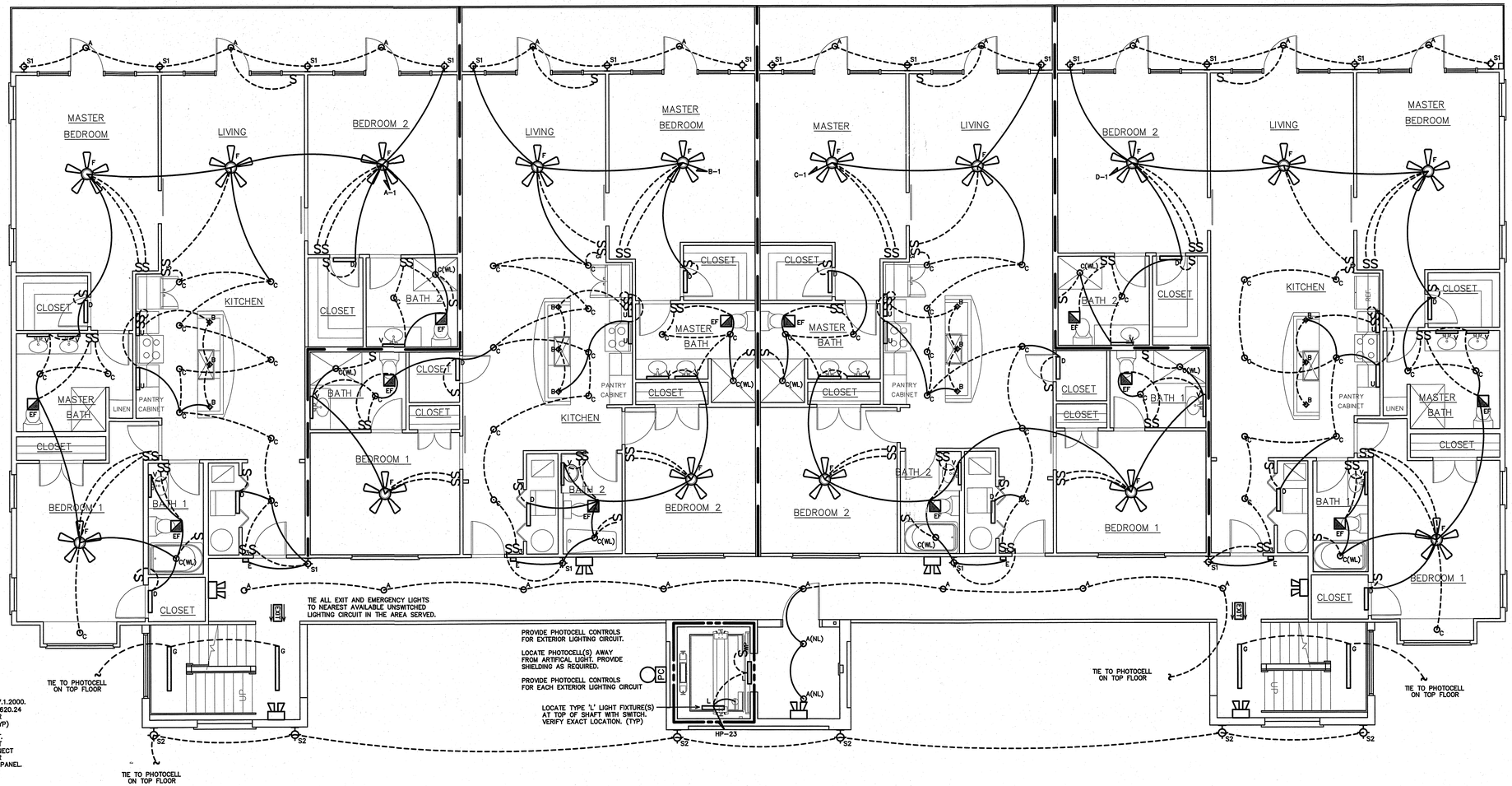
Peppertree 34 E2.3

LIGHTING SCHEDULE *

MARK	MANUFACTURER	CATALOG NO.	VOLT.	LAMPS NO.	LAMPS TYPE	LAMPS W	BALLAST TYPE	W/ FIXTURE	REMARKS	
A	TREX	45868	120	–	LED	–	–	5	TREX SURFACE MOUNT DOWNLIGHT	*
B	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	25	DECORATIVE KITCHEN PENDANT ($150 ALLOWANCE EA.)	*
C	JUNO	IC22LED-04-14LM-35K	120	–	LED	–	–	20	6" LED DOWNLIGHT	*
D	COLUMBIA	MPS2-35LW-EDU	120	–	LED	–	–	20	2' LED STRIP	*
E	ASD	ASD-OLWS-23-MV-8N12CC-BZ	120	–	LED	–	–	12	EXTERIOR WALLMOUNT LED FIXTURE	*
F	BIG ASS	HAIKU W/ LED PACKAGE	120	–	LED	–	–	100	52" DIAMETER FAN WITH INTEGRATED LED LIGHT	*
L	SYLVANIA	STRIP1A/032UNVD840/48S/WH	120	–	LED	–	–	32	LED LINEAR STRIP (ELEVATOR), WL W/ GUARD	*
S1	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	25	SCONCE ON WALKWAYS ($350 ALLOWANCE EA.)	*
S2	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	50	SCONE ON BUILDING FRONT ($500 ALLOWANCE EA.)	*
U	COLUMBIA	CUC2-ED120	120	–	LED	–	–	14	UNDERCABINET LIGHT	*
V	CHOSEN BY OWNER/ARCH; PROVIDED BY EC.		120	–	LED	–	–	60	VANITY LIGHT FIXUTRE ($250 ALLOWANCE EA.)	*
EXIT	COMPASS	CER	120	–	LED	–	–	2	LED EXIT SIGN, COLOR BY ARCH	*
	COMPASS	CU2	120	–	LED	–	–	10	EMERGENCY LIGHT, BATTERY BACKUP, BATTERY DIAGNOSTICS, COLOR BY ARCH	*

* OR APPROVED EQUAL. PROVIDE CUT SHEETS FOR OWNER APPROVAL PRIOR TO ORDERING FIXTURES.
CATALOG NUMBERS ARE FOR REFERENCE ONLY, ACTUAL NUMBERS MAY VARY.

THE EMERGENCY LIGHTS AND EXIT SIGNS MUST HAVE INTEGRAL BATTERIES, CHARGERS AND TEST SWITCHES.



PER NEC 620.23, NFPA 70:

ELEVATOR NOTES:
LIGHT, LIGHT SWITCH AND GFCI RECEPTACLE IN ELEVATOR PIT TO BE PROVIDED BY THE EC. WIRE LIGHTS ON LINE SIDE OF RECEPTACLE.

MINIMUM LIGHTING IN THE PIT TO BE 10fc PER ANSI A17.1.2000. PIT LIGHTING IS SUBJECT TO NEC CODE RULES 620.23, 620.24 FOR SEPARATE LIGHTING BRANCH CIRCUITS FROM POWER BRANCH CIRCUITS, AND LOCAL CODE REQUIREMENTS. (TYP)

PROVIDE GFCI RECEPTACLE AT TOP OF ELEVATOR SHAFT. VERIFY LOCATION. WIRE TO ADDITIONAL ELEVATOR SHAFT POWER AND LIGHTING. PROVIDE 208V, 3 PHASE DISCONNECT FOR ELEVATOR LIFT MOTOR ALONG W/ CIRCUIT BREAKER ENCLOSURE FOR ELEV LIGHTS AND CONTROLS. WIRE TO PANEL. SHUNT TRIP CIRCUIT BREAKER REQUIRED FOR ELEVATOR MAIN LINE POWER WHEN SPRINKLERS ARE PRESENT.

ELEVATOR ELECTRICAL EQUIPMENT AND WIRING MUST COMPLY WITH SECTION 620 OF NEC ANSI NFPA 70. ALL WORK MUST MEET NC DEPARTMENT OF LABOR GUIDELINES FOR TRACTION ELEVATORS. SEE OTHER ELECTRICAL SHEETS FOR ADDITIONAL WORK.

PROVIDE TELE/DATA CONDUIT FOR EACH ELEVATOR. WIRE BACK TO MAIN TELEPHONE PANEL.

PROVIDE A 120V, 1 PHASE MOTOR-CIRCUIT SWITCH OR CIRCUIT BREAKER THAT IS LOCKABLE OPEN IN ACCORDANCE W/ NFPA 70/CEC FOR VISUAL COMM DEVICE (CAMERA) IN ELEVATOR.

A DRAIN OR SUMP PUMP SHALL BE PROVIDED IF REQUIRED. THE SUMP PUMP/DRAIN SHALL HAVE THE CAPACITY TO REMOVE A MINIMUM OF 3,000 GAL/H PER ELEVATOR. PROVIDE DEDICATED 120V, 1 PHASE RECEPTACLE IN PIT.

E2.3 3RD FLOOR LIGHTING PLAN
SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP. SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

PROVIDE (AFI) ARC FAULT PROTECTION FOR ALL 120V RECEPTACLE AND LIGHTING CIRCUITS. EXCEPT FOR (GFI) PROTECTED CIRCUITS IN THE KITCHEN. (TYP)

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA REGISTERED PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E. BURKE

THIRD FLOOR LIGHTING PLAN

21014

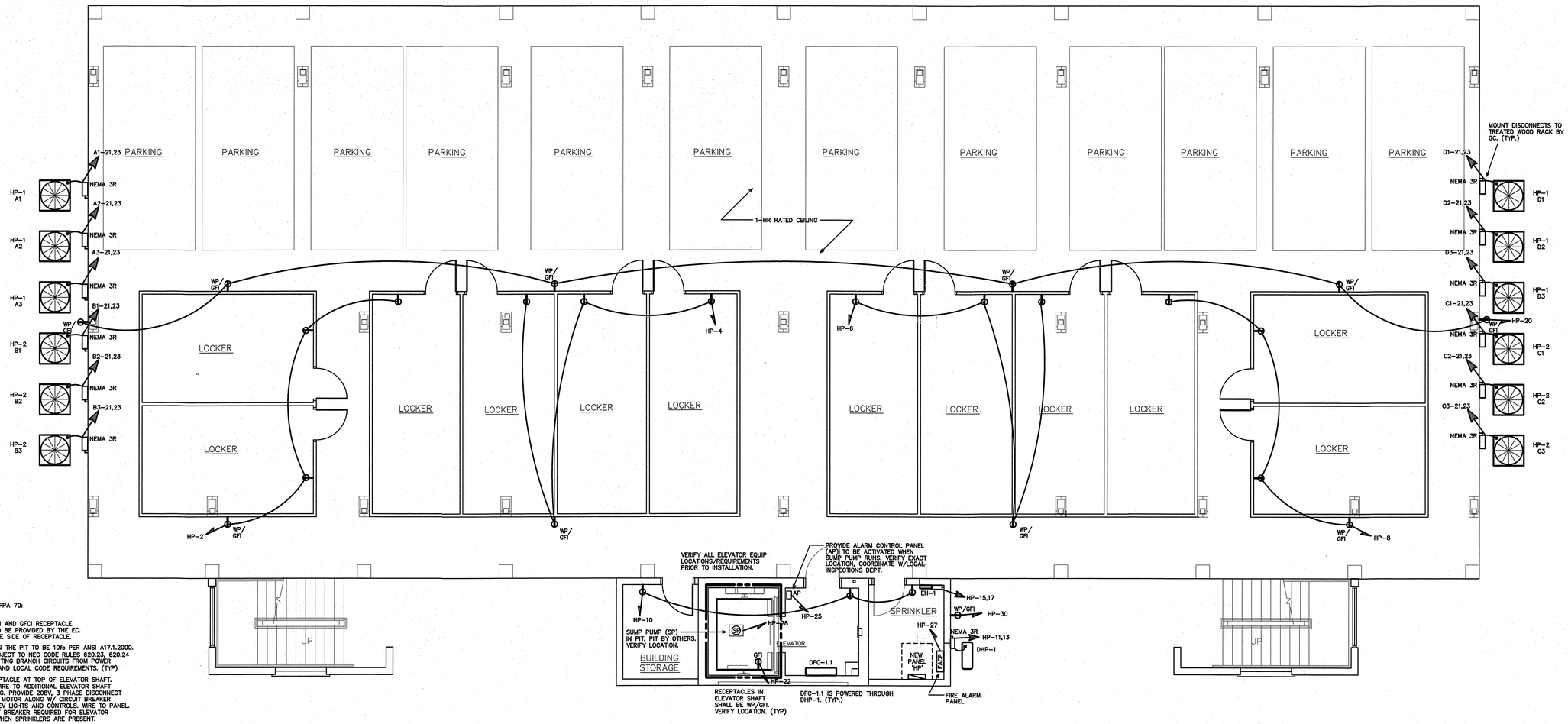
ISSUED:	5-17-21
DWG BY:	JQ
CKD BY:	BEB
REVISIONS	

SHEET NO.
E2.3

Peppertree 34 E3.0

WALL LEGEND

2-HOUR FIRE BARRIER



PER NEC 620.23, NFPA 70:

ELEVATOR NOTES:
LIGHT, LIGHT SWITCH AND GFCI RECEPTACLE IN ELEVATOR PIT TO BE PROVIDED BY THE EC. WIRE LIGHTS ON LINE SIDE OF RECEPTACLE.

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1 E-3.0 AUTOPARK LEVEL POWER PLAN
SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP, SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

PROVIDE (AFI) ARC FAULT PROTECTION FOR ALL 120V RECEPTACLE AND LIGHTING CIRCUITS. EXCEPT FOR (GFI) PROTECTED CIRCUITS IN THE KITCHEN. (TYP)

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E. BURKE

AUTOPARK LEVEL POWER PLAN

21014

ISSUED:	5-17-22
DWG BY:	JQ
CKD BY:	BEB

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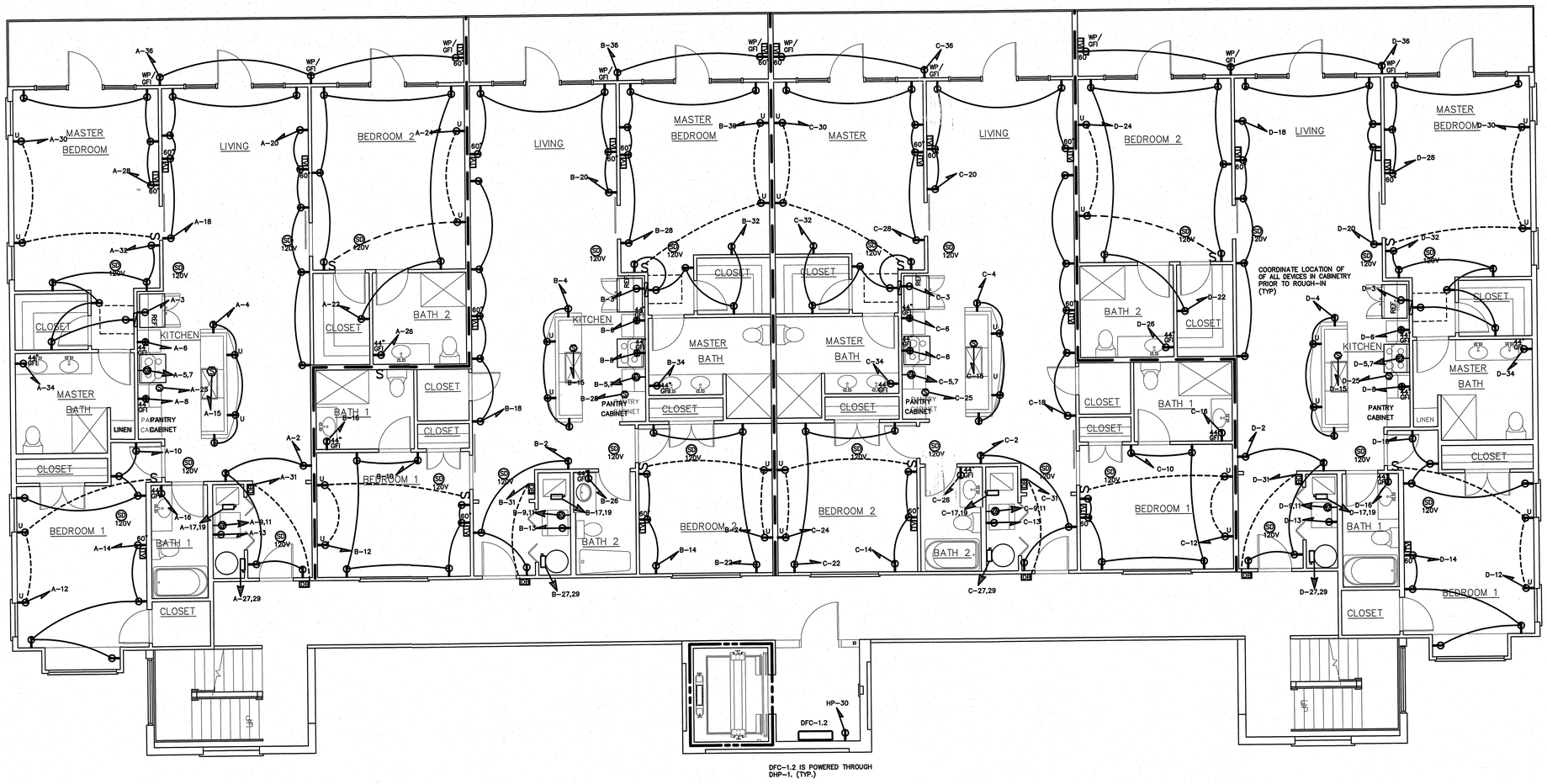
SHEET NO.
E3.0

Peppertree 34 E3.1

WALL LEGEND

1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER



1 IST FLOOR POWER PLAN
E-3.1 SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP, SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

PROVIDE (AFI) ARC FAULT PROTECTION FOR ALL 120V RECEPTACLE AND LIGHTING CIRCUITS. EXCEPT FOR (GFI) PROTECTED CIRCUITS IN THE KITCHEN. (TYP)

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E BURKE

FIRST FLOOR POWER PLAN

21014

ISSUED:	5-17-22
DWG BY:	JQ
CKD BY:	BEB
REVISIONS	

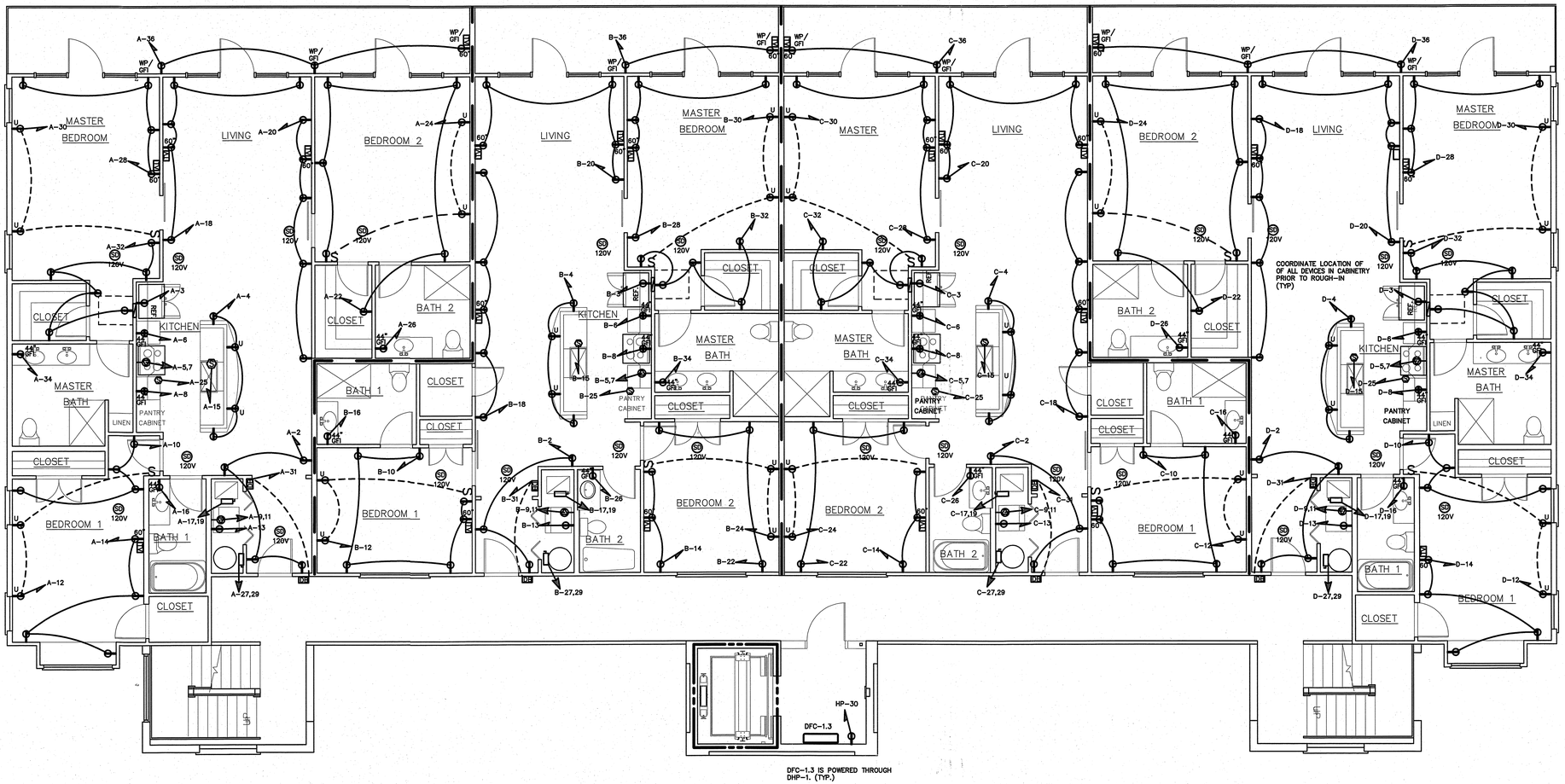
SHEET NO.
E-3.1

Peppertree 34 E3.2

WALL LEGEND

1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER



1 E-3.2 2ND FLOOR POWER PLAN

SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP. SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

PROVIDE (AFI) ARC FAULT PROTECTION FOR ALL 120V RECEPTACLE AND LIGHTING CIRCUITS. EXCEPT FOR (GFI) PROTECTED CIRCUITS IN THE KITCHEN. (TYP)

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PEPPERTREE BUILDING 34

ATLANTIC BEACH, NORTH CAROLINA

5/21/22

NORTH CAROLINA PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E BURKE

SECOND FLOOR POWER PLAN

21014

ISSUED:	5-17-22
DWG BY:	JQ
CKD BY:	BEB

REVISIONS

SHEET NO. E-3.2

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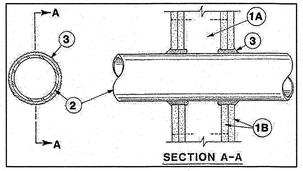
System No. W-L-1001

F Ratings — 1, 2, 3 and 4 Hr (See Items 2 and 3)

T Ratings — 0, 1, 2, 3, and 4 Hr (See Item 3)

L Rating At Ambient — less than 1 CFM/sq ft

L Rating At 400 F — less than 1 CFM/sq ft



1. **Wall Assembly —** The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

   A. **Studs —** Wall framing may consist of either wood studs (max 2 h fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide by 1-3/8 in. deep channels spaced max 24 in. OC.

   B. **Gypsum Board* —** Nom 1/2 or 5/8 in. thick, 4 ft. wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in.

2. **Through-Penetrant —** One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit, or tubing and periphery of opening shall be min of 0 in. (point contact) to max 2 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

   A. **Steel Pipe —** Nom 24 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

   B. **Iron Pipe —** Nom 24 in. diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.

   C. **Conduit —** Nom 6 in. diam (or smaller) steel conduit or nom 4 in. diam (or smaller) steel electrical metallic tubing.

   D. **Copper Tubing —** Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.

   E. **Copper Pipe —** Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.

   F. **Through Penetrating Products — Flexible Metal Piping —** The following types of steel flexible metal gas piping may be used:

   1. Nom 2 in. diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

   OMEGA FLEX INC

   2. Nom 1 in. diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

   GASTITE, DIV OF TITEFLEX

   3. Nom 1 in. diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

   WARD MFG LLC

Fill, Void or Cavity Materials* — Caulk or Sealant — Min 5/8, 1-1/4, 1-7/8 and 2-1/2 in. thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

Max Pipe or Conduit Diam In	F RATING Hr	T RATING Hr
1	1 or 2	0+, 1 or 2
1	3 or 4	3 or 4
4	1 or 2	0
6	3 or 4	0
12	1 or 2	0

+When copper pipe is used, T Rating is 0 hr.

3M COMPANY — CP 25WB+ or FB-3000 WT.

*Bearing the UL Classification Mark

DIVISION 16 — FIRE ALARM

PART 1 — GENERAL

1.1 DESCRIPTION OF THE WORK

A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
   1. Fire alarm panel, wiring and devices

B. All work shall be complete and items, equipment, etc., shall be electrically connected for proper and correct operation.

C. All work under this contract shall be installed in accordance with the latest edition of the following codes and standards insofar as they apply:
   1. The 2017 National Electrical Code.
   2. NFPA 72
   3. Underwriter's Laboratories, Inc., Standards and approved listings.
   4. Electrical Testing Labatories standards.
   5. North Carolina Building Code, Latest Edition and Revisions.
   6. All local codes and ordinances.

D. The Fire Alarm Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work

E. Obtain all permits, licenses, inspections, etc., required for the work and pay for the same. Furnish final certificate of inspection and approval from the electrical inspector having jurisdiction prior to acceptance of the work.

F. All work shall be done by skilled mechanics and shall present a neat, trim, workmanlike condition when complete.

1.2 INTENT

A. The intent of these specifications and the accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Fire Alarm Contractor shall take this into consideration and include in his base bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.

B. Locations shown are approximate. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required. Coordinate all locations with architect before any rough-in.

1.4 SHOP DRAWINGS

A. Provide complete shop drawings per NCSFC section 907.1.2 to the local fire marshal prior to start of construction including:
   1. Floorplan with room names
   2. Location of all FA devices
   3. Location of panels
   4. Power connections
   5. Battery calculations
   6. Conductors types and sizes
   7. Voltages drop calculations
   8. Equipment cut-sheets, model numbers, etc.

PART 2 — PRODUCTS AND MATERIALS

2.1 GENERAL

A. All material shall be new and shall bear the manufacturer's name, trade name, and UL label where such standard has been established for the particular material. Materials shall be the standard products of manufacturer's regularly engaged in the manufacturer of the required type of equipment and the manufacturer's latest approved design.
   1. Boxes installed in concealed locations shall be set flush with the finished surfaces.
   2. Provide rated boxes in all fire barriers & walls installed per code.

PART 3 — EXECUTION

3.1 FIRE ALARM SYSTEM EQUIPMENT

A. Provide a limited fire alarm system as shown on the drawings and as required by State, and Local codes.

B. The main control panel is new.

C. Provide a remote key test switch for the duct detectors. Locate as directed by the local AHJ.

D. All fire alarm system cables shall be installed in conduit. Size as required by the equipment supplier. Provide a submittal of all devices and a riser diagram for approval before installation of any equipment.

E. The return air smoke detectors will be furnished by the E.C. to the HVAC contractor for installation. The HVAC contr shall be responsible for the shut down of all AHU'S. The E.C. shall be responsible for all connections to the fire alarm controller.

3.2 CLEAN UP

A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.

3.3 GUARANTEE

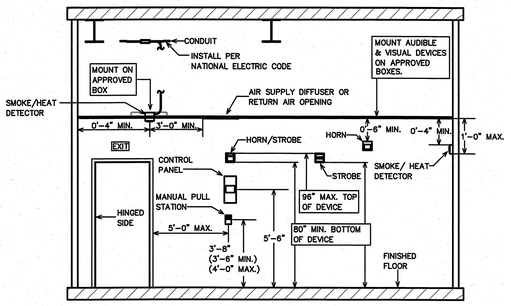
A. Guarantee all materials and labor included in the fire alarm work for a period of one year from date of final acceptance by the Owner. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the Owner.

SYSTEM OUTPUTS

SYSTEM INPUTS	A: ACTUATE COMMON ALARM SIGNAL INDICATOR	B: ACTUATE AUDIBLE ALARM SIGNAL	C: ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	D: ACTUATE AUDIBLE SUPERVISORY SIGNAL	E: ACTUATE COMMON TROUBLE SIGNAL INDICATOR	F: ACTUATE AUDIBLE TROUBLE SIGNAL	G: ACTUATE ZONE OR DEVICE ADDRESS ALARM INDICATOR	H: ACTUATE GENERAL EVACUATION SIGNAL	I: DISPLAY CHANGE OF STATUS	J: TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	K: TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	L: TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	M: RELEASE MAGNETICALLY HELD DOORS	N: RECALL ELEVATOR TO RECALL FLOOR	O: RECALL ELEVATOR TO ALTERNATE RECALL FLOOR	P: ACTUATE WARNING TO ELEVATOR CABS	Q: RELEASE REMOVAL OF POWER FROM ELEVATOR	R: CLOSE ALL SMOKE DAMPERS	S: UNLOCK EXITS AND CONTROL DOORS	T: SHUT DOWN RESPECTIVE AIR HANDLING EQUIPMENT	U: ACTUATE FLOOR PRESSURIZATION	V: ACTUATE STAIRWELL PRESSURIZATION	W: ACTUATE SMOKE EXHAUST	X	Y	
	FACP ANNUNCIATION									NOTIFICATION			REQUIRED FIRE SAFETY CONTROL													
1 FIRE ALARM SYSTEM AC POWER FAILURE			●	●						●																1
2 FIRE ALARM SYSTEM LOW BATTERY					●	●					●															2
3 OPEN CIRCUIT					●	●					●															3
4 GROUND FAULT					●	●					●															4
5 NOTIFICATION APPLIANCE CIRCUIT SHORT					●	●					●															5
6 BUILDING MANUAL PULL STATIONS	●	●					●	●	●	●			●						●							6
7 CORRIDOR SMOKE DETECTORS	●	●					●	●	●	●			●	●				●	●			●	●	●		7
8 AREA SMOKE DETECTORS	●	●					●	●	●	●			●	●				●	●			●	●	●		8
9 HVAC AIR DUCT SMOKE DETECTORS			●	●			●				●									●						9
10 AREA HEAT DETECTORS	●	●					●	●	●	●			●	●				●	●			●	●	●		10
11 HOOD OR ROOM FIRE SUPPRESSION SYSTEM ALARM	●	●					●	●	●	●			●	●				●	●							11
12 SPRINKLER TAMPER SWITCH			●	●			●				●															12
13 SPRINKLER WATER FLOW IN BUILDING	●	●					●	●	●	●			●	●					●	●						13
14 SPRINKLER WATER FLOW IN ELEV EQUIP RM OR SHAFT	●	●					●	●	●	●			●	●		●	●		●	●						14
15 ELEV EQUIP RM AREA SMOKE DETECTOR	●	●					●	●	●	●			●	●					●	●						15
16 ELEV SHAFT AND ELEV EQUIP RM HEAT DETECTORS	●	●					●	●	●	●			●	●		●	●		●	●						16
17 ELEV LOBBY SMOKE DETECTORS — UPPER FLOORS	●	●					●	●	●	●			●	●					●	●			●	●	●	17
18 ELEV LOBBY SMOKE DETECTOR — RECALL FLOOR	●	●					●	●	●	●			●		●	●			●	●			●	●	●	18
19 ELEV CONTROLLER POWER SHUNT TRIP STATUS			●	●			●			●																19
20 FIRE PUMP POWER FAILURE/PHASE REVERSAL			●	●			●			●																20
21 FIRE PUMP RUNNING	●	●					●	●	●	●			●	●					●	●						21
22 FIRE PUMP SYSTEM NOT IN AUTOMATIC			●	●			●			●																22
23 LEGALLY REQUIRED GENERATOR SYSTEM LOW FUEL			●	●			●			●																23
24 LEGALLY REQUIRED GENERATOR NOT IN AUTOMATIC			●	●			●			●																24
25 AREA OF REFUGE TWO-WAY COMMUNICATIONS STATUS			●	●			●			●																25
26																										26
27																										27
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	

FIRE ALARM LEGEND

- HORN/STROBE SIGNALING DEVICE (XX) CANDELLA RATING; (S) INDICATES STROBE-ONLY
- PULL STATION
- SMOKE DETECTOR
- HEAT DETECTOR
- CO DETECTOR
- DUCT SMOKE DETECTOR
- FIRE ALARM CONTROL PANEL
- ELECTRIC BELL
- FLOW/TAMPER SWITCH

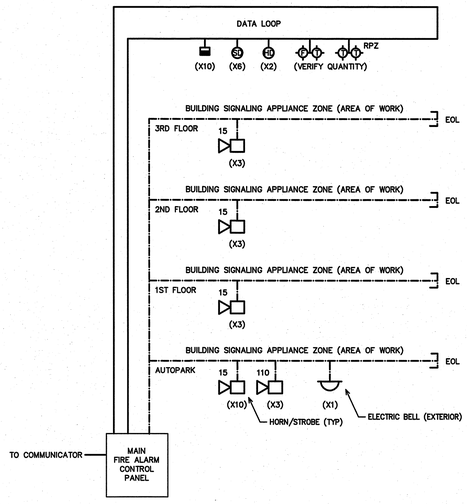


1 / FA-1 DEVICE MOUNTING DETAIL
SCALE: NTS

SEE PLAN FOR ACTUAL LOCATIONS OF DEVICES

VERIFY EXACT FIRE ALARM REQUIREMENTS WITH OWNER PRIOR TO SUBMITTING BID.

PROVIDE OR RELOCATE END-OF-LINE RESISTORS AS NEEDED FOR A CLASS B SYSTEM.



2 / FA-1 FIRE ALARM RISER
SCALE: NTS

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Architectural Design Planning Interiors

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E BURKE

FIRE ALARM SPECS & RISER

21014

ISSUED:	5-18-22
DWG BY:	RM
CKD BY:	BEB

REVISIONS

SHEET NO.
FA1.0

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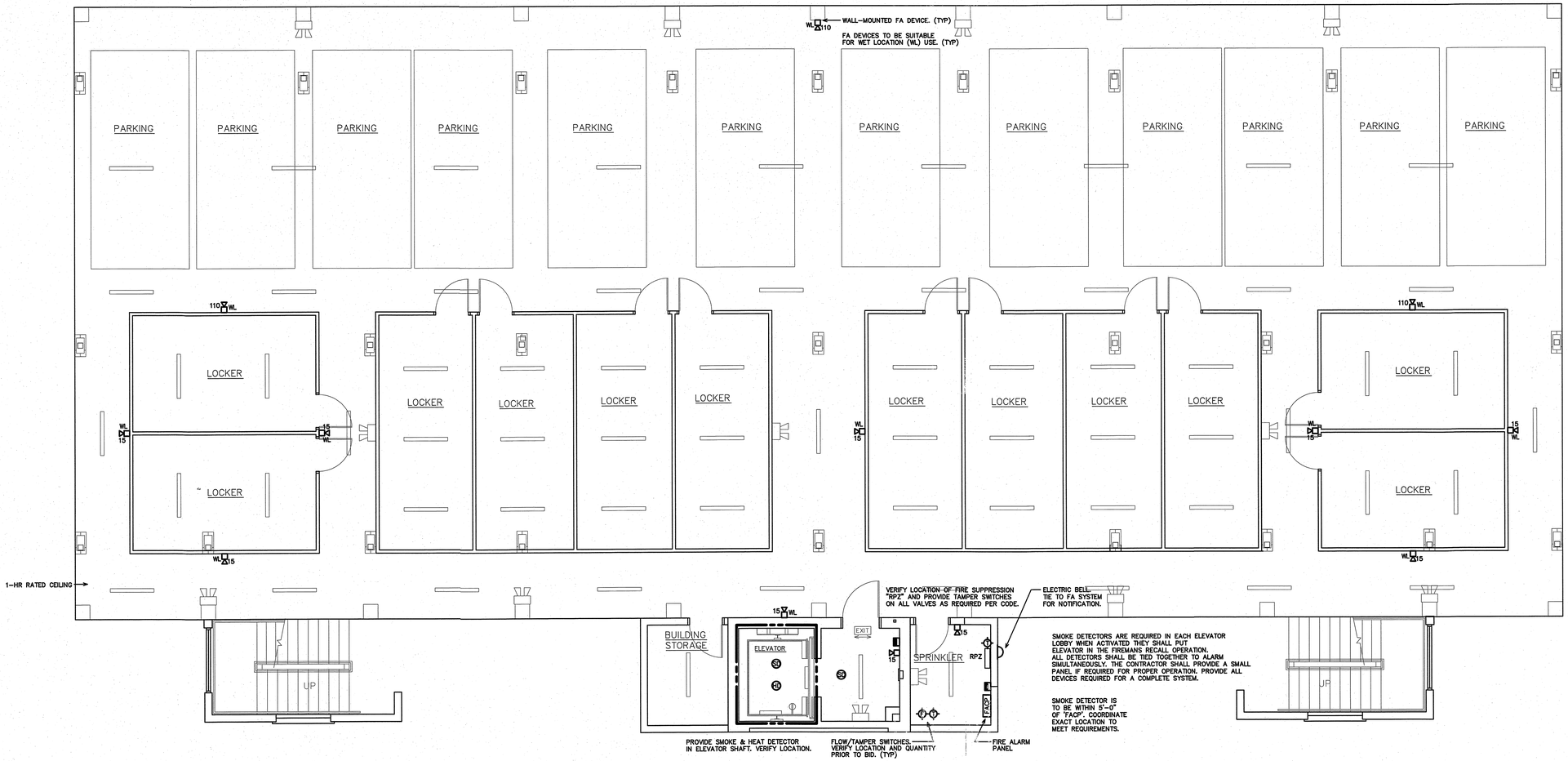
Peppertree 34 FA2.0

WALL LEGEND

2-HOUR FIRE BARRIER

GENERAL FIRE ALARM NOTES:

1. HORN/STROBES MUST BE WITHIN 15'-0" OF THE END OF EACH CORRIDOR. PROVIDE STROBES IN ALL CORRIDORS, BATHROOMS, BREAK ROOMS AND STORAGE AREAS. INSTALL PER ADA.
2. CANDELA RATINGS SHOULD BE LABELED ON ALL STROBES.
3. ALL STROBES WITHIN SIGHT OF EACH OTHER MUST BE SYNCHRONIZED PER NFPA 72 UNLESS MAXIMUM REQUIRED SEPARATION IS OBTAINED.
4. THE MAIN FIRE ALARM PANEL IS LOCATED IN THE RISER ROOM. VERIFY.
5. VERIFY THAT A SD IS ADJACENT TO THE FACP.
6. ALL EXPOSED WIRE SHALL BE IN CONDUIT. PLENUM RATED CABLE MAY BE USED WHERE CONCEALED IN ALL AREAS EXCEPT ASSEMBLY AREAS. ALL WIRING IN ASSEMBLY AREAS MUST BE IN CONDUIT.
7. ALL DEVICES, PANELS, ETC MUST BE BY SAME MANUFACTURER AND COMPATIBLE PROVIDE ALL ITEMS REQUIRED FOR A COMPLETE SYSTEM MEETING ALL CODES.
8. ALL WORK MUST MEET NFPA 72 AND APPLICABLE LOCAL CODES AND ORDINANCES. COORDINATE THE INSTALLATION WITH THE LOCAL FIRE MARSHALL.
9. MOUNT WALL-MOUNT HORN STROBES SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE THE FINISHED FLOOR.
10. MOUNT MANUAL PULL STATIONS SUCH THAT THE OPERABLE PART OF THE DEVICE IS NOT LESS THAN 42" AFF AND NOT MORE THAN 54" AFF.



1 FA-2.0 AUTOPARK LEVEL FIRE ALARM PLAN
SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP, SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA PROFESSIONAL SEAL 22038 ENGINEER BENJAMIN E BURKE

AUTOPARK LEVEL FIRE ALARM PLAN

21014

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Peppertree 34 FA3.0

WALL LEGEND

1/2-HOUR FIRE BARRIER

2-HOUR FIRE BARRIER

GENERAL FIRE ALARM NOTES:

1 HORN/STROBES MUST BE WITHIN 15'-0" OF THE END OF EACH CORRIDOR. PROVIDE STROBES IN ALL CORRIDORS, BATHROOMS, BREAK ROOMS AND STORAGE AREAS. INSTALL PER ADA.

2 CANDELA RATINGS SHOULD BE LABELED ON ALL STROBES.

3 ALL STROBES WITHIN SIGHT OF EACH OTHER MUST BE SYNCHRONIZED PER NFPA 72 UNLESS MAXIMUM REQUIRED SEPARATION IS OBTAINED.

4 THE MAIN FIRE ALARM PANEL IS LOCATED IN THE RISER ROOM. VERIFY.

5 VERIFY THAT A SD IS ADJACENT TO THE FACP.

6 ALL EXPOSED WIRE SHALL BE IN CONDUIT. PLENUM RATED CABLE MAY BE USED WHERE CONCEALED IN ALL AREAS EXCEPT ASSEMBLY AREAS. ALL WIRING IN ASSEMBLY AREAS MUST BE IN CONDUIT.

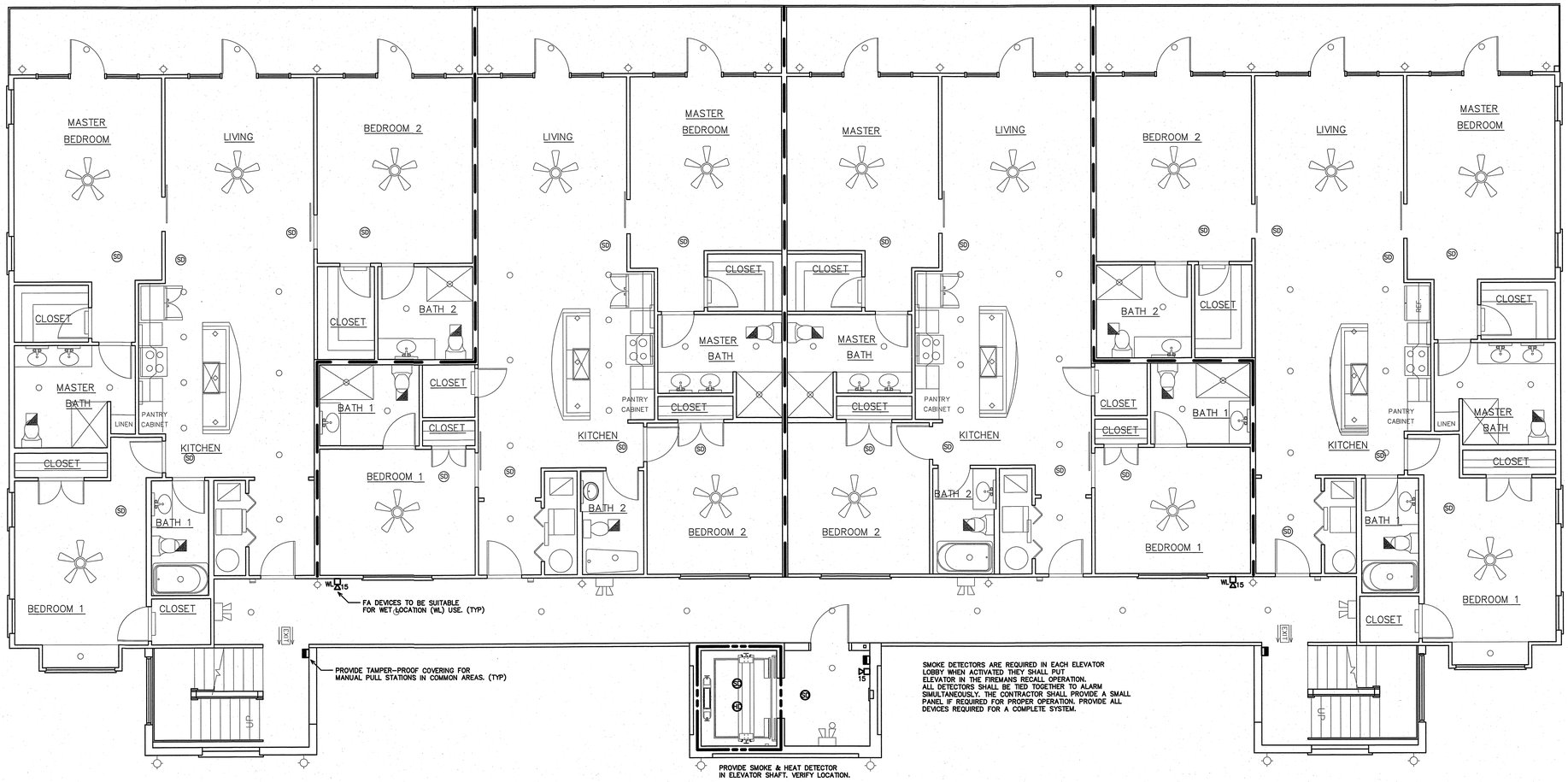
7 ALL DEVICES, PANELS, ETC MUST BE BY SAME MANUFACTURER AND COMPATIBLE PROVIDE ALL ITEMS REQUIRED FOR A COMPLETE SYSTEM MEETING ALL CODES.

8 ALL WORK MUST MEET NFPA 72 AND APPLICABLE LOCAL CODES AND ORDINANCES. COORDINATE THE INSTALLATION WITH THE LOCAL FIRE MARSHALL.

9 MOUNT WALL-MOUNT HORN STROBES SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE THE FINISHED FLOOR.

10 MOUNT MANUAL PULL STATIONS SUCH THAT THE OPERABLE PART OF THE DEVICE IS NOT LESS THAN 42" AFF AND NOT MORE THAN 54" AFF.

11 120V SMOKE DETECTORS IN UNIT ARE PROVIDED BY EC. DO NOT CONECT TO MAIN FACP (TYP.) SHOWN FOR CLARITY.



1 FA-3.0 1ST-3RD FLOOR FIRE ALARM PLAN
SCALE: 3/16" = 1'-0"

VERIFY HEIGHT/LOCATION OF ALL EQUIP, SWITCHES, AND DEVICES PRIOR TO INSTALLATION.

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PEPPERTREE BUILDING 34
ATLANTIC BEACH, NORTH CAROLINA

6/21/22
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 22038 BENJAMIN E. BURKE

1ST, 2ND, 3RD FLOOR FIRE ALARM PLAN

21014

ISSUED:	5-18-22
DWG BY:	RM
CKD BY:	BEB
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