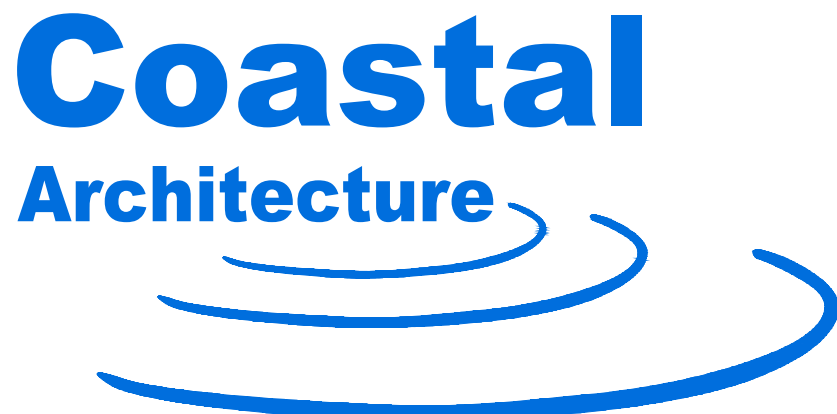


VILLAGE WEST

UNITS 4 & 5

DRAWING LIST

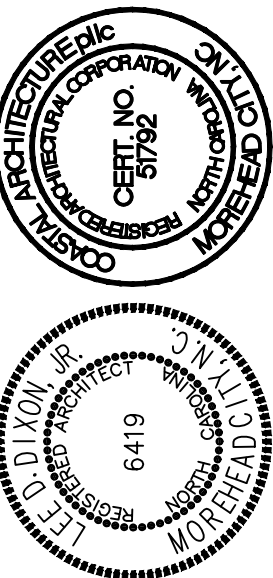
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Consual Architecture, Inc. **ADDENDUM**

The Drawings, Specifications and other documents prepared by **Consual Architecture, Inc.** (the "Designer") for this project are instruments of service for use solely with respect to this project and, unless otherwise provided, the Designer shall be deemed the author of these documents and shall retain all common law, statutory and equitable rights in and to the Designer's drawings, specifications, and other documents. The Owner shall not be permitted to reproduce, copy, or otherwise use the Designer's drawings, specifications, and other documents for information and reference in connection with the Owner's use and occupancy of this project. No portions in part or in whole of the Drawings, Specifications, and other documents shall be duplicated or used by the Owner or others for additions to this Project, completion of this Project by others, or on other Projects without written consent by the Designer.

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WG BY: BLS/MES

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OF

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

Name of Project: VILLAGE WEST
Address: EMERALD ISLE, NORTH CAROLINA Zip Code: 28594
Owner/Authorized Agent: LEE DIXON Phone # (252) 241-2127 E-Mail: lee@coastalarchitecture.net
Owned By: ☐ City/County ☒ Private ☐ State
State Enforcement Jurisdiction: ☒ City EMERALD ISLE ☐ County ☐ State

CONTACT: _____
DESIGNER: Coastal Architecture FIRM NAME: Lee Dixon LICENSE # 6419 TELEPHONE # (252) 241-2127 E-MAIL: lee@coastalarchitecture.net
Architectural: - Civil: - Electrical: Burke Design Group Ben Burke 22038 (919) 111-1916 benburke@ncrr.com
Fire Alarm: Burke Design Group Ben Burke 22038 (919) 111-1916 benburke@ncrr.com
Plumbing: Burke Design Group Ben Burke 22038 (919) 111-1916 benburke@ncrr.com
Mechanical: Burke Design Group Ben Burke 22038 (919) 111-1916 benburke@ncrr.com
Sprinkler-Standpipe: - Structural: The Cullipher Group Ron Cullipher - (252) 113-0030 ron@ccgpa.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 ☐ Shell/Core ☐ 1st Time Interior Completions
☐ Addition ☐ Phased Construction—Shell Core
2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Alteration Level I ☐ Historic Property
(check all that apply) ☐ Repair ☐ Alteration Level II ☐ Change of Use
☐ Chapter 14 ☐ Alteration Level III

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

BASIC BUILDING DATA									
Construction Type:		☐ I-A	☐ II-A	☐ III-A	☐ IV	☐ V-A			
(check all that apply)		☐ I-B	☐ II-B	☐ III-B		☒ V-B			
Sprinklers:		☐ No	☐ Partial	☒ NFPA 13	☒ NFPA 13R	☐ NFPA 13D			
Standpipes:		☐ No	☐ Class ☐ I	☐ II	☐ III	☐ Wet	☐ Dry		
Primary Fire District:		☒ No	☐ Yes	Flood Hazard Area:		☐ No	☐ Yes		
Special Inspections Required:		☒ No	☐ Yes						
GROSS BUILDING AREA TABLE									
Floor:	Existing (sq ft)	New (sq ft)	Units 1-5	Units 4-5	Units 6-7	Units 8-9	Units 10-11	Subtotal	
Mercantile	2,460	1,640	3,034	1,640	1,640	1,640	1,640	10,414	
1st Floor Living	2,460	1,640	3,034	1,640	1,640	1,640	1,640	10,414	
2nd Floor Living	2,460	1,640	3,034	1,640	1,640	1,640	1,640	10,414	

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

ASHRAE 90.1: ☐ Performance ☐ Prescriptive

Other: ☐ Performance (specify source) _____

THERMAL ENVELOPE: (Prescriptive method only)

Roof/ceiling Assembly (each assembly) 24 GA. Metal roof on ice and water shield on ½" plywood w/ R34 closed cell spray foam insulation.

Description of assembly: _____

U-Value of total assembly: _____

R-Value of insulation: R30

Skylights in each assembly: _____

U-Value of skylight: _____

total square footage of skylights in each assembly: N/A

Exterior Walls (each assembly)

Description of assembly: 4" wood stud, R13 insulation ½" plywood sheathing 30" felt.

U-Value of total assembly: _____

R-Value of insulation: R13

Openings (windows or doors with glazing)

U-Value of assembly: _____

Solar heat gain coefficient: _____

projection factor: _____

Door R-Values: _____

Walls below grade (each assembly)

Description of assembly: _____

U-Value of total assembly: N/A

R-Value of insulation: _____

Floors over unconditioned space (each assembly)

Description of assembly: _____

U-Value of total assembly: N/A

R-Value of insulation: _____

Floors slab on grade

Description of assembly: _____

U-Value of total assembly: _____

R-Value of insulation: _____

Horizontal/vertical requirement:

slab heated: N/A

STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors: Wind (IW) 1.0

Snow (IS) 1.0

Seismic (IE) _____

Live Loads: Roof 20 psf

Mezzanine N/A psf

Floor 100 psf Commercial

40 psf Residential

Ground Snow Load: 40 psf

Wind Load: Basic Wind Speed 150 mph (ASCE-7)

Exposure Category C

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ☐ C ☐ D ☐ N/A

Provide the following Seismic Design Parameters:

Occupancy Category (Table 1604.5) ☐ I ☐ II ☐ III ☐ IV

Spectral Response Acceleration SS % S1 _____ % S2 _____

Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F

Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data

Basic structural system (check one)

☐ Bearing Wall ☐ Dual w/Special Moment Frame

☐ Building Frame ☐ Dual w/intermediate R/C or Special Steel

☐ Moment Frame ☐ 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 _____

MECHANICAL DESIGN

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone: _____

winter dry bulb: _____

summer dry bulb: _____

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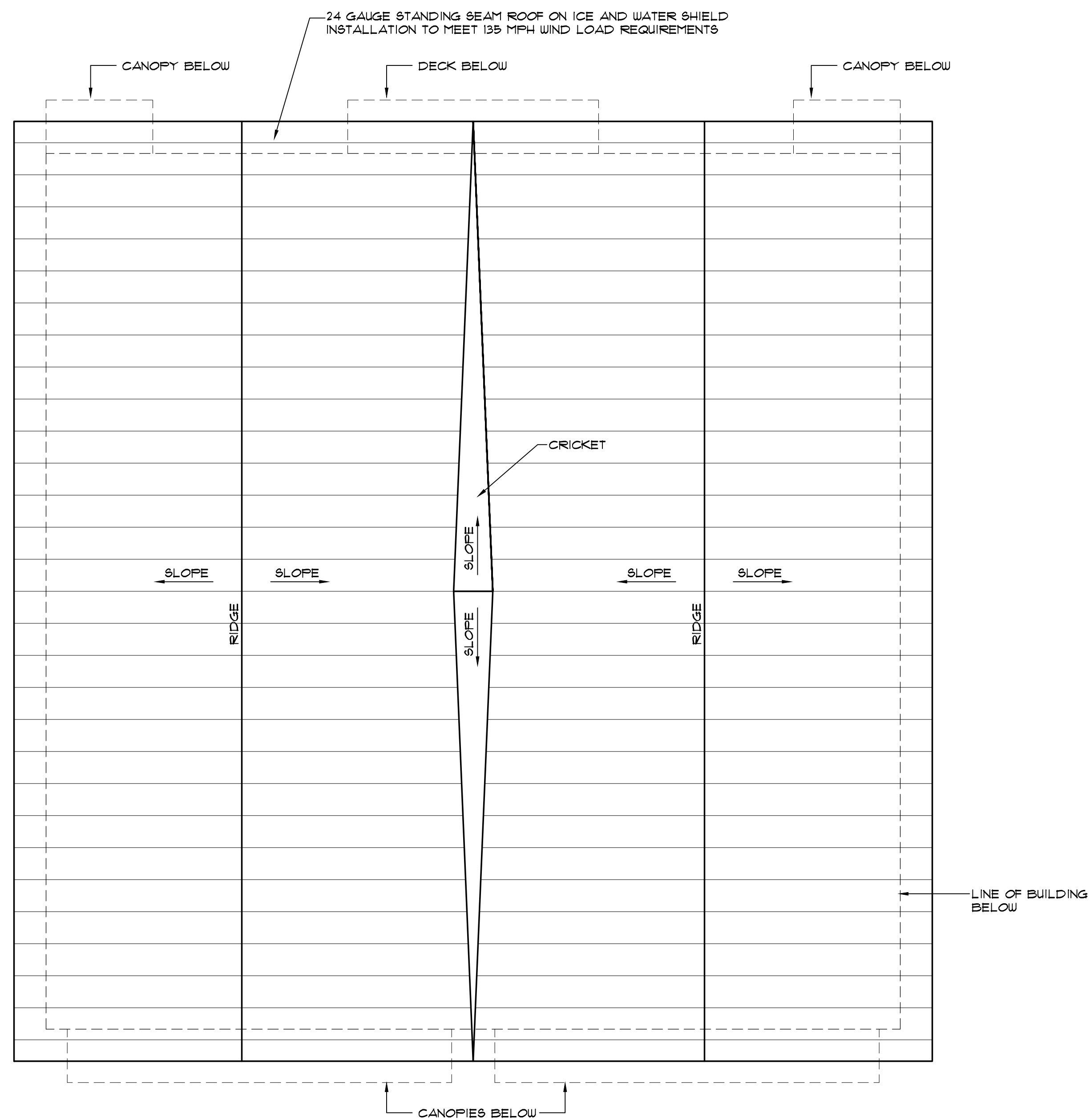
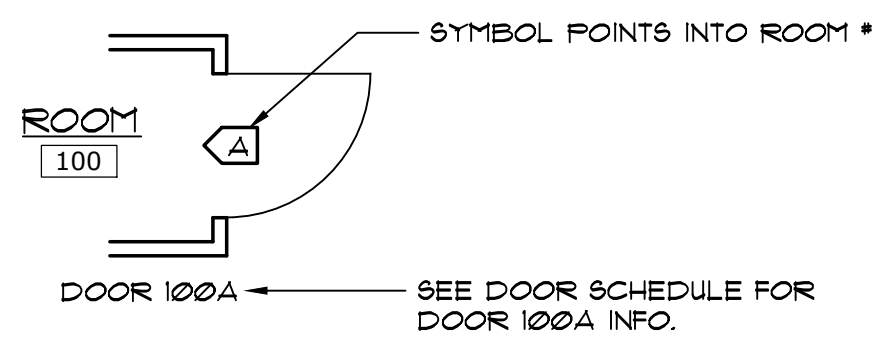
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winter dry bulb: _____</

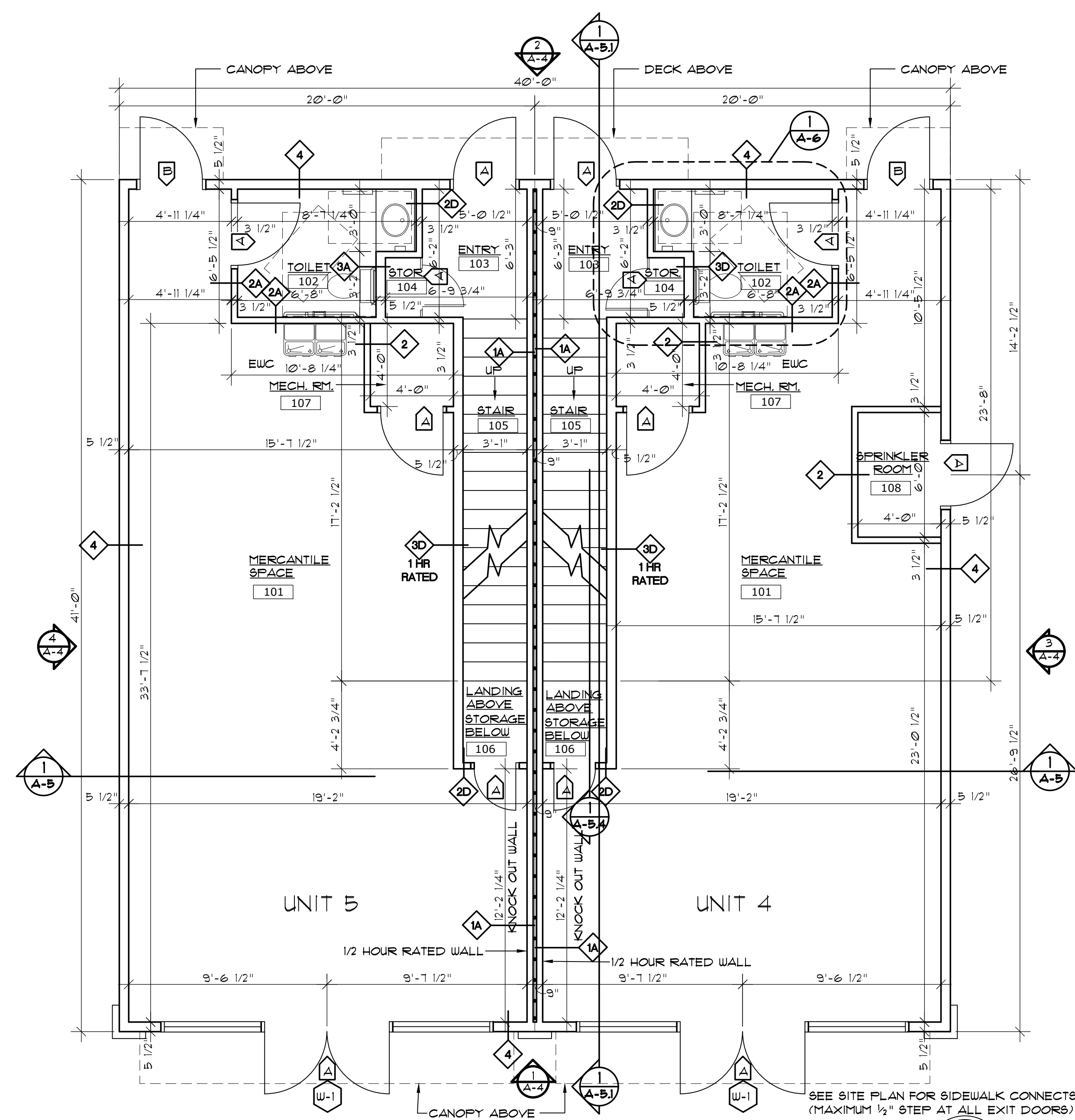
WALL TYPE LEGEND

- | | |
|--|--|
| | 2X4 @ 16" O.C. INTERIOR
LOADBEARING WALL
FROM FLOOR TO
STRUCTURE ABOVE (TYP.)
W/ 5/8" GUB EACH SIDE |
| | 2 ROWS 2X4 @ 16" O.C. INTERIOR
LOADBEARING WALL
FROM FLOOR TO
STRUCTURE ABOVE
W/ 5/8" TYPE X GUB EACH SIDE
(AND 1 LAYER 3/8" IN CAVITY)
W/ BATT INSULATION
SEE ALSO 2/A-5 & 3/A-5 |
| | 2 ROWS 2X4 @ 16" O.C. EXTERIOR
LOADBEARING WALL
W/ 5/8" PLYWOOD AND
HARDIE BOARD SIDING INSIDE & OUT
W/ R15 BATT INSULATION
SEE ALSO 2/A-5 & 3/A-5 SIMILAR |
| | 2X4 @ 16" O.C. EXTERIOR
NON-LOADBEARING WALL
W/ 5/8" PLYWOOD AND
HARDIE BOARD SIDING INSIDE & OUT
W/ R15 BATT INSULATION |
| | 2 ROWS 2X4 @ 16" O.C. EXTERIOR
LOADBEARING WALL
(SEE ALSO 2/A-5 & 3/A-5 SIMILAR
W/ 5/8" PLYWOOD AND
HARDIE BOARD SIDING INSIDE & OUT
W/ BATT INSULATION |
| | 2X4 @ 16" O.C. INTERIOR
NON-LOADBEARING WALL
FROM FLOOR TO
STRUCTURE ABOVE
W/ 5/8" GUB EACH SIDE |
| | 2X4 @ 16" O.C. INTERIOR
NON-LOADBEARING WALL
FROM FLOOR TO
STRUCTURE ABOVE
W/ 5/8" GUB EACH SIDE
W/ SOUND BATT INSULATION |
| | 2X4 @ 16" O.C. INTERIOR
NON-LOADBEARING WALL
FROM FLOOR TO
6" ABV. CEILING HEIGHT (TYP.)
W/ BATT INSULATION |
| | 2X4 @ 16" O.C. INTERIOR
NON-LOADBEARING WALL
FROM FLOOR TO
6" ABV. CEILING HEIGHT
BRACE TO STRUCTURE (TYP.)
W/ BATT INSULATION |
| | SIMILAR TO 2 BUT 3/8" TYPE
X GUB - 1 HOUR RATED |
| | 2X6 @ 16" O.C. INTERIOR WALL
NON-LOAD BEARING TO
STRUCTURE ABOVE (TYP.)
W/ 5/8" GUB EACH SIDE
W/ SOUND BATT INSULATION |
| | 2X6 @ 16" O.C. INTERIOR WALL
NON-LOAD BEARING TO
STRUCTURE ABOVE (TYP.)
W/ 5/8" GUB EACH SIDE
W/ SOUND BATT INSULATION |
| | 2X6 @ 16" O.C. INTERIOR
NON-LOADBEARING WALL
FROM FLOOR TO
6" ABV. CEILING HEIGHT
BRACE TO STRUCTURE (TYP.)
W/ SOUND BATT INSULATION |
| | 2X6 @ 16" O.C. INTERIOR
LOADBEARING WALL
W/ 5/8" TYPE X GUB
W/ SOUND BATT INSULATION |
| | SIMILAR TO 3A BUT 3/8" TYPE X
GUB - 1 HOUR RATED |
| | 2X6 @ 16" O.C. EXTERIOR
(12" O.C. 4'-0" FROM CORNERS)
W/ 5/8" PLYWOOD AND HARDIE SIDING
W/ 5/8" GUB INTERIOR
W/ R15 BATT INSULATION |
| | 2X4 @ 16" O.C. EXTERIOR
(12" O.C. 4'-0" FROM CORNERS)
W/ 5/8" PLYWOOD AND HARDIE SIDING
W/ 5/8" GUB INTERIOR
W/ R15 BATT INSULATION |
| | 2X4 @ 16" O.C. INTERIOR
LOADBEARING WALL
FROM FLOOR TO
STRUCTURE ABOVE
W/ 5/8" GUB EACH SIDE
W/ BATT INSULATION |

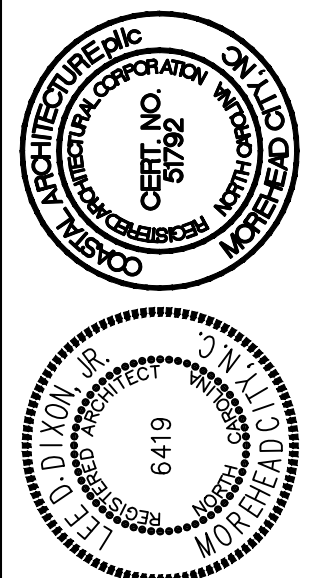
DOOR SYMBOL LEGEND



2 ROOF PLAN UNITS 4/5
SCALE: 1/4"=1'-0"



1 MERCANTILE FLOOR PLAN UNITS 4/5
SCALE: 1/4"=1'-0"



MERCANTILE PLAN
UNITS 4/5
ROOF PLAN
UNITS 4/5

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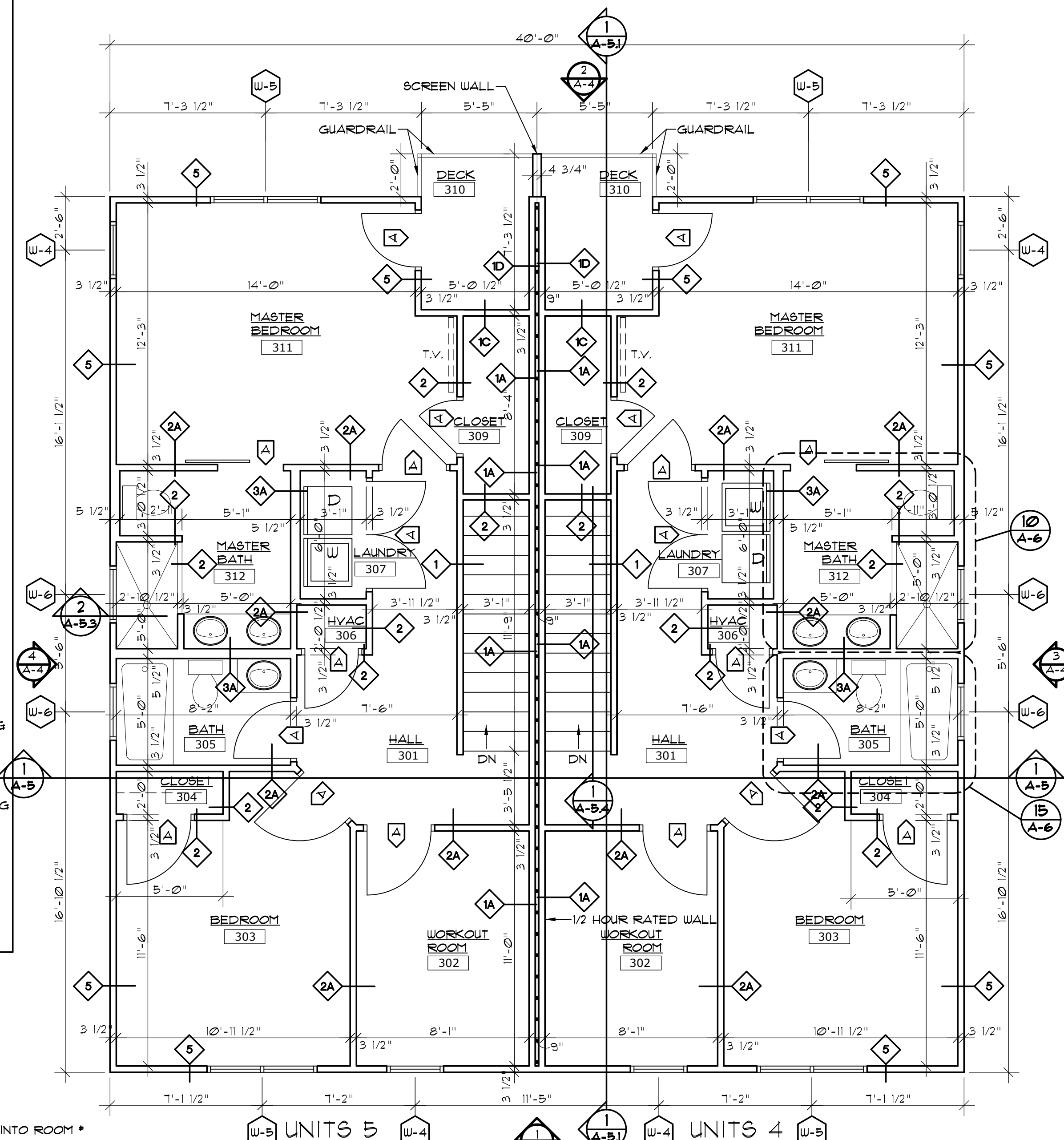
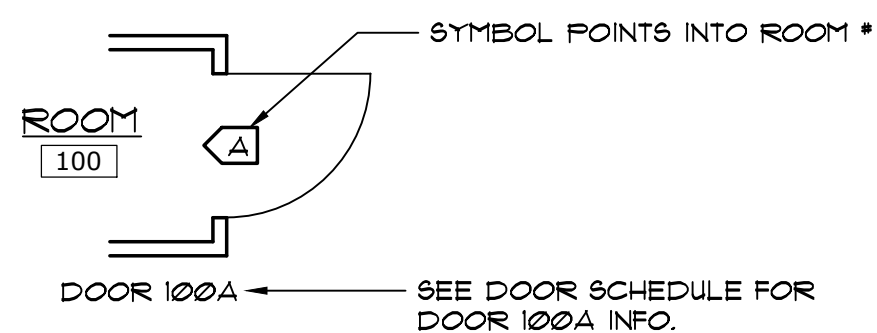
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CKD BY: LDD
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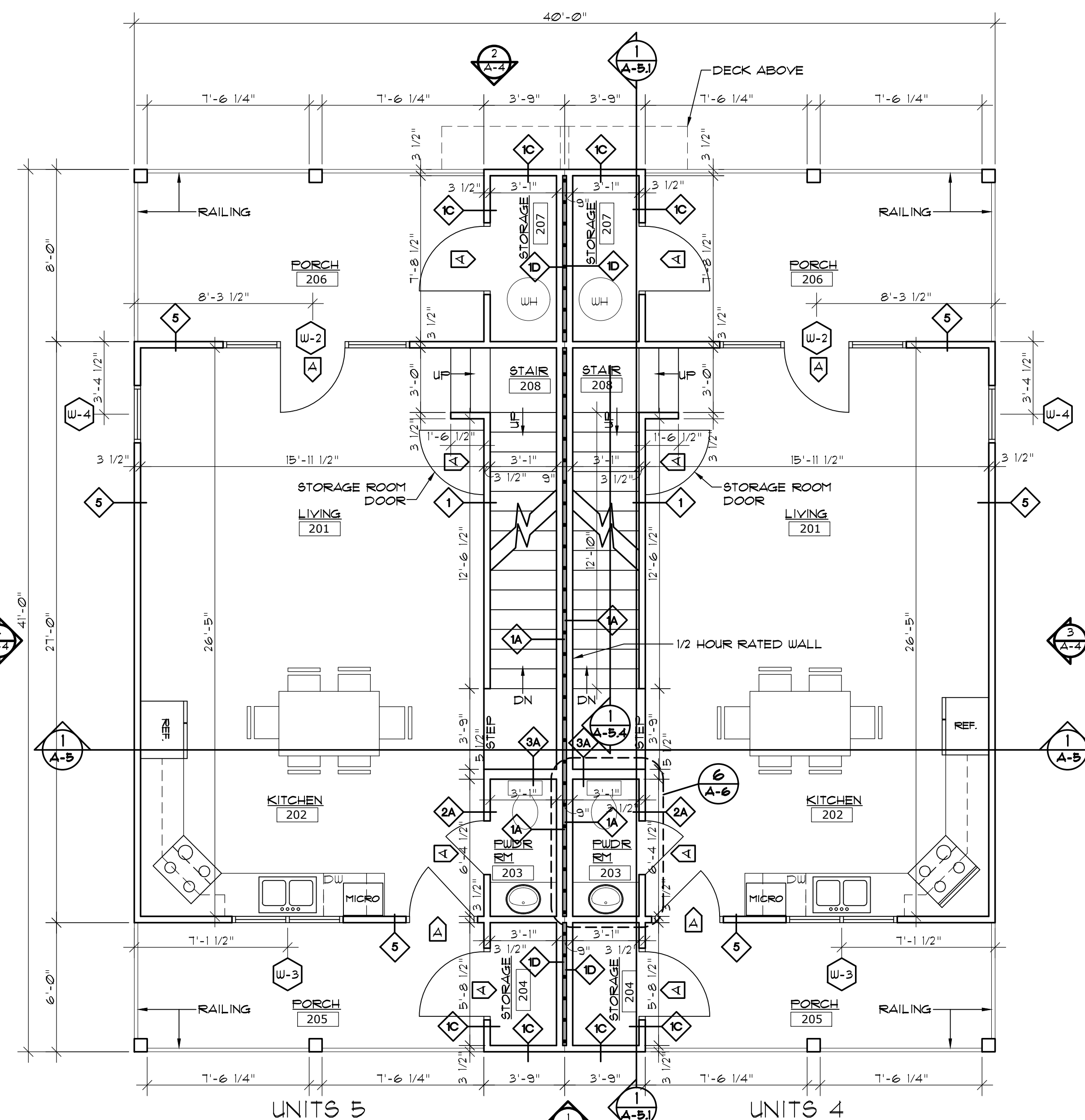
WALL TYPE LEGEND

- 1 2X4 @ 16" O.C. INTERIOR LOADBEARING WALL FROM FLOOR TO STRUCTURE ABOVE (TYP.) W/ 5/8" GUB EACH SIDE
- 1A 2 ROWS 2X4 @ 16" O.C. INTERIOR LOADBEARING WALL FROM FLOOR TO STRUCTURE ABOVE W/ 5/8" TYPE X GUB EACH SIDE (AND 1 LAYER 5/8" IN CAVITY) W/ BATT INSULATION SEE ALSO 2/A-5 & 3/A-5
- B 2 ROWS 2X4 @ 16" O.C. EXTERIOR LOADBEARING WALL W/ 5/8" FLYWOOD AND HARDIE BOARD SIDING INSIDE & OUT W/ R15 BATT INSULATION SEE ALSO 2/A-5 & 3/A-5 SIMILAR
- C 2X4 @ 16" O.C. EXTERIOR NON-LOADBEARING WALL W/ 5/8" FLYWOOD AND HARDIE BOARD SIDING INSIDE & OUT W/ R15 BATT INSULATION
- D 2 ROWS 2X4 @ 16" O.C. EXTERIOR LOADBEARING WALL (SEE ALSO 2/A-5 & 3/A-5 SIMILAR W/ 5/8" FLYWOOD AND HARDIE BOARD SIDING INSIDE & OUT W/ BATT INSULATION
- 2 2X4 @ 16" O.C. INTERIOR NON-LOADBEARING WALL FROM FLOOR TO STRUCTURE ABOVE W/ 5/8" GUB EACH SIDE
- 2A 2X4 @ 16" O.C. INTERIOR NON-LOADBEARING WALL FROM FLOOR TO STRUCTURE ABOVE W/ 5/8" GUB EACH SIDE W/ SOUND BATT INSULATION
- 2B 2X4 @ 16" O.C. INTERIOR NON-LOADBEARING WALL FROM FLOOR TO 6" ABV. CEILING HEIGHT (TYP.)
- 2C 2X4 @ 16" O.C. INTERIOR NON-LOADBEARING WALL FROM FLOOR TO 6" ABV. CEILING HEIGHT BRACE TO STRUCTURE (TYP.) W/ BATT INSULATION
- 2D 2X4 @ 16" O.C. INTERIOR NON-LOADBEARING WALL FROM FLOOR TO 6" ABV. CEILING HEIGHT BRACE TO STRUCTURE (TYP.) W/ BATT INSULATION
- 3 2X6 @ 16" O.C. INTERIOR WALL NON-LOAD BEARING TO STRUCTURE ABOVE (TYP.)
- 3A 2X6 @ 16" O.C. INTERIOR WALL NON-LOAD BEARING TO STRUCTURE ABOVE (TYP.) W/ 5/8" GUB EACH SIDE W/ SOUND BATT INSULATION
- 3B 2X6 @ 16" O.C. INTERIOR NON-LOADBEARING WALL FROM FLOOR TO 6" ABV. CEILING HEIGHT BRACE TO STRUCTURE (TYP.) W/ SOUND BATT INSULATION
- 3C 2X6 @ 16" O.C. INTERIOR LOADBEARING WALL W/ 5/8" TYPE X GUB W/ SOUND BATT INSULATION
- 3D 2X6 @ 16" O.C. INTERIOR LOADBEARING WALL W/ 5/8" TYPE X GUB W/ SOUND BATT INSULATION
- 4 2X6 @ 16" O.C. EXTERIOR (12" O.C. 4'-0" FROM CORNERS) W/ 5/8" FLYWOOD AND HARDIE SIDING W/ 5/8" GUB INTERIOR W/ R15 BATT INSULATION
- 5 2X4 @ 16" O.C. EXTERIOR (12" O.C. 4'-0" FROM CORNERS) W/ 5/8" FLYWOOD AND HARDIE SIDING W/ 5/8" GUB INTERIOR W/ R15 BATT INSULATION
- 6 2X4 @ 16" O.C. INTERIOR LOADBEARING WALL FROM FLOOR TO STRUCTURE ABOVE W/ 5/8" GUB EACH SIDE W/ BATT INSULATION

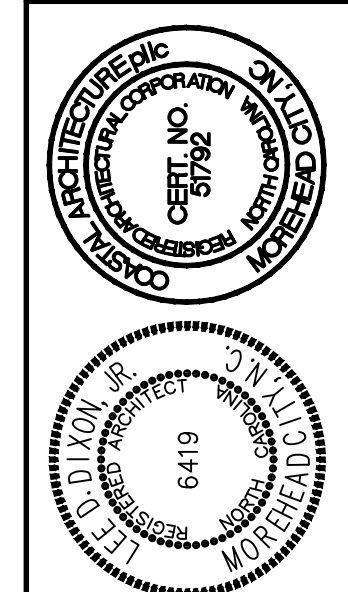
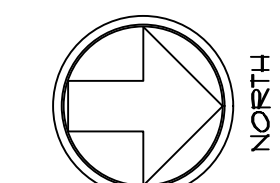
DOOR SYMBOL LEGEND



2 SECOND LIVING FLOOR PLAN UNITS 4/5
SCALE: 1/4" = 1'-0"



1 FIRST LIVING FLOOR PLAN UNITS 4/5
SCALE: 1/4" = 1'-0"



FIRST, SECOND LIVING FLOOR PLANS UNITS 4/5

18030

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- Architectural Design
- Planning
- Interiors



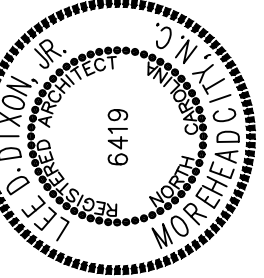
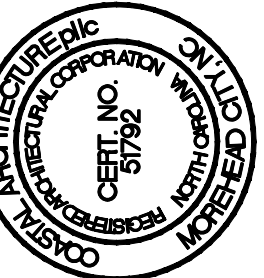
Member of the American Institute of Architects

Lee D. Dixon, Jr., AIA
252-247-2127
lee@coastalarchitecture.net

4206 Bridges St. Ext., Suite C
Morehead City, NC 28557

www.CoastalArchitecture.net

VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



REFLECTED CEILING
PLAN
MERCANTILE FLOOR
UNITS 4/5

18030

ISSUED: 03/20/2020

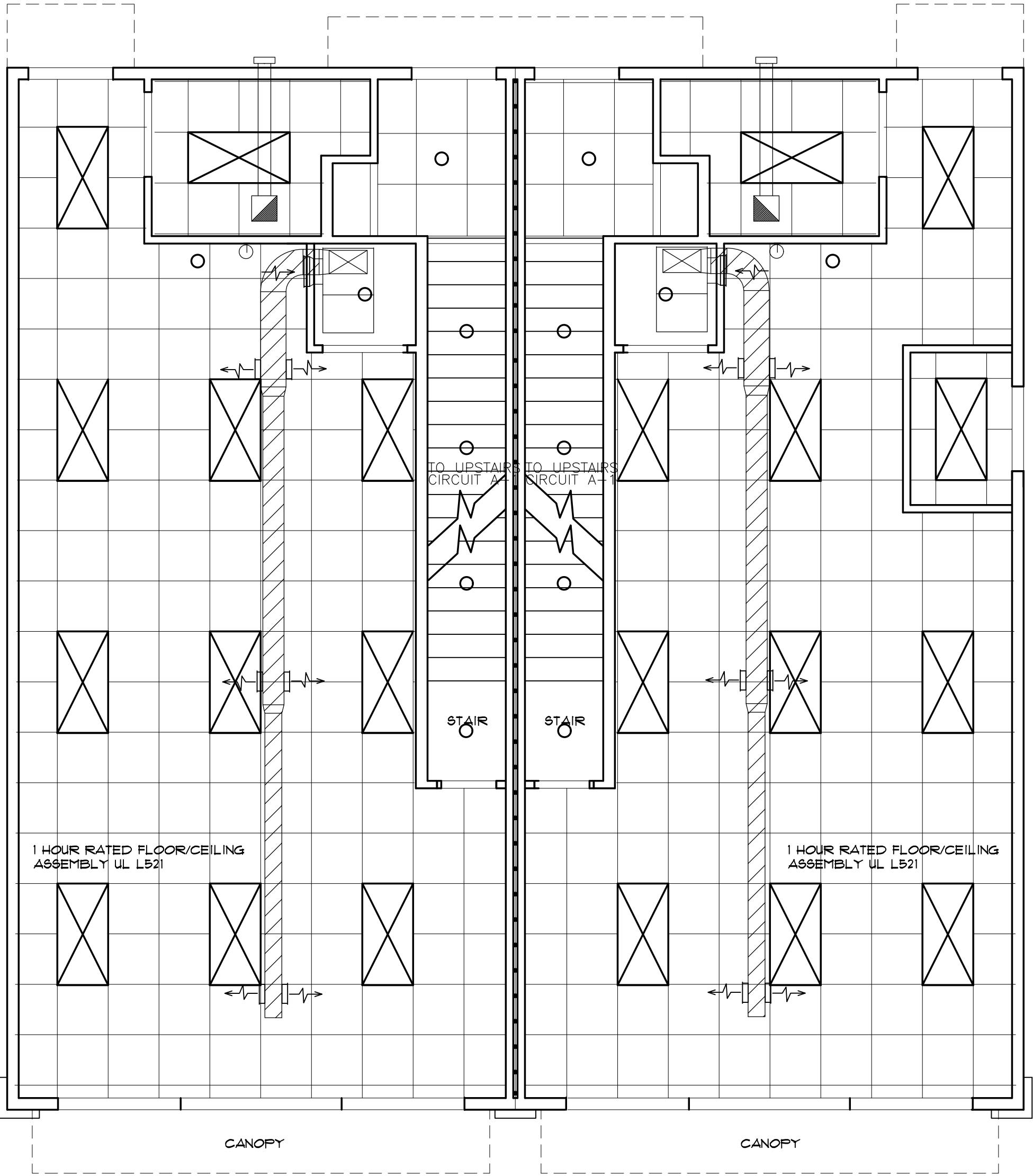
DWG BY: BLS/MES

CKD BY: LDD

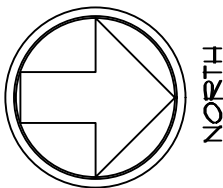
REVISIONS

SHEET NO.

A-2
OF



REFLECTED CEILING PLAN MERCANTILE FLOOR
SCALE: 1/4" = 1'-0"
UNITS 4/5



DOOR SCHEDULE (BUILDINGS 4-5)							
DOOR NO	SIZE	DOOR		FRAME		HEAD HT. SEE DOOR ELEVATIONS	REMARKS
		MAT.	TYPE	MAT.	TYPE		
101A	(2) 3'-0" X 7'-0"	ALUM.		ALUM.		7'-2"	SEE W-1 WINDOW ELEV.
101B	3'-0" X 7'-0"	ALUM.	A	ALUM.	1		
102A	3'-0" X 6'-8"	WD	C	H.M.	3		
103A	3'-0" X 7'-0"	ALUM.	E	ALUM.	1		
104A	2'-0" X 6'-8"	WD	C	H.M.	3		
106A	2'-0" X 6'-8"	WD	C	H.M.	3		1 HR RATED DOOR & FRAME
107A	3'-0" X 6'-8"	WD	C	H.M.	3		
108A	3'-0" X 7'-0"	F.G.	D	F.G.	4		
201A	3'-0" X 7'-0"	ALUM.		ALUM.		8'-0"	SEE W-2 WINDOW ELEV.
202A	3'-0" X 8'-0"	ALUM.	A	ALUM.	1		F.G. OPTION
203A	2'-6" X 6'-8"	WD	C	WD	2		
204A	3'-0" X 6'-8"	F.G.	D	F.G.	4		
207A	3'-0" X 6'-8"	F.G.	D	F.G.	4		
301A	N/A						
302A	3'-0" X 6'-8"	WD	C	WD	2		
303A	3'-0" X 6'-8"	WD	C	WD	2		
304A	3'-0" X 6'-8"	WD	C	WD	2		
305A	2'-8" X 6'-8"	WD	C	WD	2		
306A	2'-6" X 6'-8"	WD	C	WD	2		
307A	(2) 2'-6" X 6'-8"	WD	C	WD	2		
308A	NOT USED						
309A	2'-6" X 6'-8"	WD	C	WD	2		
310A	3'-0" X 6'-8"	ALUM.	A	ALUM.	1		F.G. OPTION
311A	3'-0" X 6'-8"	WD	C	WD	2		
312A	3'-0" X 6'-8"	WD	C	-	-		SLIDING BARN DOOR

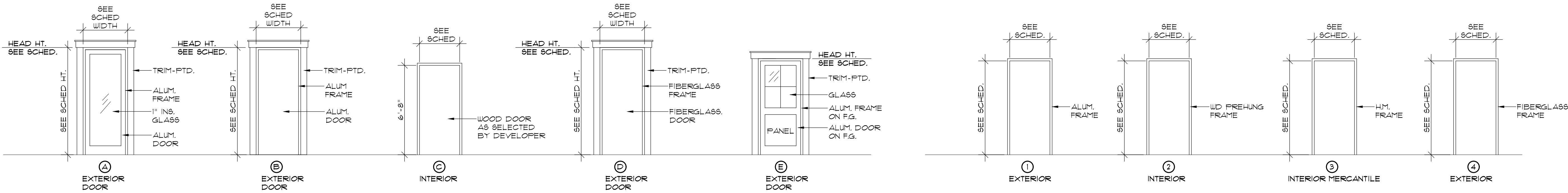
WINDOW SCHEDULE (BUILDINGS 4-5)				
MARK	TYPE	SIZE (NOMINAL)	MODEL	REMARKS
W-1	SEE ELEVATION	-	TO BE SELECTED BY DEVELOPER	MEET REQ'D WIND LOAD
W-2	SEE ELEVATION	-		MEET REQ'D WIND LOAD
W-3	DOUBLE HUNG	5'-2"W x 6'-0"H		MEET REQ'D WIND LOAD
W-4	DOUBLE HUNG	2'-8"W x 6'-0"H		MEET REQ'D WIND LOAD
W-5	DOUBLE HUNG	5'-2"W x 6'-0"H		MEET REQ'D WIND LOAD
W-6	FIXED	2'-8"W x 1'-0"H		MEET REQ'D WIND LOAD

ALL EXTERIOR GLASS TO BE IMPACT RATED (VERIFY WITH DEVELOPER IF HURRICANE SCREEN TO BE UTILIZED)

ROOM FINISH SCHEDULE (BUILDINGS 4-5)							
ROOM NUMBERS	ROOM	FLOORS	BASE	WALLS	CEILING	HEIGHT (NOMINAL)	REMARKS
101	MERCANTILE SPACE	CONC. SLAB	VINYL	GWB-PTD	ACT	10'-0"±	
102	TOILET	TILE	TILE	GWB-PTD	ACT		
103	ENTRY	LVP	VINYL	GWB-PTD	ACT		
104	STORAGE	LVP	VINYL	GWB-PTD	ACT		
105	STAIRS	LVP	VINYL	GWB-PTD	ACT		
106	STORAGE	CONC.	VINYL	GWB-PTD	ACT		
107	MECH. RM.	CONC.	VINYL	GWB-PTD	ACT		
108	SFRINKLER ROOM	CONC.	VINYL	GWB-PTD	ACT		
201	LIVING	LVP	WD-PTD	GWB-PTD	GWB-PTD	10'-0"±	
202	KITCHEN	LVP	WD-PTD	GWB-PTD	GWB-PTD		
203	POUDER ROOM	LVP	WD-PTD	GWB-PTD	GWB-PTD		
204	STORAGE	TRTD PLYWOOD	WD-PTD	HARDIE FNL - PTD	HARDIE FNL - PTD		
205	PORCH	TRTD WD PLANKS	-	SIDING - PTD	HARDIE FNL - PTD		
206	PORCH	TRTD WD PLANKS	-	SIDING - PTD	HARDIE FNL - PTD		
207	STORAGE	TRTD PLYWOOD	WD-PTD	HARDIE FNL - PTD	HARDIE FNL - PTD		
208	STAIR	LVP	WD-PTD	GWB-PTD	GWB-PTD		
301	HALL	LVP	WD-PTD	GWB-PTD	GWB-PTD	9'-0"±	
302	WORKOUT ROOM	LVP	WD-PTD	GWB-PTD	GWB-PTD		
303	BEDROOM	LVP	WD-PTD	GWB-PTD	GWB-PTD		
304	CLOSET	LVP	WD-PTD	GWB-PTD	GWB-PTD		
305	BATH	LVP	WD-PTD	GWB-PTD	GWB-PTD		
306	HVAC	LVP	WD-PTD	GWB-PTD	GWB-PTD		
307	LAUNDRY	LVP	WD-PTD	GWB-PTD	GWB-PTD		
308	NOT USED	LVP	WD-PTD	GWB-PTD	GWB-PTD		
309	OWNER'S CLOSET	LVP	WD-PTD	GWB-PTD	GWB-PTD		
310	DECK	TRTD WD PLANKS	-	HARDIE FNL - PTD	HARDIE FNL - PTD		
311	MASTER BEDROOM	LVP	WD-PTD	GWB-PTD	GWB-PTD		
312	MASTER BATHROOM	LVP	WD-PTD	GWB-PTD	GWB-PTD		

ROOM FINISH SCHEDULE REMARKS

ALL FINISHES TO BE SELECTED BUY DEVELOPER

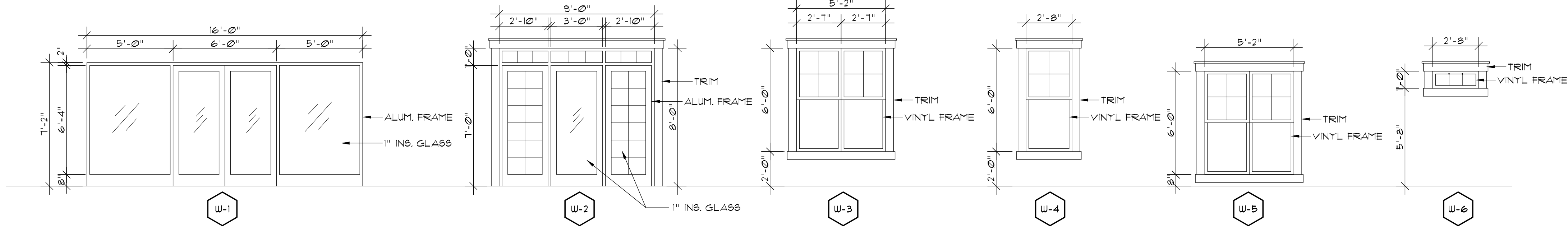


2 DOOR ELEVATIONS
A-3

3 DOOR FRAMES
A-3

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

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

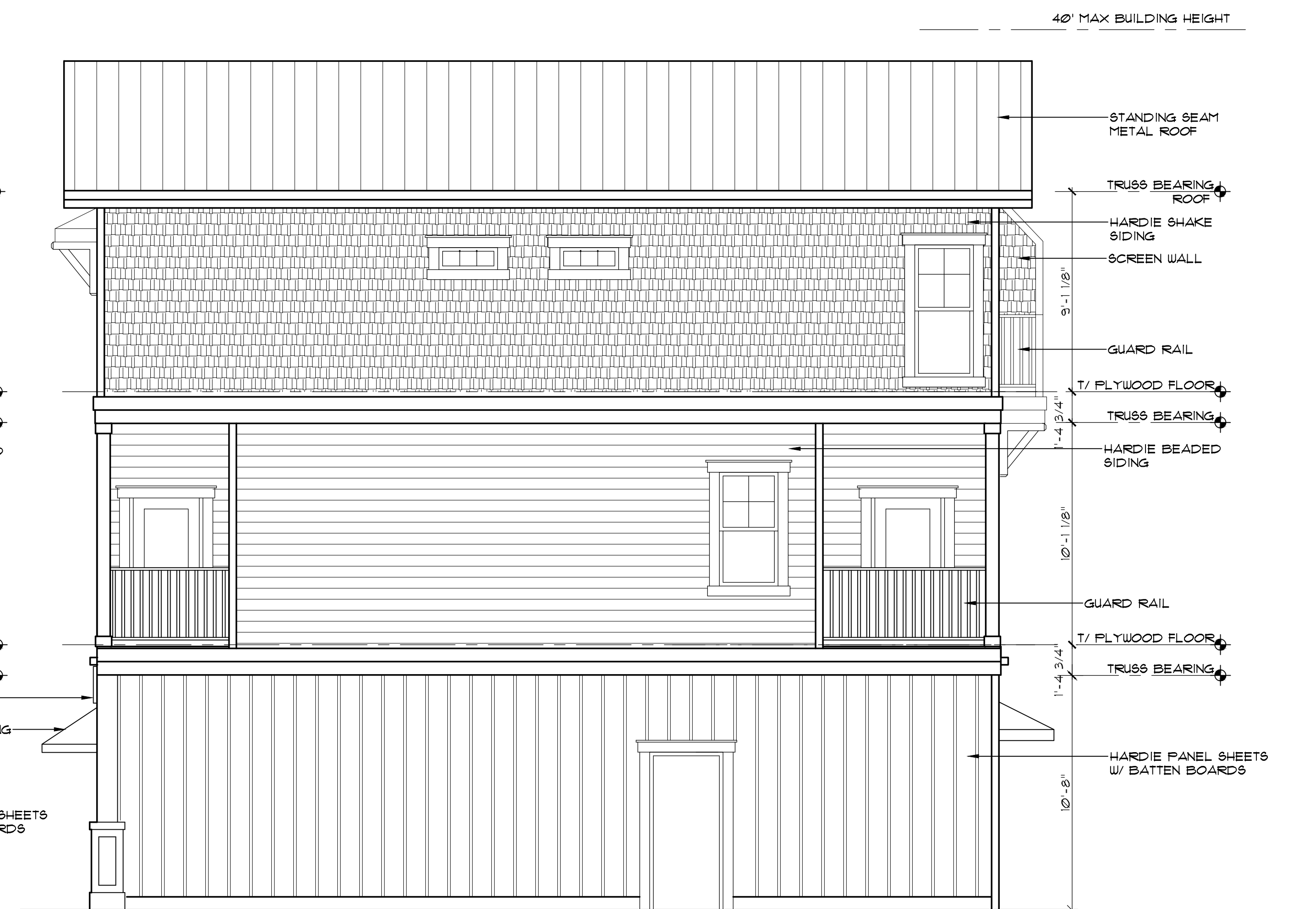


1 WINDOW ELEVATIONS
A-3

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



4 SOUTH ELEVATION UNITS 4/5
A-4 SCALE: 1/4"=1'-0"



3 NORTH ELEVATION UNITS 4/5
A-4 SCALE: 1/4"=1'-0"



2 WEST ELEVATION UNITS 4/5
A-4 SCALE: 1/4"=1'-0"



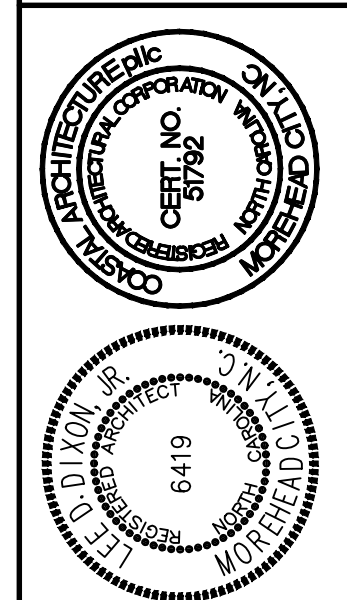
1 EAST ELEVATION UNITS 4/5
A-4 SCALE: 1/4"=1'-0"

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VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



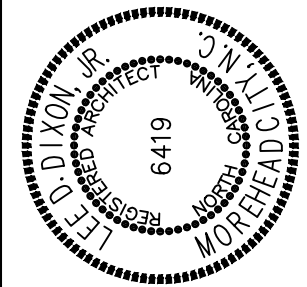
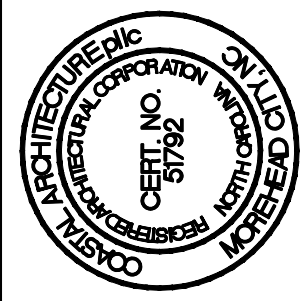
ELEVATIONS
UNITS 4/5

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CKD BY: LDD

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SHEET NO.
A-4
OF



BUILDING SECTION
BUILDINGS 4-5

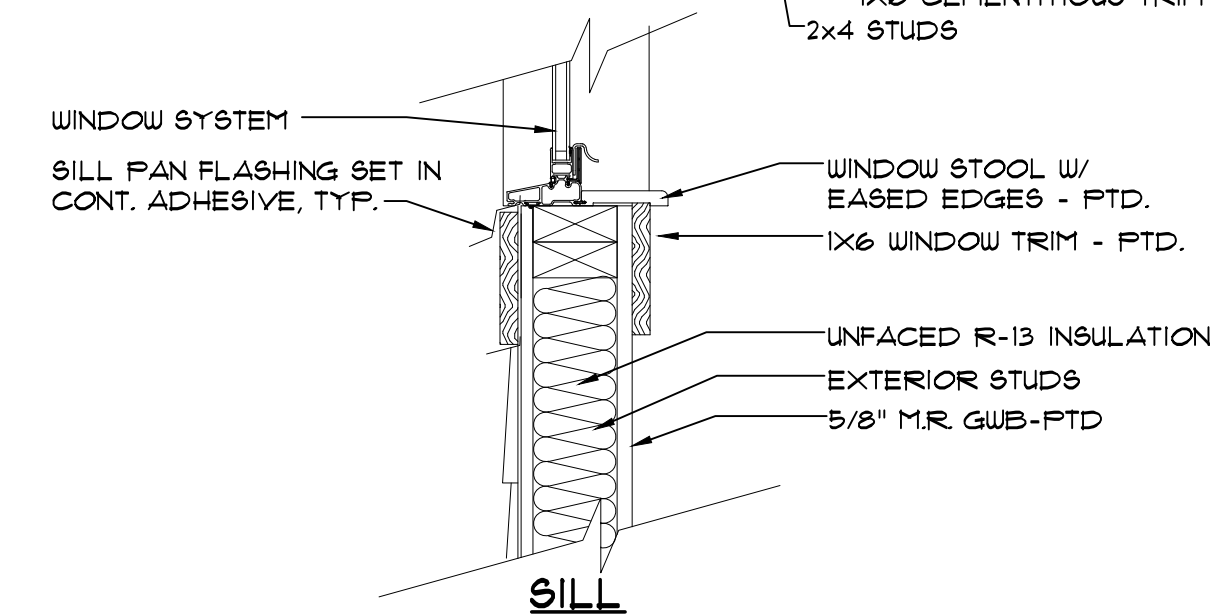
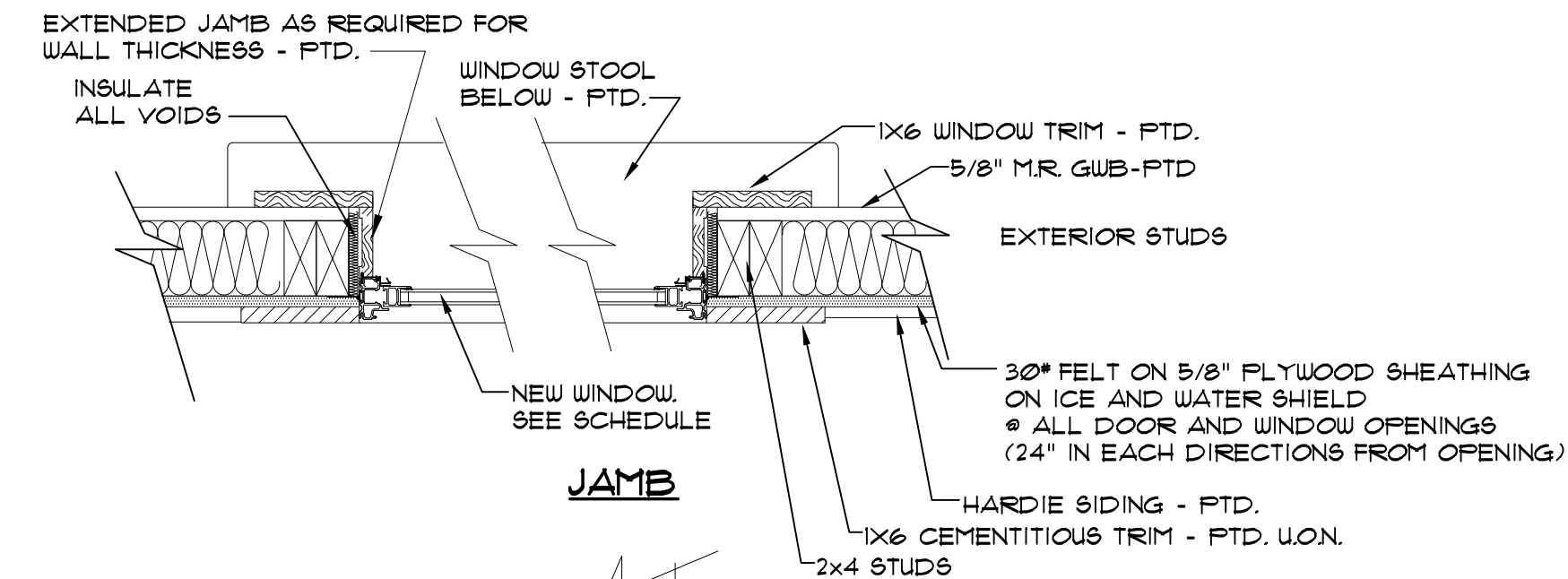
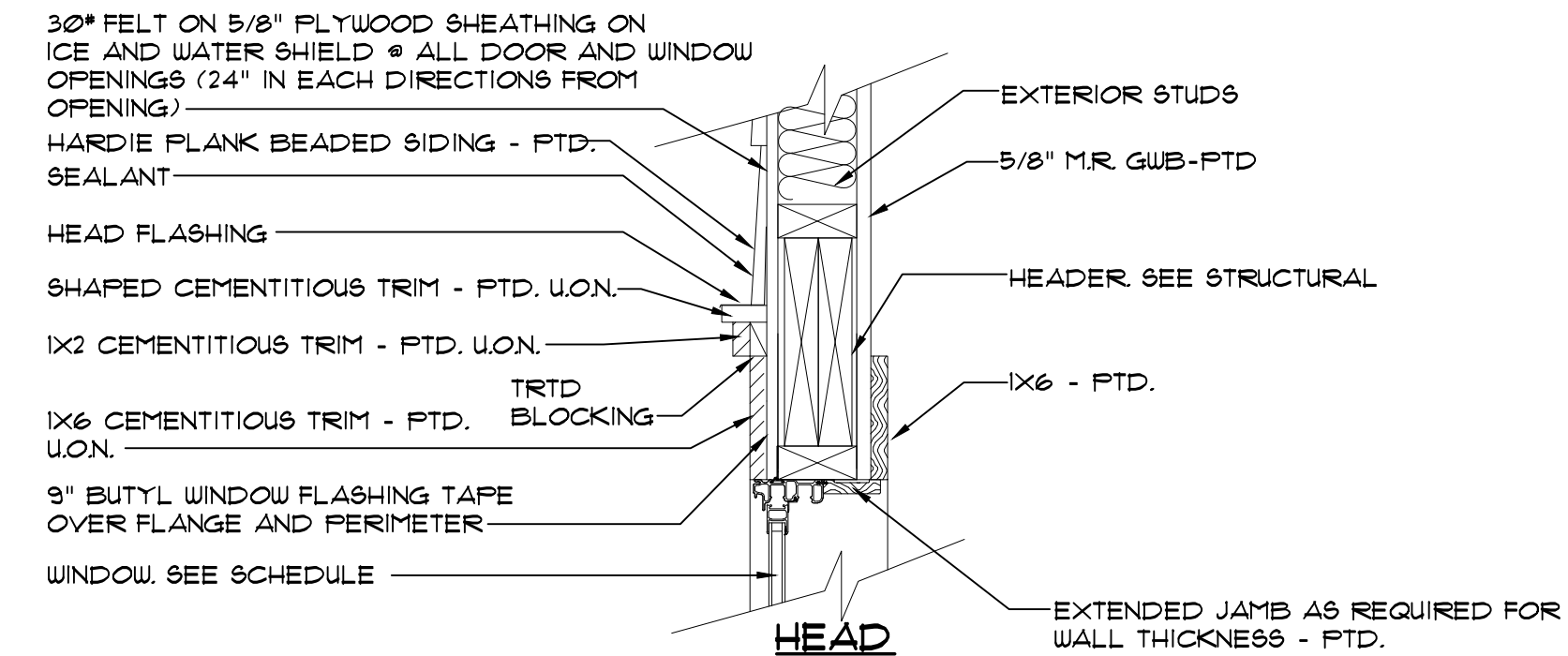
18030

ISSUED: 03/20/2020
DWG BY: BLS/MES
CKD BY: LDD

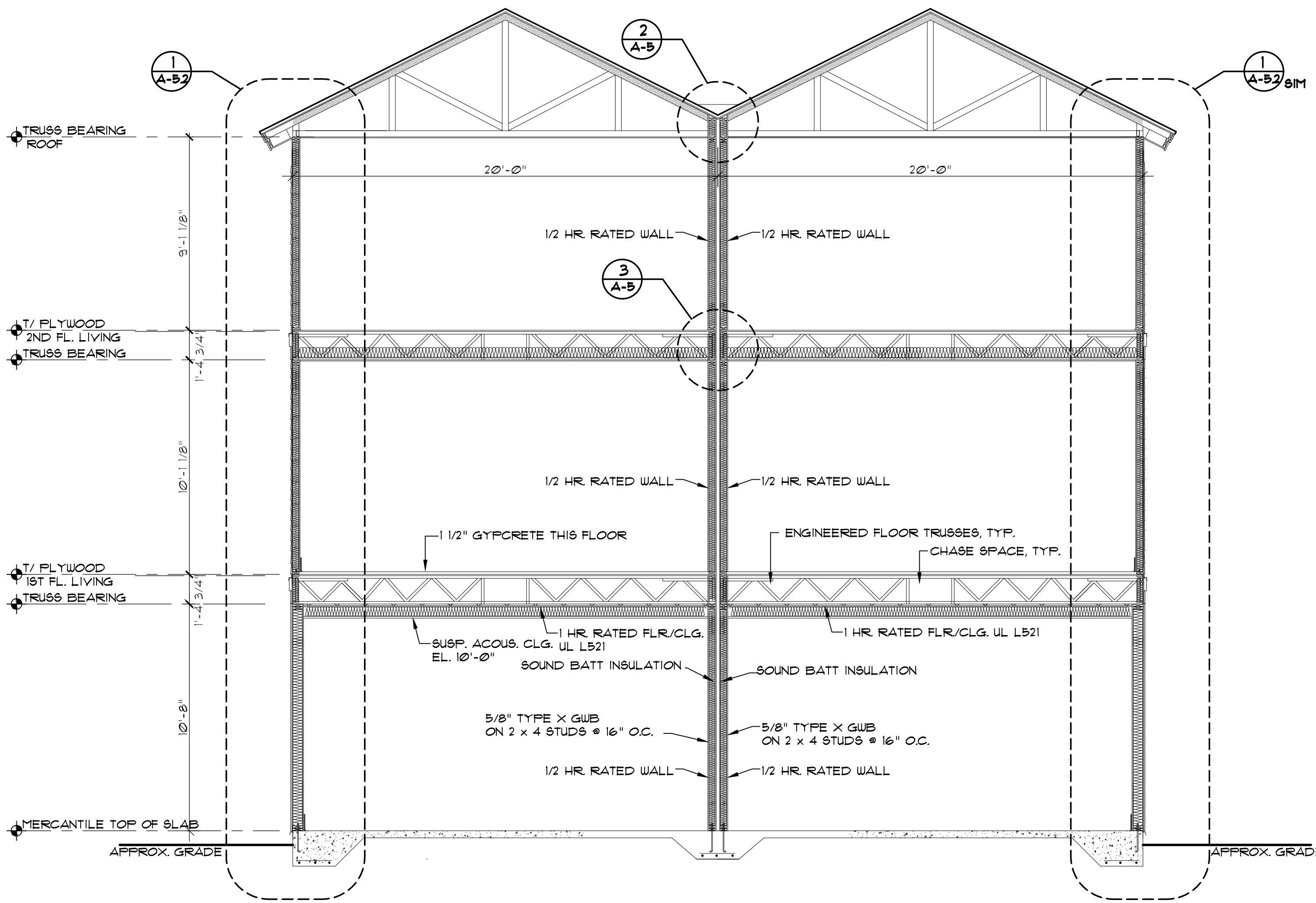
REVISIONS

SHEET NO.

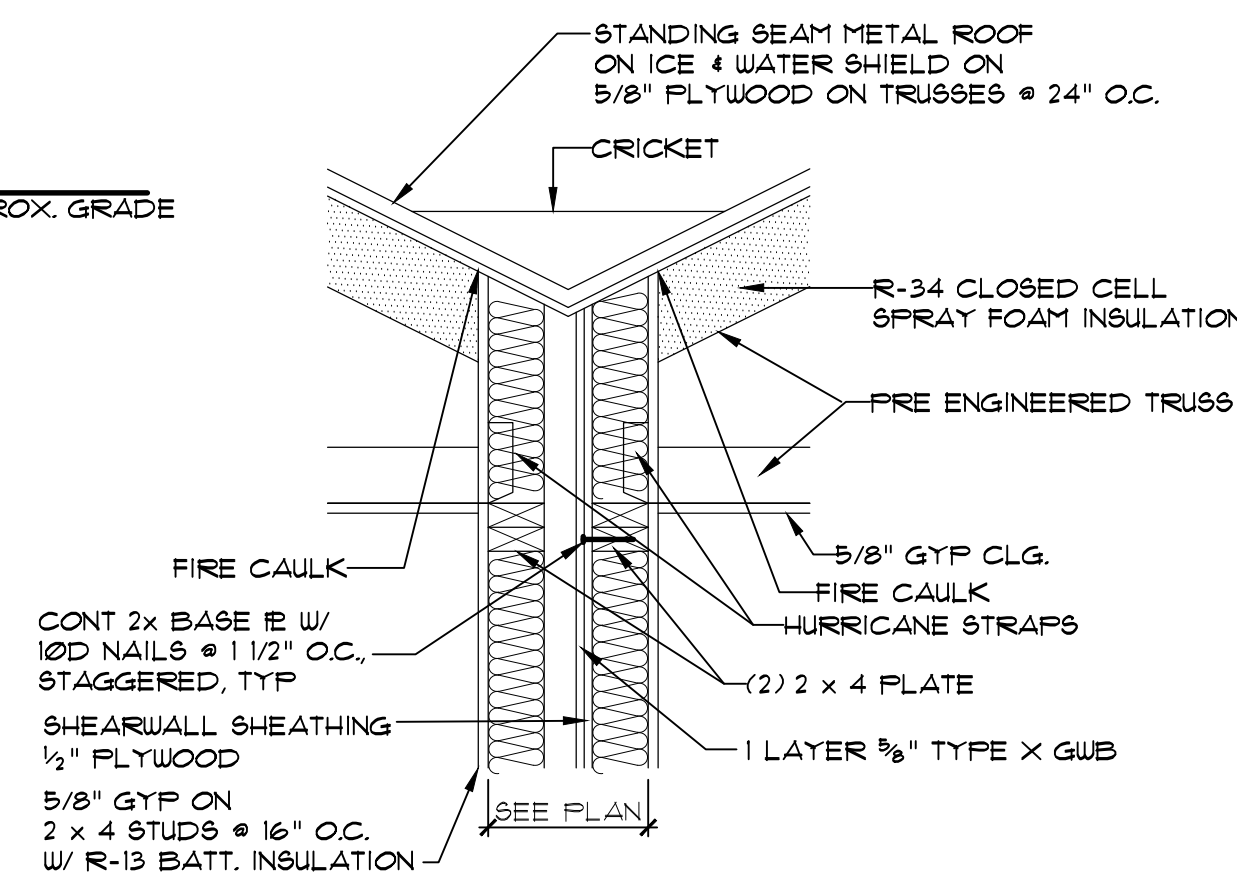
A-5
OF



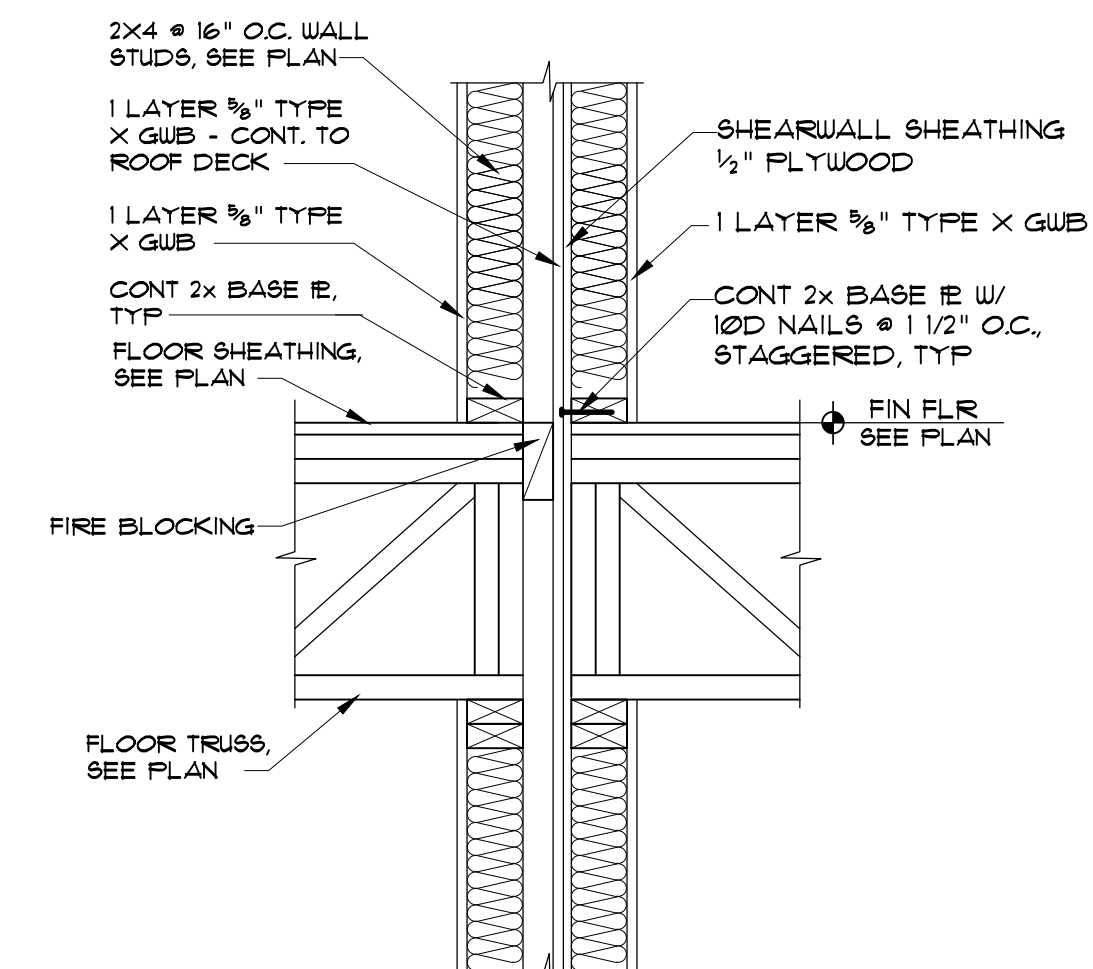
4 WINDOW DETAIL
A-5 SCALE: 1 1/2" = 1'-0"



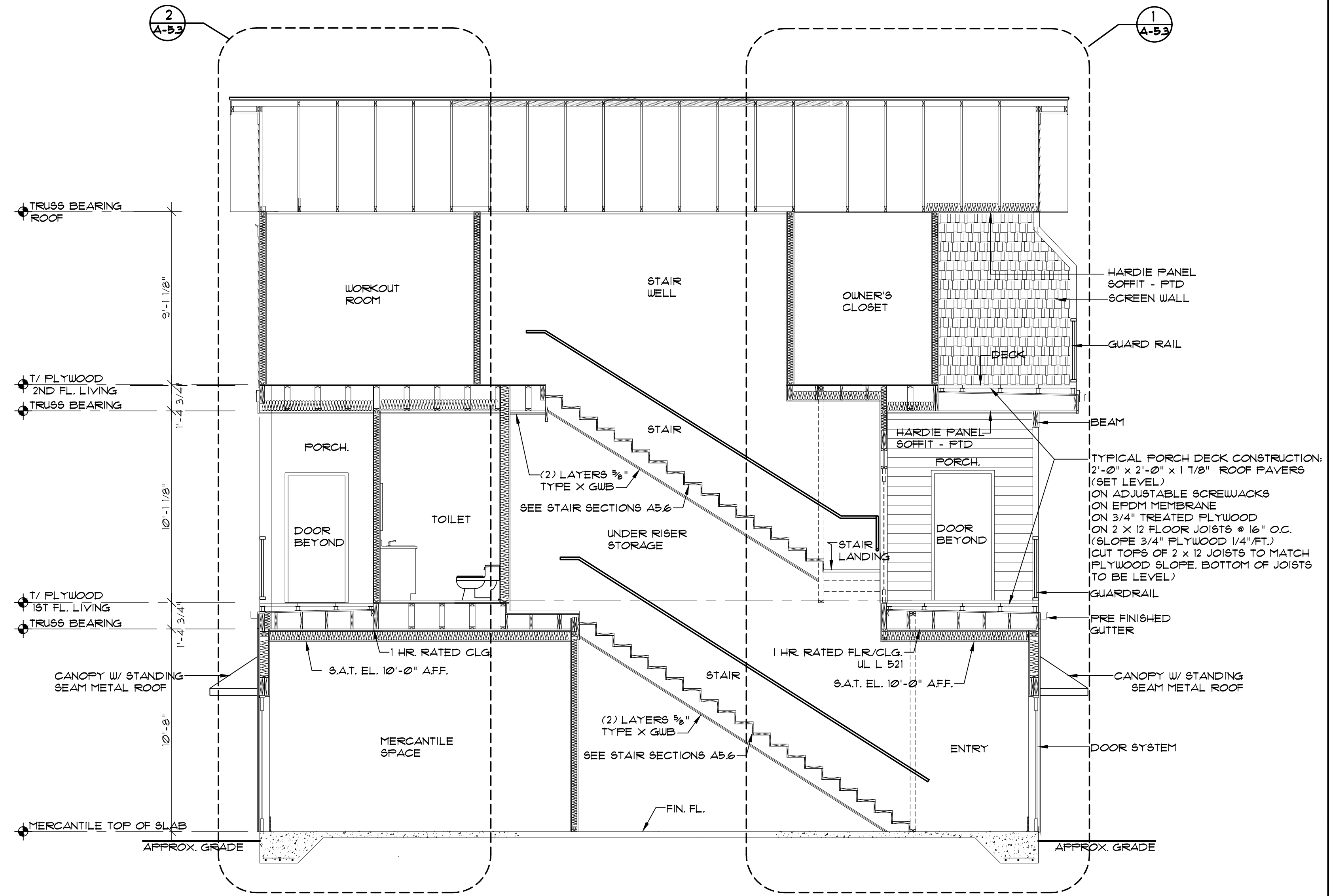
1 BUILDING SECTION BUILDINGS 4-5
A-5 SCALE: 1/4" = 1'-0"



2 1/2 HOUR RATED WALL DETAIL
A-5 SCALE: 1" = 1'-0"



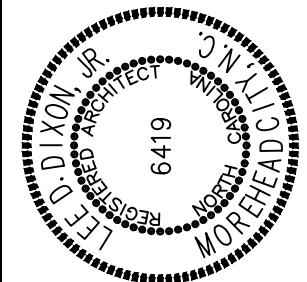
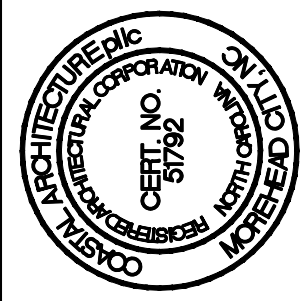
3 1/2 HOUR RATED WALL DETAIL
A-5 SCALE: 1" = 1'-0"



1
A-5.1

BUILDING SECTION

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



BUILDING SECTIONS

18030

ISSUED: 03/20/2020

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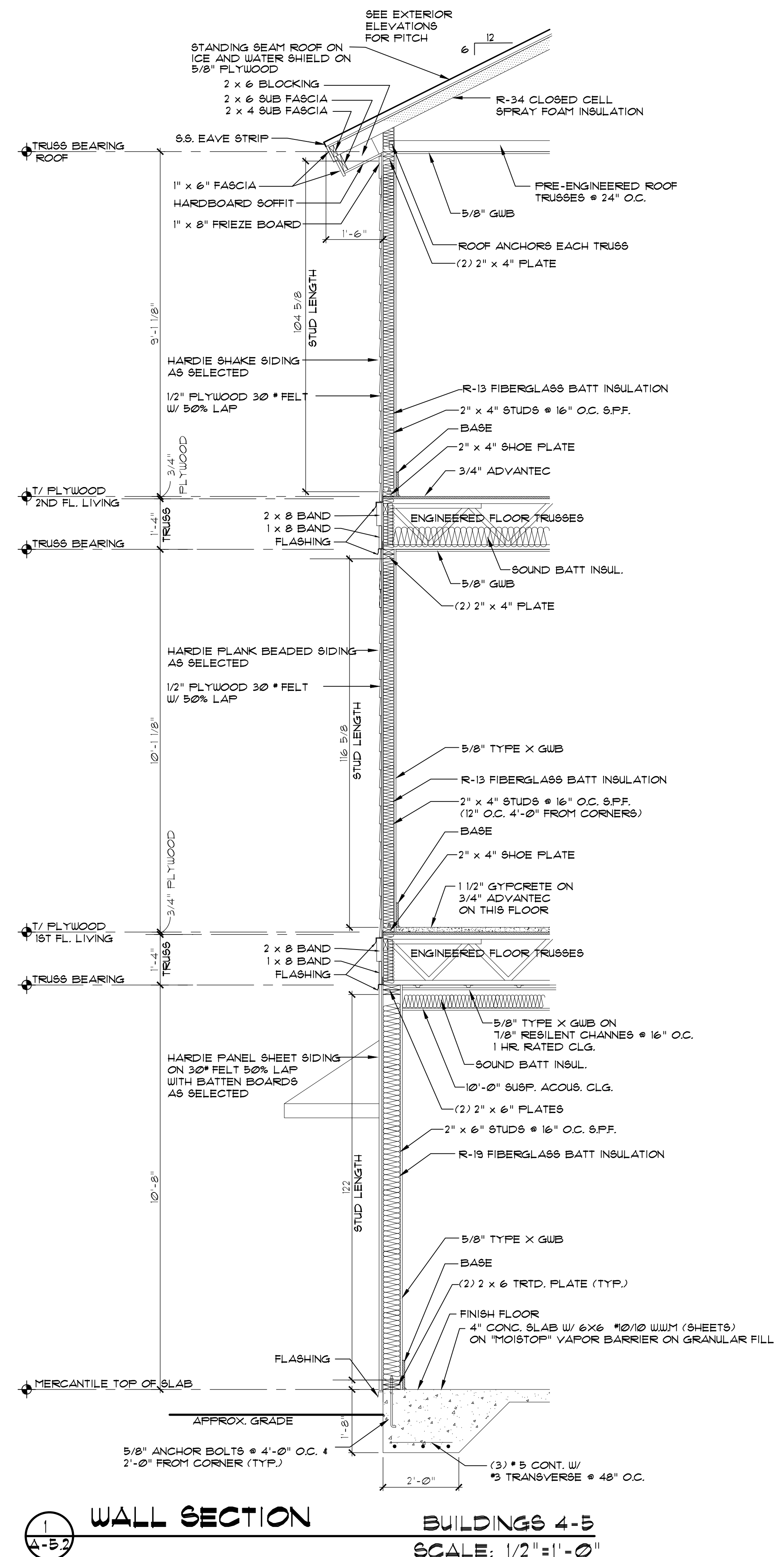
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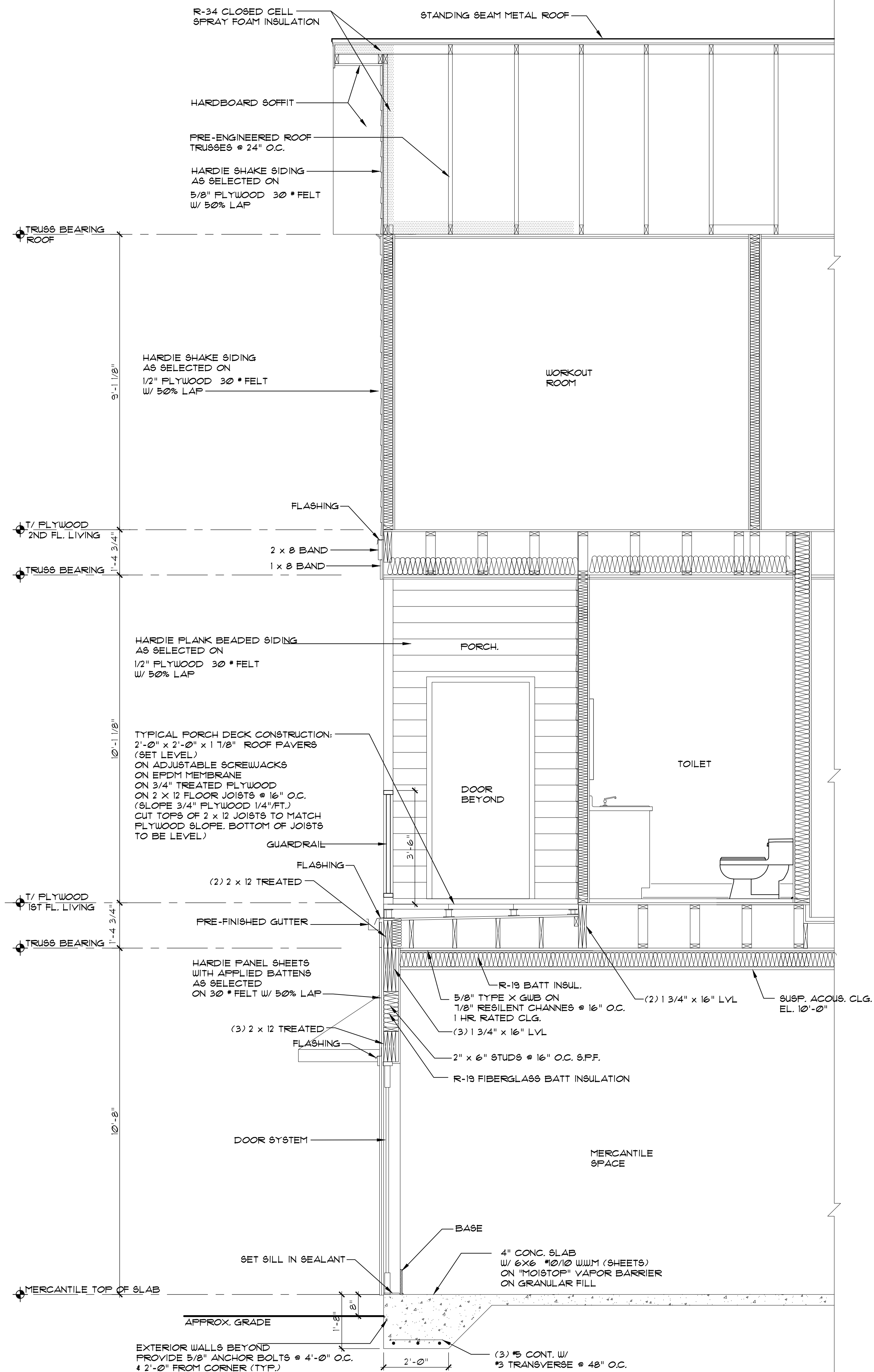
REVISIONS

SHEET NO.

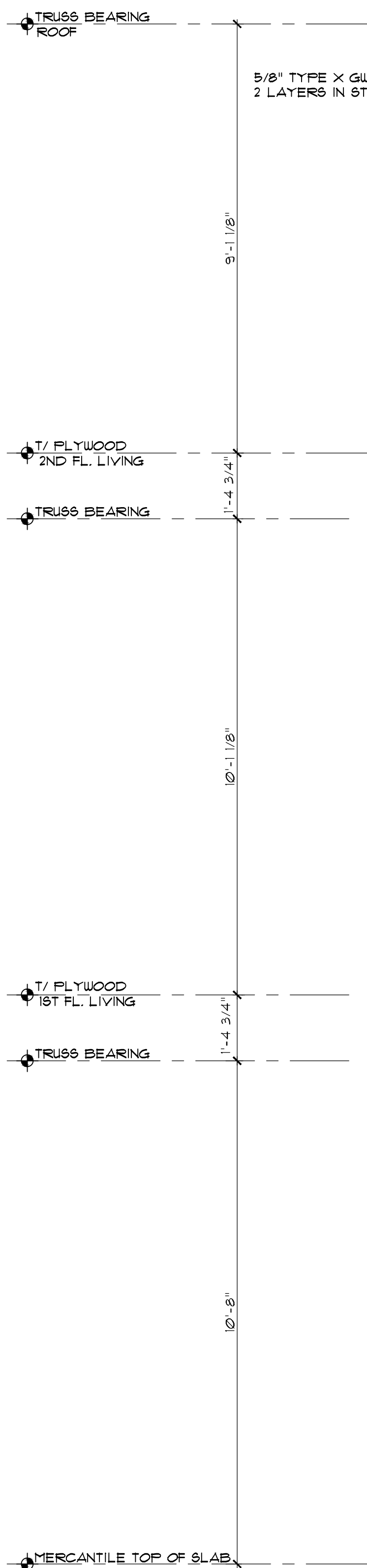
A-5.1
OF

OF

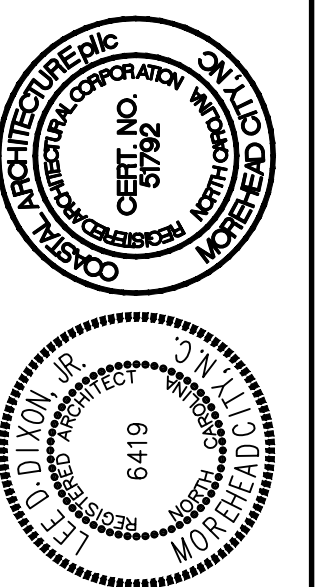




2 WALL SECTION
SCALE: 1/2"=1'-0"



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



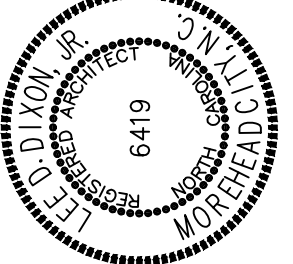
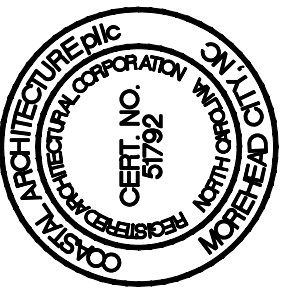
WALL SECTIONS
BUILDINGS 4-5

18030

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SHEET NO.
A-5.3
OF

VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



STAIR DETAILS

18030

ISSUED: 03/20/2020

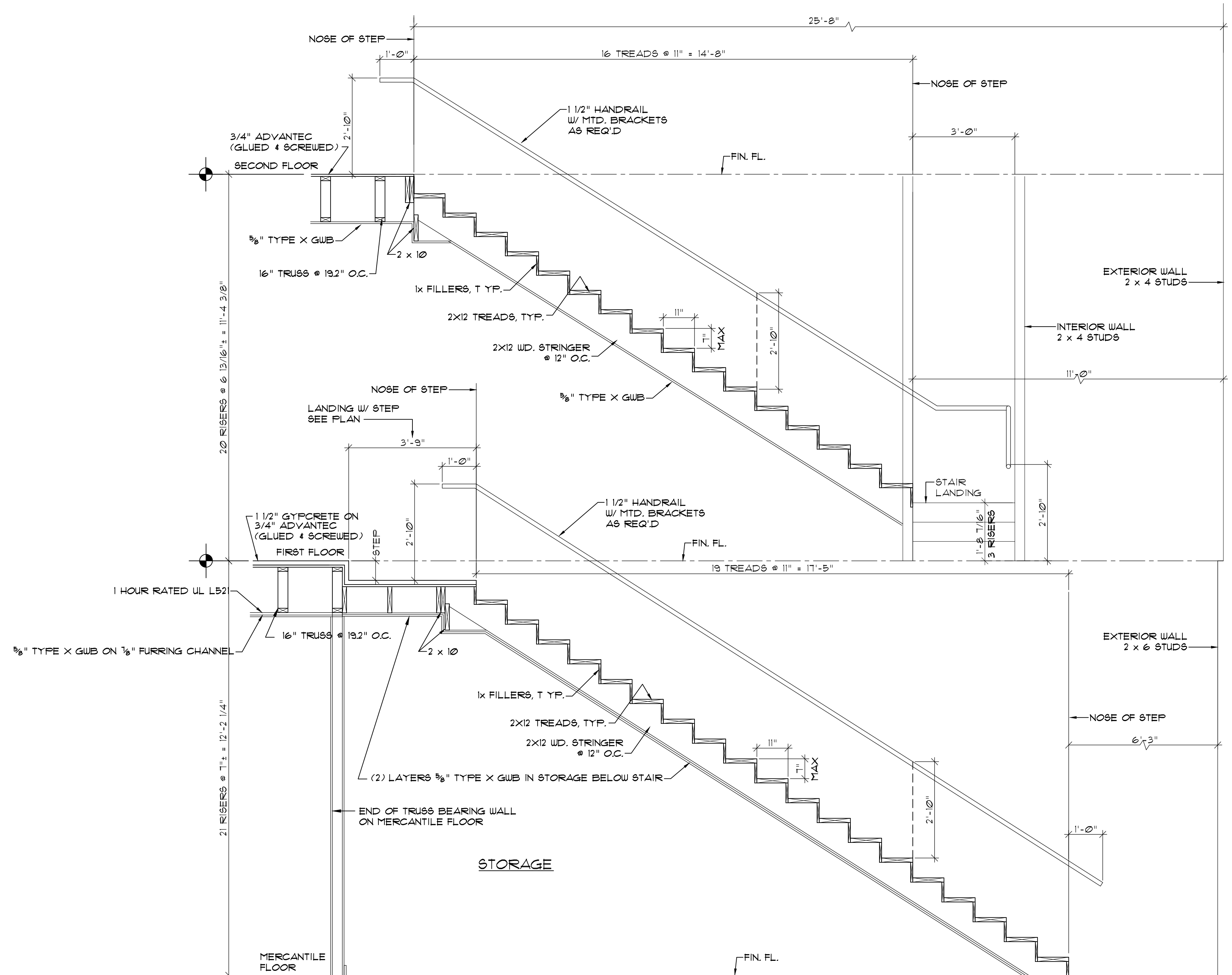
DWG BY: BLS/MES

CKD BY: LDD

REVISIONS

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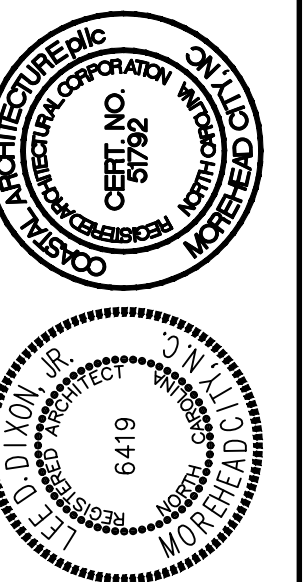
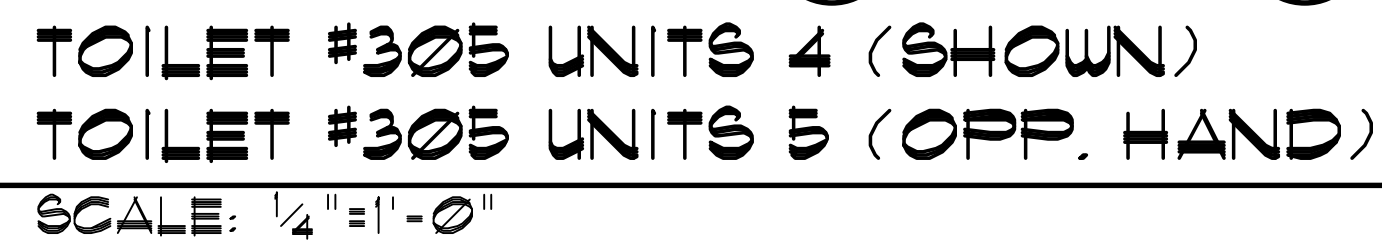
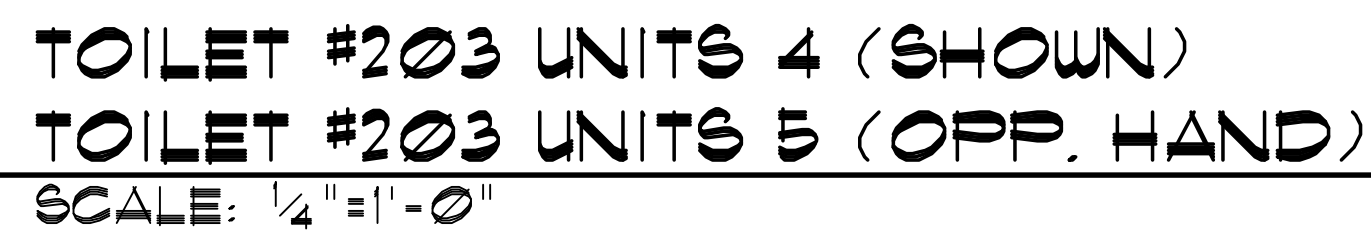
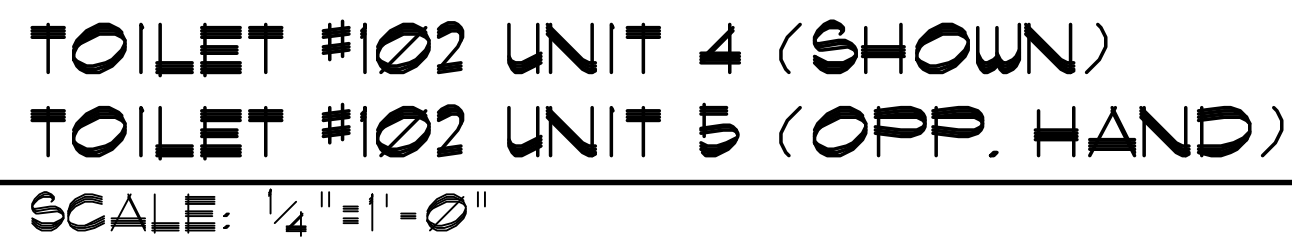
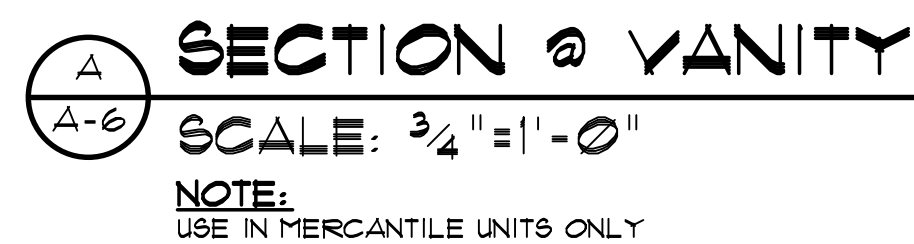
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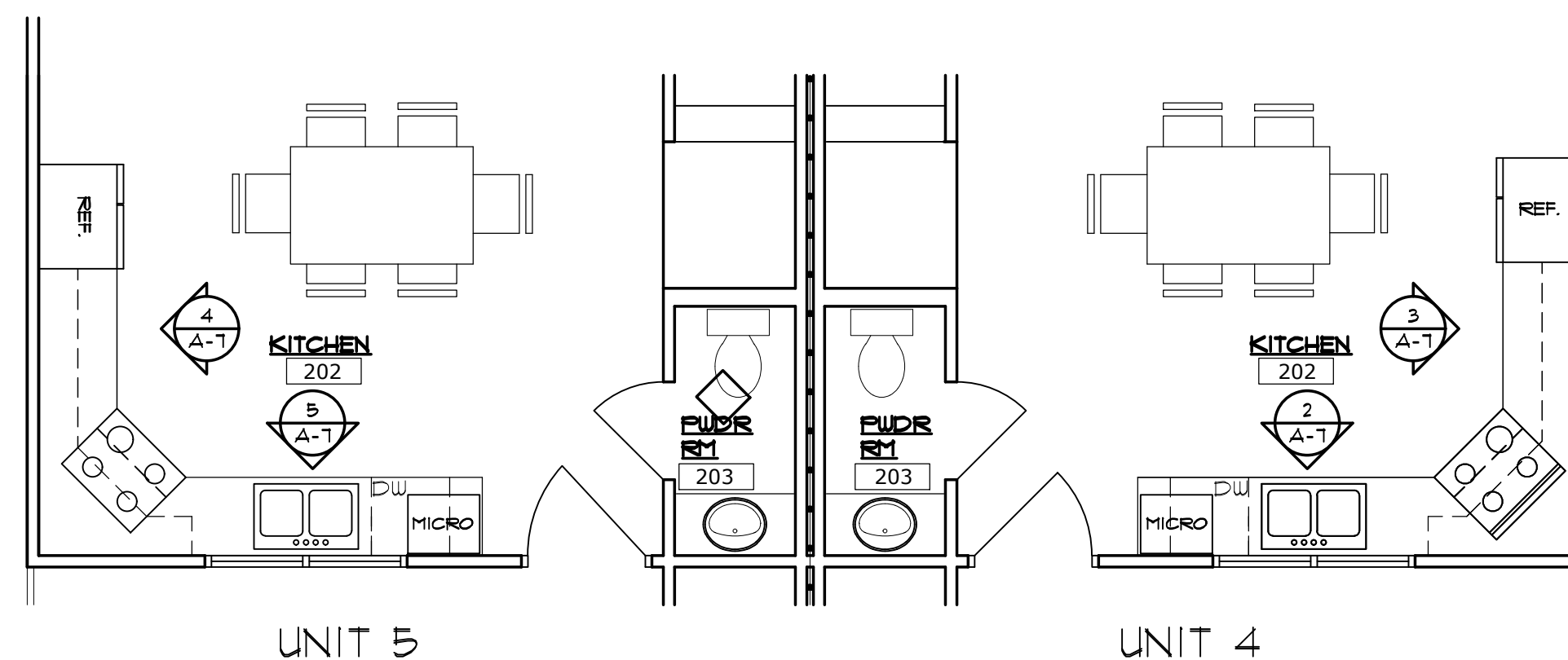


1 STAIR SECTION BUILDINGS 4-5
A-5.4 SCALE: 1/2" = 1'-0"

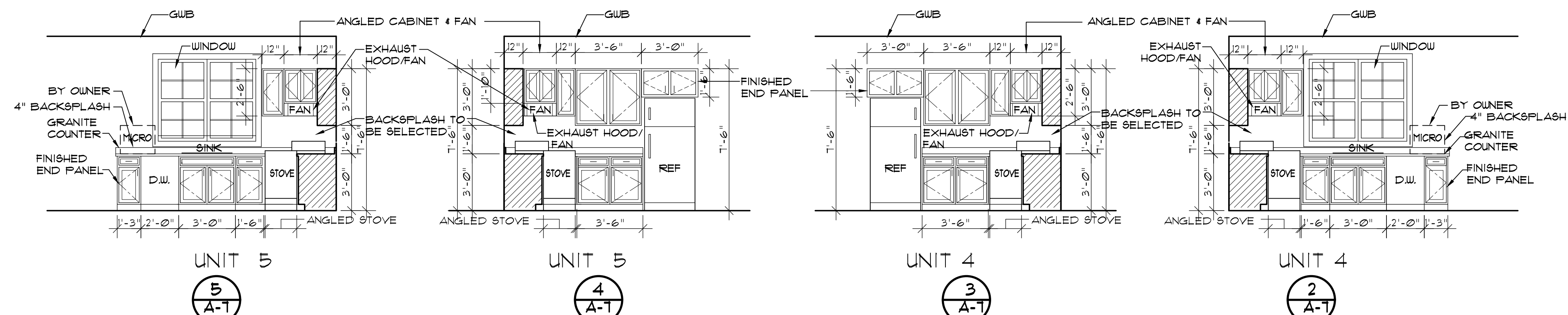
NOTE:

1. ALL MOUNTING HEIGHTS ARE AS SHOWN UNLESS OTHERWISE NOTED.
2. PROVIDE BLOCKING FOR ALL TOILET ACCESSORIES.
3. PROVIDE HANDICAP DOOR SIGNAGE AT ALL TOILET RM. DOORS.
4. SUBMIT ALL ACCESSORIES FOR APPROVAL & FINAL SELECTION BY OWNER.
5. PROVIDE ADA SIGNAGE AT ALL TOILET ROOMS.
6. PROVIDE ADA COMPLIANT DRAIN WRAP AT ALL EXPOSED PIPES/DRAINS.

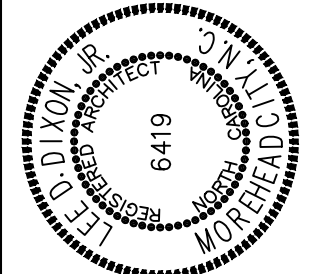
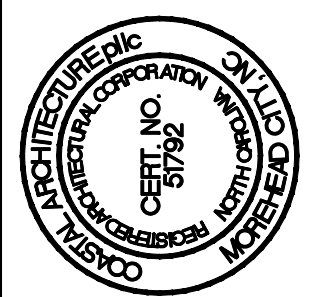




UNIT 5 UNIT 4
6 FIRST LIVING FLOOR PLAN UNITS 4/5
A-7 SCALE: 1/4" = 1'-0"



UNIT 5 UNIT 5
5 4
A-7 A-7
1 KITCHEN MILLWORK ELEVATIONS
A-7 SCALE: 1/4" = 1'-0"



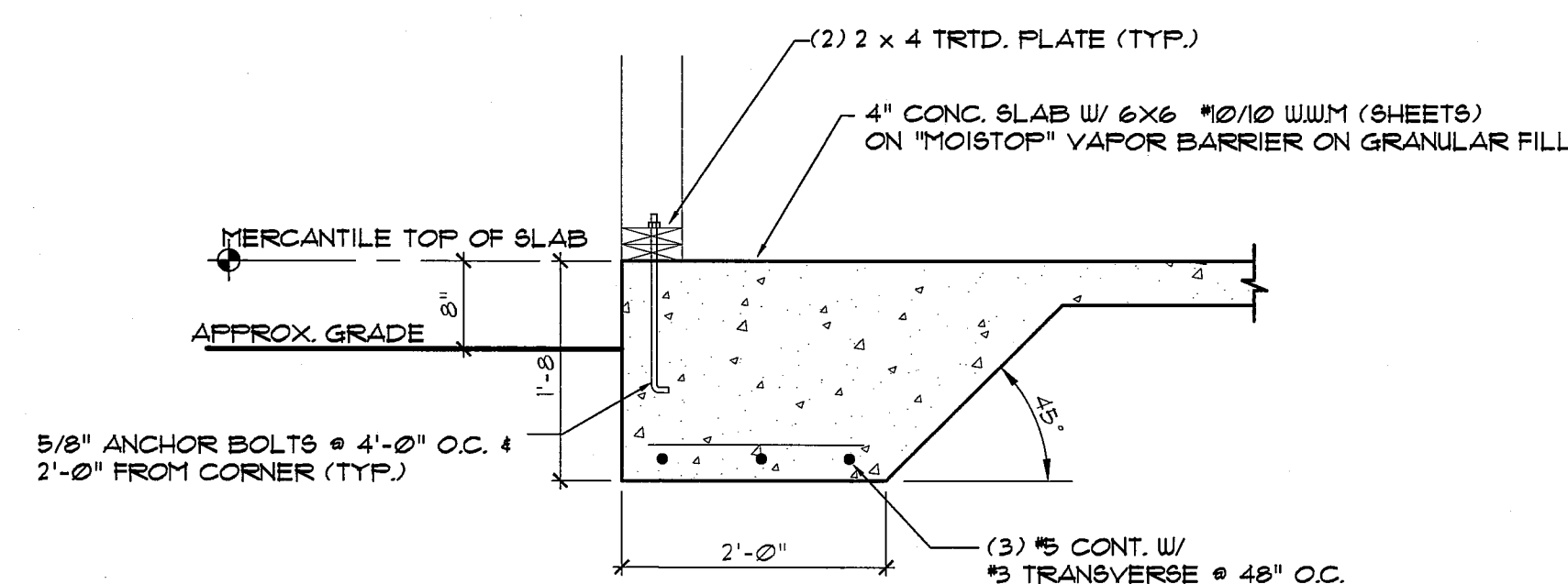
MILLWORK

18030

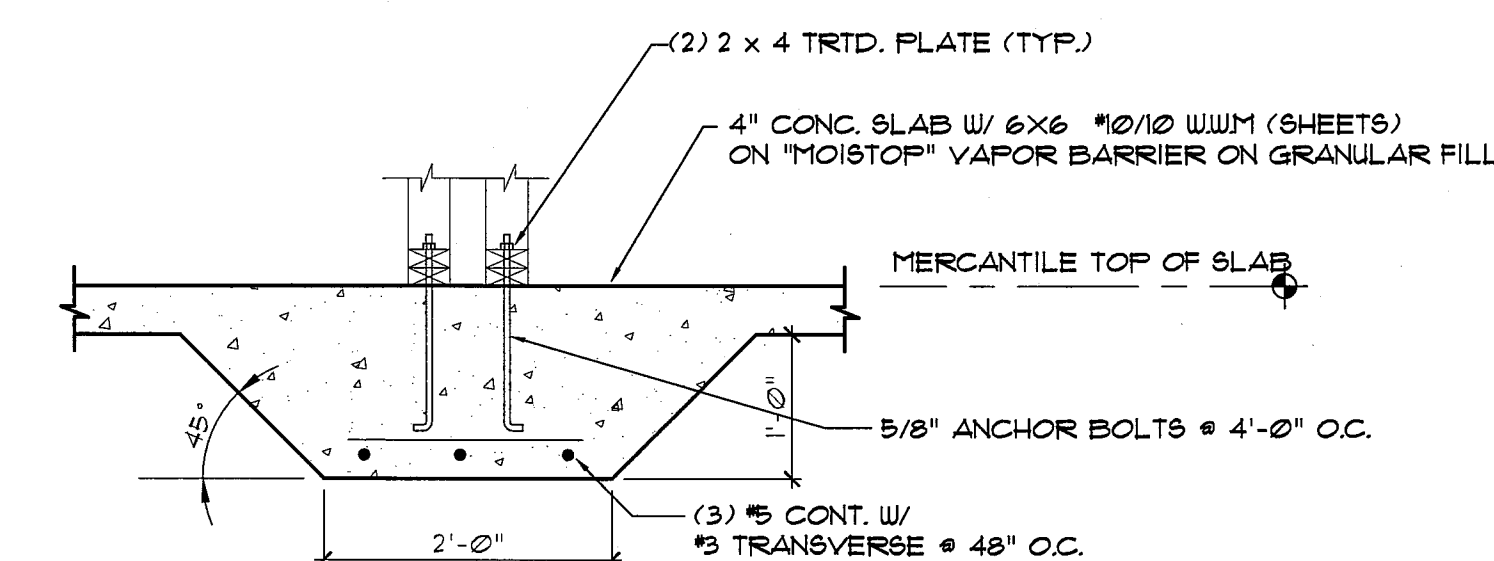
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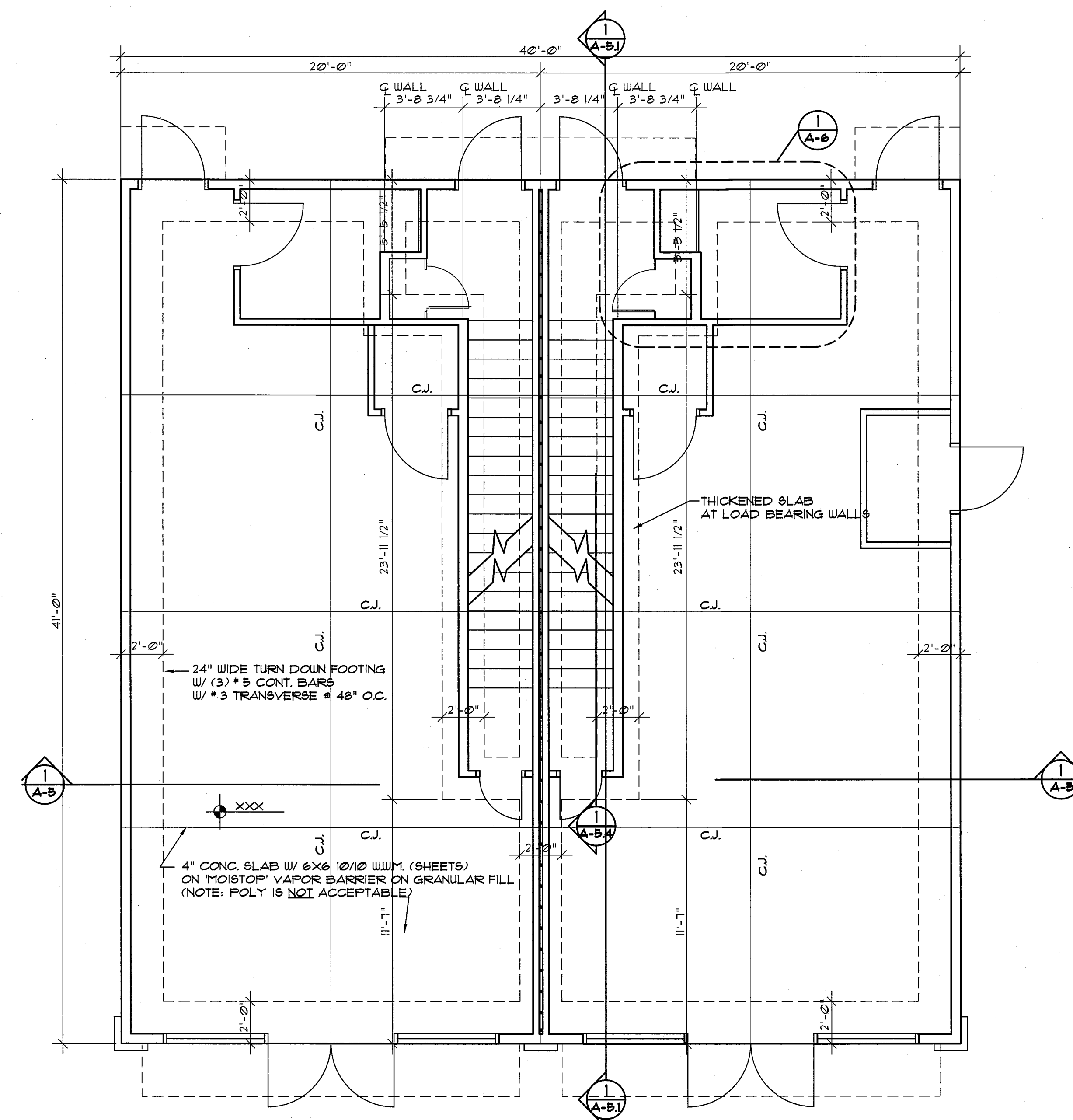
SHEET NO.
A-7
OF



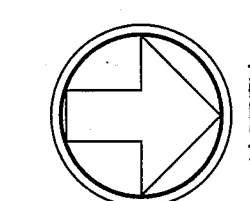
1
S-1
EXTERIOR FOUNDATION DETAIL
SCALE: 3/4"=1'-0"



2
S-1
INTERIOR FOUNDATION DETAIL
SCALE: 3/4"=1'-0"



1
S-1
MERCANTILE FOUNDATION PLAN UNITS 4/5
SCALE: 1/4"=1'-0"





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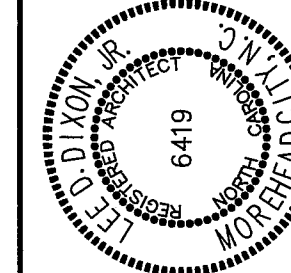
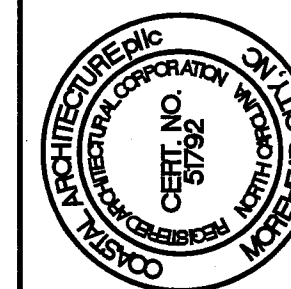
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VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



FIRST, SECOND
FLOOR FRAMING PLANS
UNITS 4/5

18030

ISSUED: 03/20/2020

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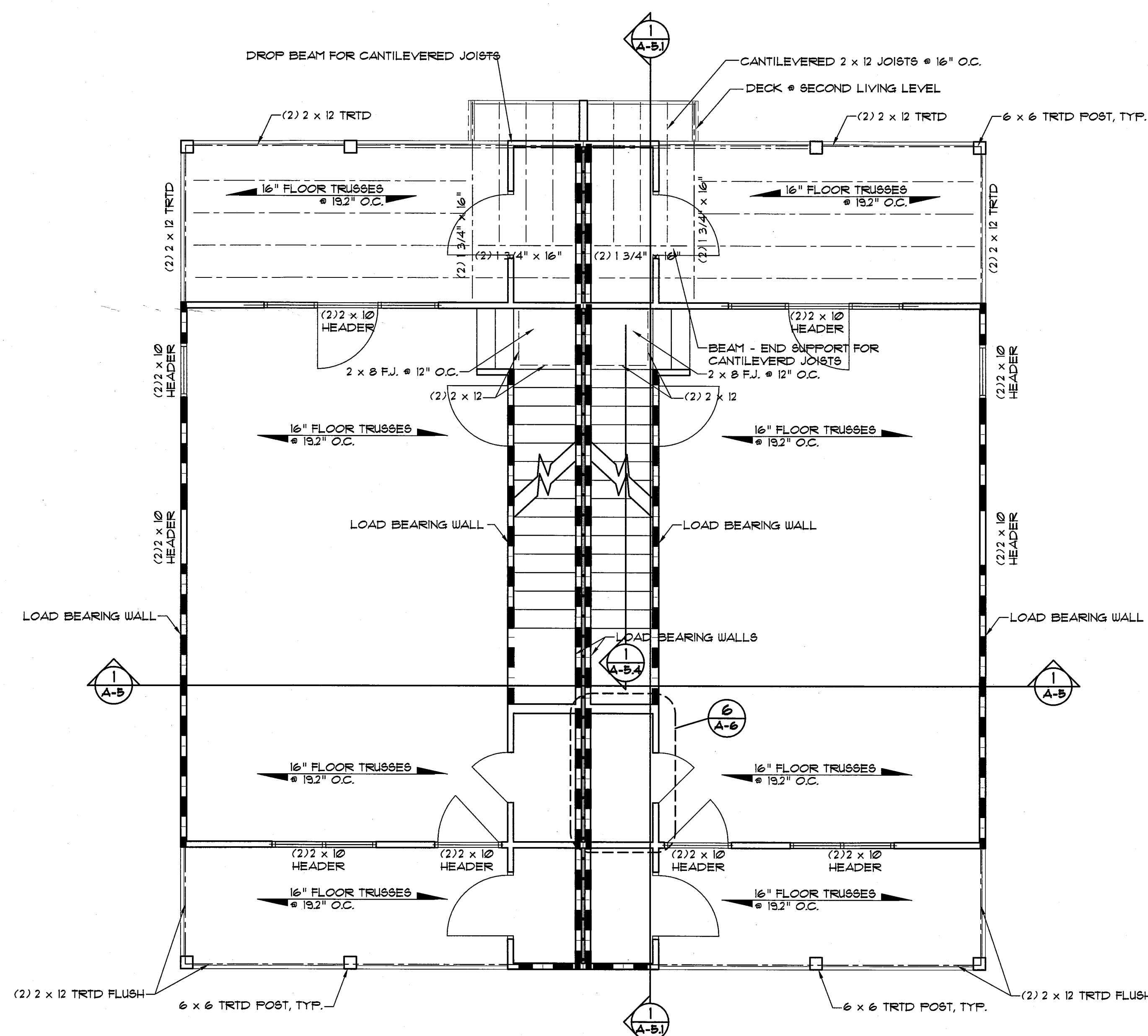
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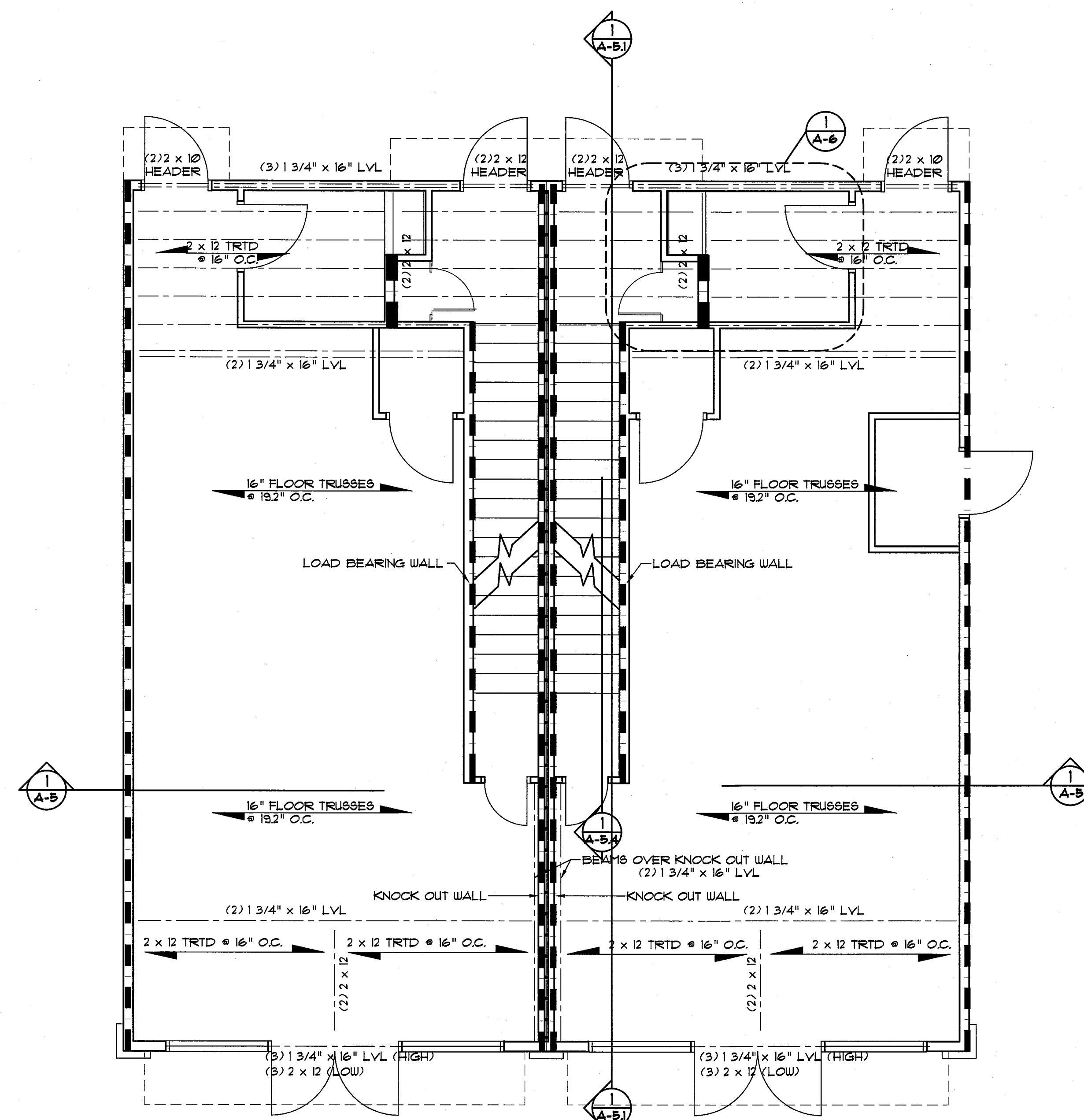
S-2

OF

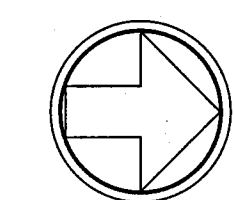
NOTE:
ALL EXTERIOR FASTENERS TO BE STAINLESS STEEL
TRUSS ENGR. SHALL INSPECT ALL TRUSS FRAMING TO
COMPLY W/ MANUF. INSTRUCTIONS



2 SECOND FLOOR FRAMING PLAN UNITS 4/5
SCALE: 1/4"=1'-0"



1 FIRST FLOOR FRAMING PLAN UNITS 4/5
SCALE: 1/4"=1'-0"



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(252) 773-0090

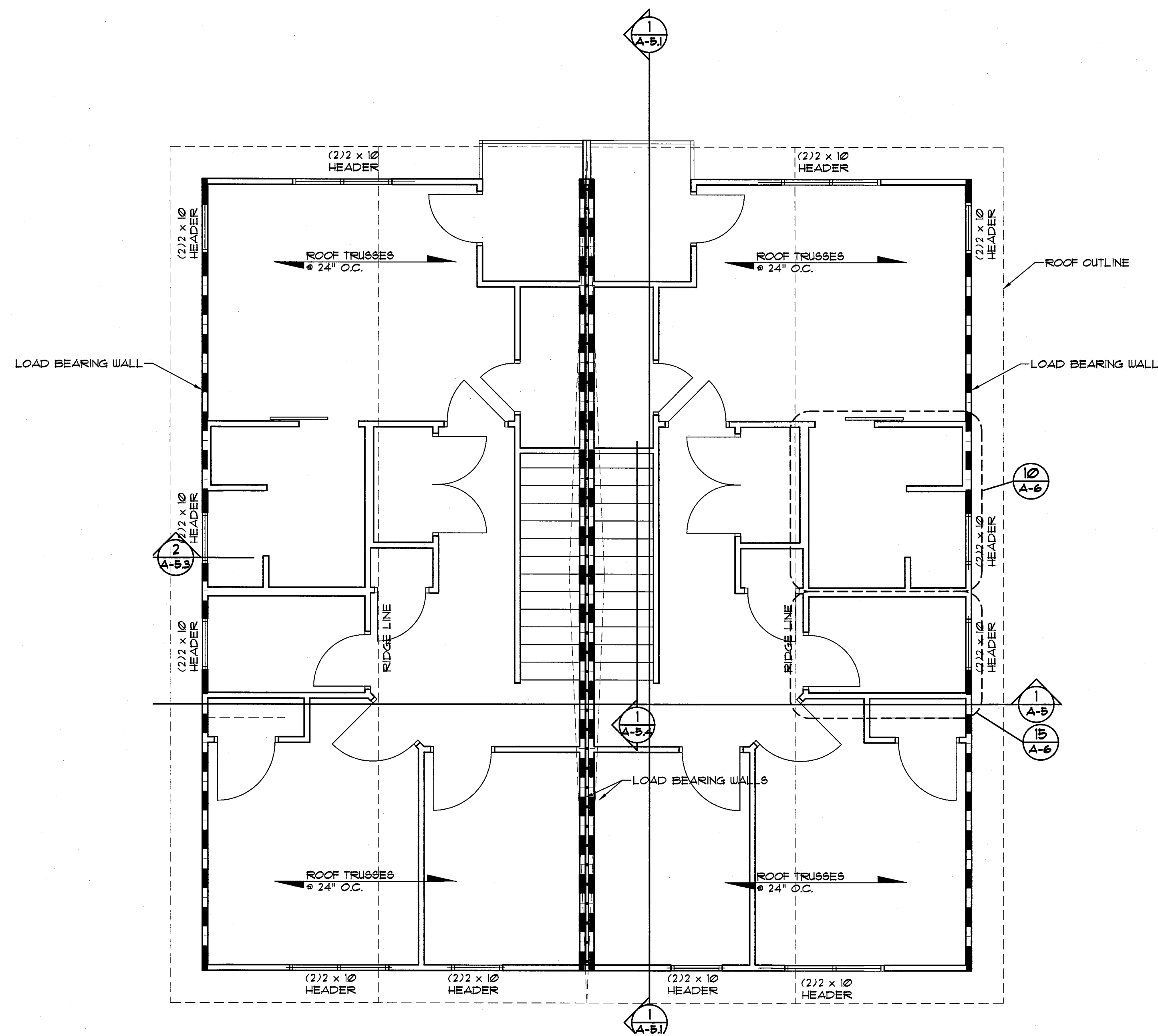
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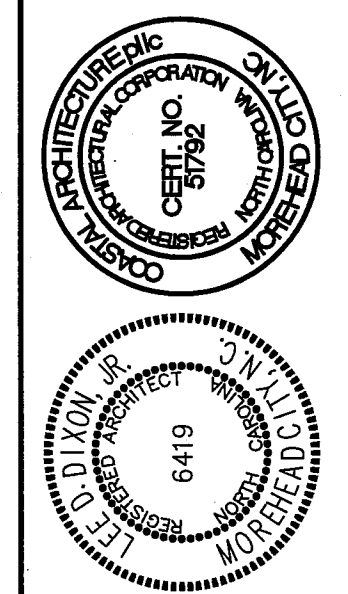
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S-2.1

ROOF FRAMING PLAN UNITS 4/5

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

THESE DRAWING AND SPECIFICATIONS REPRESENT AN INSTRUMENT OF SERVICE AND AS SUCH SHALL REMAIN IN OWNERSHIP WITH THE ARCHITECT. USE OR REPRODUCTION BY ANY MEANS, IN WHOLE OR IN PART, WITHOUT THE ARCHITECT'S WRITTEN CONSENT, IS PROHIBITED.

VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



ROOF FRAMING PLAN UNITS 4/5	
18030	
ISSUED: 03/20/2020	
DWG BY: BLS	
CKD BY: LDD	
REVISIONS	
SHEET NO.	S-2.1
OF	

DIVISION 15A – PLUMBING

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 of effluent 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 NCSCB-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 NCSCB 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 NCSCB-Plumbing Sect. 604.6.

3.8 DRAINDOWN

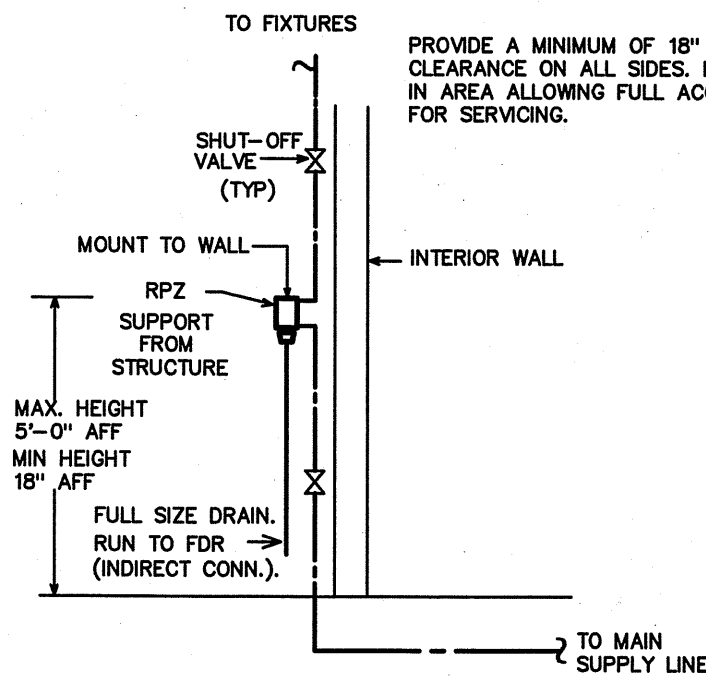
- A. Contractor to provide for complete plumbing system drain down.
- 3.9 CLEAN UP
- A. During construction, keep the site clear of debris and upon completion, and before final inspection, clean up the premises to remove all evidence of his work. In addition, upon completion of construction, clean, wash, 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.

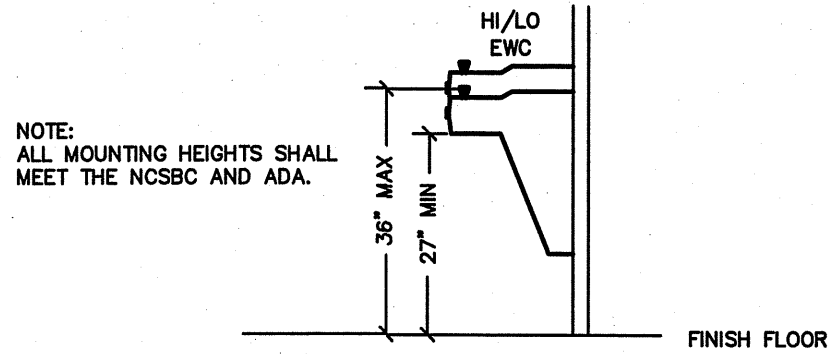
GENERAL NOTES – PLUMBING

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 HOT WATER TO FIXTURES AT 110 DEGREES F. PROVIDE THERMOSTATIC MIXING VALVE (WATTS SERIES LFMV OR EQUAL) IF/WHERE REQUIRED.
12. PROVIDE CLEANOUTS AS REQUIRED BY CODE. NOT MORE THAN 100 FEET FOR 4" DRAIN.

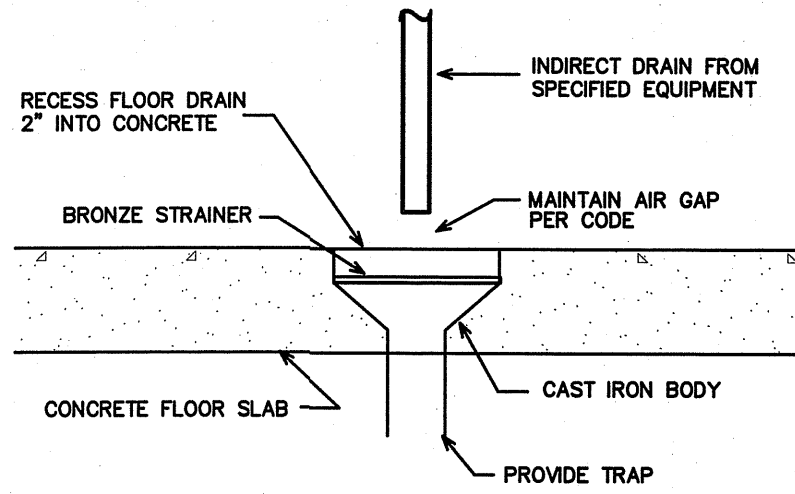


2 RPZ MOUNTING DETAIL SCALE: NTS

LOAD SUMMARY – PLUMBING			
UNIT, TENANT	WASTE DEMAND (FU)	WATER DEMAND (FU)	WATER DEMAND (GPM)
1 THRU 11, MERCANTILE (TYP)	9.0	7.5	12.3
1/2/3, 1ST AND 2ND LIVING (TYP)	21.0	15.0	17.5
4/5, 1ST AND 2ND LIVING (TYP)	21.0	15.0	17.5
6/7, 1ST AND 2ND LIVING (TYP)	23.0	15.7	17.8
8/9, 1ST AND 2ND LIVING (TYP)	21.0	15.0	17.5
10/11, 1ST AND 2ND LIVING (TYP)	21.0	15.0	17.5



1 EWC DETAIL SCALE: NTS



3 FDR DETAIL SCALE: NTS

SYMBOL LEGEND – PLUMBING

SYMBOL	DESCRIPTION (U.O.N.)
— WASTE PIPING (W)	WASTE PIPING (W)
--- VENT PIPING (V)	VENT PIPING (V)
--- COLD WATER PIPING (CW)	COLD WATER PIPING (CW)
--- HOT WATER PIPING (HW)	HOT WATER PIPING (HW)
--- HW RETURN PIPING (HWR)	HW RETURN PIPING (HWR)
— O COFF	CLEANOUT FINISH FLOOR
— WCO/HCO	WALL/HORIZONTAL CLEANOUT
— COFG	CLEANOUT FINISH GRADE—PROVIDE FLUSH CONCRETE COLLAR AND BRONZE COVER
— DIELECTRIC UNION	DIELECTRIC UNION
— SHUT-OFF VALVE	SHUT-OFF VALVE
— CHECK VALVE	CHECK VALVE
— BALANCING VALVE	BALANCING VALVE
— CIRCULATION PUMP	CIRCULATION PUMP
— VENT THRU ROOF (VTR)	VENT THRU ROOF (VTR)
— FREEZE PROOF, HOSE BIBB (FPHB/HB)	FREEZE PROOF, HOSE BIBB (FPHB/HB)
— A.A.V.	AIR ADMITTANCE VALVE
— A.F.F.	ABOVE FINISHED FLOOR
— U.O.N.	UNLESS OTHERWISE NOTED
— 1 HOUR FIRE BARRIER	1 HOUR FIRE BARRIER

MERCANTILE UNIT (TYP)
FIXTURE SCHEDULE – PLUMBING *

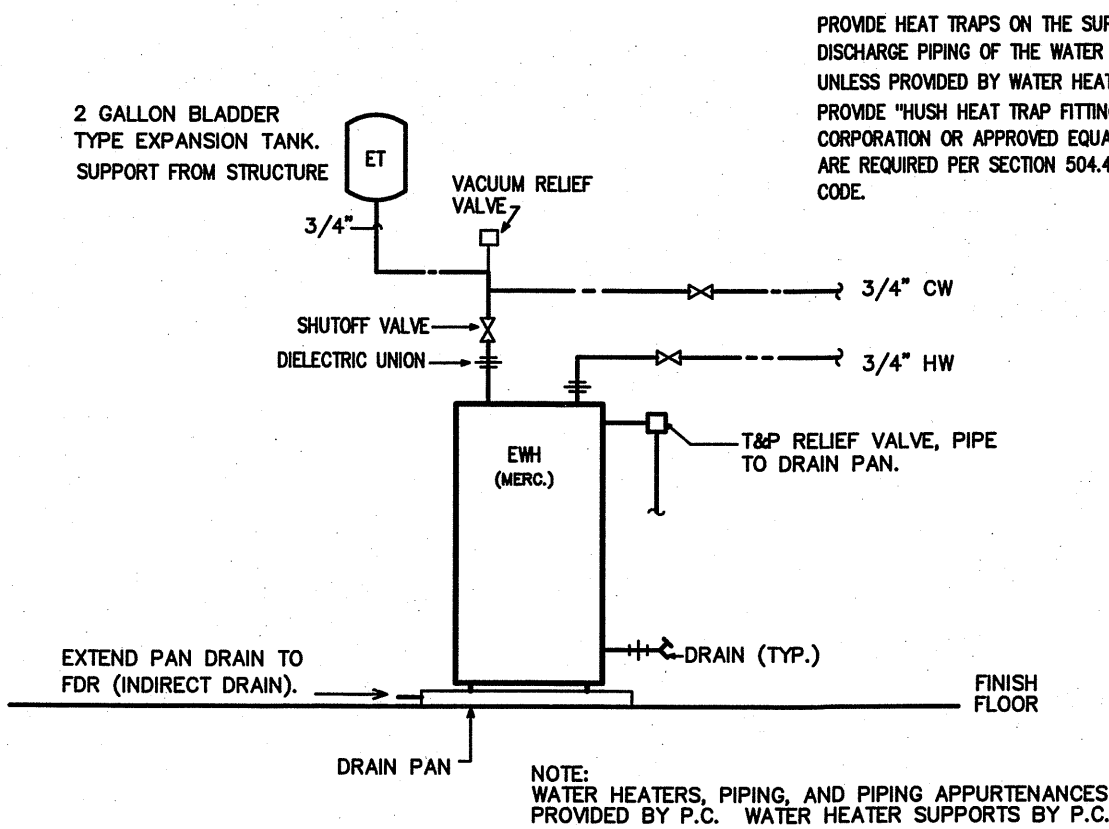
- ET * EXPANSION TANK (SAME FOR EACH EWH)
AMTROL MODEL ST-5, 2.0 GALLON, STEEL CONSTRUCTION, NON-ASME CODE RATED.
- EWC * HIGH/LOW ELECTRIC WATER COOLER
HALSEY TAYLOR DUAL LEVEL ELECTRIC WATER COOLER, MODEL # HACFBSBL-Q
ADA COMPLIANT, PIPE TO SINGLE DRAIN AND SUPPLY LINE.
VERIFY MODEL- H2O SIDE WITH TENANT, ARCH.
- EWH * ELECTRIC WATER HEATER
A.O. SMITH MODEL EIC-6, 6 GALLON, 1,650 WATTS, 120V, 3/4" INLET AND OUTLET. PROVIDE DRAIN PAN, EXPANSION TANK AND PRESSURE RELIEF VALVE.
- FDR * RECESSED FLOOR DRAIN
ZURN MODEL Z415 WITH HEEL-PROOF TYPE B STRAINER, CAST IRON WITH NICKEL BRONZE TOP, 5" DRAIN WITH 3" CONNECTION. PROVIDE TRAP PRIMER CONNECTION IF REQUIRED. RECESS 2" INTO FLOOR SLAB WHERE REQUIRED.
- FPHB * FREEZE PROOF HOSE BIBB
WOODFORD MODEL #19, FREEZE PROOF HOSE BIBB WITH BACKFLOW PREVENTER. COORDINATE MOUNTING W/TENANT. PROVIDE TEE KEY OR LOOK SL-17 IF REQUIRED. VERIFY STEM LENGTH PER WALL THICKNESS.
- L1 * LAVATORY (WALL MOUNT)
KOHLER CHESAPEAKE LAVATORY, K-1728, VITREOUS CHINA, 4" CENTERS, ADA COMPLIANT. PROVIDE DELTA MODEL 523LF-HGMDF FAUCET, 0.5 GPM MAX WITH GRID STRAINER. PROVIDE P-TRAP AND SHUT-OFF VALVES.
- RPZ * REDUCED PRESSURE BACKFLOW PREVENTER
WATTS MODEL #LF00SMOT, REDUCED PRESSURE BACKFLOW PREVENTER, 'LEAD FREE' CONSTRUCTION. MATCH INCOMING SERVICE LINE SIZE (3/4" FOR MERC.).
- WC * WATER CLOSET (ADA FLUSH TANK)
KOHLER HIGHLINE WATER CLOSET, K-3979, ADA COMPLIANT 1.6 GPF. PROVIDE PROPER OPEN FRONT ADA SEAT, K-7837 SUPPLY AND DRAIN, WAX SEAL, CLOSET BOLT KIT. PROVIDE MODEL WITH FLUSH CONTROL ON SIDE OPPOSITE GRAB BAR.

* OR APPROVED EQUAL. SUBMIT ALL ITEMS FOR APPROVAL BYTENANT AND ARCHITECT PRIOR TO ORDERING.
ALL 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.

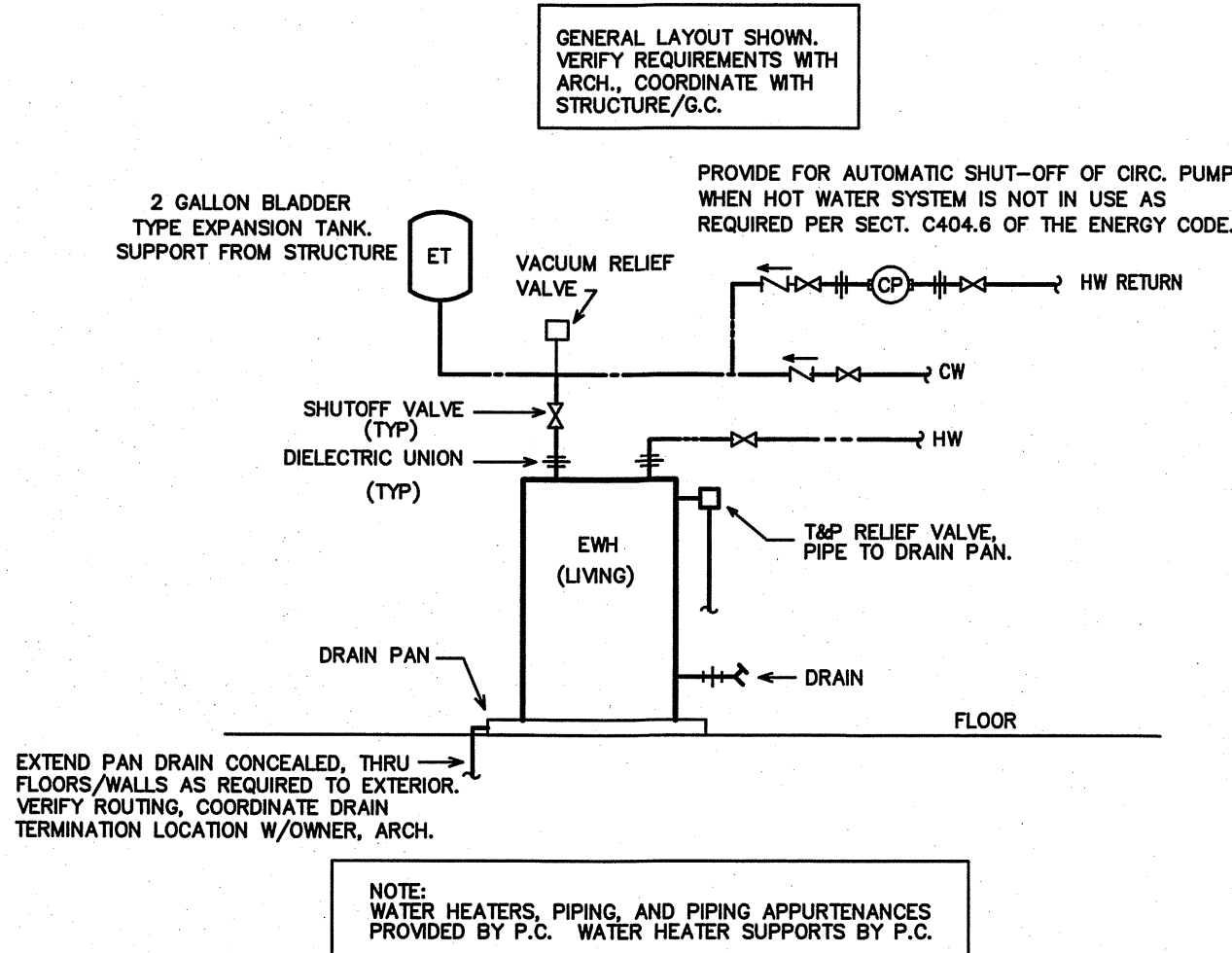
FIRST/SECOND LIVING UNIT (TYP)
FIXTURE SCHEDULE – PLUMBING *

- CP * CIRCULATING PUMP
TACO MODEL 110, 115 VOLT, 1/12 HP. SECURELY SUPPORT FROM STRUCTURE. PROVIDE AQUASTAT, THERM, CHECK VALVES AS REQUIRED.
- ET * EXPANSION TANK (TYP FOR EACH EWH)
AMTROL MODEL ST-5, 2.0 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. 26 GPH RECOVERY AT 70 DEGREE (F) TEMP. RISE. 3/4" INLET/OUTLET. PROVIDE DRAIN PAN, EXPANSION TANK AND PRESSURE RELIEF VALVE.
- L1 * LAVATORY (COUNTERTOP)
COORDINATE EXACT UNIT WITH OWNER AND GENERAL CONTRACTOR. COORDINATE SIZE WITH CABINETS PRIOR TO ORDERING. PROVIDE DWV, SUPPLY LINES/SHUT-OFF VALVES AS REQUIRED.
- SI * DOUBLE BASIN KITCHEN SINK
COORDINATE EXACT UNIT WITH OWNER AND GENERAL CONTRACTOR. COORDINATE SIZE WITH CABINETS PRIOR TO ORDERING. PROVIDE DWV, SUPPLY LINES/SHUT-OFF VALVES AS REQUIRED.
- SHR * STALL, SHOWERHEAD/FAUCET
COORDINATE UNIT AND LOCATION WITH OWNER AND GENERAL CONTRACTOR. PROVIDE DWV/SUPPLY. ROUTE SUPPLY LINES FOR UNIT HANDING AS REQUIRED.
- TUB * TUB, SHOWERHEAD/FAUCET
COORDINATE UNIT AND LOCATION WITH OWNER AND GENERAL CONTRACTOR. PROVIDE DWV/SUPPLY. ROUTE SUPPLY LINES FOR UNIT HANDING AS REQUIRED.
- 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 AND GENERAL CONTRACTOR. PROVIDE DWV, SUPPLY LINES/SHUT-OFF VALVES AS REQUIRED.

* OR APPROVED EQUAL. SUBMIT ALL ITEMS FOR APPROVAL BYTENANT AND ARCHITECT PRIOR TO ORDERING.
ALL 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.



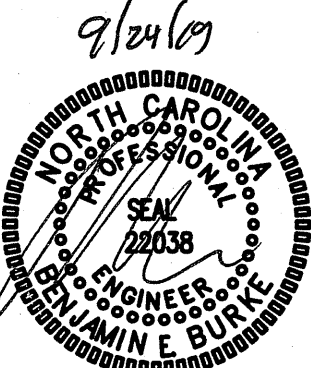
4 MERCANTILE UNIT EWH DETAIL (TYP) SCALE: NTS



5 1ST/2ND LIVING UNIT EWH DETAIL (TYP) SCALE: NTS

ENGINEER

BURKE DESIGN GROUP
3305-109 DURHAM DRIVE
RALEIGH, NC 27603
PHONE: (919) 771-1916
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email: ben@bdg-nc.com
Corp. License # C-2652



PLUMBING SPECIFICATIONS

18030

ISSUED: 09/11/19
DWG BY: DS
CKD BY: BEB

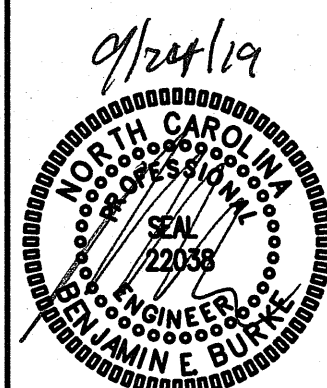
REVISIONS

SHEET NO.

P-1

1 OF 35

**VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA**



MERCANTILE
DWV PLAN
UNITS 4/5

18030

ISSUED: 09/11/19

DWG BY: DS

CKD BY: BEB

REVISIONS

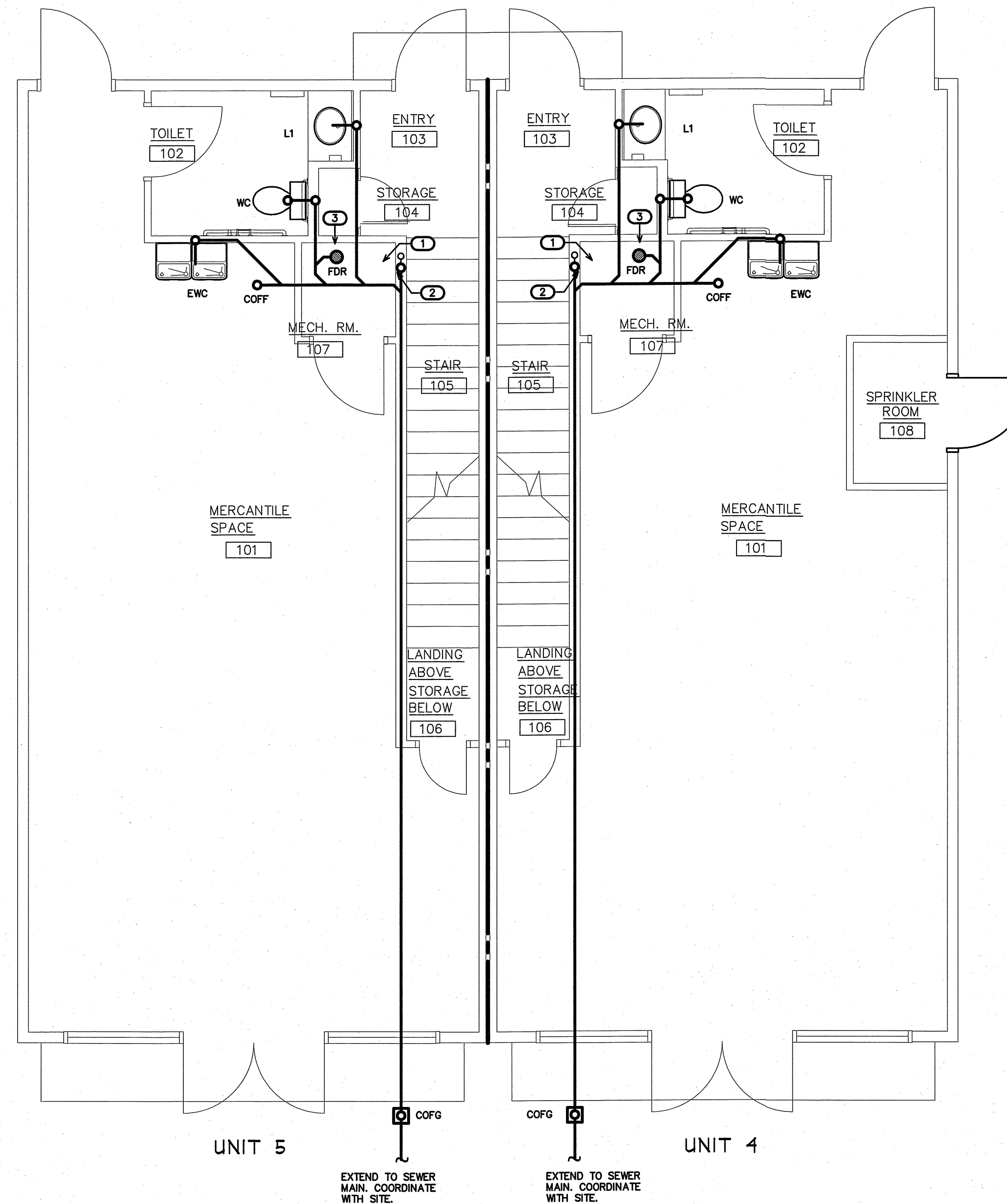
SHEET NO.

P-5

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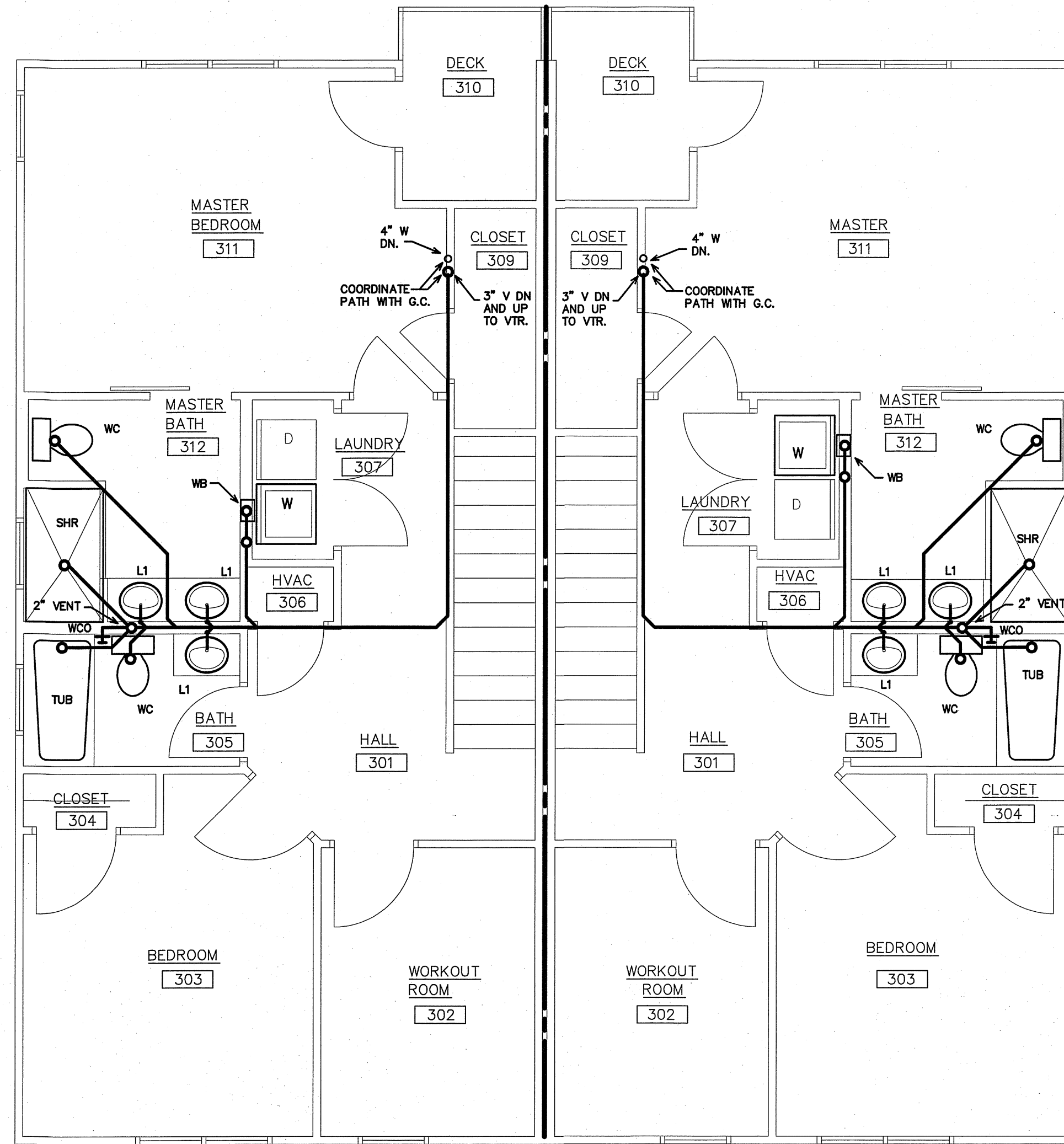
NOTE:
RPZ, EHW, FDR (F) SHOWN
OUT OF POSITION FOR CLARITY.
COORDINATE WITH MECHANICAL
DRAWINGS/HVAC CONTRACTOR.
ALL TRADES FOR LOCATIONS.
(TYP FOR ALL UNITS)

- KEY NOTES FOR SHEET P-5
- 4" WASTE STACK (W) UP. PROVIDE WCO (NOT SHOWN) AT BASE OF STACK. A.F.F. VERIFY LOCATION. WASTE STACK SHALL BE CAST IRON.
 - 3" VENT STACK (V) UP. CONNECT TO SANITARY WASTE STACK AS REQUIRED (VERIFY BELOW FLOOR OR BELOW UPPER LEVEL FLOOR—AT OR BELOW LAST HORIZONTAL BRANCH CONNECTION FROM UPPER LEVEL). BELOW FLOOR CONNECTION TO BUILDING DRAIN SHOWN. VERIFY ACTUAL LOCATION AS NOTED.
 - COORDINATE LOCATION OF FDR WITH RPZ/EHW (NOT SHOWN) PLACEMENT.

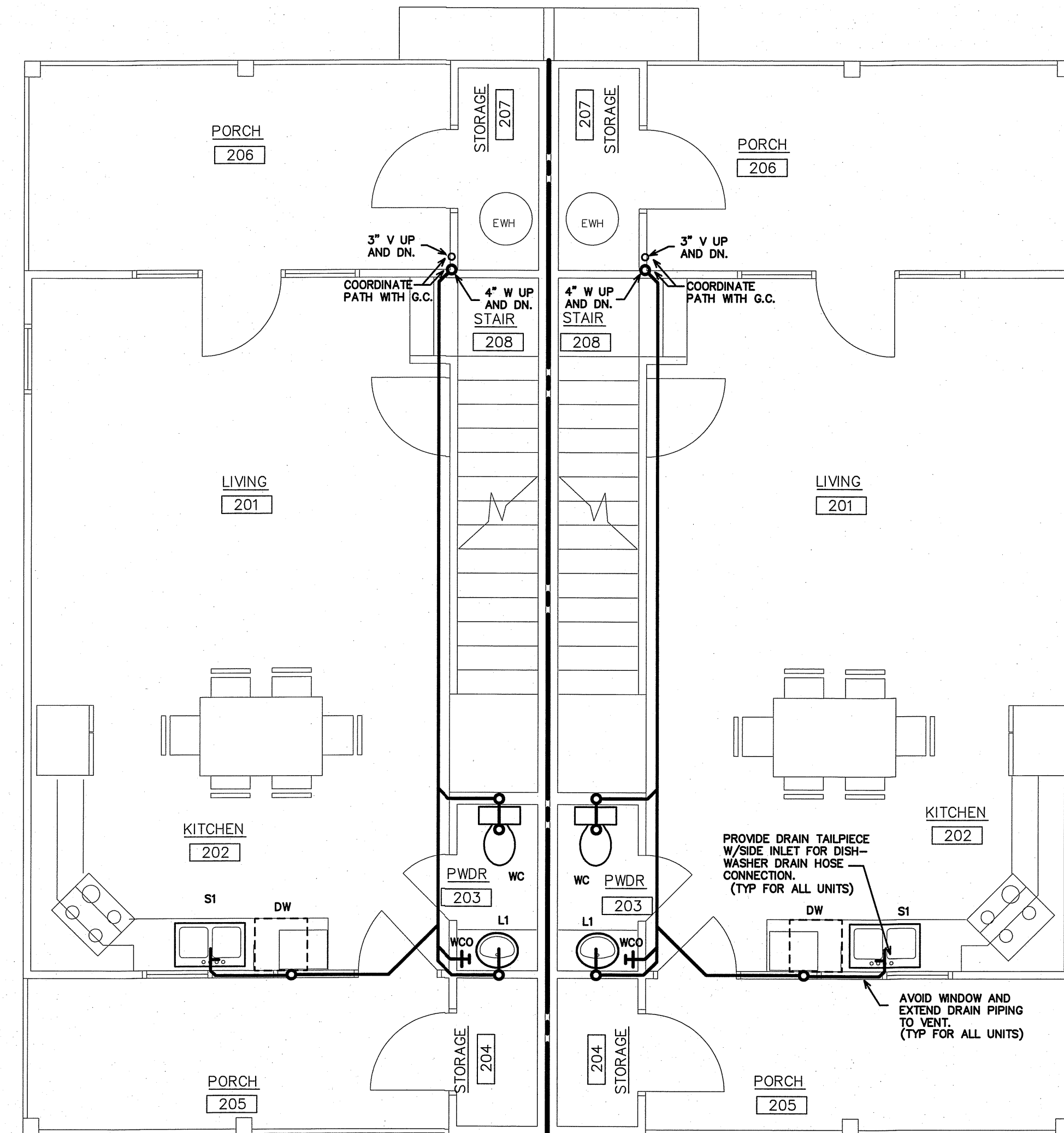


MERCANTILE DWV PLAN UNITS 4/5
SCALE: 1/4"=1'-0"

**VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA**



UNIT 5 UNIT 4
2 SECOND LIVING DWV PLAN UNITS 4/5
P-5J SCALE: 1/4"=1'-0"



UNIT 5 UNIT 4
1 FIRST LIVING DWV PLAN UNITS 4/5
P-5J SCALE: 1/4"=1'-0"

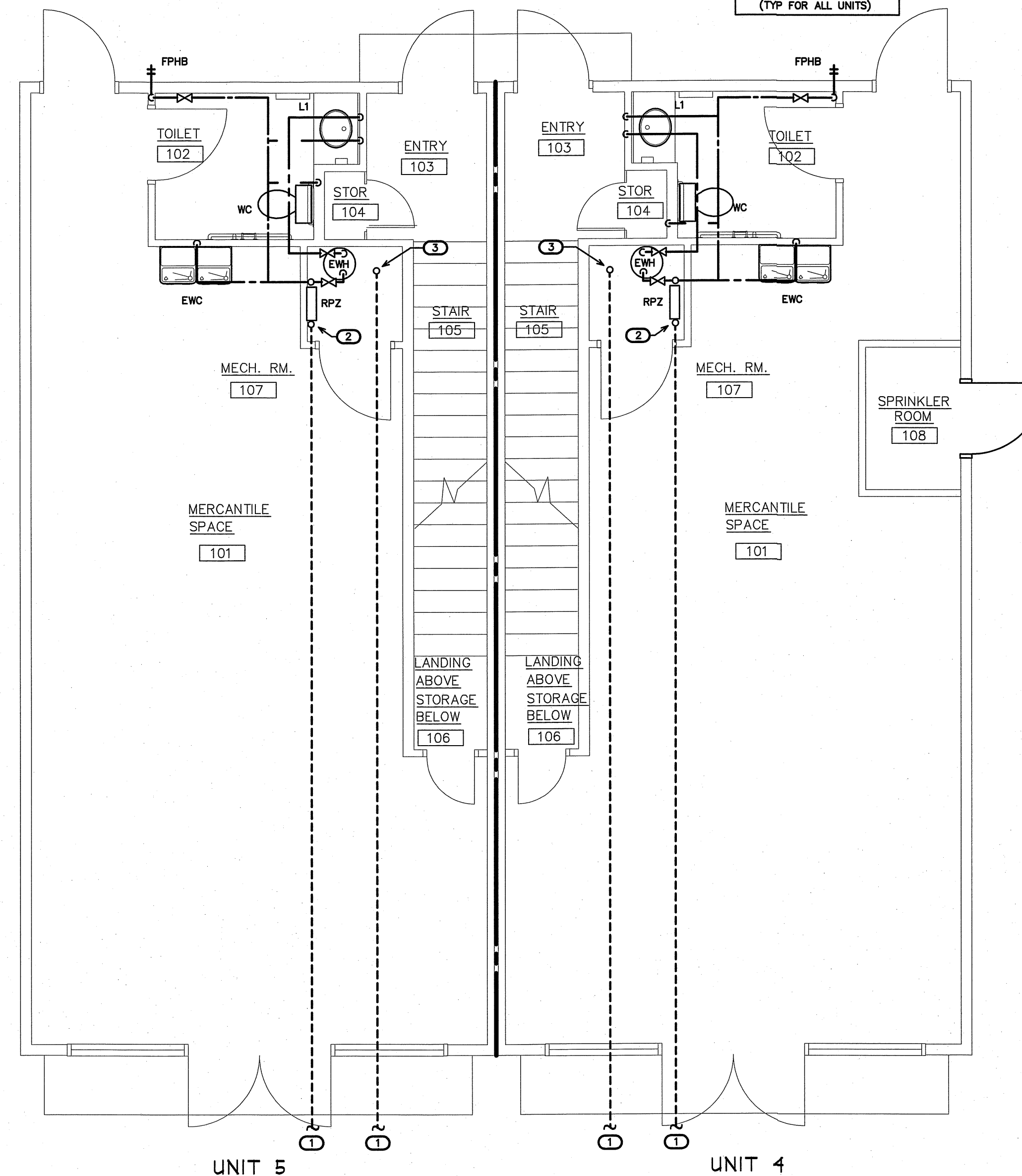
NOTE:
RPZ, EHW, FDR (IF) SHOWN
OUT OF POSITION FOR CLARITY.
COORDINATE WITH MECHANICAL
DRAWINGS/HVAC CONTRACTOR.
ALL TRADES FOR LOCATIONS.
(TYP FOR ALL UNITS)

NOTE:
PROPERLY INSULATE ALL SUPPLY
PIPING IN UNCONDITIONED AREAS.
PROVIDE ACCESS DOORS FOR
SHUT-OFF VALVES AS REQUIRED.
ANY AND ALL EHW, HW/CW/HWR,
ETC., ARE SHOWN FOR CLARITY.
VERIFY LOCATIONS/ROUTING.
(TYP FOR ALL UNITS)

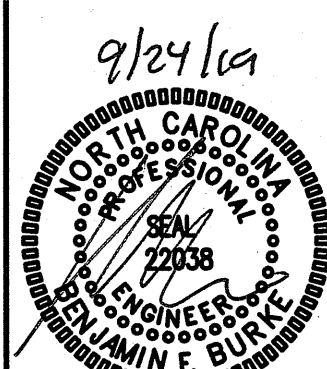
KEY NOTES FOR SHEET P-6

- 1 TENANT CW BELOW GRADE TO
MAIN. PROVIDE METER IN BOX
AFTER TAP FROM MAIN. VERIFY
LOCATION, COORDINATE W/SITE.
- 2 RISE TO RPZ. VERIFY LOCATION.
- 3 CW MAIN UP TO UPPER LIVING AREA
FLOORS TENANT. VERIFY LOCATION.
PROVIDE BACKFLOW PREVENTER IF
REQUIRED PER AHJ- WATTS 007
DOUBLE CHECK ASSEMBLY OF RPZ
AS SPECIFIED AND DETAILED FOR
MERCANTILE TENANT ON SHEET P-1.
PROVIDE MAIN SHUT-OFF VALVE W/
ACCESS DOOR IF REQUIRED- VERIFY
WITH BUILDING OWNER.

VERIFY QUANTITY AND
MOUNTING LOCATION OF
FPHB W/OWNER, ARCH.
(TYP FOR ALL UNITS)



MERCANTILE SUPPLY PLAN UNITS 4/5
SCALE: 1/4"=1'-0"



MERCANTILE
SUPPLY PLAN
UNITS 4/5

18030

ISSUED: 09/11/19

DWG BY: DS

CKD BY: BEB

REVISIONS

SHEET NO.

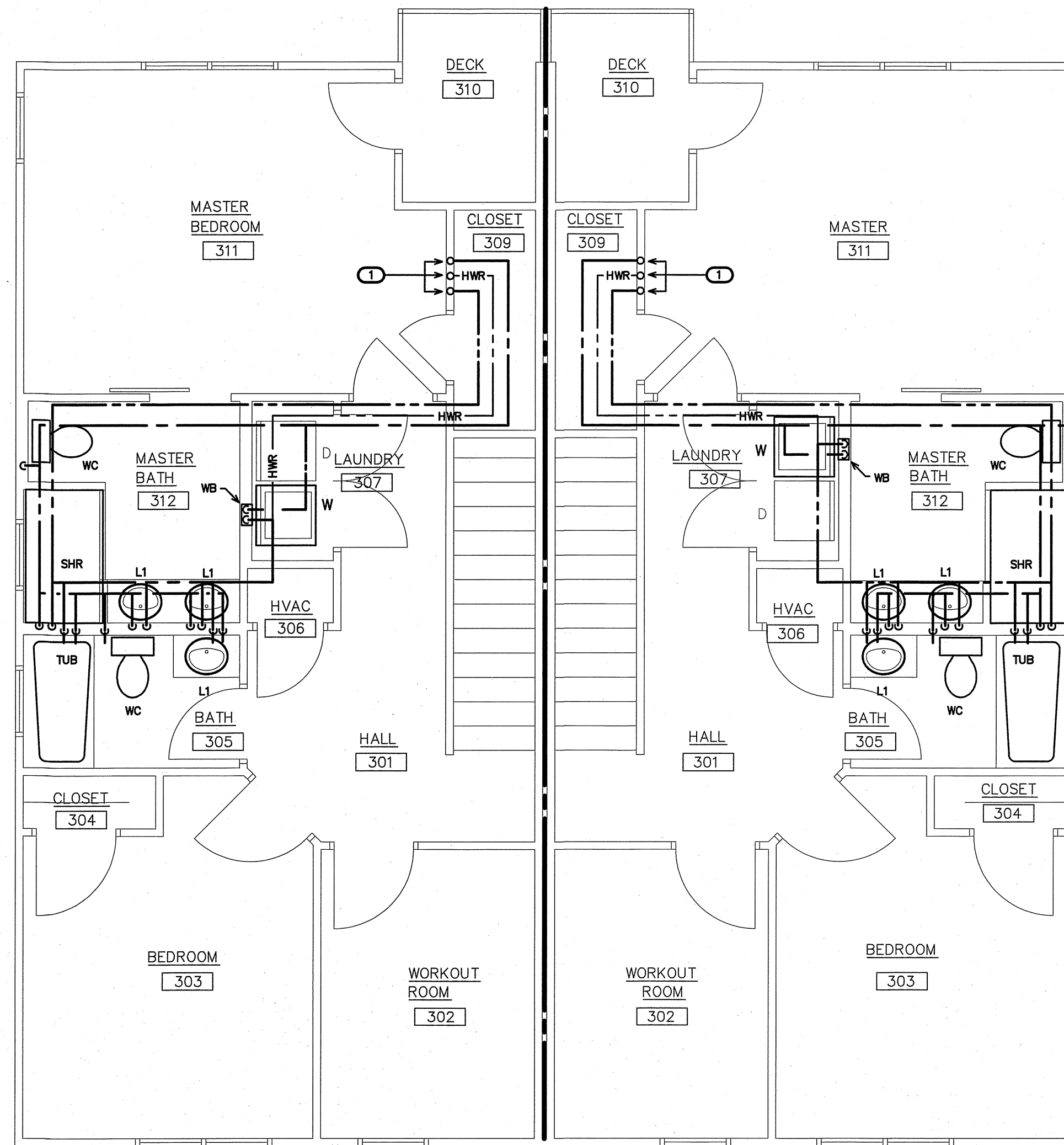
P-6

12 OF 35

NOTE:
PROPERLY INSULATE ALL SUPPLY
PIPING IN UNCONDITIONED AREAS.
PROVIDE ACCESS DOORS FOR
SHUT-OFF VALVES AS REQUIRED.
ANY AND ALL EWH, HW/CW/HWR,
ETC., ARE SHOWN FOR CLARITY.
VERIFY LOCATIONS/ROUTING.
(TYP FOR ALL UNITS)

KEY NOTES FOR DRAWING 2/P-6.1

- 1 3/4" HW, HW RETURN, CW DN (FIRST LIVING) AND UP TO ABOVE CEILING. VERIFY LOCATION. ROUTE AS REQUIRED TO DROP IN WALL OF NEXT LEVEL. SEE FIRST LIVING SUPPLY PLAN. PROVIDE SHUT-OFF VALVE FOR EACH LINE WITH ACCESS DOOR ABOVE FLOOR/BELOW CEILING IN AN ACCESSIBLE LOCATION.



UNIT 5

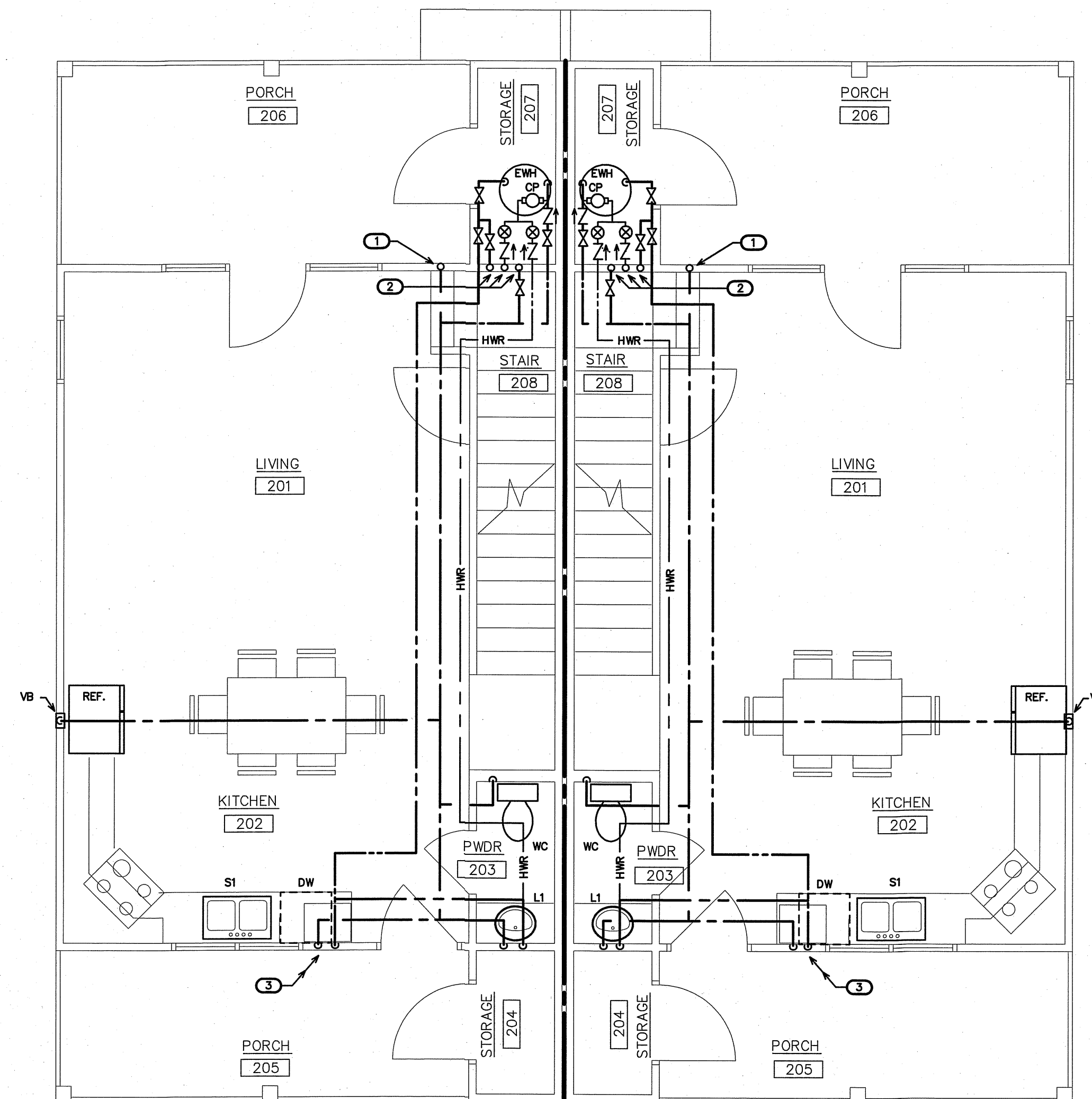
UNIT 4

2 SECOND LIVING SUPPLY PLAN UNITS 4/5
SCALE: 1/4"=1'-0"

NOTE:
PROPERLY INSULATE ALL SUPPLY
PIPING IN UNCONDITIONED AREAS.
PROVIDE ACCESS DOORS FOR
SHUT-OFF VALVES AS REQUIRED.
ANY AND ALL EWH, HW/CW/HWR,
ETC., ARE SHOWN FOR CLARITY.
VERIFY LOCATIONS/ROUTING.
(TYP FOR ALL UNITS)

KEY NOTES FOR DRAWING 1/P-6.1

- 1 1" CW DN AND UP TO ABOVE CEILING. VERIFY LOCATION. PROVIDE SHUT-OFF VALVE W/ACCESS DOOR (INTERIOR) ABOVE FLOOR/BELOW CEILING IN AN ACCESSIBLE LOCATION.
2 3/4" HW/HW RETURN/CW UP TO ABOVE NEXT LEVEL CEILING. VERIFY LOCATION. ROUTE AS REQUIRED TO RISE IN WALL OF UPPER LEVEL. SEE SECOND LIVING SUPPLY PLAN.
3 DROP CW/HW TO AVOID WINDOW AND ROUTE LINES AS REQUIRED TO S1. VERIFY LOCATION. EXTEND HW TO DW.



UNIT 5

UNIT 4

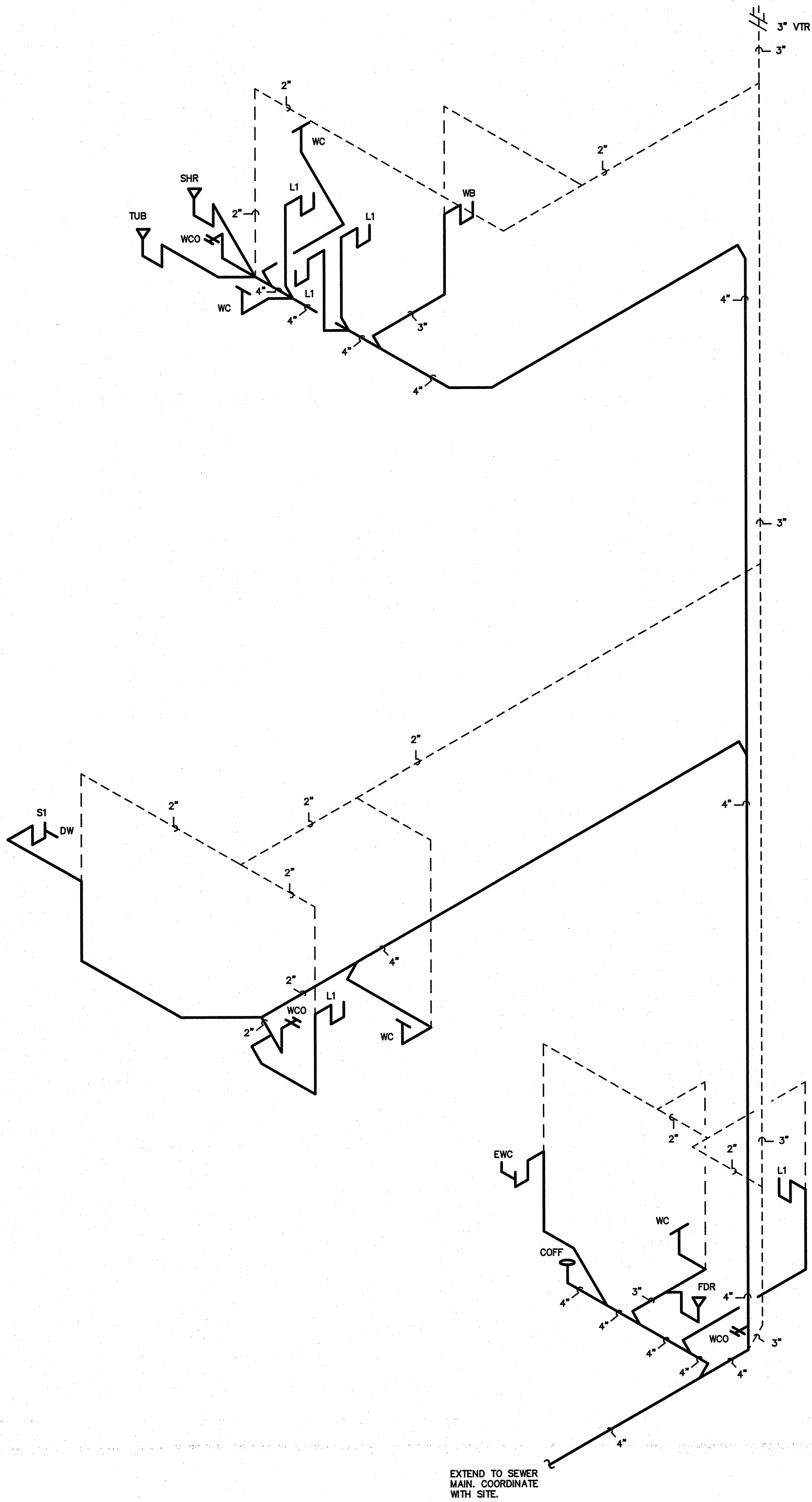
1 FIRST LIVING SUPPLY PLAN UNITS 4/5
SCALE: 1/4"=1'-0"

(VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO ROUGH-IN)

PIPE SIZING SCHEDULE		
FIXTURE TYPE	DRAIN	VENT
(DW) DISHWASHER	1 1/2"	-
(EWC) ELECTRIC WATER COOLER	1 1/4"	1 1/4"
(FDR) FLOOR DRAIN- RECESSED	2"	1 1/4"
(LI) LAVATORY	1 1/2"	1 1/4"
(SI) SINK	1 1/2"	1 1/4"
(SHR) SHOWER	2"	1 1/4"
(TUB) BATHTUB	2"	1 1/4"
(WB) WASHING MACHINE BOX	2"	1 1/2"
(WC) FLUSH TANK WATER CLOSET	3"	1 1/2"

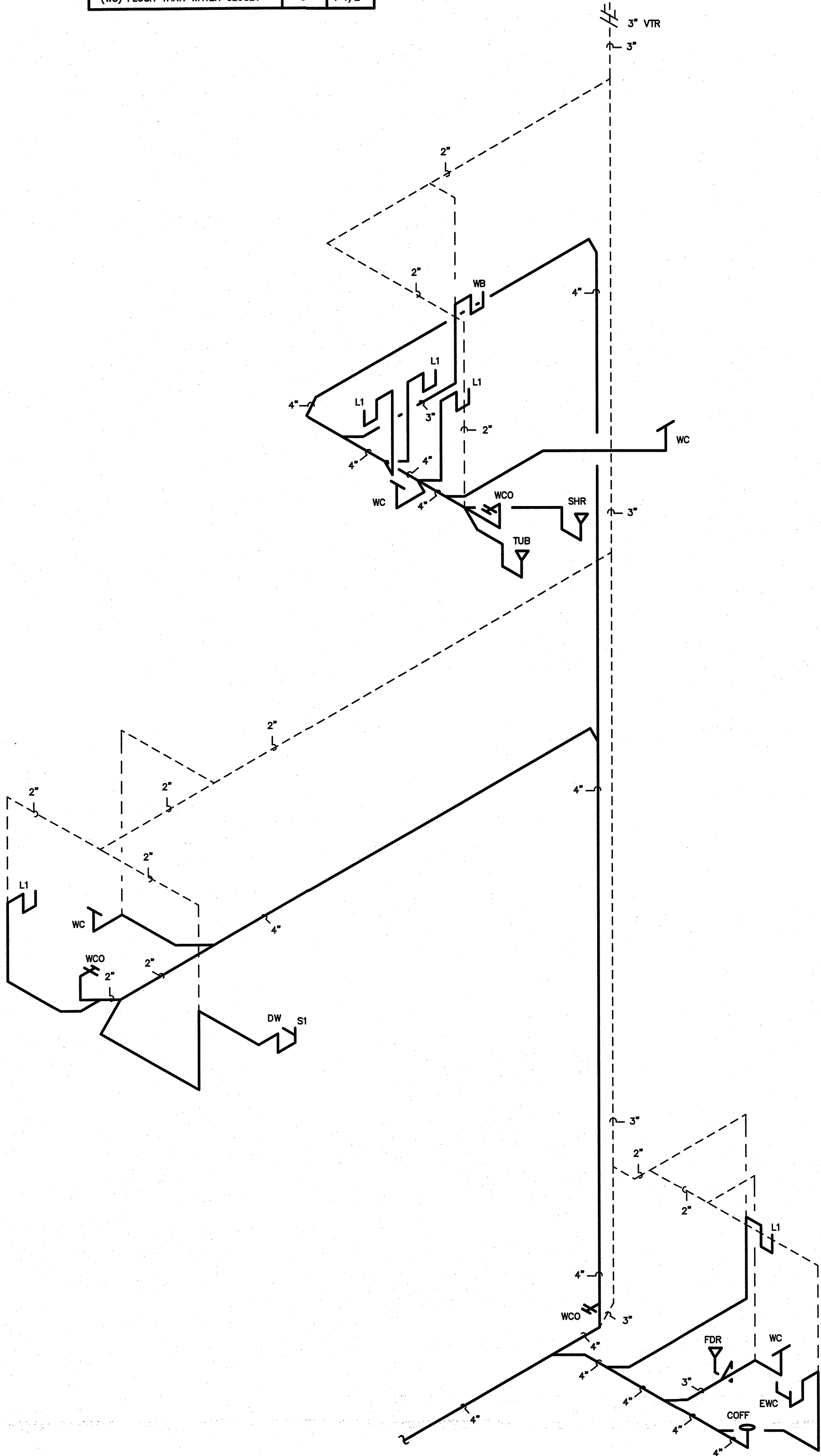
RISER NOTES:
REPRESENTATIVE SIZES ARE GIVEN FOR EACH TYPE OF FIXTURE.
SEE PIPE SIZING SCHEDULE.
MINIMUM 2" DRAIN LINE SIZE UNDER SLAB.
MAINTAIN PIPE SIZES SHOWN UNTIL LARGER SIZE IS REACHED.
PIPE SIZES ARE MINIMUMS FOR INDIVIDUAL FIXTURES U.O.N.
(TYP FOR ALL UNITS)

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 FOR ALL UNITS)



UNIT 5

DWV RISERS
SCALE: NTS
UNITS 4/5



UNIT 4

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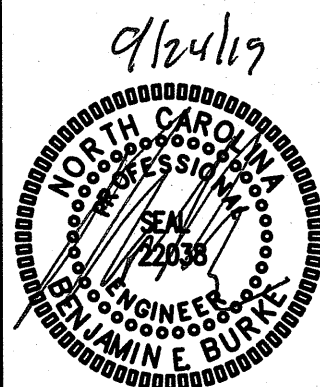
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VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



DWV RISERS
UNITS 4/5

18030

ISSUED: 09/11/19
DWG BY: DS
CKD BY: BEB
REVISIONS

SHEET NO.
P-7.1
14 OF 35

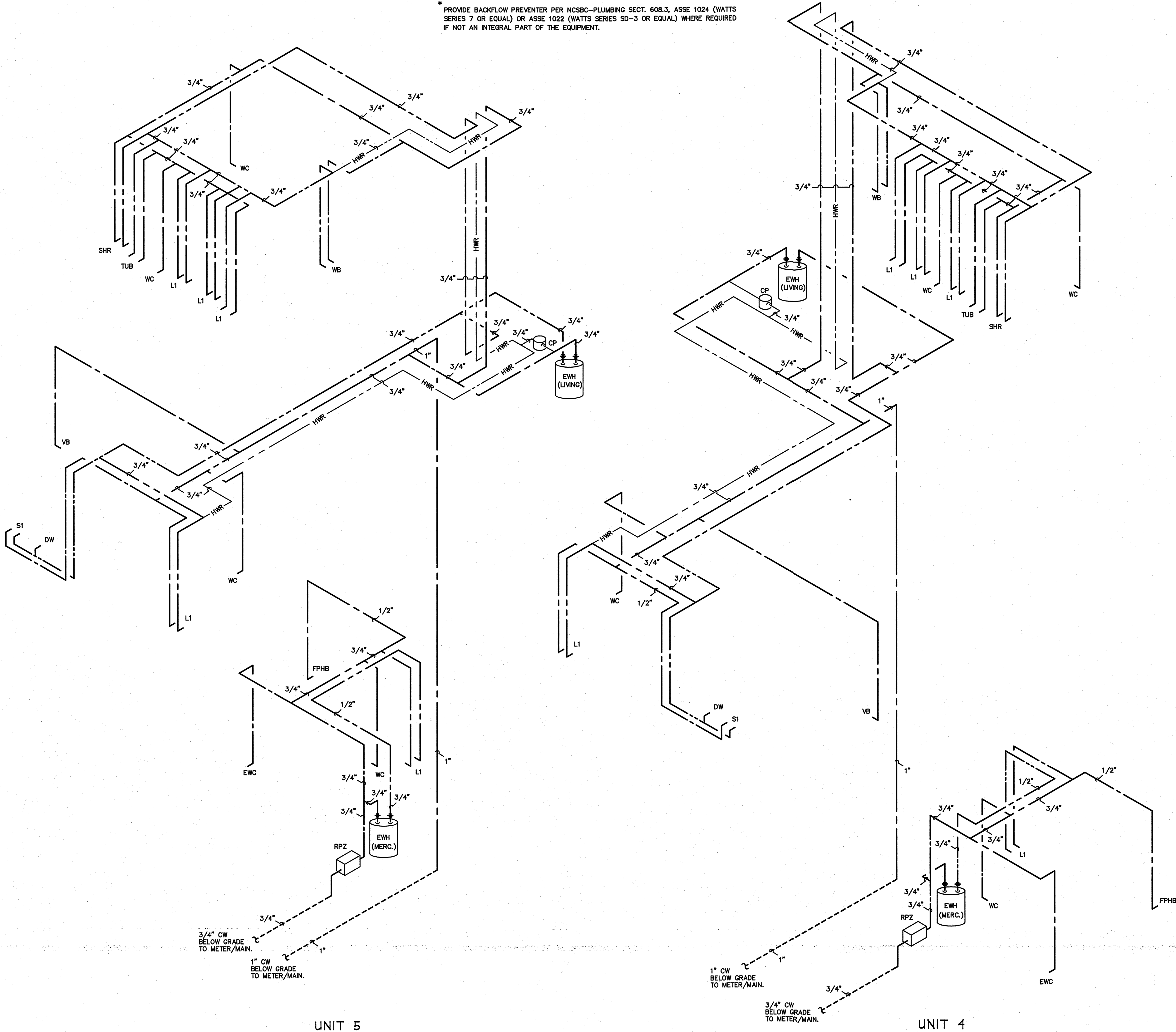
(VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO ROUGH-IN)

PIPE SIZING SCHEDULE		
FIXTURE TYPE	CW	HW
(DW) DISHWASHER	-	1/2"*
(EWC) ELECTRIC WATER COOLER	1/2"*	-
(FPHB) FREEZE PROOF HOSE BIBB	1/2"	-
(L1) LAVATORY	1/2"	1/2"
(S1) SINK	1/2"	1/2"
(SHR) SHOWER	1/2"	1/2"
(TUB) BATHTUB	1/2"	1/2"
(VB) VALVE BOX	1/2"*	-
(WB) WASHING MACHINE BOX	1/2"*	1/2"*
(WC) FLUSH TANK WATER CLOSET	1/2"	-

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

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.
(TYP FOR ALL UNITS)

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



UNIT 5

UNIT 4

1 SUPPLY RISERS UNITS 4/5
P-12 SCALE: NTS

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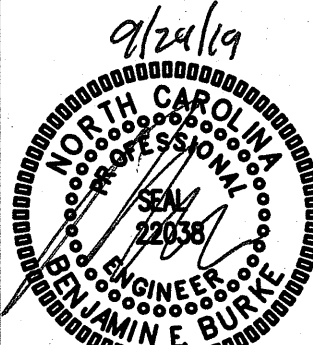
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VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



SUPPLY RISERS
UNITS 4/5

18030

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HVAC EQUIPMENT SCHEDULE	
HVAC SYSTEM #1	
AHU #1 DIRECT EXPANSION FAN COIL UNIT	* CARRIER MODEL #FX4DNF019, 4 WAY, MULTIPOISE FAN COIL UNIT. 3.8 KW HEATER. NOMINAL CAPACITY = 18,000 BTUH. 800 CFM NOMINAL. PROVIDE HARD SHUT-OFF TXV VALVE. 1.5 TON NOMINAL. PROVIDE PROGRAMMABLE THERMOSTAT AND FILTER RACK WITH HINGED DOOR. 1/3HP, 2.8A MOTOR FLA, 18.1A HEAT FLA, 208V, 1 PH, 26.0A MCA, 30A MOCP AHU & HEAT.
HP #1 OUTDOOR HEAT PUMP UNIT	* CARRIER MODEL #25HCC518A0030, 1.5 TON OUTDOOR HEAT PUMP UNIT, 15 SEER, PROVIDE CYCLE PROTECTOR, LOW PRESSURE SWITCH, CRANKCASE HEATER, 208 VOLT, 1 PHASE. COMP 9.0A RLA, FAN 0.7A FLA, OUTDOOR HEAT PUMP 11.8A MCA, 20A MOCP.
HVAC SYSTEM #2	
AHU #2 DIRECT EXPANSION FAN COIL UNIT	* CARRIER MODEL #FX4CNF037, 4 WAY, MULTIPOISE FAN COIL UNIT. 6 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, 28.9A HEAT FLA, 208V, 1 PH, 44.7A MCA, 45A 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, 208 VOLT, 1 PHASE. COMP 16.7A RLA, FAN 1.2A FLA, OUTDOOR HEAT PUMP 22.1A MCA, 35A MOCP.
HVAC SYSTEM #3	
AHU #3 DIRECT EXPANSION FAN COIL UNIT	* CARRIER MODEL #FX4DNF025, 4 WAY, MULTIPOISE FAN COIL UNIT. 5 KW HEATER. NOMINAL CAPACITY = 24,000 BTUH. 800 CFM NOMINAL. PROVIDE HARD SHUT-OFF TXV VALVE. 2 TON NOMINAL. PROVIDE PROGRAMMABLE THERMOSTAT AND FILTER RACK WITH HINGED DOOR. 1/3HP, 2.8A MOTOR FLA, 20A HEAT FLA, 240V, 1 PH, 28.5A MCA, 30A MOCP AHU & HEAT.
HP #3 OUTDOOR HEAT PUMP UNIT	* CARRIER MODEL #25HCC524A0030, 2 TON OUTDOOR HEAT PUMP UNIT, 15 SEER, PROVIDE CYCLE PROTECTOR, LOW PRESSURE SWITCH, CRANKCASE HEATER, 240 VOLT, 1 PHASE. COMP 12.8A RLA, FAN 0.5A FLA, OUTDOOR HEAT PUMP 16.5A MCA, 25A MOCP.
HVAC SYSTEM #4	
AHU #4 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 #4 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

CONTROLS FOR HVAC SYSTEM #4:

FOR EACH AIR HANDLING UNIT AHU-4 PROVIDE CARRIER MODEL ZONECC2KIT1-B, 2 ZONE SYSTEM,
CONSISTING OF 2 ZONE EQUIPMENT CONTROLLER, USER INTERFACE, REMOTE ROOM SENSOR,
DUCT SENSOR, AND OUTDOOR AIR SENSOR. PROVIDE (2) 14" X 8" ZONE DAMPERS, AND (1)
8" DIA. BAROMETRIC-BYPASS DAMPER. EACH ZONE DAMPER WILL CONTROL SUPPLY AIR TO
EACH OF (2) FLOORS IN CONDO. ZONING SYSTEM SHALL BE INSTALLED PER MANUFACTURER'S
INSTRUCTIONS. FURNISH AND INSTALL ALL PARTS TO PROVIDE COMPLETE OPERATING SYSTEM.

AHU DEHUMIDIFICATION CONTROL NOTE FOR HVAC SYSTEMS #1, 2, 3, & 4:

FOR EACH SYSTEM PROVIDE "SIMPLE ENGINEERED SOLUTIONS" MODEL #FDM-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.

Village West PH1 M1.1

EXHAUST FAN SCHEDULE

EXHAUST FAN #1 (EF-1)	* CARNES MODEL# VCD0010C 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. LOCATE EXHAUST TERMINATION A MINIMUM OF 10'-0" FROM ANY INTAKES.
--------------------------	---

* OR APPROVED EQUAL

NOTE: RUN EXHAUST DUCTS HORIZONTALLY AS REQUIRED TO MAINTAIN 10'-0" MINIMUM SEPARATION FROM ANY INTAKES.

AIR DISTRIBUTION SCHEDULE

MARK	* MANUFACTURER	MODEL NO.	NECK SIZE	FACE SIZE	MATERIAL	SERVICE	NOTES
A	CARNES	RTDBH	9" X 4"	11" X 6"	STEEL	SUPPLY	CEILING OR DUCT MOUNTED, WHITE
RA	CARNES	RSABH	14" X 14"	16" X 16"	STEEL	RETURN	WHITE, SIDEWALL MOUNTED
RB	CARNES	RSABH	16" X 16"	18" X 18"	STEEL	RETURN	WHITE, SIDEWALL MOUNTED

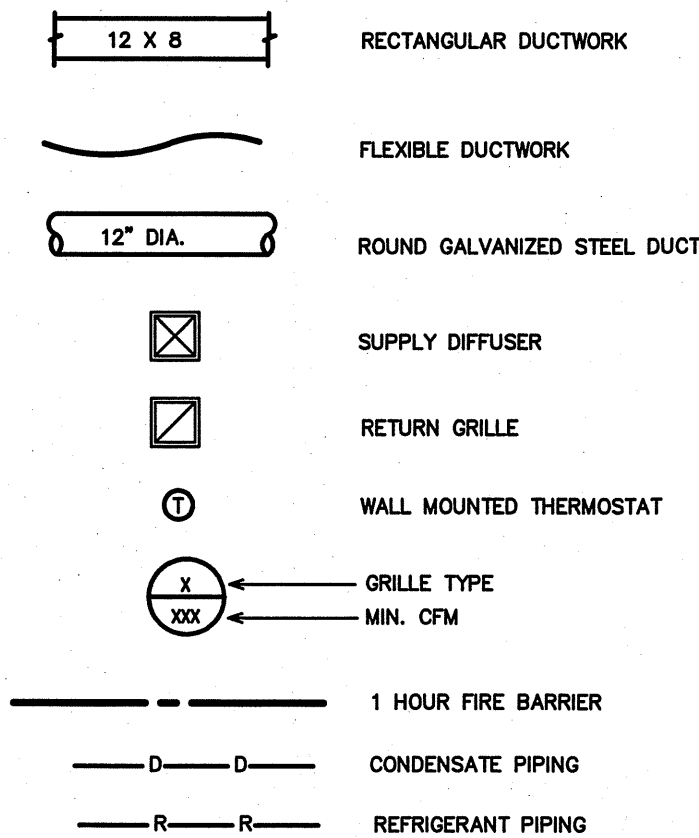
* OR APPROVED EQUAL

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

GENERAL NOTES - MECHANICAL

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE AND ALL LOCAL AND OTHER APPLICABLE CODES.
- ANY PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID FOR BY THE MECHANICAL CONTRACTOR (MC).
- 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.
- THE LOCATION OF ALL DUCT, PIPING AND EQUIPMENT SHALL BE ADJUSTED TO ACCOMMODATE ANTICIPATED OR ENCOUNTERED INTERFERENCES.
- THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS REFER TO THE ARCHITECTURAL PLANS.
- 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.
- 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.
- INSTALL FLEXIBLE CONNECTORS ON SUPPLY AND RETURN DUCTWORK AHU. ALL MECHANICAL EQUIPMENT SHALL OPERATE FREE OF OBJECTIONAL NOISE AND VIBRATION.
- 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.
- DUCT DIMENSIONS ARE SHOWN INSIDE CLEAR.
- 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.
- 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.
- THE M.C. SHALL COORDINATE WITH AND PROVIDE EQUIPMENT SPEC. SHEETS TO THE GENERAL AND ELECTRICAL CONTRACTORS FOR REVIEW PRIOR TO ORDERING EQUIPMENT.
- 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



FLEXIBLE DUCTWORK SIZES

MAXIMUM CFM'S

SIZES	SUPPLY	RETURN
4"	100	100
6"	115	115
10"	250	250
12"	400	350
14"	550	500
16"	NA	900

(CHANGE OUT EXISTING FLEX DUCTS AND COLLARS AS REQUIRED TO GET NEW CFM'S SHOWN)

FLEXIBLE DUCTWORK NOTES

- INSTALL FLEXIBLE DUCTWORK RUNS AS STRAIGHT AS POSSIBLE.
- DO NOT ALLOW FLEXIBLE DUCT TO SAG BETWEEN SUPPORTS.
- DO NOT STRETCH A SHORT SECTION TO FIT A SLIGHTLY LONGER SECTION. THIS DISTORTS THE DUCT SHAPE AND IMPEDES AIR FLOW.
- DO NOT CRUSH DUCTWORK TO FIT IN A SPACE SHALLER THAN ITS ORIGINAL OUTSIDE DIAMETER. MAXIMUM ALLOWABLE DEFORMATION IS 15% OF ORIGINAL VOLUME.
- USE RIGID 90 DEGREE ELBOWS AT ANY LOCATION WHERE THE DUCTWORK BECOMES DISTORTED.
- 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.
- SIZE ALL FLEXIBLE DUCT SO AS NOT TO EXCEED MAXIMUM CFM'S GIVEN IN TABLE.

OUTDOOR AIR CALCULATIONS			
OUTSIDE AIR PROVIDED BY NATURAL VENTILATION PER NCSCG MECHANICAL CODE, SECTION 402.			
UNIT	TOTAL FLOOR AREA, SQ.FT.	REQUIRED FREE AREA	OPERABLE FREE AREA
1 RETAIL	875	27	83
1 RESIDENTIAL	1250	50	123
2 RETAIL	875	27	83
2 RESIDENTIAL	1250	50	101
3 RETAIL	875	27	83
3 RESIDENTIAL	1250	50	115
4 RETAIL	700	27	63
4 RESIDENTIAL	1255	50	130
5 RETAIL	700	27	63
5 RESIDENTIAL	1255	50	130
6 RETAIL	1245	50	105
6 RESIDENTIAL	2280	92	224
7 RETAIL	1230	50	147
7 RESIDENTIAL	2030	81	173
8,10 RETAIL	875	27	63
8,10 RESIDENTIAL	1255	50	123
9,11 RETAIL	875	27	63
9,11 RESIDENTIAL	1255	50	123

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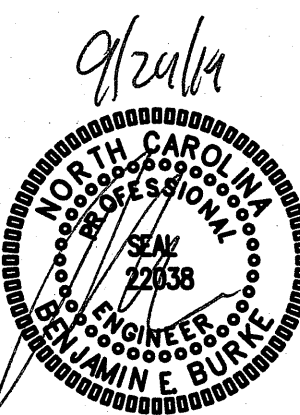
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VILLAGE WEST
PHASE 1
EMERALD ISLE, NORTH CAROLINA



HVAC
SCHEDULES

18030

ISSUED: 09/11/19
DWG BY: SBK
CKD BY: BEB
REVISIONS

SHEET NO.

M-1

1 OF 13

600 SQFT MERCANTILE SPACE

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 12,700 BTU/hr
(Tenant space only)

Building Cooling Load 22,700 BTU/hr
(Tenant space only)

Mechanical Spacing Conditioning System

Unitary - The tenant space is served the following systems:
(1) 1.5 Ton split system heat pump.

Boiler - Not applicable to this project.

Chiller - Not applicable to this project.

Equipment efficiencies

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

1200 SQFT MERCANTILE SPACE

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 11,500 BTU/hr
(Tenant space only)

Building Cooling Load 27,100 BTU/hr
(Tenant space only)

Mechanical Spacing Conditioning System

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

Boiler - Not applicable to this project.

Chiller - Not applicable to this project.

Equipment efficiencies

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

2 BEDROOM CONDO

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 9,600 BTU/hr
(Tenant space only)

Building Cooling Load 29,100 BTU/hr
(Tenant space only)

Mechanical Spacing Conditioning System

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

Boiler - Not applicable to this project.

Chiller - Not applicable to this project.

Equipment efficiencies

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

3 BEDROOM CONDO

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 14,300 BTU/hr
(Tenant space only)

Building Cooling Load 37,600 BTU/hr
(Tenant space only)

Mechanical Spacing Conditioning System

Unitary - The tenant space is served the following systems:
(2) 2 Ton split system heat pump.

Boiler - Not applicable to this project.

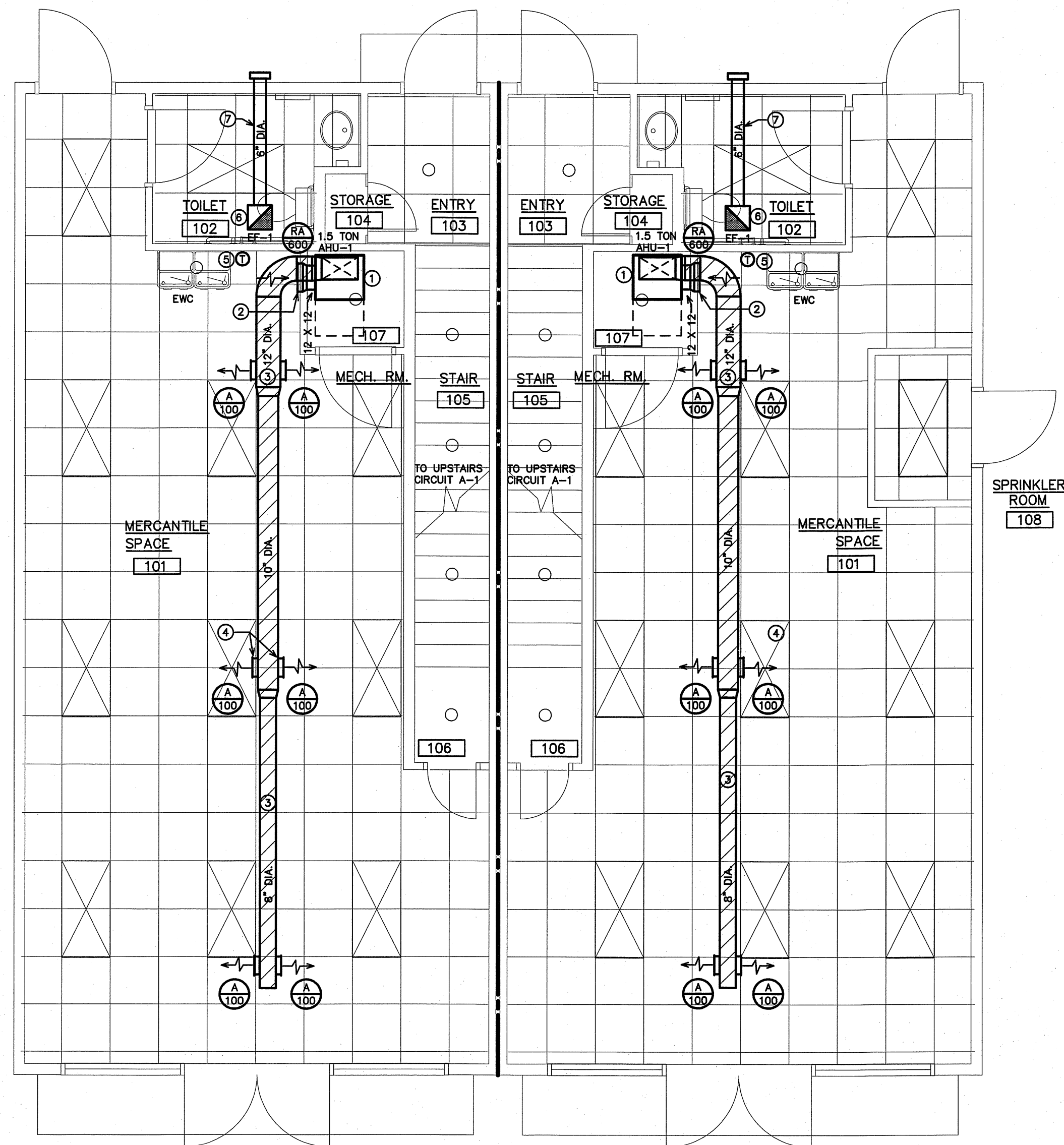
Chiller - Not applicable to this project.

Equipment efficiencies

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

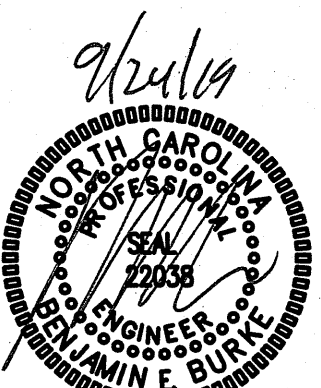
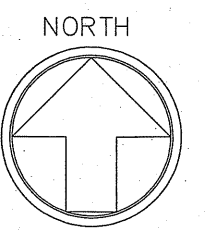
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- KEY NOTES FOR M2.1
- ① VERTICAL AIR HANDLING UNIT. SEE DETAIL 3/M6
 - ② SIDE WALL MOUNTED RETURN AIR GRILLE.
 - ③ DOUBLE WALL SPIRAL SUPPLY AIR DUCT RUN EXPOSED IN SPACE AS HIGH AS POSSIBLE. SEE DETAIL 4/M6
 - ④ DUCT MOUNTED SUPPLY AIR DIFFUSER. SEE DETAIL 4/M6 (TYPICAL)
 - ⑤ THERMOSTAT MOUNTED AT 48" AFF.
 - ⑥ TOILET EXHAUST FAN MOUNTED IN CEILING.
 - ⑦ RUN INSULATED RIGID STEEL DUCT CONCEALED ABOVE CEILING TO WALL DISCHARGE CAP.

① MERCANTILE FLOOR HVAC PLAN UNITS 4/5
M-3.1 SCALE: 1/4" = 1'-0"



MERCANTILE FLOOR
HVAC PLANS
UNITS 4/5

18030

ISSUED: 09/11/19

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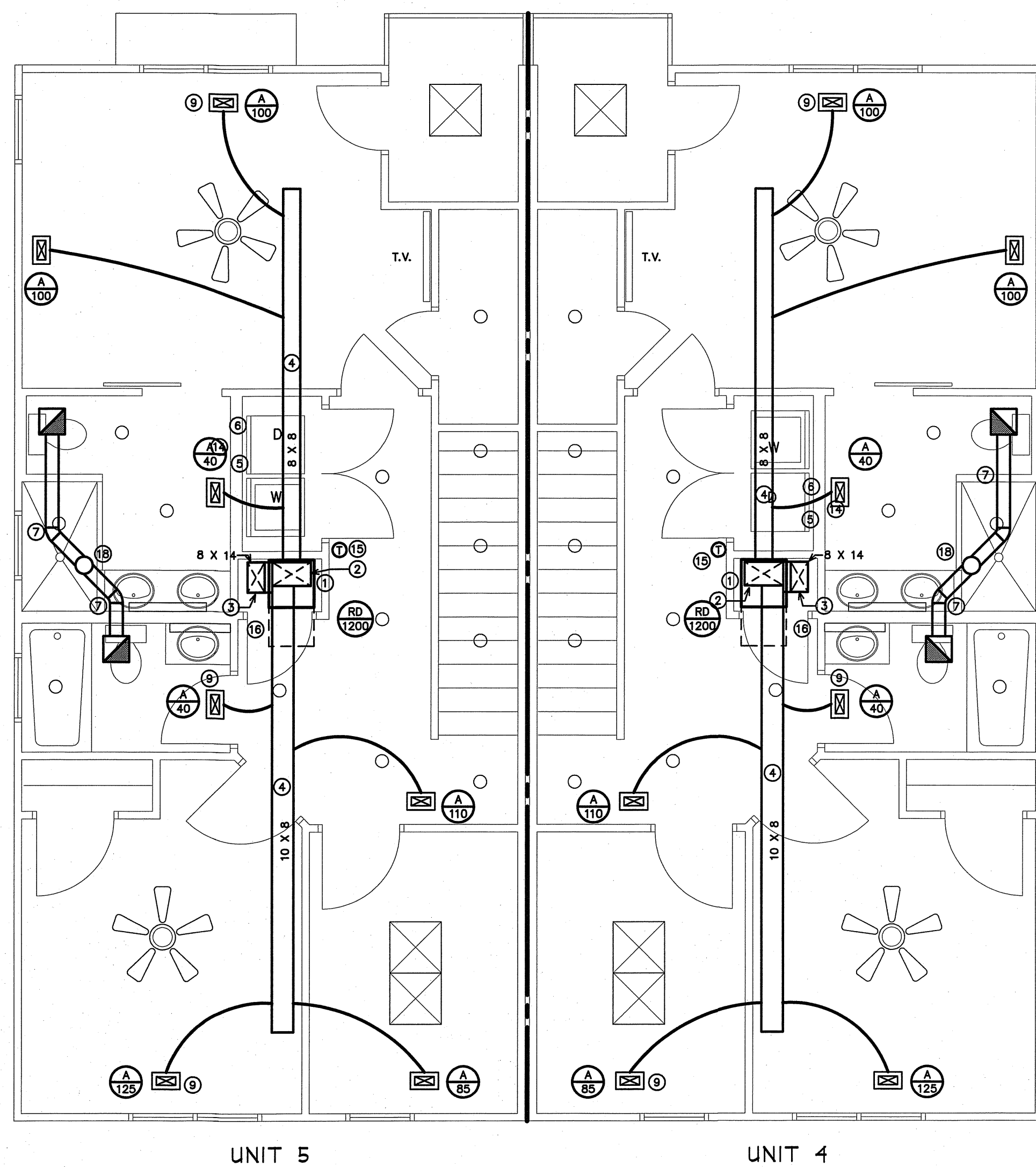
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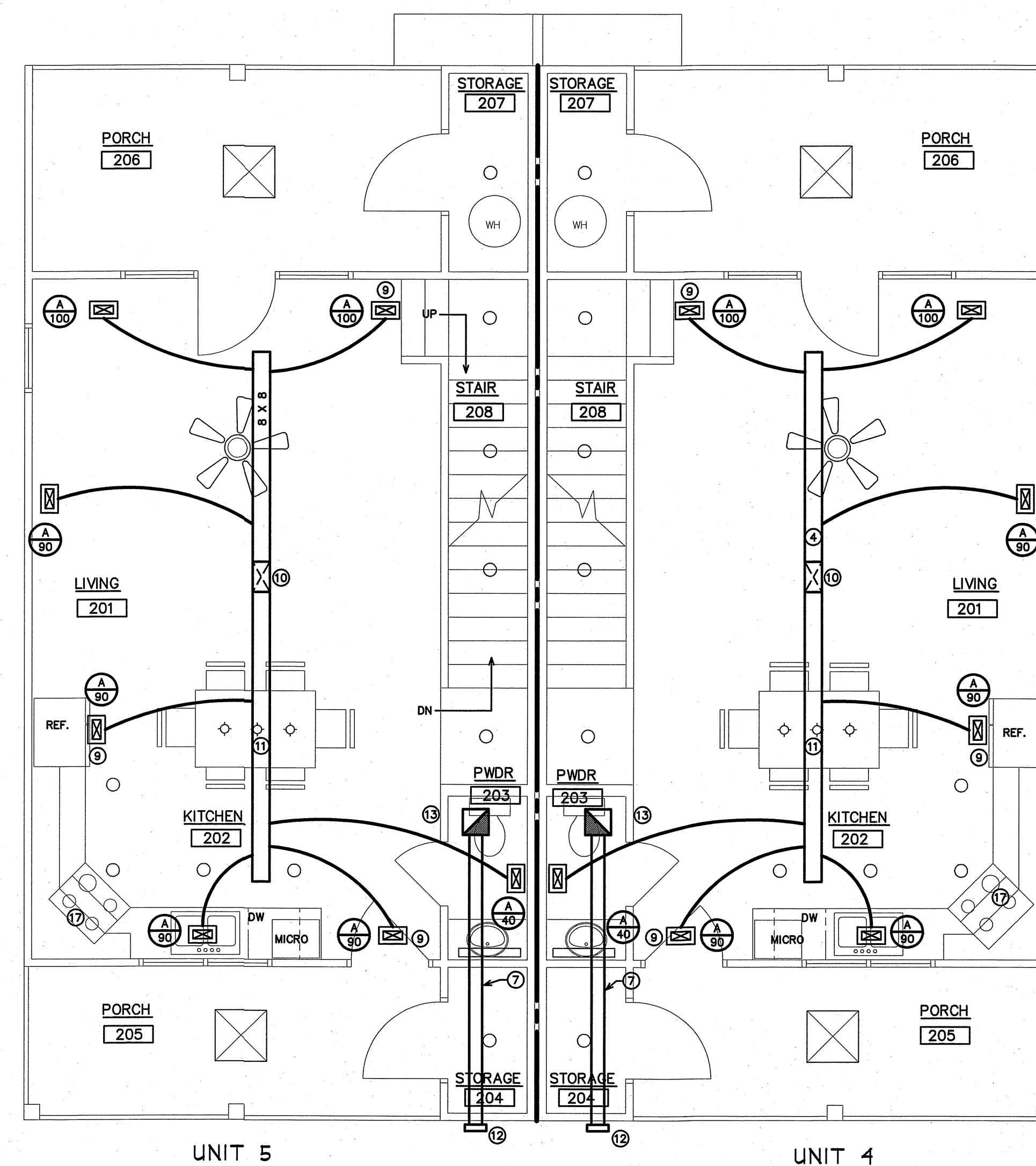
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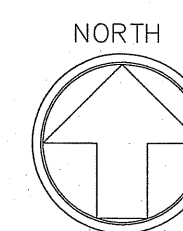


1 SECOND FLOOR HVAC PLAN UNITS 4/5
SCALE: 1/4" = 1'-0"

- KEY NOTES FOR M3.2
- 1 VERTICAL AIR HANDLING UNIT MOUNTED IN CLOSET. SEE DETAIL 1/M6
 - 2 8 X 14 SUPPLY AIR DUCT UP TO ATTIC SPACE.
 - 3 8 X 14 SUPPLY AIR DUCT DOWN TO FLOOR BELOW.
 - 4 RUN SUPPLY AIR DUCT IN ATTIC SPACE.
 - 5 4" DIA. RIGID STEEL DRYER VENT DUCT STUBBED OUT AT 48" AFF.
 - 6 4" DIA. RIGID STEEL DRYER VENT DUCT UP CONCEALED IN WALL TO CEILING ABOVE.
 - 7 RUN RIGID EXHAUST DUCT CONCEALED ABOVE CEILING. ALL EXHAUST DUCT SHALL BE INSULATED.
 - 8 RUN 4" DIA RIGID STEEL DRYER VENT DUCT CONCEALED ABOVE CEILING.
 - 9 CEILING MOUNTED SUPPLY AIR DIFFUSER. (TYPICAL)
 - 10 14 X 8 SUPPLY AIR DUCT UP TO SECOND FLOOR.
 - 11 RUN SUPPLY AIR DUCT CONCEALED ABOVE CEILING IN DUCT CHASE IN CENTER OF FLOOR JOIST.
 - 12 WALL MOUNTED EXHAUST CAP SHALL HAVE BACK DRAFT DAMPER.
 - 13 TEMPERATURE SENSOR MOUNTED AT 48" AFF.
 - 14 DRYER ROOF VENT CAP. CAP SHALL HAVE BACK DRAFT DAMPER.
 - 15 MOUNT THERMOSTAT AT 48" AFF.
 - 16 RETURN AIR TO AHU SHALL BE THROUGH LOUVERED DOOR.
 - 17 CONNECT 4" DIA RIGID STEEL DUCT TO DUCT COLLAR ON RANGE HOOD. RUN CONCEALED ABOVE CEILING TO WALL EX. CAP.
 - 18 ROOF MOUNTED EXHAUST CAP SHALL HAVE BACK DRAFT DAMPER.



2 FIRST FLOOR HVAC PLAN UNITS 4/5
SCALE: 1/4" = 1'-0"



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 show 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 brooding 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 NL-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 I. 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. Exhaust air duct shall be insulated.

- G. Insulation shall be held in place with adhesive and welding pins 16" 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 manufacturer's 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

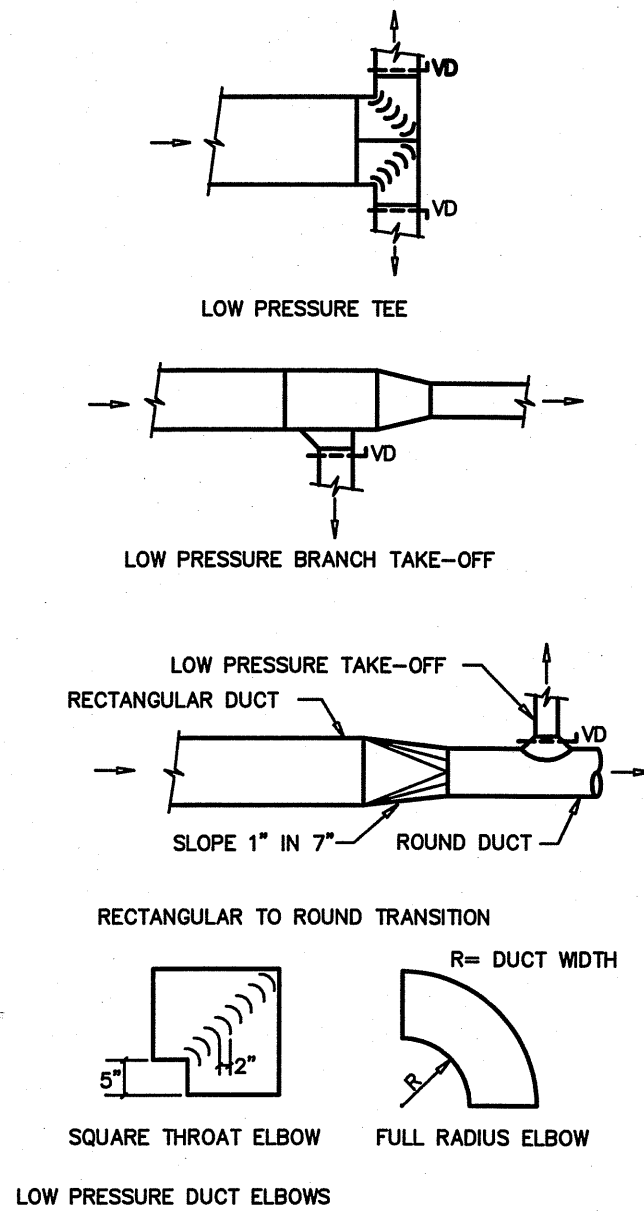
- A. The HVAC Contractor shall prepare in one copy a manual describing the proper maintenance and operation of the systems. This manual shall not consist of standard factory instructions (although these may be included) but shall be prepared to describe this particular job.

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

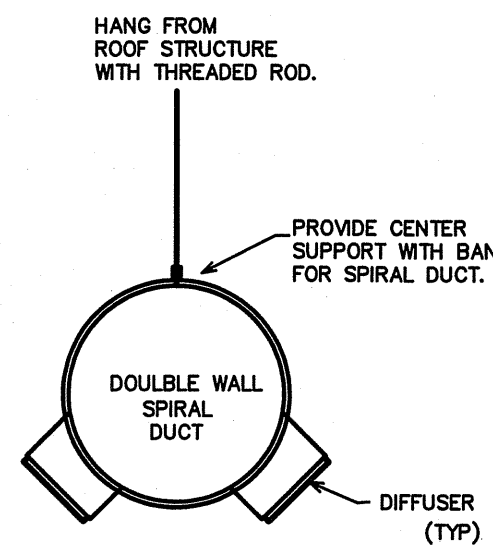
- C. Qualified representative of the HVAC contractor shall meet with the designated representatives of the Owner and the Owner's representative shall be instructed in the proper operation and maintenance of the control system and other systems.

3.5 GUARANTEE

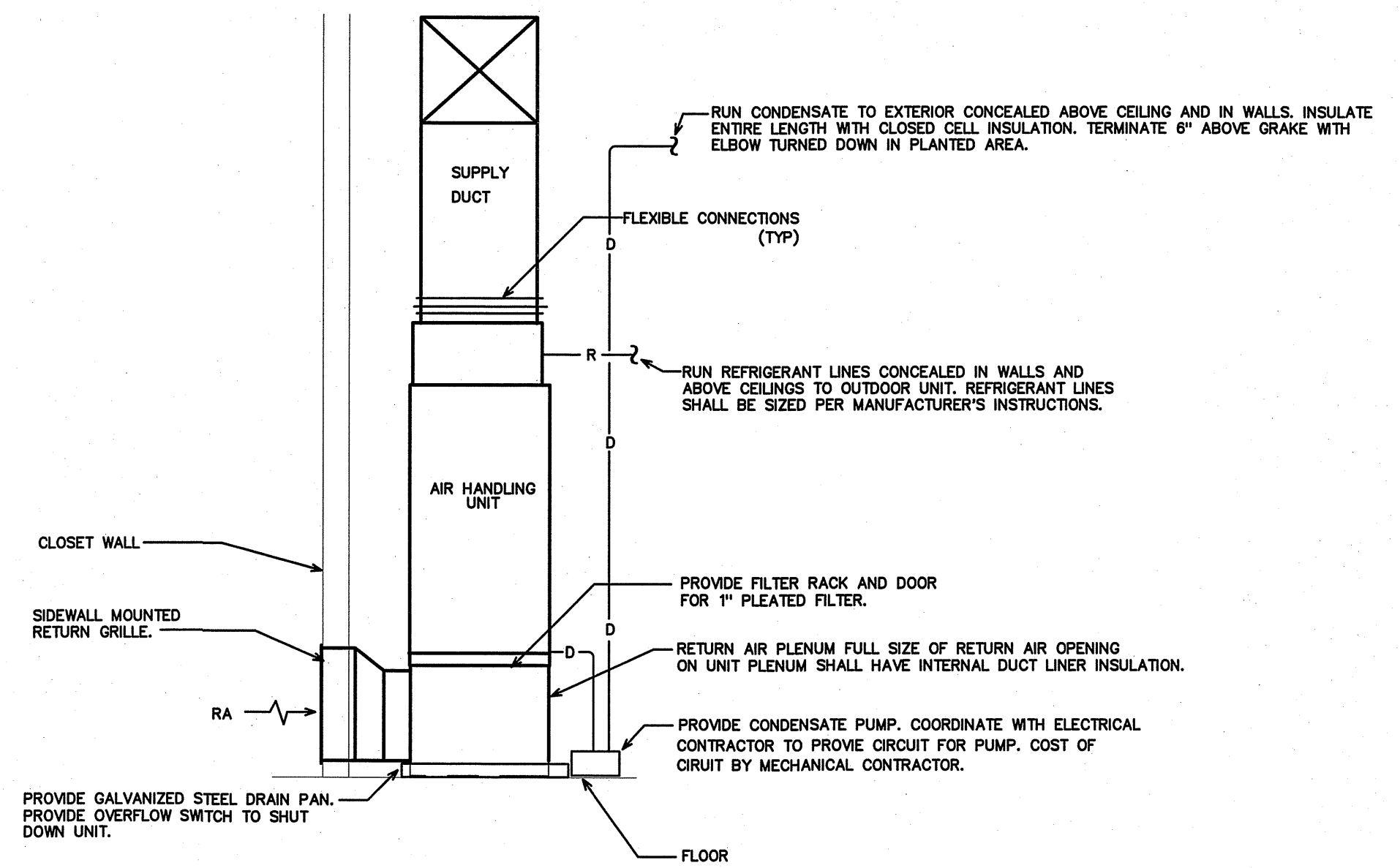
- A. Guarantee all materials and labor included in the HVAC work for a period of one year from date of final acceptance by the owner. In addition, motor compressors shall be a nonprorated five year warranty. Any part or parts of the work or equipment which prove to be defective during the guarantee period 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 airflow. 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 if required for occupant comfort.



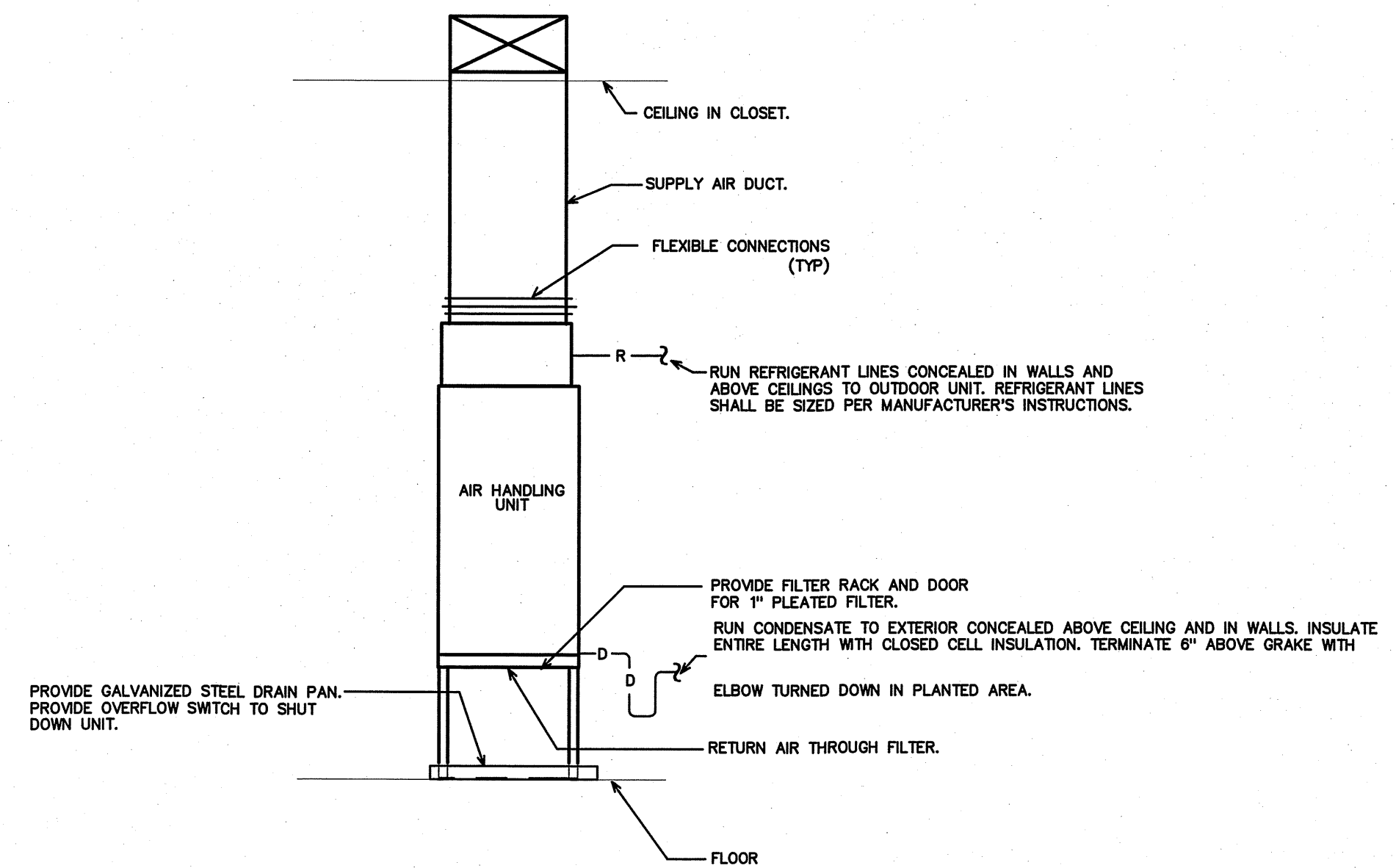
5 DUCT CONSTRUCTION DETAILS
SCALE: NOT TO SCALE



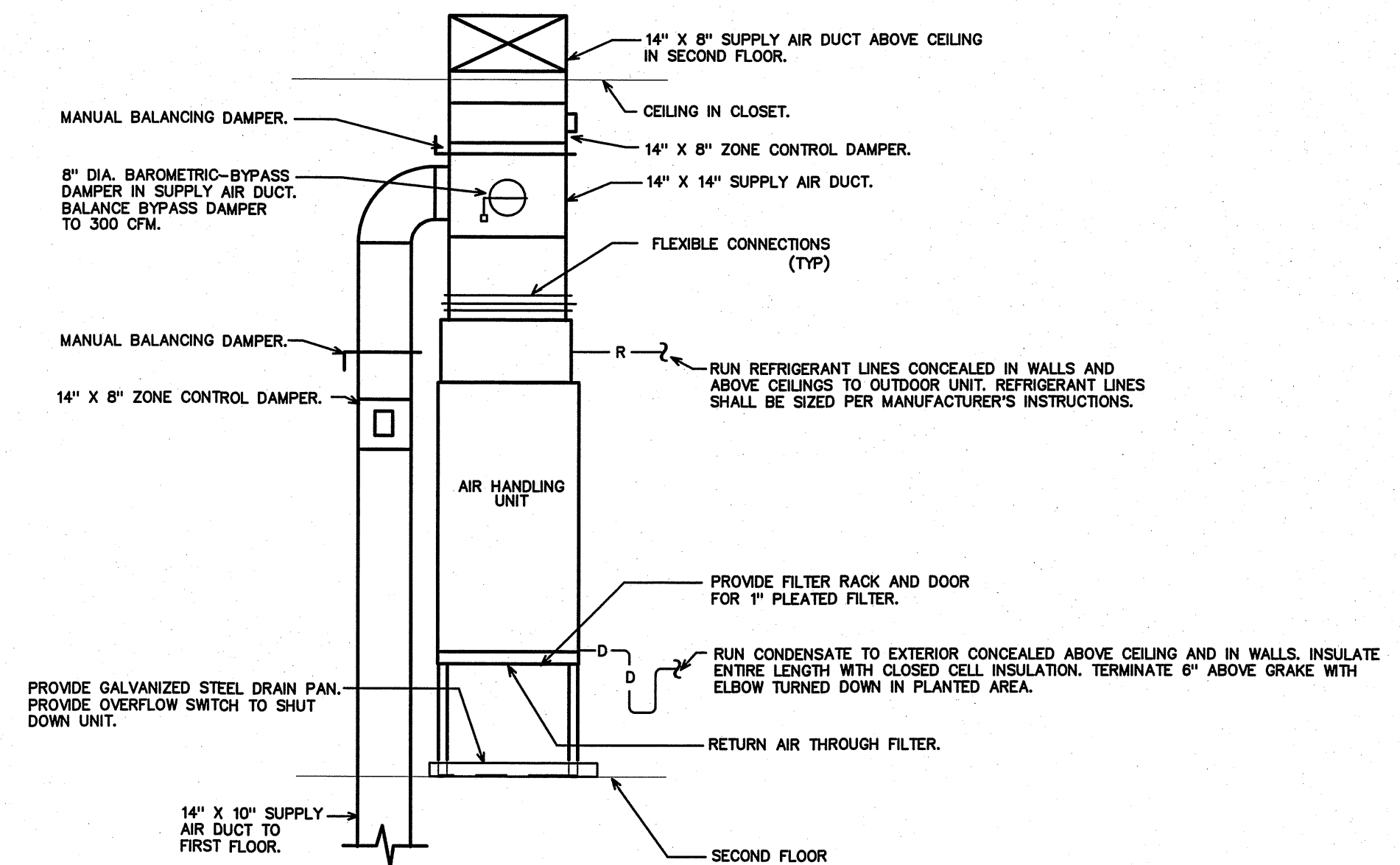
4 SPIRAL DUCT DETAIL
SCALE: NOT TO SCALE



3 AIR HANDLING UNIT #1 & #2 DETAIL
SCALE: NOT TO SCALE



2 AIR HANDLING UNIT #3 DETAIL
SCALE: NOT TO SCALE



1 AIR HANDLING UNIT #4 DETAIL
SCALE: NOT TO SCALE

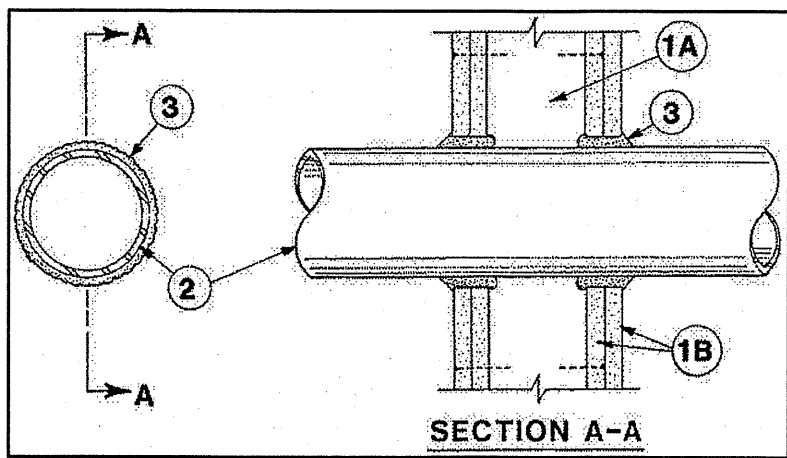
System No. W-L-1001

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 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 TITELLEX

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 Material --- **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 interfaces 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

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

- The 2017 National Electrical Code.
- The National Electrical Safety Code.
- Underwriter's Laboratories, Inc., Standards and approved listings.
- Electrical Testing Laboratories standards.
- North Carolina Building Code, Latest Edition and Revisions.
- 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 manufacture of the required type of equipment and the manufacturer's latest approved design.

- Boxes installed in concealed locations shall be set flush with the finished surfaces.
- Provide rated boxes in all fire barriers & walls installed per code.

2.2 NOT USED

2.3 CONDUCTORS

- Conductors shall be color coded, sizes #8 and larger may be color taped on the job. Color coding shall be Standard Practice.
- Conductors shall be manufactured by Dodge, Southwire or approved equal. Conductors shall meet the latest requirements of NEMA and ICEA and shall be UL approved.
- Metallic sheathed "MC" cable may be used where allowed by N.E.C.
- Conductors shall be spliced and taped as follows:
 - Size #10 and #12, use Ideal "Wing Nuts" or TAB "Piggy" connectors. Connectors shall be rated for 150 degrees C for use in recessed lighting fixtures.
 - 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.
 - No split-bolt type connectors may be used.
- All branch wire and connections shall be copper and sized per National Electric Code.
- All conductors shall be continuous without splice between junction, outlet, device boxes, etc. No splicing will be permitted in panelboard cabinets, safety switches, etc.
- All wiring in mechanical spaces shall be plenum rated.
- Provide GFI protection within 6'-0" of any sink.
- All multi-wire branch circuits shall comply with 2017 NEC, 210.4(B).
- All wiring at medical facilities shall comply with 2017 NEC, 517.1.

2.4 PANELBOARDS, SAFETY SWITCHES

- Panelboards shall comply with NEMA Standard PB 1 - Latest Edition and as manufactured by Square D or ITE-Siemens.
- The contractor shall be responsible for correctly phasing the circuits in the panelboards.
- 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

- Wiring devices shall be commercial grade by Bryant, Leviton, or approved equal. With matching cover. Color by Architect.
- Wiring devices installed under a Kitchen Hood shall have stainless steel covers.
- Wiring devices installed over counters shall comply with ANSI A117.1.

2.7 NOT USED

2.8 CONDUIT

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

- 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

- 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

- 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

- 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.
- All switch plates, receptacle plates and outlet covers shall be labeled with machine printed vinyl labels identifying the circuit(s) within.
- All empty conduit runs shall be identified and indicated where they terminate.
- 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

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

3.9 PULL WIRE

- Leave pull wire in each empty conduit run.

3.10 NOT USED

3.11 GROUNDING

- All grounding shall be in accordance with Article 250 of the NEC. In addition, the following requirements shall be met:

- 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.
- Equipment ground continuity shall be maintained through flexible metal conduit.
- All wiring devices equipped with grounding connection shall be solidly grounded to ground system with grounding conductors.
- The frame of all lighting fixtures shall be securely grounded to the equipment ground system with grounding conductors.
- All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately bonded to ground.
- 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

- 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.

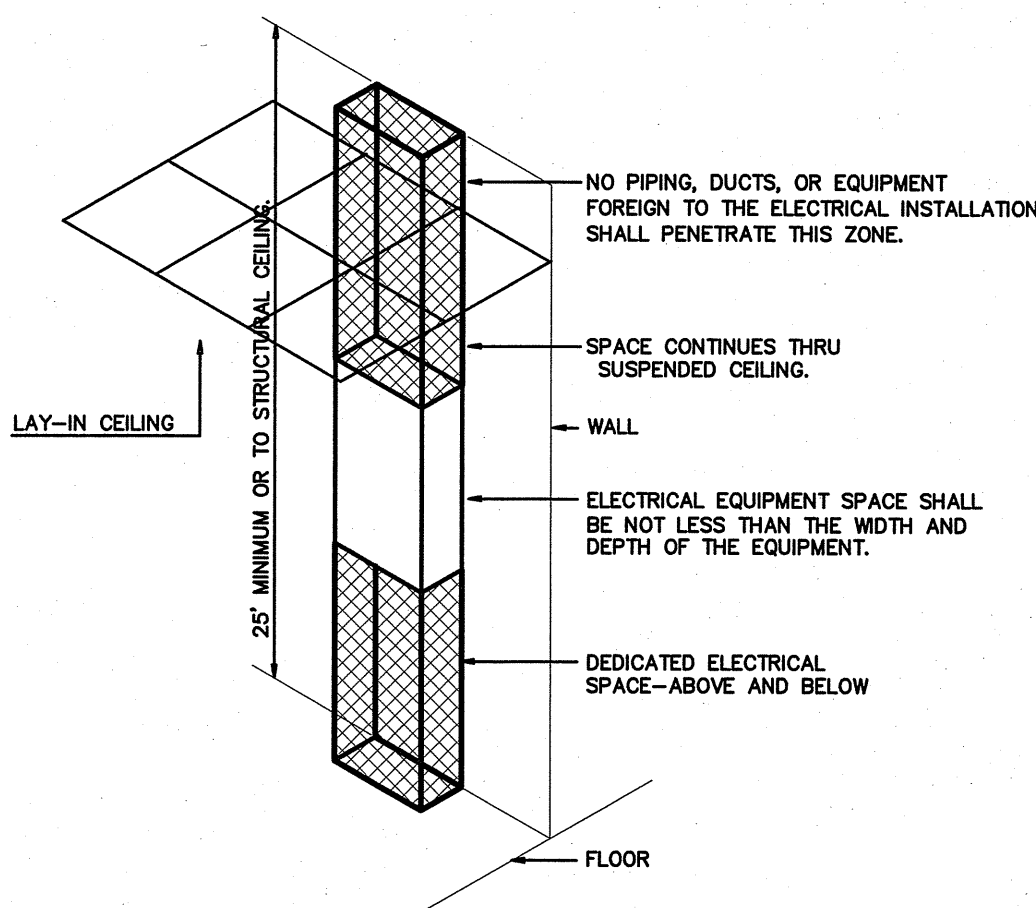
- HEATING AND AIR CONDITIONING WORK:** The Electrical Contractor shall provide all disconnect switches, starters, and associated hardware for the equipment furnished including all line and load side wiring and conduit. Final connections to the equipment will be by the HVAC contractor. All control wiring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

3.13 CLEAN UP

- 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

- 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.

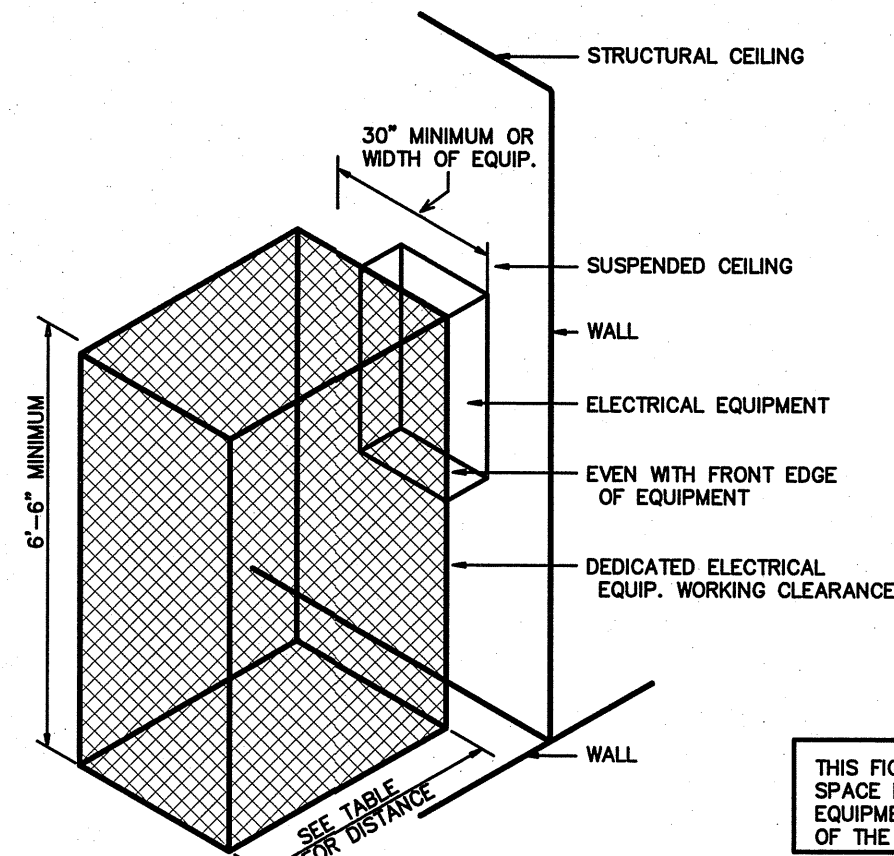


ELECTRICAL EQUIPMENT DEDICATED SPACE
PER ARTICLE 110.26.F.1 OF N.E.C.

DEDICATED SPACE
SCALE: NTS

GENERAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES HAVING JURISDICTION.
- ALL BRANCH CIRCUIT CONDUCTORS TO BE COPPER (SERVICE CONDUCTORS MAY BE ALUMINUM WITH SAME AMPACITY AS COPPER CONDUCTORS. RE-SIZE CONDUCTORS AND CONDUIT PER NEC).
- 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.
- ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FEET SHALL BE PROVIDED WITH A PULL WIRE OR FISH TAPE/CORD.
- CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.
- 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.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELBOARDS.
- 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.
- 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.
- 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.
- PROVIDE BOXES, JACKS, WIRING AND CONDUIT FROM LOCATIONS SHOWN TO MTP LOCATION. VERIFY EXACT REQUIREMENTS WITH OWNER.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS FOR MECHANICAL & PLUMBING EQUIPMENT. DISCONNECTS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS AND FUSED PER NAME PLATE. PROVIDE NEMA 3R ENCLOSURES ON EXTERIOR. COORDINATE FUSE SIZES.
- 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 EQUIPMENT WORKING CLEARANCE
PER ARTICLE 110-26 OF N.E.C.

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

WHERE THE CONDITIONS ARE AS FOLLOWS:

- 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.
- EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.
- EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

ELECTRICAL LEGEND

- SPECIAL PURPOSE RECEPTACLE - REFER TO POWER PLAN AND PANEL SCHEDULE
- DUPLEX RECEPTACLE - 120V, MOUNT 18" TO CENTER AFF. UNLESS NOTED OTHERWISE, "WP" INDICATES WEATHER PROOF, "GFI" INDICATES GROUND FAULT CURRENT INTERRUPT PROTECTED.
- LIGHT SWITCH
- SWITCH WITH INTEGRAL PIR/US MOTION SENSOR FOR AUTOMATIC SHUT-OFF WITH UP TO 2 HOUR ADJUSTABLE DELAY.
- DIMMABLE LIGHT SWITCH
- MOTOR RATED SWITCH
- 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 LIGHT
- EMERGENCY EGRESS FIXTURE
- PHOTOCELL
- BRANCH CIRCUIT WIRING
- SWITCH LEG
- GROUND CONNECTION
- DISTRIBUTION PANELBOARD
- DISCONNECTING MEANS AS REQUIRED BY CODE

Coastal
Architecture
PLC

Architectural
Design
Planning
Interiors



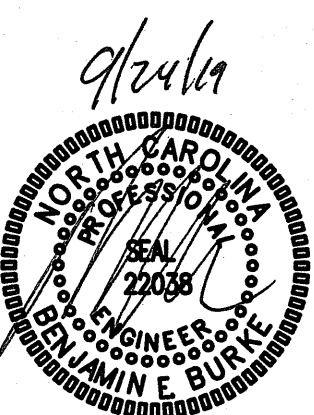
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VILLAGE WEST
PHASE 1
EMERALD ISLE, NORTH CAROLINA



ELECTRICAL
SPECIFICATIONS
ALL UNITS

18030

ISSUED: 09/11/19

DWG BY: TCM

CKD BY: BEB

REVISIONS

SHEET NO.

E-1
1 OF 25

Village West Ph1 E3.1 FIXTURE / DEVICE SCHEDULE *									
MARK	MANUFACTURER	CATALOG NO.	VOLT.	LAMPS NO. TYPE	BALLAST VA TYPE	VA/ TYPE	REMARKS		
A	COLUMBIA	JT824-3320-FSA12-3EU	120	2 T8 32	EB	64	2X4 LAY-IN, PRISMATIC ACRYLIC LENS	**	
C	PRESCO LITE	LF8LED04-8LFLED60435K	120	- LED 20	-	20	6" RECESSED CAN LIGHT	**	
EXIT	MULE	ELW-BB-15WL-W-DP	120	2 LED 15	-	15	EXIT LIGHT, WHITE HOUSING, RED STENCIL, UNIVERSAL STENCIL KIT		
EXIT	MULE	ELX-1-B-RC-WH-NC	120	- LED 2	-	2	COMBINATION EMERGENCY (TUNGSTEN)/ EXIT (LED) LIGHT		
EXIT	MULE	AL-1-R-WW-SD	120	- LED 1.5	-	1.5	EMERGENCY LIGHT		

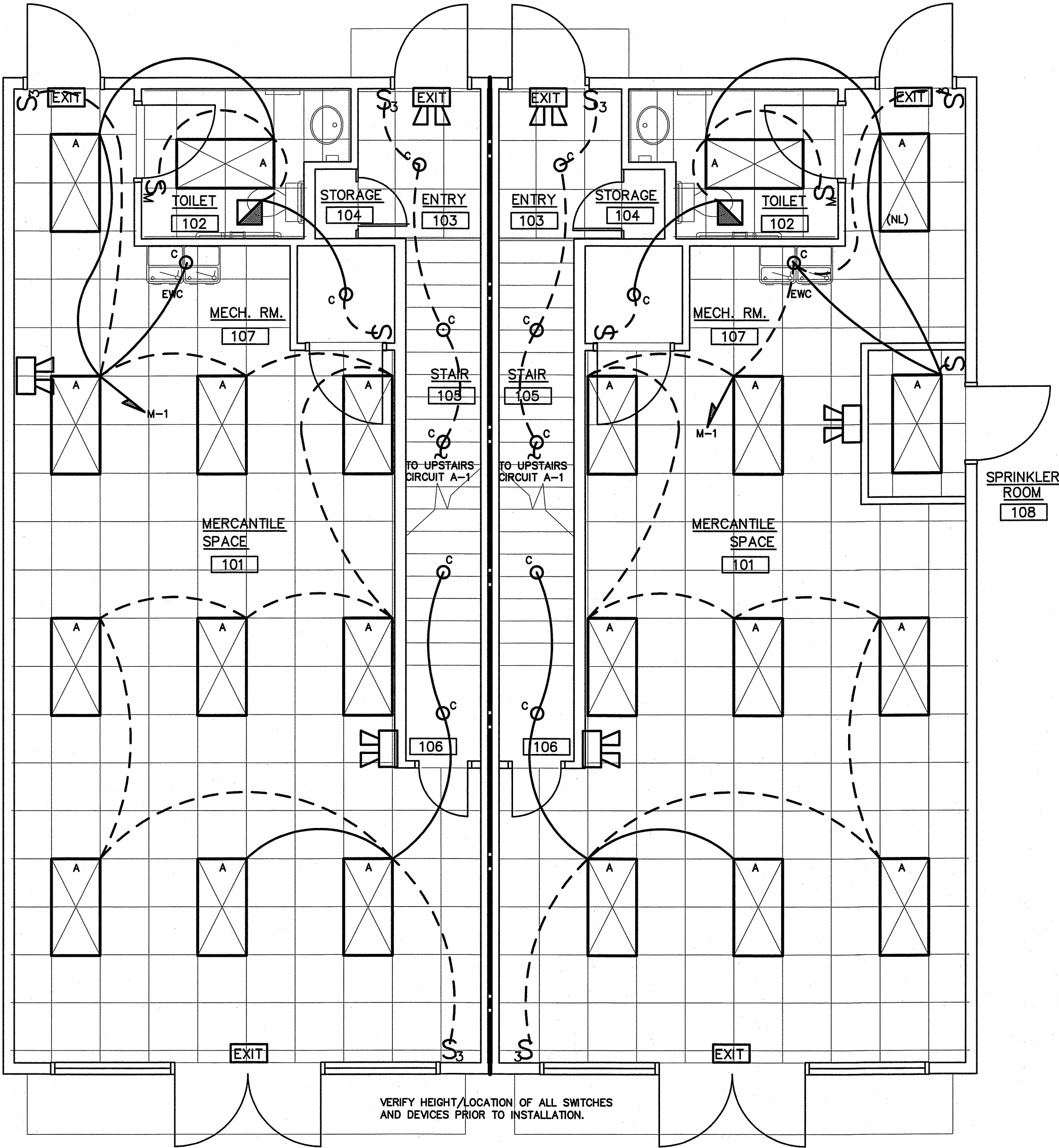
* OR APPROVED EQUAL. PROVIDE CUT SHEETS FOR OWNER APPROVAL PRIOR TO ORDERING FIXTURES. FOR FLUORESCENT FIXTURES CONTROLLED BY MOTION SENSOR, PROVIDE "PROGRAMMED RAPID START" BALLASTS. CATALOG NUMBERS ARE FOR REFERENCE ONLY, ACTUAL NUMBERS MAY VARY. "EB" DENOTES ELECTRONIC BALLAST.

** VERIFY FIXTURE HAS INTEGRAL LOCAL DISCONNECTING MEANS PER NEC 410.130 (G) (2008).

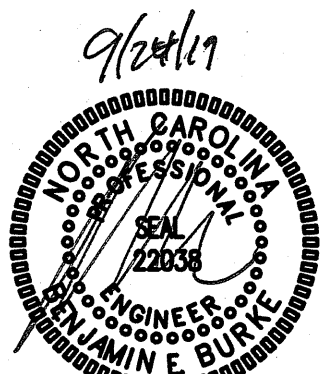
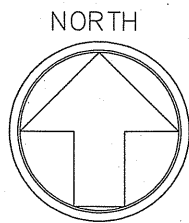
*** PROVIDE LOCAL DISCONNECTING MEANS PER NEC 410.130(G)(2008). FOR EXISTING FIXTURES, PROVIDE A SWITCH TO ALLOW THE FIXTURE TO BE DE-ENERGIZED. THE SWITCH SHALL BE LOCATED WITHIN SIGHT OF THE LIGHT FIXTURE.

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

Village West Ph1 E3.1 WALL LEGEND	
	NEW WALL
	1/2 HR FIRE BARRIER

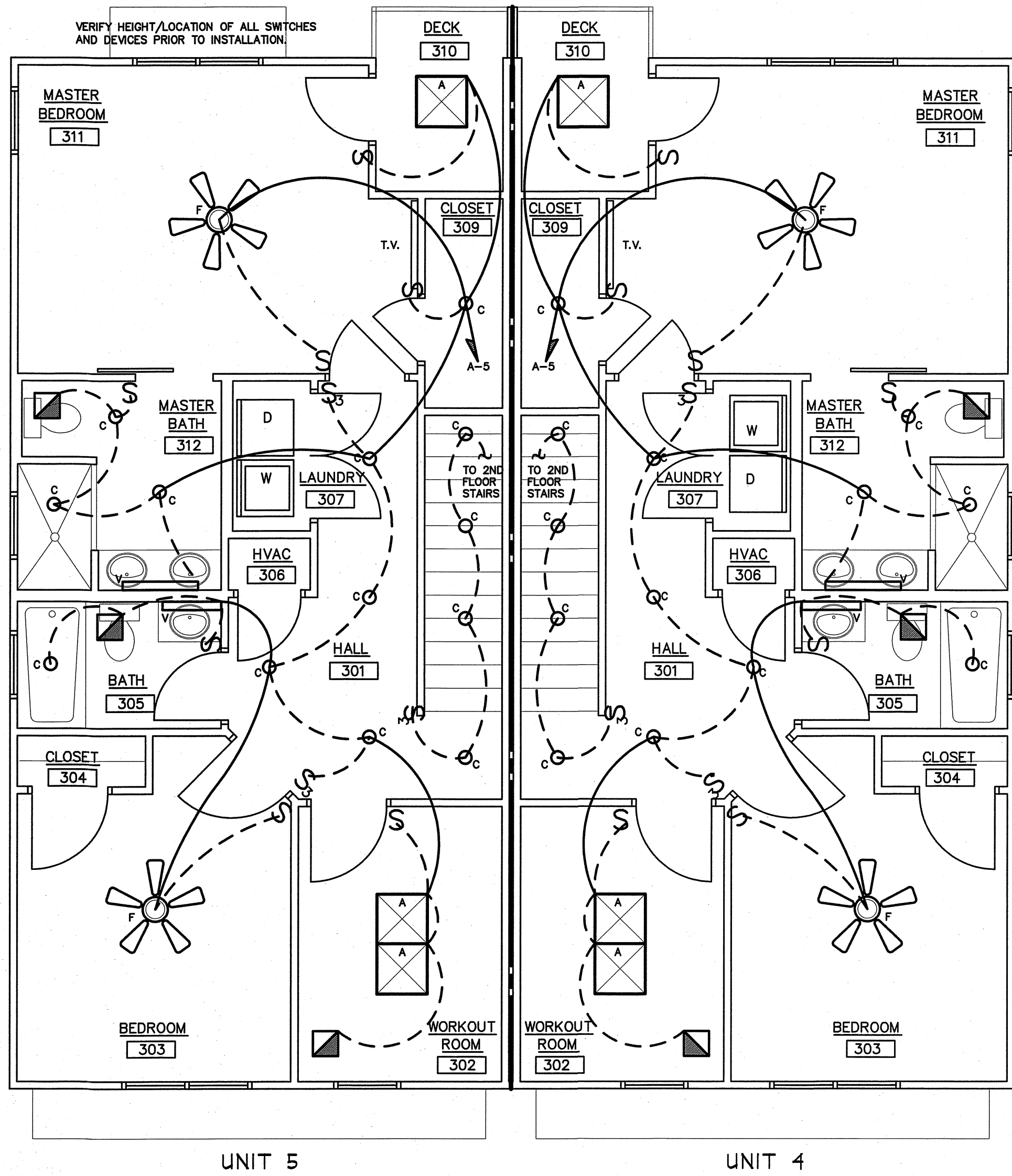


1 MERCANTILE FLOOR LIGHTING PLAN UNITS 4/5
E-3.1 SCALE: 1/4" = 1'-0"

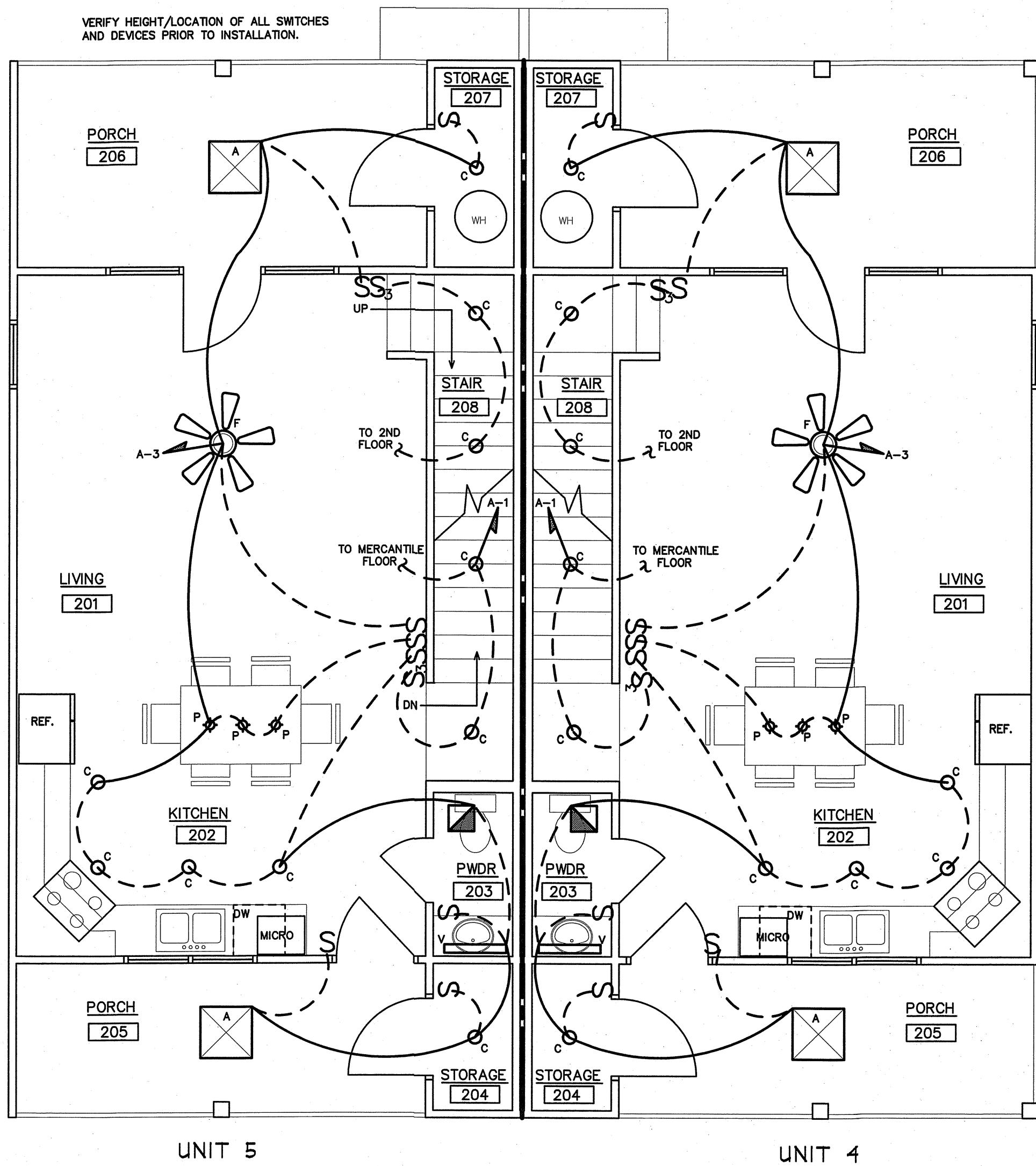


LIGHTING SCHEDULE										*
MARK	VOLT.	LAMPS		BALLAST	VA/		REMARKS			
		NO.	TYPE		VA	FIXTURE				
A	120	-	FLUR	-	EB	32	EXTERIOR 2X2 SURFACE MOUNT, WEATHER RATED/GASKETED	**	*	
C	120	-	LED	-	EB	20	CAN LIGHT	**	*	
F	120	-	FLUR	-	-	100	CEILING FAN WITH INTEGRATED, SEPERATELY SWITCHED LIGHT	**	*	
P	120	-	LED	-	-	20	SMALL LED PENDANT -- OVER COUNTER/BAR	**	*	
V	120	-	FLUR	-	-	50	BATHROOM VANITY FIXTURE	**	*	

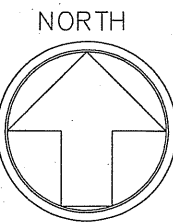
Village West Ph1 E3.2	
WALL LEGEND	
	NEW WALL
	1/2 HR FIRE BARRIER



1 SECOND FLOOR LIGHTING PLAN UNITS 4/5
E-2.3 SCALE: 1/4" = 1'-0"



1 FIRST FLOOR LIGHTING PLAN UNITS 4/5
E-2.2 SCALE: 1/4" = 1'-0"



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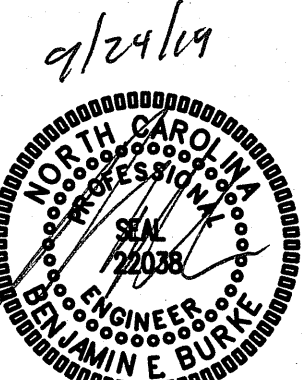
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VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



FIRST, SECOND FLOOR
LIGHTING PLANS
UNITS 4/5

18030

ISSUED: 09/11/19

DWG BY: TCM

CKD BY: BEB

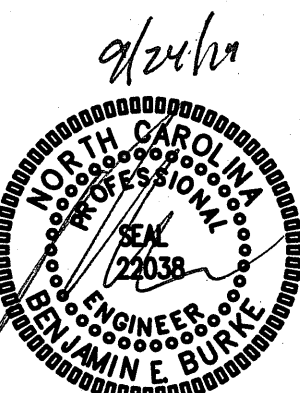
REVISIONS

SHEET NO.

E-3.2

10 OF 25

VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA



MERCANTILE FLOOR
POWER PLANS
UNITS 4/5

18030

ISSUED: 09/11/19

DWG BY: TCM

CKD BY: BEB

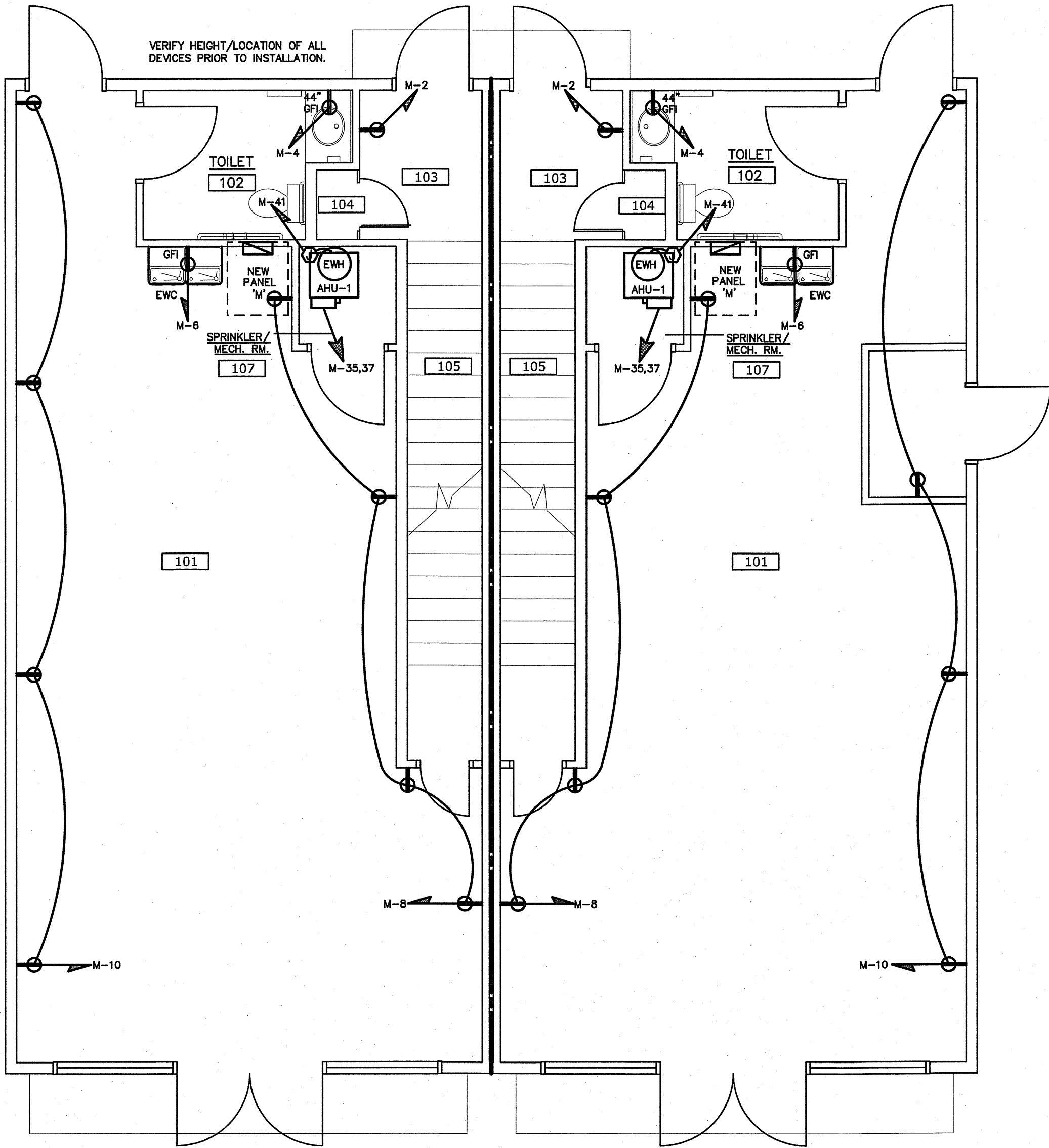
REVISIONS

SHEET NO.

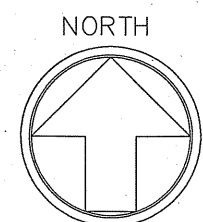
E-3.3

11 OF 25

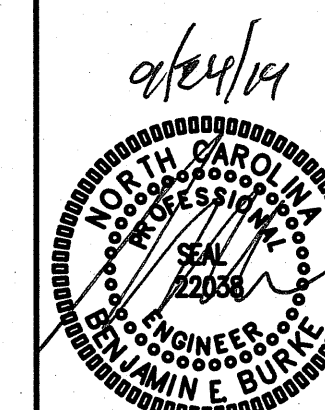
Village West Ph1 E3.3 WALL LEGEND	
	NEW WALL
	1/2 HR FIRE BARRIER



1 MERCANTILE FLOOR POWER PLAN UNITS 4/5
E-3.3 SCALE: 1/4" = 1'-0"



**VILLAGE WEST
UNITS 4-5
EMERALD ISLE, NORTH CAROLINA**

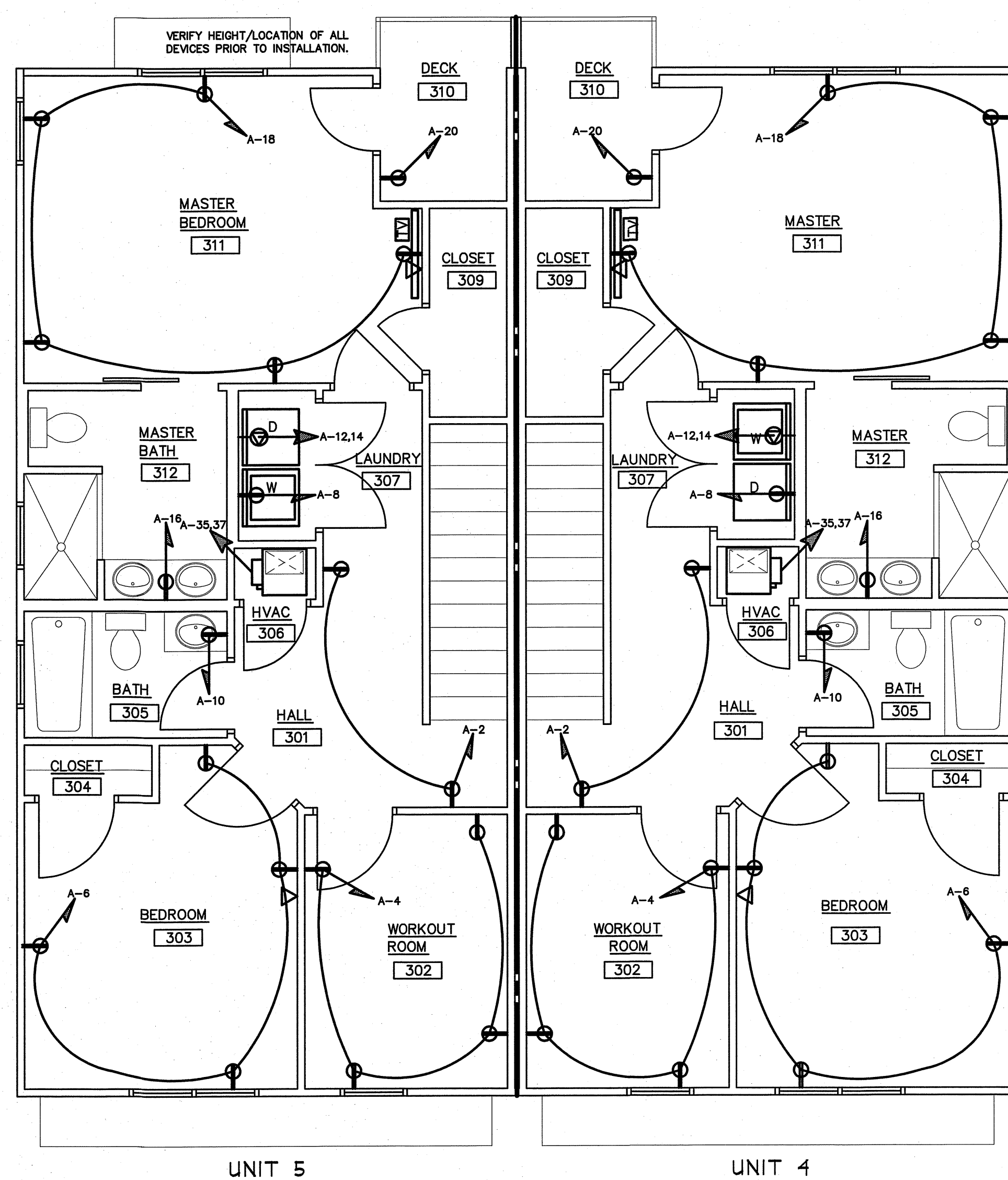


FIRST, SECOND FLO
POWER PLANS
UNITS 4/5

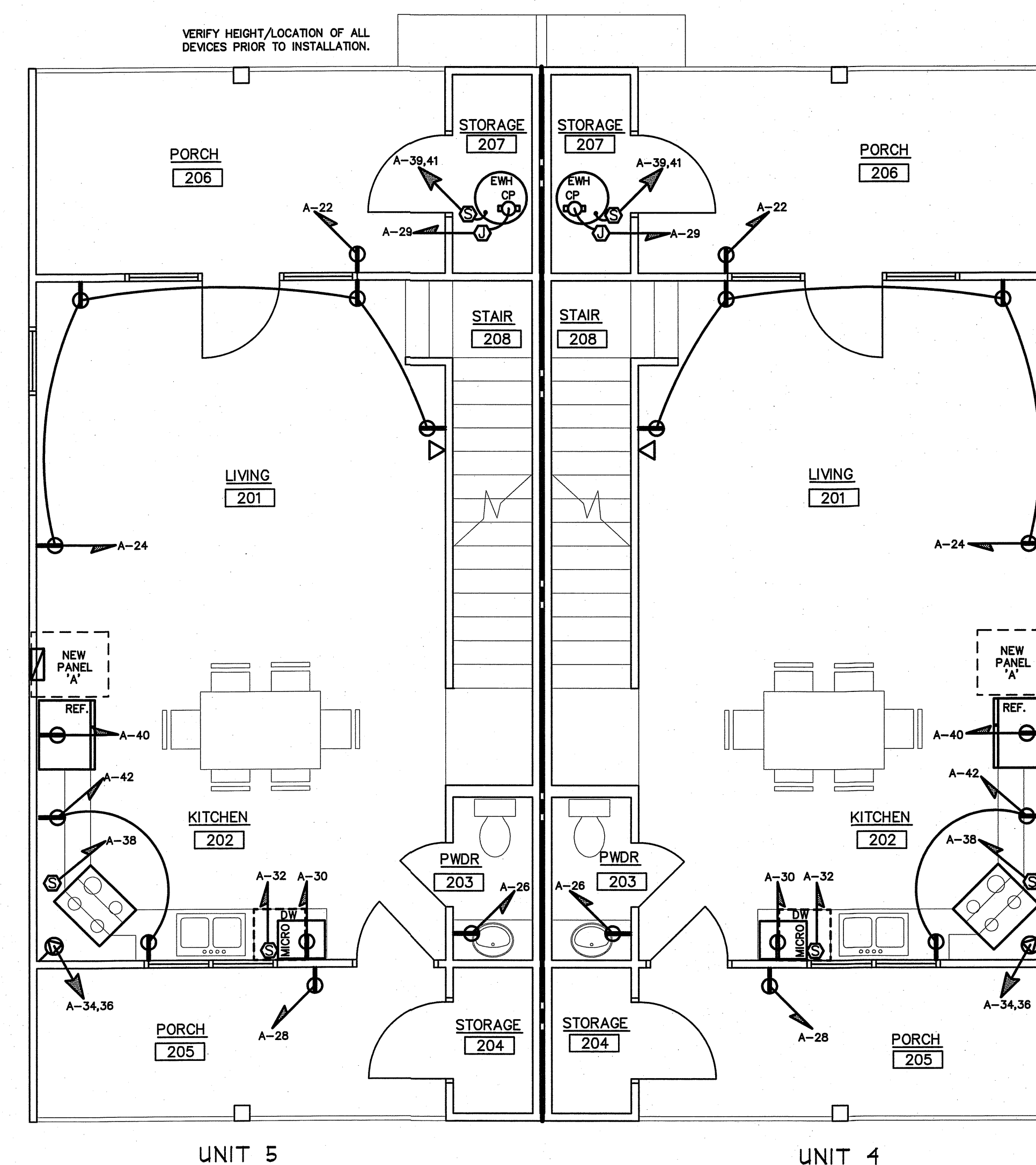
18030

ISSUED:	09/11/1
DWG BY:	TCM
CKD BY:	BEB
REVISIONS	

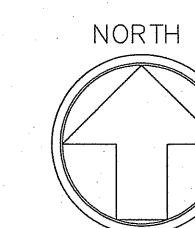
SHEET NO.
E-3.4
12 OF 25



2 SECOND FLOOR POWER PLAN UNITS 4/5
E-3.4 SCALE: 1/4" = 1'-0"



1 FIRST FLOOR POWER PLAN UNITS 4/5
E-3.4 SCALE: 1/4" = 1'-0"



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NOTE:
ALL PANEL A'S ARE TO REFLECT THE WIRING SHOWN ON THE PANEL BELOW. ALL PANELS IN UNITS 4-5 ARE IDENTICAL.

NEW PANEL- 'A'		MAKE: CUTLER HAMMER		RATING: 120/240 1 PHASE 3 WIRE		M.L.O. MAIN CIRCUIT BREAKER				
		TYPE: CH. LOAD CENTER		MOUNTING: SURFACE		EQUIPMENT GROUND BUS ☐ YES ☐ NO				
		OR APPROVED EQUAL		MINIMUM AIC: VERIFY		SERVICE ENTRY RATED ☐ YES ☒ NO				
LOAD SERVICE		CKT BKR	WATTS PER PHASE A B	CKT NO	NEUTRAL A B	CKT NO	WATTS PER PHASE A B	CKT BKR	LOAD SERVICE	
LTS: ENTRYWAY STAIRS		20A	100	1		2	540	20A	REC: HALLWAY	
LTS: FIRST FLOOR		20A		494	3	4		720	20A	REC: WORKOUT ROOM
LTS: SECOND FLOOR		20A	972	5		6	720	20A	REC: BEDROOM	
SPARE		20A	----	7		8		1440	20A	REC: WASHER
SPARE		20A	----	9		10	180	20A	REC: BATHROOM	
SPACE			----	11		12		2500	20A	SPEC REC: DRYER
SPACE			----	13		14	2500			
SPACE			----	15		16		180	20A	REC: MASTER BATHROOM
SPACE			----	17		18	720	20A	REC: MASTER BEDROOM	
SPACE			----	19		20		180	20A	REC: DECK
SPACE			----	21		22	180	20A	REC: PORCH	
SPACE			----	23		24		720	20A	REC: LIVING ROOM
SPACE			----	25		26	180	20A	REC: POWDER ROOM	
SPACE			----	27		28		180	20A	REC: PORCH
CIRC. PUMP		20A	200		29	30	1800	20A	REC: KITCHEN - MICROWAVE	
HP-6: 240V/1PH		35A		2148	31	32		1000	20A	KITCHEN - DISHWASHER
16.7 FLA CMP, 1.2 FLA FAN			2148		33	34	4000			SPEC REC: KITCHEN - OVEN
AHU-4: 240V/1PH		50A		4332	35	36		4000	20A	
4.1 FLA FAN, 32.0 FLA EH			4332		37	38	696		20A	KITCHEN - HOOD
E.W.H.				2250	39	40		1800	20A	REC: KITCHEN - REFRIGERATOR
		30A		2250	41	42		360	20A	KITCHEN - COUNTERTOP
NOTES		SUB-TOTALS 'B'		10002	9224	200A BUS	11876	12220	SUB-TOTALS 'A'	
						200A LUGS	10002	9272	TOTAL CONNECTED LOAD	
						200A FEED	21878	21944	GRAND TOTAL	
						VERIFY SIZE	182A	183A	AMPS/PHASE	