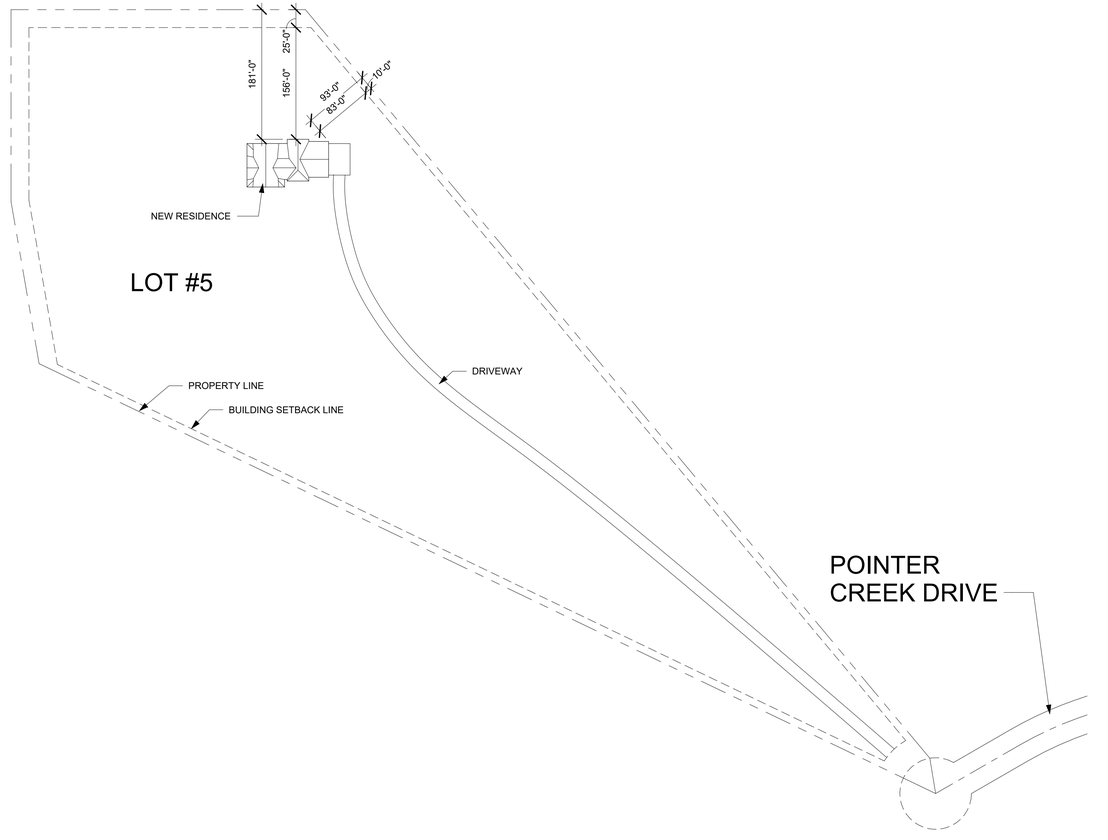
GENERAL NOTES:

1. DIMENSIONS
   - A. EXTERIOR WALL DIMENSIONS ARE TO FACE OF WOOD SIPS PANELS, FACE OF EXTERIOR SHEATHING OR FACE OF CONCRETE UNLESS NOTED OTHERWISE.
   - B. INTERIOR WALL DIMENSIONS ARE TO THE FACE OF THE WOOD STUDS UNLESS NOTED OTHERWISE.
   - C. DOOR AND WINDOW DIMENSIONS ARE TO THE CENTERLINE OF THE OPENING. FINAL DOOR & WINDOW SELECTION BY OWNER. ADJUST OPENINGS AS REQUIRED.
   - D. FOR INTERIOR DOORS, MAINTAIN A MINIMUM OF 5 1/2" OFFSET FROM ADJACENT WALL STUDS TO ROUGH OPENING.
2. FOOTINGS
   - A. ALL FOOTINGS AT FOUNDATION WALLS SHALL BE 12" WIDE x 6" THICK. CONCRETE SHALL BE MINIMUM 2500 PSI.
     1. TOP OF GARAGE FOOTINGS & PORCH FOOTINGS SHALL BE 12" BELOW GRADE.
     2. TOP OF CRAWL SPACE FOOTINGS SHALL BE 5'-5" BELOW FINISHED FIRST FLOOR.
     3. TOP OF BASEMENT WALL FOOTINGS SHALL BE 9'-8" BELOW FINISHED FIRST FLOOR.
   - B. PIER FOOTINGS AT INTERIOR TIMBER COLUMNS SHALL BE 22" SQUARE x 8" DEEP. CONCRETE SHALL BE MINIMUM 2500 PSI.
     1. TOP OF FOOTING SHALL BE 5'-3" BELOW FINISHED FIRST FLOOR.
   - C. PIER FOOTINGS AT EXTERIOR TIMBER PORCH COLUMNS SHALL BE 28" SQUARE X 8" DEEP. CONCRETE SHALL BE MINIMUM 2500 PSI.
     1. TOP OF FOOTING SHALL BE MINIMUM OF 12" BELOW GRADE.
   - D. FIREPLACE FOOTING SHALL BE 7'-0" x 7'-6" x 12" THICK. TIMBER COLUMNS AT FIREPLACE SHALL NOT BEAR ON THE FIREPLACE FOOTING. PROVIDE A BOND BREAKER WHERE TIMBER COLUMN FOOTINGS ABUT THE ADJACENT FIREPLACE WALLS AND EXTEND FOOTING TO THE FIREPLACE WALL. CONCRETE SHALL BE MINIMUM 2500 PSI.
     1. TOP OF FOOTING SHALL BE A MINIMUM OF 12" BELOW GRADE.
3. CONCRETE PIERS & FOUNDATION WALLS
   - A. PROVIDE 16" SQUARE ISOLATED PIERS AT INTERIOR TIMBER COLUMNS. CONCRETE SHALL BE MINIMUM 2500 PSI.
   - B. PROVIDE 24" SQUARE ISOLATED PIERS AT EXTERIOR TIMBER PORCH COLUMNS. CONCRETE SHALL BE MINIMUM 2500 PSI.
   - C. GARAGE FOUNDATION WALLS SHALL BE 8" THICK WITH 2" WIDE x 4" DEEP REVERSE BRICK LEDGE. PROVIDE R-10 PERIMETER INSULATION. INSULATION SHALL EXTEND 24" HORIZONTALLY AND VERTICALLY TO THE TOP OF THE FOOTING.
   - D. CRAWL SPACE FOUNDATION WALLS SHALL BE 8" THICK WITH 4" WIDE x FRAMING DEPTH REVERSE BRICK LEDGE. PROVIDE #4 GALV HORIZONTAL REINFORCING AT 6" & 25" BELOW REVERSE BRICK LEDGE.
   - E. BASEMENT FOUNDATION WALLS SHALL BE 8" THICK WITH 4" WIDE x FRAMING DEPTH REVERSE BRICK LEDGE. PROVIDE #4 GALV HORIZONTAL REINFORCING AT 6" & 25" BELOW REVERSE BRICK LEDGE AND #6 GALV VERTICAL REINFORCING AT 26" OC MAX HORIZONTAL.
4. FIRE PLACE CONSTRUCTION
   - A. PROVIDE A 2" OFFSET FROM FACE OF CHIMNEY WALLS FOR ALL WOOD MEMBERS.
   - B. FINISH CHIMNEY WITH CULTURED STONE VENEER TO MATCH EXTERIOR STONE VENEER. SELECTION BY OWNER.
   - C. HEARTH EXTENSION SHALL BE 20" x 66" x 2" THICK.
5. CONCRETE SLABS
   - A. BASEMENT SLAB SHALL BE 4" CONCRETE ON 4" COMPACTED GRAVEL BASE. CONCRETE SHALL BE 2500 PSI. PROVIDE 6 MIL SOIL-GAS RETARDING MEMBRANE AND VENT TO EXTERIOR.
   - B. GARAGE SLAB SHALL BE 4" REINFORCED CONCRETE ON 4" COMPACTED GRAVEL BASE. REINFORCING SHALL BE 6x6x10x10 WWF MESH PLACED AT 2" FROM TOP OF SLAB. CONCRETE SHALL BE 3000 PSI AIR ENTRAINED. PROVIDE EPOXY FINISH. SELECTION BY OWNER.
   - C. CRAWL SPACE SLAB SHALL BE 2" CONCRETE ON BARE EARTH. PROVIDE 6 MIL SOIL-GAS VAPOR RETARDER AND VENT EXTERIOR. PROVIDE 24"x24" MIN ACCESS OPENING.
   - D. PORCH SLABS SHALL BE 4" CONCRETE ON 4" COMPACTED GRAVEL BASE. CONCRETE SHALL BE 3000 PSI AIR ENTRAINED. PROVIDE STAMP PATTERN SIMILAR TO STONE VENEER.
6. EXTERIOR WALLS
   - A. ALL WALL EXCEPT GARAGE WALLS SHALL BE 4 5/8" MURUS OSB-2100PUR SIPS WALL PANELS, WALL PANEL DESIGN BY MANUFACTURER. EQUIVALENT R-27 INSULATION.
   - B. GARAGE WALLS SHALL BE 2x6 WOOD STUDS @ 16" OC W/ 1/2" CONTINUOUS OSB SHEATHING AND R-15 BATT INSULATION MINIMUM. SEE ELEVATIONS FOR EXTERIOR FINISHES.
   - C. WALLS TO RECEIVE CULTURED STONE VENEER SHALL BE PREPARED WITH (2) LAYER IR & VPOR BARRIER. APPLY STONE VENEER PER MANUFACTURER'S RECOMMENDATIONS.
   - D. WALLS TO RECEIVE FIBER-CEMENT SIDING SHALL BE PREPARED WITH (1) LAYER AIR & VAPOR BARRIER. INSTALL FIBER-CEMENT SIDING PER MANUFACTURER'S RECOMMENDATIONS. SIDING SHALL BE DIAMOND KOTE BOARD AND BATTEN SELECTION BY OWNER.
7. INTERIOR WALLS
   - A. ALL INTERIOR BEARING WALLS SHALL BE 2x6 WOOD STUDS @ 16" OC UNLESS NOTED OTHERWISE.
   - B. ALL INTERIOR NON-BEARING WALLS SHALL BE 2x4 WOOD STUDS @ 16" OC UNLESS NOTED OTHERWISE.
   - C. PROVIDE 1/2" GYP BD THROUGHOUT EXCEPT AS FOLLOWS:
     1. PROVIDE 5/8" FIRE RATED GYP BD IN GARAGE.
     2. PROVIDE 1/2" MOISTURE RESISTANT GYP BD IN WET AREAS.
     3. PROVIDE 1/2" TILE BACKER BOARD IN AREAS TO RECEIVE TILE FINISH.
8. SUBFLOORS
   - A. ALL SUBFLOORS SHALL BE 3/4" ADVANTECH T&G OSB SUBFLOOR SYSTEM, GLUED AND SCREWED TO FLOOR I-JOISTS. PROVIDE WATERPROOF BARRIER AND FLOOR DRAINS IN WET AREAS TO RECEIVE HARDWOOD FLOORS.
9. WINDOWS AND DOORS
   - A. ALL DOORS & WINDOWS SHALL RECEIVE 6" WIDE EXTERIOR VINYL FLAT TRIM.
   - B. OPERABLE WINDOWS SHALL BE DOUBLE-HUNG STYLE WINDOWS WITH TRANSOMS EXCEPT SECOND FLOOR CASEMENT WINDOW. FINAL WINDOW SELECTION BY OWNER. BASIS OF DESIGN, ANDERSEN, 400 SERIES WITH STORMWATCH PROTECTION AND COLONIAL GRILLES. FOR FIXED WINDOWS, SEE ELEVATIONS FOR GRILLE PATTERN
   - C. ALL PATIO DOORS SHALL BE HINGED STYLE DOORS WITH TRANSOMS. FINAL DOOR SELECTION BY OWNER. BASIS OF DESIGN - ANDERSEN, RESIDENTIAL ENTRY DOORS, 400 SERIES HINGED PATIO DOORS WITH STORMWATCH PROTECTION - FULL LITE GLASS PANEL WITH COLONIAL GRILLES AS SHOWN IN ELEVATIONS. PROVIDE TRANSOMS AS SHOWN IN ELEVATIONS.
   - D. ALL INTERIOR DOORS SHALL BE SOLID CORE DOORS. BASIS OF DESIGN IS 6 PANEL DOORS. STYLE & FINISH SELECTION BY OWNER.
   - E. MILLWORK STYLE AND FINISH PER OWNER SELECTION.
10. JOISTS AND TRUSSES
    - A. FLOOR I-JOISTS AND ROOF TRUSSES SHALL BE DESIGNED BY MANUFACTURER. ANY SIZES, PROFILES AND NOTES ASSOCIATED WITH JOISTS OR TRUSSES ARE PROVIDED AS A BASIS FOR DESIGN AND ARE SUBJECT TO MODIFICATION BY THE MANUFACTURER.
11. CEILINGS
    - A. PROVIDE 1/2" GYP BD THROUGHOUT AREA OF TRADITIONAL FRAMING.
    - B. PROVIDE WOOD PLANK FINISH AT CATHEDRAL CEILING AND AREA OF HEAVY TIMBER FRAMING..
12. ALARMS
    - A. SMOKE ALARMS SHALL BE WIRED TO THE MAIN BUILDING POWER SUPPLY AND SHALL BE INTERCONNECTED SO THAT ALL ALARMS SOUND SIMULTANEOUSLY. PROVIDE ONE SMOKE ALARM IN EACH SLEEPING ROOM AND ONE IN THE VICINITY OF EACH SLEEPING AREA.
    - B. PROVIDE ONE CARBON MONOXIDE ALARM IN THE VICINITY OF EACH SLEEPING AREA.
13. ROOF SYSTEMS
    - A. ALL ROOFS SHALL RECEIVE STANDING SEAM METAL ROOF PANELS. COLOR SELECTION BY OWNER. ROOF SYSTEM SHALL CONSIST OF THE FOLLOWING:
      1. 6 5/8" MURUS OSB-2100PUR SIPS ROOF PANELS. ROOF PANEL DESIGN BY MANUFACTURER. EQUIVALENT R-41 INSULATION..
      2. 15# FELT UNDERLAYMENT MINIMUM..
      3. 1x WOOD FURRING @ 24" OC MAX.
      4. 1/2" OSB SHEATHING.
      5. 15# FELT UNDERLAYMENT MINIMUM.
      6. STANDING SEAM METAL ROOF PANELS. COLOR SELECTION BY OWNER. PROVIDE SEALANT AT SEAMS FOR 1:12 ROOF SLOPES
      7. PROVIDE RIDGE VENTS AND VENTED SOFFIT. SOFFIT SHALL BE BEAD BOARD FIBER-CEMENT SOFFIT PANELS. COLOR SELECTION BY OWNER.
      8. PROVIDE INSECT SCREEN AT OPEN ENDS OF COLD ROOF.
    - B. PROVIDE EXTERIOR VINYL FASCIA AT ALL EAVES AND RAKES. COLOR SELECTION BY OWNER.



1 SITE PLAN
1" = 100'-0"

0 50' 100' 200'
SCALE: 1" = 100'-0"

PLAN NORTH

TRUE NORTH

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

SITE PLAN & CONSTRUCTION NOTES

Project number	21007
Date	03/07/2022

A0.1

Scale	1" = 100'-0"

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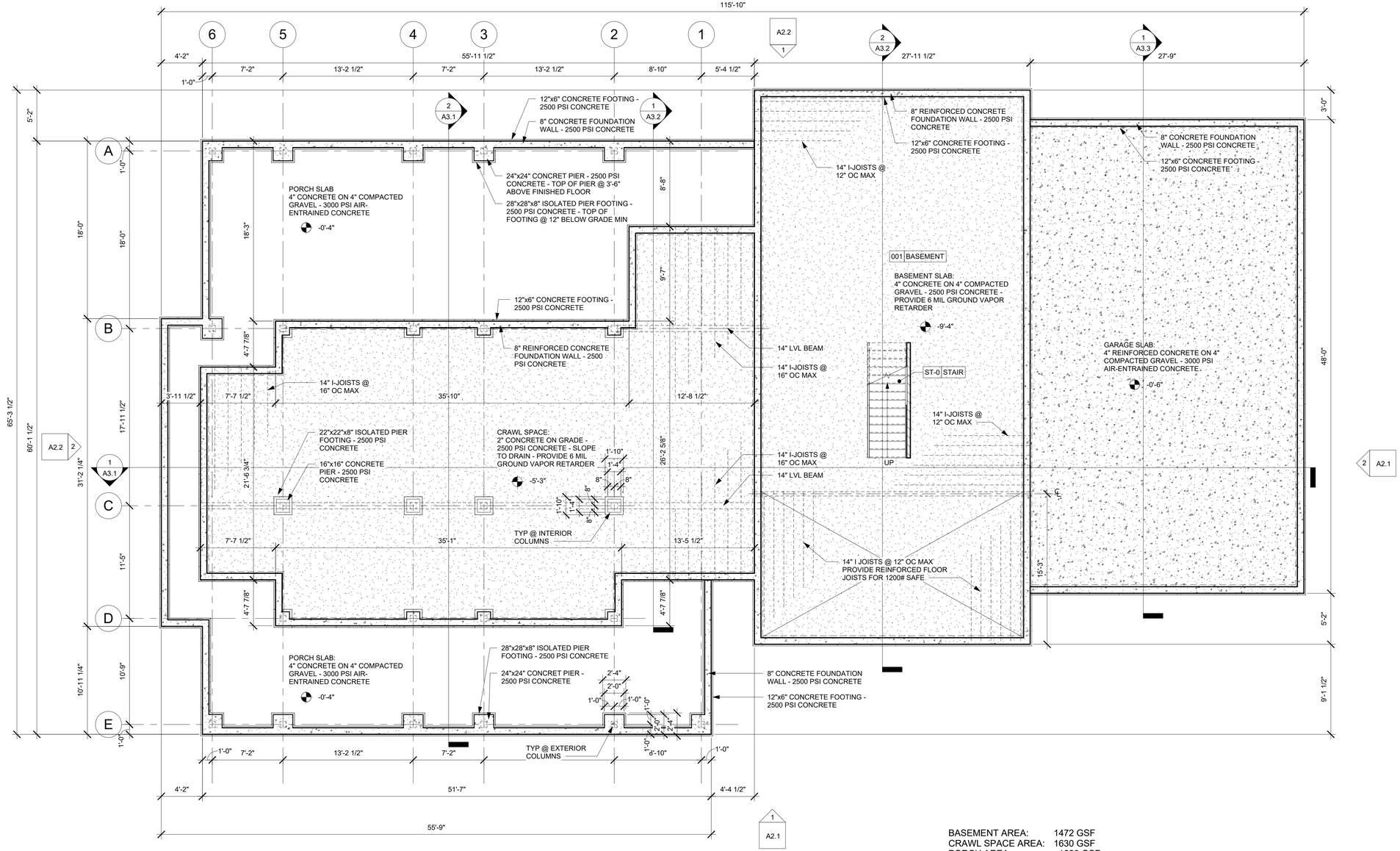

BASEMENT AREA: 1472 GSF
CRAWL SPACE AREA: 1630 GSF
PORCH AREA: 1628 GSF

1 FOUNDATION PLAN
3/16" = 1'-0"

0 2'-8" 5'-4" 10'-8"
SCALE: 3/16" = 1'-0"

PLAN NORTH

TRUE NORTH

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NEW CONSTRUCTION

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ANGIER, NC 27501

FOUNDATION PLAN

Project number	21007
Date	03/07/2022

A1.0

Scale	3/16" = 1'-0"

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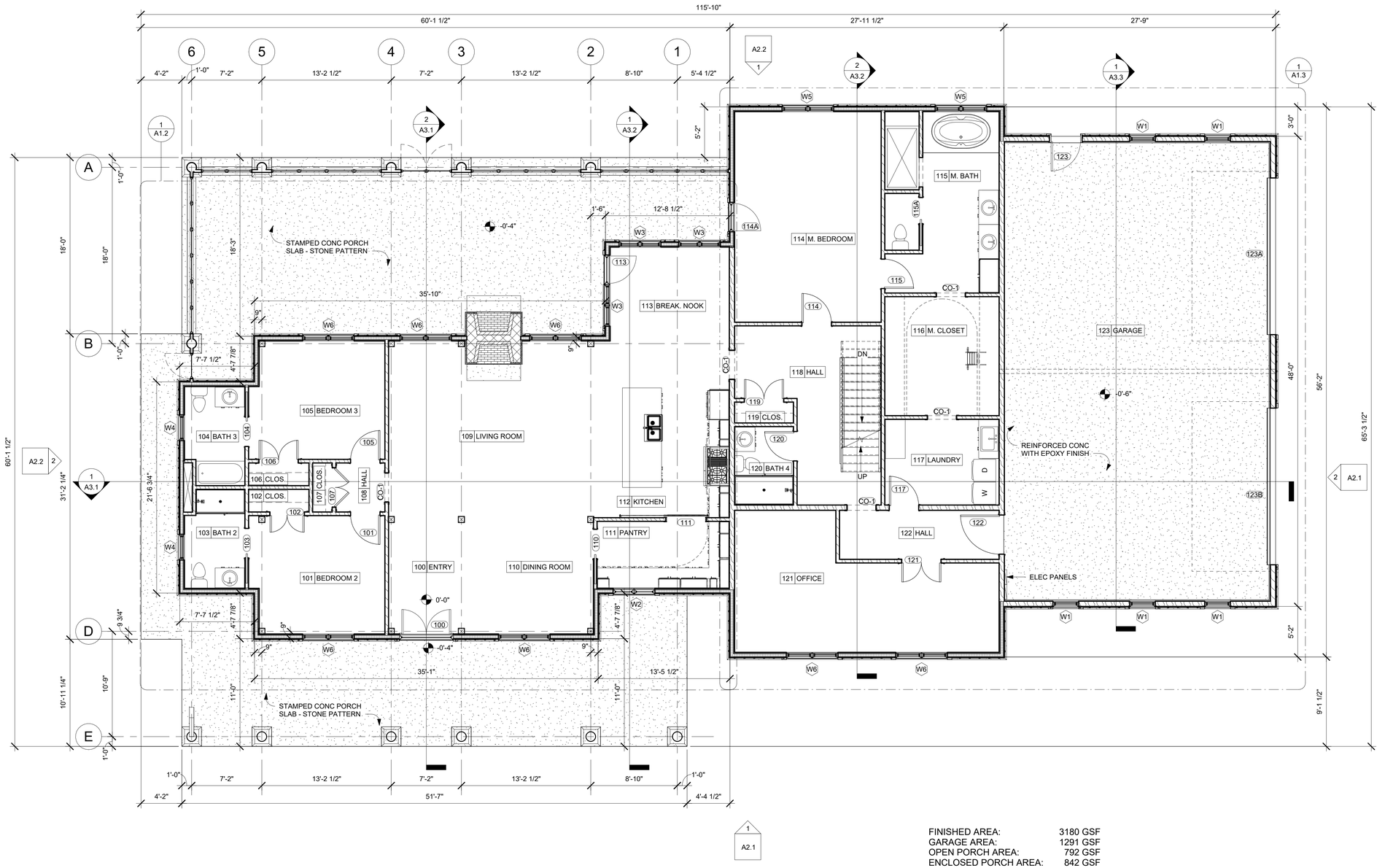

FINISHED AREA:	3180 GSF
GARAGE AREA:	1291 GSF
OPEN PORCH AREA:	792 GSF
ENCLOSED PORCH AREA:	842 GSF

1 FIRST FLOOR PLAN
3/16" = 1'-0"

0 2'-8" 5'-4" 10'-8"

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

PLAN NORTH

TRUE NORTH

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
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ANGIER, NC 27501

FIRST FLOOR PLAN

Project number	21007
Date	03/07/2022

A1.1

Scale	3/16" = 1'-0"

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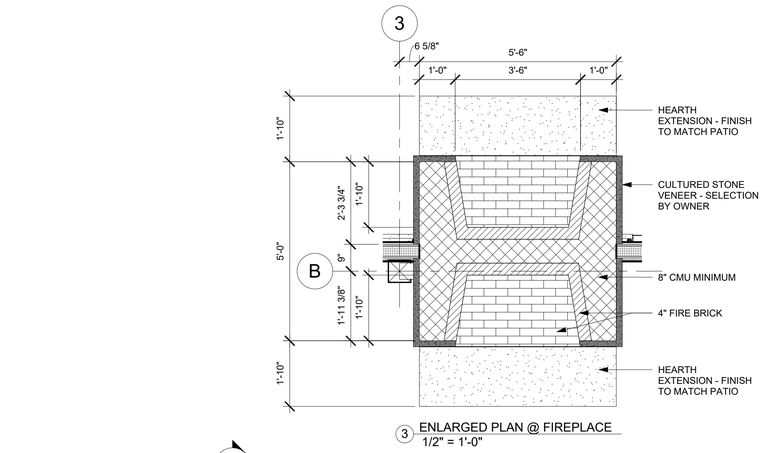
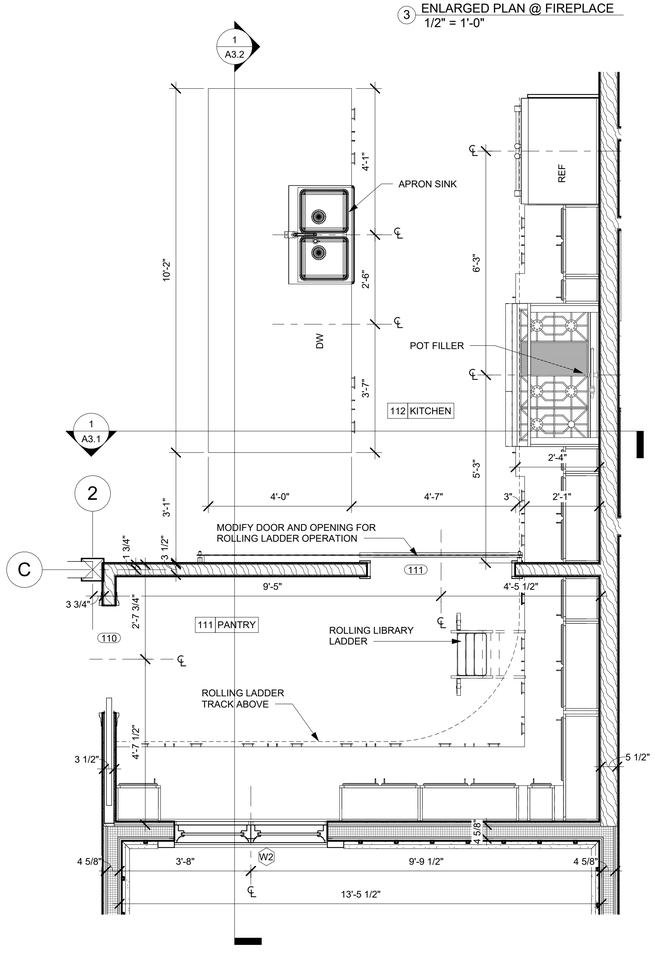
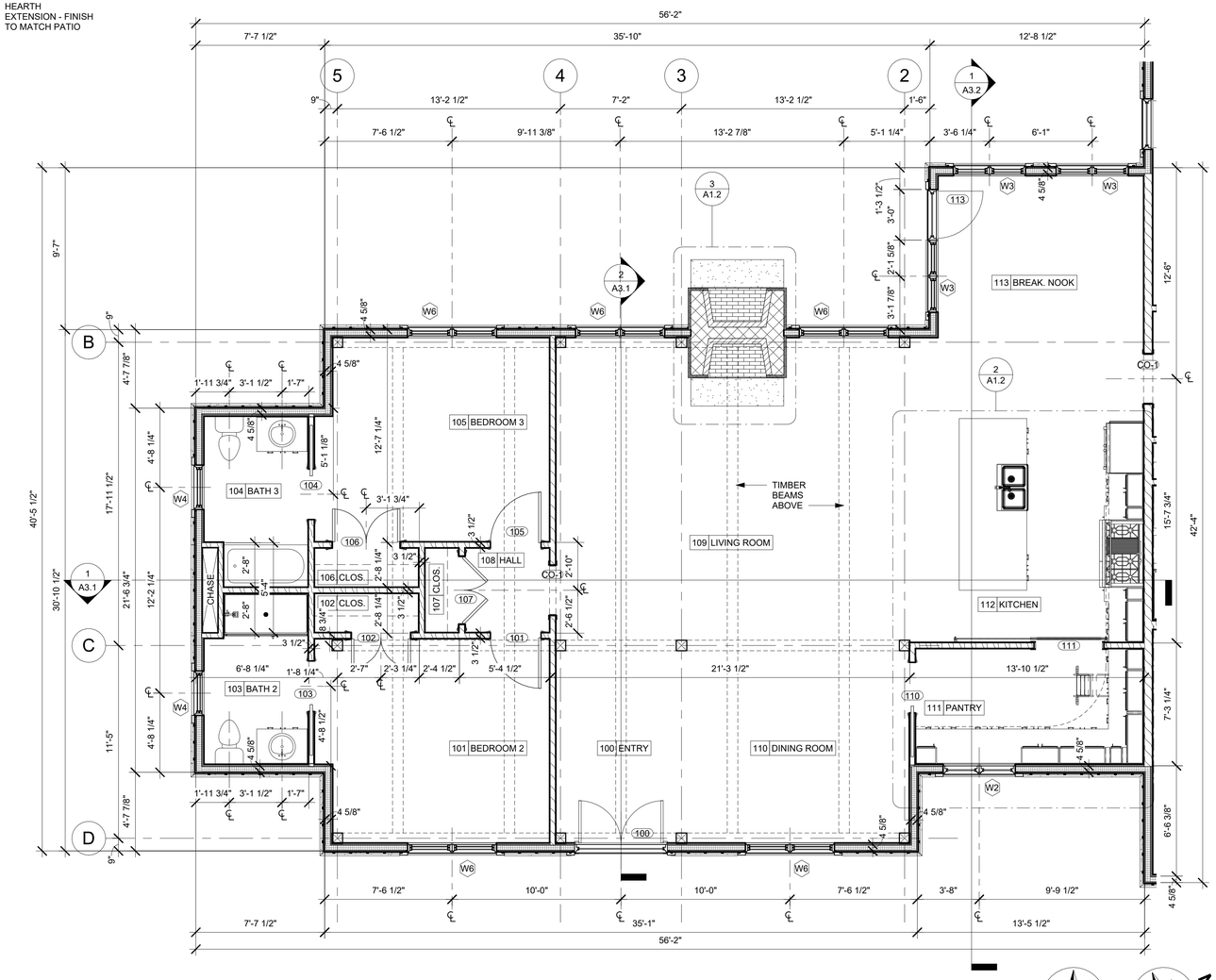


3 ENLARGED PLAN @ FIREPLACE
1/2" = 1'-0"



2 ENLARGED PLAN @ KITCHEN
1/2" = 1'-0"

0 1'-0" 2'-0" 4'-0"
SCALE: 1/2" = 1'-0"



1 PARTIAL FIRST FLOOR PLAN - SOUTH
1/4" = 1'-0"

0 2'-0" 4'-0" 8'-0"
SCALE: 1/4" = 1'-0"

PLAN NORTH

TRUE NORTH

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ENLARGED FIRST FLOOR PLANS

Project number	21007
Date	03/07/2022

A1.2

Scale	As indicated

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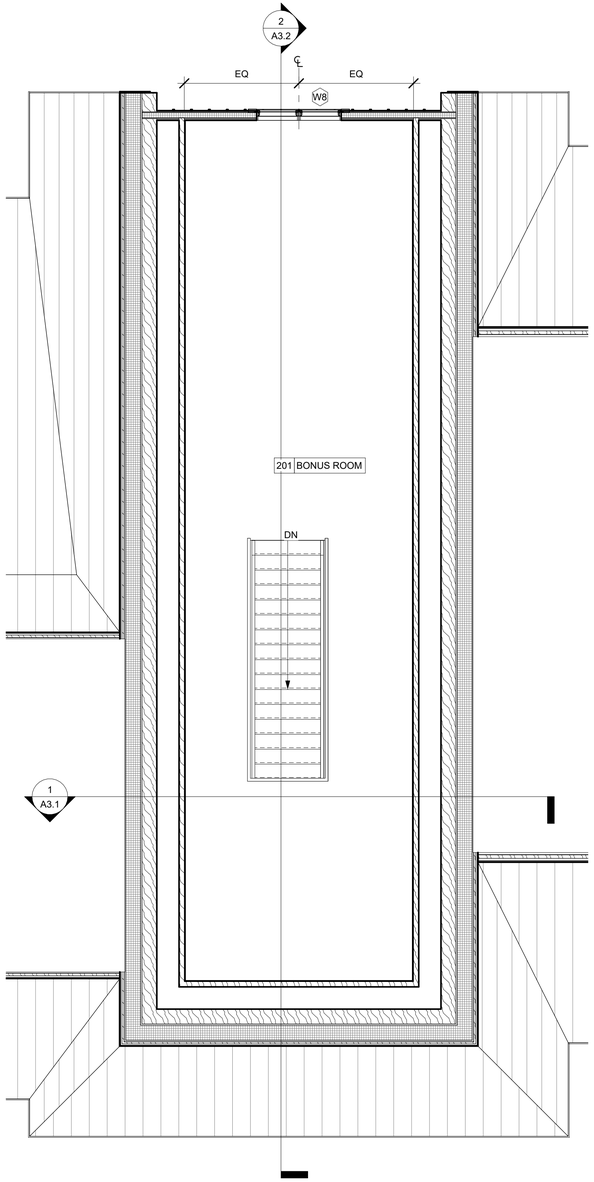
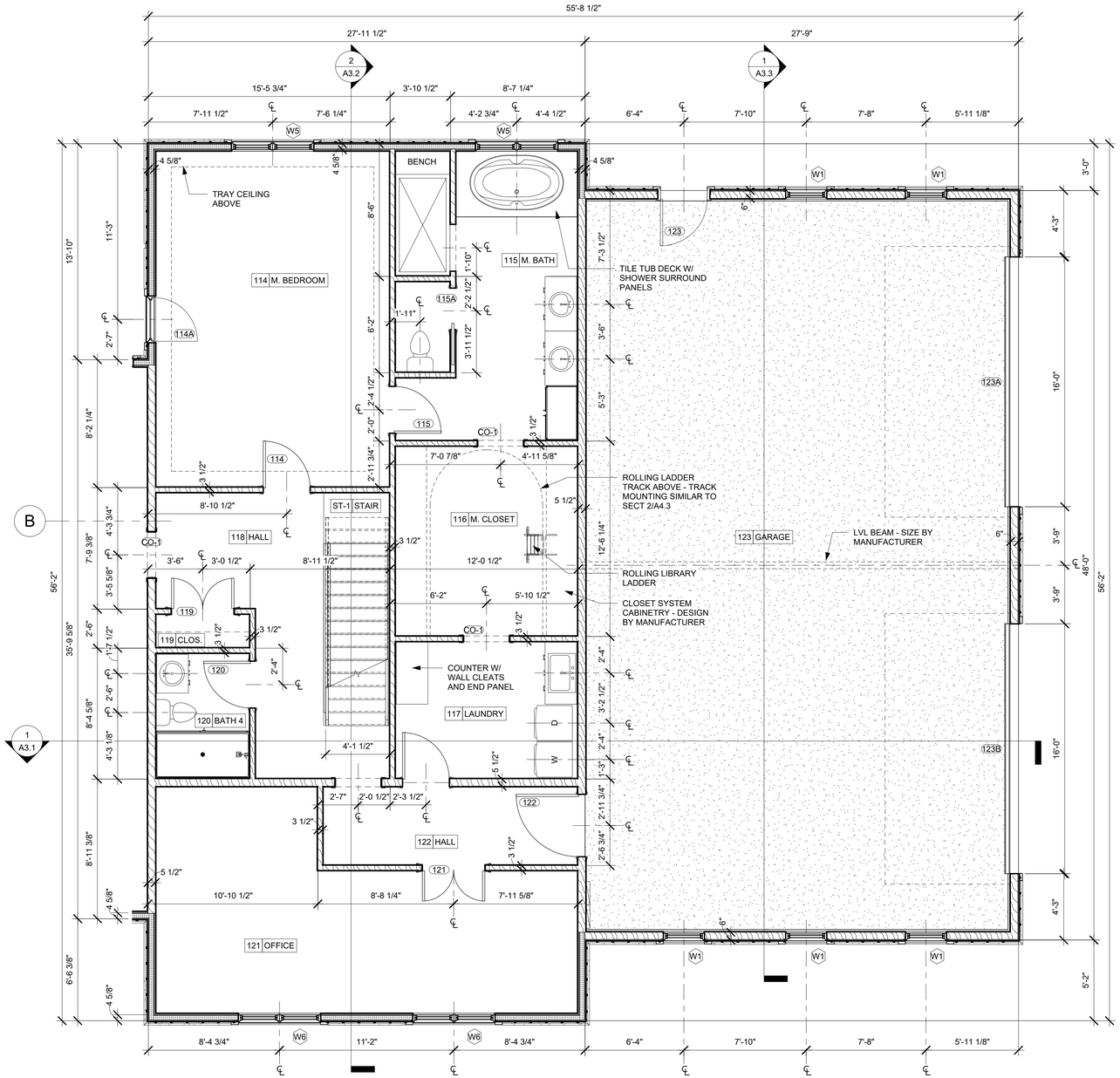


2 SECOND FLOOR PLAN
1/4" = 1'-0"



1 PARTIAL FIRST FLOOR PLAN - NORTH
1/4" = 1'-0"

0 2'-0" 4'-0" 8'-0"
SCALE: 1/4" = 1'-0"

FINISHED AREA: 611 GSF

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NEW CONSTRUCTION
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ENLARGED FIRST & SECOND FLOOR PLANS

Project number	21007
Date	03/07/2022

A1.3

Scale 1/4" = 1'-0"

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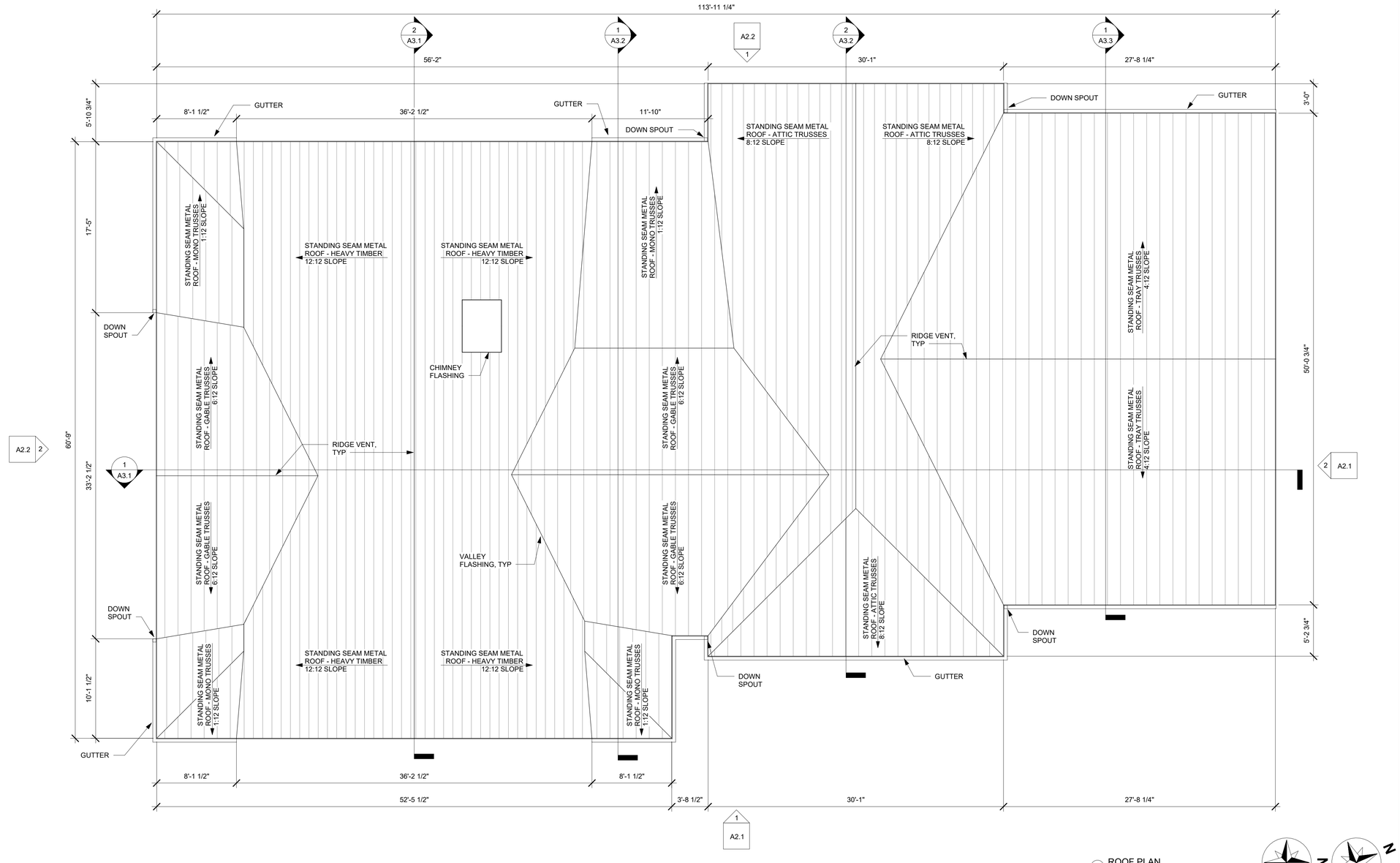

1 ROOF PLAN
3/16" = 1'-0"

0 2'-8" 5'-4" 10'-8"

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

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NEW CONSTRUCTION

LOT #5
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ROOF PLAN

Project number	21007
Date	03/07/2022

A1.4

Scale	3/16" = 1'-0"

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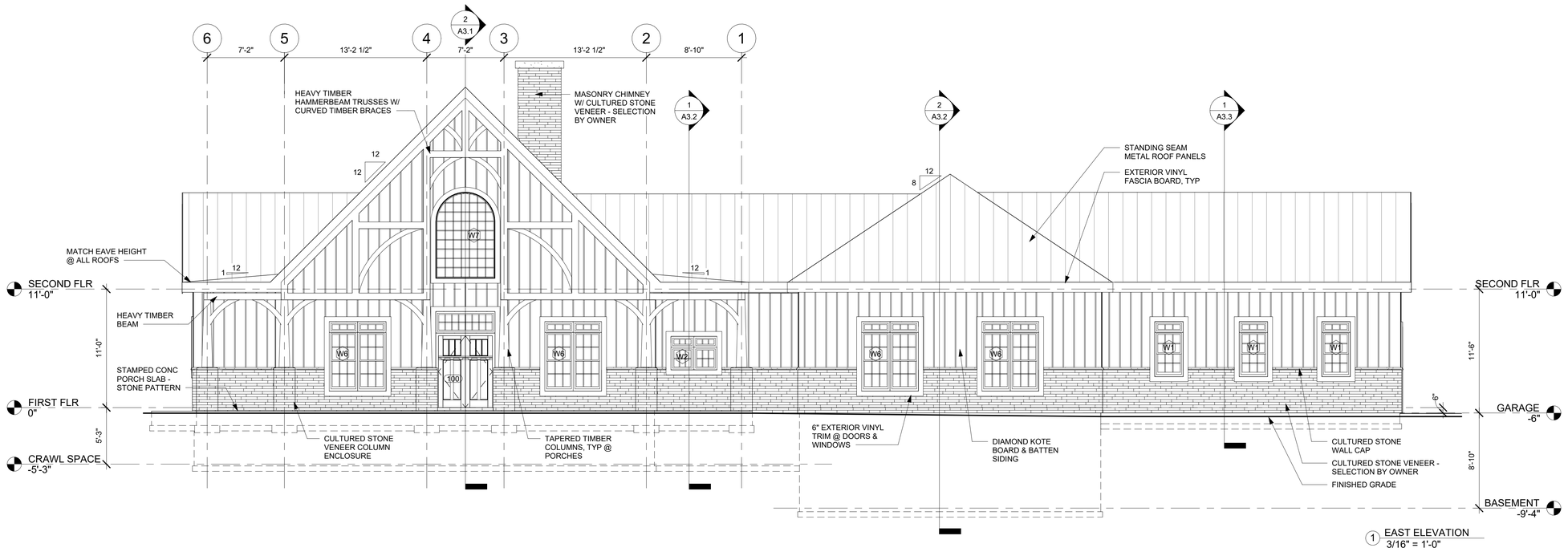

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
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EXTERIOR ELEVATIONS

Project number	21007
Date	03/07/2022

A2.1

Scale	3/16" = 1'-0"

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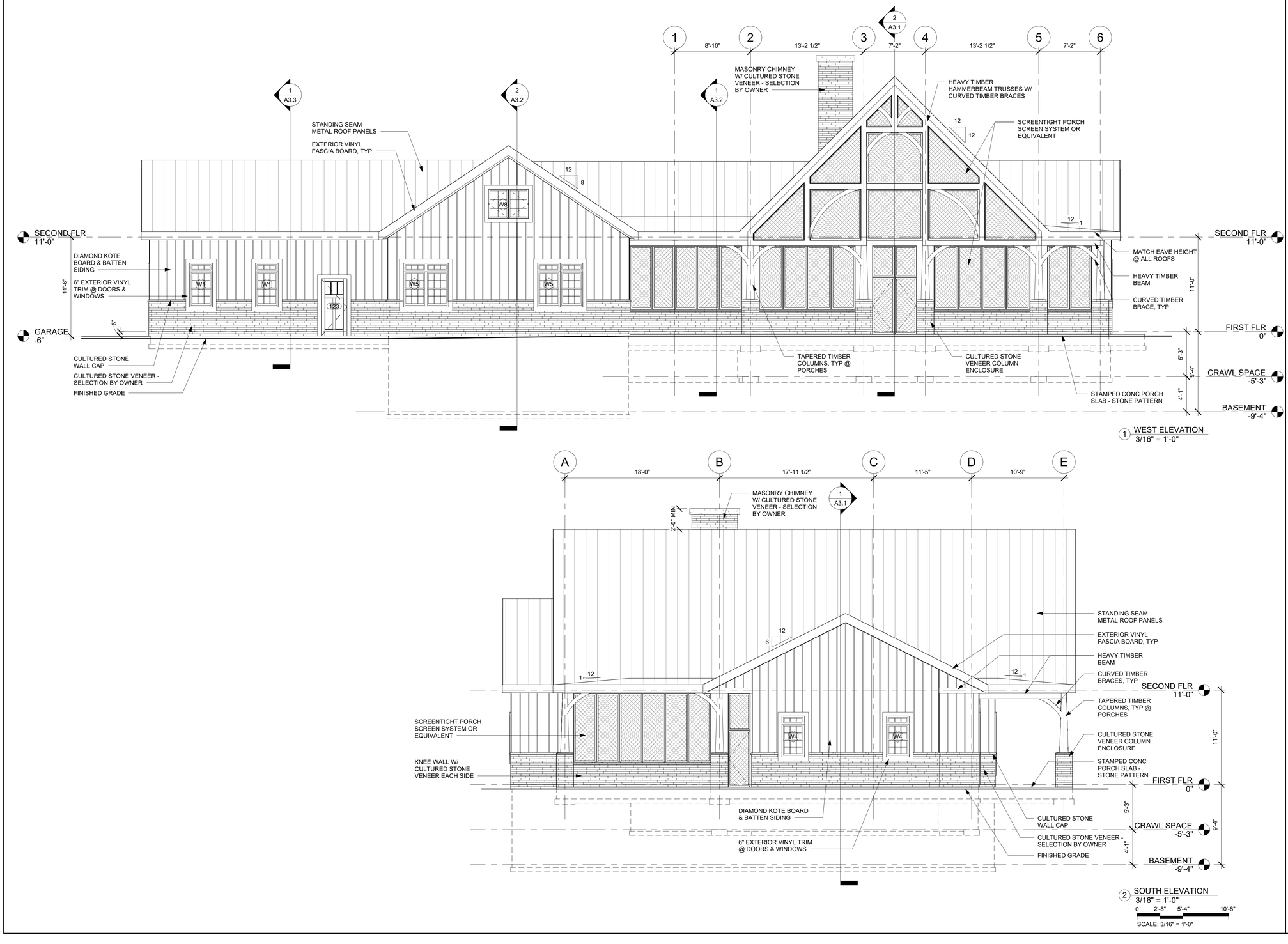

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FLEMING RESIDENCE

NEW CONSTRUCTION

LOT #5
POINTER CREEK DR.
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EXTERIOR ELEVATIONS

Project number	21007
Date	03/07/2022

A2.2

Scale	3/16" = 1'-0"

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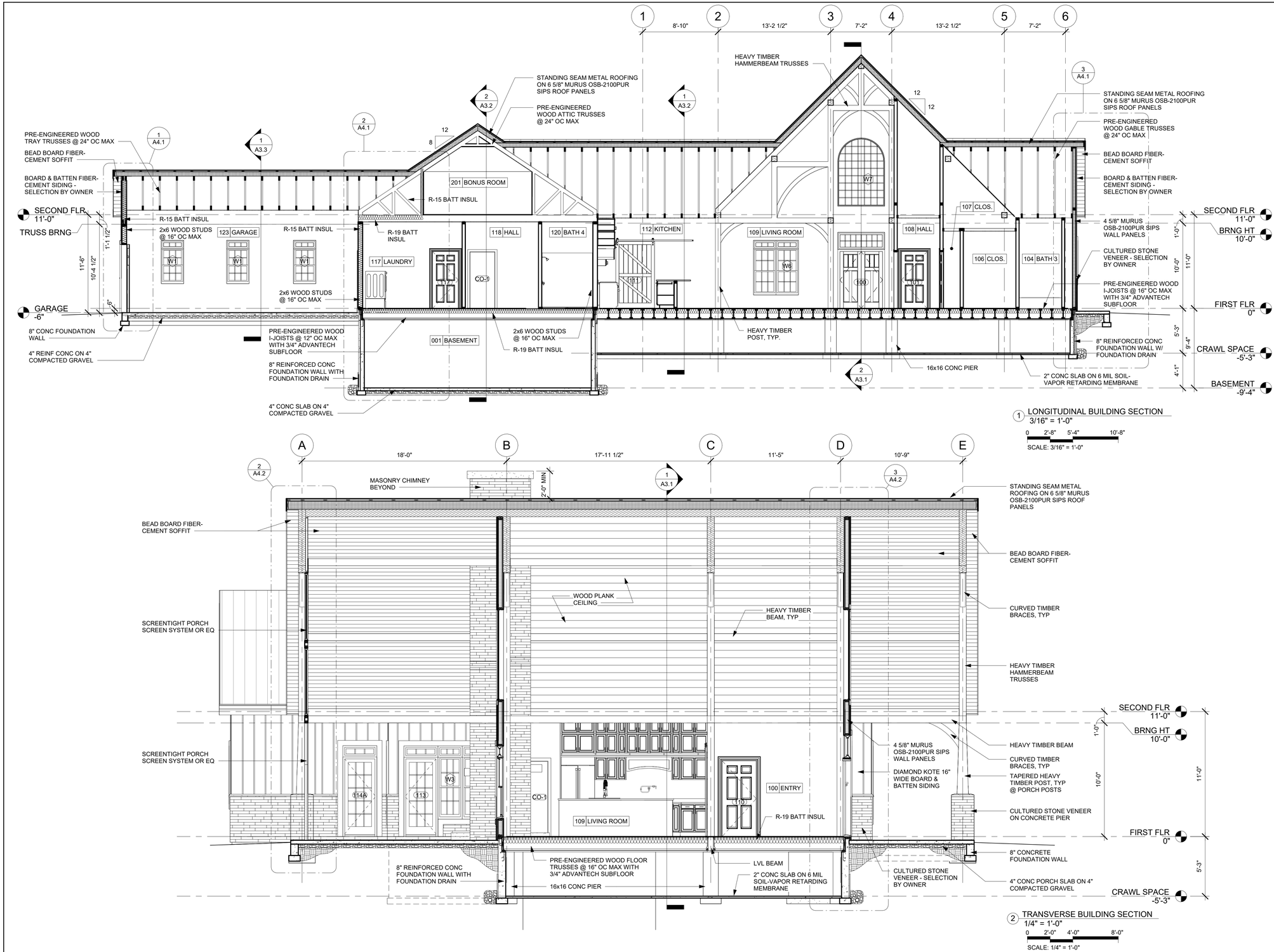

1 LONGITUDINAL BUILDING SECTION
3/16" = 1'-0"

0 2'-8" 5'-4" 10'-8"

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

2 TRANSVERSE BUILDING SECTION
1/4" = 1'-0"

0 2'-0" 4'-0" 8'-0"

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

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
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BUILDING SECTIONS

Project number	21007
Date	03/07/2022

A3.1

Scale: As indicated

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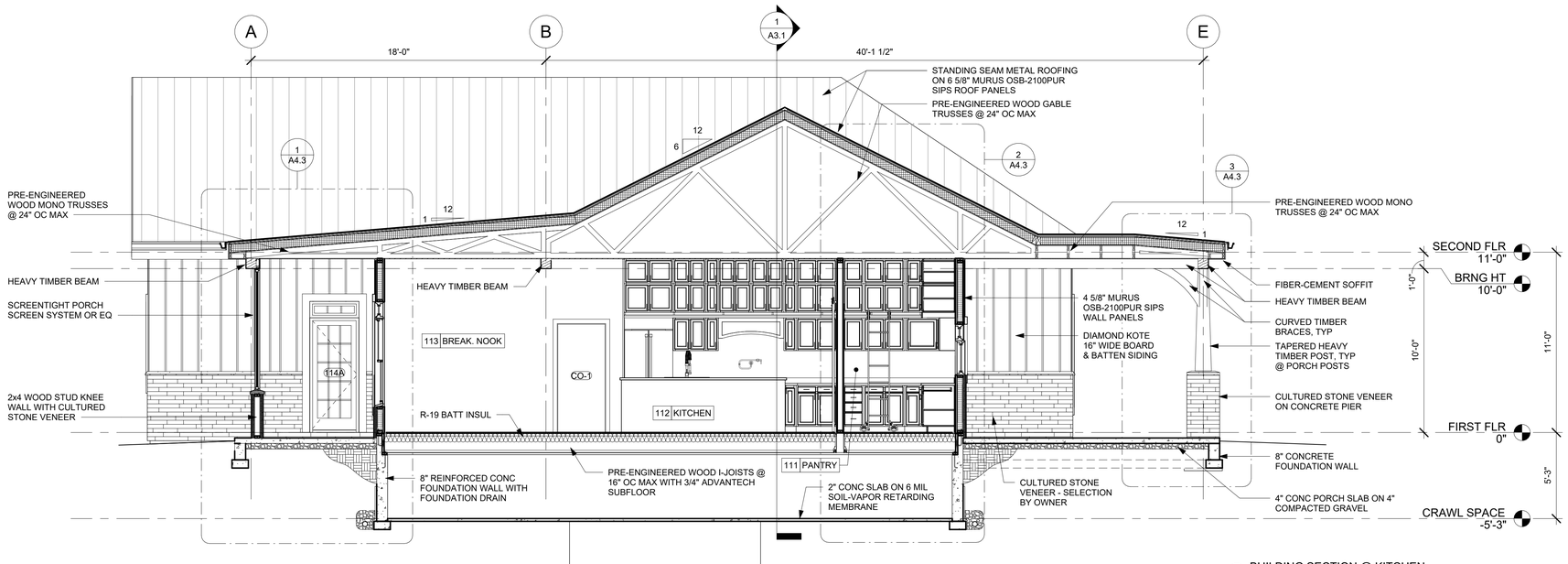
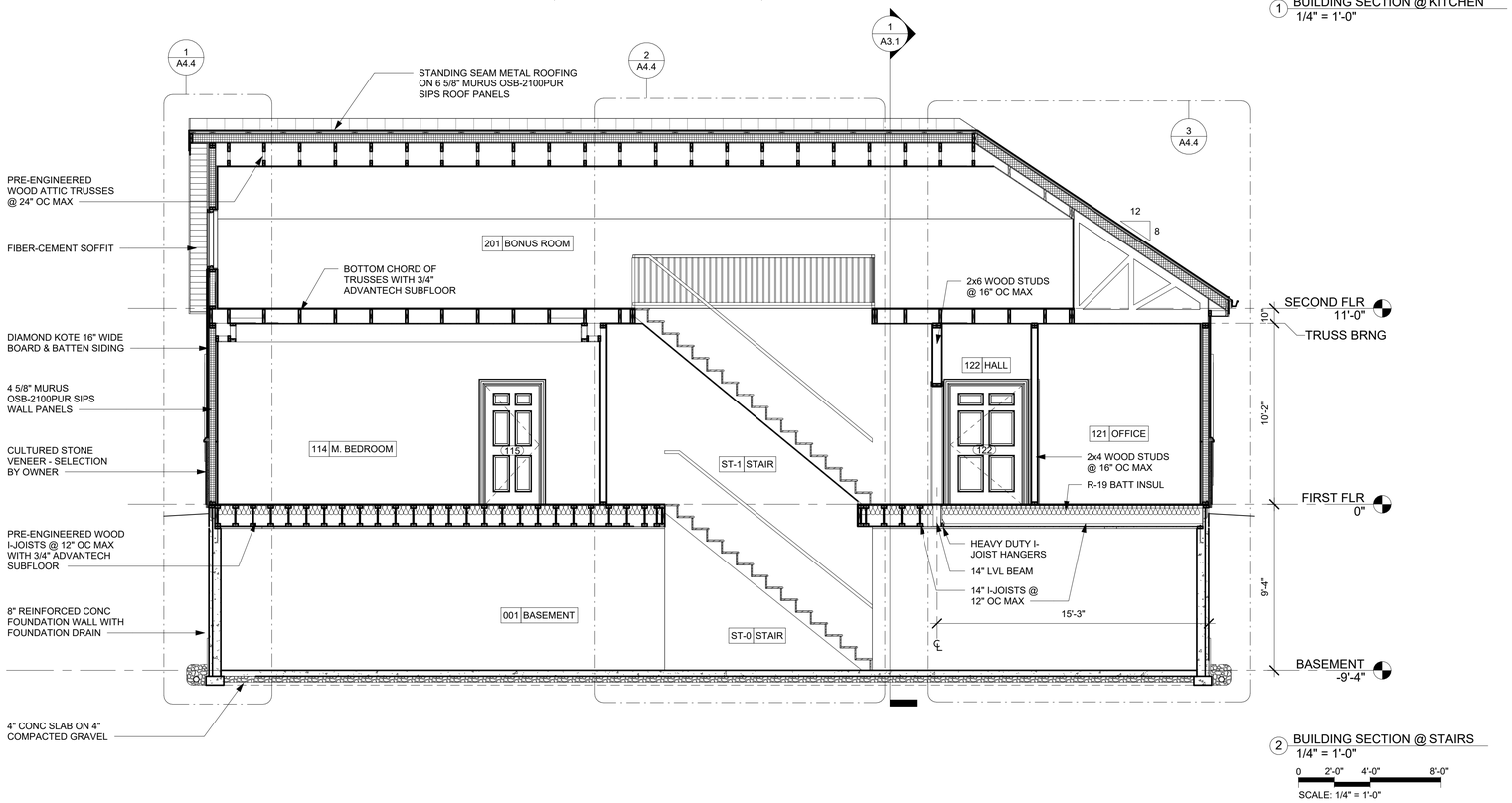


1 BUILDING SECTION @ KITCHEN
1/4" = 1'-0"



2 BUILDING SECTION @ STAIRS
1/4" = 1'-0"

0 2'-0" 4'-0" 8'-0"
SCALE: 1/4" = 1'-0"

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

BUILDING SECTIONS

Project number	21007
Date	03/07/2022

A3.2

Scale	1/4" = 1'-0"

3/8/2022 9:06:10 PM

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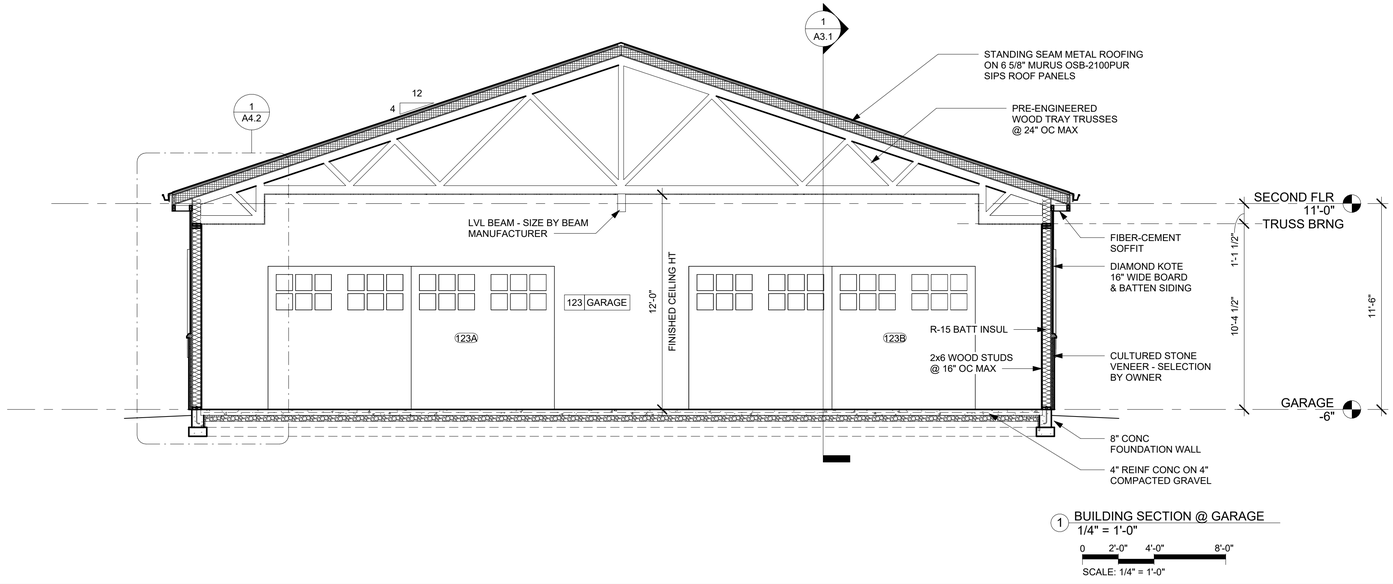

1 BUILDING SECTION @ GARAGE
1/4" = 1'-0"

0 2'-0" 4'-0" 8'-0"
SCALE: 1/4" = 1'-0"

FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

BUILDING SECTIONS

Project number	21007
Date	03/07/2022

A3.3

Scale	1/4" = 1'-0"

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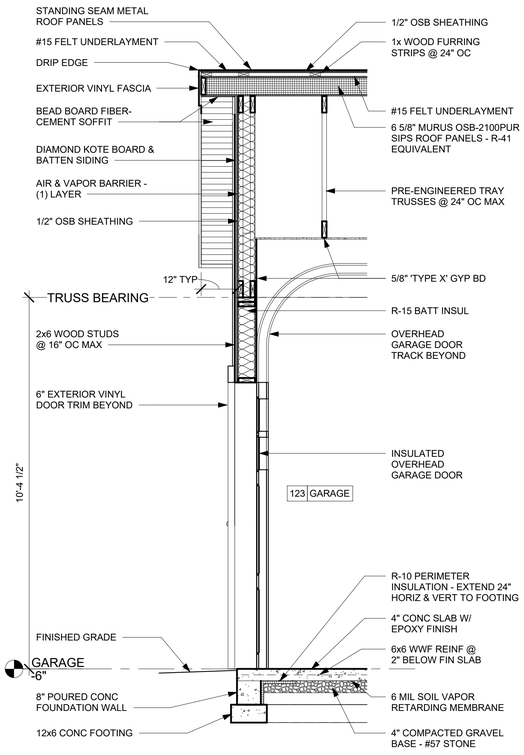
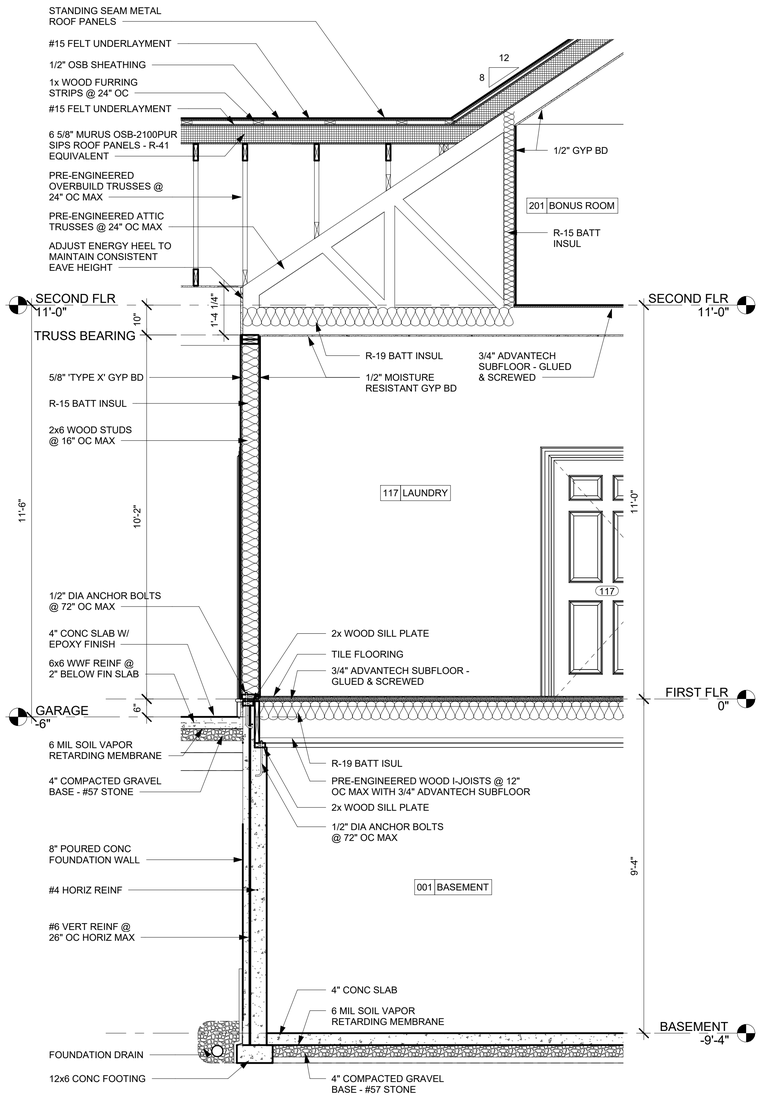
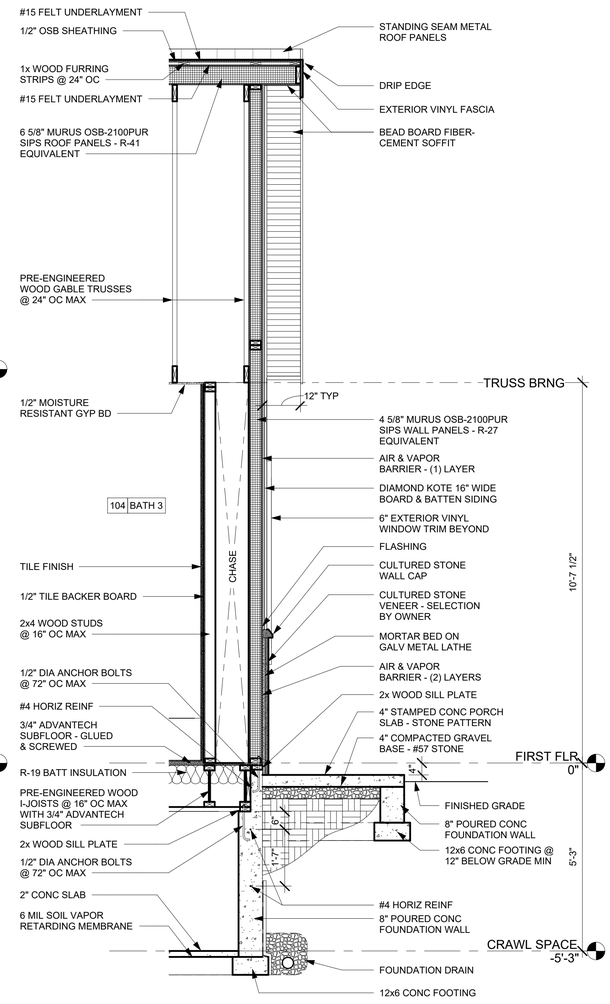


1 SECT @ GARAGE GABLE END WALL
1/2" = 1'-0"



2 SECT @ ATTIC TRUSS BEARING
1/2" = 1'-0"



3 SECT @ TYPICAL GABLE END WALL
1/2" = 1'-0"

0 1'-0" 2'-0" 4'-0"
SCALE: 1/2" = 1'-0"

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

WALL SECTIONS

Project number	21007
Date	03/07/2022

A4.1

Scale	1/2" = 1'-0"

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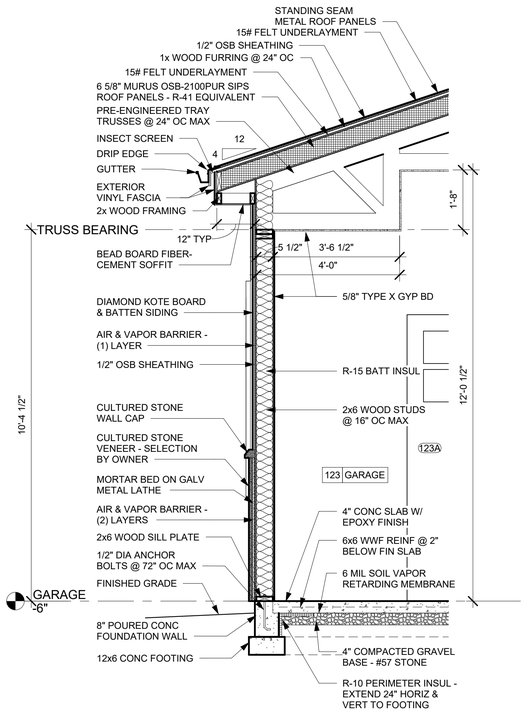
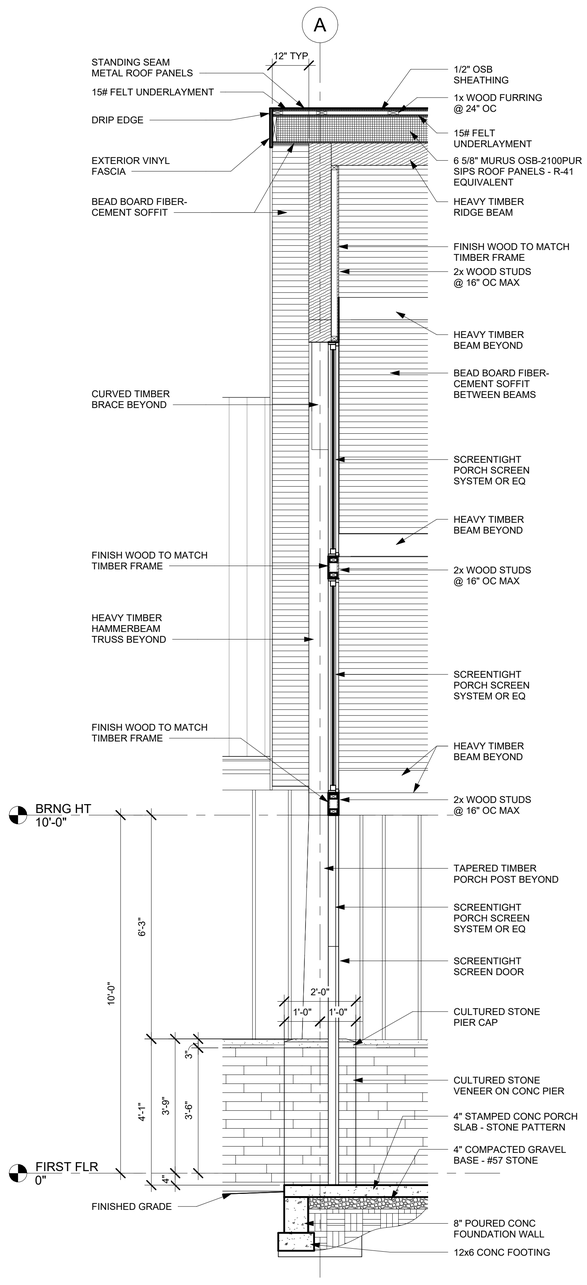
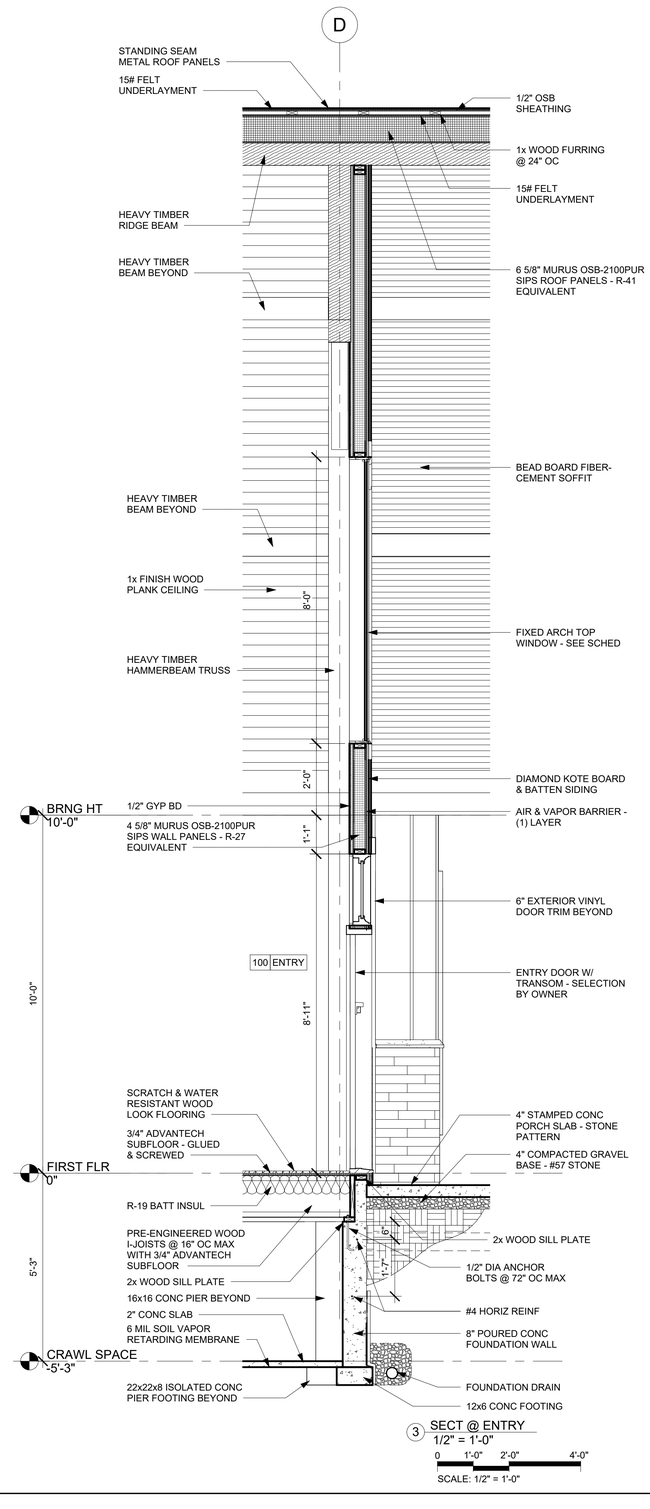


1 SECT @ GARAGE EAVE
1/2" = 1'-0"



2 SECT @ SCREENED PORCH
1/2" = 1'-0"



3 SECT @ ENTRY
1/2" = 1'-0"

0 1'-0" 2'-0" 4'-0"
SCALE: 1/2" = 1'-0"

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

WALL SECTIONS

Project number	21007
Date	03/07/2022

A4.2

Scale	1/2" = 1'-0"

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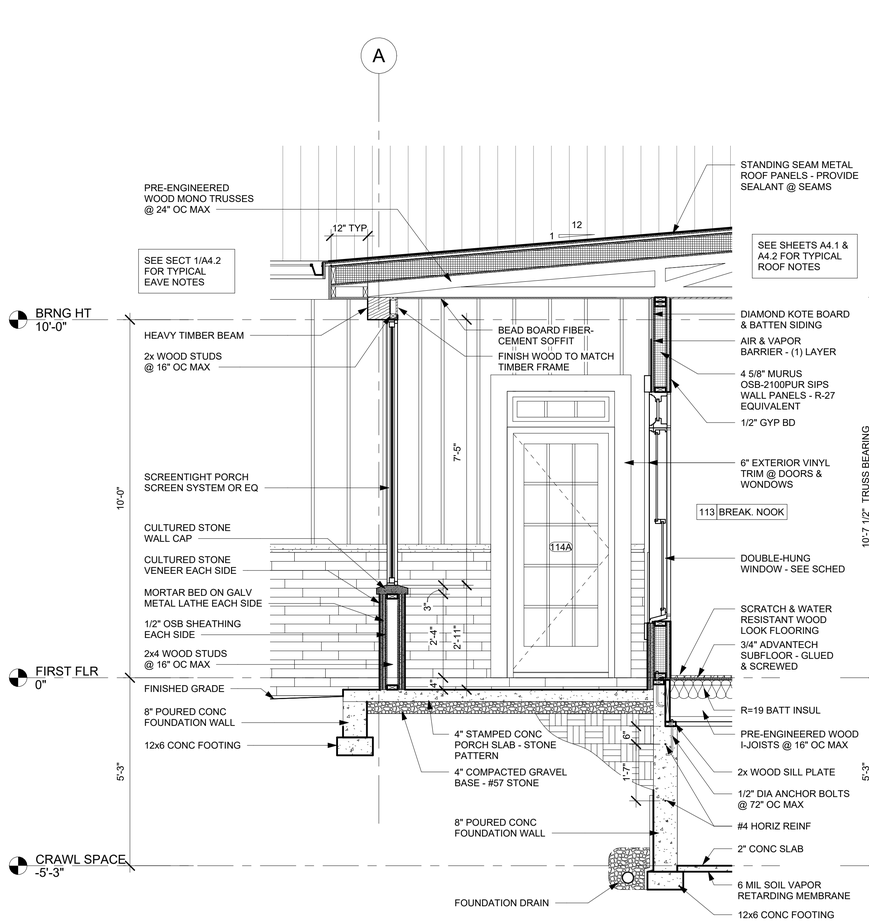
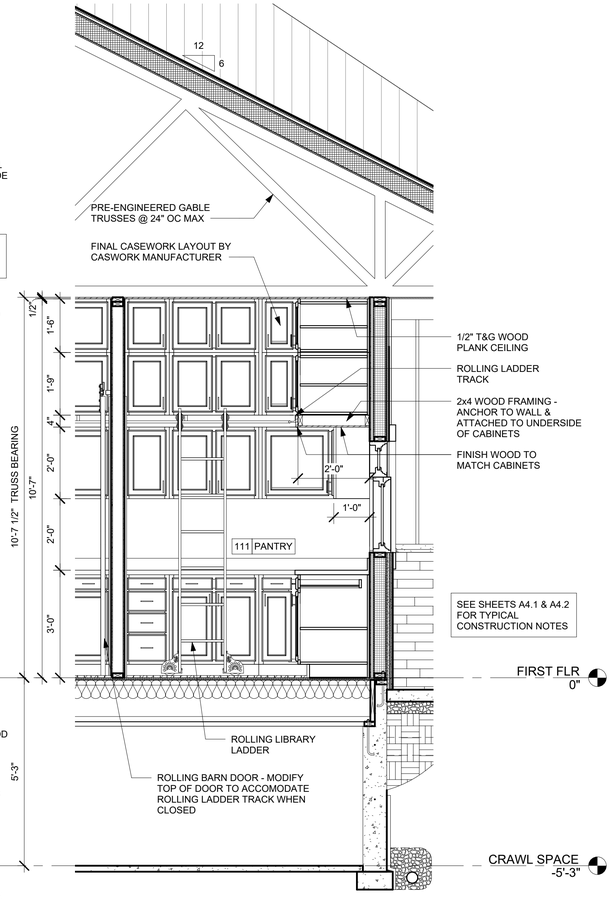
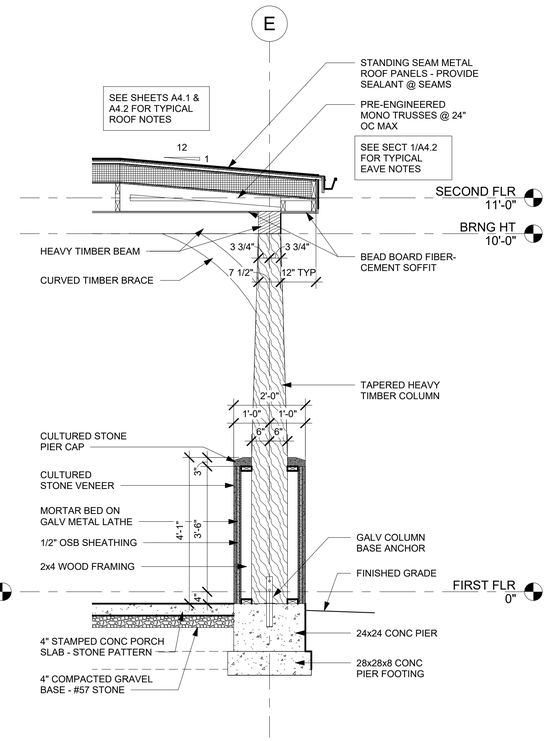


1 SECT @ BREAKFAST NOOK
1/2" = 1'-0"



2 SECT @ KITCHEN/CHEF'S PANTRY
1/2" = 1'-0"



3 SECT @ PORCH POST
1/2" = 1'-0"

0 1'-0" 2'-0" 4'-0"
SCALE: 1/2" = 1'-0"

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

WALL SECTIONS

Project number	21007
Date	03/07/2022

A4.3

Scale	1/2" = 1'-0"

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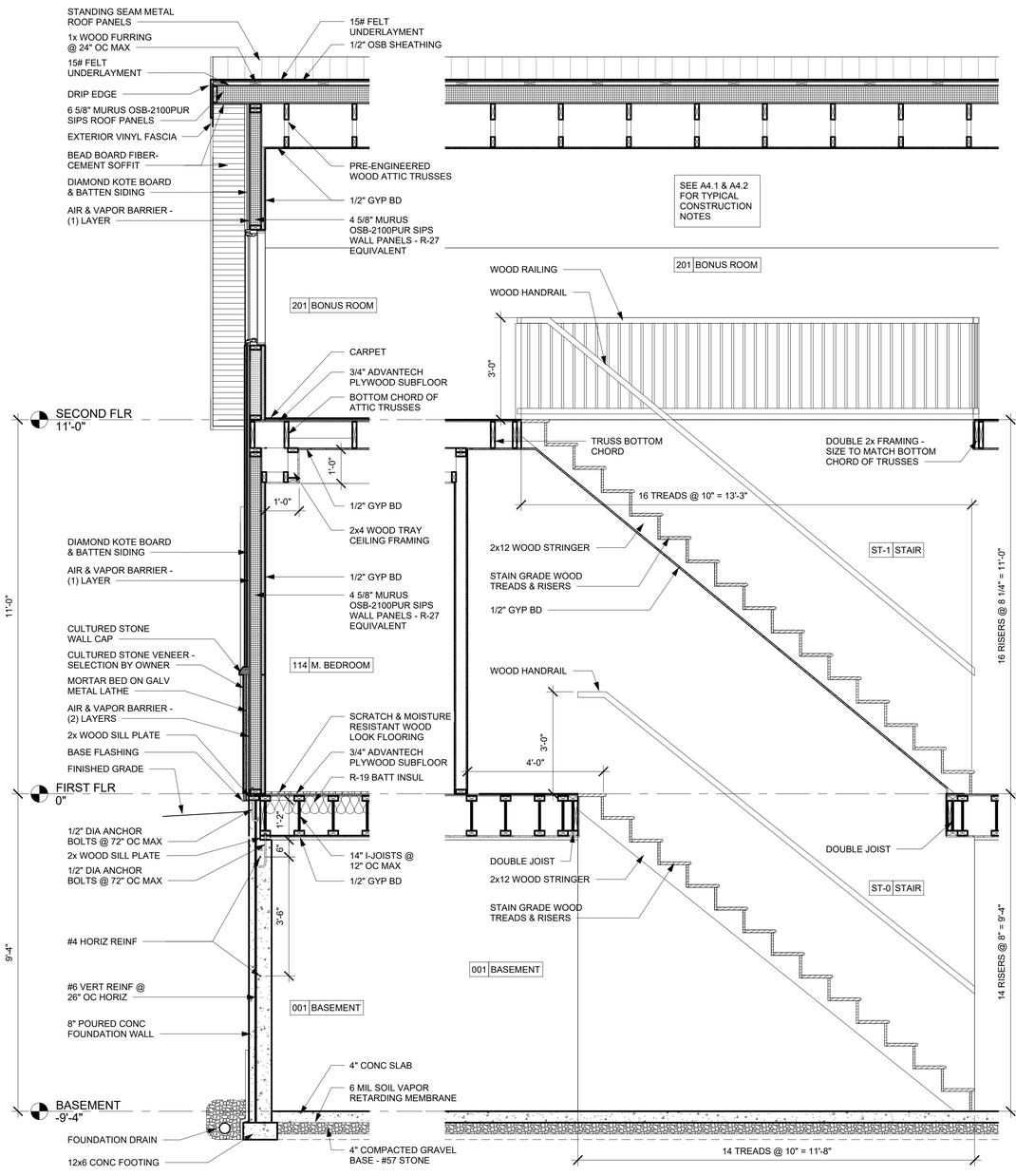

1 SECT @ MASTER BEDROOM
1/2" = 1'-0"

2 SECT @ STAIRCASE
1/2" = 1'-0"

3 SECT @ OFFICE
1/2" = 1'-0"

0 1'-0" 2'-0" 4'-0"
SCALE: 1/2" = 1'-0"

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FLEMING RESIDENCE

NEW CONSTRUCTION

LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

WALL SECTIONS

Project number	21007
Date	03/07/2022

A4.4

Scale	1/2" = 1'-0"

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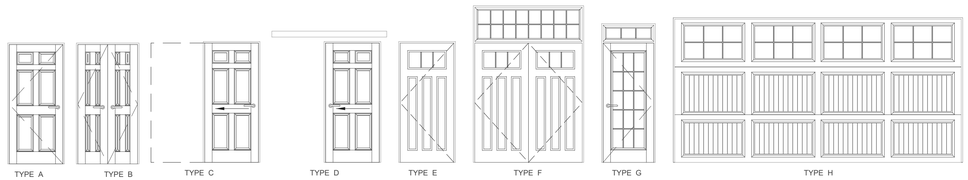
DOOR SCHEDULE

NO	LOCATION	SIZE	TYPE	MAT'L	GLAZING	U-VALUE	HARDWARE	HEADER	REMARKS
100	100 - ENTRY	5'-0" x 6'-8"	F	TBD	DUAL PANE, TEMPERED	MAX .30	ENTRY SET	BY SIPS MANUFACTURER	60" x 24" TRANSOM
101	101 - BEDROOM 2	3'-0" x 6'-8"	A	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	
102	102 - CLOSET	(2) 1'-9" x 6'-8"	B	WOOD	-	-	PASSAGE SET	NO HEADER REQUIRED	
103	103 - BATH 2	3'-0" x 6'-8"	C	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	POCKET DOOR
104	104 - BATH 3	3'-0" x 6'-8"	C	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	POCKET DOOR
105	105 - BEDROOM 3	3'-0" x 6'-8"	A	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	
106	106 - CLOSET	(2) 2'-0" x 6'-8"	B	WOOD	-	-	PASSAGE SET	NO HEADER REQUIRED	
107	107 - CLOSET	(2) 2'-0" x 6'-8"	B	WOOD	-	-	PASSAGE SET	NO HEADER REQUIRED	
110	110 - DINING ROOM	3'-0" x 6'-8"	C	WOOD	-	-	PASSAGE SET	NO HEADER REQUIRED	POCKET DOOR
111	111 - CHEF'S PANTRY	4'-6" x 7'-10"	D	WOOD	-	-	PASSAGE SET	NO HEADER REQUIRED	SLIDING BARN DOOR
113	113 - BREAKFAST NOOK	3'-0" x 7'-0"	G	VINYL CLAD	DUAL PANE, TEMPERED	MAX .30	ENTRY SET	BY SIPS MANUFACTURER	36" x 12" TRANSOM
114	114 - MASTER BEDROOM	3'-0" x 6'-8"	A	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	
114A	114 - MASTER BEDROOM	3'-0" x 7'-0"	G	VINYL CLAD	DUAL PANE, TEMPERED	MAX .30	ENTRY SET	BY SIPS MANUFACTURER	36" x 12" TRANSOM
115	115 - MASTER BATH	3'-0" x 6'-8"	A	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	
115A	115 - MASTER BATH	3'-0" x 6'-8"	C	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	POCKET DOOR
117	117 - LAUNDRY	3'-0" x 6'-8"	A	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	
119	119 - CLOSET	(2) 2'-0" x 6'-8"	B	WOOD	-	-	PASSAGE SET	NO HEADER REQUIRED	
120	120 - BATH	3'-0" x 6'-8"	A	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	
121	121 - OFFICE	(2) 2'-0" x 6'-8"	B	WOOD	-	-	PRIVACY SET	NO HEADER REQUIRED	
122	122 - HALL	4'-0" x 6'-8"	A	WOOD	-	-	PRIVACY SET	(2) 2x6, 1 JACK STUD EACH SIDE	
123	123 - GARAGE	3'-0" x 6'-8"	E	STEEL	DUAL PANE, TEMPERED	MAX .30	ENTRY SET	(2) 2x4, 1 JACK STUD EACH SIDE	
123A	123 - GARAGE	16'-0" - 8'-0"	H	STEEL	BY MANUF	BY MANUF	BY MANUF	(2) 2x12, 1 JACK STUD EACH SIDE	
123B	123 - GARAGE	16'-0" - 8'-0"	H	STEEL	BY MANUF	BY MANUF	BY MANUF	(2) 2x12, 1 JACK STUD EACH SIDE	

CASED OPENINGS

NO	LOCATION	SIZE	TYPE	MAT'L	GLAZING	U-VALUE	HARDWARE	HEADER	REMARKS
CO-1	108 - HALL	3'-0" x 6'-8"	-	-	-	-	-	NO HEADER REQUIRED	
CO-1	116 - MASTER CLOSET	3'-0" x 6'-8"	-	-	-	-	-	NO HEADER REQUIRED	
CO-1	117 - LAUNDRY	3'-0" x 6'-8"	-	-	-	-	-	NO HEADER REQUIRED	
CO-1	118 - HALL	3'-0" x 6'-8"	-	-	-	-	-	(2) 2x4, 1 JACK STUD EACH SIDE	
CO-1	122 - HALL	3'-0" x 6'-8"	-	-	-	-	-	NO HEADER REQUIRED	

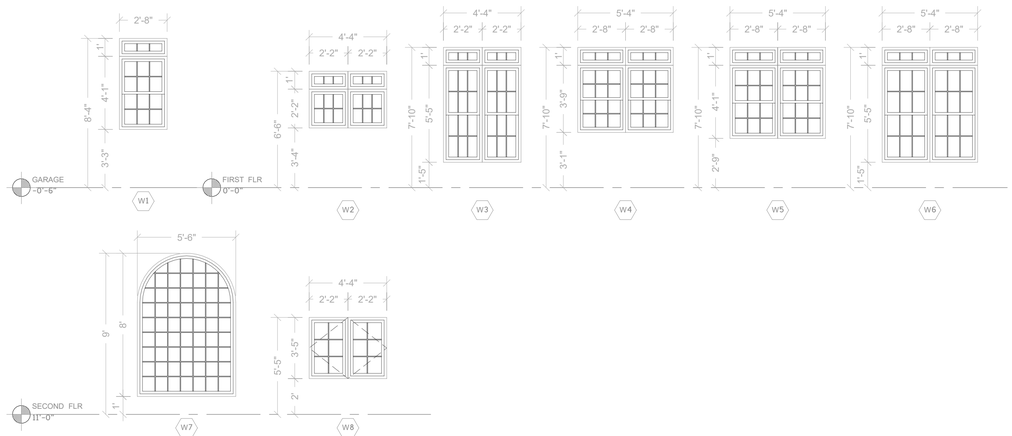
NOTES:
1. ALL MILLWORK FINISH PER OWNER SELECTION.
2. HARDWARE STYLE PER OWNER SELECTION.
3. HEADERS SHALL EXTEND 4" MIN TO EITHER SIDE OF ROUGH OPENING.
4. WHERE DOOR SELECTION INCLUDES UNSCHEDULED GLASS, PROVIDE DUAL PANE, TEMPERED GLASS WITH A MAXIMUM U VALUE OF .30.
5. BASIS OF DESIGN FOR PATIO DOORS IS ANDERSEN 400 SERIES WITH STORMWATCH PROTECTION AND COLONIAL GRILLES.



WINDOW SCHEDULE

TYPE	LOCATION	SIZE	QTY	MAT'L	GLAZING	U-VALUE	STYLE	HEADER	REMARKS
W7	100 - ENTRY	5'-6" x 8'-0"	1	VINYL CLAD	LOW-E	MAX .30	FIXED	BY SIPS MANUFACTURER	
W6	101 - BEDROOM 2	5'-4" x 6'-5"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W4	103 - BATH 2	5'-4" x 4'-9"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W4	104 - BATH 3	5'-4" x 4'-9"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W6	105 - BEDROOM 3	5'-4" x 6'-5"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W6	109 - LIVING ROOM	5'-4" x 6'-5"	2	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W7	109 - LIVING ROOM	5'-6" x 8'-0"	1	VINYL CLAD	LOW-E	MAX .30	FIXED	BY SIPS MANUFACTURER	
W6	110 - DINING ROOM	5'-4" x 6'-5"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W2	111 - CHEF'S PANTRY	4'-4" x 3'-2"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W3	113 - BREAKFAST NOOK	4'-4" x 6'-5"	3	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W5	114 - MASTER BEDROOM	5'-4" x 4'-1"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W5	115 - MASTER BATH	5'-4" x 4'-1"	1	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W6	121 - OFFICE	5'-4" x 6'-5"	2	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	BY SIPS MANUFACTURER	12" TRANSOM
W1	123 - GARAGE	2'-8" x 5'-1"	5	VINYL CLAD	LOW-E	MAX .30	DOUBLE HUNG	(2) 2x4, 1 JACK STUD EACH SIDE	12" TRANSOM
W13	201 - BONUS ROOM	4'-4" x 3'-5"	1	VINYL CLAD	LOW-E	MAX .30	CASEMENT	NO HEADER REQUIRED	

NOTES:
1. ALL MILLWORK FINISH PER OWNER SELECTION.
2. HARDWARE STYLE PER OWNER SELECTION.
3. HEADERS SHALL EXTEND 4" MIN TO EITHER SIDE OF ROUGH OPENING.
4. BASIS OF DESIGN FOR WINDOWS IS ANDERSEN 400 SERIES WITH STORMWATCH PROTECTION AND COLONIAL GRILLES.



ROOM FINISH SCHEDULE

NO	LOCATION	FLOOR	WALLS	CEILING	CEILING HEIGHT	REMARKS
001	BASEMENT	UNFINISHED	UNFINISHED	UNFINISHED	-	
100	ENTRY	WOOD LOOK	PAINTED GYP	WOOD PLANK	VARIES	
101	BEDROOM 2	WOOD LOOK	PAINTED GYP	WOOD PLANK	VARIES	
102	CLOSET	WOOD LOOK	PAINTED GYP	PAINTED GYP	9'-0"	
103	BATH 2	TILE	PAINTED GYP	PAINTED GYP	10'-7"	ROLL-IN SHOWER W/ TILE FLOOR AND SHOWER SURROUND PANELS
104	BATH 3	TILE	PAINTED GYP	PAINTED GYP	10'-7"	ONE PIECE TUB/SHOWER COMBO
105	BEDROOM 3	WOOD LOOK	PAINTED GYP	WOOD PLANK	VARIES	
106	CLOSET	WOOD LOOK	PAINTED GYP	PAINTED GYP	9'-0"	
107	CLOSET	WOOD LOOK	PAINTED GYP	PAINTED GYP	9'-0"	
108	HALL	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-0"	
109	LIVING ROOM	WOOD LOOK	PAINTED GYP	WOOD PLANK	VARIES	
110	DINING ROOM	WOOD LOOK	PAINTED GYP	WOOD PLANK	VARIES	
111	CHEF'S PANTRY	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-7"	GRANITE COUNTERS AND ROLLING LIBRARY LADDER
112	KITCHEN	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-7"	GRANITE COUNTERS AND ROLLING LIBRARY LADDER
113	BREAKFAST NOOK	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-7"	

ROOM FINISH SCHEDULE (CONT.)

NO	LOCATION	FLOOR	WALLS	CEILING	CEILING HEIGHT	REMARKS
114	MASTER BEDROOM	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-0"	TRAY CEILING @ 9'-0" AFF
115	MASTER BATH	TILE	PAINTED GYP	PAINTED GYP	10'-0"	ROLL-IN SHOWER W/ TILE FLOOR AND SHOWER SURROUND PANELS TO CEILING. DROP IN TUB ON TILE DECK WITH SHOWER SURROUND PANELS TO CEILING.
116	MASTER CLOSET	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-0"	
117	LAUNDRY	TILE	PAINTED GYP	PAINTED GYP	10'-0"	GRANITE COUNTER
119	CLOSET	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-0"	MODULAR CLOSET SYSTEM WITH ROLLING LIBRARY LADDER
120	BATH	TILE	PAINTED GYP	PAINTED GYP	10'-0"	
121	OFFICE	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-0"	
122	HALL	WOOD LOOK	PAINTED GYP	PAINTED GYP	10'-0"	
123	GARAGE	EPOXY	PAINTED GYP	PAINTED GYP	12'-0"	
201	BONUS ROOM	CARPET	PAINTED GYP	PAINTED GYP	VARIES	

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FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

SCHEDULES

Project number	21007
Date	03/07/2022

A6.1

Scale 1/4" = 1'-0"

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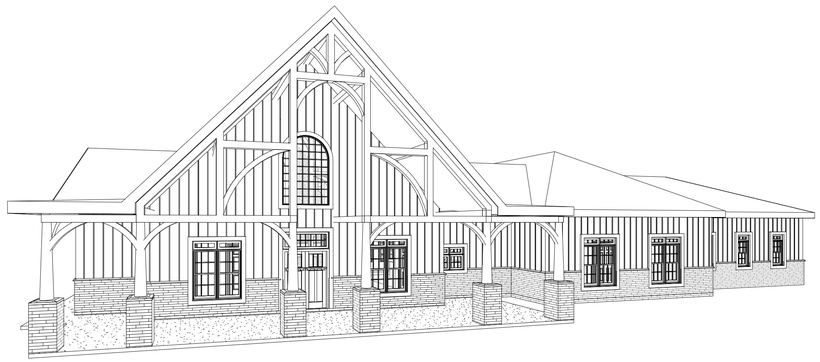
FLEMING RESIDENCE
NEW CONSTRUCTION

POINTER CREEK DRIVE
ANGIER, NC

MARCH 7, 2022



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DRAWING INDEX

FLEMING RESIDENCE

NEW CONSTRUCTION
LOT #5
POINTER CREEK DR.
ANGIER, NC 27501

TITLE SHEET

Project number	21007
Date	03/07/2022

C-1

Scale

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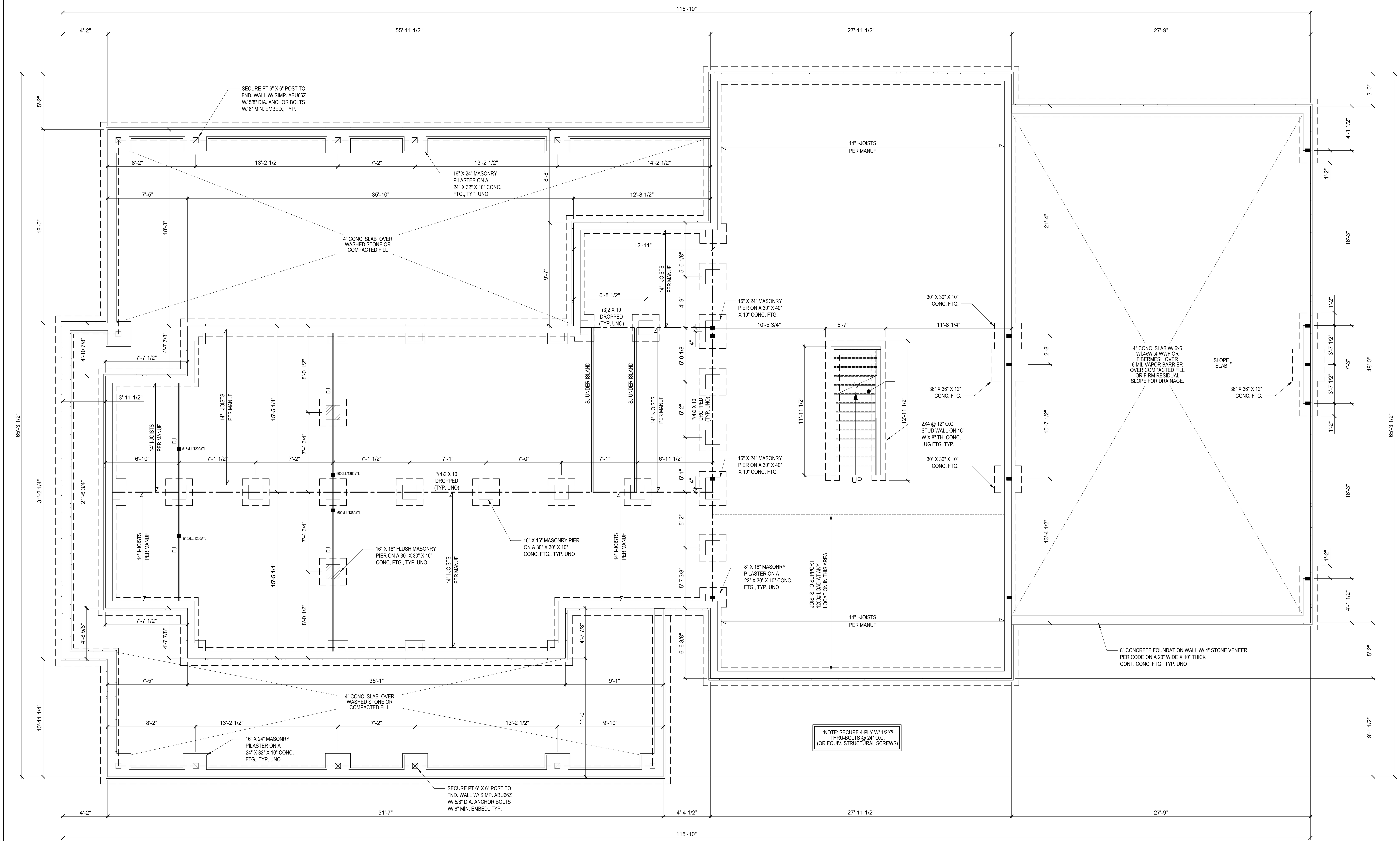


FOUNDATION PLAN

1/4" = 1'-0"

*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
*Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.
*Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.

NORTH CAROLINA PROFESSIONAL SEAL 036819 ENGINEER ALAN W. LEWIS 08-18-2022

TYNDALL ENGINEERING & DESIGN, P.A.
T 919 773-1200 ▪ F 919 773-9658
250 Shipwash Drive ▪ Garner ▪ North Carolina ▪ 27529
www.tyndallengineering.com

Client: NANCY AND ALBERT FLEMING

Plan: FLEMING RESIDENCE POINTER CREEK DR ANGIER, NC

FOUNDATION PLAN
1ST FLOOR FRAMING

Project #:	2201-010258
Date:	08/15/2022
Engineered By:	AWL
DWG. Checked By:	PAT
Scale:	SEE PLAN

REVISIONS

No.	Date:	Remarks
1		
2		
3		
4		

Sheet Number

S1

1 of 7

FILENAME: Z:_RESIDENTIAL ENG\2022 STRUCTURAL PROJECTS\2201-010258 - BRADLEY BUILT - FLEMING RESIDENCE\CAD_FILES\2201-010258_E.DWG SAVED BY: ALAN LEWIS LAST PLOT DATE:8/18/2022 1:03 PM

STRUCTURAL NOTES:

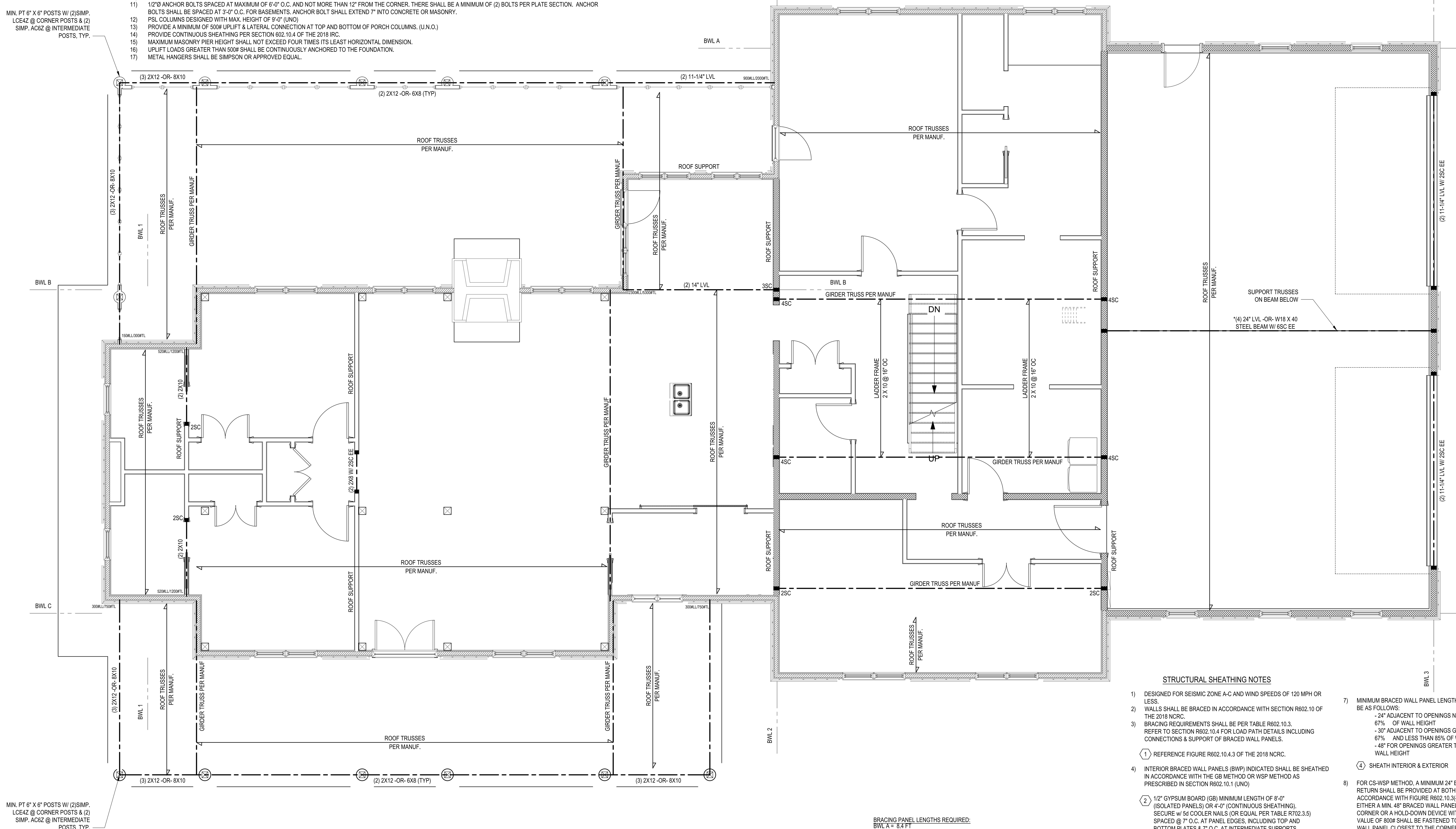
1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
3) ALL LUMBER SHALL BE SYP #2 (UNO)
ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (I.E. iLEVEL MICROLAM)
ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
4) ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1) AND R602.7(2).
5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
6) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50
Fy = 50 KSI MIN. (UNO)
8) ALL EXTERIOR LUMBER TO BE #2 SYP PT
9) ALL CONCRETE, fc = 3000 PSI MIN.
10) PRESUMPTIVE BEARING CAPACITY = 2000 PSF
11) 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
12) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
14) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC.
15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	BASED ON SEISMIC ZONES A, B & C			

SIP PER MANUFACTURER
2X6 @ 16" O.C. WOOD STUD WALL
2X4 @ 16" O.C. WOOD STUD WALL

*NOTE: SECURE 4-PLY W/ 1/2"Ø THRU-BOLTS @ 24" O.C. (OR EQUIV. STRUCTURAL SCREWS)



FIRST FLOOR PLAN

1/4" = 1'-0"

*NOTE: SEE TRUSS MANUFACTURER DOCUMENTS FOR TRUSS LOADING ON SIP WALLS. CONVENTIONAL FRAMING LOADS ON SIP WALLS SHOWN AS LIVE LOAD/TOTAL LOAD (LL/TL)

BRACING PANEL LENGTHS REQUIRED:
BWL A = 8.4 FT
BWL B = 8.4 FT
BWL C = 8.4 FT
BWL 1 = 9.2 FT
BWL 2 = 37.5 FT
BWL 3 = 9.5 FT

BRACING PANEL LENGTHS PROVIDED:
BWL A = 34.5 FT CS-WSP
BWL B = 19.6 FT CS-WSP
BWL C = 71.1 FT CS-WSP
BWL 1 = 18.8 FT CS-WSP
BWL 2 = 50.0 FT GB
BWL 3 = 15.8 FT CS-WSP

STRUCTURAL SHEATHING NOTES

1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.
3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3.
REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.

(1) REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)

(2) 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS

(3) 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS

5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
- 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
- 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT.
- 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT

(4) SHEATH INTERIOR & EXTERIOR

8) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.

(5) MINIMUM 800# HOLD-DOWN DEVICE

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08-18-2022

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Client: NANCY AND ALBERT FLEMING

Plan: FLEMING RESIDENCE
POINTER CREEK DR
ANGIER, NC

1ST FLOOR HEADER
2ND FLOOR FRAMING

Project #:	2201-010258
Date:	08/15/2022
Engineered By:	AWL
DWG. Checked By:	PAT
Scale:	SEE PLAN

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DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	BASED ON SEISMIC ZONES A, B & C			

STRUCTURAL NOTES:

1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
3) ALL LUMBER SHALL BE SYP #2 (UNO)
ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (I.E. iLEVEL MICROLAM)
ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
4) ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1) AND R602.7(2).
5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
6) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50
Fy = 50 KSI MIN. (UNO)
8) ALL EXTERIOR LUMBER TO BE #2 SYP PT
9) ALL CONCRETE, fc = 3000 PSI MIN.
10) PRESUMPTIVE BEARING CAPACITY = 2000 PSF
11) 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
12) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
14) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC.
15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

STRUCTURAL SHEATHING NOTES

1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.
3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3.
REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.

⟨1⟩ REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)

⟨2⟩ 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS

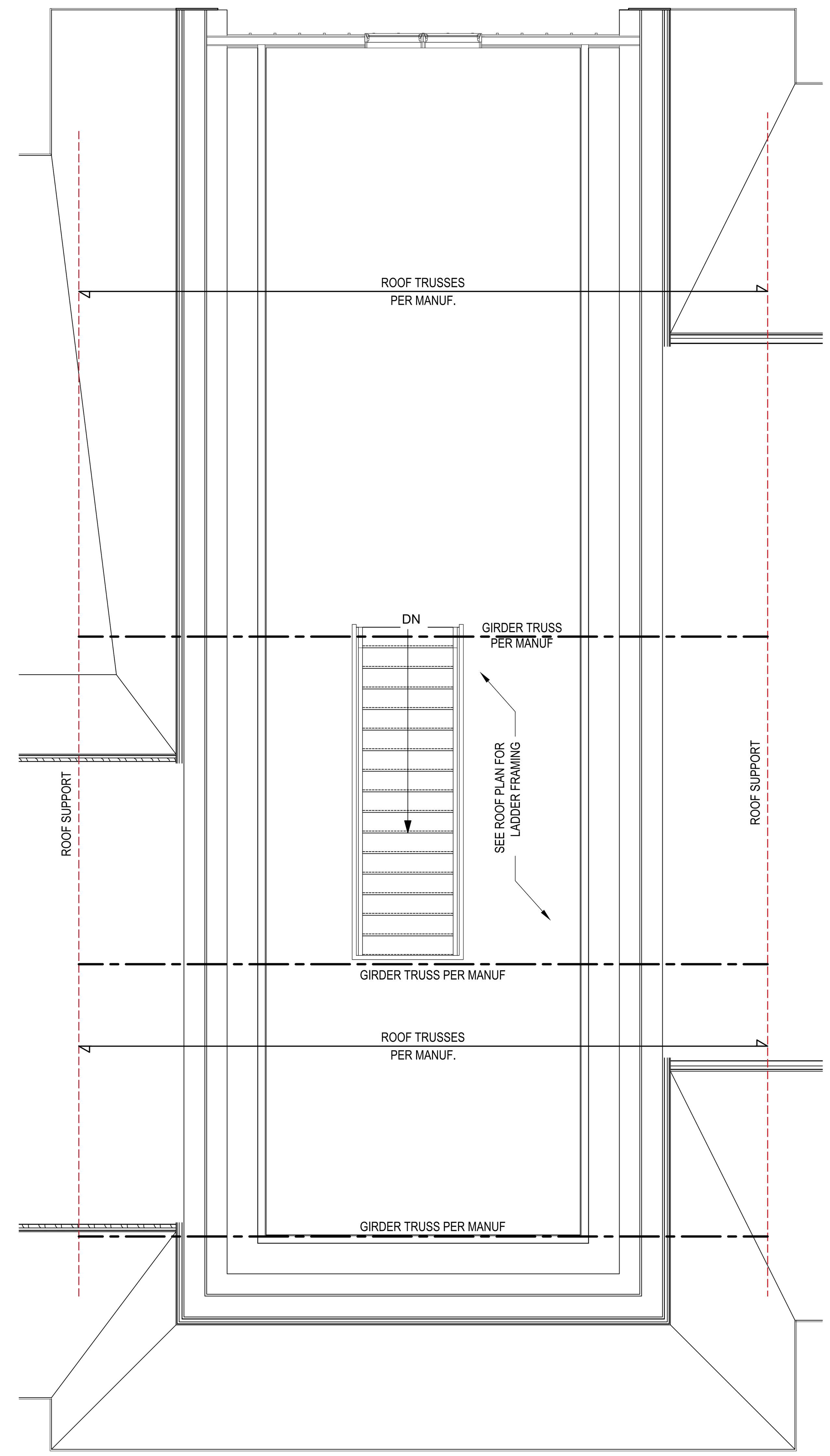
⟨3⟩ 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS

5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
- 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
- 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT.
- 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT

⟨4⟩ SHEATH INTERIOR & EXTERIOR

8) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.

⟨5⟩ MINIMUM 800# HOLD-DOWN DEVICE



SECOND FLOOR PLAN

1/4" = 1'-0"

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Client: NANCY AND ALBERT FLEMING

Plan: FLEMING RESIDENCE
POINTER CREEK DR
ANGIER, NC

2ND FLOOR HEADER
2ND FLR. CLG. FRAMING

Project #: 2201-010258
Date: 08/15/2022
Engineered By: AWL
DWG. Checked By: PAT
Scale: SEE PLAN

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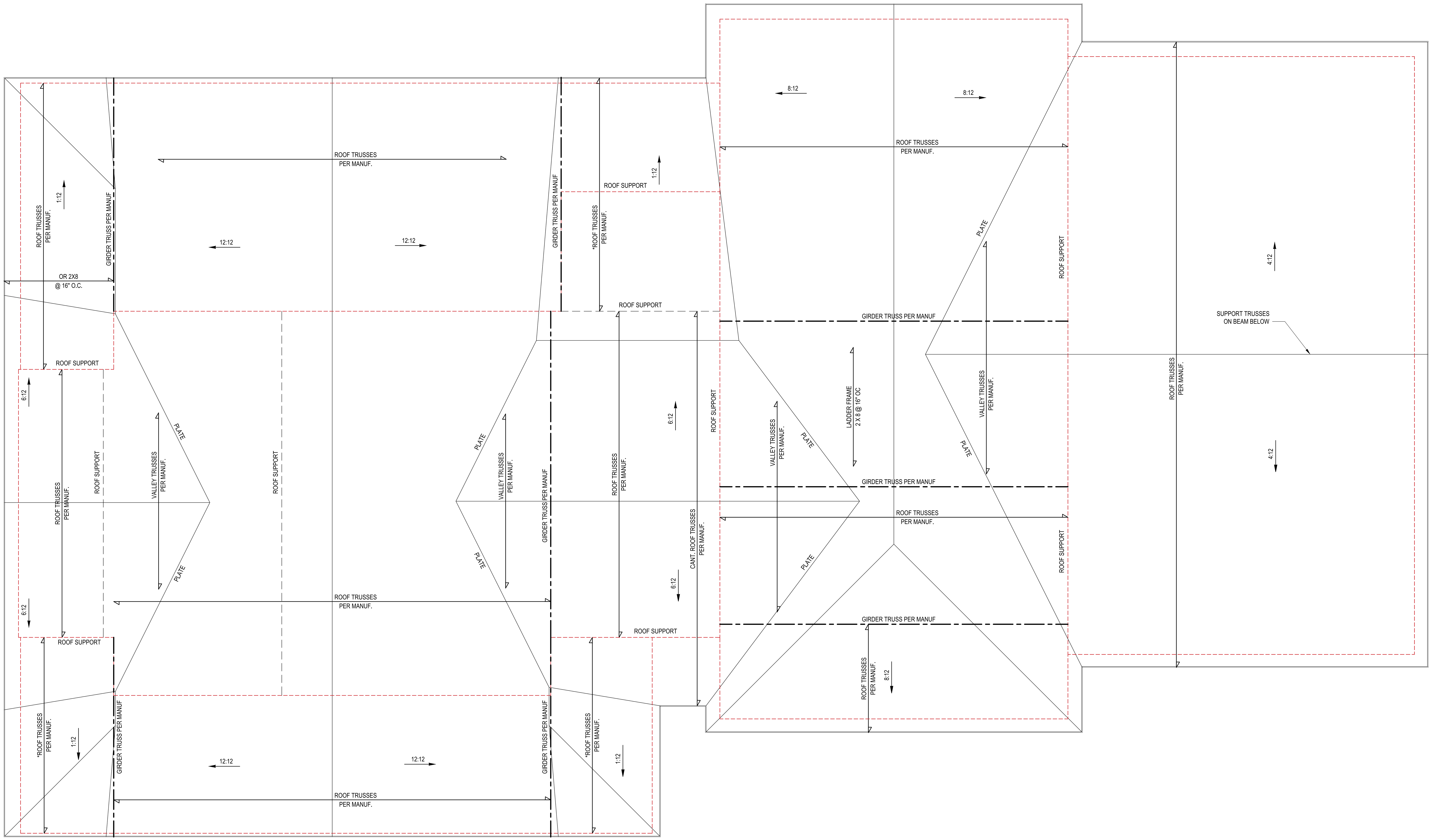

ROOF PLAN

1/4" = 1'-0"

*OR FRAME WITH 2X8
RAFTERS @ 16" O.C.

NORTH CAROLINA PROFESSIONAL SEAL 036819 08-18-2022 ENGINEER ALAN W. LEWIS

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Plan: FLEMING RESIDENCE
POINTER CREEK DR
ANGIER, NC

ROOF PLAN

Project #:	2201-010258
Date:	08/15/2022
Engineered By:	AWL
DWG. Checked By:	PAT
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FILENAME: Z:_RESIDENTIAL ENG\2022 STRUCTURAL PROJECTS\2201-010258 - BRADLEY BUILT - FLEMING RESIDENCE\CAD_FILES\2201-010258_E.DWG SAVED BY: ALAN LEWIS LAST PLOT DATE:8/18/2022 1:53 PM

STRUCTURAL NOTES

1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

2) DESIGN LOADS:

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
ALL FLOORS	40	10	L/360	L/240
ATTIC (w/ walk up stairs)	30	10	L/360	L/240
ATTIC (pull down access)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	SEISMIC ZONES A, B & C			

3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE. (U.N.O.)

5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R404 OF 2018 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.

6) ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 800 PSI, BASED ON 2x10) UNO.
ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL.
ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (U.N.O.)
ALL LSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2325 PSI, E = 1.6M PSI (U.N.O.)
ALL PSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2400 PSI, E = 1.8M PSI (U.N.O.)

7) ALL LOAD BEARING EXTERIOR HEADERS SHALL BE AT (2) 2x10. (U.N.O.) REFER TO TABLE R602.7(1) & (2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS UNLESS SPECIFICALLY NOTED ON PLANS.

8) ALL STRUCTURAL STEEL W-SHAPES (I-BEAMS) SHALL BE ASTM A992 GRADE 50.
ALL STEEL ANGLES, PLATES, AND C-CHANNELS SHALL BE ASTM A36.
ALL STEEL PIPE SHALL BE ASTM A53 GRADE B.

9) STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3-1/2" AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO (2) LAG SCREWS (1/2"Ø x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOISTS ARE TOE NAILED TO THE SOLE PLATES, AND THE SOLE PLATES ARE NAILED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.

10) PROVIDE ANCHOR BOLT PLACEMENT PER SECTION 403.1.6: 1/2"Ø ANCHOR BOLTS SPACED AT 6'-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. THERE SHALL BE A MINIMUM TWO ANCHOR BOLTS PER PLATE SECTION.

11) FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.

12) WALL AND ROOF CLADDING VALUES:
WALL CLADDING SHALL BE DESIGNED FOR 28.0 POUNDS PER SQUARE FOOT (LBS/SQFT) OR GREATER POSITIVE AND NEGATIVE PRESSURE.
ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:
39.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1.5/12
36.0 LBS/SQFT FOR ROOF PITCHES 1.5/12 TO 6/12
18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12
**MEAN ROOF HEIGHT 30'-0" OR LESS

13) FOR ROOF SLOPES FROM 2/12 THROUGH 4/12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER.

14) REFER TO SECTION R602.3 FOR FRAMING OF ALL WALLS OVER 10'-0" IN HEIGHT.

15) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 NCRC.

16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.

17) REFER TO TABLE N1102.1 FOR PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA.

18) PSL COLUMNS DESIGNED WITH MAXIMUM HEIGHT OF 9'-0" (U.N.O.)

19) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)

20) MAXIMUM MASONRY PEIR HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.

21) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION.
TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSION OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.

CLIMATE ZONES	FENESTRATION U-FACTOR b,j	SKYLIGHT U-FACTOR b	GLAZED FENESTRATION SHGC b,k	CEILING R-VALUE m	WOOD FRAMED WALL R-VALUE	MASS WALL R-VALUE i	FLOOR R-VALUE	BASEMENT WALL R-VALUE c,o	SLAB R-VALUE AND DEPTH d	CRAWL SPACE WALL R-VALUE c
3	0.35	0.55	0.30	38 or 30 cont	15 or 13 + 2.5 h	5/13 or 5/10 cont	19	5/13 f	0	5/13
4	0.35	0.55	0.30	38 or 30 cont j	15 or 13 + 2.5 h	5/13 or 5/10 cont	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont j	n 19, or 13 + 5 h or 15 + 3 h	13/17 or 13/12.5 cont	30 g	10/15	10	10/19

* TABLE N1102.1 CLIMATE ZONES 3-5
NO SCALE

a. R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.
b. THE FENESTRATION U-FACTOR COLUMN EXCLUDED SKYLIGHTS. THE SOLAR HEAT GAIN COEFFICIENT (SHGC) COLUMN APPLIES TO ALL GLAZED FENESTRATION.
c. "10/15" MEANS R-10 CONTINUOUS INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-15 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.
d. FOR MONOLITHIC SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR A MAXIMUM OF 24" BELOW GRADE WHICHEVER IS LESS. FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24", WHICHEVER IS LESS. R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.
e. DELETED
f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1101.7 AND TABLE N1101.7.
g. OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY. R-19 MINIMUM.
h. THE FIRST VALUE IS CAVITY INSULATION, THE SECOND VALUE IS CONTINUOUS INSULATION, SO "13+5" MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. "15+3" MEANS R-15 CAVITY INSULATION. PLUS R-3 INSULATED SHEATHING. IF STRUCTURAL SHEATHING COVERS 25% OR LESS OF THE EXTERIOR, INSULATING SHEATHING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2. "13 + 2.5" MEANS R-13 CAVITY INSULATION PLUS R-2.5 SHEATHING.
i. FOR MASS WALLS, THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR MASS WALL.
j. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN 0.55 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
k. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN 0.70 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
l. R-30 SHALL BE DEEMED TO SATISFY THE CEILING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. OTHERWISE R-38 INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1 INCH OF THE ATTIC ROOF DECK.
m. TABLE VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OF THE ROOF; THERE THE INSULATION MUST FILL THE SPACE UP TO THE AIR BAFFLE.
n. R -19 FIBERGLASS BATTS COMPRESSED AND INSTALLED IN A NOMINAL 2 × 6 FRAMING CAVITY IS DEEMED TO COMPLY. FIBERGLASS BATTS RATED R-19 OR HIGHER COMPRESSED AND INSTALLED IN A 2X4 WALL IS NOT DEEMED TO COMPLY.
o. BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.

3238 SQ. FT. OF CRAWL SPACE / 150 = 21.6 SQ. FT. OF REQ'D VENTILATION WITHOUT CROSS VENTILATION
21.6 SQ. FT. OF VENTILATION REQ'D / 0.88 SQ.FT. PER VENT = 25 VENTS REQ'D (BASED ON 8" X 16" VENTS)1

-OR-

3238 SQ. FT. OF CRAWL SPACE / 1500 = 2.16 SQ. FT. OF REQ'D VENTILATION WITH CROSS VENTILATION
2.16 SQ. FT. OF VENTILATION REQ'D / 0.88 SQ.FT. PER VENT = 3 VENTS REQ'D (BASED ON 8" X 16" VENTS)2

1) VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON PLAN, HOWEVER VENTS SHALL BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS AND TO PREVENT DEAD AIR POCKETS.

2) THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 OF THE CRAWL SPACE GROUND AREA WHERE THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE CRAWL SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. ONE FOUNDATION VENT SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING. TO PREVENT RAINWATER ENTRY WHEN THE CRAWL SPACE IS BUILT ON A SLOPED SITE, THE UPHILL FOUNDATION WALLS MAY BE CONSTRUCTED WITHOUT WALL VENT OPENINGS. VENT DAMS SHALL BE PROVIDED WHEN THE BOTTOM OF THE FOUNDATION VENT OPENING IS LESS THAN 4 INCHES ABOVE THE FINISHED EXTERIOR GRADE.

WALL VENTED CRAWL SPACES REQUIRE FULL COVERAGE GROUND VAPOR RETARDERS.

* CRAWL SPACE VENTILATION CALCULATION
NO SCALE

4610 SQ. FT. OF ATTIC / 300 = 15.5 SQ. FT. INLETS/OUTLETS REQUIRED

1) CALCULATION BASED ON VENTILATORS USED AT LEAST 3'-0" ABOVE THE COMICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED BY EAVE VENTS.

2) CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

* ATTIC VENTILATION CALCULATION
NO SCALE

DEFINITIONS FOR COMMON ABBREVIATIONS

ALT	=	ALTERNATE	MAX	=	MAXIMUM
CANT	=	CANTILEVER	MIN	=	MINIMUM
CJ	=	CEILING JOIST	NOM	=	NOMINAL
CMU	=	CONCRETE MASONRY UNIT	O.C.	=	ON CENTER
COL	=	COLUMN	PL	=	POINT LOAD
CONC	=	CONCRETE	PT	=	PRESSURE TREATED
CONT	=	CONTINUOUS	REINF	=	REINFORCED
CT	=	COLLAR TIE	REQD	=	REQUIRED
DBL	=	DOUBLE	RJ	=	ROOF JOIST
DIA	=	DIAMETER	RS	=	ROOF SUPPORT
DJ	=	DOUBLE JOIST	SC	=	STUD COLUMN
DR	=	DOUBLE RAFTER	SCH	=	SCHEDULE
EA	=	EACH	SPEC	=	SPECIFIED
EE	=	EACH END	THK	=	THICK
FJ	=	FLOOR JOIST	TJ	=	TRIPLE JOIST
FND	=	FOUNDATION	TRTD	=	TREATED
FTG	=	FOOTING	TYP	=	TYPICAL
GALV	=	GALVANIZED	UNO	=	UNLESS NOTED OTHERWISE
HORIZ	=	HORIZONTAL	W	=	WIDE FLANGE BEAM
HT	=	HEIGHT	WWF	=	WELDED WIRE FABRIC
MANUF	=	MANUFACTURER	XJ	=	EXTRA JOIST

1) MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

POST SIZE	MAX. POST HEIGHT**
4 x 4	8'-0"
6 x 6	20'-0"
***	OVER 20'-0"

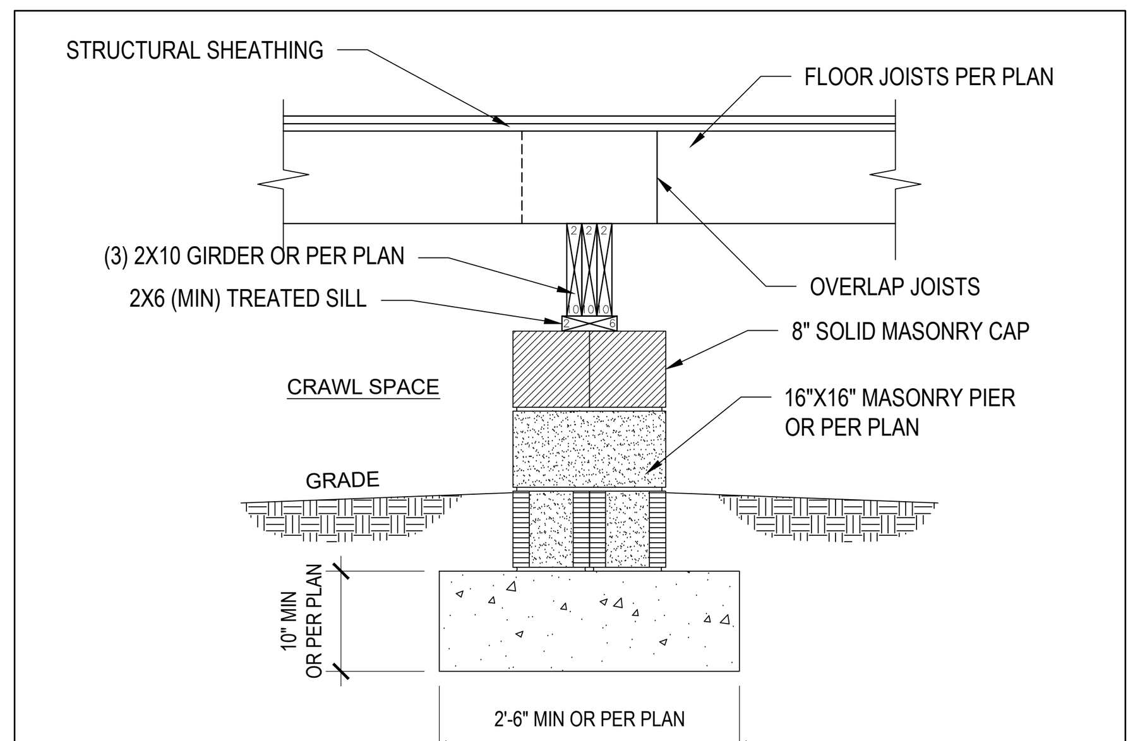
* THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET WHICH MAY BE LOCATED AT DIFFERENT LEVELS.
** FROM TOP OF FOOTING TO BOTTOM OF GIRDER
*** DECKS WITH POST HEIGHTS OVER 20'-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.

2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THESE METHODS:

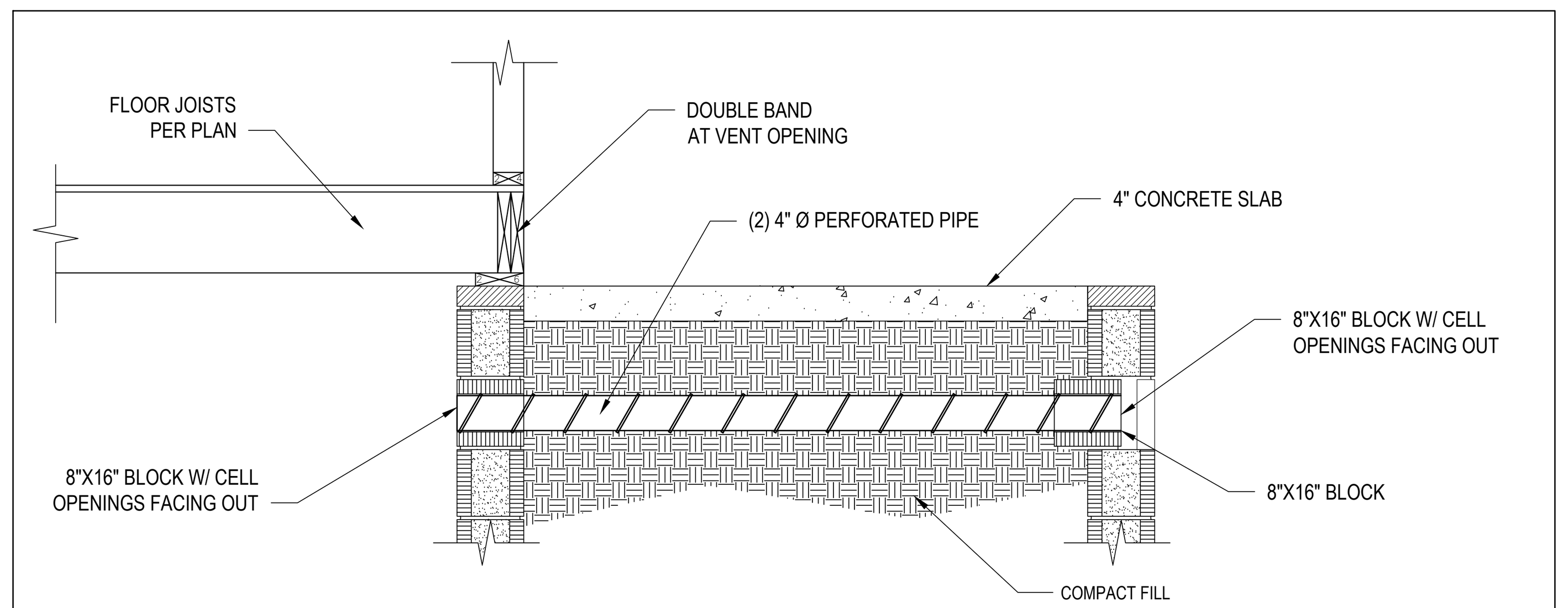
A. THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION (4) ABOVE. LATERAL BRACING IS NOT REQUIRED.
B. 4 x 4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED TO THE POST AND GIRDER WITH ONE 5/8"Ø HOT DIPPED GALVANIZED BOLT AT EACH END OF THE BRACE.
C. FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN ACCORDANCE WITH THE FOLLOWING:

POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

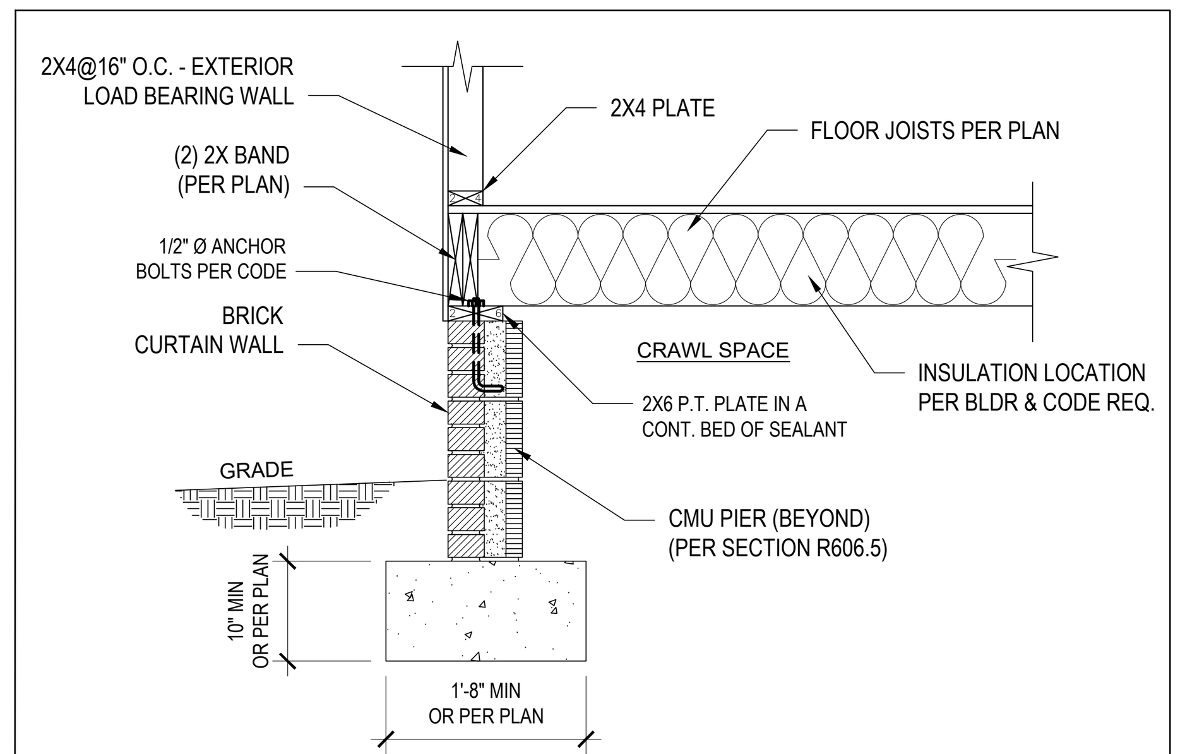
D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8"Ø HOT DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER.
E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.



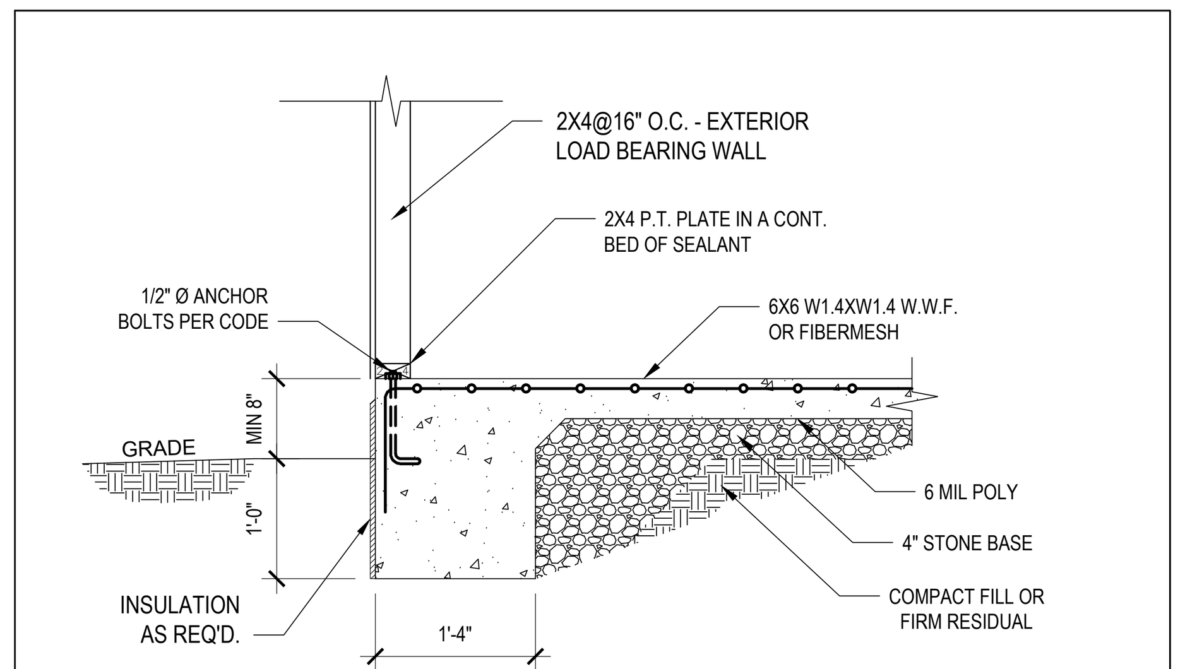
* DROPPED GIRDER DETAIL
NO SCALE



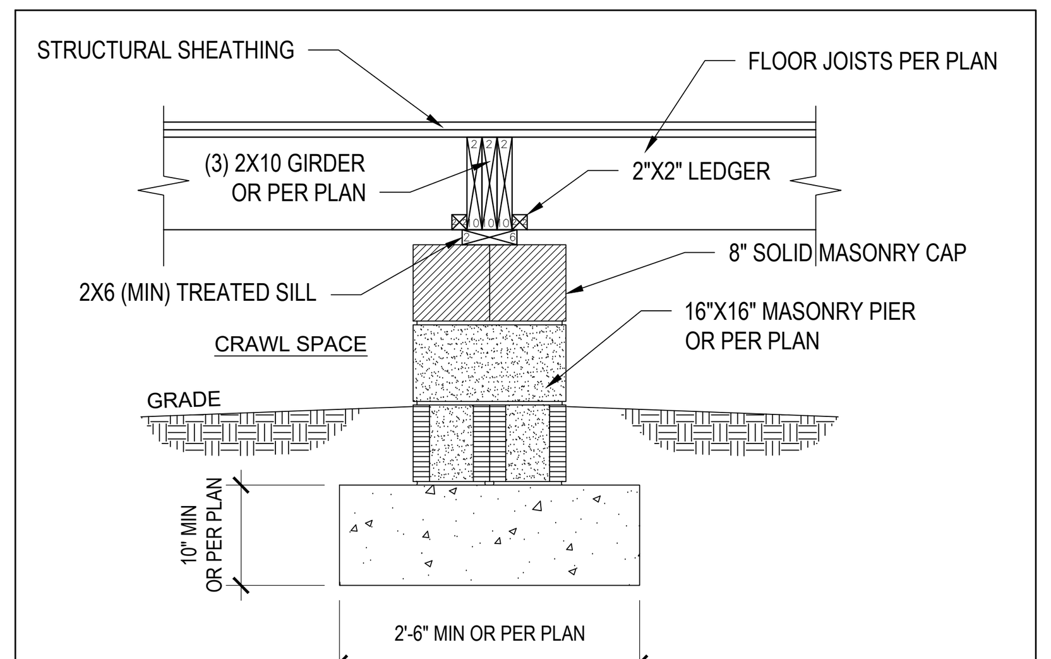
* FOUNDATION VENT DETAIL AT COMPACTED FILL
NO SCALE



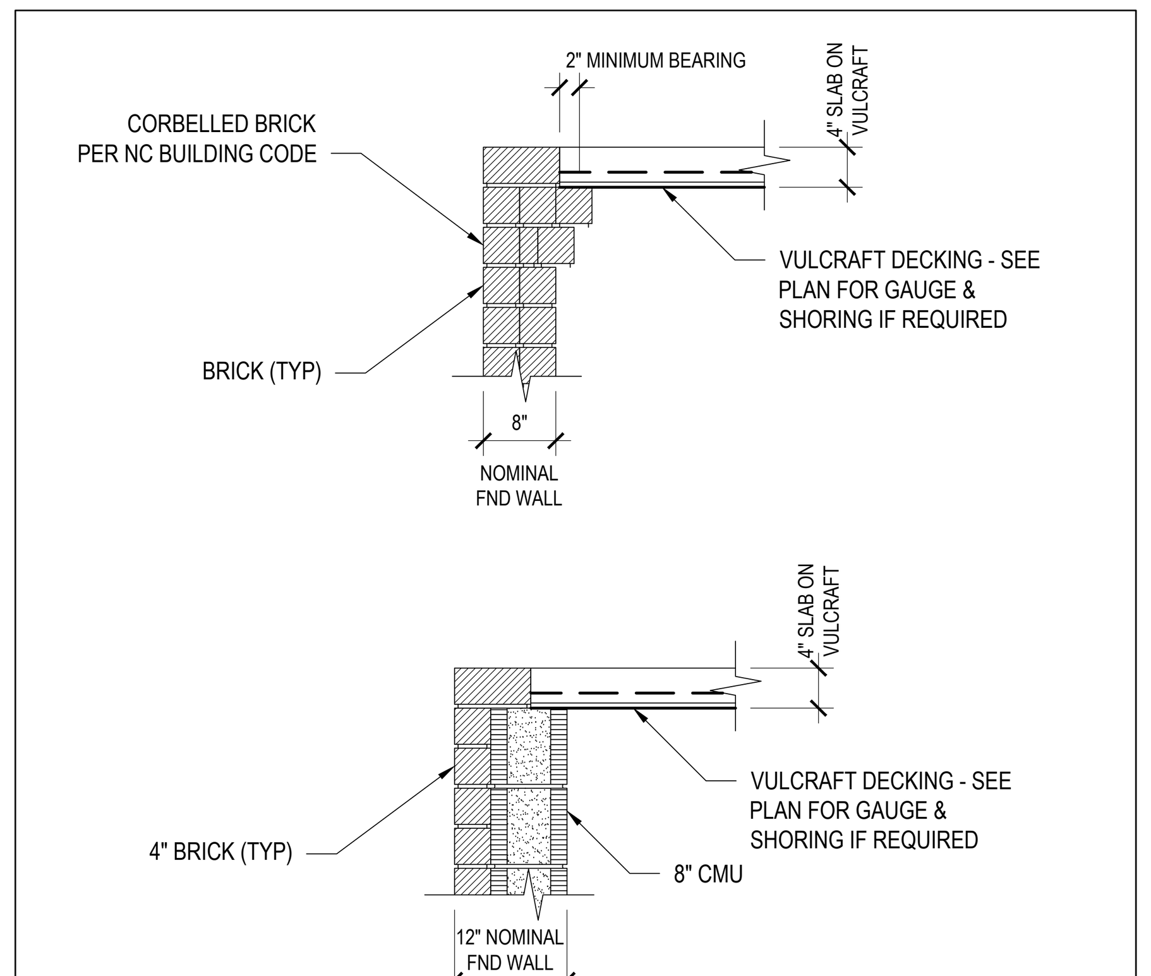
* CURTAIN WALL DETAIL
NO SCALE
PIER AND CURTAIN WALL FOUNDATION LIMITED TO 2-STORY DWELLING



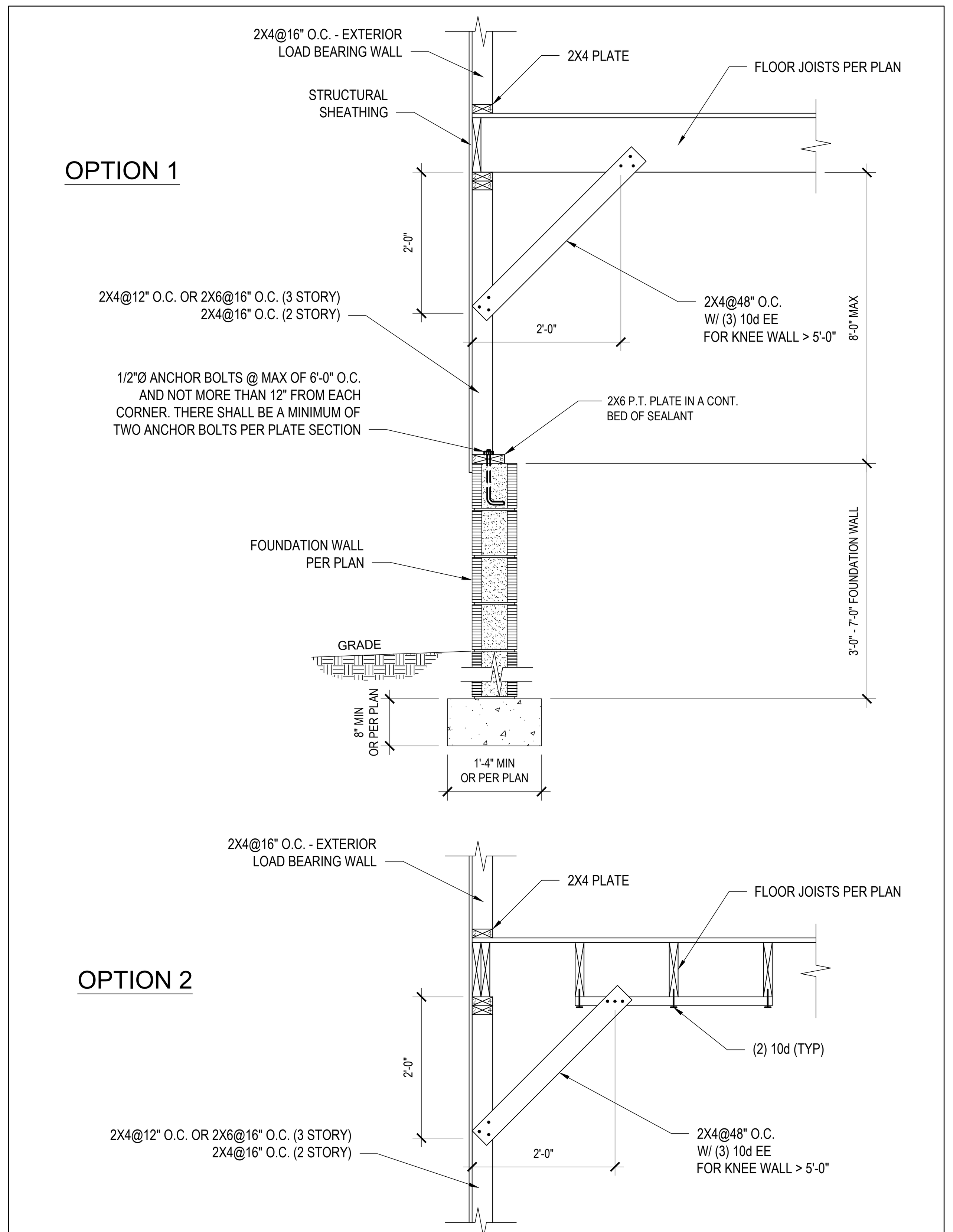
* TURN DOWN FOOTING DETAIL
NO SCALE



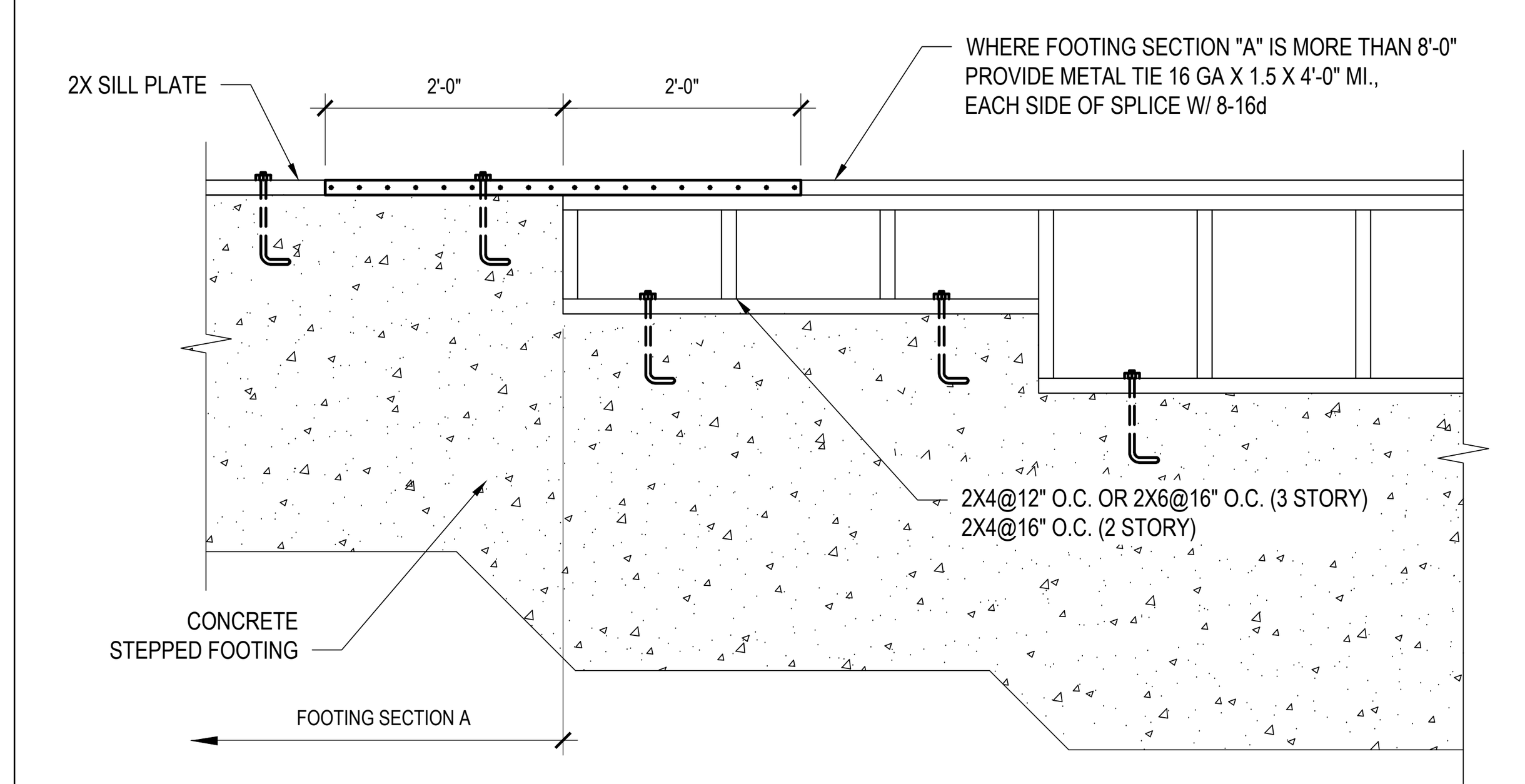
* FLUSH GIRDER DETAIL
NO SCALE



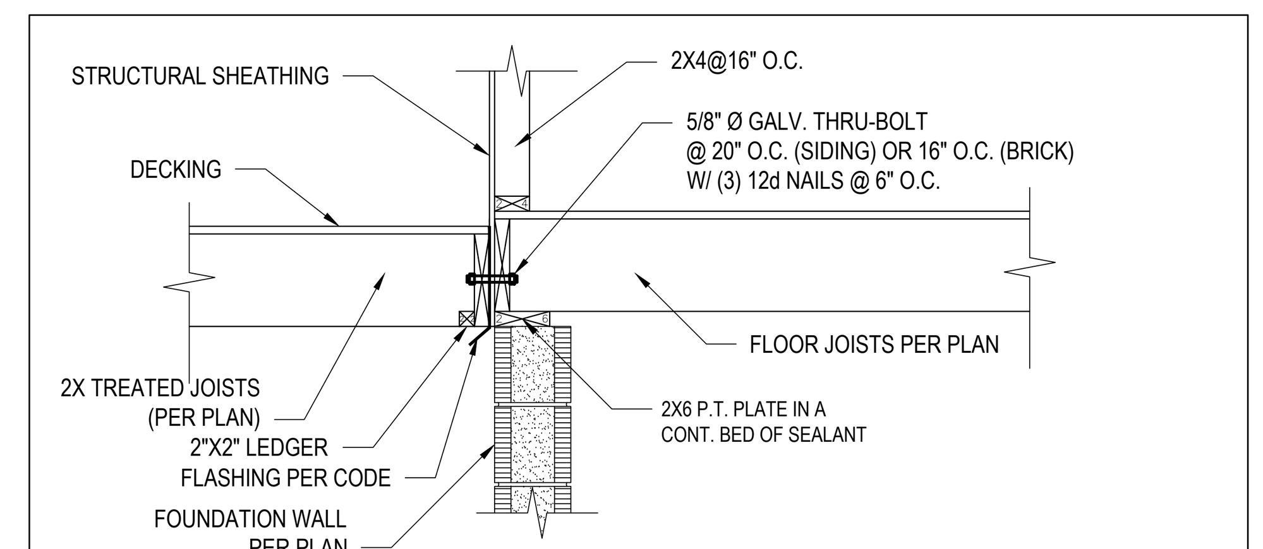
* CONCRETE SLAB ON METAL DECKING DETAIL
NO SCALE



* CRIPPLE WALL DETAIL
NO SCALE
2 OPTIONS



* STEP DOWN FOUNDATION AT CRIPPLE WALL
NO SCALE
USED WITH BOTH OPTIONS ABOVE
NOTE: WHERE FOOTING SECTION "A" IS LESS THAN 8 FEET LONG IN A 25 FEET TOTAL LENGTH WALL, PROVIDE BRACING AT CRIPPLE STUD WALL.



* DECK ATTACHMENT DETAIL
NO SCALE

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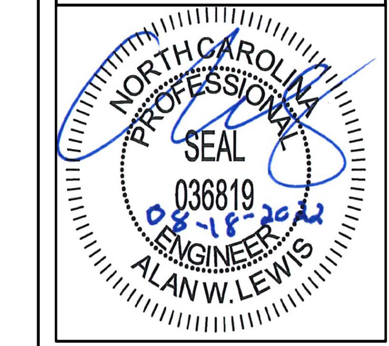

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Client: NANCY AND ALBERT FLEMING

Plan: FLEMING RESIDENCE
POINTER CREEK DR
ANGIER, NC

STANDARD DETAILS

Project #:	2201-010258
Date:	08/15/2022
Engineered By:	AWL
DWG. Checked By:	PAT
Scale:	SEE PLAN

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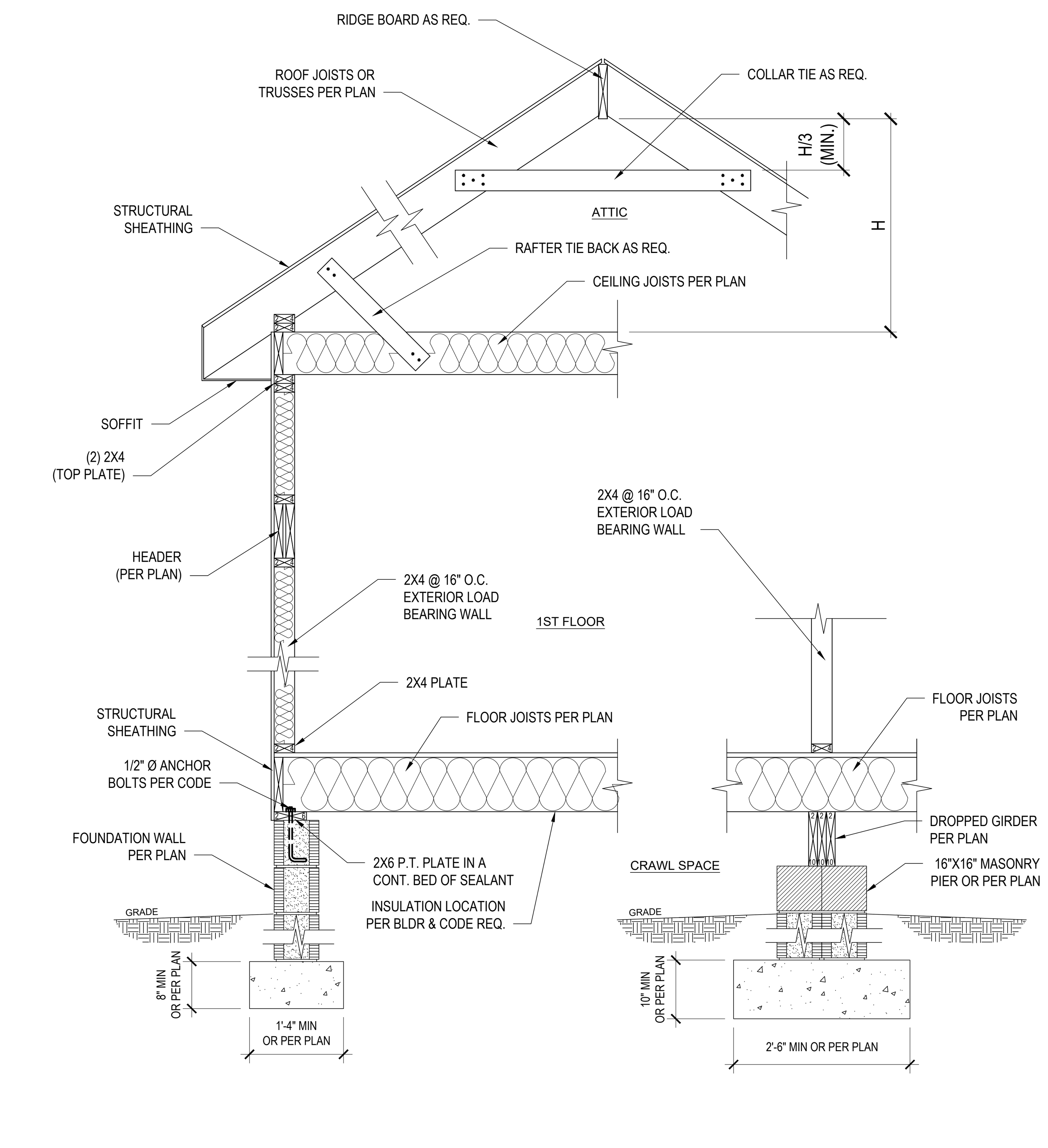
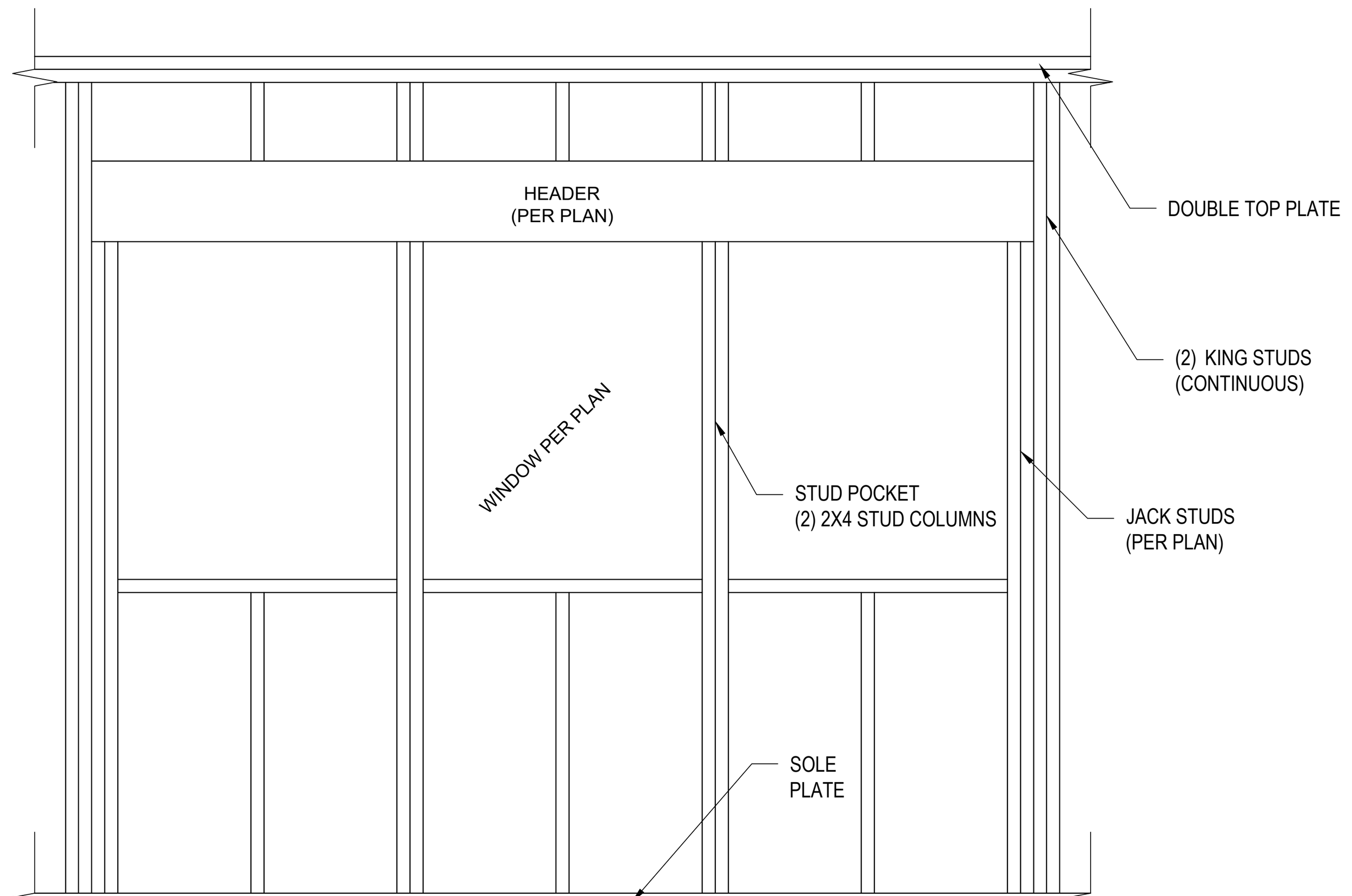
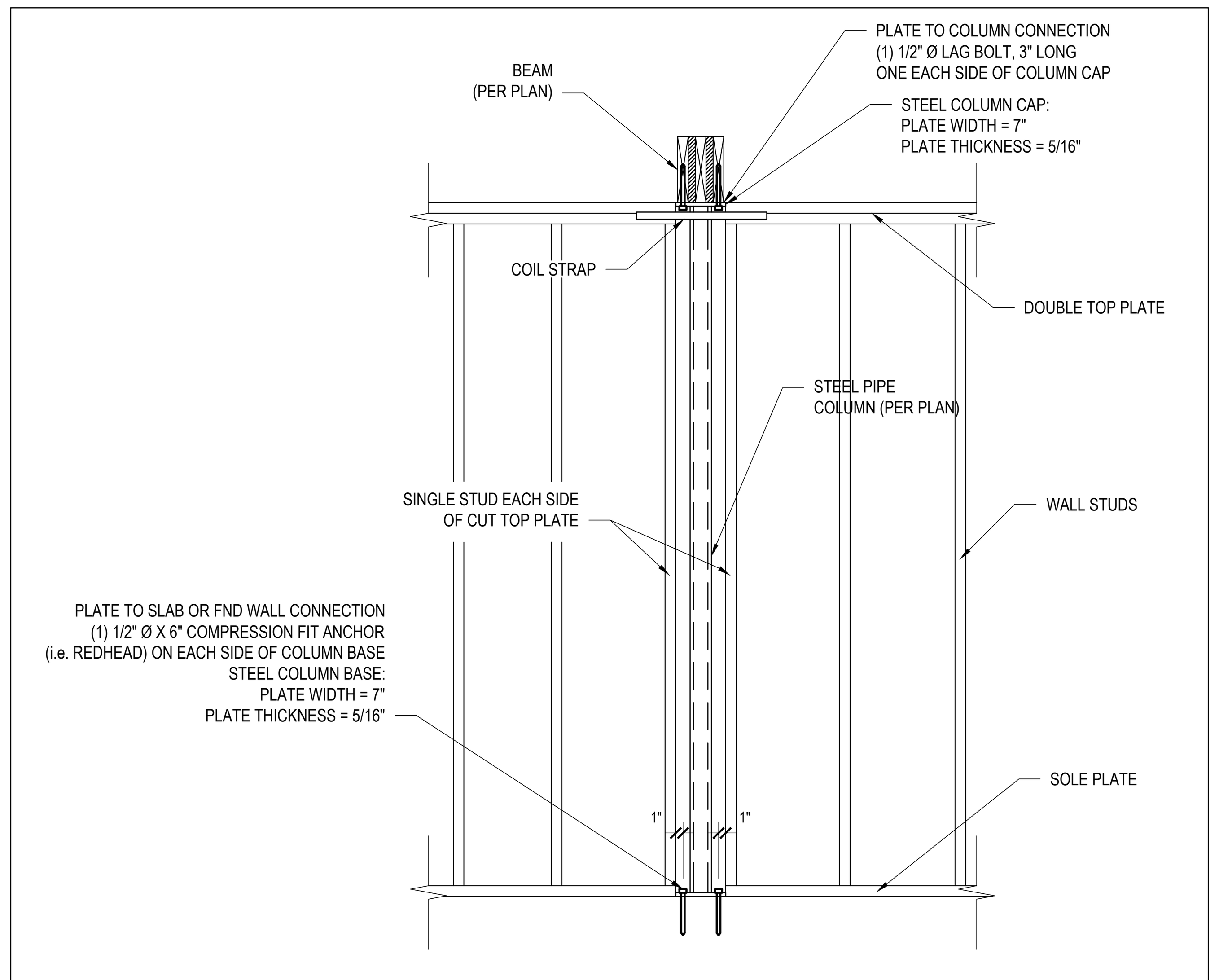


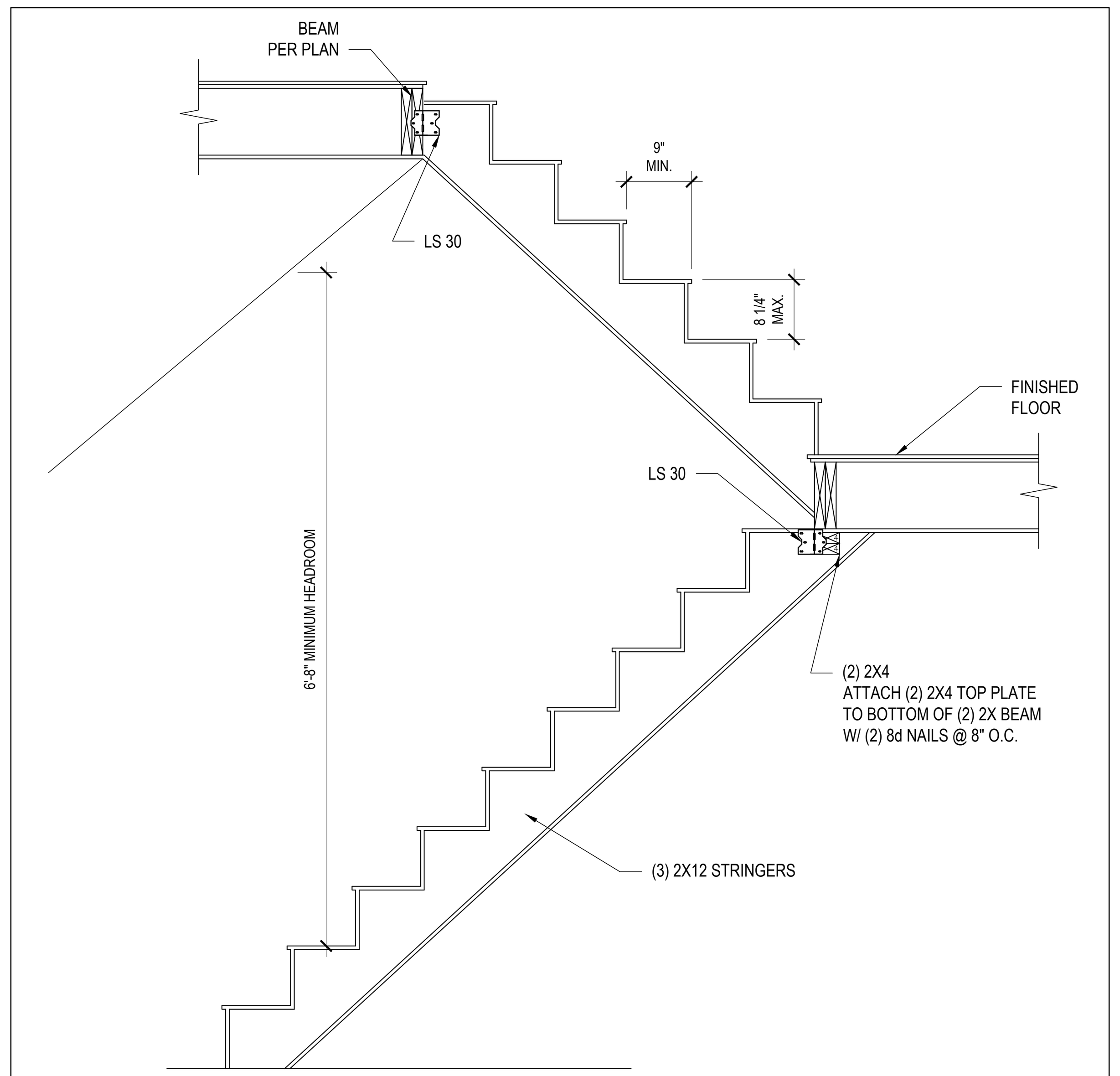
ONE-STORY ON CRAWL
TYPICAL WALL DETAIL
NO SCALE



TYPICAL WINDOW STUD POCKET DETAIL
NO SCALE

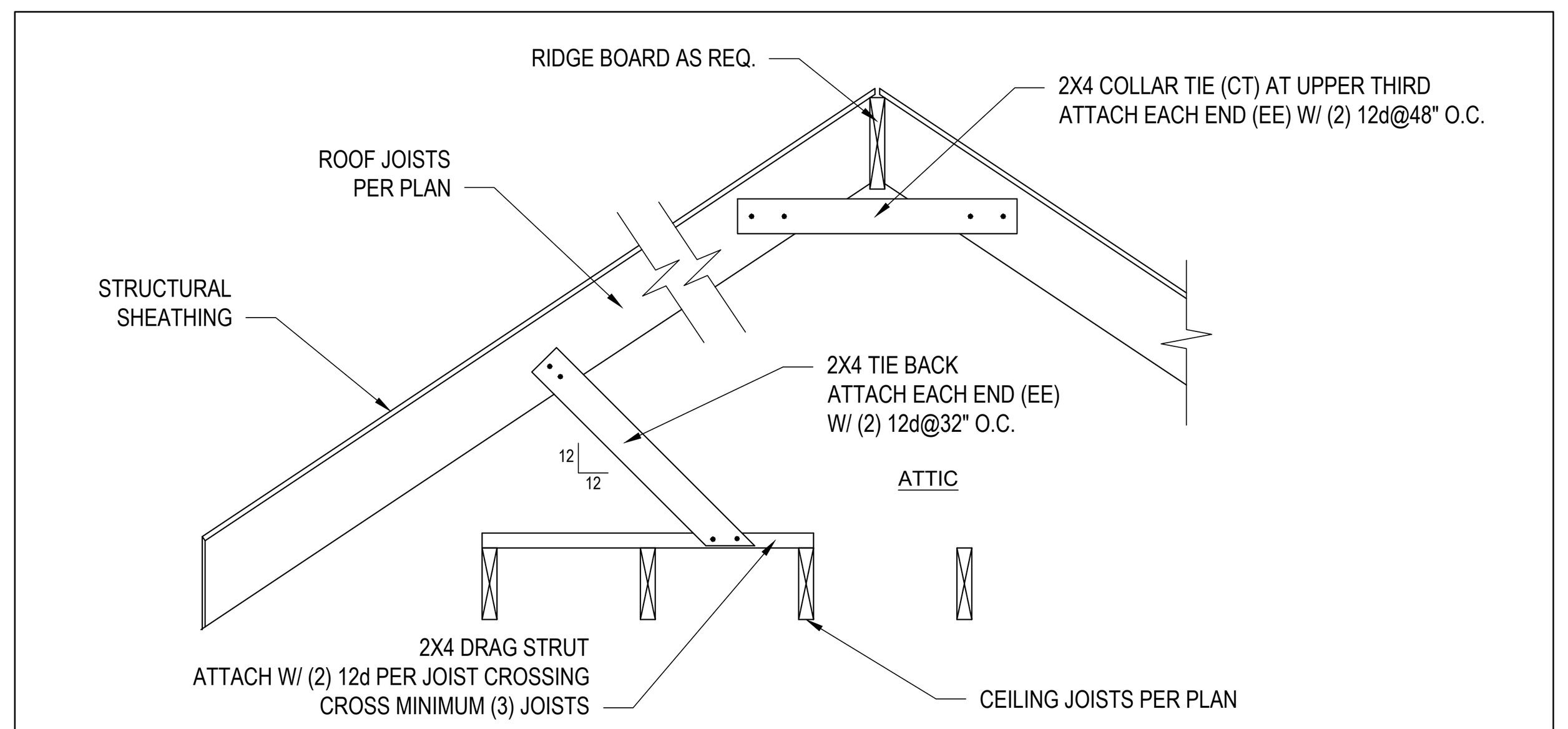


STEEL COLUMN AT WALL
NO SCALE

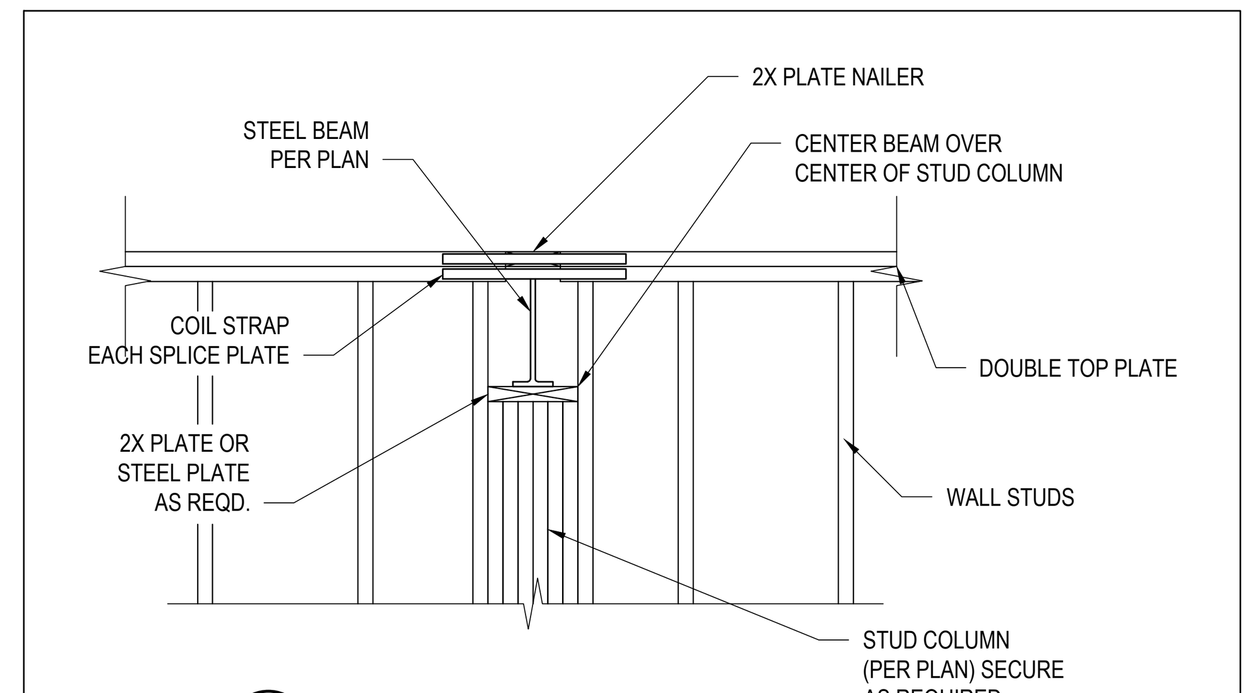


HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS. HANDRAIL HEIGHT MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL NOT BE LESS THAN 30 INCHES AND NOT MORE THAN 38 INCHES.

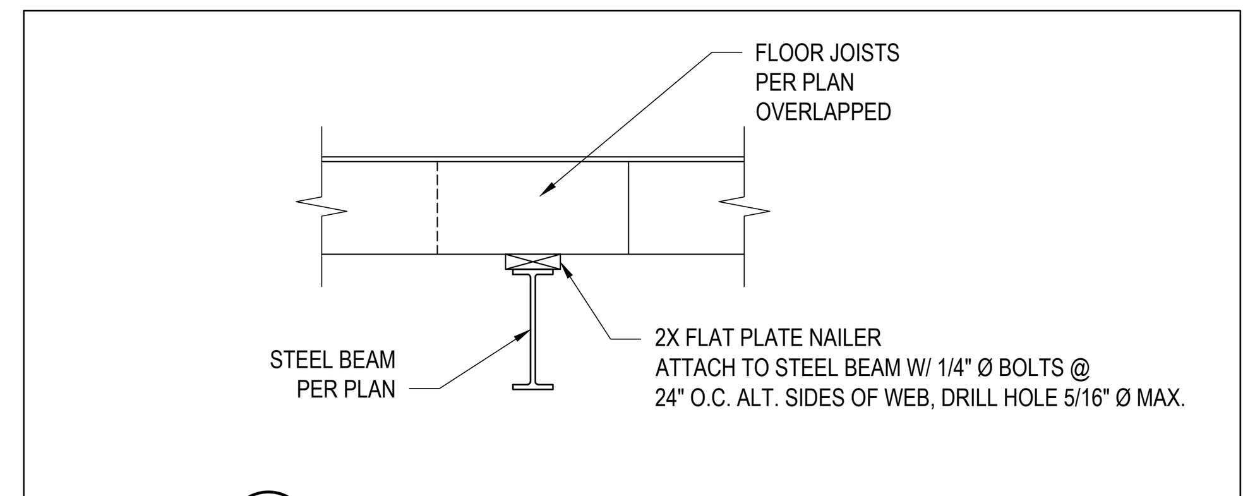
TYPICAL STAIRWAY DETAIL
NO SCALE



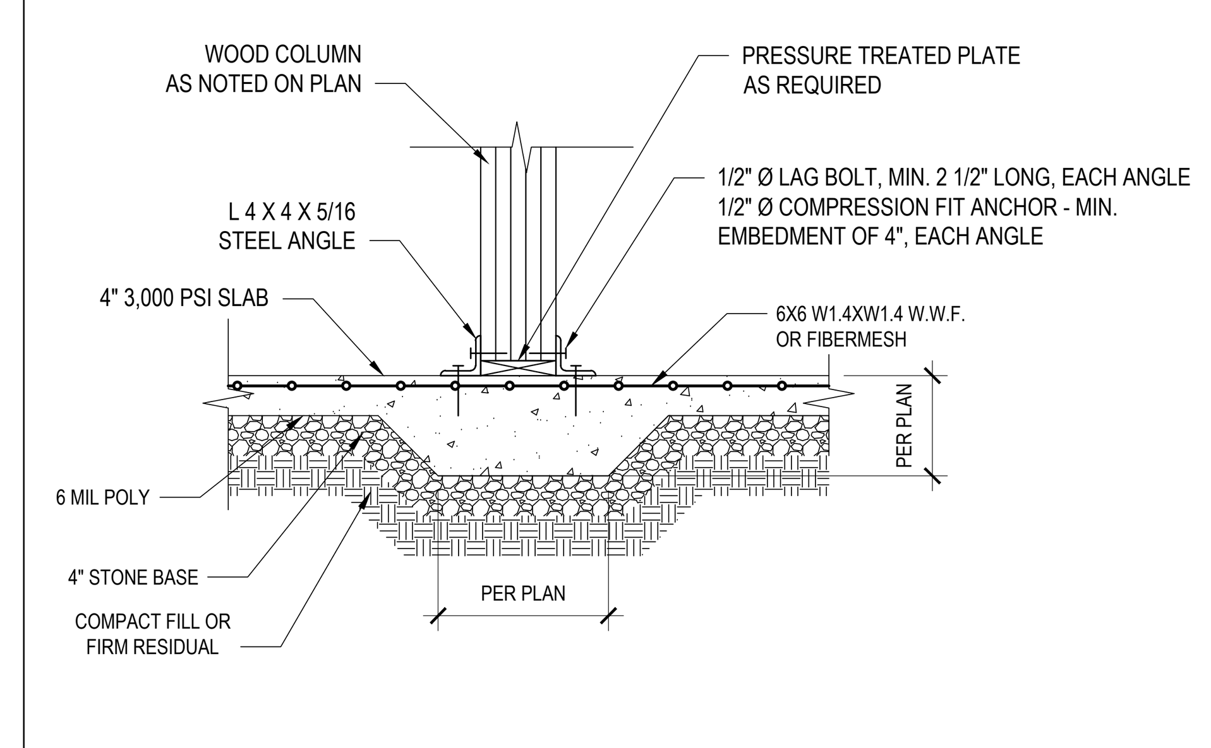
RAFTER TIE BACK DETAIL
CJ PERPENDICULAR TO RAFTERS
NO SCALE



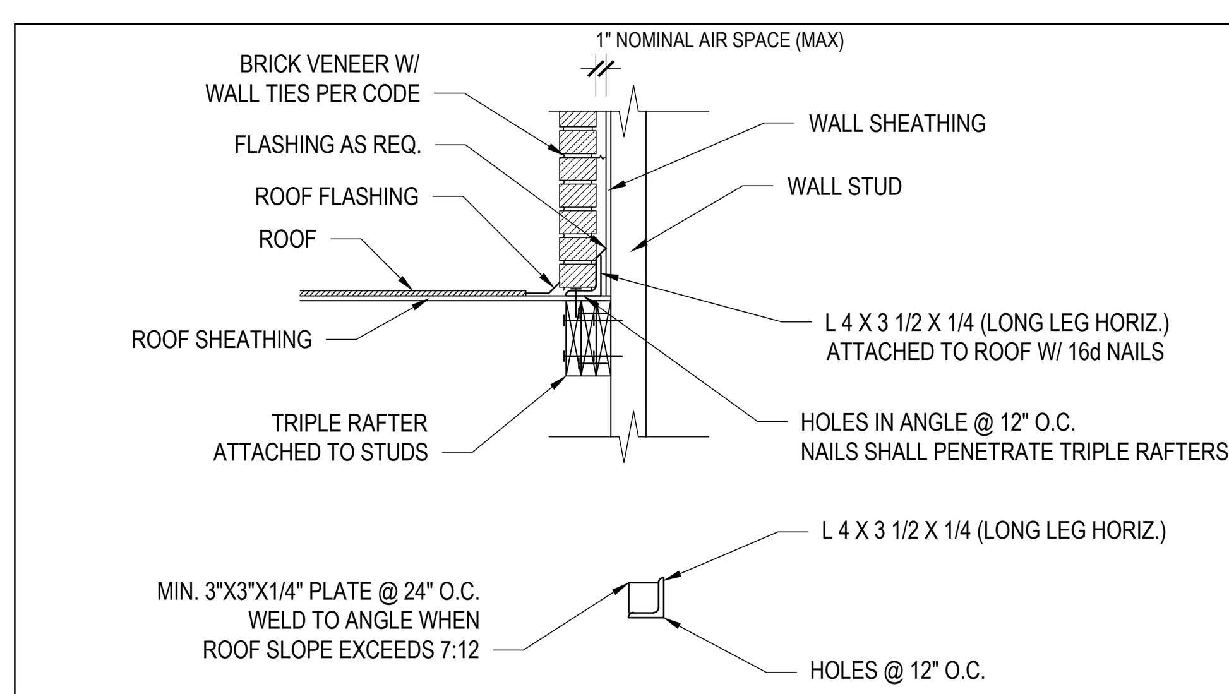
DROPPED BEAM TO STUD COLUMN DETAIL
STEEL BEAM SHOWN/LVL SIMILAR
NO SCALE



DROPPED BEAM LATERAL BRACING DETAIL
STEEL BEAM SHOWN/LVL SIMILAR
NO SCALE



BASEMENT WOOD COLUMN SLAB ATTACHMENT
NO SCALE



ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER

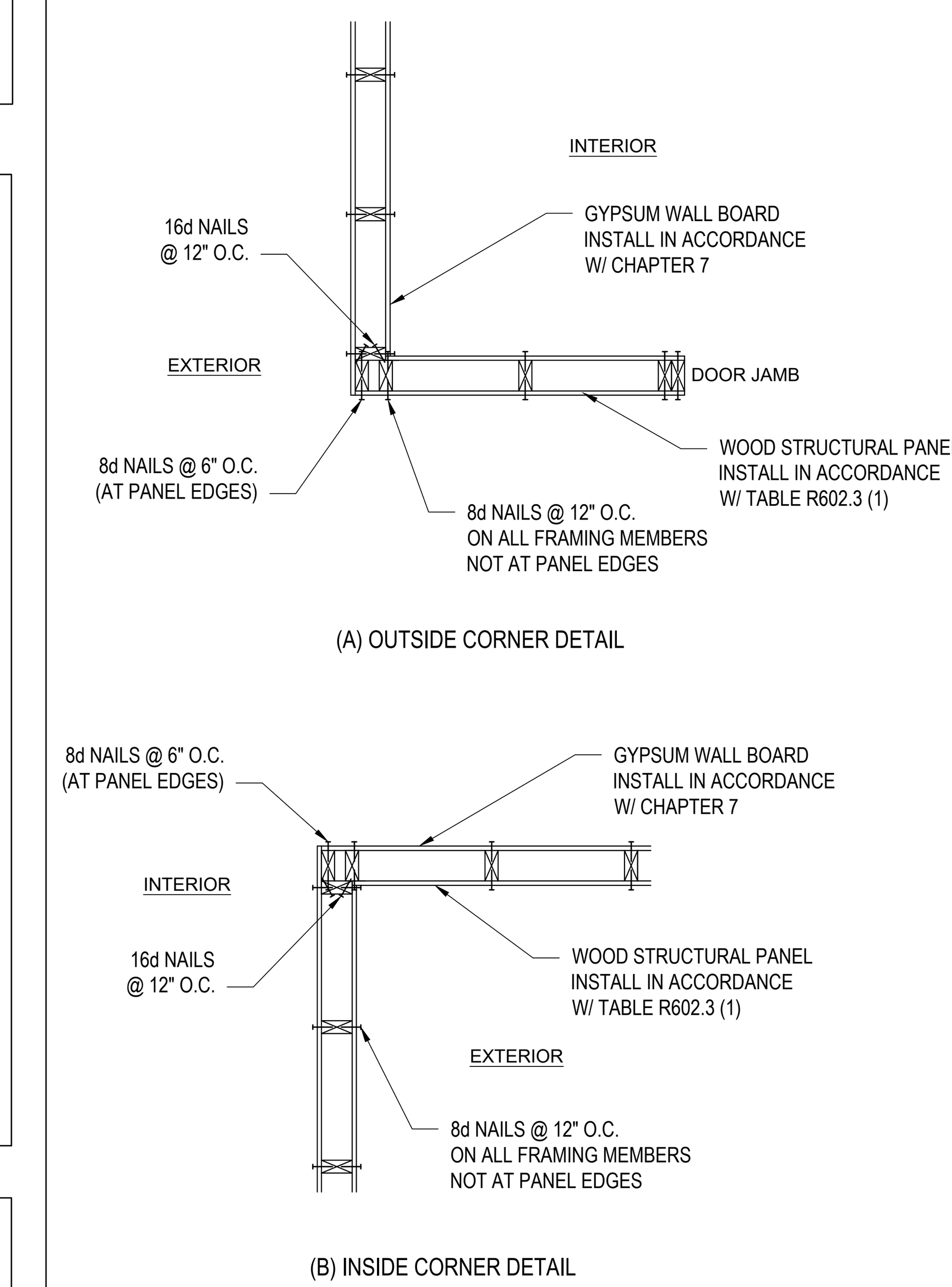
SIZE OF ANGLE (1,3)	NO STORY ABOVE (5)	1 STORY ABOVE (5)	2 STORIES ABOVE (5)	# OF ½" (OR EQUIV.) REINFORCING BARS IN REINFORCED LINTEL (2,4,5)
L 3 x 3 x ¼	6'-0"	4'-6"	3'-0"	1
L 4 x 3 x ¼	8'-0"	6'-0"	4'-6"	1
L 5 x 3 ½ x 5/16	10'-0"	8'-0"	6'-0"	2
L 6 x 3 ½ x 5/16	14'-0"	9'-6"	7'-0"	2
2L 5 x 3 ½ x 5/16	20'-0"	12'-0"	9'-6"	4

1. LONG LEG OF THE ANGLE SHALL BE PLACED IN A VERTICAL POSITION.
2. DEPTH OF REINFORCED LINTELS SHALL NOT BE LESS THAN 8" AND ALL CELLS OF HOLLOW MASONRY LINTELS SHALL BE GROUTED. REINFORCING BARS SHALL EXTEND NOT LESS THAN 8" INTO THE SUPPORT
3. STEEL MEMBERS INDICATED ARE ADEQUATE TYPICAL EXAMPLES; OTHER STEEL MEMBERS MEETING STRUCTURAL DESIGN REQUIREMENTS SHALL BE PERMITTED TO BE USED.
4. EITHER STEEL ANGLE OR REINFORCED LINTEL SHALL SPAN OPENING.
5. SPANS OVER 4'-0" SHALL BE SHORED UP UNTIL CURED.

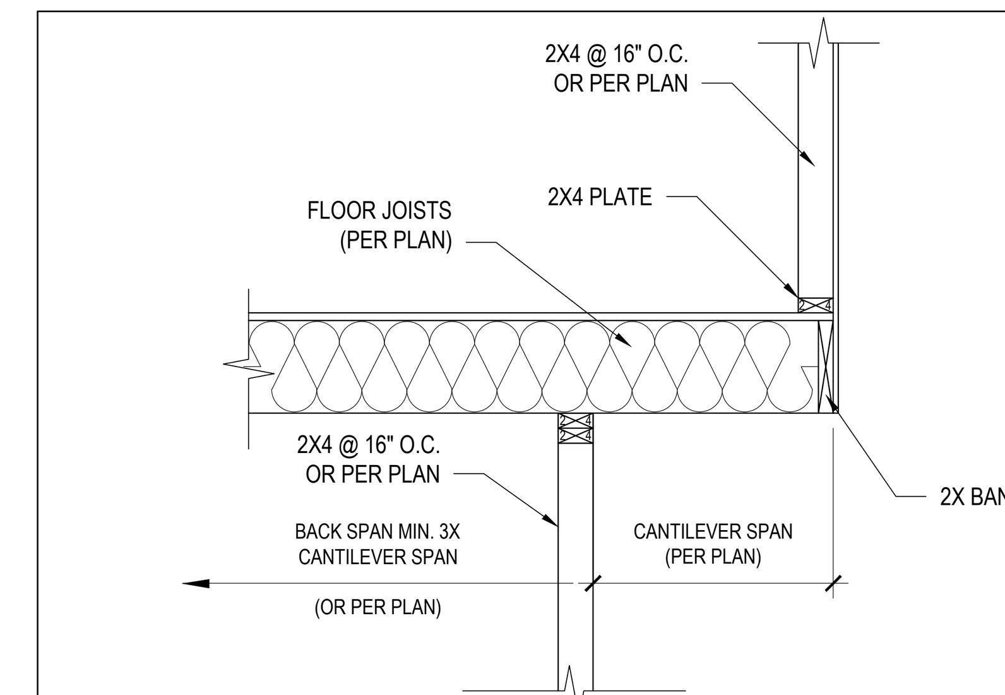
MASONRY VENEER SUPPORT FIG 703.8.3.1
NO SCALE

HARDWARE CROSS-REFERENCE CHART

SIMPSON STRONG-TIE PRODUCT NUMBER	USP STRUCTURAL CONNECTORS PRODUCT NUMBER
A35	MPA1
ABE	PAE
CBSQ	CBSQ
CCQ	KCCQ
CMSTC16	CMSTC16
CS	RS
H1	RT15
H2.5A	RT7A
H10	RT16
HDQ8-SDS3	UPHD8
HDU2-SDS2.5	PHD2
HDU5-SDS2.5	PHD5
HETA	HTA
HGAM10KTA	HGAM
HHDQ14-SDS2.5	UPHD14
HTS	HTW
HTT	HTT
HUS	HUS
LTA1	LPTA
LTHJA26	HJC26
LTP4	MP4F
LUS	JUS
MAS	FA3
MSTAM	MSTAM
PC	PCM
PHD-SDS3	PHD
SSP	RSPT6
STC	TR1
STHD	STAD



WALL BRACING DETAIL 602.10.3(4)b
NO SCALE



CANTILEVER FLOOR JOIST DETAIL
NO SCALE

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NORTH CAROLINA PROFESSIONAL SEAL 036819 ENGINEER ALAN W. LEWIS
08-18-2022

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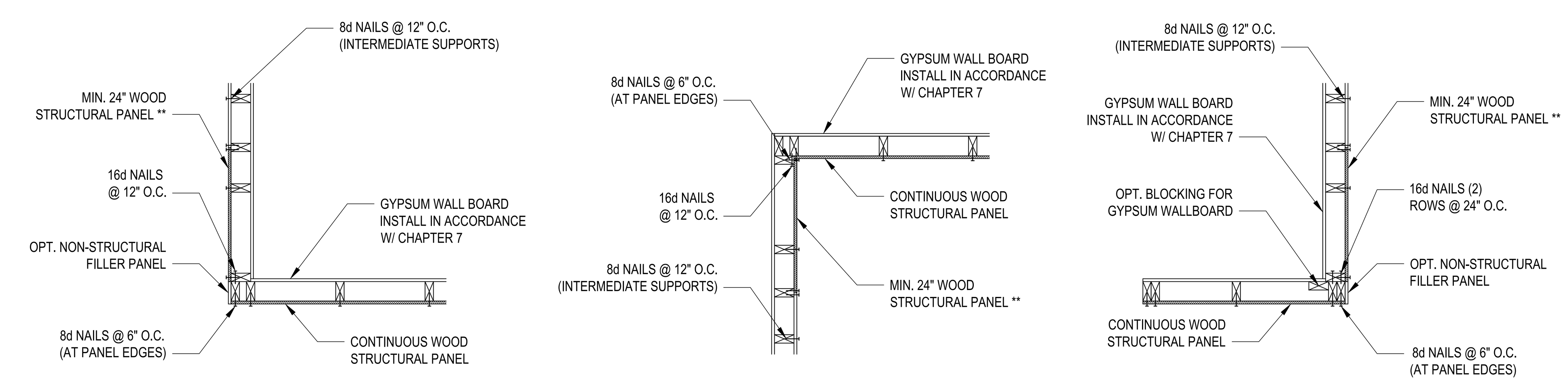


a) OUTSIDE CORNER DETAIL

b) INSIDE CORNER DETAIL

c) GARAGE DOOR CORNER

** IN LIEU OF THE 24" (MIN.) CORNER RETURN, A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE CORNER STUD AND TO THE FOUNDATION OR FRAMING BELOW.

B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING

NO SCALE

STRUCTURAL SHEATHING NOTES

1. DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
2. WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC
3. BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.

(1) REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

4. INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)

(2) 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING)

(3) 3/8" WOOD STRUCTURAL PANEL)WSP) SECURE W/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS

5. EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
6. ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
7. MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
   - 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
   - 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT
   - 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT

(4) SHEATH INTERIOR AND EXTERIOR

8. FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3 (4). IN LIEU OF A CORNER RETURN, EITHER A MINIMUM 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW

(5) MINIMUM 800# HOLD-DOWN DEVICE

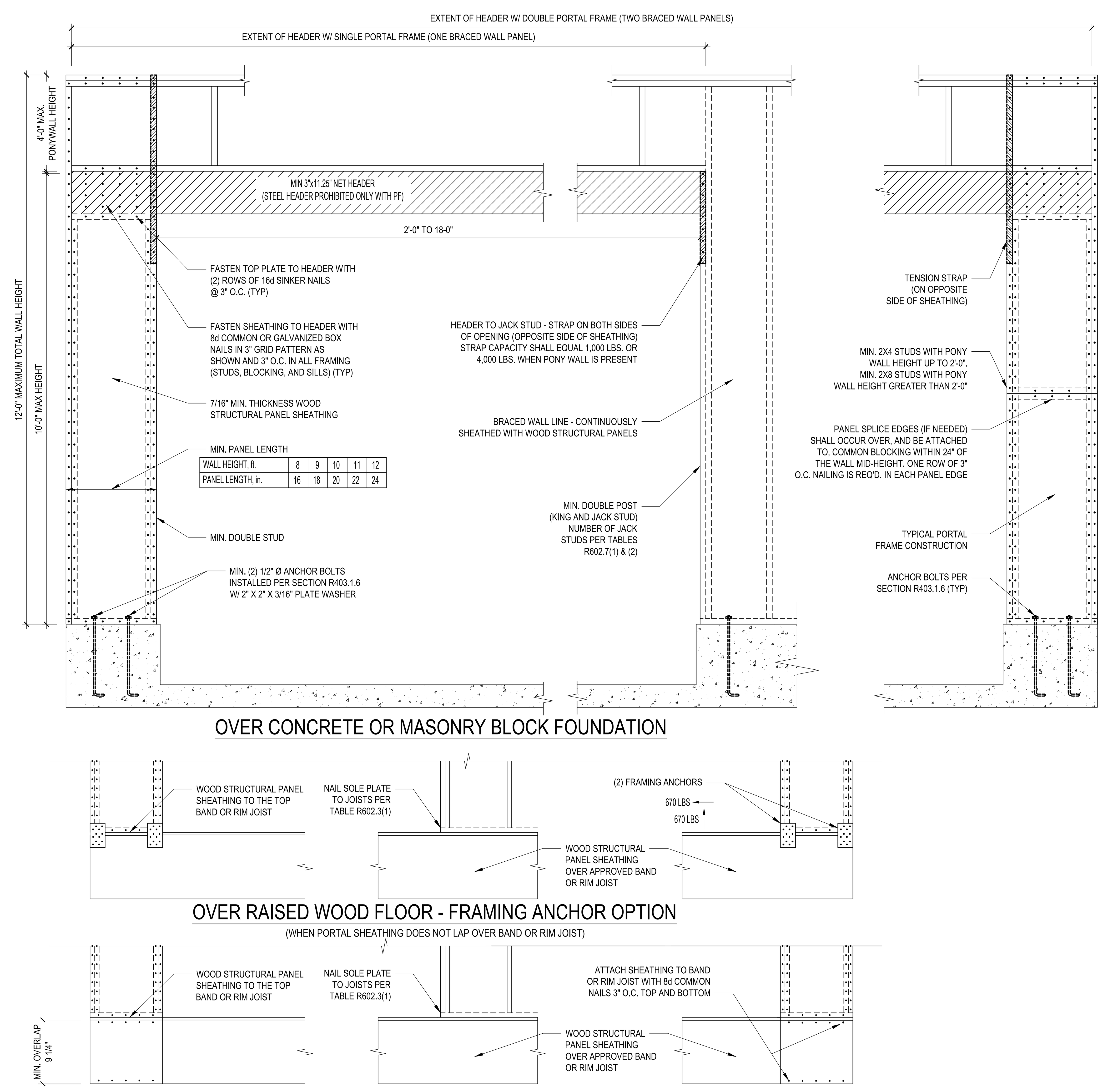
REQUIRED BRACED WALL PANEL CONNECTIONS

METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION @ PANEL EDGES	REQUIRED CONNECTION @ INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAIL** @ 7" O.C.	5d COOLER NAIL** @ 7" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.

**OR EQUIVALENT PER TABLE R702.3.5

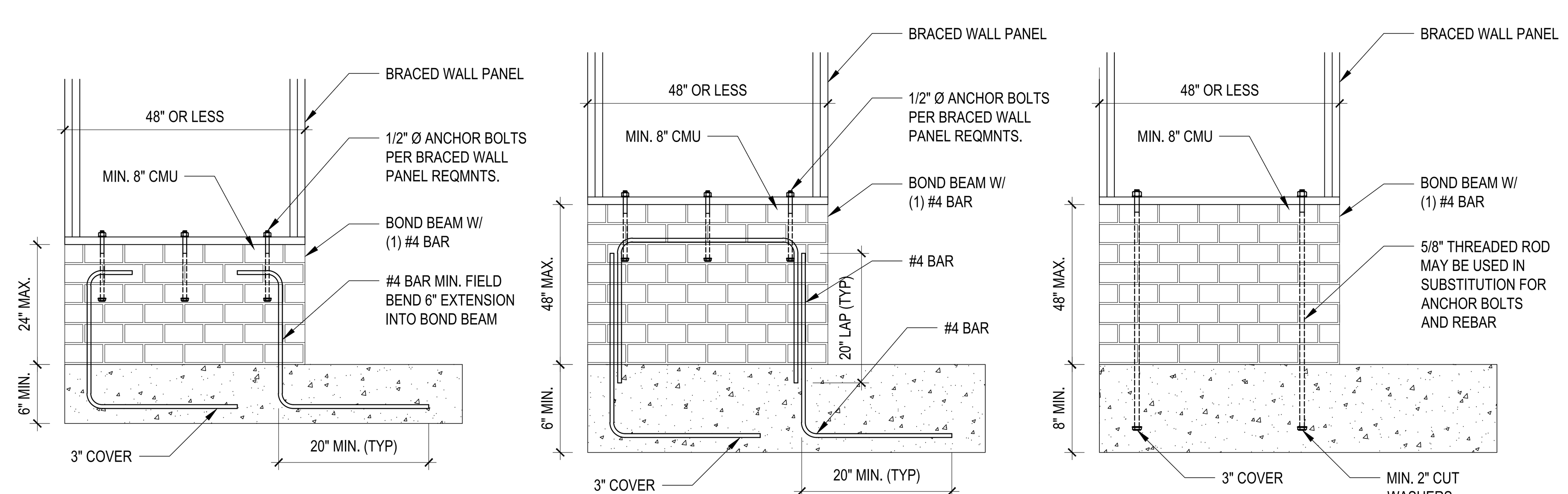
B3: BRACE WALL PANEL CONNECTIONS

NO SCALE



B2: METHOD PF: PORTAL FRAME CONSTRUCTION

FIGURE R602.10.1



B4: MASONRY STEM WALL SUPPORTING BRACED WALL PANELS

FIGURE R602.10.4.3 OF THE 2018 NCRC
NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

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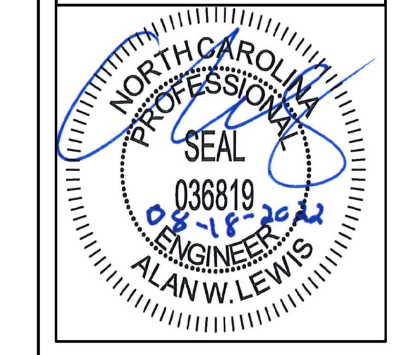

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