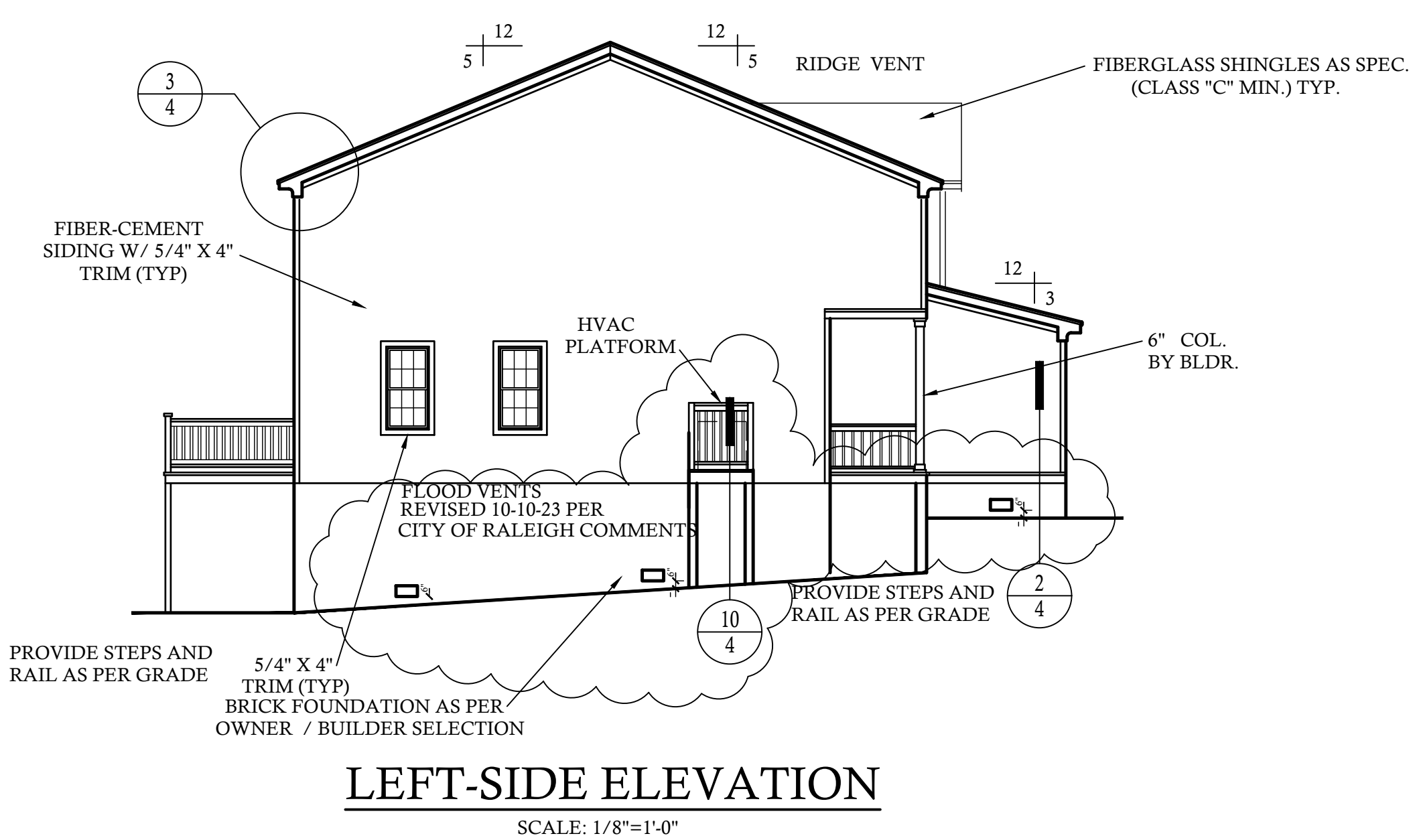
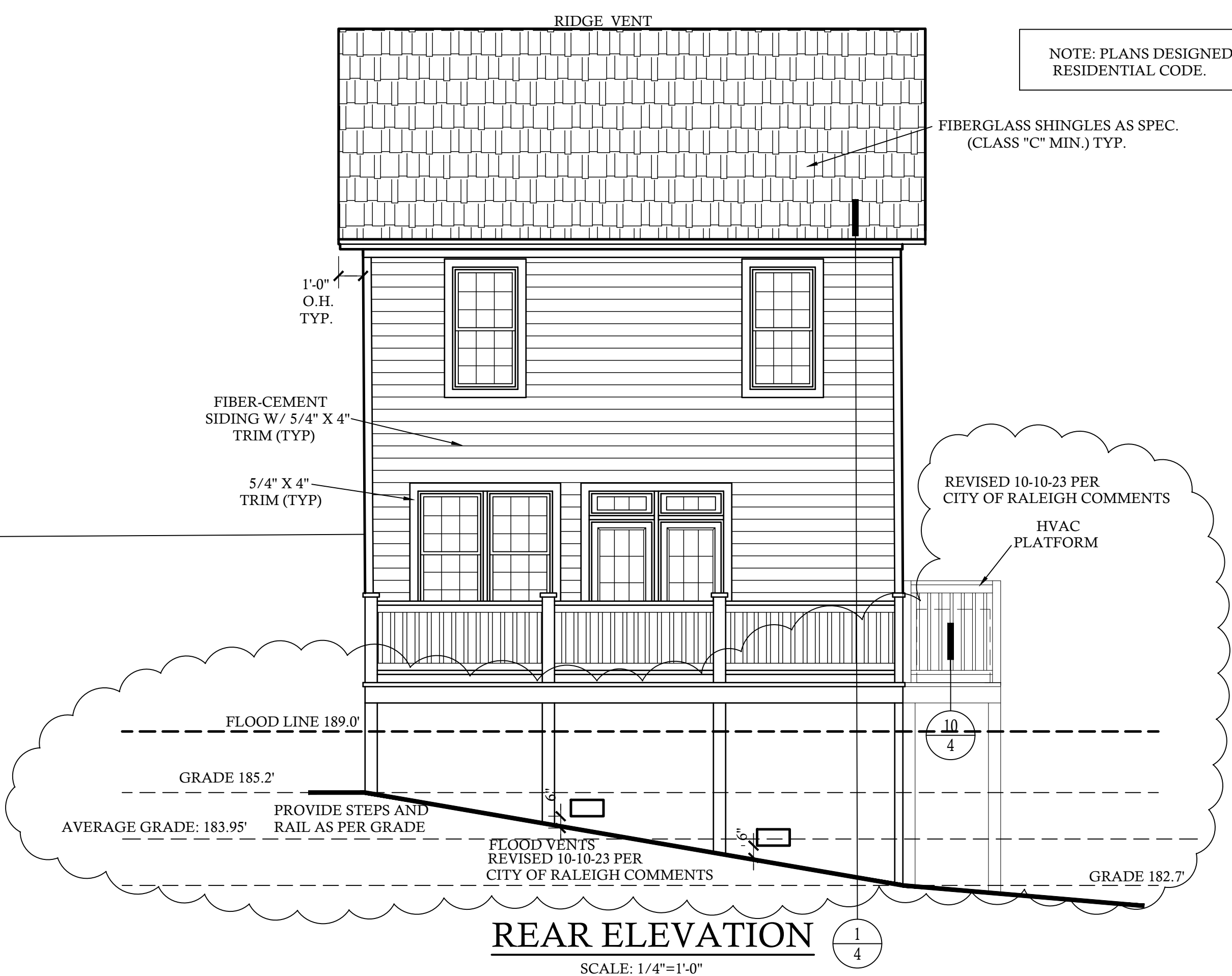




- PLANS TO BE DESIGNED UNDER 2018 NORTH CAROLINA RESIDENTIAL CODE.
- HOUSE DESIGNED FOR 115 MPH 3 SECOND GUST (89 FASTEST WIND), EXPOSURE B
- ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER & SHALL EXTEND A MINIMUM 7" INTO MASONRY OR CONCRETE
- ANCHOR BOLTS TO BE NO MORE THAN 6" O.C. AND WITHIN 12" OF THE CORNER
- WALL BRACING IS REQUIRED. DESIGNER MUST SPECIFY METHOD OF BRACING PER SECTION 602 (NC 2018 RESIDENTIAL BUILDING CODE) AND PROVIDE DETAIL.

MEAN ROOF HEIGHT = <u> < 30'-0" </u>				
COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS				
MEAN ROOF HEIGHT	UP TO 30'	30'-1" - 35'	35'-1" - 40'	40'-1" - 45'
ZONE 1	16.5, -18.0	17.3, -18.9	18.0, -19.6	18.5, -20.2
ZONE 2	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5
ZONE 3	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5
ZONE 4	18.0, -19.5	18.9, -20.5	19.6, -21.3	20.2, -21.8
ZONE 5	18.0, -24.1	18.9, -25.3	19.6, -26.3	20.2, -27.0

MINIMUM VALUES FOR ENERGY COMPLIANCE:
ZONE 4
MAX GLAZING U-FACTOR = 0.35
CEILING R-38 WALLS R-15 FLOORS R-19

1) USE CHAPTER 6 OF 2018 NCRF FOR WALL CONSTRUCTION.	5) ALL ANGLED WALLS ARE 45° UNLESS NOTED OTHERWISE.	9) ALL CABINET DESIGNS/LAYOUTS TO BE VERIFIED WITH OWNER VIA SHOP DRAWINGS FROM CABINET MANUF.
2) TEMPERED GLASS TO BE USED AT ALL SAFETY REQUIRED LOCATIONS ACCORDING TO 2018 NCRF SECTION R308.4.	6) VERIFY ALL WINDOW SIZES, RADIUS, AND DETAILS WITH CHOSEN MANUFACTURE.	10.) ALL FLOOR COVERINGS AND FINISHES BY OWNER/ BLD. COORDINATE HEIGHTS DUE TO THICKNESS CHANGES.
3) DWELLING/GARAGE FIRE SEPARATION SHALL PER TABLE 302.6 OF 2018 NCRF.	7) LOCATE DORMER FACE TO ALLOW 4" MIN. BELOW WINDOW FRAME.	11.) ALL WINDOW GLAZING TO HAVE 0.32 U-FACTOR MIN. SEE TABLE E-4A, E-4B
4) ALL HABITABLE ROOMS SHALL MEET LIGHT/VENTILATION & EGRESS AS REQUIRED IN 2018 NCRF SECTIONS R303.1 AND R310	8) FLOOR PLAN NOTATIONS GOVERN OVER ELEVATION SCALE.	

PROVIDE BLOCKING FOR:

TB = TOWEL BAR	MR = MAGAZINE RACK
TP = TOILET PAPER	MC = MEDICINE CABINET
TR = TOWEL RING	

NOTE:
SELECTION BY OWNER PER
BUILDER CONTRACT SPECIFICATIONS

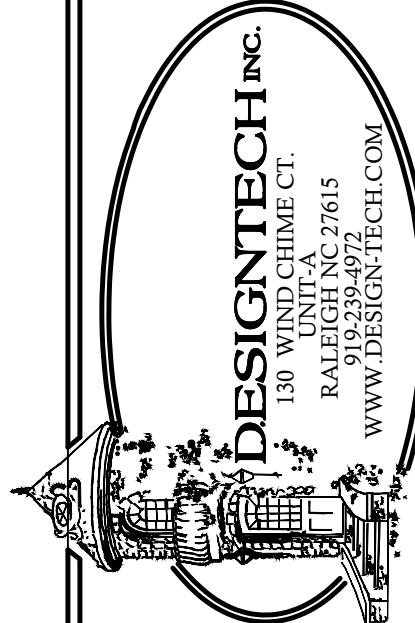
NOTE:
-SEE ROOF PLAN FOR
KNEEWALL HEIGHTS AND
LOCATIONS.

-GRADE LINES ARE ASSUMED.
VERIFY WITH FINAL GRADING PLAN.

HEATED (SQ. FT.)		UNHEATED (SQ. FT.)	
BASEMENT:	N/A	GARAGE:	251
		DECK:	176
1ST FLOOR:	673	PORCH:	54
2ND FLOOR:	881		
BONUS:	N/A	TOTAL:	481
ATTIC:	N/A	(UNHEATED)	
		<u>OVERALL DIMENSION</u>	
TOTAL:	1554	WIDTH:	22'-0"
(HEATED)		DEPTH:	56'-0"

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JCD
DATE:
7-6-22
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20-1544-D1



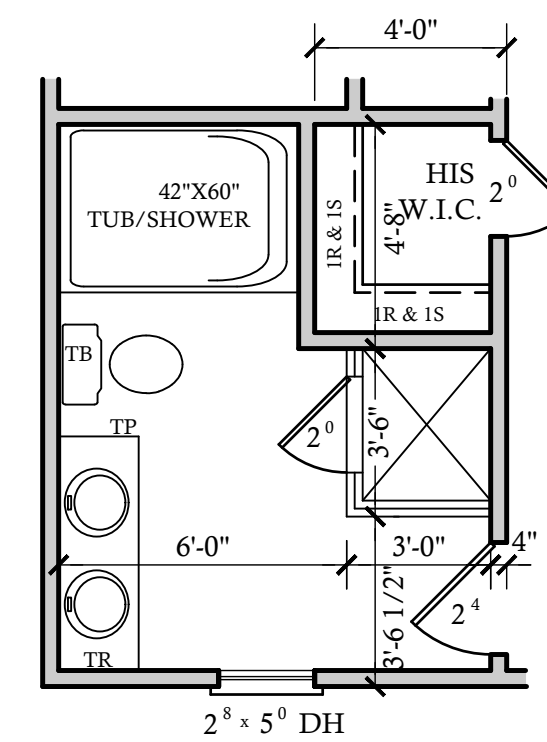
20-1554-DT
6209 RIVER BREEZE
RALEIGH, NC

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

9'-0" CLG. HGT. U.N.O.
SET WINDOWS @ 7'-10" U.N.O.

SECOND FLOOR PLAN

8'-0" CLG. HGT. U.N.O.
SET WINDOWS @ 6'-8" U.N.O.



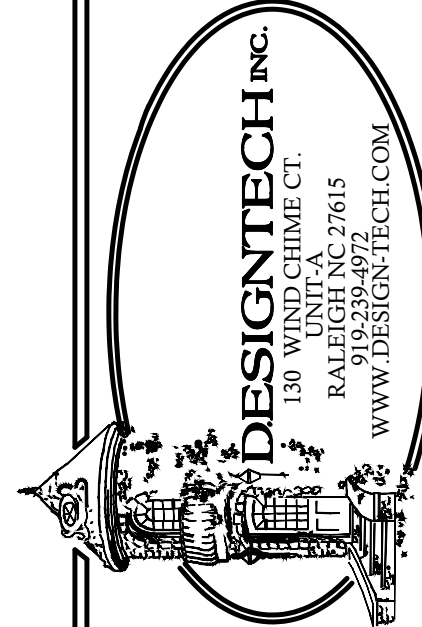
OPTIONAL SHOWER

NOTE:
SEE ROOF PLAN FOR KNEEWALL
HEIGHTS AND LOCATIONS.

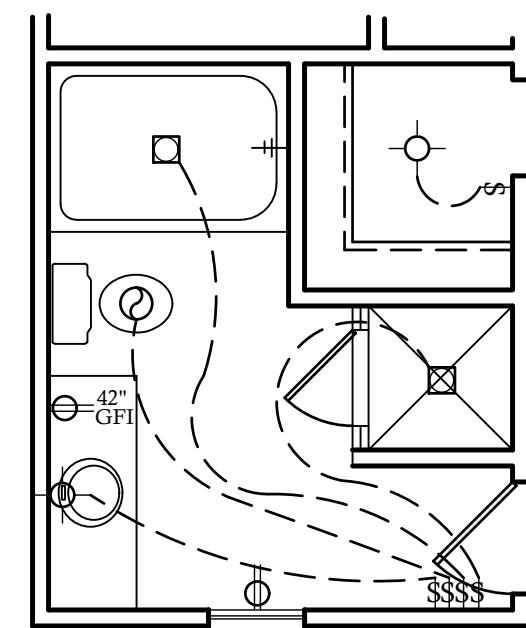
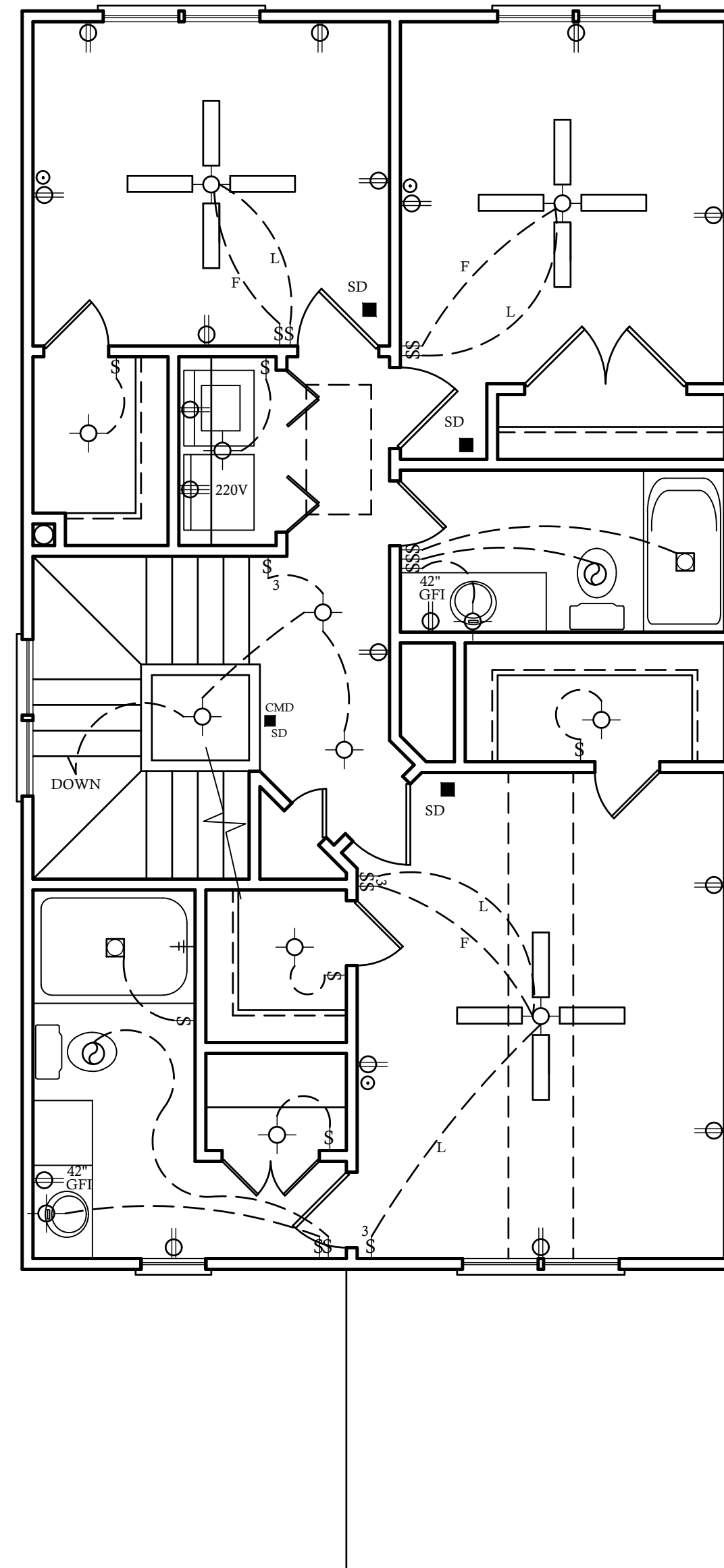
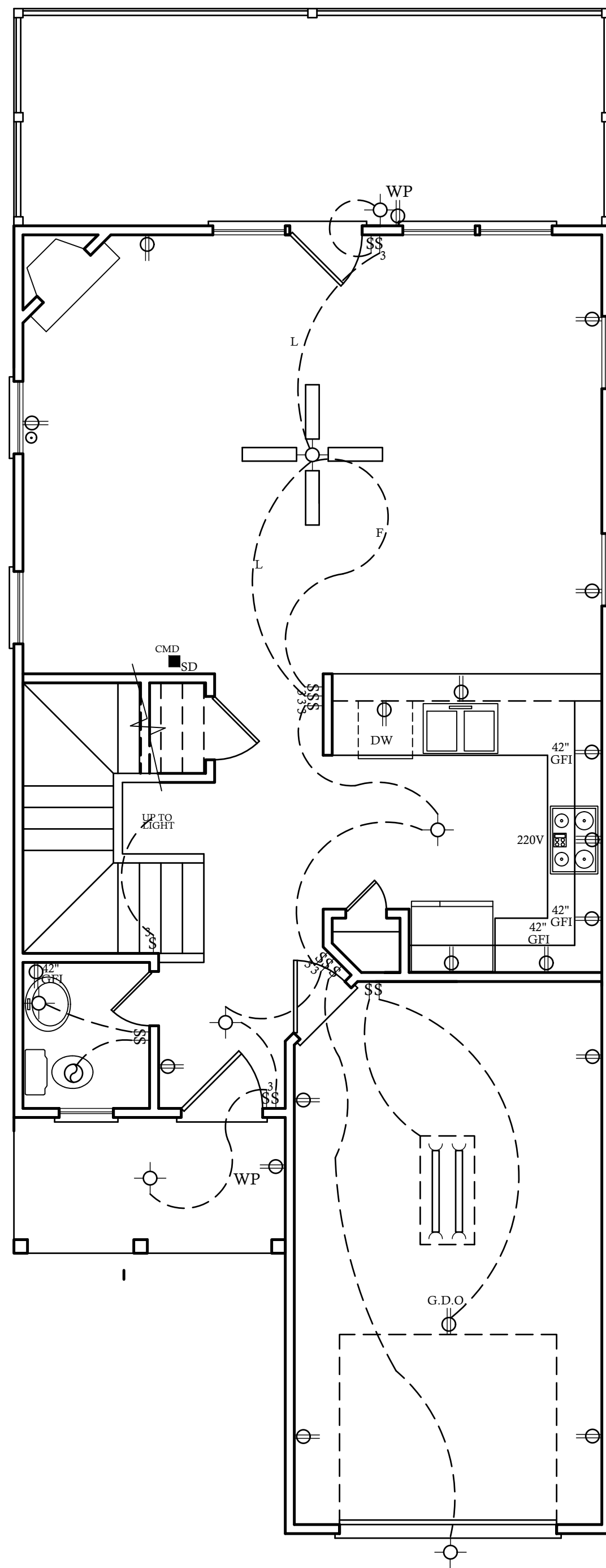
NOTE:
GRADE LINES ARE ASSUMED. VERIFY
WITH FINAL GRADING PLAN.

REVISIONS:	
DATE:	NAME:
10-24-23	GES

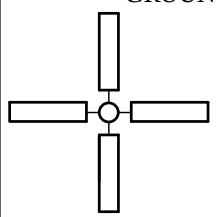
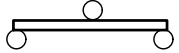
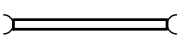
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20-1544-DT



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RALEIGH, NC



ELECTRICAL LEGEND

-  - LIGHT FIXTURE
-  - FAN/LIGHT
-  WP - WATERPROOF OUTLET
-  - RECESSED LIGHTING
-  - CAN LIGHT W/ FAN
-  - SINGLE SWITCH
-  - 3-WAY SWITCH
-  - 4-WAY SWITCH
-  - DIMMER SWITCH
-  CMO - CARBON MONOXIDE DETECTOR
-  SD - SMOKE DETECTOR
-  - FLOOD LIGHTS
-  - EYEBALL SPOTS
-  - DUPLEX RECEPTACLE (110V)
-  - 220 VOLT RECEPTACLE
-  - SWITCHED RECEPTACLE (TOP WIRE ONLY)
-  GFI - GROUND FAULT CIRCUIT INTERRUPTOR
-  - CLG FAN/LIGHTS
-  - TRACK LIGHTS
-  - FLUORESCENT/LED LIGHTING
-  - CABLE OUTLET
-  - TELEPHONE OUTLET
-  - COMPUTER DATA OUTLET
-  - INTERCOM

NOTE:
ALL ELECTRICAL INSTALLATIONS SHALL BE
IN ACCORDANCE WITH THE NEC.

ELECTRICAL NOTES:

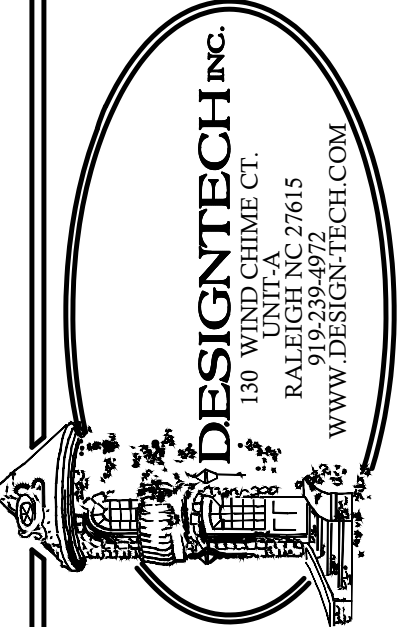
1. THE ELECTRICAL DIAGRAMS SHOWN ON THESE PLANS ARE TO BE USED AS A GUIDE. HOME OWNER AND BUILDER ARE REQUIRED TO REVIEW AND CONFIRM WITH LICENSED ELECTRICAL CONTRACTOR THESE CONTENTS PRIOR TOROUGH-IN FOR CODE COMPLIANCE AND SPECIAL REQUIREMENTS BY THE HOME OWNER. ONCE CONSTRUCTION BEGINS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR, NOT DESIGN TECH, INCORPORATED.
2. SEE ELECTRICIAN, BUILDER, AND OWNER FOR POSSIBLE GENERATOR LOCATION, SWITCHES, RECEPTACLES, AND ATTACHMENTS. COORDINATE SIZE AND MODEL OF GENERATOR TO HANDLE LOADS ADEQUATELY.
3. UNDER-CABINET COUNTER LIGHTING FOR KITCHEN IS OPTIONAL. PLEASE CONFIRM WITH CABINET MAKER AND ELECTRICIAN.
4. ELECTRICAL FOR EXTERIOR LANDSCAPE LIGHTING AND POOL EQUIPMENT BY BUILDER AS PER CODE.
5. IT IS AN OPTION FOR EVERY TOP RECEPTACLE AT FRONT WINDOWS TO BE ON ONE SWITCH LOCATED BY OWNER/ BUILDER FOR WINDOW DECORATION LIGHTING.
6. CLOSET LIGHTING TO BE CONTROLLED BY SWITCH AS SHOWN OR IN-JAMB SWITCH WHICH WOULD ILLUMINATE LIGHT WHEN DOOR IS OPENED. SOME ELECTRICAL PLANS MAY OR MAY NOT SHOW CLOSET LIGHTING. SEE OWNER AND CONFIRM WITH BUILDER.
7. EXHAUST FANS ARE REQUIRED IN BATHROOMS WITHOUT NATURAL VENTILATION. OUR PLANS WILL ALWAYS SHOW EXHAUST FAN.
8. NO HEAT LAMPS OR HEATERS MAY BE SHOWN IN THIS DRAWING. PLEASE CONFIRM WITH BUILDER FOR PRESENCE AND LOCATION.
9. ALL SLEEPING AREAS/BEDROOMS SHOULD CONTAIN SMOKE DETECTORS. SOME CORRIDORS ALSO REQUIRE SMOKE DETECTORS. PLEASE SEE LOCAL, STATE, AND FEDERAL BUILDING CODES TO CONFIRM THESE REQUIREMENTS.
10. PANEL BOX LOCATION BY ELECTRICIAN/BUILDER AS PER CODE.

AND DIMENSIONS PRIOR TO CONSTRUCTION. ANY ERROR OR OMISSIONS SHALL BE REPORTED TO DESIGN TECH, INC. FOR CORRECTIONS OR JUSTIFICATION. CONTRACTOR MUST COMPLY WITH ALL LOCAL BUILDING CODES WHERE HOME IS TO BE BUILT. IF NO ENGINEERING DRAWINGS ARE PROVIDED, CONTRACTOR MUST CONSULT WITH LOCAL ENGINEER FOR STRUCTURAL DESIGN. ONCE CONSTRUCTION HAS BEGUN, CONTRACTOR WILL ASSUME ALL RESPONSIBILITY. PLAN HAS BEEN DESIGNED TO COMPLY WITH 2018 NCCRC.

REVISIONS:

DATE:	NAME:
10-24-23	GES

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DATE:
-6-22
PLAN NO.
D-1544-DT



20-1554-DI
6209 RIVER BREEZE
RALEIGH, NC

MATERIAL REFERENCE

1. CONT. POURED CONC. FOOTING
2. 4 X 8 X 16 CM.U.
3. 6 X 8 X 16 CM.U.
4. 8 X 8 X 16 CM.U.
5. 12 X 8 X 16 CM.U.
6. BRICK
7. SOLID MASONRY CAP
8. 4" CONCRETE SLAB
9. 6 MIL VAPOR BARRIER
10. 4" STONE BASE
11. 6" X 6" 10-10 W.W.M.
12. 2 X 4 TREATED SILL PLATE
13. 2 X 6 TREATED SILL PLATE
14. 2 X 6 JOIST
15. 2 X 6 BAND
16. 2 X 8 JOIST
17. 2 X 8 BAND
18. 2 X 10 JOIST
19. 2 X 10 BAND
20. A.P.A. RATED SUBFLOOR
21. A.P.A. RATED UNDERLAYMENT
22. 2 X 4 SOLE PLATE
23. 2 X 4 STUD WALL
24. DBL 2 X 4 TOP PLATE
25. 2 X 6 SOLE PLATE
26. 2 X 6 STUD WALL
27. DBL 2 X 6 TOP PLATE
28. EXTERIOR SHEATHING
29. SHEATHING PAPER
30. 1/2" DRY WALL
31. R-15 BATT INSULATION MIN.
32. BRICK VENEER
33. WALL TIE
34. WEEP HOLES @ 16" O.C. HORIZ.
35. FLASHING AS REQ. PER CODE
36. SELF FURRING GALV METAL LATH
37. METAL BEAD
38. STUCCO PLASTER
39. SIDING AS SPECIFIED
40. TPL 2 X BLOCKING
41. WOOD FILLER
42. 1 X FRIEZE BOARD
43. NAILER
44. LOOKOUT
45. 3/8" EXT PLYWOOD SOFFIT
46. SOFFIT VENT
47. SUB FASCIA
48. 1 X FASCIA
49. METAL DRIP STRIP
50. SHINGLES AS SPECIFIED
51. 15 L.B. FELT PAPER
52. A.P.A. RATED SHEATHING
53. 2 X 8 RAFTER
54. 2 X 6 RAFTER
55. R-38 BATT INSULATION MIN.
56. C.M.U. PIER
57. TREATED 2 X 6 SHIM PLATE
58. GIRDER SIZE PER PLAN
59. 2 X 2 LEDGER BOARD
60. 1/2" EXPANSION JOINT
61. 1 1/2" RIGID INSULATION (R 5.0 MIN)
62. WATERPROOFING
63. 4" PERFORATED DRAIN TILE (SLOPE TO DRAIN)
64. CRUSHED STONE W/ INFILTRATION BARRIER ABOVE
65. CONC. WASH
66. 2 X 4 RAFTER, TIE BACKS PER ENG. SPECS. AT MIN EVERY 12TH RAFTER
67. SEE STRUCTURAL SHEETS FOR FLOOR JOIST DIRECTION & SIZES
68. R-19 BATT INSULATION (MIN.)
69. POURED CONC. FND. WALL
70. OPT. TIRM SIEE RAIL
71. STONE VENEER
72. TRUSSES PER MANUFACTURER
73. STUCCO DRIP CAP
74. STUCCO ON CMU OR CONCRETE WALL
75. HAND W/ DRIP CAP
76. SOFFIT BED MOLD TRIM
77. 2 X 8 TREATED SILL PLATE
78. 2 X 12 JOIST
79. 2 X 12 BAND
80. 66 MIL OF TIRU WALL FLASHING

BRICK

CONC. MASONRY UNIT

CONCRETE

STEEL

EARTH

BATT INSULATION

RIGID INSULATION

STUCCO

WOOD

STONE

GRAVEL BED

WELDED WIRE MESH

DETAIL NUMBER

SHEET NUMBER

INT ELEV LETTER

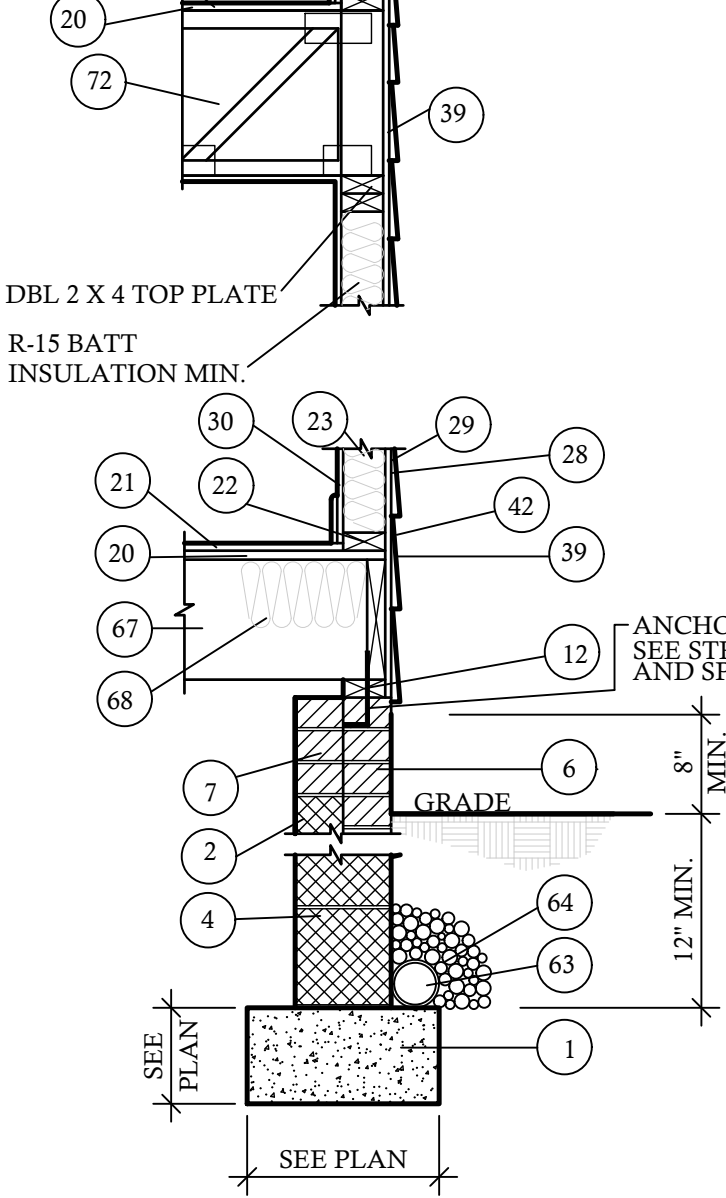
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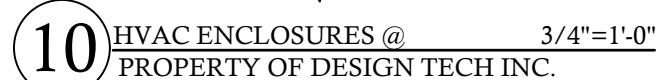
SECTION NUMBER

ROOF PITCH RATIO

ROOM NUMBER



2 GARAGE WALL W/ SIDING @ 3/4"=1'-0"
PROPERTY OF DESIGN TECH INC.
DESIGNED FOR 115 MPH WINDS



NOTE - VERIFY W/ MANUF. UNIT MODEL NO. & DIMENSIONS REQUIRED FOR FRAMING AROUND FIREPLACE UNIT PRIOR TO CONSTRUCTION



NOTE: SEE SHEET S-1
FOR FLOOD VENT CALC'S

FV= FLOOD VENTS
GFV= GARAGE FLOOD VENTS

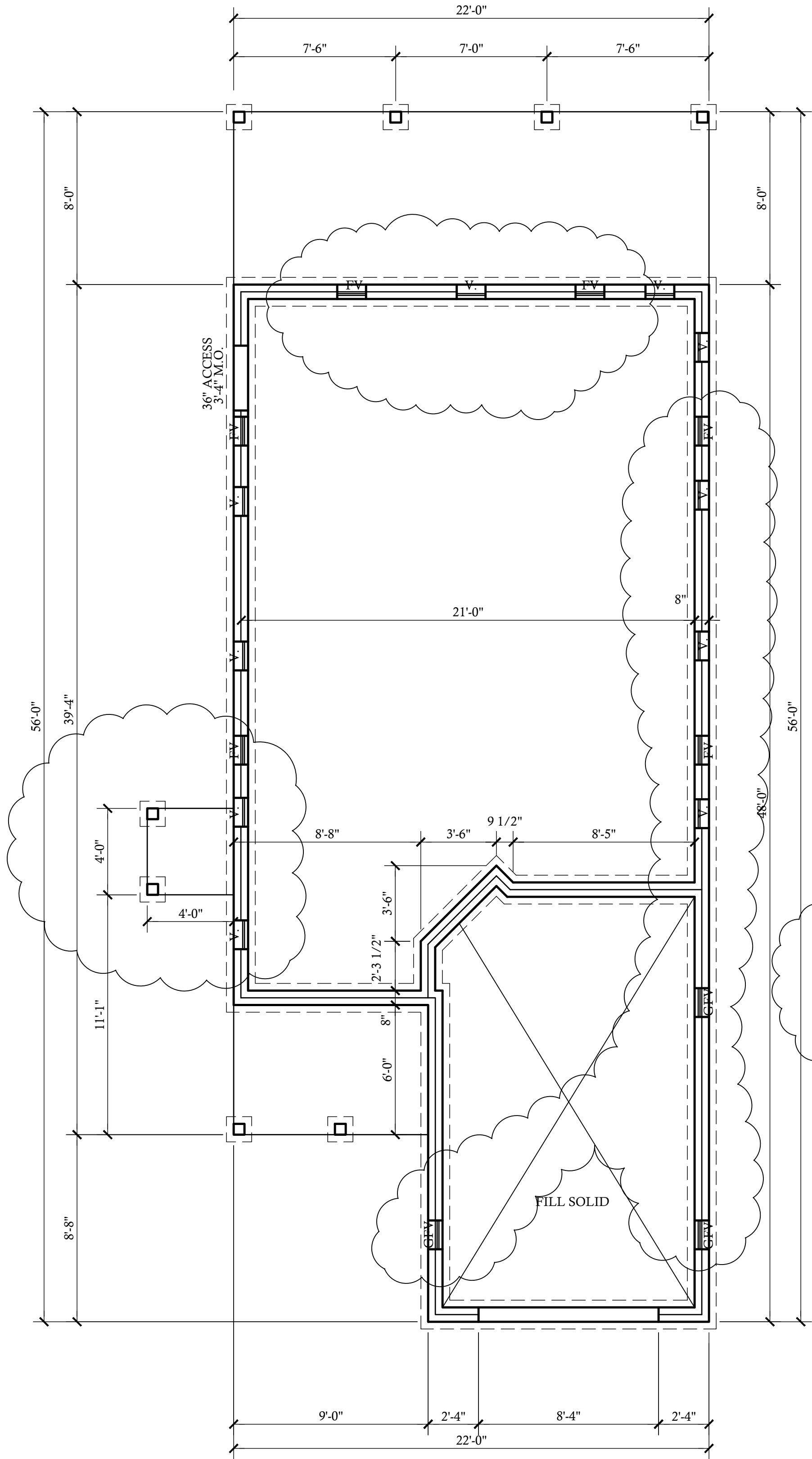
CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ANY ERROR OR OMISSIONS SHALL BE REPORTED TO DESIGN TECH. INC. FOR CORRECTIONS OR JUSTIFICATION. CONTRACTOR MUST COMPLY WITH ALL LOCAL BUILDING CODES WHERE HOME IS TO BE BUILT. IF NO ENGINEERING DRAWINGS ARE PROVIDED, CONTRACTOR MUST CONSULT WITH LOCAL ENGINEER FOR STRUCTURAL DESIGN. ONCE CONSTRUCTION HAS BEGUN, CONTRACTOR WILL ASSUME ALL RESPONSIBILITY.

PLAN HAS BEEN DESIGNED TO COMPLY WITH

REVISIONS:	
DATE:	NAME:
10-24-23	GES

DRAWN BY:
GES
CHECKED BY:
JCD
DATE:
7-6-22
PLAN NO.
20-1544-D1

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FOUNDATION VENT PLAN

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

-VENT LOCATIONS ARE TO BE VERIFIED PRIOR TO CONSTRUCTION W/ BUILDER BASED ON SECTION R-408 IN THE 2018 NCRC.

-CRAWL SPACE TO HAVE A MIN. OF 24" OF CLEAR SPACE ABOVE GRADE.

-A MIN. OF 36" OF CLEAR SPACE ABOVE GRADE IS NEEDED WHEN HVAC UNIT IS LOCATED IN CRAWL, PROVIDE A CLEAR PATH FROM ACCESS TO THE HVAC UNIT.

ROOF VENTILATING REQUIREMENTS

SQ.FT. OF AREA VENTILATED $\frac{980}{150}$ (144) = $\frac{940.8}{150}$ TOTAL SQ. IN. OF ATTIC VENTILATION REQ'D

NOTE: FIGURE BASED ON SECTION R-806.2 OF THE 2018 NCRC .

MINIMUM NET FREE VENTILATING AREA IS PERMITTED TO BE REDUCED TO 1 TO 300 WHEN CONDITIONS ARE MET AS PER SECTION R806.2 OF THE 2018 NCRC

INLET:

$\frac{940.8}{150} (.5) = 470.4$ SQ. IN. OF INLET VENTING REQ'D

OUTLET:

$\frac{940.8}{150} (.5) = 470.4$ SQ. IN. OF OUTLET VENTING REQ'D

FOUNDATION VENT CALCS.

$\frac{880}{150}$ SQ. FT. 5.86 MINIMUM NET AREA OF VENTILATION OPENING REQ'D
 $\frac{5.86}{.56}$ SQ. FT. = 11 VENTS REQUIRED - (11) VENTS PROVIDED

NOTE: FIGURE BASED ON SECTION R-408.1.1 OF THE 2018 NCRC.

NOTE: FND VENT SPECS BASED ON PUSH/PULL POLYPROPYLENE FND. VENT THAT ALLOWS 72 SQ. IN. OF NET FREE AREA PER VENT.

NOTE: ONE VENTILATION OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING PER R-408.1.2 2018 NCRC . THE REMAINING VENTS LOCATED TO PROVIDE CROSS VENTILATION OF THE CRAWL SPACE .

EXCEPTIONS:

① QUANTITY OF VENTS CAN BE REDUCED .

WHEN AN APPROVED VAPOR RETARDER MATERIAL IS USED IN ACCORDANCE WITH SECTION 408.2 OF THE 2018 NCRC . THE MINIMUM NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 SQUARE FOOT FOR EACH 1500 SQUARE FEET OF UNDER FLOOR SPACE AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING PER R-408.1.2 2018 NCRC . THE REMAINING VENTS LOCATED TO PROVIDE CROSS VENTILATION OF THE CRAWL SPACE .

② FOUNDATION VENTS CAN BE ELIMINATED

IF CONDITIONS ARE MET AS PER SECTION R409 2018 NCRC

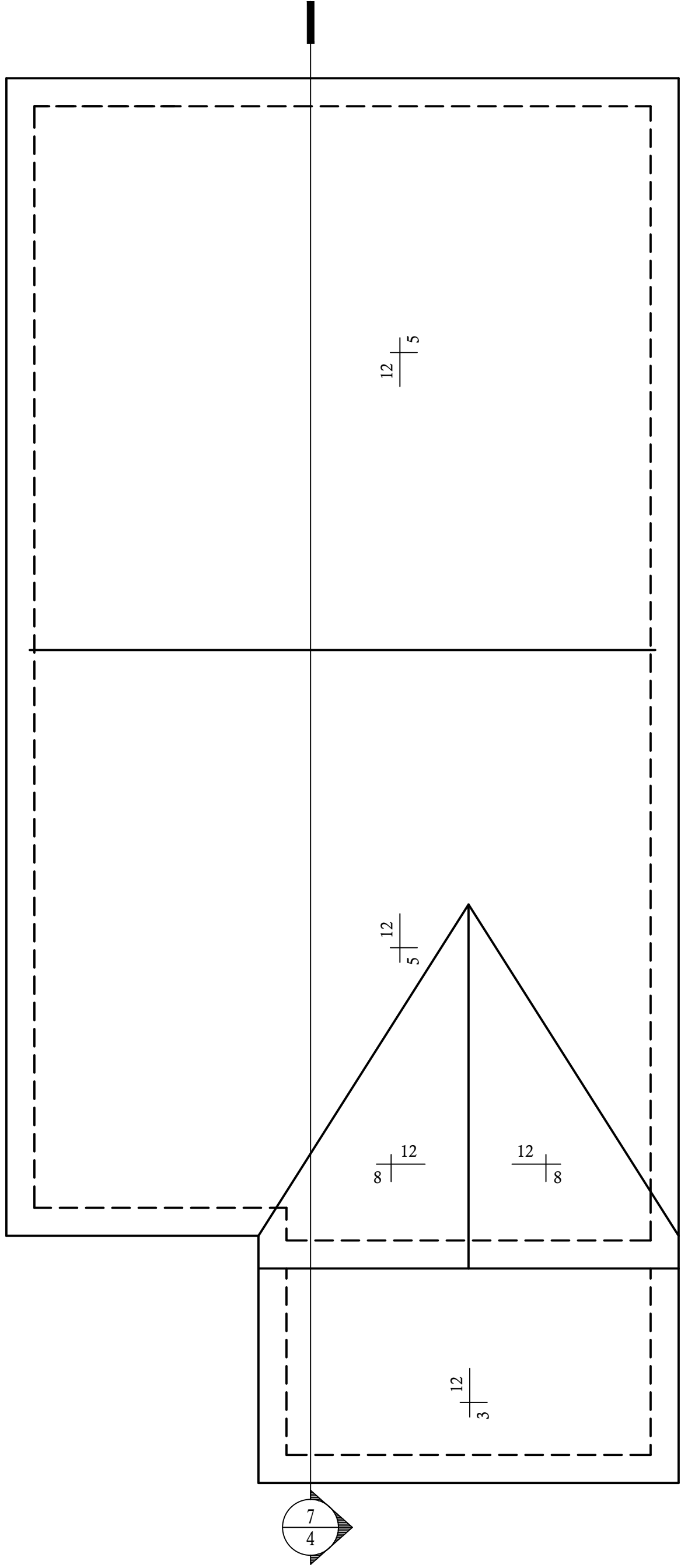
FLOOD VENTS
REVISED 10-10-23 PER
CITY OF RALEIGH COMMENTS

NOTE: SEE SHEET S-1
FOR FLOOD VENT CALCS

FV= FLOOD VENTS
GFV= GARAGE FLOOD VENTS

NOTE:

HVAC TO BE LOCATED IN ATTIC
W/ DUAL THERMOSTATS.
TANKLESS WATER HEATER
TO BE MOUNTED TO EXTERIOR WALL



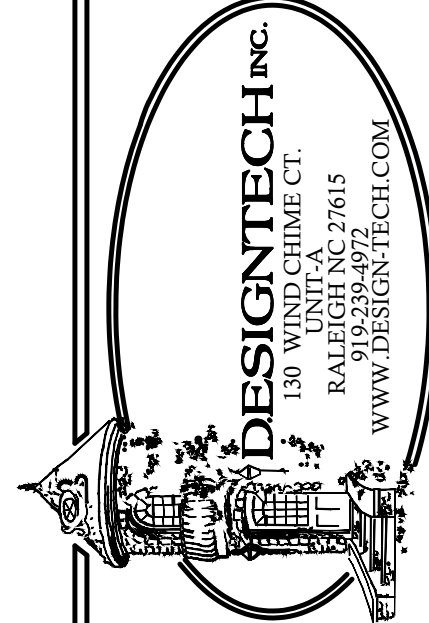
ROOF FRAMING PLAN

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

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR ANY CORRECTIONS OR CHANGES TO THE PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING DEPARTMENT.

REVISIONS:
DATE: 10-24-23 NAME: GES

DRAWN BY: GES
CHECKED BY: JCD
DATE: 7-6-22
PLAN NO. 20-1544-DT



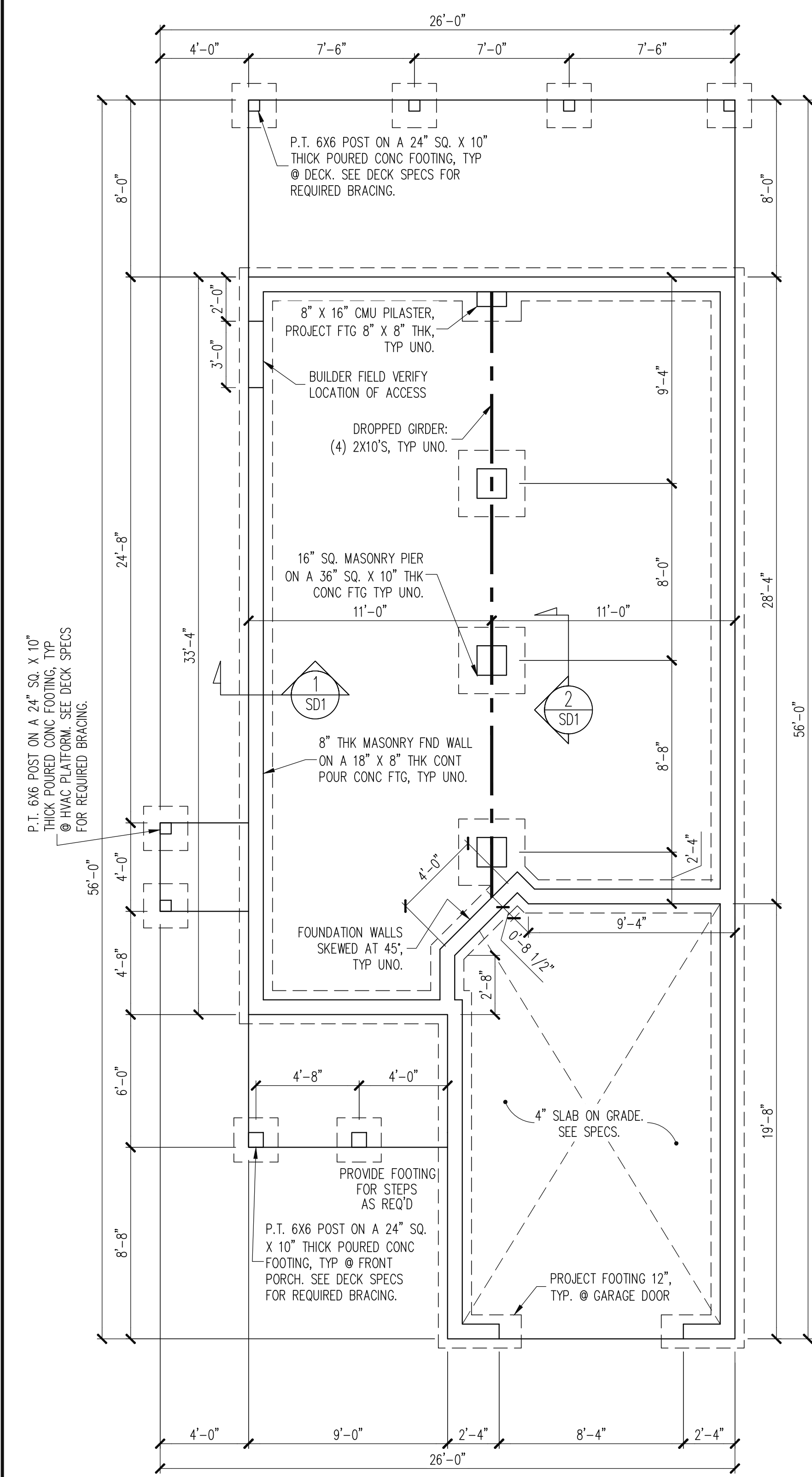
20-1554-DT
6209 RIVER BREEZE
RALEIGH, NC

A1
B1
OF 5

SHEET NO.

5

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CONSTRUCTION SPECIFICATIONS

INSTANT REFERENCES

REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION:

PART 1.01: CURRENT GOVERNING CODE

PART 14: STUD SUPPORT FOR BEAMS

PART 16.02: GENERAL WALL BRACING NOTES

PART 17: KING STUDS FOR EXTERIOR WALLS

SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS

FOUNDATION SCHEDULE

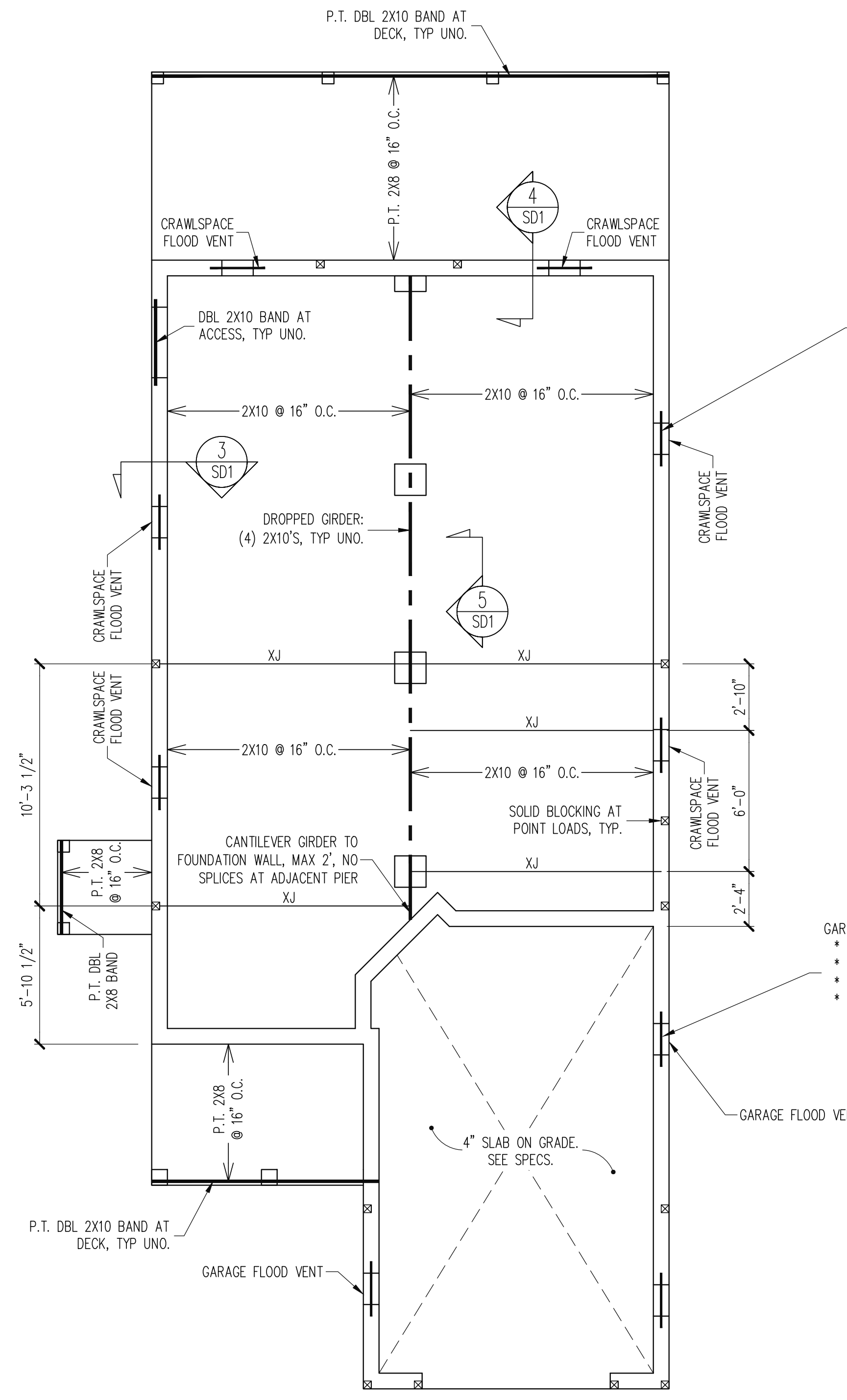
F1

NOTES:

- HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE NCSBC, LATEST EDITION.
- 14" SQ POURED CONC PIERS OR 16" Ø POURED CONC PIERS MAY BE USED IN LIEU OF 16" SQ MASONRY PIERS.

FOUNDATION PLAN

1/4" = 1'-0"



CRAWLSPACE FLOOD VENTS:

- * 672 SQ. FT. IN CRAWLSPACE FROM OUTSIDE FND WALL
- * 1 SQ. IN. OPENING/ 1 FT. SQ. SPACE REQUIRED
- * 672 SQ. IN. OPENINGS REQUIRED
- * 6 FLOOD VENTS, EACH VENT RATED FOR 128 SQ.FT. HYDROSTATIC RELIEF = 768 SQ.FT. PROVIDED
- * DO NOT PLACE FLOOD VENTS BELOW POINT LOADS FROM ABOVE
- * "BOTTOM OF EACH OPENING MUST BE NOT MORE THAN 1" ABOVE THE HIGHER OF THE FINAL INTERIOR GRADE (OR FLOOR) AND THE UNFINISHED EXTERIOR GRADE IMMEDIATELY UNDER EACH OPENING" PER NFIP TECHNICAL BULLETIN 3/2020 SECTION R322.2.2.1

GARAGE FLOOD VENTS:

- * 264 SQ. FT. IN GARAGE FROM OUTSIDE FND WALL
- * 1 SQ. IN. OPENING/ 1 FT. SQ. SPACE REQUIRED
- * 264 SQ. IN. OPENINGS REQUIRED
- * 3 FLOOD VENTS, EACH VENT RATED FOR 128 SQ.FT. HYDROSTATIC RELIEF = 384 SQ.FT. PROVIDED

CRAWLSPACE PLAN

1/4" = 1'-0"

Engineering

STRUCTURAL ENGINEERS

License No. C-3870

318 W Millbrook Rd. Unit 201

Raleigh, North Carolina 27609

Phone (919) 844-1661

Associates, P.A.

Lech

DESIGN TECH

STRUCTURAL ADDENDUM

SCOPE: 6209 RIVER BREEZE

LOC: 1

ENC: CIB/NBG

DATE 7/7/2022

PARENT

PROJECT NO.

22-15-025

SHEET NO.

S1

1 of 4

REV #

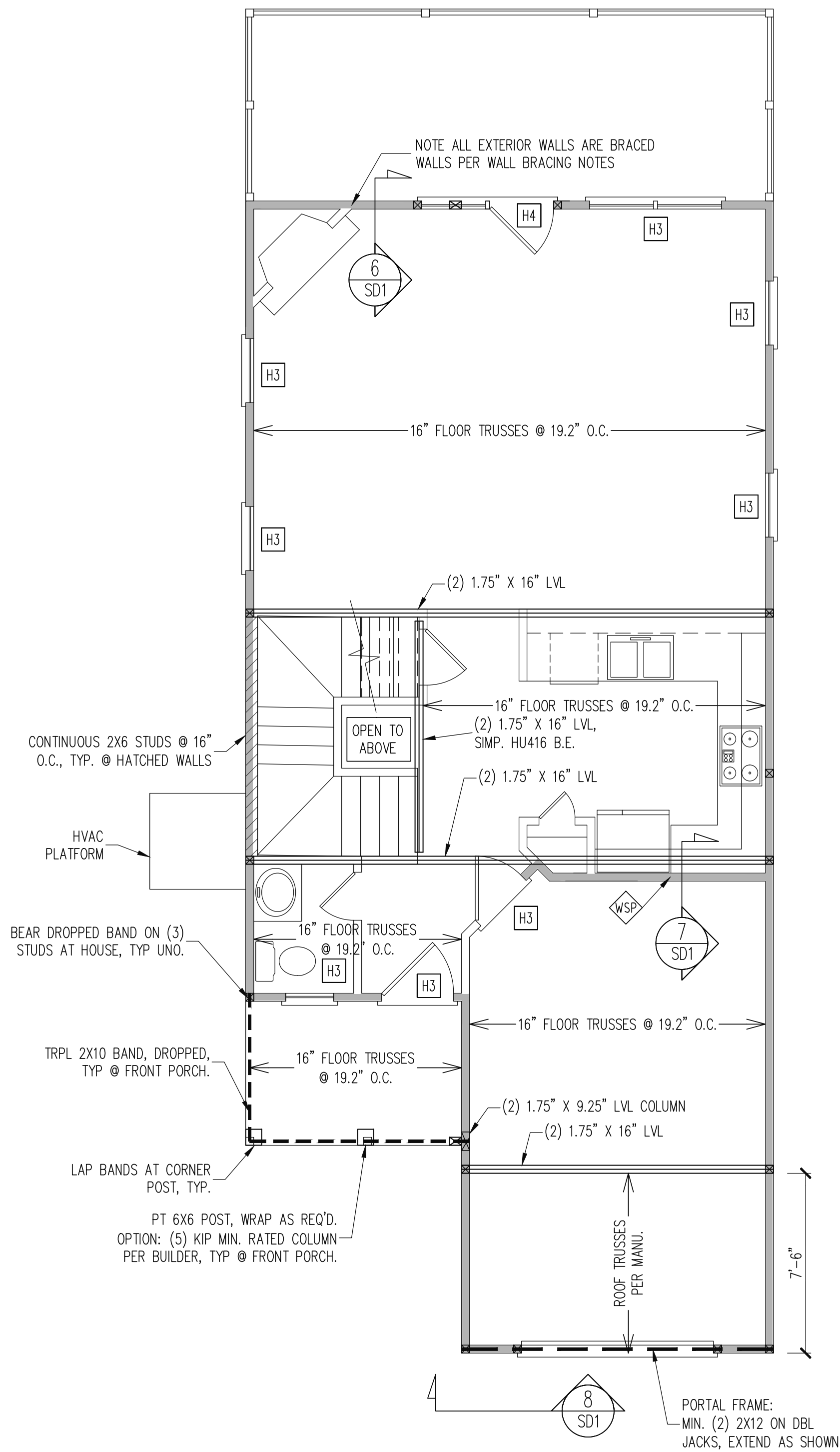
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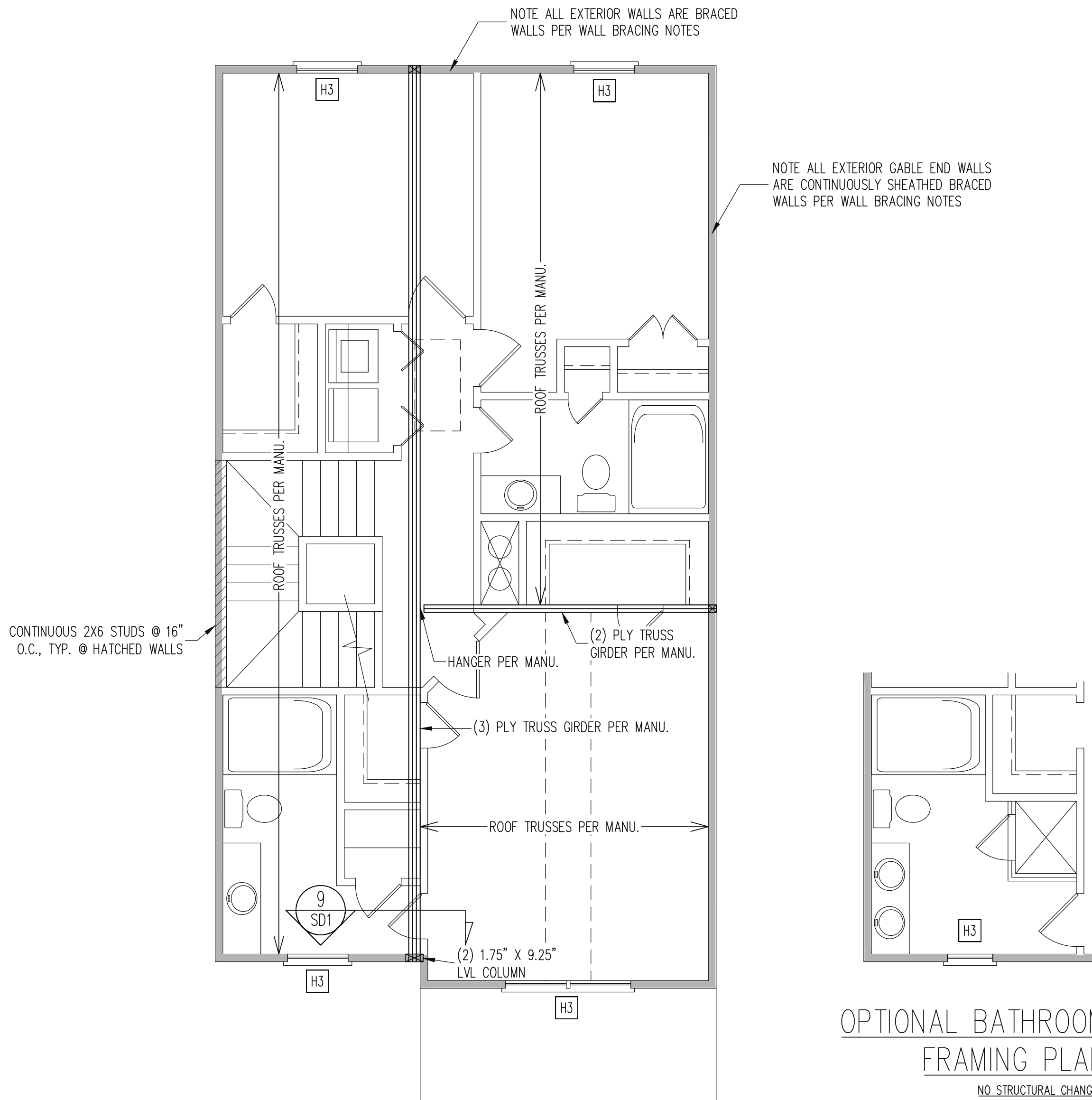
10/24/2023



WALL BRACING FIRST FLOOR ONLY	
CS - ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 4" O.C. AT PANEL EDGES, 8" O.C. IN PANEL FIELD.	
SHADED WALLS:	
WSP ONE SIDE OF INTERIOR WALL OR INSIDE OF EXTERIOR WALL WITH 3/8" MIN. THICKNESS WOOD STRUCTURAL PANELING. ATTACH WSP TO STUD WALL WITH 8d NAILS @ 4" O.C. AT PANEL EDGES, 8" O.C. IN PANEL FIELD.	
NOTES: -PROVIDED CONTINUOUS SHEATHING = 157' MIN.	
HEADER SCHEDULE	
H1	SINGLE 2X4 TURNED FLAT (A)
H2	(2) 2X4'S ON SINGLE JACKS (B)
H3	(2) 2X10'S ON SINGLE JACKS (C)
H4	(2) 1.75" X 9.25" LVL'S ON DBL JACKS
H5	(3) 2X10'S ON SINGLE JACKS

(A)	TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
(B)	TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
(C)	TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.
NOTES: -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.	

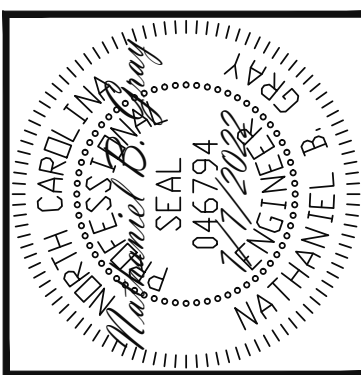
1ST FLOOR FRAMING PLAN
WALLS AND CEILING 1/4" = 1'-0"



WALL BRACING SECOND FLOOR ONLY	
CS - ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 4" O.C. AT PANEL EDGES, 8" O.C. IN PANEL FIELD.	
SHADED WALLS:	
NOTES: -PROVIDED CONTINUOUS SHEATHING = 125' MIN.	
HEADER SCHEDULE	
H1	SINGLE 2X4 TURNED FLAT (A)
H2	(2) 2X4'S ON SINGLE JACKS (B)
H3	(2) 2X10'S ON SINGLE JACKS (C)
H4	(2) 1.75" X 9.25" LVL'S ON DBL JACKS
H5	(3) 2X10'S ON SINGLE JACKS

(A)	TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
(B)	TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
(C)	TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.
NOTES: -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.	

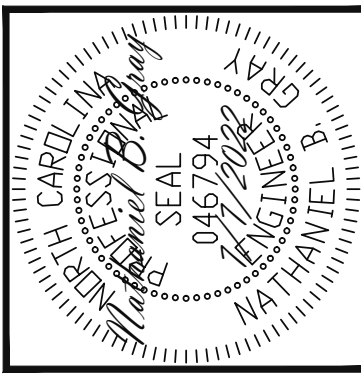
2ND FLOOR FRAMING PLAN
WALLS AND CEILING 1/4" = 1'-0"



STRUCTURAL ENGINEERS
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Phone (919) 844-1661
Associates, P.A.

DESIGN TECH	
STRUCTURAL ADDENDUM	
SCOPE	LOC
REV #	REF PROJ #
1	23-66-335
DATE	10/24/2023

ENC:	CIB/NBG
DATE	7/7/2022
PARENT	
PROJECT NO.	22-15-025
SHEET NO.	S2
2 of 4	



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Engineering Lech
ASSOCIATES, P.A.

DESIGN TECH			
STRUCTURAL ADDENDUM			
REV #	REF PROJ #	DATE	
1	23-66-335	10/24/2023	
SCOPE:		6209 RIVER BREEZE	
LOC:			

ENG:	CIB/NBG
DATE	7/7/2022

PARENT

PROJECT NO.
22-15-025

SHEET NO.
S3
3 of 4

TRUSS UPLIFT CONNECTORS

EXPOSURE B, 115 MPH, ANY PITCH
24" O.C. MAX ROOF TRUSS SPACING

TRUSSES SHALL BE ATTACHED TO SUPPORT WALL FOR UPLIFT RESISTANCE. CONTINUOUS OSB WALL SHEATHING BELOW PROVIDES CONTINUOUS UPLIFT RESISTANCE TO FOUNDATION. ALL TRUSSES SUPPORTED BY INTERMEDIATE SUPPORT WALLS, KNEEWALLS OR BEAMS SHALL BE ATTACHED TO SUPPORTING MEMBER PER SCHEDULE BELOW.

ROOF SPAN IS MEASURED HORIZONTALLY BETWEEN FURTHEST SUPPORT POINTS.

ROOF SPAN UP TO 28'	CONNECTOR NAILING PER TABLE 602.3(1) NCRBC 2018 EDITION
OVER 28'	(1) SIMPSON H2.5A HURRICANE CLIP TO DBL TOP PLATE OR BEAM

FRAMING NOTES

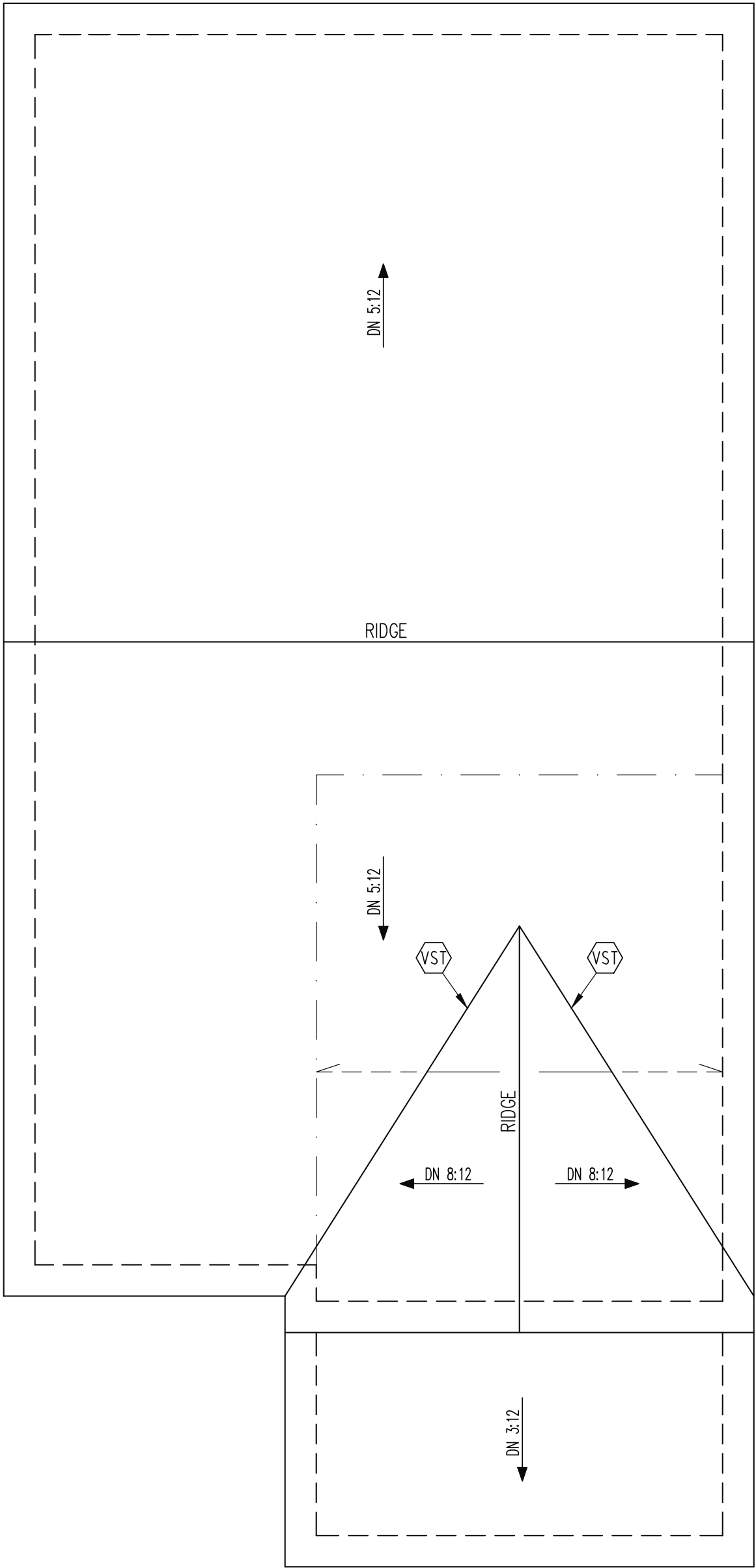
ROOF ONLY
-ROOF TRUSSES PER MANU. TYPICAL U.N.O.
-VERIFY ALL HEEL HEIGHTS, ROOF PITCHES,
AND ARCHITECTURAL OVERHANGS PRIOR TO
CONSTRUCTION

FRAMING SCHEDULE

ROOF ONLY
VST VALLEY SET TRUSSES PER MANU

ROOF FRAMING PLAN

1/4" = 1'-0"



NOTES

THE BUILDER IS RESPONSIBLE FOR REVIEWING PLANS PRIOR TO CONSTRUCTION. THE BUILDER SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION:

- 1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR
- 2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION

ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAT ANY REVISIONS ISSUED BY THE EOR ARE PROMPTLY DISTRIBUTED TO THE SUBCONTRACTORS

THE EOR DOES NOT PERFORM FENESTRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING.

ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW

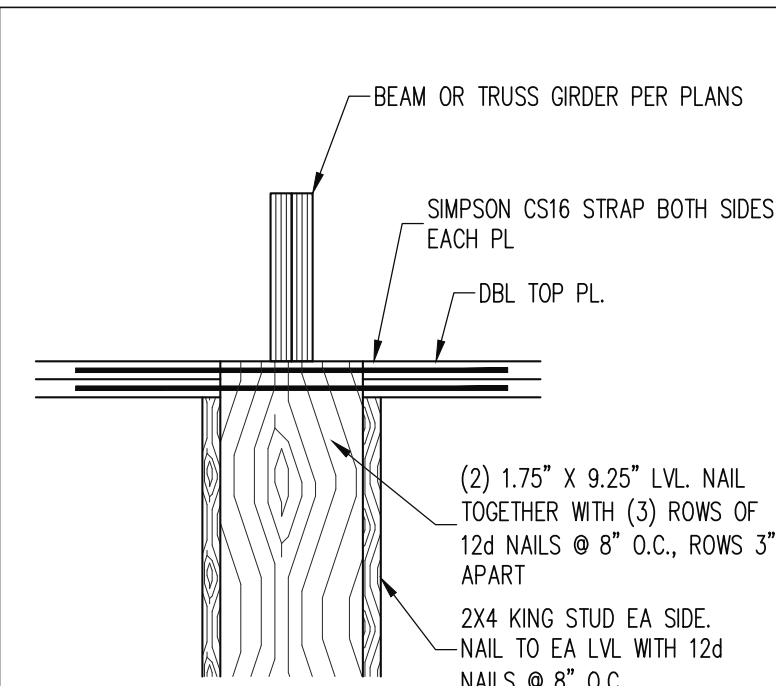
DECK SPECIFICATIONS

1. A DECK IS AN EXPOSED EXTERIOR WOOD FLOOR STRUCTURE WHICH MAY BE ATTACHED TO A STRUCTURE OR BE FREE STANDING. ROOFED PORCHES, OPEN OR SCREENED IN, MAY BE CONSTRUCTED USING THESE PROVISIONS.
2. SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING.
3. WHEN ATTACHED TO A STRUCTURE, THE STRUCTURE TO WHICH ATTACHED SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION RESISTANT FLASHING SHALL BE USED TO PREVENT MOISTURE FROM COMING IN CONTACT WITH THE UNTREATED FRAMING OF THE STRUCTURE. THE DECK BAND AND THE STRUCTURE BAND SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER EXCEPT AT BRICK VENEER AND WHERE PLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED. SILING SHALL NOT BE INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND. IF ATTACHED TO A BRICK STRUCTURE, NEITHER FLASHING NOR A TREATED BAND FOR THE BRICK STRUCTURE IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRICK
4. WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SCHEDULES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

JOIST LENGTH		
UP TO 8' MAX.		UP TO 16' MAX.
REQUIRED FASTENERS	ONE- 5/8" Ø BOLT @ 42" O.C. AND (2) ROWS OF 12d NAILS @ 8" O.C. OR TWO ROWS OF SIMPSON SDWS22400DB Ø d = 32" O.C. STAGGERED	ONE- 5/8" Ø BOLT @ 20" O.C. AND (3) ROWS OF 12d NAILS @ 6" O.C. OR TWO ROWS OF SIMPSON SDWS22400DB Ø d = 16" O.C. STAGGERED

JOIST LENGTH		
UP TO 8' MAX.		UP TO 16' MAX.
REQUIRED FASTENERS	ONE- 5/8" Ø BOLT @ 28" O.C.	ONE- 5/8" Ø BOLT @ 16" O.C.

5. IF THE DECK BAND IS SUPPORTED BY A 1/2" MINIMUM MASONRY LEDGE ALONG THE FOUNDATION WALL, 5/8" Ø BOLTS SPACED @ 48" O.C. MAY BE USED FOR SUPPORT.
6. OTHER MEANS OF SUPPORT, SUCH AS JOIST HANGERS, MAY BE USED TO CONNECT DECK JOISTS TO A TREATED STRUCTURE BAND
7. ORDERS SHALL BEAR DIRECTLY ON POSTS OR BE CONNECTED TO THE SIDES OF POSTS WITH 2- 5/8" Ø BOLTS
8. FLOOR DECKING SHALL BE NO. 2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. THE MINIMUM FLOOR DECKING THICKNESS SHALL BE AS FOLLOWS:



9 SECTION
S2 LVL COLUMN FOR FLUSH BEAM
3/4" = 1'-0"

- (2) CONT. 2X TOP PLATES, EXTEND EACH END INTO ADJACENT WALL. NAIL SPLICES WITH 8-16d NAILS PER SPLICE/LAP.
- CONT. 2X PLATE WITH 10d NAILS AT 16" O.C. INTO HEADER/BEAM
- 7/16" O.S.B. OR 15/32" PLYWOOD EXTERIOR WALL SHEATHING AT UNSHADED AREAS (BEAM, INFILL WALL ABOVE BEAM, AND CENTER WALL). NAIL SHEATHING TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC.) WITH 8d NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. IN THE FIELD.
- WHERE FULL HEIGHT PANEL WIDTH EXCEEDS 16", PROVIDE ADDITIONAL STUDS AT 16" O.C. NAIL SHEATHING TO ALL STUDS WITH 8d NAILS AT 3" O.C.
- FOR A PANEL SPLICE (IF NEEDED), PANEL EDGES SHALL OCCUR OVER AND BE NAILED TO COMMON BLOCKING AND OCCUR WITHIN MIDDLE 24" OF WALL HEIGHT. ONE ROW OF 3" O.C. NAILING IS REQUIRED IN EACH PANEL EDGE.
- 7/16" O.S.B. OR 15/32" PLYWOOD EXTERIOR WALL SHEATHING. AT SHADED AREAS NAIL SHEATHING TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC.) WITH 8d NAILS AT 3" O.C.
- (2)2x STUD MIN. AT START AND END OF WALL SEGMENTS EACH SIDE OF OPENING. SEE PLANS FOR ADDITIONAL STUDS
- 2x4 P.T. PLATE WITH TWO 1/2" DIA x 7" EMBED ANCHOR BOLTS WITH A 3/16"x2"x2" PLATE WASHERS OR ADDITIONAL HOLDOWN PER PLANS

8 SECTION
S2 PORTAL FRAME WALL
3/4" = 1'-0"

ABBREVIATIONS

ABV ABOVE	FND FOUNDATION	TJ TRIPLE JOIST
B. BOTH	FTG FOOTING	TRPL TRIPLE
B.E. BOTH ENDS	HOG HOT DIPPED	TRPL STUD POCKET
BTWN BETWEEN	GALV GALVANIZED	UNO UNLESS NOTED
CP CAST IN PLACE	HOR HANGER	UNO OTHERWISE
CONC CONCRETE	LVL LAMINATED VENEER	XJ EXTRA JOIST
CS CONTINUOUS SHEATHING	LUM LUMBER	
DIA DIAMETER	NTS NOT TO SCALE	
DBL DOUBLE	O.C. ON CENTER	
DJ DOUBLE JOIST	PSL PARALLEL STRAND LUMBER	
DSP DBL STUD POCKET	PT PRESSURE TREATED	
EQ EQUAL	QJ QUAD JOIST	
EA EACH	SP SPACE (OR SPACING)	
FLG FLANGE	SPP SINGLE STUD POCKET	
FL PL FLUTCH PLATE	SQ SQUARE	
FLR FLOOR		

JOIST SPAN	DECKING
12" O.C.	1" S4S
16" O.C.	1" T&G
24" O.C.	1 1/4" S4S
32" O.C.	2" S4S

9. MAXIMUM HEIGHT OF DECK SUPPORT POSTS IS AS FOLLOWS:

POST SIZE	MAX POST HEIGHT
4X4	8'
6X6	20'
ENGINEERED	20' +

- NOTES: 1) THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS.
2) THIS TABLE IS BASED ON A MAXIMUM TRIBUTARY AREA OF 128 SQ. FT.
3) POST HEIGHT IS FROM TOP OF FOOTING TO BOTTOM OF GIRDER.

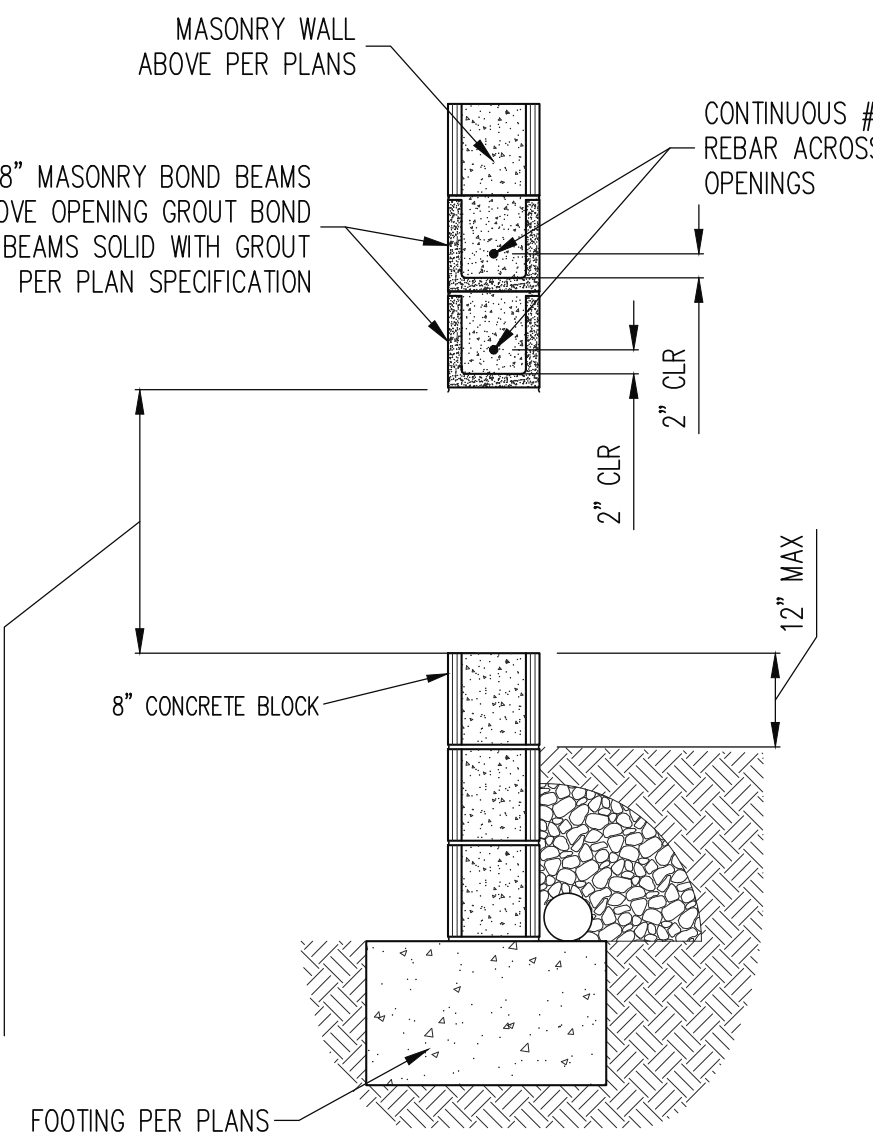
10. DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THE FOLLOWING METHODS:

- A. WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION 4, LATERAL BRACING IS NOT REQUIRED.
- B. 4X4 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 ATTACHED AT THE ENDS TO THE GIRDER AND THE POST WITH ONE - 5/8" Ø BOLT
- C. FOR FREE STANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN CONCRETE IN ACCORDANCE WITH THE FOLLOWING:

POST SIZE	TRIBUT. AREA	POST HEIGHT	EMB. DEPTH	CONC. DIAM.
4X4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6X6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

- D. 2X6 DIAGONAL VERTICAL CROSS BRACING SHALL BE PROVIDED IN TWO PERPENDICULAR DIRECTIONS FOR FREE STANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE BRACES SHALL BE ATTACHED TO THE POSTS WITH ONE - 5/8" Ø BOLT AT EACH END OF THE BRACE.

- NOTES: 1) ALL NAILS AND BOLTS ARE TO BE HOT DIPPED GALVANIZED.
2) MINIMUM EDGE DISTANCE FOR BOLTS IS 2 1/2".
3) NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 1 1/2".



3 SECTION
S1 BOND BEAMS AT FLOOD VENTS, TYP.
3/4" = 1'-0"

- CONTINUOUS FLOOR SHEATHING. ATTACH TO TRUSS ABOVE BRACED WALL WITH 8d NAILS @ 6" O.C.
- TRUSS ABOVE WALL ATTACH TO DBL TOP PLATE WITH 8d TOENAILS @ 6" O.C. ALONG BRACED WALL PANEL
- INTERIOR BRACED WALL PANEL

7 SECTION
S2 INTERIOR BRACED WALL WITH PARALLEL FLOOR TRUSS ABOVE WALL, TYP.
3/4" = 1'-0"

CONSTRUCTION SPECIFICATIONS

PART 1: GENERAL

- 1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.

METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

PART 2: DESIGN LOADS

USE	LIVE LOAD (PSF)	DEAD LOAD (PSF)
BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES	40	10
GARAGES (PASSENGER CARS ONLY)	50	---
ATTICS (NO STORAGE, LESS THAN 5' HEADROOM)	10	10
ATTICS (WITH STORAGE)	20	10
ROOF	20	10 (15 FOR VAULTS)

NOTES: - INDIVIDUAL STAIR TREADS ARE TO BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OF 40 PSF ON A 300 LB. CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQ. WHICHEVER PRODUCES THE GREATER STRESS.
- BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED 10 PSF WHEN HEAVY FLOOR OR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER THESE CONDITIONS

- 2.02 INTERIOR WALLS: 5 PSF LATERAL.
- 2.03 BASIC WIND DESIGN VELOCITY OF 115 MPH.
- 2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

PART 3: STRUCTURAL STEEL

- 3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM GRADE.
- 3.02 SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM GRADE.
- 3.03 STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, TYPE S, MINIMUM GRADE
- 3.04 ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE
- 3.05 STRUCTURAL STEEL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

PART 4: WELDING

- 4.01 WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER

PART 5: CONCRETE AND SLABS ON GRADE

- 5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 4-6% AIR ENTRAINMENT, FOR EXTERIOR CONCRETE, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL ITEMS NOTED AS 'CONCRETE' ARE TO BE CAST IN PLACE, TYP UNO.
- 5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.
- 5.03 SLABS ON GRADE, IF ANY, SHALL BE CAST IN PLACE, CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/CU YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 4" MIN GRANULAR FILL ON SOIL WITH 90% MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT IN ENCLOSED AREAS

PART 6: REBAR AND WIRE REINFORCEMENT

- 6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO
- 6.02 LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO
- 6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064.

PART 7: MASONRY

- 7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT,

f'm = 1,500 PSI MIN

- 7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW
- 7.03 MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.
- 7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530
- 7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS

PART 8: BOLTS AND LAG SCREWS

- 8.01 BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR THE NUT / BOLT HEAD WHEN BOLTING WOOD MEMBERS. HOLES FOR BOLTS SHALL BE AISC STANDARD HOLES UNO
- 8.02 LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.21-1989. PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR SCREW HEAD
- 8.03 ANCHOR ROOS AND BOLTS SHALL CONFORM TO ASTM F1554-15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO

PART 9: DRYN FASTENERS

- 9.01 NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667- 05. NAILS ARE TO BE COMMON WIRE OR BOX

PART 10: DIMENSIONAL LUMBER

- 10.01 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR SYP #2 FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC. MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS:
E = 1,400,000 PSI, F_e _{prop} = 425 PSI, F_v = 285 PSI, SPECIFIC GRAVITY = 0.42 MIN
F_b = 875 PSI FOR 2X4, 2X6, 2X8, F_b = 800 PSI FOR 2X10'S, 750 PSI FOR 2X12'S

PART 11: ENGINEERED LUMBER

- 11.01 LVL OR PS. MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS:
E = 1,900,000 PSI, F_b = 2600 PSI, F_v = 285 PSI, F_e _{prop} = 750 PSI
LSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E = 1.3 X 10E6 PSI, F_b = 1700 PSI, F_v = 400 PSI, F_e _{prop} = 680 PSI
- 11.02 LVL OR PS. MEMBERS MAY BE RIPPE FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS

PART 12: PRESSURE TREATED LUMBER

- 12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH ANPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH ANPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6(A)

PART 13: STEEL FLUTCH PLATE BEAMS

- 13.01 FLUTCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PIECES TOGETHER USING 1/2" Ø BOLTS SPACED AT 16" O.C. STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 16" MAX FROM EACH END OF THE BEAM. TYP UNO

PART 14: STUD SUPPORTS FOR BEAMS

- 14.01 STEEL, ENGINEERED LUMBER, AND FLUTCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:

- 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD COLUMN WITH A NUMBER OF STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WIDTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UNO, FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM
- 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRIPLE STUD GANGED COLUMN TYP UNO

PART 15: NAILING OF JOISTS TO THE BEAM

- 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP UNO. (E.G. A TRIPLE 2X10 IS TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM

- 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 3" ONTO THE WALL AND BE SUPPORTED BY A DBL STUD GANGED COLUMN TYP UNO.

- 14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD.

- 14.04 STUDS THAT ARE GANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH ONE ROW OF 10d NAILS AT 8" O.C. TWO ROWS OF 10d NAILS @ 8" O.C., 3" APART, FOR 2X8 OR 2X10 STUDS) ALL COLUMNS SHALL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH AS A BEAM. COLUMNS TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN WITHIN THE CAVITY FORMED BY THE FLOOR JOISTS

PART 15: NAILING OF MULTI-PLY WOOD BEAMS

- 15.01 SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.

- 15.02 LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP UNO

PART 16: WALL FRAMING AND BRACING

- 16.01 STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING OR ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UNO.
MAX ALLOWABLE WALL HEIGHTS FOR EXTERIOR STUD WALLS, INCLUSIVE OF SOLE PLATE AND DBL TOP PLATE AND 7/16" OSB EXTERIOR BRACING AND ROW OF 2X4 2X6 PURLINS AT 8" HEIGHT (AND AT 16" HEIGHT FOR TALL WALLS), TYP UNO:
2X4 @ 16" O.C.: 11'-1 1/2" 2X6 @ 16" O.C.: 17'-0"
2X4 @ 12" O.C.: 12'-1 1/2" 2X6 @ 12" O.C.: 18'-8"
DBL 2X4 @ 16" O.C.: 13'-4" DBL 2X6 @ 16" O.C.: 21'-0"

- 16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY:
-BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO.
-WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NRCRC. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NRCRC HAS BEEN MET AND EXCEEDED.

- BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NRCRC® R602.3.5 AND R602.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.
-MAY SUBSTITUTE WSP FOR GB
-SINGLE JOIST, CONTINUOUS RIM JOIST, OR BLOCKING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS. NAIL BLOCKING ABOVE WALL TO TOP PLATE WITH 16d TOE NAILS @ 6" O.C. NAIL SOLE PLATE OF BRACED WALL TO BLOCKING BELOW WITH (3) 16d NAILS @ 16" O.C. BLOCKING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.

PART 17: KING STUDS

- 17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:

		NUMBER OF KING STUDS					
MAX OPENING WIDTH	5'-0"	9'-0"	13'-0"	17'-0"	21'-0"		
STUD SIZE	2X4	1	2	3	4	5	
	2X6	1	1	2	2	2	

PART 18: SUBSTITUTIONS

- 18.01 MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS. UNAUTHORIZED DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

PART 19: OWNERSHIP OF STRUCTURAL DESIGN

- 19.01 THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED AND FOR THE CLIENT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM ETA

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Engineering
Leach
ASSOCIATES, P.A.

DESIGN TECH
STRUCTURAL ADDENDUM
REV # REF PROJ # DATE
1 23466-335 10/24/2023

SCOPE
LOC
6209 RIVER BREEZE

ENC: CIB/NBG
DATE 7/7/2022
PARENT
PROJECT NO.
22-15-025
SHEET NO.
SD1
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