Residence for

Bernard and Pearl Minter
1074 Red Hill Church Road
Harnett County, North Carolina

GENERAL NOTES

1. ALL WORK IS TO BE DONE IN STRICT ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE, 2018 EDITION (HEREWITH SHOWN AS N.C.S.R.B.C.).
2. DIMENSIONS SHOWN ON DRAWINGS GOVERN OVER SCALE.
3. STUD WALL DESIGN SHALL CONFORM TO ALL N.C.S.R.B.C. REQUIREMENTS.
4. CONTRACTOR SHALL USE TEMPERED SAFETY GLASS IN ALL LOCATIONS AS REQUIRED BY N.C.S.R.B.C., 2018 EDITION, SECTION R308.4
5. ANY HABITABLE ROOM SHALL MEET ALL LIGHT/VENTILATION AND EGRESS AS REQUIRED BY N.C.S.R.B.C., 2018 EDITION, SECTION R-310.2
6. ALL WALLS SHOWN ON FLOOR PLANS ARE 2x4 FRAME UNLESS NOTED OTHERWISE.
7. ALL ANGLED WALLS SHOWN ON FLOOR PLANS ARE 45° UNLESS NOTED OTHERWISE.
8. ALL WINDOWS SHALL HAVE A MINIMUM DPI RATING OF 25. BUILDER SHALL VERIFY WITH WINDOW MANUFACTURER THAT UNITS INSTALLED MEET THESE REQUIREMENTS AS PER N.C.S.R.B.C., 2018 EDITION, TABLE 301.2(6)
9. ENERGY EFFICIENCY REQUIREMENTS FOR THE SPECIFIC CLIMATE ZONE WHERE STRUCTURE IS BEING BUILT SHALL BE IN ACCORDANCE WITH CHAPTER 11 OF THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, 2018 EDITION, AS SHOWN IN TABLES N1101.1 (FOR N.C.) AND N1102.1.

PLAN ABBREVIATIONS

TYP	TYPICAL	PR	PAIR
U.N.O.	UNLESS NOTED OTHERWISE	TRP	TRIPLE
FIN. FLR.	FINISHED FLOOR	DH	DOUBLE HUNG
FJ	FLOOR JOIST	SH	SINGLE HUNG
CJ	CEILING JOIST	CS	CASEMENT
CLG.	CEILING	SLDR	SLIDER
SPEC.	SPECIFIED	FXD	FIXED
SQ.	SQUARE	C.O.	CASED OPENING
DIA.	DIAMETER	O.H.D.	OVERHEAD DOOR
MIN.	MINIMUM OR MINUTE	PDS	PULL DOWN STAIR
MAX.	MAXIMUM	HB	HOSE BIBB
DN	DOWN	FND.	FOUNDATION
T	TREADS	FTG.	FOOTING
R	RISERS	CLR.	CLEAR

MATERIALS LEGEND

- EARTH/COMPACT FILL
- CONCRETE
- BRICK
- CONCRETE BLOCK/STONE
- STEEL
- ALUMINUM
- FINISH WOOD
- ROUGH WOOD
- BLOCKING
- PLYWOOD
- BATT INSULATION
- RIGID INSULATION

TOILET ACCESSORIES LEGEND

PROVIDE 2x4 BLOCKING IN THE WALL FOR THE FOLLOWING:

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

THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE INTENT OF THE DESIGN AND CONSTRUCTION OF THIS HOME. ANY ERRORS AND/OR OMISSIONS FOUND IN THIS SET SHOULD IMMEDIATELY BE REPORTED TO HOMES UNIQUE FOR CLARIFICATION OR CORRECTION. THE CONTRACTOR SHOULD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ONCE A PERMIT HAS BEEN ISSUED FOR CONSTRUCTION, THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY AS TO THE ACCURACY OF THE PLANS AND TO ANY CHANGES MADE BY THE CONTRACTOR AND/OR THE OWNER.

DUE TO VARYING LOCAL AND STATE CODES, HOMES UNIQUE CANNOT BE HELD RESPONSIBLE FOR ANY REQUIREMENTS THAT EXISTING SITE CONDITIONS MAY CREATE.

PROJECT NO. 6738

INDEX TO DRAWINGS

	COVER SHEET
1	FRONT AND RIGHT SIDE ELEVATIONS
2	REAR AND RIGHT SIDE ELEVATIONS
3	FLOOR PLAN
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5	ARCHITECTUAL ROOF PLAN
D1	CONSTRUCTION DETAILS
S1	CRAWL SPACE FOUNDATION PLAN
S2	FOUNDATION FRAMING PLAN
S3	CEILING FRAMING PLAN
S4	ROOF FRAMING PLAN
SD1	STRUCTURAL DETAILS AND SPECIFICATIONS

RESIDENTIAL BUILDING CODE SUMMARY

1. PLANS ARE DESIGNED TO THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
2. HOUSE IS DESIGNED FOR 120 MPH, 3 SECOND GUST (93 MPH FASTEST WIND), EXPOSURE B.
3. ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER AND SHALL EXTEND 7" MIN. INTO MASONRY OR CONCRETE. BOLTS TO BE NO MORE THAN 6' O.C. AND WITHIN 12" OF ALL PLATE SPLICES AND CORNERS.
4. MEAN ROOF HEIGHT: 18'-7"
5. COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS:

MEAN ROOF HGT:	UP TO 30'	30'-1"TO 35'	35'-1"TO 40'	40'-1"TO 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

6. MINIMUM VALUES FOR ENERGY COMPLIANCE: ZONE 3
7. MAXIMUM GLAZING U-FACTOR: 0.35
8. INSULATING VALUES: CEILING: R-30* / WALLS: R-15 / FLOOR: R-19 / SLABS: R-0. CODE REFERENCE: TABLE N1102.1 (*R-30 ONLY IF UNCOMPRESSED, R-38 REQUIRED IF COMPRESSED)

AREA CALCULATIONS

HEATED (SQ. FT.)		UNHEATED (SQ. FT.)		UNFINISHED (SQ. FT.)	
BASEMENT:	N/A	GARAGE:	548	BASEMENT:	N/A
1ST FLOOR: (MAIN HSE.)	2199	PORCH 1 (MAIN HOUSE):	196	UNF REC RM:	N/A
2ND FLOOR:	N/A	PORCH 2 (IN-LAW):	23	ATTIC:	N/A
IN-LAW SUITE:	1041	SCREEN PORCH 1 (HSE.):	240	STORAGE:	N/A
REC ROOM:	N/A	SCREEN PORCH 2(IN-LAW):	156		
ATTIC:	N/A	BRICK:	N/A	OVERALL DIMENSIONS	
TOTAL:	3240	TOTAL:	1213	WIDTH:	117'-2"
				DEPTH:	61'-10"

FOUNDATION VENTING CALCULATIONS

(REFERENCE: N.C.S.R.B.C., 2018 EDITION, SECTION R408)

THE MINIMUM NET AREA OF VENTILATION OPENINGS SHALL BE NOT LESS THAN ONE (1) SQUARE FOOT FOR EACH 150 SQUARE FEET OF CRAWL SPACE GROUND AREA AND ONE FOUNDATION VENT SHALL BE WITHIN THREE (3) FEET OF EACH CORNER OF THE BUILDING.

EXCEPTION: THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 OF THE UNDER-FLOOR AREA WHERE THE GROUND SURFACE IS TREATED WITH AN APPROVED VAPOR RETARDER MATERIAL AND THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS-VENTILATION.

3240 SQUARE FEET OF CRAWL SPACE AREA / 150 =

21.6 SQUARE FEET OF NET FREE AREA REQUIRED

ATTIC VENTILATION REQUIREMENTS

NATURAL ROOF VENTILATION CALCULATIONS

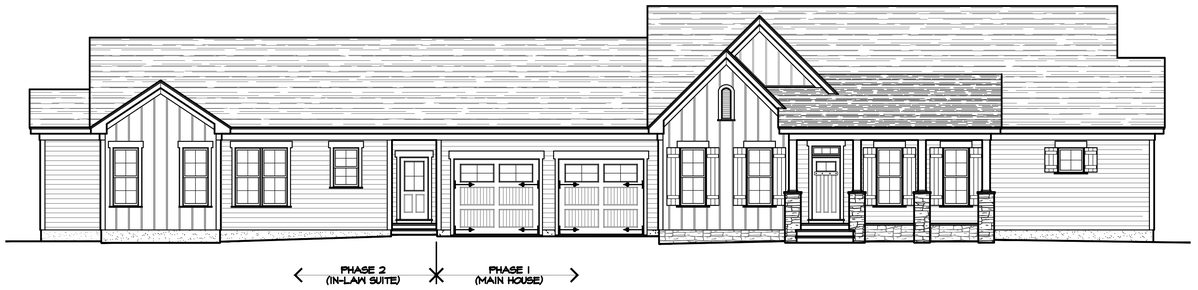
4453 SQ. FT. / 150 = 29.69 SQ. FT. VENT REQ'D.

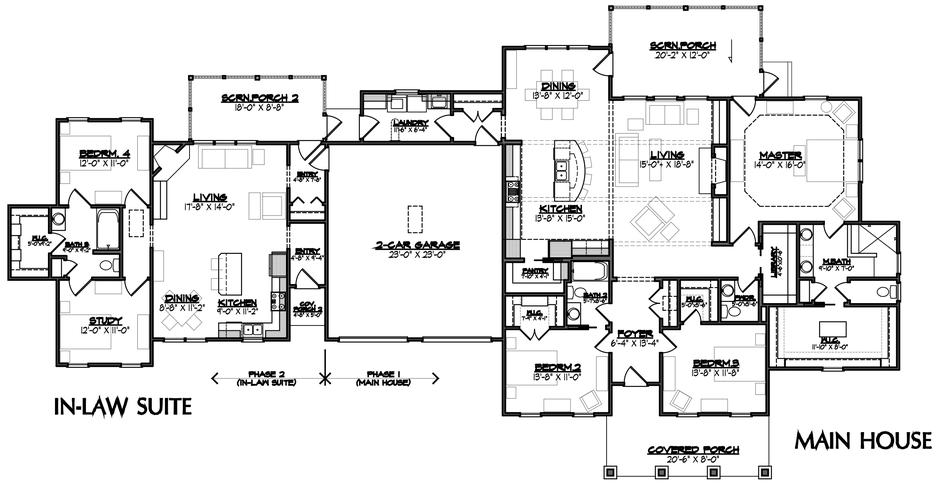
BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE

MECHANICAL ROOF VENTILATOR CALCULATIONS

4453 SQ. FT. / 300 = 14.84 SQ. FT. VENT REQ'D.

BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE





IN-LAW SUITE

MAIN HOUSE

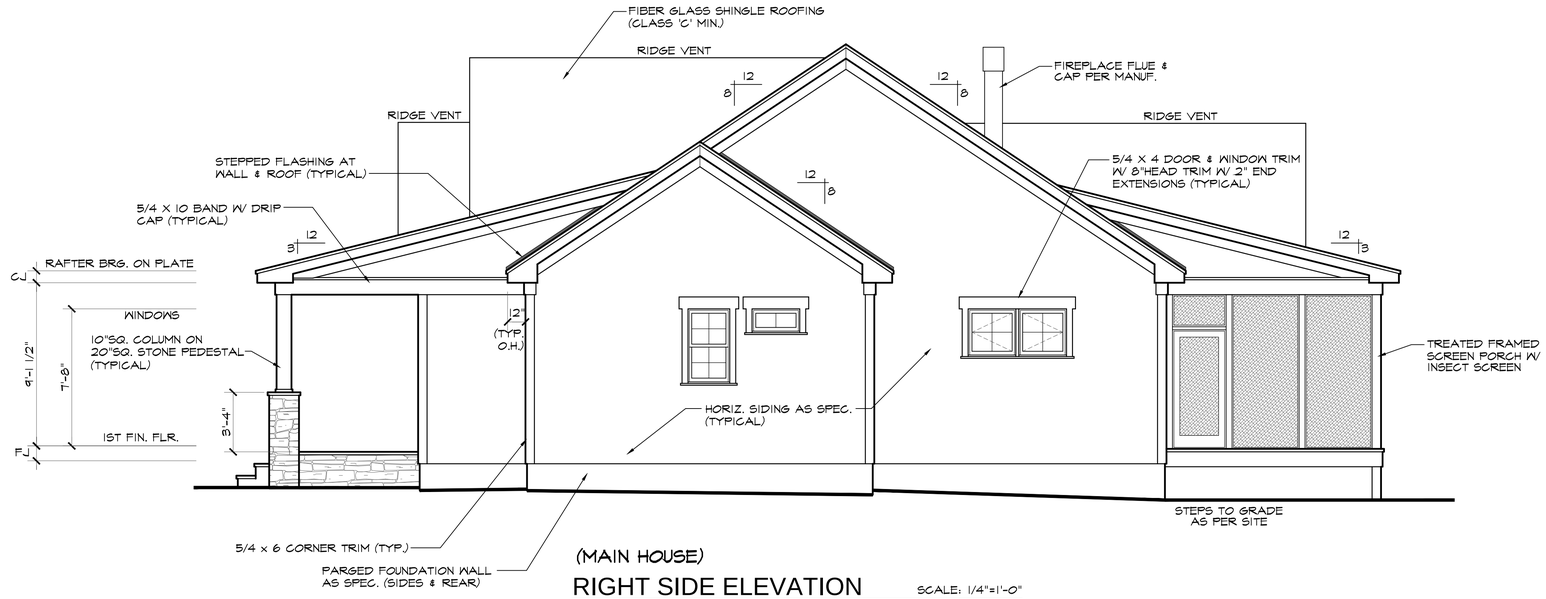
24-3240

homes unique

residential design

1027 Hwy. 70 West, Suite 223
Garner, North Carolina 27529
Phone: (919) 779-6005
Fax: (919) 779-6025

08 JUL 2024



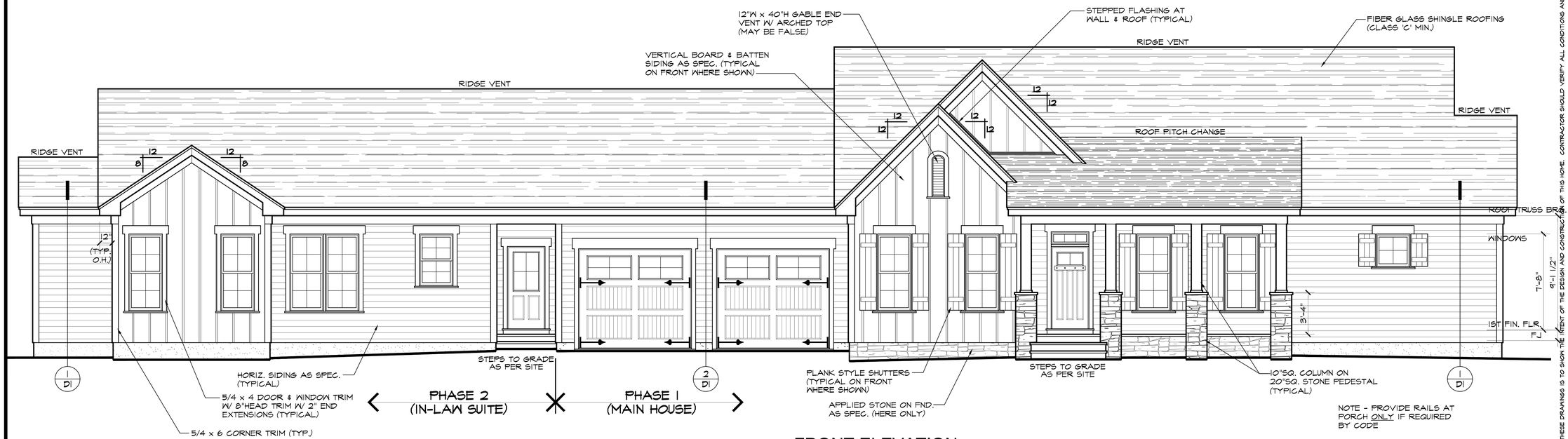
(MAIN HOUSE)

RIGHT SIDE ELEVATION

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

NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE

NOTE - BOTTOM OF WINDOW CLEAR OPENINGS SHALL BE MORE THAN 24" ABOVE FINISH FLOOR OR A FALL PREVENTION DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R312.2 OF N.C.S.R.B.C., 2018 EDITION.



FRONT ELEVATION

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

NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE

PLAN-6738.DWG

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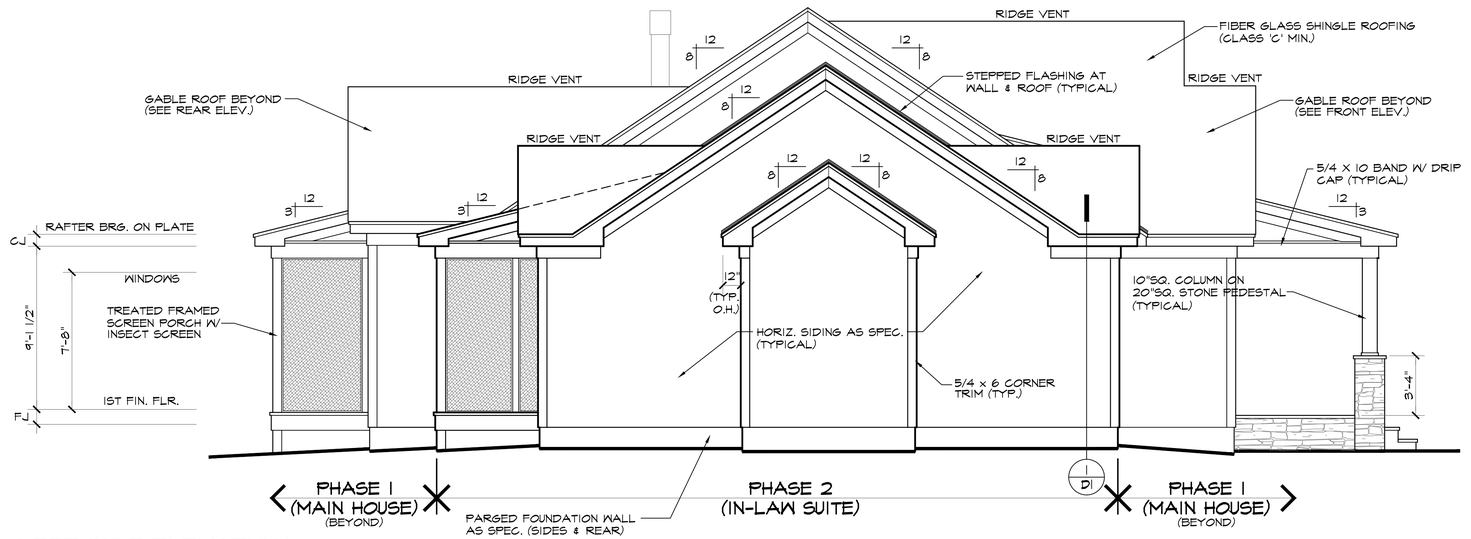
PROJECT NUMBER	6738
PLAN NAME	MINTER-1
PLAN NUMBER	24-3240

RESIDENCE FOR BERNARD & PEARL MINTER

1074 RED HILL CHURCH ROAD (LOT 6)
HARNETT COUNTY, NORTH CAROLINA

DRAWN BY	J.T.S.
CHECKED BY	J.A.D.
DATE DRAWN	08 JUL 2024
REVISIONS	

SHEET 1 OF 5

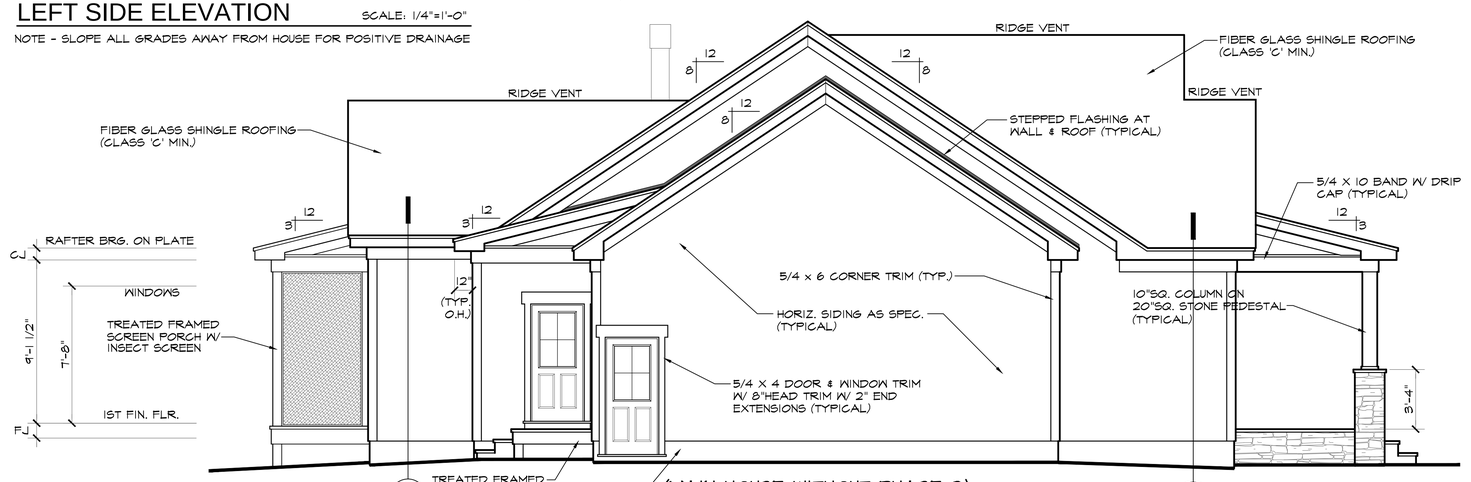


LEFT SIDE ELEVATION

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

NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE

NOTE - BOTTOM OF WINDOW CLEAR OPENINGS SHALL BE MORE THAN 24" ABOVE FINISH FLOOR OR A FALL PREVENTION DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R312.2 OF N.C.S.R.B.C., 2018 EDITION.

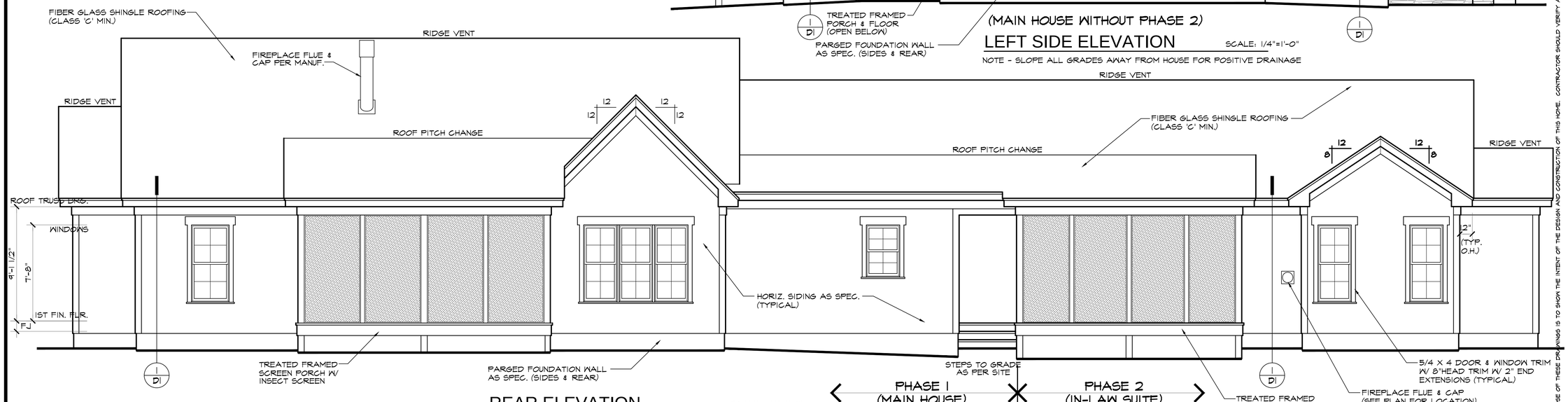


(MAIN HOUSE WITHOUT PHASE 2)

LEFT SIDE ELEVATION

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

NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE



REAR ELEVATION

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

NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE

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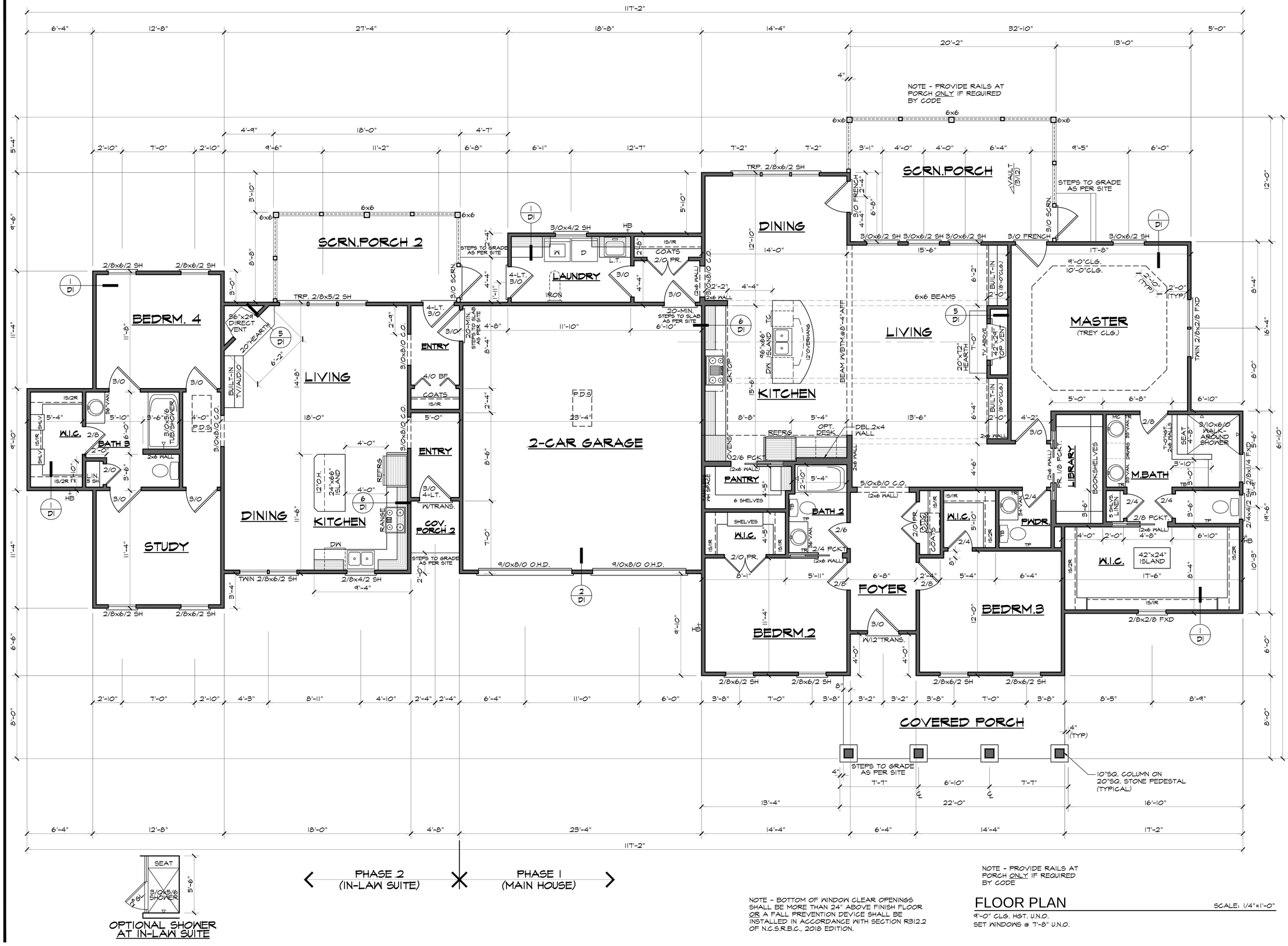

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NOTE - PROVIDE RAILS AT PORCH ONLY IF REQUIRED BY CODE

FLOOR PLAN

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

9'-0" CLG. HGT. U.N.O.
SET WINDOWS @ 7'-8" U.N.O.

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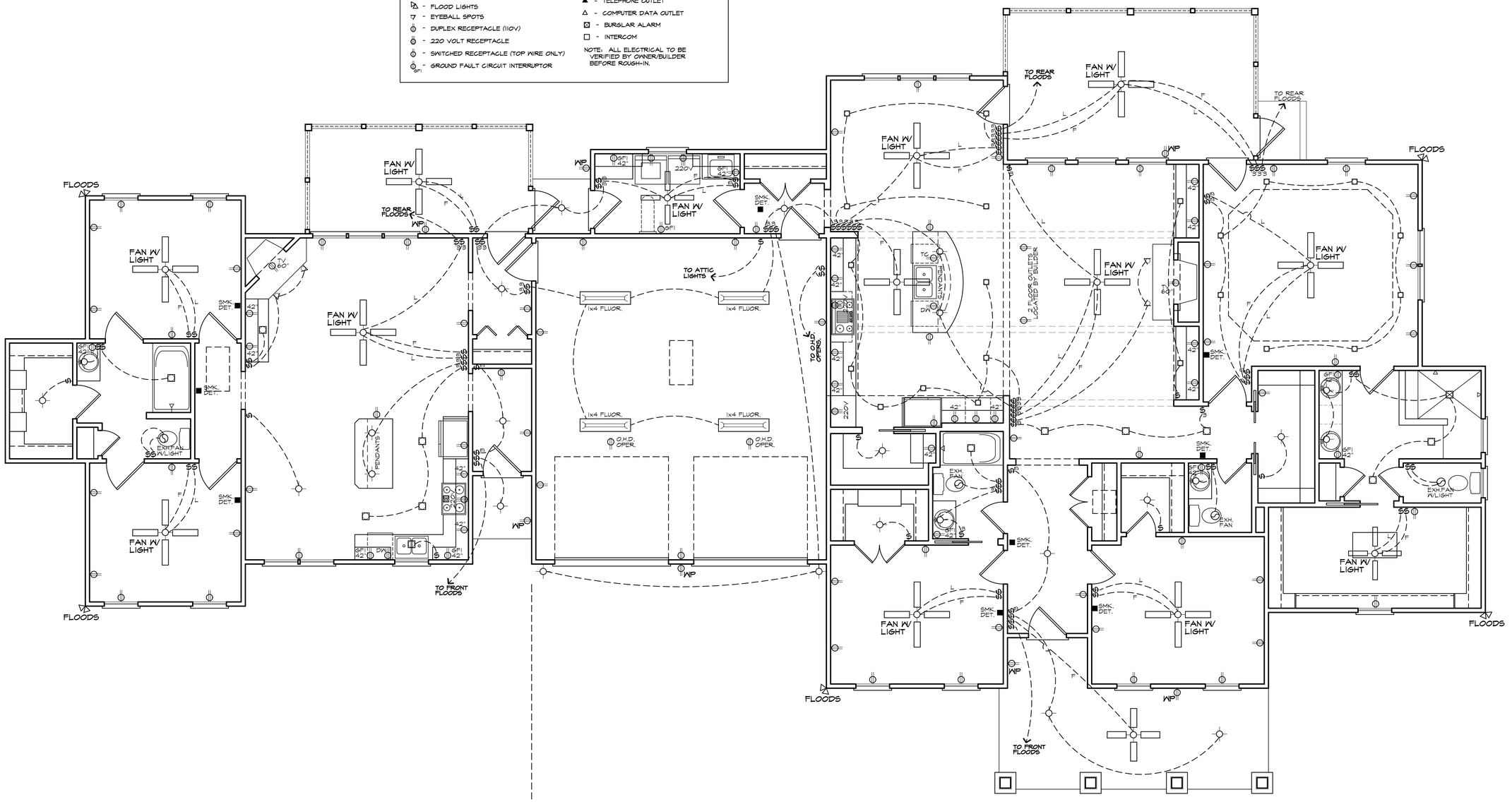
SHEET 3 OF 5

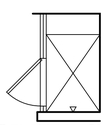
ELECTRICAL LEGEND

- LIGHT FIXTURE
- FAN/LIGHT
- WP - WATERPROOF OUTLET
- RECESSED LIGHTING
- S - SINGLE PULL SWITCH
- S3 - 3-WAY SWITCH
- S4 - 4-WAY SWITCH
- SD - DIMMER SWITCH
- SMK - SMOKE DETECTOR
- FL - 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 LIGHTING
- CABLE OUTLET
- TELEPHONE OUTLET
- COMPUTER DATA OUTLET
- BURGLAR ALARM
- INTERCOM

NOTE: ALL ELECTRICAL TO BE VERIFIED BY OWNER/BUILDER BEFORE ROUGH-IN.



PHASE 2 (IN-LAW SUITE) | PHASE 1 (MAIN HOUSE)



OPTIONAL SHOWER AT IN-LAW SUITE

ELECTRICAL PLAN

NOTE - ELECTRICAL RECEPTACLE AND SWITCH QUANTITIES AND LOCATIONS SHOWN ON PLAN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL NUMBER AND LOCATIONS SHALL BE FIELD DETERMINED AS PER CLIENT AND BUILDER EXCEPT WHERE CODE REQUIREMENTS APPLY.

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PLAN NAME: MINTER-1
PLAN NUMBER: 24-3240

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DRAWN BY: J.T.S.
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SHEET 4 OF 5

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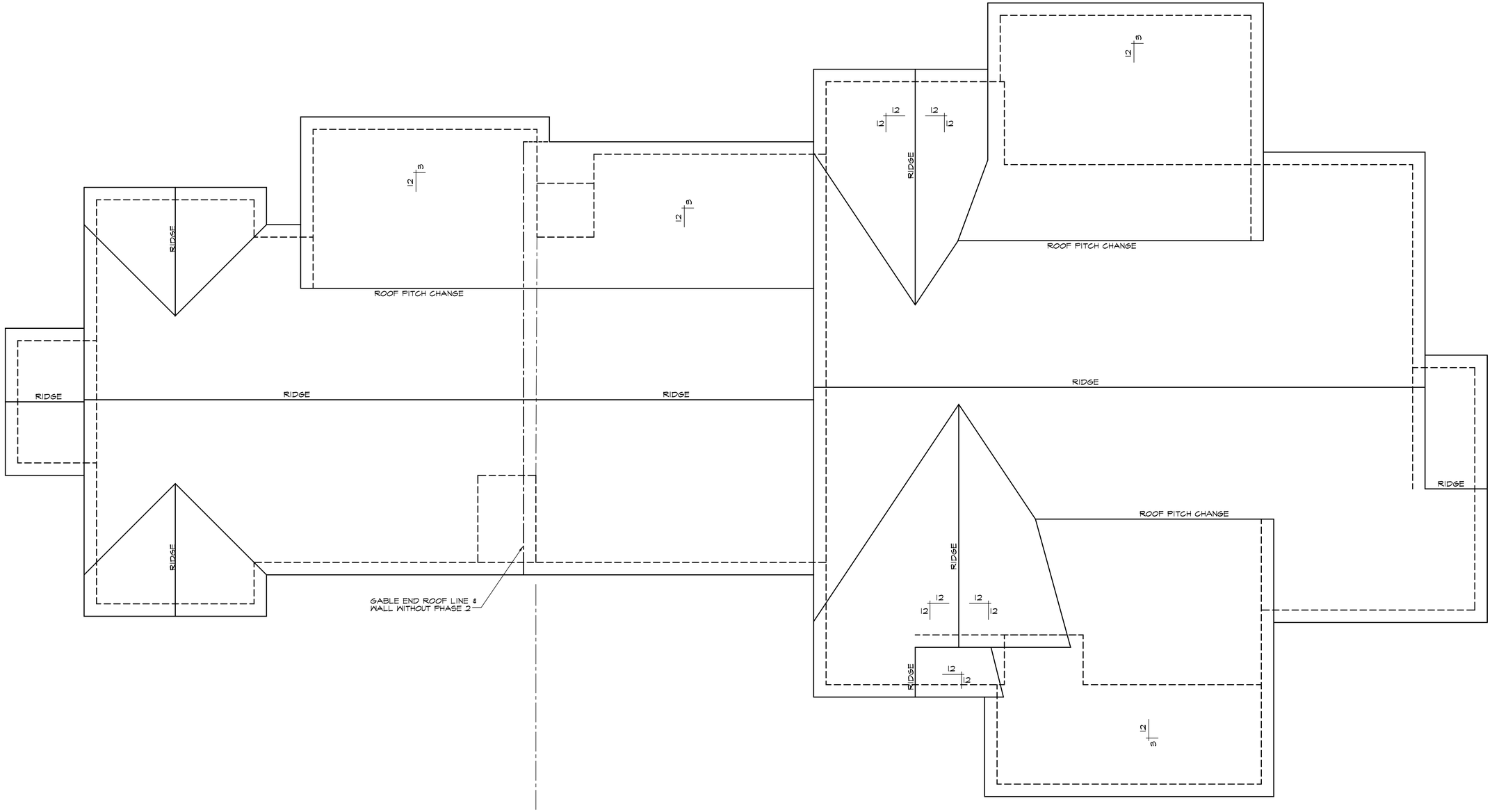

ROOF PLAN

NOTE 1 - ALL ROOF PITCHES TO BE 8/12 UNLESS NOTED OTHERWISE

NOTE 2 - ALL ROOF OVERHANGS TO BE 12" UNLESS NOTED OTHERWISE

NOTE 3 - ANY DETAILS REFERENCED ON THIS PLAN IS FOR GENERAL INFORMATION ONLY.

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PROJECT NUMBER
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MINTER-1
PLAN NUMBER
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HARNETT COUNTY, NORTH CAROLINA

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SHEET 5 OF 5

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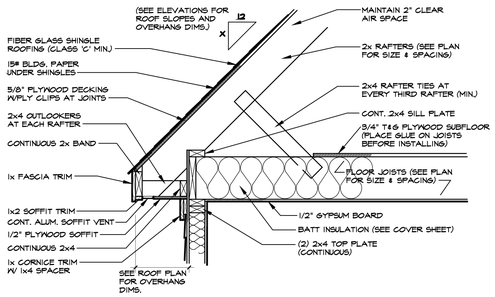
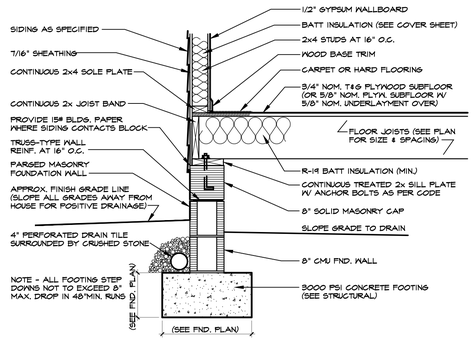
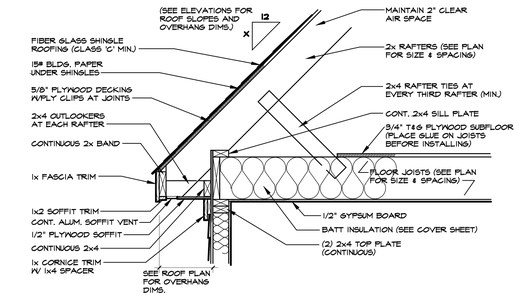
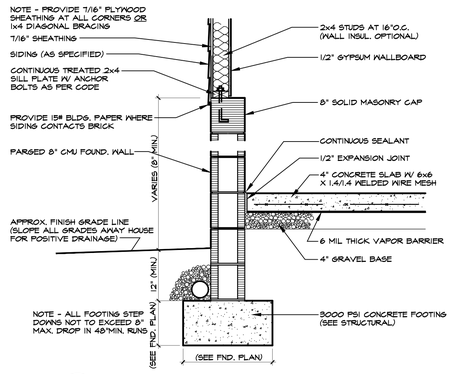


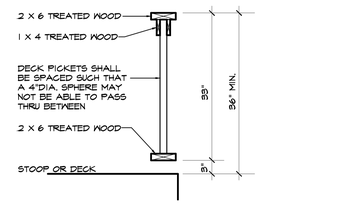


1 ONE-STORY WALL SECTION W/SIDING
SCALE: 3/4"=1'-0" (PARGED MASONRY FOUNDATION)

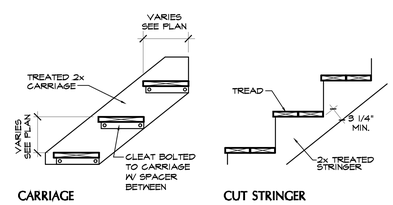




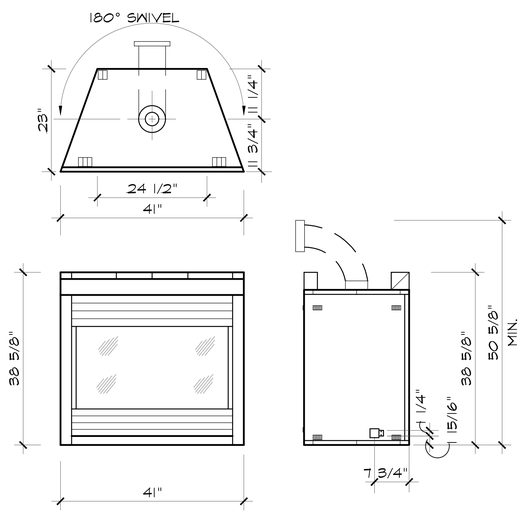
2 GARAGE WALL SECTION W/SIDING
SCALE: 3/4"=1'-0" (PARGED MASONRY FND.)



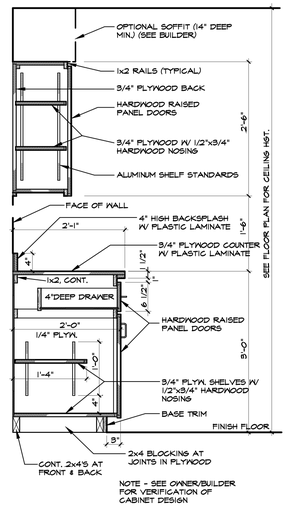
3 TYPICAL DECK HANDRAIL DETAIL
SCALE: 3/4"=1'-0"



4 TYPICAL DECK STAIR DETAIL
SCALE: 3/4"=1'-0"



5 DIRECT VENT FIREPLACE DETAIL
SCALE: NONE



6 CABINET DETAIL
SCALE: 3/4"=1'-0"

DETAILDWG

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homes unique
residential design
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Garner, North Carolina 27529
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Fax: (919) 774-6025

PROJECT NUMBER
6738
PLAN NAME
MINTER-1
PLAN NUMBER
24-3240

RESIDENCE FOR BERNARD & PEARL MINTER

1074 RED HILL CHURCH ROAD (LOT 6)
HARNETT COUNTY, NORTH CAROLINA

DRAWN BY
J.T.S.
CHECKED BY
J.A.D.
DATE DRAWN
08 JUL 2024
REVISIONS

SHEET D1 OF 1

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

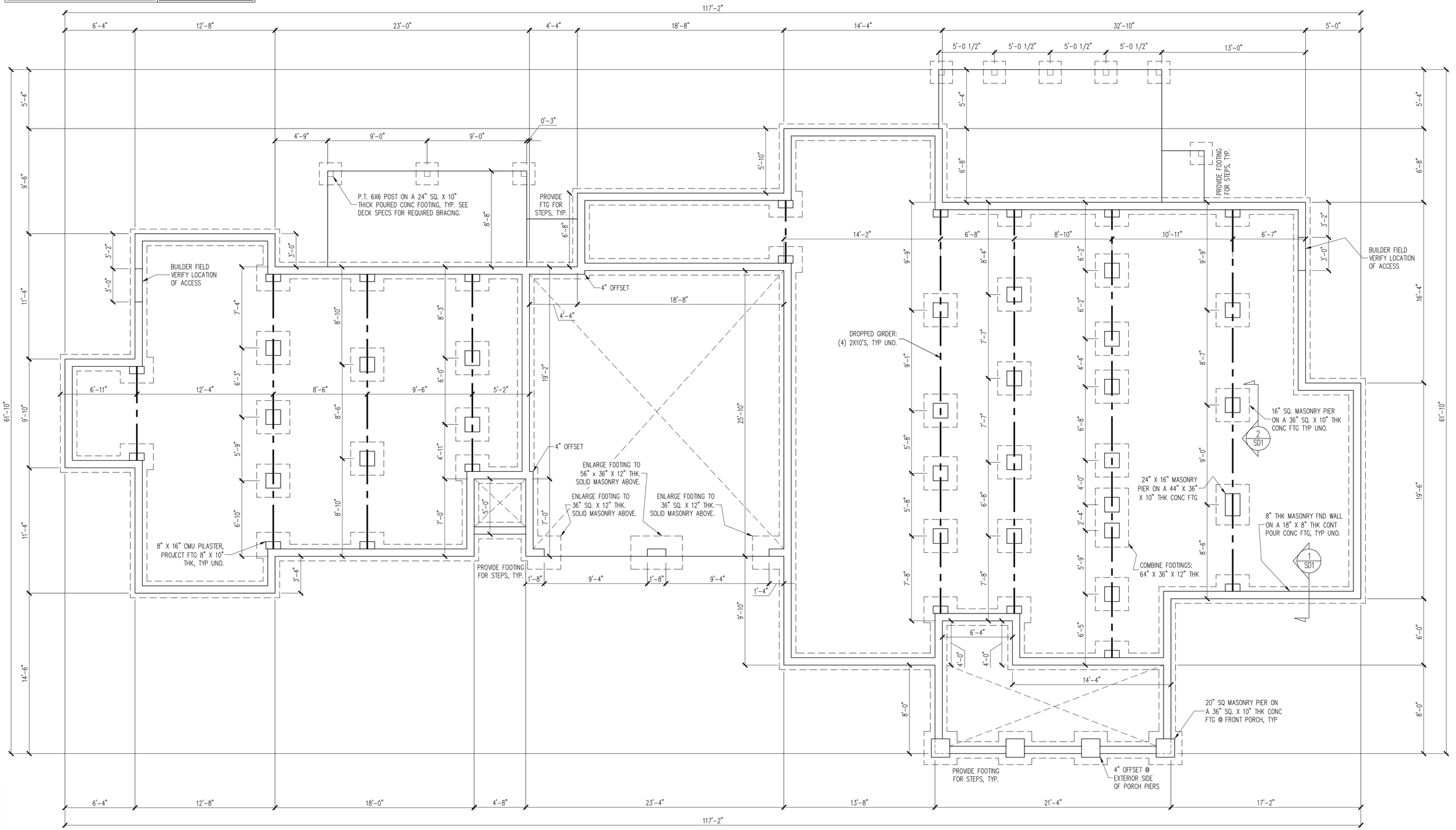
PART 16.02: GENERAL WALL BRACING NOTES

PART 17: KING STUDS FOR EXTERIOR WALLS

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

NOTES:
-HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE NCRC LATEST EDITION.
REINFORCEMENT AND GROUTING SHALL BE DETERMINED BY FINAL SITE CONDITIONS.

-BUILDER TO FIELD LOCATE CRAWLSPACE ACCESS OPENING WITH MINIMUM DIMENSIONS OF 18X24. DO NOT LOCATE ACCESS OPENING BELOW POINT LOADS FROM ABOVE WITHOUT ENGINEER APPROVAL.



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

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046794 NATHANIEL R. GRAY

Engineering Tech ASSOCIATES, P.A.
STRUCTURAL ENGINEERS
License No. C-3870
318 W Millbrook Rd. Unit 201
Raleigh, North Carolina 27609
Phone (919) 844-1661

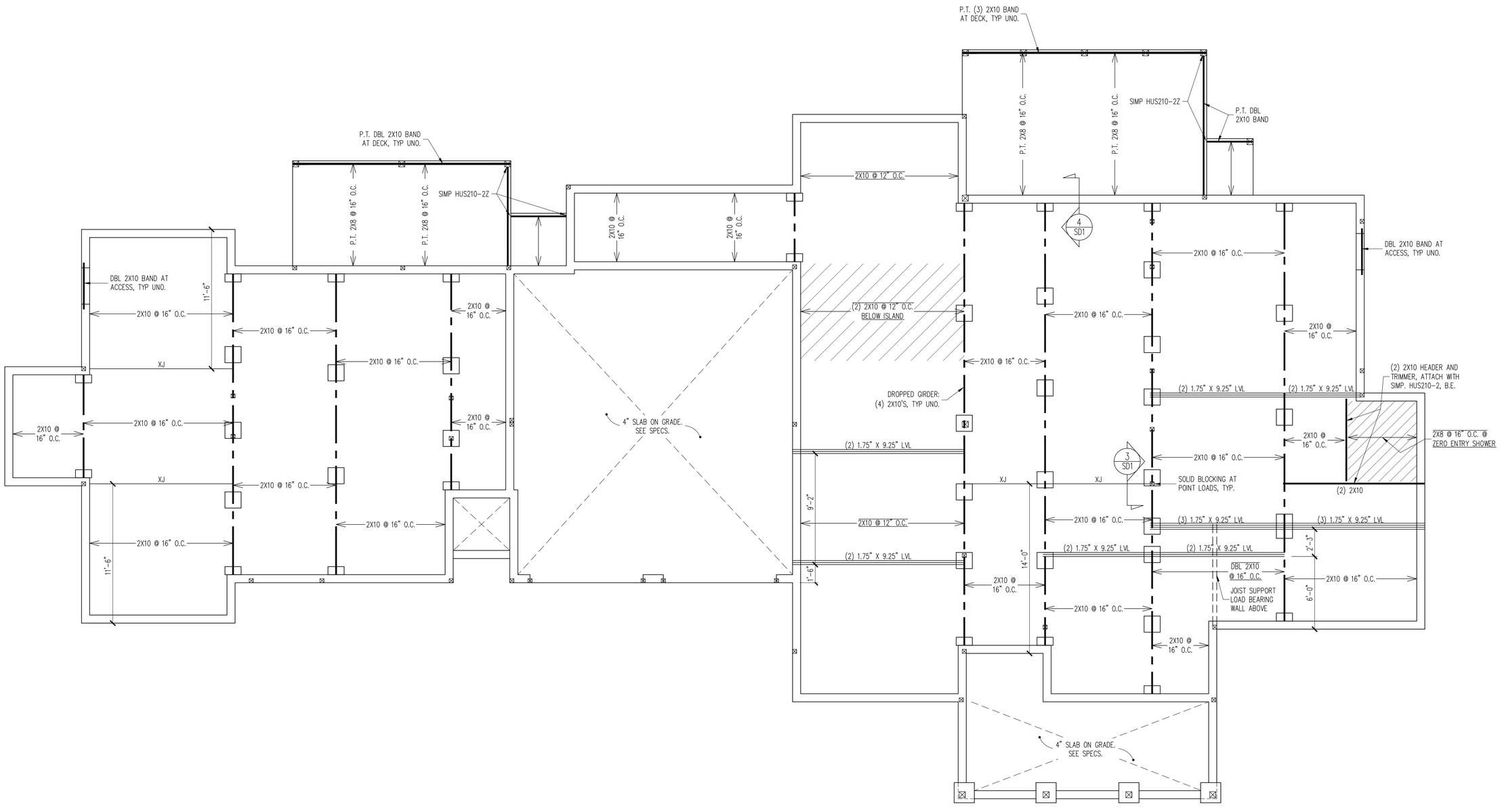
MINTER RESIDENCE
SCOPE: STRUCTURAL ADDENDUM
LOC: 1074 RED HILL CHURCH ROAD
HARNETT COUNTY, NC

REV #	REF PROJ #	DATE

ENG: PAL/NBG
DATE: 07/05/2024

PROJECT NO.
24-18-319

SHEET NO.
S1
1 of 5



CRAWLSPACE FRAMING PLAN

1/4" = 1'-0"

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046794 ALEXANDER NATHANIEL PRICE

Engineering Tech ASSOCIATES, P.A.
STRUCTURAL ENGINEERS
License No. C-3870
318 W Millbrook Rd. Unit 201
Raleigh, North Carolina 27609
Phone (919) 844-1661

MINTER RESIDENCE
STRUCTURAL ADDENDUM
SCOPE:
LOC: 1074 RED HILL CHURCH ROAD
HARNETT COUNTY, NC

REV #	REF PROJ #	DATE

ENG: PAL/NBG
DATE: 07/05/2024

PROJECT NO.
24-18-319

SHEET NO.
S2
2 of 5

WALL BRACING

SHADED WALLS:

ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

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 @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

2X – SHEATH BOTH SIDES OF STUD WALL WITH 7/16 APA RATED OSB, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

NOTES:
PROVIDED CONTINUOUS SHEATHING = 365° MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

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

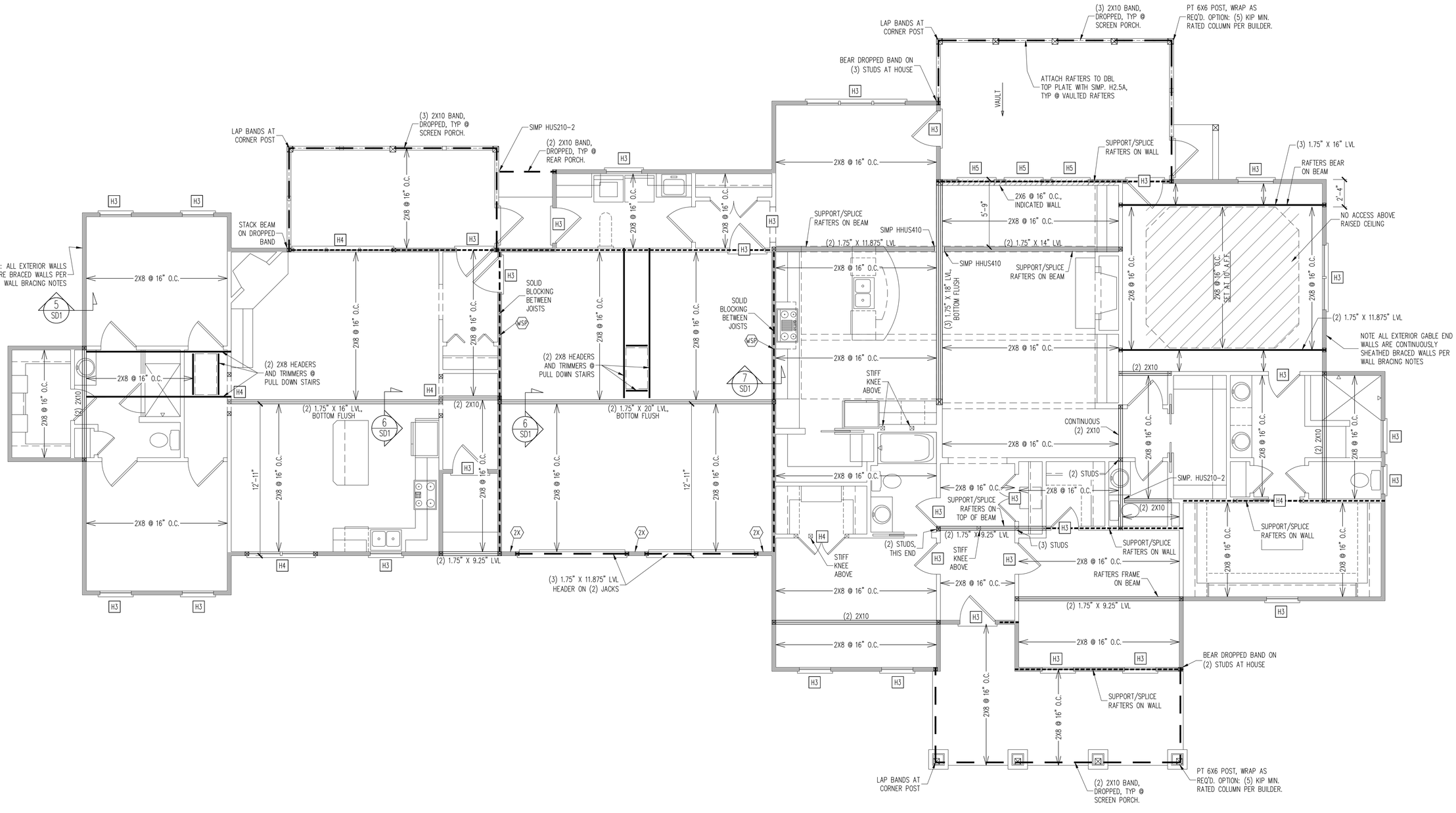
H5 (3) 2X10'S ON SINGLE JACKS

(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"

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046794 NATHANIEL B. GRAY

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MINTER RESIDENCE
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SCOPE:
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PROJECT NO.
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SHEET NO.
S3
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FRAMING NOTES

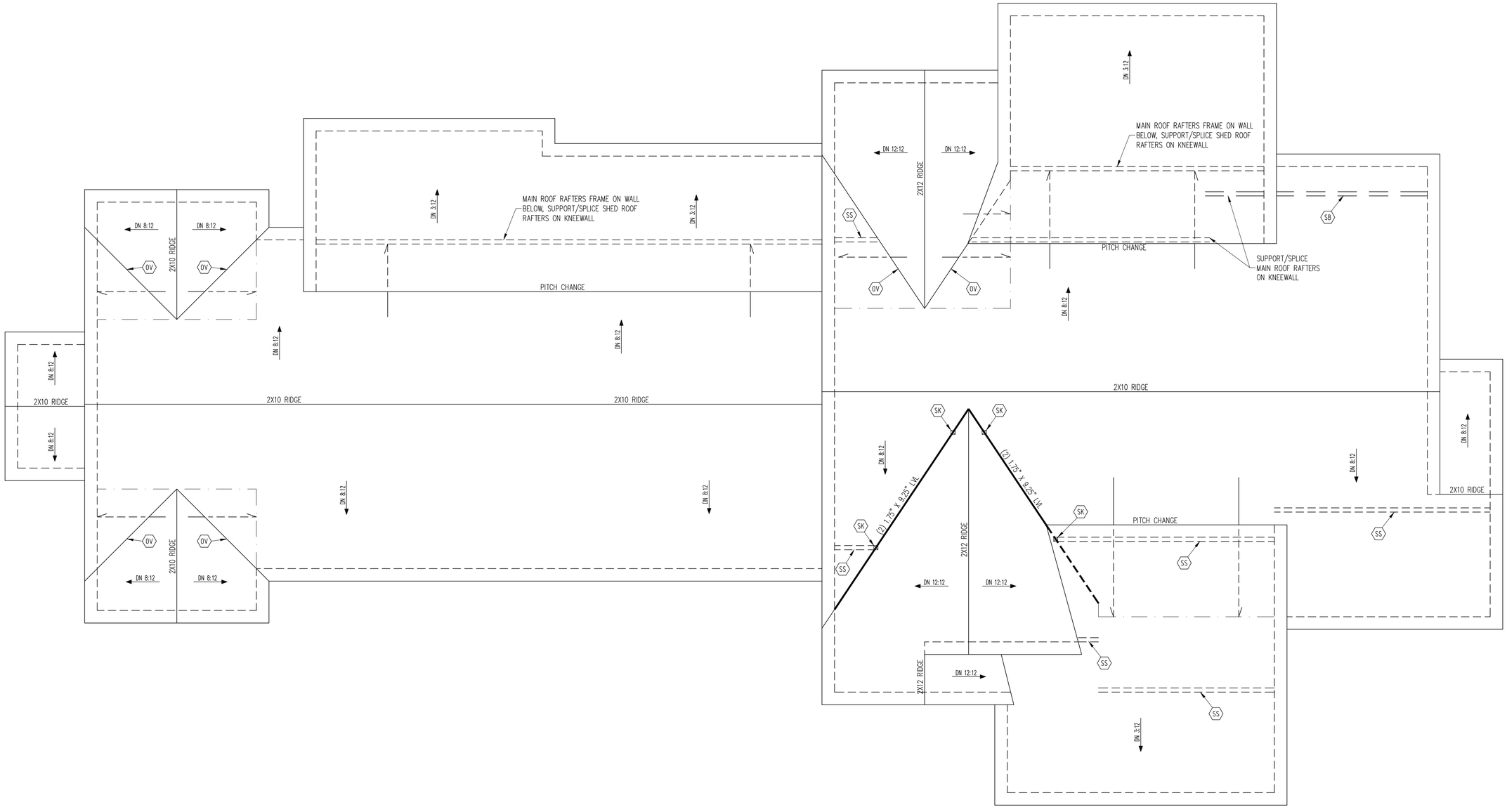
ROOF ONLY

- COMMON RAFTERS 2X8 @ 16" O.C. TYP U.N.O.
- COLLAR TIES 2X4 EVERY 3RD SET OF RAFTERS TYP U.N.O.
- VERIFY ROOF PITCHES, OVERHANG LENGTHS, AND KNEEWALL FRAMING HGTS WITH ARCHITECTURAL DRAWINGS, TYPICAL.

FRAMING SCHEDULE

ROOF ONLY

OV	OVERFRAME VALLEY (2X10 SLEEPER)
SB	SUPPORT/SPLICE RAFTERS ON BEAM BELOW
SK	DBL 2X4 STIFF KNEE
SS	SUPPORT/SPLICE RAFTERS ON KNEEWALL BELOW



ROOF FRAMING PLAN

1/4" = 1'-0"

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046794 NATHANIEL B. GRAY

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MINTER RESIDENCE
STRUCTURAL ADDENDUM
SCOPE:
LOC: 1074 RED HILL CHURCH ROAD
HARNETT COUNTY, NC

REV #	REF PROJ #	DATE

ENG: PAL/NBG
DATE: 07/05/2024

PROJECT NO.
24-18-319

SHEET NO.
S4
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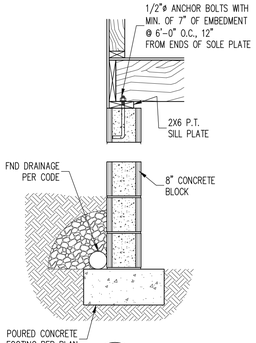
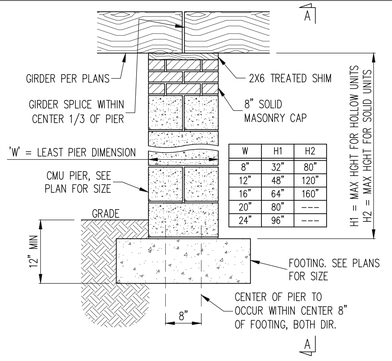
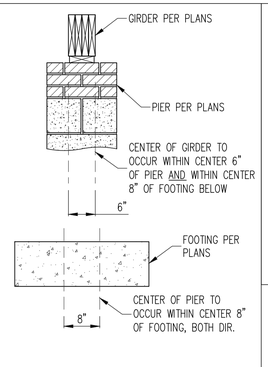


1 S1 SECTION
TYPICAL FND WALL CRAWL SPACE
3/4" = 1'-0"

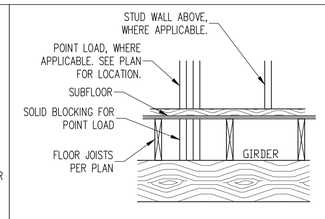


W	H1	H2
8"	32"	80"
12"	48"	120"
16"	64"	160"
20"	80"	---
24"	96"	---

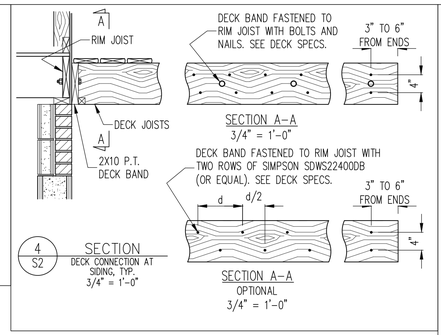
2 S1 SECTION
TYPICAL MASONRY PIER, GIRDER
3/4" = 1'-0"



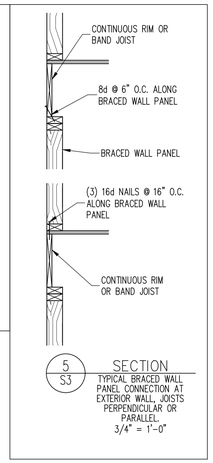
SECTION A-A
3/4" = 1'-0"



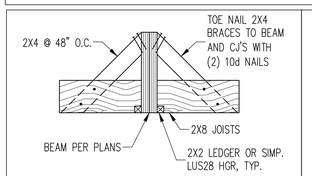
3 S2 SECTION
TYPICAL DROPPED GIRDER
3/4" = 1'-0"



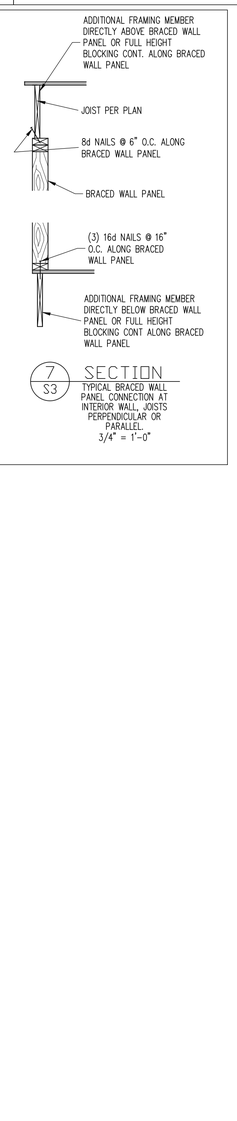
4 S2 SECTION
DECK CONNECTION AT SIDING, TYP.
3/4" = 1'-0"



5 S3 SECTION
TYPICAL BRACED WALL PANEL CONNECTION AT EXTERIOR WALL, JOISTS PERPENDICULAR OR PARALLEL.
3/4" = 1'-0"



6 S3 SECTION
FLUSH BEAM BRACING EVERY 3RD JOIST
3/4" = 1'-0"



7 S3 SECTION
TYPICAL BRACED WALL PANEL CONNECTION AT INTERIOR WALL, JOISTS PERPENDICULAR OR PARALLEL.
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.

1.05 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

2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:

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 OR 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 TO 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 120 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. STAGGER ADJACENT SPLICES A MINIMUM OF ONE LAP LENGTH

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 USS 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 B18.2.1-1981. 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 RODS AND BOLTS SHALL CONFORM TO ASTM F1554-15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO

PART 9: DRIVEN 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, $F_{c\ perp}$ = 425 PSI, F_v = 135 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 PSL MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS:
E= 1,900,000 PSI, F_b = 2600 PSI, F_v = 285 PSI, $F_{c\ perp}$ = 750 PSI
LSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E= 1.3 X 10E6 PSI, F_b = 1700 PSI, F_v = 400 PSI, $F_{c\ perp}$ = 680 PSI

11.02 LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS. MAY SUBSTITUTE PSL AND LVL FOR EACH OTHER UNO

PART 12: PRESSURE TREATED LUMBER

12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA 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 FLITCH PLATE BEAMS

13.01 FLITCH 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 FLITCH 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 TRPL STUD GANGED COLUMN TYP UNO.

14.02 DIMENSIONAL LUMBER 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 (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 NCRC. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NCRC 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 NCRBC R602.3.5 AND R802.11 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
	2X8	1	1	1	1	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

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 THAN ANY REVISIONS ISSUED BY THE EOR ARE PROMPLY 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

ABBREVIATIONS

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

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. SIDING 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:

A. ALL STRUCTURES EXCEPT BRICK STRUCTURES

	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 @ 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 @ d = 16" O.C. STAGGERED

A . BRICK VENEER STRUCTURES

	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. GIRDERS SHALL BEAR DIRECTLY ON POSTS OR BE 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:

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".

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SCOPE: STRUCTURAL ADDENDUM
LOC: 1074 RED HILL CHURCH ROAD HARNETT COUNTY, NC
MINTER RESIDENCE

REV #	REF PROJ #	DATE

ENG: PAL/NBG
DATE: 07/05/2024

PROJECT NO.
24-18-319

SHEET NO.
SD1
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