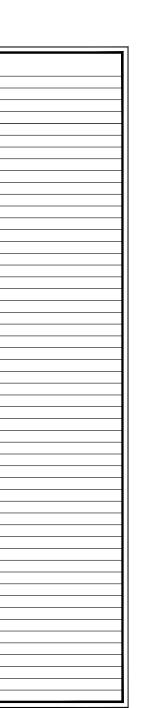
MALBEC-RALE

RALEIGH - LOT 00.0046 THE FARM AT NEILL'S CREEK

(MODEL# 1930)

ELEVATION 4 - GR



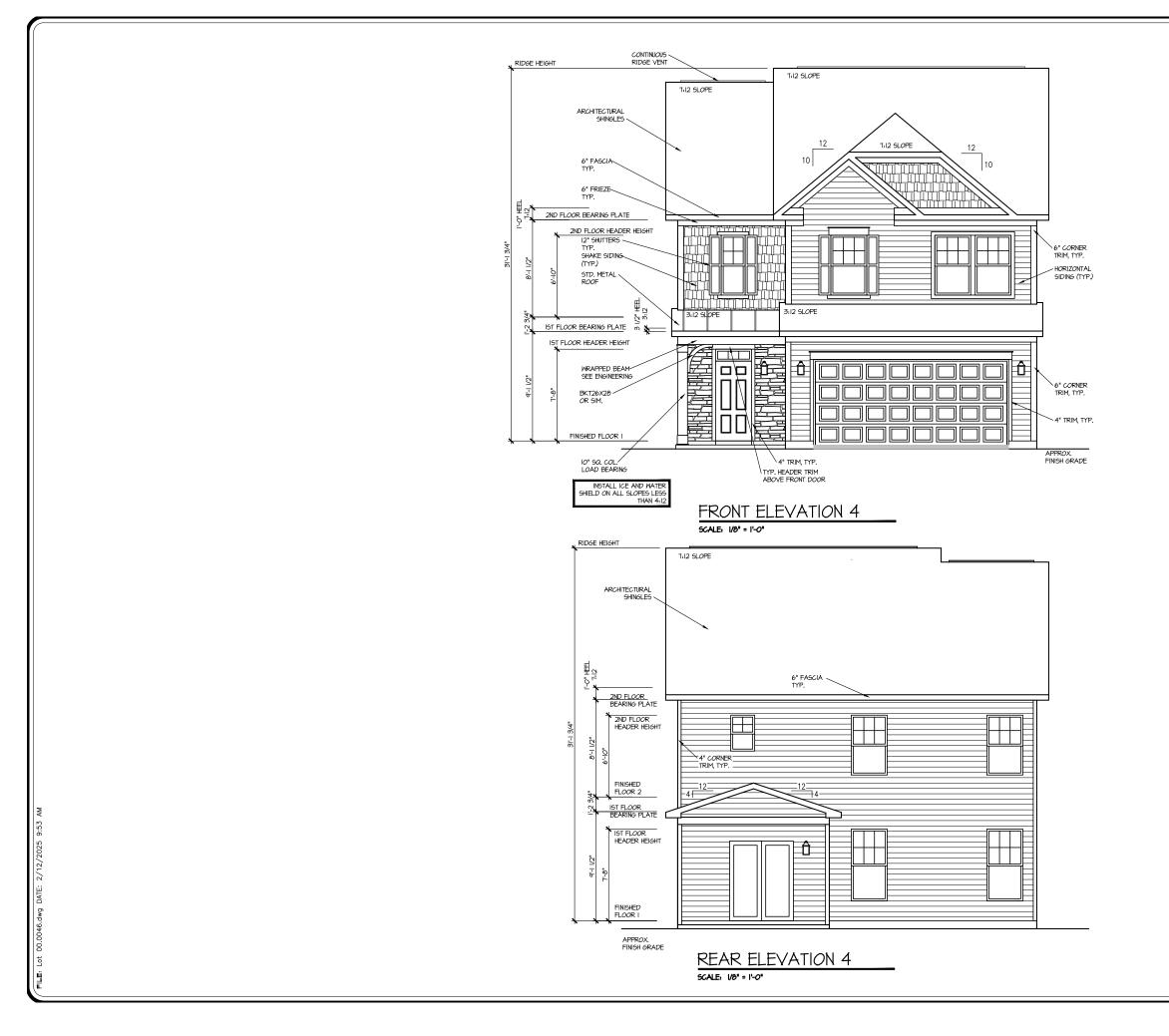
<u>INDEX</u>



AREA CALCULATIONS	HEATED	COVERED /	LINIOOVEDED
ELEVATION 4	HEATED	UNHEATED	UNCOVERED
FIRST FLOOR	885 SF		
GARAGE		448 SF	
FRONT PORCH - ELEVATION 4		57 SF	
SECOND FLOOR	1100 SF		
SEGGIND TEGGIN	1100 01		
OPTION			
		107.05	
COVERED PORCH		127 SF	
TOTAL	1985 SF	632 SF	

542 WINDING CREEK DRIVE

LOT	SPECIFIC	
		THE FARM AT NEILL'S CREEK
	LOT 00.0046	MALBEC REV. RALE 1 ELEVATION 4
2	ADDRESS	542 WINDING CREEK DR LILLINGTON, NC 27546
		,
-		

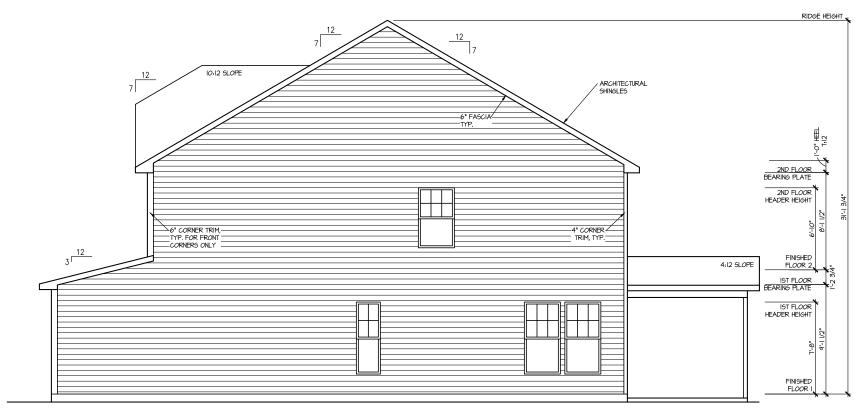


DRAWN BY: ITS DATE: 02/12/2025 PLAN NO. 1930

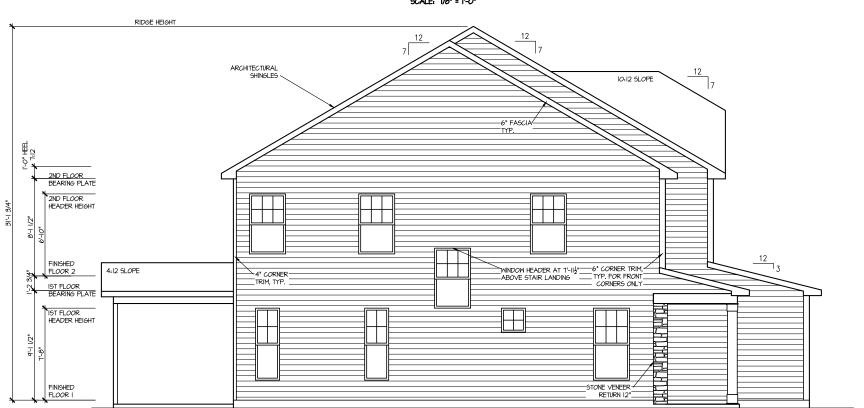


* REAR ELEVATIONS

HOUSE NAME:
MALBEC
DRAWING TITLE
FRONT # RE



RIGHT ELEVATION 4 SCALE, 1/8" = 1'-0"



LEFT ELEVATION 4

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

DRAWN BY: DATE: 02/12/2025 PLAN NO. 1930



 $\frac{O}{W}$ EVAT. ᇳ

HOUSE NAME:
MALBEC
DRAWING TITLE
RIGHT & LE

UPPER ROOF VENTILATION CALCULATIONS:
ROOF AREA = 1044 50, FT.
0/FEAUL SEQUEET VENTILATION
1 170 50 5.24 50, FT.
1 170 50 50 50, FT.
50-60% IN TOP THEID = 2.06 - 3.32 50, FT. (1 TO 300) NET FREE AREA OF VENTED SOFFIT = 5.7 SQ, IN / LINEAR FT. NET FREE AREA OF RIDGE VENT = 18 SQ, IN/ LINEAR FT.

COMER VENTING. (BOTTOM 2/3 RDS)

65 LINEAR FIET OF SOFFIT X 5.7 SQ. IN. = 2.57 SQ. FT.

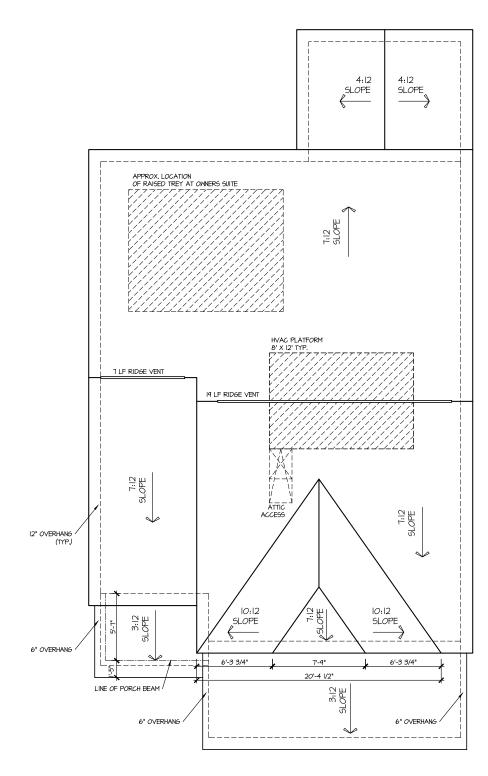
95 LINEAR FIET OF RIDGE X 15 SQ. IN. = 2.25 SQ. FT.

25 LINEAR FIET OF RIDGE X 15 SQ. IN. = 3.25 SQ. FT.

25 LINEAR FIET OF RIDGE X 15 SQ. IN. = 3.25 SQ. FT.

26 LINEAR FIET OF RIDGE X 15 SQ. FT. > 4.15 SQ. FT. (RGTD)

TOTAL ROOF VENTILATION. 5.25 SQ. FT. > 4.15 SQ. FT. (RGTD)



ROOF PLAN ELEV. 4

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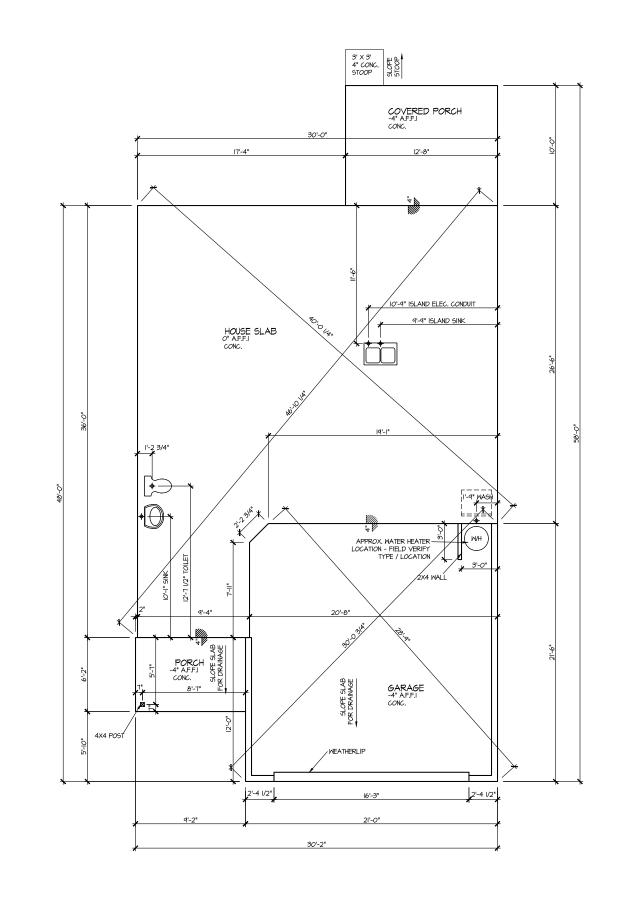
DATE: 02/12/2025 PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
ROOF PLAN

SHEET No.

A1.3

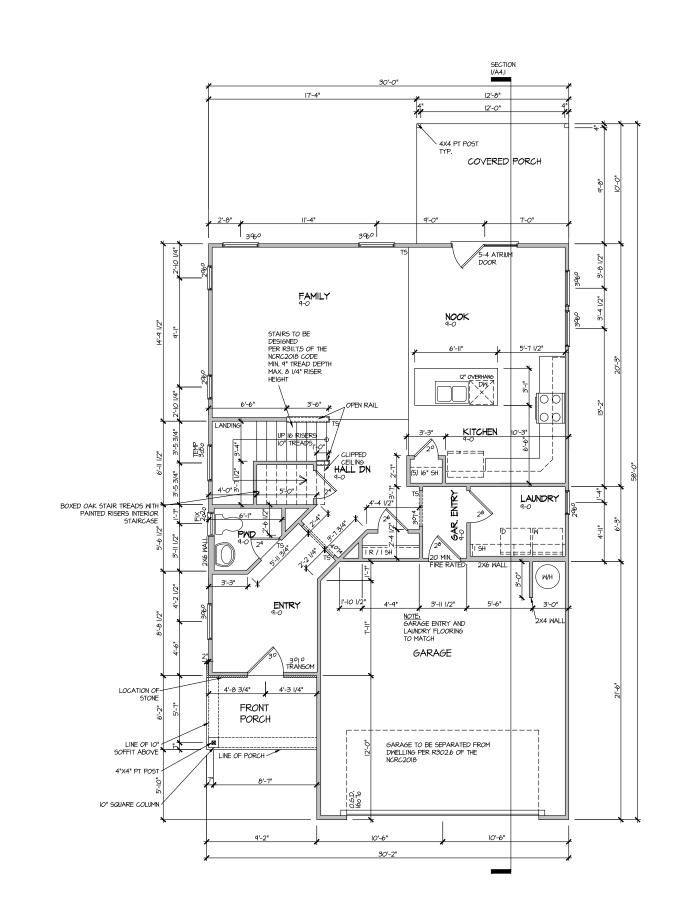


ELEVATION 4 SLAB PLAN SCALE: 1/8" = 1'-0" | MASTER PLAN INFORMATION | REVISION | DATE | DATE

DRAWN BY: ITS DATE: 02/12/2025 PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
SLAB PLAN



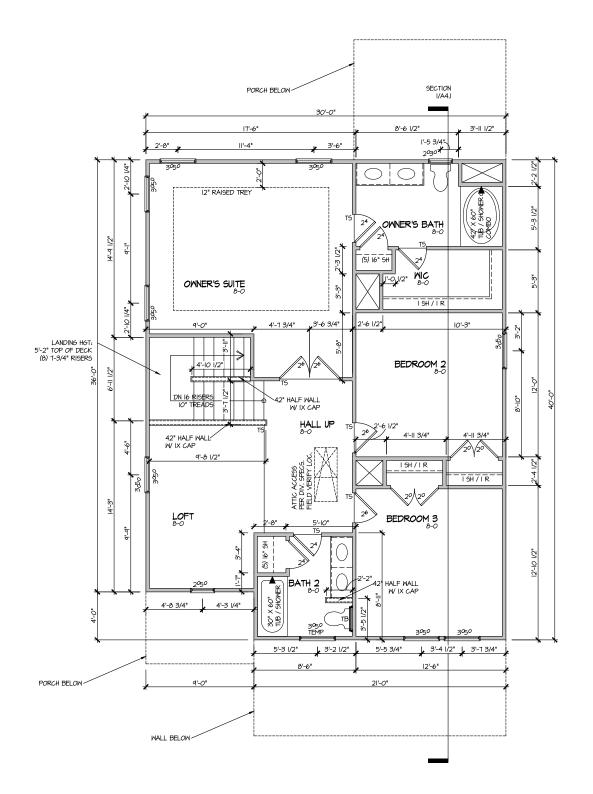
ELEVATION 4 FIRST FLOOR PLAN

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

HOUSE NAME:
MALBEC
DRAWING TITLE
FIRST FLOO

DRAWN BY:

DATE: 02/12/2025 PLAN NO. 1930



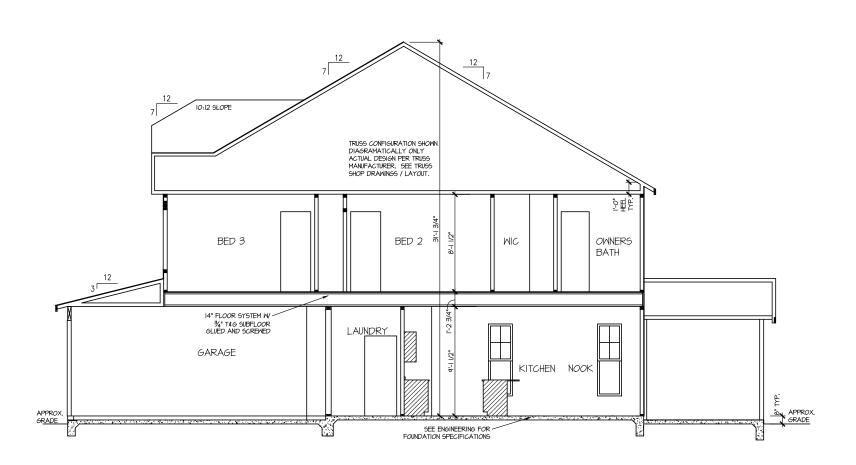
ELEVATION 4 SECOND FLOOR PLAN SCALE: 1/8" = 1'-0"

DRAWN BY: DATE: 02/12/2025 PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
SECOND FL

SHEET No. A3.2

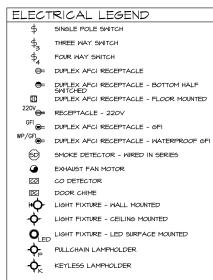


SECTION I SCALE 1/8" = 1'-0" | MASTER PLAN INFORMATION | REVISION | DATE | DATE

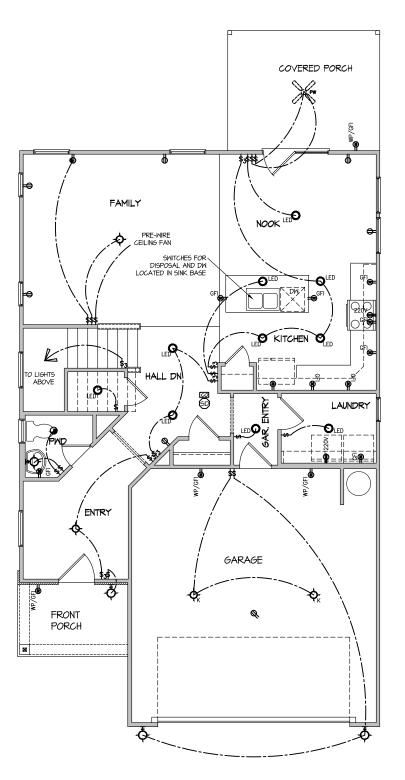
DRAWN BY:
ITS
DATE:
02/12/2025
PLAN NO.
1930



HOUSE NAME:
MALBEC
DRAWING TITLE
BUILDING SECTION



NOTE: ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ADDPTED VERSION OF THE NATIONAL ELECTRICAL CODE, THE LOCAL POWER COMPANY AND TO ALL APPLICABLE LOCAL REGULATIONS.





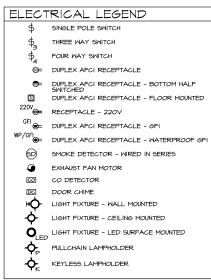
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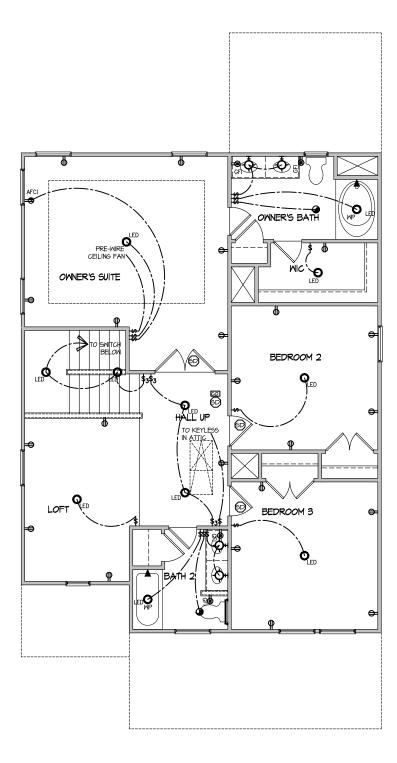
ᇳ HOUSE NAME:
MALBEC
DRAWING TITLE
FIRST FLOC

SHEET No.

ELECTRICAL PLAN FIRST FLOOR - ELEV. 4



NOTE: ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, THE LOCAL POWER COMPANY AND TO ALL APPLICABLE LOCAL REGULATIONS.



ELECTRICAL PLAN SECOND FLOOR - ELEV. 4 scale: 1/8" = 1'-0"



FLOOR ELECTRICAL

HOUSE NAME:
MALBEC
DRAWING TITLE
SECOND FLO

SHEET No.

≣1.2

WOOD FRAME ENGINEERING IS BASED ON NDS. "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

DESIGN LOADS:

DEAD = 7 PSF T.C., IO PSF B.C. LOAD DURATION FACTOR = 1.25

FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (I-JOISTS & SOLID SAWN)
10 PSF T.C., 5 PSF B.C. (TRUSSES)

LATERAL 120 MPH, EXPOSURE B. SEISMIC A/B

2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION, ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- REFER TO FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. U.N.O.
- EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS @ 16" O.C. SPF OR SYP "STUD" GRADE LUMBER, OR BETTER, U.N.O. WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SPF) OR SOUTHERN PINE #2 (SYP) LUMBER, OR BETTER (KILN-DRIED). ALL HEADERS HAVE BEEN DESIGNED BASED ON CALCULATED LOADS & SIZED ACCORDINGLY. CODE TABLES HAVE NOT BEEN USED.
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x 'STUD' GRADE MEMBERS SPACED @ 16" O.C. (MAX., U.N.O.)

 • HEADERS IN NON-LOAD BEARING WALLS SHALL BE:
- (I)2x4/6 FLAT @ OPENINGS UP TO 4', (2)2x4/6 FLAT UP TO 8'.
- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).
- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING: • 'LSL' - Fb=2325 psi; Fv=310 psi; E=1.55x10^6 psi
- "LVL" Fb=2600 psi; Fv=285 psi; E=2.0xl0^6 psi 'PSL' - FB=2900 PSI; FV=290 PSI; E=2.0XIO^6 PSI
- M+K SHALL BE FULLY INDEMNIFIED FOR ANY AND ALL ISSUES RESULTING FROM OR RELATED TO ANY BUILDING COMPONENT IF THE OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO MH FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALL ATION
- FOR 2 & 3 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS • 8" O/C OR 2 ROWS 1/4"x31/2" SIMPSON SDS SCREWS (OR 31/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 3 ROWS FOR BEAM DEPTHS OF 14" OR GREATER.
 APPLY FASTENING AT BOTH FACES FOR 3-PLY CONDITION. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3½" OR 5½" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 \$ 2x8
- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/4"x6" SIMPSON SDS SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREW 2" FROM EDGE, A SOLID 7" BEAM IS ACCEPTABLE.
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STUD, MINIMUM.

 - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE
- NUMBER OF JACK STUDS REQUIRED, U.N.O.
- ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER W/ 3"X0.131" NAILS @ 24" O.C. (MIN.) EACH PLY.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND, BEARING. BLOCKING TO MATCH POST ABOVE
- FASTEN 2x WOOD PLATES TO TOP FLANGE OF STEEL BEAMS WITH P.A.F.'s ('HILTI' X-CF PINS OR EQUAL) @ 16" O.C. STAGGERED, OR 1/2" DIA, BOLTS @ 48" O.C. STAGGERED.
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4 CAP & ABW44Z BASE, U.N.O.

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUE TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES MARBLE FLOORS - CONTACT M&K FOR MARBLE FLOOR DESIGNS) AT I-JOIST FLOORS, PROVIDE I I/8" MIN. OSB RIM BOARD.
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR 24" O.C., EXPOSURE I (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W GLUE AND
- 2 1 x 0.131" NAILS @ 6"0.c. @ PANEL EDGES & @ 12"0.c. FIELD.
- 2 8 × 0.120 NAILS @ 4 O.C. @ PANEL EDGES \$ @ 8" O.C. FIELD.
- 2 8 × 0.113" NAILS @ 3" O.C. @ PANEL EDGES \$ @ 6" O.C. IN FIELD #6 x 2" MIN. SCREWS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD

ROOF FRAMING

- BAY WINDOWS & SHED ROOFS (UP TO 6' SPAN) CAN BE 2x4 OR 2x6 RAFTERS & CEILING JOISTS @ 16/24" O.C
- FASTEN FACH POOF TRIES TO TOP PLATE W/ SIMPSON H2 ST CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS, PROVIDE (2) H2.57 CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.C
- PERFOT AND INSTALL ROOF TRUSSES PER WICA & TPL'S BOSI I-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- SUPPORT PORCH & SHORT SPAN ROOF TRUSSES (MAX T' SPAN) w/ 2x4 LEDGER FASTENED TO:
 - RIM BOARD W/ (2) 3" VO 131" NAIL S @ 16" OC. MAX (1- 1015TS - TRUSS VERTICALS w/ (3) 3"x0.131" NAILS @ 19.2" O.C. MAX. (FLOOR TRUSSES)
- ROOF SHEATHING SHALL BE 1/16" A.P.A. RATED SHEATHING 24/16
 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
- W/ 2 ½" × 0.131" NAILS @ 6"O.C. @ PANEL EDGES € @ 12" O.C. FIELD.
- w/ 2 🖁 × 0.120" NAILS @ 4"o.c. @ PANEL EDGES \$ @ 8" O.C. FIELD.
- · W/ 2 🖥 × 0.113" NAILS @ 3"O.C. @ PANEL EDGES & @ 6" O.C. FIELD.

HOLD-DOWN SCHEDULE

	SYMBOL	SPECIFICATION		
	► HD-I	SIMPSON HTT4 HOLD-DOWN * (%" DIA. ANCHOR)		
	HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UN.O.) -OR- MSTC66B3 ALTERNATE		
I	► HD-3	SIMPSON STHDI4/STHDI4RJ		

* UTILIZE THE SSTB24 ANCHOR BOLT ● ALL MONOSLAB & INTERIOR RAISED SLAB (LE THICKENED SLABS FOOTINGS) CONDITIONS MINIMUM 24" MIN OOTING THICKNESS REQUIRED

POXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB CONDITIONS ONLY: UTILIZE SIMPSON 'SET' EPOXY SYSTEM THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" (FOR 5/8" DIA.) OR 15" (FOR 7/8" DIA.) MIN. EMBEDMENT INTO CONCRETE.

NSTALL PER MANUE INSTRUCTIONS MINIMUM 16" FOOTING THICKNESS REQ'D DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF CONCRETE.

SD2. | REFERS TO SD2. | A FOR LVL/PSL/LSL BEAMS OR SD2.IB FOR FLITCH BEAMS OR SD2.IC FOR STEEL BEAMS

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM: 20 MPH WIND IN 2018 NCSBC:RC

(120 MPH WIND SPEED IN ASCE 7-10 WIND MAP, PER IRC R301,2,1,1) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 IBC

(SECTION 1609) & ASCE 7-10, AS PERMITTED BY R301.1.3 OF THE 2018 NCSBC:RC, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R602.12 COMPLY. CORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIET LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBC:RC SECTION R802.II.I.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 R802.11

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 ¾"x0.II3" NAILS @ 6" O.C. AT EDGES & @ I2" O.C. IN THE PANEL FIELD. TYP, U.N.O.
- HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL PANEL EDGES IS NOT REQUIRED BY THIS DESIGN EXCEPT FOR THOSE AREAS SPECIFICALLY NOTED.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT STAPLE CONNECTION SPEC: 1/5" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C IN FIELD.

BLOCKED PANEL EDGES

AT DESIGNATED AREAS - FASTEN SHEATHING w/ 2 %" x 0.113" NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 3/4" 16 GA STAPLES (1/6" CROWN) ● 3" O.C. AT EDGES & ● 6"
O.C. IN FIELD, ALL SHEATHING PANELS SHALL BE DRIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.

3" O.C. EDGE NAILING

at designated areas - fasten panel edges of WOOD STRUCTURAL WALL SHEATHING TO FRAMING N/ 8d NAILS @ 3" O.C. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING. IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN. T WILL BE SPECIFICALLY NOTED ON PLAN.
- DESIGN ASSUMES 16" O.C MAX. STUD SPACING, U.N.O.
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

OR 3" O.C. OSB SHEARWALL.

► INDICATES HOLDOWN BELOW

VENEER LINTEL SCHEDULE

(MAX)	ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x/4"
	3 FT. MAX	L3"x3"x/4"
6'-0"	I2 FT. MAX	L4"x3"x/4"
	20 FT. MAX	L5"x3½"x¾"
	3 FT. MAX	L4"x4"x/4" *
8'-0"	I2 FT. MAX	L5"x3½"x¾"
	I6 FT. MAX	L6"x3½"x¾"
q'-6"	I2 FT. MAX	L6"x3½"x¾"
16'-0"	2 FT. MAX	L7"x4"x½" **
10-0	3 FT. MAX	L8"x4"x⁄⁄s" **

HALL SUPPORT 2 %" - 3 ½" VENEER W/ 40 psf MAXIMUM WEIGHT IG SHALL HAVE 4" MIN BEARNIG IG SHALL HAVE 5" MIN BEARNIG IG SHALL NOT BE FASTINED BACK TO HEADER. IG SHALL BE FASTINED BACK TO MOOD HEADER. IN MALL **048**°0... W/JS" DIAX 3 JS" LONG LAG SCREWG IN 2" LONG VERTICALLY SOUTHED HOLD.

X, VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE

LL LINTELS SHALL BE LONG LEG VERTICAL. HEN SUPPORTING VENEER < 3" WIDE THE EXTERIOR TOE OF THE

HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3 ½" WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT FINISHING.
SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT
ENCOMPASSED BY THE ABOVE PARAMETERS, FOR ANY LINTEL

Fastened Back to Beam, fasteners shall maintain a 2½" Minimum) Clear Distance from Bottom of Beam,

FOR GWEEN VENEER USE L4x3x/4". FOR 31/4" VENEER ONLY, SEE PLAN FOR VENEER SUPPORT IF

LEGEND

- INTERIOR BEARING WALL
- □=== BEARING WALL ABOVE
- ■== BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

INDICATES HOLD-DOWN OR STRAP REFER TO SCHEDULE

NON-BEARING HEADER SCHEDULE

SPAN	2x4 NON-BEARING PARTITION WALL	2x6 NON-BEARING PARTITION WALL	
UP TO 3'-0" (1)2x4 FLAT		(I)2x6 FLAT	
UP TO 6'-0"	(2)2x4	(3)2x4	
UP TO 8'-0"	(2)2x6	(3)2x6	
UP TO 12'-0"	(2)2x8	(3)2x8	

• ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x 'STUD' GRADE MEMBERS SPACED @ 24" O.C. (MAX.)

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE.
- FOOTING DESIGN 2,000 PSF ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY
- FASTEN 2×4/6 SILL PLATES TO END WITH A MINIMUM OF 2 ANCHORS
- PER PLATE, 12" MAX. FROM PLATE ENDS UTILIZING: • 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C, 7" MIN. EMBEDMENT
- (CONC), 15" MIN. EMBEDMENT (CMU) SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C. (CONC)
- SIMPSON MAB23 ANCHOR STRAPS @ 2'-8" O.C. (CMU)
- (REFER TO DETAILS FOR IO' TALL WALL ANCHOR REQUIREMENTS) ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W CONCRETE OR CMU SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2.
- BUILDER TO VERIFY CORROSION-RESISTANCE COMPATIBILITY OF HARDWARE & FASTENERS IN CONTACT W/ PRESERVATIVE-TREATED WOOD, CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.
- BASEMENT INTERIOR BEARING WALLS & EXTERIOR WALK-OUT BASEMENT WALLS SHALL BE 2x6 @ 16" O.C. SPF OR SYP, "STUD
- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O. 4,000 psi: FOUNDATION WALLS
- 2,500 psi: FOOTINGS & INTERIOR SLABS ON GRADE 3,000 psi: GARAGE & EXTERIOR SLABS ON GRADE leg 000.06
- BASEMENT FOUNDATION WALL DESIGN BASED ON: . 9' OR 10' HEIGHT (AS NOTED ON PLANS)
- TALLER WALLS MUST BE ENGINEERED. NOMINAL WIDTH (9 ½" FOR 10" THICK WALL).

· LARGER OPENINGS SHALL BE PER PLAN

- BASEMENT WALL DESIGN IS BASED ON 60 PCF BACKFILL SOIL TYPE CLASSIFICATIONS (SC. ML-CL. OR CL).
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL IST FLOOR DECK
- PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN CONCRETE BONT, FND. WALL WITH 2" CLEAR, REINFORCEMENT SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS.
- FOR OPENINGS UP TO 36", PROVIDE MINIMUM 10" CONCRETE DEPTH OVER OPENING OR (3)2x10 W/ (2)2x6 JACK STUDS, U.N.C
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- ALL FOOTINGS SHALL BEAR AT LEAST 12" BELOW FINISH GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP.
- JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMUM)
- JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (I:I RATIO), WITH A MAXIMUM OF I:I.5 RATIO CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL
- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C90 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (Fm=1500 psi). MORTAR SHALL BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 & 530.I.
- CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL JOINT REINFORCEMENT (OR EQUAL) - 9 GA, MINIMUM @ 16" O.C
- PROVIDE 2x8 x I6" LONG P.T. PLATE ON TOP OF ALL CRAWL SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID.
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE.
- DIMENSIONS BY OTHERS, BUILDER TO VERIFY
- PULL DER TO VERIEY THAT MODEL HAS BEEN ADEQUATELY TREATED BY A LICENSED AND BONDED PEST CONTROL COMPANY FOR SUBTERRANEAN TERMITES. METHOD AND TYPE OF TREATMENT TO BE DETERMINED BY PEST CONTROL COMPANY.

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY
DETERMINE THE ERECTION PROCEDURES SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL. NCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY OR WARRANTY TO FRANCES

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN.

TRUSSES/JOISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUS BEAMS DO NOT EXCEED THE FOLLOWING:

- 1/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS: 1/8" DEAD LOAD FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO
- FLOOR FRAMING BY OTHERS: LIMIT ARGOLUTE TRUGS DEELECTION TO 3/16" DEAL LOAD. (NOT DIFFERENTIAL DEFLECTION)

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126-22076

REVISIONS

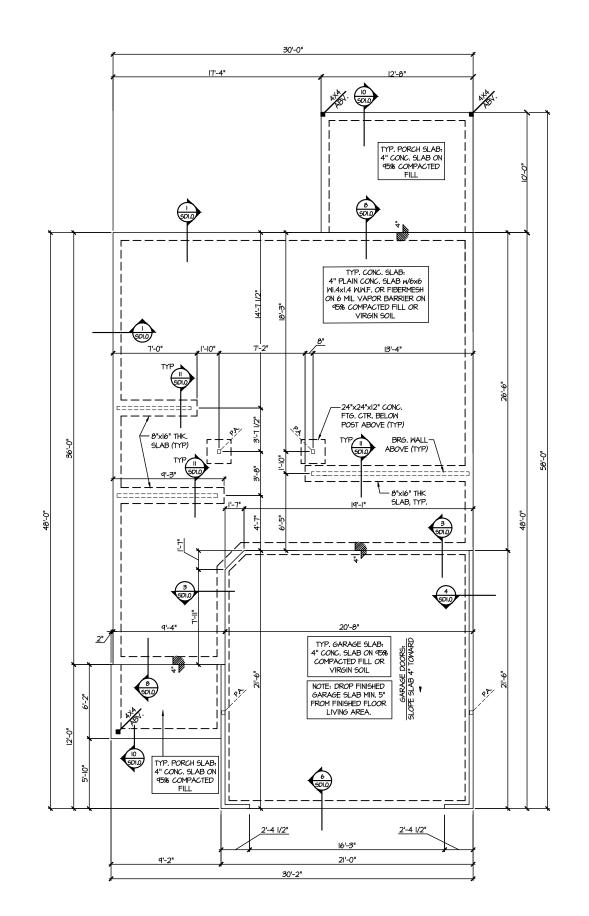
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CONNECTION SPECIFICATIONS (TYP. U.N.O.) DESCRIPTION OF BLDG. ELEMENT 3"x0.131" NAILS 3"x0.120" NAII 5 (3) TOENAILS* IOIST TO SOLE PLATE (3) TOENAILS OLE PLATE TO JOIST/BLK' TUD TO SOLE PLATE (3) NAILS @ 4" 0.0 (2) TOENAILS (3) NAILS **@** 4" o.c (3) TOENAILS* TOP OR SOLE PLATE TO STUD TOENAILS @ 6" OFNAILS @ 8" BLK'G. BTWN. JOISTS TO TOP PL. (3) TOENAILS NAILS @ 16" o.c NAILS @ 24" O.C DOUBLE STUD MIRI E TOP PI AT NAILS @ 24" a NAILS @ 16" o. OUBLE TOP PLATE LAP SPLICE (9) NAILS IN LAPPED AREA (II) NAILS IN LAPPED AREA (2) NAILS OP PLATE LAP @ CORNERS & (2) NAILS ITERSECTING WALLS 2½"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. ONLY ACCEPTABLE WHERE * ARE SHOWN)



MONO SLAB FOUNDATION PLAN SCALE: 1/8"=1"0"

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RESIDENTIAL STRUCTURAL ENSINEERING Y

M&K project number: 126-22076

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CREEK **OUNDATION PLANS** FARM AT NEIL'S Lot 46 - Malbec 4 Raleigh, nc

• == INDICATES SHEAR WALL & EXTENT

LEGEND

EXTENT OF OVERFRAMING

• IIIII INTERIOR BEARING WALL ● □===□ BEARING WALL ABOVE • ---- BEAM / HEADER

JL METAL HANGER

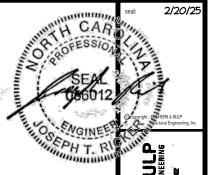
* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

S1.0

3" O.C. EDGE NAILING



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RESIDENTIAL STRUCTURAL ENGINEERING Y

M&K project number 126-22076

JTR drawn by: KJN issue date: 02-18-2

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REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.I REFERS TO SD2.IA FOR LVL/PSL/LSL BEAMS OR SD2.IB FOR FLITCH BEAMS OR SD2.IC FOR STEEL BEAMS

LEGEND

- IIIIIII INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(3)194"×18" - FT	5¼"xl8" - FT	N/A	(4)2xi2 + (3) 片"xil片" STEEL FLITCH PLATES - FB	WI2x26 - F
002	(2)13/4"×14" - F	3½"xl4" - F	(3)13/4"×14" - F	(2)2xl2 + (1)从"xl以" STEEL FLITCH PLATES - FB	WI2xI4 - F

- BEAM NOTATION: "F" INDICATES FLUSH BEAM "FT" INDICATES FLUSH TOP BEAM "FB" INDICATES FLUSH BOTTOM BEAM

- "H" INDICATES FLUSH BOTTOM BEAM
 "D" INDICATES DROPPED BEAM
 "H" INDICATES DROPPED OPENING HEADER
 REFER TO DETAIL D/SD2.0 FOR TYPICAL FILTCH BEAM CONNECTIONS
 REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
 FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN
 PLATES IN SUCCESSION W (2) 3"X01.20" NAILS 9 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2X STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W (2) 3"XO.120" NAILS @ 8" O.C.

CREEK NEIL'S RAMING

MAT N • MALBEC 4 FARM / LOT 46 - M/ RALEIGH, N OOR

S2.0

2ND FLOOR FRAMING PLAN SCALE: 1/8"=1'-0"

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M&K project number: 126-22076

JTR drawn by: KJN issue date: 02-18-25

REVISIONS:

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RAMING P

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES \$ SCHEDULES

LEGEND

• = = INDICATES SHEAR WALL & EXTENT • EXTENT OF OVERFRAMING

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

 INTERIOR BEARING WALL ● □===□ BEARING WALL ABOVE

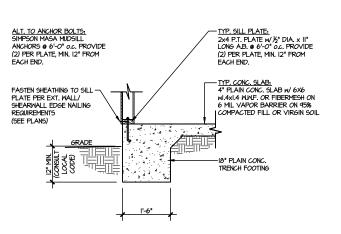
• ---- BEAM / HEADER

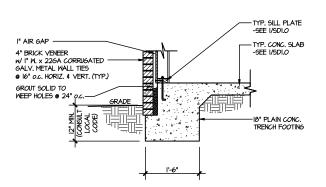
FARM AT NEIL'S CREEK
LOT 46 - MALBEC 4
RALEIGH, NC ROOF

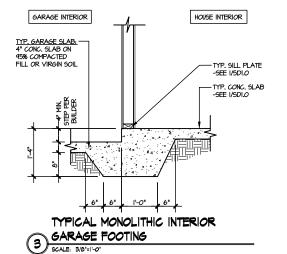
* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE. **S3.0**

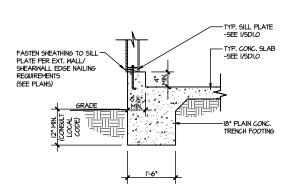
ROOF TRUSSES @ 24" O.C. BALLOON+RANED W - (2)2x4 SINDS @ 16' 0.0.
SF #2 OR SIP #2
GRADE OR BETTER - (3)2x4 B.F. KINGS + (1)2x4 JACK LOCATE ATTIC ACCESS BETWEEN ROOF TRUSSES

ROOF FRAMING PLAN



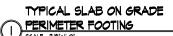




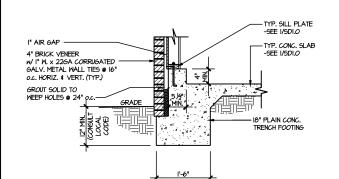


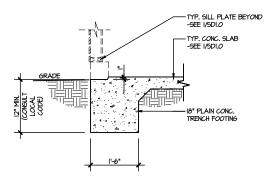
TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING

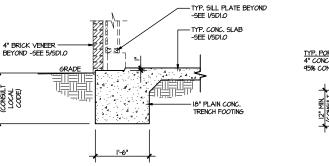
-SEE I/SDI.O

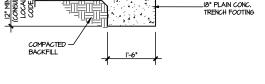






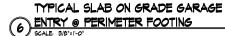




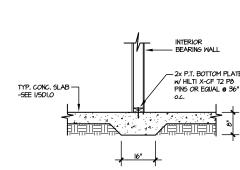


TYPICAL SLAB ON GRADE GARAGE 5 PERIMETER FOOTING

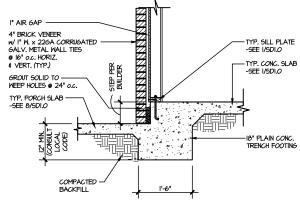
w/ BRICK VENEER

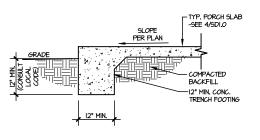


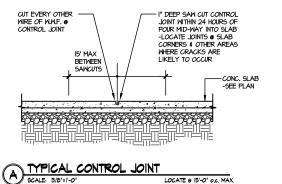




TYPICAL SLAB ON GRADE PERIMETER 8 FOOTING @ PORCH/PATIO







TYPICAL FOOTING @ PORCH SLAB

TYPICAL THICKENED SLAB @

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

LOCATE ® 15'-O" o.c. MAX. OR CORNERS WHERE CRACKS LIKELY TO DEVELOP

TYPICAL SLAB ON GRADE PERIMETER

INTERIOR BEARING WALL

2/20/2

STRUCTURAL ENGINEER

M&K project number: 126-22076

drawn by:

REVISIONS:

JTR

KJN

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ssue date: 02-18-2!

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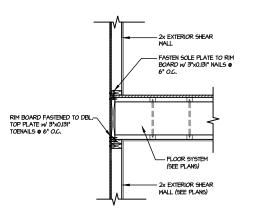
TYPICAL SHEAR

TRANSFER DETAIL @ ROOF

SCALE: 3/6"=1"-0" HEEL HEIGHT LESS THAN 9

ETAIL @ ROOF

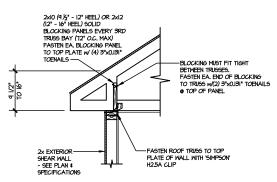
HEEL HEIGHT LESS THAN 9 ½*
NO BLOCKING REQT



TYPICAL SHEAR TRANSFER DETAIL

BETWEEN FLOORS @ EXTERIOR WALL

SCALE: 308-1-0"

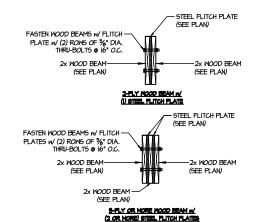


TYPICAL SHEAR

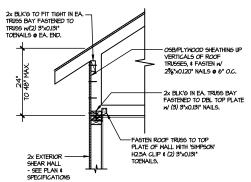
TRANSFER DETAIL @ ROOF

SCALE: 3/0'=1'-0' HEEL HEIGHT BETWEEN 9 1/2' - 16

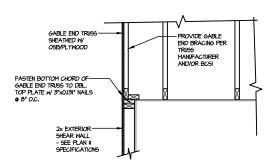
SCALE: $3/\delta^*$ =1'- O^* HEEL HEIGHT BETWEEN $9/2^*$ - 16^* BLOCKING REQ D



TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE SAT-11-0*



TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS SCALE: 3/6':1'-0' JEER MERITAGE TO THE TRUSS



TYPICAL GABLE END DETAIL SCALE: 3/8"=1"-0"



PACK OUT STEEL BEAM WEB WSOLID 2x MATERIAL & FASTEN
W (2) ROWS OF % DIA.
THRU-BOLITS • 16° O.C.

PACK OUT STEEL BEAM WEB WSOLID 2x MATERIAL & FASTEN
W (2) ROWS OF % DIA.
THRU-BOLITS • 16° O.C.

PACK OUT STEEL BEAM W (2) ROWS
OF HILTI XU-4-TPO PINS • 16° O.C.

PACK OUT STEEL BEAM
PA

TYPICAL STEEL BEAM CONNECTION DETAIL

SCALE SUPPLYOF

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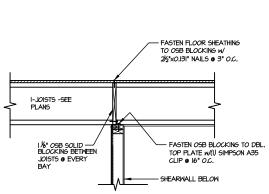
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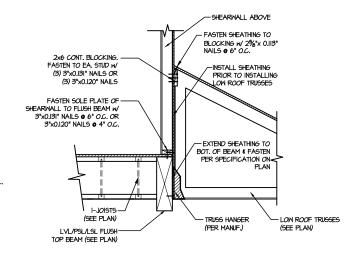
FRAMING DETAILS
FARM AT NEIL'S CREE
LOT 46 - MALBEC 4
RALEIGH, NC

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

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SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE 544-1-0

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MULHERN+KULP

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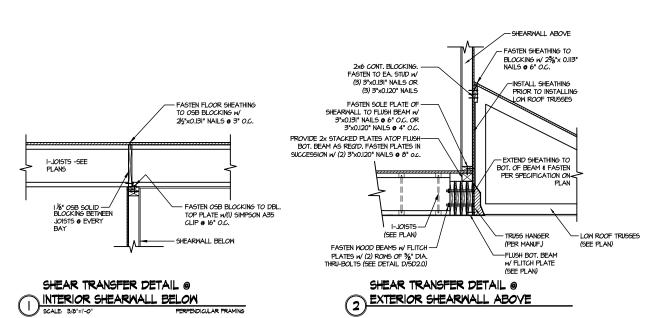
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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 46 - MALBEC 4
RALEIGH, NC

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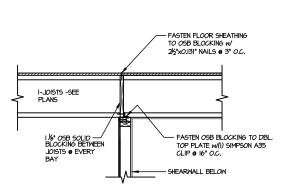
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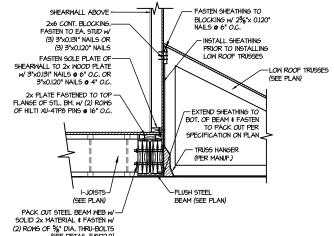
FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 46 - MALBEC 4
RALEIGH, NC

SD2.1B



SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW

SCALE: 3/8":1"-0" FERFENDI



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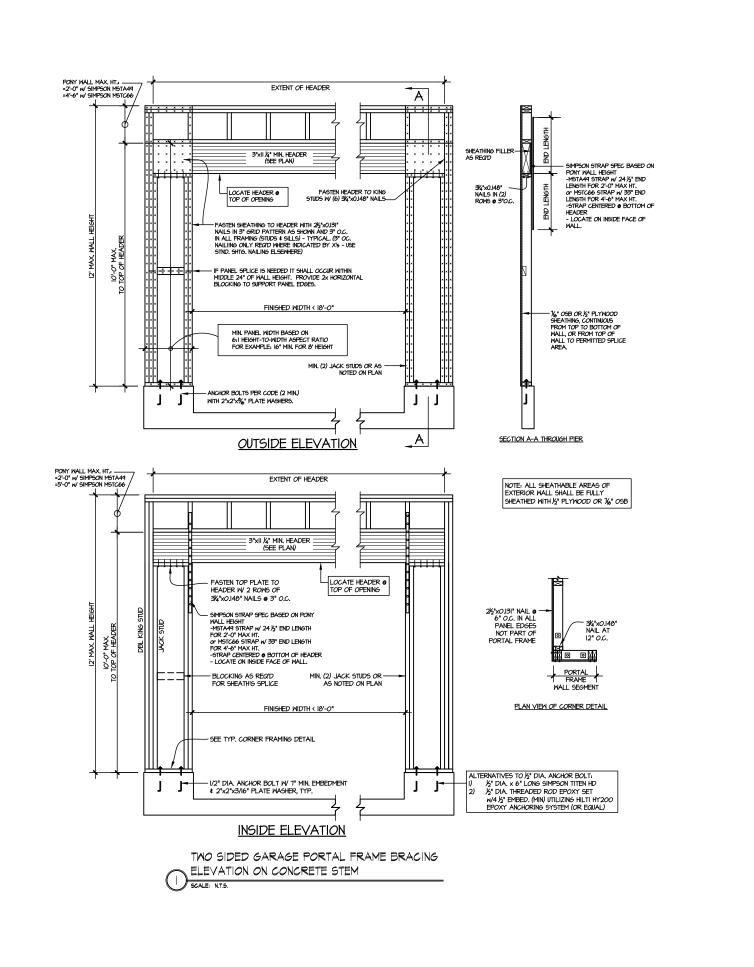
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FARM AT NEIL'S CREEK LOT 46 - MALBEC 4 RALEIGH, NC FRAMING DETAILS

SD2.1C

PACK OUT STEEL BEAM WEB w/— SOLID 2x MATERIAL & FASTEN w/ (2) ROWS OF 3/8" DIA. THRU-BOLTS (SEE DETAIL E/SD2.0) SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE



2/20/25 TH CAR SEPH T. R

MULHERNHKULP RESIDENTIAL STRUCTURAL ENGINEERING 300 December Ave. Parker, PA 19002 Y

M&K project number

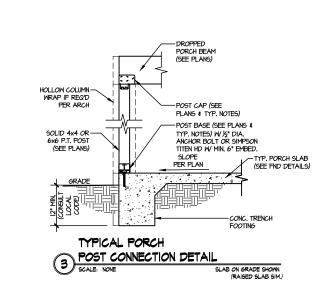
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CREE RAMING DETAILS FARM AT NEIL'S LOT 46 - MALBEC 4 RALEIGH, NC



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FARM AT NEIL'S CREEK
LOT 46 - MALBEC 4
RALEIGH, NC

SD3.0

