MALBEC-RALE

RALEIGH - LOT 00.0177 THE FARM AT NEILL'S CREEK

(MODEL# 1930)

ELEVATION 4.1 - GL

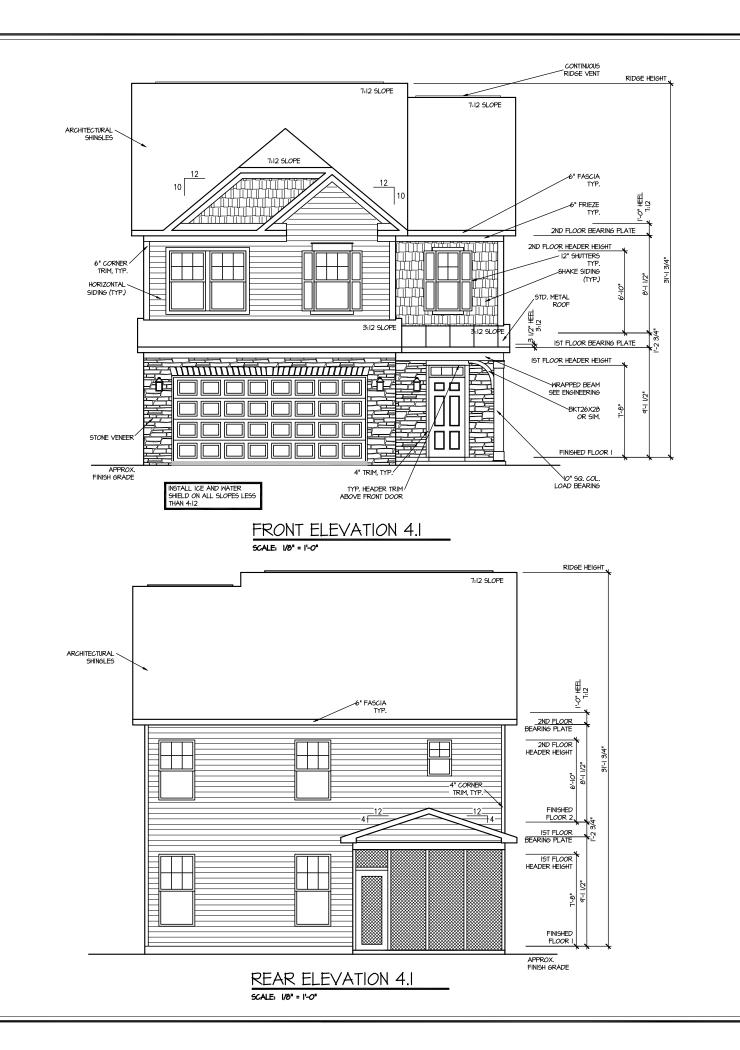


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	AREA CALCULATIONS ELEVATION 4.1 FIRST FLOOR GARAGE FRONT PORCH — ELEVATION 4.1 SECOND FLOOR OPTIONS SCREENED PORCH	HEATED 885 SF 1100 SF	COVERED / UNHEATED 448 SF 57 SF 127 SF	UNCOVERED
П	TOTAL	1985 SF	632 SF	
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155 Appleseed Drive

LOT	LOT SPECIFIC						
1		THE FARM AT NEILL'S CREEK					
		MALBEC REV. RALE 1 ELEVATION 4.1					
2	ADDRESS	MALBEC REV. RALE 1 ELEVATION 4.1 155 APPLESEED DR LILLINGTON, SC 27546					
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	1						

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DRAWN BY: DATE: 03/28/2025

PLAN NO. 1930

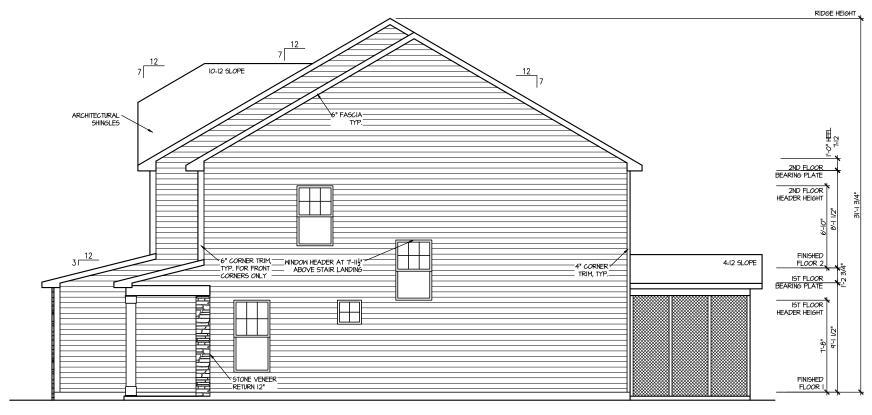


ELEVATIONS

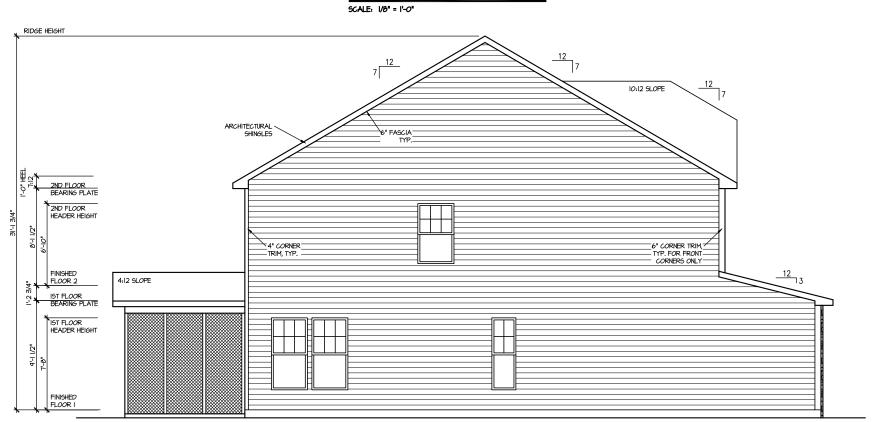
HOUSE NAME:
MALBEC
DRAWING TITLE
FRONT # R

SHEET No.

A|.|



RIGHT ELEVATION 4.1



LEFT ELEVATION 4.1

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

DRAWN BY: DATE: 03/28/2025 PLAN NO. 1930



<u>0</u>N0 ELEVATION

HOUSE NAME:
MALBEC
DRAWING TITLE
RIGHT & LE

SHEET No. A1.2 UPPER ROOF VENTILATION CALCULATIONS:

ROOF AREA : 1244 50 FT.

CHEMICAL SERVICE STREET STREET

4:12 SLOPE 4:12 SLOPE 7:12 5LOPE HVAC PLATFORM 8' X I2' TYP. 7 LF RIDGE VENT 19 LF RIDGE VENT 7:12 5LOPE 7:12 5LOPE 12" OVERHANG (TYP.) IO:12 SLOPE 10:12 SLOPE 6" OVERHANG 6'-3 3/4" 6'-3 3/4" LINE OF PORCH BEAM 3:12 5LOPE 6" OVERHANG 6" OVERHANG

ROOF PLAN ELEV. 4.1

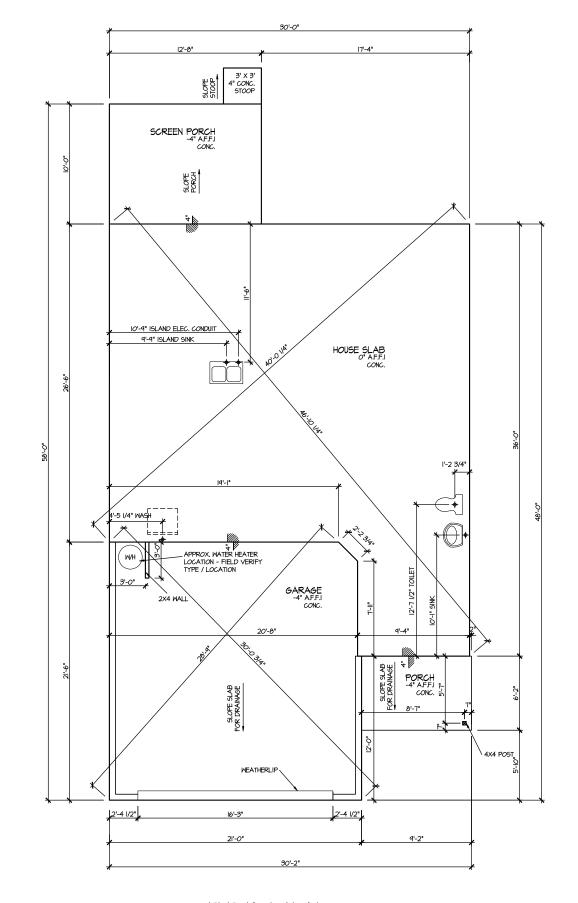
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| MASTER PLAN INFORMATION | MASTER PLAN INFO



HOUSE NAME:
MALBEC
DRAWING TITLE
ROOF PLAN

SHEET No.





DATE: 03/28/2025 PLAN NO. 1930

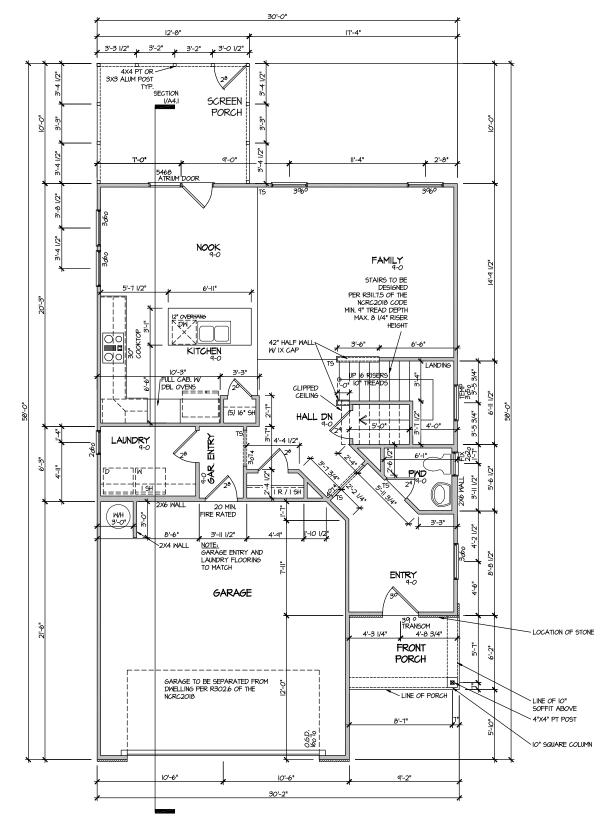


HOUSE NAME:
MALBEC
DRAWING TITLE
SLAB PLAN

SHEET No. A2.1

ELEVATION 4.1 SLAB PLAN

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



ELEVATION 4.1 FIRST FLOOR PLAN scale: 1/8" = 1'-0" NASTER PLAN INFORMATION

BENEFIT PARTIES

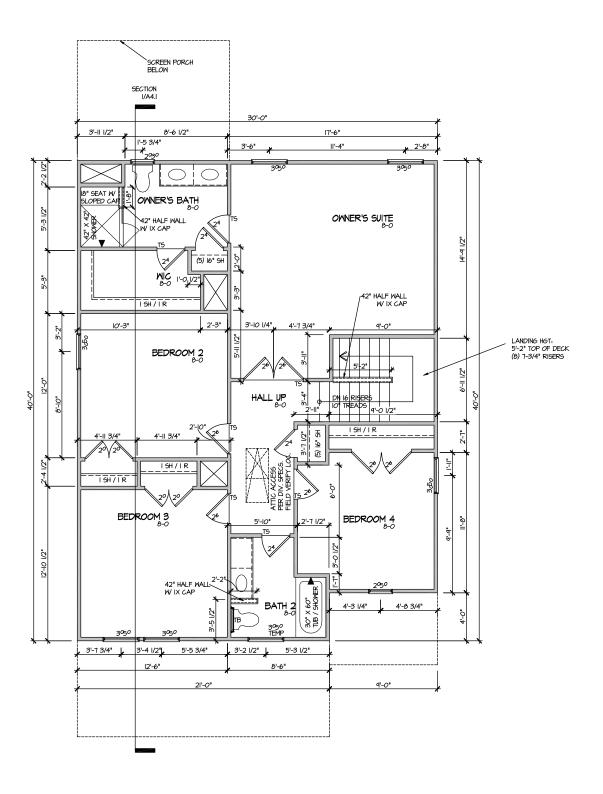
DATE: 03/28/2025

PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
FIRST FLOOR PLAN

SHEET No.



ELEVATION 4.1 SECOND FLOOR PLAN SCALE: 1/8" = 1'-0"

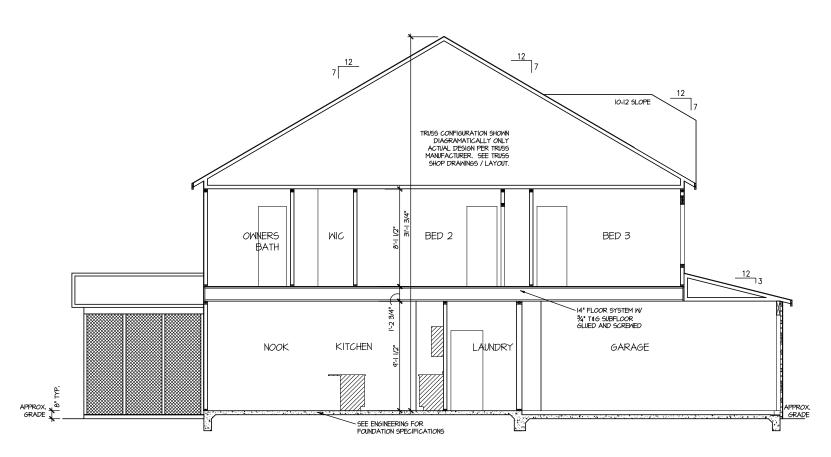
UPDATED DATE 04-17-2024 DRAWN BY:

DATE: 03/28/2025 PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE

SHEET No. A3.2



SECTION I

HOUSE NAME:
MALBEC
DRAWING TITLE
BUILDING SECTION

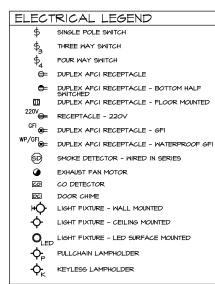
UPDATED DATE 04-17-2024

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DATE:
03/28/2025

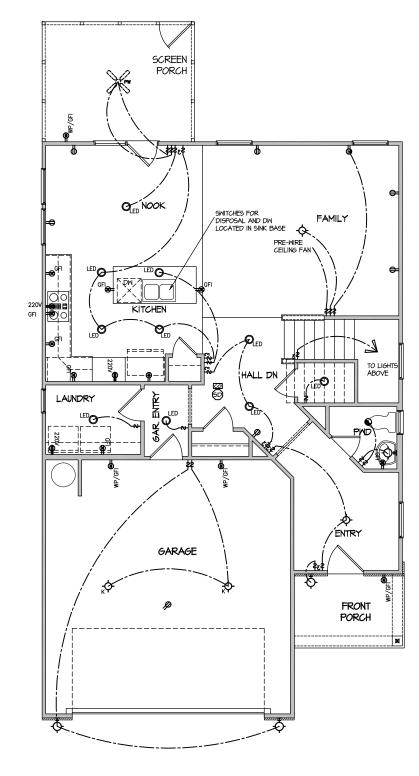
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SHEET No.

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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.



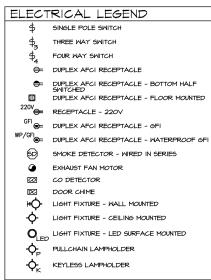
ELECTRICAL PLAN FIRST FLOOR - ELEV. 4.1 SCALE: 1/8" = 1'-0" ᇳ

DRAWN BY:
ITS

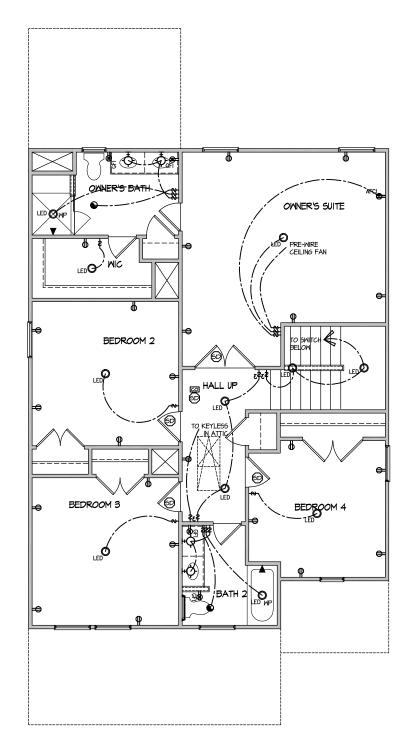
DATE:
03/28/2025

PLAN NO. 1930

SHEET No.



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. 4.1 SCALE: 1/8" = 1'-0" MASTER PLAN INFORMATION

REVISION DATE

1-RALE 07-06-2018 04-17-2024

DATE: 03/28/2025
PLAN NO. 1930

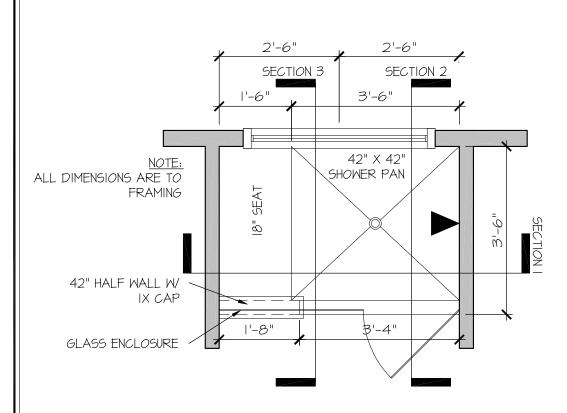


FLOOR ELECTRICAL

HOUSE NAME:
MALBEC
DRAWING TITLE

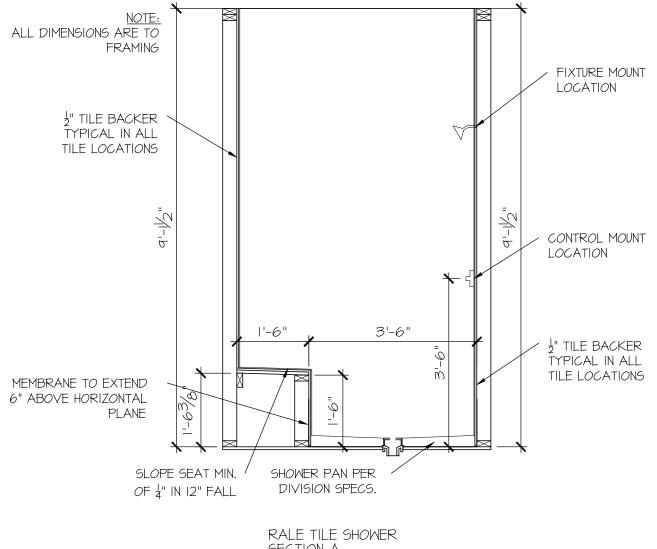
SHEET No.

E|.2



RALE TILE SHOWER 42" X 42" W 18" SEAT

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



SECTION A

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

CONSULTANT LOGO

DRAWN BY: L. BEAVERS DATE: 9/1/22 PLAN NO.

11 X 17 SCALE

24 X 36 SCALE



DETAIL SHOWER RALE

SHEET No.



SEAL

DRAWN BY:
L. BEAVERS
DATE: 9/1/22

PLAN NO.

24 X 36 SCALE

~ "

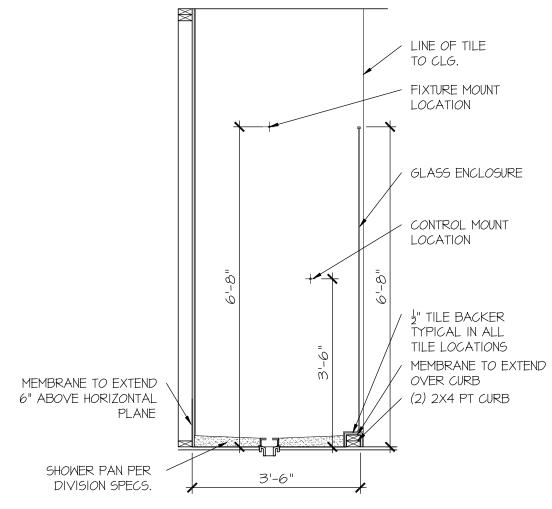


E ILE SHOWER DETAIL

OUSE NAME:

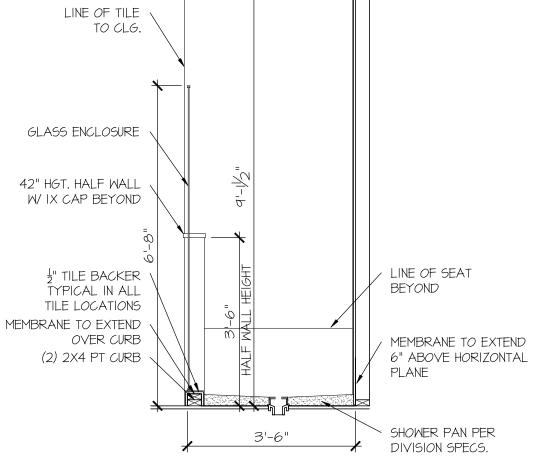
SHEET No.

P||.2



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





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

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

ROOF

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

LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (1-JOISTS & SOLID SAWN) (ADD'L IO PSF @ TILE)

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)
 I6" O.C. SPF OR SYP "STUD" GRADE LUMBER, OR BETTER, UN.O. WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRICE-PINE-FIR #2 (SPE) 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" OC (MAX. UNO) . 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).
- PENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING:
- "LSL" Fb=2325 psi: Fv=3i0 psi: E=1.55xi0^6 psi • 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0xl0^6 psi
- 'PSL' FB=2900 PSI; FV=290 PSI; E=2.0XI0^6 PSI
- M+K SHALL BE FULLY INDEMNIFIED FOR ANY AND ALL ISSUES
- OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO MH FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION. FOR 2 & 3 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER
- WITH 3 ROWS OF 3" \times 0.120" NAILS @ 8" O/C OR 2 ROWS %" \times 3%" SIMPSON SDS SCREWS (OR 3%" 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. LOCAT TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3 1/2" OR 5 1/2" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 \$ 2x8 MEMBERS FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER
- WITH 3 ROWS OF $\mbox{\it k}^{*}$ "x6" SIMPSON SDS SCREWS (OR 6 $\mbox{\it k}^{*}$ " 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 SCREWS 2" FROM EDGE. A SOLID 7" BEAM IS ACCEPTABLE.
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STID MINIMIM - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE

NAILS @ 24" O.C. (MIN.), EACH PLY.

- NUMBER OF JACK STUDS REQUIRED, U.N.O., ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER W/ 3"X0.131"
- 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 I/2" DIA. BOLTS @ 48" O.C. STAGGERED.
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4 CAP & ABM44Z BASE, U.N.O.

CONNECTION SPECIFICATIONS (TYP. U.N.O.)

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. 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 1/8" 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 ½" x 0.131" NAILS @ 6"o.c. @ PANEL EDGES € @ 12"o.c. FIELD.
- 2 3 × 0.120 NAILS @ 4" O.C. @ PANEL EDGES \$ @ 8" O.C. FIELD. 2 3" × O II3" NAII S @ 3" O C @ PANEL EDGES & @ 6" O C IN FIELD
- #6 x 2" MIN. SCREMS @ 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 ROOF TRUSS TO TOP PLATE W/ SIMPSON H2.5T CLIP (OR APPROVED EQUAL) • ALL BEARING POINTS. PROVIDE (2) H2.51 CLIPS AT 2-PLY GIRDER TRUSSES (3) H25T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.C
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BCSI I-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- SUPPORT PORCH & SHORT SPAN ROOF TRUSSES (MAX 7' SPAN) W 2x4 LEDGER FASTENED TO:
 - RIM BOARD w/ (2) 3"x0.131" NAILS @ 16" O.C. MAX. (1-JOISTS) - TRUSS VERTICALS w/ (3) 3"x0.131" NAILS @ 19.2" O.C. MAX. (FLOOR TRUSSES)
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
- W 2 ½" x 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 3" x 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
▶ HD-3	SIMPSON STHDI4/STHDI4RJ

* <u>UTILIZE THE 95TB24 ANCHOR BOLT</u> • ALL MONOSLAB & INTERIOR RAISED SLAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS, MINIMUM 24* MIN. COTING THICKNESS REQUIRED

EPOXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB ONDITIONS ONLY. UTILIZE SIMPSON 'SET' EPOXY SYSTEM TO FASTE THREADED ROD INTO CONCRETE FOUNDATION, PROVIDE 10" (FOR 5/8" DIA.) OR 15" (FOR 7/8" DIA.) MIN. EMBEDMENT INTO CONCRETE. NSTALL PER MANUF, INSTRUCTIONS, MINIMUM 16" FOOTING THICKNESS REQ'D.

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

FOR STEEL BEAMS

DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF CONCRETE.

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

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

(120 MPH WIND SPEED IN ASCE 7-10 WIND MAP. PER IRC R301.21.1) EXP. B. RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 IBC SECTION 1609) & ASCE 7-10, AS PERMITTED BY R30113 OF THE 2018 NCSBC-RC OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R602.12 COMPLY. CCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBC:RC SECTION R802.II.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R60235& R80211

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 ORIENTED 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 SHALL BE ORIENTED AND INSTALLED FULL HEIGHT HEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

NOTES

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING, IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT 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)

INDICATES EXTENT OF INT. OSB SHEARWALL OR 3" O.C. OSB SHEARWALL

INDICATES HOLDOWN BELOW

VENEER LINTEL SCHEDULE

(MAX)	ABOVE LINTEL	SILLE FROLE SILE
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"x¾6"
	3 FT. MAX	L4"x4"x¼" *
8'-O"	I2 FT. MAX	L5"x3½"x¾6"
	I6 FT. MAX	L6"x31/2"x3%"
q'-6"	I2 FT. MAX	L6"x3½"x¾6"
16'-0"	2 FT. MAX	L7"x4"x½" **
20	3 FT. MAX	L8"x4"x½" **

LL LINTELS:

- SHALL SUPPORT 2 %" 3½" VENEER w/ 40 psf MAXIMUM WEIGHT. 16' SHALL HAVE 4" MIN. BEARING
- 16' SHALL HAVE 8" MIN. BEARING 16' SHALL NOT BE FASTENED BACK TO HEADER.
- 6' SHALL BE FASTENED BACK TO WOOD HEADER IN WALL #48"0 w/ ½" DIA, x 3 ½" LONG LAG SCREMG IN 2" LONG VERTICALLY SLOTTED HOLES.
- X. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE
- OPENING. ALL LINTELS SHALL BE LONG LEG VERTICAL. WHEN SUPPORTING VENEER < 3° WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3 ¼" 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 SHACK TO DEAM FASTENEDS SHALL MAINTAIN A 2½ (MINIMA) 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
- JL METAL HANGER
- * INDICATES POST ABOVE, PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP.

NON-BEARING HEADER SCHEDULE

SPAN	2x4 NON-BEARING PARTITION WALL	2x6 NON-BEARING PARTITION WALL
UP TO 3'-0"	(I)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
NOTEC		

ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x 'STUD' GRADE MEMBERS SPACED a 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 2x4/6 SILL PLATES TO FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
- (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 VERIEY 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" GRADE OR BETTER.
- CONCRETE DESIGN BASED ON ACL 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 60.000 psi
- BASEMENT FOUNDATION WALL DESIGN BASED ON:
- · 9' OR 10' HEIGHT (AS NOTED ON PLAN - TALLER WALLS MUST BE ENGINEERED

LARGER OPENINGS SHALL BE PER PLAN.

- NOMINAL WIDTH (9 1/2" FOR 10" THICK WALL).
- BASEMENT WALL DESIGN IS BASED ON 60 PCF BACKFILL SOIL TYP! CLASSIFICATIONS (SC, ML-CL, OR CL).
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK.
- PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN CONCRETE BOMT END 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
- 95% COMPACTED FILL. PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY
 - 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:1.5 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 \$ 530.1. CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL
- JOINT REINFORCEMENT (OR EQUAL) 9 GA. MINIMUM @ 16" O.C. PROVIDE 2x8 x 16" LONG PT PLATE ON TOP OF ALL CRAWL
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS. FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE.

SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID.

- DIMENSIONS BY OTHERS, BUILDER TO VERIFY
- BUILDER 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 INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, 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 AD JACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUS BEAMS DO NOT EXCEED THE FOLLOWING: ROOF TRUSSES:

I/4" DEAD LOAD

FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS: 1/8" DEAD LOAD FLOOR TRUSSES & ATTIC TRUSSES AD JACENT TO FLOOR FRAMING BY OTHERS: LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAL

LOAD. (NOT DIFFERENTIAL DEFLECTION)



4/4/2

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rawn by:

REVISIONS

126-22076

sue date: 04-02-2

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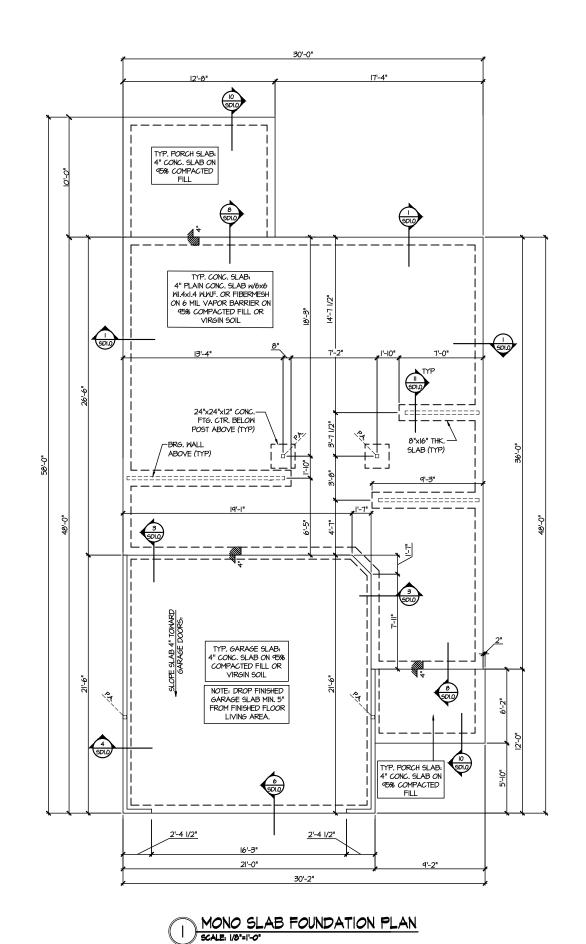
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 \Box $\bigcap_{i=1}^{n}$ \sim ZEIL

MALBE ARM LO

DESCRIPTION OF BLDG. ELEMENT 3"x0.131" NAILS 3"x0.120" NAILS (3) TOENAILS* JOIST TO SOLE PLATE (3) TOENAILS SOLE PLATE TO JOIST/BLK'S STUD TO SOLE PLATE (3) NAILS @ 4" o.c 3) TOENAILS* TOP OR SOLE PLATE TO STU (3) NAILS TOENAILS **0** 6" O.C OENAILS @ 8" o BLK'G. BTWN. JOISTS TO TOP PL. (3) TOENAILS (3) TOFNAIL S* NAII 5 @ 16" 00 DOUBLE TOP PLATE NAII S @ 24" a NAILS @ 16" o DOUBLE TOP PLATE LAP SPLICE (9) NAILS IN LAPF (II) NAILS IN LAPPED ARE INTERSECTING WALLS

2½"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. (ONLY ACCEPTABLE WHERE * ARE SHOWN)



4/4/25 H CAR

MUCHERN+KULP



M&K project number: 126-22076

JTR drawn by: issue date: 04-02-2

initial:

I AT NEIL'S CREEK Malbec 4.1 .nc **OUNDATION PLANS**

• IIIII INTERIOR BEARING WALL ● □===□ BEARING WALL ABOVE

• ---- BEAM / HEADER

• == INDICATES SHEAR WALL & EXTENT EXTENT OF OVERFRAMING

LEGEND

JL METAL HANGER

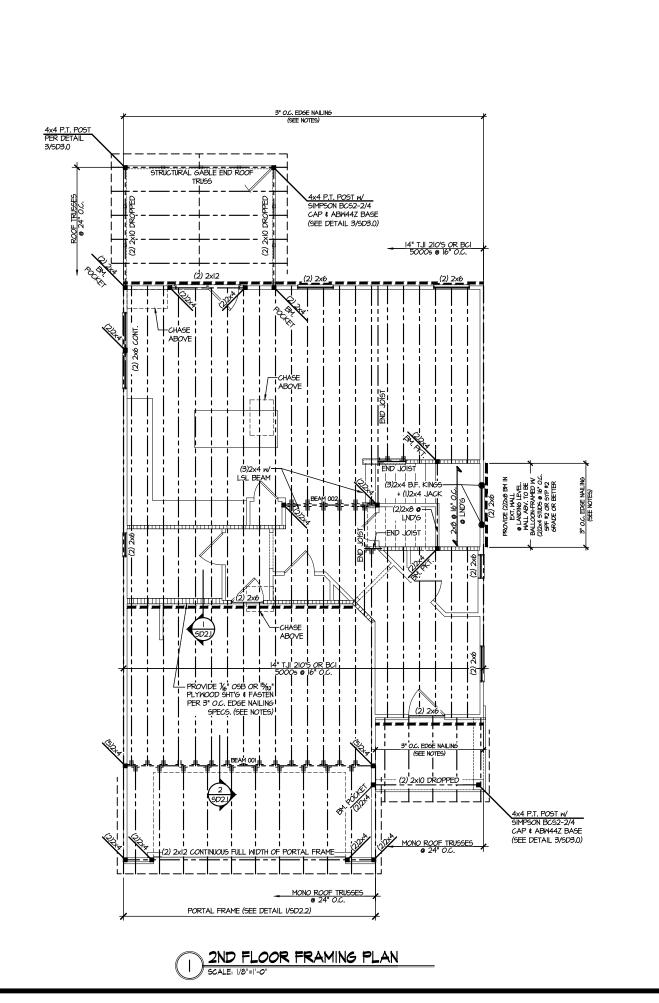
* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES

& SCHEDULES

FARM A
LOT 177 - M.
RALEIGH, N



4/4/25 H CAR

MUCHERN+KULP

RESIDENTIAL STRUCTURAL ENGINEERING

Y

M&K project number 126-22076

JTR drawn by: JAD issue date: 04-02-2

initial:

REVISIONS:

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)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB	WI2x26 - F
002	(2)13/4"×14" - F	3½"x 4" - F	(3)13/4"×14" - F	(2)2x12 + (1) ¼"x1l¼" 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 FLITCH BEAM CONNECTIONS
 REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
 FOR FLUSH TO'P BEAM'S PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN
 PLATES IN SUCCESSION W (2) 3"X0.120" NAILS 6 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 RAMING

FARM AT NEIL'S LOT 177 - MALBEC 4.1 RALEIGH, NC OOR

S2.0

4/4/25 H CAR

MUCHERN+KULP

RESIDENTIAL STRUCTURAL ENSINEERING

STRUCTURAL ARTINITY THE PROPERTY OF THE PROP



M&K project number: 126-22076

JTR drawn by: issue date: 04-02-2

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RAMING PLANS

REFER TO SO.O FOR

TYPICAL STRUCTURAL NOTES # SCHEDULES

LEGEND

• = = 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.

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

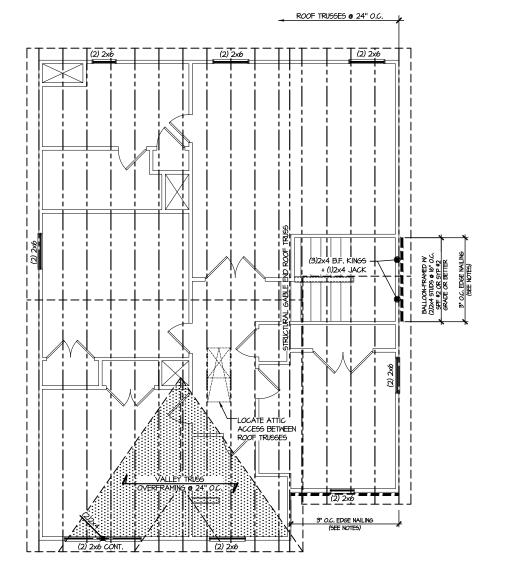
• ---- BEAM / HEADER

JL METAL HANGER

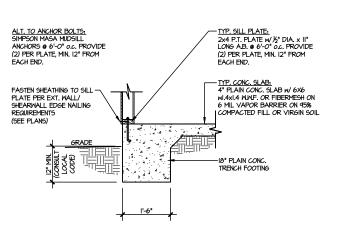
FARM AT NEIL'S CREEK LOT 177 - MALBEC 4.1 RALEIGH, NC

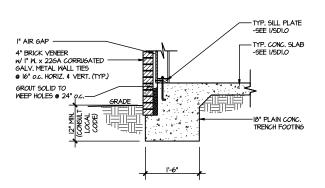
ROOF

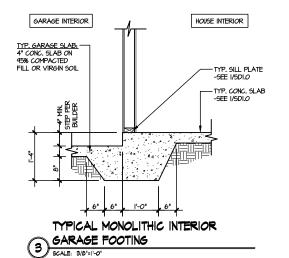
S3.0

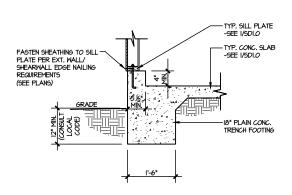


ROOF FRAMING PLAN

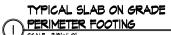




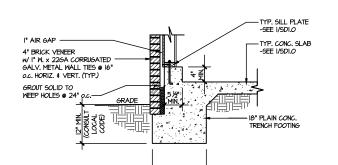


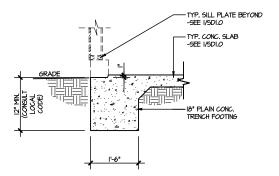


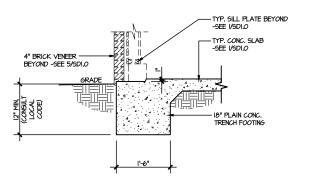
TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING











TYPICAL SLAB ON GRADE GARAGE

TENTRY @ PERIMETER FOOTING

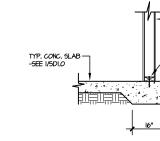


TYPICAL SLAB ON GRADE GARAGE

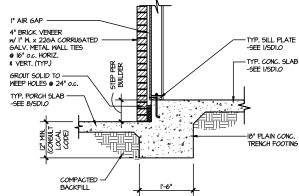
5 PERIMETER FOOTING w/ BRICK VENEER

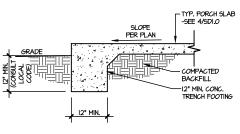
1'-6"



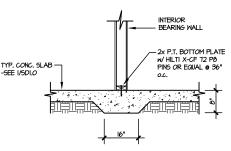


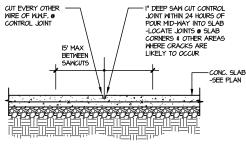
8 FOOTING @ PORCH/PATIO





TYPICAL FOOTING @ PORCH SLAB





INTERIOR BEARING WALL

TYPICAL THICKENED SLAB @

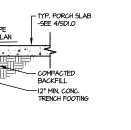
ALL APPLICABLE AREAS. THESE

TYPICAL CONTROL JOINT

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

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

TYPICAL SLAB ON GRADE PERIMETER



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

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

-SEE I/SDI.O

18" PLAIN CONC.

TRENCH FOOTING

REEK

4/4/2

STRUCTURAL ENGINEER

M&K project number: 126-22076

drawn by:

REVISIONS

JTR

JAD

initial:

ssue date: 04-02-2

H CAR

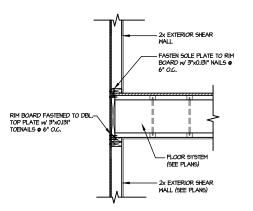
SEPH T. R

 \Box NEII SC 4.1 NO 1 AT J MALBEC NC LOT 177 - N RALEIGH, 1 ARM

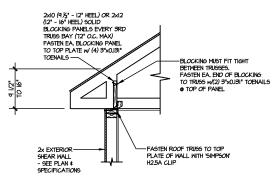
TYPICAL SHEAR

TRANSFER DETAIL @ ROOF

SCALE: 3/8"=1"-0" HEEL HEIGHT LESS THAN HEEL HEIGHT LESS THAN 9½" NO BLOCKING REQ'D



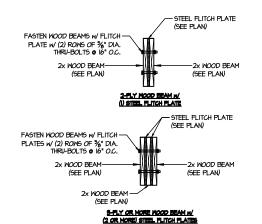
TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/6"=1"-0"



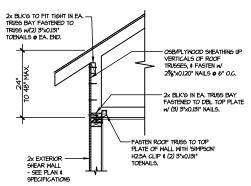
TYPICAL SHEAR

TRANSFER DETAIL @ ROOF

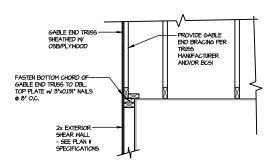
SCALE: 3/8"=1"-0" HEEL HEIGHT BETWEEN 9 1/2 HEEL HEIGHT BETWEEN 9½" - 16" BLOCKING REQ'D



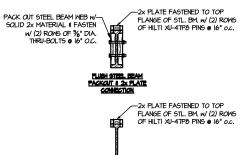
TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE 344-1-67



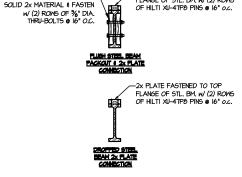
TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS



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



TYPICAL STEEL BEAM CONNECTION DETAIL SCALE SIAN-IN-OF



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

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

4/4/25

MULHERN+KULP

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M&K project number

drawn by:

REVISIONS:

126-22076

issue date: 04-02-2

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A AT NEIL'S (
- MALBEC 4.1
I. NC

FARM A
LOT 177 - M
RALEIGH, N

SD2.0

DETAILS

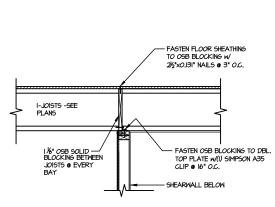
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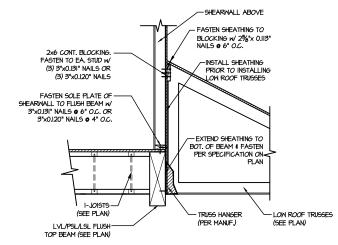
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H CAR

SEPHT. R







SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE

4/4/25 TH CAR SEPH T. RI

MULHERN+KULP

RESIDENTIAL SURFACE

SUBSECULATION OF A MANON PAYSURE
PASS SECTION OF A MANON PAYSURE
NOT LICENSE #C-3825



M&K project number: 126-22076

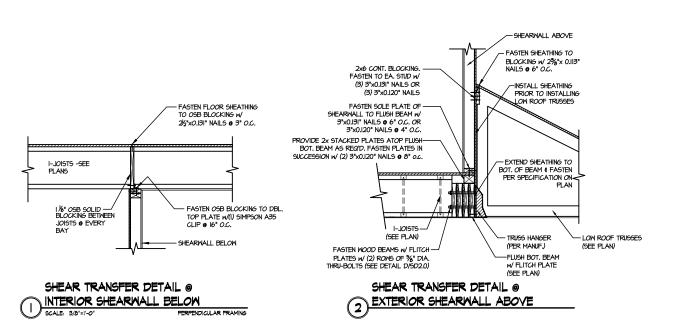
project mgr: JTR drawn by: JAD issue date: 04-02-2

REVISIONS:

initial:

FARM AT NEIL'S CREEK LOT 177 - MALBEC 4.1 RALEIGH, NC FRAMING DETAILS

SD2.1A



EIH - Neil's Creek - Lot 177 - Structurals DATE: 4/4/2025 2:31 PM

4/4/25

TH CAR

SEPH T. RI

M&K project number: 126-22076

project mgr: JTR drawn by: JAD issue date: 04-02-25

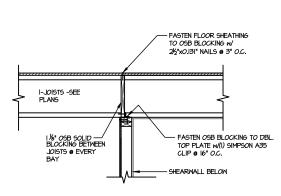
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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 177 - MALBEC 4.1
RALEIGH, NC

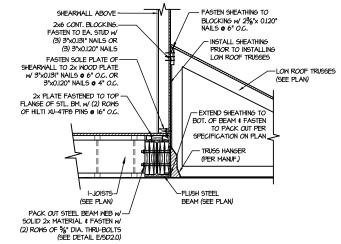
SD2.1B



SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW

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

FERPENDIA



SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE

4/4/25 TH CAR SEPHT. RI

MULHERN+KULP

RESIDENTIAL SURFACE

SUBSECULATION OF A MANON PAYSURE
PASS SECTION OF A MANON PAYSURE
NOT LICENSE #C-3825 Y



126-22076

JTR drawn by: JAD issue date: 04-02-2

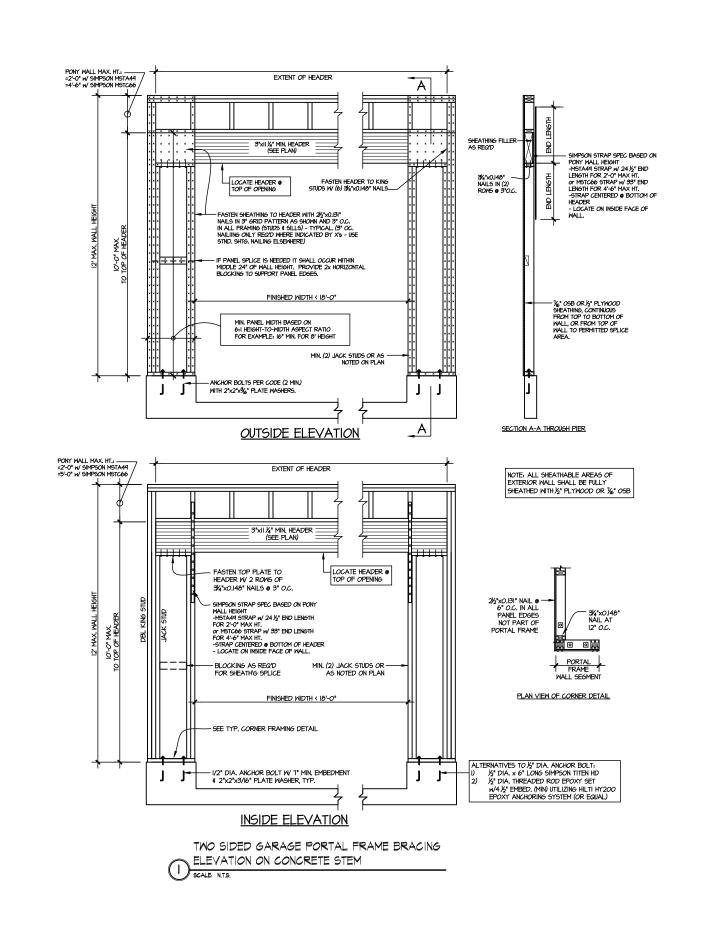
REVISIONS:

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FARM AT NEIL'S CREEK LOT 177 - MALBEC 4.1 RALEIGH, NC FRAMING DETAILS

SD2.1C



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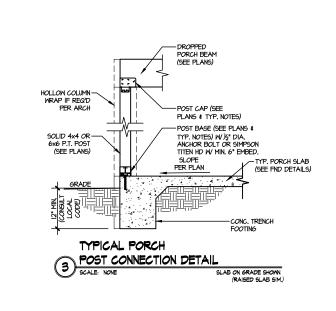
H CAR

4/4/25

HOMES

FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 177 - MALBEC 4.1
RALEIGH, NC

SD2.2



4/4/25

MUCHERN+KULP RESIDENTAL STRUCTURAL ENGINEERING STRUCTURAL ENGINEERING



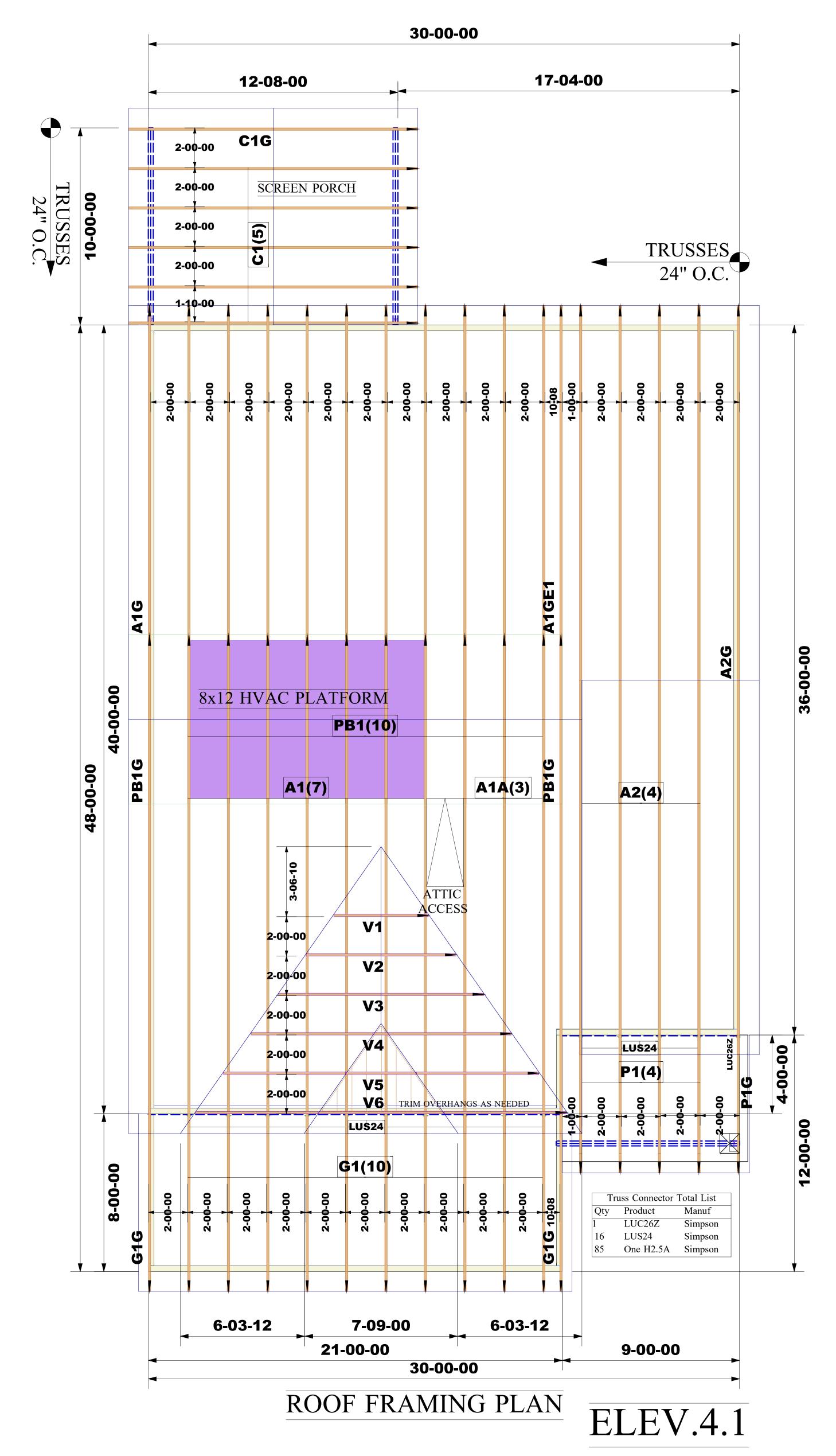
M&K project number:

126-22076

project mgr: JTR drawn by: JAD issue date: 04-02-25

FARM AT NEIL'S CREEK LOT 177 - MALBEC 4.1 RALEIGH, NC

SD3.0



NOTE:
*EXTERIOR DIMENSIONS ARE TO STUD.
*TRUSS 2' O.C U.N.O.

*TRUSS 2' O.C U.N.O.

*INSTALL SIMPSON One H2.5A HURRICANE
ANCHORS AT EACH BEARING POINT.

THE FARM AT NEILL'S CREEK (NC)(RAL) LOT 00.0177 PHASE

MODEL-1930-1-MALBEC

GARAGE LEFT SIDE

OPT. SCREENED PORCH/COVERED PORCH

Job #:		T			_
2503-4457	WARNING: CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE	NOTE: IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO	Customer: DRB Raleigh		
	TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINOING DURING ERECTION; AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMAITON. TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS, THEY SHALL BE BRACED AS SPCIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.	SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION. THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCA 1-1995 "DESIGN RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS INCLUDING THE INSTALLATION, AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.	Job Name: The Farm at Neill's Creek Lot 00.0177 Roof	f Third-Party Quality Assurance Licensee TPI Plant W974 Structural, LLC 201 Poplar Avenue Thurmont, MD 21788 Phone: 301-271-7591	S
Designer: Sayan Roy			Lot #: Lot 00.0177		
Sales Rep: Robbie Zarobinski			Model Name: Malbec		

OPEN WEB FLOOR TRUSS LAYOUT SCALE: NTS

