# MILLHAVEN-RALE

RALEIGH - LOT 00.0195 THE FARM AT NEILL'S CREEK

(MODEL# 2379)

ELEVATION 1 - GR

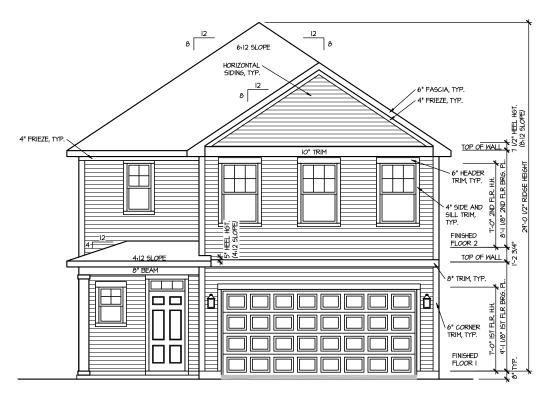


ADEA CALCULATIONS			
<u>AREA CALCULATIONS</u>		COVERED /	
ELEVATION 1	HEATED	UNHEATED	UNCOVERED
FIRST FLOOR	1065 SF	01111271128	OTTO TETTE
GARAGE	1000 01	390 SF	
FRONT PORCH — ELEVATION 1		42 SF	
REAR PATIO		72 31	120 SF
SECOND FLOOR	1352 SF		120 35
SECOND FLOOR	1332 35		
TOTAL	0.447.05	170.05	100.05
TOTAL	2417 SF	432 SF	120 SF

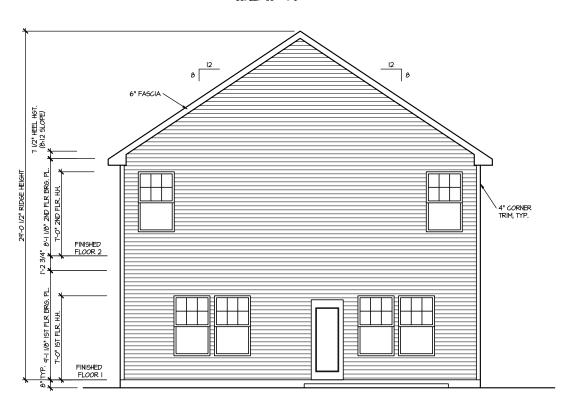
## 390 Winding Creek Drive

	SPECIFIC	
1	LOT 00.0195	THE FARM AT NEILL'S CREEK
		MILLHAVEN REV. RALE 1 ELEVATION 1
2	ADDRESS	390 WINDING CREEK DR LILLINGTON, NC 27546
	ADDINESS	390 WINDING CIVER DIVELLINGTON, NC 27340
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<u>INDEX</u>	



#### FRONT ELEVATION I SCALE: 1/8" = 1'-0"



REAR ELEVATION I

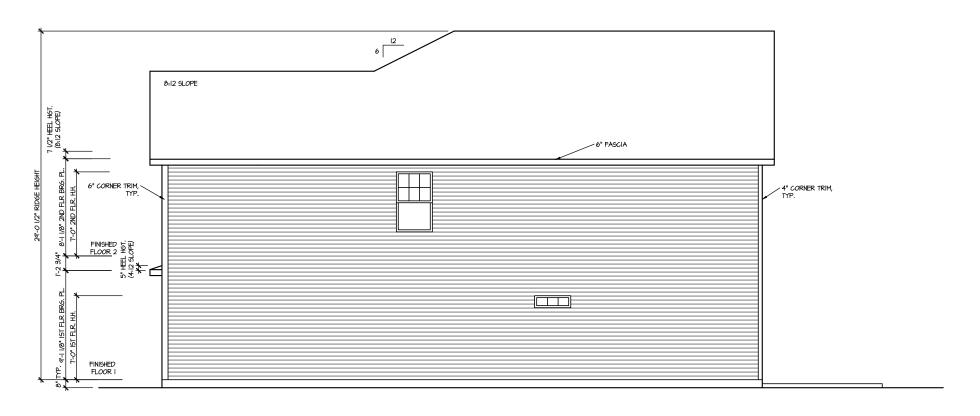
DRAWN BY:

DATE: 06/27/2024 PLAN NO. 2379

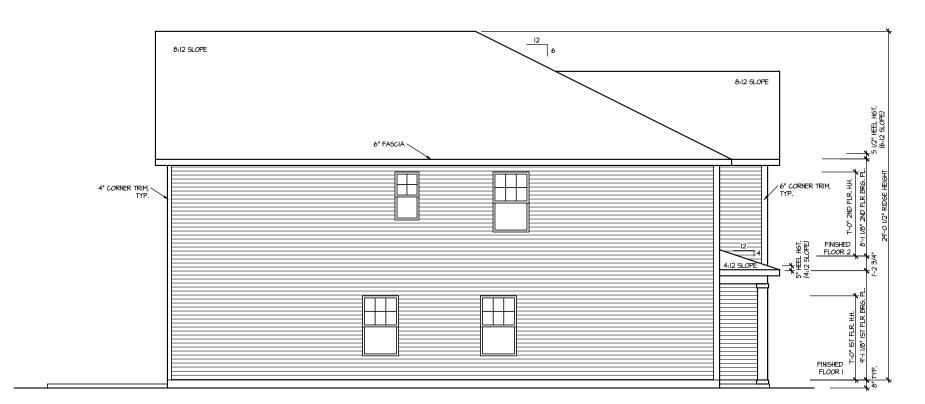


ELEVATIONS 87 17 18 HOUSE NAME:
MILLHAVEN
DRAWING TITLE
FRONT & REAR

A.



# RIGHT ELEVATION I SCALE: 1/8" = 1'-0"



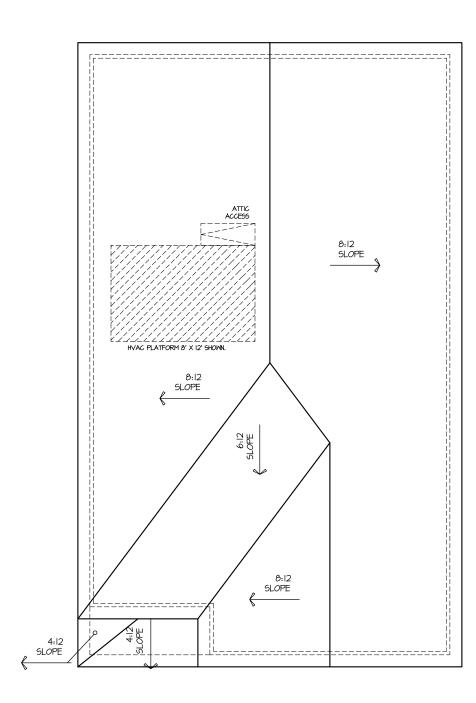
LEFT ELEVATION I

DRAWN BY:

DATE: 06/27/2024 PLAN NO. 2379



HOUSE NAWE:
MILLHAVEN
DRAWING TITLE
RIGHT & LEFT E



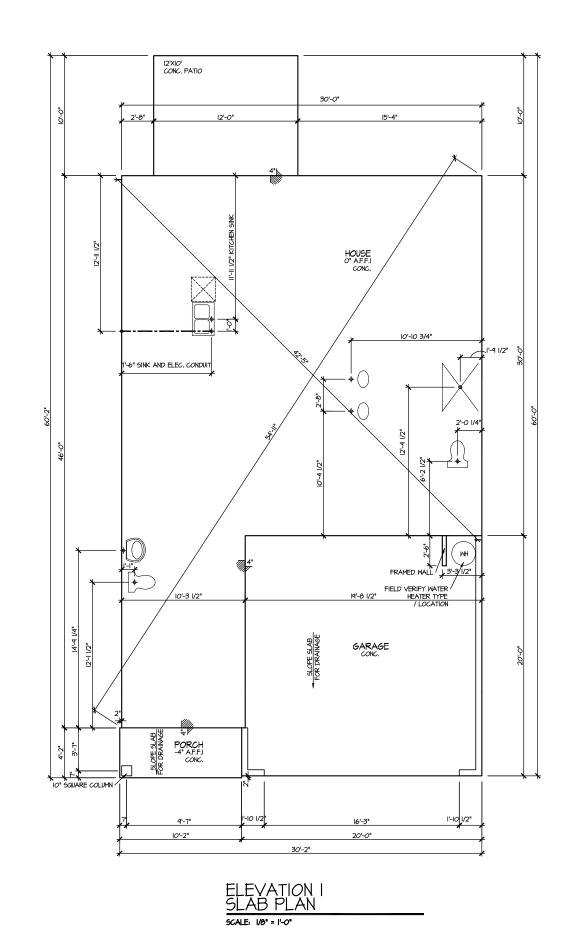
ROOF PLAN ELEV. I SCALE: 1/0" = 1'-0"

| Lot 00.0193.awg DAIE: 6/2//2024 10:43 AM

HOUSE NAME:
MILLHAVEN
DRAWING TITLE
ROOF PLAN

DRAWN BY:

DATE: 06/27/2024
PLAN NO. 2379



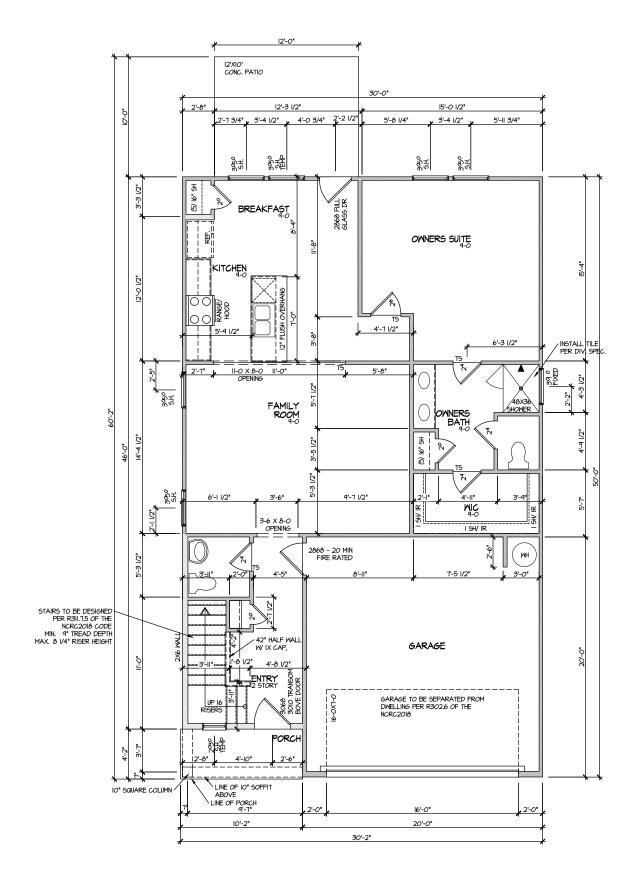
DRAWN BY:

DATE: 06/27/2024 PLAN NO. 2379



HOUSE NAME:
MILLHAVEN
DRAWING TITLE
SLAB PLAN

SHEET No. A2.1



ELEVATION I FIRST FLOOR PLAN SCALE: 1/8" = 1'-0"

DRAWN BY: DATE: 06/27/2024

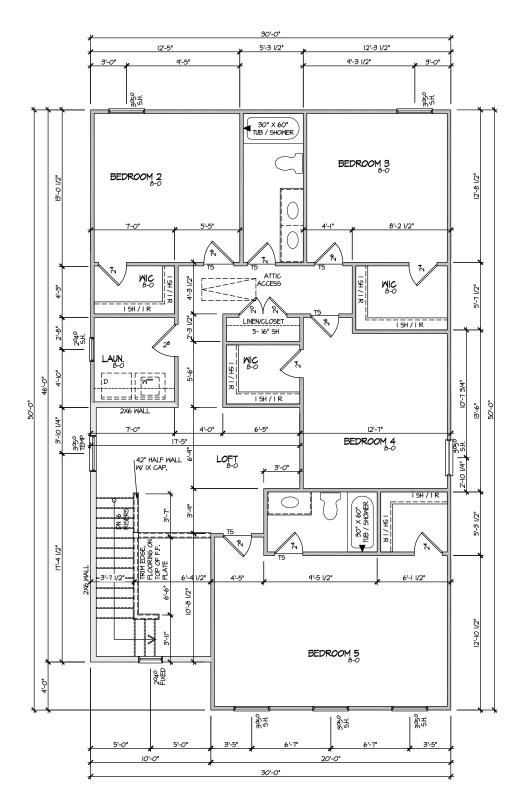
PLAN NO. 2379



HOUSE NAME:
MILLHAVEN
DRAWING TITLE
FIRST FLOOR P

SHEET No.

A3.1



ELEVATION I SECOND FLOOR PLAN SCALE, 1/8" = 1'-0" | MASTER PLAN INFORMATION | MASTER PLAN INFO

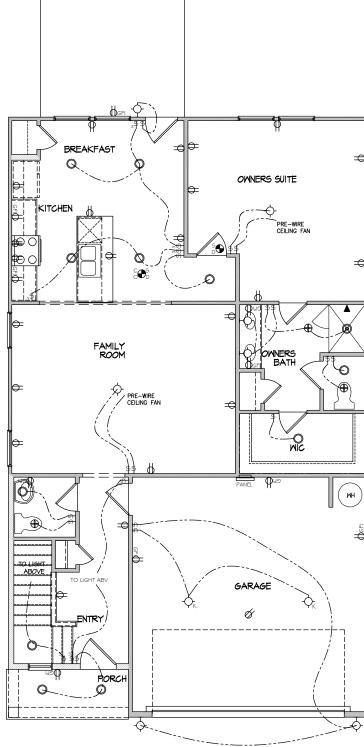
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HOUSE NAME:
MILLHAVEN
DRAWING TITLE
SECOND FLOOR PLAN

SHEET No.

A3.2

ELECTRICAL LEGEND			
CEILING FAN W/ LIGHT KIT			
CEILING MOUNT LIGHT	<b></b>		
LED PUCK LIGHT	0		
WALL MOUNTED LIGHT	· · · · ·		
MOTION SENSOR LIGHT	<i>\$</i> \$		
I I OV OUTLET	Ф		
GFI OUTLET	<b>d</b> GFI		
WATERPROOF OUTLET	₩P		
220V OUTLET	₩		
SWITCH	\$		
3-WAY SWITCH			
TV JACK	TV		
PHONE JACK	<b>●</b> △		
EXHAUST FAN	<del>•</del>		
HANGING LIGHT	ф-		
SD / CO COMBO DETECTOR	5 <b>⊕</b> C □ <b>●</b> 0		
KEYLESS LAMPHOLDER	- <b>Ç</b> <sub>K</sub>		
PENDANT LIGHT	×		



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

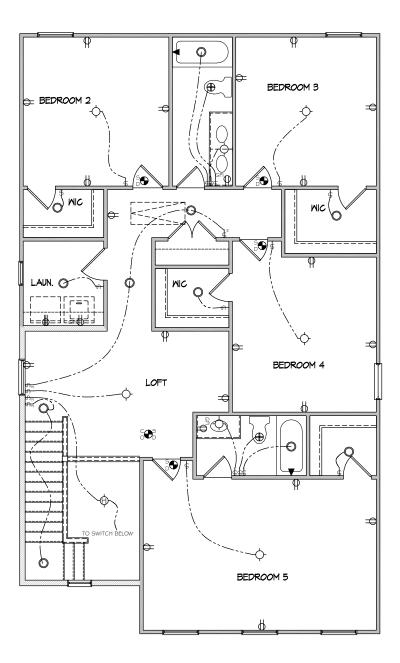
DRAWN BY:

DATE: 06/27/2024 PLAN NO. 2379



HOUSE NAME:
MILLHAVEN
DRAWING TITLE
FIRST FLOOR E

ELEC	ELECTRICAL LEGEND		
CEILING FAN W/ LIGHT KIT			
CEILING MOUNT LIGHT	<b></b>		
LED PUCK LIGHT	0		
WALL MOUNTED LIGHT	ф		
MOTION SENSOR LIGHT	<i>\$</i> ○\$		
I IOV OUTLET	В		
GFI OUTLET	<b>∆</b> GFI		
WATERPROOF OUTLET	₩P		
220V OUTLET	₩		
эмтсн \$			
3-WAY SWITCH			
TV JACK	TV		
PHONE JACK	<b>●</b> ∆		
EXHAUST FAN	<b>⊕</b>		
HANGING LIGHT	ф		
SD / CO COMBO DETECTOR	5 <b>⊕</b> C 0		
KEYLESS LAMPHOLDER	- <del>\</del>		
PENDANT LIGHT			



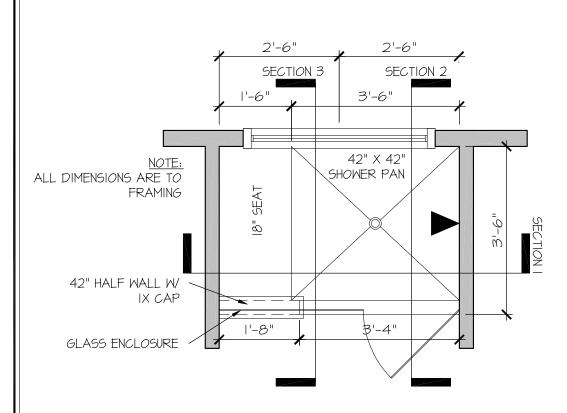
ELECTRICAL PLAN SECOND FLOOR - ELEV. I SCALE: 1/8" = 1'-0"

	UPDATED DATE	04-26-2024			
MASTER PLAN INFORMATION	DATE	09-09-2021			
MASTER PL	REVISION DATE	1-RALE			
DR DA	AWN		Y: ITS		

.: 06/27/2024 PLAN NO. 2379

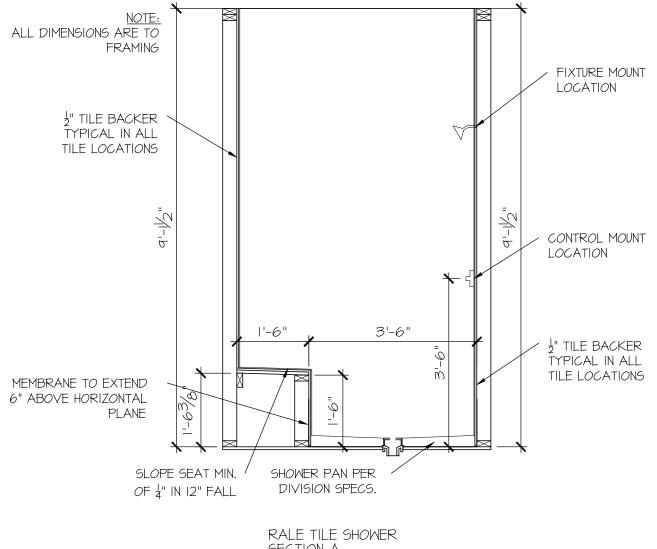


HOUSE NAME:
MILLHAVEN
DRAWING TITLE
SECOND FLOOF



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



SEAL

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

PLAN NO.

24 X 36 SCALE

~ "

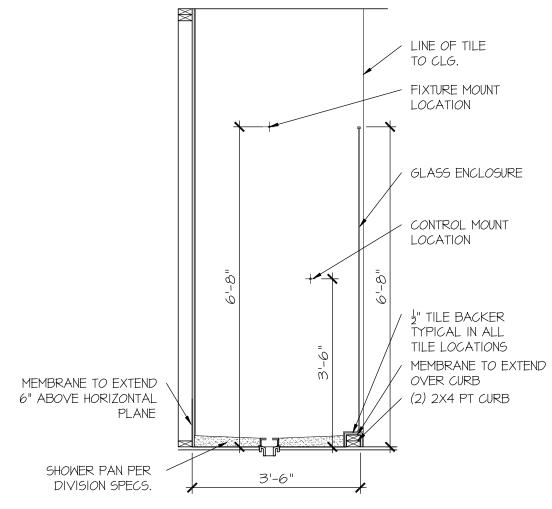


E ILE SHOWER DETAIL

OUSE NAME:

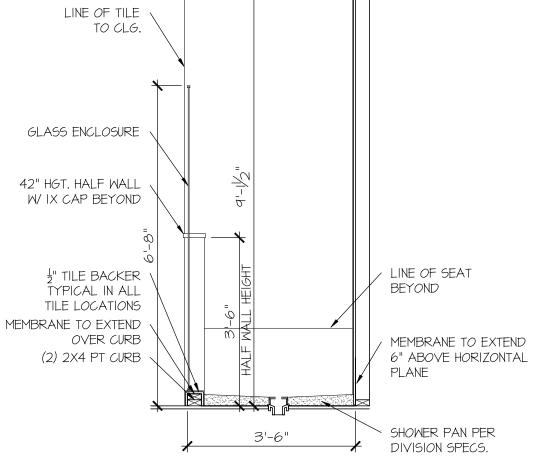
SHEET No.

P||.2



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





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

#### **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 - LITH 17ING
- (CONC.) 15" MIN EMBEDMENT (CMU)
- SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C. (CONC)
- (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" 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
- BASEMENT FOUNDATION WALL DESIGN BASED ON:
- . 9' OR IO' HEIGHT (AS NOTED ON PLANS)
- TALLER WALLS MUST BE ENGINEERED.
- NOMINAL WIDTH (9 ½" FOR 10" THICK WALL). 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 1st FLOOR DECK.
- PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN CONCRETE BSMT. FND. WALL WITH 2" CLEAR. REINFORGEMENT SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS
- FOR OPENINGS UP TO 36", PROVIDE MINIMUM IO" CONCRETE DEPTH OVER OPENING OR (3)2x10 W (2)2x6 JACK STUDS, U.N.C
- LARGER OPENINGS SHALL BE PER PLAN.
- 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 TO DEVELOP
- JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-O" OC (MAXIMUM) JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS
- POSSIBLE (I.I RATIO) WITH A MAXIMIM OF I.I.S PATIO
- CONTROL JOINTS SHALL <u>NOT</u> 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 16" LONG P.T. PLATE ON TOP OF ALL CRAW 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.
- BUILDER TO VERIFY 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

#### GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE
- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.
- DESIGN LOADS: ROOF

DEAD = 7 PSF T.C., 10 PSF B.C. LOAD DURATION FACTOR = 1.25

FLOOR LIVE = 40 PSF (30 PSF @ SI FEPING AREAS) DEAD = 10 PSF (1-JOISTS & SOLID SAWN) IO 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)

(ADD'L IO PSF @ TILE)

#### GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS ALL NAILS SPECIFIED ARE MIN 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
- EXT & INT BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS 16" 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 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 (1)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=3I0 psi; E=I.55xI0^6 psi
- 'LVL' Fb=2600 psi; Fv=285 psi; E=2.0xl0^6 ps
- 'PSL' FB=2900 PSI; FV=290 PSI; E=2.0XI0^6 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 M+K FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR
- 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"x31/5" SIMPSON SDS SCREWS (OR 3½" 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 3 1/2" OR 5 1/4" 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 1/2"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.I3I"
- 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 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.

#### FLOOR FRAMING

- -JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED 1 /480 LIVE LOAD DEELECTION 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 3" × 0 120" NAILS @ 4" OC @ PANEL EDGES & @ 8" OC FIELD
- 2 3" x 0.113" NAILS @ 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 EACH ROOF TRUSS TO TOP PLATE W SIMPSON H2.5T CLIP (OR APPROVED EQUAL.) © ALL BEARING POINTS. PROVIDE (2) H2.5T 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.O.
- 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 1/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
- w/ 2 1 x 0.131 NAILS @ 6 0c. @ PANEL EDGES & @ 12 0.C. FIELD.
- w/ 2 🐉 x 0.120" NAILS 🙍 4"o.c. 🙍 PANEL EDGES 🕻 🗖 8" O.C. FIELD.
- W/ 2 🖥 x 0.113" NAILS @ 3"o.c. @ PANEL EDGES \$ @ 6" O.C. FIELD.

#### HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION				
HD-I	SIMPSON HTT4 HOLD-DOWN *				
HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UN.O.) (PRE-BENT MSTC66 ALT. WHEN SPECIFIED)				
₩р-з	SIMPSON STHD14/14RJ HOLD-DOWN				

ALTERNATIVE TO SSTB24 ANCHOR BOLT SPECIFICATION: UTILIZE SIMPSON "SET" EPOXY SYSTEM TO FASTEN 3/8 DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 12" MIN. EMBEDMENT INTO CONCRETE. NSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF FOUNDATION

#### 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.

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

- A. ROOF TRUSSES: 1/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS: I/A" DEAD LOAD
- FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS: LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAL LOAD. (NOT DIFFERENTIAL DEFLECTION)

#### LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM: 0 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 R301.13 OF THE 2018 NCSBC:RC, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC. IF THE PARAMETERS OF SECTION R60212 COMPLY ACCORDINGLY, 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.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5¢ R802.II.

#### EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 % "XO.II3" NAILS ● 6" O.C. AT EDGES & ● 12" O.C. IN THE PANEL FIELD. TYP, U.N.C
- HORIZONTAL BLOCKING OF EXT WALLISHEAR 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 ½" 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 %" 16 GA STAPLES (%" 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 FDGES & FDGE FASTENING

#### 3" O.C. EDGE NAILING

AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING w/ 8d NAILS @ 3" O.C. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL 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, 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 SHEARWAL OR 3" O.C. OSB SHEARWALL INDICATES HOLDOWN BELOW

#### VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT, MAX	L3"x3"x/4"
	3 FT. MAX	L3"x3"x¼"
6'-0"	I2 FT. MAX	L4"x3"x/4"
	20 FT. MAX	L5"x3½"x¾"
8'-0"	3 FT. MAX	L4"x4"x¼" "
0-0	I2 FT. MAX	L5"x3½"x¾"
	I6 FT. MAX	L6"x3½"x¾"
9'-6"	I2 FT. MAX	L6"x3½"x¾"
16'-0"	2 FT. MAX	L7"x4"x½" **
	3 FT MAX	1 8"v4"vK" **

LL SUPPORT 2 %" - 3 ½" VENEER W 40 per MAXIMUM MEIGHT. SHALL HAVE 4" MIN. REARING

WHEN THE AT "NE EXPANSES AN APPRIVATION PECHNIC

SHELL HAVE "I NE EXPANSE

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LI LIMITES SHALL BE LONG LES VERTICAL.

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HALL SHALLS SHALL BE LONG LES VERTICAL.

HALL SHALLS SHALL BE LONG LES VERTICAL.

BY SHE SHALL SHOWER SH "IN DE HOTSHOR TOO OF THE HORIZONTAL LES

MAY BE OUT IN THE FIELD TO BE 3 JA" NIDE OVER THE BEARING LINGHH ONLY. THE

STO TALLON FOR KATER AND HIS HORISHING.

BE SHECKINGAL PLANS FOR ANY LIMITEL CONDITION NOT BICOMPOSED BY THE

BOOKE PROAVE PERSON.

7 GUEEN VENEER USE L4x34/4". 2R 31/2" VENEER ONLY. SEE PLAN FOR VENEER SUPPORT IF VENEER < 31/2" THICK.

### LEGEND

- IIIIIIII 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.

#### NON-BEARING HEADER SCHEDULE

2x4 NON-BEARING PARTITION WALL	2x6 NON-BEARING PARTITION WALL
(I)2x4 FLAT	(I)2x6 FLAT
(2)2x4	(3)2x4
(2)2x6	(3)2x6
	PARTITION WALL (1)2x4 FLAT (2)2x4

#### NOTES:

ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x 'STUD' GRADE MEMBERS SPACED 9 24" O.C. (MAX.)

#### ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION		
001	(2)13/4"×18" - H	N/A	N/A	N/A	N/A		

- BEAM NOTATION:
   "F" INDICATES FLUSH BEAM
- "FT" INDICATES FLUSH TOP BEAM
  "FB" 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 TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W (2) 3"X0.120" NAILS  $\odot$   $\delta$ " O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W/ (2) 3"x0.120" NAILS @ 8" O.C.



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1&K project numbe 126-2207

rawn by: JAI sue date: 07-09-2

REVISIONS initial:



RE Ô NEIL AT NI MILLHAY NC  $\mathbb{R}^{\mathbb{Z}}$ LOT 195 -RALEIGE

seal: 7/11/24
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Groupids: Blein & KUP
Studie Engreering, Inc.

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M&K project number:

126-22076 project mgr: JTF

project mgr: JTR drawn by: JAD issue date: 07-09-24

REVISIONS:

initial:

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**OUNDATION PLANS** 

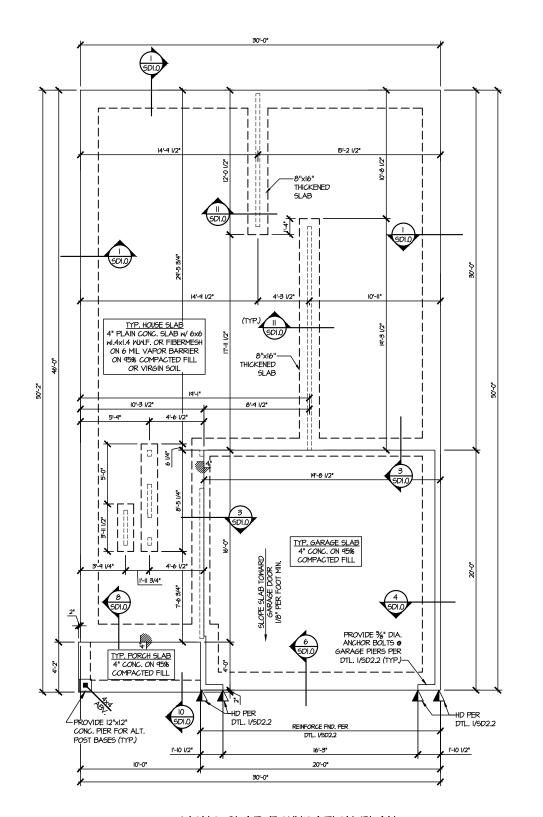
FARM AT NEIL'S LOT 195 - MILLHAVEN 1 RALEIGH, NC

**S1.0** 

#### 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.

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



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

MULHERN+KULF
RESIDENTIAL STRUCTURAL ENGINEERIN



M&K project number 126-2207

drawn by: JAC issue date: 07-09-24

REVISIONS: initial:

\* 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

LEGEND

• = = INDICATES SHEAR WALL & EXTENT EXTENT OF OVERFRAMING

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

• --- BEAM / HEADER

JL METAL HANGER

#### ENGINEERED BEAM MATERIAL SCHEDULE BEAM NUMBER LVL OPTION STEEL OPTION PSL OPTION LSL OPTION FLITCH OPTION 001 (2)13/4"×18" - H N/A

- PLATES IN SUCCESSION W (2) 3"X0.120" 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"x0.120" NAILS 9 8" O.C.

BEAM NOTATION:

- "F" INDICATES FLUSH BEAM

- "F" INDICATES FLUSH BOTOP BEAM

- "F" INDICATES FLUSH BOTTOM BEAM

- "B" INDICATES FLUSH BOTTOM BEAM

- "D" INDICATES DROPPED DEAM

- "H" INDICATES DROPPED DENING HEADER
REFER TO DETAIL D'SO20 FOR TYPICAL FLITCH BEAM CONNECTIONS
REFER TO DETAIL D'SO20 FOR TYPICAL STEEL BEAM CONNECTIONS
FOR FLUSH TOP DEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN
PLATES IN SICKCESSION W (2) 3"NOJE" NAILS @ 9" O.C.

2ND FLOOR FRAMING PLAN

HD PER DTL. 1/5D2.2

PER EXT. WALL SHEATHING SPEC

(3)2x12 CONT. FULL WIDTH OF PORTAL FRAME

PORTAL FRAME

(SEE DETAIL I/SD2.2)

BLOCKED PANEL EDGES (SEE NOTES)

HD PER DTL.

DTL. 3+4/5D2.I

FLUSH BOT:--PLANT LEDGE

SIMPSON HUC210-2TF

4x4 P.T. POST w/ SIMPSON BCS2-2/4 CAP & ABW44Z BASE (SEE DETAIL 3/SD3.0)

PPB44-6Z & PPBF44 POST BASES ARE ACCEPTABLE

ALTERNATIVES TO ABM44Z POST BASE

<u>OPEN</u>

2x6 SPF#2 BALLOON FRAMED

WALL © 16" O.C.
BLOCKED PANEL EDGES (SEE NOTES)

ROOF TRUSSES @ 24" O.C

AT NEIL'S (MILHAVEN 1), NC FARM Lot 195 - 1 Raleigh,

LANS

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M&K project number: 126-2207

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FARM AT NEIL'S (LOT 195 - MILLHAVEN 1 RALEIGH, NC

**S3.0** 

ROOF FRAMING P

#### LEGEND

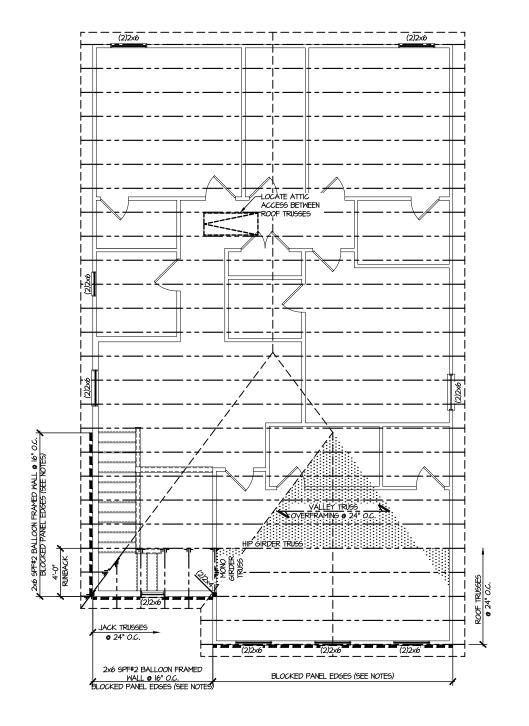
- INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- ---- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING

JL METAL HANGER

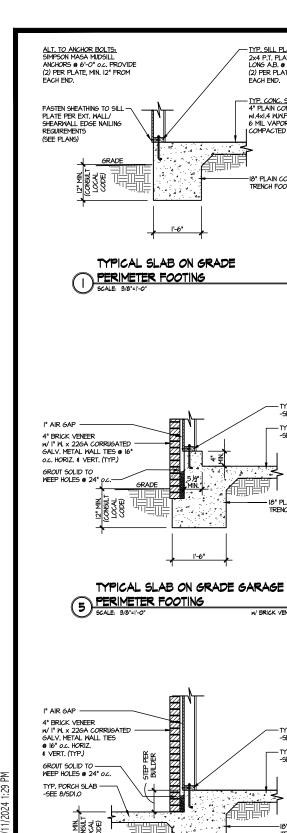
\* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

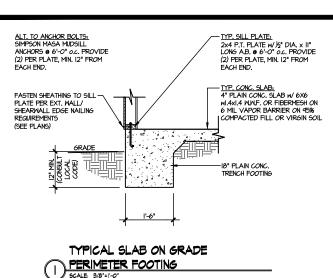
INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

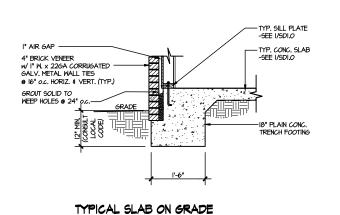
REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES # SCHEDULES





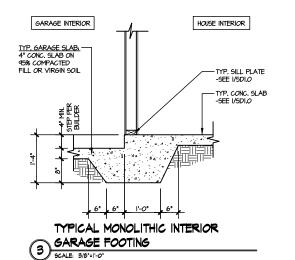


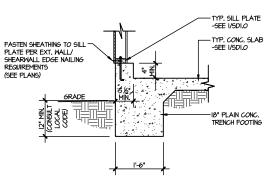


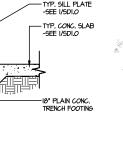


PERIMETER FOOTING

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







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M&K project number: 126-2207

ssue date: 07-09-24

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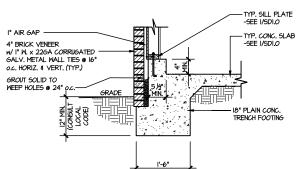
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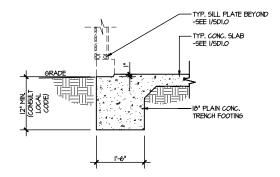
TYPICAL SLAB ON GRADE GARAGE

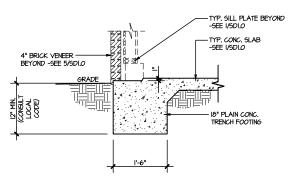
PERIMETER FOOTING

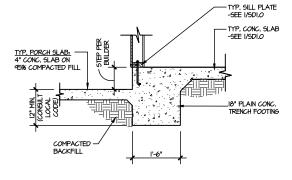
SCALE: 3/8"=1"-0"







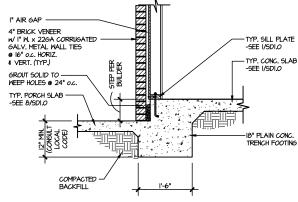


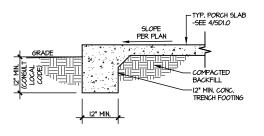


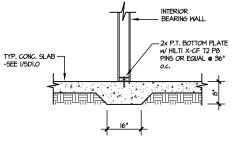


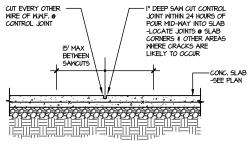
TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING

TYPICAL SLAB ON GRADE PERIMETER 8 FOOTING @ PORCH/PATIO SCALE: 3/8"=1'-0"









#### TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO

TYPICAL FOOTING @ PORCH SLAB



TYPICAL CONTROL JOINT SCALE: 9/8"=1"-0" LOCATE @ 15'-O" o.c. MAX, OR CORNERS WHERE CRACKS LIKELY TO DEVELOP

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.

LETTERED DETAILS ARE TYPICAL FOR

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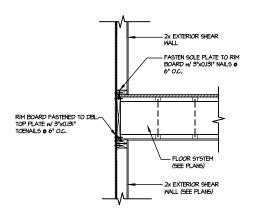
CREEK

NEIL!

LOT 195 – RALEIGH, ARM

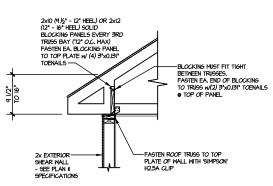
Z O

HEEL HEIGHT LESS THAN 9 ½" NO BLOCKING REQ'D



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL

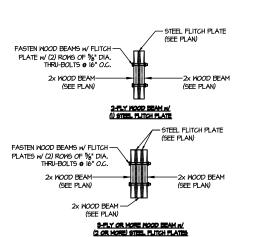
SCALE: 3/8/11-0\*

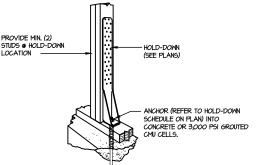


TYPICAL SHEAR TRANSFER DETAIL @ ROOF

SCALE: 3/8'=1-0' HEEL HEIGHT BETWEEN 9 1/2 HEEL HEIGHT BETWEEN 9 ½" - 16" BLOCKING REQ'D

TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE 547-11-0\*

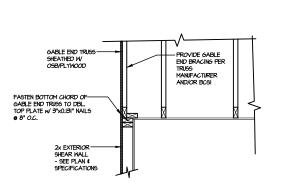




TYPICAL HOLD DOWN INSTALLATION
SCALE: N.T.S.

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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- OSB/PLYWOOD SHEATHING UP VERTICALS OF ROOF TRUSSES, & FASTEN W/ 2%'x0.120" NAILS ● 6" O.C.

— 2x BLK'G IN EA. TRUSS BAY FASTENED TO DBL TOP PLATE w/ (3) 3"x0.131" NAILS.

-FASTEN ROOF TRUSS TO TOP PLATE OF WALL WITH "SIMPSON" H25A CLIP & (2) 3"X0.131" TOENAILS.

24" TO 48" MAX.

2x exterior — Shear Wall - See Plan & Specifications

TYPICAL SHEAR TRANSFER

DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8':1'-0' HEEL HEIGHT UP TO 48" MAX

TYPICAL GABLE END DETAIL

SCALE: 3/8°=1-0°

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RESIDENTIAL STRUCTURAL ENGINEERING

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M&K project number 126-2207

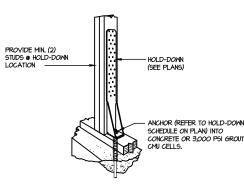
drawn by: JAC issue date: 07-09-24

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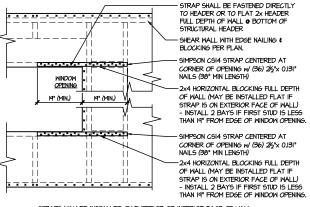
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CREEK DETAILS AT NEIL'S (MILHAVEN 1), NC FARM LOT 195 - NRALEIGH,

**SD2.0** 

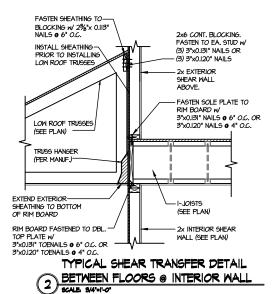


## SHEAR TRANSFER DETAIL @ INTERIOR SHEARMALL BELOW SCALE 8/4'-1'-0' PARAL



- STRAPS MAY BE INSTALLED ON EXTERIOR OR INTERIOR FACE OF WALL WHEN INSTALLED ON THE EXTERIOR FACE OF THE WALL, STRAPS TO BE METALLED ON EXTERIOR FACE OF SHITE, I MAY BE MOVED IS FROM EDSE TO ALLOW FOR WINDOW NAILING REQUIRED ONLY • OPENINGS WHERE SPECIFIED ON PLAN

TYPICAL EXT. WALL & INT. 3 SHEARWALL OPENING ELEVATION



STRAP SHALL BE FASTENED DIRECTLY TO HEADER OR
TO FLAT 2x HEADER FULL
DEPTH OF WALL @ BOTTOM
OF STRUCTURAL HEADER - SHEAR WALL WITH EDGE NAILING & BLOCKING PER PLAN. - SIMPSON CSI4 STRAP CENTERED AT CORNER OF OPENING W/ (36) 2½"x 0.131" NAILS (38" MIN LENGTH) -2x4 HORIZONTAL BLOCKING FULL DEPTH OF WALL (MAY BE INSTALLED FLAT IF DOOR <u>OPENING</u> STRAP IS ON EXTERIOR FACE OF WALL)
- INSTALL 2 BAYS IF FIRST 19" (MIN.) 19" (MIN.) STUD IS LESS THAN 19" FROM EDGE OF WINDOW OPENING.

- STRAPS MAY BE INSTALLED ON EXTERIOR OR INTERIOR FACE OF WALL WHEN INSTALLED ON THE EXTERIOR FACE OF THE WALL, STRAPS TO BE
- INSTALLED ON EXTERIOR FACE OF SHTG. & MAY BE MOVED 1/2" FROM EDGE TO ALLOW FOR DOOR NAILING REQUIRED ONLY @ OPENINGS WHERE SPECIFIED ON PLAN

TYPICAL EXT. WALL & INT. SHEARWALL OPENING ELEVATION SCALE, NTB

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.

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7/11/24

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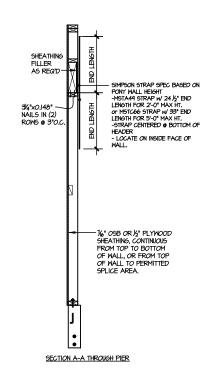
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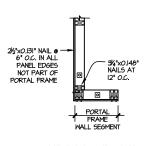
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REVISIONS:

REE  $\Box$ AT NEIL'S (MILHAVEN 1), NC FARM LOT 195 - 1 RALEIGH,

SD2.1





PLAN VIEW OF CORNER DETAIL

EXTENT OF HEADER

-3"xII¼" MIN. HEADER. SEE PLAN. - HEADER TO BE LOCATED AT TOP OF OPENING

6'-0" < FINISHED WIDTH < 18'-0"

-ONE %" DIA, ANCHOR BOLT WITH 7" MIN, EMBEDMENT INTO CONC, OR GROUTED CMU

OUTSIDE ELEVATION

& SUPPORTING ONE STORY + ROOF - SIMPSON STHOIL HOLDOWN STRAP (EMBEDDED INTO -CONCRETE AND NAILED INTO FRAMING) OR SIMPSON HTT4
HOLDOWN, INSTALLED PER MANUFACTURER SPECIFICATIONS.

MIN. 3"X3"X 1/4" PLATE WASHER

MIN. PANEL WIDTH BASED ON IRC TABLE R602.10.5 FOR EXAMPLE: 16" MIN. FOR 10" MAX HEIGHT & SUPPORTING ROOF ONLY, 24" MIN FOR 10" MAX HEIGHT

MIN. (2) 2x4-

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MULHERN+KULP

7/11/24

**Y** M&K project number

126-2207

drawn by: issue date: 07-09-24

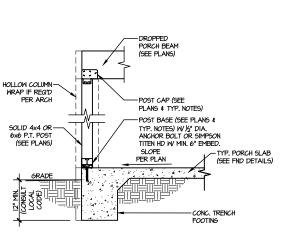
REVISIONS:

initial:

CREEK DETAILS AT NEIL'S (MILHAVEN 1), NC

FARM LOT 195 - NRALEIGH, 1

**SD2.2** 



TYPICAL PORCH
POST CONNECTION DETAIL
SCALE: NONE SLAB ON GRADE SHOW SLAB ON GRADE SHOWN (SIM. & CRAWL & BSMT.)

> 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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FARM AT NEIL'S CREEK Lot 195 - Millhaven 1 Raleigh, nc

MULHERN+KULP

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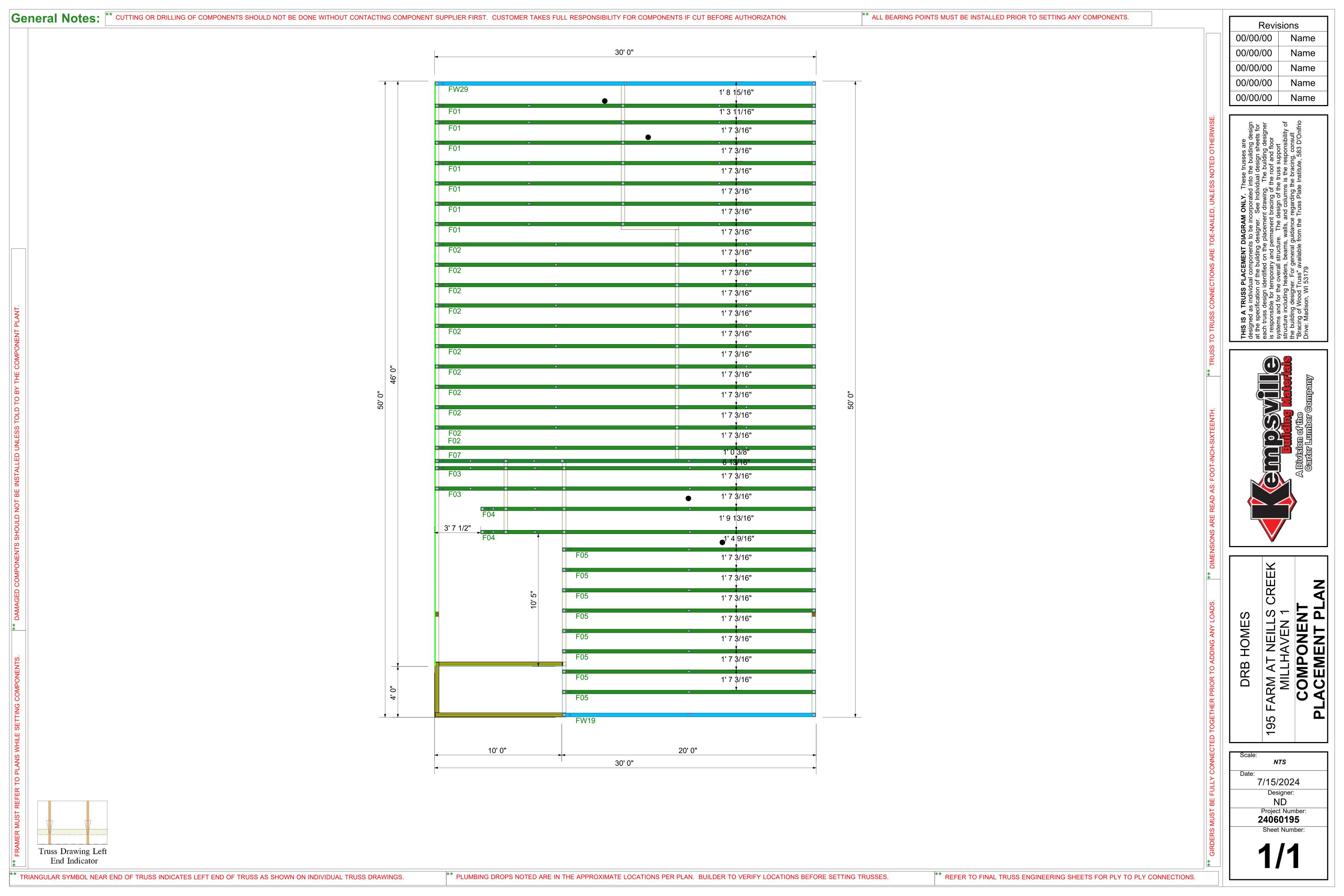
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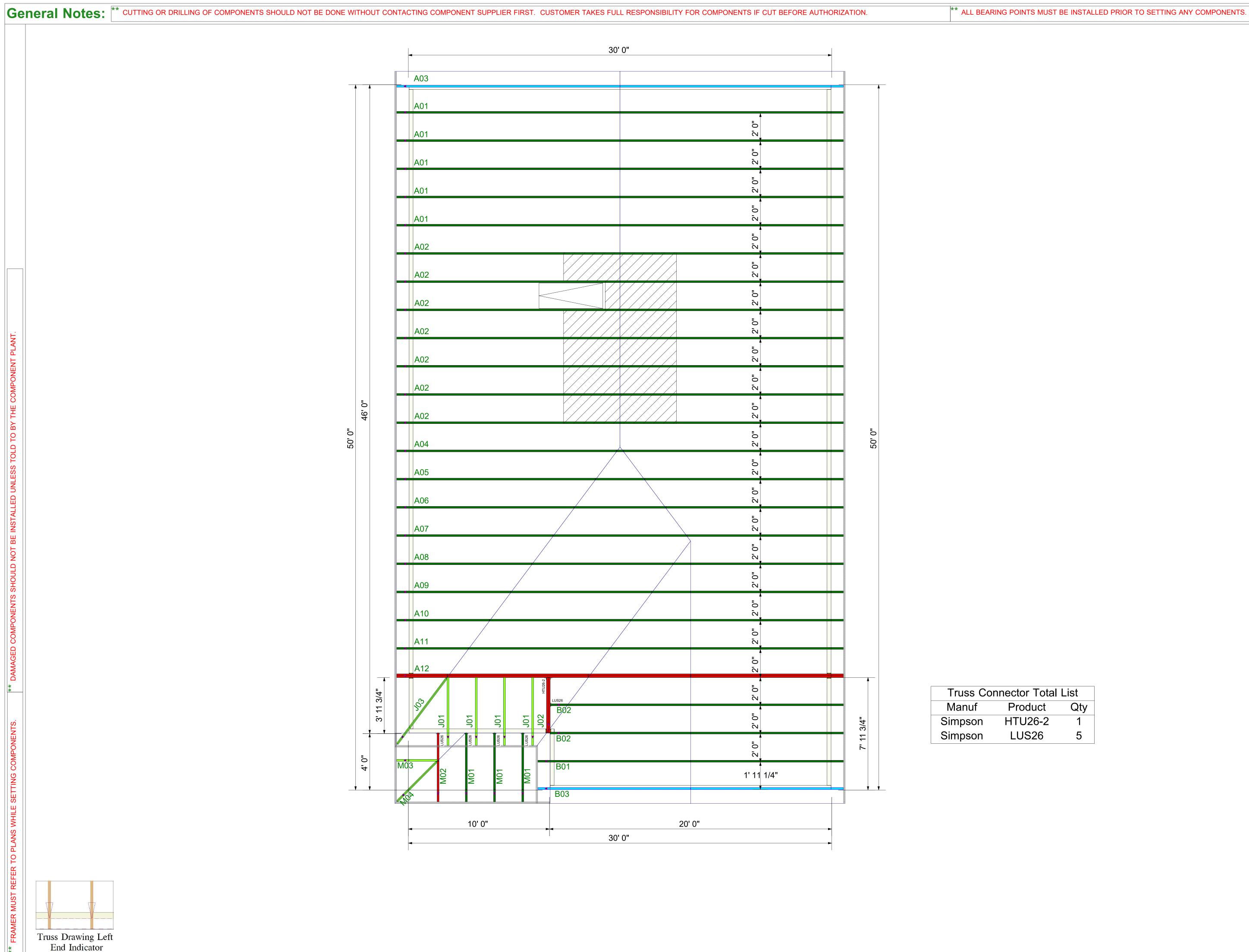
issue date: 07-09-24

JAC

drawn by:

**SD3.0** 





Truss Connector Total List Qty Manuf **Product** HTU26-2 Simpson Simpson LUS26 5

Revisions 00/00/00 Name 00/00/00 Name 00/00/00 Name 00/00/00 Name 00/00/00

Name

195

7/15/2024 Designer: ND Project Number: **24060195** Sheet Number: