# COOPER 3-RALE

RALEIGH - LOT 00.0021 THE FARM AT NEILL'S CREEK

(MODEL# 1777)

ELEVATION 9 - GR

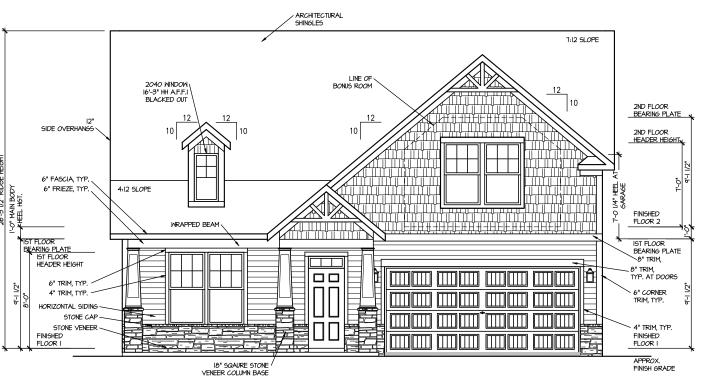


1551 01101					
<u>area calcu</u>	<u>ILA HONS</u>			COVERED /	
ELEVATION 9			HEATED	COVERED / UNHEATED	UNCOVERED
FIRST FLOOR			1777 SF	ONTILATED	ONCOVERED
			1/// 3F	704 65	
GARAGE				394 SF	
FRONT PORCH - E	LEVATION 9			182 SF	
OPTIONS					
SCREEN PORCH				120 SF	
BONUS ROOM			430 SF		
BEDROOM 4			168 SF		
		TOTAL	2375 SF	696 SF	
		TOTAL	2070 31	090 31	
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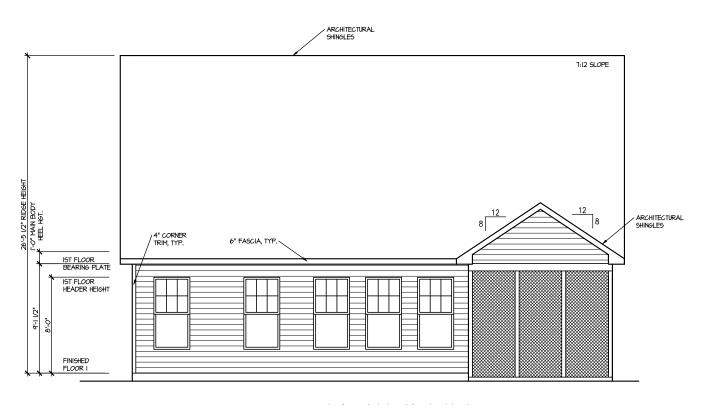
# 218 Peach Grove Way

LOT	LOT SPECIFIC					
1		THE FARM AT NEILL'S CREEK				
		COOPER 3 REV. RALE 4 ELEVATION 9				
2	ADDRESS	218 PEACH GROVE WAY LILLINGTON, NC 27546				
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INDEX	



### FRONT ELEVATION 9 SCALE: 1/8" = 1'-0"



REAR ELEVATION 9 SCALE: 1/8" = 1'-0"

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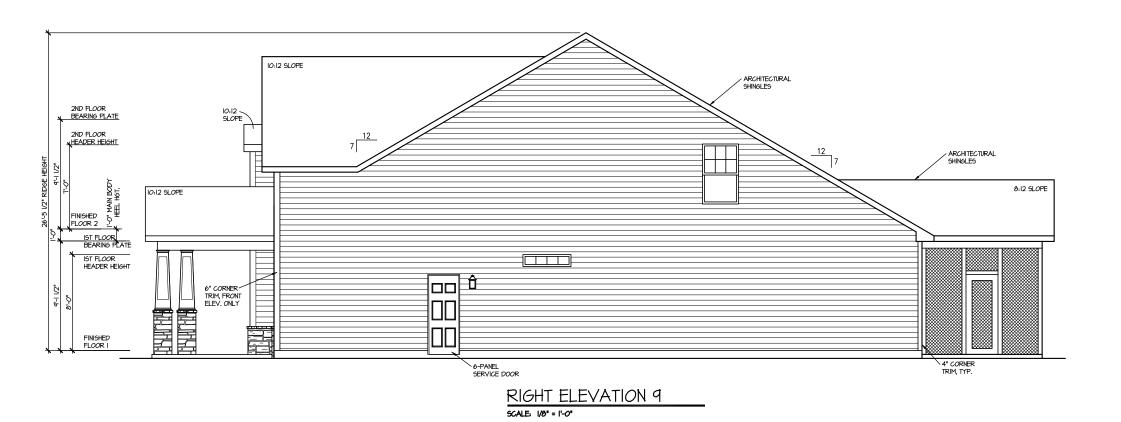
DATE: 08/20/2025 PLAN NO. 1777

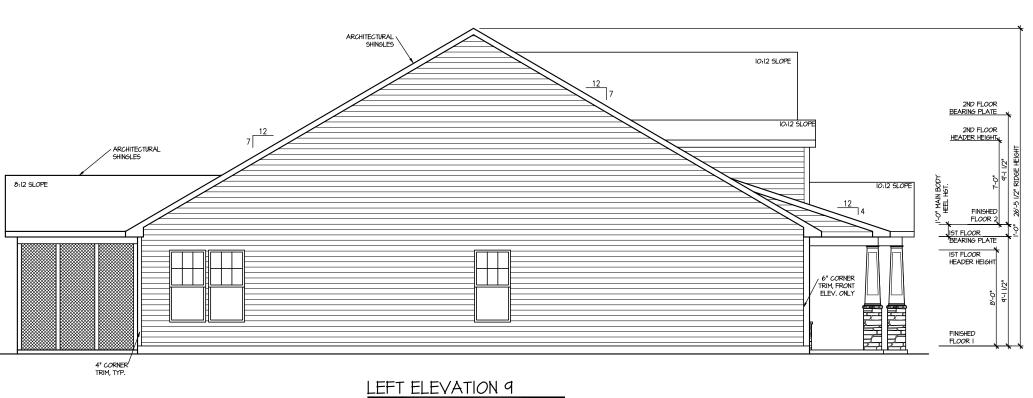


ᇳ HOUSE NAME:
COOPER
DRAWING TITLE

SHEET No.

A



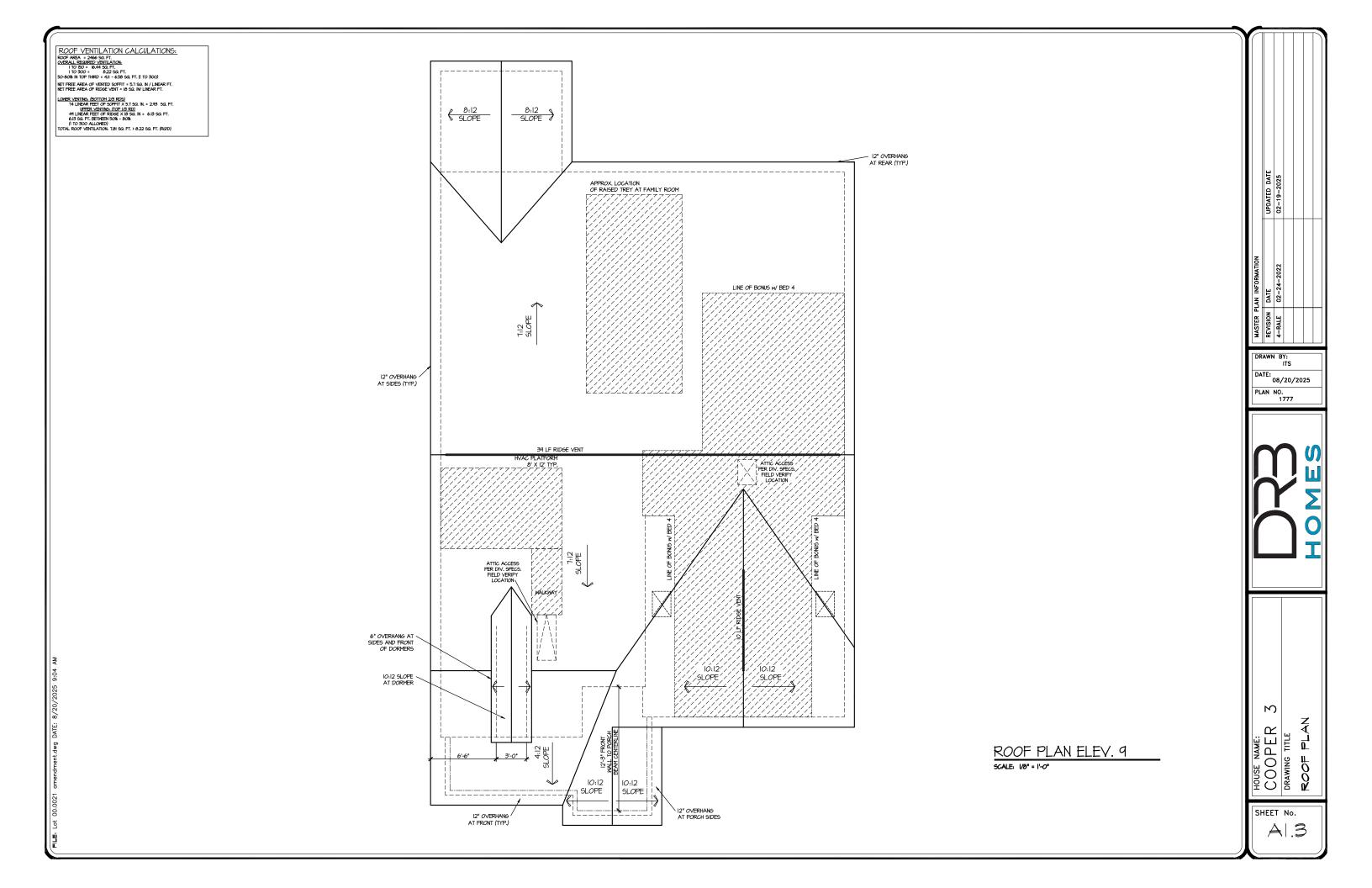


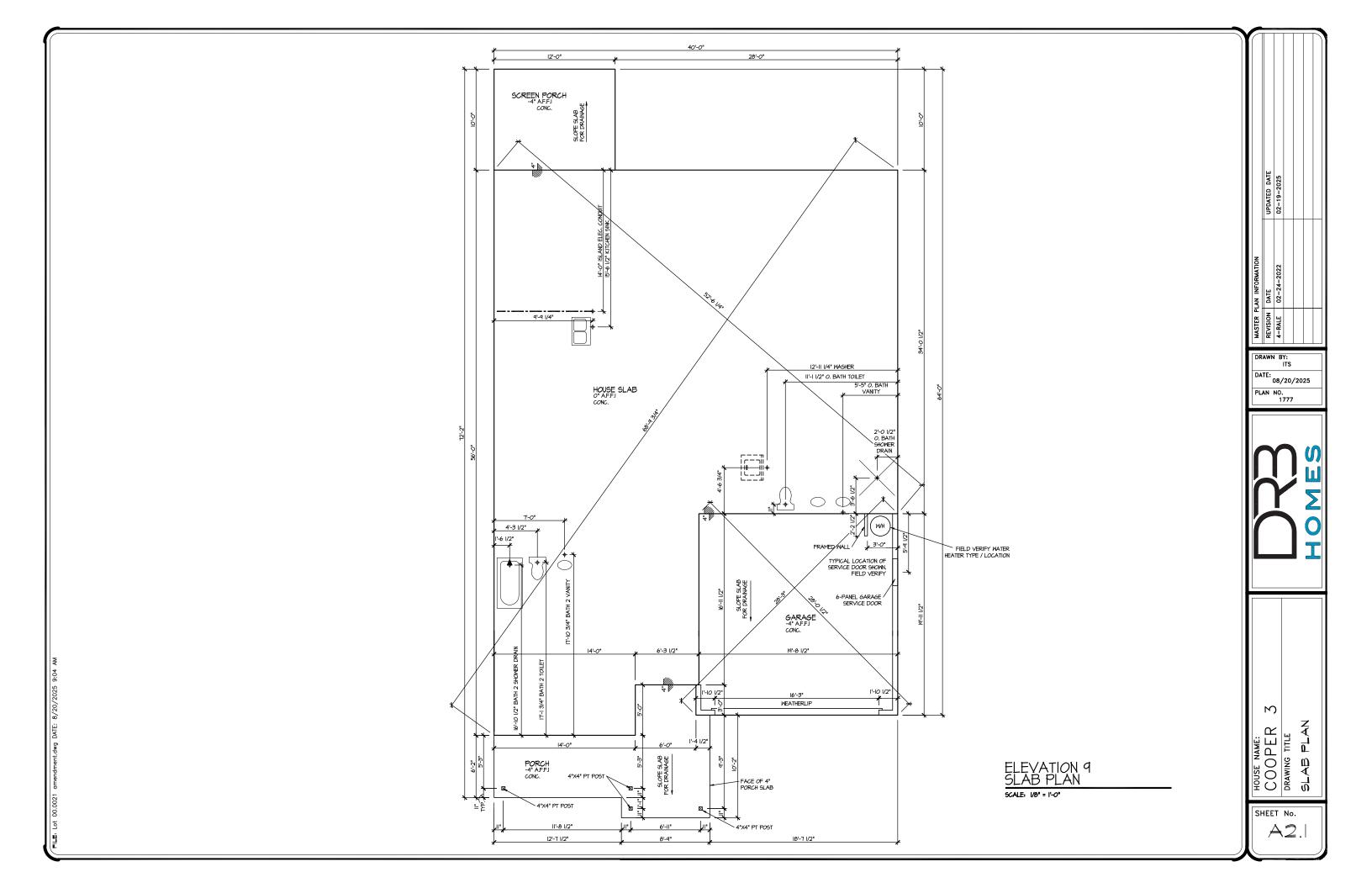
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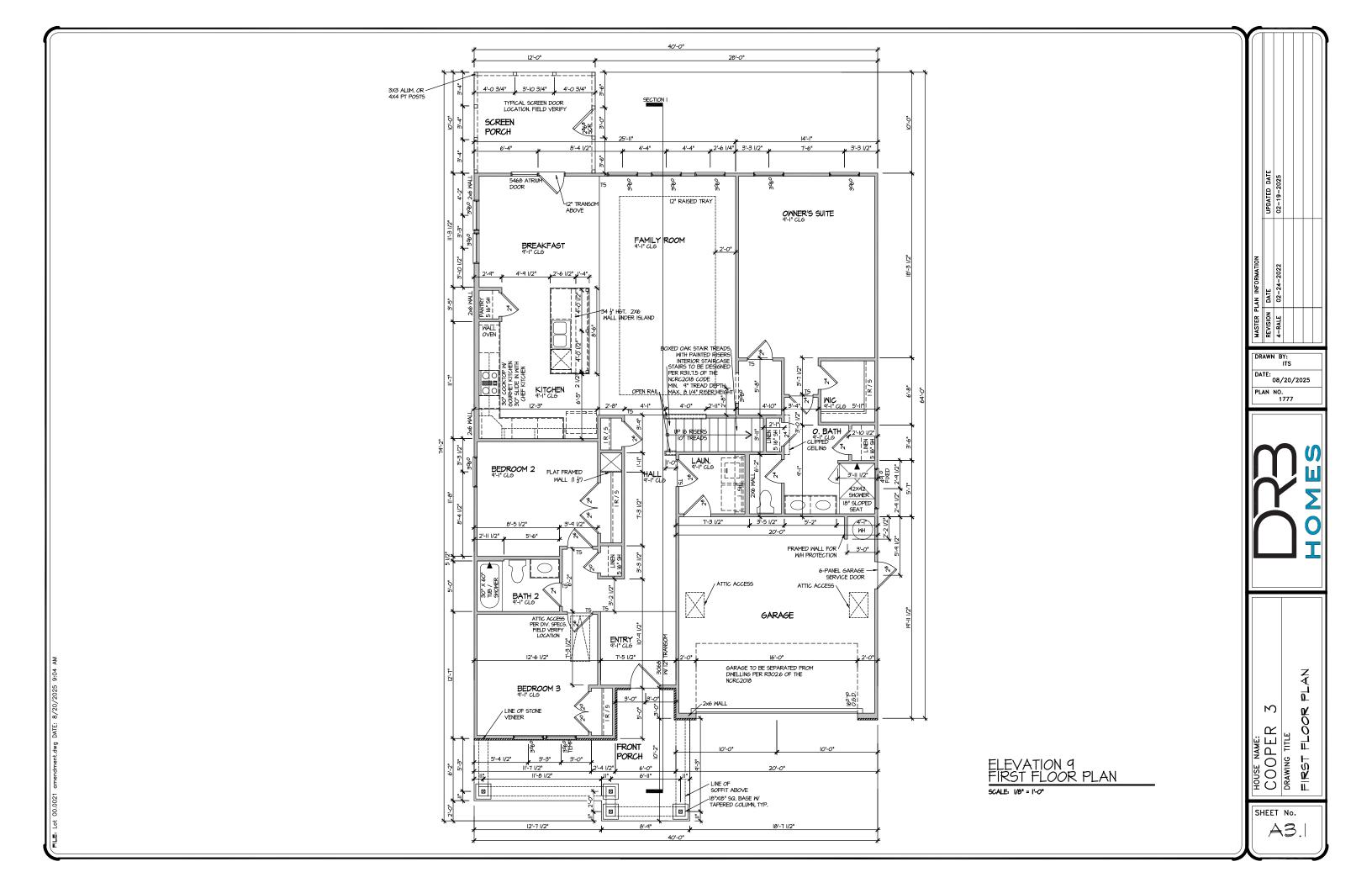
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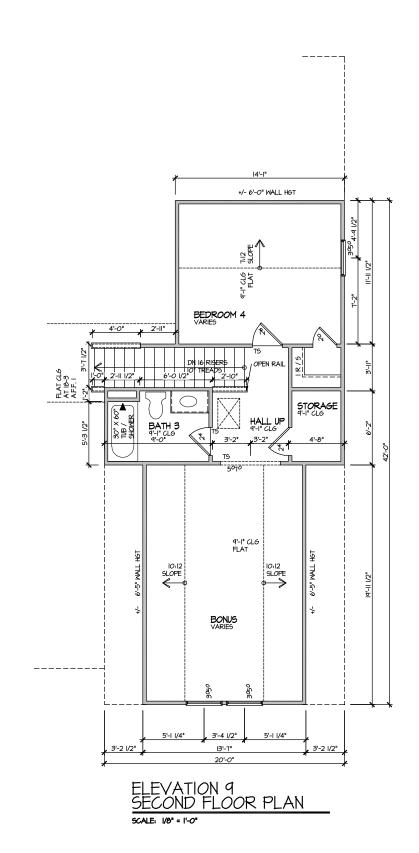
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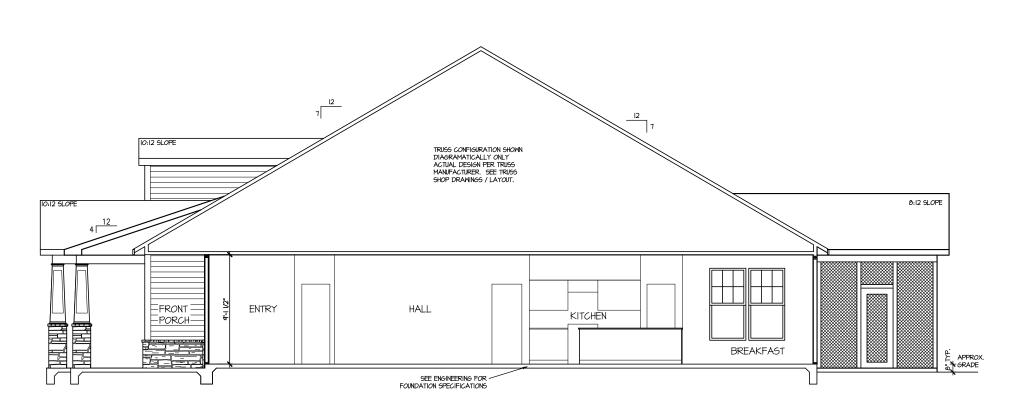
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PLAN NO. 1777

HOUSE NAME:
COOPER
DRAWING TITLE
SECOND FLO

SHEET No.

A3.2



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

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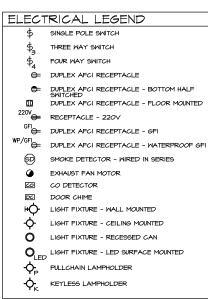
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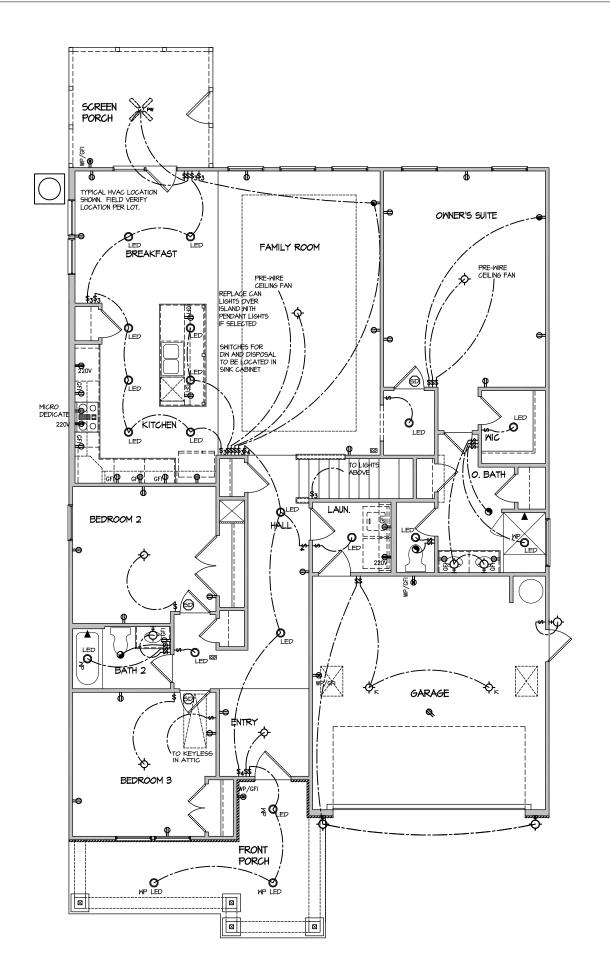
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HOUSE NAME:
COOPER
DRAWING TITLE
BUILDING SE

SHEET No. A4.1



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.



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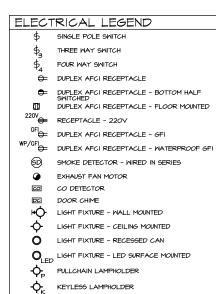
PLAN NO. 1777



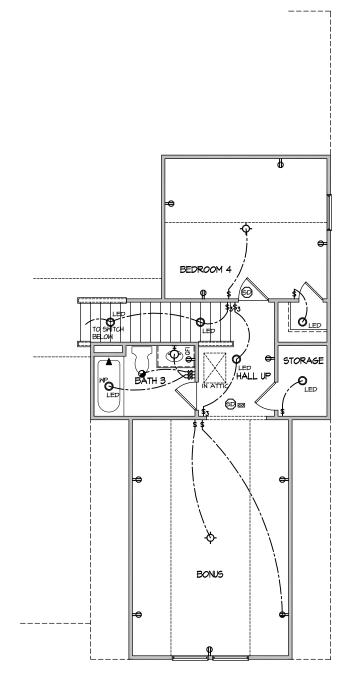
HOUSE NAME:
COOPER
DRAWING TITLE

ELECTRICAL PLAN FIRST FLOOR - ELEV. 9

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

	IATION	UPDATED DATE	022   02-19-2025			
	MASTER PLAN INFORMATION	DATE	4-RALE 02-24-2022			
	MASTER PL	REVISION DATE	4-RALE			
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DRAWN BY: ITS

DATE:
08/20/2025

PLAN NO.
1777



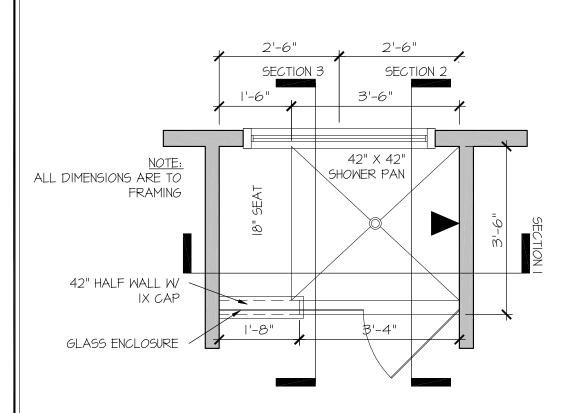
LOOR ELECTRICAL

HOUSE NAME:
COOPER
DRAWING TITLE

3

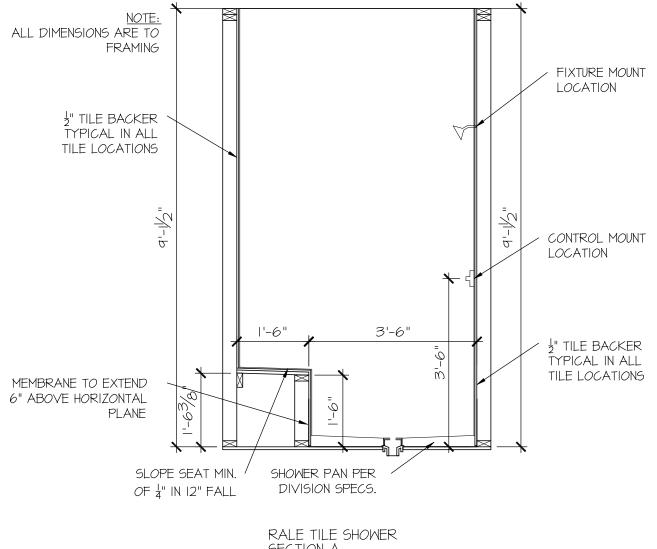
SHEET No.

Ē1.2



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

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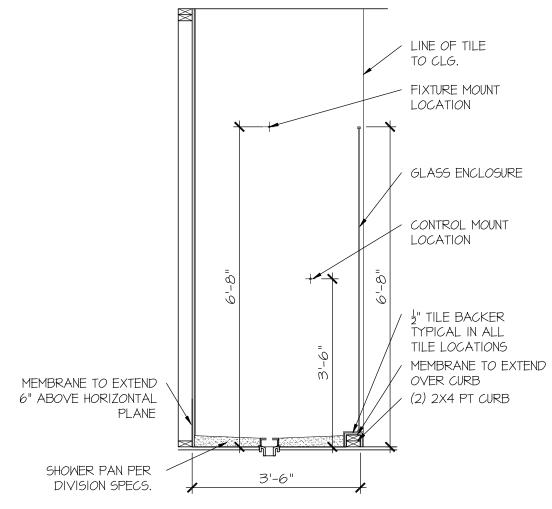


E ILE SHOWER DETAIL

OUSE NAME:

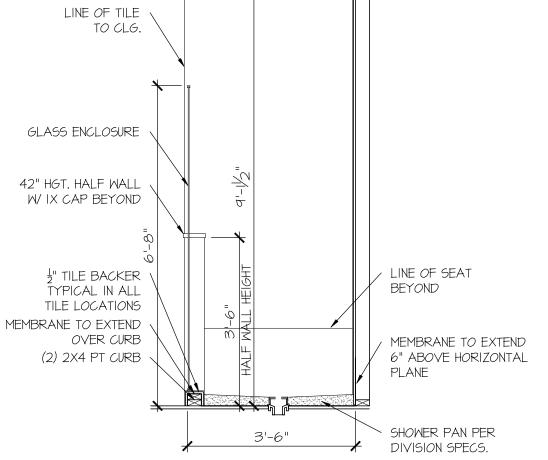
SHEET No.

P||.2



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





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

#### 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 2x SILL PLATES TO FND 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 10' 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 IARDWARE & 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 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 60,000 psi
- BASEMENT FOUNDATION WALL DESIGN BASED ON
- 9' OR 10' HEIGHT (AS NOTED ON PLANS)
- TALLER WALLS MUST BE ENGINEERED. NOMINAL WIDTH (9½" FOR 10" THICK WALL).
- BASEMENT WALL DESIGN IS BASED ON 60 PCF BACKELL 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, 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
- · LARGER OPENINGS SHALL BE PER PLAN. ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS
- 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 (MAXIMIM)
  - JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (I:1 RATIO) WITH A MAXIMUM OF 1:15 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 2x6 (MIN.) x 16" LONG PT PLATE ON TOP OF ALL CRAWL SPACE PIERS. ALL PIERS SHALL BE FASTENED PER ANCHORAGE SPECIFICATIONS NOTED ABOVE. TOP 2 COURSES (MIN.) OF PIER TO BE GROUTED SOLID (8 COURSE MAX. PIER HEIGHT).
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE. TOP 2 COURSES (MIN.) OF WALL TO BE GROUTED SOLID (8 COURSE MAX. WALL HEIGHT)
- 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: RESIDENTIAL CODE.
- WOOD FRAME ENGINEERING IS BASED ON NDS. "NATIONAL DESIGN
- DESIGN LOADS:

DEAD = 7 PSF T.C., 10 PSF B.C.

LOAD DURATION FACTOR = 1.25

LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (I-JOISTS & SOLID SAWN)
10 PSF T.C., 5 PSF B.C. (TRUSSES) (ADD'L IO PSF @ TILE)

LATERAL 120 MPH, EXPOSURE B. SEISMIC A/B.

2,000 PSF ASSUMED ALLOWABLE BEARING

#### 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 REQUIREMENT FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- REFER TO FASTENING SCHEDULE TABLE R602.3(I) 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 'STIJD' GRADE MEMBERS SPACED @ 16" O.C. (MAX., U.N.O.) HEADERS IN NON-LOAD BEARING WALLS SHALL BE:
- 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=1.55xI0^6 psi
   'LVL' Fb=2600 psi; Fv=285 psi; E=2.0xI0^6 psi
- 'PSL' FB=2400 PSI; FV=240 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 THI OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO M+K 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 31/3" 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. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3 1/2" OR 5 1/2" DEAMS ARE ACCEPTABLE. USE 2 ROMS OF NAILS FOR 2x6 & 2x8 MEMBERS
- 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 SCREWS 2" FROM EDGE. A SOLID T" 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 I/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 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" × 0.131" NAILS @ 6"o.c. @ PANEL EDGES & @ 12"o.c. FIELD.
- 2 🖥 x 0,120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD. 2 🖁 × 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 ROOF TRIES TO TOP PLATE W/ SIMPSON H2 ST 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.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 (U.N.O.) FASTENED TO:
  - RIM BOARD w/ (2) 3"x0.131" NAILS @ 16" O.C. MAX. (I-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 8 × 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		
<b>→</b> HD-3	SIMPSON STHD14/STHD14RJ		

\* UTILIZE THE SSTB24 ANCHOR BOLT ● ALL MONOSLAB & INTERIOR RAISED SLAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS. MINIMUM 24" MIN. POXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB

THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" (FOR 5/8" DIA.) OR 5" (FOR 1/8" DIA.) MIN, EMBEDMENT INTO CONCRETE. INSTALL PER MANUE. INSTRUCTIONS, MINIMUM 16" FOOTING THICKNESS REQ'D. 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: 20 MPH WIND IN 2018 NCSBC:RC

(120 MPH WIND SPEED IN ASCE 7-10 WIND MAP, PER IRG 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 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 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 R602.3.5¢ R802.II.

#### EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 3/8"XO.II3" NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. TYP, U.N.O.
- HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL PANEL EDGES IS <u>NOT</u> 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 K" 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 3/8" 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 √ 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.

#### **NOTES**

- SEE CONNECTION SPECIFICATIONS CHART FOR 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
- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)
- INDICATES EXTENT OF INT. OSB SHEARWALL
  - INDICATES HOLDOWN BELOW

#### 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:

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

#### ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)134"x1176" - F	3½"x11%" - F	(3)1¾"x11%" - F	(2)2xl2 + (l) %"xll4" STEEL FLITCH PLATES - F	WI2xI4 - F
002	(3)1¾"x11%" - F	5¼"xII%" - F	(4)1¾"x11%" - F	(2)2xl2 + (1) %"xll4" STEEL FLITCH PLATES - F	WI2xI4 - F
003	(2)134"x11%" - F	3½"×11%" - F	(3)1¾"x11%" - F	(2)2xl2 + (l) %"xl以" STEEL FLITCH PLATES - F	WI2xI4 - F
004	(2) 3/4"×   ½" - D	3½"xII ⅓" - D	(2)1¾"×11¾" - D	(2)2xi0 + (1) %"xiK" STEEL	W8XIO - D

- BEAM NOTATION:
   "F" INDICATES FLUSH BEAM
- "FT" INDICATES FLUSH TOP BEAM "FB" INDICATES ELUSH 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 SICCESSION W/ (2) 3"X0 120" NAILS @ 8" OC.
- 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.

#### LEGEND

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

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
IP TO 12'-0"	(2)2x8	(3)2v8

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

#### ALTERNATE F.J MANUFACTURERS

FLOOR JOISTS BY MANUFACTURER'S OTHER THAN THOSE SHOWN ON PLAN SHALL CONFORM TO THE APA PERFORMANCE RELATED I-JOISTS DESIGN AND CONSTRUCTION GUIDE, MINIMUM JOIST PROPERTIES INCLUDING, BUT NOT LIMITED TO, ALLOWABLE SHEAR, ALLOWABLE MOMENT, STRENGTH, AND STIFFNESS, SHALL MEET OR EXCEED THOSE LISTED FOR THE PRI-60 SERIES I- JOISTS ALL ALLOWABLE HOLES, BEARING STIFFENERS, AND JOIST TO JOIST CONNECTIONS ARE PER THE JOIST MANUFACTURER.

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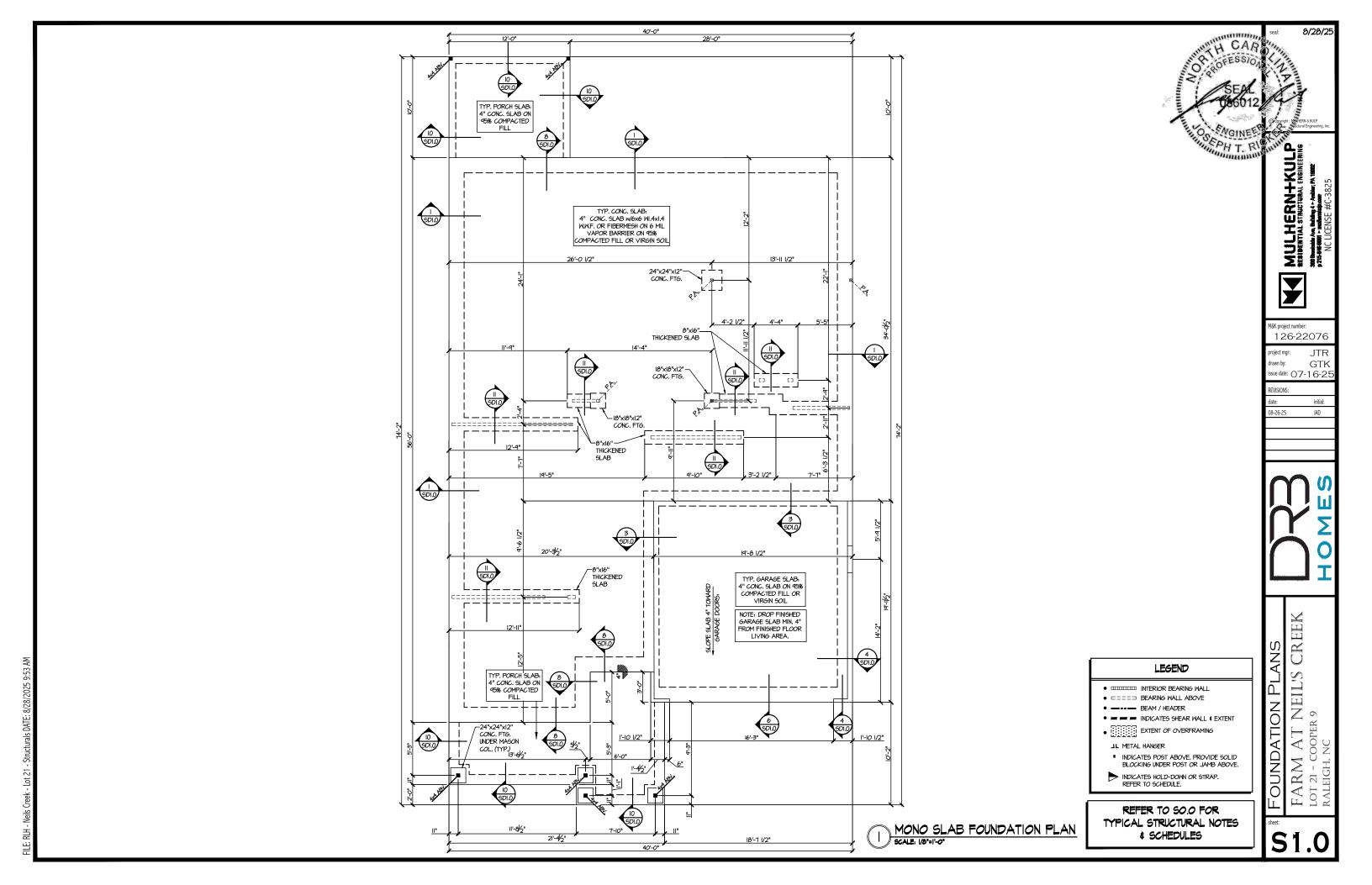
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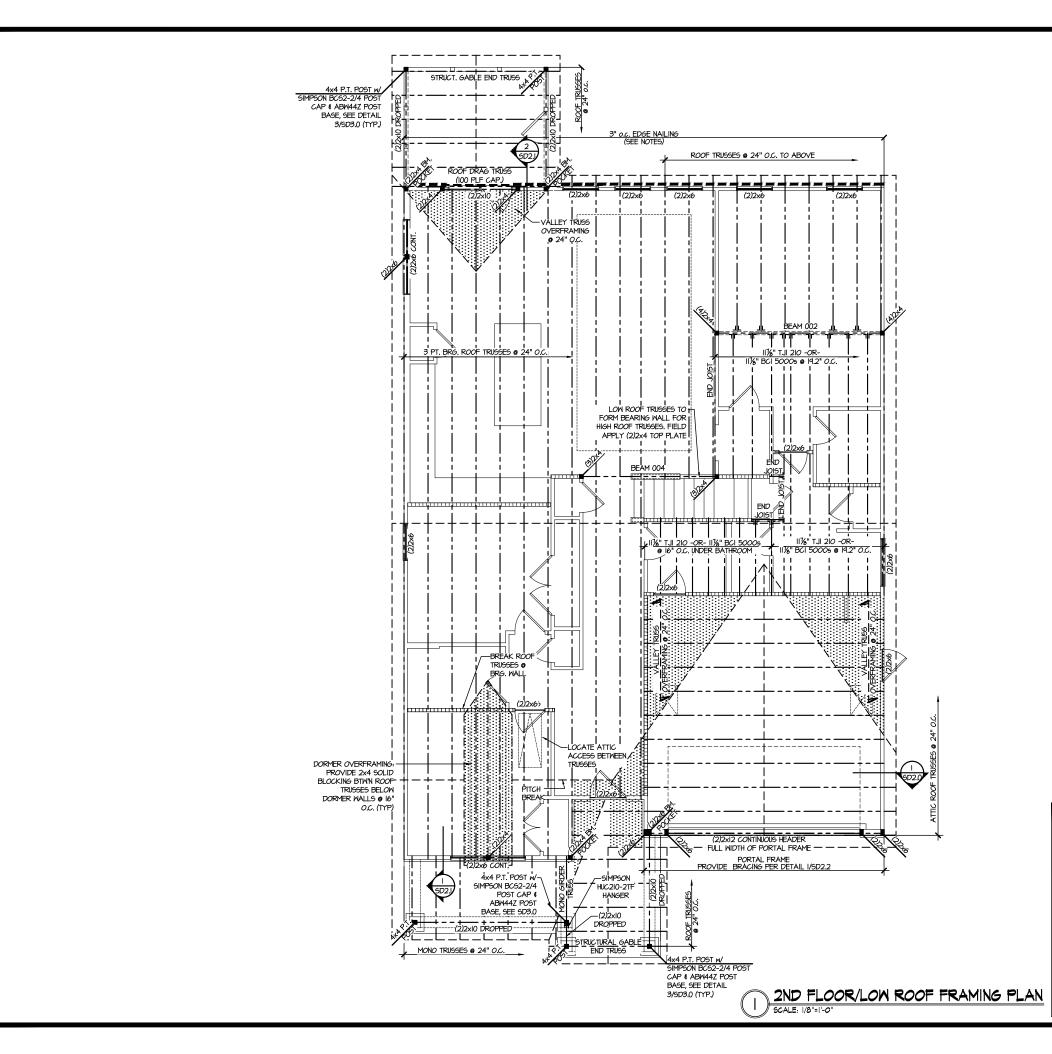
REVISIONS: initial: 8-26-25 JAD



CREEK TRUCTURAL NOTE NEILS ATRM

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8/28/25

M&K project number: 126-22076

JTR rawn by: GTK ssue date: 07-16-2

REVISIONS: initial: JAD

LEGEND

• IIIIII INTERIOR BEARING WALL

● □===□ BEARING WALL ABOVE

● ■ ■ ■ BEAM / HEADER

ALTERNATE F.J MANUFACTURERS

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PLAN SHALL CONFORM TO THE APA PERFORMANCE RELATED I-JOISTS DESIGN AND CONSTRUCTION GUIDE. MINIMUM JOIST

• = = 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

#### ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)154"x1176" - F	3½"×II%" - F	(3)134"x11%" - F	(2)2xl2 + (l) %"xl以" STEEL FLITCH PLATES - F	WI2xI4 - F
002	(3)1¾"x11½" - F	5¼"xII%" - F	(4)1¾"x11%" - F	(2)2xl2 + (l) %"xl以" STEEL FLITCH PLATES - F	WI2xI4 - F
003	(2)1¾"x11%" - F	3½"×II%" - F	(3)1¾"x11%" - F	(2)2xl2 + (l) %"xl以" STEEL FLITCH PLATES - F	WI2xI4 - F
004	(2)134"x11 1/4" - D	3½"×II ¼" - D	(2)13/4"x111/6" - D	(2)2xi0 + (i) %"xi以" STEEL FLITCH PLATES - D	MBXIO - D

- BEAM NOTATION:
   "F" INDICATES FLUSH BEAM
   "FI" INDICATES FLUSH TOP BEAM
   "FI" INDICATES FLUSH BOTTOM BEAM
   "FB" INDICATES FLUSH BOTTOM BEAM
   "D" INDICATES DROPPED BEAM
   "H" INDICATES DROPPED OPENING HEADER
- REFER TO DETAIL DESCRIPTION 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 SICCESSION W (2) 3"X0.120" NAILS © 0" 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

CREEK NEIL'S ATFARM LOT

**S2**.

MUCHERN+KULP ¥

M&K project number: 126-22076

JTR drawn by: GTK ssue date: 07-16-2

REVISIONS: initial: 08-26-25 JAD

#### LEGEND

- IIIIII 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

#### ENGINEERED BEAM MATERIAL SCHEDULE BEAM NUMBER LVL OPTION PSL OPTION LSL OPTION FLITCH OPTION STEEL OPTION (2)2xl2 + (I) %"xll"," STEEL FLITCH PLATES - F 001 (2)134"x1136" - F (3)13/4"x117/6" - F WI2xI4 - F 3½"x11%" - F (2)2xl2 + (l) %"xl以" STEEL FLITCH PLATES - F 002 (3)1¾"x11%" - F 5¼"xII%" - F (4)134"×1136" - F (2)2xl2 + (I) %"xll4" STEEL FLITCH PLATES - F 003 (3)134"x1136" - F WI2xI4 - F (2)13/4"x113/6" - F 3½"x11%" - F (2)2xi0 + (i) %"xil4" STEEL FLITCH PLATES - D 004 W8XIO - D (2)134"×1136" - D (2)13/4"x11 1/2" - D 3½"xII ‡" - D

ROOF TRUSSES

LOCATE ATTIC
ACCESS BETWEEN
TRUSSES

ON ROOF TRUSSES TO FORM BEARING WALL FOR HIGH ROOF TRUSSES, FIELD

HIGH ROOF FRAMING PLAN

بخط

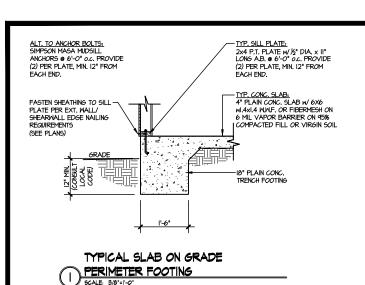
- BEAM NOTATION:

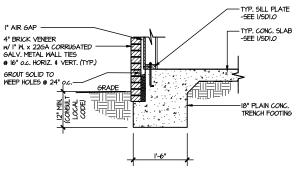
   "F" INDICATES FLUSH BEAM
   "F" INDICATES FLUSH BEAM
   "F" INDICATES FLUSH BOTTOM BEAM
   "B" INDICATES FLUSH BOTTOM BEAM
   "H" INDICATES PROPPED BEAM
   "H" INDICATES PROPPED BEAM
   "H" INDICATES PROPPED DEPLING HEADER
  REFIER TO DETAIL DEPOZO FOR TYPICAL FLITCH BEAM CONNECTIONS
  REFIER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
  FOR FLUSH TOP DEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D, FASTEN
  PLATES IN SIZCESSION W (7) 3"NO.12" NAILS @ 0" C/C. PLATES IN SUCCESSION W (2) 3"X0.120" NAILS @ 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 @ 8" O.C.

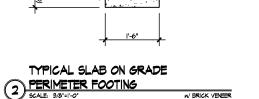
CREEK ROOF FRAMING PLANS AT NEIL'S

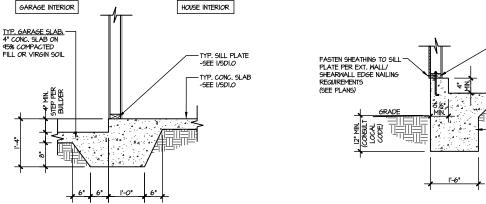
FARM / LOT 21 - CO RALEIGH, NA

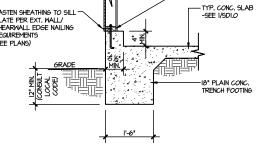
**S3**.







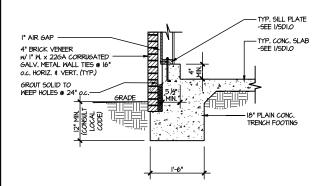




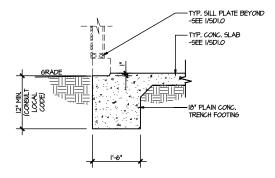
TYP. SILL PLATE

-SEE I/SDI.O

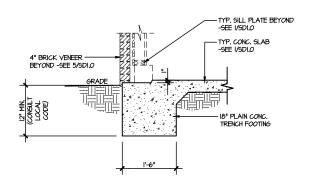










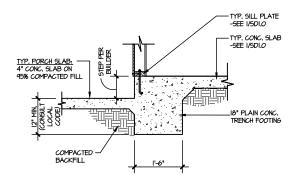


TYPICAL MONOLITHIC INTERIOR

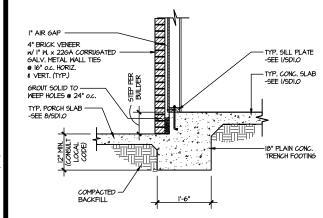
GARAGE FOOTING

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

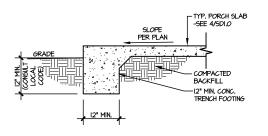
TYPICAL SLAB ON GRADE GARAGE PENTRY @ PERIMETER FOOTING



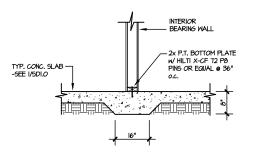
TYPICAL SLAB ON GRADE PERIMETER (8) FOOTING @ PORCH/PATIO



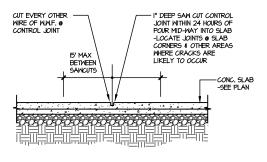
TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO



TYPICAL FOOTING @ PORCH SLAB



TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL





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.

OUNDATION DETAILS NEIL'S ATFARM

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8/28/2

STRUCTURAL ENGINEER

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M&K project number 126-22076

ssue date: 07-16-2

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08-26-25

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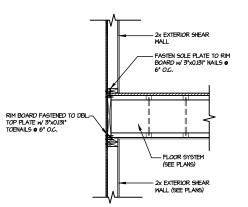
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SEPH T. R

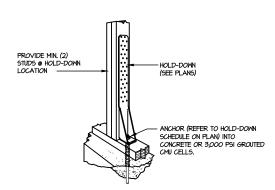
LOT

#### TYPICAL SHEAR

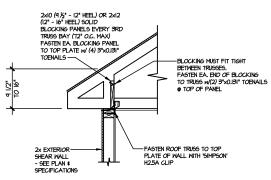
TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1"-0" HEEL HEIGHT LESS THAN HEEL HEIGHT LESS THAN 9 ½" NO BLOCKING REQ'D



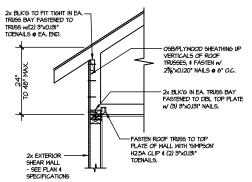
## TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL SCALE: 3/8'=1'-0'



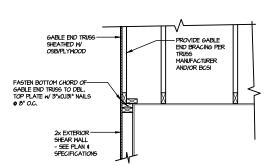
TYPICAL HOLD DOWN INSTALLATION
SCALE: NTS.



#### TYPICAL SHEAR TRANSFER DETAIL @ ROOF SCALE: 3/8"=1"-0" HEEL HEIGHT BETWEEN 9 1/2 HEEL HEIGHT BETWEEN 9½" - 16" BLOCKING REQD



TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 9/6'=1-0'



LETTERED DETAILS ARE TYPICAL FOR

THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE

DETAILS ARE NOT "CUT" ON THE PLANS.

TYPICAL GABLE END DETAIL

SCALE: 9/8"=1"-0"

M&K project number: 126-22076

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MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
THE STRUCTURAL ENGINEERING

8/28/25

H CAR

SEPH T. RI

JTR drawn by: GTK ssue date: 07-16-2

REVISIONS:

initial: 08-26-25 JAD

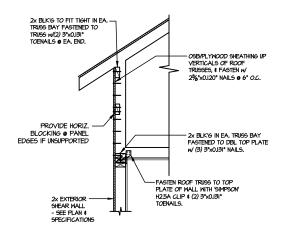


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**SD2.0** 

FRAMING DETAILS
FARM AT NEIL'S CI
LOT 21 - COOPER 9
RALEIGH, NC

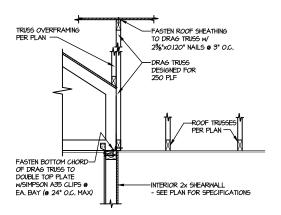
NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.



TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS

SCALE: 3/8"=1"-0" HEEL HEIGHT GREATER THAN 48





SHEAR TRANSFER DETAIL

AT INTERIOR SHEARMALL BELOW

SCALE 344-1-0"

OSEPH T. RI MUCHERN+KULP ¥

TH CAR

M&K project number: 126-22076

8/28/25

JTR drawn by: GTK issue date: 07-16-25

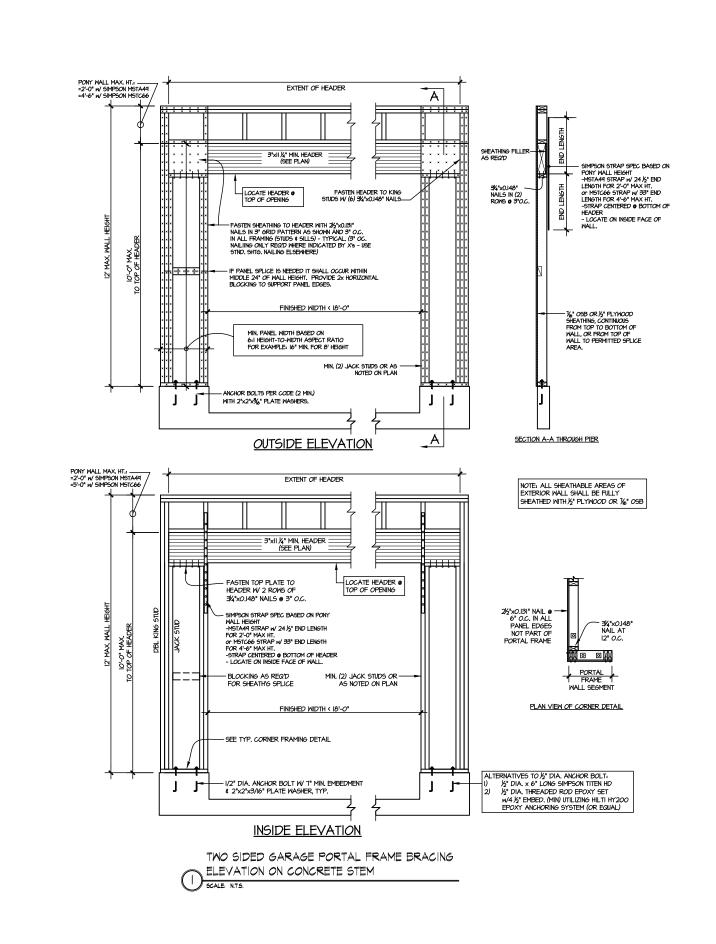
> REVISIONS: initial: 08-26-25 JAD



FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 21 - COOPER 9
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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MUCHERN+KULP

TH CAR

8/28/25



M&K project number: 126-22076

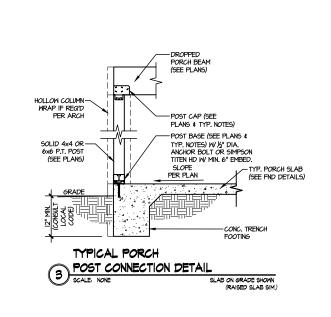
JTR drawn by: GTK ssue date: 07-16-2

REVISIONS: initial:

08-26-25 JAD

FRAMING DETAILS FARM AT NEIL'S C LOT 21 - COOPER 9 RALEIGH, NC

**SD2.2** 



MULHERNAL STRUCTURAL ENGINEERING TO LICENSE #C-3825

NC LICENSE #C-3825

NC LICENSE #C-3825

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M&K project number: 126-22076

project mgr: JTR drawn by: GTK issue date: 07-16-25

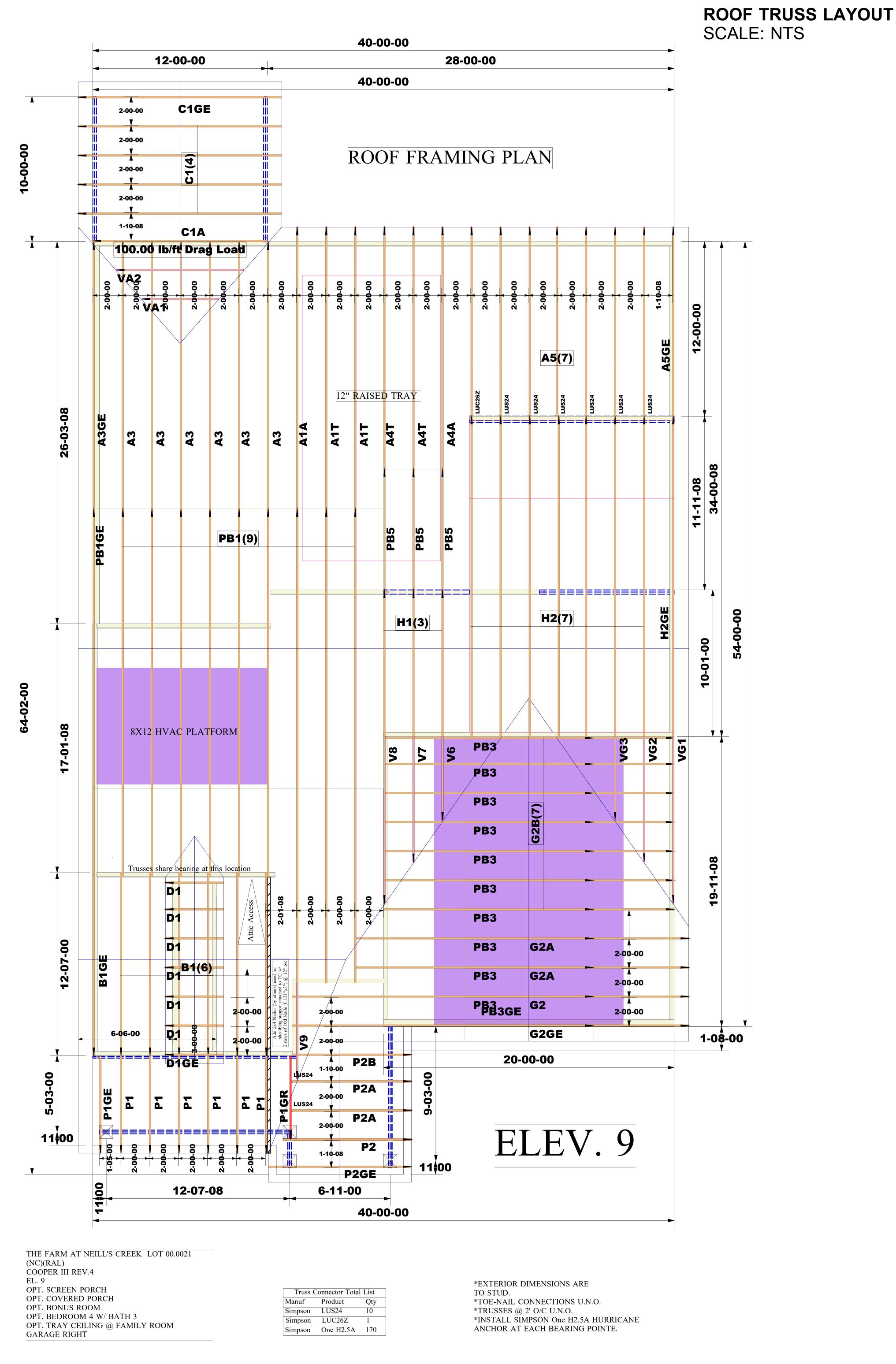
REVISIONS:
date: initial:
08-26-25 JAD

HOMES

FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 21 - COOPER 9

sheet:

SD3.0



Job #: **WARNING: NOTE:** Customer: DRB Raleigh CONVENTIONAL FRAMING, ERECTION AND/OR IT IS THE RESPONSIBILITY OF THE BUILDING 2507-2047 PERMANENT BRACING IS NOT THE RESPONSIBILITY OF DESIGNER OR ARCHITECT TO PROVIDE AN THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACTIONS SHOWN TRUSS MANUFACTURER. PERSONS ERECTING Third-Party Quality Assurance Licensee TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS Job Name: The Farm at Neill's Creek ROOF ADVICE REGARDING THE ERECTION BRACING WHICH IS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING TPI Plant W974 ALWAYS REQUIRED TO PREVENT TOPPLING AND (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION. DOMINOING DURING ERECTION; AND PERMANENT **BRACING WHICH MAY BE REQUIRED IN SPECIFIC** Structural, LLC APPLICATIONS. SEE "BRACING WOOD TRUSSES Designer: THIS COMPANY IS A TRUSS MANUFACTURER WHOSE <u>ot #:</u> 00.0021 RESPONSIBILITIES ARE LIMITED TO THOSE 201 Poplar Avenue DESCRIBED IN WTCA 1-1995 "DESIGN TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS Savvy Nath
Sales Rep: Thurmont, MD 21788 PLUMB POSITION WHERE NO SHEATHING IS APPLIED ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE DIRECTLY TO TOP AND/OR BOTTOM CHORDS. THEY CONSTRUCTION DESIGN. DRAWINGS. DOCUMENTS INCLUDING THE INSTALLATION, AND BRACING OF SHALL BE BRACED AS SPCIFIED ON THE ENGINEERED Phone: 301-271-7591 DESIGN. TRUSSES SHALL BE HANDLED WITH TRUSSES MANUFACTURED BY THIS COMPANY. Model Name: Cooper III Rev. 4 REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY. Robbie Zarobinski

