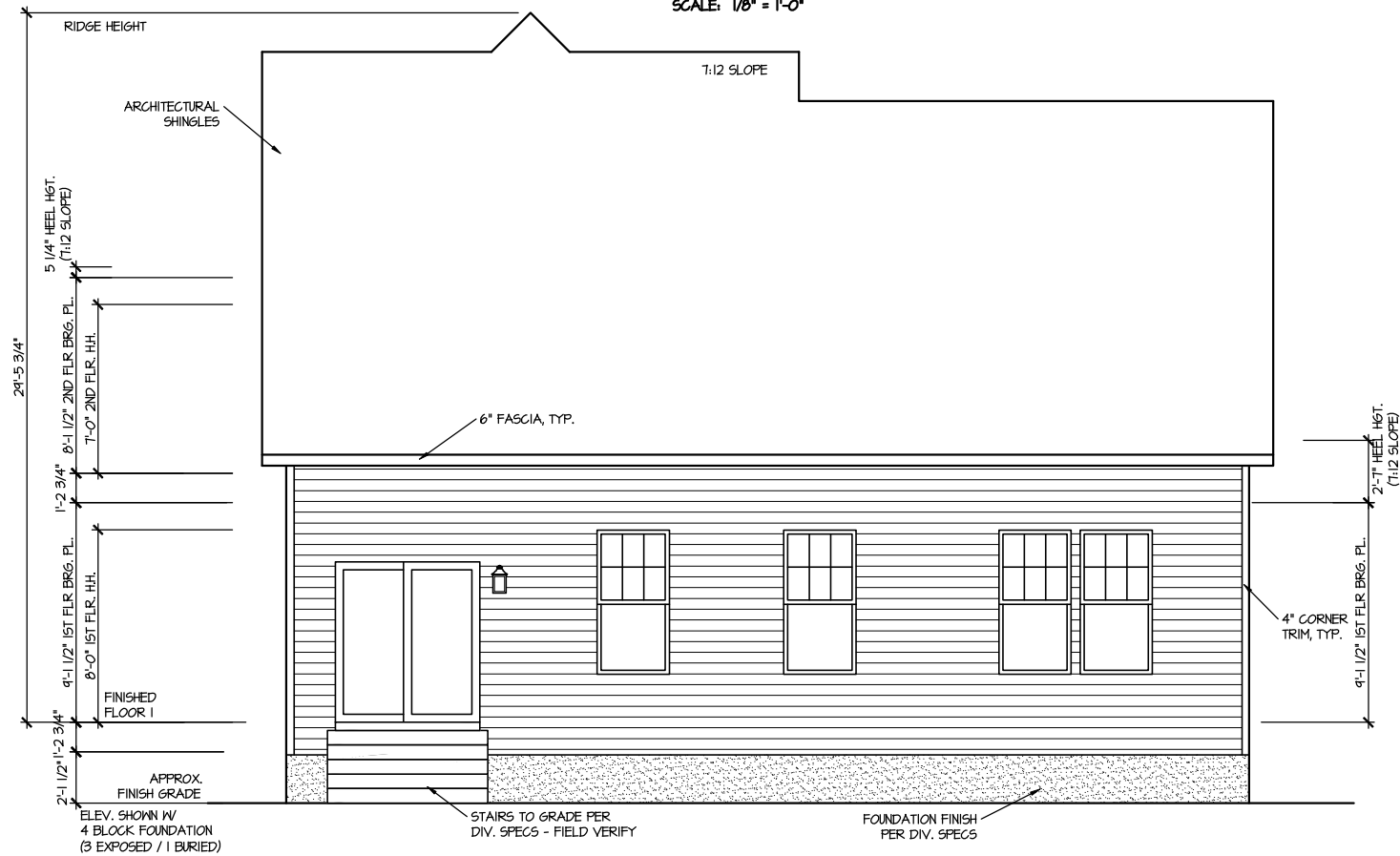


FRONT ELEVATION 4

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



REAR ELEVATION 4

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

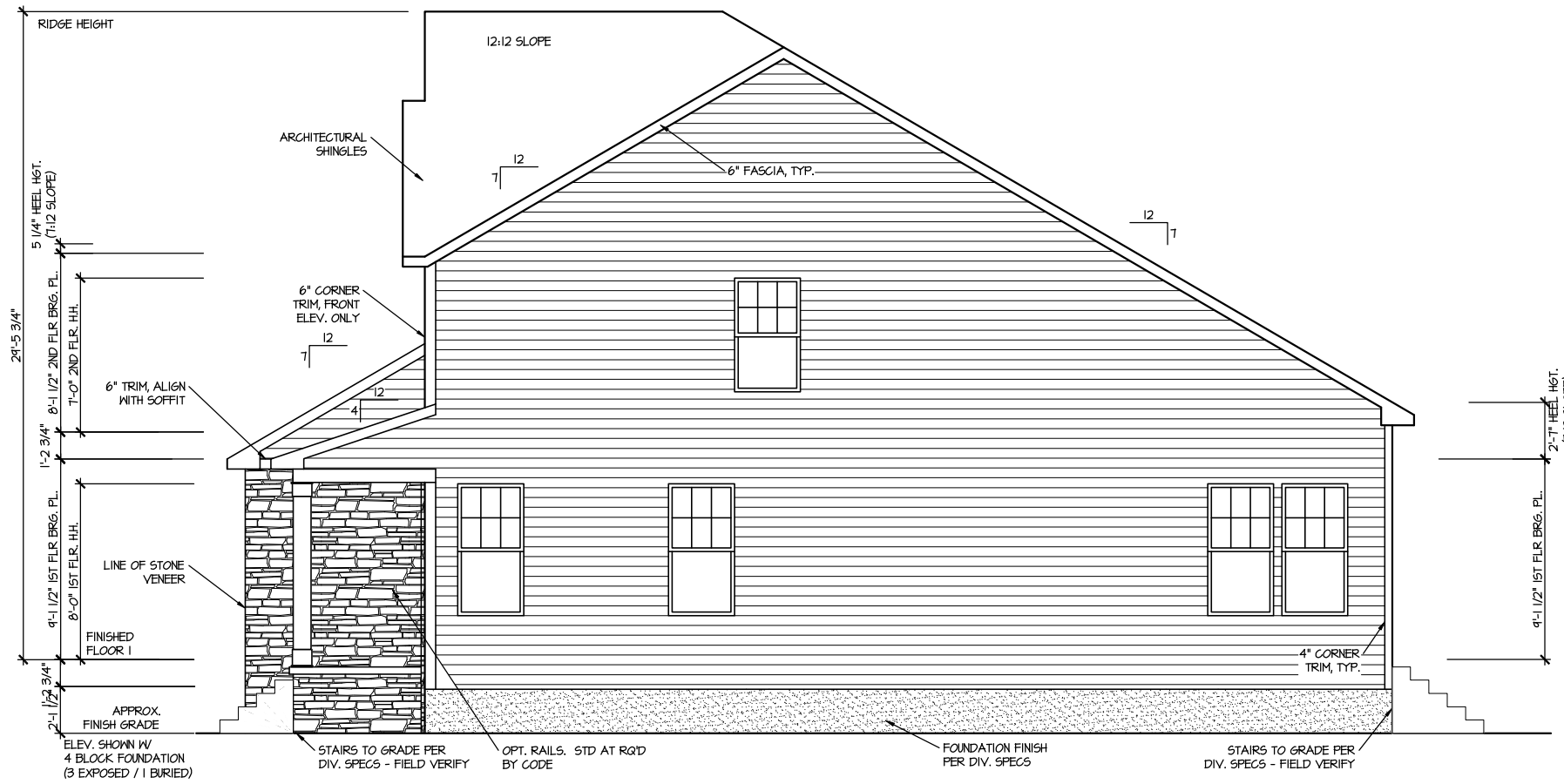
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REVISION	DATE	02-03-2023
1 - RALE	10-12-2018	

DRAWN BY:	ITS
DATE:	06/28/2023
PLAN NO.	2183



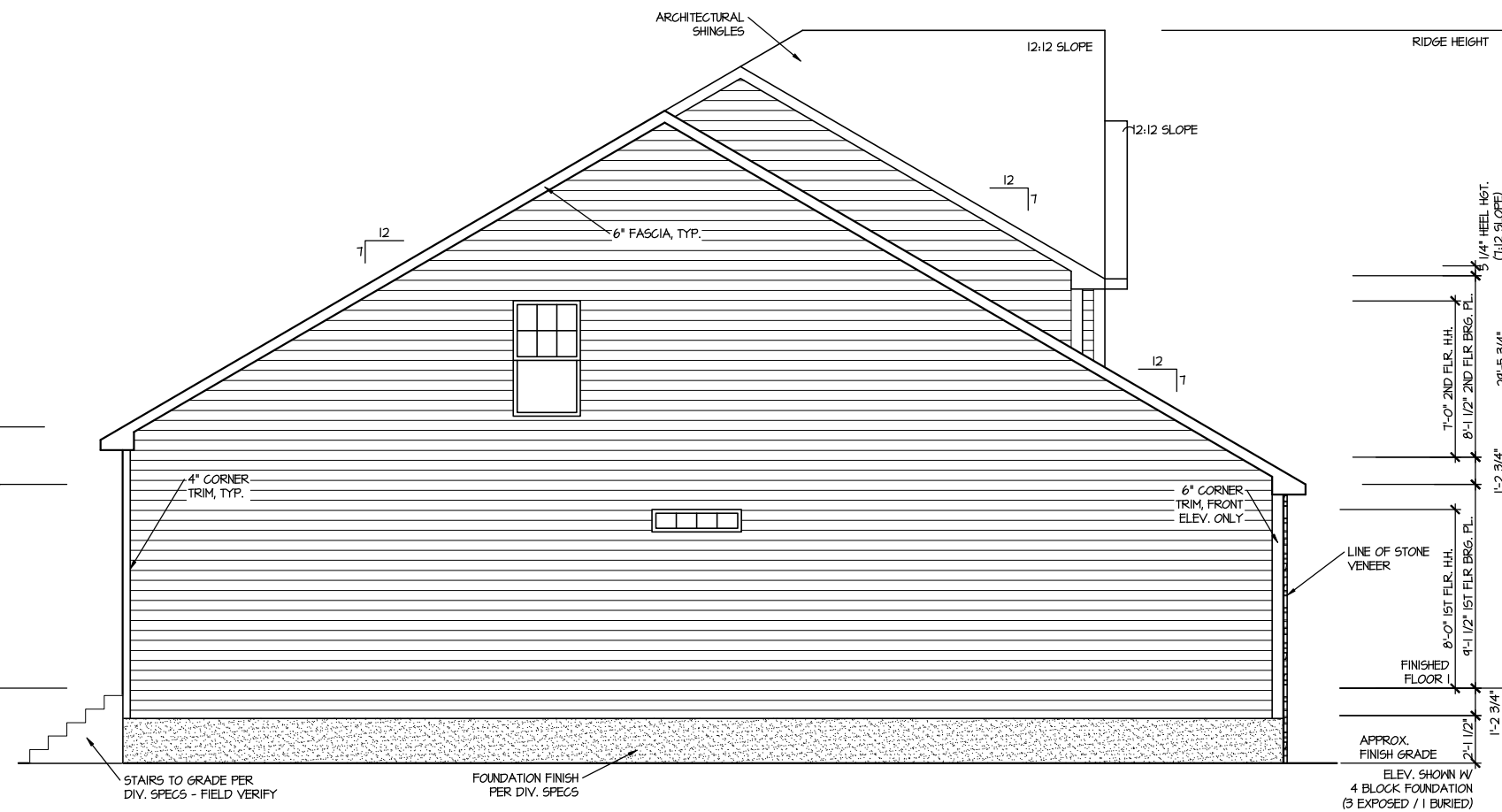
HOUSE NAME:
MIDDLETON
DRAWING TITLE
FRONT & REAR ELEVATIONS

SHEET No.
A.1



RIGHT ELEVATION 4

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



LEFT ELEVATION 4

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

MASTER PLAN INFORMATION	
REVISION	DATE
1 - RALE	10-12-2018
	UPDATED DATE
	02-03-2023

DRAWN BY:	ITS
DATE:	06/28/2023
PLAN NO.	2183

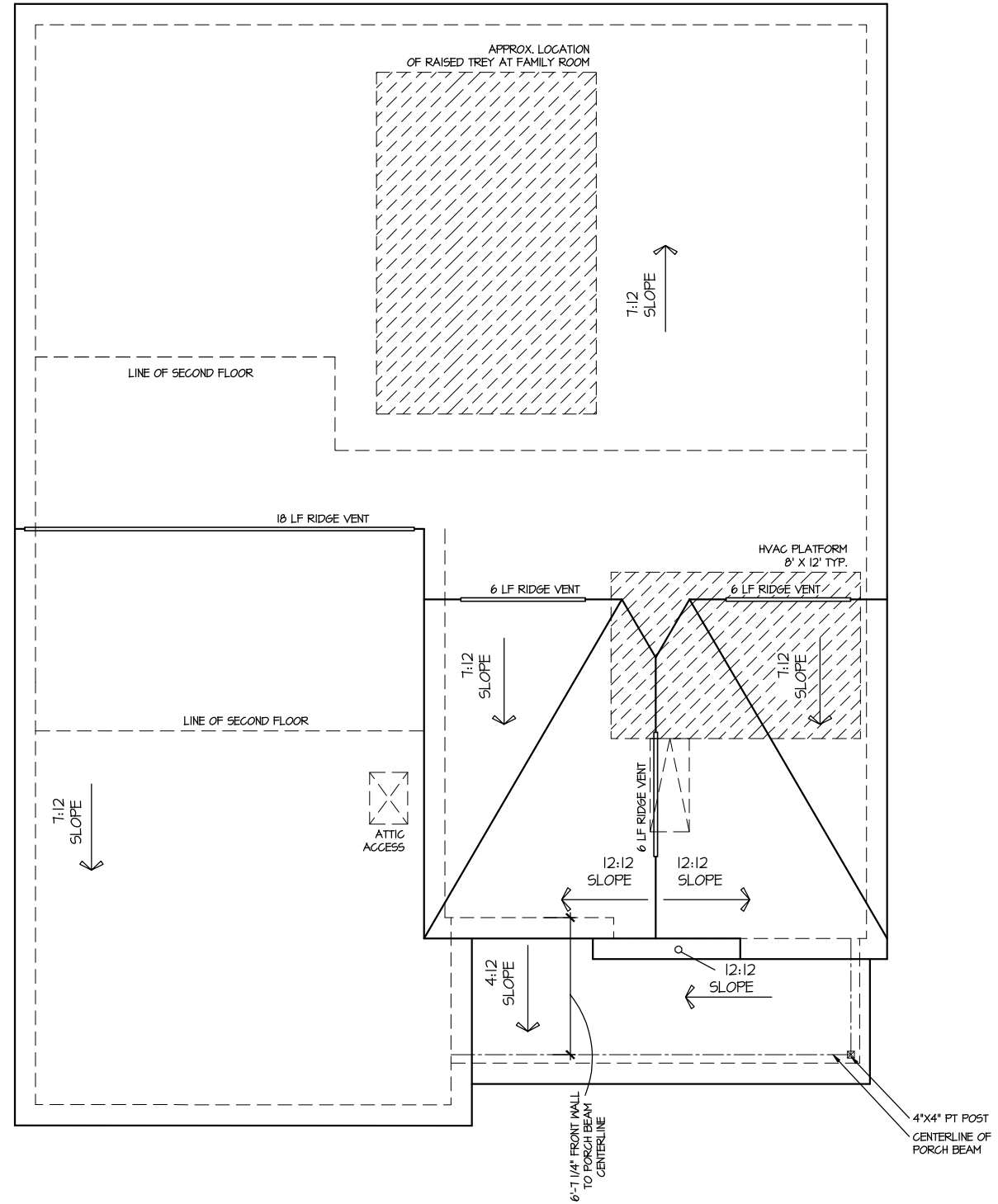


HOUSE NAME:	MIDDLETON
DRAWING TITLE	RIGHT & LEFT ELEVATIONS

SHEET No.	A1.2
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FILE: Lot_00.0046.dwg DATE: 6/28/2023 11:52 AM

ROOF VENTILATION CALCULATIONS:
 ROOF AREA = 2102 SQ. FT.
 OVERALL REQUIRED VENTILATION:
 1 TO 150 = 14.01 SQ. FT.
 1 TO 300 = 7.01 SQ. FT.
 50-80% IN TOP THIRD = 350 - 561 SQ. FT. (1 TO 300)
 NET FREE AREA OF VENTED SOFFIT = 5.7 SQ. IN / LINEAR FT.
 NET FREE AREA OF RIDGE VENT = 10 SQ. IN / LINEAR FT.
 LOWER VENTING (BOTTOM 2/3 RISE):
 14 LINEAR FEET OF SOFFIT X 5.7 SQ. IN. = 249 SQ. FT.
 UPPER VENTING (TOP 1/3 RISE):
 36 LINEAR FEET OF RIDGE X 10 SQ. IN. = 45 SQ. FT.
 400 SQ. FT. BETWEEN 50% - 80%
 (1 TO 300 ALLOWED)
 TOTAL ROOF VENTILATION: 743 SQ. FT. > 701 SQ. FT. (REQ'D)



ROOF PLAN ELEV. 4
 SCALE: 1/8" = 1'-0"

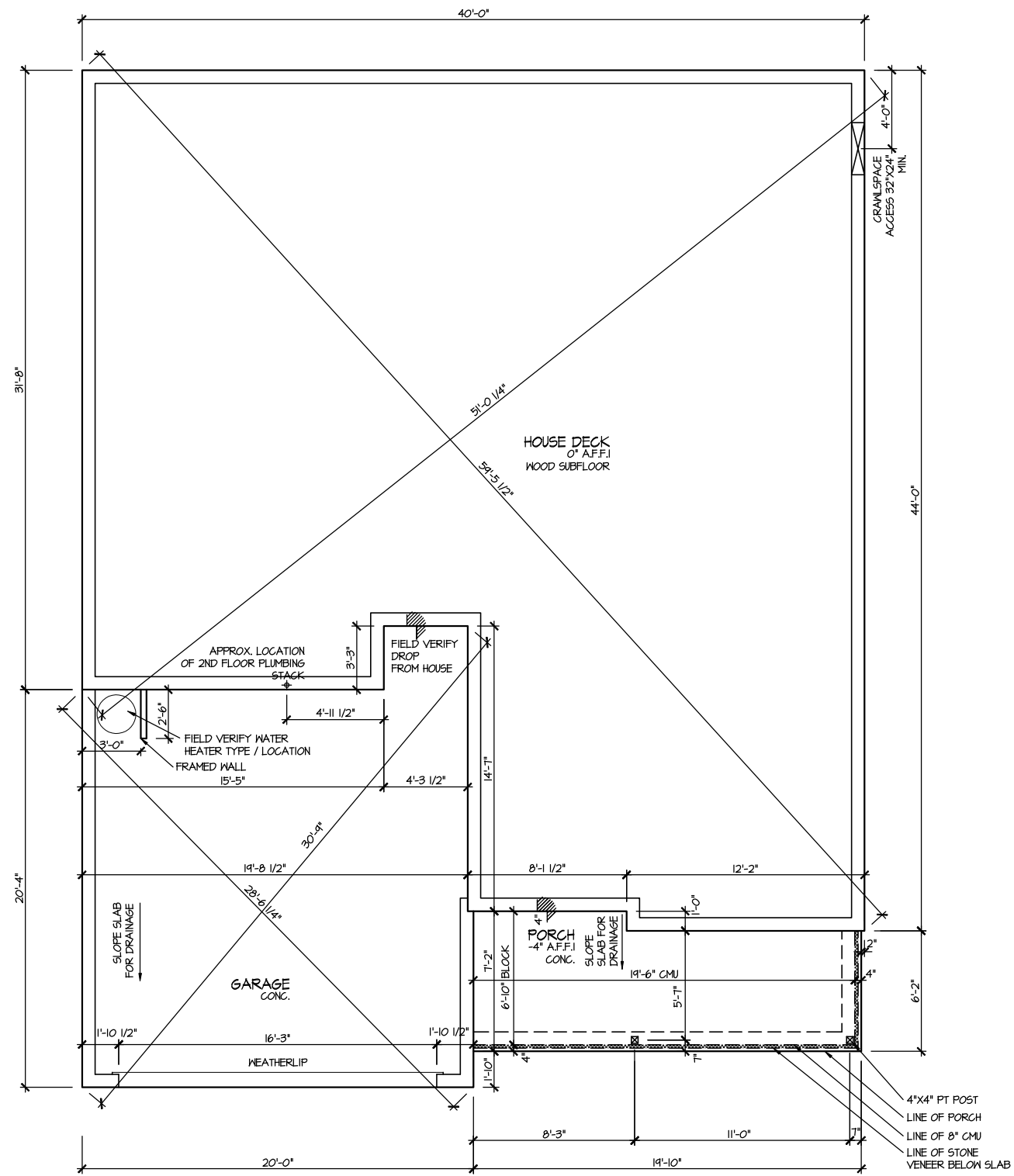
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REVISION	DATE	
1-RALE	10-12-2018	02-03-2023

DRAWN BY: ITS
 DATE: 06/28/2023
 PLAN NO. 2183



HOUSE NAME: MIDDLETON
 DRAWING TITLE: ROOF PLAN

SHEET No. A13



**ELEVATION 4
CRAWLSPACE PLAN**

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

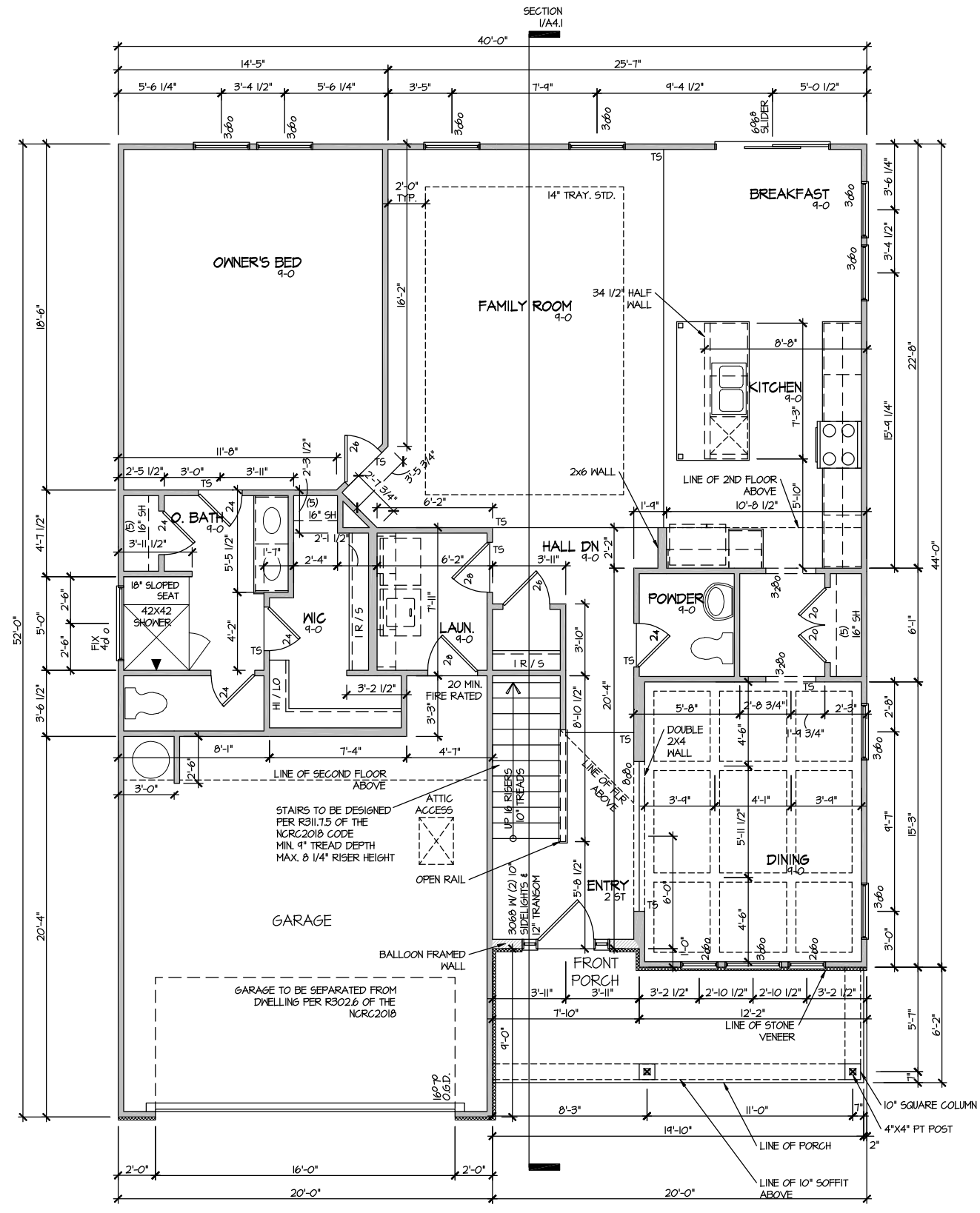
MASTER PLAN INFORMATION		UPDATED DATE
REVISION	DATE	
1 - RALE	10-12-2018	02-03-2023

DRAWN BY:
ITS
DATE:
06/28/2023
PLAN NO.
2183



HOUSE NAME:
MIDDLETON
DRAWING TITLE
CRAWLSPACE PLAN

SHEET No.
A2.1



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

MASTER PLAN INFORMATION

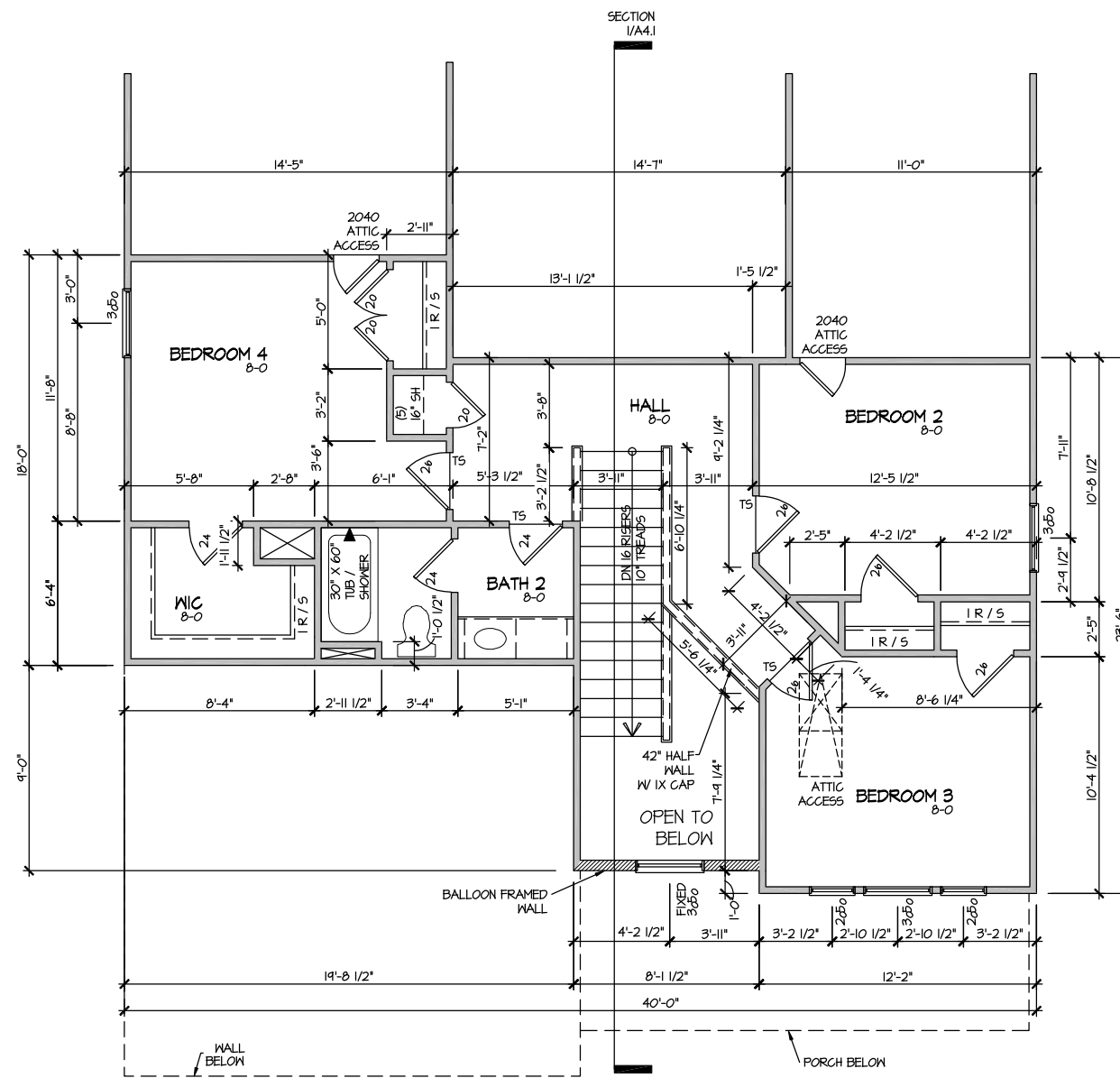
REVISION	DATE	UPDATED DATE
1 - RALE	10-12-2018	02-03-2023

DRAWN BY: ITS
DATE: 06/28/2023
PLAN NO. 2183



HOUSE NAME: MIDDLETON
DRAWING TITLE: FIRST FLOOR PLAN

SHEET No. A3.1



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

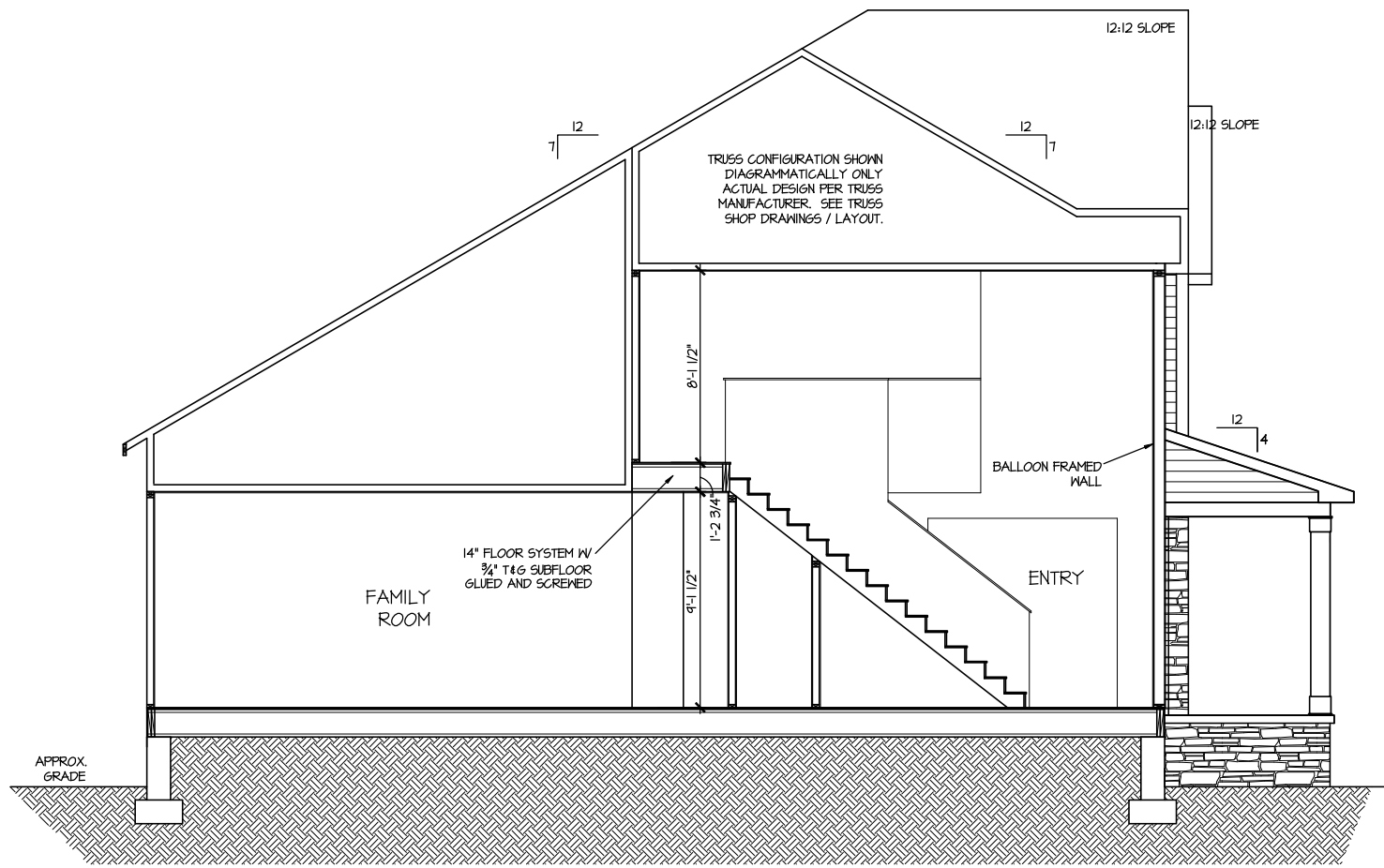
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REVISION	DATE
1 - RALE	10-12-2018
	UPDATED DATE
	02-03-2023

DRAWN BY:	ITS
DATE:	06/28/2023
PLAN NO.	2183



HOUSE NAME:	MIDDLETON
DRAWING TITLE	SECOND FLOOR PLAN

SHEET No.
 A3.2



SECTION I

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

UPDATED DATE
02-03-2023

MASTER PLAN INFORMATION
REVISION DATE
1-PALE 10-12-2018

DRAWN BY:
ITS

DATE: 06/28/2023

PLAN NO.
2183



HOUSE NAME:
MIDDLETON
DRAWING TITLE
BUILDING SECTION

SHEET No.

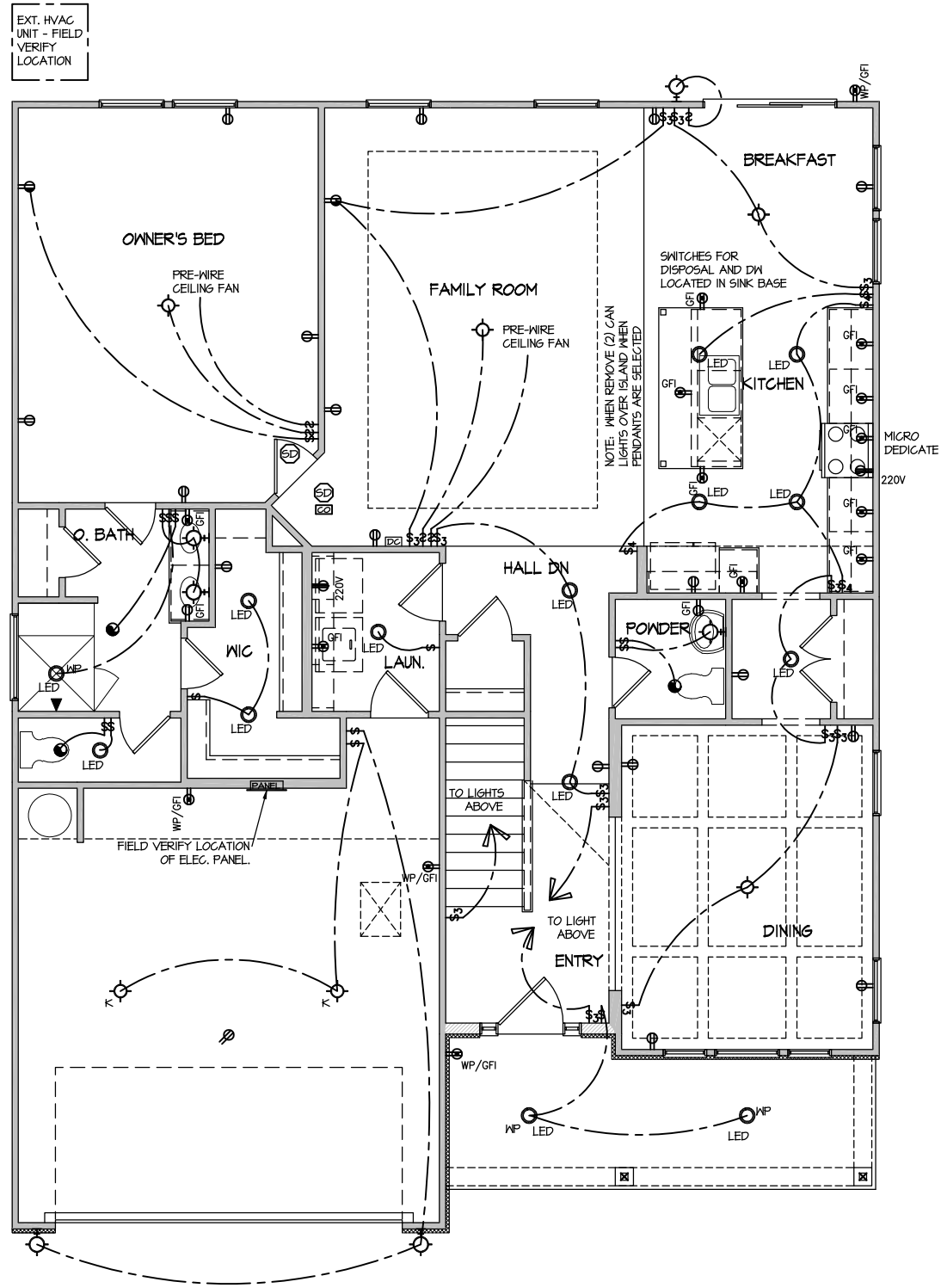
A4.1

FILE: Lot_00.0046.dwg DATE: 6/28/2023 11:52 AM

ELECTRICAL LEGEND

- Ⓢ SINGLE POLE SWITCH
- Ⓢ₃ THREE WAY SWITCH
- Ⓢ₄ FOUR WAY SWITCH
- Ⓢ- DUPLEX AFCI RECEPTACLE
- Ⓢ- DUPLEX AFCI RECEPTACLE - BOTTOM HALF SWITCHED
- Ⓢ- DUPLEX AFCI RECEPTACLE - FLOOR MOUNTED
- 220V Ⓢ RECEPTACLE - 220V
- Ⓢ- GFI DUPLEX AFCI RECEPTACLE - GFI
- WP/GFI Ⓢ- DUPLEX AFCI RECEPTACLE - WATERPROOF GFI
- Ⓢ- SMOKE DETECTOR - WIRED IN SERIES
- Ⓢ- EXHAUST FAN MOTOR
- Ⓢ- CO DETECTOR
- Ⓢ- DOOR CHIME
- Ⓢ- LIGHT FIXTURE - WALL MOUNTED
- Ⓢ- LIGHT FIXTURE - CEILING MOUNTED
- Ⓢ- LED LIGHT FIXTURE - LED SURFACE MOUNTED
- Ⓢ- P FULLCHAIN LAMPHOLDER
- Ⓢ- K KEYLESS LAMPHOLDER

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

MASTER PLAN INFORMATION		UPDATED DATE
REVISION	DATE	02-03-2023
1 - RALE	10-12-2018	

DRAWN BY:	ITS
DATE:	06/28/2023
PLAN NO.	2183



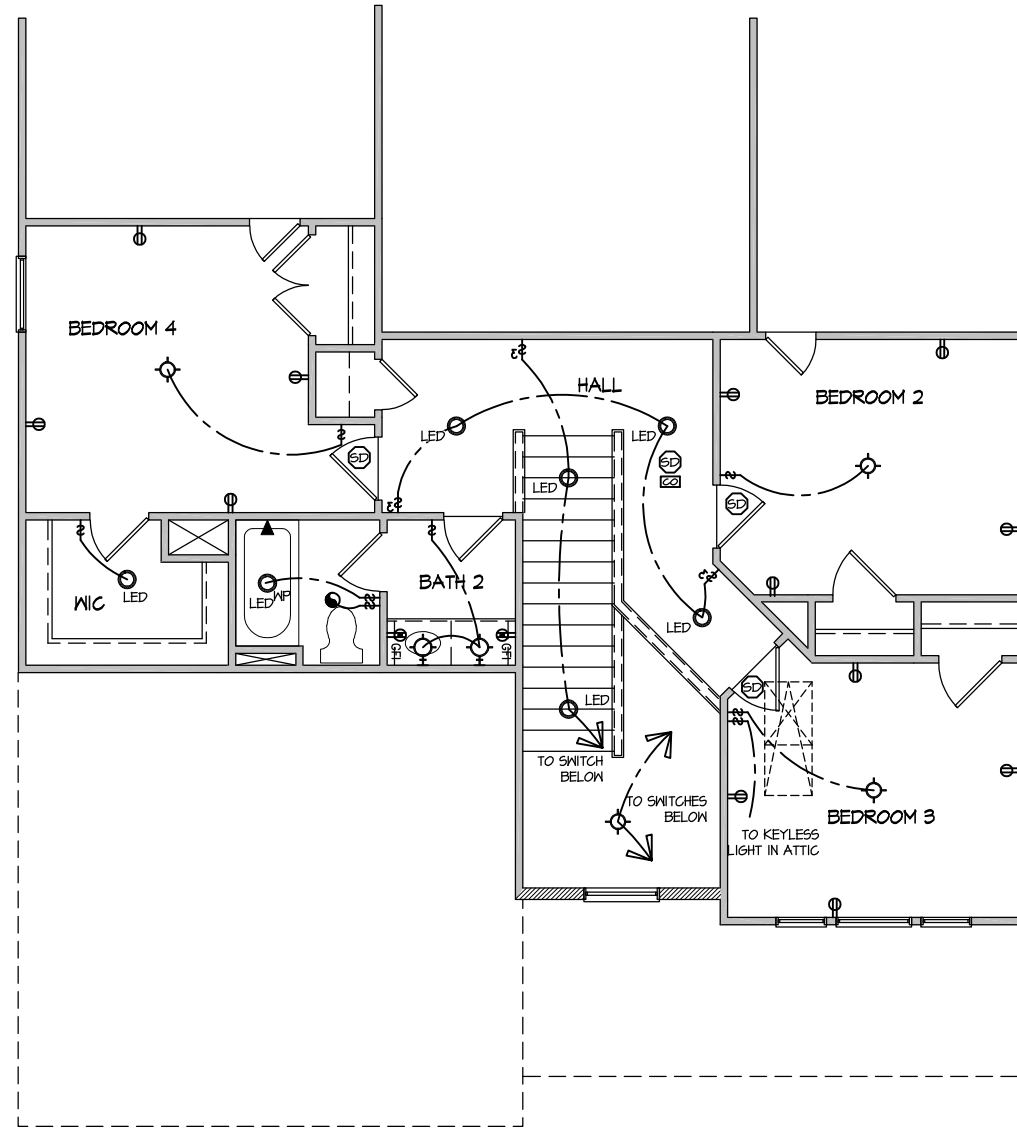
HOUSE NAME:	MIDDLETON
DRAWING TITLE	FIRST FLOOR ELECTRICAL

SHEET No.	E.I.
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ELECTRICAL LEGEND

- Ⓢ SINGLE POLE SWITCH
- Ⓢ₃ THREE WAY SWITCH
- Ⓢ₄ FOUR WAY SWITCH
- ⓈⓈ DUPLEX AFCI RECEPTACLE
- ⓈⓈ_B DUPLEX AFCI RECEPTACLE - BOTTOM HALF SWITCHED
- ⓈⓈ_F DUPLEX AFCI RECEPTACLE - FLOOR MOUNTED
- 220V Ⓢ RECEPTACLE - 220V
- ⓈⓈ_{GFI} DUPLEX AFCI RECEPTACLE - GFI
- ⓈⓈ_{WP/GFI} DUPLEX AFCI RECEPTACLE - WATERPROOF GFI
- ⓈⓈ_{SD} SMOKE DETECTOR - WIRED IN SERIES
- ⓈⓈ_{EFM} EXHAUST FAN MOTOR
- ⓈⓈ_{CO} CO DETECTOR
- ⓈⓈ_{DC} DOOR CHIME
- ⓈⓈ_{LM} LIGHT FIXTURE - WALL MOUNTED
- ⓈⓈ_{CM} LIGHT FIXTURE - CEILING MOUNTED
- ⓈⓈ_{LED} LIGHT FIXTURE - LED SURFACE MOUNTED
- Ⓢ_F FULLCHAIN LAMPHOLDER
- Ⓢ_K KEYLESS LAMPHOLDER

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



**ELECTRICAL PLAN
SECOND FLOOR - ELEV. 4**

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

MASTER PLAN INFORMATION		UPDATED DATE
REVISION	DATE	02-03-2023
1 - RALE	10-12-2018	

DRAWN BY:	ITS
DATE:	06/28/2023
PLAN NO.	2183



HOUSE NAME:	MIDDLETON
DRAWING TITLE	SECOND FLOOR ELECTRICAL

SHEET No.	E1.2
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SEAL

DRAWN BY:
L. BEAVERS
DATE: 9/1/22
PLAN NO.
11 X 17 SCALE
24 X 36 SCALE



HOUSE NAME:
DRAWING TITLE
RALE TILE SHOWER DETAIL

SHEET No.
01.12



RALE TILE SHOWER SECTION B
SCALE: 1/2" = 1'-0"



RALE TILE SHOWER SECTION C
SCALE: 1/2" = 1'-0"

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

Table with 3 columns: DESCRIPTION OF BLDG. ELEMENT, 3"x0.131" NAILS, 3"x0.120" NAILS. Rows include JOIST TO SOLE PLATE, SOLE PLATE TO JOIST/BLK'G, STUD TO SOLE PLATE, etc.

GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL 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. LIVE = 16 PSF LOAD DURATION FACTOR = 1.25

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA.
MARBLE FLOORS - CONTACT MKR FOR MARBLE FLOOR DESIGNS
AT I-JOIST FLOORS, PROVIDE 1 1/8" MIN. OSB RIM BOARD.
METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.

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 H25T CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS.
METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O.

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS.
REFER TO FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. U.N.O.
EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SFF OR 5/8" STUD GRADE LUMBER OR BETTER.

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL).
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)

HOLD-DOWN SCHEDULE

Table with 2 columns: SYMBOL, SPECIFICATION. Rows include HD-1 SIMPSON HIT4 HOLD-DOWN, HD-2 SIMPSON MSTC66 STRAP TIE, HD-3 SIMPSON 5THD14/14R1J HOLD-DOWN.

ALTERNATIVE TO SD2.24 ANCHOR BOLT SPECIFICATION:
UTILIZE SIMPSON "SET" EPOXY SYSTEM TO FASTEN 5/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION.
PROVIDE 12" MIN. EMBEDMENT INTO CONCRETE.
INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 3/4" OF EDGE OF FOUNDATION.

VENEER LINTEL SCHEDULE

Table with 3 columns: SPAN (MAX), HEIGHT OF VENEER ABOVE LINTEL, STEEL ANGLE SIZE. Rows include 3'-0", 6'-0", 8'-0", 9'-6", 16'-0" spans.

ALL LITELS SHALL SUPPORT 2 3/4" - 3 1/2" VENEER W/ 40 PPH MAXIMUM HEIGHT
1/2" SHALL HAVE 4" MIN BEARING
1/2" SHALL HAVE 8" MIN BEARING
1/2" SHALL NOT BE FASTENED BACK TO HEADER.

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
120 MPH WIND IN 2018 NCSEBG: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 1604) & ASCE 7-10, AS PERMITTED BY R301.1.3 OF THE 2018 NCSEBG:RC, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREIN, 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 NCSEBG:RC SECTION R802.11.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD:
FASTEN SHEATHING W/ 2 3/8"x0.113" 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 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 1/2" 16 GA STAPLES (1/8" 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 (1/8" 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 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.

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 HOLD-DOWN BELOW

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:
- 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C., 1" 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 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. SFF OR STP, "STUD" GRADE OR BETTER.
CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
fc = 4,000 psi: FOUNDATION WALLS
2,500 psi: FOOTINGS & INTERIOR SLABS ON GRADE
3,000 psi: GARAGE & EXTERIOR SLABS ON GRADE
fy = 60,000 psi
BASEMENT FOUNDATION WALL DESIGN BASED ON:
- 4' OR 10' HEIGHT (AS NOTED ON PLANS)
- TALLER WALLS MUST BE ENGINEERED.
- NOMINAL WIDTH (4 1/2" 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. 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.O.
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'-0" O.C. (MAXIMUM)
JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SLABS

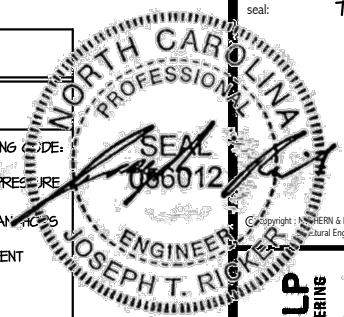
- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C40 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (Fm=1500 psi). MORTAR SHALL BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 & 530J.

- 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 CRAWL SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID.

- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE.
DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

- 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.

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

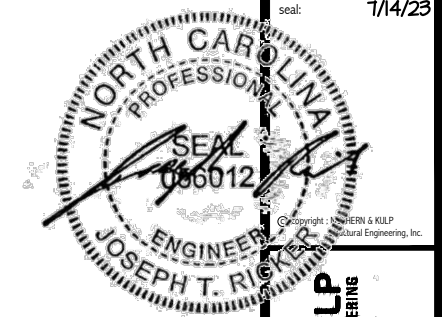


MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERING
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NC LIC. #C-3825

M&K project number: 126-23047
project mgr: JTR
drawn by: GTK
issue date: 07-14-23
REVISIONS:
date: initial:



STRUCTURAL NOTES
HONEYCUT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC



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380 Riverside Ave., Building 4 - Asheville, PA 18027
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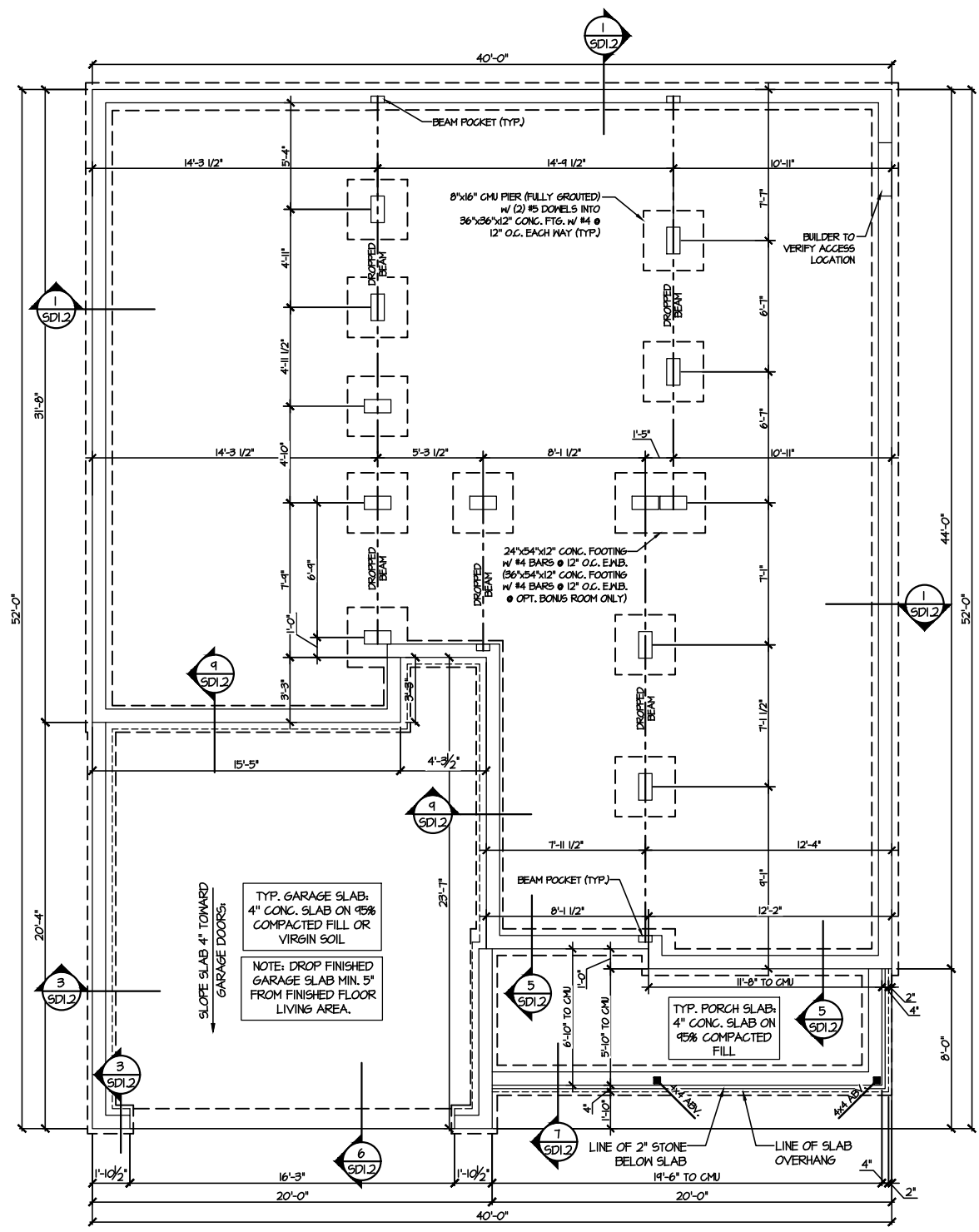
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REVISIONS:
date: initial:



FOUNDATION PLANS
HONEYCUTT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

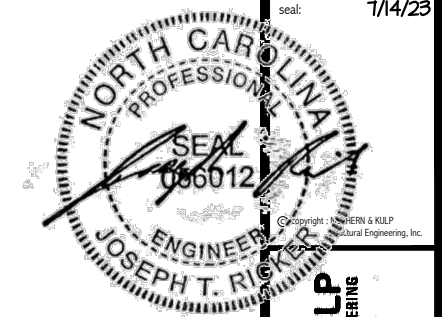
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CRAWL SPACE FOUNDATION PLAN
SCALE: 1/8"=1'-0"

LEGEND	
	INTERIOR BEARING WALL
	BEARING WALL ABOVE
	BEAM / HEADER
	INDICATES SHEAR WALL & EXTENT
	EXTENT OF OVERHANG
	∟L METAL HANGER
	* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
	▶ INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES



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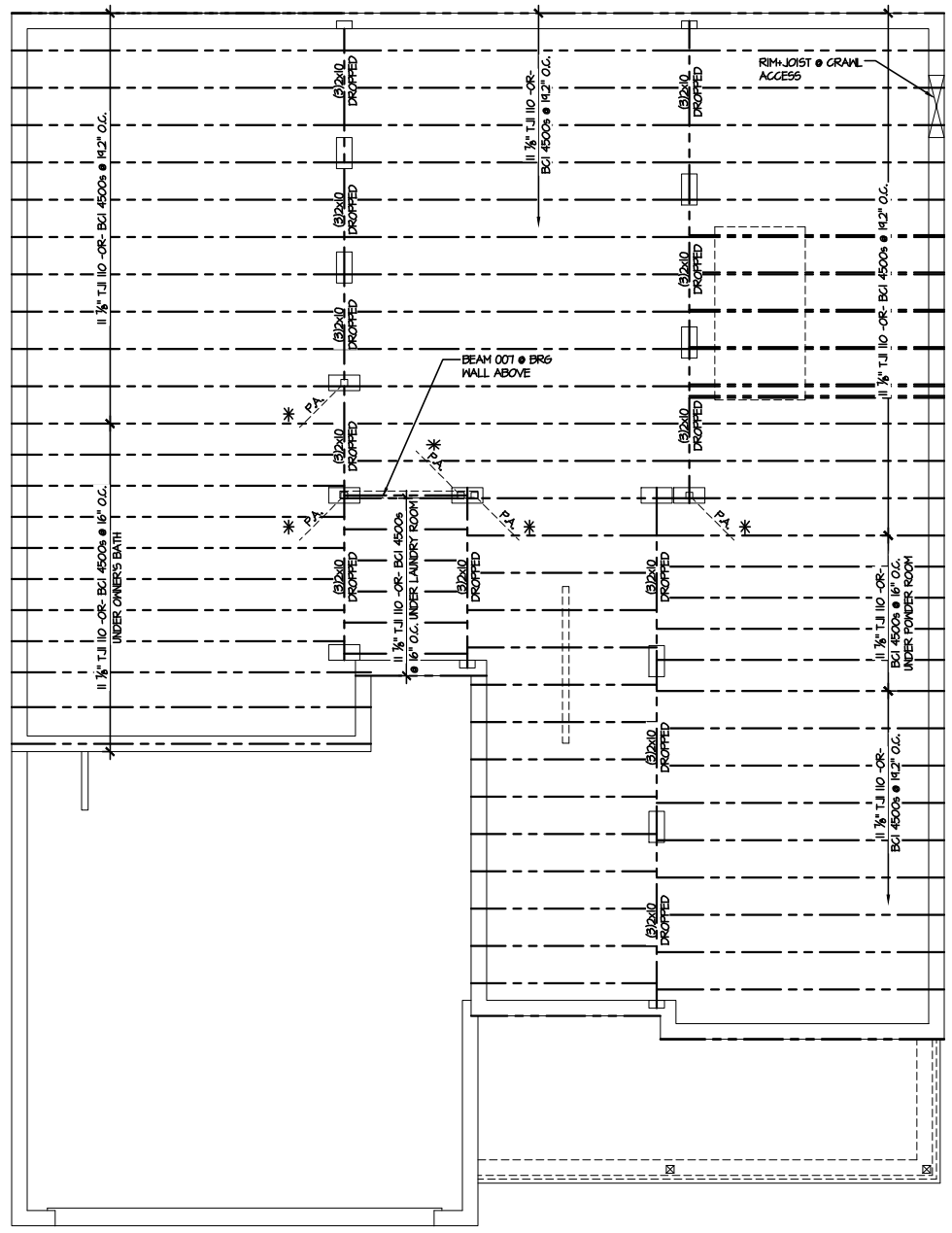
REVISIONS:

date:	initial:



FLOOR FRAMING PLANS
HONEYCUTT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

sheet:
S2.0



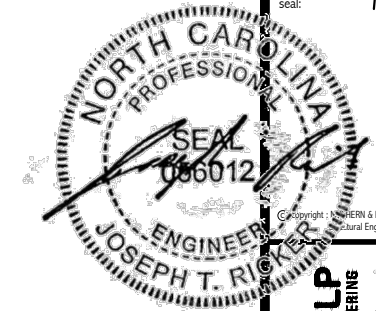
FIRST FLOOR FRAMING PLAN - CRAWL SPACE
SCALE: 1/8"=1'-0"

SD2.1 REFERS TO SD2.1A FOR LVL/PSL/LSL BEAMS OR SD2.1B FOR FLITCH BEAMS OR SD2.1C FOR STEEL BEAMS

LEGEND

- [Symbol] INTERIOR BEARING WALL
- [Symbol] BEARING WALL ABOVE
- [Symbol] BEAM / HEADER
- [Symbol] INDICATES SHEAR WALL & EXTENT
- [Symbol] 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 S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES



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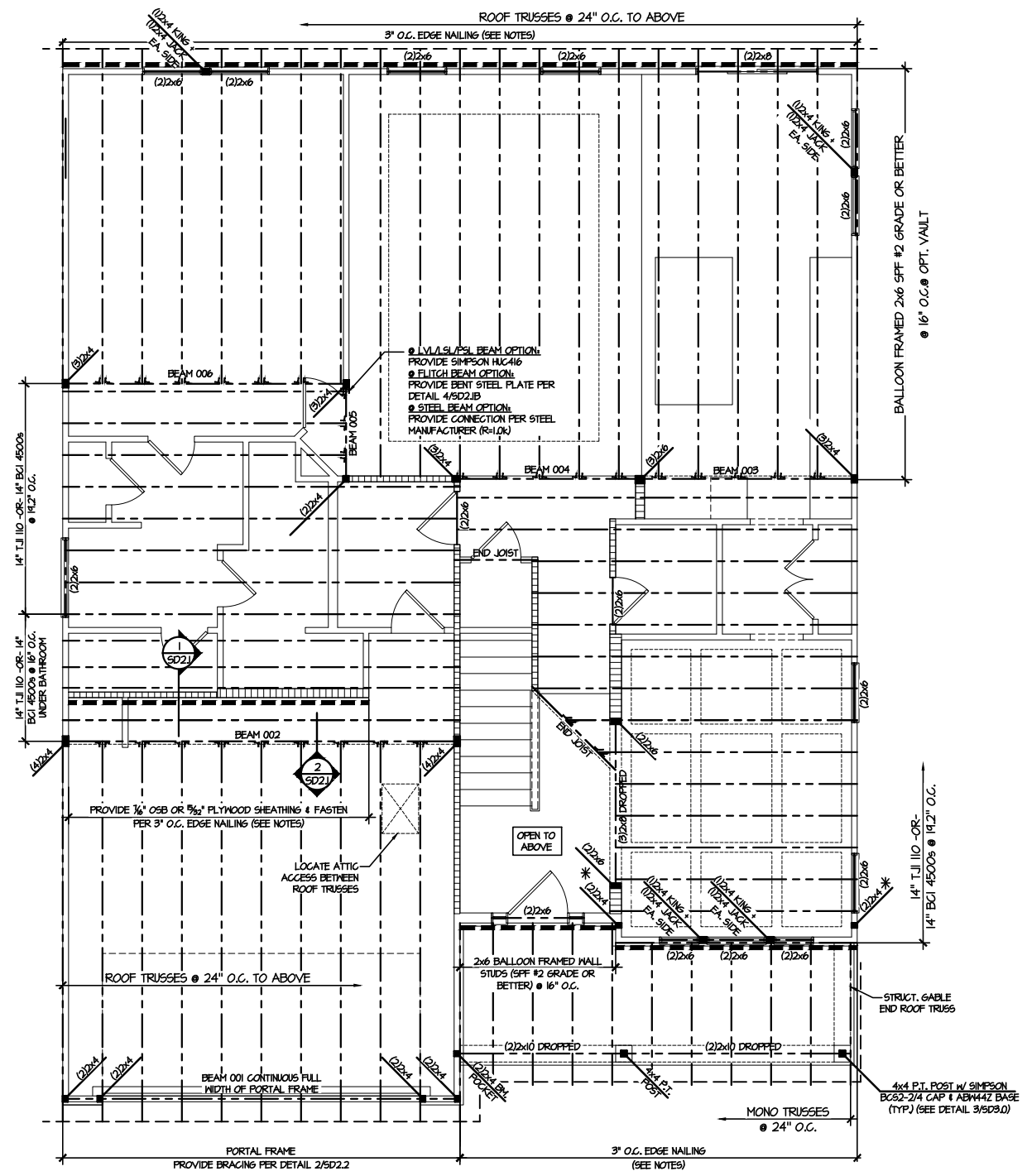
MS&K project number:
126-23047
project mgr: JTR
drawn by: GTK
issue date: 07-14-23

REVISIONS:
date: initia:



FLOOR FRAMING PLANS
HONEYCUT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

sheet:
S3.0



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

ENGINEERED BEAM MATERIAL SCHEDULE					
BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x17/8" - H	3/2"x11/8" - H	(2)3/4"x17/8" - H	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x17/8" - H	3/2"x11/8" - H	(2)3/4"x17/8" - H	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	3/2"x10" - FT	N/A	(2)2x12 + (2)1/2"x11/4" STEEL FLITCH PLATES - FB	M2x14 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - FB	M2x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - FB	M2x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - FB	M2x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - FB	M2x14 - F
007	(2)3/4"x17/8" - F	3/2"x11/8" - F	(2)3/4"x17/8" - F	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - F	M10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - FB	M2x14 - F
004	(3)3/4"x10" - FT	3/2"x10" - FT	N/A	(4)2x12 + (3)1/2"x11/4" STEEL FLITCH PLATES - FB	M2x26 - F
010	(3)3/4"x20" - FT	3/2"x20" - FT	N/A	(4)2x12 + (3)1/2"x11/4" STEEL FLITCH PLATES - FB	M2x35 - F
011	(2)3/4"x17/8" - FB	3/2"x11/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATE - FB	M10x12 - FB

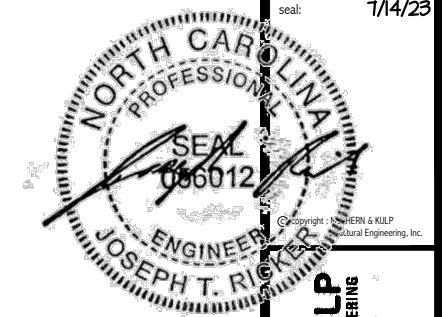
BEAM NOTATION:
 - "H" INDICATES FLUSH BEAM
 - "FT" INDICATES FLUSH TOP BEAM
 - "FB" INDICATES FLUSH BOTTOM BEAM
 - "D" INDICATES DROPPED BEAM
 - "H" INDICATES DROPPED OPENING HEADER
 - REFER TO DETAIL D/SD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
 - REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
 - FOR FLUSH TOP BEAMS PROVIDE 2x STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W/ (2) 3"x0.120" NAILS @ 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.

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

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



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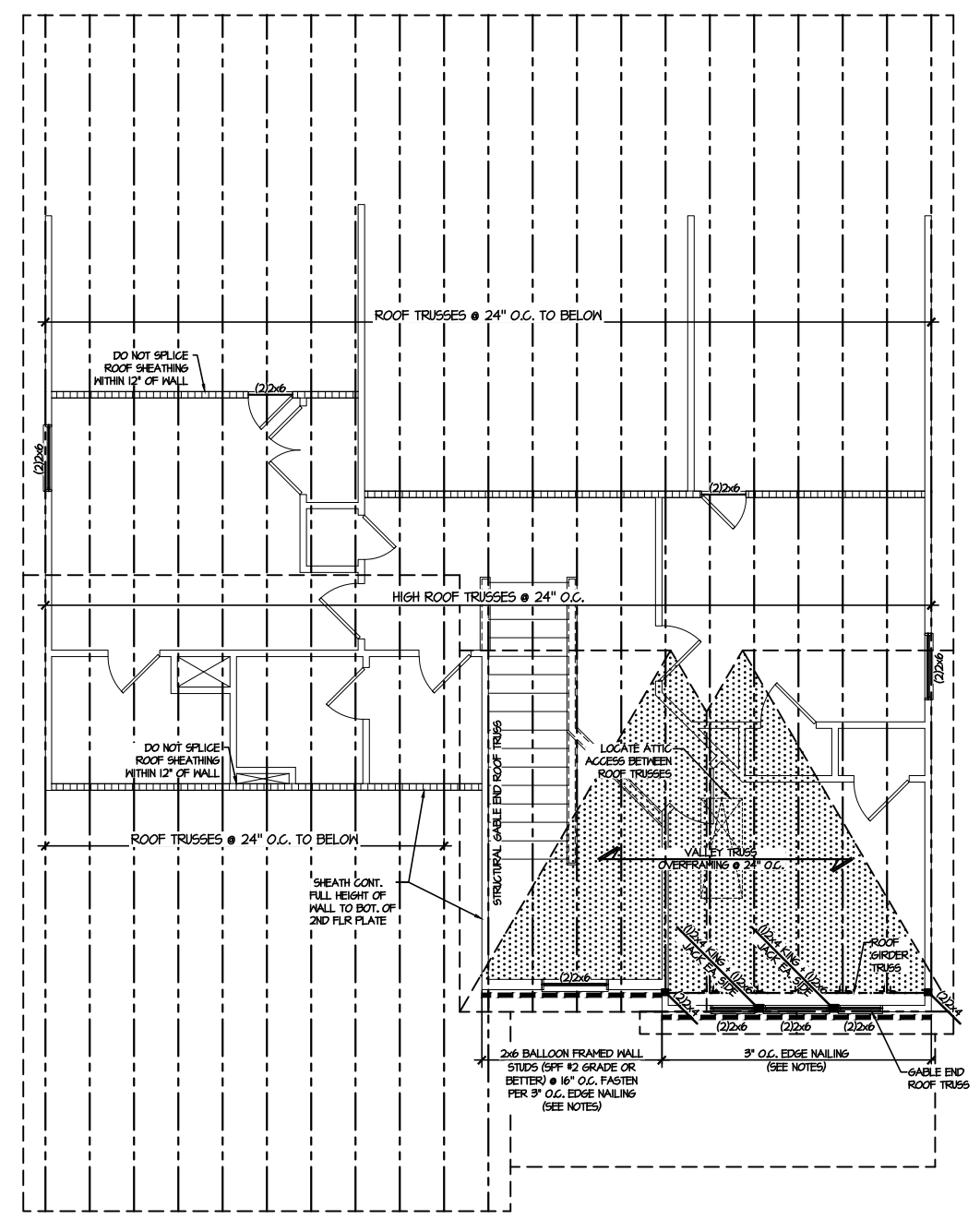
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date:	initial:



ROOF FRAMING PLANS
HONEYCUTT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

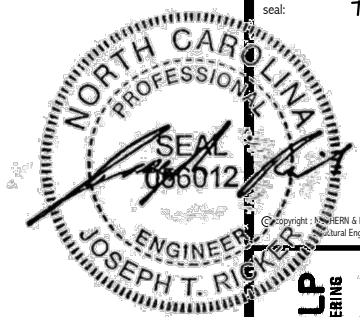
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1 ROOF FRAMING PLAN
SCALE: 1/8"=1'-0"

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 S.O FOR
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& SCHEDULES



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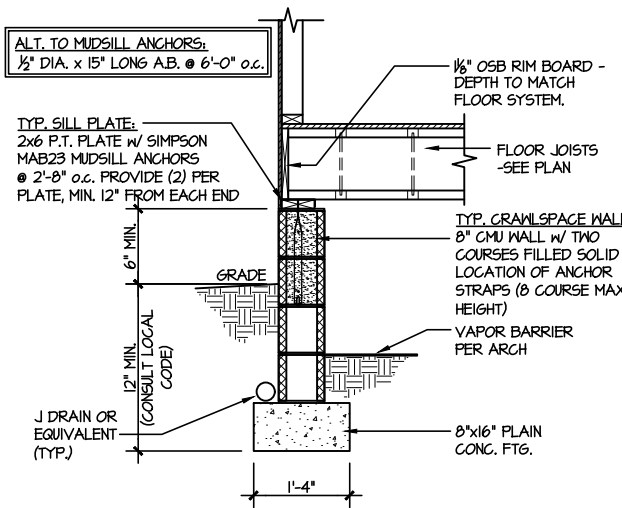
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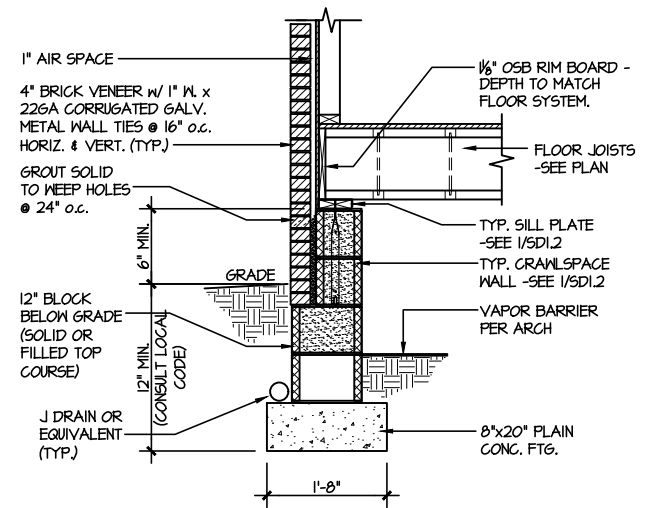
DRB
HOMES

FOUNDATION DETAILS
HONEYCUT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

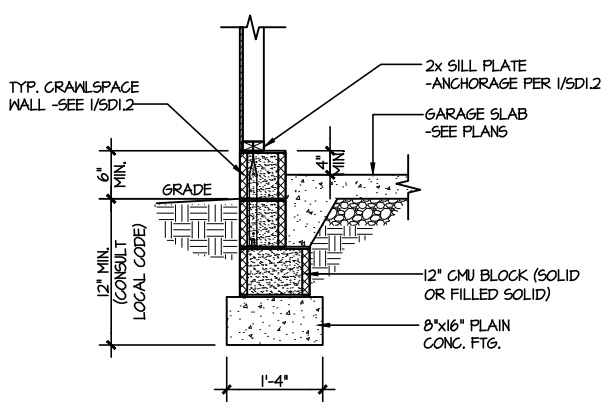
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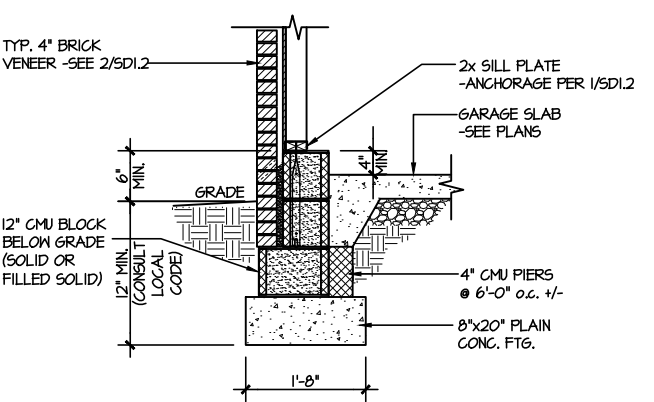
1 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/8"=1'-0"



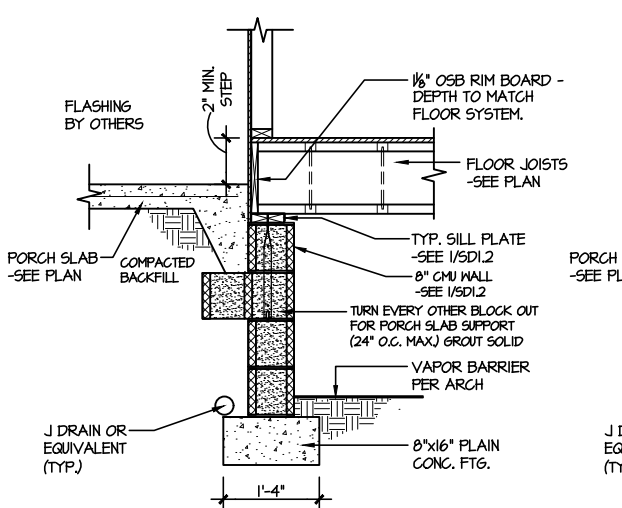
2 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/8"=1'-0" w/ BRICK VENEER



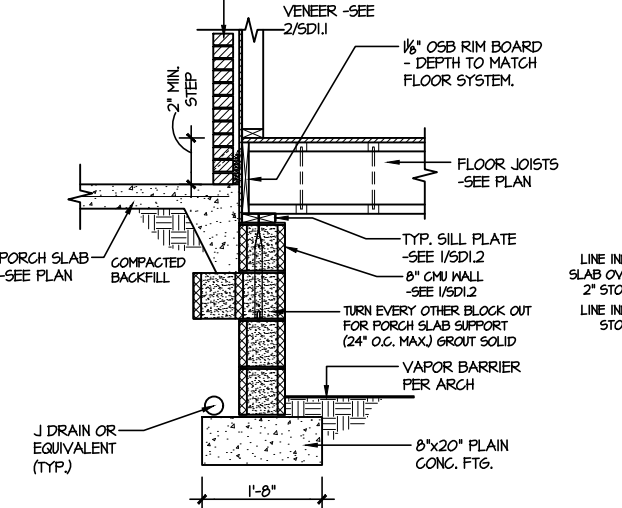
3 TYPICAL GARAGE FOUNDATION
SCALE: 3/8"=1'-0"



4 TYPICAL GARAGE FOUNDATION
SCALE: 3/8"=1'-0" w/ BRICK VENEER

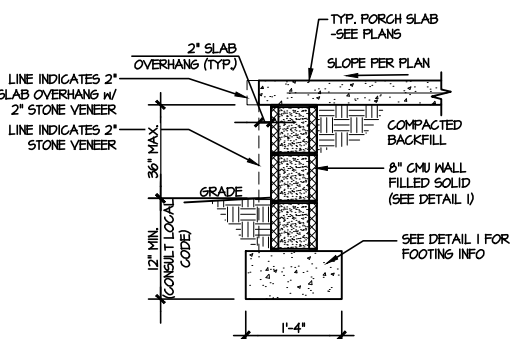


5 TYPICAL CRAWLSPACE FOUNDATION @ PORCH/PATIO SLAB
SCALE: 3/8"=1'-0"
(REFER TO DETAIL 12 FOR WOOD PORCH OPTION)

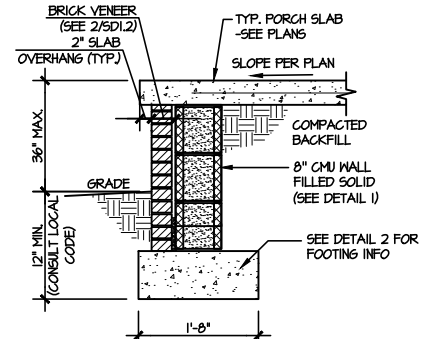


6 TYPICAL CRAWLSPACE FOUNDATION @ PORCH/PATIO SLAB
SCALE: 3/8"=1'-0" w/ BRICK VENEER

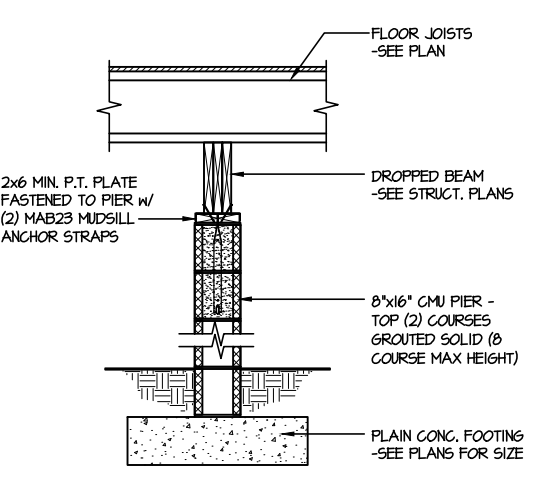
PLAIN CONC. FOOTINGS AS DIMENSIONED & SHOWN ARE MINIMUM SIZES REQUIRED & HAVE BEEN ENGINEERED. ADDITION OF CONTINUOUS REBAR OR LARGER FOOTINGS MAY BE PROVIDED AT THE DISCRETION OF THE BUILDER.



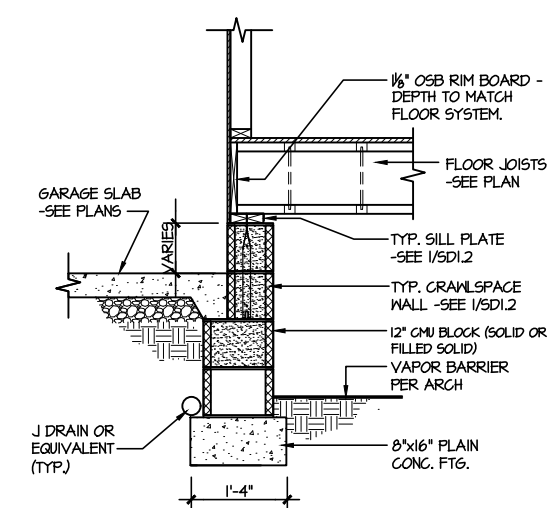
7A TYPICAL FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0"



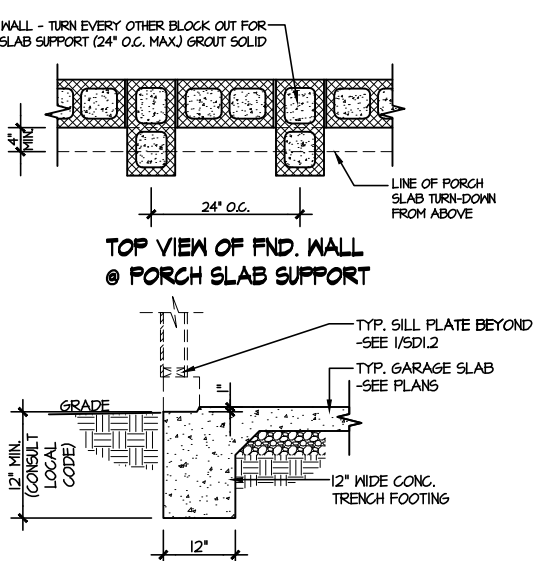
7B TYPICAL FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0" w/ BRICK VENEER



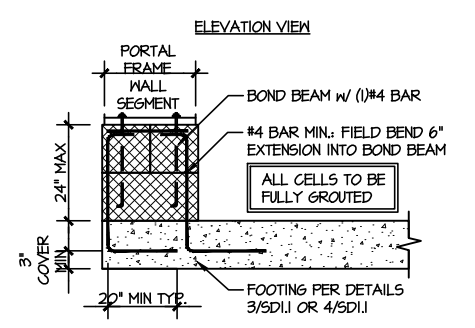
8 TYPICAL CRAWLSPACE FOUNDATION @ INTERIOR PIER
SCALE: 3/8"=1'-0"



9 TYPICAL CRAWLSPACE FOUNDATION @ GARAGE
SCALE: 3/8"=1'-0"



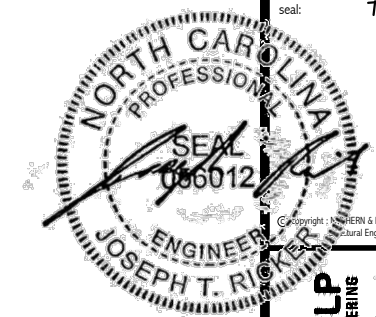
10 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0"



A GARAGE PORTAL FRAME STEM WALL REINFORCEMENT
SCALE: 3/8"=1'-0"

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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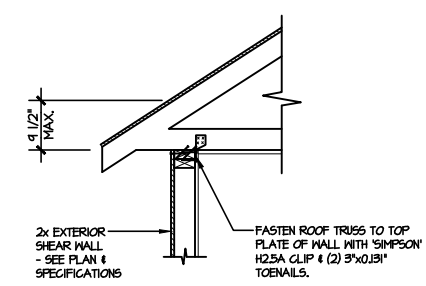
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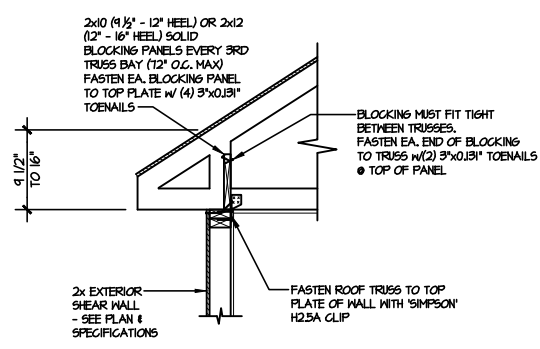
DRB
HOMES

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HONEYCUT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

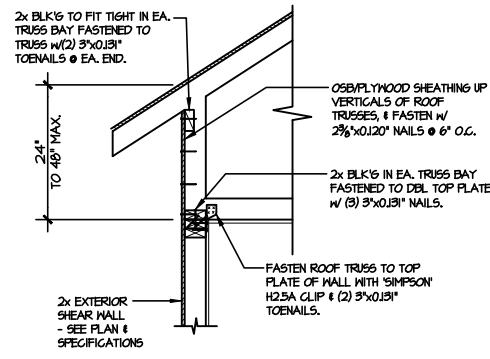
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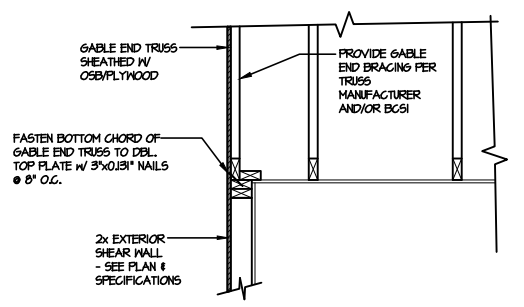
A1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT LESS THAN 9 1/2" NO BLOCKING REQ'D



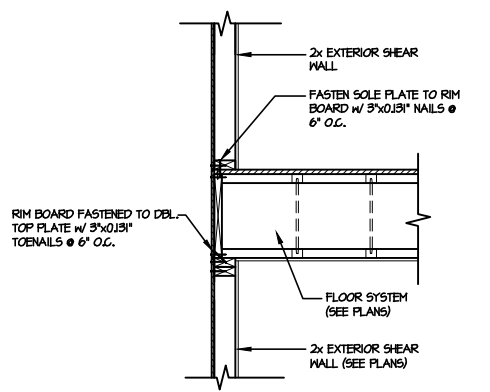
A2 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT BETWEEN 9 1/2" - 16" BLOCKING REQ'D



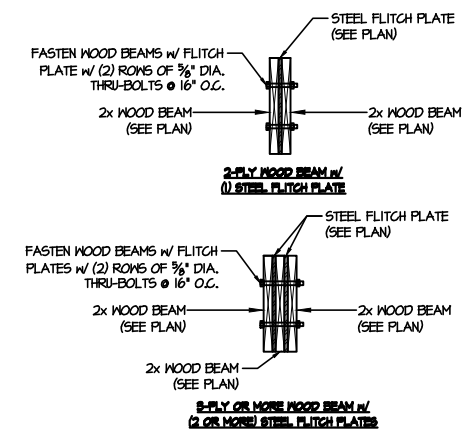
A3 TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8"=1'-0"
HEEL HEIGHT UP TO 48" MAX.



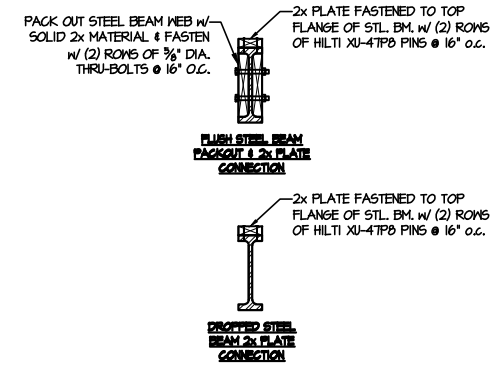
B TYPICAL GABLE END DETAIL
SCALE: 3/8"=1'-0"



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



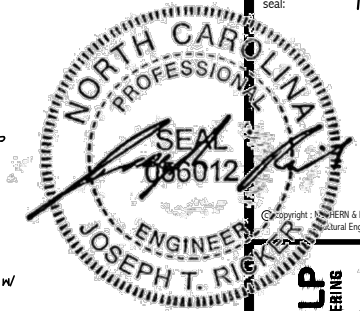
D TYPICAL FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



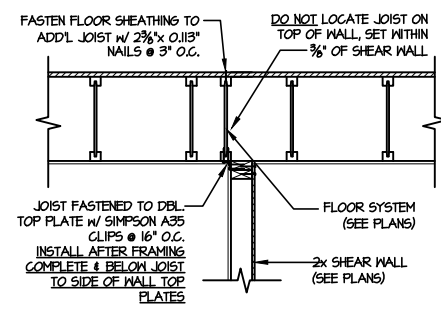
E TYPICAL STEEL BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"

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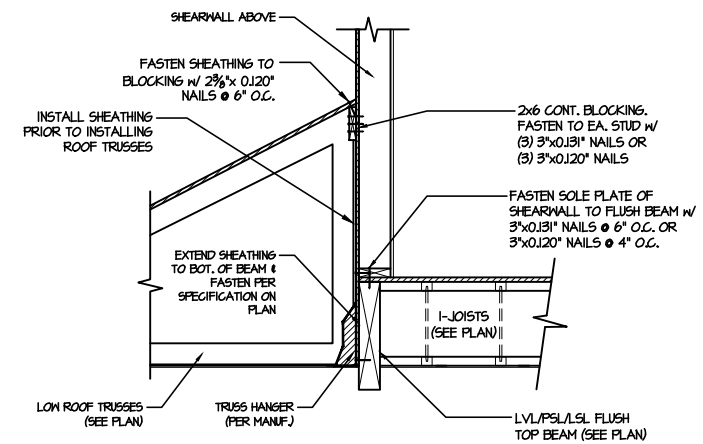
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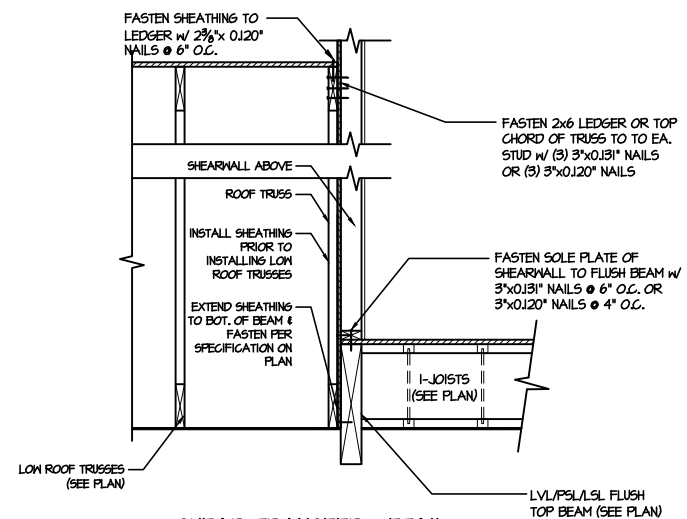
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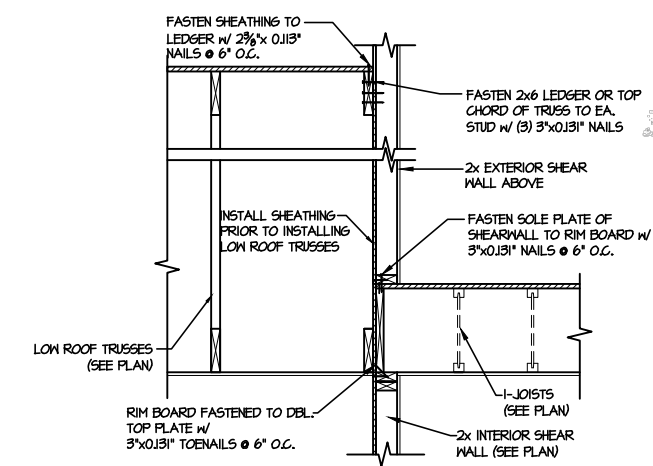
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0"
PARALLEL TO FRAMING
ONLY READ WHERE NOTED ON PLAN



2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



3 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"

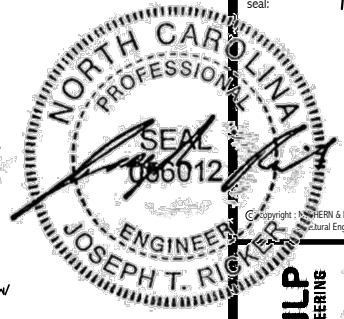
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FRAMING DETAILS
HONEYCUT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC



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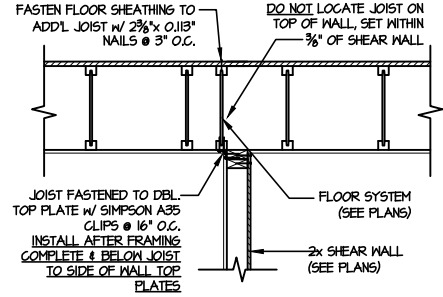
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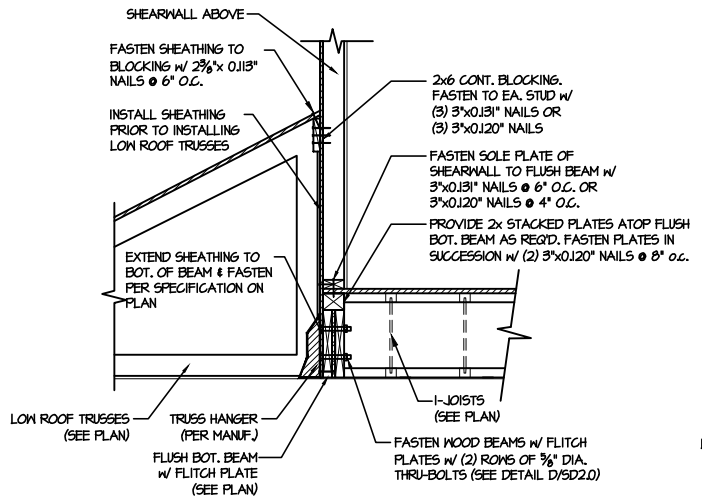
DRB
HOMES

FRAMING DETAILS
HONEYCUT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

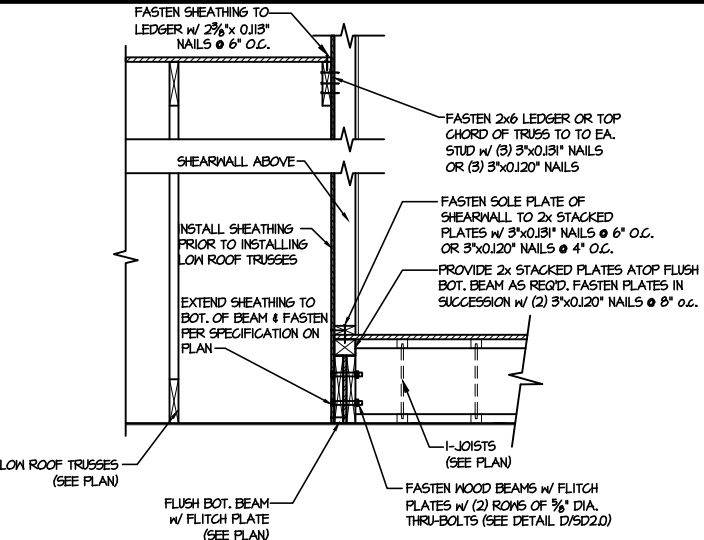
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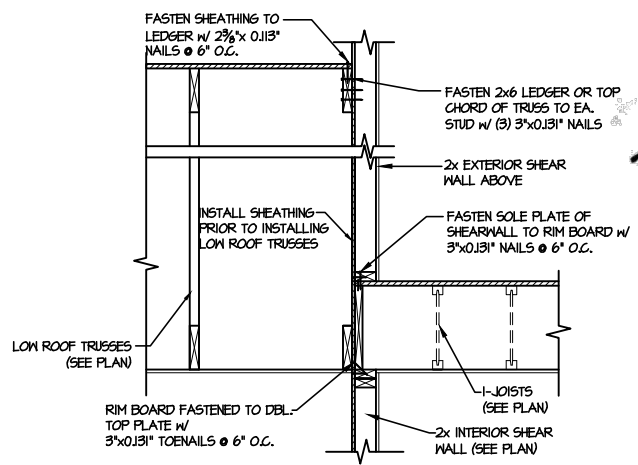
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0"
PARALLEL TO FRAMING
ONLY READ WHERE NOTED ON PLAN



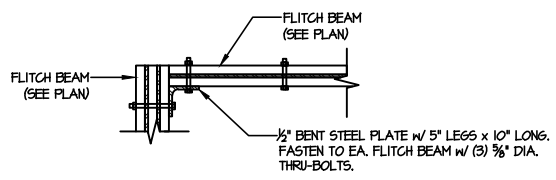
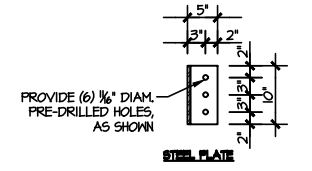
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SCALE: 3/8"=1'-0"



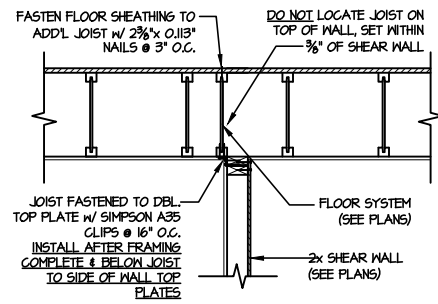
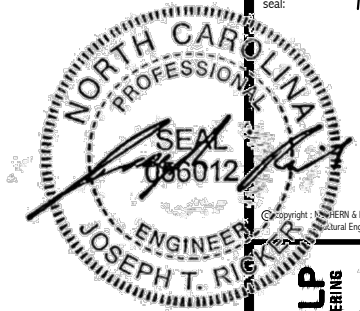
2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"

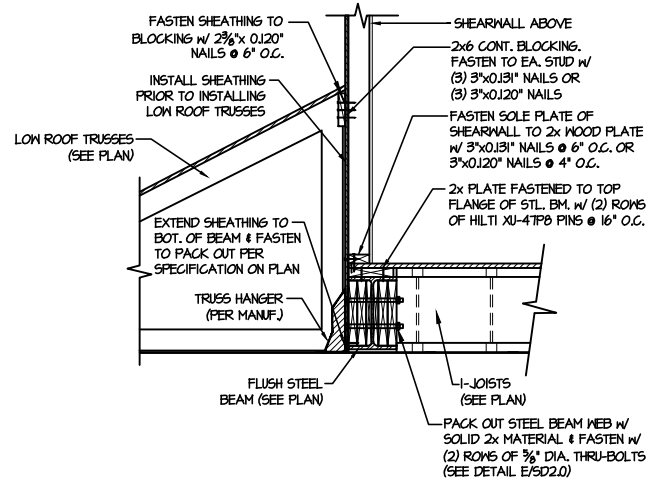


4 TYPICAL FLITCH BEAM TO FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



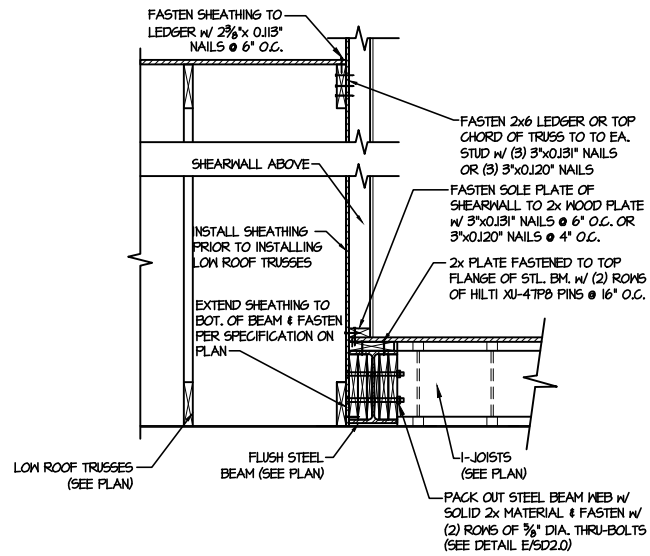
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW

SCALE: 3/4\"/>



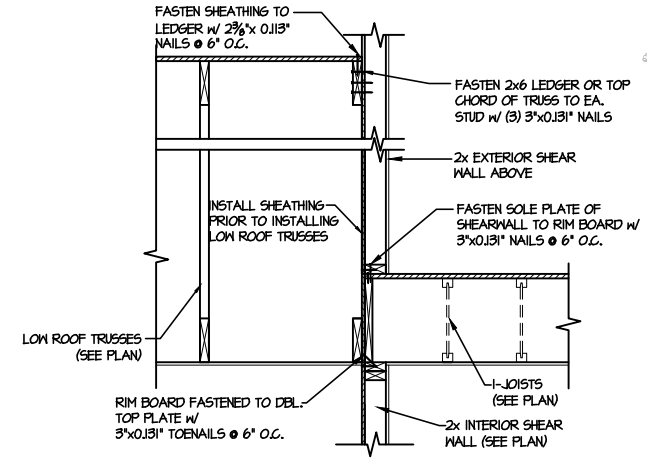
2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE

SCALE: 3/8\"/>



2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE

SCALE: 3/8\"/>



3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL

SCALE: 3/4\"/>

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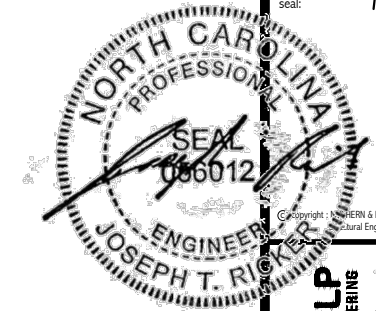
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FRAMING DETAILS
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sheet:
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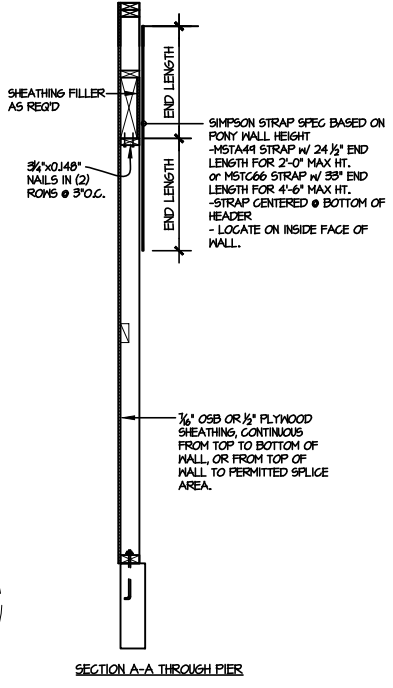
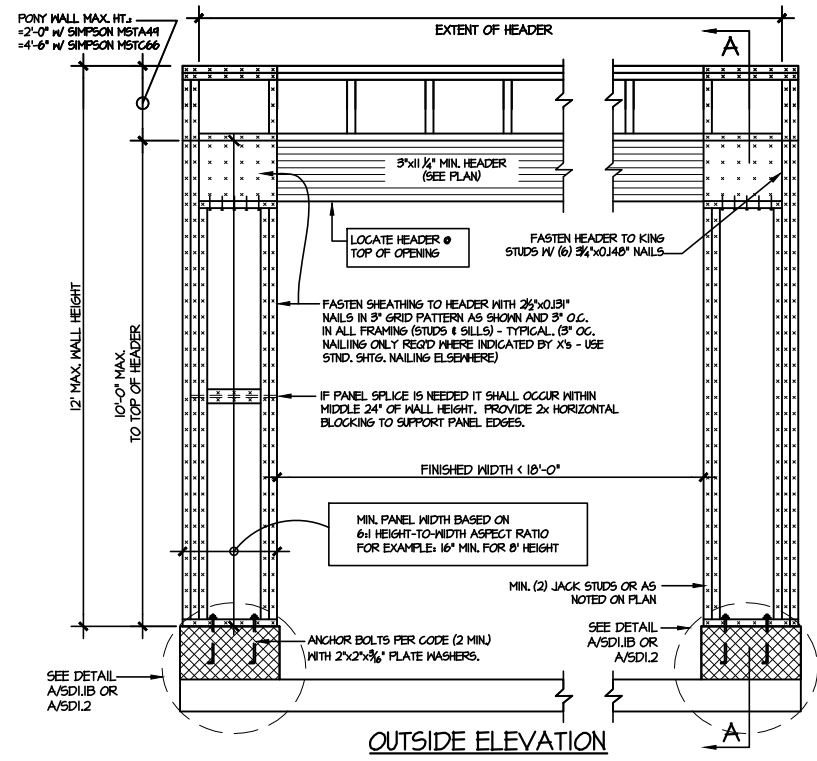
project mgr: JTR
drawn by: GTK
issue date: 07-14-23

REVISIONS:
date: initial:

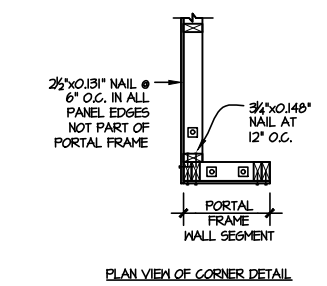
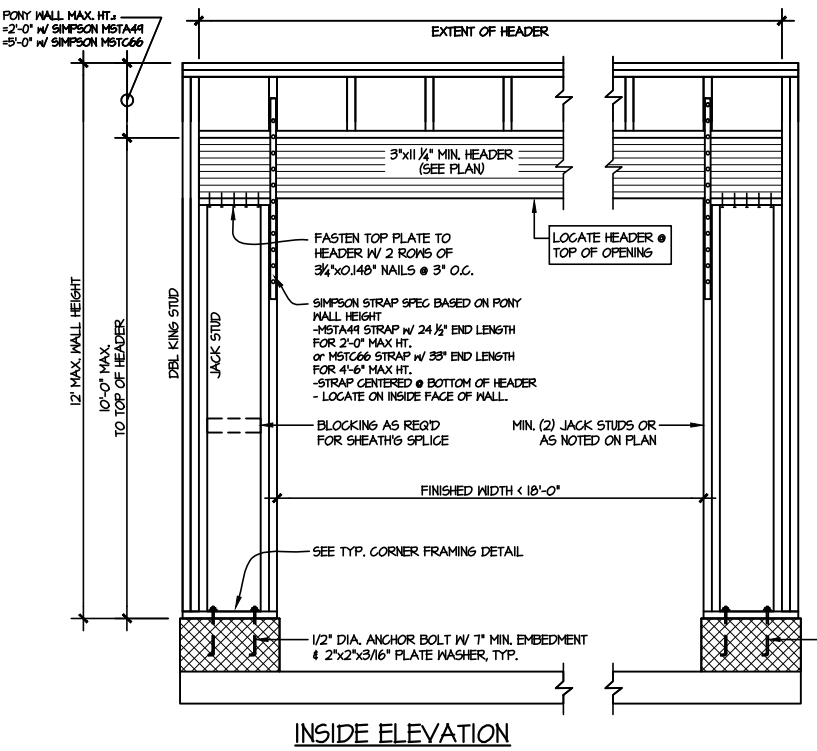


FRAMING DETAILS
HONEYCUT HILLS
LOT 46 - MIDDLETON 4
RALEIGH, NC

sheet:
SD2.2

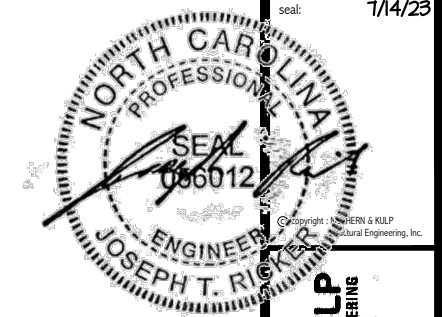


NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 1/2" OSB



ALTERNATIVE TO 1/2" DIA. ANCHOR BOLT:
1/2" DIA. THREADED ROD EPOXY SET
W/ 4 1/2" EMBED. (MINI UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM (OR EQUAL))

2 TWO SIDED GARAGE PORTAL FRAME BRACING
ELEVATION ON CMU STEM
SCALE: N.T.S.



MULHERN+KULP
 RESIDENTIAL STRUCTURAL ENGINEERING
 388 Remondino Ave. Building 4 - Asheville, PA 18007
 P 715-998-8001 - mulhernkulp.com
 NC LIC. #C-3825

M&K project number:
 126-23047
 project mgr: JTR
 drawn by: GTK
 issue date: 07-14-23

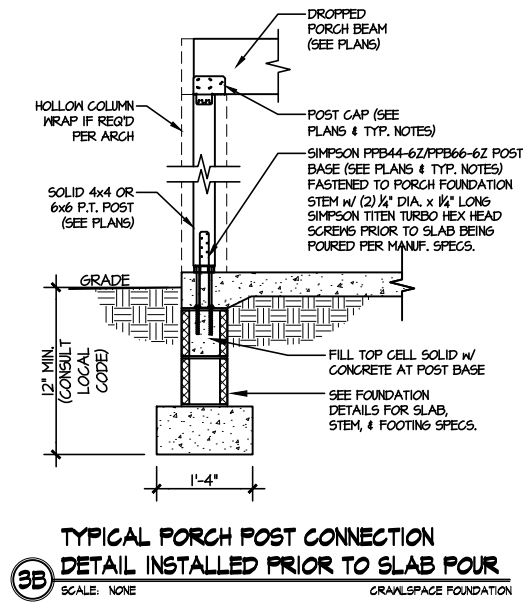
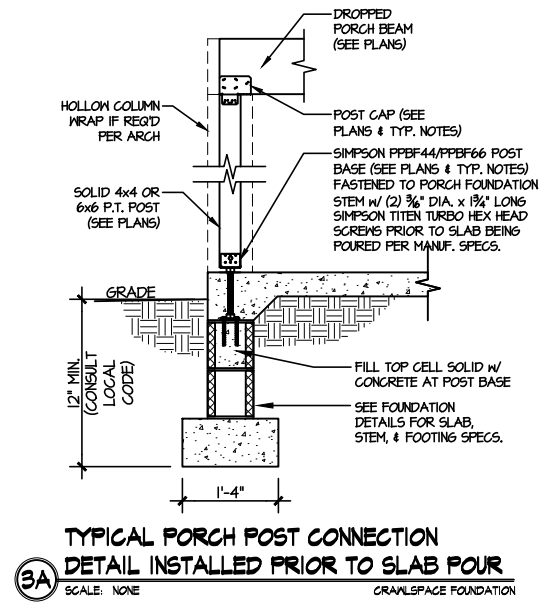
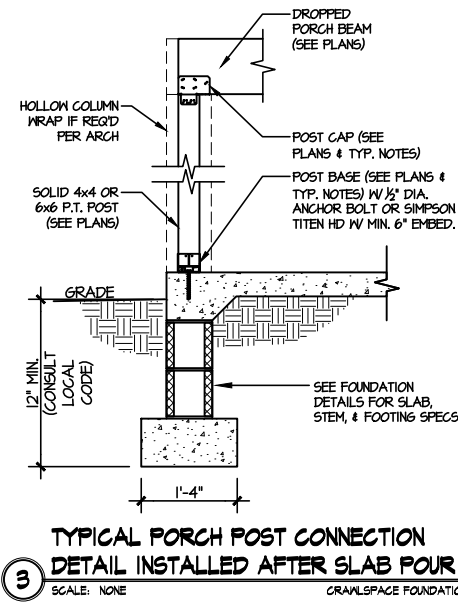
REVISIONS:

date:	initial:



FRAMING DETAILS
 HONEYCUT HILLS
 LOT 46 - MIDDLETON 4
 RALEIGH, NC

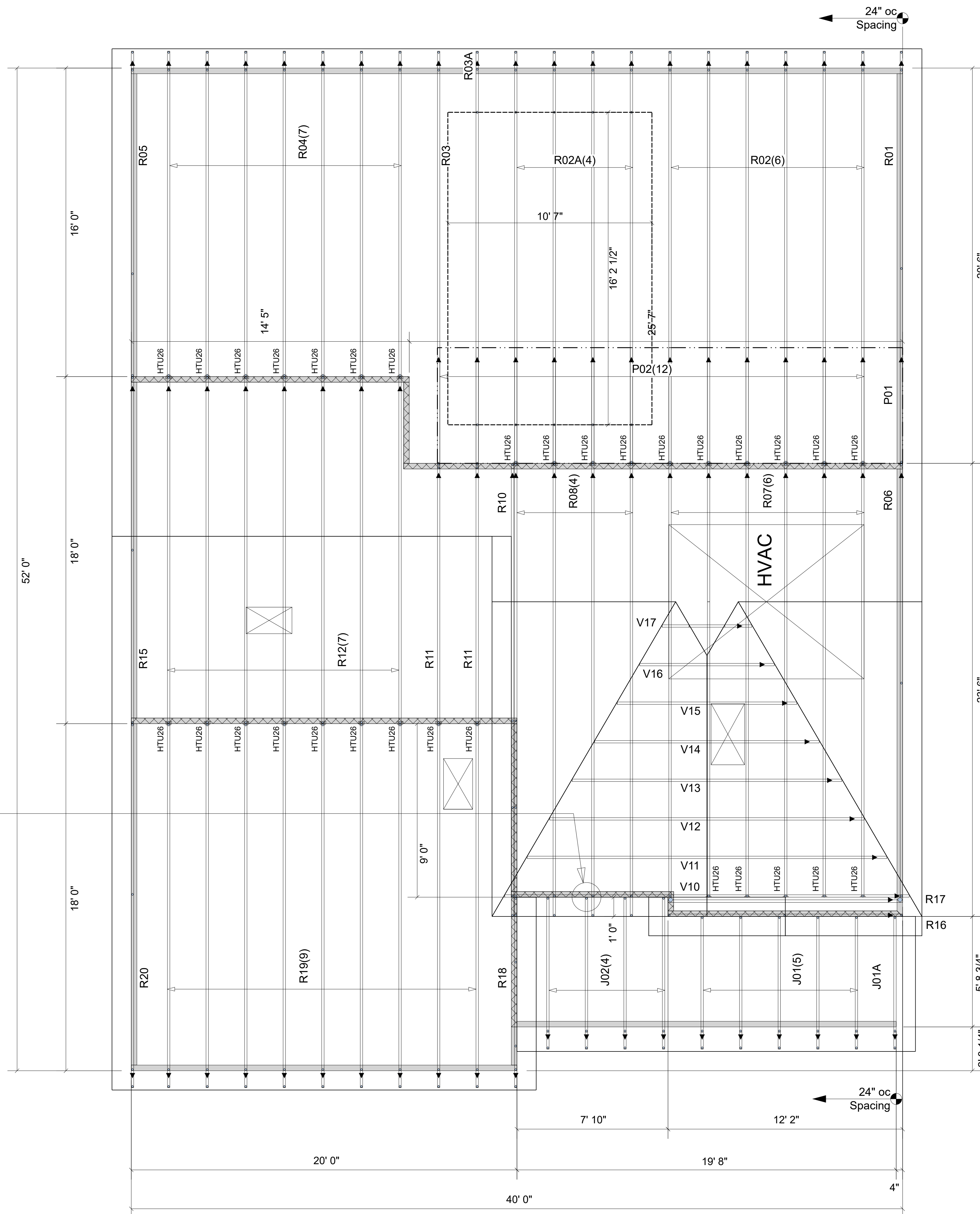
sheet:
SD3.0



Truss Connector Total List		
Qty	Product	Manuf
31	HTU26	Simpson

All first-story wall heights are 9-1-8, and all second-story wall heights are 18-5-12 (based on a 14" floor truss depth, and an 8-1-8 second-story wall height), unless otherwise indicated.

2x4 ledger (by others) connected to studs spaced 16" oc with minimum (3) .128x3.25" nails.



▲ = LEFT END OF TRUSS

NOT FOR CONSTRUCTION

REVISIONS:



Moncks Corner/Easley, SC (800) 475-3999
Sparta, NC (336) 372-2226

Client: DRB GROUP-RALEIGH		Date: 06/28/23	
Job: LOT 0.0046 HONEYCUTT HILL		Job #: 23-4637-R01	
Plan Information: MIDDLETON-4		Sales Rep: KYLE GIBSON	
NOT TO SCALE		Phone:	
Drawn By: ANS		23-4637-R01	

ROOF

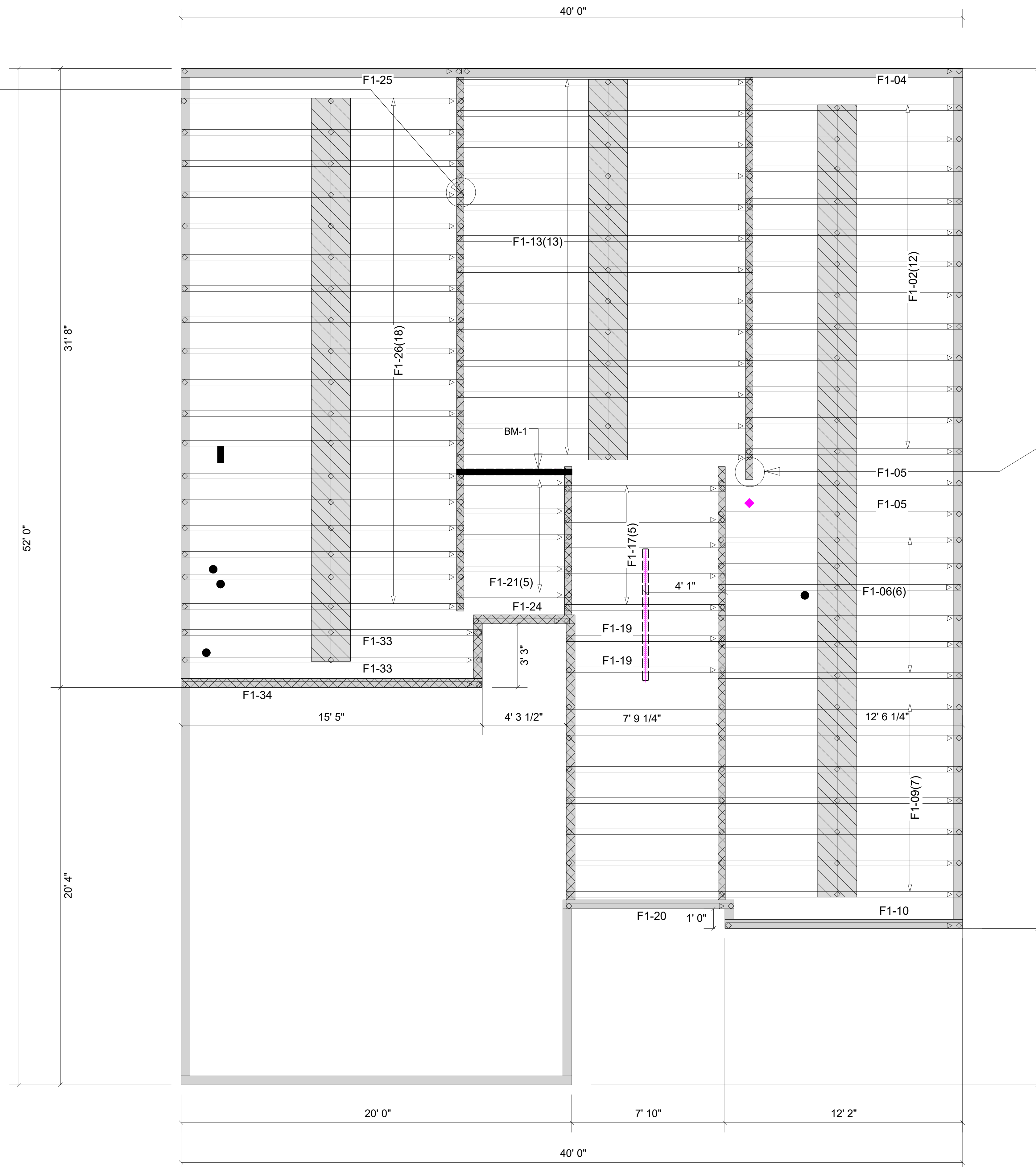
WARNING! Long span trusses, 60' or greater in length, require extreme care and experience for proper and safe handling and installation. For general handling and installation guidance, see the "Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), JOINTLY PRODUCED BY SBCA and TPI. For project specific guidance, consult with a registered design professional. ATLANTIC assumes no responsibility for the handling, installation or bracing of trusses.

These trusses key together using a double, edgewise 2x4 ribbon board.

Extreme care must be taken to not set any of these trusses backwards.

Products					
Net Qty	Plies	Product	Length	PlotID	
2	2	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	6' 0"	BM-1	

Floor Depth: 12"



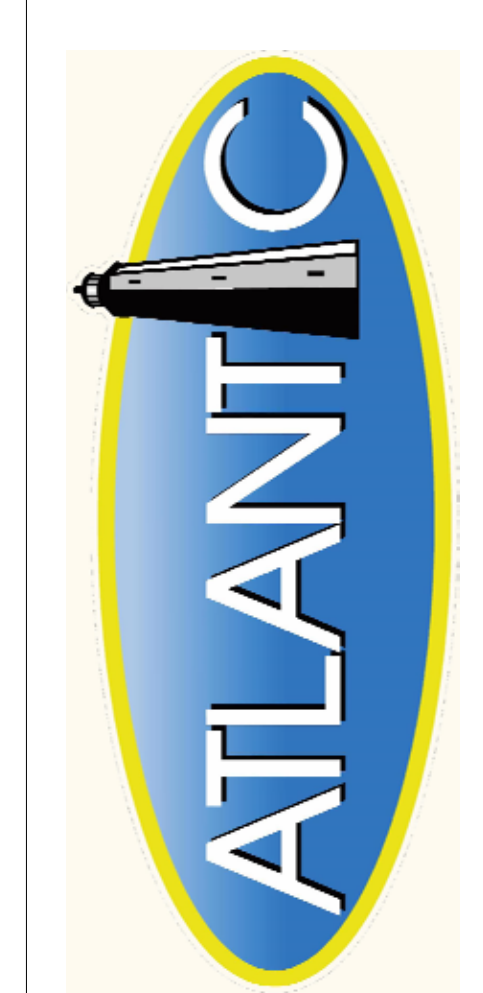
Block solid to the bearing to support the end reactions of the beams in the upper floor system.

▲ = LEFT END OF TRUSS

NOT FOR CONSTRUCTION

Client:	DRB GROUP-RALEIGH
Job:	LOT 0.0046 HONEYCUTT HILL
Plan Information:	MIDDLETON-4
NOT TO SCALE	Date: 06/28/23
Drawn By: ANS	Job #: 23-4637-F02
	Sales Rep: KYLE GIBSON
	Phone: 864-304-3282

REVISIONS:



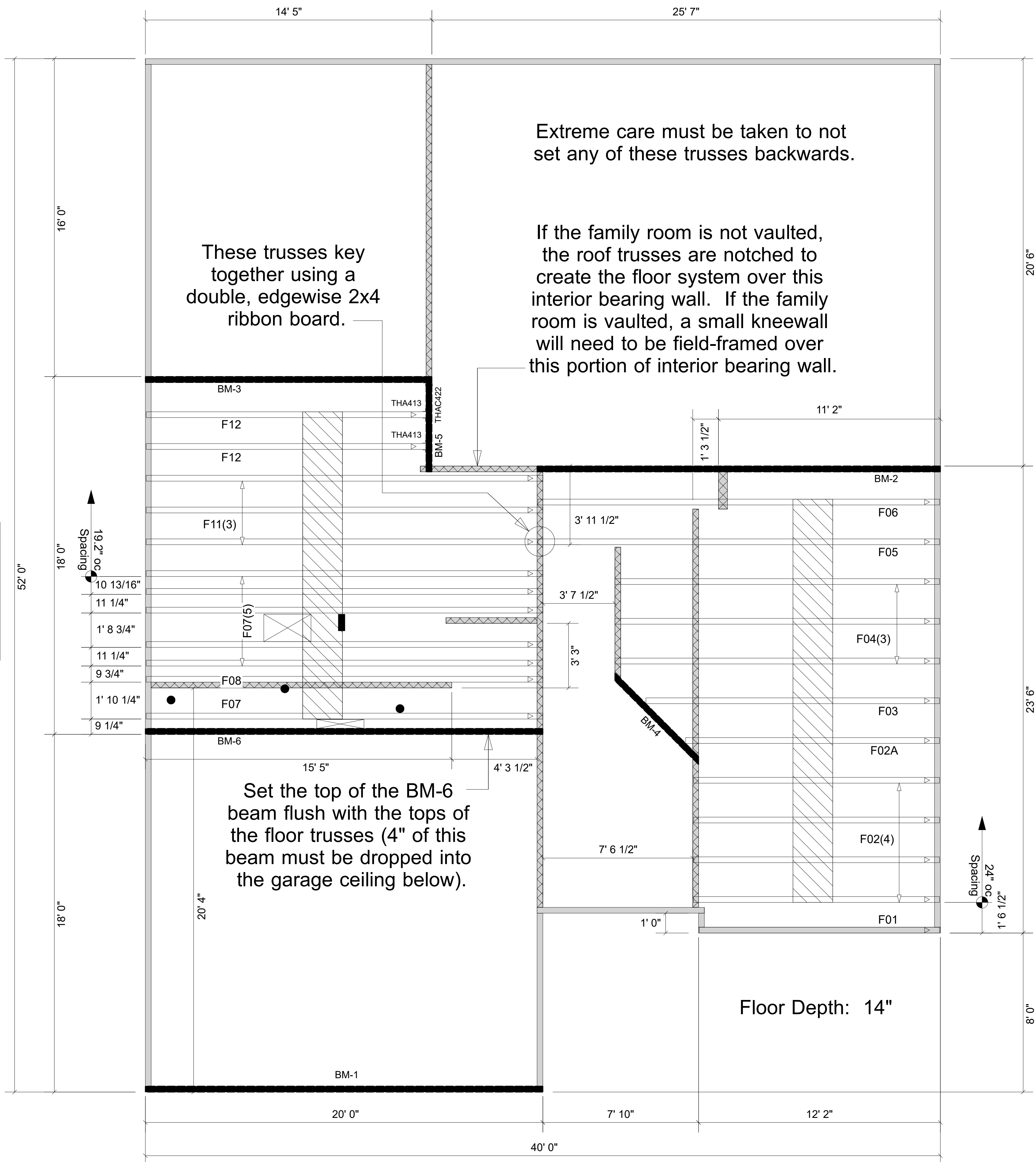
Moncks Corner/Easley, SC (800) 475-3999
Sparta, NC (336) 372-2226

WARNING! Long span trusses, 60' or greater in length, require extreme care and experience for proper and safe handling and installation. For general handling and installation guidance, see the "Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), JOINTLY PRODUCED BY SBCA and TPI. For project specific guidance, consult with a registered design professional. ATLANTIC assumes no responsibility for the handling, installation or bracing of trusses.

Products					
Net Qty	Plies	Product	Length	PlotID	
2	2	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	20' 0"	BM-1	
2	2	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	22' 0"	BM-2	
2	2	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	16' 0"	BM-3	
2	2	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	8' 0"	BM-4	
2	2	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	6' 0"	BM-5	
2	2	1-3/4" x 18" VERSA-LAM® 2.0 3100 SP	20' 0"	BM-6	

Connector Summary				
Flange	Product	Manuf	Qty	
Reverse	THAC422	Simpson	1	

Truss Connector Total List			
Qty	Product	Manuf	
2	THA413	Simpson	



▲ = LEFT END OF TRUSS

REVISIONS:



Moncks Corner/Easley, SC (800) 475-3999
Sparta, NC (336) 372-2226

NOT FOR CONSTRUCTION

Client:	DRB GROUP-RALEIGH
Job:	LOT 0.0046 HONEYCUTT HILL
Plan Information:	MIDDLETON-4
NOT TO SCALE	Date: 06/28/23
Drawn By: ANS	Job #: Sales Rep: KYLE GIBSON
	23-4637-R01 Phone: 864-304-3282

ROOF