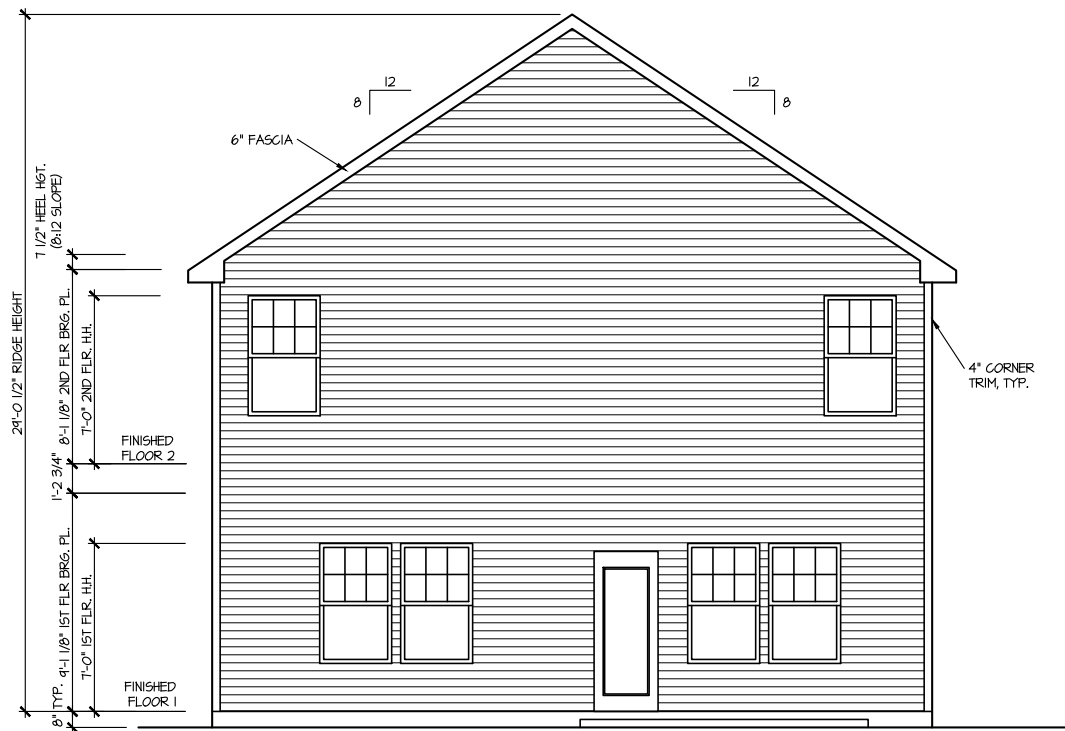


FRONT ELEVATION 2

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



REAR ELEVATION 2

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

FILE: Lot_00.0076.dwg DATE: 7/1/2024 9:10 AM

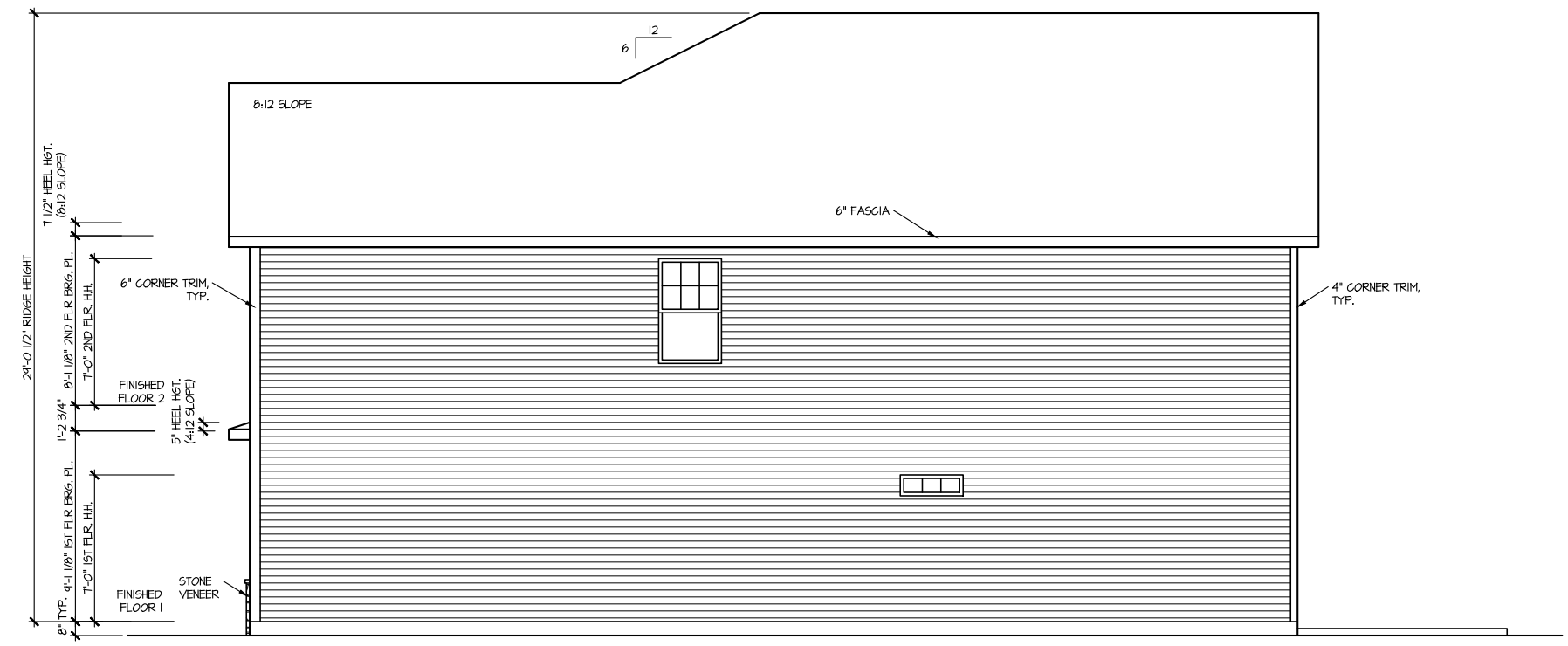
MASTER PLAN INFORMATION	
REVISION	DATE
1-RALE	09-09-2021
	UPDATED DATE
	04-28-2024

DRAWN BY:	ITS
DATE:	07/01/2024
PLAN NO.	2379

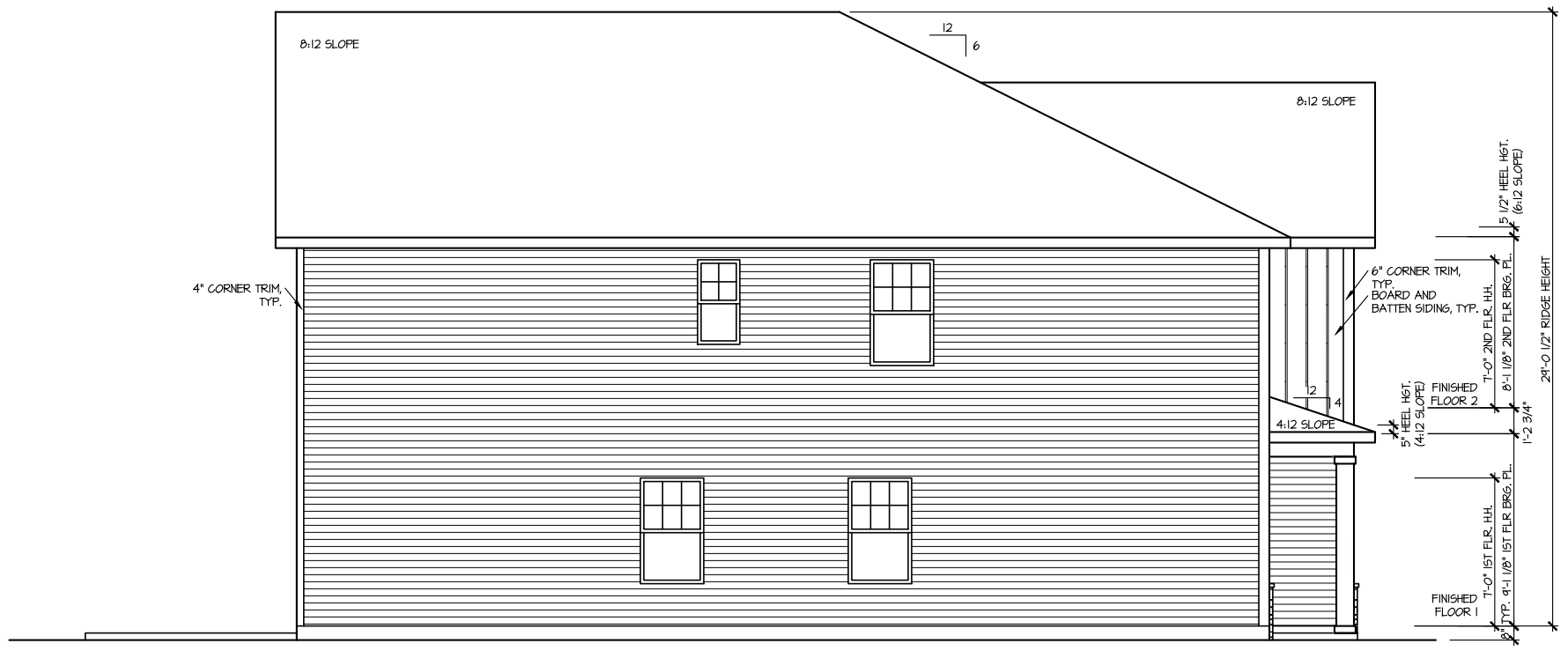


HOUSE NAME:
MILLHAVEN
DRAWING TITLE
FRONT & REAR ELEVATIONS

SHEET No.
A.1



RIGHT ELEVATION 2
SCALE: 1/8" = 1'-0"



LEFT ELEVATION 2
SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION		
REVISION	DATE	UPDATED DATE
1-RALE	09-09-2021	04-28-2024

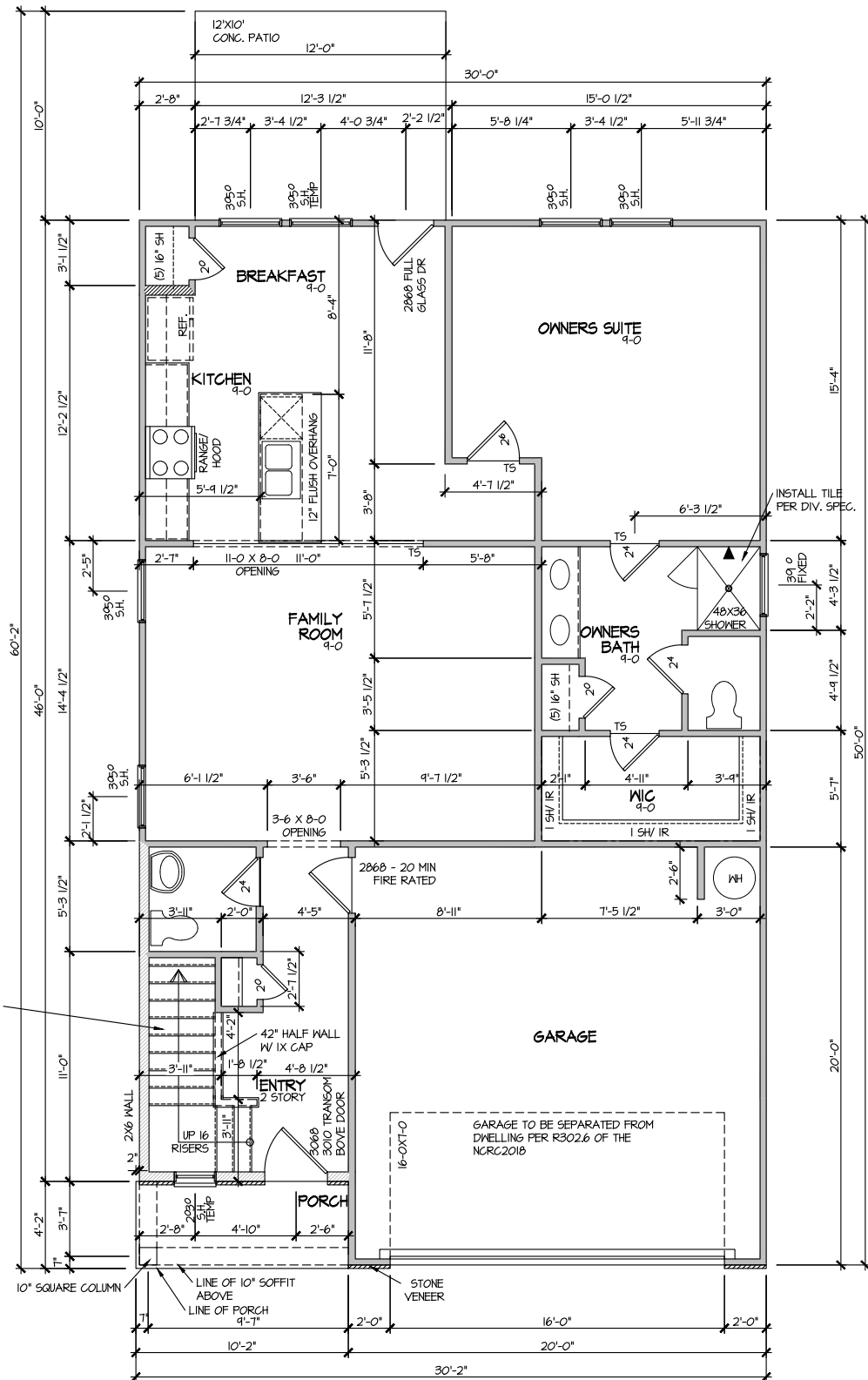
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DATE: 07/01/2024
PLAN NO. 2379



HOUSE NAME: MILLHAVEN
DRAWING TITLE: RIGHT & LEFT ELEVATIONS

SHEET No. A.2

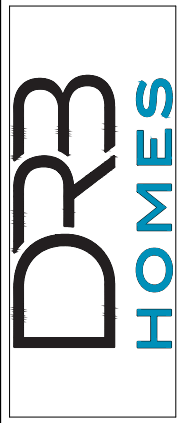
STAIRS TO BE DESIGNED PER R301.7.5 OF THE NCR2018 CODE MIN. 4" TREAD DEPTH MAX. 8 1/4" RISER HEIGHT



ELEVATION 2
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION	
REVISION	DATE
1-RALE	09-09-2021
	UPDATED DATE
	04-26-2024

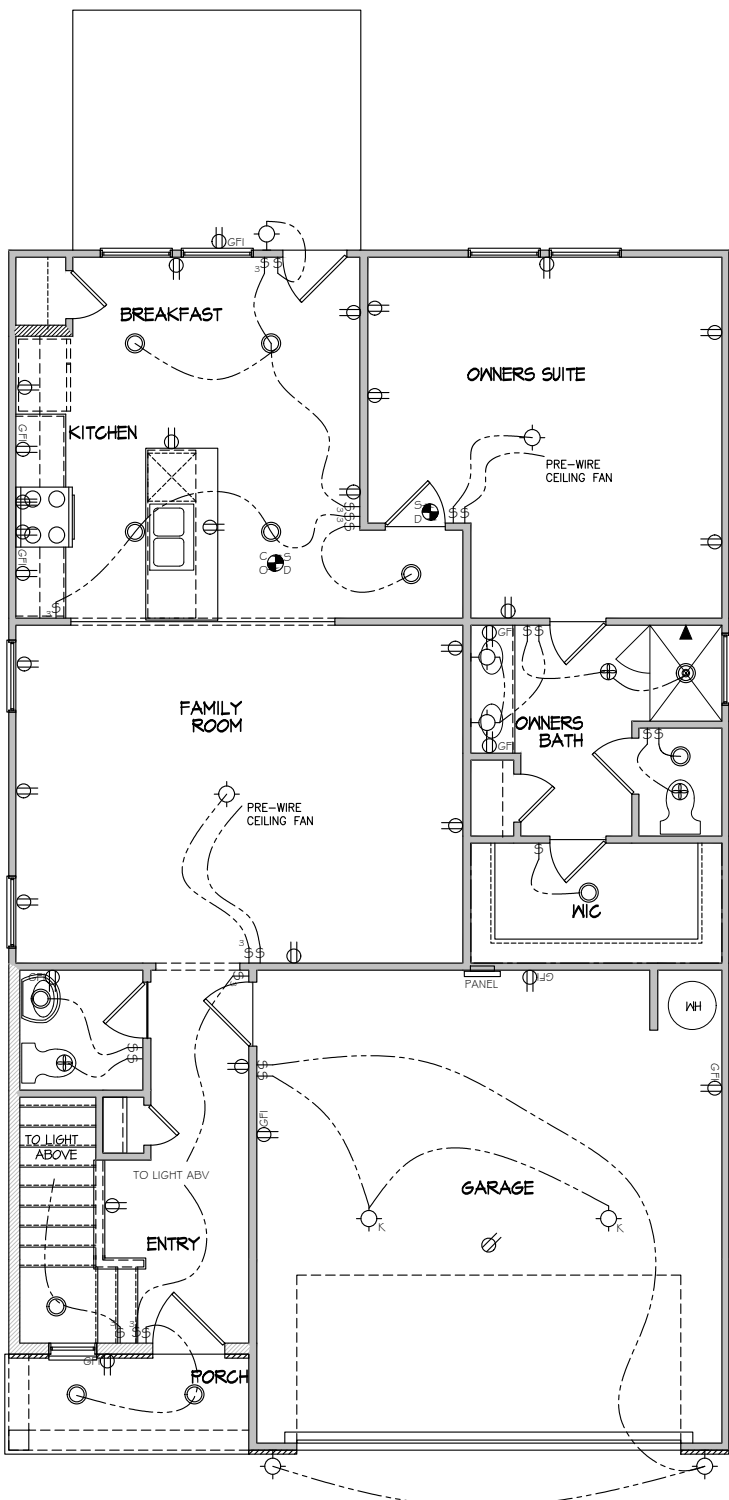
DRAWN BY:	ITS
DATE:	07/01/2024
PLAN NO.	2379



HOUSE NAME:
MILLHAVEN
DRAWING TITLE
FIRST FLOOR PLAN

SHEET No.
A3.1

ELECTRICAL LEGEND	
CEILING FAN W/ LIGHT KIT	
CEILING MOUNT LIGHT	
LED PUCK LIGHT	
WALL MOUNTED LIGHT	
MOTION SENSOR LIGHT	
110V OUTLET	
GFI OUTLET	
WATERPROOF OUTLET	
220V OUTLET	
SWITCH	
3-WAY SWITCH	
TV JACK	
PHONE JACK	
EXHAUST FAN	
HANGING LIGHT	
SD / CO COMBO DETECTOR	
KEYLESS LAMPHOLDER	
PENDANT LIGHT	

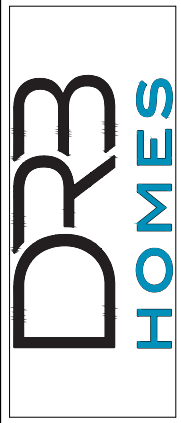


ELECTRICAL PLAN
 FIRST FLOOR - ELEV. 2
 SCALE: 1/8" = 1'-0"

FILE: Lot_00.0076.dwg DATE: 7/1/2024 9:10 AM

MASTER PLAN INFORMATION	
REVISION	DATE
1-RALE	09-09-2021
UPDATED DATE	04-26-2024

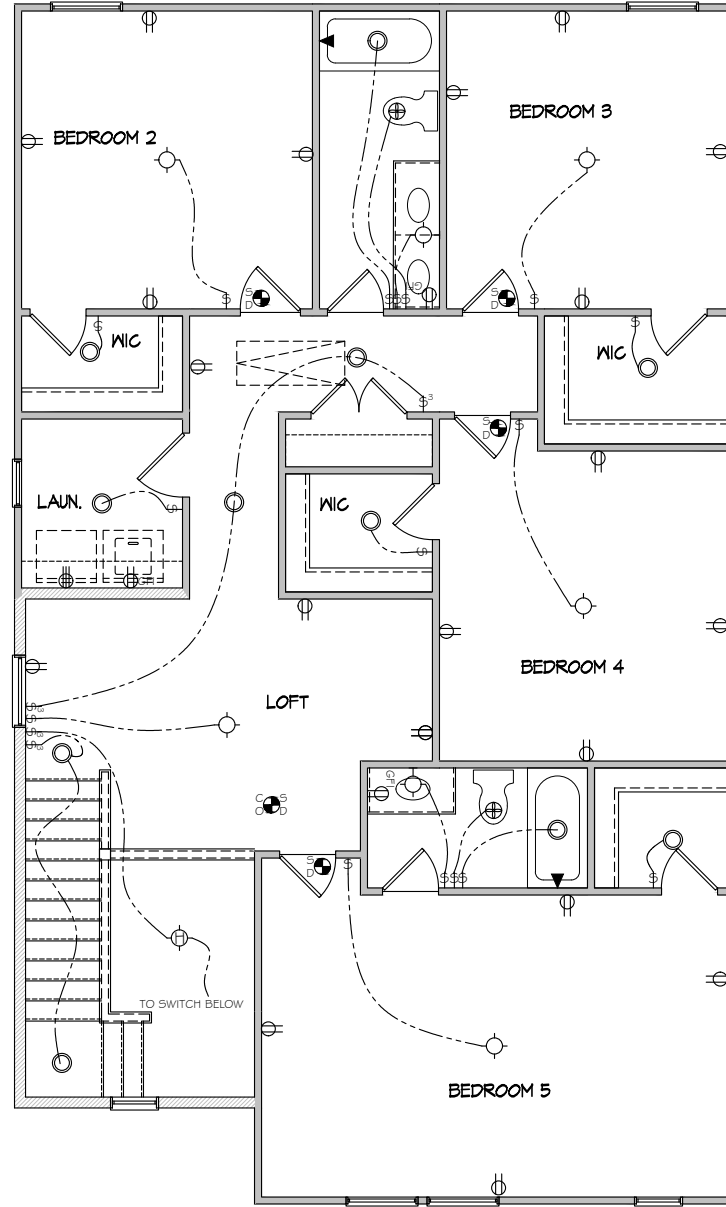
DRAWN BY:	ITS
DATE:	07/01/2024
PLAN NO.	2379



HOUSE NAME:	MILLHAVEN
DRAWING TITLE	FIRST FLOOR ELECTRICAL

SHEET No.	1
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ELECTRICAL LEGEND	
CEILING FAN W/ LIGHT KIT	
CEILING MOUNT LIGHT	
LED PUCK LIGHT	
WALL MOUNTED LIGHT	
MOTION SENSOR LIGHT	
110V OUTLET	
GFI OUTLET	
WATERPROOF OUTLET	
220V OUTLET	
SWITCH	
3-WAY SWITCH	
TV JACK	
PHONE JACK	
EXHAUST FAN	
HANGING LIGHT	
SD / CO COMBO DETECTOR	
KEYLESS LAMPHOLDER	
PENDANT LIGHT	



ELECTRICAL PLAN
 SECOND FLOOR - ELEV. 2
 SCALE: 1/8" = 1'-0"

FILE: Lot_00.0076.dwg DATE: 7/1/2024 9:10 AM

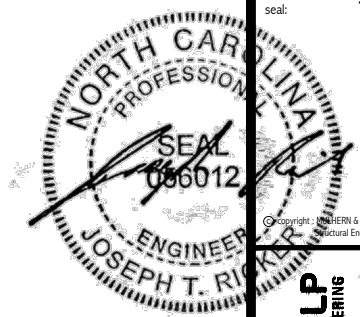
MASTER PLAN INFORMATION	
REVISION	DATE
1-RALE	09-09-2021
	UPDATED DATE
	04-26-2024

DRAWN BY:	ITS
DATE:	07/01/2024
PLAN NO.	2379



HOUSE NAME:	MILLHAVEN
DRAWING TITLE	SECOND FLOOR ELECTRICAL

SHEET No.	1.2
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M&K project number: 126-22076

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

REVISIONS:
date: initial:

DRB HOMES

STRUCTURAL NOTES
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC

sheet: SO.0

VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x1/4"
6'-0"	3 FT. MAX	L3"x3"x1/4"
	12 FT. MAX	L4"x3"x1/4"
8'-0"	20 FT. MAX	L5"x3"x3/8"
	3 FT. MAX	L4"x4"x1/2" *
	12 FT. MAX	L5"x3"x3/8"
9'-6"	16 FT. MAX	L6"x3"x3/8"
	12 FT. MAX	L6"x3"x3/8"
16'-0"	2 FT. MAX	L7"x4"x1/2" **
	3 FT. MAX	L8"x4"x1/2" **

ALL LINTELS:
 - SHALL SUPPORT 2 3/4" - 3 1/2" VENEER w/ 40 psf MAXIMUM HEIGHT.
 - 1/2" SHALL HAVE 4" MIN. BEARING
 - 1/4" SHALL HAVE 8" MIN. BEARING
 - 1/2" SHALL NOT BE FASTENED BACK TO HEADER.
 - 1/2" SHALL BE FASTENED BACK TO WOOD HEADER IN WALL @ 48" O.C. w/ 3/4" DIA. x 3 1/2" LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES.
 - MAX VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.
 - ALL LINTELS SHALL BE LONG LEG VERTICAL.
 - WHEN SUPPORTING VENEER < 9" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 5/8" WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT FINISHING.
 - SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS.
 * FOR GREEN VENEER USE L4x3x1/4"
 ** FOR 3/2" VENEER ONLY. SEE PLAN FOR VENEER SUPPORT IF VENEER < 3/2" THICK.

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.

NON-BEARING HEADER SCHEDULE

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

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

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x18" - 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/S/D2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
 • REFER TO DETAIL E/S/D2.0 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.

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
20 MPH WIND IN 2018 NCSEBC: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 R301.3 OF THE 2018 NCSEBC: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 HEREWITH, 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 NCSEBC: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"x0.131" NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. TYP. UNO.
- 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 (1/2" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD.

BLOCKED PANEL EDGES

- AT DESIGNATED AREAS - FASTEN SHEATHING w/ 2 3/8" x 0.131" NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 3/4" 16 GA STAPLES (1/2" 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 SPACINGS, UNO.
- 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

FLOOR FRAMING

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

- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR' 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND - 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD.
 - 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
 - 2 3/8" x 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 EACH ROOF TRUSS TO TOP PLATE W/ SIMPSON H25T CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H25T CLIPS AT 2-FLY GIRDER TRUSSES, (3) H25T CLIPS AT 3-FLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, UNO.

- ERECT AND INSTALL ROOF TRUSSES PER ITCA & TPI'S BCS1 1-08 "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-IJOISTS)
 - TRUSS VERTICALS w/ (3) 3"x0.131" NAILS @ 14.2" O.C. MAX. (FLOOR TRUSSES)

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS - w/ 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD.
 - w/ 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
 - w/ 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. FIELD.

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
▶ HD-1	SIMPSON HIT4 HOLD-DOWN *
▶ HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.) (PRE-BENT MSTC66 ALT. WHEN SPECIFIED)
▶ HD-3	SIMPSON STDH4/MRJ HOLD-DOWN

ALTERNATIVE TO S51B24 ANCHOR BOLT SPECIFICATION:
 * UTILIZE SIMPSON "SET" EPOXY SYSTEM TO FASTEN 3/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 12" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 3/4" @ 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.

- TRUSSES/JOISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUSH BEAMS DO NOT EXCEED THE FOLLOWING:
 A. ROOF TRUSSES:
 1/4" DEAD LOAD
 B. FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:
 1/8" DEAD LOAD
 C. FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS:
 LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)

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 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 10 PSF @ TILE)
 LATERAL 120 MPH, EXPOSURE B. SEISMIC A/B.
 SOIL 2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)

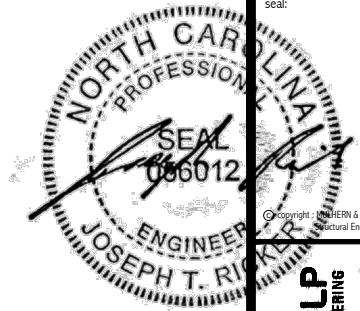
GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- REFER TO FASTENING SCHEDULE TABLE R602.3(I) FOR ALL CONNECTIONS, TYP. UNO.
- EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SFF OR SYP "STUD" GRADE LUMBER, OR BETTER, UNO.
 • WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SFF) 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., UNO.)
 • 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=310 psi; E=1.55x10⁶ psi
 • 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0x10⁶ psi
 • 'PSL' - Fb=2400 psi; Fv=240 psi; E=2.0x10⁶ psi
- MK 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 MK FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.
- FOR 2 & 3 PLY BEAMS OF EQUAL WIDTH, FASTEN PLYS TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS 1/4"x3/8" SIMPSON SDS SCREWS (OR 3/8" 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 MEMBERS.
- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLYS 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 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, UNO..
- ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER w/ 3"x0.131" NAILS @ 24" O.C. (MIN), EACH PLY.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND/BEARING. BLOCKING TO MATCH POST ABOVE.
- FASTEN 2x WOOD PLATES TO TOP FLANGE OF STEEL BEAMS WITH P.A.F.'s (HILTI) X-CF PINS OR EQUAL) @ 16" O.C. STAGGERED, OR 1/2" DIA. BOLTS @ 48" O.C. STAGGERED.
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4 CAP & ABW44Z BASE, UNO.

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., 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 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 SYP, "STUD" GRADE OR BETTER.
- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, UNO.:
 f'c = 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:
 • 9' OR 10' HEIGHT (AS NOTED ON PLANS)
 • TALLER WALLS MUST BE ENGINEERED.
 • NOMINAL WIDTH (1 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, UNO.
 • 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 45% 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 C90 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) - 4 GA. MINIMUM @ 16" O.C.
- PROVIDE 2x8 x 16" LONG P.T. PLATE ON TOP OF ALL CRANL SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID.
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRANL 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.



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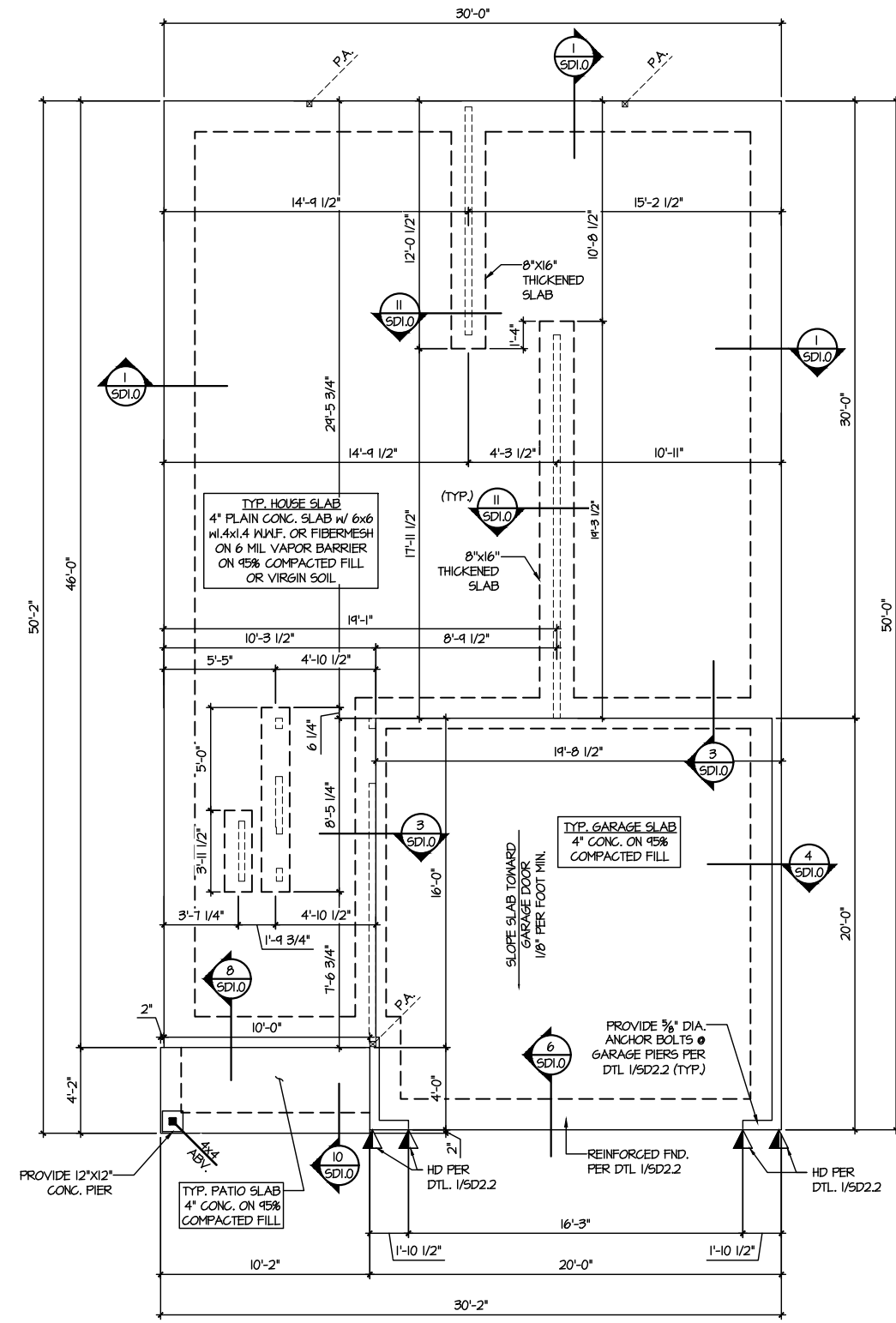
M&K project number:
126-22076
project mgr: JTR
drawn by: JAD
issue date: 07-09-24

REVISIONS:
date: initial:



FOUNDATION PLANS
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC

sheet:
S1.0

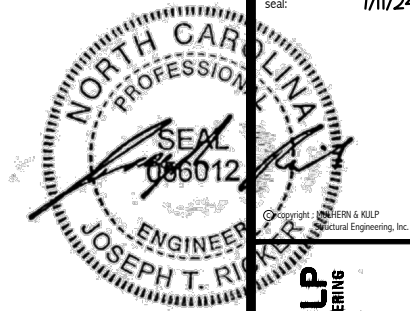


1 MONO SLAB FOUNDATION PLAN
SCALE: 1/8"=1'-0"

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 SO.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES



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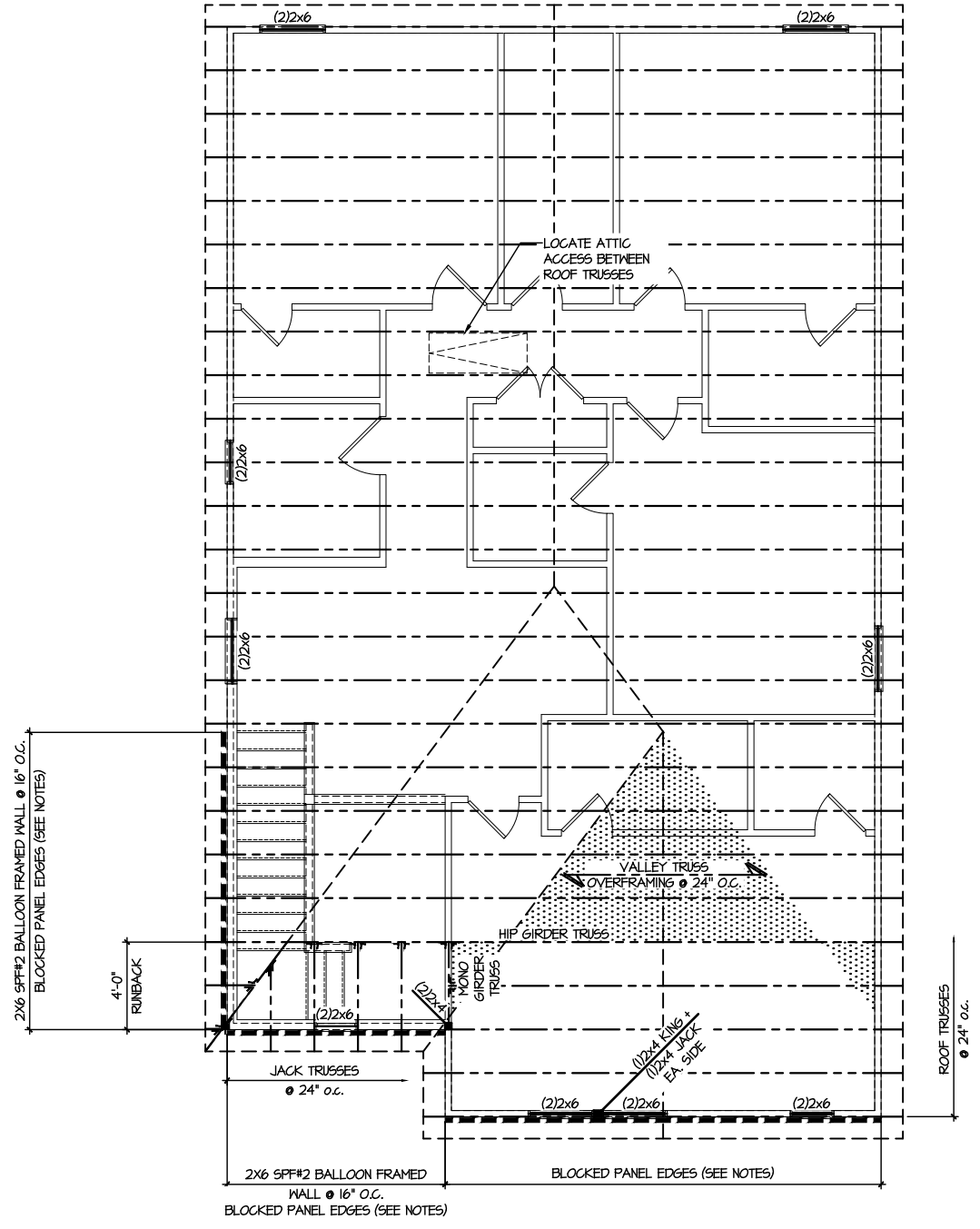
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project mgr: JTR
drawn by: JAD
issue date: 07-09-24

REVISIONS:
date: initial:



ROOF FRAMING PLANS
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC

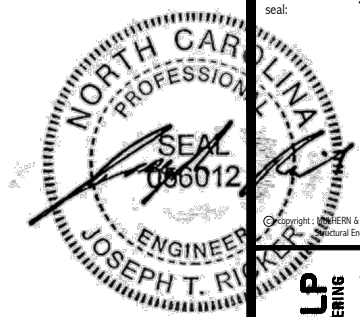
sheet:
S3.0



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 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES



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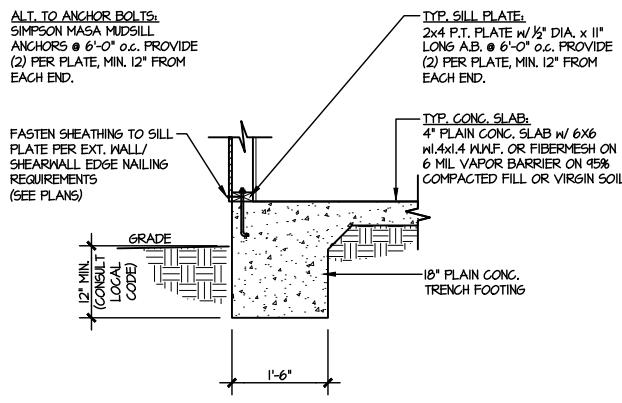
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issue date: 07-09-24

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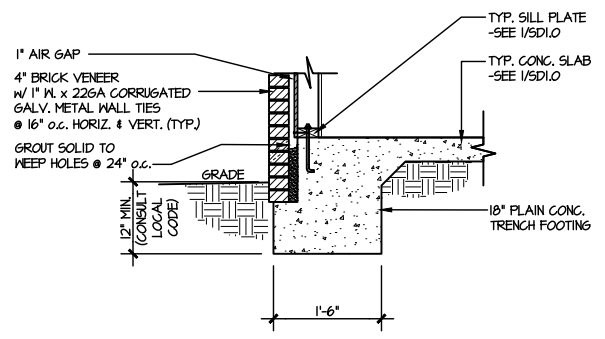


FOUNDATION DETAILS
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC

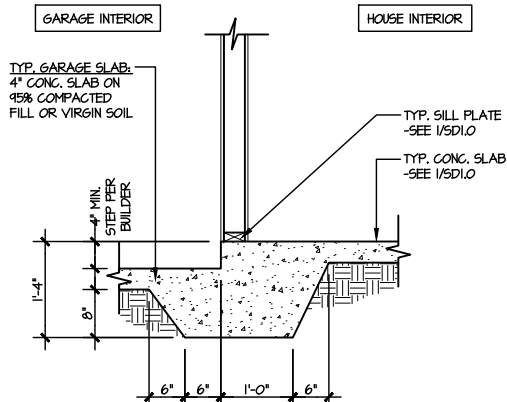
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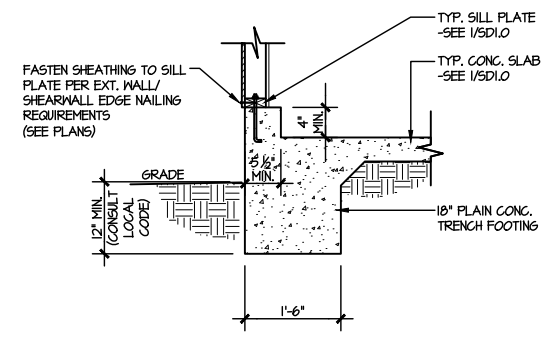
1 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



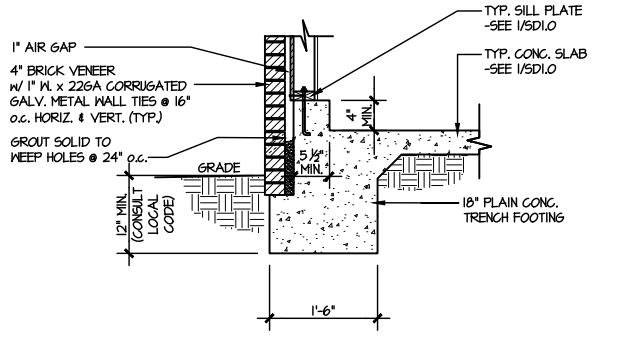
2 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



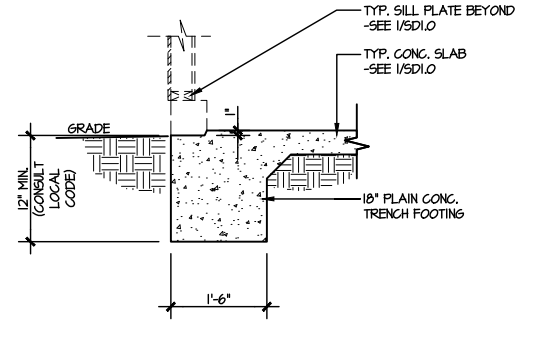
3 TYPICAL MONOLITHIC INTERIOR GARAGE FOOTING
SCALE: 3/8"=1'-0"



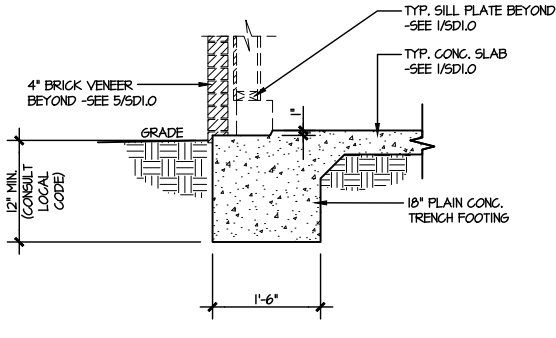
4 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



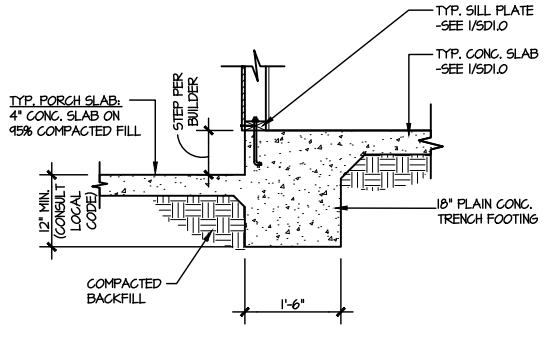
5 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



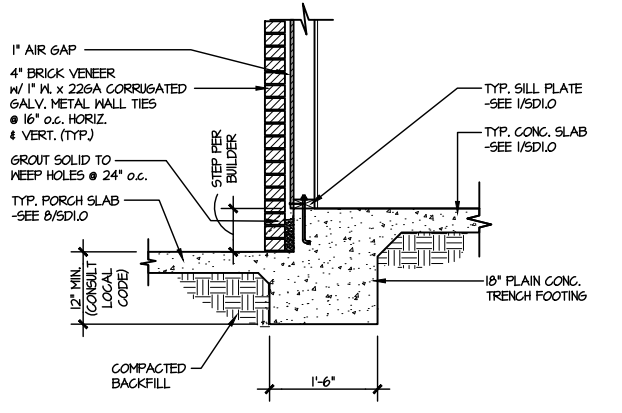
6 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0"



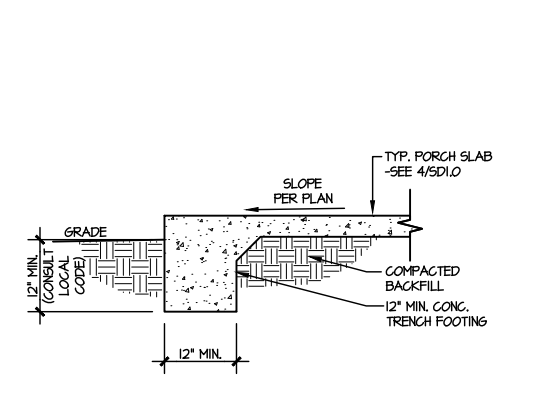
7 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



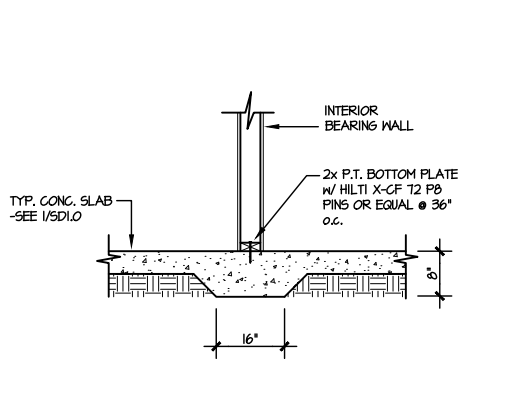
8 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO
SCALE: 3/8"=1'-0"



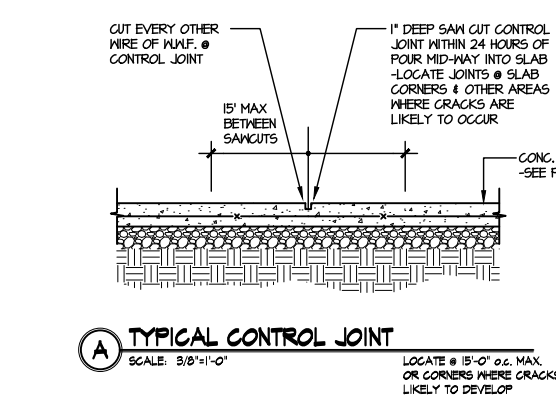
9 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO
SCALE: 3/8"=1'-0" W/ BRICK VENEER



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



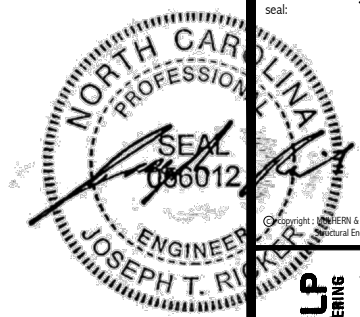
11 TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL
SCALE: 3/8"=1'-0"



A TYPICAL CONTROL JOINT
SCALE: 3/8"=1'-0"
LOCATE @ 15'-0" O.C. MAX. OR CORNERS WHERE CRACKS LIKELY TO DEVELOP

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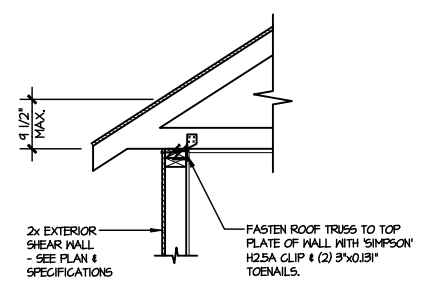
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drawn by: JAD
issue date: 07-09-24

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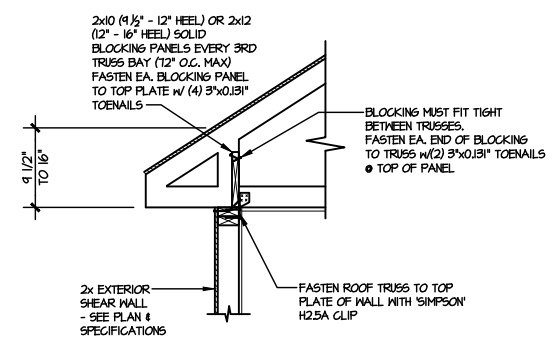
DRB
HOMES

FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC

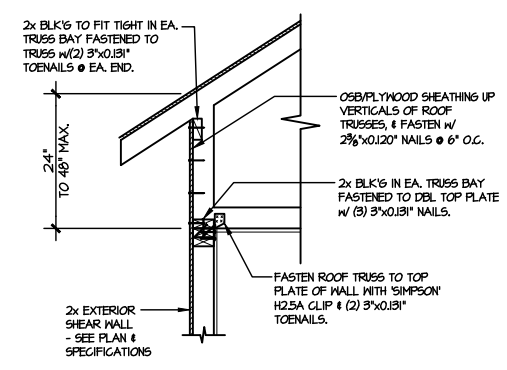
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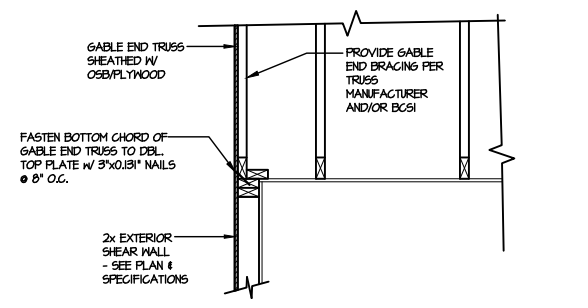
A1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT LESS THAN 9 1/2"
NO BLOCKING REQ'D



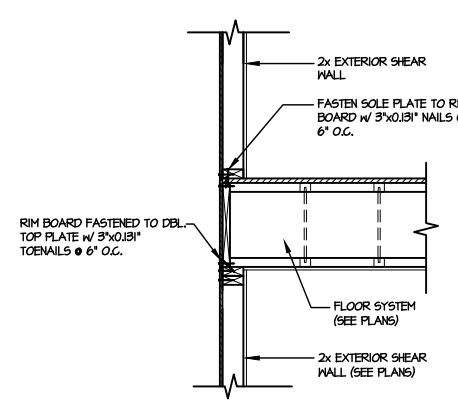
A2 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT BETWEEN 9 1/2" - 16"
BLOCKING REQ'D



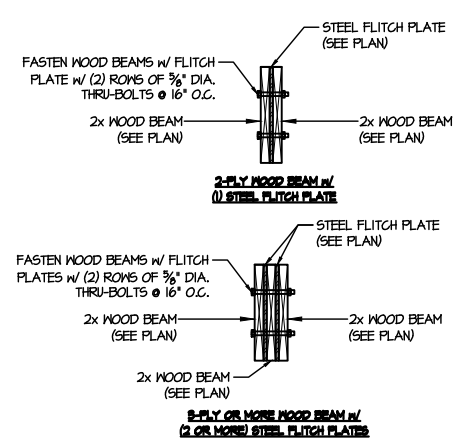
A3 TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8"=1'-0"
HEEL HEIGHT UP TO 48" MAX.



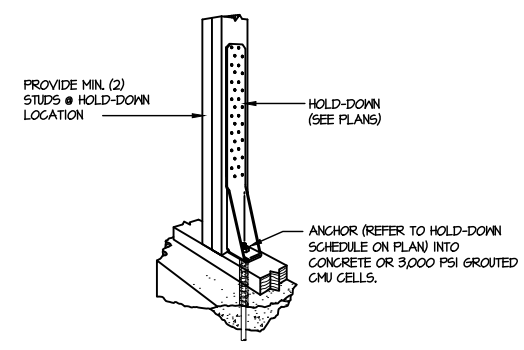
B TYPICAL GABLE END DETAIL
SCALE: 3/8"=1'-0"



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"



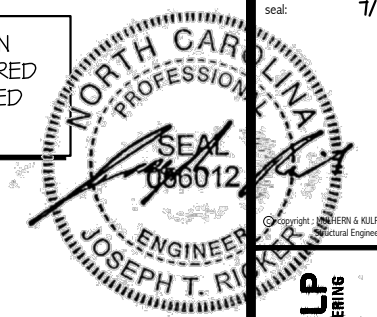
F1 TYPICAL HOLD DOWN INSTALLATION
SCALE: N.T.S.

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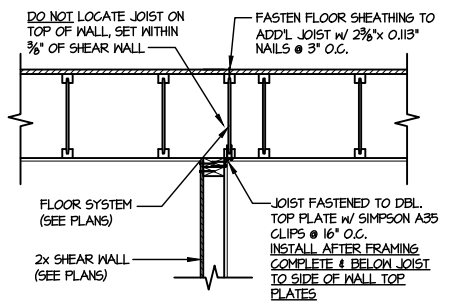
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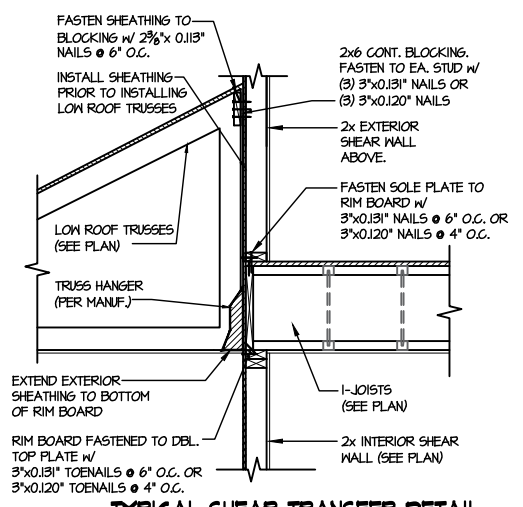
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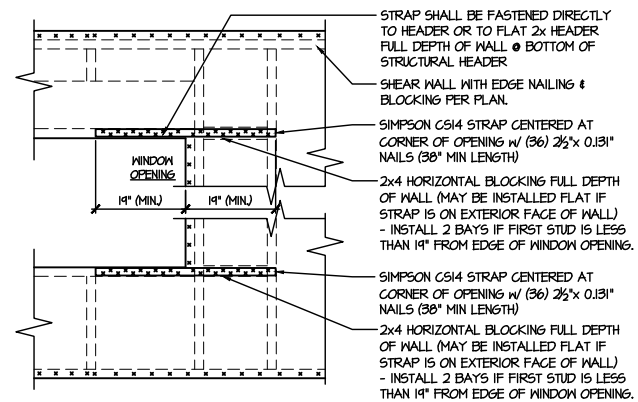
FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC



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

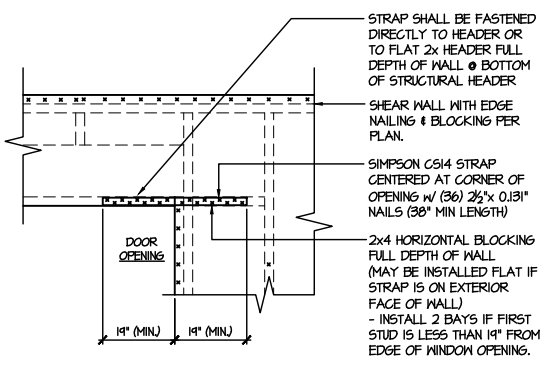


2 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



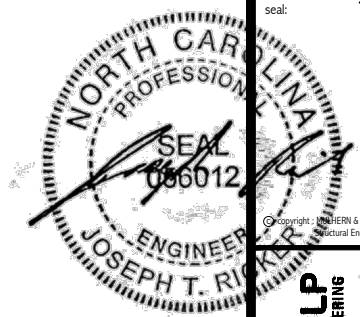
- STRAPS MAY BE INSTALLED ON EXTERIOR OR INTERIOR FACE OF WALL
- WHEN INSTALLED ON THE EXTERIOR FACE OF THE WALL, STRAPS TO BE INSTALLED ON EXTERIOR FACE OF SHTG. & MAY BE MOVED 1/2" FROM EDGE TO ALLOW FOR WINDOW NAILING
- REQUIRED ONLY @ OPENINGS WHERE SPECIFIED ON PLAN

3 TYPICAL EXT. WALL & INT. SHEARWALL OPENING ELEVATION
SCALE: NTS



- 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

4 TYPICAL EXT. WALL & INT. SHEARWALL OPENING ELEVATION
SCALE: NTS



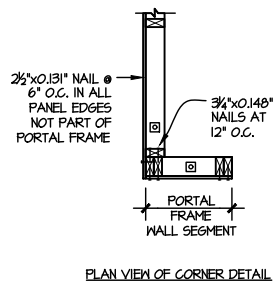
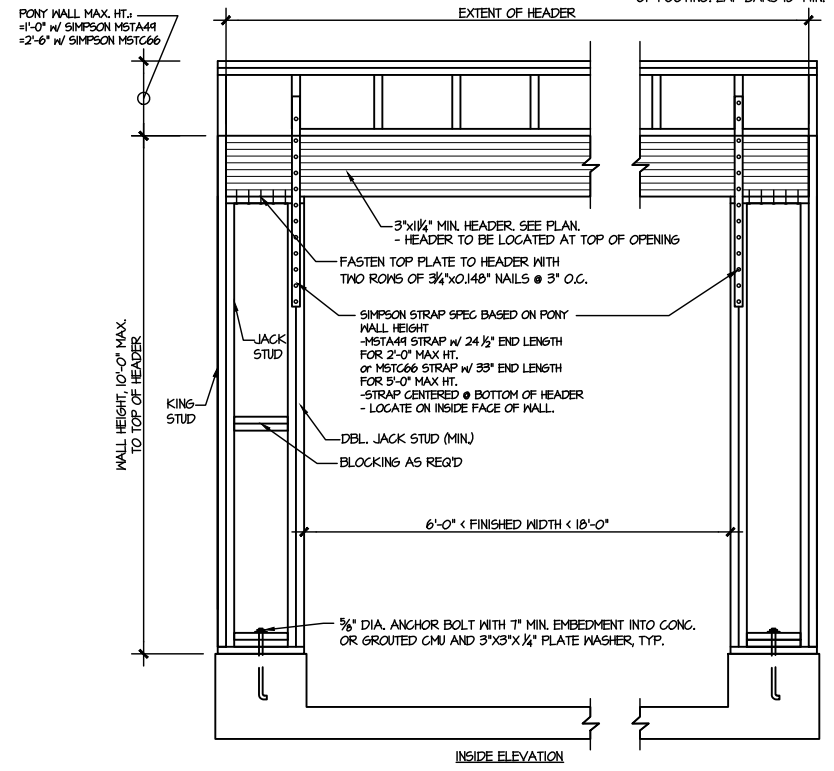
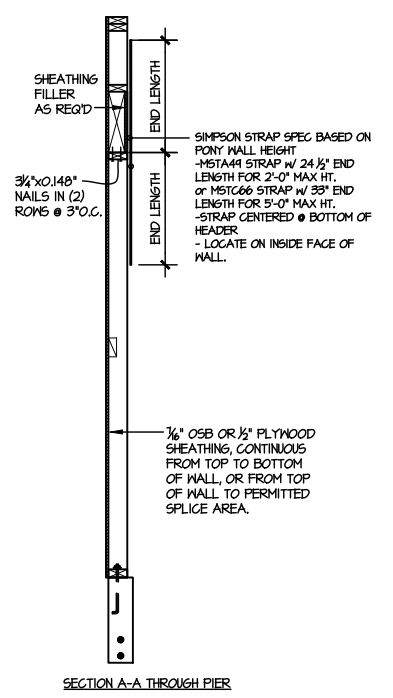
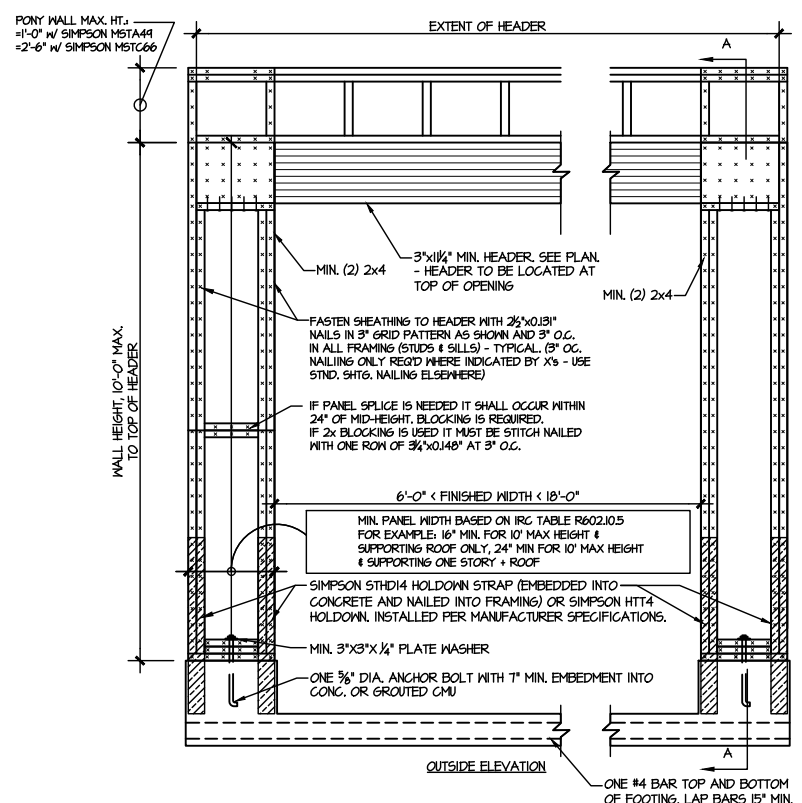
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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC

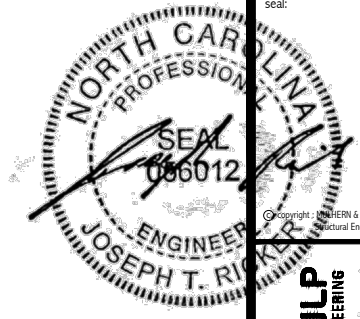
sheet:
SD2.2



1 GARAGE PORTAL FRAME BRACING ELEVATION WITH HOLD-DOWNS
SCALE: N.T.S. BOTH SIDES OF GARAGE DOOR

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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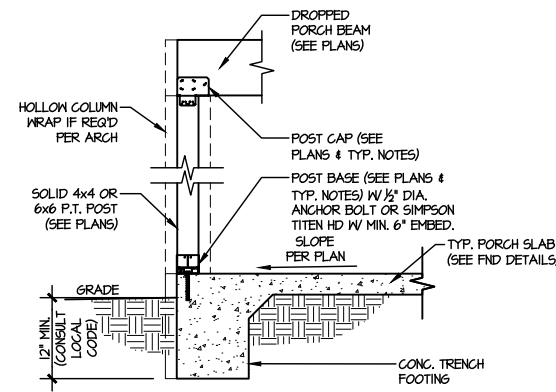
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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 76 - MILLHAVEN 2
RALEIGH, NC

sheet:
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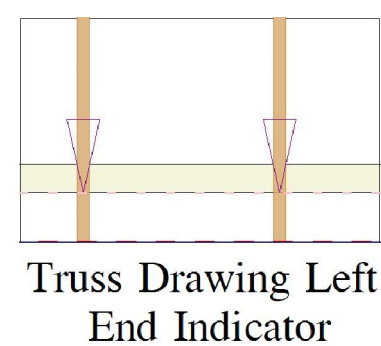
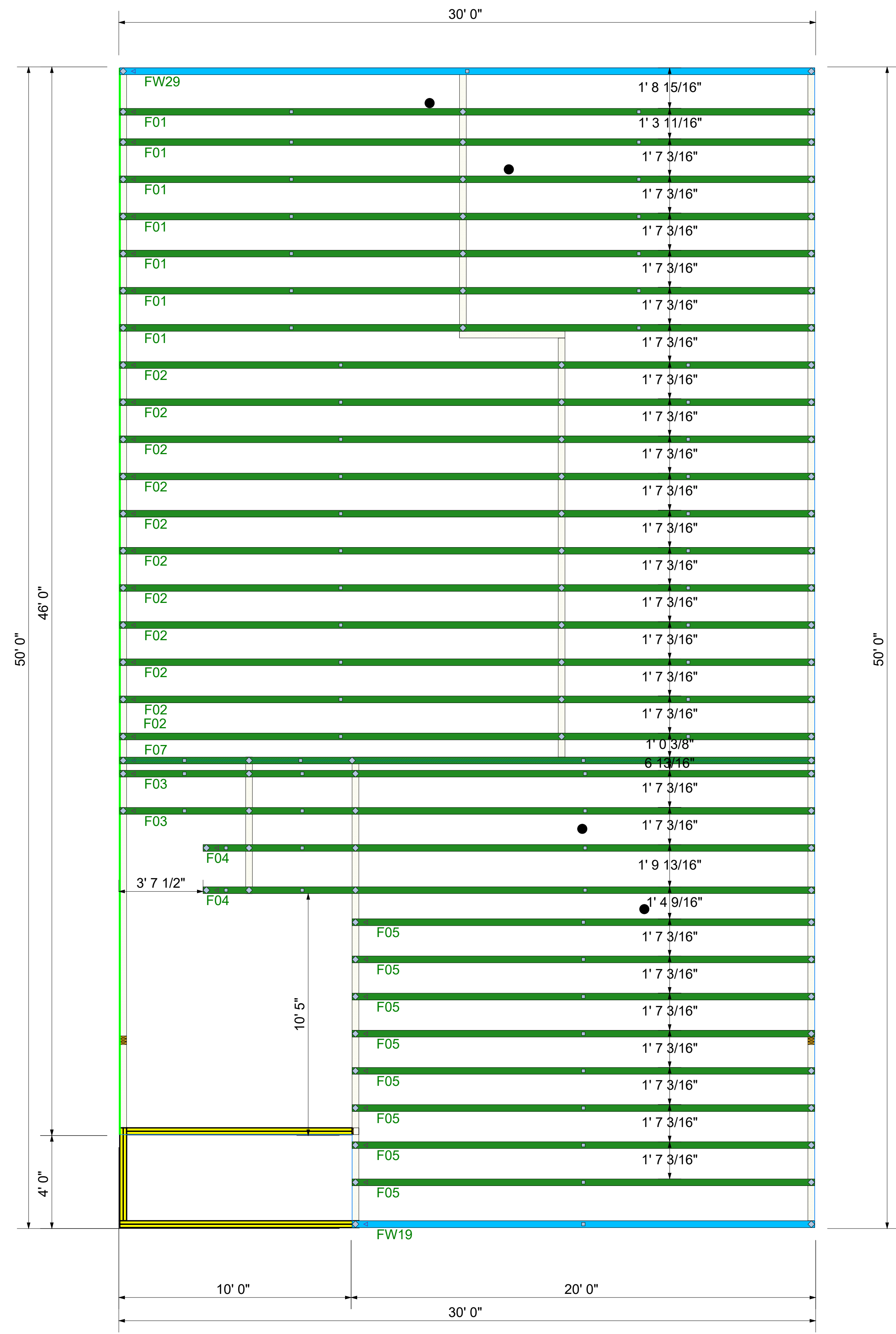


3 TYPICAL PORCH POST CONNECTION DETAIL
SCALE: NONE
SLAB ON GRADE SHOWN (SIM. @ CRAWL & BSMT.)

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General Notes: ** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION. ** ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.



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

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179.



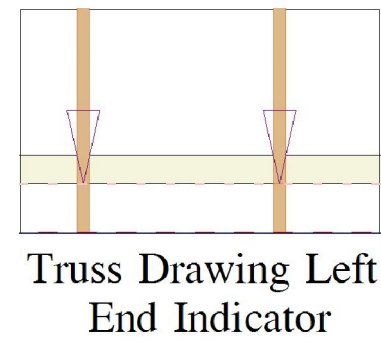
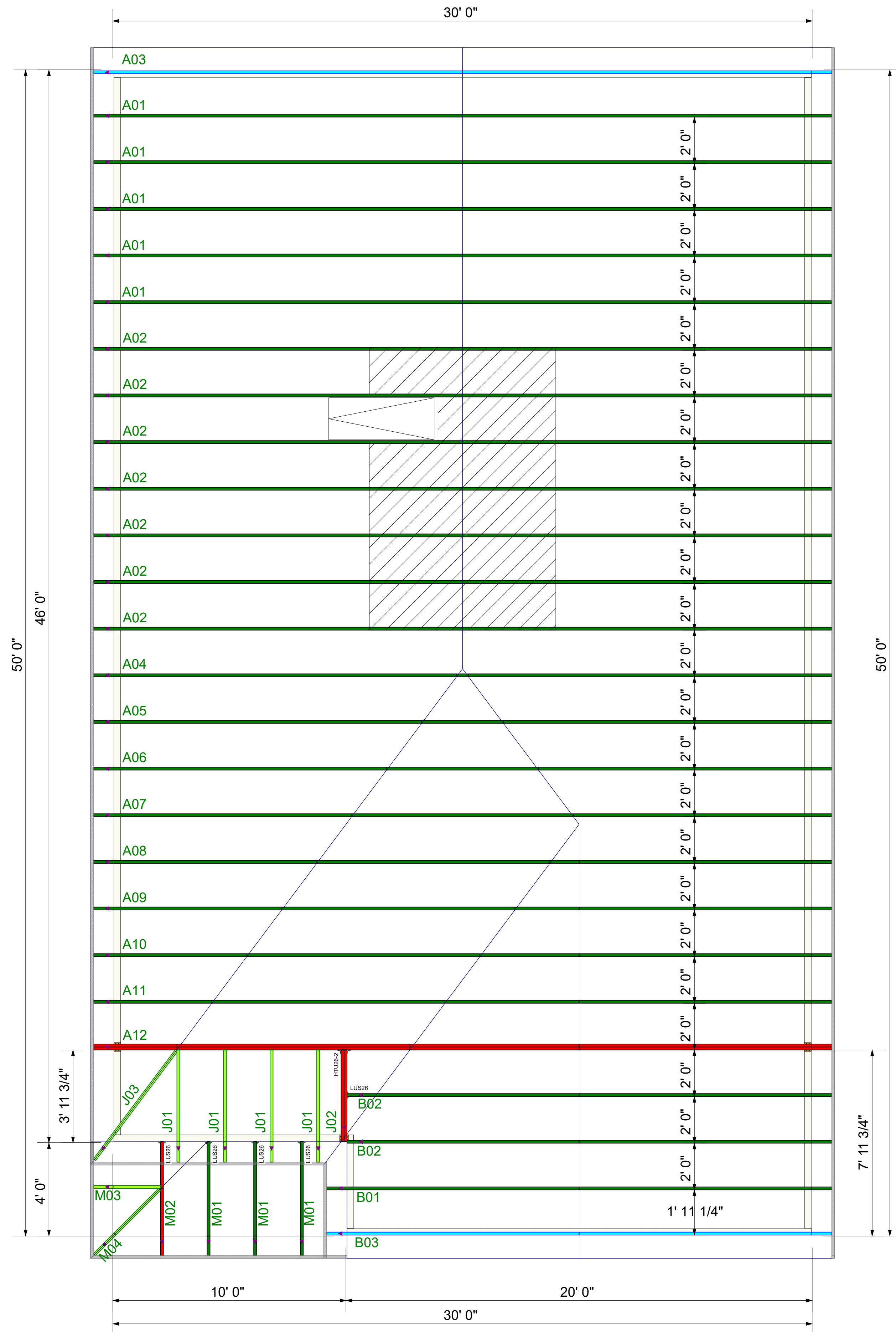
DRB HOMES
76 FARM AT NEILLS CREEK
MILLHAVEN 2
**COMPONENT
PLACEMENT PLAN**

Scale: **NTS**
Date: **7/15/2024**
Designer: **ND**
Project Number: **24070012**
Sheet Number:

1/1

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS. ** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT. ** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. ** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE. ** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS. ** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES. ** REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.



** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.

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

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179.



DRB HOMES
76 FARM AT NEILLS CREEK
MILLHAVEN 2
**COMPONENT
PLACEMENT PLAN**

Scale:	NTS
Date:	7/15/2024
Designer:	ND
Project Number:	24070012
Sheet Number:	1/1