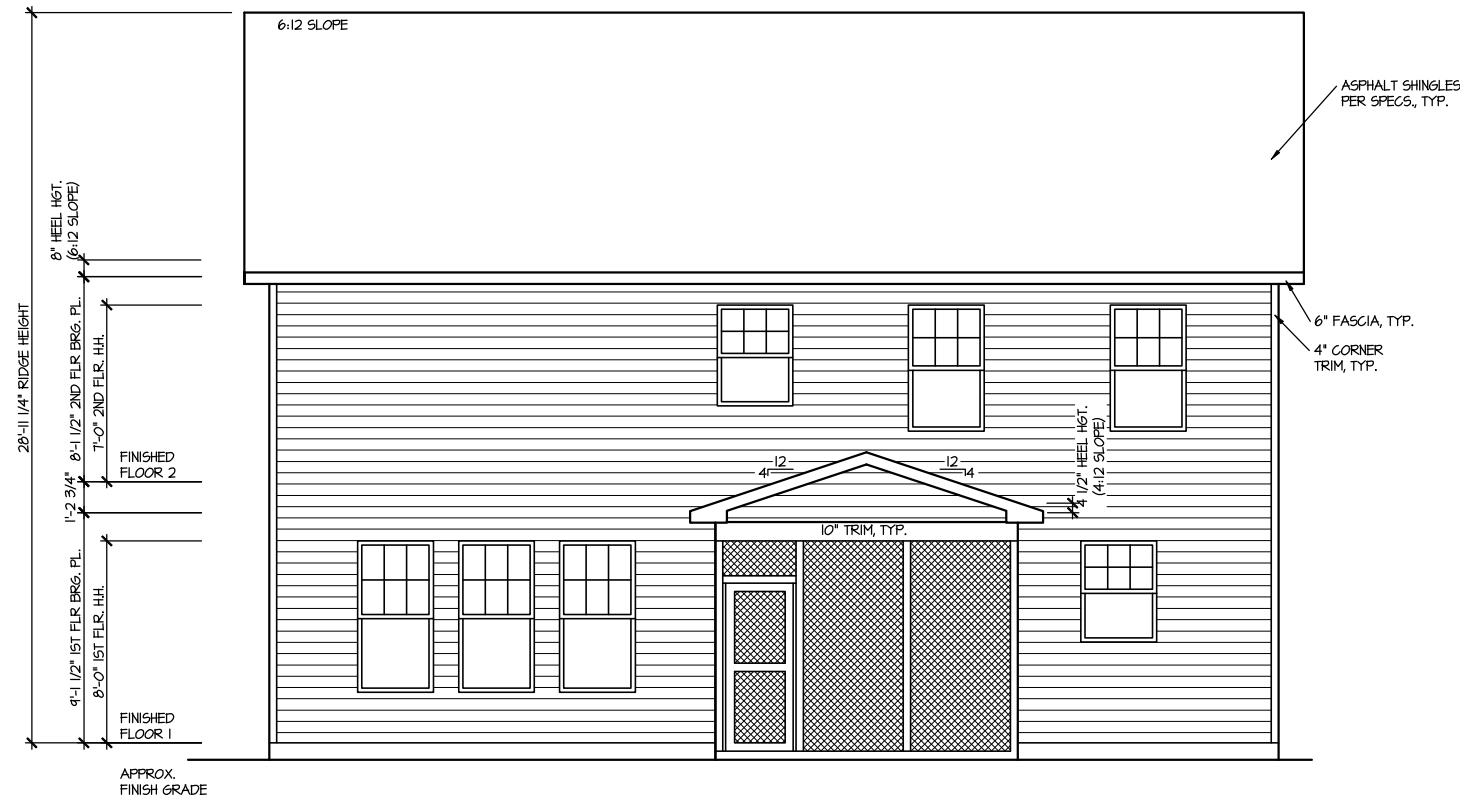


FRONT ELEVATION 4

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



REAR ELEVATION 4

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

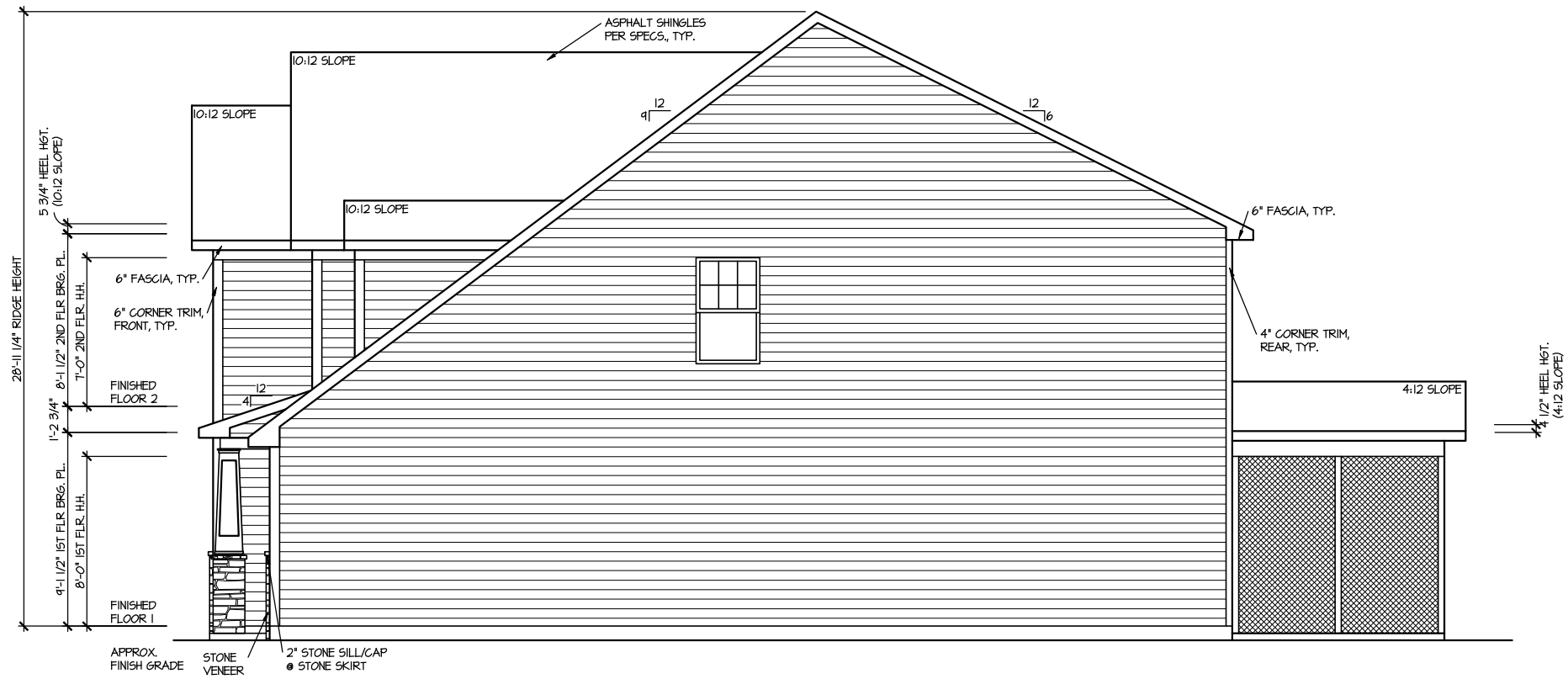
| MASTER PLAN INFORMATION | |
|-------------------------|------------|
| REVISION | DATE |
| 2 - RALE | 03-06-2019 |
| UPDATED DATE | 01-31-2023 |

DRAWN BY: ITS
 DATE: 12/19/2023
 PLAN NO. 2695



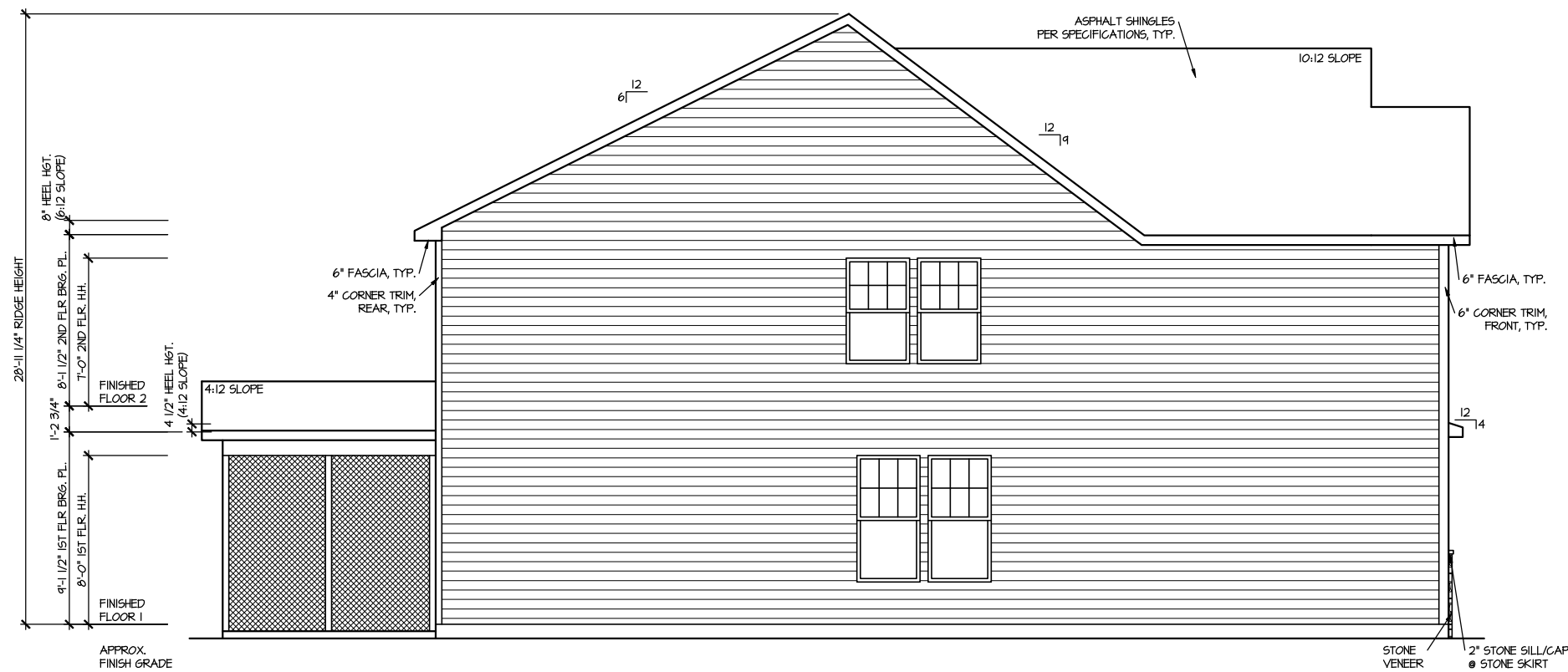
HOUSE NAME: DRAYTON
 DRAWING TITLE: FRONT & REAR ELEVATIONS

SHEET No. A.1



RIGHT ELEVATION 4

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



LEFT ELEVATION 4

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

UPDATED DATE
01-31-2023

MASTER PLAN INFORMATION
REVISION DATE
2-RALE 03-06-2019

DRAWN BY:
ITS

DATE:
12/19/2023

PLAN NO.
2695



HOUSE NAME:
DRAYTON

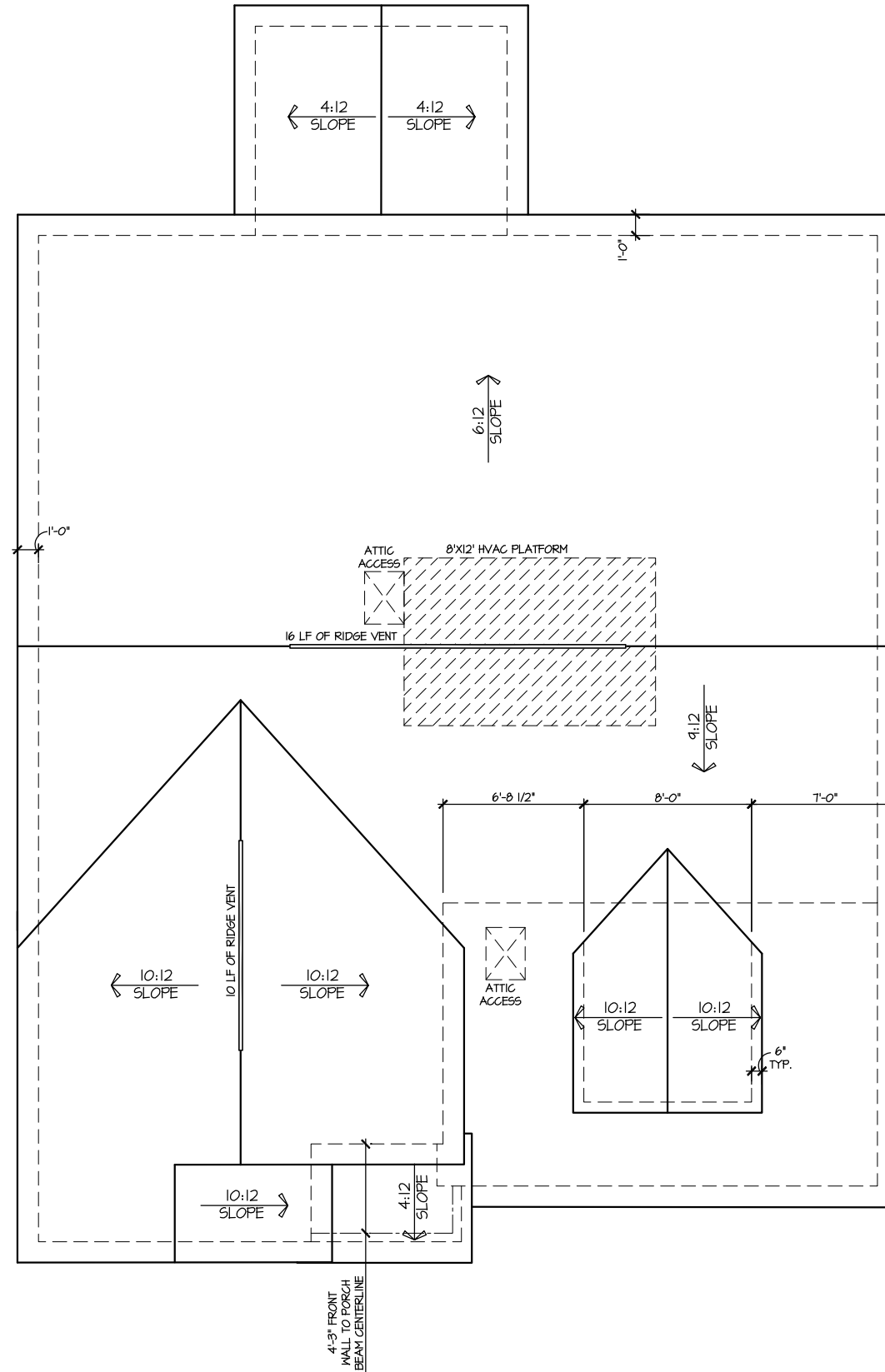
DRAWING TITLE
RIGHT & LEFT ELEVATIONS

SHEET No.

A1.2

ROOF VENTILATION CALCULATIONS:

ROOF AREA = 1036 SQ. FT.
 OVERALL REQUIRED VENTILATION:
 1 TO 150 = 12.24 SQ. FT.
 1 TO 300 = 6.12 SQ. FT.
 50-80% IN TOP THIRD = 3.06- 4.90 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 RDS)
 77 LINEAR FEET OF SOFFIT X 5.7 SQ. IN. = 3.05 SQ. FT.
 UPPER VENTING: (TOP 1/3 RD)
 26 LINEAR FEET OF RIDGE X 10 SQ. IN. = 3.25 SQ. FT.
 3.25 SQ. FT. BETWEEN 50% - 80%
 (1 TO 300 ALLOWED)
 TOTAL ROOF VENTILATION: 6.30 SQ. FT. > 6.12 SQ. FT. (REQ'D)



ROOF PLAN ELEV. 4

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

UPDATED DATE
01-31-2023

MASTER PLAN INFORMATION
 REVISION DATE
 2-RALE 03-06-2019

DRAWN BY:
ITS
 DATE:
12/19/2023
 PLAN NO.
2695

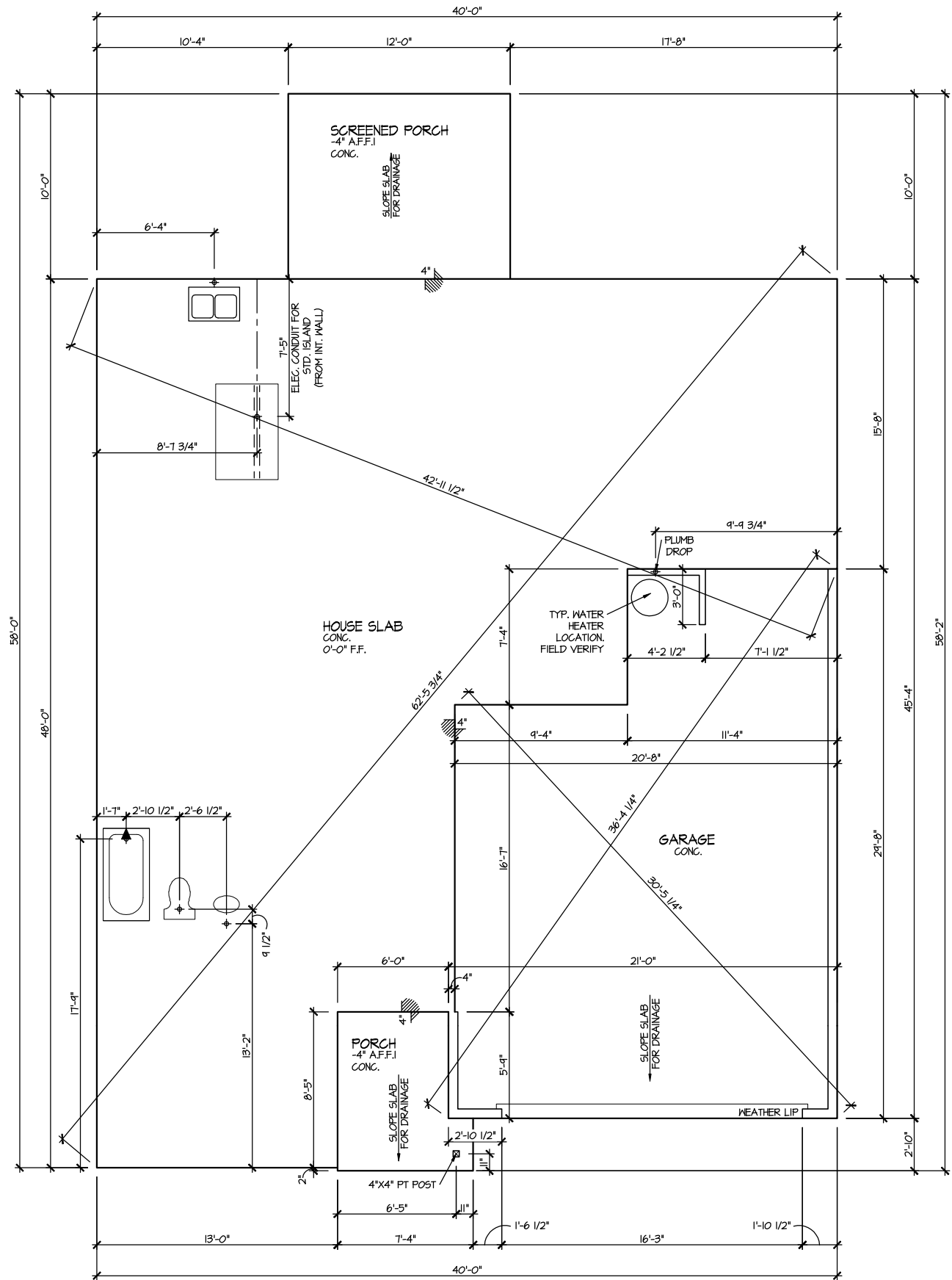


HOUSE NAME:
DRAYTON
 DRAWING TITLE
ROOF PLAN

SHEET No.
A.13

ELEVATION 4
SLAB PLAN

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



| MASTER PLAN INFORMATION | |
|-------------------------|------------|
| REVISION | DATE |
| 2 - RALE | 03-06-2019 |
| UPDATED DATE | 01-31-2023 |

| | |
|-----------|------------|
| DRAWN BY: | ITS |
| DATE: | 12/19/2023 |
| PLAN NO. | 2695 |

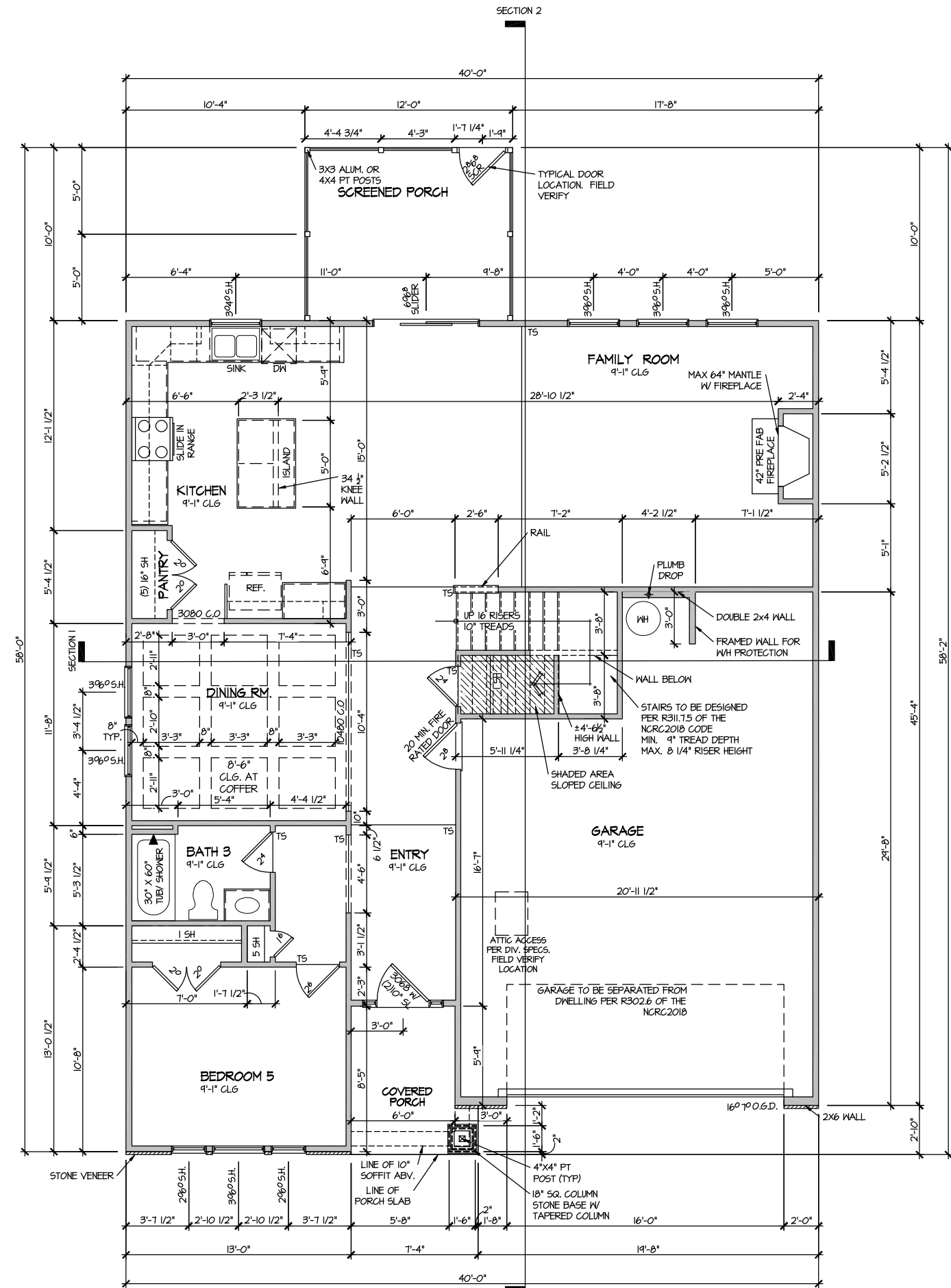


| | |
|---------------|-----------|
| HOUSE NAME: | DRAYTON |
| DRAWING TITLE | SLAB PLAN |

| | |
|-----------|------|
| SHEET No. | A2.1 |
|-----------|------|

ELEVATION 4 FIRST FLOOR PLAN

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



| MASTER PLAN INFORMATION | |
|-------------------------|------------|
| REVISION | DATE |
| 2-RALE | 03-06-2019 |
| UPDATED DATE | 01-31-2023 |

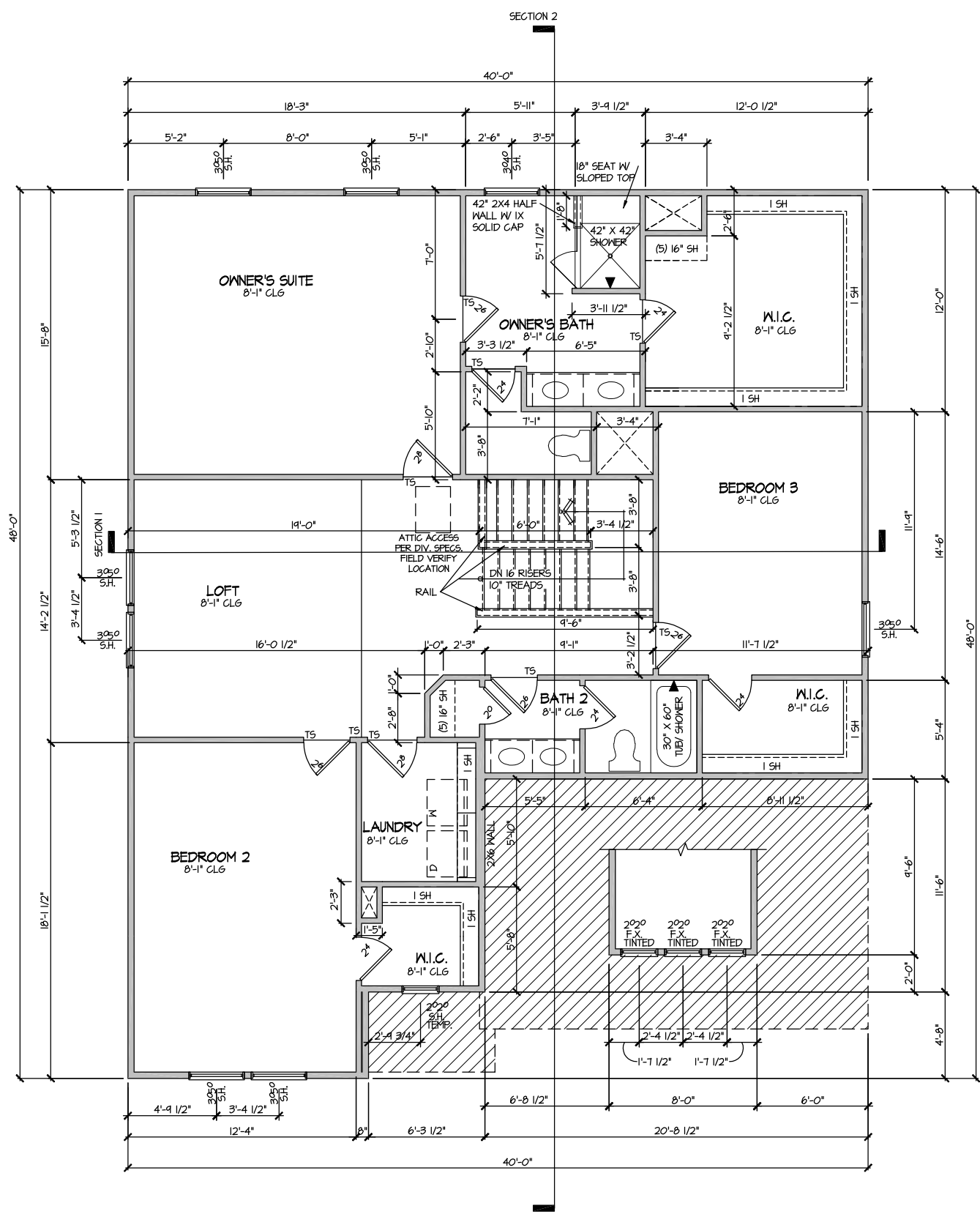
| | |
|-----------|------------|
| DRAWN BY: | ITS |
| DATE: | 12/19/2023 |
| PLAN NO. | 2695 |



| | |
|---------------|------------------|
| HOUSE NAME: | DRAYTON |
| DRAWING TITLE | FIRST FLOOR PLAN |

| | |
|-----------|------|
| SHEET No. | A3.1 |
|-----------|------|

FILE: Lot 00.0102.dwg DATE: 12/19/2023 9:36 AM



ELEVATION 4
 SECOND FLOOR PLAN

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

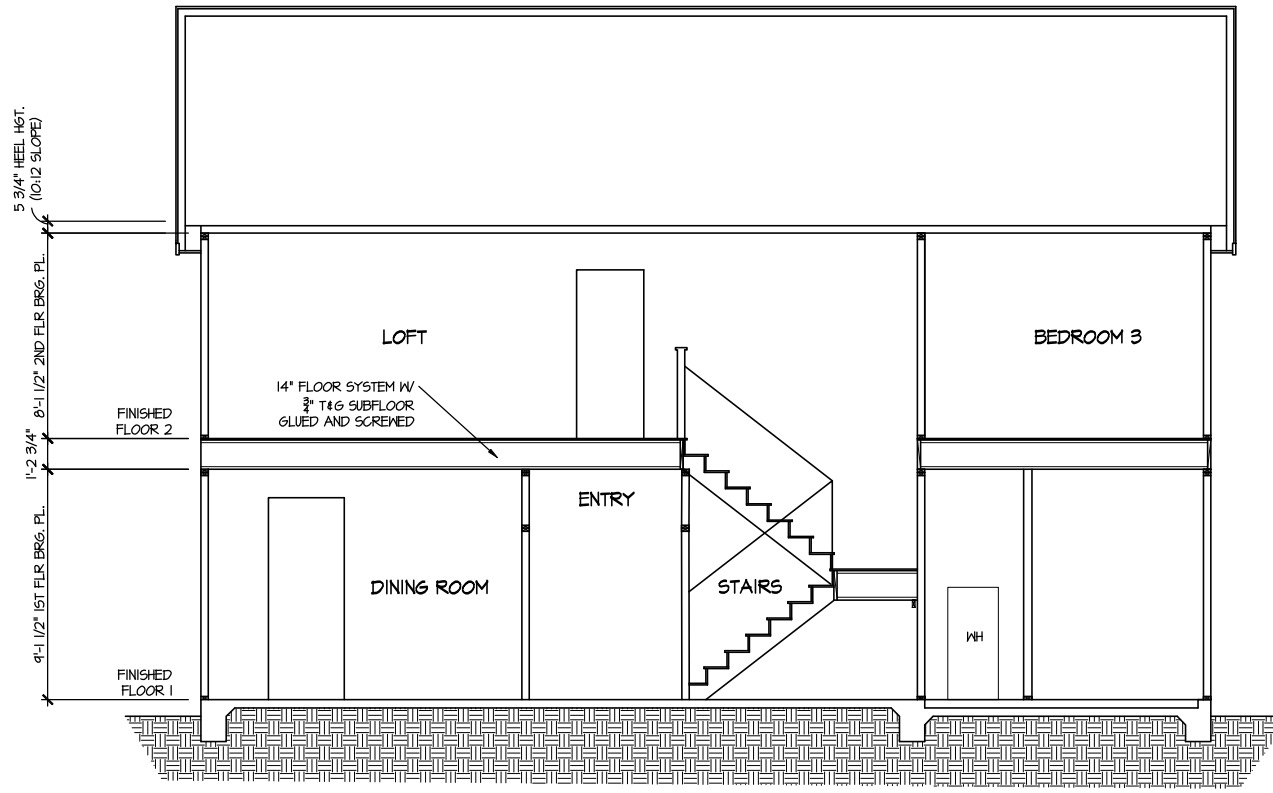
| MASTER PLAN INFORMATION | |
|-------------------------|------------|
| REVISION | DATE |
| 2-RALE | 03-06-2019 |
| UPDATED DATE | 01-31-2023 |

| | |
|-----------|------------|
| DRAWN BY: | ITS |
| DATE: | 12/19/2023 |
| PLAN NO. | 2695 |

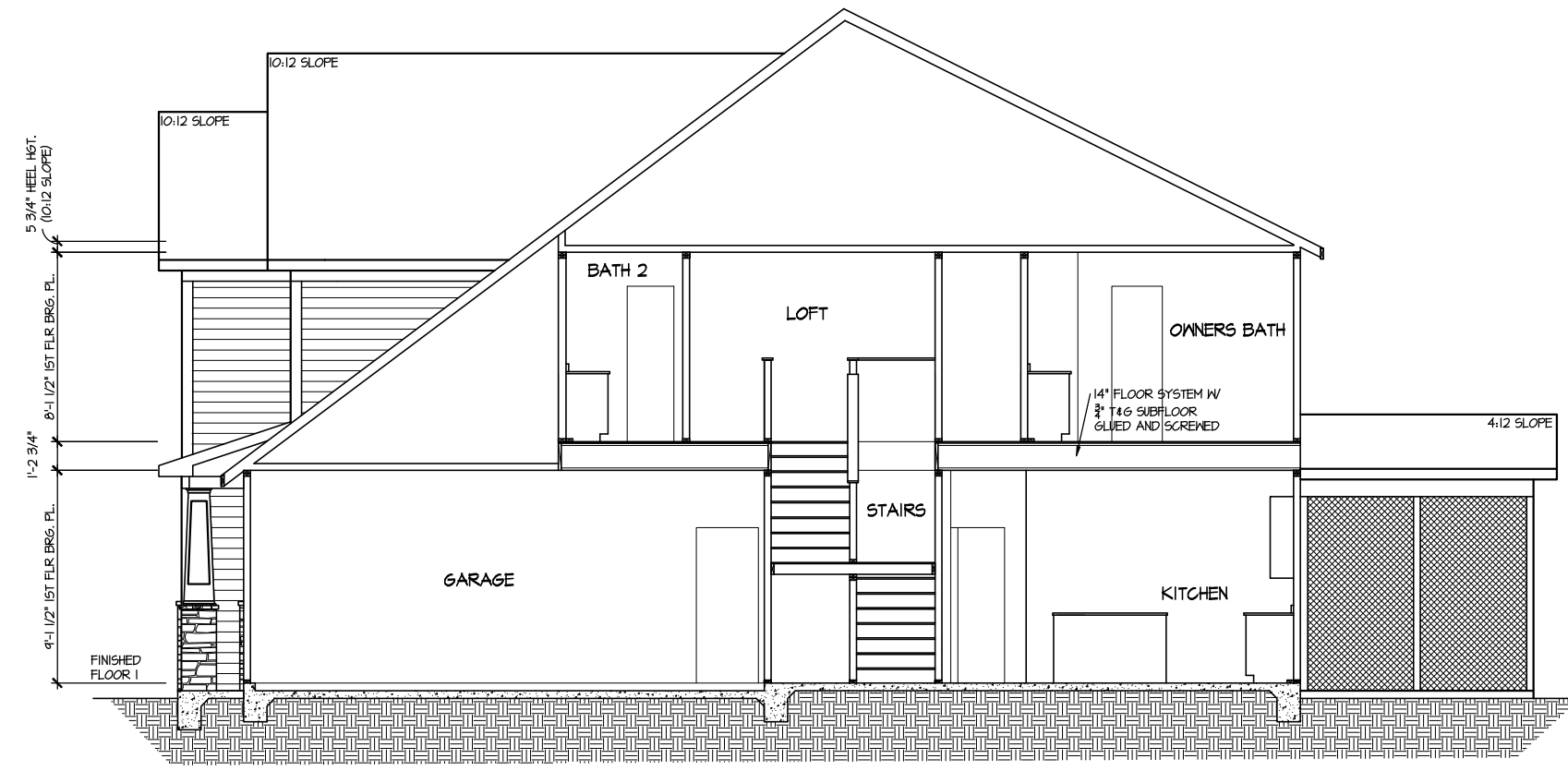


| | |
|---------------|-------------------|
| HOUSE NAME: | DRAYTON |
| DRAWING TITLE | SECOND FLOOR PLAN |

SHEET No.
 A3.2



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



SECTION 2
SCALE: 1/8" = 1'-0"

| MASTER PLAN INFORMATION | |
|-------------------------|------------|
| REVISION | DATE |
| 2 - RALE | 03-06-2019 |
| | |
| | |
| UPDATED DATE | 01-31-2023 |

| | |
|-----------|------------|
| DRAWN BY: | ITS |
| DATE: | 12/19/2023 |
| PLAN NO. | 2695 |



| | |
|---------------|------------------|
| HOUSE NAME: | DRAYTON |
| DRAWING TITLE | BUILDING SECTION |

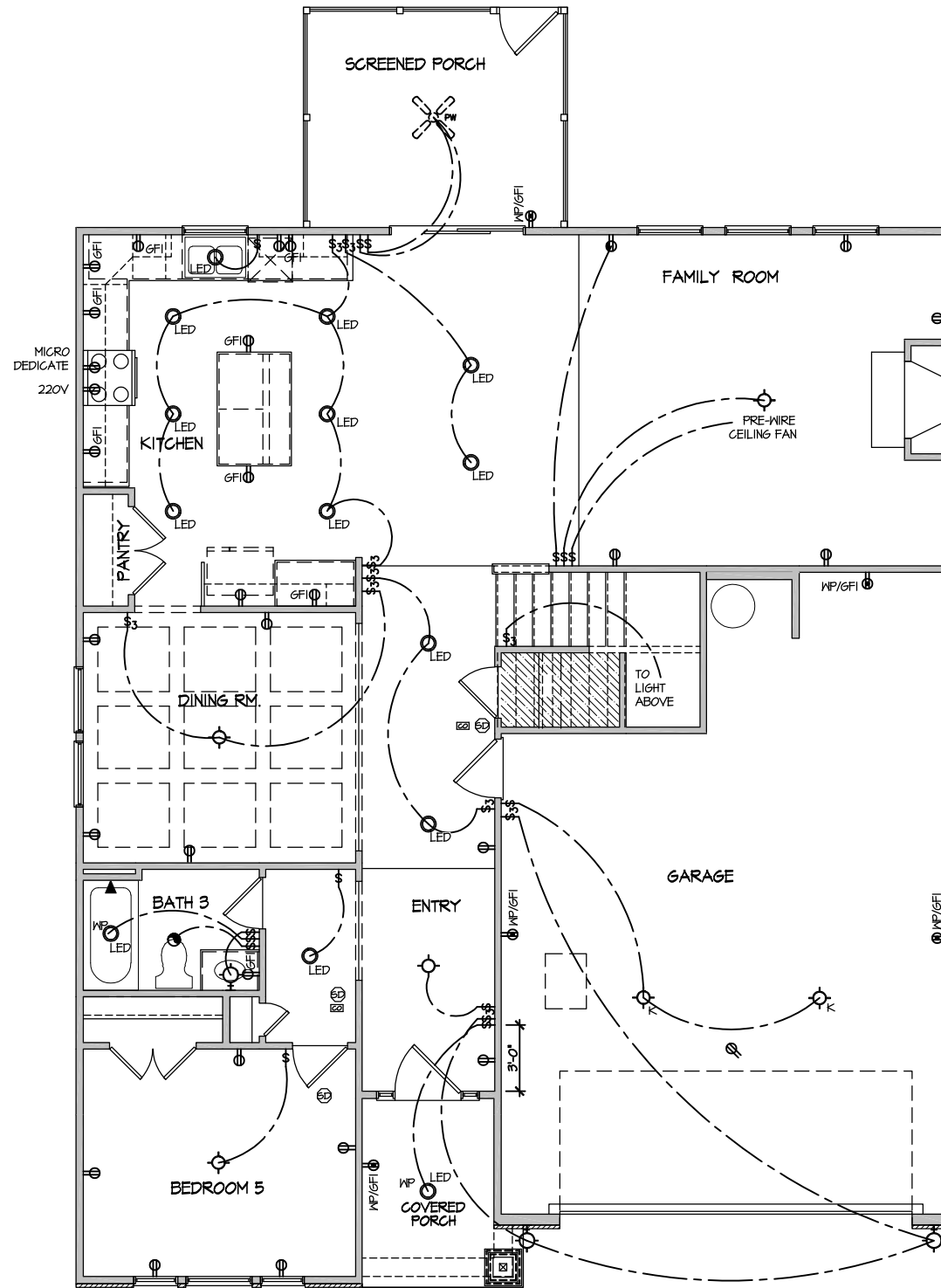
| | |
|-----------|------|
| SHEET No. | A4.1 |
|-----------|------|

FILE: Lot_00.0102.dwg DATE: 12/19/2023 9:36 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
- ⊕_{SD} SMOKE DETECTOR - WIRED IN SERIES
- ⊕_{EF} 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
- ⊕_P PULLCHAIN 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 | |
|-------------------------|------------|
| REVISION | DATE |
| 2 - RALE | 03-06-2019 |
| UPDATED DATE | 01-31-2023 |

| | |
|-----------|------------|
| DRAWN BY: | ITS |
| DATE: | 12/19/2023 |
| PLAN NO. | 2695 |



| | |
|---------------|------------------------|
| HOUSE NAME: | DRAYTON |
| DRAWING TITLE | FIRST FLOOR ELECTRICAL |

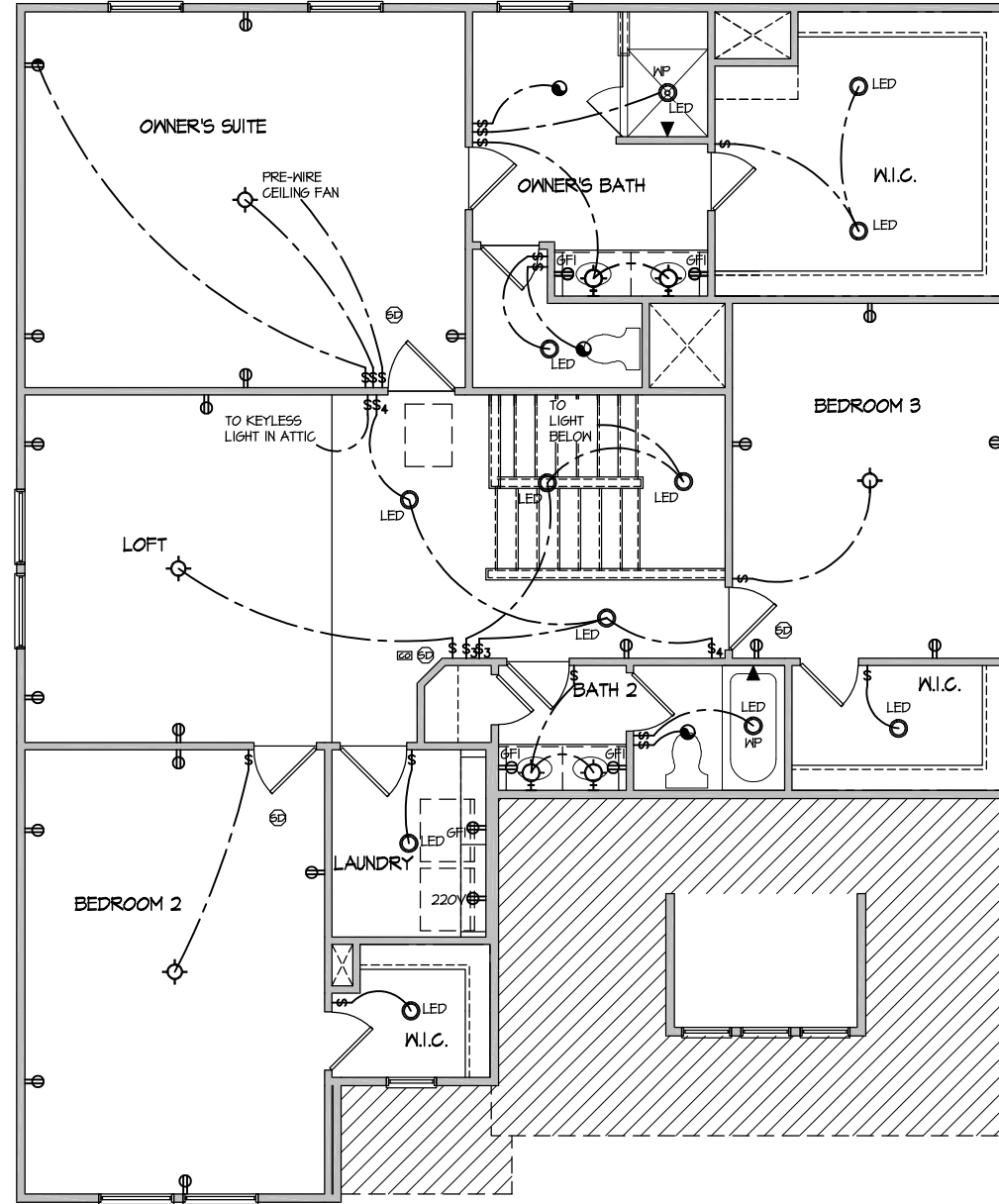
| | |
|-----------|------|
| SHEET No. | E.I. |
|-----------|------|

FILE: Lot 00.0102.dwg DATE: 12/19/2023 9:36 AM

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
- ⓈⓈ_{EF} EXHAUST FAN MOTOR
- ⓈⓈ_{CO} CO DETECTOR
- ⓈⓈ_{DC} DOOR CHIME
- ⓈⓈ_L LIGHT FIXTURE - WALL MOUNTED
- ⓈⓈ_C 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
SECOND FLOOR - ELEV. 4
 SCALE: 1/8" = 1'-0"

| MASTER PLAN INFORMATION | |
|-------------------------|------------|
| REVISION | DATE |
| 2 - RALE | 03-06-2019 |
| UPDATED DATE | 01-31-2023 |

DRAWN BY: ITS
 DATE: 12/19/2023
 PLAN NO. 2695

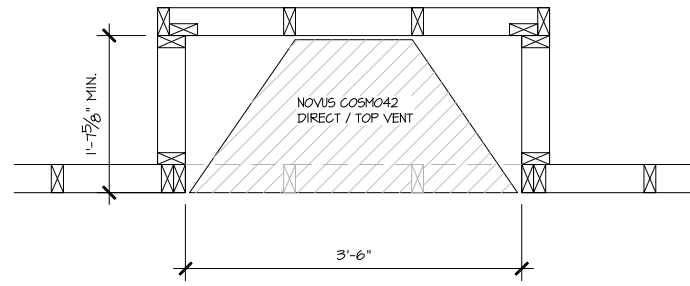


HOUSE NAME: DRAYTON
 DRAWING TITLE: SECOND FLOOR ELECTRICAL

SHEET No. E1.2

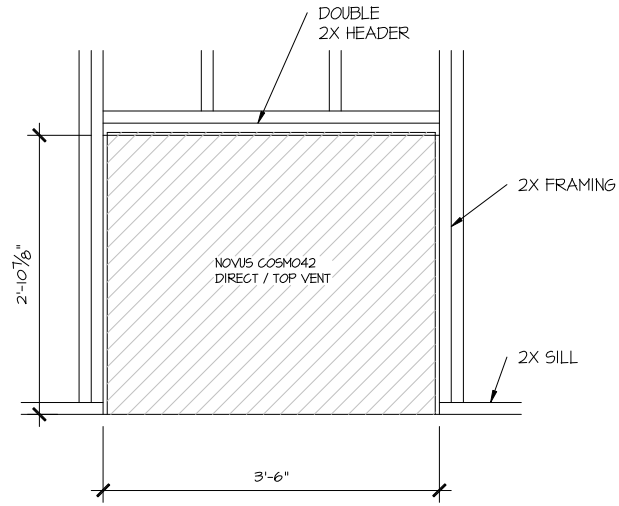
FILE: Lot_00.0102.dwg DATE: 12/19/2023 9:36 AM

ALL DIMENSIONS ARE TO FRAMING



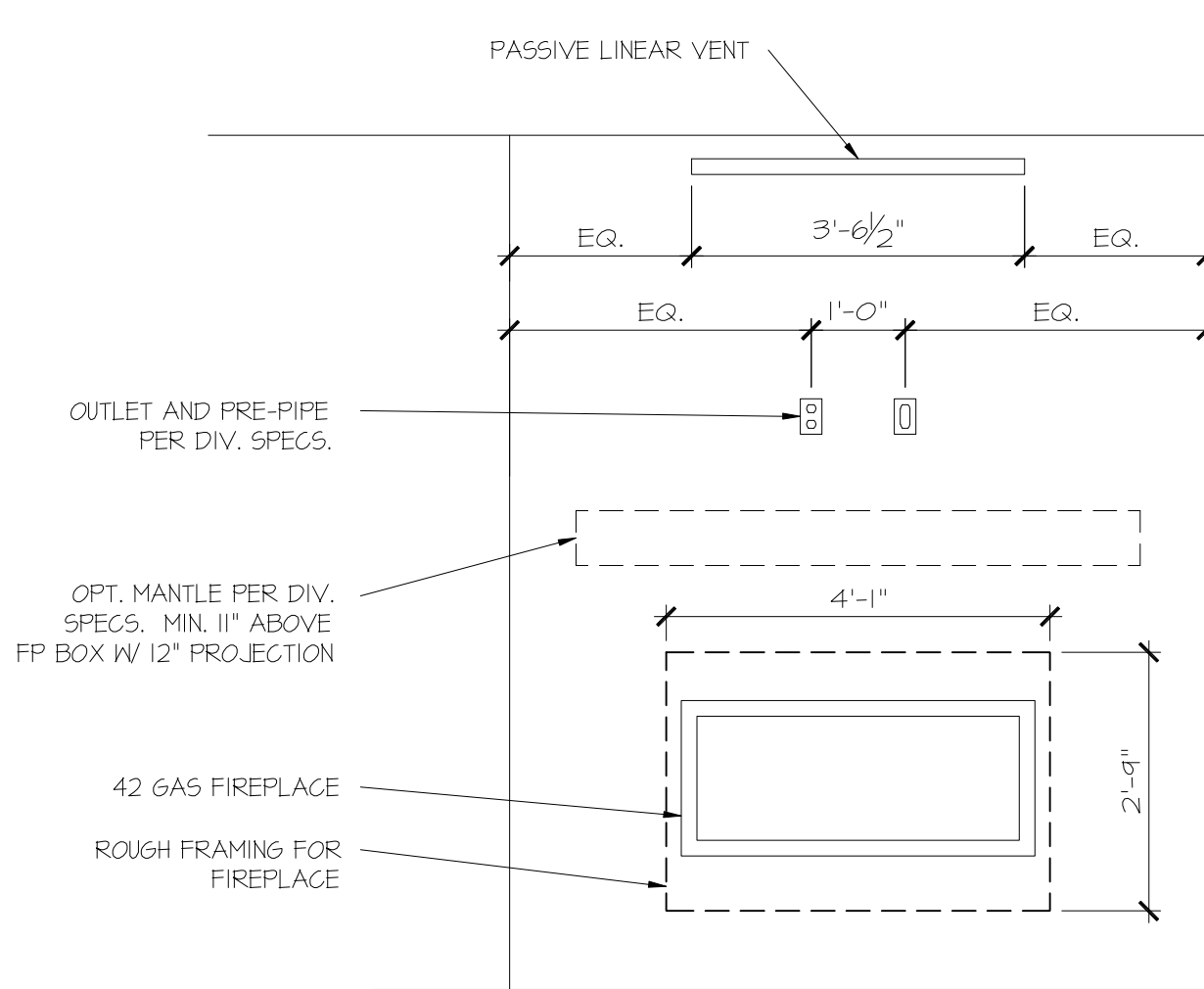
PARTIAL PLAN
NOVUS COSMO42

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



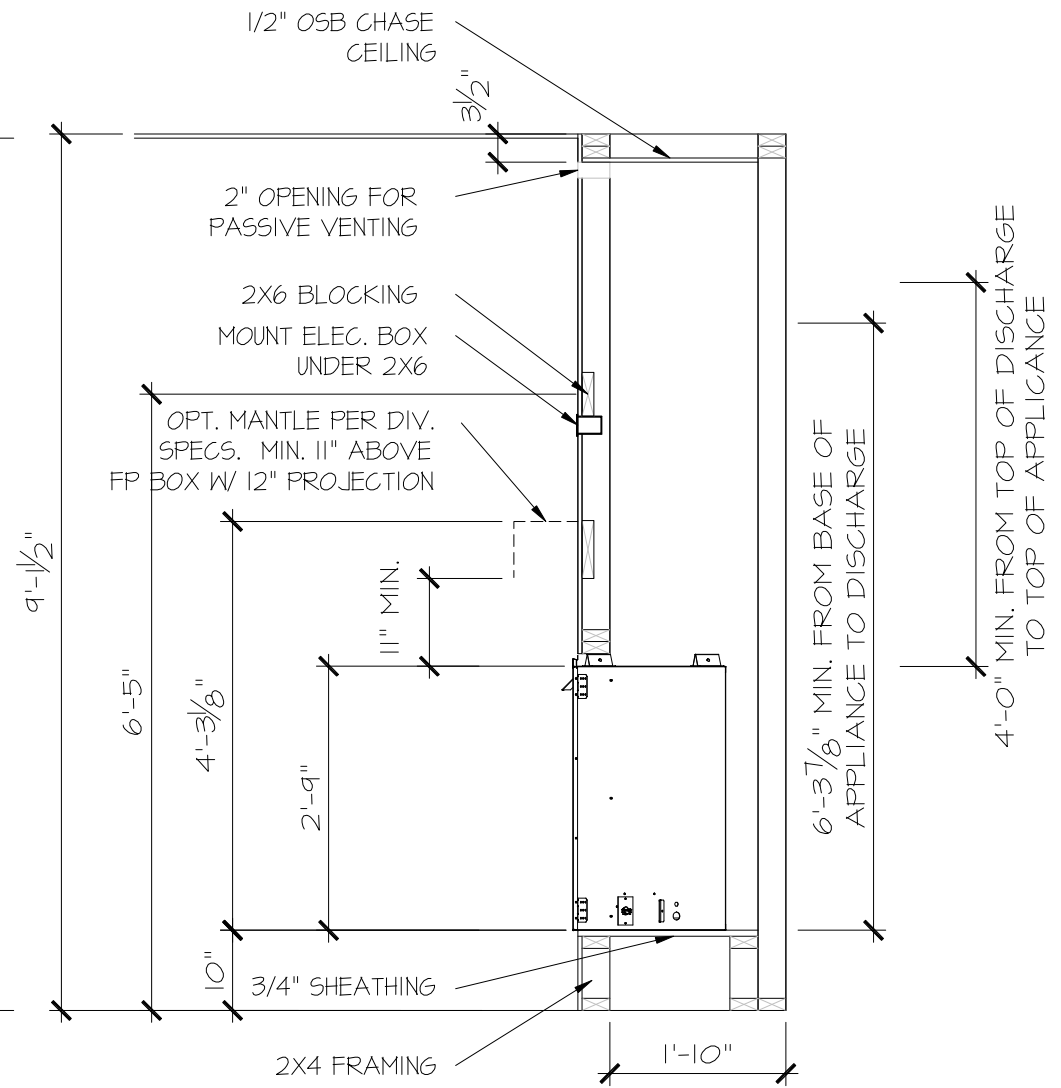
PARTIAL ELEVATION
NOVUS COSMO42

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



PARTIAL ELEVATION
NOVUS COSMO42

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



PARTIAL SECTION
NOVUS COSMO42

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

FILE: RALE FIREPLACE DETAILS 11-8-23.dwg DATE: 5/27/2022 10:35 AM

CONSULTANT LOGO

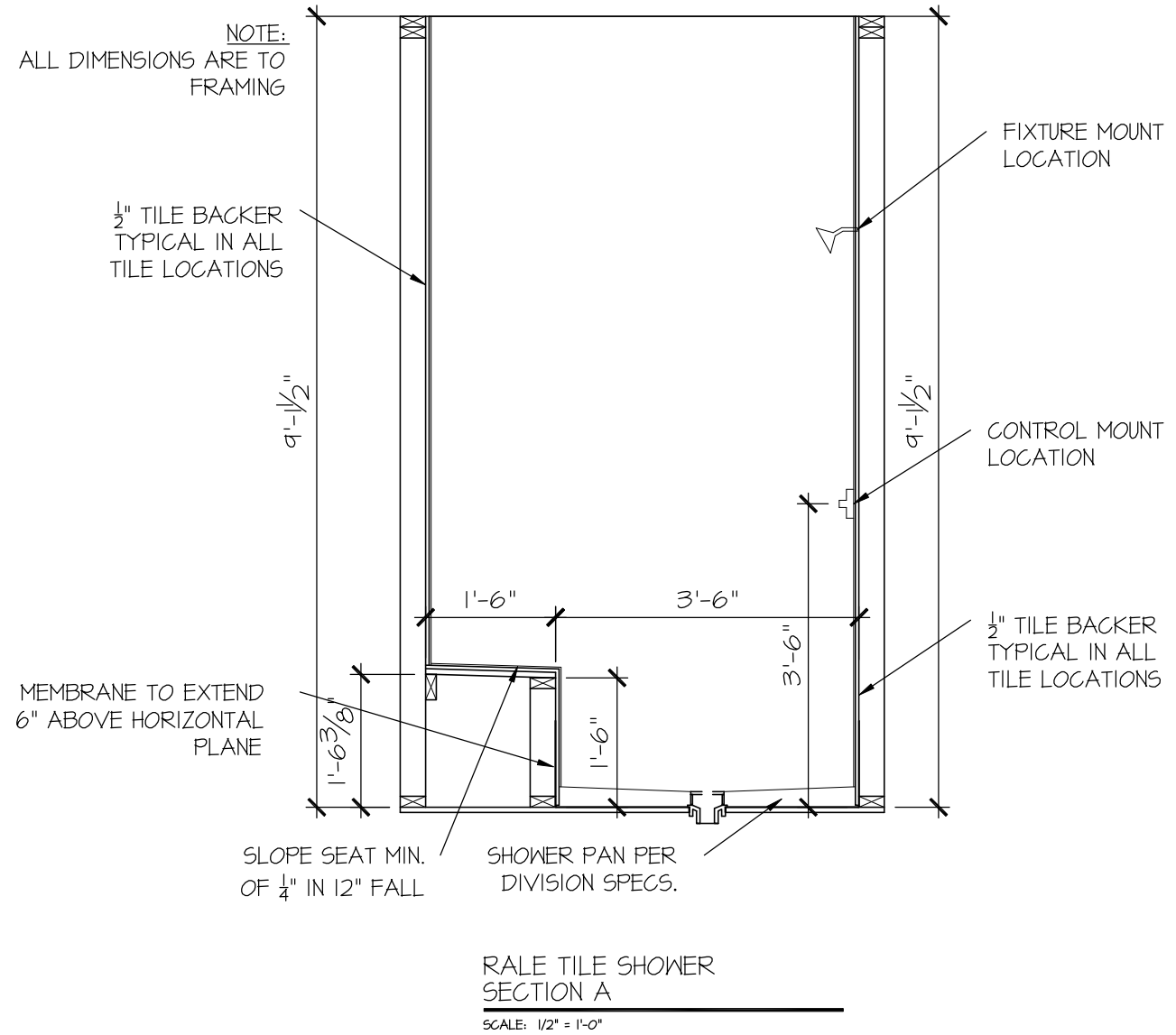
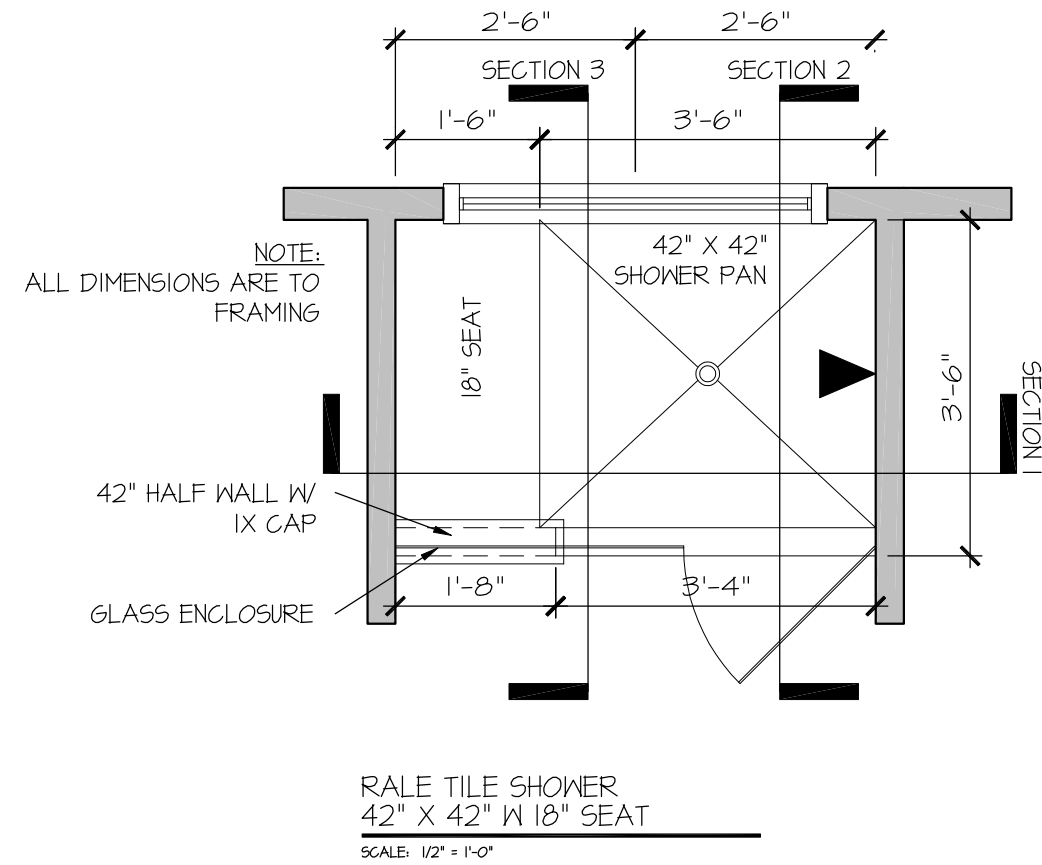
SEAL

| | |
|---------------|------------|
| DRAWN BY: | L. BEAVERS |
| DATE: | 11-8-23 |
| PLAN NO. | N/A |
| 11 X 17 SCALE | |
| 24 X 36 SCALE | |



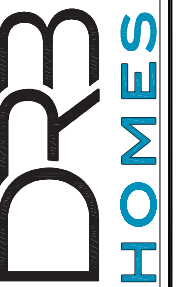
| | |
|---------------|--|
| HOUSE NAME: | RALE FIREPLACE DETAILS |
| DRAWING TITLE | RALE FIREPLACE DETAIL INTERIOR GAS UNITS |

SHEET No.
10



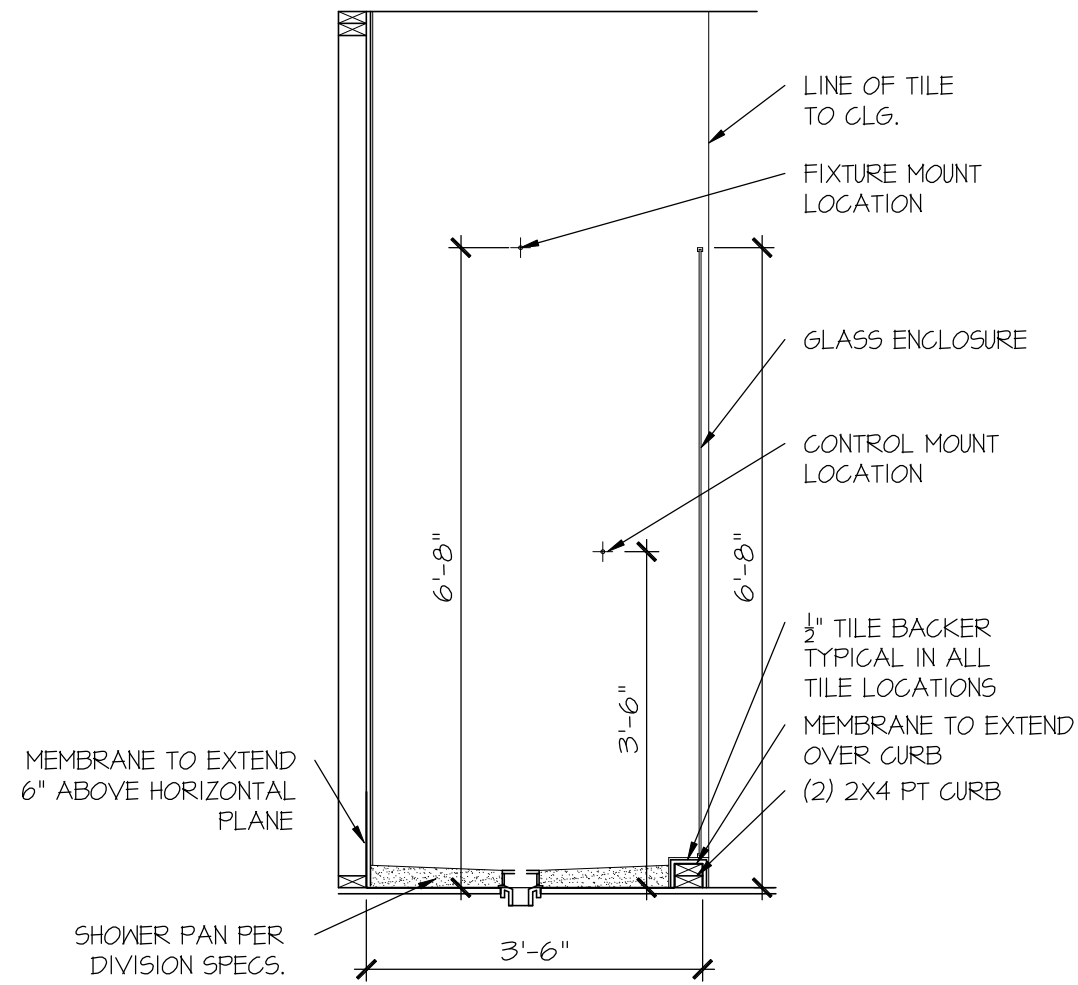
SEAL

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



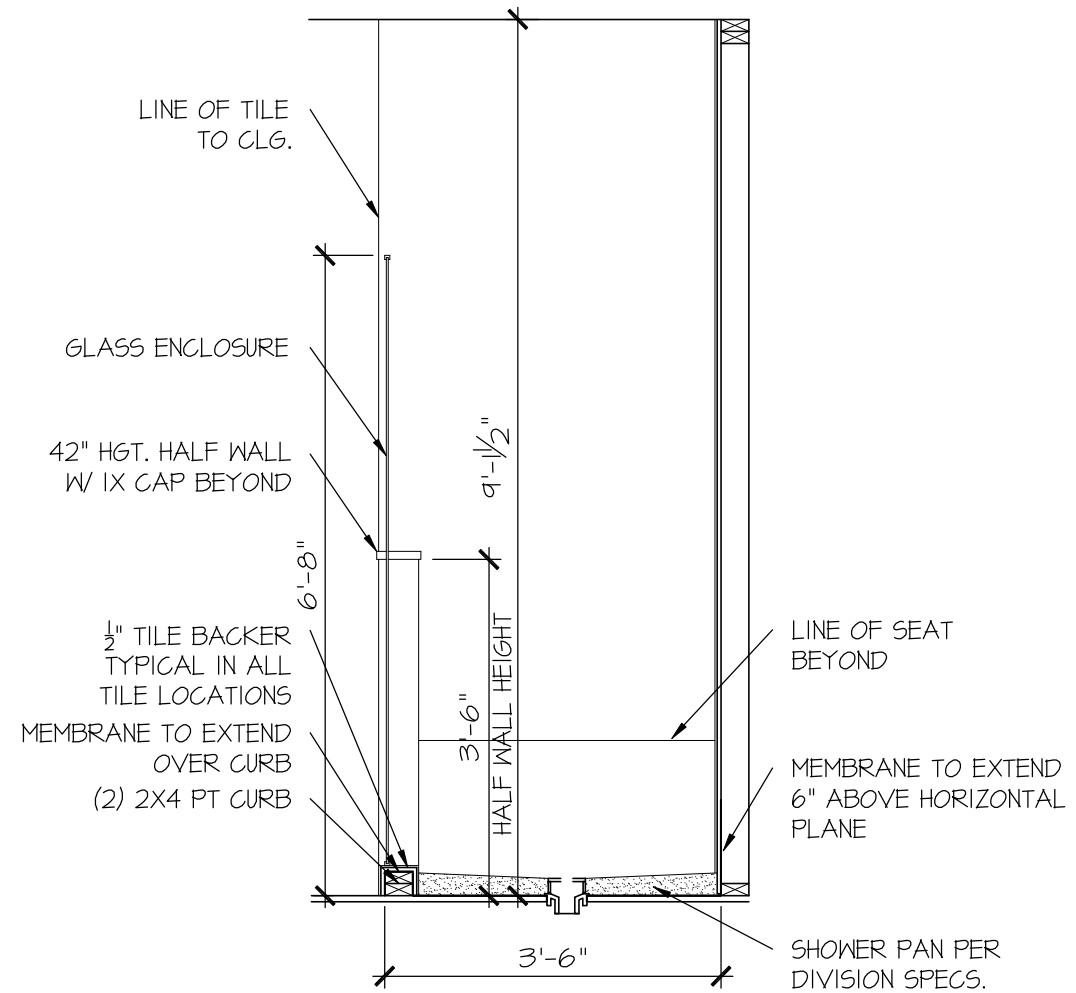
HOUSE NAME:
DRAWING TITLE
RALE TILE SHOWER DETAIL

SHEET No.
01.12



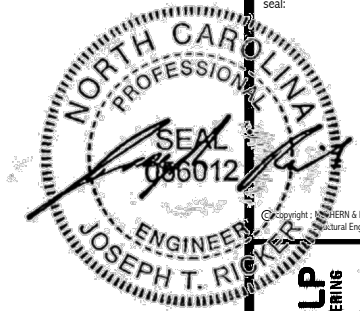
RALE TILE SHOWER SECTION B

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



RALE TILE SHOWER SECTION C

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



MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERING 300 Bannockburn Ave., Building 4 - Asheville, PA 18002 P: 717-948-0800 M: mulhern@mkulpe.com NC LICENSE #C-3825

M&K project number: 126-22076 project mgr: JTR drawn by: SJF issue date: 12-21-23 REVISIONS: date: initial:



STRUCTURAL NOTES FARM AT NEIL'S CREEK LOT 102 - DRAYTON 4 RALEIGH, NC

sheet: SO.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.
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. SFP OR SYP, "STUD" GRADE OR BETTER.
CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, UNO.:
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, 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 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 C90 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (Fm=1500 psi). MORTAR SHALL BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 & 530.1.
CMU FOUNDATION WALLS SHALL HAVE "DUR-O-HALL" HORIZONTAL JOINT REINFORCEMENT (OR EQUAL) - 4 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.

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 (1-JOISTS @ SOLID SAWN)
10 PSF T.C., 5 PSF B.C. (TRUSSES)
(ADDL. 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(1) FOR ALL CONNECTIONS, TYP. UNO.
EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SFP 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 (SPF) OR SOUTHERN PINE #2 (SP) 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=1.55x10^6 psi
"LVL" - Fb=2600 psi; Fv=285 psi; E=2.0x10^6 psi
"PSL" - Fb=2400 psi; Fv=240 psi; E=2.0x10^6 psi
M&K SHALL BE FULLY INDEMNIFIED FOR ANY AND ALL ISSUES RESULTING FROM OR RELATED TO ANY BUILDING COMPONENT IF THE OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO M&K FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR 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.

FLOOR FRAMING

- 1-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES MARBLE FLOORS - CONTACT M&K FOR MARBLE FLOOR DESIGNS)
AT 1-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 H2.5T CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H2.5T CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, UNO.
ERECT AND INSTALL ROOF TRUSSES PER WTCGA & TP1'S BCSI 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-JOISTS)
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

Table with 2 columns: SYMBOL, SPECIFICATION. Rows include HD-1 SIMPSON HTT4 HOLD-DOWN, HD-2 SIMPSON MSTC66 STRAP TIE, HD-3 SIMPSON 5THD44/14RJ HOLD-DOWN.

ALTERNATIVE TO 55TB24 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" OF EDGE OF FOUNDATION.

LEGEND

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

Table with 3 columns: SPAN, 2x4 NON-BEARING PARTITION WALL, 2x6 NON-BEARING PARTITION WALL. Rows include UP TO 3'-0", UP TO 6'-0", UP TO 8'-0".

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

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
120 MPH WIND IN 2018 NCSCBC: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 R301.1.3 OF THE 2018 NCSCBC: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 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 NCSCBC:RC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5.4 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, 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 (1/8" 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, 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

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)

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

MEANS & METHODS NOTES

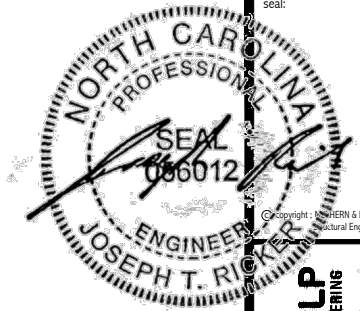
THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUY'S, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO: FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

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".

ALL LINTELS:
SHALL SUPPORT 2 3/8" - 3 1/2" VENEER W/ 40 psi MAXIMUM HEIGHT.
16" SHALL HAVE 4" MIN. BEARING
16" SHALL HAVE 8" MIN. BEARING
16" SHALL NOT BE FASTENED BACK TO HEADER.
16" SHALL BE FASTENED BACK TO WOOD HEADERS IN WALL @ 48" O.C. W/ 1/2" DIA. x 9 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 LESS VERTICAL.
WHEN SUPPORTING VENEER < 9" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3/4" WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR PORTAL JOINT FINISHING.
SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS.
FOR QUEEN VENEER USE L4x6x4.
FOR 3 1/2" VENEER ONLY: SEE PLAN FOR VENEER SUPPORT IF VENEER < 3 1/2" THICK.



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bismarck Ave, Building 4 - Asheville, PA 18002
P 716-946-8001 • mulhern+kulp.com
NC LICENSE #C-3825

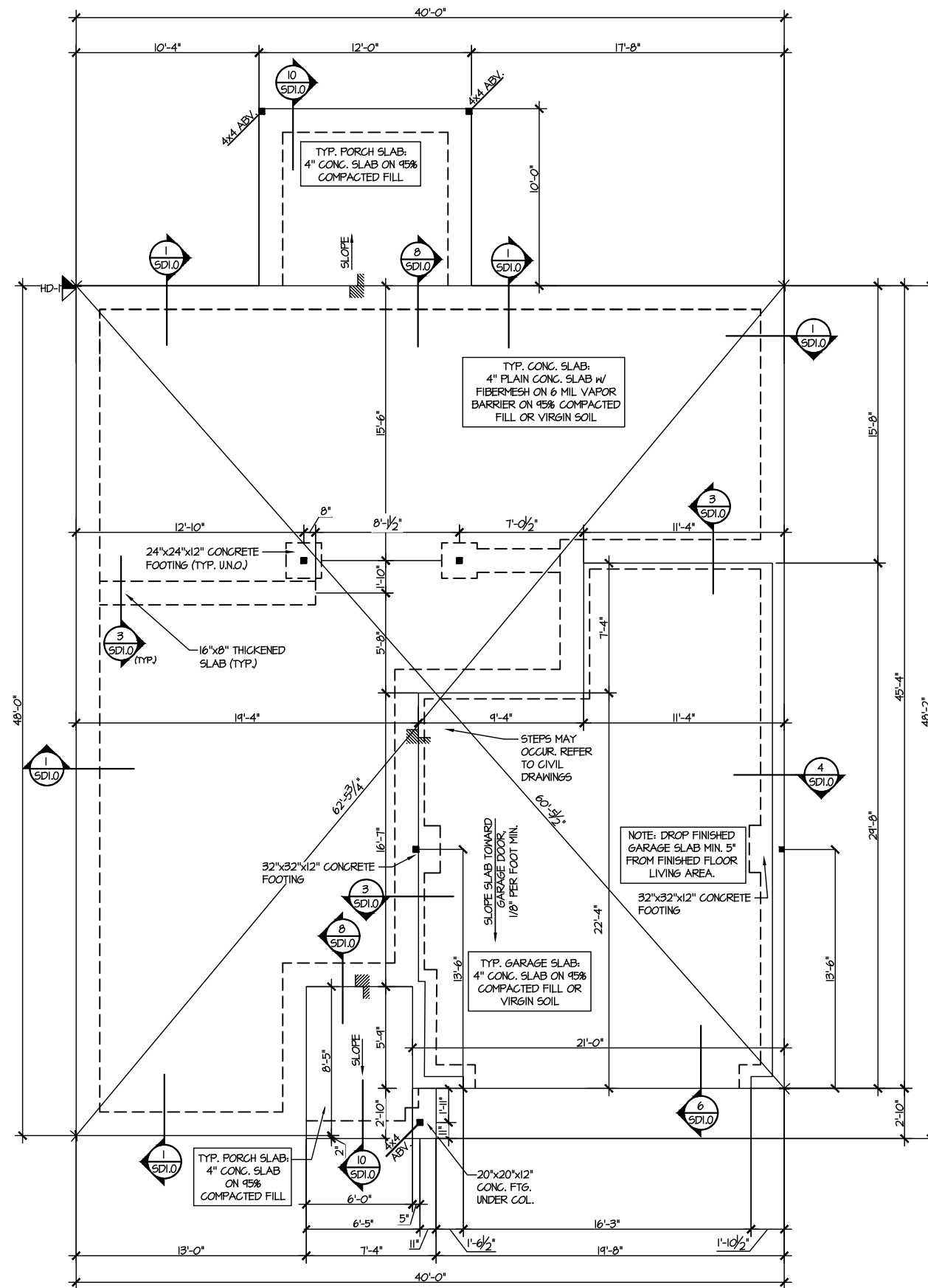
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:



FOUNDATION PLANS
FARM AT NEILS CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

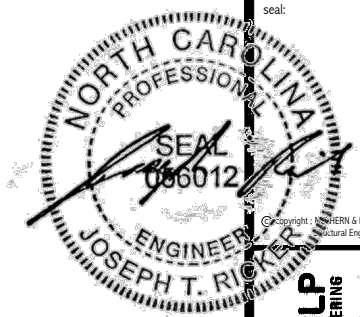
sheet:
S1.0



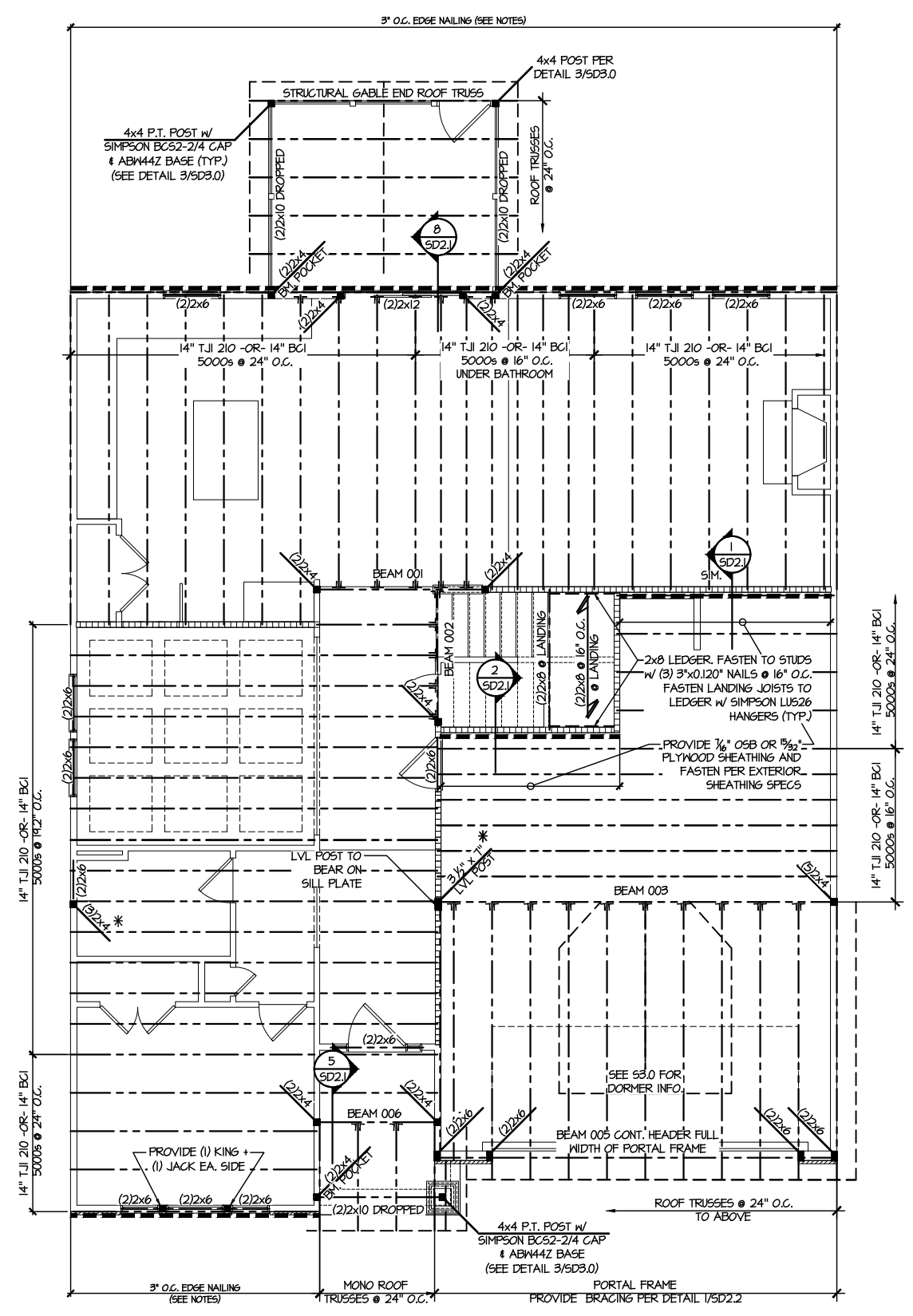
| LEGEND | |
|--------|--|
| | INTERIOR BEARING WALL |
| | BEARING WALL ABOVE |
| | BEAM / HEADER |
| | INDICATES SHEAR WALL & EXTENT |
| | EXTENT OF OVERFRAMING |
| | ∟L METAL HANGER |
| | * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE. |
| | ▶ INDICATES HOLD-DOWN OR STRAP.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

REFER TO SO.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

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



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bannockburn Ave, Building 4 - Ardur, PA 19002
P 215-948-0801 • mulhern+kulp.com
NC LICENSE #C-3825



ENGINEERED BEAM MATERIAL SCHEDULE

| BEAM NUMBER | LVL OPTION | PSL OPTION | LSL OPTION | FLITCH OPTION | STEEL OPTION |
|-------------|--------------------------------------|------------------------|---------------------------|---|--------------|
| 001 | (2)3/4"x14" - F | 3/4"x14" - F | (2)3/4"x14" - F | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - FB | W12x14 - F |
| 002 | (2)3/4"x14" - F | 3/4"x14" - F | (2)3/4"x14" - F | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - FB | W12x14 - F |
| 003 | (3)3/4"x10" - FB or (2)3/4"x20" - FB | 3/4"x10" - FB | N/A | (3)2x12 + (2)1/2"x11/4" STEEL FLITCH PLATES - FB | W12x26 - F |
| 004 | (2)3/4"x14" - F | 3/4"x14" - F | (2)3/4"x14" - F | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - FB | W12x14 - F |
| 005 | (2)3/4"x11 1/2" - H cont. | 3/4"x11 1/2" - H cont. | (2)3/4"x11 1/2" - H cont. | (3)2x12 + (2)1/2"x11/4" STEEL FLITCH PLATES - H cont. | N/A |
| 005A | (3)3/4"x14" - H cont. | 3/4"x14" - H cont. | N/A | (3)2x12 + (2)1/2"x11/4" STEEL FLITCH PLATES - H cont. | N/A |
| 006 | (1)3/4"x14" - F | 3/4"x14" - F | (2)3/4"x14" - F | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - FB | W12x14 - F |
| 007 | (2)3/4"x11 1/2" - D | 3/4"x11 1/2" - D | (2)3/4"x11 1/2" - D | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - D | W10x12 - D |
| 008 | (2)3/4"x16" - H cont. | 3/4"x16" - H cont. | (3)3/4"x16" - H cont. | (3)2x12 + (2)1/2"x11/4" STEEL FLITCH PLATES - H cont. | N/A |
| 009 | (2)3/4"x9" - F | 3/4"x9" - F | (2)3/4"x9" - F | (2)2x10 + (1)1/2"x9" STEEL FLITCH PLATES - F | W8x10 - F |
| 010 | (2)3/4"x14" - F | 3/4"x14" - F | (2)3/4"x14" - F | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - FB | W12x14 - F |
| 011 | (2)3/4"x14" - F | 3/4"x14" - F | (2)3/4"x14" - F | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - FB | W12x14 - F |
| 012 | (2)3/4"x11 1/2" - D | 3/4"x11 1/2" - D | (2)3/4"x11 1/2" - D | (2)2x12 + (1)1/2"x11/4" STEEL FLITCH PLATES - D | W10x12 - D |

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

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
- [Symbol] METAL HANGER
- [Symbol] INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- [Symbol] INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

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

M&K project number:
126-22076

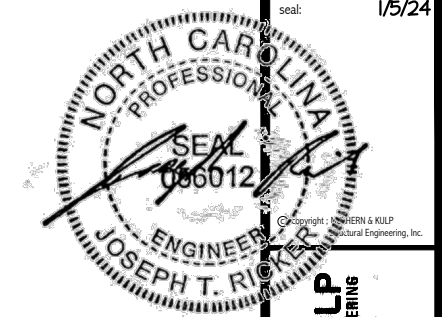
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:



FLOOR FRAMING PLANS
FARM AT NEILS CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

sheet:
S2.0



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Beardslee Ave, Building 4 - Asheville, PA 18002
P 716-946-8001 • mulhernkulp.com
NC LICENSE #C-3825

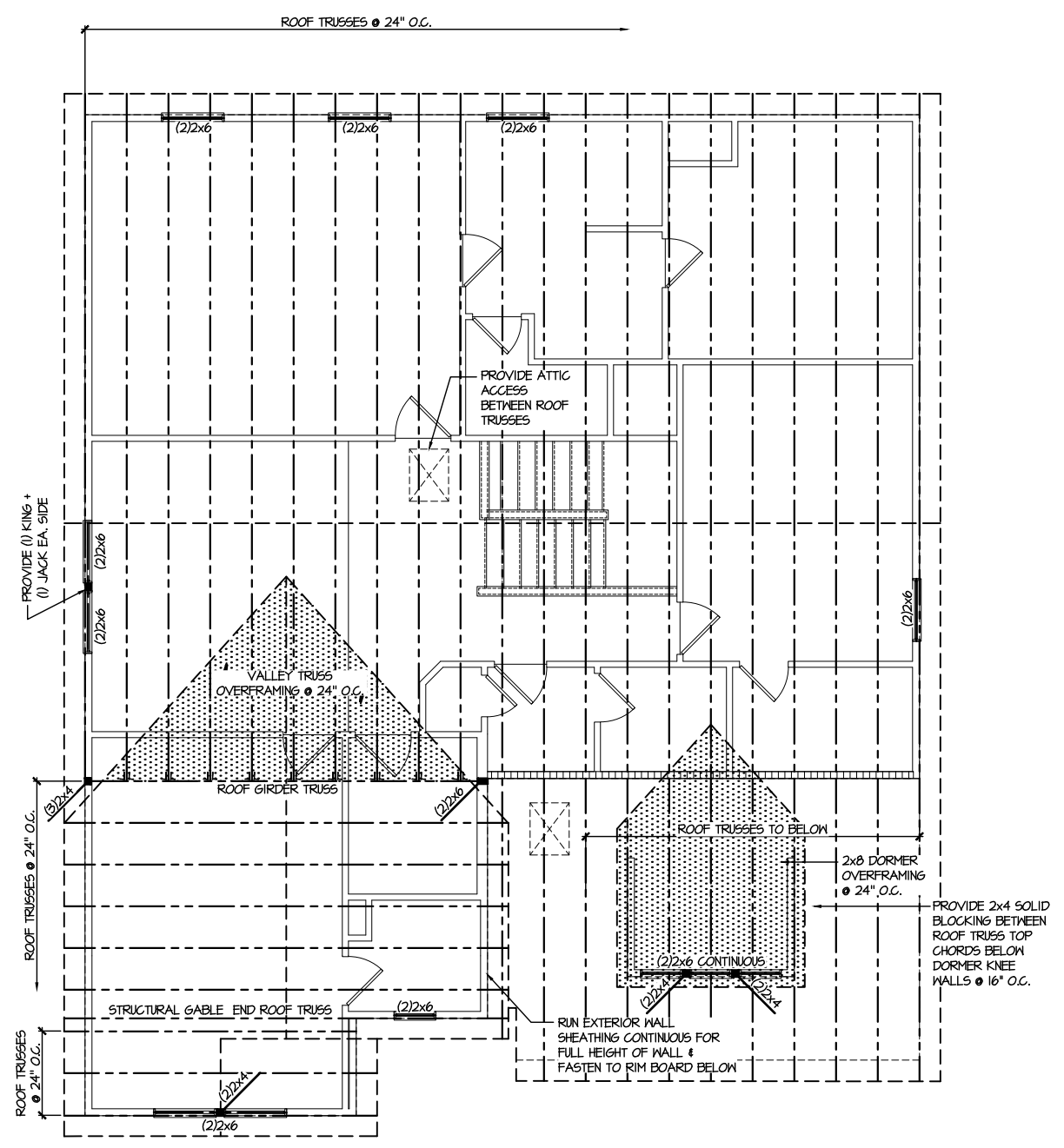
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:



ROOF FRAMING PLANS
FARM AT NEILS CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

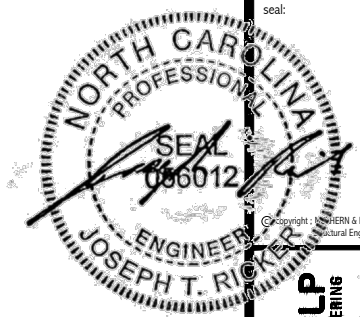
sheet:
S3.0



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 SO.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bismarck Ave, Building 4 - Asheville, PA 18002
P 718-948-8800 - mulhern+kulp.com
NC LICENSE #C-3825

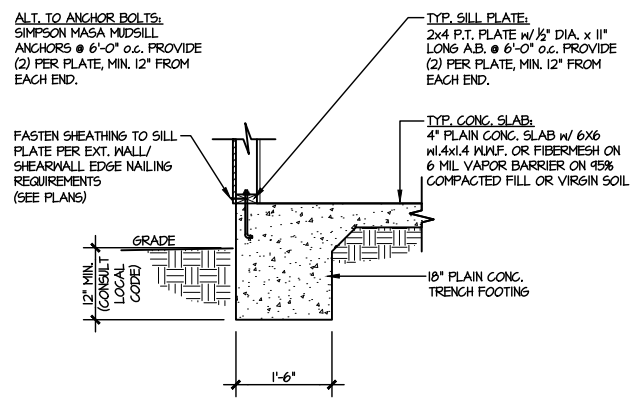
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:

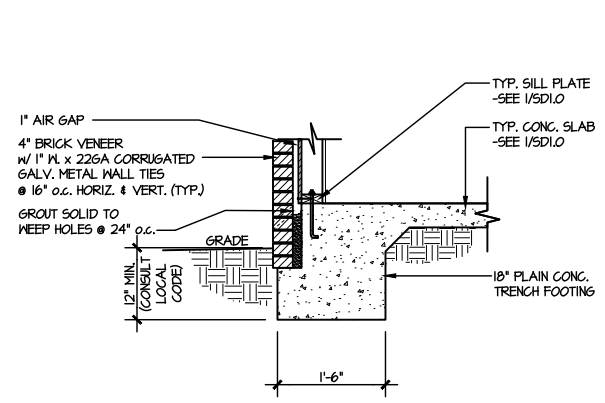


FOUNDATION DETAILS
FARM AT NEIL'S CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

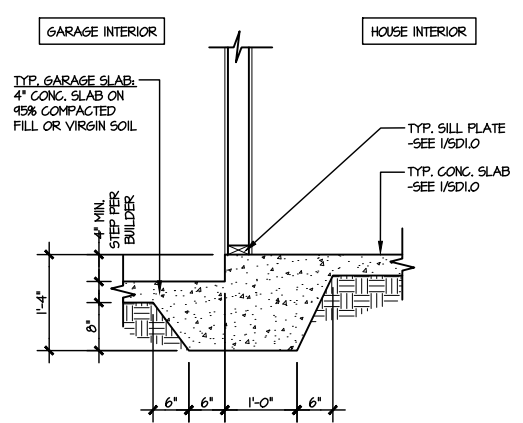
sheet:
SD1.0



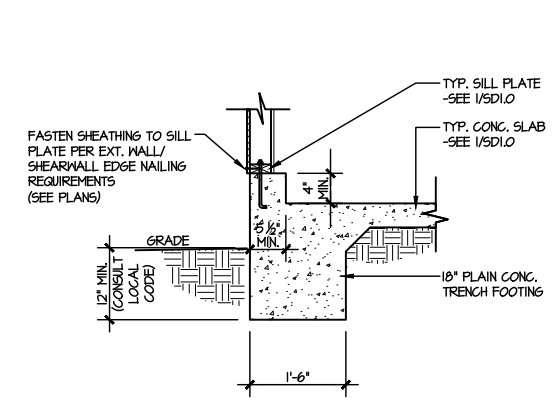
1 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



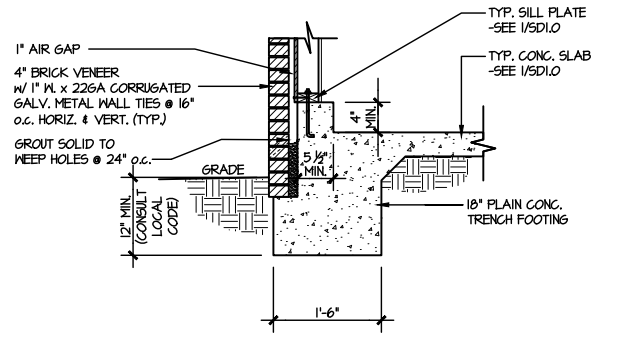
2 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



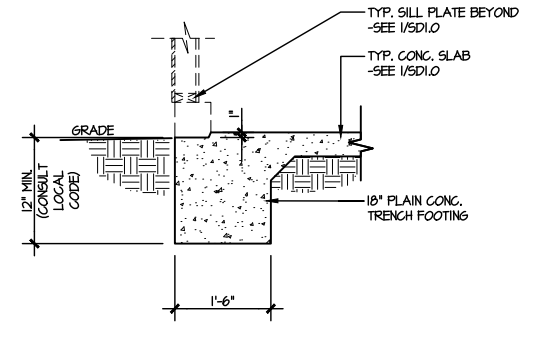
3 TYPICAL MONOLITHIC INTERIOR GARAGE FOOTING
SCALE: 3/8"=1'-0"



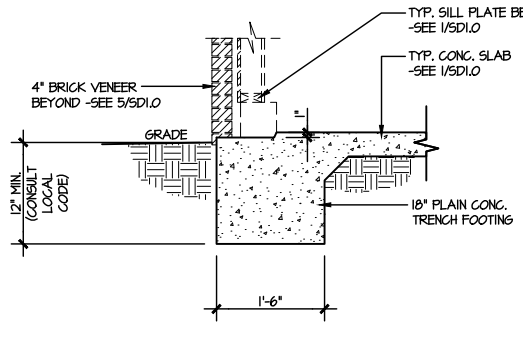
4 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



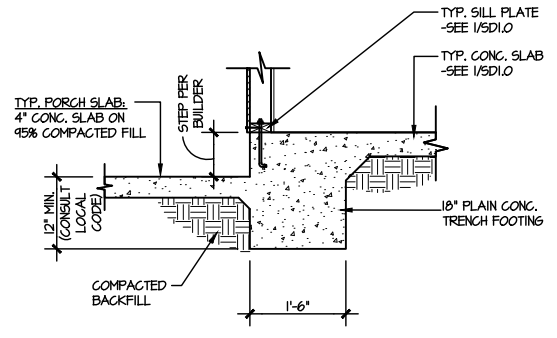
5 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



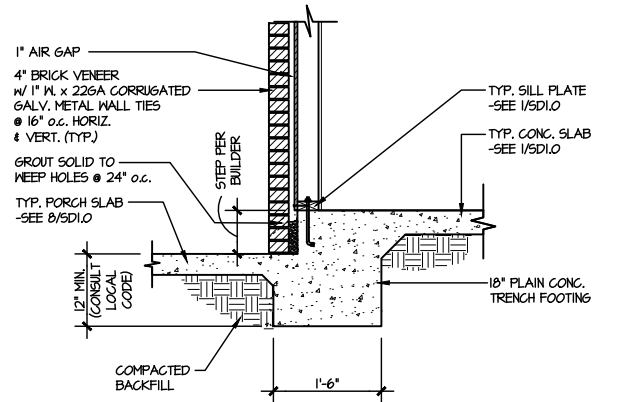
6 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0"



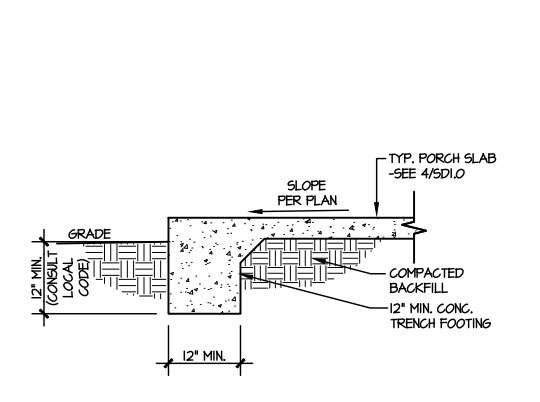
7 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



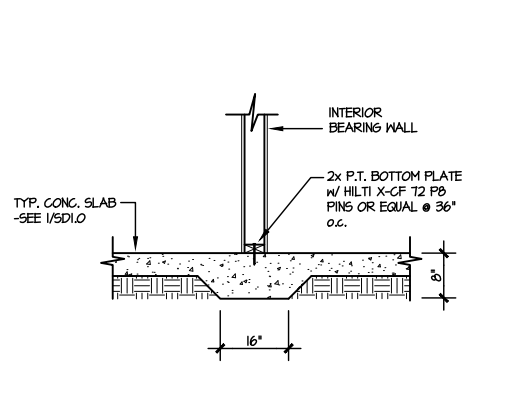
8 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO
SCALE: 3/8"=1'-0"



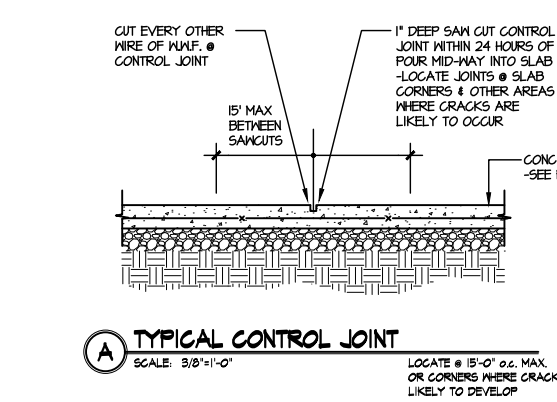
9 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO
SCALE: 3/8"=1'-0" W/ BRICK VENEER



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



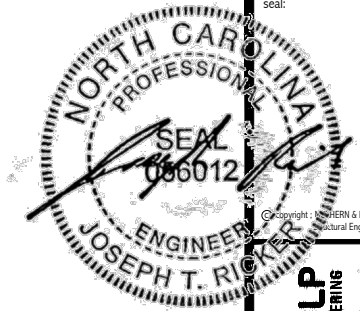
11 TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL
SCALE: 3/8"=1'-0"



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

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.



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bainsville Ave, Building 4 - Asheville, PA 18002
P 716-946-8881 - mulhern+kulp.com
NC LICENSE #C-3825

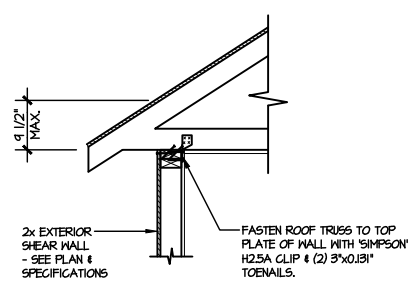
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

| REVISIONS: | |
|------------|----------|
| date: | initial: |
| | |
| | |

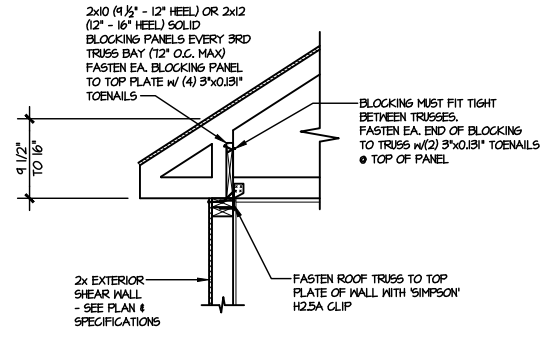
DRB
HOMES

FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

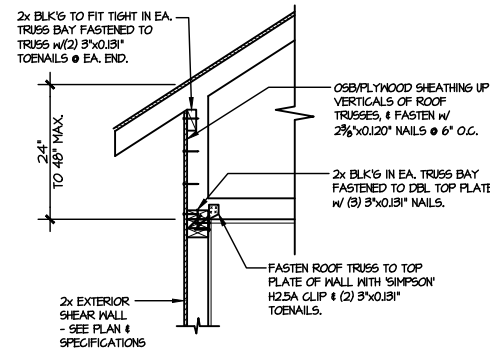
sheet:
SD2.0



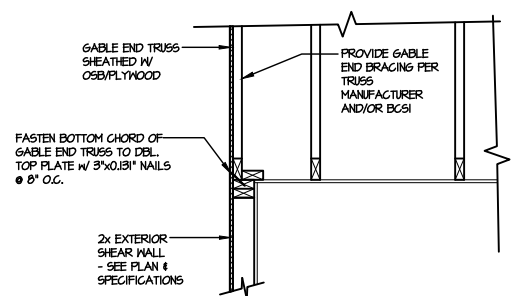
A1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT LESS THAN 9 1/2"
NO BLOCKING REQ'D



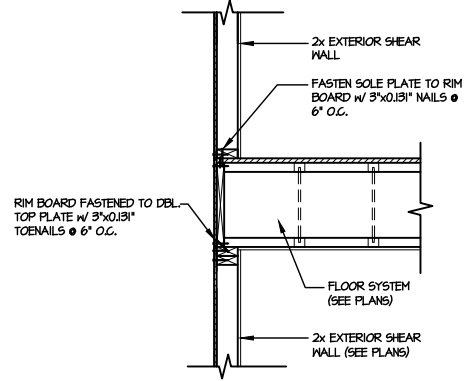
A2 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT BETWEEN 9 1/2" - 16"
BLOCKING REQ'D



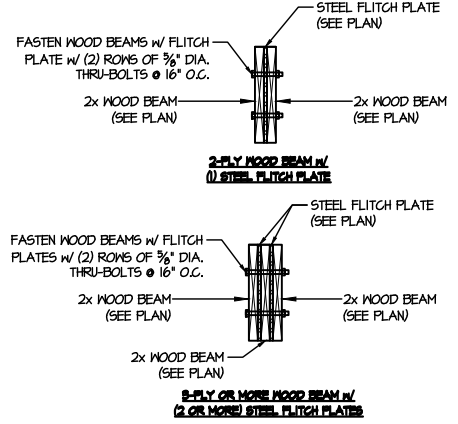
A3 TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8"=1'-0"
HEEL HEIGHT UP TO 48" MAX.



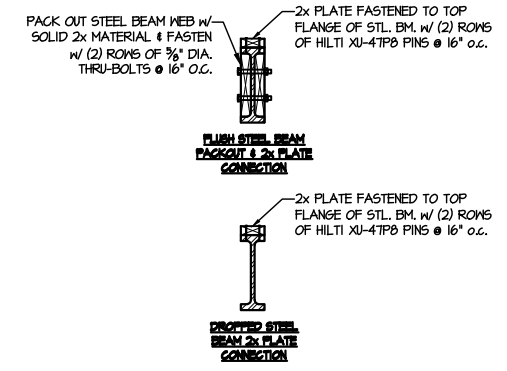
B TYPICAL GABLE END DETAIL
SCALE: 3/8"=1'-0"



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



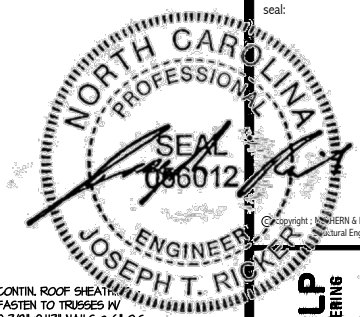
D TYPICAL FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



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

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.



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bainsville Ave., Building 4 - Asheville, PA 18002
P 718-948-0801 - mulhern+kulp.com
NC LICENSE #C-3825

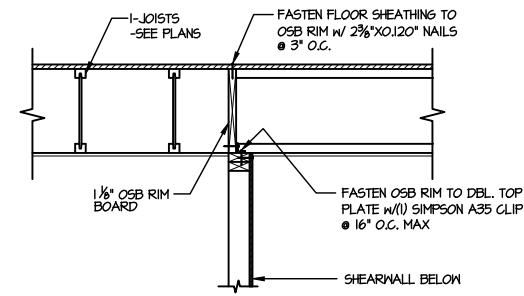
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:

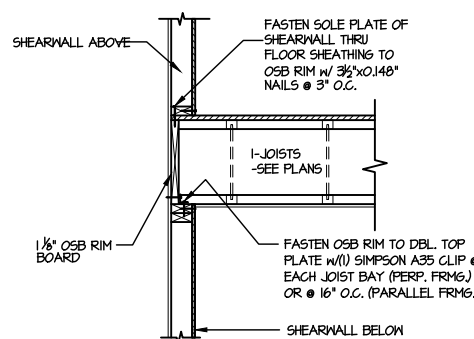


FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

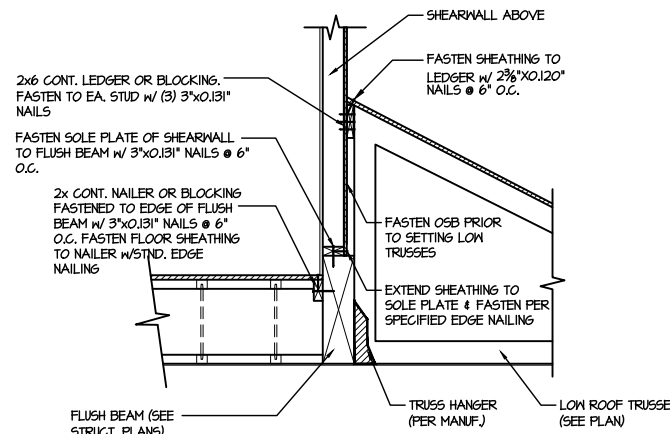
sheet:
SD2.1A



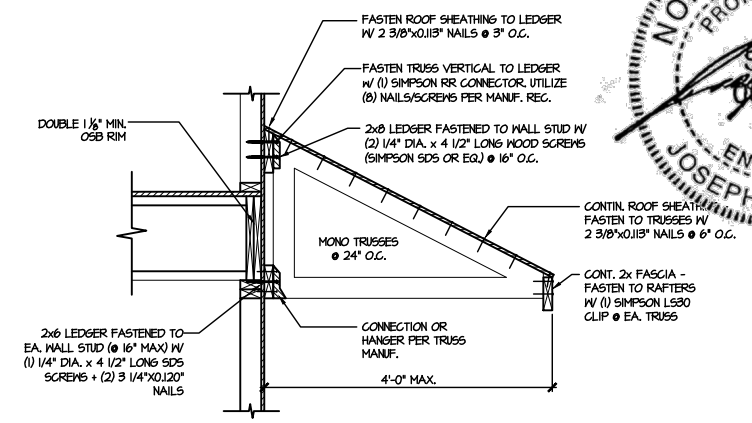
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0" PARALLEL FRAMING



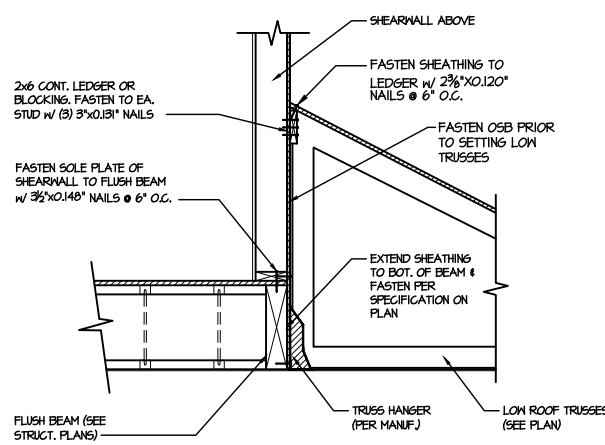
2 SHEAR TRANSFER DETAIL @ INT. SHEARWALL ABOVE & BELOW
SCALE: 3/4"=1'-0" EDGE OF FRAMING



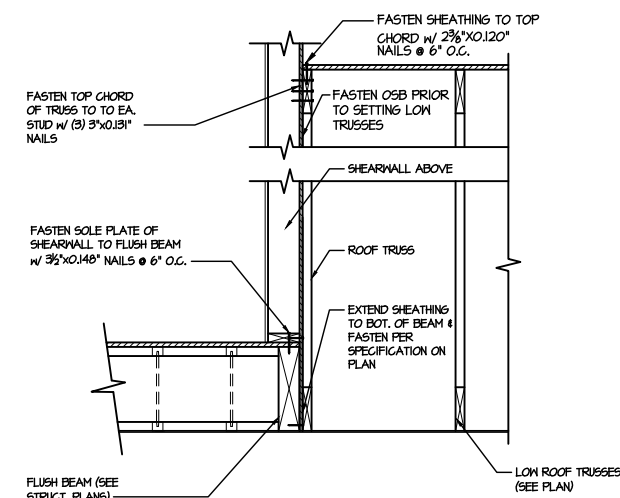
3 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



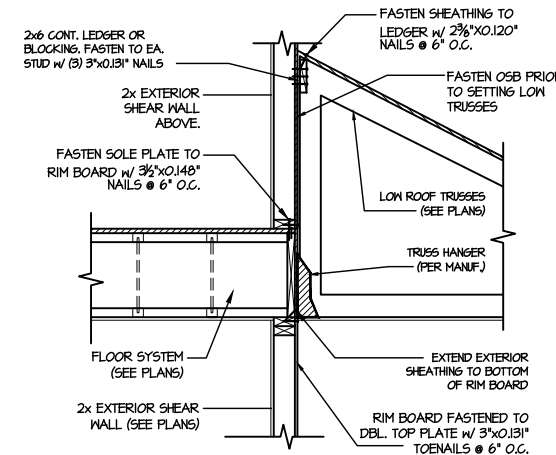
4 DETAIL @ SHED ROOF
SCALE: 3/8"=1'-0"



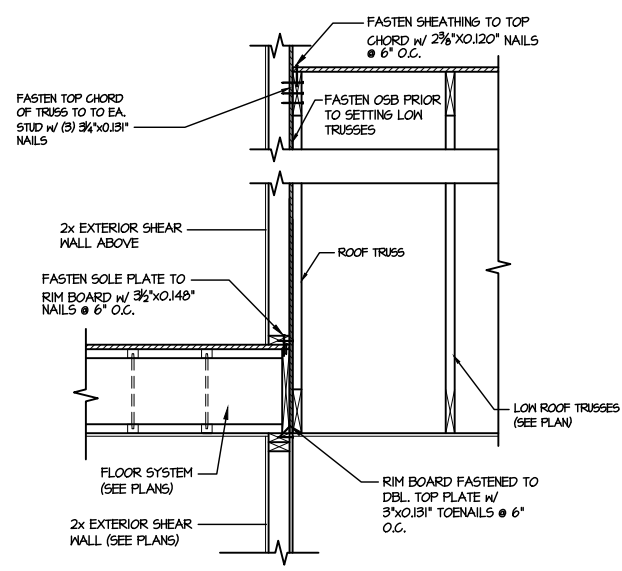
5 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



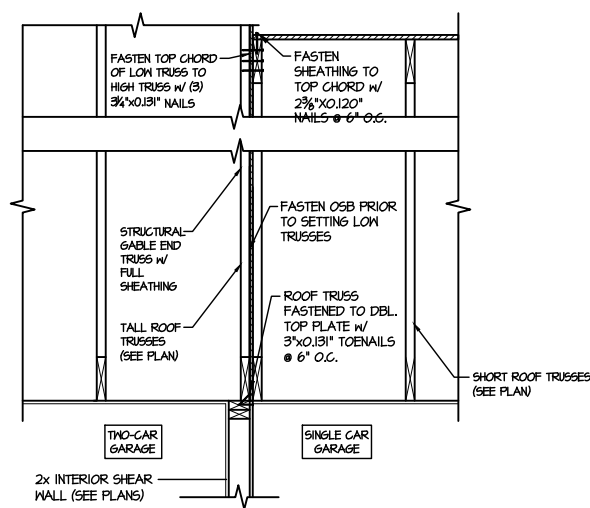
6 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



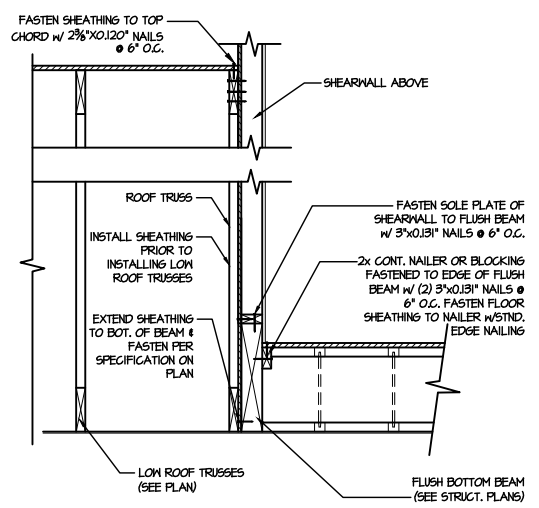
7 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



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



9 TYPICAL SHEAR TRANSFER DETAIL BETWEEN GARAGE BAYS
SCALE: 3/4"=1'-0"

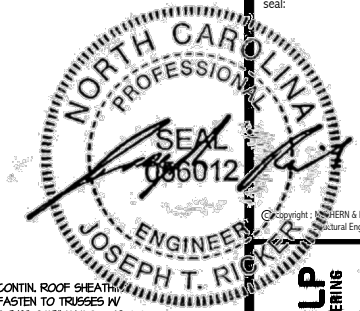


13 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"

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.

FILE: RLH - Neil's Creek - Lot 102 - Structural DATE: 1/5/2024 12:42 PM



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bannockburn Ave., Building 4 - Asheville, PA 18002
P 715-948-8881 - mulhern+kulp.com
NC LICENSE #C-3825

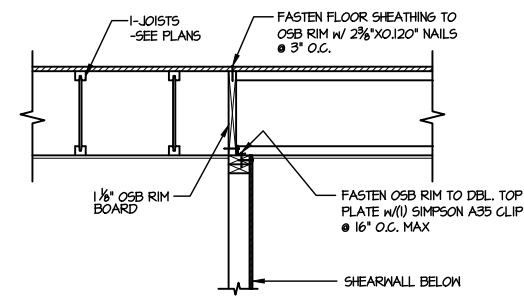
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:

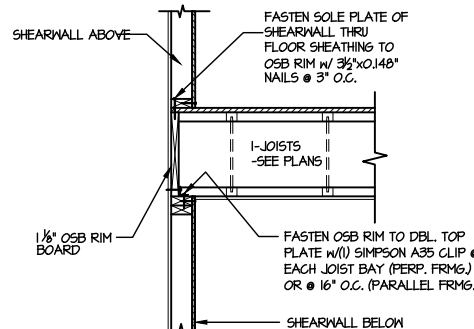
DRB
HOMES

FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

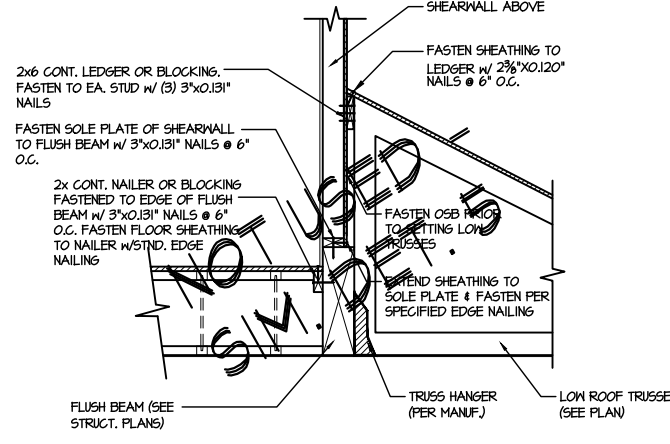
sheet:
SD2.1B



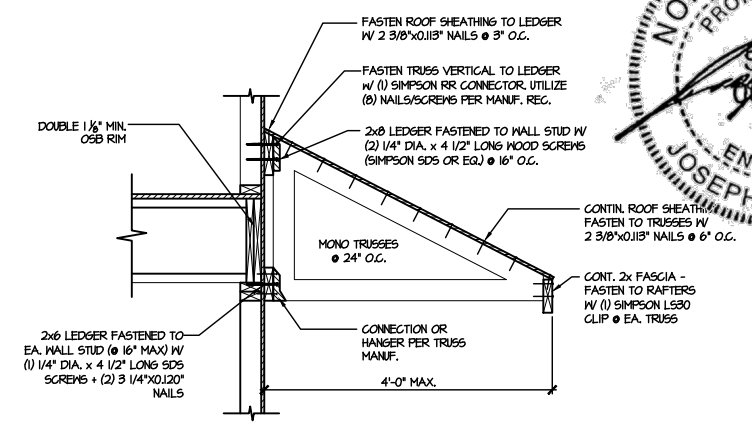
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0" PARALLEL FRAMING



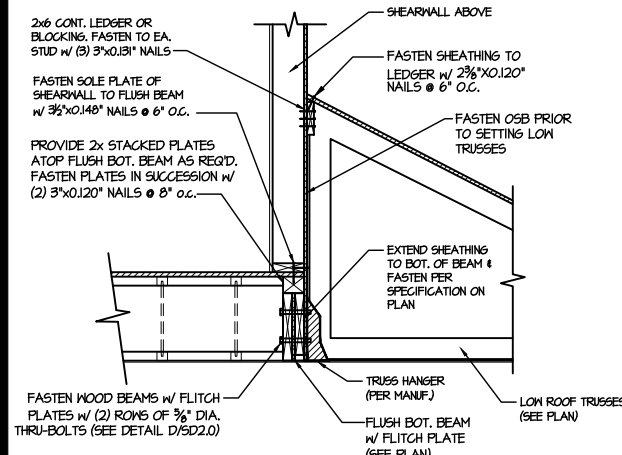
2 SHEAR TRANSFER DETAIL @ INT. SHEARWALL ABOVE & BELOW
SCALE: 3/4"=1'-0" EDGE OF FRAMING



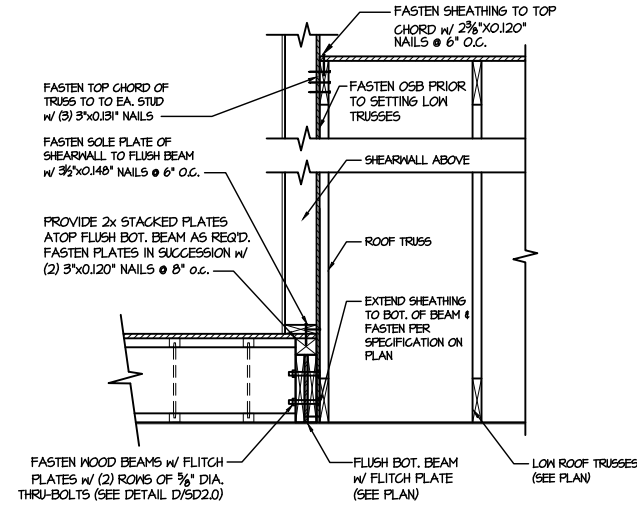
3 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



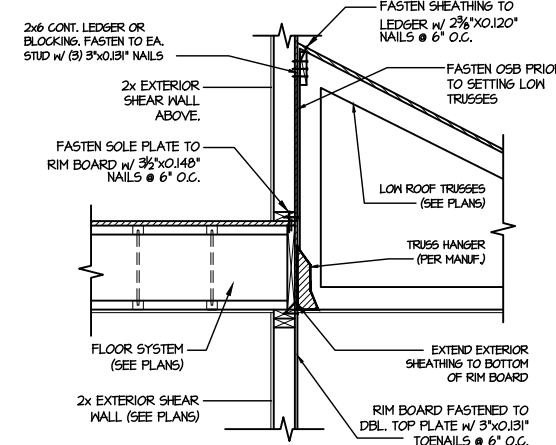
4 DETAIL @ SHED ROOF
SCALE: 3/8"=1'-0"



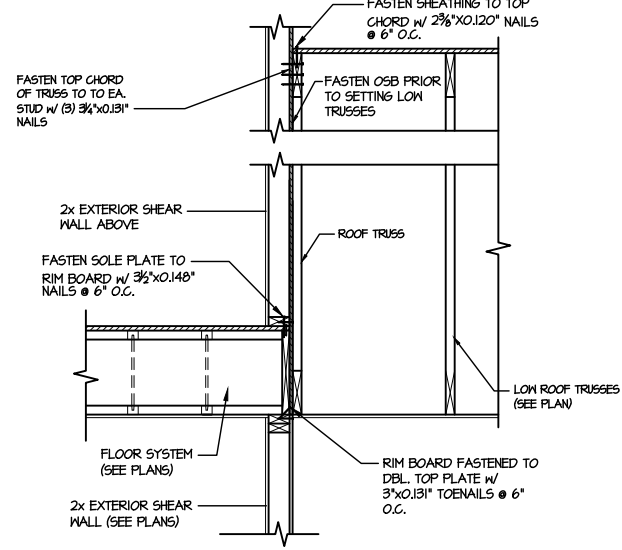
5 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



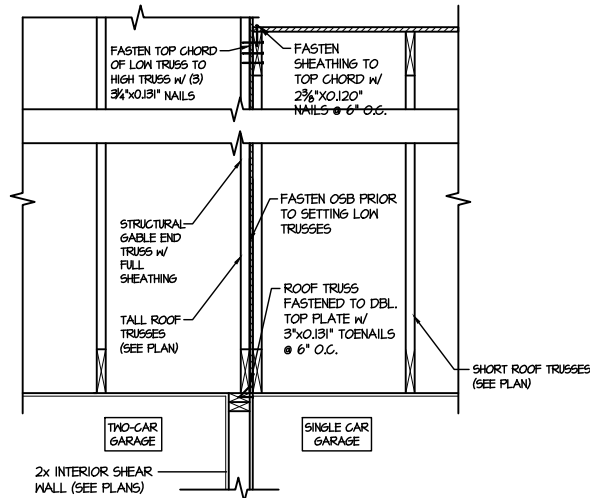
6 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



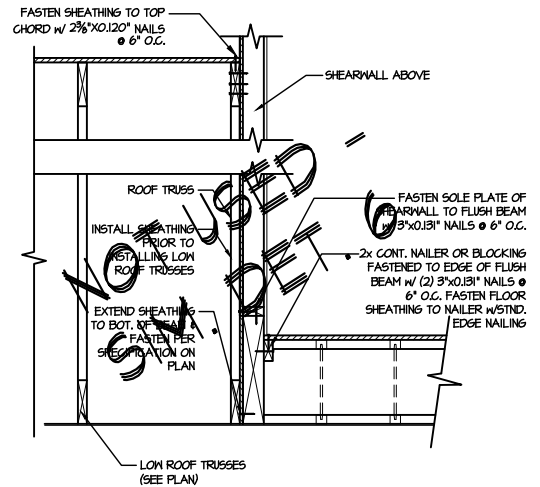
7 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



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



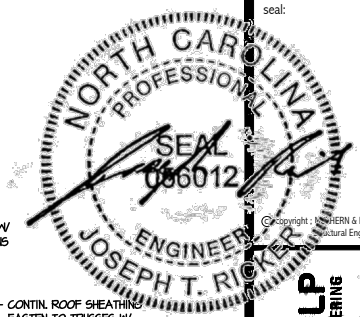
9 TYPICAL SHEAR TRANSFER DETAIL BETWEEN GARAGE BAYS
SCALE: 3/4"=1'-0"



13 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=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.

FILE: RLH - Neil's Creek - Lot 102 - Structural DATE: 1/5/2024 12:42 PM



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bannockburn Ave. Building 4 - Asheville, PA 18002
P 717-698-8801 - mulhern+kulp.com
NC LICENSE #C-3825

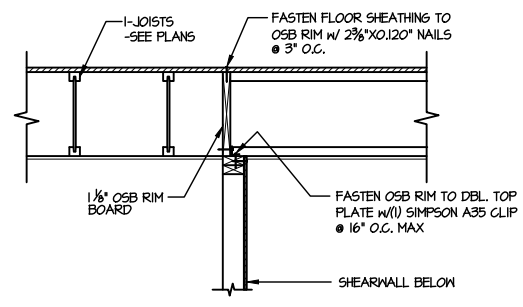
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:

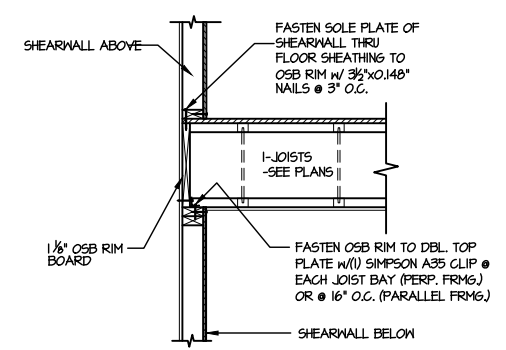
DRB HOMES

FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

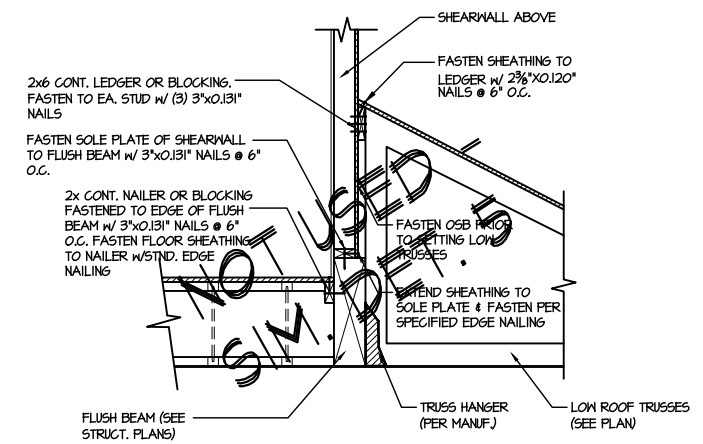
sheet:
SD2.1C



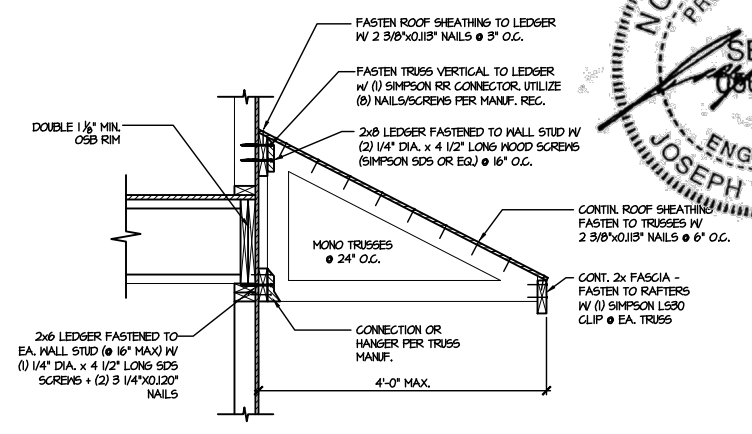
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0" PARALLEL FRAMING



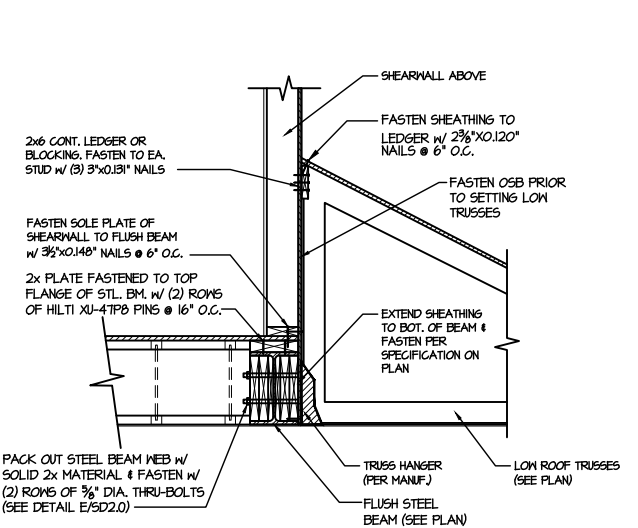
2 SHEAR TRANSFER DETAIL @ INT. SHEARWALL ABOVE & BELOW
SCALE: 3/4"=1'-0" EDGE OF FRAMING



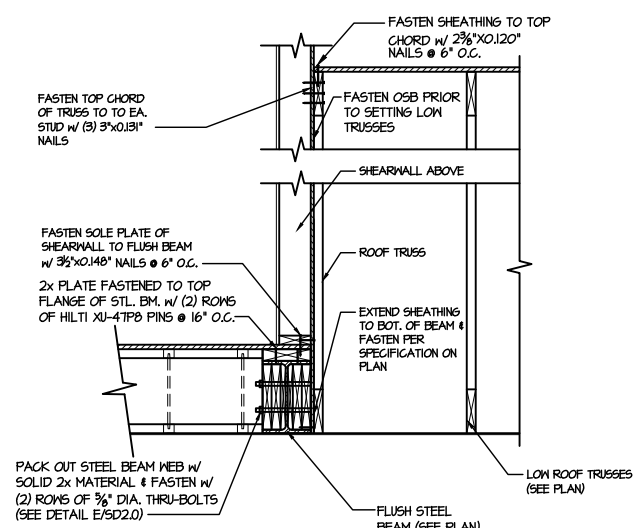
3 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



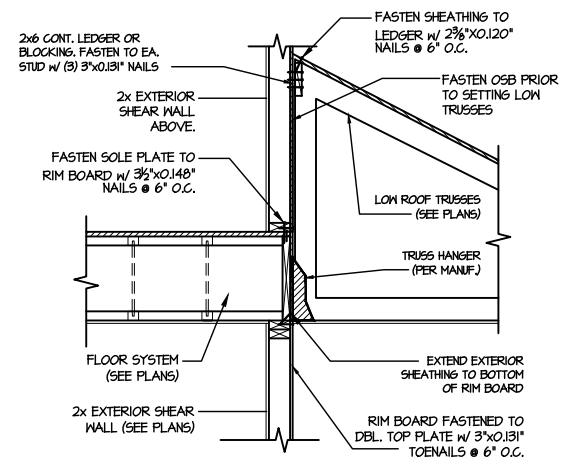
4 DETAIL @ SHED ROOF
SCALE: 3/8"=1'-0"



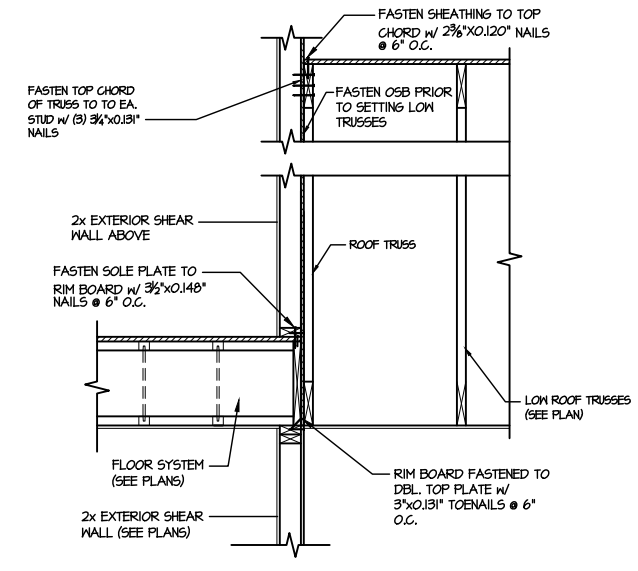
5 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



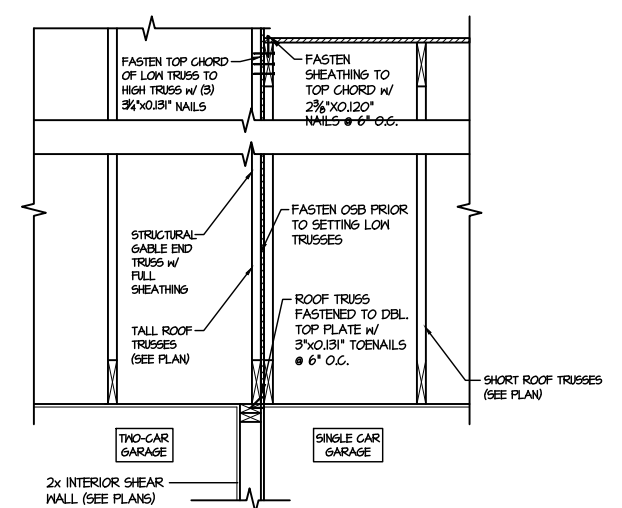
6 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



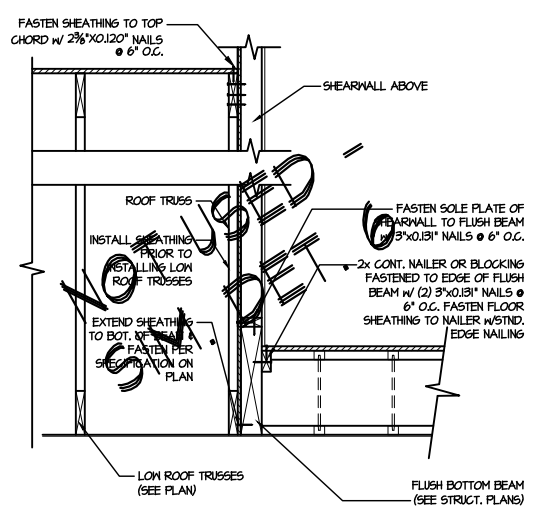
7 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



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



9 TYPICAL SHEAR TRANSFER DETAIL BETWEEN GARAGE BAYS
SCALE: 3/4"=1'-0"

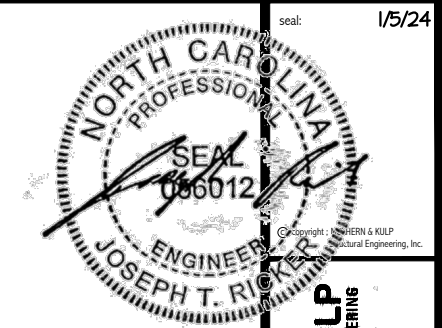


13 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"

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.

FILE: RLH - Neils Creek - Lot 102 - Structural DATE: 1/5/2024 12:43 PM



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Riverside Ave., Building 4 - Asheville, PA 18002
P 716-946-8001 • mulhern+kulp.com
NC LICENSE #C-3825

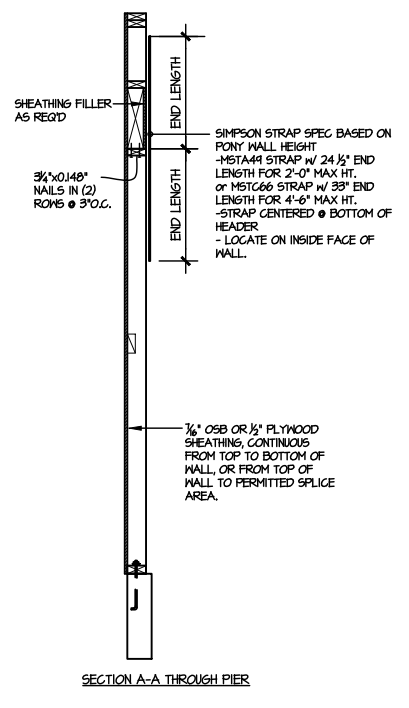
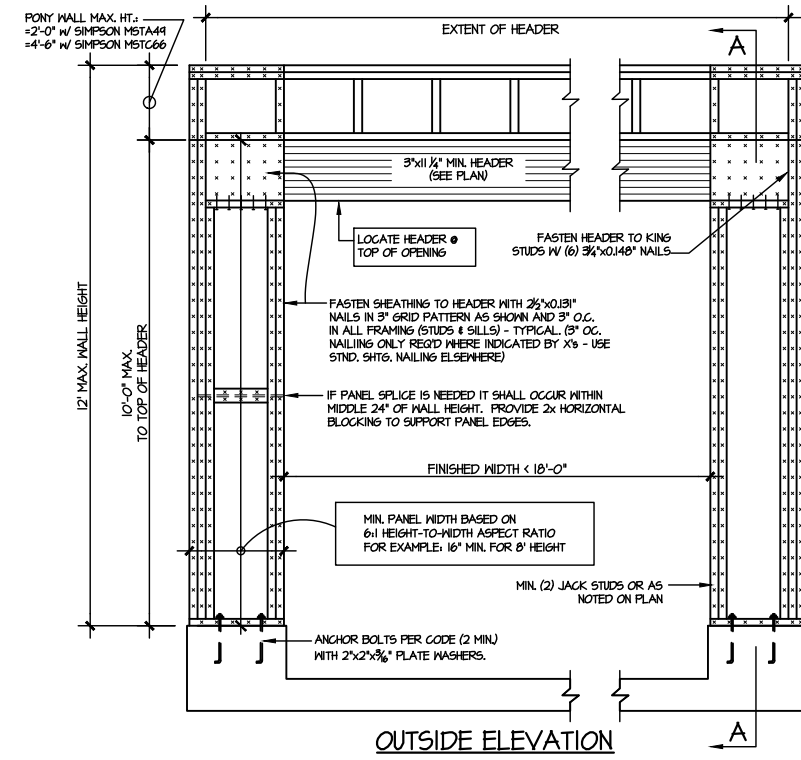
M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

REVISIONS:
date: initial:

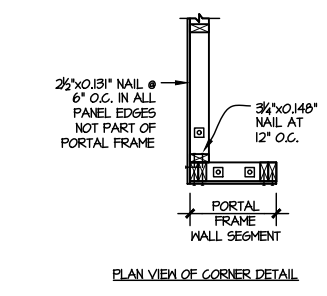
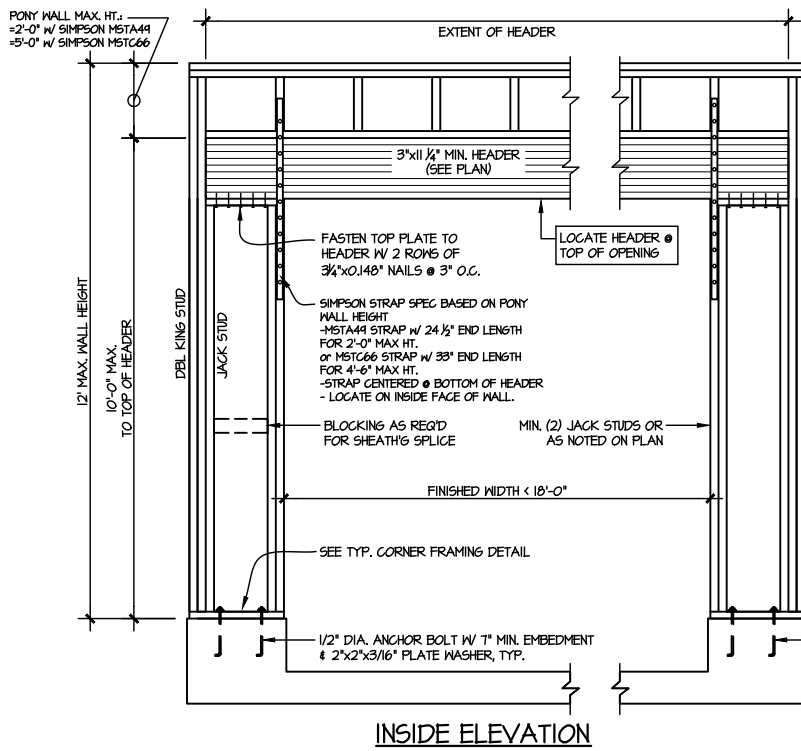


FRAMING DETAILS
FARM AT NEILS CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

sheet:
SD2.2

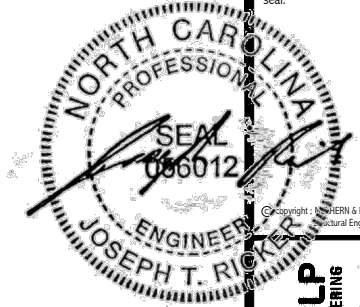


NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 1/2" OSB



ALTERNATIVES TO 1/2" DIA. ANCHOR BOLT:
1) 1/2" DIA. x 6" LONG SIMPSON TITEN HD
2) 1/2" DIA. THREADED ROD EPOXY SET w/4 1/2" EMBED. (MIN UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM (OR EQUAL)

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



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
380 Bismarck Ave, Building 4 - Asheville, PA 18002
P 212-946-8001 • mulhern+kulp.com
NC LICENSE #C-3825



M&K project number:
126-22076
project mgr: JTR
drawn by: SJF
issue date: 12-21-23

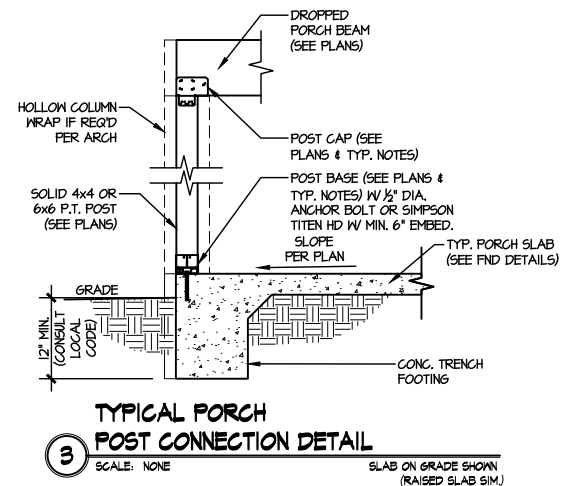
REVISIONS:

| date: | initial: |
|-------|----------|
| | |
| | |
| | |



FRAMING DETAILS
FARM AT NEILS CREEK
LOT 102 - DRAYTON 4
RALEIGH, NC

sheet:
SD3.0



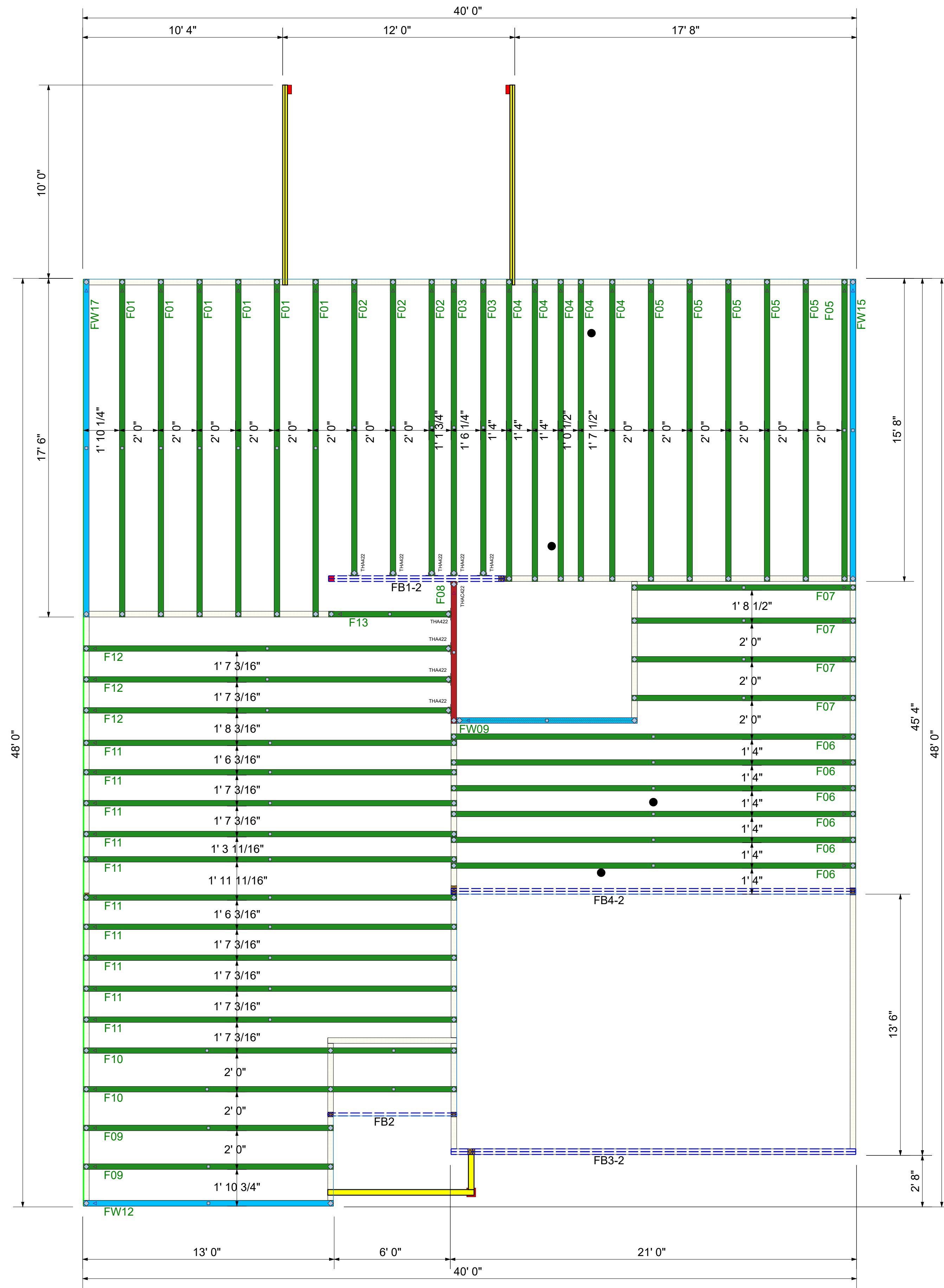
| Revisions | |
|-----------|------|
| 00/00/00 | Name |
| 00/00/00 | Name |
| 00/00/00 | Name |
| 00/00/00 | Name |
| 00/00/00 | Name |

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
102 FARM ATW NEILLS CREEK
DRAYTON 4
COMPONENT PLAN
PLACEMENT PLAN

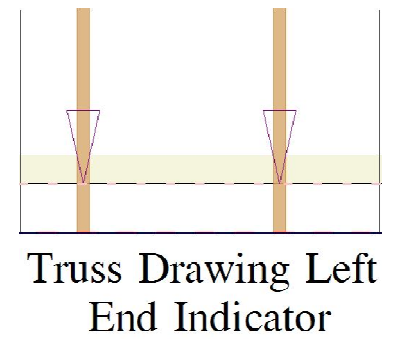
| | |
|-----------------|-----------|
| Scale: | NTS |
| Date: | 1/18/2024 |
| Designer: | ND |
| Project Number: | 23120151 |
| Sheet Number: | 1/1 |



| Products | | | | | |
|----------|--------|------------------------------------|-------|---------|----------|
| PlotID | Length | Product | Plies | Net Qty | Fab Type |
| FB3-2 | 22' 0" | 2.0 RigidLam DF LVL 1-3/4 x 11-7/8 | 2 | 2 | FF |
| FB1-2 | 10' 0" | 2.0 RigidLam DF LVL 1-3/4 x 14 | 2 | 2 | FF |
| FB2 | 8' 0" | 2.0 RigidLam DF LVL 1-3/4 x 14 | 1 | 1 | FF |
| FB4-2 | 22' 0" | 2.0 RigidLam DF LVL 1-3/4 x 20 | 2 | 2 | FF |

| Truss Connector Total List | | |
|----------------------------|---------|-----|
| Manuf | Product | Qty |
| Simpson | THA422 | 9 |
| Simpson | THAC422 | 1 |

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS. ** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.



** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. ** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE. ** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. **

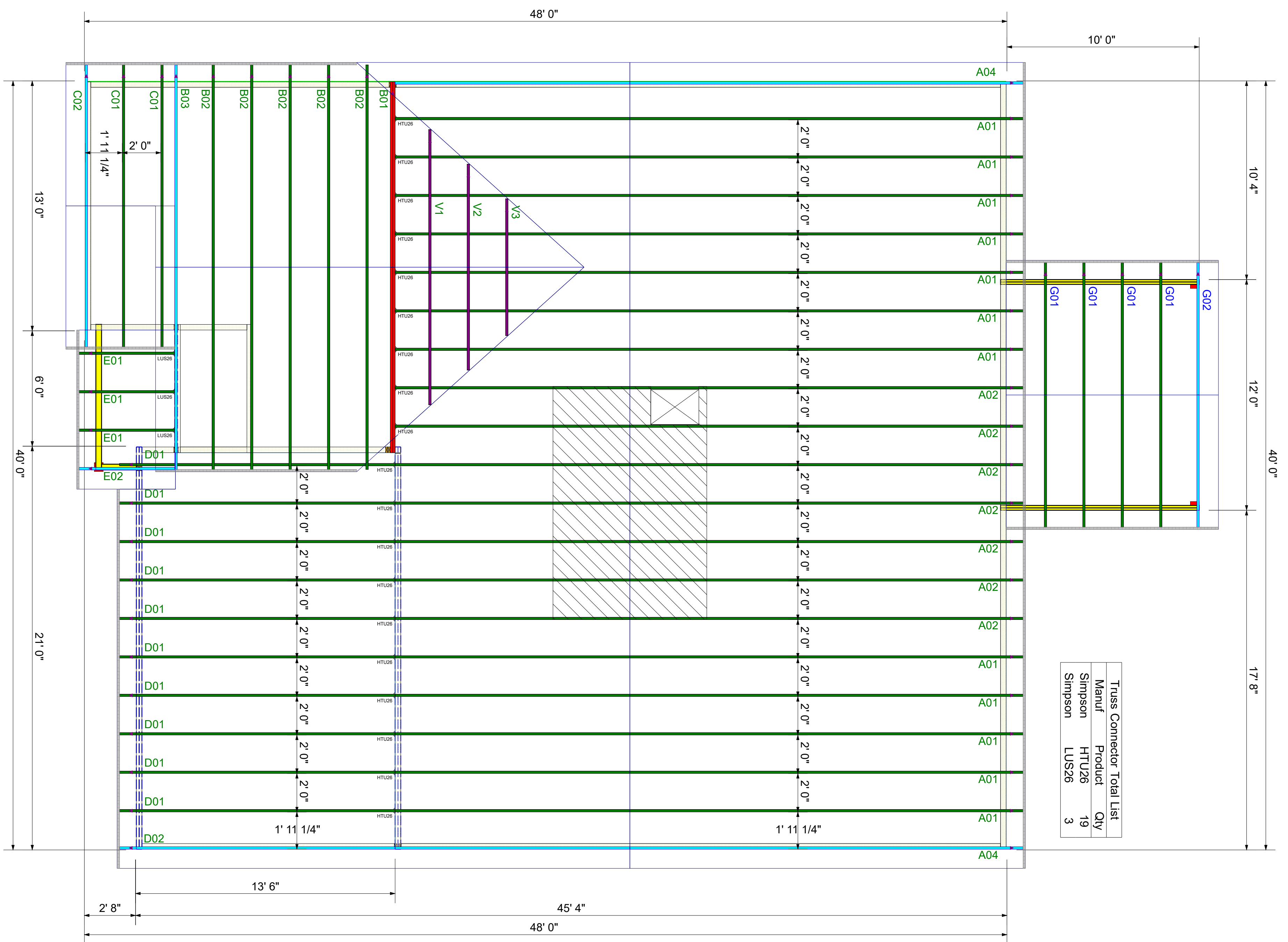
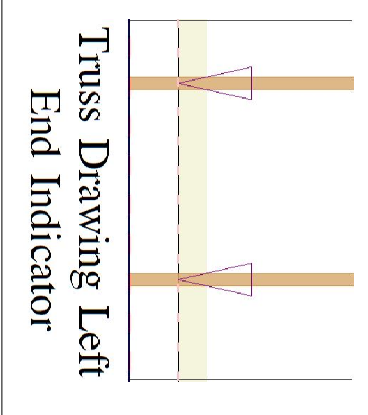
** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

** 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.



| Truss Connector Total List | | | |
|----------------------------|---------|-----|--|
| Manuf | Product | Qty | |
| Simpson | HTU26 | 19 | |
| Simpson | LUS26 | 3 | |

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.

| | |
|-----------------|-----------|
| Scale: | NTS |
| Date: | 1/18/2024 |
| Designer: | ND |
| Project Number: | 23120151 |
| Sheet Number: | 1/1 |

DRB HOMES
102 FARM AT NEILLS CREEK
DRAYTON 4
**COMPONENT
PLACEMENT PLAN**



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

| Revisions | |
|-----------|------|
| Name | |
| 00/00/00 | Name |
| 00/00/00 | Name |
| 00/00/00 | Name |
| 00/00/00 | Name |