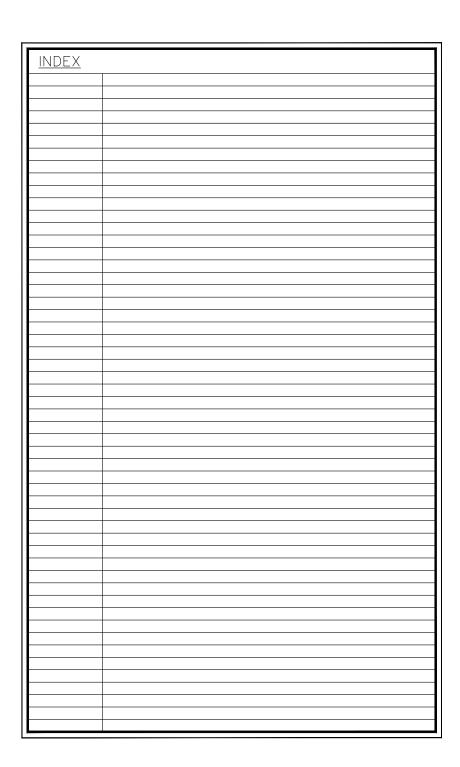
# MIDDLETON-RALE

RALEIGH - LOT 00.0136 THE FARM AT NEILL'S CREEK

(MODEL# 2183)

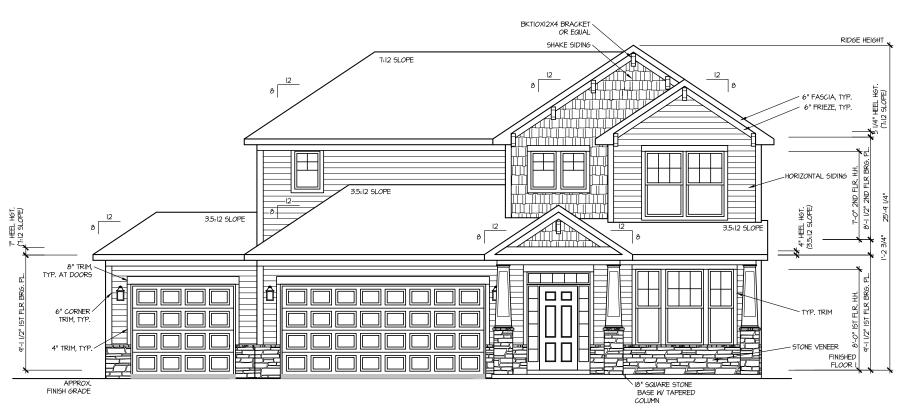
**57 BARN DOOR DRIVE** 



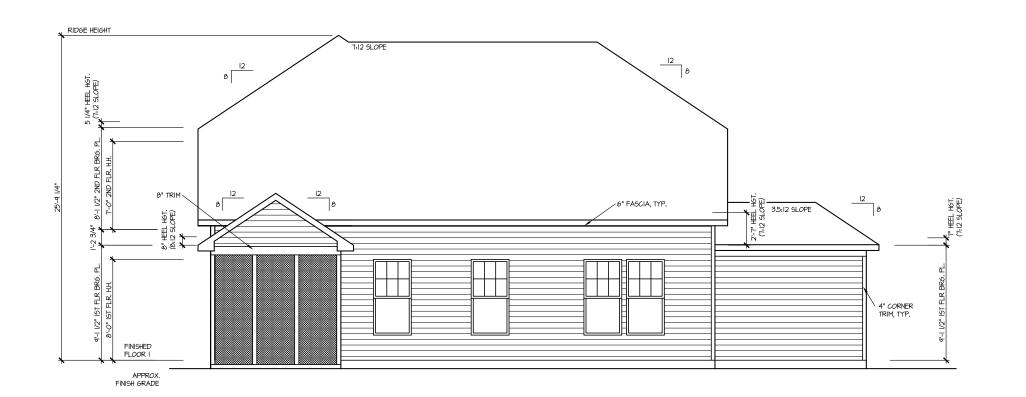


AREA CALCULATIONS  ELEVATION 10		HEATED	COVERED / UNHEATED	UNCOVERED
FIRST FLOOR		1495 SF	ONTILATED	ONCOVERED
		1490 36	447.05	
GARAGE			417 SF	
FRONT PORCH — ELEVATION 10			203 SF	
SECOND FLOOR		692 SF		
OPTIONS				
3RD CAR GARAGE			252 SF	
SCREEN PORCH			124 SF	
1	TOTAL	2187 SF	996 SF	

LOT	SPECIFIC	
1		THE FARM AT NEILL'S CREEK
		MIDDLETON REV. RALE 1 ELEVATION 10
2	ADDRESS	57 BARN DOOR DR LILLINGTON, NC 27546
<b>—</b>		
<u> </u>		
$\vdash$		



## FRONT ELEVATION IO



REAR ELEVATION IO

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

ILE: Lot 00.0136.dwg DATE: 4/3/2023 11:11 AM

DRAWN BY:

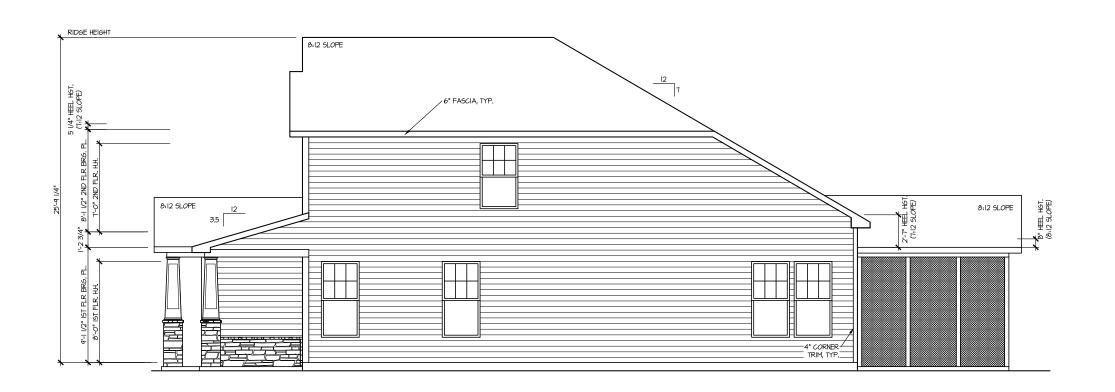
PLAN NO. 2183

DATE: 04/03/2023

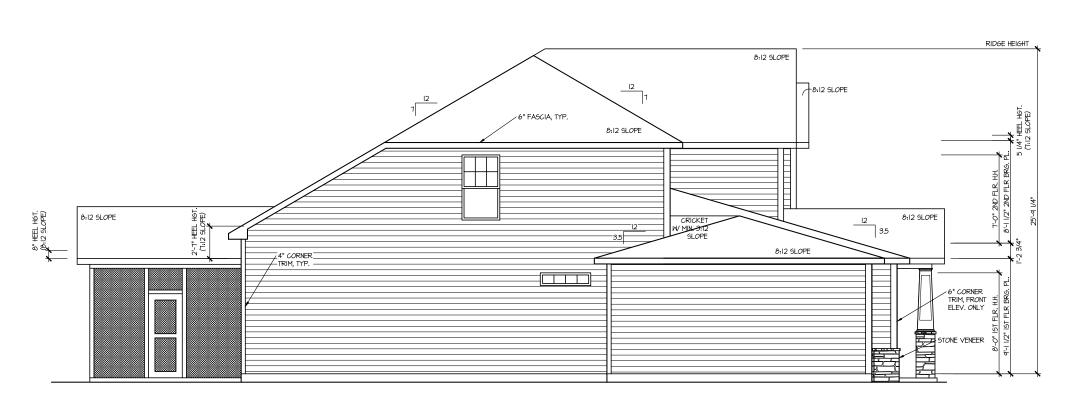
> DRAWING TITLE FRONT & REAR ELEVATIONS

HOUSE NAME:
MIDDLETON
DRAWING TITLE

SHEET No.



## RIGHT ELEVATION 10 SCALE: 1/8" = 1"-0"

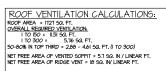


LEFT ELEVATION IO

DATE: 04/03/2023 PLAN NO. 2183

RIGHT & LEFT ELEVATIONS HOUSE NAME:
MIDDLETON
DRAWING TITLE

SHEET No.

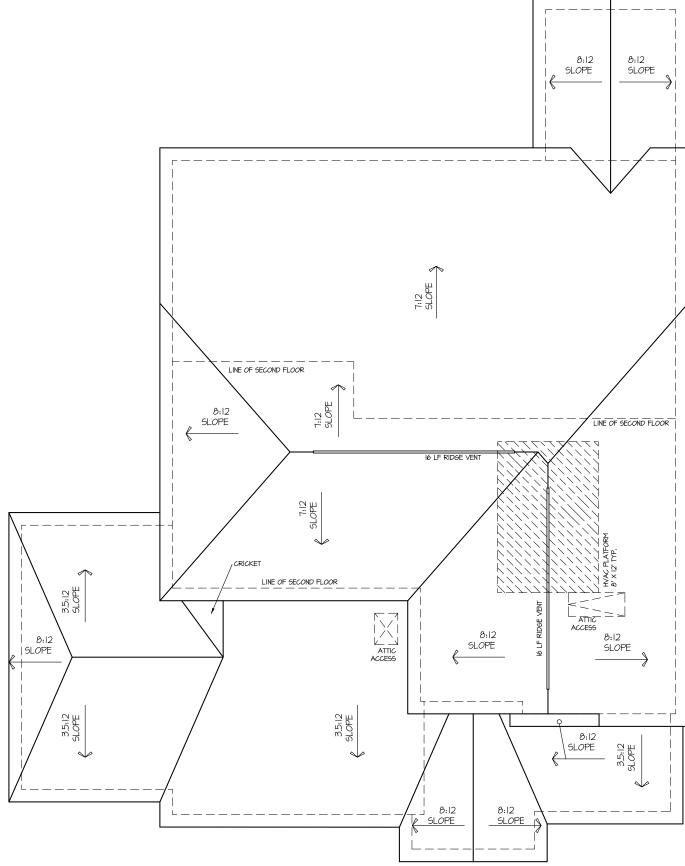


LOMER VENTING. (BOTTOM 2/3 RDS)

IN LINEAR FEET OF SOFFIT X 5.7 SA, IN. = 4.71 SA, FT, 
WPER VENTING. (TOP 1/3 BD)

32 LINEAR FEET OF RIDGE X ID SA, IN. = 4.0 SA, FT, 
4.00 SA, IT, ENTEND SA, BO, SO, IN. = 4.0 SA, FT, 
4.00 SA, IT, ENTEND SA, BO, SO, IN. = 4.0 SA, FT, 
10 SAO, ALLOHED)

TOTAL ROOF VENTILATION 6.71 SA, FT, Y 5.76 SA, FT, (Radb)



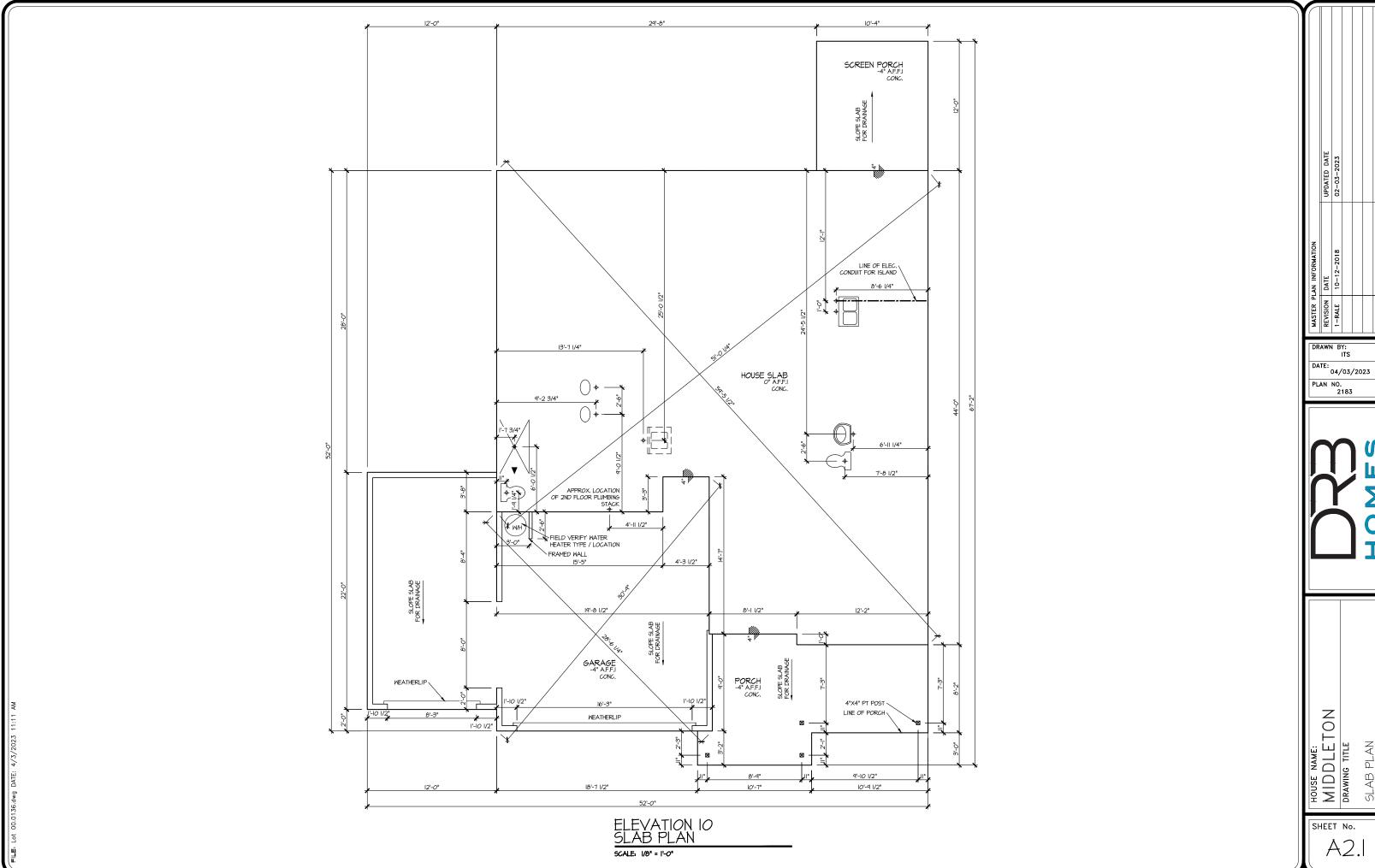
ROOF PLAN ELEV. 10
SCALE: 1/8" = 1'-0"

DRAWN BY: DATE: 04/03/2023 PLAN NO. 2183



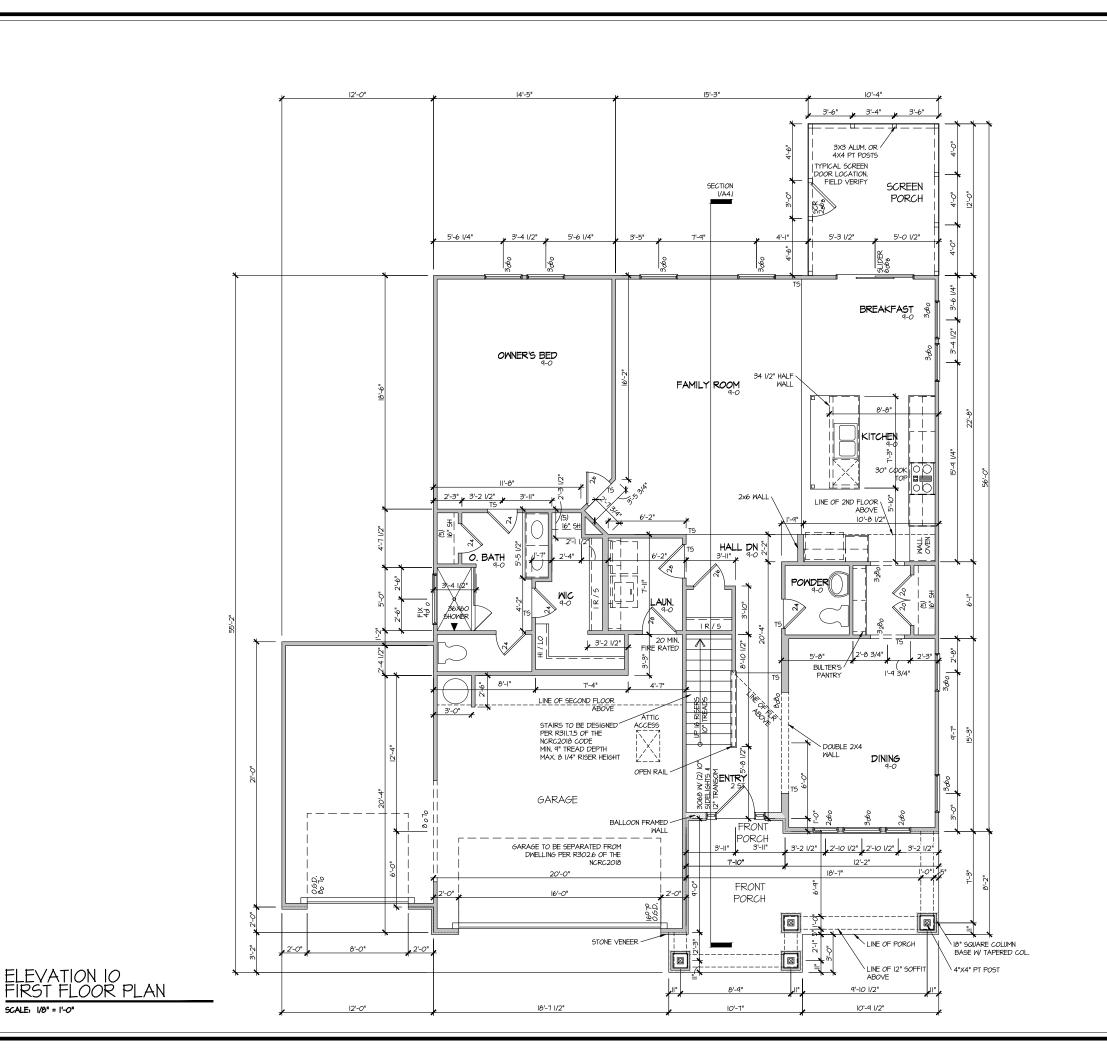
HOUSE NAME:
MIDDLETON
DRAWING TITLE ROOF PLAN

> SHEET No. AI.3



SLAB PLAN

SHEET No. A2.I

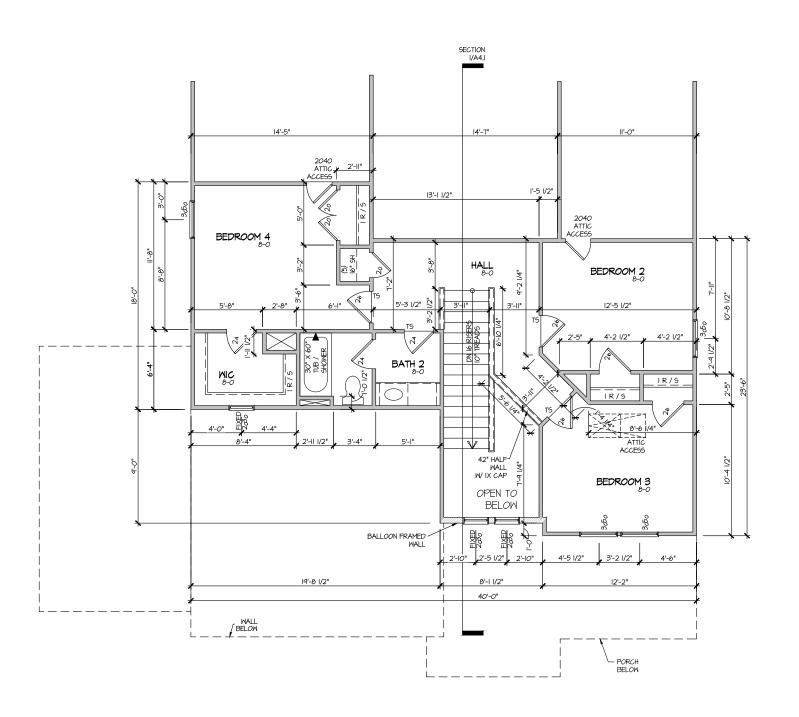


DRAWN BY: DATE: 04/03/2023 PLAN NO. 2183 FIRST FLOOR PLAN HOUSE NAME:
MIDDLETON
DRAWING TITLE

SHEET No.

A3.I

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



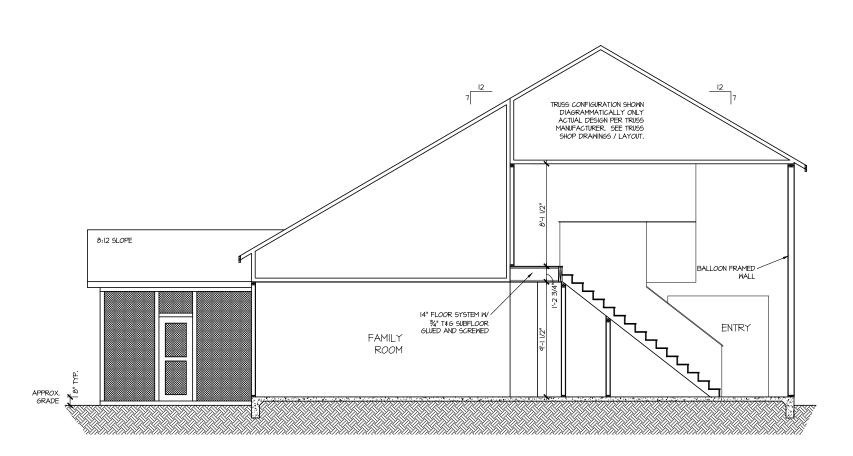
ELEVATION IO SECOND FLOOR PLAN SCALE: 1/0" = 1'-0"

E: Lot 00.0136.dwg DATE: 4/3/2023 11:11 AM



HOUSE NAME:
MIDDLETON
DRAWING TITLE
SECOND FLOOR PLAN

SHEET No. A3.2



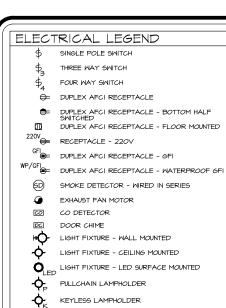
SECTION I

HOUSE NAME:
MIDDLETON
DRAWING TITLE
BUILDING SECTION

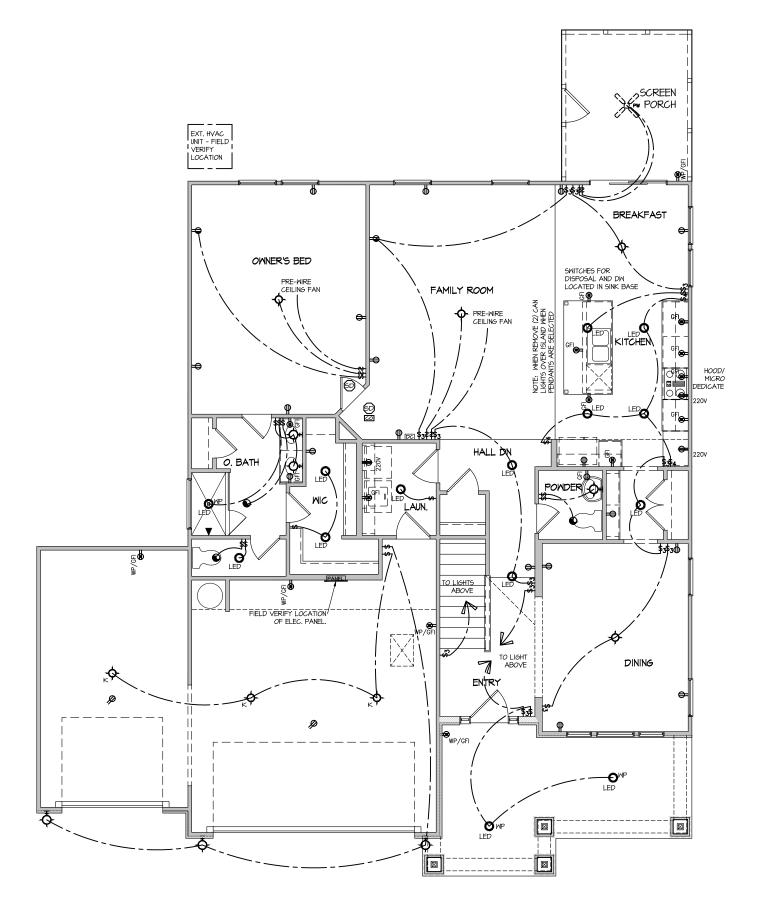
DRAWN BY:

DATE: 04/03/2023 PLAN NO. 2183

SHEET No. A4.I



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



Lot 00.0136.dwg DAIE: 4/3/2023 11:11

ELECTRICAL PLAN FIRST FLOOR - ELEV. 10

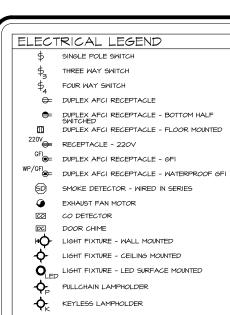
SCALE: 1/8" = 1'-0"

HOUSE NAME:
MIDDLETON
DRAWING TITLE
FIRST FLOOR ELECTRICAL

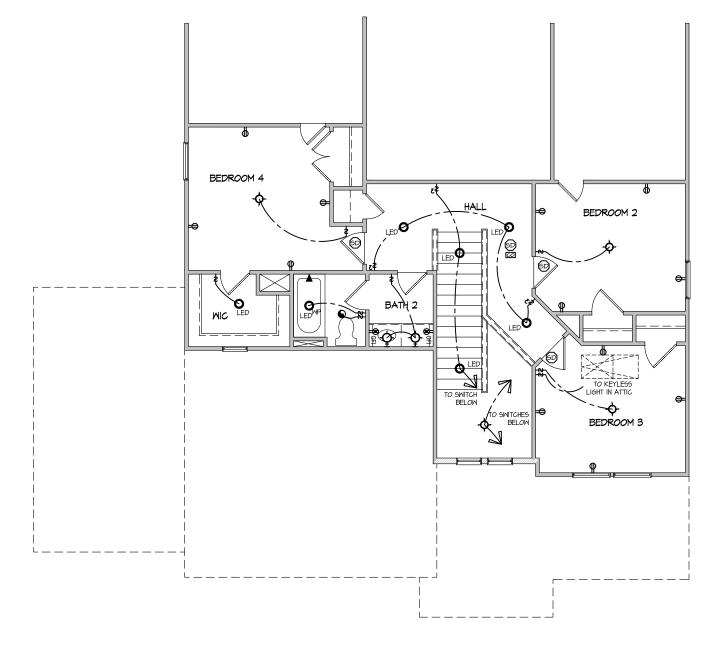
DRAWN BY:

DATE: 04/03/2023 PLAN NO. 2183

SHEET No.



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



ELECTRICAL PLAN SECOND FLOOR - ELEV. 10 SCALE: 1/8" = 1'-0"

SHEET No.

HOUSE NAME:
MIDDLETON
DRAWING TITLE

DRAWN BY: DATE: 04/03/2023 PLAN NO. 2183

SECOND FLOOR ELECTRICAL

25"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. (ONLY ACCEPTABLE WHERE \* ARE SHOWN)

#### LEGEND

- IIIIIIIIII 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"	(I)2x4 FLAT	(I)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 SPACED @ 24" O.C. (MAX.)

## 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 GLYS AND TIF-DOWNS CONTRACTOR 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 ELEMENT 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 VERIEY LEVELNESS AND MAKE ADJUSTMENTS AS AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY OR WARRANTY TOLERANCES.

#### 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. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MAK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

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

- A. ROOF TRUSSES: 1/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS: I/8" DEAD LOAD
- FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS. LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAL LOAD. (NOT DIFFERENTIAL DEFLECTION)

#### GENERAL STRUCTURAL NOTES

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

DEAD = 7 PSF T.C., 10 PSF B.C. 1 IVF = 16 PSF

LOAD DURATION FACTOR = 1.25

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

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

2,000 PSF ASSUMED ALLOWABLE BEARING 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
- EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) 9 16" O.C. SPF OR SYP "STUD" GRADE LUMBER, OR BETTER, U.N.O. • WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SPF) OR SOUTHERN PINE #2 (SYP) LUMBER, OR BETTER (KILN-DRIED). ALL HEADERS HAVE BEEN DESIGNED BASED ON CALCULATED LOADS & SIZED ACCORDINGLY, CODE TABLES HAVE NOT BEEN USED
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED
- WITH 2x 'STUD' GRADE MEMBERS SPACED @ 16" O.C. (MAX., U.N.O.) . HEADERS IN NON-LOAD BEARING WALLS SHALL BE: (I)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).
- PNGINEERED LUMBER 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=2.0xl0^6 psi
- FOR 2 & 3 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS 1/4"x31/2" SIMPSON SDS SCREWS (OR 31/5" TRUSSLOK SCREWS) 👨 16" O/C. USE APPLY FASTENING AT BOTH FACES FOR 3-PLY CONDITION. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3½" OR 5¼"

BEAMS ARE ACCEPTABLE, USE 2 ROWS OF NAILS FOR 2x6 \$ 2x8

- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/4"x6" SIMPSON SDS SCREWS (OR 6 3/4" TRUSSLOP 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, U.N.O.,
- ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER W/ 3"X0.I3I" NAILS @ 24" O.C. (MIN.), EACH PLY.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND,/BEARING. BLOCKING TO MATCH POST ABOVE.
- FASTEN 24 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

#### FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED 1 /480 LIVE LOAD DEELECTION CRITERIA (EXCLUDES MARBLE FLOORS - CONTACT M&K FOR MARBLE FLOOR DESIGNS)
- AT I-JOIST FLOORS, PROVIDE I I/8" MIN, OSB RIM BOARD.
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.
- I-JOIST/TRUSS SHOP DWGS, SHALL BE SUBMITTED TO ARCH, & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVER
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR' 24" O.C, EXPOSURE I (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND
- 2 ½" × 0.131" NAILS @ 6"o.c. @ PANEL EDGES € @ 12"o.c. FIELD. - 2 3 × 0.120" NAILS @ 4" O.C. @ PANEL EDGES \$ @ 8" O.C. FIELD.
- 2 8 × 0.113" NAILS @ 3" O.C. @ PANEL EDGES \$ @ 6" O.C. IN 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 CLIF (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H2.51 CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.(
- ROOF TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH & ENG.
   FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVER
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BCSI I-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- SUPPORT PORCH & SHORT SPAN ROOF TRUSSES (MAX 7' SPAN) W 2x4 LEDGER FASTENED TO:
- RIM BOARD w/ (2) 3"x0.131" NAILS @ 16" O.C. MAX. (I-JOISTS) - TRUSS VERTICALS w/ (3) 3"x0.131" NAILS @ 19.2" O.C. MAX. (FLOOR TRUSSES)
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBER
- W/ 2 3" x 0.131" NAILS @ 6"o.c. @ PANEL EDGES & @ 12" O.C. FIELD.
- w/ 2 3 x 0120" NAILS @ 4"0 c @ PANEL EDGES & @ 8" OC FIELD
- W/ 2 3" x 0.113" NAILS @ 3"O.C. @ PANEL EDGES & @ 6" O.C. FIELD

### HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION SPECIFICATION
► HD-I	SIMPSON HTT4 HOLD-DOWN *
HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)
► HD-3	SIMPSON STHDI4RJ HOLD-DOWN

ALTERNATIVE TO SSTB24 ANCHOR BOLT SPECIFICATION: JITILIZE SIMPSON "SET" FROXY SYSTEM TO FASTEN 5%

PROVIDE 12" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF FOUNDATION.

### VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x¼"
	3 FT. MAX	L3"x3"x¼"
6'-0"	I2 FT. MAX	L4"x3"x¼"
	20 FT. MAX	L5"x3½"x%"
8'-0"	3 FT. MAX	L4"x4"x¼" *
0-0	I2 FT. MAX	L5"x3½"x%"
	I6 FT. MAX	L6"x3½"x¾"
q'-6"	I2 FT. MAX	L6"x3½"x%;"
16'-0"	2 FT. MAX	L7"x4"x½" **
	3 FT. MAX	L8"x4"x½" **

. Lintels. Hall Support 2 %" - 3 ½" veneer W 40 paf Maximum Weight 6' Shall Have 4" min. Bearing 6' Shall Have 8" min. Bearing 6' Shall Not be fagtised back to Header.

- 16 SHALL BY FERFIEDED BACK TO FEADER IN WALL 646°G. W 15° DIA. 3 15° IN SHALL BY FERFIEDED BACK TO DOE FEADER IN WALL 646°G. W 15° DIA. 3 15° ING WERRICHLE JUSTIED BALES.

  WHO GABER SCHOOL BY LOW FERFIELD JUSTIED BALES.

  WHO SHALL BITTED SHALL BE LOW EED VERTICAL.

  WHEN SHPORTING YEARS OF MICE THE EXTENSIOR TOE OF THE MORIZONTAL LES MAY BE CUT IN THE FILE TOE BE 35° UNDEC MORT BE EARING LIGHT ON THE BATTEN OF THE BATTE

## DIFEN VENEER USE L4x34/4". 3%" VENEER ONLY, SEE PLAN FOR VENEER SUPPORT IF VENEER < 3%" THICK

#### LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:

#### 20 MPH WIND IN 2018 NCSBC:RC (120 MPH WIND SPEED IN ASCE 7-10

WIND MAP, PER IRC R301.2.1.1) EXP. B. RISK CAT. 2 & SEISMIC CAT. A/B

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1609) & ASCE 7-10 AS PERMITTED BY R301.13 OF THE 2018 NGSBG:RG, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC. IE THE PARAMETERS OF SECTION R602.12 COMPLY CCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST

THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBC:RC SECTION R802.II.I.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIET LOAD PATH PER SECTIONS R602.3.5¢ R802.II.

#### EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 3/2"x0.II3" NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. TYP, U.N.C.
- 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: 1½" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES \$ @ 6" O.C IN FIELD

## BLOCKED PANEL EDGES

AT DESIGNATED AREAS - FASTEN SHEATHING w/ 2 3/4" x 0.113" NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 34" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL FDGES & FDGE FASTENING

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

• AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING w/8d NAILS @ 3" O.C. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 24 HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING, IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT WILL BE SPECIFICALLY NOTED ON PLAN.
- DESIGN ASSUMES 16" O.C MAX. STUD SPACING, U.N.O
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

INDICATES EXTENT OF INT. OSB SHEARWAL OR 3" O.C. OSB SHEARWALL INDICATES HOLDOWN BELOW

#### GENERAL STRUCTURAL NOTES

#### **FOUNDATION**

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CO......
- RESIDENTIAL CODE. RESIDENTIAL CODE.
  • FOOTING DESIGN - 2,000 PSF ALLOWABLE SOIL BEARING PRESENT.
- 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. (CMIJ)
- (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. 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. SPE OR SYP. "STUD"
- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
  16'c = 4,000 psi: ....... FOUNDATION WALLS
- 2,500 psi: ...... FOOTINGS & INTERIOR SLABS ON GRADE 3,000 psi: ...... GARAGE & EXTERIOR SLABS ON GRADE ieq 000,00
- BASEMENT FOUNDATION WALL DESIGN BASED ON: 9' OR IO' HEIGHT (AS NOTED ON PLANS)
- TALLER WALLS MUST BE ENGINEERED • NOMINAL WIDTH (91/2" 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 BACKELLING BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK.
- PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN CONCRETE BSMT. FND. WALL WITH 2" CLEAR. REINFORCEMENT SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS
- FOR OPENINGS UP TO 36", PROVIDE MINIMUM 10" CONCRETE DEPTH OVER OPENING OR (3)2x10 w/ (2)2x6 JACK STUDS, U.N.C
- LARGER OPENINGS SHALL BE PER PLAN
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- ALL FOOTINGS SHALL BEAR AT LEAST 12" BELOW FINISH GRADE.  $\bullet$  FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR
- 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 (I.I RATIO), WITH A MAXIMUM OF I.I.5 RATIO CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL
- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C90 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (Fm=1500 psi). MORTAR SHALL
- BE ASTM C270, TYPE S. CMU DESIGN PER ACL 530 & 530 L. ● CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL
- JOINT REINFORCEMENT (OR EQUAL) 9 GA. MINIMUM @ 16" O.C PROVIDE 2x8 x 16" LONG P.T. PLATE ON TOP OF ALL CRAWL SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID.
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE.
- DIMENSIONS BY OTHERS, BUILDER TO VERIFY
- BUILDER TO VERIFY THAT MODEL HAS BEEN ADEQUATELY TREATED BY A LICENSED AND BONDED PEST CONTROL COMPANY FOR SUBTERRANEAN TERMITES. METHOD AND TYPE OF TREATMENT TO BE DETERMINED BY PEST CONTROL COMPANY

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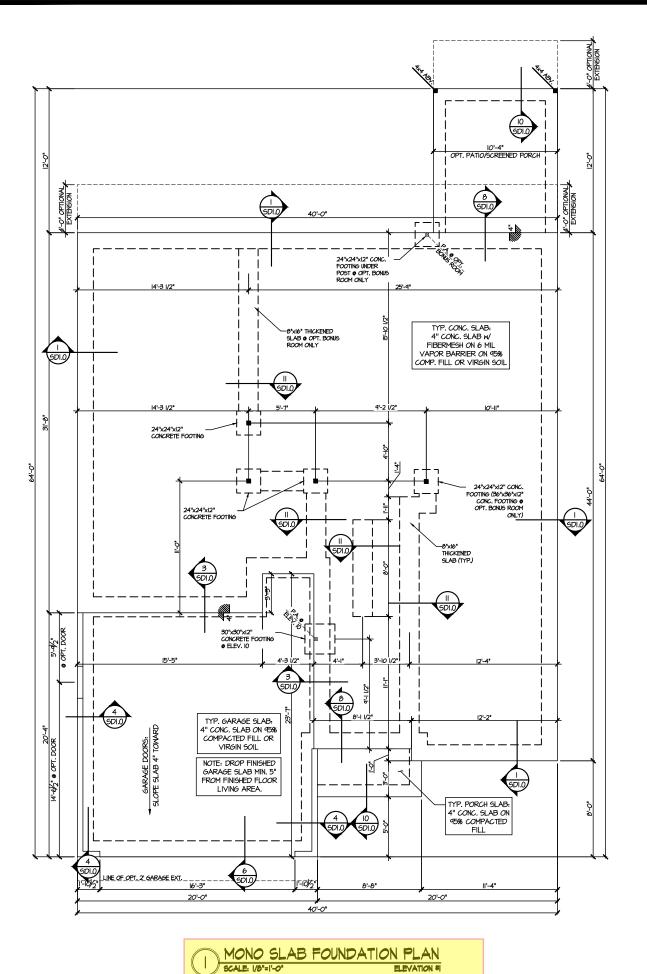
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NOINE EPHEN I

William W

1&K project number



REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

• IIIIII INTERIOR BEARING WALL

● □===□ BEARING WALL ABOVE

LEGEND

• 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.

O VOINES

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M&K project number: 126-21018

JTR MDH drawn by: issue date: 07-16-21

MDH



MIDDLETON MODEL OUNDATION

sheet: LEFT HAND

PTIONAL SCREENED PORCH SHOWN

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

#### LEGEND

- IIIIII INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- BEAM / HEADER
- - INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

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M&K project number: 126-21018

JTR MDH drawn by: issue date: 07-16-21

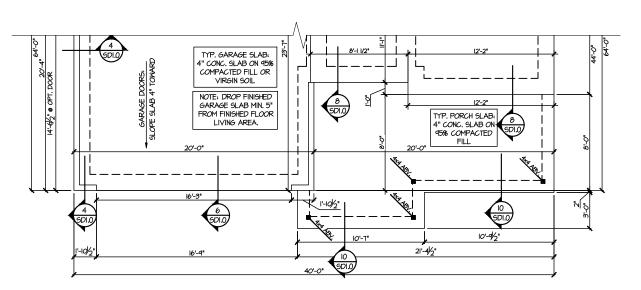
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MIDDLETON MODEL OUNDATION PLANS

RALEIGH, NC

sheet: LEFT HAND



2 PARTIAL MONO SLAB FOUNDATION PLAN SCALE: 1/8"=1"-0" ELEVATIONS #10

ENGINEERED BEAM MATERIAL SCHEDULE						
BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION	
001	(2)13/4"×117/6" - H	3½"×11½" - H	(2)134"×1176" - H	(2)2xl2 + (I) 片"xll片" STEEL FLITCH PLATE - H	N/A	
00IA	(2)13/4"×111/6" - H	3½"×II⅓" - H	(2)134"x1176" - H	(2)2xl2 + (l) ½"xll¼" STEEL FLITCH PLATE - H	N/A	
002	(2)13/4"×18" - FT	51/4"×18" - FT	N/A	(3)2xl2 + (2) ½"xl以" STEEL FLITCH PLATES - FB	WI2xI9 - F	
003	(2)13/4"×14" - F	3½"×l4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
004	(2)13/4"×14" - F	3½"×I4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
005	(2)134"×14" - F	3½"x 4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
006	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	3½"×14" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
007	(2)1¾"×11%" - F	3½"×II%" - F	(2)134"x11%" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - F	WI0xI2 - F	
008	(2)13/4"×14" - F	3½"×I4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
009	(3)13/4"x18" - FT	51/4"×18" - FT	N/A	(4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB	WI2x26 - F	
010	(3)13/4"×20" - FT	5¼"×20" - FT	N/A	(4)2xl2 + (3) %"xl以" STEEL FLITCH PLATES - FB	WI2x35 - F	
	/- \. 2 / II	-1	(-).2(	(2)2xl2 + (l) ¼"xll¼" STEEL		

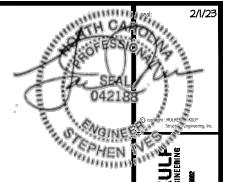
#### LEGEND

- INTERIOR BEARING WALL
- □==== BEARING WALL ABOVE
- --- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES # SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.OT & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS



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RESIDENTIAL STRUCTURAL ENGINERRING



M&K project number: 126-21018

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MDH



MODEL RAMING

MIDDLETON

heet: LEFT HAND **S3.0**J

(2)13/4"×117/6" - FB 3½"xII%" - FB (2)13/4"×14" - FB WI0xI2 - FB FLITCH PLATE - FB BEAM NOTATION: - "F" INDICATES FLUSH BEAM
- "FT" INDICATES FLUSH TOP BEAM - "FB" INDICATES FLUSH BOTTOM BEAM - TO INDICATES DROPPED BEAM
- "I" INDICATES DROPPED BEAM
- "I" 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.

ENGINEERED BEAM MATERIAL SCHEDULE					
BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)13/4"x117/6" - H	3½"×II⅓" - H	(2)13/4"×111/6" - H	(2)2xl2 + (l) ½"xll¼" STEEL FLITCH PLATE - H	N/A
00IA	(2)i¾"×II%" - H	3½"×II%" - H	(2)13/4"x111/6" - H	(2)2xl2 + (l) ½"xl以" STEEL FLITCH PLATE - H	N/A
002	(2)134"×18" - FT	5¼"xl8" - FT	N/A	(3)2xl2 + (2) ½"xll¼" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)134"×14" - F	3½"xI4" - F	(2)134"x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
004	(2)1¾"×14" - F	3½"x14" - F	(2)134"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
005	(2)1¾"×14" - F	3½"x14" - F	(2)134"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
006	(2)1¾"×14" - F	3½"x14" - F	(2)134"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
007	(2)i¾"xII%" - F	3½"×II%" - F	(2)1¾"x11½" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - F	WI0xI2 - F
800	(2)134"×14" - F	3½"×14" - F	(2)134"x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
009	(3)13/4"×18" - FT	51/4"×18" - FT	N/A	(4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB	WI2x26 - F
010	(3)1¾"x20" - FT	5¼"×20" - FT	N/A	(4)2xl2 + (3) %"xl以" STEEL FLITCH PLATES - FB	WI2x35 - F
OII	(2)1¾"×11%" - FB	3½"×II%" - FB	(2)134"×14" - FB	(2)2xl2 + (l) 以"xll以" STEEL FLITCH PLATE - FB	WI0xI2 - FB

#### 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.

#### LEGEND

- INTERIOR BEARING WALL
- □=== BEARING WALL ABOVE
- ---- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.OT & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

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M&K project number: 126-21018

**JTR** MDH drawn by: issue date: 07-16-21

REVISIONS: initial: MDH



PLANS RAMING

MIDDLETON MODEL RALEIGH, NC

sheet: LEFT HAND S3.1J

OPEN TO ABOVE (2)2x4 BM, POCKET OR SIMPSON HUCIIO-2 HANGER FASTENED TO PORTAL FRAME HDR. 4x4 P.T. POST W/ SIMPSON BC52-2/4 CAP & ABW44Z BASE (TYP.) (SEE DETAIL 3/SD3.0) MONO TRUSSES

9 24" O.C.

PARTIAL 2ND FLOOR FRAMING PLAN - I-JOIST

ENGINEERED BEAM MATERIAL SCHEDULE					
BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)1¾"×11%" - H	3½"xII⅓" - H	(2)13/4"×117/6" - H	(2)2xl2 + (l) ½"xll¼" STEEL FLITCH PLATE - H	N/A
00IA	(2)13/4"×117/6" - H	3½"×II%" - H	(2)13/4"×111/6" - H	(2)2xl2 + (l) 片"xll¼" STEEL FLITCH PLATE - H	N/A
002	(2)13/4"x18" - FT	5¼"×I8" - FT	N/A	(3)2xl2 + (2) ½"xl以" STEEL FLITCH PLATES - FB	WI2xI9 - F
003	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	3½"x14" - F	(2)13/4"×14" - F	(2)2xl2 + (l)以"xll以" STEEL FLITCH PLATE - FB	WI2xI4 - F
004	(2)134"×14" - F	3½"x14" - F	(2)134"×14" - F	(2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATE - FB	WI2xI4 - F
005	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	3½"x14" - F	(2)134"×14" - F	(2)2xl2 + (l)以"xll以" STEEL FLITCH PLATE - FB	WI2xI4 - F
006	(2)134"x14" - F	3½"x 4" - F	(2)134"x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
007	(2)1¾"x11%" - F	3½"×II%" - F	(2)1¾"x11%" - F	(2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATE - F	WI0xI2 - F
008	(2)1 <sup>3</sup> / <sub>4</sub> "×14" - F	3½"x14" - F	(2)13/4"×14" - F	(2)2xl2 + (l)以"xll以" STEEL FLITCH PLATE - FB	WI2xI4 - F
009	(3)13/4"x18" - FT	5¼"xI8" - FT	N/A	(4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB	Wl2x26 - F
010	(3)13/4"×20" - FT	5¼"×20" - FT	N/A	(4)2xl2 + (3) %"xl以" STEEL FLITCH PLATES - FB	WI2x35 - F
OII	(2)1¾"x11%" - FB	3½"xII%" - FB	(2)13/4"x14" - FB	(2)2xl2 + (l)以"xll以" STEEL FLITCH PLATE - FB	WIOxI2 - FB

- "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/502.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
  REFER TO DETAIL E/502.0 FOR TYPICAL STEEL BEAM CONNECTIONS
  FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W/ (2) 3"X0.120" NAILS @ 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION w/ (2) 3"x0.120" NAILS @ 8" O.C.

#### LEGEND

- INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- --- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 \$ SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

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M&K project number: 126-21018

**JTR** MDH drawn by: issue date: 07-16-21

initial:

MDH



ANS FRAMING

MIDDLETON MODEL

sheet: LEFT HAND S5.0J

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

PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL SCREENED PORCH - I-JOISTS 4 | SCALE: 1/8"=1'-0" ELEV. #1 SHOWN - ALL ELEV. SIM.

N/A

(2)13/4"x14" - FB

(4)2xl2 + (3) %"xll4" STEEL FLITCH PLATES - FB

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB

WI2x35 - F

WIOxI2 - FB

#### BEAM NOTATION:

(3)13/4"×20" - FT

(2)13/4"×117/6" - FB

010

OII

- "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

51/4"×20" - FT

3½"x11½" - FB

PLATES IN SUCCESSION w/ (2) 3"x0.120" NAILS @ 8" O.C.

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

#### LEGEND

- INTERIOR BEARING WALL
- □□□□□□ BEARING WALL ABOVE
- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

(2)2x6 o PORTAL FRAME
PROVIDE BRACING PER DETAIL I/SD2.2

PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL 3RD CAR GARAGE - I-JOISTS SCALE: 1/8"=1'-0" ELEV. #1 SHOWN ELEVS. #2-#4, # #6 SIM. M&K project number 126-21018

**JTR** drawn by: MDH issue date: 07-16-2

REVISIONS: initial: MDH



ANS MODEL RAMING

MIDDLETON

sheet: LEFT HAND S5.2J

N/A

(2)13/4"x14" - FB

(4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB

(4)2xl2 + (3) ⅓"xll¼" STEEL FLITCH PLATES - FB

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB

WI2x26 - F

WI2x35 - F

WI0xI2 - FB

#### BEAM NOTATION:

009

010

OII

- "F" INDICATES FLUSH BEAM

(3)13/4"x18" - FT

(3)13/4"×20" - FT

(2)13/4"x117/6" - FB

- "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

51/4"x18" - FT

51/4"×20" - FT

3½"x11%" - FB

- FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W/ (2) 3"X0.120" NAILS @ 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION w/ (2) 3"x0,120" NAILS @ 8" O.C.

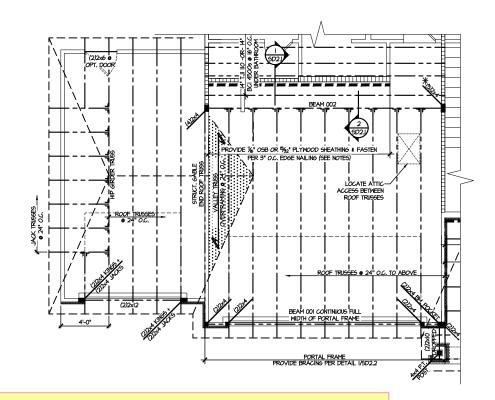
#### LEGEND

- IIIIII INTERIOR BEARING WALL
- □□□□□□ BEARING WALL ABOVE
- --- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS



PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL 3RD CAR GARAGE - I-JOISTS SCALE: 1/8"=1'-0"

M&K project number 126-21018

**JTR** drawn by: MDH issue date: 07-16-2

REVISIONS: initial: MDH



ANS MODEL RAMING MIDDLETON

sheet: LEFT HAND

S5.3J

2ND FLOOR FRAMING PLAN - TRUSSES

ELEVATION #

ENGINEERED BEAM MATERIAL SCHEDULE					
BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)13/4"×117/6" - H	3½"×11⅓" - H	(2)1¾"x11%" - H	(2)2xl2 + (I) 片"xll片" STEEL FLITCH PLATE - H	N/A
00IA	(2)134"×1176" - H	3½"x11½" - H	(2)134"×1176" - H	(2)2xl2 + (I) ½"xll¼" STEEL FLITCH PLATE - H	N/A
002	(2)13/4"×18" - FT	5¼"xl8" - FT	N/A	(3)2xl2 + (2) ½"xl以" STEEL FLITCH PLATES - FB	WI2xI9 - F
003	(2)134"×14" - F	3½"×I4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
004	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	3½"×I4" - F	(2)13/4"×14" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
005	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	3½"x 4" - F	(2) 3/ <sub>4</sub> "x 4" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
006	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	3½"x 4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
007	(2)13/4"×117/6" - F	3½"×11½" - F	(2)134"x1176" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - F	WI0x12 - F
008	(2)13/4"×14" - F	3½"×14" - F	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
009	(3)13/4"x18" - FT	51/4"×18" - FT	N/A	(4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB	WI2x26 - F
010	(3)13/4"×20" - FT	5¼"x20" - FT	N/A	(4)2xl2 + (3) %"xl以" STEEL FLITCH PLATES - FB	WI2x35 - F
OII	(2)13/4"×117/6" - FB	3½"xII%" - FB	(2)13/4"×14" - FB	(2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATE - FB	WI0xI2 - FB

- BEAM NOTATION:

  - "F" INDICATES FLUSH BEAM
     "FT" INDICATES FLUSH TOP BEAM
  - "FB" INDICATES FLUSH BOTTOM BEAM

- "P" INDICATES DROPPED BEAM
   "I" INDICATES DROPPED BEAM
   "I" INDICATES DROPPED OPENING HEADER
  REFER TO DETAIL D/SD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
  REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
  FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN
- PLATES IN SUCCESSION W (2) 3"X0.120" NAILS & 8" O.C.
  FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W/ (2) 3"x0.120" NAILS @ 8" O.C.

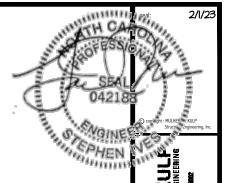
#### LEGEND

- INTERIOR BEARING WALL
- □==== BEARING WALL ABOVE
- --- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.OT & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS



MULHERN+KULF
RESIDENTIAL STRUCTURAL ENGINERRING

M&K project number: 126-21018

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

MDH



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

ENGINEERED BEAM MATERIAL SCHEDULE

LSL OPTION

(2)13/4"x117/4" - H

(2)13/4"×117/6" - H

(2)13/4"×14" - F

(2)13/4"x14" - F

(2)13/4"×14" - F

(2)13/4"×14" - F

(2)13/4"×117/6" - F

(2)13/4"x14" - F

(2)13/4"x14" - FB

FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN

FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN

FLITCH OPTION

(2)2x12 + (1) 片"x1比" STEEL

FLITCH PLATE - H

(2)2xl2 + (1) 片"xl比" STEEL

FLITCH PLATE - H

(3)2x12 + (2) 片"xI以" STEEL

FLITCH PLATES - FB

(2)2xl2 + (l) ¼"xl¼" STEEL

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - F

(2)2xl2 + (l) ¼"xll¼" STEEL

FLITCH PLATE - FB

(4)2xl2 + (3) ½"xl¼" STEEL FLITCH PLATES - FB

(4)2xl2 + (3) %"xll以" STEEL FLITCH PLATES - FB

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB

STEEL OPTION

N/A

W12x19 - F

WI2xI4 - F

WI2xI4 - F

WI2xI4 - F

WI2xI4 - F

WIOVIZ - F

WI2xI4 - F

WI2x26 - F

WI2x35 - F

WI0xI2 - FB

LVL OPTION

(2)13/4"x117/4" - H

(2)134"x1136" - H

(2)13/4"x18" - FT

(2)13/4"×14" - F

(2)13/4"×14" - F

(2)13/4"×14" - F

(2)13/4"×14" - F

(2)13/4"x113/6" - F

(2)13/4"×14" - F

(3)13/4"x18" - FT

(3)13/4"×20" - FT

(2)134"x1136" - FB

- "F" INDICATES FLUSH BEAM

- "FT" INDICATES FLUSH TOP BEAM

- "FB" INDICATES FLUSH BOTTOM BEAM - "D" INDICATES DROPPED BEAM

- "H" INDICATES DROPPED OPENING HEADER

PLATES IN SUCCESSION W/ (2) 3"X0.120" NAILS @ 8" O.C.

PLATES IN SUCCESSION w/ (2) 3"x0.120" NAILS @ 8" O.C.

BEAM NOTATION:

001

00IA

002

003

004

005

006

007

008

009

010

PSL OPTION

3%"xII%" - H

3½"xII%" - H

51/4"x18" - FT

3½"xl4" - F

3½"xl4" - F

3½"xl4" - F

3½"xl4" - F

3½"×11½" - F

3½"xl4" - F

51/4"x18" - FT

51/4"×20" - FT

3½"xII%" - FB

REFER TO DETAIL D/SD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS

REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS

- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP.

TYPICAL STRUCTURAL NOTES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT

SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

REFER TO SO.O FOR & SCHEDULES

FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO

OPEN TO ABOVE BETTER) @ 16" O.C. (2)2x4 BM. POCKET OR SIMPSON HUCIIO-2 HANGER FASTENED TO PORTAL FRAME HDR. 4x4 P.T. POST W/ SIMPSON BC52-2/4 CAP & ABW44Z BASE (TYP) (SEE DETAIL 3/SD3.0) MONO TRUSSES

> PARTIAL 2ND FLOOR FRAMING PLAN - TRUSSES ELEVATION #10

M&K project number 126-21018

**JTR** MDH drawn by: issue date: 07-16-2

REVISIONS: initial:

MDH

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RALEIGH, NC

ENGINEERED BEAM MATERIAL SCHEDULE					
BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)13/4"×117/6" - H	3½"×II⅓" - H	(2)13/4"×117/6" - H	(2)2xl2 + (l) 片"xl以" STEEL FLITCH PLATE - H	N/A
00IA	(2)13/4"×113/6" - H	3½"×II%" - H	(2)13/4"×117/6" - H	(2)2xl2 + (l) 片"xl以" STEEL FLITCH PLATE - H	N/A
002	(2)13/4"x18" - FT	51/4"×18" - FT	N/A	(3)2xl2 + (2) ½"xll¼" STEEL FLITCH PLATES - FB	WI2xI9 - F
600	(2)13/4"×14" - F	3½"x14" - F	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
004	(2)134"×14" - F	3½"xI4" - F	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
005	(2)134"×14" - F	3½"xl4" - F	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
006	(2)134"x14" - F	3½"x14" - F	(2) 3/ <sub>4</sub> "x 4" - F	(2)2xl2 + (l) 从"xl以" STEEL FLITCH PLATE - FB	WI2xI4 - F
007	(2)1¾"x11%" - F	3½"×11½" - F	(2)134"x1176" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - F	WI0xI2 - F
008	(2)13/4"×14" - F	3½"x14" - F	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
009	(3)13/4"x18" - FT	5¼"×I8" - FT	N/A	(4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB	WI2x26 - F
010	(3)1¾"×20" - FT	5¼"x20" - FT	N/A	(4)2xl2 + (3) %"xll以" STEEL FLITCH PLATES - FB	WI2x35 - F
OII	(2)1¾"x11%" - FB	3½"xII%" - FB	(2)13/4"x14" - FB	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI0xI2 - FB

- 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"XO.120" NAILS @ 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION w/ (2) 3"x0.120" NAILS @ 8" O.C.

#### LEGEND

- INTERIOR BEARING WALL
- □□□□□ BEARING WALL ABOVE
- --- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

S S PHEN IN



M&K project number: 126-21018

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MDH



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SIMPSON BCS2-2/4 CAP & ABW44Z BASE (TYP.) (SEE DETAIL 3/SD3.0)

PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL SCREENED PORCH - TRUSSES 4 | SCALE: 1/8"=1'-0"

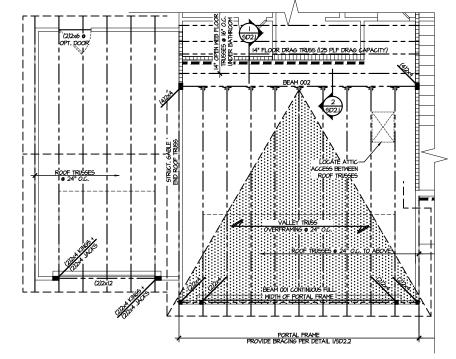
ELEV. #1 SHOWN - ALL ELEV. SIM.

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR



PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL 3RD CAR GARAGE - TRUSSES SCALE: 1/8"=1'-0" ELEV. #1 SHOWN ELEVS. #2-#4, # #6 SIM.

LVL OPTION PSI OPTION ISI OPTION FLITCH OPTION STEEL OPTION (2)2xl2 + (l) ½"xll¼" STEEL FLITCH PLATE - H (2)13/4"×117/6" - H 3½"×11½" - H (2)13/4"x113/6" - H N/A (2)2xl2 + (l) 片"xll以" STEEL FLITCH PLATE - H (2)1¾"×11½" - H 3½"xII%" - H (2)13/4"x117/6" - H (3)2xl2 + (2) ½"xll¼" STEEL FLITCH PLATES - FB (2)13/4"x18" - FT 51/4"x18" - FT W12x19 - F (2)2xl2 + (l) 4"xl以" STEEL (2)13/4"×14" - F (2)13/4"×14" - F 3%"xI4" - F WI2xI4 - F FLITCH PLATE - FB (2)2xl2 + (1) ¼ "xll¼" STEEL (2)13/4"×14" - F (2)13/4"x14" - F 3½"x|4" - F WI2xI4 - F FLITCH PLATE - FB (2)2xl2 + (l) 4"xl以" STEEL (2)13/4"x14" - F (2)13/4"x14" - F 3½"x|4" - F WI2xI4 - F FLITCH PLATE - FB (2)2x12 + (1) ¼"xI¼" STEEL (2)13/4"x14" - F (2)13/4"x14" - F 3½"xl4" - F WI2xI4 - F FLITCH PLATE - FB (2)2xl2 + (l) 以"xli以" STFFI (2)13/4"×117/6" - F 3½"x11%" - F (2)134"x1136" - F WI0xI2 - F FLITCH PLATE - F /2)2y12 + /I) 以"yII以" STEEL (2)13/4"×14" - F 3½"xI4" - F (2)13/4"×14" - F WI2xI4 - F (4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB (3)13/4"x18" - FT WI2x26 - F 51/4"x18" - FT (4)2xl2 + (3) %"xl以" STEEL FLITCH PLATES - FB (3)13/4"×20" - FT 51/4"×20" - FT N/A WI2x35 - F (2)2xl2 + (l) ¼"xll¼" STEEL (2)13/4"x14" - FB (2)13/4"×117/6" - FB 3½"xII%" - FB WIOxI2 - FB FLITCH PLATE - FB

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NOTATION:

NUMBER

001

00IA

002

003

004

005

006

007

800

009

010

OII

- "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.

MODEL RAMING MIDDLETON

ANS

M&K project number

drawn by:

REVISIONS:

126-21018

**JTR** 

MDH issue date: 07-16-2

initial:

MDH

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N/A

(2)13/4"x14" - FB

010

OII

BEAM NOTATION:
- "F" INDICATES FLUSH BEAM

(3)13/4"x20" - FT

(2)134"x1136" - FB

- "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

5¼"x20" - FT

3½"xII%" - FB

- FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W/ (2) 3"X0.120" NAILS @ 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION w/ (2) 3"x0.120" NAILS @ 8" O.C.

#### LEGEND

- INTERIOR BEARING WALL
- □□□□□□ BEARING WALL ABOVE
- --- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

THE PHEN W

M&K project number 126-21018

**JTR** drawn by: MDH issue date: 07-16-2

REVISIONS: initial: MDH

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PORTAL FRAME
PROVIDE BRACING PER DETAIL I/5D2.2

WI2x35 - F

WI0xI2 - FB

(2)2xl2 + (I) 焆"xl焆" STEEL FLITCH PLATE - FB

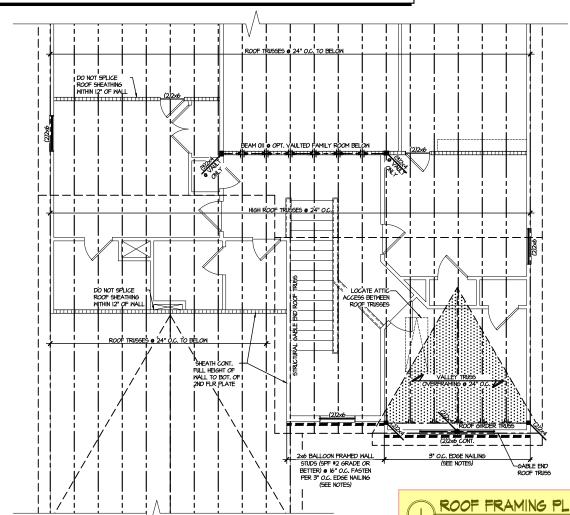
PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL 3RD CAR GARAGE - TRUSSES 3 SCALE: 1/8"=1'-0"

ENGINEERED BEAM MATERIAL SCHEDULE						
BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION	
001	(2)134"×1176" - H	3½"×II⅓" - H	(2)134"x1176" - H	(2)2xl2 + (l) 片"xll片" STEEL FLITCH PLATE - H	N/A	
00IA	(2)13/4"×117/6" - H	3½"×II⅓" - H	(2)134"x1176" - H	(2)2xl2 + (l) ½"xll¼" STEEL FLITCH PLATE - H	N/A	
002	(2)134"x18" - FT	51/4"×18" - FT	N/A	(3)2xl2 + (2) ½"xll¼" STEEL FLITCH PLATES - FB	WI2xI9 - F	
003	(2)13/4"×14" - F	3½"x 4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
004	(2)13/4"×14" - F	3½"×14" - F	(2)13/4"×14" - F	(2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATE - FB	WI2xI4 - F	
005	(2)1 <sup>3</sup> / <sub>4</sub> "x14" - F	3½"x14" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
006	(2)13/4"×14" - F	3½"×14" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
007	(2)134"x1176" - F	3½"×II%" - F	(2)134"x1176" - F	(2)2x12 + (1) ¼"x11¼" STEEL FLITCH PLATE - F	WI0xI2 - F	
008	(2)13/4"×14" - F	3½"x 4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
009	(3)13/4"×18" - FT	51/4"×18" - FT	N/A	(4)2xl2 + (3) 片"xl片" STEEL FLITCH PLATES - FB	WI2x26 - F	
010	(3)13/4"×20" - FT	5¼"×20" - FT	N/A	(4)2xl2 + (3) %"xl以" STEEL FLITCH PLATES - FB	WI2x35 - F	
OII	(2)134"x1176" - FB	3½"x11%" - FB	(2)13/4"×14" - FB	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB	WI0xI2 - FB	

#### BEAM NOTATION:

- "F" INDICATES FLUSH BEAM "FT" INDICATES FLUSH TOP BEAM
- "FB" INDICATES FLUSH BOTTOM BEAM

- "D" INDICATES DROPPED BEAM
   "H" 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.



REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 \$ SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.OT & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

#### LEGEND

- IIIIII INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

2/1/2 MANAGER HEN IN





126-21018

JTR MDH issue date: 07-16-2

MDH

PLANS MIDDLETON MODEL OOF FRAMING

**S4.0** 

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

ENGINEERED BEAM MATERIAL SCHEDULE						
BEAM NUMBER	LYL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION	
001	(2)13/4"×111/6" - H	3½"×II%" - H	(2)134"x1176" - H	(2)2xl2 + (l) ½"xll¼" STEEL FLITCH PLATE - H	N/A	
00IA	(2)13/4"×111/6" - H	3½"×II%" - H	(2)134"x1176" - H	(2)2xl2 + (l) ½"xll¼" STEEL FLITCH PLATE - H	N/A	
002	(2)13/4"x18" - FT	51/4"×18" - FT	N/A	(3)2xl2 + (2) ½"xll¼" STEEL FLITCH PLATES - FB	WI2xI9 - F	
003	(2)13/4"×14" - F	3½"×14" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
004	(2)13/4"×14" - F	3½"×14" - F	(2)13/4"×14" - F	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
005	(2) 3/4"× 4" - F	3½"xI4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATE - FB	Wl2xl4 - F	
006	(2)13/4"×14" - F	3½"×14" - F	(2)13/4"x14" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB	WI2xI4 - F	
007	(2)13/4"×111/6" - F	3½"×II%" - F	(2)134"x1176" - F	(2)2x12 + (1) ¼"xII¼" STEEL FLITCH PLATE - F	WI0xI2 - F	
008	(2)134"×14" - F	3½"xI4" - F	(2)13/4"×14" - F	(2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATE - FB	WI2xI4 - F	
009	(3)134"×18" - FT	5¼"xl8" - FT	WA	(4)2xl2 + (3) ½"xl以" STEEL FLITCH PLATES - FB	WI2x26 - F	
010	(3)13/4"×20" - FT	5¼"×20" - FT	N/A	(4)2xl2 + (3) %"xl以" STEEL FLITCH PLATES - FB	WI2x35 - F	
OII	(2)134"x1176" - FB	3½"x11%" - FB	(2)13/4"x14" - FB	(2)2xl2 + (I) 以"xll以" STEEL FLITCH PLATE - FB	WI0xI2 - FB	

- 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.

REFER TO SO O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J \$ SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

SD2.IJ/SD2.IT REFERS TO SD2.IJA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.IJB/SD2.ITB FOR FLITCH BEAMS OR SD2.IJC/SD2.ITC FOR STEEL BEAMS

#### 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.

S SPHEN W

MULHERN+KUL
RESIDENTIAL STRUCTURAL ENGINEERI



M&K project number: 126-21018

**JTR** MDH drawn by: issue date: 07-16-21

REVISIONS: initial: MDH

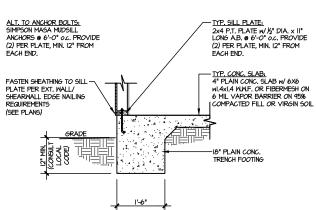


MODEL FRAMING

MIDDLETON

sheet: LEFT HAND **S4.1** 

SHEATH CONT. -FULL HEIGHT OF WALL TO BOT, OF 2ND FLR PLATE ROOF FRAMING PLAN ELEVATIONS #10





I" AIR GAP

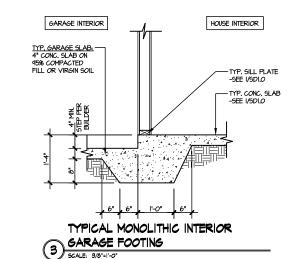
4" BRICK VENEER

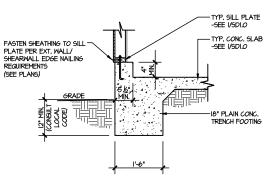
GROUT SOLID TO WEEP HOLES @ 24"

W/ I" W. x 22GA CORRUGATED —
GALV. METAL WALL TIES

16" O.C. HORIZ. \$ VERT. (TYP.)

GRADE





STANGIST NO.

M&K project number 126-21018

drawn by:

REVISIONS:

**JTR** 

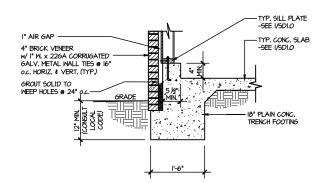
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initial:

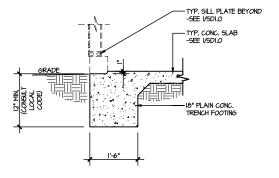
MDH

issue date: 07-16-2

TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING







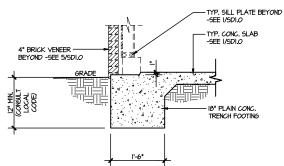
-TYP. SILL PLATE -SEE I/SDI.O

- TYP. CONC. SLAB -SEE I/SDI.O

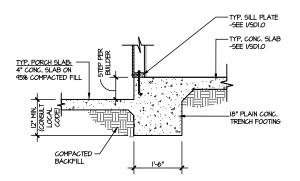
18" PLAIN CONC.

w/ BRICK VENEER

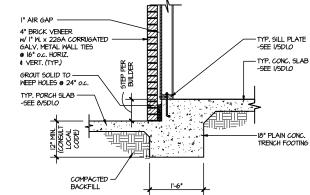
TYPICAL SLAB ON GRADE GARAGE 6 ENTRY @ PERIMETER FOOTING



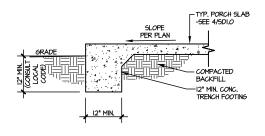




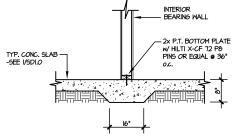
TYPICAL SLAB ON GRADE PERIMETER (8) FOOTING @ PORCH/PATIO



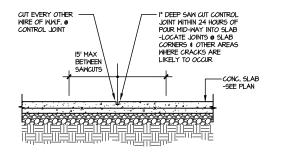




TYPICAL FOOTING @ PORCH SLAB



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



TYPICAL CONTROL JOINT

**SD1.0** 

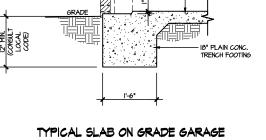
MODEL

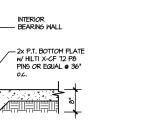
MIDDLETON

RALEIGH, NC

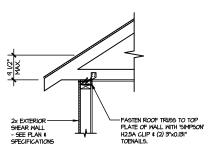
TAIL

OUNDATION

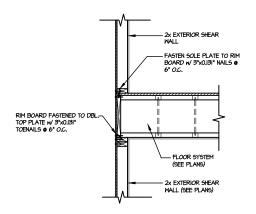








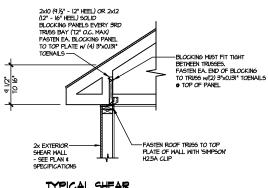




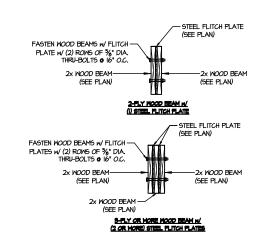
TYPICAL SHEAR TRANSFER DETAIL

DETMEEN FLOORS @ EXTERIOR WALL

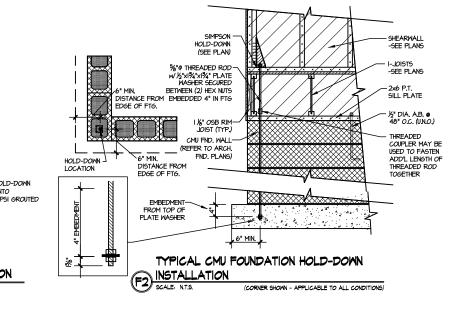
SCALE: 3/9's1-0'

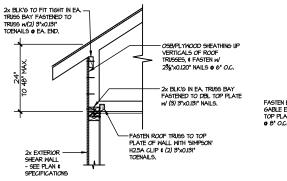




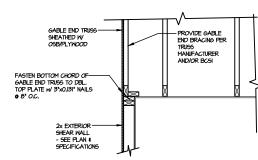


## TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE SUPPLIES



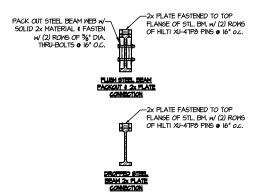


## TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS SCALE: 3/9"=1"-0" HEEL HEIGHT UP TO 49" MAX



TYPICAL GABLE END DETAIL

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



TYPICAL STEEL BEAM CONNECTION DETAIL
SCALE 944-1-67



SEPHEN N

126-21018
project mgr: JTR
drawn by: MDH

issue date: O7-1 6-2 TREVISIONS:
date: initial:

 date:
 initial:

 01/13/22
 MDH

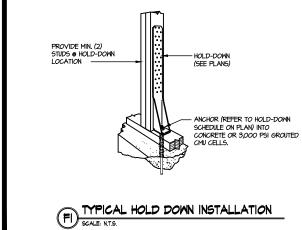
 02/01/23
 JTS



FRAMING DETAILS
MIDDLETON MODEL

SD2.0J

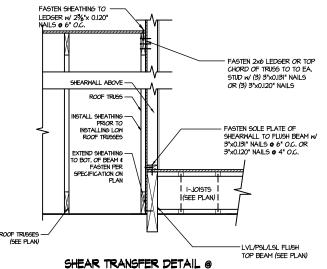
RALEIGH, NC



SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW PARALLEL TO FRAMING ONLY READ MERE NOTED ON FLAN

SHEARWALL ABOVE -FASTEN SHEATHING TO BLOCKING W/ 23/6"x 0.120" NAILS @ 6" O.C. - 2x6 CONT. BLOCKING. FASTEN TO EA. STUD w/ (3) 3"x0.131" NAILS OR INSTALL SHEATHING — PRIOR TO INSTALLING ROOF TRUSSES (3) 3"x0.120" NAILS -FASTEN SOLE PLATE OF SHEARWALL TO FLUSH BEAM W 3"x0.131" NAILS @ 6" O.C. OR 3"x0.120" NAILS @ 4" O.C. EXTEND SHEATHING -TO BOT. OF BEAM & FASTEN PER SPECIFICATION ON PLAN || |-Joists || ||*(9*EE Plan)|| LOW ROOF TRUSSES (SEE PLAN) LVL/PSL/LSL FLUSH TOP BEAM (SEE PLAN)

> SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE SCALE S/0°-11-0°



EXTERIOR SHEARWALL ABOVE

FASTEN SHEATHING TO NSTALL SHEATHING PRIOR TO INSTALLING LOW ROOF TRUSSES LOW ROOF TRUSSES (SEE PLAN) -I-JOISTS RIM BOARD FASTENED TO DBL.-TOP PLATE W/ 3"x0.131" TOENAILS @ 6" O.C. WALL (SEE PLAN)

TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCAE 94"-1"-0"

M&K project number 126-21018

**JTR** MDH drawn by: issue date: 07-16-2

REVISIONS: initial: MDH



MODEL

MIDDLETON RAMING

RALEIGH, NC

SD2.1AJ

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

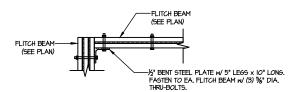
SHEAR TRANSFER DETAIL @
INTERIOR SHEARMALL BELOW

SCALE 9/4"-1"-O"

SCALE 9/4"-1"-O"

CALY RESO PRESE NOTE ON FLAM

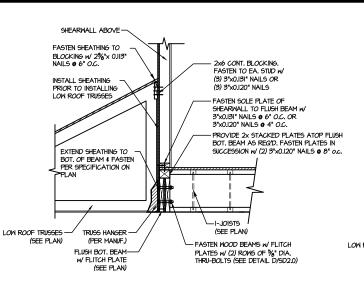
PROVIDE (6) % DIAM.
PRE-DRILLED HOLES,
AS SHOWN



TYPICAL FLITCH BEAM TO FLITCH BEAM

CONNECTION DETAIL

SCALE SAN-1-CF



SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE 30°-1-0°

FASTEN SHEATHING TO-LEDGER w/ 23/8"x 0.113" NAILS @ 6" O.C. FASTEN 2x6 LEDGER OR TOP CHORD OF TRUSS TO TO EA. STUD W (3) 3"x0.131" NAILS SHEARWALL ABOVE-- FASTEN SOLE PLATE OF SHEARWALL TO 2x STACKED PLATES w/ 3"x0.131" NAILS @ 6" O.C. OR 3"x0.120" NAILS @ 4" O.C. NSTALL SHEATHING — PRIOR TO INSTALLING LOW ROOF TRUSSES -PROVIDE 2x STACKED PLATES ATOP FLUSH BOT. BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION w/ (2) 3"x0.120" NAILS @ 8" o.c. EXTEND SHEATHING TO BOT. OF BEAM & FASTEN PER SPECIFICATION ON LOW ROOF TRUSSES (SFF PLAN) FASTEN WOOD BEAMS w/ FLITCH PLATES w/ (2) ROWS OF 5/6" DIA. THRU-BOLTS (SEE DETAIL D/SD2.0) FLUSH BOT, BEAM w/ FLITCH PLATE (SEE PLAN)

SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE SIGN-1-0"

FASTEN SHEATHING TO LEDGER W 23% X 0.113"
WALS @ 6" O.C.

FASTEN 2.6 LEDGER CIT TO CHARD OF TRUST TO EA.
STUD W (3) 3" X0.131" NALLS

2X EXTERIOR SHEAR
WALL ABOVE

FASTEN SOLE PLATE OF SHEARWALL TO RIM BOARD W 3"X0.131" NAILS @ 6" O.C.

RIM BOARD FASTENED TO DBL.

RIM BOARD FASTENED TO DBL.

INTERIOR SHEAR
WALL (SEE PLAN)

2x INTERIOR SHEAR
WALL (SEE PLAN)

TYPICAL SHEAR TRANSFER DETAIL

TYPICAL SHEAR TRANSFER DETAIL

BETWEEN FLOORS @ INTERIOR WALL

SCALE SAT-POT

M&K project number:

126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:

date: initial:
01/13/22 MDH
02/01/23 JTS



RAMING DETAILS
IIDDLETON MODEL

MIDDLETON RALEIGH, NC

SD2.1BJ

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

SHEAR TRANSFER DETAIL @ INTERIOR SHEARMALL BELOW PARALLEL TO FRAMING ONLY READ WHERE NOTED ON FLAN

FASTEN SHEATHING TO -BLOCKING W/ 23/8"x 0.120" NAILS @ 6" O.C. -2x6 CONT. BLOCKING. FASTEN TO EA. STUD w/ INSTALL SHEATHING -PRIOR TO INSTALLING LOW ROOF TRUSSES (3) 3"x0.131" NAILS OR (3) 3"x0.120" NAILS -FASTEN SOLE PLATE OF SHEARWALL TO 2x WOOD PLATE W 3"x0.131" NAILS @ 6" O.C. OR LOW ROOF TRUSSES-— 2x PLATE FASTENED TO TOP FLANGE OF STL. BM, w/ (2) ROWS OF HILTI XU-4TP8 PINS ● 16" O.C. EXTEND SHEATHING TO — BOT. OF BEAM & FASTEN TO PACK OUT PER SPECIFICATION ON PLAN TRUSS HANGER (PER MANUF.) FLUSH STEEL-BEAM (SEE PLAN) (SEE PLAN) -PACK OUT STEEL BEAM WEB w/ SOLID 2x MATERIAL & FASTEN w/ (2) ROWS OF "%" DIA. THRU-BOLTS (SEE DETAIL E/SD2.0)

> SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE

LEDGER W/ 2%"x 0.113" NAILS @ 6" O.C. FASTEN 2x6 LEDGER OR TOP CHORD OF TRUSS TO TO EA. STUD w/ (3) 3"x0.131" NAILS SHEARWALL ABOVE -FASTEN SOLE PLATE OF SHEARWALL TO 2x MOOD PLATE W/3"x0.131" NAILS • 6" O.C. OR 3"x0.120" NAILS • 4" O.C. NSTALL SHEATHING — PRIOR TO INSTALLING LOW ROOF TRUSSES - 2x PLATE FASTENED TO TOP FLANGE OF STL. BM, w/ (2) ROWS OF HILTI XU-47P8 PINS @ 16\* O.C. EXTEND SHEATHING TO BOT. OF BEAM & FASTEN PER SPECIFICATION ON FLUSH STEEL-BEAM (SEE PLAN) LOW ROOF TRUSSES -(SEE PLAN) (SEE PLAN) -PACK OUT STEEL BEAM WEB w/ SOLID 2x MATERIAL & FASTEN W

(2) ROWS OF %" DIA. THRU-BOLTS
(SEE DETAIL E/SD2.0)

SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE

FASTEN SHEATHING TO NSTALL SHEATHING PRIOR TO INSTALLING LOW ROOF TRUSSES LOW ROOF TRUSSES (SEE PLAN) -I-JOISTS RIM BOARD FASTENED TO DBL.-TOP PLATE W 3"x0.131" TOENAILS @ 6" O.C. -2x INTERIOR SHEAR WALL (SEE PLAN) TYPICAL SHEAR TRANSFER DETAIL

3 BETWEEN FLOORS @ INTERIOR WALL

M&K project number 126-21018

**JTR** MDH drawn by: issue date: 07-16-2

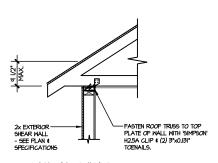
REVISIONS: initial: MDH

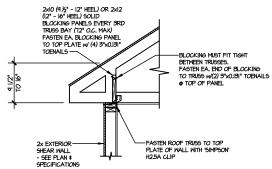


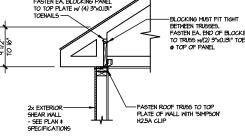
MODEL RAMING

MIDDLETON RALEIGH, NC

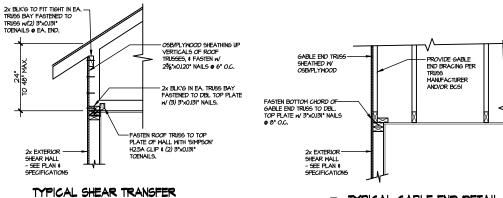
LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

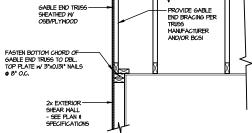












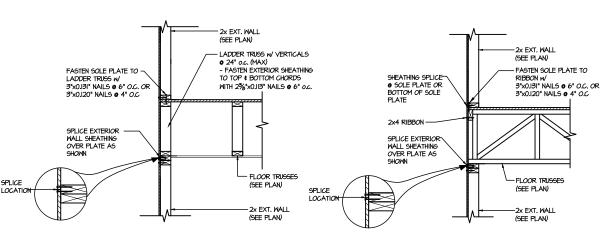
TYPICAL GABLE END DETAIL

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

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

TYPICAL SHEAR TRANSFER DETAIL

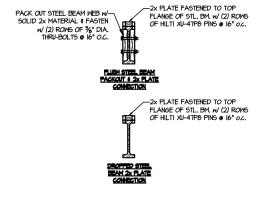
BETWEEN FLOORS @ EXTERIOR WALL
SCALE \$100-11-0" PARALLE PRIME



- Steel Flitch Plate (See Plan) FASTEN WOOD BEAMS w/ FLITCH -PLATE w/ (2) ROWS OF %" DIA. THRU-BOLTS @ 16" O.C. (SEE PLAN) (SEE PLAN) 2-FLY MOOD SEAM IN/ - Steel Flitch Plate (See Plan) FASTEN WOOD BEAMS W/ FLITCH -PLATES w/ (2) ROWS OF 56" DIA. THRU-BOLTS @ 16" O.C. 2x WOOD BEAM -2x WOOD BEAM (SEE PLAN) (SEE PLAN) 2x WOOD BEAM -(SEE PLAN) S-FLY OR MORE WOOD BEAM W/ (2 OR MORE) STEEL FLITCH PLATES

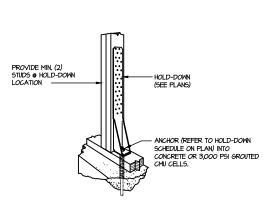
DETAIL @ RAISED HEEL TRUSS

SCALE: 3/8'=1'-0' HEEL HEIGHT UP TO 48" MAX.

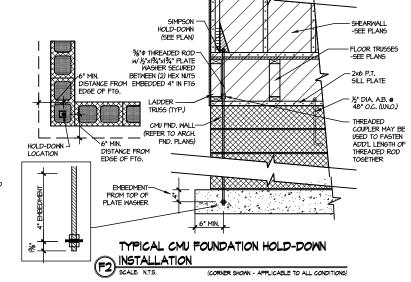


TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE 944-11-0\*

TYPICAL STEEL BEAM CONNECTION DETAIL



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



MODEL MIDDLETON RAMING

SAGIN NO.

M&K project number 126-21018

drawn by:

REVISIONS:

**JTR** 

MDH

initial:

MDH

issue date: 07-16-2

**SD2.0T** 

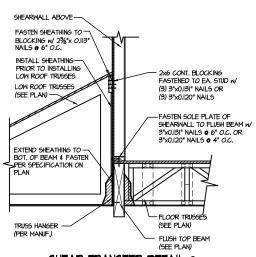
RALEIGH, NC

FILE: RLH -

SHEAR TRANSFER DETAIL

@ INTERIOR SHEAR WALL

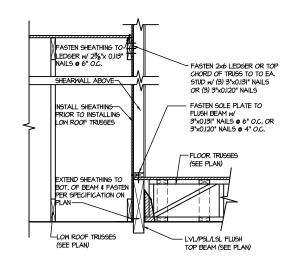
SCALE SAT-11-0" PARALLE FRANCE



SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

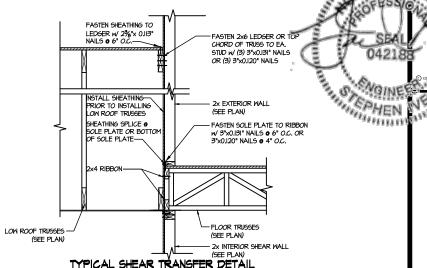
SCALE SAFETO



SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE SOUTHON



TYPICAL SHEAR TRANSFER DETAIL

BETWEEN FLOORS @ INTERIOR WALL

SCALE SUPPLY

M&K project number:

126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:

date: initial:

01/13/22 MDH



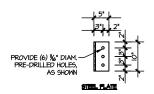
RAMING DETAILS IIDDLETON MODEL

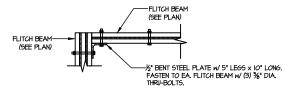
MIDDLETON RALEIGH, NC

SD2.1AT

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.



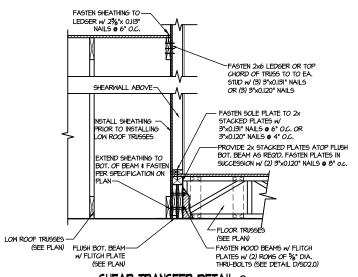




### TYPICAL FLITCH BEAM TO FLITCH BEAM CONNECTION DETAIL

SHEARWALL ABOVE-FASTEN SHEATHING TO-BLOCKING w/ 236"x O.113" NAILS @ 6" O.C. INSTALL SHEATHING PRIOR TO INSTALLING LOW ROOF TRUSSES - 2x6 CONT. BLOCKING FASTENED TO EA. STUD w/ (3) 3"x0.131" NAILS OR LOW ROOF TRUSSES (3) 3"x0.120" NAILS (SEE PLAN) -FASTEN SOLE PLATE TO 2x 3"x0.120" NAILS @ 4" O.C. PROVIDE 2x STACKED PLATES ATOP FLUSH BOT, BEAM AS REQ'D, FASTEN PLATES IN EXTEND SHEATHING TO — BOT. OF BEAM & FASTEN PER SPECIFICATION ON PLAN SUCCESSION w/ (2) 3"x0.120" NAILS @ 8" o.c. -FLOOR TRUSSI (SEE PLAN) (PER MANUE.) FLUSH BOT, BEAM-w/ FLITCH PLATE PLATES W/ (2) ROWS OF 56" DIA. THRU-BOLTS (SEE DETAIL D/SD2.0) (SEE PLAN)

SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE SCALE SOUTH SOUTH



SHEAR TRANSFER DETAIL @ 3 EXTERIOR SHEARWALL ABOVE

FASTEN SHEATHING TO LEDGER W/ 2 %" × 0.113" NAIL5 @ 6" O.C. -FASTEN 2x6 LEDGER OR TOP CHORD OF TRUGG TO EA. STUD w/ (3) 3"x0.131" NAILS SAGINGING N NSTALL SHEATHING— PRIOR TO INSTALLING 2x EXTERIOR WALL (SEE PLAN) LOW ROOF TRUSSES SHEATHING SPLICE @ SOLE PLATE OR BOTTO OF SOLE PLATE - FASTEN SOLE PLATE TO RIBBON w/ 3"x0.131" NAILS • 6" O.C. OR 3"x0.120" NAILS • 4" O.C. LOW ROOF TRUSSES -(SEE PLAN) (SEE PLAN) 2x INTERIOR SHEAR WALL TYPICAL SHEAR TRANSFER DETAIL

BETWEEN FLOORS @ INTERIOR WALL

M&K project number 126-21018

**JTR** drawn by: MDH issue date: 07-16-2

REVISIONS: initial: MDH

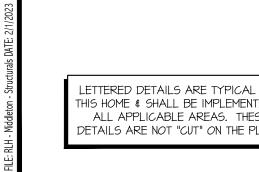


MODEL RAMING

MIDDLETON RALEIGH, NC

SD2.1BT

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.





SHEAR TRANSFER DETAIL

@ INTERIOR SHEAR WALL

SCALE 5/4"-1"-0" PARALLE FRANCIS

FASTEN SHEATHING TO -- SHEARWALL ABOVE BLOCKING W/ 23/8"x 0.120" NAILS @ 6" O.C. -2x6 cont. Blocking. Fasten to Ea, stud W (3) 3"x0.131" nails or INSTALL SHEATHING -PRIOR TO INSTALLING LOW ROOF TRUSSES (3) 3"x0.120" NAILS -FASTEN SOLE PLATE OF SHEARWALL TO 2x WOOD PLATE W/3"x0.131" NAILS • 6" O.C. OR 3"x0.120" NAILS • 4" O.C. (SEE PLAN) - 2x PLATE FASTENED TO TOP FLANGE OF STL. BM. w/ (2) ROWG OF HILTI XU-47P8 PING @ 16" O.C. EXTEND SHEATHING TO — BOT. OF BEAM & FASTEN TO PACK OUT PER PECIFICATION ON PLAN TRUSS HANGER -(PER MANUF.) FLUSH STEEL-BEAM (SEE PLAN) - FLOOR TRUSSES -PACK OUT STEEL BEAM WEB W SOLID 2x MATERIAL & FASTEN W/ (2) ROMS OF 5/8" DIA. THRU-BOLTS (SEE DETAIL E/SD2.0)

SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE 380\*100\*

FASTEN SHEATHING TO LEDGER w/ 2%"x 0.113" NAILS @ 6" O.C. FASTEN 2x6 LEDGER OR TOP CHORD OF TRUGG TO TO EA. STUD w/ (3) 3"x0.131" NAILS SHEARWALL ABOVE~ OR (3) 3"x0.120" NAILS -FASTEN SOLE PLATE OF SHEARWALL TO 2x WOOD PLATE w/ 3"x0.131" NAILS • 6" O.C. OR 3"x0.120" NAILS • 4" O.C. NSTALL SHEATHING — PRIOR TO INSTALLING LOW ROOF TRUSSES 2x PLATE FASTENED TO TOP FLANGE OF STL. BM. w/ (2) ROWS OF HILTI XU-4TP8 PINS @ 16" O.C. BOT. OF BEAM & FASTEI PER SPECIFICATION ON FLUSH STEEL-BEAM (SEE PLAN) FLOOR TRUSSES LOW ROOF TRUSSES (SEE PLAN) -PACK OUT STEEL BEAM WEB w/ SOLID 2x MATERIAL & FASTEN W/ (2) ROWS OF %" DIA. THRU-BOLTS (SEE DETAIL E/SD2.0)

SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE SOPILOT

FASTEN SHEATHING TO LEDGER W/ 2%"x 0.113" NAILS @ 6" O.C. FASTEN 2x6 LEDGER OR TOP CHORD OF TRUGG TO EA. STUD w/ (3) 3"x0.131" NAILS OR (3) 3"x0.120" NAILS SAGIN N NSTALL SHEATHING-PRIOR TO INSTALLING LOW ROOF TRUSSES 2x EXTERIOR WALL SHEATHING SPLICE &
SOLE PLATE OR BOTTON
OF SOLE PLATE FASTEN SOLE PLATE TO RIBBON w/ 3"x0.131" NAILS @ 6" O.C. OR 3"x0.120" NAILS @ 4" O.C. FLOOR TRUSSES LOW ROOF TRUSSES — (SEE PLAN) (SEE PLAN) 2x INTERIOR SHEAR WALL (SFE PLAN) TYPICAL SHEAR TRANSFER DETAIL

TYPICAL SHEAR TRANSFER DETAIL

BETWEEN FLOORS @ INTERIOR WALL

scale \$44-1-0

M&K project number:

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02/01/23 JTS

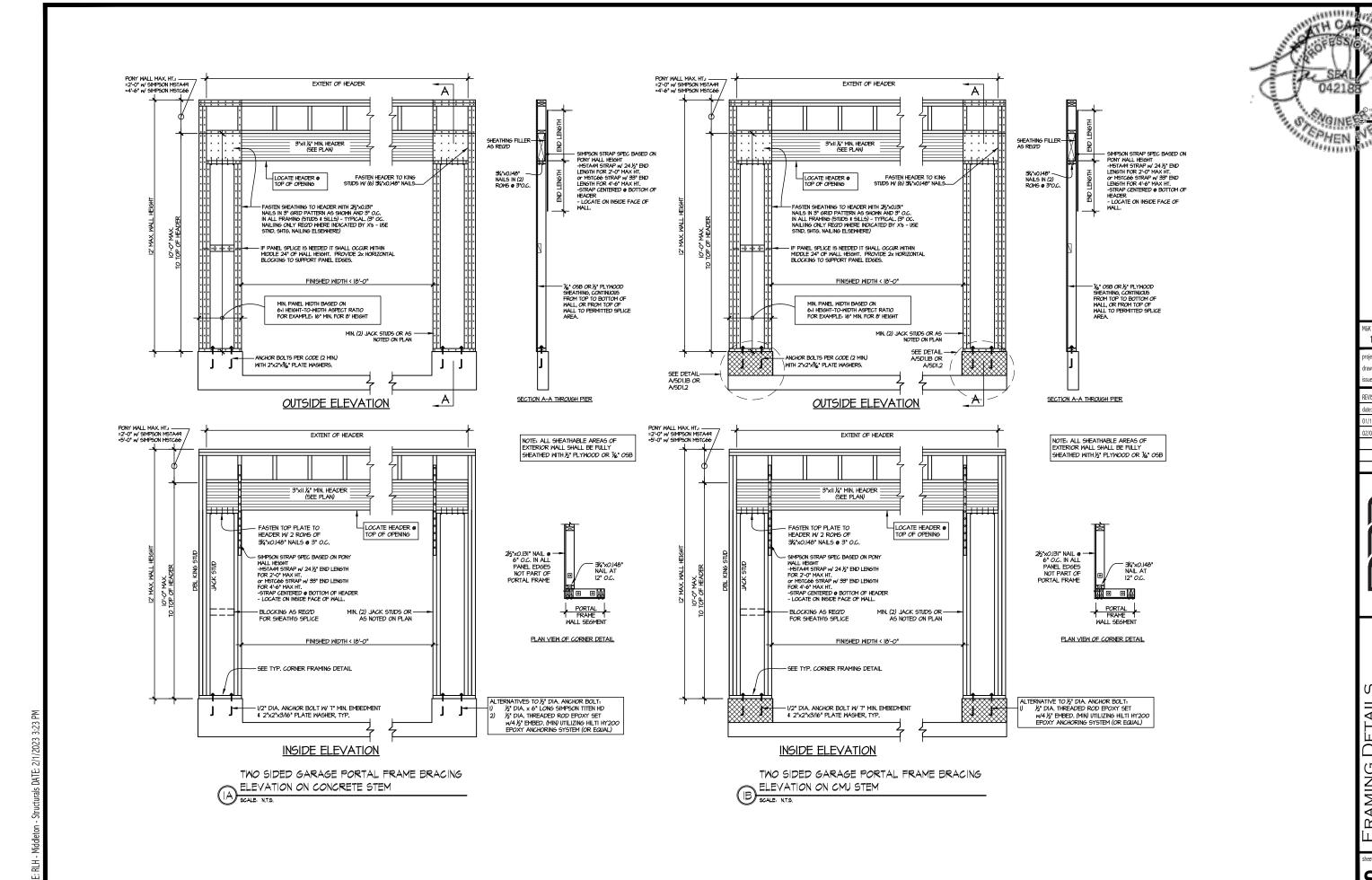


LETON MODEL

FRAMING DET
MIDDLETON
RALEIGH, NC

SD2.1CT

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.



M&K project number: 126-21018

project mgr: JTR drawn by: MDH issue date: 07-16-21

REVISIONS:

date: initial:

01/13/22 MDH

01/13/22 MDH 02/01/23 JTS



AILS MODEL

MIDDLETON M

SD2.2

**SD2.3** 

RALEIGH, NC

A LOCATE HEADER O FASTEN TOP PLATE TO HEADER W/ 2 ROWS OF 3¼"x0.148" NAILS @ 3" O.C. - FASTEN SHEATHING TO HEADER WITH 2½"x0.131" NALIS IN 3" GRID PATTERN AS SHOWN AND 3" O.S. IN ALL FRAMING (STUDS & SILLS) -TYPICAL. - SIMPSON STRAP SPEC BASED ON PONY MALL HEIGHT - MSTAARI STRAP W 24 ½\* END LENGTH FOR 2\*-0\* MAX HT. Or MSTC66 STRAP W 33\* END LENGTH FOR 5\*-0\* MAX HT. - STRAP CENTERED • BOTTOM OF HEADER - LOCATE ON INSIDE FACE OF WALL. IF PANEL SPLICE IS NEEDED IT SHALL OCCUR WITHIN MIDDLE 24" OF WALL HEIGHT. PROVIDE 2x HORIZONTAL BLOCKING TO SUPPORT PANEL - BLOCKING AS REQ'D FOR SHEATH'G SPLICE - MIN. (2) JACK STUDS OR AS NOTED ON PLAN - MIN. (2) JACK STUDS OR AS NOTED ON PLAN MIN, WIDTH BASED ON 6:1 HEIGHT-TO-WIDTH ASPECT RATIO FOR EXAMPLE: 16" MIN, FOR 6' HEIGHT NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH ½" PLYWOOD OR ¾" OSB — Anchor Bolts per Code (2 Min.) With 2"x2"x%" Plate Washers. ALTERNATIVES TO ½" DIA, ANCHOR BOLIT.

1) ½" DIA, x 12" LONG SIMPSON TITEN HD
2) ½" DIA, THREADED ROD EPOXY SET
W4'½" BEDED, (MIN) UTILLING HILTI HY200 EPOXY
ANCHORING SYSTEM (OR EQUAL) \_A INSIDE ELEVATION

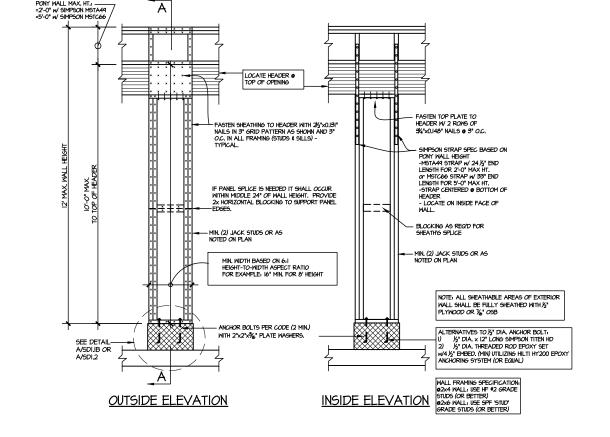
WALL FRAMING SPECIFICATION

O2x4 WALL: USE IF \$2 GRADE
STUDS (OR BETTER)

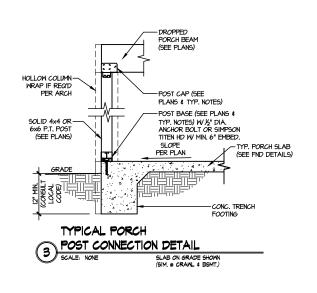
STUDS (OR BETTER)

GRADE STUDS (OR BETTER) **OUTSIDE ELEVATION** 









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NC LIC. #C-3825



M&K project number: 126-21018

project mgr: JTR drawn by: MDH issue date: 07-16-21

initial: MDH



MIDDLETON MODEL

RALEIGH, NC

SD3.0