# LANIER-RALE

RALEIGH - LOT 00.0091 BLAKE POND

(MODEL# 2991)

ELEVATION 3- GL

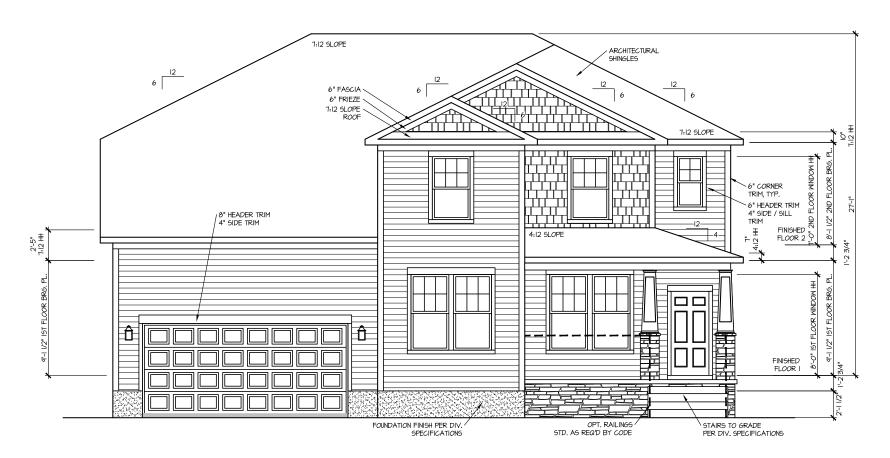


AREA CALCULATIONS		COVERED /	
ELEVATION 3	HEATED	UNHEATED	UNCOVERED
FIRST FLOOR	1435 SF		
GARAGE		588 SF	
FRONT PORCH - ELEVATION 3		148 SF	
SECOND FLOOR	1516 SF		
OPTION			
COVERED PORCH		252 SF	
POCKER OFFICE	66 SF		
TOTAL	7017.05		
TOTAL	3017 SF	988 SF	
			+

### 92 WHIMBREL COURT

LOT	SPECIFIC	
1	LOT 00.0091	
	201 00.0031	LANIER REV. R98 ELEVATION 3
2	ADDRESS	999 NEWSTAR DRIVE NEWSTAR, AK 99999
	ADDRESS	999 NEWSTAR DRIVE NEWSTAR, AK 99999
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INDEX	



## FRONT ELEVATION 3



REAR ELEVATION 3

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

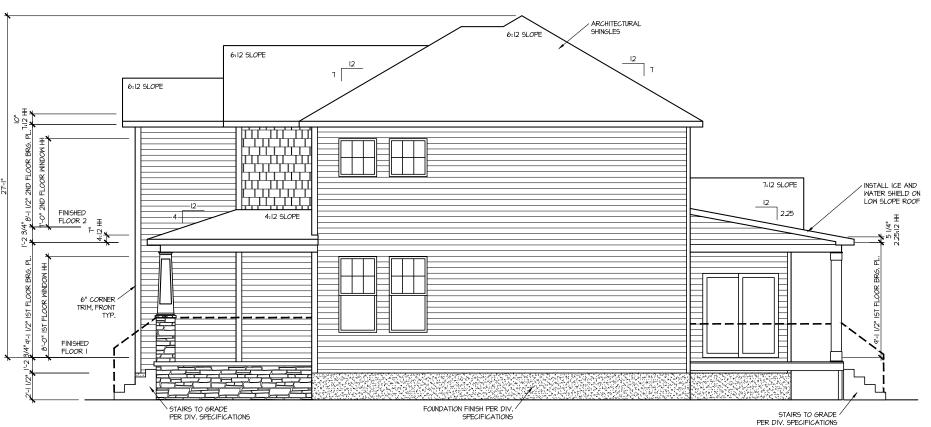
FRONT & REAR ELEVATIONS HOUSE NAME: LANIER DRAWING TITLE

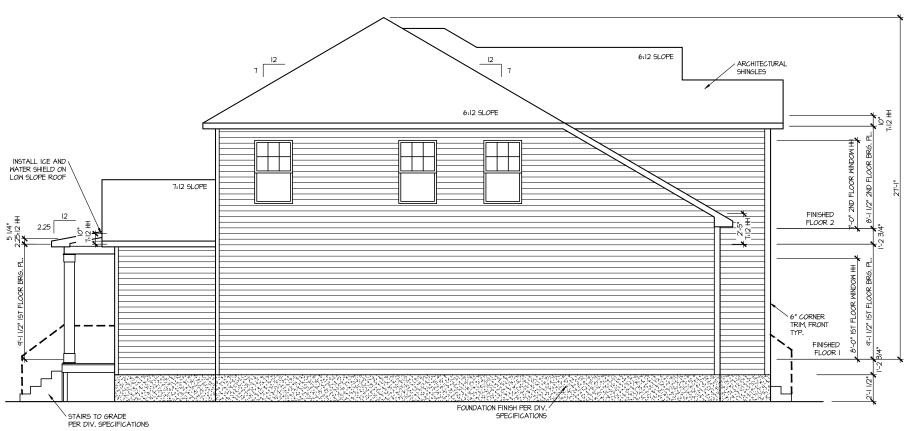
SHEET No.

DRAWN BY:

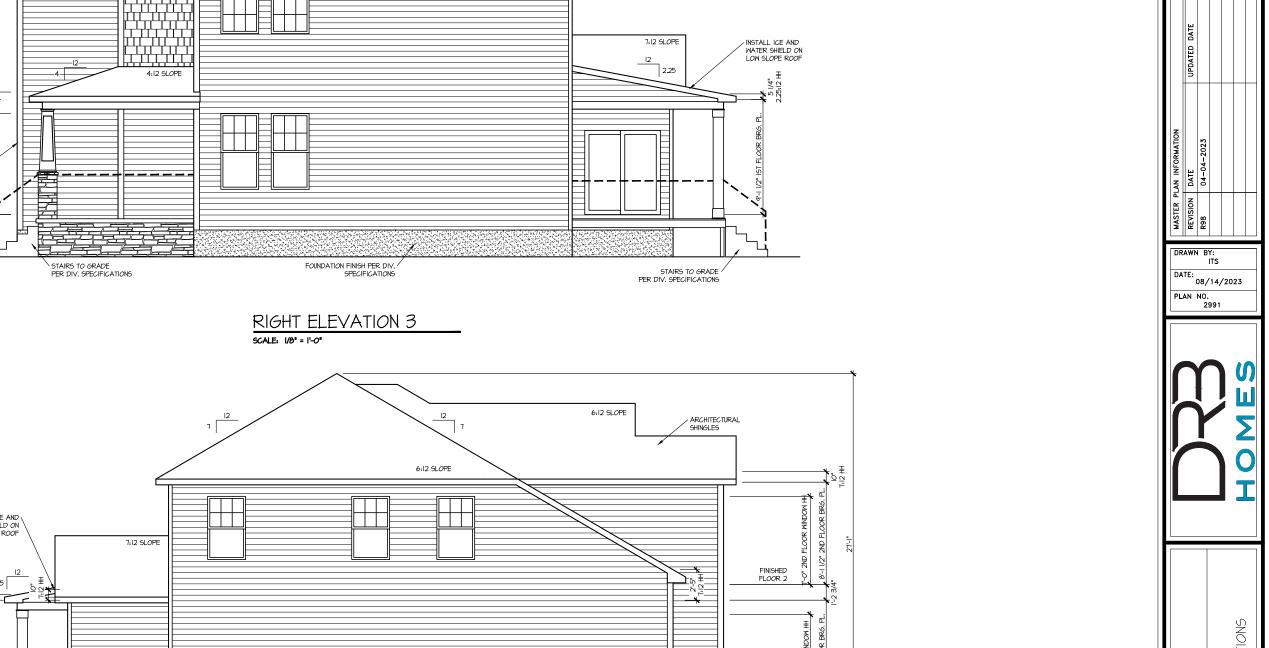
PLAN NO. 2991

DATE: 08/14/2023





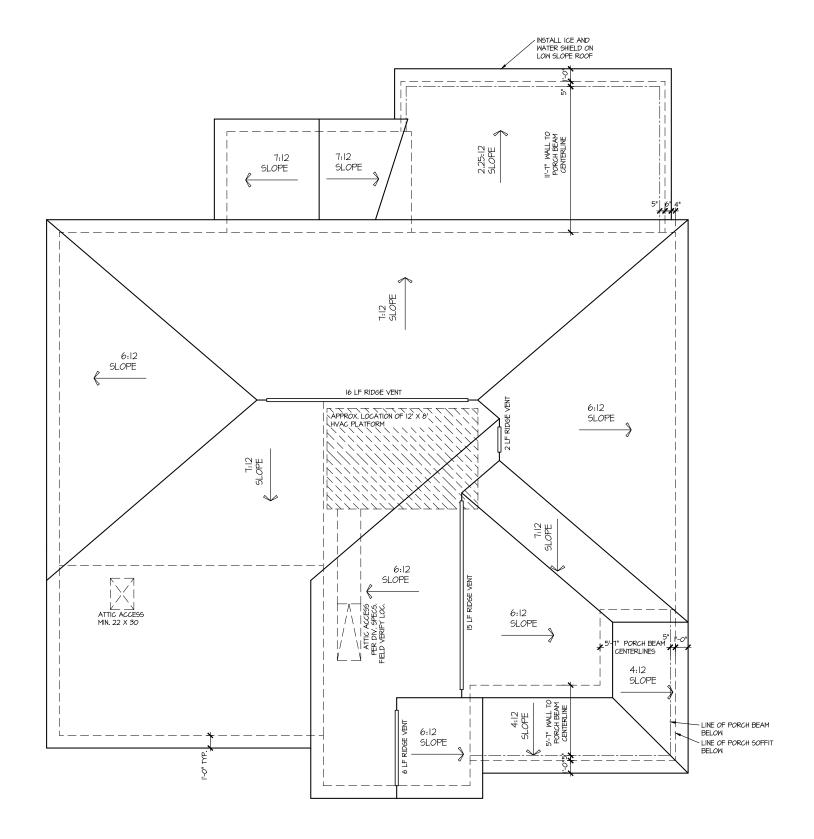
# LEFT ELEVATION 3 SCALE: 1/8" = 1'-0"



RIGHT & LEFT ELEVATIONS HOUSE NAME: LANIER DRAWING TITLE

SHEET No.



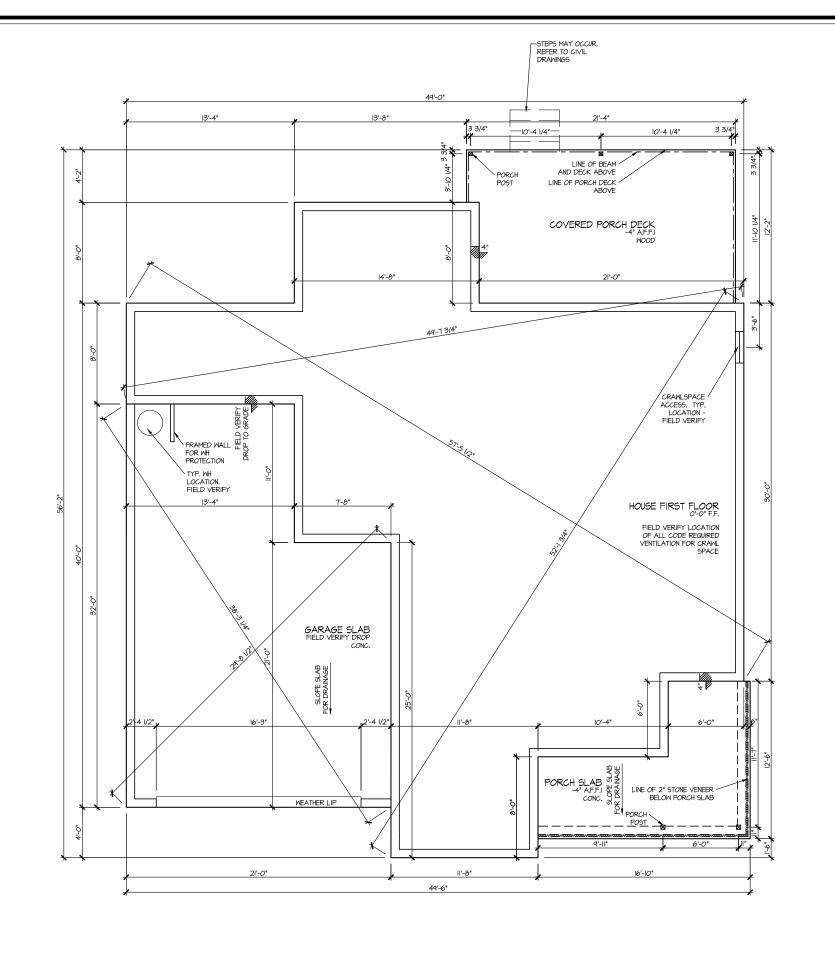


ROOF PLAN ELEV. 3 SCALE: 1/8' = 1'-0'

DRAWN BY: DATE: 08/14/2023 PLAN NO. 2991

HOUSE NAME: LANIER DRAWING TITLE ROOF PLAN

> SHEET No. AI.3



ELEVATION 3 CRAWL SPACE PLAN SCALE: 1/8" = 1'-0"

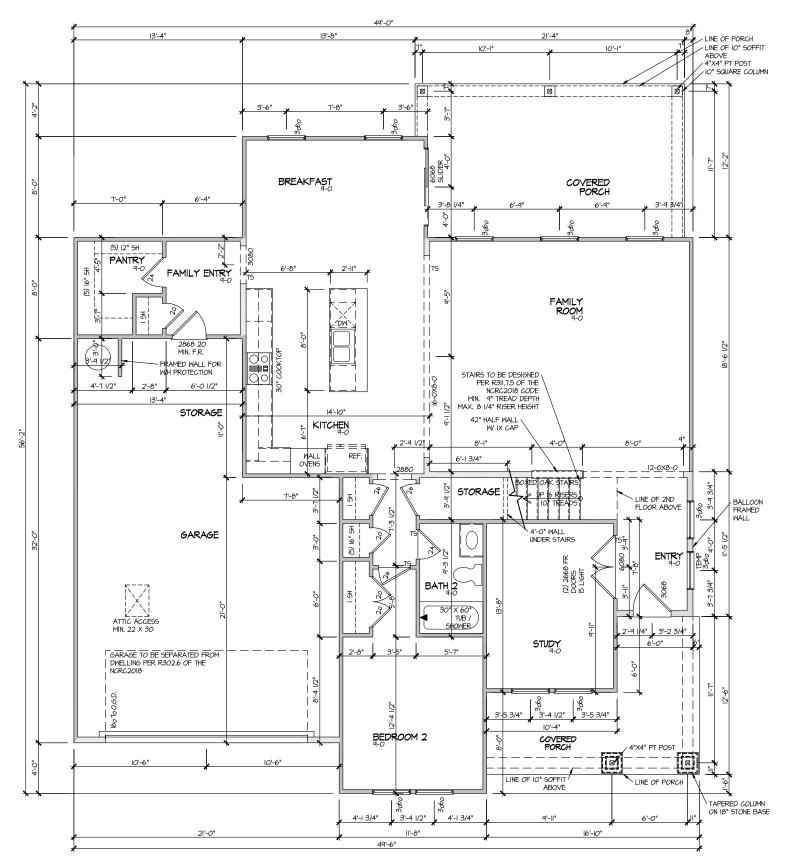
DRAWN BY:

DATE: 08/14/2023 PLAN NO. 2991



CRAML SPACE PLAN HOUSE NAME: LANIER DRAWING TITLE

SHEET No. A2.I



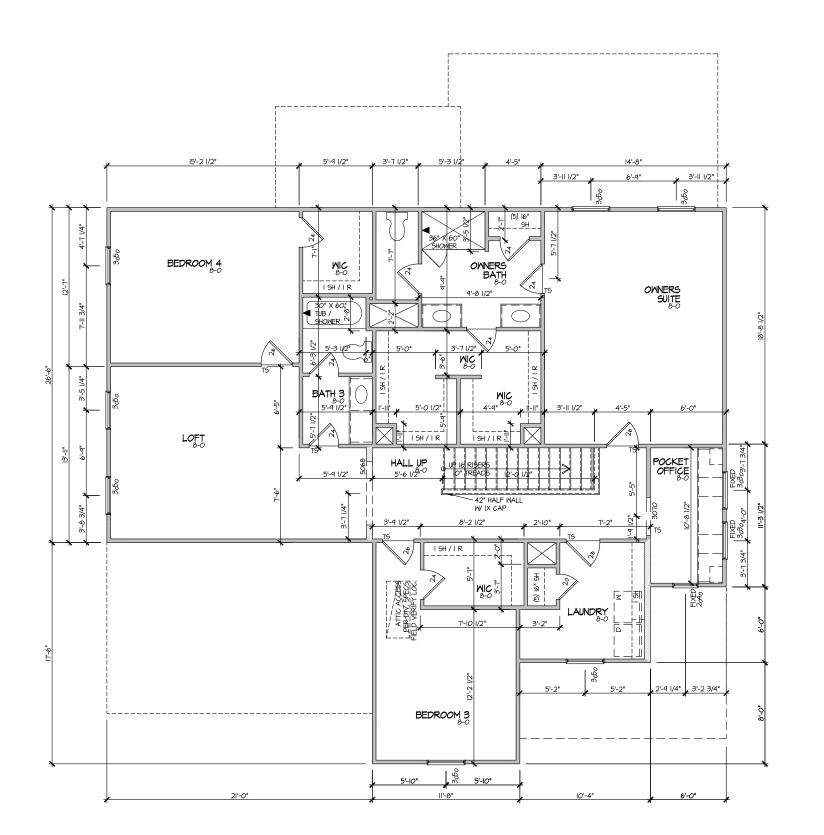
ELEVATION 3 FIRST FLOOR PLAN SCALE: 1/8" = 1'-0"

DRAWN BY: DATE: 08/14/2023 PLAN NO. 2991



FIRST FLOOR PLAN HOUSE NAME: LANIER DRAWING TITLE

SHEET No. A3.I



ELEVATION 3 SECOND FLOOR PLAN SCALE: 1/8" = 1'-0" MASTER PLAN INFORMATION

MASTER PLAN INFORMATION

REVISION DATE

REVISION DATE

ROS 04-04-2023

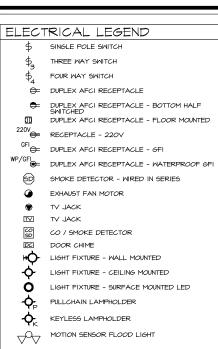
PLAN NO. 2591



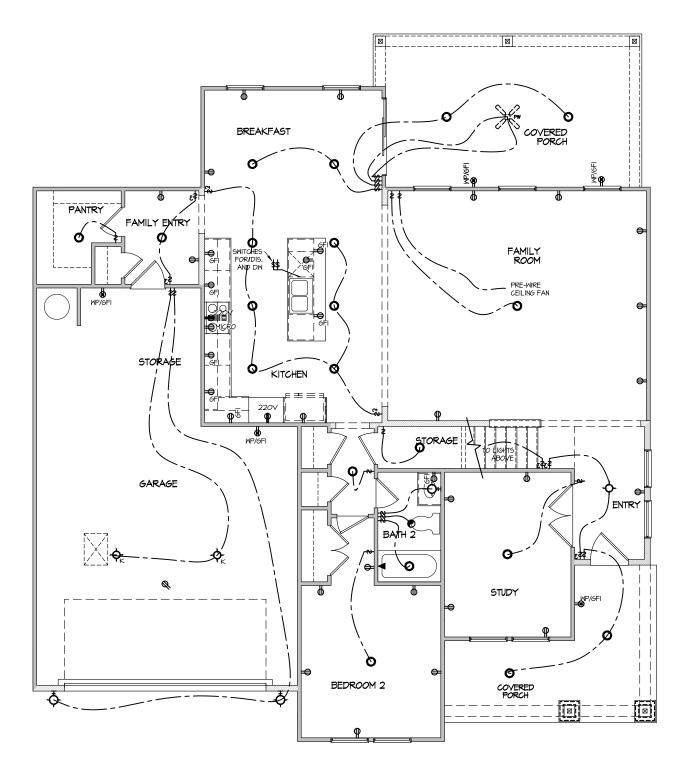
HOUSE NAME:
LANIER
DRAWING TITLE
SECOND FLOOR PLAN

SHEET No.

A3.2



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.



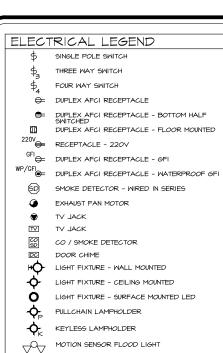
DRAWN BY:
ITS
DATE: 08/14/2023
PLAN NO.
2991

HOMES

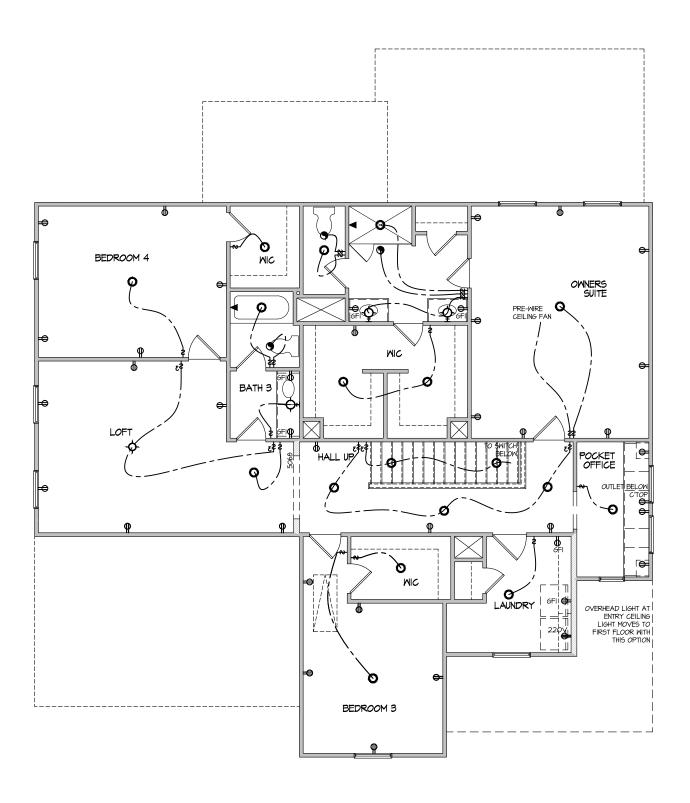
HOUSE NAME:
LANIER
DRAWING TITLE
FIRST FLOOR ELECTRICAL

SHEET No.

ELECTRICAL PLAN FIRST FLOOR - ELEV. 3



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



ELECTRICAL PLAN SECOND FLOOR - ELEV. 3 SCALE: 1/8" = 1'-0"

HOUSE NAME:
LANIER
DRAWING TITLE

E: Lot 00.0091.dwg DATE: 8/14/2023 11:40 AM

SHEET No.

SECOND FLOOR ELECTRICAL

DRAWN BY:

DATE: 08/14/2023 PLAN NO. 2991

DESCRIPTION OF BLDG. ELEMENT	3"x0.131" NAILS	3"x0.120" NAILS
JOIST TO SOLE PLATE	(3) TOENAILS	(3) TOENAILS*
SOLE PLATE TO JOIST/BLK'G.	(3) NAILS 🛭 4" O.C.	(3) NAILS <b>@</b> 4" O.C.
STUD TO SOLE PLATE	(2) TOENAILS	(3) TOENAILS*
TOP OR SOLE PLATE TO STUD	(2) NAILS	(3) NAILS
RIM TO TOP PLATE	TOENAILS @ 8" O.C.	TOENAILS @ 6" O.C.*
BLK'G. BTWN. JOISTS TO TOP PL.	(3) TOENAILS	(3) TOENAILS*
DOUBLE STUD	NAILS @ 24" O.C.	NAILS ● 16" O.C.
DOUBLE TOP PLATE	NAILS @ 24" O.C.	NAILS @ 16" O.C.
DOUBLE TOP PLATE LAP SPLICE	(9) NAILS IN LAPPED AREA	(II) NAILS IN LAPPED AREA
TOP PLATE LAP @ CORNERS \$	(2) NAILS	(2) NAILS
INTERSECTING WALLS		
* al/1 cura is 111 1		

2½"x0.113 is an acceptable alternative to a 3"x0.120", same spacing or number of nails.
 (ONLY ACCEPTABLE WHERE \* ARE SHOWN)

#### MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELE FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY 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, GUYS, 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 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 VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE 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.

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

#### GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE:
- 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.

LOAD DURATION FACTOR = 1.25

LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (1-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 CONNECTIONS, TYP, U.N.O.
- EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS,
   I6" O.C. SPF OR SYP "STUD" GRADE LUMBER, OR BETTER, UN.O. . WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRICE-PINE-FIR #2 (SPE) 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. UN.O.) . 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=3I0 psi: E=L55xI0^6 psi
- 'LVL' Fb=2600 psi; Fv=265 psi; E=2.0x10^6 psi 'PSL' - FB=2900 PSI, FV=290 PSI, E=2.0XIO^6 PSI
- M+K SHALL BE FILLY 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 PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS 1/4"x31/2" SIMPSON SDS SCREMS (OR 3½" TRUSSLOK SCREMS) & 16" O/C. USE A MINIMUM OF 3 ROMS 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 K" OR 5 K" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 \$ 2x8 MEMBERS.
- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF  $V_*$ "x6" SIMPSON SDS SCREWS (OR 6  $V_*$ " 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, U.N.O.,
- ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER w/ 3"X0.131" NAILS @ 24" O.C. (MIN.), EACH PLY.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND/BEARING. BLOCKING TO MATCH POST ABOVE.
- FASTEN 2x WOOD PLATES TO TOP FLANGE OF STEEL BEAMS WITH P.A.F.'s ('HILTI' X-CF PINS OR EQUAL) @ 16" O.C. STAGGERED, OR I/2" DIA. BOLTS @ 48" O.C. STAGGERED.
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4 CAP & ABW44Z BASE, UN.O.

#### FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES MARBLE FLOORS - CONTACT MEK FOR MARBLE FLOOR DESIGNS)
- AT I-JOIST FLOORS, PROVIDE I 1/8" MIN. OSB RIM BOARD.
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR' 24" O.C. EXPOSURE I (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W GLUE AND
- 2 1 × 0.131" NAILS @ 6"O.C. @ PANEL EDGES \$ @ 12"O.C. FIELD.
- 2 🖣 × 0.120" NAILS 4" O.C. PANEL EDGES € 8" O.C. FIELD. - 2 3" 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 FACH 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) H25T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O.
- 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"XO.131" NAILS @ 16" O.C. MAX. (1-JOISTS)
  - TRUSS VERTICALS W/ (3) 3"x0.131" NAILS 19.2" O.C. MAX. (FLOOR TRUSSES)
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
- W/ 2 ½" × 0.131" NAILS @ 6"O.C. @ PANEL EDGES € @ 12" O.C. FIELD. - w/ 2 3 × 0.120" NAILS • 4"o.c. • PANEL EDGES € • 8" O.C. FIELD.
- W/ 2 3" x 0.113" NAILS @ 3"06. @ PANEL EDGES \$ @ 6" O.C. FIELD.

#### VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	Steel angle size
3'-0 <b>'</b>	20 FT. MAX	L3"x3"x/4"
	3 FT. MAX	L3"x3"x/4"
6'-0"	I2 FT. MAX	L4"x3"x/4"
	20 FT. MAX	L5"x3½"x¾"
ð'-O"	3 FT. MAX	L4"x4"x¼" "
	I2 FT. MAX	L5"x3½"x¾"
	I6 FT. MAX	L6"x3%"x%"
4'-6"	I2 FT. MAX	L6"x3%"x3%"
16'-0"	2 FT. MAX	L7"x4"x/2" ***
	3 FT. MAX	L8"x4"x/2" **

### LINIELS. WLL 9LPRORT 2 %' - 3 ½' YENEER W 40 pof MAXIMUM WEK 9' SHALL HAVE 4" MIN BEARING 9' SHALL HOT BE FASTENED BACK TO HEADER

- IF SHALL BUT BE FASTERED BACK TO FEADER IN WALL 6469 C. W. III'D DIA 25 JUL 10 SHALL BE FASTERED BACK TO MOOD FEADER IN WALL 6469 C. W. II'D DIA 25 JUL 10 SHALL BE FASTERED BACK TO MOOD FEADER IN COPE THE OFFERNMENT OF THE LIGHT EIGHT STRENGT TOE OF THE MORIZORTAL LES WHEN JUL 10 SHALL BE SHOULD SHALL BE AND SHALL B
- R QUEEN VENEER USE LAXXXX'. OR 3½" VENEER ONLY SEE PLAN FOR VENEER SUPPORT IF VENEER < 3½" THICK.

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

#### LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM: 20 MPH WIND IN 2018 NCSBC:RO

(120 MPH WIND SPEED IN ASCE 7-10 WIND MAP, PER IRC R30L2LL) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1609) & ASCE 7-10, AS PERMITTED BY R30113 OF THE 2018 NOSEC-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 NCSBC:RC SECTION R802.II.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602 3 5& R802 II

#### EXT. WALL SHEATHING SPECIFICATION

- 1/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W 2 3/8"XO.II3" NAILS @ 6" O.C. AT EDGES \$ @ 12" O.C. IN THE PANEL FIELD. TYP, UN.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: 1 名" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C IN FIELD.

#### BLOCKED PANEL EDGES

AT DESIGNATED AREAS - FASTEN SHEATHING w/ 2 3/8" x 0.113" NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 3/4" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6 O.C. IN FIELD. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.

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

AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING 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

- 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
- <u>PRE-MANUFACTURED PANELIZED WALLS:</u> 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 CODE: RESIDENTIAL CODE.
- FOOTING DESIGN 2,000 PSF ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.
- FASTEN 2x4/6 SILL PLATES TO FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX, FROM PLATE ENDS - UTILIZING
- I/2" DIA. ANCHOR BOLTS 6'-0" O.C, 7" MIN. EMBEDMENT
- (CONC), 15" MIN. EMBEDMENT (CMU)
  SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C. (CONC)
- SIMPSON MAB23 ANCHOR STRAPS @ 2'-8" O.C. (CMU) (REFER TO DETAILS FOR IO' TALL WALL ANCHOR REQUIREMENTS)
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W CONCRETE OR CMU SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2.
- BUILDER TO VERIEY CORROSION-RESISTANCE COMPATIBILITY OF 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. SPF OR SYP, "STUD" GRADE OR BETTER.
- CONCRETE DESIGN BASED ON ACI 318, CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, UN.O.: 4,000 psi: ...... FOUNDATION WALLS 2,500 psi: ...... FOOTINGS & INTERIOR SLABS ON GRADE 3,000 psi: ...... GARAGE & EXTERIOR SLABS ON GRADE
- BASEMENT FOUNDATION WALL DESIGN BASED ON:
- 4' OR 10' HEIGHT (AS NOTED ON PLANS)
   TALLER WALLS MUST BE ENGINEERED.

leq 000,00

- NOMINAL WIDTH (91/5" FOR 10" THICK WALL).
- BASEMENT WALL DESIGN IS BASED ON 60 PCF BACKFILL SOIL TYPE CLASSIFICATIONS (SC. ML-CL, OR CL).
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK.
- PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN CONCRETE BSMT, FND, WALL WITH 2" CLEAR, REINFORCEMENT SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS.

  • FOR OPENINGS UP TO 36", PROVIDE MINIMUM 10" CONCRETE
- DEPTH OVER OPENING OR (3)2x10 W (2)2x6 JACK STUDS, U.N.O.
- LARGER OPENINGS SHALL BE PER PLAN.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT
- ALL FOOTINGS SHALL BEAR AT LEAST 12" BELOW FINISH GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP
- . JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR
- 15'-0" O.C. (MAXIMUM) JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS
- POSSIBLE (I-I RATIO) WITH A MAXIMUM OF I-15 RATIO • CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL
- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C90 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (F/m=1500 psi). MORTAR SHALL BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 € 530.I.
- CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL JOINT REINFORGEMENT (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
- 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.

#### HOLD-DOWN SCHEDULE

\* DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

SYMBOL	SPECIFICATION	
► HD-I	SIMPSON HTT4 HOLD-DOWN *	
► HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UN.O.) (PRE-BENT MSTC66 ALT. WHEN SPECIFIED)	
<b>→</b> HD-3	SIMPSON STHD14/14RJ HOLD-DOWN	

ALTERNATIVE TO SSTB24 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 I 3/4" OF EDGE OF FOUNDATION

*□ 8/*30/23 "H CAR NOFESSIO, O. ENGINE SEPH T. R

N+KCL Ш£



l&K project numbe 126-2306

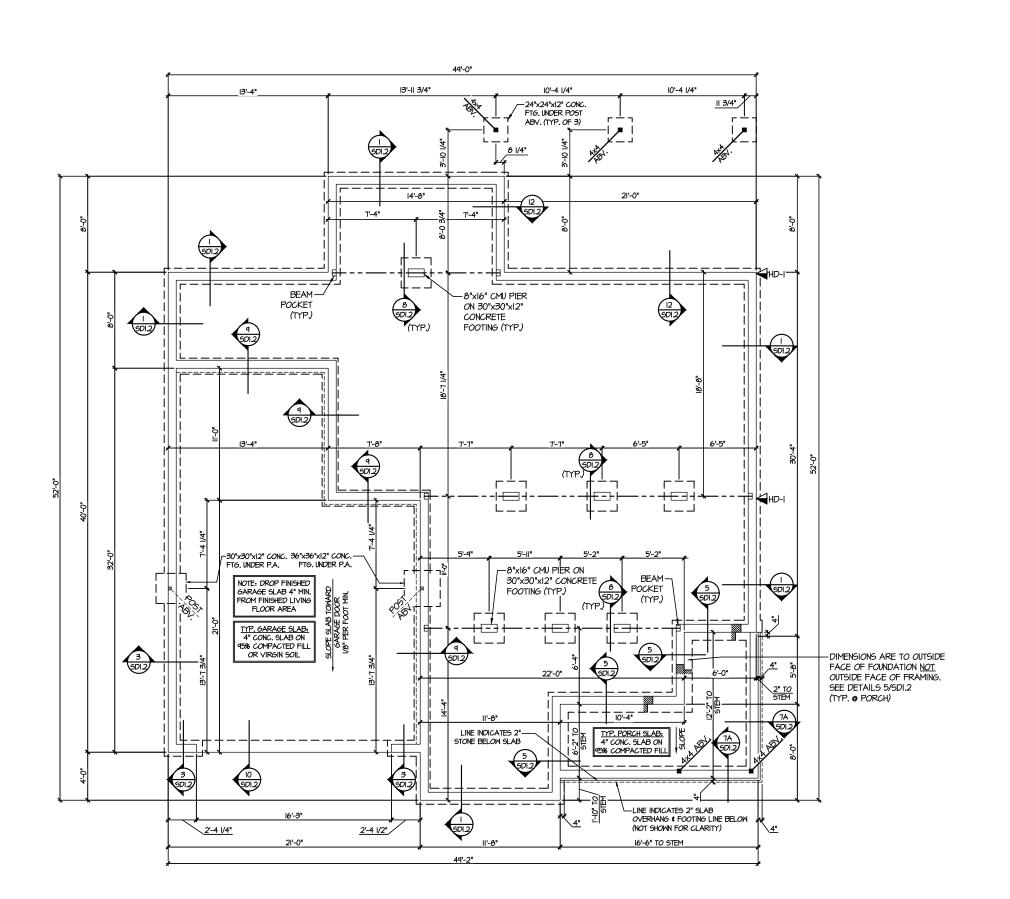
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NGINEE WEPH T. R MULHERN+KUL RESIDENTIAL STRUCTURAL ENSINEERI

> M&K project number: 126-2306

<sup>2al:</sup> 8/30/23

JTR drawn by: issue date: 08-22-2

BLAKE POND Lot 91 - Lanier 3 Raleigh, nc OUNDATION

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REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

INDICATES HOLD-DOWN OR STRAP.
REFER TO SCHEDULE.

LEGEND

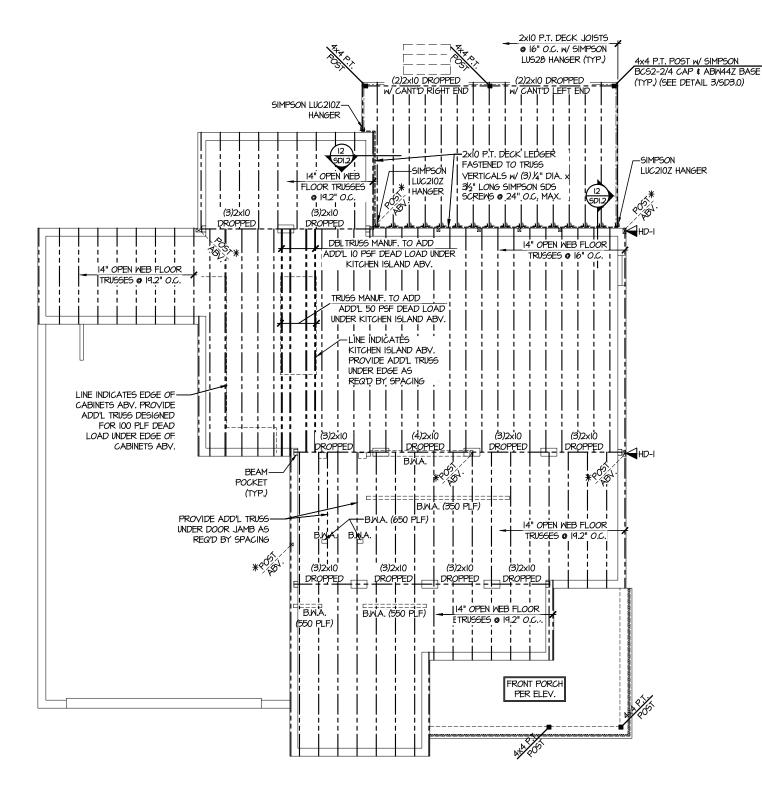
• = = INDICATES SHEAR WALL & EXTENT EXTENT OF OVERFRAMING

\* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

• IIIIII INTERIOR BEARING WALL • □===□ BEARING WALL ABOVE

• --- BEAM / HEADER

JIL METAL HANGER



ENGINEERED BEAM MATERIAL SCHEDULE BEAM LVL OPTION PSL OPTION FLITCH OPTION STEEL OPTION 4)2x12 + (3) %"xIK" STEE FLITCH PLATES - FB 001 (4)13/4"x18" - FT 7"x18" - FT NΑ WI2x30 - F (2)2xl2 + (I) %"xll4" STEEL FLITCH PLATE - D (3)13/4"x113/6" - D 002 (3)%"xl此" - D %"VIK" - D WI2xI4 - D 003 3)2xi2 + (2) 及"xii以" Steei Flitch Plates - FB (3)13/4"x16" - FB 5¼"xl6" - FB (3)13/4"x16" - FE WI2xI9 - I (2)13/4"x14" - F 3%"xl4" - F (2)13/4"×14" -005 (2)134"×14" - F 3½"x|4" - F (2)13/4"×14" - F N/A )2xl2 + (2) %"xll**以**" STEEI FLITCH PLATES - D 006 (3)13/4"×14" - D 5¼"xl4" - D (3)13/4"×14" - D WI2xI4 - D 001 (3)13/4"x14" - H 5½"xl4" - H (3)19/4"x14" - H (2)2xl2 + (1) %"xlik" Steel Flitch Plate - D 008 (2)13/4"x16" - D (2)13/4"x16" - D WI2xI4 - D 3%"x16" - D (2)2x10 + (1) ¼"x4¼" STEEL FLITCH PLATE - H (2)134"×94" - H 3½"x9¼" - H MBxIO - H (2)2xI0 + (I) %"x44" STEEL FLITCH PLATE - H (2)13/4"×9/4" - H 3½"×9¼" - H (2)134"×91/2" - H W8xIO - H

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.

al: 8/30/23 W. P. T. CAR SEPH T. R

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1&K project number: 126-23061

**JTR** frawn by: BGL issue date: 08-22-2

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LEGEND

SD2.I REFERS TO SD2.IA FOR

LVL/PSL/LSL BEAMS OR SD2.IB FOR FLITCH BEAMS OR SD2.IC

FOR STEEL BEAMS

 INTERIOR BEARING WALL ● □===□ BEARING WALL ABOVE

BEAM / HEADER

● ■ ■ INDICATES SHEAR WALL & EXTENT

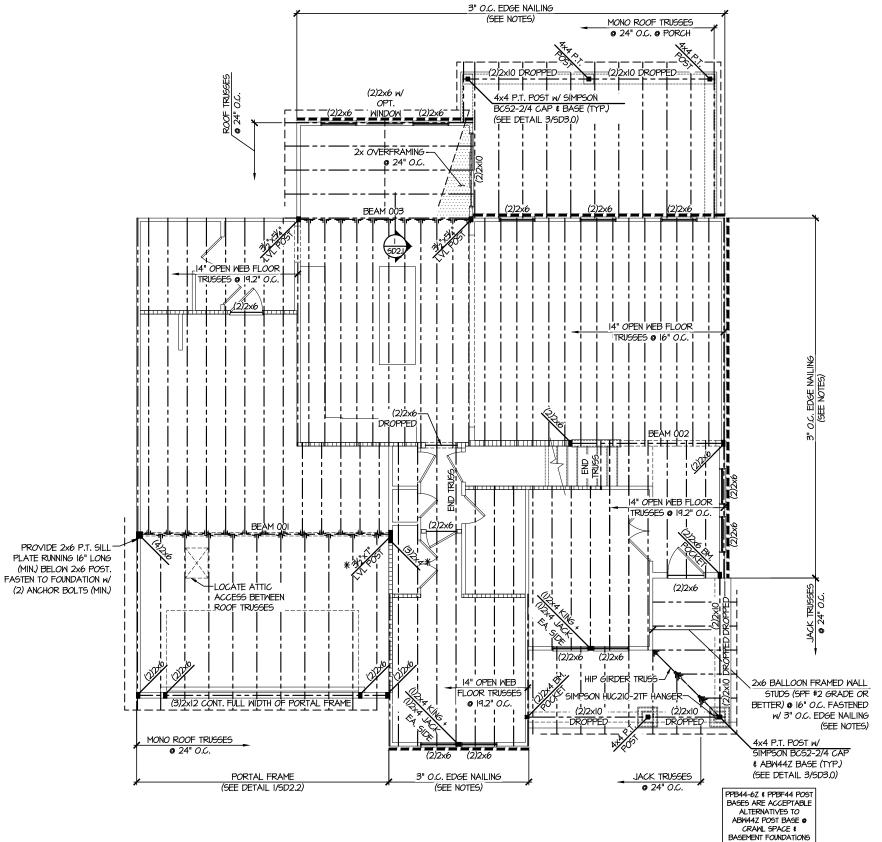
EXTENT OF OVERFRAMING

JL METAL HANGER

\* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES



ENGINEERED BEAM MATERIAL SCHEDULE BEAM LVL OPTION FLITCH OPTION 4)2x12 + (3) %"xIK" STEE FLITCH PLATES - FB 001 (4)13/4"x18" - FT 7"x18" - FT NΑ WI2x30 - F (2)2xl2 + (I) %"xll4" STEEL FLITCH PLATE - D 002 (3)%"xl此" - D 56"YIK" - D (3)134"×1136" - D 003 3)2xi2 + (2) ½"xil¼" Steei Flitch Plates - Fb (3)13/4"x16" - FB (3)13/4"×16" - FE 5¼"xl6" - FB WI2x19 - I 004 (2)13/4"x14" - F (2)13/4"x14" - 1 3%"xl4" - F 005 (2)134"x14" - F 3½"x|4" - F (2)13/4"×14" - F N/A )2xl2 + (2) %"xll**以**" STEEI FLITCH PLATES - D 006 (3)13/4"×14" - D 5¼"xl4" - D (3)13/4"×14" - D WI2xI4 - D 001 (3)13/4"x14" - H 5½"xl4" - H (3)19/4"x14" - H (2)2xl2 + (1) %"xlik" Steel Flitch Plate - D 008 (2)13/4"x16" - D (2)13/4"x16" - D 3%"x16" - D WI2xI4 - D (2)2x10 + (1) ¼"x4¼" STEEL FLITCH PLATE - H (2)134"×94" - H 3½"x9¼" - H MBxIO - H (2)2xI0 + (I) %"x44" STEEL FLITCH PLATE - H (2)13/4"x91/4" - H 3½"x9¼" - H (2)134"×91/2" - H W8xIO - H

BEAM NOTATION:
- "F" INDICATES FLUSH BEAM

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

- "B" INDICATES PLUSH BUTTOM BEAM
   "D" INDICATES PROPPED BEAM
   "H" INDICATES PROPPED BEAM
   "H" INDICATES PROPPED OPENING HEADER
  REFER TO DETAIL DISD2.0 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 REQTD. 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.

W. H. H. STEEL OPTION WI2xI4 - D

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RESIDENTIAL STRUCTURAL ENGINEERII

al: 8/30/23

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SEPH T. R



1&K project number 126-2306

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

#### LEGEND

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

TYPICAL STRUCTURAL NOTES & SCHEDULES

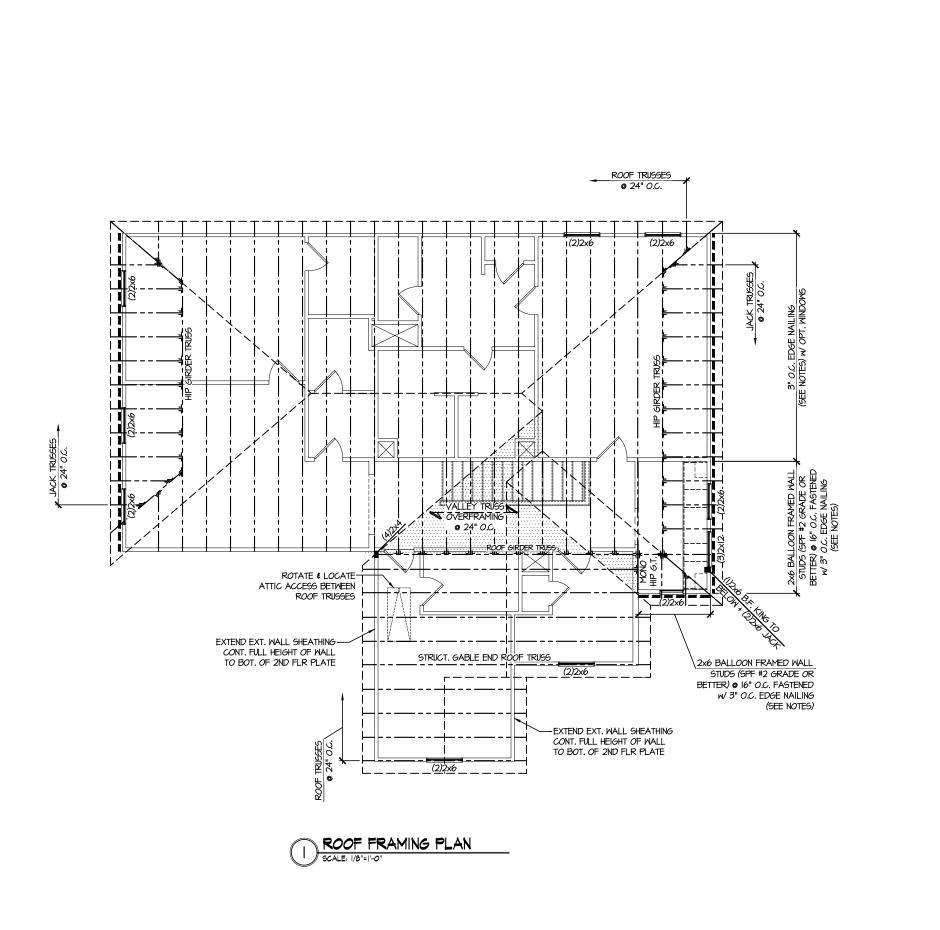
JL METAL HANGER

REFER TO SO.O FOR

**S3**.

BLAKE POND Lot 91 - Lanier 3 Raleigh, nc

2ND FLOOR FRAMING PLAN



<sup>2al:</sup> 8/30/23 SEPH T. R

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M&K project number: 126-2306

JTR BGL drawn by: issue date: 08-22-23

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#### • 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.

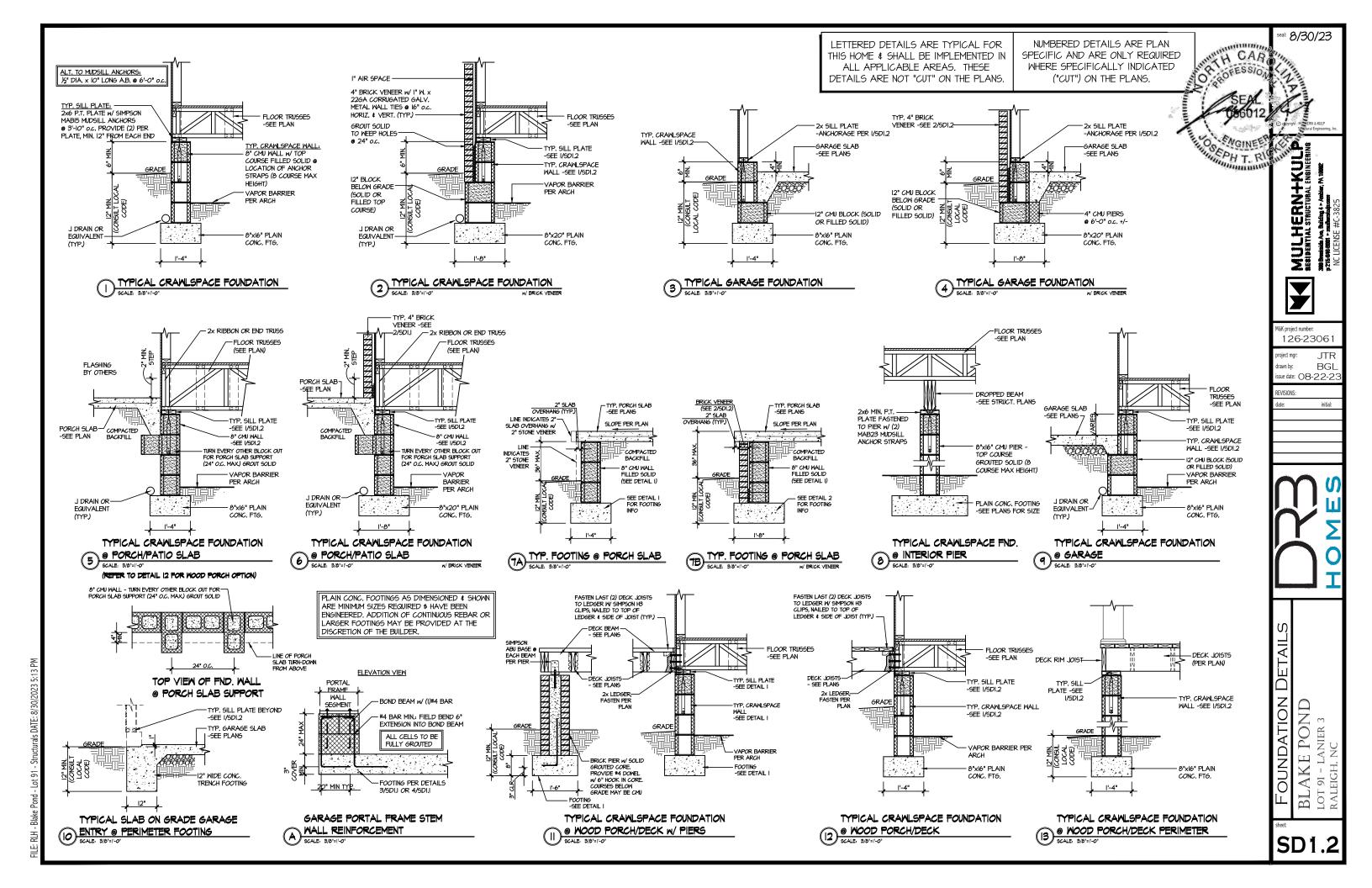
LEGEND

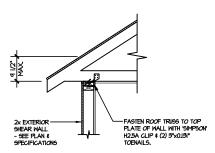
INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

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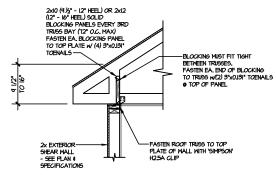




#### TYPICAL SHEAR

TRANSFER DETAIL @ ROOF

SCALE: 3/8'=1'-0' HEEL HEIGHT LESS THAN HEEL HEIGHT LESS THAN 9½" NO BLOCKING REQ'D

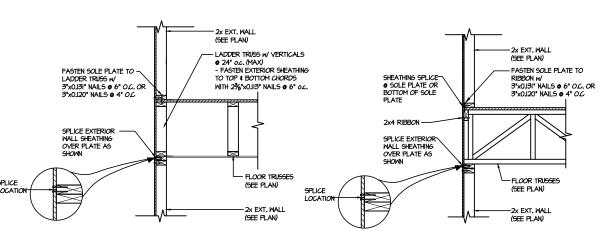


#### TYPICAL SHEAR

TRANSFER DETAIL @ ROOF

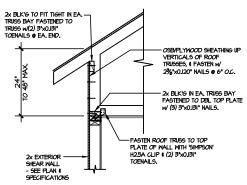
SCALE: 9/8'=1-0' HEEL HEIGHT BETWEEN 4)

HEEL HEIGHT BETWEEN 9½" - 16" BLOCKING REQ'D



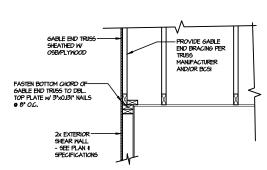
TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE 300'10' PARALLE FROM



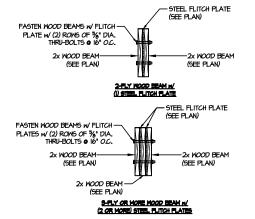


### TYPICAL SHEAR TRANSFER

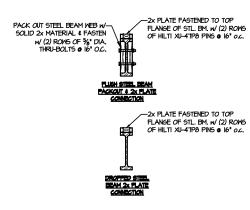
DETAIL @ RAISED HEEL TRUSS



TYPICAL GABLE END DETAIL SOLLE SIDE STATE



TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE 344-1-07



TYPICAL STEEL BEAM CONNECTION DETAIL SCALE 9/4"-1"-0"

NUMBERED DETAILS ARE PLAN

("CUT") ON THE PLANS.

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M&K project number:

roject mgr:

drawn by:

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126-2306

issue date: 08-22-2

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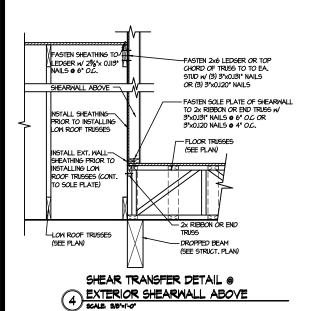
**SD2.0** 

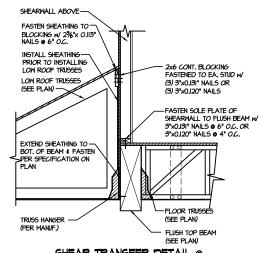
THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

LETTERED DETAILS ARE TYPICAL FOR

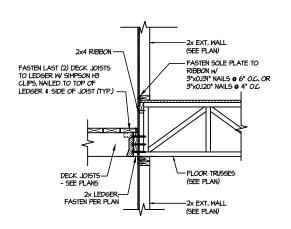
SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED

#### SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE SCALE SUPPLYOF

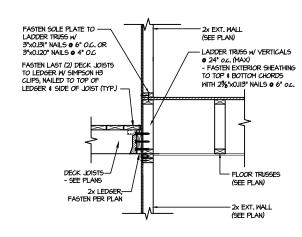




SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE SIGNATOR



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE SODE OF PARALLEL FIRMS MULHERN+KUL RESIDENTIAL STRUCTURAL ENGINEERIN

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1&K project number: 126-2306

roject mgr: **JTR** drawn by: BGL issue date: 08-22-2

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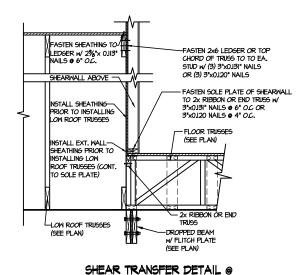
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NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

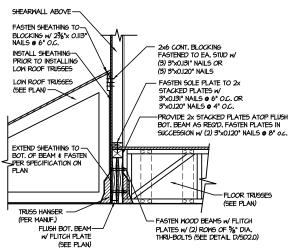
LETTERED DETAILS ARE TYPICAL FOR ALL APPLICABLE AREAS. THESE

THIS HOME & SHALL BE IMPLEMENTED IN DETAILS ARE NOT "CUT" ON THE PLANS.

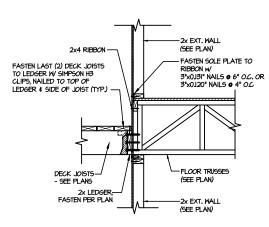
SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE



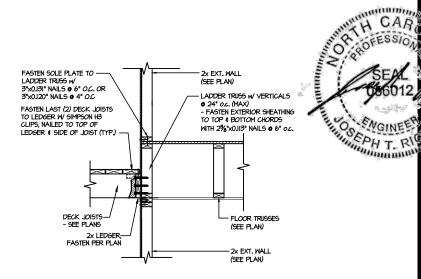
EXTERIOR SHEARWALL ABOVE



SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE SCALE 9/4"=1"-0"



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL

1&K project number: 126-2306

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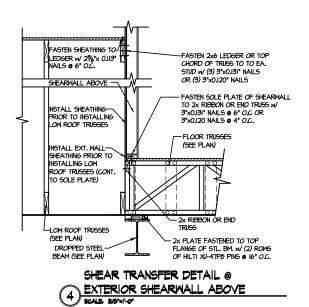
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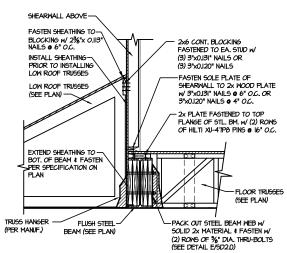
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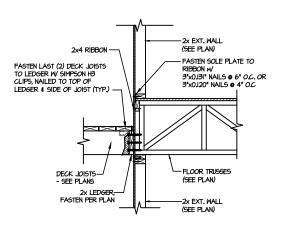
NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

SD2.1B

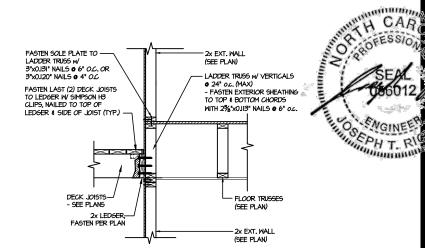




SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE S/8"-1"-O" PARALLE FROM

> 1&K project number: 126-2306

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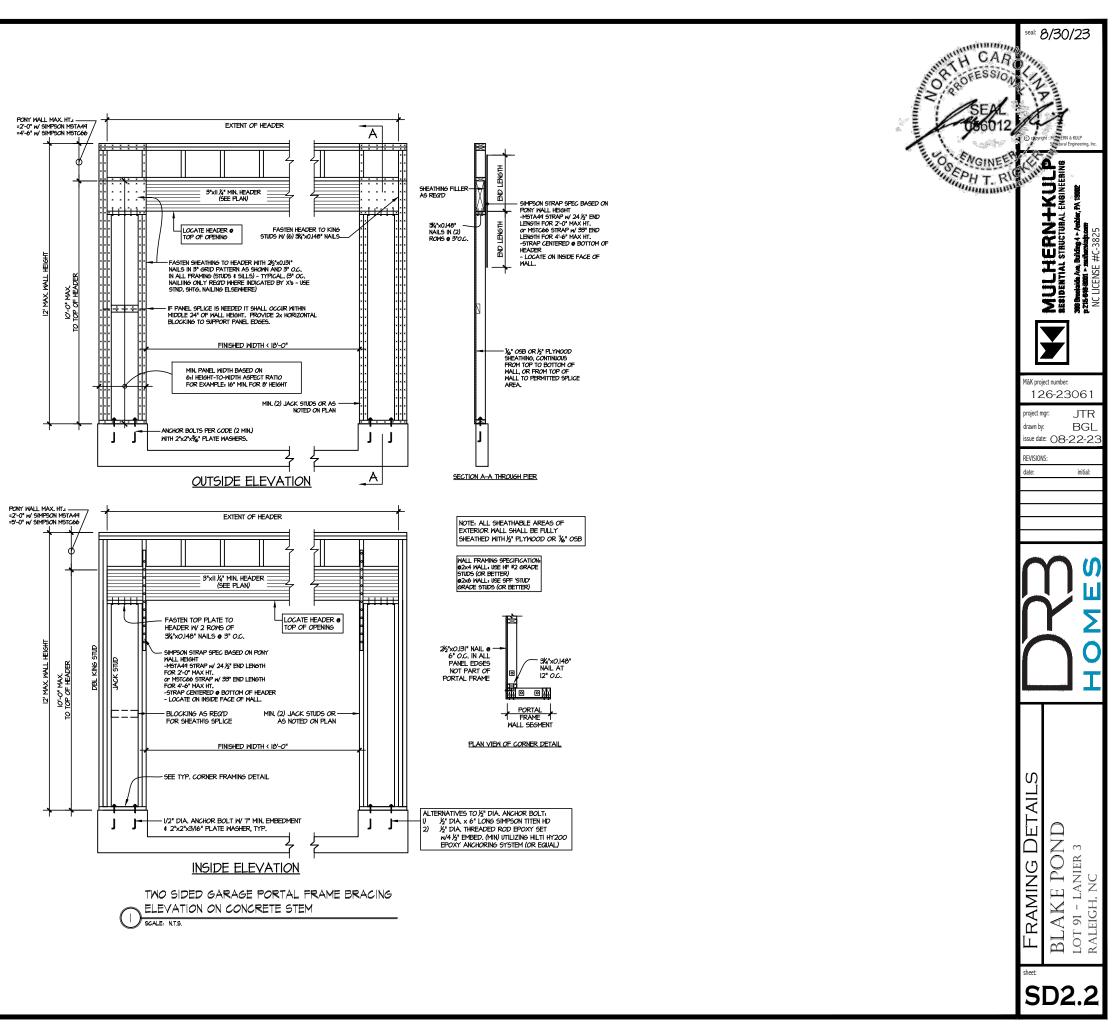
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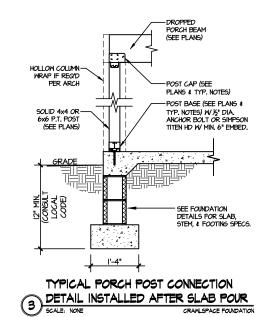
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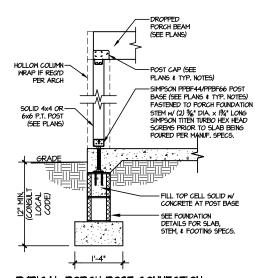
BLAKE POND Lot 91 - Lanier 3 Raleigh, nc RAMING DET

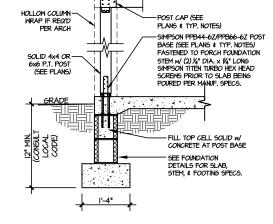
NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.



Blake Dond | 1ct 01 Charatering DATE: 8/20/2003 E:13 DM







-DROPPED PORCH BEAM (SEE PLANS)

TYPICAL PORCH POST CONNECTION

DETAIL INSTALLED PRIOR TO SLAB POUR

SCALE: NONE CRANLSPACE FOUNDATION

TYPICAL PORCH POST CONNECTION

DETAIL INSTALLED PRIOR TO SLAB POUR

SCALE: NONE CRANLSPACE FOUNDATION

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M&K project number: 126-2306 1

**JTR** 

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issue date: 08-22-23

roject mgr:

drawn by:

REVISIONS

FRAMING DETAILS

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SD3.0